6179

The LEWIN GROUP

# Strategies for Obtaining Public Health Infrastructure Data at the Federal, State, and Local Levels

# Appendix A: Profiles of Existing Mechanisms to Collect Public Health Infrastructure Data

**U.S. Department of Health and Human Services**
***December 199 7***

**Contract Number: 282-95-0021**

Fairfax, Virginia
San Francisco, California
Cambridge, Massachusetts

# Strategies for Obtaining Public Health Infrastructure Data at the Federal, State, and Local Levels

# Appendix A: Profiles of Existing Mechanisms to Collect Public Health Infrastructure Data

**U.S. Department of Health and Human Services**
***December 199 7***

**Contract Number: 282-95-0021**

## SYSTEMS IDENTIFIED AND PROFILED TO DATE

Introduction ..... 5

Existing Data Collection Efforts by Unit of Analysis ..... 7

**MULTI-FOCUSED EFFORTS**

*1994* Biennial Profile of Public Health Nutrition Services
*Association of State and Territorial Public Health Nutrition Directors* ..... 13

Annual Monographs of Structure and Function of State EMS Departments
*National Association of State EMS Directors* ..... 15

Association of State and Territorial Health Officials Reporting System
*Public Health Foundation* ..... 17

County Health Policy Project
*National Association of Counties Research Foundation, Inc. and the Brandeis University Institute of Health Policy* ..... 21

National Profile of Local Health Departments
*National Association of County and City Health Officials (NACCHO) and Centers for Disease Control and Prevention* ..... 24

National Survey of Local Boards of Health
*Centers for Disease Control and Prevention and National Association of Local Boards of Health* ..... 27

Protocol for Surveying Epidemiological Surveillance Capacity of State Health Departments
*Council of State and Territorial Epidemiologists* ..... 29

Survey of State Chronic Disease Epidemiology Capacity
*Epidemiology and Science Committee of the Association of State and Territorial Chronic Disease Program Directors* ..... 31

Survey of State Health Agency Chronic Disease Programs
*Association of State and Territorial Chronic Disease Program Directors* ..... 33

Synopsis of State Dental Public Health Programs
*Association of State and Territorial Dental Directors* ..... 35

who's in Charge? 50-State Profile of Environmental Health and Protection Services
*Bureau of Health Professions* ..... 37

**FISCAL RESOURCES FOCUS**

Annual Census Bureau Survey of Local Government Finances and Employment
U.S. *Department of Commerce, Economics and Statistics Administration, Bureau of the Census, Governments Division* ..... 40

Annual Census Bureau Survey of State Government Finances and Employment
U.S. *Department of Commerce, Economics and Statistics Administration, Bureau of the Census, Governments Division* ..... 43

Budget and Employment Statistics of the United States Government
U.S. *Department of Commerce, Economics and Statistics Administration, Bureau of the Census, Governments* Division ..... 46

HRSA Personal Health Care Services Expenditures
*Health Resources and Services Agency (URSA) and Public Health Foundation* ..... 49

Local Public Health Expenditures Project
*National Association of County and City Health Officials, National Association of Local Boards of Health,* and the Public Health Foundation ..... 51

NASMHPD Funding Database
*National Association of State Mental Health Program Directors (NASMHPD) and NASMHPD Research Institute, Inc.* ..... 54

Public Health Expenditures Project
U.S. *Public Health Service; Public Health Foundation* ..... 57

**ACTIVITIES FOCUS**

Guidance for Application to Maternal and Child Health Services Block Grant Program
*Maternal and Child Health Bureau* ..... 60

Guidance for the State MCH Block Grant Annual Report
*Maternal and Child Health Bureau.* ..... 62

Inventory of Mental Health Organizations and General Hospital Mental Health Services (IMHO/GHMHS)
*DHHS, Substance Abuse and Mental Health Services Administration, Center for Mental Health* Services ..... 64

Local Health Department Primary Care Assessment
*National Association of County Health Officials* ..... 66

Preventive Health and Health Services Block Grant Uniform Data Set
*Centers for Disease Control and Prevention (CDC).* ..... 68

Query of Worksite Health Promotion Activities and Capacity
*Association of State and Territorial Directors of Health Promotion and Public Health Education* ..... 70

Ryan White Care Act Title I Annual Administrative Reports
*Bureau of Health Resources* Development ..... 72

Ryan White Care Act Title II Annual Administrative Reports
*Bureau of Health Resources Development* ..... 75

Ryan White Care Act Title IV Reporting System
*Maternal and Child Health* Bureau ..... 78

State Alcohol and Drug Abuse Profile (SADAP)
*National Association of State Alcohol and Drug Abuse Directors* ..... 80

The State Mental Health Agency Profile System
*National Association of State Mental Health Program Directors (NASMHPD) and NASMHPD Research Institute, Inc. (NRI)* ..... 82

Uniform Facility Data System (formerly the National Drug and Alcohol Treatment Unit Survey)
*DHHS/Substance Abuse and Mental Health Services Administration (SAMHSA) Office of Applied Studies..* ..... 84

HUMAN RESOURCES FOCUS

1994 Census of Public Health Nutrition Personnel
*Association of State and Territorial Public Health Nutrition Directors* ..... 87

Annual Census Bureau Survey of Local Finances and Employment
U.S. *Department of Commerce, Economics and Statistics Administration, Bureau of the Census, Governments Division* ..... See page 40

Annual Census Bureau Survey of State Finances and Employment
U.S. *Department of Commerce, Economics and Statistics Administration, Bureau of the Census, Governments Division...* ..... See page 43

Annual Survey of Schools of Public Health
*Association of Schools of Public Health* ..... 89

Assessing the Training and Education Needs of State Public Health Workers
*Center for Health Policy Research, The George Washington University Medical Center and the Bureau of Health Professions* ..... 92

Budget and Employment Statistics of the United States Government
U.S. *Department of Commerce, Economics and Statistics Administration, Bureau of the Census, Governments Division.* ..... See page 46

National Practitioner Data Bank
*Health Resources and Services Administration* ..... 95

State Health Agency Staffs, 1989
*Bureau of Health Professions; Public Health Foundation* ..... 98

State and Territorial Public Health Laboratories Classification and Pay Report
*Association of State and Territorial Public Health Laboratory Directors..* ..... 100

Survey of Public Health/Community Health Personnel
*Bureau of Health Professions: American Public Health Association* ..... 102

Survey of Training Needs of State Health Agency Chronic Disease Programs
*Association of State and Territorial Chronic Disease Program Directors* ..... 104

Training and Education for Public Health
U.S. *Public Health Service, DHHS* ..... 106

## ORGANIZATIONAL CAPACITY FOCUS

Database of State Public Health Agencies
Association of State and Territorial Health Officials (ASTHO) ..... 109

NACCHO APEXPH Questionnaire
National Association of County and City Health Officials ..... 111

Profile of State and Territorial Public Health Systems: United States, 1990
Public Health Practice Program Office, Division of Public Health Systems, Centers for Disease Control ..... 113

Survey on the Future of Public Health Recommendations
W. K. Kellogg Foundation ..... 115

Survey of Privatization of State and Local Health Departments
Centers for Disease Control and Prevention ..... 117

Privatization of Public Health Services
Public Health Foundation ..... 1 19

Public Health Laboratories and Health System Change
The Lewin Group, for the Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services ..... 122

## INFORMATION SYSTEMS FOCUS

Assessment of the Telecommunications Infrastructure in State Health Agencies
Centers for Disease Control and Prevention ..... 124

ASTHO Information System Survey
Association of State and Territorial Health Officials ..... 126

AVRHS Vital Statistics Automation Survey
Association for Public Health Statistics and Information Services ..... 127

Local Health Department Geographic Information System
Centers for Disease Control and Prevention ..... 129

NACCHO Electronic Communications Questionnaire
National Association of County and City Health Officials ..... 131

# *PROFILES OF EXISTING MECHANISMS TO COLLECT PUBLIC HEALTH INFRASTRUCTURE DATA*

## INTRODUCTION

The following profiles constitute a first step in identifying and reviewing existing data systems and strategies that have provided (or will provide ) information concerning the capacity of the public health infrastructure. Through a review of internal files and contacts with field experts, project staff have identified approximately 50 data systems or data collection strategies that have either provided, continue to provide, or will in the future provide information that can answer questions about the capacity of agencies responsible for public health functions.

In compiling these profiles, project staff obtained copies of data collection instruments and reports and have interviewed experts knowledgeable about many of these systems. Typically these "systems" are periodic (e.g., annual or biennial) surveys of agencies or departments responsible for different aspects of public health services, but sometimes they are analyses of available and written information--such as the Federal government budget. Respondents to surveys are either State agencies or local agencies, and in many cases are members of the organizations conducting the survey.

### ORGANIZATION OF PROFILES

To facilitate analysis of the data systems, project staff have prepared brief profiles for all of the data systems identified to date. The Profiles are grouped according to the major purpose and focus of the data collection mechanism. Many of the data collection mechanisms focus on a particular type of infrastructure data, such as "Fiscal Resources" or "Human Resources". A limited set of data sources focus on multiple aspects of the public health infrastructure. Each profile is organized into the following sections:

- ***Summary;***
- ***Background;***
- ***Funding/Supporting Agency/Sponsor;***
- ***Periodicify,*** including frequency of data collection, the first year for which it is available, and the number of years collected;
- ***Sample,*** providing information on geographic coverage and sample size, as well as any other available information concerning sampling approach and sample frame;
- ***Description of Data Nemenfs,*** a brief summary of the types of infrastructure-related elements in the system;
- ***Methodology,*** providing information about the following:
    - 0 *data collection method* (survey, review of hard copy),

- *format of collected material* (electronic or hard copy),
- *format for housing of data* (electronic or hard copy),
- *participation* (voluntary versus mandatory),
- *data information flow* (who provides what information to whom),
- data *quality assurance* (key steps in assuring data validity), and
- *data analysis* that can be supported by the data;

- ***Strengths/Limitations (Methodology),*** an objective summary of certain factors that strengthen or limit use of the data for answering questions about public health infrastructure capacity, including:
  - *Strengths* that may include comprehensibility of data, consistency of data, and availability of data for multiple years; and
  - *Limitations* that may include gaps or challenges encountered in the conduct of surveys or the analysis of data, such as generalizability of findings and inconsistencies in the availability of similar data across jurisdictions or over time;
- ***Reports,*** Reference is made to reports that provide or heavily rely on information provided through the system.

## EXISTING DATA COLLECTION EFFORTS BY UNIT OF ANALYSIS

| | | | CAPACITY MEASURE | | | | |
|---|---|---|---|---|---|---|---|
| **SOURCE** | **Sponsoring Organization** | **Activities Focus** | **Human Resources** | **Capital Resources** | **Information System Capacity** | **Organizational Capacity** | **Fiscal Resources** |
| **MULTI-FOCUSED EFFORTS** | | | | | | | |
| 1994 Biennial Profile of Public Health Nutrition Services | Association of State and Territorial Public Health Nutrition Directors | State | State | | State | State | |
| Annual Monographs of Structure and-Function of Each State's EMS Department | National Association of State EMS Directors | | State | | | State | State |
| Association of State and Territorial Health Officers Reporting System | Association of State and Territorial Health Officers | State | State | State | State | State | State |
| County Health Policy Project | National Association of Counties and Brandeis University's Institute of Health Policy | Local | Local | Local | | Local | Local |
| National Profile of Local Health Departments | National Association of County and City Health Departments and Centers for Disease Control and Prevention | Local | Local | Local | Local | Local | Local |
| National Survey of Local Boards of Health | CDC; National Association of Local Boards of Health | Local | Local | | Local | Local | Local |
| Protocol for Surveying Epidemiological Surveillance Capacity of State Health Departments | Council of State and Territorial Epidemiologists | State | State | | State | State | |
| Survey of State Chronic Disease Epidemiology Capacity | Epidemiology and Science Committee of the Association of State and Territorial Health Officials | | State | | State | State | |

| | | | CAPACITY MEASURE | | | | |
|---|---|---|---|---|---|---|---|
| **SOURCE** | **Sponsoring Organization** | **Activities Focus** | **Human Resources** | **Capital Resources** | **information System Capacity** | **Organizational Capacity** | **Fiscal Resources** |
| Survey on State Health Agency Chronic Disease Programs | Association of State and Territorial Chronic Disease Program Directors | | State | | | State | State |
| Synopsis of State Dental Public Health Programs | Association of State and Territorial Dental Directors | State | State | | | State | State |
| Who's In Charge? 50 State Profile of Environmental Health and Protection Services | Bureau of Health Professions | State | State | | | State | State |
| **FISCAL RESOURCES FOCUS** | | | | | | | |
| Annual Census Survey of Local Government Finances and Employment | U.S. Bureau of the Census | | Local | | | | Local |
| Annual Census Bureau Survey of State Finances and Employment | U.S. Bureau of the Census | | State | | | | State |
| Budget and Employment Statistics of the United States Government | U.S. Bureau of the Census | | National | | | | National |
| HRSA Personal Health Care Services Expenditures | Health Resources and Services Agency (HRSA) | | | | | | State (subset) |
| Local Public Health Expenditures Project | NACCHO/ NALBOH/ PHF | | | | | | Local |
| NASMHPD Funding Database | National Association of State Mental Health Program Directors (NASMHPD) and NASMHPD Research Institute, Inc. | | | | | | National State |
| Public Health Expenditures Project | Public Health Service and the Public Health Foundation | | | | | | State (subset) Local (subset) |

| | | | CAPACITY MEASURE | | | | |
|---|---|---|---|---|---|---|---|
| **SOURCE** | **Sponsoring Organization** | **Activities Focus** | **Human Resources** | **Capital Resources** | **Information System Capacity** | **Organizational Capacity** | **Fiscal Resources** |
| **ACTIVITIES FOCUS** | | | | | | | |
| Guidance for Application to Maternal and Child Health Services Block Grant Program | Maternal and Child Health Bureau | State | | | State | | State |
| Guidance for the State MCH Block Grant Annual Report | Maternal and Child Health Bureau | State | | | State | | State |
| Inventory of Mental Health Organizations and General Hospital Mental Health Services | Substance Abuse and Mental Health Services Administration | State<br>Local<br>National | State<br>Local<br>National | | | State<br>Local<br>National | State<br>Local<br>National |
| Local Health Department Primary Care Assessment | National Association of County Health Officials | Local | Local | | | | Local |
| Preventive Health and Health Services Block Grant Uniform Data Set | Centers for Disease Control and Prevention (CDC) | State | | | | | |
| Query of Worksite Health Promotion Activities and Capacity | Association of State and Territorial Directors of Health Promotion and Public Health Education | State | | | | State | State |
| Ryan White Care Act Title I Annual Administrative Reports | Health Resources and Services Administration | Local | | | | Local | Local |
| Ryan White Care Act Title II Annual Administrative Reports | Health Resources and Services Administration | State<br>Local | | | | State<br>Local | |
| Ryan White Care Act Title IV Reporting System | Health Resources and Services Administration | Local | | | | Local | Local |
| State Alcohol and Drug Abuse Profile | National Association of State Alcohol and Drug Abuse Directors | National<br>State | National<br>State | | | | National<br>State |

| | | | CAPACITY MEASURE | | | | |
|---|---|---|---|---|---|---|---|
| **SOURCE** | **Sponsoring Organization** | **Activities Focus** | **Human Resources** | **Capital Resources** | **Information System Capacity** | **Organizational Capacity** | **Fiscal Resources** |
| State Mental Health Agency Profile System | National Association of State Mental Health Program Directors (NASMHPD) and NASMHPD Research Institute, Inc. (NRI) | State | | | State | State | State |
| Uniform Facility Data System (formerly the National Drug and Alcohol Treatment Unit Survey) | Substance Abuse and Mental Health Services Administration | National<br>State<br>Local | National<br>State<br>Local | | | National<br>State<br>Local | National<br>State<br>Local |
| **HUMAN RESOURCES FOCUS** | | | | | | | |
| ***1994*** Census of Public Health Nutrition Personnel | Association of State and Territorial Public Health Nutrition Directors | | State | | | | |
| Annual Census Survey of Local Government Finances and Employment | U.S. Bureau of the Census | | Local | | | | Local |
| Annual Census Bureau Survey of State Finances and Employment | U.S. Bureau of the Census | | State | | | | State |
| Annual Survey of Schools of Public Health | Association of Schools of Public Health | | National<br>State | | | | |
| Assessing the Training and Education Needs of State Public Health Workers | Bureau of Health Professions, Health Resources and Services Administration and Center for Health Policy Research, George Washington University Medical Center | | National<br>State | | | | |
| Budget and Employment Statistics of the United States Government | U.S. Bureau of the Census | | National | | | | National |

| | | | CAPACITY MEASURE | | | | |
|---|---|---|---|---|---|---|---|
| **SOURCE** | **Sponsoring Oraanization** | **Activities Focus** | **Human Resources** | **Capital Resources** | **Information System Capacity** | **Organizational Capacity** | **Fiscal Resources** |
| National Practitioner Data Bank | Health Resources and Services Administration | | Local | | | | |
| State Health Agency Staffs, 1989 | Bureau of Health Professions | | State | | | | |
| State and Territorial Public Health Laboratories Classification and Pay Report | Association of State and Territorial Public Health Laboratory Directors | | State | | | | State |
| Survey of Public Health/Community Health Personnel | Bureau of Health Professions/American Public Health Association | | State<br>Local | | | | |
| Survey of Training Needs of State Health Agency Chronic Disease Programs | Association of State and Territorial Chronic Disease Program Directors | | State | | | | |
| Training and Education for Public Health | Public Health Service, US Department of Health and Human Services | | National | | | | |
| **ORGANIZATIONAL CAPACITY FOCUS** | | | | | | | |
| Database of State Public Health Agencies | Association of State and Territorial Health Officials (ASTHO) | | | | | State | |
| NACCHO APEXPH Questionnaire | National Association of County and City Health Officials | | Local | | | Local | |
| Profile of State and Territorial Public Health Systems: United States, 1990 | Public Health Practice Program Office, Division of Public Health Systems, CDC | | State<br>Local | | | State<br>Local | State<br>Local |
| Survey on the Future of Public Health Recommendations | W.K. Kellogg Foundation | State<br>Local | | | | State<br>Local | |

| | | | CAPACITY MEASURE | | | | |
|---|---|---|---|---|---|---|---|
| **SOURCE** | **Sponsoring Organization** | **Activities Focus** | **Human Resources** | **Capital Resources** | **Information System Capacity** | **Organizational Capacity** | **Fiscal Resources** |
| Survey of Privatization of State and Local Health Departments | Centers for Disease Control and Prevention | | | | | State<br>Local | |
| Privatization of Public Health Services | Public Health Foundation | | | | | Local<br>(Subset) | |
| Public Health Laboratories and Health System Change | Office of the Assistant Secretary for Planning and Evaluation, US Department of Health and Human Services | | | | | State | |
| **INFORMATION SYSTEMS FOCUS** | | | | | | | |
| Assessment of the Telecommunications Infrastructure in State Health Agencies | Centers for Disease Control and Prevention | | | | State | | |
| ASTHO Information Systems Survey | Association of State and Territorial Health Officials | | | | State<br>(Pending) | | |
| AVRHS Vital Statistics Automation Survey | Association for Public Health Statistics and Information Surveys | | | | State | | |
| Local Health Department Geographic information System | Centers for Disease Control and Prevention | | | | Local | | |
| NACCHO Electronic Communications Questionnaire | National Association of County and City Health Departments | | | | Local (sample) | | |

# 1994 Biennial Profile of Public Health Nutrition Services

## *Association of State and Territorial Public Health Nutrition Directors*

**SUMMARY**

The Association of State and Territorial Public Health Nutrition Directors (ASTPHND) has developed this survey instrument to assess the public health nutrition activities at the state health agencies. The goal of the project is to determine the status of nutrition programs implemented by the state health department. The instrument also allows the states to assess their progress in achieving Year 2000 nutrition objectives.

***BACKGROUND***

Aware of the benefits of nutrition programs, the members of ASTPHND were interested in conducting a query to determine what nutrition programs currently existed in state health departments and how they were organized. The query also enabled the states to determine the populations that were being reached and the populations needing more attention in nutrition services.

***FUNDING/ SUPPORTING AGENCY/ SPONSOR***

Maternal and Child Health Bureau, Health Resources Services Administration, Department of Health and Human Services, and the Association of State and Territorial Public Health Nutrition Directors (ASTPHND)

*Cost of data collection effort:* Data not provided

***PERIODICITY***

*Frequency of data collection*: Every three years

*Start date:* 1981

*Years collected:* 6 times (1981, 1984, 1987, 1990, 1993, 1996)

***SAMPLE***

*Geographic coverage*: All fifty states and U.S. territories

*Sample size:* Data available from all in the geographic coverage except Indiana, American Samoa, Guam, or the Northern Mariana Islands

***DESCRIPTION OF DATA ELEMENTS***

The survey consisted of five different sections:

- Organizational structure: Collects information on the structure of the public health nutrition program (i.e. centralized unit, matrix organization, or decentralized organization). It discusses the placement of the WIC program within this infrastructure. Finally, it requests information on any relations with for-profit or non-profit agencies.
- Scope of nutrition services: Collects information on the nutrition services (including consultation, technical assistance, education, policy development) in the specified program areas (i.e. adolescent health, child health, WIC, Medicaid, Minority Health, etc.)
- Data Systems: Collects information on systems in place in the state/territory, discusses the use of the data system in relation to nutritional services, and indicates whether data for the entire population are entered into the system. Data systems include vital statistics, CDC Pediatric Surveillance System, USDA WIC Participant Study, and Hospital Discharge Data.
- Year 2000 nutrition objectives: Collects data on which data indicators for the Year 2000 nutrition objectives are being collected and indicates whether a data system is being used to collect that data.
- Lists the major health problems that the health agencies are targeting in the next five years and discusses the emerging areas of concern for the agencies.

Data collected vary each year depending on the political environment and the data requested by the state and local public health nutrition program directors.

*METHODOLOGY*

*Data collection method:* Survey
*Format (of collection):* Hard copy
*Format (housing of data):* Hard copy and disk; data in Epi-Info
*Participation:* Voluntary
*Data/information flow:* Standard forms are completed each time by the Association of State and Territorial Public Health Nutrition Directors. The surveys are completed by officials directly associated with the public health nutrition programs. The completed forms were tabulated and compiled at the Office of the Association of State and Territorial Public Health Nutrition Directors.
*Data quality assurance:* *No* data quality assurance performed.
*Data analysis:* Descriptive, cross-sectional, and longitudinal data.

*STRENGTHS/ LIMITATIONS (METHODOLOGY)*

*Strengths:*

1. Comprehensive data collected on public health nutrition services.
2. Collection of data cross-sectional allows for state comparison.
3. Data assist the states in assessing the public health nutrition programs.

*Limitations:*

1. Data collected over the years vary depending on their political salience. Therefore, there is not always an opportunity for longitudinal comparison.

*REPORTS*

- Kaufman, M et al. "Nutrition services in state and local public health agencies: how do we measure up in 1987?" *Journal of American Dietetic Association 88: 1576-l 580,* 1988.

# Annual Monographs of Structure and Function of State EMS Departments

## *National Association of State EMS Directors*

**SUMMARY**

The National Association of State EMS Directors conducts a survey biennially which collects data on the structure and the function of each state's Emergency Medical Services (EMS) Department. The purpose of the survey is to continually reassess the department and to enable the association to keep apprised of the functions and activities of the EMS programs nationally. No survey instrument was available to profile the data collection source. The profile is therefore based on limited background data provided by the National Association of State EMS Directors.

***BACKGROUND***

The National Association of State Emergency Medical Services Directors (NASEMSD) was created in 1980 to enhance the effectiveness of EMS across all states. NASEMSD is a means of exchanging important data on EMS and is a vehicle to assist states in recognizing and achieving the best practices. States have assumed the leadership role in financing and regulating the local delivery of EMS. NASEMSD serves as the national leader, proving support services to state EMS programs and representing their interest at the national level.

To foster communications and information exchange across the nation and ultimately to increase the effectiveness of emergency services, NASEMSD has conducted surveys of state EMS programs. The survey covers the following components of EMS departments: administration, transportation, communications, disaster preparedness, evaluation/information systems, public information and education, personnel training, and facilities.

***FUNDING/ SUPPORTING AGENCY/ SPONSOR***

National Association of State EMS Directors

**Cost** *of data collection effort:* Data not provided

***PERIODICITY***

*Frequency of data collection:* Biennially

*Start dafe:* 1985

*Years collected:* 5 (1985, 1987, 1989, 1992, 1994)

***SAMPLE***

*Geographic coverage:* All fifty states and U.S. territories

*Sample size:* All fifty states, the District of Columbia, and the U.S. Territories (American Samoa, Guam, Mariana Islands, Puerto Rico, and the Virgin Islands).

***DESCRIPTION OF DATA ELEMENTS***

The survey is comprised of five major sections.

- Structure: Data are collected on the EMS hierarchy or chain of command within the different departments. The departments also provide data on the staffing by full-time equivalents (FTEs) and on the salaries of the full-time staff.
- Funding: States provide data on their funding sources and report on the allocation of these funds to the different aspects of the **EMS** departments. The funding source data correspond to the fiscal year in which the survey is being conducted.
- Areas of Responsibility: This segment provides a highly-detailed description of EMS department infrastructure. States report on who has jurisdiction in the EMS department for planning, regulatory, and training activities. States also provide information on the EMS Committees and Councils, these groups' major functions, and their influence on the administration of the program.

- Responder Health and Safety: Includes data on health and safety guidelines and their impact on the EMS department. Also, the states provide data on Emergency Vehicle Operator qualifications and EMS Unit safety belt use to ensure the safety of the workers and the patients.
- Statutes, Products, and Standards: Statues, products and standards that affect the daily workings of the EMS Departments.

METHODOLOGY

*Dafa collection method:* Survey
*Formaf (of collection):* Hard copy
*Format (housing of data)*: Electronic
*Participation:* Mandatory

*Data/information flow:* Standard surveys, developed by the National Association of State EMS Directors, are given to the states for completion of the data. It is uncertain as to what the packet contains since no survey instrument was available for profiling. The survey, once completed, is sent to the Association where the data are compiled and the report is constructed.

*Data quality assurance: No* data quality assurance done.

*Dafa analysis:* Descriptive, longitudinal data.

STRENGTHS/ LIMITATIONS (METHODOLOGY)

*Strengths*:

1. Surveys are collected from all state EMS departments and are comprehensive in their scope.
2. Analysis of ongoing data collection can track changes in expenditure and policy over time.
3. Details are gathered from all aspects of the EMS departments providing important insights their infrastructures and activities.

*Limitations:*

1. No survey instrument available so it is difficult to discern how detailed the data are that the survey collects.
2. Unclear as to whether the analysis of the data allows for cross-state comparisons.

REPORTS

- National Association of State Emergency Medical Services Directors. The EMS Office: Its Structure and Its Functions. (Carlsbad, CA: National Association of State EMS Directors), 1994.

# Association of State and Territorial Health Officials Reporting System
## *Public Health Foundation*

**SUMMARY**

The Association of State and Territorial Health Officials (ASTHO) Reporting System was administered annually from 1970 to 1993 by the Public Health Foundation (PHF) via surveys to state and territorial health agencies. The reporting system contained program and expenditure data for the 50 states, the District of Columbia, and the U.S. Territories (55 in total). A state-by-state inventory of expenditure data by program area, type of expenditure, and source of funds was presented for state health agencies (SHAs) and for local health departments (LHDs). All SHA programs were classified into the following program areas: personal health, environmental health, health resources, laboratory, and general administration.

The stated purpose of this inventory was to document the services, programs, and expenditures in the 50 states, the District of Columbia, and the U.S. territories in order to aid planning, evaluation, budgetary, and legislative activities at the national level. Users of the ASTHO Reporting System included the Congress, the Department of Health and Human Services, federal agencies, and ASTHO. The use of the data system by state governments for program planning and evaluation was a secondary objective. ASTHO Reporting System data were collected through Fiscal Year 1993 until the system was defunded by the federal government in 1994.

***BACKGROUND***

The ASTHO Reporting System was established in 1970 by the Association of State and Territorial Health Officials through a contract with the Department of Health, Education, and Welfare to provide Congress with accountability for 314(d) comprehensive public health services block grant.

From 1980 to Fiscal Year 1989, the ASTHO Reporting System data collection mechanism remained relatively constant; focusing capturing all activities performed by state public health departments. In the early 1990s, the Public Health Foundation, with assistance from a special Workgroup, revised the data collection mechanism to focus more on specific types of interventions that had proven outcomes. As a result of this revision effort, nine problem areas (e.g., infant mortality, adolescent pregnancy, cancer prevention, and STDs) were identified and the ASTHO data collection mechanism was altered to collect more outcomes-oriented information on these problem areas. The revised survey was implemented in Fiscal Year 1991 through Fiscal Year 1993.

***FUNDING/ SUPPORTING AGENCY/ SPONSOR***

***1991*** Inventory (of FY 1989 data) supported by the Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and the Maternal and Child Health Bureau, Health Resources and Services Administration.

Cost of data collection *effort:* $400,000 (Annual average)

***PERIODICITY***

***Frequency of*** data collection: Annual

*Start* date: 1970

***Years collected:*** 24 (1970 - Fiscal Year 1993)

***SAMPLE***

| | |
|---|---|
| *Geographic coverage:* | Fifty states, the District of Columbia, and American Samoa, Guam, Puerto Rico and the Virgin Islands |
| Sample *size:* | All 50 states and District of Columbia surveyed; response rate varied by year but was generally close to 100% |

***DESCRIPTION OF DATA ELEMENTS***

Expenditure data are disaggregated by program area, select program category, and source of funds. Data on organization capacity and community planning and service delivery are also captured. A detailed list of data elements included in the FY 1989 inventory is presented below:

- Expenditures by state health agencies and by local health departments:
  - by type of expenditure (e.g. direct, intergovernmental transfer to local health department)
  - by program area (personal health, environmental health, health resources, laboratory, general administration)
  - by source of funds (e.g. federal, state, local, fees)

- Maternal and Child Health Services and Prevention Block Grant expenditures by state health agencies, by program area and selected program category
- Organizational characteristics and responsibilities of state health agencies (e.g. freestanding independent agency or component of superagency; lead environmental agency)
- State health agencies designated as lead environmental agency for selected environmental health statutes
- Percentage of state population served by state health agencies and by local health departments (includes number of local health departments by state)

Prior surveys contained additional detail regarding the scope and nature of services provided.

The Public Health Foundation's classification system for state health agency (SHA) expenditure data was initially designed in 1974. The goal of the classification system is to be comprehensive enough to include all SHA programs and flexible enough to accommodate variation. The system classifies public health programs into five *program areas:* personal health, environmental health, health resources, laboratory, and general administration. Within the first four program areas, programs are further disaggregated into *program categories.* Where appropriate, program categories are divided into *program subcategories.* A fourth level of detail is used to capture the content of special studies or programs. The classification system uses a four digit code to capture the increasing levels of program detail:

1. *program* area (personal health, environmental health, health resources, laboratory, and general administration)
2. *program category* within an area (e.g., personal health further subdivided into supporting personal health services, maternal and child health, communicable disease control. dental health, and chronic disease)
3. *program subcategories (e.g.,* maternal and child health further subdivided into maternal and child health, family planning, WIC, and perinatal care)
4. further level of detail, special studies (e.g., age group, population, disease condition)

All state-by-state expenditures are categorized by the five program areas. Program categories and subcategories may vary by state.

METHODOLOGY

| | |
|---|---|
| *Data collection method:* | Survey |
| *Format (of collection):* | Hard copy |
| *Format (housing of data):* | Electronically on mainframe tapes. Some high-level aggregate data for trending expenditures over time is maintained on a PC-based database. |
| *Participation:* | Voluntary |

*Data/information flow:* The head of each SHA was asked to designate three staff members as primary contacts in the data collection effort: a project coordinator, data manager, and fiscal coordinator. The project coordinator evaluated and coordinated the reporting forms completed by program directors and state health agency staff. The data manager and fiscal coordinator worked to ensure completeness, accuracy, and consistency of SHA data. Completion of the survey took approximately three months by the state. Once the surveys were returned to PHF, PHF staff reviewed the surveys and contacted the states with any remaining questions. During the 1970s, PHF sponsored workshops for state contacts on how to complete the survey.

*Data quality assurance:* Data quality assurance includes a comprehensive review by the Public Health Foundation upon receipt of SHA data. The PHF review consists of computer edits for consistency, completeness, and accuracy of data and consistency with historical knowledge of SHAs. Expenditure data are organized using the four digit code described above. Once the data has been reviewed by PHF, computer listings are sent to all SHA project coordinators for verification. Upon completion of the PHF review process and SHA verification, a final database is produced.

*Data analysis:* Descriptive and cross-section. Estimation techniques used for missing state and local health department data.

STRENGTHS/ LIMITATIONS (METHODOLOGY)

*Strengths:*

1. Annual survey can provide longitudinal data.
2. Program areas allow for general state-by-state expenditure comparisons.
3. Detailed system of program classification provided flexibility to respondents in reporting according to their own program and accounting structure.
4. Quality assurance mechanisms are used.
5. In some cases, data may be disaggregated to local health department level.

*Limitations:*

1. Public health expenditures by other state agencies or community organizations outside the state health department are excluded. Expenditure and program data on local health departments is reported to PHF by state health agencies, not directly by local health departments.
2. The absence of a particular program category or sub-category may not reliably indicate program content since programs may be classified differently by state; state-by-state expenditure comparisons by program category, sub-category, or further level of detail may not be highly accurate.

3. Categorical nature of expenditure categories makes it difficult to distinguish the types of services being funded.

***REPORTS***

- *Public Health Agencies 1991: An Inventory of Programs and Block Grant Expenditure*
- *1991 Public Health Charfbook:* companion to *Public Health Agencies 1991*
- *1991 Prevention Block Grant Charfbook:* data for FY 1990 Prevention Block Grants

# County Health Policy Project

## *National Association of Counties Research Foundation, Inc. and the Brandeis University Institute of Health Policy*

**SUMMARY**

The County Health Policy Project (CHPP), a collaborative effort between the National Association of Counties Research Foundation, Inc., and Brandeis University, was funded by the W.K. Kellogg Foundation to help county governments address major health and financial issues. One major component of the project was the collection of primary data on health care systems and problems at the local level. The project developed a series of surveys to gather information on the county role in health service delivery. Data collection for the project was implemented in three survey formats.

The first phase included the fielding of an opinion survey to the chair of the county commission or board, the county administrative officer, and the county health official. The opinion survey included questions concerning health care problems facing the community and a few general questions on county support for the public health department and indigent care. The second survey included a detailed seven-section survey on county services and expenditures for various programs and services. The third survey included questions regarding the county's fiscal support for health care including special taxes/assessments levied and/or collected for health care, participation in Medicaid, and estimates of county payments for indigent care.

**BACKGROUND**

This County Health Policy Project (CHPP), a collaborative effort of the National Association of Counties and Brandeis University's Institute for Health Policy, was funded in 1989 by the W.K. Kellogg Foundation to provide a develop a greater understanding of the health care services and expenditures at the local level. The data from the surveys provided an in-depth look at the complexity of health care responsibilities at the local level.

**FUNDING/ SUPPORTING AGENCY/ SPONSOR**

The project was conducted by the National Association of Counties Research Foundation and funded by the W.K. Kellogg Foundation, Inc.

Cost *of data collection effort*: Data not provided

**PERIODICITY**

*Frequency of data collection:* One time survey

*Start date:* *1989*

*Years collected:* 1989 - 1992 (1 year, three phases)

**SAMPLE**

*Geographic coverage*: All counties in the United States.

*Sample size:* For the first (opinion survey) survey, the survey was mailed to appointed officials of the 3,110 counties in the country. The second surveys on programs were sent to a sample of 950 counties, including all counties with populations above 500,000 and 25 percent of the remaining counties (excluding Connecticut, Rhode Island, and the US territories) stratified by state and population size. The third survey was sent to all 3,110 counties in the country.

***DESCRIPTION OF DATA ELEMENTS***

The County Health Policy Project was implemented in three phases with three different sets of surveys which are discussed below:

- County Government Health Care Opinion Survey: This survey was fielded to the chair of the county commission or board, **the county administrative officer, and the county health official. The opinion survey included questions concerning health care problems facing the community and a few general questions on county support for the public health department and indigent care.** The survey collects data on the following items:
    - Authority of the county in planning and managing health care activities
    - Five most pressing health problems facing the respondents community (i.e. lack of prevention programs, HIV/AIDS, inadequate prenatal care, health care needs for the elderly)
    - Five most pressing health problems facing county governments according to the respondents
    - Recent trends in their department (i.e. decreasing/increasing budget for public health, greater demand for primary health care services, growth or decrease in the amount of indigent care rendered by the county)
    - Additional comments
- County Government Health Care Expenditures and Programs Survey: These surveys were sent to a sample of 950 counties, including all counties with populations above 500,000 and 25 percent of the remaining counties (excluding Connecticut, Rhode Island, and the US territories) stratified by state and population size. The survey requested information on the following components of the county health departments: Public Health Services, Environmental Health Services, Mental Health Services, Substance Abuse Services, Health Services for the Non-Institutional Elderly/Disabled, EMS, and Correctional System Health Care. The following data elements were collected on the preceding components of the county health departments:
    - Demographics: Numbers and percentages of people from different populations and age groups that received services
    - Program Services: Data on whether the listed services are rendered by the county, who funds the services, under what authority does the county deliver the services, the reason for providing the services (i.e. state mandate or county option), any legal requirements, the service providers (i.e. county employees, contracted employees, volunteers)
    - Revenue Information: Data on the sources of funding (i.e. county funds, Medicaid/Medicare, third-party, federal funds, state funds, and municipal funds)
    - Expenditures information: Data on actual expenditures, estimated expenditures, and units of services if available for each of the listed services in the programs
    - Staffing data on the paid and voluntary employees
    - Service requirements or controls independent from state or federal requirements
- County Health System Survey: This survey was sent to all counties in the United States and requested information on the following data elements:
    - Budgetary data: county total budget, county total health care budget, expenditures on health care for the indigent, sources of funding (i.e. existence of a general assistance/general relief medical program), county's role in funding the state Medicaid program (voluntary or mandatory)
    - Data on special programs to the following subpopulations: HIV/AIDS patients, Migrants, Refugees, and Homeless

- Data on County Owned Facilities: Number of facilities, the arrangement **between the county and state (i.e. does the county manage the facility or is there a private/public partnership), management, administrators and contact people at the facilities**
- **Data on Non-County** Owned Facilities: Ownership of these facilities, county subsidy to their operating budgets, amount of county funds used to pay for services at these facilities, total county payments, and patient days represented by these payments

| | | |
|---|---|---|
| METHODOLOGY | *Data collection method:* | Three sets of surveys |
| | *Format (of collection):* | **Hard copy** |
| | *Format (housing of data):* | Hard copy |
| | *Participation:* | Voluntary |
| | *Data/information flow:* | The County Health System Survey and County Government Health Care Opinion Survey were mailed to all the county health departments. The nonrespondents received one follow-up letter from the supporting agencies. The County Government Health Care Expenditures and Programs Survey was sent to the selected counties and these counties also received follow-up letters. The completed surveys were returned to the National Association of Counties Research Foundation, Inc., where the data were analyzed. |
| | *Data quality assurance:* | *No* discussion of any data quality assurance measures taken to ensure the validity of the data. |
| | *Data analysis:* | Descriptive and cross-sectional data |

STRENGTHS/ ***LIMITATIONS*** (METHODOLOGY)

*Strengths*:

1. This project provides detailed, comprehensive data on the overall status of the county health departments, on particular services and programs within the project, and on health problems facing the different counties.
2. The report that summarizes the data provides counties with a better understanding of their problems in relation to other counties and allows for comparison of programs and services.

*Limitations*:

1. The County Government Health Care Expenditures and Programs Survey was only completed by a limited number of counties and prevents a comprehensive, national comparison.
2. No significant quality assurance measures were taken to assess the validity of the data.

REPORTS

- Uyeda, MK et al. (1992). "On the Front Line: The County Government Role in Health Service Delivery" (Washington, D.C.: National Association of Counties and Brandeis University).

# National Profile of Local Health Departments

## *National Association of County and City Health Officials (NACCHO) and Centers for Disease Control and Prevention*

***SUMMARY***

The National Association of County and City Health Officials (NACCHO), in collaboration with the Centers for Disease Control and Prevention (CDC)'s Public Health Practice Program Office, surveys local health departments (LHDs) as part of an ongoing effort to provide a descriptive report of the activities, capacities, and needs of LHDs.

The purpose of this data collection effort is to enhance the understanding of the activities and capacity of LHDs in the nation's health system given that LHDs have the unique responsibility to assess the health status, assure the health of, and develop policy to protect the health of the residents of a jurisdiction. The data base provides a baseline description of LHDs and a surveillance database from which to conduct longitudinal analyses, including analyses of the impact of changes in U.S. health policy. In addition, it provides a vehicle for assessing progress towards Healthy People 2000 Objective 8.14 which reads as follows: "Increase to at least 90 percent the proportion of people who are served by a local health department that is effectively carrying out the core functions of public health." Information from the database is also used to facilitate contact with LHDs throughout the country.

Based on recommendations from an advisory Work Group, the 1996 NACCHO Profile study was revamped in Summer 1996. NACCHO will develop a smaller "core" questionnaire which will be used to collect basic information on local health departments and to create a directory of local health departments. The survey will be fielded to all local health departments between November and December 1996. This study will also be used to develop sampling frames for future studies of local health departments which will be used to field larger, more detailed supplemental issue-specific questionnaires.

***BACKGROUND***

The project originated in 1989 as an adjunct to the Assessment Protocol for Excellence in Public Health (APEX*PH*) project, and the first National Profile study was published in 1990. A second study was conducted in 1992-1993, which included more detailed information, and the results were published in 1995. The project is guided by a Work Group representing a variety of public health organizations. The final questionnaire was 20 pages in length (the 1989 questionnaire was six pages in length).

***FUNDING/ SUPPORTING AGENCY/ SPONSOR***

Centers for Disease Control and Prevention, Public Health Practice Program Office and the National Association of County and City Health Officials.

***PERIODICITY***

| | |
|---|---|
| *Cost of data collection effort:* | Data not provided |
| *Frequency of data collection:* | Three year cycle |
| *Start date:* | *1989* |
| *Years collected:* | 3 (1989, 1992-93, 1996 (in process)) |

*SAMPLE*

*Geographic coverage:* Forty-nine states and the District of Columbia (DC not included in 1989 Profile). Rhode Island was not included in any Profile Study.

*Sample size:* 100 percent sample, but compliance varies by year. In 1990, 2269 local health departments responded to the survey. For the 1992-1993 Profile, 2079 local health departments responded. The 1996 Profile "core" will survey all LHDs and the longer survey will be sent to stratified random sample(s).

*DESCRIPTION OF DATA ELEMENTS*

LHD data are presented in the following general areas: overview, total annual expenditures, top agency executive, personnel, policy and planning, data collection, and agency services. In 1992-l 993, an occupational safety and health section was included in the questionnaire. Specific data elements under each heading are as follows:

- overview of local health departments
- type of jurisdiction (county, city/county, town etc.)
- total annual expenditures
- characteristics of top agency executive (e.g. sex, race/ethnicity, education)
- staffing levels and characteristics (e.g. number of staff, occupations)
- policy and planning activities (e.g. program or organizational planning techniques like APEXPH or Healthy People 2000)
- data collection activities (e.g. types of vital statistics collected, data sets maintained)
- agency services (e.g. laboratory services offered, immunizations offered, inspections/licensing performed by the health department)
- occupational safety and health (e.g. occupational safety and health services offered by the LHD, occupational safety and health staff and equipment)

The definition used by NACCHO for a local health department in all Profile studies is as follows: *an administrative or service unit of* local or *state government, concerned with health, and carrying some responsibility for the health of a jurisdiction smaller than a state.*

This definition was adapted from one used in a 1974 study of the capacity of LHDs to carry out the core functions of public health and from the Association of State and Territorial Health Officers' (ASTHO) definition. The NACCHO definition is less restrictive than either of these because it does not include a requirement that an LHD have at least one full-time employee. To further verify LHDs, each state health agency was contacted. In addition, some modifications in the inclusions and exclusions of LHDs varied between NACCHO's two studies to reflect system changes (e.g. increases in LHDs) and new understandings of the public health structures on a local level. As a result, the sample frame varies somewhat between the two studies.

*METHODOLOGY*

*Data collection method:* Survey

*Format (of collection):* Hard Copy

*Format (housing of data):* Electronic

Participation: Voluntary

*Data/information flow:* Questionnaires are mailed to LHDs. In 1992-1993, non respondents received two additional mailings and phone calls. Questionnaires were first returned to NACCHO for tracking and then sent to CDC for tabulation

Data *quality assurance:* In 1992-l 993, CDC was responsible for editing and cleaning the data (this will be NACCHO's responsibility for the 1996 survey). CDC staff used the study definition of LHDs to eliminate duplicates and remove no longer existing units. Formal reliability testing for the whole database was not conducted; however, evidence suggests a high degree of reliability where it has been tested.

*Data analysis:* Univariate analysis, descriptive, and cross-sectional analyses have been performed. Data are used for reports which provide baseline descriptions of local health departments. Initially, data collected in 1990 was used for developing the APEX*PH* tool.

STRENGTHS/ **LIMITATIONS** (METHODOLOGY)

*Strengths*:

1. Comparable data are available from two studies so far and a third is in process, which will make longitudinal analysis possible.
2. Capacity measures are provided in the areas of human resources, capital resources, fiscal resources, information systems, organizational capacities, and community planning and service delivery.
3. Survey is implemented and designed by the member organization for local health departments; therefore, much of the information collected by the survey allows LHDs to compare their resources with those of their peers.

*Limitations*:

1. Analyses to date have not disaggregated State level findings from National findings.
2. Comparability with surveys from other organizations is hampered by a lack of common definition of LHDs.
3. Sample frames also differ somewhat between the first and second studies, limiting longitudinal comparability.
4. Refinements in questions and changes in terminology between the first and second study somewhat limit longitudinal comparability.
5. No definitions or criteria were provided for reporting services, and the scope, quality, and quantity of services were not verified.

REPORTS


- NACHO. 7990 *National Profile of Local Health Departments*
- NACHO. *National Directory of Local Health Departments, 7991*
- NACCHO. 1992-1993 *National Profile of Local Health Departments*
- Schade, CP. "A Preliminary Comparison Between Local Public Health Units in the Canadian Province of Ontario and in the United States". *Public Health Reports* 110: 35 - 41, 1995.
- NACCHO. 1992-1993 *National Profile of Local Health Departments Serving Big Cities*
- NACCHO Special Report on Planning Activities, NACCHO News MMWR, CDC, "Select Characteristics of Local Health Departments, U.S. 1992-1993." 43(45): 839-843.
- Mullet et al. "Descriptive Epidemiology of Local Public Health Systems." *American Journal of Preventive Medicine,* Supplement 11(6), Nov./Dec. 1995.

# National Survey of Local Boards of Health
## *Centers for Disease Control and Prevention and National Association of Local Boards of Health*

**SUMMARY**

The Centers of Disease Control and Prevention (CDC), in collaboration with the National Association of Local Boards of Health (NALBOH), is conducting a nationwide survey of local boards of health. The purpose of the survey is to document the role of local boards of health in developing public health policy at the local level and to identify areas in which local boards may need assistance to carry out their responsibilities. It is anticipated that the results of the survey will be used by local boards of health to compare their its roles, responsibilities, authorities, capacities and needs with other local boards around the nation.

**BACKGROUND**

During the development of the Fiscal Year 1992-93 National Association of County and City Health Officials (NACCHO) survey, a section of the survey was devoted to the identifying local boards of health and their responsibilities as they related to local health departments. Using a mailing list generated from the NACCHO survey, the CDC and NALBOH distributed the National Survey of Local Boards of Health in November 1995. CDC has received approximately half (1,100-l ,300) of the surveys mailed and is in the process of entering the data for analysis.

**FUNDING/ SUPPORTING AGENCY/ SPONSOR**

The Centers for Disease Control and Prevention; National Association of Local Boards of Health

*Cost of data collection effort:* Data not provided

**PERIODICITY**

*Frequency of data collection*: One time survey

*Start dafe:* November 1995

*Years collected:* *1 (1995)*

**SAMPLE**

*Geographic coverage:* All identified local boards of health in the fifty states

*Sample size:* Received approximately half (1,100-l ,300 or 43 percent) of the surveys mailed thus far.

**DESCRIPTION OF DATA ELEMENTS**

Most data elements are descriptive in nature, but defined answers are listed for checking yes or no. Questions are separated into five areas:

- Demographics of jurisdiction (e.g. geographic area, population size, racial/ethnic composition)
- Telecommunications Infrastructure (e.g. agency director's access to personal computers and electronic mail, board of health access to satellite equipment)
- Roles, Responsibilities, and Authorities (e.g. board of health statutory functions, board of health jurisdiction for environmental and mental health programs)
- Composition, Organizational Structure, etc. (e.g. number of board members, length of terms, formal relationships between boards and other community organizations)
- Concerns and Needs (e.g. degree to which the board feels it need training, information, or technical assistance, areas of expertise for board members).

| | | |
|---|---|---|
| METHODOLOGY | *Data collection method:* | *Survey* |
| | *Format (of collection):* | Hard copy |
| | *Format (housing of data):* | Electronic |
| | *Participation:* | Voluntary |

*Data/information flow:* The CDC mailed the surveys to local boards of health based on a mailing list generated by the NACCHO survey. Local liaisons have assisted NALBOH and CDC in encouraging local health departments to fill out the survey.

*Data analysis*: Descriptive, cross-sectional. CDC is still in the process of collecting the surveys for analysis.

STRENGTHS/ LIMITATIONS (METHODOLOGY)

*Strengths:*

1. Descriptive information on local boards of health collected for the first time.
2. Survey identifies needs of the local health departments.
3. Survey has OMB approval.

*Limitations:*

1. One time survey can serve as a reference point to assess changes over time, but does not itself answer questions about changes.
2. Survey often filled out by local health departments, therefore the data may not be from the board of health perspective.

REPORTS

Survey data are still being collected.

# Protocol for Surveying Epidemiological Surveillance Capacity of State Health Departments
## *Council of State and Territorial Epidemiologists*

**SUMMARY**

The Council of State and Territorial Epidemiologists developed this protocol in conjunction with the Centers for Disease Control and Prevention (CDC) in order to assess the epidemiological capacity of state and territorial health agencies. An assessment of the epidemiological capacity enables the agencies to develop action plans for preserving and strengthening their capacity to cope with incidence, distribution, and control of acute and chronic diseases and health conditions related to the environment and behavioral risk factors within their demographic population. This survey presents a detailed protocol for collecting data that depicts the organization's current epidemiological capacity. The purpose of this protocol was to facilitate an assessment, not an evaluation, of the epidemiological capacities of state and territorial health agencies.

**BACKGROUND**

The Council of State and Territorial Epidemiologists worked in conjunction with the Centers of Disease Control and Prevention (CDC) to develop this protocol for assessment of epidemiological capacity. The Council of State and Territorial Epidemiologists defined three essential broad epidemiological functions: (1) monitoring and assessing the health status (and its determinants) of the constituency; (2) managing health crises by responding to emergencies and outbreaks; and (3) providing the science for policy decisions related to public health. To further detail the epidemiological functions, the Council of State and Territorial Epidemiologists determined the following "Twelve Component Epidemiologic Capacities":

1. Operate a surveillance system;
2. Conduct supplemental surveillance and assessments of health determinants;
3. Evaluate surveillance and assessment activities;
4. Detect outbreaks, high endemic levels, or increasing incidence disease (for chronic disease, detect health needs);
5. Initiate crisis/needs response and situation analysis;
6. Conduct crisis/needs intervention;
7. Conduct internal and public communications and relations;
8. Conduct post-interview review of procedures;
9. Recognize issues for which new or revised policy may be needed;
10. Assemble and interpret information;
11. Formulate intent, goal and strategy of new policy; and
12. Communicate this information to decision-makers.

These epidemiological functions were derived from related capacities compiled in the current public health literature. The protocol was created in order to assess the SHD's ability to perform these essential functions.

**FUNDING/ SUPPORTING AGENCY/ SPONSOR**

Council of State and Territorial Epidemiologists; Centers for Disease Control and Prevention (CDC)

Cost of data *collection effort:* Highly variable depending on the organizational scope and objectives of each assessment

**PERIODICITY**

Frequency of *data collection:* Initial protocol guide was sent out in winter 1995

*Start date:* *1996*

*Years collected:* Data collection currently **in process**

**SAMPLE**

*Geographic coverage*: All states and territorial health departments

*Sample size:* *59* state and territorial health departments

*DESCRIPTION OF DATA ELEMENTS*

The questionnaire has three sections of data collection which include:

- Data on indicators for the whole range of the twelve epidemiological capacities. These data are collected through interviews with directors of the program or epidemiologists in the unit and through responses to "yes/no" questions on the questionnaire. Each subsidiary unit is to complete the questionnaire independently and the data, at the end, is to be presented in tabular form.
- Log of selected data about reports, cases of outbreaks, or crises. These data highlight the time interval between selected important events in the onset, reporting, and follow-up of reported cases of illness and the completeness of case investigations. The questionnaire recommends abstracting all reported cases or abstracting a systematic representation of the cases where over twenty-five cases were noted.
- Selected program information about the organization and function of unit being assessed. Data are collected based on interviewing the program director and selected staff within each organizational unit.

*METHODOLOGY*

*Data collection method:* Questionnaire
*Format (of collection):* Hard Copy
*Format (housing of data):* Hard Copy
*Participation:* Voluntary

*Data/information flow:* Council of State and Territorial Epidemiologists staff send the questionnaires to the State Health Departments where initially the questionnaire is completed by the individual organization units independently. Following the initial completion of the questionnaire, the guide recommends the officials participating in the performance review convene to assess the epidemiological capacities. The data are recorded and maintained within the state health department with interim policy solutions for future assistance.

*Data qualify assurance:* Not applicable

*Data analysis:* Descriptive data of the current epidemiological capacities.

*STRENGTHS/ LIMITATIONS (METHODOLOGY)*

*Sfrenafhs:*

1. Data provides a detailed assessment of the epidemiological capacities, identifying strengths and weakness within the state health department.
2. Definitions for the essential epidemiological functions are included in the survey materials.
3. Questionnaire discusses potential causes and remedies of gaps in the state health departments capacities.
4. Coordination among the differing organizational units minimizes the possibility of error in assessment.
5. The assessment procedure is designed to permit flexibility. Within a cohesive organizational unit, the procedure is intended to be used for periodic self-assessment.

*Limifafions:*

1. Questionnaire serves merely as a diagnostic tool for assessing capacity; there are no evaluations of the effectiveness of the organization or functional units within the state health departments.
2. Data are not maintained in a central database.
3. Only on year of data are being collected, thus there is no opportunity to measure changes in capacity over time.

*REPORTS*

Final report by the Council of State and Territorial Epidemiologists to the Centers of Disease Control and Prevention to evaluate this guide (July 1, 1996).

# Survey of State Chronic Disease Epidemiology Capacity
## *Epidemiology and Science Committee of the Association of State and Territorial Chronic Disease Program Directors*

**SUMMARY**

The Association of State and Territorial Chronic Disease Program Directors and the National Center for Chronic Disease Prevention and Health Promotion developed a survey to collect data on state health departments' ability to do chronic disease epidemiology. The survey results will have three uses: 1) identifying areas where health departments need help in developing their epidemiological capacity; 2) permitting states to compare themselves to one another and make a case for the resources they need to stay abreast of current epidemiological practice: and 3) measuring change over time and the impact of various interventions to improve epidemiological capacity.

**BACKGROUND**

Numerous surveys have attempted to count epidemiologists in state health agencies as one measure of the extent to which epidemiology is playing a role in public health practice. No surveys have attempted to measure epidemiology capacities, other than staffing, that contribute to a health departments ability to do its job effectively and efficiently.

Members of ASTCDPD and the CDC were interested in obtaining a fuller picture of epidemiological capacity in the area of chronic diseases because such information would help states identify their needs and strengths. Improved chronic disease capacity is expected to translate into more effective disease prevention and control by state health agencies. This interest in obtaining more information on epidemiological capacity led to this survey that measures that capacity.

**FUNDING/ SUPPORTING AGENCY/ SPONSOR**

Epidemiology and Science Committee of the Association of State and Territorial Chronic Disease Program Directors and the National Center for Chronic Disease Prevention and Health Promotion

Cost of data collection *effort*: Data not provided

**PERIODICITY**

*Frequency of data* collection: One time survey
*Start date*: 1994
*Years collected*: *1 (1994)*

**SAMPLE**

*Geographic coverage*: All fifty states and U.S. territories
Sample *size*: Same as above

**DESCRIPTION OF DATA ELEMENTS**

The survey consists of four main sections with yes and no questions.

- Use of Data for Planning (e.g. are there set chronic disease objectives; has a state epidemiologist worked on a formal evaluation of a state chronic disease program in the past 12 months; do epidemiologists usually make substantial contributions to the background and needs section of CD program grant applications)
- Human Resources (e.g. education background of state epidemiologist; staffing levels for epidemiologists)
- Tools for Analysis (e.g. computer equipment for state epidemiologist; software and internet access; access to various data sets)
- Translation and Dissemination of Results (e.g. published surveillance reports; presentations on chronic diseases; Health Department press releases of chronic disease data)

*METHODOLOGY*

*Data* collection method: Survey
*Formaf (of collection):* Hard copy
*Format (housing of data)*: Hard copy and electronic
Participation: Voluntary

*Data/information flow*: A survey of state chronic disease program directors in May 1994 identified one chronic disease epidemiology contact in each state and the District of Columbia. The survey on state chronic disease epidemiology capacity was mailed to and completed by these individuals, all of which were state epidemiologists or chronic disease program directors. The nonrespondents were contacted via the telephone and e-mail. The completed surveys were returned to ASTCDPD where the data were collected and analyzed.

*Data quality assurance: No* major quality assurance performed

*Dafa analysis*: Data were aggregated for final report on results

*STRENGTHS/ LIMITATIONS (METHODOLOGY)*

*Strengths:*

1. The survey is targeted specifically at chronic disease epidemiology on at the state level.
2. One hundred percent response rate gave ASTCDPD a comprehensive view of the status of state chronic disease epidemiology programs.

*Limitations*:

1. Yes/No question format does not capture details on variations in state programs.
2. Survey was conducted only once and therefore prevented any longitudinal analysis.

*REPORTS*

- *Association of State and Territorial Chronic Disease Program Directors.* A Survey of State Capacity in Chronic Disease Epidemiology, 1995.

# Survey on State Health Agency Chronic Disease Programs
## *Association of State and Territorial Chronic Disease Program Directors*

**SUMMARY**

The Association of State and Territorial Chronic Disease Program Directors (ASTCDPD) developed a survey to collect data on state health agency chronic disease programs. The survey results will have three uses: 1) identifying areas where health departments need help in developing their epidemiological capacity; 2) permitting states to compare themselves to one another and make a case for the resources they need to stay abreast of current epidemiological practice; and 3) allowing the Association to measure change over time and the impact of program reforms on the capacity to control and prevent chronic diseases.

**BACKGROUND**

The Association of State and Territorial Chronic Disease Program Directors (ASTCDPD) constructed this survey in order to stay up-to-date on status of their programs with regards to their staffing needs, their funding, and the program initiatives. This survey also enables the Association to monitor the programs and ensure that the program initiatives and goals are being met or that the programs are progressing smoothly.

**FUNDING/ SUPPORTING AGENCY/ SPONSOR**

Association of State and Territorial Chronic Disease Program Directors (ASTCDPD); and Centers for Disease Control and Prevention (CDC)

*Cost of data collection effort:* Data not provided

**PERIODICITY**

*Freauencv of data collection:* First pilot survey collected FY 1990 data, second pilot survey collected data for FY 1994.

*Start date:* *1990*

*Years collected:* *2* (1990 and *1994)*

**SAMPLE**

*Geographic coverage:* All fifty States and U.S. Territories

*Sample size:* *39* states and territories

**DESCRIPTION OF DATA ELEMENTS**

The survey form consists of five different segments.

- Resource Assessment: States report expenditures for their chronic disease activities by program area (i.e. cancer, arthritis, high blood pressure, etc.), by function (i.e. surveillance, epidemiology, outreach, etc.) and by the source of funds (i.e. federal funds from preventive block grant, general federal funds, state funds, and other sources). The states report staffing levels, including full time equivalents and contract staff. If data are unavailable, the budget expenditures should be estimated from the accessible reports.
- Plans and Priorities: Agencies report on the program areas for which the health department has developed a state plan and describes health agency programs that are coordinated with other agencies. This section also includes data on its chronic disease priorities, its risk factor priorities, and its priority target populations for chronic diseases.
- Linkages: States indicate those program areas where the agency or state health department has a programmatic relationship with a coalition or council and the reason for this relationship.
- Laws, Policies, and Regulations: States report on the existing laws and regulations that govern their activities within specific program areas.
- Needs: In the final segment, the states have the opportunity to make requests for instruments or data that would improve their state chronic disease program.

*METHODOLOGY*

*Data collection method:* Survey
*Format (of collection):* Hard copy
*Format (housing of data):* Hard copy and electronic
*Participation:* Voluntary

*Data/information flow*: Standard surveys, developed by ASTCDPD, were given to chronic disease program directors and staff in the participating states. Each packet included: instructions, and an overview of the packet; worksheets for organizing the data collection process; and a form for comments and suggestions. Upon completing the form, the states sent the data to ASTCDPD where the data for FY 1994 is currently being analyzed and compared longitudinally.

*Data quality assurance: No* data quality assurance, data from states are used directly.

*Data analysis:* Descriptive, longitudinal, and cross-sectional data.

*STRENGTHS/ LIMITATIONS (METHODOLOGY)*

*Strengths:*

1. Analysis of ongoing data collection can track changes in expenditures over time.
2. Detailed forms enable the program directors to determine program areas that need greater attention.
3. The survey provides ASTCDPD a mechanism for understanding the needs of program directors.

*Limitations:*

1. Data elements are not defined by a broader framework which would allow for the data to be used for broader public health infrastructure assessment.

*REPORTS*

None to date.

# Synopsis of State Dental Public Health Programs
## *Association of State and Territorial Dental Directors*

**SUMMARY**

The Association of State and Territorial Dental Directors (ASTDD) developed this synopsis of State Dental Public Health programs which presents a detailed description of the current status of the dental programs within each state. The mission of the dental programs are to improve the oral health of the nation through intervention strategies designed to prevent or limit the prevalence of oral diseases while broadening access and removing barriers to essential dental care. ASTDD tracks the programs in order to keep apprised of the changing programs and to ensure that the programs are continually making progress in their efforts to improve the oral health of the nation. The tracking of the programs annually also enables ASTDD to quickly observe any changes in funding sources and expenditure allocations.

**BACKGROUND**

The tracking of state dental public health programs was initiated by members of the Association of State and Territorial Dental Directors (ASTDD). Currently, ASTDD is working with the Centers for Disease Control and Prevention to develop a survey instrument to formalize the data collection process. ASTDD hopes to determine a core set of data that are important to State and Territorial Dental Directors. It is anticipated that the survey will be implemented at the annual meeting in 1997.

**FUNDING/ SUPPORTING AGENCY/ SPONSOR**

Association of State and Territorial Dental Directors; Centers for Disease Control and Prevention

Cost of *data collection effort:* Data not provided

**PERIODICITY**

Frequency of *data collection:* Annually
*Start* date: 1993
*Years collected:* 3 (1993, 1994, 1995)

**SAMPLE**

*Geographic coverage*: All fifty states
*Sample size:* All states that have a state dental director

**DESCRIPTION OF DATA ELEMENTS**

Each state presents data on their mission, their staffing, their funding (broken down into state, federal, and other), and a detailed description of their major program activities or programs to be completed or implemented during fiscal year 1996.

Some states also incorporate their targeted populations and an estimate of funds distributed to the dental programs.

**METHODOLOGY**

*Data collection method:* Questionnaire
*Format (of collection):* Hard copy or electronic
*Format' (housing of data)*: Hard copy
*Participation*: Voluntary

*Data/information flow:* Surveys are fielded to the dental programs within each state's health departments and data are compiled by health officials within the dental program. The data are then received by the Association of State and Territorial Dental Directors where the synopsis is constructed.

*Data quality assurance:* *No* quality assurance is performed. The data on state dental programs are taken at face value by the organizations.

*Data analysis*: Descriptive data with summaries of the staffing, funding, and services of state dental programs.

***STRENGTHS/ LIMITATIONS (METHODOLOGY)***

*Strengths*:

1. Data are collected from the majority of state dental programs.
2. Detailed report of the current programs allows the directors to understand what other states are doing in this area

*Limitations*:

1. Data are not used to evaluate the dental program or assess the capabilities of the dental programs.
2. No longitudinal data readily accessible to determine trends in spending over time.

***REPORTS***

- Evans, CA. "A national survey of dental public health services in local health departments: a report of findings". *Journal of Public Health Dentistry* 44(3): 112-119, 1984.

# Who's in Charge? 50-State Profile of Environmental Health and Protection Services Bureau *of Health Professions*

***SUMMARY***

The Bureau of Health Professions worked in conjunction with the Johns Hopkins University (JHU) to examine the infrastructure of state environmental health and protection services. The goal of the project was to conduct a comprehensive analysis of the structure, functions, and funding of state environmental health and protection services, and to examine the impact of major federal environmental statutes on the organization of the state infrastructure. The project aimed at identifying key organizational structures common to all states despite the diversity of state environmental health and protection departments and agencies.

***BACKGROUND***

With the emergence of the U.S. Environmental Protection Agency and state environmental agencies, the environmental responsibilities of traditional public health agencies dramatically changed. Many environmental agencies were reorganized or incorporated into the emerging environmental regulatory agencies. However, according to a report published by the Institute of Medicine in 1988, the reorganization led to fragmented responsibility, lack of coordination, and inadequate attention to the public health dimensions of environmental health issues.

To address these problems, the Bureau of Health Professions initiated a project with Johns Hopkins University to assess states' organization of environmental health and protection services. Prior to this assessment, the Bureau constructed a macroscopic picture of the national infrastructure and identified the federal and state agencies involved in implementing environmental health and protection policies. The project had five topic areas in its assessment of state environmental agencies:

- Responsibility and Authority: Who is in charge? What states are leading the environmental efforts?
- Federal Laws and State Infrastructure: How are states structured to implement the environmental laws?
- Programs of Environmental Health and Protection
- Core Functions of Environmental Health and Protection
- State Budgets for Environmental Health and Protection

With these goals, the Bureau of Health Professions conducted a comprehensive analysis of the environmental infrastructure.

***FUNDING/ SUPPORTING AGENCY/ SPONSOR***

Bureau of Health Professions, Health Resources and Services Administration

Cost of *data collection effort:* Data not provided

***PERIODICITY***

*Freauencv of data collection:* First request for data was issued in 1992

*Start date:* November 1992

*Years collected:* *1 (1992)*

***SAMPLE***

*Geographic coverage:* All 50 States

*Sample size:* Same as above

*DESCRIPTION OF DATA ELEMENTS*

Three different forms of data were gathered from the states: organizational charts, program descriptions, and budget information.

- Organizational charts: Environmental health programs are generally administered from within larger divisions of state environmental and/or health departments. Consequently, the Bureau of Health Professions received organizational charts (177) of varying detail.
- Program Descriptions: The program descriptions tended to include the goals of the program and plans to achieve these goals.
- Budgetary data: Bureau of Health Professions collected executive budget summaries, appropriations data, financial reports and budget highlights. Data were gathered from four state agencies - environment, health, labor, and agriculture. The budget data was requested for Fiscal Years 1992 to 1994. Due to the difficulty in determining which resources were directed toward environmental health activities, state officials provided estimates of their budgets.

*METHODOLOGY*

| | |
|---|---|
| *Data collection method:* | Telephone requests |
| *Format (of collection)*: | Hard copy |
| *Format (housing of data)*: | Hard copy and electronic |
| *Participation*: | Voluntary |

*Data/information flow:* State Executive Directors assisted the JHU staff in outlining the structure of environmental agencies in each state via secondary data collected by the National Governor's Association. The JHU staff then called the state agency contacts to request state organizational charts, program descriptions, and budgetary data. The JHU staff then sent letters to the governors of the states that had not responded to the request and this letter was followed by a telephone call. The data were received by the JHU staff who then created spread sheets and charts of the data to facilitate cross - state comparisons.

*Data quality assurance:* Quality assurance capabilities were hampered by the diversity in the format and quality of data received from the states.

*Data analysis*: Descriptive, longitudinal data, cross-sectional data. State per capita populations are based on *1991* population census data.

*STRENGTHS/ LIMITATIONS (METHODOLOGY)*

*Strengths*:

1. Data were collected from all state agencies that had possible environmental health and protection roles.
2. Analysis of budgetary data over time enabled the Bureau to identify possible trends in environmental health agencies.
3. Initial reaction from the pilot states for the collection process was positive.

*Limitations:*

1. Environmental health programs are housed within larger environmental and/or health departments and therefore extracting budget data specific to environmental health proved difficult.
2. Differences in state and local public health agencies' organizational structures, fiscal years, and reporting of budgets and/or actual expenditures limit the ability to make comparisons across states.
3. No clear source of information regarding the organization and funding of environmental services existed in most states.

*REPORTS*


- Department of Health Policy and Management. identification of State Environmental Services: A Profile of the State Infrastructure for Environmental Health and Protection. (Washington, D.C.: Bureau of Health Professions) March 1995.

- Burke, T. A.; Shalauta, N. M.; Tran, N. L.; and Stern, B. S. "The Environmental Web: A National Profile of the State Infrastructure for the Environmental Health Protection" *Journal* **of** *Public Health Management Practice* 3(2): *1-12, 1997.*

# Annual Census Bureau Survey of Local Government Finances and Employment

## U.S. *Department of Commerce, Economics and Statistics Administration, Bureau of the Census, Governments Division*

***SUMMARY***

**The survey provides comprehensive data on local government financing activities, including revenue, expenditure, and debt. A separate survey also collects data on local government employment. The Bureau of the** Census aggregates local health expenditures into three categories: public welfare, hospitals, and health. This survey provides information on local health expenditures by type of local government (e.g. county, municipal, township, school district, special district). Total expenditures are also broken out by direct (i.e. payments to employees, suppliers, contractors, beneficiaries, and other final recipients of government payments) and intergovernmental expenditures. Employment data are listed by number of full-time employees and equivalents and total payroll dollars. Data are presented at the local level for use by federal, state and local policy makers.

***BACKGROUND***

Data on government spending have been collected by the U.S. Census Bureau since the mid-1800's, but information on local governments has been collected only since World War II. Data on local finances and employment are collected annual from a stratified sample of different types of local governments. A census of all local governments in performed every five years. Data elements collected for the annual sample and the five-year census are identical. The last major local census was in 1992. The data are collected as a means of documenting government expenditures and employment.

***FUNDING/ SUPPORTING AGENCY/ SPONSOR***

U.S. Department of Commerce, Economics and Statistics Administration, Bureau of the **Census, Governments Division.**

*Cost of data collection effort:* Data not provided

***PERIODICITY***

*Freuuencv of data collection:* An annual survey of local governments is performed using a stratified random sample. The Census performs a survey of all local governments every five years.

*Start date:* *1957*

*Years collected:* Almost all years since 1957

***SAMPLE***

*Geographic coverage:* Local governments (county, city, township, school districts)

*Sample size:* For the annual, stratified sample, 14,000 local governments are surveyed.

The Census consists of certain local governments taken with certainty plus a sample below the certainty level. Units in the certainty group are: all county governments with a population greater than 50,000; all city and township governments with populations greater than 25,000; all school district governments with enrollments greater than 5,000; and certain specialized classes of governments such as school districts providing higher education and special districts providing transit services. The remaining sampled units were selected with probability proportional to their financial activity. This criterion was applied first for each county area having 100,000 or more population and then for the balance of local governments in each State.

*DESCRIPTION OF DATA ELEMENTS*

Local government spending, staffing levels, and payroll taxes for public welfare, hospitals, and health by type of government entity (e.g. **county, municipal, township,** school district, special district).

- Public welfare: Includes support of and assistance to needy persons contingent upon their need. Expenditures include:
  - cash assistance paid directly to needy persons under the categorical programs (e.g. AFDC) and under any other welfare programs;
  - vendor payments made directly to private purveyors for medical care and other commodities and services provided under welfare programs; and
  - provision and operation by the government of welfare institutions including nursing homes not directly associated with a government hospital.

  Employment includes such activities as the administration of various public assistance programs for the needy, operation of homes for the elderly, indigent care institutions, and programs which provide payments for medical care and other services for the needy.

- Hospitals: Includes government expenditures for financing, construction acquisition, maintenance or operation of hospital facilities, provisions of hospital care, and support of public or private hospitals.

Employment data includes only employees and payrolls of government operated medical facilities which provide inpatient care (versus private facilities). In hospitals associated with government operated medical schools, the instructional staff are included under "Higher Education" and all other hospital staff are included in the "Hospital" category.

- Health. Outpatient health services, other than hospital care, including: public health administration; research and education; categorical health programs; treatment and immunization clinics; nursing; environmental health activities such as air and water pollution control; ambulance service if provided separately from fire protection services; and other general public health activities such as mosquito abatement. School health services provided by health agencies (rather than school agencies) are also included here.

  Employment data include administration of public health programs, community and visiting nurse services, immunization programs, drug abuse rehabilitation programs, health and food inspection activities, operation of outpatient clinic, and environmental pollution control activities are included in this classification.

*METHODOLOGY*

| | |
|---|---|
| *Data collection method:* | Survey |
| *Format (of collection):* | Hard Copy |
| *Format (housing of data):* | Electronic |
| *Participation:* | Voluntary |

*Data/information flow:* Data are collected by Census officials in one of two ways. First, some states (approximately 35) collect financial and employment data from their localities. When possible, Census staff use these state documents to collect data. Second, when states do not already collect this data, the Census Bureau sends a survey to localities in the sample for completion.

*Data qualify assurance:* Census staff use a combination of cash flow analysis and annual line item checks for data quality. However, because all data captured are a matter of public record, data undergo additional scrutiny by the public.

*Data analysis:* Longitudinal, cross-sectional

*STRENGTHS/ LIMITATIONS (METHODOLOGY)*

*Strengths:*

1. The figures are classified according to the standard Census Bureau categories so that comparisons can be made between states and across federal and local governments.

Limitations:

1. Revenues, expenditures, and employment data are aggregated into three large categories, making it difficult to identify the detailed data on public health expenditures (e.g., environmental health, health regulation and inspection, personal health care services).
2. The locals' fiscal years vary which makes comparing local data somewhat inaccurate.

*REPORTS*

- U.S. Advisory Commission on Intergovernmental Relations. Local Government Responsibilities in Health Care. (Washington, D.C.) July 1994.

1991 Government Finance Series (Series GF91) with 7 parts:

- *No. 1, State Government Tax Collections: 1991*
- *No. 2, Finances of Employee-Retirement Systems of State and Local Governments: 1990-91*
- *No. 3, State Government Finances: 1991*
- *No. 4, City Government Finances: 1990-91*
- *No. 5, Government Finances: 1990-91*
- *No. 8, County Government Finances 1990-91*
- *No. 10, Public Education Finances: 1990-91*

# Annual Census Bureau Survey of State Government Finances and Employment
## U.S. *Department of Commerce, Economics and Statistics Administration, Bureau of the Census, Governments Division*

**SUMMARY**

The financial survey provides comprehensive data on state government financing activities, including revenue, expenditure, and debt. A separate survey also collects data on state government employment and payroll. The Bureau of the Census aggregates state health expenditures into three categories: public welfare, hospitals, and health. Total expenditures are also broken out by direct (i.e. payments to employees, suppliers, contractors, beneficiaries, and other final recipients of government payments) and intergovernmental expenditures. Employment data are listed by number of full-time employees and equivalents and total payroll dollars. Data are presented at the state level for use by federal, state and local policy makers.

***BACKGROUND***

Data on government spending have been collected by the U.S. Census Bureau since the mid-1800's. Originally, government finance data were collected as part of the decennial census, but in the early 1900's, the Bureau began to collect selected data annually. The data are collected as a means of documenting government expenditures and employment.

***FUNDING/ SUPPORTING AGENCY/ SPONSOR***

U.S. Department of Commerce, Economics and Statistics Administration, Bureau of the Census, Governments Division.

Cost *of data collection effort:* Data not provided

***PERIODICITY***

*Frequency of data collection:* Annual

*Start date:* Mid-1800's, current version since World War II

*Years collected:* Most years since the end of WWII

***SAMPLE***

*Geographic coverage*: All fifty states and the District of Columbia

*Sample size:* Same as above

***DESCRIPTION OF DATA ELEMENTS***

State government revenues, expenditures, staff level and payroll data are divided into three broad categories: public welfare, hospitals, and health.

- Public welfare: Includes support of and assistance to needy persons contingent upon their need. Expenditures include:
  - cash assistance paid directly to needy persons under the categorical programs (e.g. AFDC) and under any other welfare programs;
  - vendor payments made directly to private purveyors for medical care and other commodities and services provided under welfare programs; and
  - provision and operation by the government of welfare institutions including nursing homes not directly associated with a government hospital.

  Employment includes such activities as the administration of various public assistance programs for the needy, operation of homes for the elderly, indigent care institutions, and programs which provide payments for medical care and other services for the needy.

- Hospitals: Includes state government expenditures for financing, construction acquisition, maintenance or operation of hospital facilities, provisions of hospital care, and support of public or private hospitals.

Employment data includes only employees and payrolls of government operated medical facilities which provide inpatient care (versus private facilities). In hospitals associated with government operated medical schools, the instructional staff are included under "Higher Education" and all other hospital staff are included in the "Hospital" category.

- Health: Outpatient health services, other than hospital care, including: public health administration; research and education; categorical health programs; treatment and immunization clinics; nursing; environmental health activities such as air and water pollution control; ambulance service if provided separately from fire protection services; and other general public health activities such as mosquito abatement. School health services provided by health agencies (rather than school agencies) are also included here.

  Employment data include administration of public health programs, community and visiting nurse services, immunization programs, drug abuse rehabilitation programs, health and food inspection activities, operation of outpatient clinic, and environmental pollution control activities are included in this classification.

Figures are classified according to standard Census Bureau categories.

*METHODOLOGY*

*Dafa collection method:* Census Bureau staff obtain state budget records and aggregate the states' data into Census categories. States also provide employment data to the Census Bureau.

*Format (of collection):* Hard copy

*Format (housing of data):* Electronic

*Participation:* Voluntary

*Data/information flow:* Representatives from the U.S. Bureau of the Census compiled figures in detail from official records and reports of the various states for most of the state financial data. Data for tax revenue, some debt figures, and the finances of state administered retirement and miscellaneous insurance trust systems came from mail canvasses. States also supply human resources information for the employment data.

*Data qualify assurance:* Census staff use a combination of cash flow analysis and annual line item checks for data quality. However, because all data captured are a matter of public record, data undergo additional scrutiny by the public. Similar spot checks and line item checks are used for the employment data.

*Data analysis:* Longitudinal

*STRENGTHS/ LIMITATIONS (METHODOLOGY)*

*Strengths:*

1. The figures are classified according to the standard Census Bureau categories so that comparisons can be made between states and across federal and local governments.

*Limitations:*

1. Revenues, expenditures, and employment data are aggregated into three large categories, making it difficult to identify the detailed data on public health expenditures (e.g., environmental health, health regulation and inspection, personal health care services).
2. The states' fiscal years vary which makes comparing state data somewhat inaccurate.

***REPORTS***

1991 Government Finance Series (Series GF91) with 7 parts:

- **No.** 1, *State Government Tax Collections: 1991*
- *No.* 2, *Finances of Employee-Retirement Systems of State and Local Governments: 1990-91*
- *No.* **3,** *State Government Finances: 1991*
- *No.* 4, *City Government Finances: 1990-91*
- *No. 5, Government Finances: 1990-91*
- *No. 8, County Government Finances 1990-91*
- *No. 10, Public Education Finances: 1990-91*

# Budget and Employment Statistics of the United States Government
## U.S. *Department of Commerce, Economics and Statistics Administration, Bureau of the Census, Governments Division*

***SUMMARY***

The Bureau of the Census provides a tally of Federal government budget line items related to Federal expenditures for health. Health data are aggregated into three categories: public welfare, hospitals, and health. The budget includes data on total and per capita federal government expenditures in these three areas. Total expenditures are also broken out by direct (i.e. payments to employees, suppliers, contractors, beneficiaries, and other final recipients of government payments) and intergovernmental expenditures. Data are presented at the federal level for use by federal, state and local policy makers,

Data are also collected on the number of federal employees and the public payroll.

***BACKGROUND***

Data on government spending have been collected by the U.S. Census Bureau since the mid-l 800's. Originally, government finance data were collected as part of the decennial census, but in the early 1900's, the Bureau began to collect selected data annually. The data are collected as a means of documenting government expenditures and employment.

***FUNDING/ SUPPORTING AGENCY/ SPONSOR***

U.S. Department of Commerce, Economics and Statistics Administration, Bureau of the Census, Governments Division.

Cosf *of data collection effort:* Data not provided

***PERIODICITY***

Frequency *of data collection*: Annual

*Start date:* Mid- 1800's, the current version since World War II

*Years collected:* Most years since the end of WWII.

***SAMPLE***

*Geographic coverage:* Federal government

*Sample size:* All federal agencies and departments

***DESCRIPTION of DATA ELEMENTS***

Federal government revenues, expenditures, staffing levels and payroll amounts are divided into three broad categories: public welfare, hospitals, and health.

- Public welfare: Includes support of and assistance to needy persons contingent upon their need. Expenditures include:
  - cash assistance paid directly to needy persons under the categorical programs (e.g. AFDC) and under any other welfare programs;
  - vendor payments made directly to private purveyors for medical care and other commodities and services provided under welfare programs; and
  - provision and operation by the government of welfare institutions including nursing homes not directly associated with a government hospital.

  Employment includes such activities as the administration of various public assistance programs for the needy, operation of homes for the elderly, indigent care institutions, and programs which provide payments for medical care and other services for the needy.

- Hospitals: Includes federal expenditures for financing, construction acquisition, maintenance or operation of hospital facilities, provisions of hospital care, and support of public or private hospitals (e.g. federal veterans hospitals).

Employment data includes only employees and payrolls of government operated medical facilities which provide inpatient care (versus private facilities). In hospitals associated with government operated medical schools, the instructional staff are included under "Higher Education" and all other hospital staff are included in the "Hospital" category.

- Health: Outpatient health services, other than hospital care, including: public health administration; research and education; categorical health programs; treatment and immunization clinics; nursing; environmental health activities such as air and water pollution control; ambulance service if provided separately from fire protection services; and other general public health activities such as mosquito abatement. School health services provided by health agencies (rather than school agencies) are also included here.

  Employment data include administration of public health programs, community and visiting nurse services, immunization programs, drug abuse rehabilitation programs, health and food inspection activities, operation of outpatient clinic, and environmental pollution control activities are included in this classification.

The classification used by the Bureau of the Census for reporting state and local government finance statistics differs from the classification used for the United States Budget. In order to facilitate comparison of Federal, state, and local government expenditures, the Census reclassifies Federal budget items. This involves (1) grouping individual Federal receipt items and expenditure amounts for various agencies and appropriation items according to the functional framework used for reporting of State and local government finances and (2) applying certain adjustments to many of the items in order to arrive at revenue and expenditure amounts as reported. For certain kinds of transactions, the Bureau of the Census analysts use the annual reports of the Secretary of Treasury and of the Commissioner of Internal Revenue.

*Data collection method:* Review Federal budget items for government finances. Federal employment and payroll data are from U.S. Office of Personnel surveys.

*Format (of collection):* Hard copy

*Format (housing of data):* Electronic

*Participation:* Voluntary, but usually 100 percent compliance

*Data/information flow:* Census staff obtain hard copy budgets from the individual federal agencies and aggregate the data to census categories. U.S. Office of Personnel Management supplies information on employment.

*Data quality assurance:* Census staff use a combination of cash flow analysis and annual line item checks for data quality. However, because all data captured are a matter of public record, data undergo additional scrutiny by the public.

*Data analysis:* Longitudinal

*STRENGTHS/ LIMITATIONS (METHODOLOGY)*

*Strengths*:

1. Health expenditures and employment statistics may be compared with other federal government expenditures.
2. Federal expenditures and employment statistics may be compared with state and local expenditures.

*Limitations:*

1. Revenues, expenditures, and employment data are aggregated into three large categories, making it difficult to identify the detailed data on public health expenditures (e.g., environmental health, health regulation and inspection, personal health care services).
2. Turn-around time to issue reports are generally 1-2 years from the end of data collection.

*REPORTS*

1991 Government Finance Series (Series GF91) with 7 parts:

- *No. 1, State Government Tax Collections: 1991*
- *No. 2, finances of Employee-Retirement Systems of State and Local Governments: 1990-91*
- *No. 3, State Government Finances: 1991*
- *No. 4, City Government finances: 1990-91*
- *No. 5, Government Finances: 1990-91*
- *No. 8, County Government Finances 1990-91*
- *No. 10, Public Education Finances: 1990-91*

# HRSA Personal Health Care Services Expenditures

## *Health Resources and Services Agency (HRSA) and Public Health Foundation*

***SUMMARY***

The Public Health Foundation is assisting HRSA in developing a categorization schema for reporting comparable information on state and local health agency personal health services. The survey attempts to capture data on health department spending on personal health services by service categories and delivery method. It is expected that collection of this data overtime will assist health departments in documenting shifts among personal health service spending categories, and shifts in the way health departments are delivering those services.

This effort is being closely coordinated with the Public Health Expenditures Project, representing a further delineation of the public health expenditures tool by measuring state and local capacity to carry out the essential service entitled "link people to needed personal health services and assure the provision of care when otherwise unavailable." It is expected that the data set will document changes in the delivery of personal health care services and support analysis to understand these changes. The overall goal of this project is to develop a methodology to collect consistent and complete data on state and local health agency personal health care services to enable policy makers, managers and researchers to assess the impact of changes in the health care delivery system.

***BACKGROUND***

The Public Health Expenditures Project results indicated that approximately 59 percent of state and local health department expenditures focus on personal health care services. The HRSA personal health survey was developed to answer a number of questions which include;

1. To what extent are traditional public health personal health care services being bundled into comprehensive services?
2. What shifts are occurring among personal health spending categories?
3. What shifts are occurring in the way health departments are delivering personal health services?
4. What is the feasibility of collecting this type of data on a regular basis?
5. How are health departments aggregating their financial resources for personal health services?
6. What populations are implicitly receiving what funds through service categories?
7. What are the delivery mechanisms for personal health services?

Development of the survey included interviews with state officials on the expenditures and the structure of delivered personal health services.

***FUNDING/ SUPPORTING AGENCY/ SPONSOR***

Health Resources and Services Agency (HRSA)

*Cost of data collection effort:* *$90,000*

***PERIODICITY***

*Frequency of* ***data collection:*** First survey attempt

*Start date:* Spring 1996

*Years collected:* *1* (Fiscal year 1995)

**SAMPLE**

*Geographic coverage:* Pilot tested in selected state and county health departments. States included Arizona, Rhode Island and Iowa. Localities include New York City and Austin, Texas.

*Sample size:* Selected states and local health departments

**DESCRIPTION OF DATA ELEMENTS**

Data elements collected include information on services delivered by type (e.g. comprehensive personal services, comprehensive primary care only, or components of primary and specialty personal health services) and the delivery method (e.g. publicly sponsored HMOs, comprehensive clinics, health department-run categorical clinics, and contracted services). It is expected that expenditure information on enabling services (e.g. administrative expenses, client-based data systems) which are provided along with personal health care services will be collected.

Data definitions are included in the survey instrument. Definitions include descriptions of those expenditures which are and are not to be included in certain categories.

**METHODOLOGY**

*Data collection method:* Survey, interactive discussions between HRSA, PHF, and health department liaisons

*Format (of collection):* Hard copy

*Format (housing of data):* Electronic

*Participation:* Voluntary

*Data/information flow:* HRSA and the Public Health Foundation recruited volunteers from state and county health departments in the pilot states. These volunteers complete the surveys but also interact with PHF to collect the necessary data and to test the framework of the collection system. Once the data are collected from the departments, the analysis is to be completed by HRSA and PHF.

*Data quality assurance:* *No* quality assurance done as of yet. This data set is still in the experimental stage so no quality assurance has been implemented.

*Data analysis:* Descriptive, cross-sectional

**STRENGTHS/ LIMITATIONS (METHODOLOGY)**

*Strengths:*

1. This is the most comprehensive project undertaken to date which studies personal health care services and the methodologies used by the states to estimate expenditures in this area.

*Limitations:*

1. State and local personal health care data sources may not be consistently available across states, which may limit the ability to collect comprehensive data nationally.
2. There is room for subjective interpretation of data definitions.
3. The survey does not capture health department estimation techniques for collecting the data. The survey also does not collect information on how state and local health departments do financial planning.

**REPORTS**

- (Draft) "Measuring Expenditures for Personal Health Care Services Rendered by Public Health Agencies", September 1996.

# Local Public Health Expenditures Project
## *National Association of County and City Health Officials, National Association of Local Boards of Health, and Public Health Foundation*


**SUMMARY**

The National Association of County and City Health Officials (NACCHO), National Association of Local Boards of Health (NALBOH), and the Public Health Foundation (PHF), in cooperation with the Office of Disease Prevention and Health Promotion (ODPHP), US Department of Health and Human Services, are collaborating on three detailed case studies of local public health expenditures. The purpose of the project is to develop a methodology for quantifying expenditures at the local level using the ten essential public health services. This effort seeks to build upon the PHF State Expenditure Study, which detailed public health expenditures in nine states using the ten essential services framework. The project objectives include: 1) refine the state guidelines for mapping activities to the essential public health services with terminology that is useful to local public health officials; 2) develop case studies of three sentinel sites to test the partition of local public health expenditures into the ten essential services framework and to assess key commonalties and differences among the participating sites affecting data collection, with an emphasis on data quality; 3) recommend steps to standardize methodologies, data elements, and definitions to collect local public health expenditure data that are based on the findings uncovered in (2); and 4) begin identifying issues related to measuring the needed capacity (in terms of dollars and workforce) to effectively perform the essential services of public health.


**BACKGROUND**

The Local Public Health Expenditures Project is being sponsored by ODPHP as a pilot study for developing a methodology for use by local health jurisdictions nationwide. The three case study sites are Columbus City Health Department, OH; Northeast Tri-County Health District, WA; and Onondaga County Health Department, NY. In each of these communities, the study will examine how public health functions are organized, how dollars flow into and from the health departments, how budgets are adopted, what data sources are available and used, the extent to which private sector data are being or could be captured, and whether the health department is well positioned for coordinating public health expenditure data collection across other organizations. An Advisory Committee to oversee the project has been convened.

**FUNDING/ SUPPORTING AGENCY/ SPONSOR**

Office of Disease Prevention and Health Promotion, US Department of Health and Human Services

| | |
|---|---|
| *Cost of data collection effort:* | $100,000 |

**PERIODICITY**

| | |
|---|---|
| *Frequency of data collection:* | First survey attempt |
| *Start date:* | February 1997 |
| *Years collected:* | 1 (Fiscal year 1996) |

**SAMPLE**

| | |
|---|---|
| *Geographic coverage:* | Pilot tested in three local health departments. Localities include: Columbus City Health Department, OH; Northeast Tri-County Health District, WA; and Onondaga County Health Department, NY. |
| *Sample size:* | Three local health departments |

***DESCRIPTION OF DATA ELEMENTS***

The case studies include the fielding of the methodology (i.e., two surveys) and interviews with health department staff, local board of health members, and community partner organizations.

A preliminary version of the methodology was sent out prior to the site visit and included a short table requesting that total health expenditures for the health department be divided by the 10 Essential Public Health Services as a percentage of total expenditures.

The longer survey methodology was then completed for the overall local health department expenditures and program areas. Overall, the methodology collected,

- Local public health expenditures by essential public health service and source of funds (i.e. federal funds, state funds, state fees, local funds, local fees, Medicaid reimbursement, and other sources).
- Qualitative information on the use and the value of the tool.
- Qualitative information from interviews held with community partners to assess the feasibility of collecting expenditures data for their public health efforts.

***METHODOLOGY***

| | |
|---|---|
| *Data collection method:* | Survey, interactive discussions between NACCHO, NALBOH, PHF, and health department liaisons and other liaisons |
| *Format (of collection):* | Hard copy |
| *Format (housing of data):* | Spread sheet database |
| *Participation:* | Voluntary |

*Data/information flow:* NACCHO, NALBOH, and PHF recruited volunteer local health departments to complete the surveys. The LHDs were asked to fill out the preliminary survey first on the percentage of the LHD budget that went to each of the 10 Essential Services. These data will be used for comparison with the larger survey to better understand the assumptions made about the 10 essential services. Once the data are collected from the departments, the analysis will be completed by NACCHO, NALBOH and PHF.

*Data quality assurance:* NACCHO, NALBOH, and PHF staff worked with the local health departments on informal validity checks of a sample number of variables to establish the degree of confidence in the comparability of the numbers across sites.

*Data analysis:* Descriptive, one-time pilot study with hope of eventually collecting longitudinal data.

***STRENGTHS/ LIMITATIONS (METHODOLOGY)***

*Strengths:*

1. Survey builds upon the survey mechanisms used for the PHF Expenditures project for collecting state-level data, and the HRSA personal expenditures project that collects expenditure data for personal health by the 10 Essential Public Health services.
2. Survey materials provide definitions for the essential public health functions that translate the terminology to activities meaningful to the LHDs.
3. Future analysis of ongoing data collection can track changes in expenditures over time.
4. Initial reaction from the pilot sites for the collection process was positive.
5. Researchers met with other non-governmental members of the community who are involved with public health (e.g. Salvation Army, hospitals, medical groups).

6. Bottom-up study approach to gain a better understanding of how public health resources are distributed and spent at the local level and the methods, sources, assumptions, and decision rules employed by each locality.

*Limitations:*

1. Pilot survey is based on analysis of data from a small, non-random sample of local health departments.
2. Differences in local public health agencies' organizational structures, fiscal years, and reporting of budgets and/or actual expenditures may limit the ability to make comparisons across LHDs.
3. Estimating expenditures for each of the essential public health services requires some subjective decisions because of the difficulty in budgeting categorical program expenditures by percentages, making comparisons difficult across the sites.
4. Data on public health expenditures by other groups in the state (e.g., hospitals, managed care) are not included.
5. The health officials at all three sites are nationally recognized and active in national public health initiatives and had a strong familiarity with the essential services framework. Furthermore, the health officials were well prepared by PHF, NACCHO, and NALBOH about the methodology. Thus the pilot site project was not a true test of the methodology and the feasibility of its implementation with less "cutting edge" local health departments.

*REPORTS*

Case studies of each site visit are being developed. A final synthesis report will be released in the future.

# NASMHPD Funding Database
# National Association of State Mental Health Program Directors
# *(NASMHPD) and NASMHPD Research Institute, Inc.*

**SUMMARY**

NASMHPD Research Institute has collected detailed state-level mental health expenditure and revenue data periodically since 1981. Data are based on revenues and expenditures controlled by each state mental health agency (SMHA), assessed at the end of a state's fiscal year. The data set provides total expenditures by type and setting of mental health service, and revenues by source within the SMHA. Data on community-level expenditures, separate and in addition to State expenditures, is also available from approximately 35 states. Six reports have been prepared to date, summarizing these data.

**BACKGROUND**

An original contract in 1983 from the National Institute of Mental Health (NIMH) led to the development of a methodology for collecting this data set. For the original NIMH grant, an Advisory Panel comprised of six SMHA representatives (3 Commissioners and 3 technical staff) was selected. These representatives were chosen based on their ongoing involvement with and knowledge of NASMHPD's Committee of Statistics, Research, and Evaluation; the Committee on Financing Mental Health Services; and other NIMH-NASMHPD data compilation efforts. The panel also included representatives from NIMH. Recent compilations have been supported by the Center for Mental Health Services

In 1986, the panel concluded that the methodology was successful and recommended that NASMHPD continue to compile funding data for future years. In prior years, NASMHPD also accumulated data on expenditures from other State agencies on mental health services. Currently, approximately 35 states provide data on community expenditures in addition to State controlled expenditures.

**FUNDING/ SUPPORTING AGENCY/ SPONSOR**

National Association of State Mental Health Program Directors (NASMHPD)

*Cost of data compilation effort:* Approximately $150,000 per compilation

**PERIODICITY**

*Frequency of data collection:* Biennial

*Start date:* *1981*

*Years collected:* 6 years (1981, 1984, 1987, 1990, 1993, 1996)

**SAMPLE**

*Geographic coverage:* All states and territories

*Sample size:* All states provide SMHA expenditures and revenues; 35 states provide community expenditures in addition to State support

**DESCRIPTION OF DATA ELEMENTS**

Expenditure data by:

- Setting (psychiatric inpatient, community based) and type of service within setting;
- support;
- Age group;
- Expenditures for disabilities other than mental health (e.g.. MR/DD, Drugs, alcohol);
- Priority populations (Forensic, SMI, SED, Homeless, mentally ill chemical abusers);

- Revenue data by State, Federal, local, and other sources; and,
- Detail about SMHA Medicaid revenues.

Revenues and expenditures are depicted by type of provider within a State (state mental hospital programs, other hospital programs, SMHA community administered programs), and SMHA support activities.

METHODOLOGY

*Data compilation method:* Survey of SMHA secondary data

*Format (of collection):* Hard copy and electronic

*Format (housing of data):* Electronic

*Participation:* Voluntary

*Data/information flow:* NASMHPD Research Institute works with the states to appoint a contact person in each state. Each state can either (a) receive a package of table shells and glossary of standard terms to allocate funds, or (b) submit budget documents to the Research Institute which makes initial allocations and then returns the tables for verification. After verification, data are entered in a central database. Revenues and expenditures are actual (rather than "estimated") and are limited to only those providers under direct control of the SMHA. The compilation consists of seven tables of detailed defined categories to be completed by all states:

1. SMHA Controlled Mental Health Expenditures: by type of provider, service and age of patients;
2. SMHA Controlled Mental Health Revenues: by revenue source and type of provider;
3. SMHA Controlled Expenditures for Disabilities Other than for Mental Health: by type of provider, service and disability program;
4. Total Mental Health Expenditures of SMHA-Funded Mental Health Organizations: by type of provider, service and age of patients;
5. Total Mental Health Revenues of SMHA-Funded Mental Health Organizations: by revenue source and type of provider;
6. SMHA-Controlled Revenues from Medicaid: by revenue source and type of provider; and,
7. Total Revenues from Medicaid to SMHA-Funded Programs: by revenue source and type of provider.

Detailed footnotes are collected for each SMHA's mental health revenues and expenditures. The footnotes indicate specific facility and program expenditures. The footnotes contain references to publications and documents that cite specific expenditures and also provide the page numbers to these documents. The footnotes remain on file at the NASMHPD Research Institute for the SMHA revenue tables.

*Data quality assurance:* For states submitting data through the NASMHPD table shells, a glossary is provided to the state and project staff with uniform definitions of terms that correspond to the row and column headings on the tables.

*Data analysis*: NASMHPD Research Institute reports provide descriptive and longitudinal analysis.

***STRENGTHS/ LIMITATIONS (METHODOLOGY)***

*Strengths*:

1. These are the only data on mental health funding available at State level, including SMHA administration.
2. Community-level expenditures are available for approximately 35 states, including local government mental health expenditures in excess of revenues from State/Federal sources.

*Limitations*:

1. Although there is good SMHA participation, there are cells where the data could not be obtained for specific agencies.
2. Some SMHA's do not have an accounting system that portrays the allocation of revenues/expenditures using the Projects glossary and table formats.
3. The focus on SMHAs may neglect mental health funding received from other state agencies.

***REPORTS***

- *Final Report: Funding Sources and Expenditures for Sfafe Mental Health Agencies: Revenue/Expenditure Study Results* (January, 1984)
- *Funding Sources of State Mental Health Agencies: Revenue/Expenditure Study Results: Fiscal Year 1983, Updated Final Report,* (August 1985)
- *Funding Sources and Expenditures of State Mental Health Agencies: Revenue/Expenditure Study Results Fiscal Year 1990* (March 1993)
- *Funding Sources and Expenditures of State Mental Health Agencies: Revenue/Expenditure Study Results Fiscal Year 1993* (August 1994)

# Public Health Expenditures Project
## U.S. *Public Health Service; Public Health Foundation*

***SUMMARY***

**The Public Health Foundation is assisting the Office of Disease Prevention and Health Promotion of the U.S. Department of Health and Human Services in developing an expenditure survey for reporting comparable information on state and local health department expenditures by the 10 essential public health services.** The purpose of the study is to develop a methodology for estimating investments in the essential public health services, with an emphasis on distinguishing community-based health from personal health care services. It is anticipated that the survey will provide a framework for a long-term data collection system to track and report these expenditures over time. The project will also provide states with a tool for demonstrating their commitment to community-wide prevention efforts in the area of public health. Although total spending for public health programs in the United States has been estimated, expenditures by essential public health services have not previously been recorded.

***BACKGROUND***

In 1993, the U.S. Public Health Service (PHS) began an effort to quantify public health expenditures by federal, state, and local governments. PHS was concerned that no routinely published reports documented the nation's investment in population-based health activities distinct from expenditures for personal health or direct care services. In September 1993, public health officials from Connecticut, Iowa, Missouri, Oregon, and Rhode Island participated in an effort to develop a set of guidelines for documenting expenditures for the core functions of public health. Using these guidelines, these states documented expenditures for public health and lead mental health, substance abuse, and environmental agencies. The pilot was expanded in 1994 to include Illinois, New York and Texas.

A second phase of the project began in June 1995 when PHS convened nine states' public health, mental health, substance abuse, and environmental officials to review and refine guidelines for documenting population-based public health and approaches for collecting expenditure data. In the second phase of the project, the IO core public health functions framework used in the projects first phase was superseded by the IO essential public health services.

The core public health functions used in Phase I of this study built on efforts by the National Academy of Sciences-Institute of Medicine, the National Association of County and City Health Officials, the CDC, and the 1994 Essential Public Health Services Workgroup. For Phase II, the Public Health Services Workgroup convened for this study defined six public health responsibilities and IO essential services of public health.

***FUNDING/ SUPPORTING AGENCY/ SPONSOR***

*Office* of Disease Prevention and Health Promotion, Office of Public Health and Science, U.S. Department of Health and Human Services

*Cost of data collection effort:* Approximately $100,000

***PERIODICITY***

*Frequency of data collection:* First pilot survey collected Fiscal Year 1993 data, second pilot for Fiscal Year 1994/1995 data

*Start date:* *1993*

*Years collected:* *2* (Fiscal Years 1993, 1994/1995)

**SAMPLE**

| | |
|---|---|
| *Geographic coverage:* | **Illinois, Iowa, New York, Oregon, Rhode Island, Texas, Arizona, Louisiana, and Washington (The following entities are not included** in this analysis: Illinois' local health departments) |
| Sample *size:* | *9* states |

**DESCRIPTION OF DATA ELEMENTS**

The survey consists of three expenditure summary worksheets.

- State public health expenditures by essential public health service and source of funds (i.e. federal funds, state funds, state fees, local funds, local fees, Medicaid reimbursement, and other sources).
- Local public health expenditures by essential public health service and source of funds (i.e. federal funds, state funds, state fees, local funds, local fees, Medicaid reimbursement, and other sources).
- Expenditures of the WIC supplemental food program by source of funds (federal or state).

In addition, each state separately estimated essential public health expenditures for mental health, substance abuse, and environmental services as provided by other state agencies. The survey includes separate packets for state's environmental and substance abuse agencies to be used if other than the state health agency. The mental health agencies were not asked to conduct primary data collection, but were asked to verify expenditure information they reported through the National Association of Mental Health Program Director's biennial study of state mental health agency revenues and expenditures, which have been mapped into the ten essential public health services. During the second pilot, agencies also were provided a second worksheet to give participants an opportunity to identify the essential public health services being performed by other agencies in the state and, to the extent possible, to estimate a range of these expenditures. For the second pilot, states reported the most recent 12-month period for which data are available subsequent to Fiscal Year 1993.

**METHODOLOGY**

| | |
|---|---|
| *Data collection* **method:** | Survey |
| ***Format (of** collection)*: | Hard copy and electronic (varies by state) |
| ***Formaf (housing of** data)*: | Electronic |
| ***Participation:*** | Voluntary |

*Data/information* **flow.** Standard forms and methodologies, developed by PHS and PHF, were given to senior public health officials in the nine participating states. The data collection tools were developed to be self-contained packets for each of the four types of agencies participating in the pilot. The public health agency packets combined both state and local health agency expenditure data elements. Each packet included: a project description, instructions, and an overview of the packet; a suggested methodology for estimating expenditures for essential public health services; an agency-specific guide to allocating categorical program activities to essential public health services; worksheets for organizing the data collection process; expenditure summaries for reporting the data; samples of completed expenditure summaries; and an evaluation form. Public Health Foundation materials provided state officials with a guide for estimating expenditures. The survey included a worksheet for calculating expenditures and showing methodology, but about half of the states used the worksheet (or some variation thereof) and these generally were at a high level of program divisions. State officials could employ their own estimation techniques which all did; however, these estimation techniques varied and were not well documented. States used local health department plans and annual reports to collect expenditure data for local health departments.

*Data quality assurance:* Data were supplied by state agency staff from accounting and time reporting systems, payroll transaction reports, budget documents and strategic plans. Because estimates were developed by those staff closest to the relevant programs, participants believed that this produced fairly reliable results. However, some states expressed concern in the functional allocations, but supported the accuracy of the total budget figures. Local estimates were also considered to be questionable because most state health agencies had to rely on developing overall estimates either from a small sample of counties which answered the questionnaire or from local health department annual reports.

*Data analysis:* Descriptive, one-time pilot study with hope of eventually collecting longitudinal data. State populations were determined using 1995 census data estimates, recognizing that the nine states may not be representative of the US population, overall expenditures were extrapolated to the national level.

***STRENGTHS/ LIMITATIONS (METHODOLOGY)***

*Strengths*:

1. Data are collected from state public health, mental health, substance abuse, and environmental agencies.
2. Definitions for the essential public health functions that translated the terminology to activities meaningful to the agencies are provided in the survey materials.
3. Analysis of ongoing data collection can track changes in expenditure over time.
4. Initial reaction from the pilot states for the collection process was positive.

*Limitations:*

1. Estimated expenditures are based on analysis of data from a small, non-random sample of states.
2. Differences in state and local public health agencies' organizational structures, fiscal years, and reporting of budgets and/or actual expenditures limits the ability to make comparisons across states.
3. Estimating expenditures for each of the essential public health services requires some subjective decisions because of the difficulty in budgeting categorical program expenditures by percentages.
4. The extent to which program staff or central management staff invested time into the survey varied tremendously.
5. The data on local health department expenditures is derived from inconsistent and incomplete sources -- states used a variety of methods (annual reports, samples of LHDs, legislative mandates) to estimate LHD spending.
6. States did not accurately document their data collection techniques and estimation assumptions.
7. Data on public health expenditures by other groups in the state (e.g., hospitals, managed care) are not included.

*REPORTS*

- Public Health Foundation. Measuring Expenditures for Essential Public Health Services. (Washington, D.C.: Public Health Foundation) November 1996.

# Guidance for Application of Maternal and Child Health Services Block Grant Program

## *Maternal and Child Health Bureau*

**SUMMARY**

The Maternal and Child Health (MCH) State grants constitute a major segment of the MCH Services Block Grant, Title V of the Social Security Act, as amended by the Omnibus Budget Reconciliation Act of 1989 (OBRA-89), Public Law 101-239. This program grants funds to improve the health of all mothers and children consistent with state needs and the national health objectives. The application offers a framework for the States to discuss their plans for serving the entire MCH population, including special subgroups, and for administering the Block Grant. The guide facilitates the application process by giving a standardized application with necessary definitions for completion.

**BACKGROUND**

Title V of the Social Security Act mandates that state MCH agencies assess statewide needs every five years and to establish MCH goals. Annually, each state submits a plan defining the MCH program efforts for the upcoming year, justifying the allocation of funds to address service needs, and setting criteria to determine progress for that year. The application must meet the following legal requirements for the MCHB programs by providing information on:

- Statewide needs assessment and annual plan;
- Administrative requirements - Ten percent limit on administrative costs; discussion of coordination with related federal agencies serving the MCH population; specification of the agency's role in facilitating Medicaid enrollment of eligible pregnant women and young children;
- Use and restrictions of funds - States are not permitted to direct the MCHB funds toward purchasing major medical equipment or toward other programs not affiliated with MCHB; and,
- Linkage with National Health Objectives - In their application, state's need assessment must identify goals and objectives consistent with the goals and objectives of Healthy People 2000.

This guidance kit provides the standardized format and definitions to be used during the application process.

**FUNDING/ SUPPORTING AGENCY/ SPONSOR**

United States Maternal and Child Health Bureau (MCHB)

Cost of *data collection effort*: Data not provided

**PERIODICITY**

*Frequency of data collection:* Annually
*Start date:* 1990
*Years collected:* 6 (1990-1995)

**SAMPLE**

*Geographic coverage:* All fifty states
*Sample size:* All fifty states

**DESCRIPTION OF DATA ELEMENTS**

This guidance packet includes the following essential components which collect infrastructure data:

- Instructions for application preparation and submission, including instructions for the content application (i.e. assessment of state, needs assessment of the population, annual budget and budget justification, waiver requests, and supporting documentation); and
- Application forms and instruction on completing the forms. The instruction include recommendations for estimating the need for federal dollars and for estimating the total State General Funds.

Specific data elements collected include:

- Estimated funding for state Maternal and Child Health Bureau by source;
- State budget planning profile for upcoming fiscal year; and
- State Title V program budget by type of services and class of individuals to be served.
- Resources and structure of Title V programs in the state.
- State statutes related to MCH and Children with Special Health Care Needs (CSHCN).
- Mission and public health goals of the state health agency.
- Programs and Services to be paid in full or in part by Title V funds
- Description of CSHCN programs and services with funds from Title V.
- Information on the organizational relationship with the MCH agency and other related state human services agencies, local agencies, and other providers (e.g. community health centers).

**METHODOLOGY**

Data collection method: Application form

Format (of collection): Hard copy

Format (housing of data): Hard copy, electronic

Participation: Mandatory

Data/information flow: State officials in the MCH agency complete the application forms annually, submitting their annual plan together with their annual report from the preceding year. Upon arrival at MCHB, the staff administratively screens the application to ensure that the required elements are incorporated. If incomplete, the State has thirty days to correct the deficiencies once reported by MCHB. Following the screening process, the application undergoes a complete application review based on the criteria established by the MCH Bureau.

Data quality assurance: Not applicable. There is no data quality assurance of applications for MCH grants. Only the annual reports have data quality assurance.

Data analysis: Descriptive, cross-sectional data.

**STRENGTHS/ LIMITATIONS (METHODOLOGY)**

Strengths:

1. Data are collected from all state MCH agencies.
2. MCH Block Grant definitions, application review criteria, and national MCH objectives for the year 2000 are provided in the survey materials.

Limitations:

1. Data are based on definitions of a discrete set of services and activities which do not match to other surveys (e.g., essential public health services).

**REPORTS**

None to date.

# Guidance for the State MCH Block Grant Annual Report
## *Maternal and Child Health Bureau*

**SUMMARY**

The Maternal and Child Health (MCH) State grants constitute a major segment of the MCH Services Block Grant, Title V of the Social Security Act, as amended *by* the Omnibus Budget Reconciliation Act of 1989 (OBRA-89), Public Law 101-239. This program grants funds to improve the health of all mothers and children consistent with state needs and the national health objectives. Annually, the states must draft a report as a means of assuring accountability for the Title V effort. In this report, the state must predetermine indicators and State-specific health status outcomes and also report program results and progress on objectives and measures related to the expenditure of MCH funds. The guidance presents the necessary format of the annual report to MCH in order to facilitate the drafting of the report by MCHB to Congress.

**BACKGROUND**

In 1994, the Maternal and Child Health Bureau constructed this guide to standardize the annual report and to ensure that Congressional requirements are met. States need to compare planned State priorities, objectives, and budget with actual reported status, accomplishments and expenditures. The guide describes the data mandated in each segment of the annual report.

**FUNDING/ SUPPORTING AGENCY/ SPONSOR**

Office of Disease Prevention and Health Promotion, Office of Public Health and Science, U.S. Department of Health and Human Services (DHHS); Maternal and Child Health Bureau (MCHB)

Cost *of* data collection effort: Data not provided

**PERIODICITY**

*Frequency of dafa collection:* Annually
*Start* date: 1990
*Years collected:* *6 (1990-I 995)*

**SAMPLE**

*Geographic coverage:* All fifty states
*Sample size:* MCH agencies in all fifty states

**DESCRIPTION OF DATA ELEMENTS**

The guide provides a description of the necessary steps for completing the Maternal and Child Health Services Block Grant Program annual report. The guidance report includes the necessary forms for the report and standard definitions for reporting data.

Data elements collected for the annual report are as follows:

- General data on the Maternal and Child Health program (e.g. location of agency, title of programs within the agency, areas affected by the project, estimation of funding from the different funding sources).
- Data on the state budget and expenditures for the respective fiscal year (budget available for specific projects versus funds expended or obligated to the programs, funds expended on special legislative financial provisions).
- Breakdown of state expenditures by type of service (e.g. policy development, demonstration & applied research, community assessment, program development and management) and by class of individuals (pregnant women, infants, children and adolescents, and children with special health care needs (CSHCN)).
- Data on the number of individuals that received services by type of health coverage (e.g. Title V, Medicaid, private insurance, no insurance. and other sources).

The annual report packets also include definitions used in the annual reports, information on the annual report review criteria, and instructions for filing the reports on disk as well as on paper.

METHODOLOGY

| | |
|---|---|
| *Data collection* method: | Survey |
| Format *(of collection)*: | Hard copy and electronic |
| *Format (housing of data)*: | Hard copy and electronic |
| Participation: | Mandatory |

Data/information flow: State officials within the Maternal and Child Health Bureau complete the annual report based upon the guidelines and restrictions enunciated in the guide. The states send the completed report to MCHB where the office staff reviews the annual report for compliance with format and required elements. No further Title V funds are granted to the state agency until any problems with the annual report are resolved. The staff review the report and corresponding annual plan to assure that the status of priorities, needs, annual objectives and related milestones are reported. MCHB sends a written note of acceptance of the report based on documentation and the professional judgment of completeness as recommended by the staff reviewer.

Data *quality* assurance: Accuracy of the reported material is presumed since verification of state expenditures is a function of the audit process. Criminal penalties for false representation of facts related to Title V-reimbursed services are enunciated in the law.

Data *analysis:* Descriptive, longitudinal, cross-sectional data.

STRENGTHS/ LIMITATIONS (METHODOLOGY)

Strengths:

1. Data are collected from all state Maternal and Child Health Bureaus annually to ensure the meeting of national standards.
2. Standardized definitions for completion of the MCHB annual report are provided in the survey materials.
3. Analysis of ongoing data collection can track changes in expenditure over time.

Limitations

1. Data do not present an evaluation of the effectiveness of the project but rather a summation of the distribution of expenditures and the existing programs.
2. Definitions are limited to a discrete set of services and activities which do not match to other surveys (e.g., essential public health services).

REPORTS

Department of Health and Human Services. Maternal and Child Health Bureau Report to Congress. (Washington, D.C.: Maternal and Child Health Bureau), 1995.

# Inventory of Mental Health Organizations and General Hospital Mental Health Services (IMHO/GHMHS)

## *DHHS, Substance Abuse and Mental Healfh Services Administration, Center for Mental Health Services*

**SUMMARY**

This data set contains detailed information on nationwide mental health admissions, beds, census, staff, expenditures, and revenues in outpatient, residential, and inpatient settings. Consistent and comparable data are available every other year from 1986 and some major trend data date to 1967. The data describe services and service utilization, and provide data on client characteristics. Separate processes are in place to obtain data from (1) State Mental Health Authority-controlled or -funded programs, (2) psychiatric units within general hospitals, and other private psychiatric care providers.

**BACKGROUND**

The IMHO is the product of a merger of earlier surveys of (1) community-based mental health treatment providers and (2) psychiatric hospitals and general hospitals with psychiatric wards.

**FUNDING/ SUPPORTING AGENCY/ SPONSOR**

DHHS, Substance Abuse and Mental Health Services Administration, Center for Mental Health Services

*Cost of data collection effort:* Data not provided

**PERIODICITY**

*Frequency of data collection:* Biennial

*Start date:* *1968,* but consistent data available after 1986

*Years collected:* 6 (1979-1980, 1986, 1988, 1990, 1992, 1994)

**SAMPLE**

*Geographic coverage:* United States

*Sample size:* Census of over 10,000 "master" providers, that include agencies with multiple and distinct service delivery units. This includes psychiatric units in non-AHA member hospitals.

**DESCRIPTION OF DATA ELEMENTS**

- Type of service (inpatient, outpatient, partial care, residential, emergency care, and case management)
- Type of organization (State/county Mental Hospital, Private Psychiatric Hospital, Non-federal General Hospital, VA, Federal CMHC, Residential Center, Outpatient Clinic)
- Staffing by level of staff
- Revenue by source
- Expenditures by setting and type of treatment within setting
- Counts of clients and client demographics

**METHODOLOGY**

*Data collection method:* Survey

*Format (of collection):* Hard copy and electronic

*Format (housing of data):* Electronic

*Participation:* Voluntary

*Data/information flow:* Previously, all providers were directly surveyed by a Federal contractor who received, keyed, and analyzed data. Under the current arrangement, the prime contractor receives data from three subcontractors who are each responsible for different aspects of mental health services.

First, most State Mental Health Authority-controlled or funded programs provide data to the SMHA, who in turn provides electronic data to the National Association of State Mental Health Program Directors Research Institute. This includes community-based mental health service providers and State-funded psychiatric hospitals. NASMHPD-RI currently is relying on computer-based surveys rather than paper and pencil surveys in 30 states. In a few states, the prime contractor continues to directly survey SMHA-controlled or funded providers. Second, the American Hospital Association surveys psychiatric units in general hospitals. Third, the National Association of Psychiatric Health Systems surveys other private psychiatric service providers.

Non-responding providers receive a second mailing, then reminder telephone calls, and finally, a telephone survey for selected "core" (essential) items. Non-response may have been a larger problem in 1994 as States attempted to switch to centralized and automated collection and reporting. For providers who do not respond or those respondents who are missing data, data are imputed based on a computer generated procedure.

*Data quality* assurance: The contractor performs data edits. Some SMHAs perform preliminary edits on data prior to submission to the national database.

*Data* analysis: Descriptive and longitudinal data analysis at the provider and State level is feasible.

***STRENGTHS/ LIMITATIONS (METHODOLOGY)***

*Strengths*:

1. IMHO provides the only facility level data available nationally on mental health services and expenditures.
2. Automated data flow from providers to SMHAs to the contractor may expedite data availability.

Limitations:

1. Although the survey attempts to collect information (e.g., revenue data) from other state agencies providing mental health services, the information available is limited.
2. Many providers do not maintain accurate and up to date records on client counts, and employ sometimes divergent methods for estimating this data. The Mental Health Statistics Improvement Project (MHSIP) is designed to improve the quality of mental health data.

***REPORTS***

- Substance Abuse and Mental Health Services Administration. Mental *Health,* United States, 1994

# Local Health Department Primary Care Assessment
## *National Association of County Health Officials*

**SUMMARY**

The National Association of County Health Officials (NACHO) developed the Primary Care Assessment to assess the role of local health departments in the delivery of primary health care. Data from the National Profile of Local Health Departments, a survey conducted by NACHO in 1990, identified health departments that were active in personal health services. This Primary Care Assessment (PCA) gave greater detail on the specific types of personal health care services provided by LHDs.

**BACKGROUND**

Traditionally, local health departments have promoted health through health education, the control of communicable diseases, the provision of medical and nursing services for the diagnosis and prevention of diseases and environment sanitation. However, in past decade, the local health departments have directed more funds and attention to the delivery of primary health care services, especially to the indigent population. NACHO conducted this survey in order to develop a better understanding of the contributions that local health departments make to the delivery of primary care services. NACHO also undertook the survey to address the need for data concerning the health care delivery system.

**FUNDING/ SUPPORTING AGENCY/ SPONSOR**

National Association of County Health Officials

Cost of data collection *effort*: Data not provided

**PERIODICITY**

Frequency of data collection: First survey

*Start* date: 1991

*Years collected*: 1991 (1 Year)

**SAMPLE**

Geographic *coverage:* Local public health entities, including independently operated nursing and environmental units

Sample size: 3,020 entities in 46 states that had local health departments (excluding Vermont, Delaware, Hawaii, and Rhode Island). 46 percent of the LHDs submitted completed questionnaires.

**DESCRIPTION OF DATA ELEMENTS**

The survey was comprised of three main sections.

- Health Department Services: Information on the components of primary care. Respondents were asked whether the services were provided through direct provisions, contracting out, or through referrals and how many hours per week the services were available. Respondents also provided information on the number of primary care users in the corresponding fiscal year, the location of the primary care service sites, and whether a waiting list for services exists. Finally, respondents were asked whether they provided comprehensive primary care services in accordance with the definition given by the U.S. Public Health Service.
- Budget: Data from respondents on the estimated total expenditures of the health department and how much of those expenditures were used to provide primary care services.
- Staffing: Data were requested on the number of full time equivalents (FTEs) budgeted in each department for primary care and the number of FTE vacancies. The study also requested data on the number of staff that worked over 35 hours during each week.

At the end of the questionnaire, respondents had the opportunity to give general data on their health department (i.e. geographic jurisdiction served, the number of clinic sites, the estimated population of services area, the unduplicated count of total users, number of patient visits, and a contact person who could respond to further questions).

*METHODOLOGY*

| | |
|---|---|
| ***Data collection method:*** | Survey |
| Format ***(of collection):*** | Hard copy |
| ***Format (housing of data)***: | Hard copy |
| Participation: | Voluntary |
| ***Data/information flow*** | NACHO mailed out the survey to *3,020* randomly selected local health departments. Two subsequent mailings were done to nonrespondents to improve the response rate. |
| *Data quality* ***assurance:*** | ***No*** substantial quality assurance measures were performed to ensure the validity of the data. |
| ***Data analysis:*** | Descriptive and cross-sectional data. |

*STRENGTHS/ LIMITATIONS (METHODOLOGY)*

***Strengths:***

1. The survey provides comprehensive information on the specific types of personal health care services provided by local health departments.
2. The survey provided data on the public health work force in local health departments, enabling national health officials to better assess the public health work force needs.
3. Health officials may use the information to develop a better understanding of who receives basic services and where those services are obtained.

***Limitations:***

1. Definitions on "comprehensive primary care" may vary between respondents thereby allowing the respondents to interpret the question based on their own concepts and definitions.
2. The response rate (46 percent) was relatively low.
3. The data are self-reported and follow-up reviews were not conducted

*REPORTS*

- ***National Association of County Health Officials.*** "Primary Care Assessment: Local Health Departments' Role in Service Delivery", October 1992.

# Preventive Health and Health Services Block Grant Uniform Data Set
## *Centers for Disease Control and Prevention (CDC)*

**SUMMARY**

The purpose of the Uniform Data Set is to monitor the use and performance of the PHHS Block Grant against the Healthy People 2000 objectives and other public health objectives. There are 24 primary data sets, one for each of the *22* chapters of Healthy People 2000, one for Emergency Medical Services, and one for Rodent Control. The chapters are subdivided creating a total of 64 uniform data sets. Each state is responsible for reporting one data item from each of the health chapters of Healthy People 2000.

**BACKGROUND**

The Preventive Health and Health Services (PHHS) Block Grant administered by the CDC provides states with resources to carry out comprehensive preventive health services. The PHHS legislation allows the grant to be used to address Healthy People 2000 objectives and for Emergency Medical Services, Rodent Control, grant administration, and monitoring and evaluating of chosen health status objectives.

The PHHS Uniform Data Set is in the development and implementation period at this point in time. Congress in 1995 revised the law, mandating the CDC to collect data on the PHHS Block Grant; no data collection had occurred prior to this Congressional requirement.

**FUNDING/ SUPPORTING AGENCY/ SPONSOR**

Centers for Disease Control and Prevention

Cost of data collection *effort*: Data not provided

**PERIODICITY**

Frequency *of* data collection: Annual

Start date: Implemented in February 1996

*Years collected:* *1 (1996)*

**SAMPLE**

*Geographic coverage*: *50* states

*Sample size:* All state recipients of PHHS block grants, mandatory reporting

**DESCRIPTION OF DATA ELEMENTS**

- There are 21 uniform data items (from the 21 health chapters of Healthy People 2000):

| | |
|---|---|
| physical activity and fitness | food and drug safety |
| nutrition | oral health |
| tobacco | maternal and infant health |
| alcohol and other drugs | heart disease and stroke |
| family planning | cancer |
| mental health and mental disorders | diabetes and chronic disabling conditions |
| immunization and infectious diseases | HIV infection educational and community-based programs |
| sexually transmitted diseases | violent and abusive behavior |
| unintentional injuries | occupational safety and health |
| clinical preventive services | environmental health |

Uniform Data Items (21) are subdivided according to different health status objectives of Healthy People 2000 into 61 uniform data sets. Chapter 22 of Healthy People 2000 (surveillance and data systems), Emergency Medical Services and Rodent Control are added to these to make a total of 64 uniform data sets.

**Activities Focus**

Most of the data collected are outcomes oriented (e.g. mortality rates, communicable disease rates, number of times people used health department services), but some infrastructure data are collected, including:

- percent of schools with different educational programs,
- number of community programs supported by the state program,
- number of local health units carrying out core public health functions,
- existence of immunization consulting system to providers and travelers,
- names and title of surveillance and data systems by the PHHS Block Grant,
- percent financial support of surveillance and data systems by the PHHS Block Grant,
- Number of persons trained/certified in emergency medical services,
- number of licensed/certified emergency medical services in state.

***METHODOLOGY***

*Data collection method:* Data records

*Format (of collection):* Electronic

*format (housing of data):* Electronic

Participation: Mandatory

Data/information *flow:* Each year, States prepare an annual plan. States identify which uniform data sets best correspond to the health status objectives in their annual plans and report this information to CDC. CDC reports this information to its contractor. The contractor searches national databases for data items chosen. If items are not found, the CDC and contractor notify the State and the State must report this data to the CDC. Most of the data items for the 21 health oriented chapters of HP 2000 are available in national databases, in which case States are not asked to report this data. If the State plans include additional activities, not included in HP 2000 objectives, the State must indicate intended health outcomes and provide these additional data items to CDC.

*Data qualify* assurance: The collection is intended to have a vehicle for data quality assurance but that vehicle has not yet been determined.

Data analysis: Longitudinal, cross-sectional

***STRENGTHS/ LIMITATIONS (METHODOLOGY)***

*Strengths*:

1. Block Grant recipients are required to report data.
2. The CDC utilizes existing data collection mechanisms for most of the data.

*Limitations:*

1. Uniform data set includes very little data on public health infrastructure.
2. Variations in types of services actually offered is not captured.

***REPORTS***

None to date.

# Query of Worksite Health Promotion Activities and Capacity

## *Association of State and Territorial Directors of Health Promotion and Public Health Education*

**SUMMARY**

The Association of State and Territorial Directors of Health Promotion and Public Health Education (ASTDHPPHE) has developed this survey instrument to assess the worksite health promotion activities. The goal of the project is to determine the level of worksite health promotion conducted within and by the state health department. The instrument allows the state health department to assess its worksite health promotion activities and to assess its needs and methods of implementing these programs.

**BACKGROUND**

Evidence of the effectiveness of worksite health promotion (WHP) activities in improving public health has accumulated over the past two decades. In a review covering 48 studies on WHP, all studies but one found that WHP had positive health outcomes and a positive return on investment for programs including prenatal classes, hypertension control, and back injury prevention. Positive health outcomes are only one aspect of WHP; improvements have also been documented in the following four areas: (1) productivity (including absenteeism, morale, performance ability, and staff quality), (2) benefits cost (health insurance, life insurance, and workers' compensation); (3) human resources development; and (4) image (general visibility, being a concerned employer).

Aware of the benefits of WHP, the members of ASTDHPPHE were interested in conducting a query to determine what worksite health promotion activities currently existed in state health departments and how they were organized. This query was done in conjunction with the Centers for Disease Control and Prevention (CDC).

**FUNDING/ SUPPORTING AGENCY/ SPONSOR**

Association of State and Territorial Directors of Health Promotion and Public Health Education (ASTDHPPHE); Centers for Disease Control and Prevention (CDC)

Cost of data collection effort: Data not provided

**PERIODICITY**

Frequency of data collection: One, point-in-time query
Start date: **February 1995**
Years collected: *1 (1995)*

**SAMPLE**

Geographic coverage: All fifty states and U.S. territories
Sample size: *94%* of the states, 20% of the territories

**DESCRIPTION OF DATA ELEMENTS**

The survey consisted of three different sections:

- Overview: General discussion about the worksite health promotion activities (i.e. administration, laws that affect its scope, future plans).
- External and Internal Worksite Health Promotion Assessment: External WHP is directed toward agencies and companies while internal WHP is directed toward state health department employees. Qualitative and quantitative data were collected on the integral aspects of external and internal WHPs (appropriateness of program, effectiveness, its missions and goals, management support, and program expenditures/resources).
- State Health Officer WHP Assessment: State health officers were asked to assess the effectiveness of the WHP programs and their relation to SHD missions and goals (i.e. does the WHP goals concur with goals of Healthy People 2000). This segment also collected information on the place of WHP in the upcoming years.

METHODOLOGY

Data collection method: Survey

***Format (of collection)***: Hard copy

Format *(housing* of data): Hard copy

Participation: Voluntary

*Data/information* ***flow:*** Standard forms, developed by ASTDHPPHE, were fielded to state health departments officials in the participating states. The survey was completed by officials directly associated with the worksite health promotion activities, internally and externally, and by ASTDHPPHE liaisons. The completed forms were tabulated and coordinated by the Department of Kinesiology and Health Education at the University of Texas at Austin

Data *quality* ***assurance: No*** data quality assurance performed.

Data analysis: Descriptive data.

*STRENGTHS/* ***LIMITATIONS (METHODOLOGY)***

***Strengths:***

1. Data were collected regarding the status of worksite health promotion activities. Discussion of future plans of WHP activities allows ASTDHPPHE to assess the future of these activities.
2. The data assisted the states in assessing the effectiveness of the programs.

***Limitations:***

1. No report was prepared which summarizes the results from the survey. It is unclear if the data are analyzed in such a manner as to allow for states to learn about other WHP state activities.
2. Definitions or activities and services narrowly defined to only worksite health promotion framework.

*REPORTS*

None to date.

# Ryan White Care Act Title I Annual Administrative Reports
## *Bureau of Health Resources Development (BHRD), Health Resources and Services Administration (HRSA)*

**SUMMARY**

Under the Ryan White Care Act Titles I, eligible metropolitan areas (EMAs) must complete annual administrative reports (AAR) on their programs and annual applications to receive funding for the following fiscal year. The Bureau of Health Resources Development (BHRD) has created a guide to facilitate the completion of the applications to ensure that the necessary criteria are met. The EMAs receive the AAR forms and send the completed forms to BHRD each year, enabling BHRD to monitor the funding for HIV/AIDS throughout the United States.

**BACKGROUND**

In 1990, Congress enacted the Ryan White Comprehensive AIDS Resource Emergency Act of 1990 to improve the quality of and access to care for individuals and families HIV disease.

Title I, the "HIV Emergency Relief Grant Program", provides direct formula, financial assistance to eligible metropolitan areas (EMAs). Supplemental funding is awarded to EMAs seriously affected by the AIDS epidemic that have demonstrated a severe need for additional funding. The purpose of these funds is two-fold:

- Deliver HIV-related outpatient and ambulatory and support services, including case management and comprehensive treatment services for individuals and families with HIV disease.
- Deliver HIV-related inpatient case-management services that prevent unnecessary hospitalization or that expedite discharge, as medically appropriate.

EMAs that are granted funding must establish a HIV Health Services Planning Council (HHSPC); the EMA grantee must distribute the funds to providers based on priorities determined by the council.

**FUNDING/ SUPPORTING AGENCY/ SPONSOR**

Bureau of Health Resources Development (BHRD), Health Resources and Services Administration (HRSA)

*Cost of data collection effort:* Data not provided

**PERIODICITY**

*Frequency of data collection:* Annually
*Start date:* First field test conducted in September 1992
*Years collected:* 2 years (1994, 1995)

**SAMPLE**

*Geographic coverage:* 42 Eligible Metropolitan Areas (EMAs) in 1995
*Sample size:* Same as above

**DESCRIPTION OF DATA ELEMENTS**

The collection strategy developed is designed to collect descriptive data on programs supported by Title I funds by documenting different systems of care, program management, evaluation, and planning and policy development.

The forms collect numerous data elements, some which are infrastructure related.

Title I (Data at the EMA level):

- Providers by type (e.g. hospital based clinic, community health center, private medical practice) and by ownership (public - local, public - state, federal, non-profit private).

- HIV funding sources (Title I, Title II, Title III, other federal HIV programs, Medicaid, other sources).
- Numbers, demographics, and HIV status of clients served under Title I (gender, age, race/ethnicity, percentage estimated with AIDS, new clients, anonymous clients).
- Data on the HIV Health Services Planning Council (HHSPC) (members, distribution of funds, priorities set by the council)
- Client HIV exposure categories (men who have sex with men, injection drug users, men who have sex with men and are injection drug users, people who have had a heterosexual relations, undetermined). These data highlight "high-risk" populations.
- State and local HIV expenditures by source of funds (i.e. federal funds, state funds, state fees, local funds, local fees, Medicaid reimbursement, and other sources).
- Data on HIV Service Expenditures and Staffing by Category (i.e. direct service staff, medications, contracted services, other direct expenditures, support service expenditures). The category of direct service staff is broken down into providers reporting FTEs, paid FTEs, and volunteer FTEs. Also, organizations or states report on the added staff with CARE funds by type of staff.
- Data on EMA funding of support services rendered (i.e. adoption/foster care, buddy/companion services, client advocacy, direct emergency financial assistance, transportation, and health education/risk reduction)

Data collection for the Ryan White Care Act occur on two different levels. First, providers that receive funding from the EMA grantee collect and give aggregated data to the grantees who in return give the aggregated data from all the providers to BHRD.

Second, the Ryan White Care Act also created the Client Level Demonstration Data Project that collects client-level data, unduplicated counts, and clinical information on the patients. This Data Project is still in the experimental stage and is accessible to a limited number of grantees and EMAs.

*METHODOLOGY*

| | |
|---|---|
| *Data collection method*: | Report |
| Format *(of collection)*: | Hard copy and electronic |
| Format *(housing of data)*: | Hard copy and electronic |
| Participation: | Mandatory |

Data/information *flow*: Standard reports are completed by the providers that receive funding for their services from the EMA. The director of the EMA or the health official that oversees the Title I program then aggregates the data and sends the completed report to BHRD. The data collection packet for the applications includes instructions for completing the application, forms, annual criteria review, and pertinent definitions for the application process.

The data for the national Annual Administrative Report are compiled and aggregated by BHRD of HRSA.

*Data qualify assurance:* Grantees and BHRD runs quality assurance checks and clean the data as best as possible.

*Data analysis:* Longitudinal, cross-sectional data that allows for state comparison. Over time, as the client-level database expands, BHRD may be able to do analysis based on unduplicated client counts.

*STRENGTHS/ LIMITATIONS (METHODOLOGY)*

*Sfrenqfhs:*

1. Data are collected from all aspects of the Title I and Title II programs. The data allow for an extensive view of the inner workings of the programs.
2. Data are collected on the different types of HIV providers by ownership.

3. Definitions and instructions for completing the annual applications are included in the survey packet.
4. Analysis of ongoing data collection can track changes in expenditure over time.

*Limitations*:

1. All grantees in the program serve as fiscal intermediaries and therefore do not have direct access to pertinent data.
2. Differences in state and local public health agencies' organizational structures, fiscal years, and reporting of budgets and/or actual expenditures limit the ability to make comparisons across states.
3. Current AAR reports based on aggregated client counts.
4. Data collected on services are narrowly defined to the Title I classification scheme and are not linked to a broader framework (e.g. ten essential public health functions).

REPORTS


- Bureau of Health Resources Development. Ryan White Care Act, Title I and Title II, Annual Administrative Reports (AAR) for 1994. (Washington, D.C.: Services Documentation Branch) 1995.

# Ryan White Care Act Title II Annual Administrative Reports
## *Bureau of Health Resources Development (BHRD), Health Resources and Services Administration (HRSA)*

**SUMMARY**

Under the Ryan White Care Act Titles II, state must complete annual administrative reports (AAR) on their programs and annual applications to receive funding for the following fiscal year. The Bureau of Health Resources Development (BHRD) has created a guide to facilitate the completion of the applications to ensure that the necessary criteria are met. The EMAs receive the AAR forms and send the completed forms to BHRD each year, enabling BHRD to monitor the funding for HIV/AIDS throughout the United States.

**BACKGROUND**

In 1990, Congress enacted the Ryan White Comprehensive AIDS Resource Emergency Act of 1990 to improve the qualify of and access to care for individuals and families with HIV disease.

Title II, the "HIV Care Grant Program", gives formula-based financial assistance to States and Territories to improve the quality, availability, and organization of health care and support services for families and individuals with the HIV disease. This Title emphasizes that the care and support be part of a continuum of care for HIV patients. States may spend the Title II funds in accordance with the following four areas:

- HIV Care Consortia: Establishing and operating HIV care consortia designed to provide a comprehensive continuum of care.
- Home and Community Based Care: Providing home and community based care to HIV patients.
- Continuum of Health Insurance Coverage: Providing assistance to assure the continuity of health insurance coverage (Health Insurance Continuation Program).
- Provision of Treatments: Providing treatments that have been determined to prolong life or prevent serious deterioration of health to people with HIV/AIDS (AIDS Drug Assistance Program).

**FUNDING/ SUPPORTING AGENCY/ SPONSOR**

Bureau of Health Resources Development (BHRD), Health Services Resources Administration (HRSA)

*Cost of data collection effort*: Data not provided

**PERIODICITY**

*Frequency of data collection*: Annually
Start date: First field test conducted in September 1992
Years collected: 2 years (1994, 1995)

**SAMPLE**

Geographic *coverage*: All fifty states and U.S. Territories
Sample size: 49 states (excludes North Dakota), Puerto Rico

**DESCRIPTION of DATA ELEMENTS**

The collection strategy developed is designed to collect descriptive data on programs supported by Title II funds by documenting different systems of care, program management, evaluation, and planning and policy development.

The report collects numerous data elements, some of which are infrastructure related.

Title II (Data at the state level):

- Providers by type (e.g. hospital based clinic, community health center, private medical practice) and by ownership (public - local, public - state, federal, non-profit private).
- HIV funding sources (Title I, Title II, Title III, other federal HIV programs, Medicaid, other sources).
- Numbers, demographics, and HIV status of clients served under Title I (gender, age, race/ethnicity, percentage estimated with AIDS, new clients, anonymous clients).
- Client HIV exposure categories (men who have sex with men, injection drug users, men who have sex with men and are injection drug users, people who have had a heterosexual relationship, undetermined).
- Data on the Title II Consortium (i.e. its members and the populations they represent, its funding sources, and its activities).
- State and local HIV expenditures by source of funds (i.e. federal funds, state funds, state fees, local funds, local fees, Medicaid reimbursement, and other sources).
- Data on HIV Service Expenditures and Staffing by Category (i.e. direct service staff, medications, contracted services, other direct expenditures, support service expenditures). The category of direct service staff is broken down into providers reporting FTEs, paid FTEs, and volunteer FTEs. Also, organizations or states report on the added staff with CARE funds by type of staff.
- Data on state funding of support services rendered (i.e. adoption/foster care, buddy/companion services, client advocacy, direct emergency financial assistance, transportation, and health education/risk reduction)

Under Title II, a program called the AIDS Drug Assistance Program seeks to maintain the accessibility of drugs that try to prevent serious deterioration of health. The data collected are as follows:

- Program characteristics (administering agency, medical eligibility criteria, processing period, and recertification frequency).
- Annual funding and expenditures by source and percent of program funds from Care Title I and II.
- Demographics and numbers on the clientele served.
- Drugs dispensed and their costs to the government.

The Annual Administrative Report (AAR) also collects data on the Health Insurance Continuation Program which is a program that falls under Title II. The data collected are as follows:

- Organization Name
- Demographics on the clientele served (e.g. unduplicated count, gender, racial heritage, age group)
- Annual HIV/AIDS funding by funding source (e.g. Title I CARE, Title II CARE, State/Local public sources, other sources)
- Payments, number of client months, and number of clients for (premiums, deductibles, co-payments, risk pool payments)

**Activities Focus**

Data collection for the Ryan White Care Act occur on two different levels. First, providers that **receive funding directly from the state collect and give aggregated data to the state. Providers that receive funding from state grantees collect and give aggregated data to the grantee who in turn gives the aggregated data from all providers that** receive funding to BHRD.

Second, the Ryan White Care Act is conducting a Client Level Demonstration Data Project that collects client-level data, unduplicated counts, and clinical information on patients through the provider. This Data Project is still in the experimental stage and involves a limited number of grantees.

METHODOLOGY

*Data collection method:* Report

*Format (of collection)*: Hard copy and electronic

*Format (housing of data)*: Hard copy and electronic

*Participation:* Mandatory for AAR only

*Data/information flow:* Standard reports are completed by the providers that receive funding for their services from the state or the grantee. The director of the state agency or the health official that oversees the Title II program then aggregates the data and sends the completed report to BHRD. The data collection packet for the applications includes instructions for completing the application, forms, annual criteria review, and pertinent definitions **for the application process.**

The data **for the national Annual Administrative** Report are compiled and aggregated by BHRD of HRSA.

*Data qualify assurance:* Grantees and BHRD run quality assurance checks and clean the data as best as possible.

*Data* analysis: Longitudinal, cross-sectional data that allows for interstate and intrastate comparison. Most of the data from Title II is unduplicated.

STRENGTHS/ LIMITATIONS (METHODOLOGY)

*Strengths*:

1. Data are collected all different aspects of the Title II programs. The data allow for an extensive view of the inner workings of the programs.
2. Data are collected on the different types of HIV providers by ownership.
3. Definitions and instructions for completing the annual applications are included in the survey packet.
4. Analysis of ongoing data collection can track changes in expenditure over time.

*Limitations:*

1. Many grantees in the program serve as fiscal intermediaries and therefore do not have direct access to the pertinent data.
2. Differences in state and local public health agencies' organizational structures, fiscal years, and reporting of budgets and/or actual expenditures limit the ability to make comparisons across states.
3. Current AAR reports are not necessarily based on unduplicated client counts but rather on aggregated data for all programs under Title II.
4. Data on services and activities are defined within the Title II classification scheme and are not linked to a broader framework (e.g. ten essential public health functions).

REPORTS

· Bureau of Health Resources Development. Ryan White Care Act, Title I and Title II, Annual Administrative Reports (AAR) for 1994. (Washington, D.C.: Services Documentation Branch) 1995.

# Ryan White Care Act Title IV Reporting System
## *Maternal and Child Health Bureau, Health Resources and Services Administration*

**SUMMARY**

Under the Ryan White Block Grant Title IV Program, which grants funds for Coordinated HIV services and Access to Research for Children, Youth, Women, and Families, states must complete annual administrative reports on their programs and document the allocation of funds to the differing populations. The Maternal and Child Health Bureau collects these data and the data enable MCHB to track/monitor the programs to ensure that the necessary services are being provided to the vulnerable populations.

**BACKGROUND**

The Ryan White Title IV Program was permanently authorized in 1993 and received funding for fiscal year 1994. The program supports efforts to develop comprehensive, family-centered, community based, culturally competent coordinated systems of care and to provide access to research. Originally operated as the Pediatric/Family HIV Demonstration project in 1988, the program supports a broad variety of interventions that are designed to link clients receiving health care to other essential and supporting services and to clinical research. Title IV projects also have, as part of their goals and objectives, prevention of transmission of HIV infection among women and children.

In 1991, MCHB contracted with Lewin-VHI to assist in the design of a Title IV Program Data Collection Strategy. Four sets of data reporting tables were developed and distributed to grantees to collect information regarding their organizational characteristics and service delivery approaches, clients, and activities related to outreach, prevention, and education.

**FUNDING/ SUPPORTING AGENCY/ SPONSOR**

Maternal and Child Health Bureau (MCHB)

*Cost of data collection effort:* Data not provided

**PERIODICITY**

*Frequency of data collection:* First pilot survey collected Fiscal Year 1992 data

*Start date:* 1992

*Years collected:* 1 (1992)

**SAMPLE**

*Geographic coverage:* Title IV grantees may be located in all fifty states and U.S. territories.

*Sample size:* 36 Title IV program grantees in 22 states (including the District of Columbia and Puerto Rico).

**DESCRIPTION OF DATA ELEMENTS**

The collection strategy developed is designed to collect descriptive data on programs supported by Title IV funds by documenting different systems of care, program management, evaluation, and planning and policy development.

The data collection strategy is comprised of four sets of data reporting tables:

- Description of the organizational structure of the grantee and of the type of services available.
- Service Mix profile describing the range of services available and accessible to subgroups (infants, children, adolescents, pregnant women and mothers, adult women, adult men, families, HIV positive service populations, HIV negative status service populations, and unknown) of the target populations served by the Title IV projects.

- **Aggregated person-based demographic and clinical status summary and service utilization summary describing the demographic and clinical status characteristics of clients who are enrolled** in the Title IV project (age, gender, ethnicity, race) and the services rendered to these individuals.
- Prevention, outreach, and education activities summary tables describing activities conducted by Title IV projects as well as the demographic characteristics of the people reached through these activities.

The data reported in these tables also provide information related to the Title IV program objectives of providing comprehensive, coordinated, community-based, family centered, and culturally competent care and access to research for child, youth, women, and families.

METHODOLOGY

*Data collection method:* Survey
*Format (of collection):* Hard copy
*Format (housing of data):* Hard copy, electronic
*Participation:* Voluntary until next year

*Data/information flow:* Standard surveys, developed by Lewin-VHI in conjunction with MCHB, were given to grantees in the twenty-two states. The data were collected by the officials, as best as possible, and the complete forms were analyzed and aggregated by Lewin-VHI and MCHB. The two sponsors also assisted the grantees during the initial collection process to cope with operational **issues involved in reporting data.**

*Data quality assurance:* Some grantees were unable to collect data on all elements of the tables. Standard footnotes account for the missing data and for skewed results due to the absence of pertinent data. This collection strategy was recently designed and has been implemented on only one occasion to date.

*Data analysis:* Descriptive, longitudinal data.

STRENGTHS/ LIMITATIONS (METHODOLOGY)

*Strengths:*

1. Data collected in the initial pilot survey represent a baseline for assessing future changes in Title IV projects.
2. Analysis of ongoing data collection can track changes in expenditure over time.
3. Data collected present insight into all aspectsof the HIV/AIDS treatment efforts including activities to prevent the spread of the epidemic and to ensure the continuity of care for those individuals with the disease.

*Limitations:*

1. Many grantees in the program serve as fiscal intermediaries and therefore do not have direct access to the pertinent data.
2. Grantees do not receive funding for data collection, automation, or reporting and are therefore reluctant to invest a great deal of time and effort in data collection activities.
3. Defined activities and services collected are not standardized to a broader framework such as the essential public health services.

REPORTS

- Maternal and Child Health Bureau. HIV Demonstration Program for Children, Adolescents, and Families: Report of 1992 Organizational Data Submitted by Grantees. (Washington, D.C.: Maternal and Child Health Bureau), May 1994.

# State Alcohol and Drug Abuse Profile (SADAP)
## *National Association of State Alcohol and Drug Abuse Directors*

**SUMMARY**

NASADAD conducts SADAP, a voluntary annual survey of State and territorial alcohol and drug abuse agencies in the United States, to collect data on alcohol and other drug abuse treatment and prevention services, treated persons, revenues, and expenditures on providers that receive at least some funds administered by the State alcohol/drug agency. Data are reported annually in a report entitled *State Resources and Services Related to Alcohol and Other Drug Problems.*

**BACKGROUND**

Following the discontinuation of Federally-mandated reporting of specialty treatment information in 1981, NASADAD undertook the responsibility for obtaining State-level data concerning revenues and persons served through State-supported providers.

**FUNDING/ SUPPORTING AGENCY/ SPONSOR**

NASADAD conducts the survey, and the Substance Abuse and Mental Health Services Administration's Office of Applied Studies sponsors analysis of the data received.

*Cost of data collection effort:* Data not provided

**PERIODICITY**

*Frequency of data collection:* Annual

*Start date:* *1983*

*Years collected:* *13* (1983 - present)

**SAMPLE**

*Geographic coverage:* Single State Agencies for Alcohol/Drug Abuse in the United States and its territories

*Sample size:* Typically about 48 or 49 states, plus District of Columbia, Guam, and Puerto Rico

**DESCRIPTION OF DATA ELEMENTS**

- State expenditures separately for treatment, prevention, and other; by source (Block Grant, Other Federal, State Agency, Other State, County/Local, Other).
- Number of units (alcohol only, drug only, combined)
- Annual admissions into alcohol or other drug treatment by type of treatment (same categories as UFDS);
- Age, Race/Ethnicity, Gender, Primary drug problems;
- Information on injection drug abuse;
- Information on pregnant women;
- Identification of State's top five policy issues;
- Identification of major needs/types of resources needed;
- Identification of significant changes/emerging trends;
- Identification of steps to collect effectiveness information
- Description of prevention efforts
- Description of HIV/AIDS efforts
- State agency staffing; and
- Types of products State agency has produced.

***METHODOLOGY***

***Data collection method:*** ***Survey***

*Format (of collection)*: Hard copy

*Format (housing of data)*: Electronic

*Participation:* Voluntary

*Data/information flow:* A hard copy questionnaire is mailed out to NASADAD members at the end of each calendar year, and State agency personnel are asked to pull data for the survey from existing sources. Data are keyed at NASADAD for analysis.

*Data quality assurance:* Data are checked for completeness by NASADAD and recontacts with the State agency personnel are made as necessary.

*Data analysis:* Descriptive, longitudinal, cross-sectional
Summary descriptive data from NDATUS have been reported from OAS and its previous sponsors, NIDA/NIAAA. Analytic reports involving hypothesis testing have been conducted by outside analysts. Longitudinal data are available, as well as cross-sectional data.

***STRENGTHS/ LIMITATIONS (METHODOLOGY)***

*Strengths:*

1. Annual survey provides longitudinal data.
2. This is the only source for information concerning balance of State and Federal contribution to treatment and prevention programs.
3. This is the only source providing state-level estimates that include SSA expenditures.

*Limitations:*

1. Data analyses to date have been primarily descriptive, though opportunities for hypothesis testing exist.
2. Data cannot be disaggregated to sub-state or facility level.
3. Focus on state substance abuse agencies runs the risk of neglecting other state agencies which support substance abuse services. It is unclear by what process states obtain/report data on county/local expenditures.
4. There is evidence of a lack of common taxonomy between the states.
5. NASADAD is concerned about the lack of specificity concerning "units of services delivered".
6. Some states do not differentiate between expenditures on alcohol versus other drug treatment, making interpretation of this data difficult.

***REPORTS***

- Sfafe *Resources and Services Related to Alcohol and Other Drug Problems for Fiscal* Year (year): An analysis of State Alcohol and Drug Abuse Profile (SADAP) data. Reports typically prepared in Spring of each year, with support by SAMHSA/OAS, but published by the National Association of State Alcohol and Drug Abuse Directors (NASADAD).

# The State Mental Health Agency Profile System
## *National Association of State Mental Health Program Directors Research Institute, Inc. (NRI)*

**SUMMARY**

NASMHPD Research Institute (NRI) is updating a centralized, computer-based compilation of descriptive information about the State Mental Health Agencies. The profiles consist of twelve components: organization and structure; policies, statutes, and regulations; clientele; services; forensic services; workforce; finances; monitoring and quality assurance; research and evaluation; information management; consumer **issues; and state demographics.** Both quantitative and non-quantitative data are maintained in the profiles. Information and data are available on the Internet that allows (1) states to directly update information and (2) allow users to download information about specific states.

The purpose of the data set is to provide contextual information about how mental health services fit within the framework of states' organizational structures and their policies. The system was also designed as a way to reduce the burden of multiple periodic information requests SMHAs receive, by establishing a single centralized interstate information system that would be regularly updated and accessible to all states.

***BACKGROUND***

Original funding provided from the National Institute of Mental Health (NIMH), which was subsequently transferred from NIMH to the Center for Mental Health Services (CHMS), to pilot test and develop the system.

***FUNDING/ SUPPORTING AGENCY/ SPONSOR***

National Association of State Mental Health Program Directors operates the profiling system under contract from the Center for Mental Health Services.

*Cost of data collection effort:* Approximately $150,000

***PERIODICITY***

*Frequency of data collection:* Periodic in the past; annual moving forward.

*Start dafe:* *1992*

*Years collected:* *2 (1992; 1996)*

***SAMPLE***

*Geographic coverage*: All fifty states

*Sample size:* *50* states

***DESCRIPTION OF DATA ELEMENTS***

Qualitative and quantitative data are provided by the SMHAs for the following twelve components:

- organization and structure: structure, boards, primary and shared responsibilities, relationships, reorganizations, funding, and CON;
- policies, statutes, and regulations concerning hospitals, community services, managed care, and special policies concerning adults, children/adolescents, elderly, and others. Extensive data on Federal Medicaid waiver status and implementation are included;
- target populations;
- types of services available;
- forensic services;
- workforce issues;
- finances;
- monitoring and quality assurance activities;
- research and evaluation;
- information management;
- consumer issues; and
- state demographics.

METHODOLOGY

*Data collection method:* Survey

*Format (of collection):* Hard copy and electronic

*Format (housing of data):* Electronic

*Participation:* Voluntary

*Data/information flow:* Each state has appointed a point of contact for each of the ten information components of in the profile system. These points of contact update the information, then submit changes to the State mental health agency director for approval. The NRI receives and processes the data. The NRI is in the process of establishing the profile system on the Internet, allowing (1) states to directly access and revise information and (2) users to obtain information a bout specific states.

*Data quality assurance:* NASMHPD Research Institute staff review the information for inconsistencies and incompleteness, and works with the appropriate contact persons to review/revise the information. Where data were available from an already existing source, the survey indicated the data item and source. These data are electronically integrated into the Profiling System.

*Data analysis:* Descriptive, cross-sectional.

STRENGTHS/ LIMITATIONS (METHODOLOGY)

*Strengths:*

1. This system provides in-depth information about State mental health systems that are under the control of the SMHA.
2. The 1996 system will allow for assessment in change from 1992 system.
3. Information is readily accessible about State mental health managed care activities, particularly through 1115 and 1915 Medicaid waivers.
4. Electronic data can be searched for text strings and, soon, indexed items for analysis.

*Limitations:*

1. Survey may miss revenue information on mental health spending by other state agencies outside of the state mental health agency.

REPORTS

- Substance Abuse and Mental Health Services Administration. *Mental Health, United States, 7994*
- Periodic reports from the profiles available on the internet and the CMHS-sponsored knowledge exchange network

# Uniform Facility Data System (formerly the National Drug and Alcoholism Treatment Unit Survey)

## *DHHS/Substance Abuse and Mental Healfh Services Administration (SAMHSA) Office of Applied Studies (OAS)*

***SUMMARY***

UFDS is an annual survey conducted with a reference data of October 1 each year to document capacity and utilization on that date, as well as annual admissions and revenues, from over 16 thousand substance abuse service providers nationwide. This survey is sent directly to over 6,000 prevention and treatment providers identified in the National Facility Register. Prior to 1995, UFDS was known as the National Drug and Alcoholism Treatment Unit Survey (NDATUS) and has been the nation's primary reference for program-level data on capacity and utilization. Reports published regularly from NDATUS are primarily descriptive. These data are used in updates of the 'requirements table' which OAS now supplies to the Office of National Drug Control Policy, describing capacity, cost, and annual client flow through the nation's treatment system.

***BACKGROUND***

NDATUS/UFDS was created in 1972 to track development of the national system of substance abuse treatment programs.

***FUNDING/ SUPPORTING AGENCY/ SPONSOR***

DHHS/Substance Abuse and Mental Health Services Administration (SAMHSA) Office of Applied Studies

Cost of data collection effort: Data not provided

***PERIODICITY***

*Frequency of data collection:* Annual since 1989

*Start date:* *1972*

*Years collected:* 10 (Consistent data available for 1980, 1982,1987, 1989-1993, 1995, and 1996)

***SAMPLE***

*Geographic coverage*: United States and its territories

*Sample size:* Census of all identified public and private providers which, in 1996, is over 16,000 facilities. The most recent survey achieved a 92% provider response rate.

UFDS is sent to all facilities listed in the National Facility Register, the sampling frame for this survey, which contains listings of over 16 thousand distinct providers in 56 states and territories of the United States. Facilities in this register include Federal, State, and locally-owned or supported as well as privately supported service providers, located in community-based settings, hospitals, prisons, and other locations. Each facility provides services ranging from education and prevention to inpatient and outpatient rehabilitation in medical and non-medical settings.

The NFR includes all service providers identified through State and Federal funding and regulatory agencies. Other studies have concluded that a substantial number of additional drug and alcohol service providers exist outside of this frame. There has been an effort to augment the register to reflect providers of substance abuse prevention and treatment who were not previously included in the database. Over time, the NFR has changed: for example, one hospital in New York City has operated around 20 methadone treatment clinics--in the past, this one provider reported once for NDATUS; now, all 20 clinics report separately.

*DESCRIPTION OF DATA ELEMENTS*

- Ownership (private/public, profit status)
- Type of setting and services provided (e.g., detox vs. rehab; hospital vs. residential; inpatient vs. outpatient)
- Current clients and current capacity (point prevalence) by type of treatment
- Characteristics of clients served: age, gender, racelethnicity, and other descriptors
- Current staffing levels by type of staff through 1992
- Annual unduplicated admissions
- Annual revenue by source

The survey differentiates treatment, prevention, and other non-treatment services (only ***1995*** administrative services).

1. *Substance abuse* treatment: initiating and maintaining individual's recovery from substance abuse and on averting relapse, including detoxification;
2. *Substance abuse* primary *prevention:* strategies directed at individuals not in need of treatment, such as information dissemination, education, alternatives, problem identification, etc.;
3. *Other* non-treatment: intake/assessment/referral; sobering-up station, collateral services; and
4. *Administrative:* billing, personnel, and scheduling.

*METHODOLOGY*

| | |
|---|---|
| *Data collection method:* | Survey |
| *Format (of collection):* | Hard copy |
| *Format (housing of data)*: | Electronic |
| *Participation*: | Voluntary |

*Data/information flow:* Prior to 1996, surveys were mailed to States on September 15 each year for subsequent distribution to providers listed in the NFR. Postcards are also sent to providers in states with low response rates by the SAMHSA data collection contractor. Providers completed the hard copy forms and return them to the State agency for initial editing prior to forwarding to the SAMHSA contractor. Beginning with the 1996 survey, the survey will be sent directly to providers on the NFR in all states except California, which will still act as an intermediary. Surveys will be returned directly to the contractor responsible for the survey, who will provide edits and submit photocopies plus electronic files of data on each State's providers to each Single State Agency.

*Data quality assurance:* Prior to 1996, initial edits and quality assurance was provided by staff in Single State Agencies who received and checked over provider responses. Beginning in 1996, this function will be transferred entirely to the Federal contractor responsible for the survey. A limited number of telephone calls are made to clarify ambiguous responses or to complete missing items. Statistical hotdecking is performed for providers that provide either client capacity or total clients, but not both. Imputations are made for missing numbers of clients by type of treatment, type of problem, and demographics. Non-respondents contacted again by telephone. Variables known to have questionable validity and reliability (including capacity for ambulatory settings) have been dropped. The survey instrument was revised in 1995, and items were pretested with a sample of providers to verify their face validity and feasibility of response. The Alcohol and Drug Service Study (ADSS), a treatment outcome study also sponsored by SAMHSA/OAS, will be used to validate responses in the subset of providers that both responded to UFDS and participate in ADSS.

*Data analysis*: Descriptive, longitudinal, cross-sectional, estimation techniques: Ratio estimation for missing values.

Summary descriptive data from NDATUS have been reported from OAS and its previous sponsors, NIDA/NIAAA. Analytic reports involving hypothesis testing have been conducted by outside analysts. Longitudinal data are available, as well as cross-sectional data.

***STRENGTHS/ LIMITATIONS (METHODOLOGY)***

*Strengths*:

1. Data support both cross-sectional and longitudinal analysis.
2. Data available at facility level, and data on capacity and current clients in treatment are reported for specific modalities of treatment within a facility.
3. Public use data files are available from SAMHSA/OAS, and can be downloaded or analyzed on SAMHSA's mainframe.
4. Code books are available from SAMHSA, though limited written information exists concerning adjustments made for item non-response and survey non-response.
5. Recent extensive efforts to augment the National Facility Register addresses a concern raised previously that NDATUS underrepresented private, for-profit substance abuse treatment facilities.

*Limitations*:

1. Not all data can be disaggregated by type of treatment within a facility: annual clients served, staffing, and program revenues are examples of data available only at the facility level.
2. Distinctions between methadone and other types of services are blurred.
3. Client level analysis is not possible.
4. There is evidence that a substantial number of facilities are not in the survey's frame.

***REPORTS***

Preliminary and annual reports summarizing findings in the data are produced regularly, though not necessarily annually. Reports summarize data in total, as well as broken out by types of treatment and types of organization providing the services.

# 1994 Census of Public Health Nutrition Personnel

## *Association of State and Territorial Public Health Nutrition Directors*

**SUMMARY**

The Association of State and Territorial Public Health Nutrition Directors conducted this survey to collect data on the personnel that organize and manage state and local public health nutrition programs. The goal of the program was to develop a better understanding of the training, education, and salaries of the personnel and to observe any difference among the states.

**BACKGROUND**

The members of the Association of State and Territorial Public Health Nutrition Directors were interested in the quality and quantity of personnel that administered the public health nutrition programs. Therefore, ASTPHND conducted this query to obtain a comprehensive view of their human resources.

**FUNDING/ SUPPORTING AGENCY/ SPONSOR**

Maternal and Child Health Bureau, Health Resources and Services Administration, Department of Health and Human Services, and the Association of State and Territorial Public Health Nutrition Directors

Cost of data collection effort: Data not provided

**PERIODICITY**

*Frequency of data collection:* Every three years

*Start date:* 1981

*Years collected:* 6 times (1981, 1984, 1987, 1990, 1993, 1996)

**SAMPLE**

*Geographic coverage:* All fifty states and U.S. territories

*Sample size:* Same as above except California

**DESCRIPTION OF DATA ELEMENTS**

Data elements collected from the survey include:

- Position title: Collects data on the position held (i.e. public health nutrition directors, public health nutrition consultant, nutritionist, clinical nutritionist), the employer agency, the location of the position, and the employment hours.
- Funding sources: Collects data on the sources of funding for the position and the percentage of time from each funding source. Funding sources include earmarked state funding, local funding, federal funding from the USDA, federal funding from DHHS, federal funding from Department of Education, and other sources.
- Data collected on the practice areas in which the individual spends the majority of his/her time (i.e. general/comprehensive nutrition, WIC, women's health, family planning, adult disabilities, communications, research).
- Training/education: Data collected on the highest level of education received, the credentials earned, and the three areas that the individual is in the greatest need for training

Position titles for Public Health Nutrition Personnel are also included with the personnel survey.

**METHODOLOGY**

*Data collection method:* *Survey*

*Forma t (of collection)*: Hard copy

Forma *t (housing of data):* Hard copy and disk

*Participa tion*: Voluntary

Data/information *flow:* Standard forms are mailed to the state/local public health nutrition programs where each member of the personnel completes the survey. The completed forms were then tabulated and coordinated by the Texas Department of Health in their Bureau of Health Nutrition.

Data *quality* assurance: No data quality assurance performed.

*Data analysis*: Descriptive, longitudinal data. Data are in the analysis program, Epi Info.

**STRENGTHS/ LIMITATIONS (METHODOLOGY)**

*Strengths:*

1. Data are collected regarding the personnel of nutrition programs and enables the states to observe personnel needs.
2. Assists the states in assessing the effectiveness of the nutrition programs.
3. Provides national profile of public health nutrition personnel and their capacity to achieve Healthy People 2000 objectives.
4. Ability to monitor trends in public health nutrition workforce

*Limitations:*

1. Not all state public health nutritionists use the data from the analysis and no training is available to these nutritionists.

**REPORTS**

None to date.

# Annual Survey of Schools of Public Health
## *Association of Schools of Public Health*

**SUMMARY**

Schools of public health have educated professionals in the techniques of health preservation and disease prevention since the turn of the century. The schools of public health organize their curriculum around nine major specialties:

- Biostatistics
- Epidemiology
- Health Services Administration
- Public Health Practice and Program Management (in&ding international health, maternal and child health)
- Health Education and Behavioral Science
- Environmental Sciences
- Occupational Safety and Health
- Nutrition
- Biomedical and Laboratory Sciences

Graduates of schools of public health constitute the resource pool from which private and public health and environmental agencies draw their personnel needs. The Association of Schools of Public Health operates a Data Center to compile aggregate data on students, faculty, and expenditures within the schools. These data serve the educational institutions and governmental agencies in planning and implementing their respective public health training and research activities.

**BACKGROUND**

In the 1974-1975 academic year, the Association of Schools of Public Health (ASPH) began collecting data on applicants, enrollments, students, graduates, and expenditures within the schools of public health. In the years following the 1980-1981 academic session, the data were aggregated for all categories. In the past five years, ASPH has incorporated data previously omitted from associate members of ASPH (programs in public health that have initiated the accreditation process but have not yet received full accreditation).

**FUNDING/ SUPPORTING AGENCY/ SPONSOR**

Association of Schools of Public Health

Cosf of *data collection effort*: Data not provided

**PERIODICITY**

*Frequency of data collection:* Annually

*Sfarf date*: *1974-75* academic year

*Years* collected: 20 (1974-1995)

**SAMPLE**

*Geographic coverage*: Fully accredited schools of public health and associate members of ASPH

***Sample size:*** 27 schools

*DESCRIPTION OF DATA ELEMENTS*

Data on the students, new enrollments and applicants related to the current academic year. Data on the graduates and expenditures are for the preceding year. Data on the graduates relate to the entire academic year while expenditure data are for the fiscal year.

Applicant, student, and new enrollment data for the schools are broken down demographically to give percentages in gender, race, and ethnicity. The data on the graduates are aggregated by the preceding demographics and by the area of specialization and degree received. Areas of specialization are:

- BIOSTAT - biostatistics, biometry
- EPID - Epidemiology
- HSA - Health services administration, hospital administration, health policy, health planning, health management, health services organization, health law, evaluation research
- PHP&PM - public health practice and program management, maternal and child health, gerontology, dental public health, optometric public health, public health nursing, social work, veterinary public health, mental health, community health sciences, community health practice.
- H.EDUC/BS - Health education, public health education, health education administration, behavioral sciences, socio-medical sciences, health promotion, and health behavior.
- ENV.SC - Environmental health and science, toxicology, radiological health, environmental chemistry, water quality, environmental health planning, occupational health
- MCH (As of 1994) - Maternal and child health, population, family planning
- INTERNATIONAL HEALTH (As of 1994).
- NUTR - Nutrition, public health nutrition.
- BIOMED - Biomedical and laboratory sciences, microbiology, parasitology, immunology, cancer biology, biochemistry, biophysics, pathology.
- OTHER - All other areas of specialization.

The classification scheme for the areas of specialization was developed by the ASPH Data Advisory Committee in 1993 and the system undergoes periodic review and revision by the Data Advisory Committee.

Expenditures are broken down into four source categories: institutional, federal, state/local government sources, and other sources (expenditure for research, training and student aid from private contracts, grants, gifts, endowment income).

*METHODOLOGY*

| | |
|---|---|
| *Data collection method:* | Survey |
| Format (of *collection*): | Hard copy |
| *Format (housing of data)*: | Hard copy and electronic |
| Participation: | Mandatory |

*Data/information flow:* The Association of Schools of Public Health sends the questionnaires to the schools of public health to be completed by their administration. Each packet includes an overview of the survey, instruction guiding the administration during the completion of the surveys, and a suggested methodology, developed by ASPH, for estimating fringe benefits and indirect costs when necessary. Schools then report their expenditures and their students by department and the ASPH staff reorganize the aggregate data into the specialization categories discussed above.

*Data quality assurance:* In cases where there are major discrepancies in the data, the analysts often ask the schools to resubmit the data but in all other cases, the data are taken at face value.

*Data analysis*: Descriptive, longitudinal data.

***STRENGTHS/ LIMITATIONS (METHODOLOGY)***

*Strengths*:

1. Data are collected from all schools of public health.
2. Analysis of ongoing data collection can track changes in expenditure over time.

Limitations:

1. Data are not linked to public health personnel needs.
2. Student placement information after graduation are not collected.

***REPORTS***

- Association of Schools of Public Health. U.S. Schools of Public Health Data Report. (Washington, D.C.: Association of Schools of Public Health) December 1995.

# Assessing the Training and Education Needs of State Public Health Workers

## Center *for Health Policy Research, The George Washington University Medical Center and Bureau of Health Professions*


**SUMMARY**

As part of a broader study to assess the training and education needs of state public health workers, the George Washington University Medical Center, Center for Health Policy Research, developed a data collection methodology and assessed the size and composition of the public health workforce in five states. The study included work force data on state health departments, state environmental health personnel in various agencies, and state substance abuse and mental health agencies.

The project had multiple goals which included: 1) establish a health workforce data collection capability; 2) characterize the workforce and assess training and education needs; 3) profile the workforce to assess size and composition; 4) assess new skills and attributes of the public health workforce and how they related to training and education needs; and, 5)formulate recommendations to address the training and education need identified. This collection mechanism does not include information at the county or local level, nor does it include information on private resources.


**BACKGROUND**

In October 1994, The Center for Health Policy Research, under a Health Resources and Services Administration (HRSA) delivery order, was tasked with examining the changing landscape of public health practice at the state level to identify new skills required of public health personnel and training and education needs. As part of the project, the Center also assessed size and composition of the public health workforce and developed a methodology to collect data on a national level. This study included traditional state public health workers, environmental health staff regardless of state agency, mental health staff, and substance abuse personnel. The project involved five tasks: 1) determining the size and composition of state public health staff and classifying staff by the Bureau of Health Profession (BHPr) categories; 2) attempting to link staff categorize by the BHPr categories to the ten essential public health services; 3) assessing the training and education needs of the five states; 4) examining training and education models; and, 5) developing recommendations for addressing training and education needs.

**FUNDING/ SUPPORTING AGENCY/ SPONSOR**

Bureau of Health Professions, Health Resources and Services Administration and Substance Abuse and Mental Health Services Administration

Cost of data collection *effort*: $246,000

**PERIODICITY**

| | |
|---|---|
| *Frequency* of data collection: | One year, special delivery order contract |
| ***Start*** date: | October 1994 |
| Years collected: | 1 (1995) |

**SAMPLE**

| | |
|---|---|
| Geographic ***coverage:*** | Pilot project included five states (Maryland, Illinois, Rhode Island, Oregon and Missouri) |
| ***Sample size:*** | State health departments, state environmental health personnel regardless of their location in state government, and state substance abuse and mental health agencies in the United States |

***DESCRIPTION OF DATA ELEMENTS***

Data on public health personnel such as titles, organizational unit, functional category (e.g. public health, environmental health, substance abuse, mental health or developmentally disabled) size, education, and training. Only FTE state employees were included; data on vacant positions, part-time workers, and contractors were not collected. The Center used 22 occupation categories developed by the Bureau of Health Professions to count personnel; 15 other categories were added to describe workers providing institutional services and direct personal care services. Data were cross-walked with the ten essential public health services in two-states (RI and OR).

***METHODOLOGY***

*Data collection method* Center staff obtained state documents on personnel from various state agencies (e.g., state personnel office, budget office) depending on the organizational structure of the state. Two of the five states were able to link personnel categories to the ten essential public health services. The Center provided Oregon and Rhode Island with their respected personnel data by BHPr classification and asked the states to cross-walk the categories with the ten essential public health services. These two states also verified the personnel data with respect to the BHPr categories.

Information on training and education needs was gathered through expert interviews, focus groups of state management and staff, and site visits.

Format *(of collection):* Hard Copy state records

*Format (housing* of data): Electronic

*Participation*: Voluntary, State were selected based variations in geographic location, resources, demographic composition, and relationship with local health systems. Participating states also had interest in addressing training and education issues. Four of the five states had also participated in the Public Health Expenditures Project. Other states (Missouri) were selected in part because they have model public health training programs in areas such as substance abuse.

*Data/information flow:* Center for Health Policy Research staff site visited all the states to collect data and interview staff.

*Data quality assurance:* Data were compiled by Center for Health Policy Research staff using original state documents. Only personnel data were sent back to Oregon and Rhode Island for verification.

*Data analysis*: Descriptive, cross-sectional.

***STRENGTHS/ LIMITATIONS (METHODOLOGY)***

*Strengths:*

1. This project collected a range of variables focused specifically on personnel resources in public health agencies.
2. Four of the five pilot states are included in the Public Health Expenditure study, thus some cross-survey analysis may be possible.
3. The collection methodology attempted to link occupational categories to the 10 essential public health functions.

*Limitations:*

1. Job titles are not indicative of actual activities performed by state public health personnel.
2. Data collection was extremely difficult due to lack of data and state variations in personnel systems.
3. State personnel often fit into more than one BHPr category.

4. Only two of the five states were able to link BHPr personnel categories to the ten essential public health services because of a lack of competencies to define the link between the two classification systems.
5. Researchers were able to identify training and education needs with other methods (e.g. interviews, site visits).

***REPORTS***

Final report will be available in early 1997..

# National Practitioner Data Bank
## *Health Resources and Services Administration*

**SUMMARY**

The National Practitioner Data Bank is a clearinghouse for information on medical malpractice payments and adverse actions taken against physicians, dentists, and other licensed health care practitioners in the United States and its territories. It was designed to act as a flagging system and a secondary source of information regarding practitioner competence in order to facilitate the comprehensive review of professional credentials by hospitals, State Medical Licensing Boards, other health care organizations (entities), etc. Information is collected from and disseminated to eligible entities; it is not accessible to the public. Although the Data Bank provides important information to eligible public and private organizations, it does not contain any public health infrastructure data. For more information, please visit our web site (www.npdb.com) or contact the Data Bank hotline at I-800-767-6732.

***BACKGROUND***

The Health Care Quality Improvement Act of 1986 (HCQIA), Title IV of Public Law 99-660, was enacted to improve the quality of health care by encouraging health care practitioners to identify and discipline those who engage in unprofessional behavior. It was also intended to restrict the ability of incompetent practitioners to move from State to State without disclosure and/or discovery of their previous damaging or incompetent performance. Title IV authorized the Secretary of the Department of Health and Human Services to establish a data collection program to achieve the above. This led to the creation of the Data Bank

***FUNDING/ SUPPORTING AGENCY/ SPONSOR***

Health Resources and Services Administration (HRSA), Bureau of Health Professionals, Division of Quality Assurance

*Cost* **of data collection effort:** All operations and management activities needed to administer and manage the Data Bank are funded via querying fees.

***PERIODICITY***

*Frequency of data collection:* Medical malpractice payers must submit reports to the Data Bank within 30 days of payment. Hospitals, other health care entities, and professional societies must submit reports within 15 days of an adverse action. State Medical Licensing Boards are responsible for submitting reports to the Data Bank within 30 days of an adverse licensure action

*Start date:* 1990

*Years collected:* 6 (1990-I 995)

***SAMPLE***

*Geographic coverage:* 50 states, the District of Columbia, and U.S. territories (Puerto Rico, Guam, Virgin Islands, Federated States of Micronesia, American Samoa)

*Sample size:* All practitioners, dentists and other licensed health practitioners in the 50 states, District of Columbia, or territories with at least one malpractice payment or adverse action taken against them since September 1990

***DESCRIPTION OF DATA ELEMENTS***

Data in the National Practitioner Data Bank are collected from two reports, a medical malpractice payment disclosure report and an adverse action disclosure report. The medical malpractice payment report contains the following data elements:

- Report entity identification (i.e. entity name, address, telephone number, authorized agent, agent phone, individual submitting the report, his/her title)

- Practitioner identified in the report (i.e. name, other name (s) used, gender, organization name and address, home address, social security number, date of birth, deceased notation (if applicable), professional schools and graduation year, license #, state, field, drug enforcement number, hospital affiliation(s))
- Information reported to the National Practitioner Data Bank (i.e. date of report, type of report, act/omission code, date of act/omission, payment data, multiple or single payment, amount of this payment, total amount of judgment or settlement, adjudicative case and body name)
- Practitioner's statement (if submitted by the practitioner)
- Report status (if disputed by the practitioner)

The adverse action disclosure report contains the following data elements:

- Report entity identification (i.e. entity name, address, telephone number, authorized agent, agent phone, individual submitting the report, his/her title)
- Practitioner identified in the report (i.e. name, other name (s) used, gender, organization name and address, home address, social security number, date of birth, deceased notation (if applicable), professional schools and graduation year, license #, state, field, drug enforcement number, hospital affiliation(s))
- Adverse Action information (date of action, adverse action classification code, length of action, effective date of action, description of acts or omissions)
- Practitioners statement (if submitted by the practitioner)
- Report status (if disputed by the practitioner)

*METHODOLOGY*

Data *collection* method: Data are transmitted to a private contractor which maintains the data bank

*Format (of collection):* Data are reported on two different paper forms depending on whether the report is for a malpractice settlement or a adverse action report. An electronic form is currently under development.

*Format (housing of data)*: Electronic

Participation: State Medical Licensing Boards, professional societies, hospitals, and other health care entities (HMOs, PPOs, etc.), must report adverse actions taken against physicians and dentists and may report those actions taken against other health care practitioners. Adverse actions include clinical privileges actions, licensure action, and societal membership actions. Adverse clinical privileges actions submitted to the Data Bank are based on a physician's or dentist's professional competence or professional conduct which adversely affects, or could adversely affect, the health or welfare of a patient. Hospitals and other eligible health care entities must report professional review actions that (1) affect clinical privileges for a period of more than 30 days and (2) result due to the acceptance of the voluntary surrender or restriction of clinical privileges while under investigation or in return for not conducting an investigation or professional review action, Medical malpractice payers must report payments made for the benefit of physicians, dentists, and other health care practitioners. Hospitals must query the Data Bank when a practitioner applies for privileges and biennially on practitioners on the medical staff or holding privileges. Other health care entities, State Medical Licensing Boards, health care practitioners may query the Data Bank. Under certain limited circumstances, plaintiffs attorney may also query. Medical malpractice insurers may not query the Data Bank at any time.

*Data/information flow*: Each time a medical malpractice payment report or an adverse action report is processed by the Data Bank computer system, a report verification is sent to the reporting entity. The Data Bank also sends a notification to the practitioner named in the report. At this time, the practitioner has an opportunity to submit a "Practitioner's Statement" to respond to the submitted report. Corrections, voids, or revisions may also be submitted.

Data *quality* assurance: Federal laws require that this data be reported; failure to do so may lead to penalties. The Data Bank cannot change the content of submitted reports. However, the practitioner may file disputes or statements concerning the data reported.

Data *analysis*: Aggregate analysis of report variables.

*STRENGTHS/ LIMITATIONS (METHODOLOGY)*

***Strengths:***

1. Data are collected on all malpractice payments made in the United States and many professional review actions.
2. Currently, it is the only database with comprehensive information on malpractice payments and adverse actions.

***Limitations:***

1. Data Bank does not provide information about practitioner capacity in public health, but focuses on only those practitioners who have had malpractice settlements or other adverse actions.

*REPORTS*

National ***Practitioner Data Bank Annual Report: 1995***

# State Health Agency Staffs, 1989
## *Bureau of Health Professions; Public Health Foundation*

**SUMMARY**

The Public Health Foundation worked in conjunction with the Health Resources and Services Administration's Bureau of Health Professionals to gather data on the staffing of state health agencies within the public health infrastructure. The purpose of this project was to present a comprehensive view of the staffing patterns within the state health agencies.

**BACKGROUND**

In 1989, the Public Health Work Force Consortium emphasized the need for a more systematic data collection mechanism to determine the impact of changes in the work force on public health. The Consortium found that human resources data were needed to fulfill the functions delineated in the Institute of Medicine's (IOM) report, The Future *of Public Health.* The IOM report stated that state health agencies play an important role in setting statewide public health priorities, implementing state and national mandates, and assuring access to personal health services for underserved state residents. The State Health Agency Staffs survey sought to better delineate the status of staffing levels, patterns, and trends in state health agencies and to identify gaps in human resources.

**FUNDING/ SUPPORTING AGENCY/ SPONSOR**

Health Resources and Services Administration's Bureau of Health Professions and the Public Health Foundation.

Cost *of data collection effort:* Data not provided

**PERIODICITY**

*Frequency of data* collection: Data collected once during 1990

*Start date:* *1990*

*Years collected:* *1 (1990)*

**SAMPLE**

*Geographic coverage*: All fifty states, the District of Columbia, American Samoa, Guam, Puerto Rico, and the Virgin Islands

Sample size: 87% of State health agencies within the geographic area cited above

**DESCRIPTION OF DATA ELEMENTS**

Human resources of the state health agencies within the public health infrastructure (e.g. the number of employees on the SHA payroll; the number of SHA employees serving at the state level or assigned to LHDs; vacancies and recruitment problems in selected professional, technical, and administrative occupations).

Staffing patterns and staffing needs related to the following important public health goals:

- Preventing adolescent pregnancy
- Preventing, detecting, and controlling cancer/cardiovascular diseases
- Preventing and controlling AIDS and HIV infection
- Preventing and controlling sexually transmitted diseases
- Preventing and controlling vaccine-preventable diseases
- Preventing unintentional injuries

Data were available on the staffing patterns in State health agencies for the years 1979-l 989 to allow for longitudinal analysis.

Data were organized by occupational category, state, and Public Health Service region. The occupational classification scheme was based upon definition of public health occupations derived from the American Public Health Association, the Health Resources and Services Administration, and the Public Health Foundation.

***METHODOLOGY***

Data collection method: Questionnaire
*Format (of collection)*: Hard copy
format *(housing of* da *ta)*: Hard copy and electronic
*Participa* tion: Voluntary

Data/information *flow:* Questionnaires were mailed to the State Health agencies where the local health liaison officials completed the surveys. Questionnaires were returned to the Bureau of Health Professions where the data were tabulated and staffing rates per 10,000 population served were calculated based on state population estimates from the Bureau of Census for 1989 (1988 population estimates were used for the territories).

Data *quality* assurance: Only limited data validation was performed by SHAs so there exists a significant possibility of undercounting, overcounting, and misclassification of occupational categories.

Data *analysis*: Cross-sectional, longitudinal data. State populations were determined using 1989 census data.

***STRENGTHS/ LIMITATIONS (METHODOLOGY)***

*Strengths*:

1. This survey is the most comprehensive project undertaken to date that focused on the work force within the public health infrastructure at the state level.
2. Survey collected data on staffing levels related to identified important public health goals.

*Limitations*:

1. Report did not incorporate data on employees of the Medicaid Single State Agency, numerous LHD employees that are not on the SHA payroll but work in SHA, or data on health-related staff of other state agencies. Data analysis and conclusions only apply to State health agency staff.
2. Differences in state organizational structures, responsibilities, and demographics of the populations limited the ability to make comparisons across states.
3. Limited effort to validate the data reported by the SHAs and to weigh the occupational categories led to possible undercounting or overcounting of staff.

***REPORTS***


- Yordy, K.D. Status of the public health workforce: Issues and data needs. Issue paper commissioned by the Steering Committee for the Caucus on Public Health Workforce Statistics as background for the Public Health Workforce Consortium, June 2, 1989.
- Public Health Foundation. State Health Agency Staff, 1979-1985. (Washington, D.C.: Public Health Foundation) 1988.

# State and Territorial Public Health Laboratories Classification and Pay Report
## *Association of State and Territorial Public Health Laboratory Directors*

**SUMMARY**

The State and Territorial Public Health Laboratories Classification and Pay Report was developed by the Association of State and Territorial Public Health Laboratory Directors (ASTPHLD) to present data on productivity, personnel, and staffing patterns for state laboratory programs. The data present a comprehensive view of the current employment data on public health laboratory professionals throughout the country.

**BACKGROUND**

In May 1988, ASTPHLD and the Centers for Disease Control and Prevention (CDC) published A Personnel Classification Guide for *State and Territorial Public Health* Laboratories to provide data on the standardization of jobs and education and experience requirements for comparable positions within the public health laboratories. The data were collected from ASTPHLD member states and territories (including the District of Columbia, Guam, Puerto Rico, and the Virgin Islands); the data,were then assembled and organized by a task force comprised of human resource specialists from six different states, ASTPHLD's Management Information Systems, and CDC staff members. The task force accomplished the following:

- Defined the classification structure flexible enough to meet the needs of various public health laboratories;
- Prepared job classification specifications; and
- Provided the means for comparing job classifications amongst the different public health laboratories.

The initial report was revised based upon the data obtained from a survey that was mailed to ASTPHLD membership in June 1993. This current report constitutes a collaboration of the revised report on personnel classification and a companion report, Public *Health Laboratory* Personnel *Salary and Benefit Report,* published in April 1989 on salary and work benefit information.

**FUNDING/ SUPPORTING AGENCY/ SPONSOR**

Association of State and Territorial Public Health Laboratory Directors (ASTPHLD); Centers for Disease Control and Prevention

Cost of data collection effort: Data not provided

**PERIODICITY**

Frequency of data collection: First pilot survey collected 1988 data, Second survey collected data in 1993

Start date: 1988; 1993

Years collected: 2 Years (1988, 1993)

**SAMPLE**

Geographic coverage: All fifty states and the District of Columbia, Guam, Puerto Rico, and the Virgin Islands

Sample size: Same as the geographic coverage

*DESCRIPTION OF DATA ELEMENTS*

The survey consists of two essential personnel sections, classification descriptions/salaries and employee benefits. The data elements collected in the survey include the following:

- Comparative salary table: The survey collects comparative data on the salaries of the different ASTPHLD classifications (e.g. mean monthly salary range, percent of salary increase in Fiscal Years 1990 to 1993, adjusted mean monthly salary range, number of positions, number of vacancies).
- Salary/Employment Data: The survey also collects data from each state and region on each of the ASTPHLD classification titles (e.g. minimum qualifications, monthly salary range, number of positions, length of employment, the number of vacancies).
- Employee Benefits: Survey collects data by region on the different benefits offered to the different level employees (e.g. annual leave, sick leave, retirement conditions, insurance benefits, and comp time).

Survey includes generic classification structures, minimum qualifications coding matrix, ASTPHLD classification titles, and comparative salary definitions.

***METHODOLOGY***

*Data collection method:* Survey
*Format (of collection):* Hard copy
Format *(housing of data)*: Hard copy and electronic
*Participation:* Voluntary
*Data/information flow:* Standard surveys were sent to ASTPHLD members to complete and return to the ASTPHLD task force. Following the receipt of the survey, the data were organized by classification and benefits.
Data *quality* assurance: No data quality assurance done
Data *analysis*: Data on states are presented by regional categories, providing for cross-sectional data analysis.

***STRENGTHS/ LIMITATIONS (METHODOLOGY)***

*Strengths:*

1. Data are collected from all ASTPHLD members to provide a comprehensive overview of the current personnel and staffing levels.
2. Definitions of classifications and benefits are provided in the survey materials.
3. Division of data by region allows for comparative analysis among different states.
4. Reaction from ASTPHLD members to the collection process was positive.

Limitations:

1. Data are not collected over a certain time period which would allow for identifying trends in personnel.
2. Data definitions are not based on framework specific to labs; therefore, incorporation of this data to a broader public health data collection mechanism would be difficult.

***REPORTS***

- Health Management Resources, Inc. State and Territorial Public Health Laboratories Classification and Pav Report. (Washington, D.C.: Association of State and Territorial Public Health Laboratory Directors) 1994.

# Survey of Public Health/Community Health Personnel
## *Bureau of Health Professions; American Public Health Association*

**SUMMARY**

The American Public Health Association (APHA) **in conjunction with the Health Resources and Services Administration's (HRSA) Bureau of Health Professions drafted this proposal to construct a public health personnel data system.** The goal of the system was to facilitate the work of government officials and educators as they developed plans to respond efficiently to the changing public health environment in the United States. The system was designed to monitor personnel levels and the analytical capacity to investigate problem areas, make projections, and develop recommendations for action.

**BACKGROUND**

Sections of the Health Professions Educational Assistance Act of 1976 and the Health Services Research, Health Statistics, and Health Care Technology Act of 1987 mandated that the Secretary of the U.S. Department of Health and Human Services prepare biennial reports to Congress that include data on the public health/community personnel. Prior to the APHA and HRSA survey development effort, few reports were drafted to project personnel needs or to acknowledge problem areas in personnel qualification and distribution. The few reports available incorporated the top-rated data available and presented a comprehensive overview of the field of human resources. However the lack of definitive data precluded the rendering of sound conclusions and recommendations on the status of public health personnel. To address this problem, the Bureau of Health Professions developed a contract with American Public Health Association (APHA) in 1981 to create this personnel data system.

The report presented definitions integral to understanding the public health system and reviewed past efforts at personnel definitions and measurements. In conjunction with these definitions, the report addressed the personnel needs of the public health system and the data needs essential to constructing this public health personnel system.

**FUNDING/ SUPPORTING AGENCY/ SPONSOR**

American Public Health Association and HRSA's Bureau of Health Professions

Cost of data collection effort: Data not provided

**PERIODICITY**

frequency of data collection: The system was never implemented
*Start* date: Not applicable
Years collected: Not applicable

**SAMPLE**

Geographic *coverage*: Not applicable
Sample size: Not applicable

**DESCRIPTION OF DATA ELEMENTS**

Data elements in this report are descriptive and definitive in nature.

- Critique of the current public health classification systems.
- Review of the existing data sources on public health personnel.
- Definition of public health terms as determined by the American Public Health Association's Advisory Group
- Enunciation of data needs and the essential functions of the proposed data system.
- Model of the paradigmatic public health personnel data system.

Report incorporated detail public health occupational classifications based on definitions determined by the Advisory Group and from contemporary public health literature.

Data to be obtained once the proposal is implemented include:

- Information from public health employees on their background (i.e. job title, ethnic background, public health job outputs, education, primary function, and hours worked).
- Data from employers on their current personnel (i.e. vacancies, projected needs, geographic location, employer type, and employer sponsorship).
- Statistics from the training institutions or schools of public health (i.e. degree concentration of students/graduates, faculty availability, costs of programs, demographics of students).

***METHODOLOGY***

*Data collection method:* Survey

*Format (of collection):* Not applicable

*Format (housing of data):* Not applicable

*Participation:* Voluntary

*Data/information flow:* Data on existing personnel data sources are to be collected by the project director and researchers. Different surveys will be sent to training institutions and LHD employees and employers. The surveys once completed are returned to APHA where the data are analyzed, aggregated, and prepared to give a comprehensive picture of the status of public health personnel.

*Data quality assurance:* None, data collection was never implemented

*Data analysis:* Not applicable

***STRENGTHS/ LIMITATIONS (METHODOLOGY)***

*Strengths:*

1. Provided an understanding of data needs and existing data sources related to public health personnel.
2. Analysis of existing personnel data sources enabled the report to be extremely comprehensive.

*Limitations:*

1. Project data strategy was not implemented.

***REPORTS***

- American Public Health Association. Survey of Public Health/Community Health Personnel. (Washington, D.C.: American Public Health Association) June 1983.

# Survey of Training Needs of State Health Agency Chronic Disease Programs

## *Association of State and Territorial Chronic Disease Program Directors*

**SUMMARY**

The Association of State and Territorial Chronic Disease Program Directors developed a survey to collect data on the training needs of state health agency chronic disease programs. The survey results will have two uses: 1) identifying areas where health departments need to better train their agency officials and 2) permitting states to compare themselves to one another and make a case for the resources the state needs in order to keep their workers educated. The survey was constructed to provide an overview of the training needs and current policies, not to evaluate existing training sessions

**BACKGROUND**

The Association of State and Territorial Chronic Disease Program Directors constructed this survey in order to keep apprised of the training needs with their chronic disease programs. Education and training are essential to administering a successful program for preventing and controlling chronic diseases.

**FUNDING/ SUPPORTING AGENCY/ SPONSOR**

Association of State and Territorial Chronic Disease Program Directors; Centers for Disease Controls and Prevention

Cost *of data collection effort:* Data not provided

**PERIODICITY**

Freauenc *y of data collection*: First pilot survey collected 1990 data, second pilot survey collected data for 1994

Start *date:* 1990

Years collected: 2 Years (1990, 1994)

**SAMPLE**

*Geographic* coverage: All fifty states and U.S. territories affiliated with ASTCDPD

*Sample size:* Same as above

**DESCRIPTION OF DATA ELEMENTS**

The survey consists of three segments:.

- Topics for Continuing Education: States are asked to indicate topics for continuing education needed by chronic disease staff, prioritize the level of need, and indicate whether high priority education is accessible to the health agency staff.
- Methods of Receiving Continuing Education: States rank the methods of instruction (national training sessions, local training sessions, telecommunications, video-tapes, etc.) and the preferred method of training (generic chronic disease training such as planning, assessment, evaluation; disease-specific programs such as breast and cervical cancer, risk factor specific programs. etc.)
- Training Policies: States are asked to discuss their formal training policies and any obstacles or training challenges that they expect in the upcoming years.

**METHODOLOGY**

Dafa *collection method*: Survey
Format ***(of collection):*** Hard copy
Format *(housing of data)*: Hard copy
***Participation:*** Voluntary

***Data/information flow:*** Standard surveys, created by ASTCDPD, were given to senior public health officials in the participating states. Following the completion of the survey, the data were collected and compiled by the Association of State and Territorial Chronic Disease Program Directors. At this point in time, the ASTCDPD is in the process of comparing the 1995 to the 1990 data.

***Data quality assurance: No*** data quality assurance necessary since the survey only asks for description of training needs.

***Data analysis:*** Data are descriptive of the training needs. Currently, ASTCDPD is in the process of comparing the 1990 data to the 1995 data to observe progress.

**STRENGTHS/ LIMITATIONS (METHODOLOGY)**

***Sfrenqfhs:***

1. Data collection allows the program directors to assess their training needs and to keep their staff apprised of the latest research technologies.

***Limitations:***

1. Survey does not assess the effectiveness of existing training sessions and policies.
2. Data were not conducted using a general classification framework (e.g. essential public health services) which would allow this data to be incorporated in a broader public health infrastructure data collection mechanism.

**REPORTS**

None to date

# Training and Education for Public Health
## U.S. *Public Health Service; Department of Health and Human Services*

**SUMMARY**

Training and Education for Public Health (TEPH) is an inventory of TEPH programs in the United States. The Department of Health and Human Services and the Public Health Service sponsored the project which involved a literature review and collecting a database and inventory of PHS TEPH programs; interviewing and meeting PHS agencies and outside interest groups, and visiting two schools of public health - Johns Hopkins and the University of Illinois - Chicago. Throughout the study the author consulted with designated PHS agency representatives, who constituted a TEPH advisory committee. Based on a standard definition of TEPH, a wide range of TEPH activities from videotape production to doctorate degree education was available for inclusion in the inventory. A database of more than 150 programs was derived from the PHS Grants Management Information System (GMIS), Contracts Information System (CIS) and the Catalog of Federal Domestic Assistance (CFDA), with additional input and editing form agency staff.

**BACKGROUND**

In 1993, the Assistant Secretary for Health commissioned a review and recommendations on US Public Health Service activities in the area of education and training for public health. Training and Education in Public Health (TEPH) was identified as one of the core eight public health functions in President Clinton's Health Security Act. The TEPH category as defined by the Health Security Act is "to assure provision of care by all health professionals, with special emphasis placed on training of public health professionals including epidemiologists, biostatisticians, health educators, public health administrators, sanitarians, and laboratory technicians." The purpose of the study was to identify future PHS directions in public health training and education, a core function of public health, especially considering the President's Health Security Act proposal.

**FUNDING/ SUPPORTING AGENCY/ SPONSOR**

U.S. Public Health Service; Department of Health and Human Services

Cost of data collection effort: Data not provided

**PERIODICITY**

Frequency of data collection: One time study

Stat-f date: *1993*

Years collected: *1 (1993-l 994)*

**SAMPLE**

Geographic coverage: Training and Education resources in the US Public Health Service.

Sample size: Training and Education resources in the US Public Health Service.

**DESCRIPTION OF DATA ELEMENTS**

The study was conducted in the following different phases:

- Conducting a literature review: A literature review was initially conducted to determine if a common definition of TEPH existed and if there were any existing studies on the PHS role in training and education in public health. No such surveys seemed to exist and no common definition of TEPH emerged from the literature review. However, following the literature review, it was better understood why comprehensive surveys of the public health workforce were abandoned (complex array of professions, poor response rate by public health entities, data validity problems, and lack of standard terminology).

- Collecting a database and inventory of PHS TEPH programs: After reaching

consensus on a definition for TEPH, an inventory database with information on these TEPH activities was created. Many elements of the database were collected from already existing databases (CFDA, PHS GMIS, and PHS CIS) to prevent duplication of effort by public health officials and representatives. The following elements are a partial list of the data collected and stored in the database:

- Program Title and Supporting Agency
- Objectives of the program and any existing use restrictions
- Applicant eligibility
- Range and average of assistance (Funds granted to recipients)
- Percent of resources devoted to TEPH and the number of TEPH trainees in the fiscal year including the percent of minorities
- Accomplishments of the program

- Interviewing and meeting with PHS agencies and pertinent interest groups: During this phase of the study, interviews were held with key people within PHS offices and other interest groups to discuss future PHS activities. The interviewees were asked several distinct questions and their responses helped to supplement the existing data within the data base. Questions included:
  - Do you agree with the TEPH definition? What changes do you recommend?
  - Can you provide a recent inventory of existing TEPH programs within your agency?
  - What are your best programs?
  - What new ideas do you recommend for TEPH and what are their costs?
- Visiting two schools of public health: In the final phase of the study, the author met with two schools of public health known for their excellence in TEPH (University of Illinois - Chicago and Johns Hopkins University). The author met with the deans and key faculty staff to discuss the study and the database and to develop a better understanding about the TEPH activities at each of these schools.

***METHODOLOGY***

| | |
|---|---|
| Data collection method: | Interviews, questionnaires, and surveys |
| Format (of collection): | Hard copy and electronic |
| Format (housing of data): | Hard copy and electronic |
| Participation: | Voluntary |
| Data/information flow: | Data were collected from different agencies that had TEPH programs and these programs were entered into the database. The author of this study also met with public health officials and his findings were entered into the computer to supplement existing data in the database. |
| Data quality assurance: | The data base records were returned to agency representatives, once entered into the computer, to allow for editing and additions based on standard guidelines. |
| Data analysis: | Cross-sectional, descriptive data, and longitudinal |

***STRENGTHS/ LIMITATIONS (METHODOLOGY)***

*Strengths*:

1. This study provided a comprehensive overview of the status of Training and Education for Public Health based on a single definition that was agreed upon by public health officials.
2. The database is maintained and updated each year.

*Limitations*:

1. Includes only federal training and education provided through the Public Health Service.
2. Unclear if and how the database the maintained.

***REPORTS***

- Harmon, Robert G., MD, MPH. "Training and Education for Public Health: A Report to the Assistance Secretary for Health". U.S. *Public Health Service* and *Department of Health and Human Services* (1994).

# Database of State Public Health Agencies
## *Association of State and Territorial Health Officials (ASTHO)*

**SUMMARY**

This database includes state-level contact information on all U.S. and territorial state health agencies (SHAs) including the director's name, address, phone and fax numbers. Information is collected from ASTHO members. The database also includes a list of agencies within each health department and the name and phone numbers of the agency director. Information is collected on the names of major health programs and contact information for programs which are not a part of official state health agency. The purpose of the inventory is to provide information for contacting state and territorial public health agencies, divisions of the agencies and related departments in state government. The most recent directory was issued in 1994.

**BACKGROUND**

**FUNDING/ SUPPORTING AGENCY/ SPONSOR**

Association of State and Territorial Health Officials (ASTHO)

**Cost of data collection effort:** Data not provided

**PERIODICITY**

*Frequency of data collection:* Biennial

*Start date:* 1980s

Years collected: ASTHO is uncertain how many years were collected

**SAMPLE**

*Geographic coverage:* All fifty states, the District of Columbia, American Samoa, Puerto Rico, the Virgin Islands and the Federal States of Micronesia

***Sample size:*** All of the SHAs provide some information.

**DESCRIPTION OF DATA ELEMENTS**

Contact and location information includes the following data elements:

- Agency head;
- State health official address and telephone;
- Name, department and telephone number of directors in the public health agencies; and,
- Name, department and telephone number of directors of major health activities not a part of the official state health agency.

**METHODOLOGY**

Data collection method: Survey

Format *(of collection):* Electronic

Format *(housing of* data): Electronic

*Participation:* Voluntary

Data/information *flow:* ASTHO sends a survey in diskette form to state and territorial public health agencies which is filled out and returned to ASTHO. ASTHO performs follow-up phone calls to those agencies who fail to return the survey.

Data *analysis:* Descriptive listings of agencies and contacts.

*STRENGTHS/ LIMITATIONS (METHODOLOGY)*

*Strengths*:

1. Biennial directory provides updated information.
2. Data includes department-specific contacts.

*Limitations*:

1. This survey does not provide detailed information on the responsibilities of the different departments or the background of the staff.

*REPORTS*

- *Directory of State Public Health Agencies (1994)*, Association of State and Territorial Health Officials.

# NACCHO APEXPH Questionnaire
## *National Association of County and City Health Officials*

***SUMMARY***

The Assessment Protocol for Excellence in Public Health (APEXPH) Workbook is offered to local health departments as a means of enhancing their capacity and strengthening their leadership role in their communities. The workbook is intended to be a voluntary tool to guide health department officials in two principal areas of activity: (1) assessing and improving the capacity of the department, and (2) working with the local community to assess and improve the health status of the community. The NACCHO APEXPH Questionnaire was administered to identify and explore community health assessment and planning activities in local health departments and the utilization of the APEXPH tool.

***BACKGROUND***

Development of the APEXPH tool began in 1987 through a cooperative agreement from the Centers of Disease Control and Prevention (CDC) to the National Association of County and City Health Officials **(NACCHO).** Other national public health organizations participated in its development. The APEXPH tool was first released to local health departments in March 1991. In 1995, the National Association of County and City Health Officials(NACCHO) in cooperation with the CDC designed this questionnaire in order to assess and evaluate the APEXPH tool.

***FUNDING/ SUPPORTING AGENCY/ SPONSOR***

The Centers for Disease Control and Prevention (CDC) and the National Association of County and City Health Officials (NACCHO)

Cost *of data collection effort:* Data not provided

***PERIODICITY***

*Frequency of data collection:* First questionnaire administered in August 1995

Start *date:* August 1995

*Years collected:* *1* Year (1995)

***SAMPLE***

*Geographic coverage*: Local health departments in the U.S.

*Sample size:* **A** simple random sample of 800 local health departments.

***DESCRIPTION OF DATA ELEMENTS***

Description of the assessment and planning activities of local health departments and the implementation of the APEXPH tool.

Data elements collected include:

- Tools for Community Health Planning: Local health departments report any recently used tools implemented in organizational assessment and community planning; local health departments are also questioned as to their use of different community assessment tools. The purpose of this section is to determine the extent of activity in organizational and community health planning.

Implementation: Local health departments are questioned on the feasibility of the APEXPH tool (i.e. was it easy to implement, was it productive, what were the outcomes of the implementation). Local health departments are also encouraged to discuss the barriers to implementation that the LHD faced or to discuss reasons for not utilizing the APEXPH tool. Specific questions about each part of APEXPH are included.

- Modifications: In the final segment of the survey, respondents are asked to recommend modifications to the **APEXPH** tool that would facilitate its implementation. In this final section, data are also collected on the demographics of the LHD in order to discern the LHDs that have benefited the most or the least from this tool.

*METHODOLOGY*

*Data collection method*: Survey

Format (of collection): **Hard copy**

**Format *(housing* of data):** **Electronic**

Participation: Voluntary

*Data/information* flow: The NACCHO APEXPH questionnaire was completed by the local health official or staff person in the LHD knowledgeable about the agency's assessment and planning activities. Nonrespondents received a second mailing and follow-up telephone calls. Data definitions are included in the APEXPH survey.

*Data quality* assurance: Survey is a report on the local health departments that used the APEXPH tool and their assessment of it. Each survey was reviewed and validated for accuracy of the data.

*Data* analysis: Descriptive data.

*STRENGTHS/ LIMITATIONS (METHODOLOGY)*

Strengths:

1. Provides NACCHO with a tool for identifying local health departments that are conducting organizational and community health assessments and creating plans to address needs.
2. Assessment of APEXPH enables NACCHO to provide technical assistance or support or to modify the tool in order to better assist APEXPH users.

Limitations:

1. Responses may be skewed slightly toward those who have used APEXPH or are aware of it, as these LHDs may have more of an interest in completing the questionnaire.

*REPORTS*

None to date

# Profile of State and Territorial Public Health Systems: United States, 1990

## *Public* Health Practice Program *Office, Division of Public Health Systems, Centers for Disease Control*

**SUMMARY**

The *Profile* of State and Territorial Public Health *Systems:* United States, 1990 is a collection of descriptive abstracts of how public health systems in the United States are organized at the state and local levels, and how state and local components interact, based on existing information available between 1989 and 1990. Descriptive information is provided for all 50 states, the District of Columbia, and 8 territories of the United States. Currently, the CDC is planning on placing a copy of the Profiles on the Internet for public dissemination. CDC staff are also developing a method for state officials to update the Profile information by reviewing the document on the Internet and contacting CDC with changes.

**BACKGROUND**

As part of the Health People 2000 Objectives, objective 8.14 stated that the nation needs to "increase to at least 90 percent the proportion of people who are served by a local health department that is effectively carrying out the core functions of public health." In order to achieve this objective, staff of the Centers for Disease Control believed that a new surveillance system would be needed that can measure and evaluate the status of public health practice in the state and local systems of the United States. In 1989 and 1990, staff of the Public Health Practice Program Office collected existing sources of data on characteristics of states' public health systems and selected socio-demographic characteristics of the population.

**FUNDING/ SUPPORTING AGENCY/ SPONSOR**

Public Health Practice Program Office, Division of Public Health Systems, Centers for Disease Control

Cosf *of data* collection effort: Data not provided

**PERIODICITY**

Frequency *of data* collection: One-time collection of existing data sources

*Start* date: 1990

Years collected: 1 year (1990)

**SAMPLE**

*Geographic* ***coverage:*** ***50*** states, District of Columbia and 8 territories

***Sample size:*** All states, territories provided some information

**DESCRIPTION OF DATA ELEMENTS**

Data elements collected on the state level for a number of topics including the organization of the State Health Agency (SHA); the head of the SHA; the state board of health or council; regional or district health offices; and state-local relationships. Examples of the data collected are as follows:

- Selected Socio-demographic Indicators (e.g. population, percent below poverty, education, racial composition)
- County Government Structure (e.g. geographic jurisdiction, statutory powers, commission-form governments, home rule governments)
- State Health Agencies (SHAs) (e.g. general structure, characteristics of agency head, use of state board or councils of health, availability of state-local **liaisons, total budget)**
- Local Public Health Agencies (LPHAs) (e.g. services provided, relationship with local board of health, presence of local health officer, number and occupations of staff, budget information)

**METHODOLOGY**

Dafa *collection method*: Reviewed existing printed information

*Format (of collection)*: Hard copy

Format *(housing* of *data)*: Hard copy; however, CDC staff are working on placing a copy of all the profiles on the Internet.

*Participation*: Voluntary

*Data/information flow*: Data were collected from existing pamphlets, brochures, publications, reports, or other printed materials prepared by state and territorial public health systems. For SHAs with a Local Health Liaison Official (LHLO), the LHLO was designated as the point person for collecting the information. CDC staff used existing data sources (e.g. demographics by state from the 1980 national census; budget information from the ASTHO reporting system; and local health department information from the National Association of County Health Officials).

*Data quality* assurance: CDC staff developed draft documents for each state and territory and returned them to the SHA for review and verification.

Data *analysis*: The data are presented in the form of descriptive abstracts for each state, territory and the District of Columbia.

**STRENGTHS/ LIMITATIONS (METHODOLOGY)**

*Strengths:*

1. This is the only source with complete descriptive profiles of the public health systems in all 50 states, the District of Columbia, and 8 territories of the United States.

*Limitations:*

1. Data were somewhat uneven across responding entities and certain information was missing from some entities.
2. Data are descriptive, and no quantitative analysis has been undertaken.

**REPORTS**

- *Profile of State and Territorial Public Healfh Systems: United States, 1990.* Public Health Practice Program Office, Division of Public Health Systems, Centers for Disease Control. December 1991.

# Survey on the Future of Public Health Recommendations
## *W. K. Kellogg Foundation*

***SUMMARY***

In 1996, the W.K. Kellogg **Foundation funded a survey to collect information on recommendations issued by the Institute of Medicine (IOM) in a** report entitled "The Future of Public Health." The Kellogg survey was sent to state and local health department officials to: (1) discern the level of agreement with the IOM public health recommendations; (2) determine the level of implementation of these recommendations; and (3) understand why recommendations had not yet been implemented (if applicable). This survey was modeled after a survey fielded by the Association of State and Territorial Health Officials (ASTHO) in 1989. The goal of this survey was to determine whether the recommendations had been further implemented since 1989 or whether the failed attempt at a health system reform and "an age of negativity regarding government" had caused a regression in the efforts to accomplish the IOM recommendations.

***BACKGROUND***

In 1988, the Institute of Medicine reported that the public health system in the United States was in "disarray". The "Future of Public Health" report issued a series of recommendations to address the problems plaguing the public health system. In 1989, in response to the report, the Association of State and Territorial Health Officers conducted a survey with state health departments to "ascertain their level of agreement with the recommendations of the report." This study has served as a benchmark for examining the level of implementation and progress at the state level for the IOM recommendations. It should be noted that a similar survey was not performed for local health departments.

In 1996, the W.K. Kellogg Foundation contracted with researchers at the San Diego State University Graduate School of Public Health to modify the 1989 survey and field the second survey to state health officials. The purpose of this survey was to determine whether progress had been achieved toward the IOM recommendations. Researchers also sent a similar survey to local health officials to examine of the state of public health at the local level as well as "furnish a benchmark for future analysis."

*FUNDING/ SUPPORTING AGENCY/ SPONSOR*

W.K. Kellogg Foundation funded, survey conducted by researchers at the Graduate School of Public Health, San Diego State University.

Cost *of data* collection *effort:* Data not provided

***PERIODICITY***

*Frequency of* data collection: One time survey

Start date: 1996

Years *collected*: 1 (1996)

*SAMPLE*

*Geographic* coverage: All fifty states, 6 U.S. territories, and local health departments from around the county.

Sample size: 50 responses were received from the state survey (blinded as to who responded) and the local survey had 66 responses from the random stratified sample of 200 local health departments.

*DESCRIPTION OF DATA ELEMENTS*

The survey for local health officials incorporates excerpts for the IOM "Future of Public Health" recommendations and asked approximately 22 questions that are comprised of three parts. The first part asks the health official his/her opinion of the specific IOM recommendation. The second part asks about the status of the recommendation in 1989. The third part asks the respondent to describe the reasoning for not implementing the recommendation (if applicable). The survey

also requests the local health officials to answer "Yes or No" to whether there is an appropriate balance between state and local public health responsibilities.

The survey to state and territorial health officers is similar to the local health department survey except that the state survey asks 55, rather than 22, questions. The survey also requests identification of the organization type that best represents the placement of public health functions in the state.

***METHODOLOGY***

Data *collection* method: Survey
*Formaf (of collection)* Hard copy
*Format (housing of data):* Hard copy
*Participation*: Voluntary

*Data/information flow:* Surveys were sent to selected local health departments and state officials. The survey questionnaires were mailed on three separate occasions, with follow-up calls after the second and third mailing. The data were then received by the San Diego State University Graduate School of Public Health where the analysis and evaluation were conducted.

*Data qualify assurance:* *No* quality assurance was performed.

*Data analysis:* Descriptive data with comments on the recommendations were analyzed using the CDC's public health statistical data base program, Epi Info.

*STRENGTHS/ LIMITATIONS (METHODOLOGY)*

*Strengths*:

1. Data are collected from the majority of state health agencies and some local health departments.
2. Discussion and evaluation of the IOM recommendations allows ASTHO to understand the level of support for the recommendations and their level of implementation throughout the country.
3. Benchmarks for the state health agencies enables public health professionals to observe what progress has been made in the implementation of the recommendations.

*Limitations:*

1. Detailed data are not collected on the mechanisms for implementing the recommendations. Rather, the survey only asks whether the recommendations are implemented or not.
2. The survey was not sent to local health departments in 1989 so there are no data for comparison.
3. The response rate for the local health departments was extremely poor (33 percent) and therefore it is difficult to make any generalizations with certainty.

***REPORTS***

- Scutchfield, F.D. ; Beversdorf, C.A.; Hiltabiddle, S.E.; and Volante, T. "A Survey of State Health Department Compliance with the Recommendations of the Institute of Medicine Report, *The Future of Public Health."* This article was recently accepted by the *Journal of Public Health /Jo/icy.*

- Scutchfield, F.D. ; Hiltabiddle, S.E.; Rawding, N.; and Volante, T. "Compliance with the Recommendations of the Institute of Medicine Report, *The Future of* Public Health: A Survey of Local Health Departments". This article was recently accepted by the *Journal of Public Health Policy*.

# Survey of Privatization of State and Local Health Departments
## Centers *for Disease Control and Prevention*

**SUMMARY**

**The Division of Public Health Systems (DPHS)** conducted a brief phone scan of privatization activities in state and selected large city health departments. The survey **focused on** five broad areas in privatization activities: (1) privatization in the **past** five years; (2) privatization in the past year; (3) major driving forces behind the **privatization movement; (4) projected privatization action** in the next five years; and (5) information needs related to the privatization of public health services. **This scan was implemented** to give only a brief overview of contemporary privatization activities and did not **focus on managed care related projects.** The primary purpose of the scan was to determine whether there was sufficient activity to justify a survey. The conclusion was that a survey on privatization would be warranted.

**BACKGROUND**

In the past decade, privatization has emerged as a controversial issue in state government management and services delivery. Constituent-oriented state agencies - health, mental health and mental retardation - have extended their privatization activities in recent years. Health officials have offered the following explanations for the trend toward privatization: cost savings, lack of agency personnel or expertise, flexibility, high quality service, and speedy implementation. DPHS in conjunction with ASTHO implemented this scan to broaden their knowledge about current privatization in state and local health departments and to evaluate contemporary privatization problems.

**FUNDING/ SUPPORTING AGENCY/ SPONSOR**

Division of Public Health Systems (DPHS); Centers for Disease Control and Prevention (CDC)

Cost *of data* collection *effort:* Data not provided

**PERIODICITY**

*Frequency of data collection:* First survey was administered in Spring 1996

*Start date:* April 1996

*Years* collected: 1 Year (1996)

**SAMPLE**

*Geographic coverage*: All fifty states

Sample *size:* *94%* of all states and the following cities: Baltimore, Chicago, Detroit, Houston, Los Angeles, New York, Philadelphia, San Antonio, San Diego, San Francisco, and Washington D.C. (The large cities were selected on the basis of being directly funded cities for several **CDC** categorical programs).

**DESCRIPTION OF DATA ELEMENTS**

Qualitative data on the level of privatization implemented by the state health departments in order to combat increasing economic pressure.

Data elements collected from the SHD include:

- Discussion and definition of privatization methods and techniques (i.e. contracting out, vouchers, grants and subsidies, etc.)
- Models of recent privatization policy initiatives implemented by the different states and cities (i.e. custodial services, information services)
- Discussion of policy initiatives that proved successful and other reforms that did not obtain the desired results or desired savings.
- Enunciation of major reasons/driving forces behind the privatization activities.
- Projection of privatization activities in the upcoming years
- Information needs related to the privatization of public health services.

*METHODOLOGY*

*Data collection method:* Telephone Survey

*Format (of collection):* Hard Copy

*Formaf (housing of data):* Hard Copy, electronic

*Participa tion:* Voluntary

*Data/Information flow:* Public health officials were called to give responses. The questionnaires were mailed to Local Health Liaison Officials (LHLO) if they requested a copy. The surveys were returned to DPHS where the data was tabulated with the results of the phone screen.

*Data analysis:* Descriptive data. The large cities were selected on the basis of being direct funded cities for several CDC categorical programs.

*STRENGTHS/ LIMITATIONS (METHODOLOGY)*

*Strengths:*

1. Initial reaction from the state and large cities for the collection process was positive.
2. Overview of the recent privatization activities was given thereby addressing the need and request for data on privatization activities throughout the country.

*Limitations:*

1. Absence of a comprehensive overview of privatization activities in a particular state or large city health departments.
2. Does not address the need for information on the impact and outcomes of privatization activities on public health programs and services.
3. Response of the local health liaison officer varied depending on the focus of the official on the state or local levels.

***REPORTS***

- Empereur, RW and Galassie, DW. Privatizina local public health services: A methodoloav for rational evaluation. Paper presented at the APHA Annual meeting. November, 1995.

# Privatization of Public Health Services

## *Public Health Foundation*

**SUMMARY**

The Annie E. Casey Foundation commissioned the Public Health Foundation to conduct a study on the level of privatization in public health services. The goal of the study was to gather information on services that public health programs have privatized and to identify early lessons learned from these privatization attempts. For this study, the Annie E. Casey Foundation requested that the study focus on the needs of disadvantaged children and families.

**BACKGROUND**

With the emergence of managed care and the decrease in government funding for public health programs, health departments have been forced to reorganize their programs in a more efficient, cost-saving manner. One approach taken by these departments has been the privatization of public health services to particular segments of the community. This study was prompted by the Annie E. Casey Foundation and Public Health Foundation who were interested in identifying the reasons for privatization by the local health departments, the common barriers faced during the privatization process, and the lessons learned from these privatization efforts.

**FUNDING/ SUPPORTING AGENCY/ SPONSOR**

Public Health Foundation and the Annie E. Casey Foundation

Cost *of data collection effort:* Data not provided

**PERIODICITY**

Frequency *of data collection:* Once

Start *date:* *1996*

*Years collected:* *1* time (1996)

**SAMPLE**

*Geographic coverage:* Local health departments in the United States that had privatized their services

*Sample size:* Information on privatization from 20 local health departments throughout the county and statewide information on privatization in the State of Maryland.

**DESCRIPTION OF DATA ELEMENTS**

The study on privatization in local health departments was three-tiered with a survey of 11 local health departments which had privatized one or two public health services, site visits to local health departments who had extensively privatized public health services, and a statewide analysis of privatization in the State of Maryland.

The survey of the 11 local health departments was developed to gather baseline information on the services privatized and the impact of privatization on the other components of the health department.. The following data were obtained from the data instrument:

- Type of service privatized, the year of privatization, the number of clients served per year before and after privatization, and the cost per individual before and after privatization;
- Any preparations made prior to deciding whether to privatize a particular service (e.g. needs assessment, market analysis, technical assistance, regulatory changes);
- Nature of the relationship between the private agency and the government agency (i.e. what responsibilities did the health department keep in the privatization of services, where there any obligations for the private agency to proof the efficiency of their work, what government agencies were involved);

- Discussion of how privatization has affected certain areas of service delivery and if privatization has initiated or increased participation in any essential public health services; and
- Evaluation of the privatization efforts and discussion of any future plans for privatization.

The site visits were to two communities that had extensively privatized their public health services. These sites collected information on the privatization process through interviews and focus groups. The interviews and focus groups with public and private sector individuals focused on the following issues:

- Accountability;
- Partnerships between the public and private sectors;
- Impact of privatization on community-level service delivery;
- Community participation in the privatization process; and
- Changes in expenditures and other revenue sources pertaining to privatization.

The final component of data collection was a survey of the 24 health county health departments in the State of Maryland. The following information was obtained from these surveys:

- Perception of privatization by the community, private providers, and health department;
- Level of privatization in the county;
- Level of community participation in the privatization process;
- Impact of privatization on the relationship between the local and state health departments; and
- Successful and challenging privatization efforts.

**METHODOLOGY**

*Data collection method:* Surveys, interviews, and focus groups

Format (of *collection):* Hard copy

*Format (housing of data):* Hard copy

*Participation:* Voluntary

*Data/information flow:* Surveys were sent to 20 local health departments that had completed a privatization process. The surveys were followed by an interview of the identified contact person. The completed surveys were sent to the Public Health Foundation who then reviewed the information. The site visits and focus groups were conducted by staff from PHF who then synthesized the findings into reports. After an initial focus group with state officials, survey were sent out to the 24 counties in Maryland. Responses were synthesized into reports. All interviewees were provided with drafts of the summaries for comment and review.

*Data qualify assurance: No* data quality assurance performed.

*Data analysis:* Synthesis of qualitative information.

**STRENGTHS/ LIMITATIONS (METHODOLOGY)**

*Strengths:*

1. Collection of data of numerous different health departments allowed for comparison and identification of common problems, barriers, and lessons learned.
2. Information focused on public health services rather than services as a whole and could serve to develop a framework for the privatization of public health services.
3. Provides strong baseline information on the types of privatization attempted by the local health departments.

*Limitations*:

1. Data collected was qualitative and therefore did not allow for statistical analysis or causal analysis.
2. Because study participation was voluntary and uncompensated, some sites were unable to participate due to the timing of the study. Therefore the representativeness of the findings are limited.
3. Because the number of participants is limited, it is difficult to make any sweeping conclusions regarding privatization of public health services nationwide.

REPORTS

- Whitehand, Lori, Bechamps, Michon, and Bialek, Ron. (Draft) "Privatization and Public Health: A Study of Initiatives and Early Lessons Learned." Report submitted to the Annie E. Casey Foundation by the Public Health Foundation on August 1, 1997.

# Public Health Laboratories and Health System Change
# The *Lewin* Group, under *contract for the Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services*

**SUMMARY**

The Lewin Group conducted a study examining the role of public health laboratories (PHLs) in the changing health care market, with an emphasis on delineating the relationship between PHLs and managed care.

**BACKGROUND**

The Office of the Assistant Secretary for Planning and Evaluation (ASPE), Office of Health Policy, within the US Dept. of Health and Human Services (HHS) commissioned this study in order to better understand the relationship between PHLs and managed care organizations. Of particular importance to HHS is: a) understanding the role of state PHLs related to new actors in the health care system; b) identifying and characterizing interactions between PHLs and MCOs (e.g., contracts for testing, information reporting); and c) defining the unique value of PHLs in the promotion of public health.

**FUNDING/ SUPPORTING AGENCY/ SPONSOR**

The Office of the Assistant Secretary for Planning and Evaluation (ASPE), Office of Health Policy, within the US Dept. of Health and Human Services (HHS)

**PERIODICITY**

| | |
|---|---|
| *Frequency of data collection:* | One year |
| *Start date:* | 1996 |
| *Years collected:* | 1996, 1997 |

**SAMPLE**

| | |
|---|---|
| *Geographic coverage*: | Obtained information from all U.S. states except for Utah and Alabama; various federal health agencies (CDC, FDA, USDA); and various private laboratory organizations and managed care organizations. |
| *Sample size:* | 96% sample of states (2 non-responses). Three case study states studied in depth, including public and private laboratory stakeholders. |

**DESCRIPTION OF DATA ELEMENTS**

Obtained qualitative information designed to answer the following questions:

- What is the role of ths state PHL relative to new actors in the health care system?
- What are the interactions between state PHLs and managed care organizations (eg., contracts, collaborations)?
- How has managed care's presence in the area of laboratory services changed or affected the practices/functions of PHLs?
- What are some of the other major health market changes or trends affecting PHLs (e.g., hospital consolidation, privatization of public health functions)?

*METHODOLOGY*

*Data collection method:* literature review, interviews with public and private lab stakeholders, 3 case studies of states with PHLs that have had experience with managed care organizations, informal poll of state PHL directors

*Format (of collection):* Telephone and site interviews

*Format (housing of data):* N/A

*Participation:* Voluntary

*Data/information flow:* Lewin staff conducted interviews of PHLs in three case study states, through detailed on-site and phone interviews. In addition, a poll was faxed to all fifty states and the District of Columbia requesting descriptive information about the impacts of managed care and other components of health system change, and about existing contractual arrangements between the state and private labs. Phone interview follow-up to this poll ensured a high response rate.

*Data quality assurance:* Follow-up interviews to the faxed poll sought to clarify answers from state PHL directors.

*Data analysis:* Descriptive

***STRENGTHS/ LIMITATIONS (METHODOLOGY)***

*Strengths:*

1. Included informal information from nearly all states.
2. Included information from both the public and private sector to delineate responsibilities and relationships between these sectors.
3. Information collected allows for analysis of changes in relationships with managed care entities, which had not been studied in detail previously.

*Limitations:*

1. Descriptive information not able to be linked with other studies of public health infrastructure.
2. One-time data collection does not allow for continued monitoring of state public health laboratory relationships with private laboratories.
3. Data collected only relative to public health laboratories, and does not consider broader relationships between public health and managed care organizations.
4. Information collected does not seek to evaluate the capacity of public health laboratories to respond to changes in the health delivery system.

*REPORTS*

- *Public Health Laboratories and Health System Change.* Final report prepared for the Office of Health Policy, Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services.

# Assessment of the Telecommunication Infrastructure in State Health Agencies
## Centers *for Disease Control and Prevention*

***SUMMARY***

An Assessment of the Telecommunication Infrastructure in State Health Agencies was conducted by the Centers for Disease Control and Prevention to develop a better understanding of state health agencies' telecommunication infrastructure, their interests, and their capacities. The purpose of the assessment was to learn of the comprehensiveness of existing networks and the connectivity of the employees in the different state health agencies. The survey was conducted via phone interviews during July 1996.

***BACKGROUND***

In the past two decades, many innovations have occurred in the telecommunications industry that have an impact on how people communicate with one another. This assessment was conducted to determine what the telecommunication abilities of state health agencies were and to identify potential barriers to the creation of comprehensive statewide information networks. While the assessment focused mainly on the existing information networks, the assessment covered other topics including desktop hardware and software and human resources.

***FUNDING/ SUPPORTING AGENCY/ SPONSOR***

Centers for Disease Control and Prevention (CDC)

*Cosf of data collection effort:* Data not provided

***PERIODICITY***

*Frequency of data collection:* One time survey
*Sfarf date:* July 1996
*Years collected:* 1 (1996)

***SAMPLE***

*Geographic coverage*: All fifty state health agencies and the health departments in Washington, D.C. and Puerto Rico.

*Sample size:* Representatives from all fifty state health agencies and the health departments in Washington, D.C. and Puerto Rico.

***DESCRIPTION OF DATA ELEMENTS***

The survey was comprised of five main sections:

- General Information: Respondents were asked to evaluate their current telecommunications infrastructure and to give telecommunications data (i.e. number of FTE employees and percent of employees with computers, the type of computers, and the different connections of their computers).
- Security and Support: In this section, the respondents were asked to provide data on the written security policies (if any) of the state health agencies and the type of support that the employees receive (state support versus contract support).
- Software Standards: Respondents provided data on their existing software (i.e. the e-mail system, the operating system, the word processor, and the network operating system). The respondents also discussed their software and convention standards (if any were applicable).
- Linkage: Respondents were asked for information on the linkages between local health agencies and state health agencies (if any) via LAN/WAN networks or Modem or terminals to mainframe.
- Future Plans: Respondents discussed what improvements the state health agencies had budgeted for in the upcoming fiscal year and potential technological barriers that they foresaw.

| | | |
|---|---|---|
| METHODOLOGY | Data collection method | Telephone survey/interview |
| | Format (of collection): | Hard copy |
| | Format (housing of data): | Electronic |
| | Participa tion: | Voluntary |
| | Data/information flow | The survey administrators spoke to officials within the health agency, usually the CIOs or LAN administrators, over the phone and conducted the survey. The first ten responses were then e-mailed to the respondents so that revisions could be made if necessary. Then, the results were aggregated and analyzed by the survey administrators. |
| | Data quality assurance: | The first 10 responses were e-mailed to the interviewees to allow the respondents to check the accuracy of the data, clarify questions, and update information provided. |
| | Data analysis: | Descriptive |

**STRENGTHS/ LIMITATIONS (METHODOLOGY)**

*Strengths:*

1. The survey provides a comprehensive overview of the SHAs' telecommunication infrastructure, providing states with comparative information.
2. The data underwent quality assurance to ensure the accuracy of the data.

*Limitations:*

1. Interpretation of the questions may have varied from one phone interview to the next.
2. It is difficult to compare data across states because of the difference in administrative and bureaucratic environments in which the health departments exist.

**REPORTS**

- *Centers for Disease Control and Prevention.* (1996). "Assessment of the Telecommunication Infrastructure in State Health Agencies."

# ASTHO Information Systems Survey
## *Association of State and Territorial Health Officials*

**SUMMARY**

The Association of State and Territorial Health Officials is considering the development of a survey to assess the information capacity of state and territorial health departments. Survey development is still in very preliminary stages, but it is anticipated that the survey would collect data on the types of information systems used by health departments; the accessibility of information systems and tools (e.g. internet, electronic mail) to various staff members; and the information system needs of state and territorial health officials.

**BACKGROUND**

ASTHO staff and members have expressed interest in developing this survey to assess, in a broad sense, the capacity and needs of health departments in the area of health information systems.

**FUNDING/ SUPPORTING AGENCY/ SPONSOR**

Association of State and Territorial Health Officials and perhaps another funding agency if one is found.

*Cost of data collection effort:* Data not provided

**PERIODICITY**

*Frequency of data collection:* Not Applicable
*Start date:* Not Applicable
*Years collected:* Not Applicable

**SAMPLE**

*Geographic coverage:* 50 U.S. states and the territories
*Sample size:* Health departments located in the 50 states and U.S. territories

**DESCRIPTION OF DATA ELEMENTS**

Survey is currently being considered for development.

**METHODOLOGY**

*Data collection method:* Survey
*format (of collection):* Uncertain
*Format (housing of data):* Uncertain
*Participation:* Voluntary
*Data/information flow:* Uncertain
*Data quality assurance:* Not Applicable
*Data analvsis:* Uncertain

**STRENGTHS/ LIMITATIONS (METHODOLOGY)**

*Strenaths:*

*Limitations:*

**REPORTS**

None to date.

# AVRHS Vital Statistics Automation Survey
## *National Association for Public Health Statistics and Informa tion Services*

**SUMMARY**

The National Association for Public Health Statistics and Information Services developed the AVRHS Vital Statistics Automation Survey; the purpose of the survey was to determine the level of technology that currently existed in vital statistics offices throughout the United States and Canada. This survey was not constructed to evaluate the effectiveness of the technology but merely to discern the level of technology that existed.

**BACKGROUND**

In 1993, members of AVRHS became interested in the level of technology that existed throughout the country and sought to develop the AVRHS Vital Statistics Automation Survey. The AVRHS - Computer Technology Committee developed a series of question and a draft survey was submitted to committee members and other officials within AVRHS. Suggestions and comments were incorporated into the final survey that was fielded to all AVRHS members.

**FUNDING/ SUPPORTING AGENCY/ SPONSOR**

Association for Public Health Statistics and Information Services

Cost *of data collection effort*: Minimal

**PERIODICITY**

Frequency *of data collection*: First pilot survey collected data in 1993

*Start* date: 1993

Years collected: 1 Year (1993)

**SAMPLE**

*Geographic coverage:* All fifty states, U.S. territories, and Canadian counterparts that were members of AVRHS (76 surveys in all mailed out)

Sample size: 58 regions

**DESCRIPTION OF DATA ELEMENTS**

The data are, for the most part, descriptions of the technological systems within the vital statistics offices and the methods of collecting the data. The state provide important information on the mainframe, microcomputer, and minicomputer operating systems that are utilized in their offices. The states also described and evaluated their technological vendors, citing problems and complications.

**METHODOLOGY**

*Data collection* method: Survey

format *(of collection):* Hard copy

*Format (housing of data)*: Hard Copy

*Participation*: Voluntary

*Data/information flow:* Standard surveys, developed by the AVRHS Computer Technology Staff, were fielded to officials in the state vital statistics offices. Following the completion of the survey questions, the survey was sent to the Office of Research and Analysis, Center for Health and Environmental Statistics, Kansas Department of Health and Environment where the data were compiled and analyzed. The analyzed data were then presented to AVHRS.

*Data qualify assurance:* Data were unedited and time allowance did not permit verification of the information with the respondents.

*Data analysis*: Descriptive, cross-sectional data presented on the state level.

| | |
|---|---|
| STRENGTHS/ ***LIMITATIONS*** (METHODOLOGY) | *Strengths:*<br>1. Data were collected from 58 different members of AVRHS and therefore the survey is relatively comprehensive.<br>*Limitations:*<br>1. The survey was constructed to give an overview of the level of technology and not to evaluate the current level of technology or to address the informational or technological needs of vital statistics offices. |
| REPORTS | • *AVRHS Vita/ Statistics Automation Survey* (April 1994).<br>• *A VRHS Vita/ Statistics Automation Survey* (Revised, February 1995). |

# Local Health Department Geographic Information System
## *Centers for Disease Control and Prevention*

**SUMMARY**

The Centers for Disease Control and Prevention is currently developing a Geographic Information System (GIS) for local health departments. Currently, maps of local health departments boundaries do exist; certain states have employed the GIS software. However, no national boundary file for local public health jurisdications currentl exists; the purpose of this project is to develop that national boundary file.

**BACKGROUND**

In the past, the Centers for Disease Control and Prevention has become interested in technological developments that would facilitate the comparison of local health departments. A Geographic Information System is a system that can store maps and tabluar data liked to geo-referenced identifiers. The GIS would enable officials to comprehend large volumens of data and to explore spatial relationships, patterns, and trends that might otherwise go unnoticed.

One major reasons for developing a LHD GIS would be that the system would help, to development a surveillance system for monitoring the Healthy People 2000 Objective 8.14 who goal is to "increase to at least 90 percent the proportion of people who are served by a LHD thatis effectively carrying out the core functions of public health." The GIS system would also enable national officials to develop a national sampling frame for LHD surveys, to identify non-respondents, and to study their demographics and statistics.

**FUNDING/ SUPPORTING AGENCY/ SPONSOR**

Centers for Disease Control and Prevention

***Cost of data collection effort:*** Undetermined

**PERIODICITY**

Frequency of dafa collection: First pilot survey will be collected in summer-fall 1997

*Start date:* ***1997***

***Years collected:*** ***No*** data actually collected yet

SAMPLE

***Geographic coverage:*** The initial pilot project will collect information on boudaries in six states

***Sample size:*** Local Boards of Health and Local Health Depts

**DESCRIPTION OF DATA ELEMENTS**

In the pilot

**METHODOLOGY**

*Data* ***collection method:*** ***Survey***

***format (of collection):*** Electronic

***Format (housing of data):*** Electronic

***Participation:*** Voluntary

***Data/information flow:*** Data will be collected from the local health departments and local boards of health. This data will then be entered into the desk top GIS software package which will be able to map the boundaries of the local public health jurisdictions.

***Dafa quality assurance:*** Not applicable

Dafa ***analysis:*** Data will be prepared in formats to meet requirements for easy access by several GIS programs currently in use (e.g. MapInfor, ArcView GIS, and EpiMap).

6179

The LEWIN GROUP

# Strategies for Obtaining Public Health Infrastructure Data at the Federal, State, and Local Levels

# Appendix B: Annotated Bibliography

**U.S. Department of Health and Human Services**
***November 1997***

**Contract Number: 282-95-0021**

Fairfax, Virginia
San Francisco, California
Cambridge, Massachusetts

## TABLE OF CONTENTS


Association of Schools of Public Health. (1991) ..... 5

Association of State and Territorial Health Officials. (1993) ..... 6

Baker, Edward L.; Melton, Robert J.; Stange, Paul V.; et al. (1994) ..... 7

Battelle Human Affairs Research Centers. (1990) ..... 7

Bean, NH Jr. (1992) ..... 9

Burke, T. A.; Shalauta, N. M.; Tran, N. L.; And Stern, B. S. (1997) ..... 10

Abstracts of Articles on Public Health Manpower. (October 1988) ..... 11

Centers for Disease Control and Prevention (CDC). (1994) ..... 12

Centers for Disease Control and Prevention (CDC). (1994) ..... 12

Christenson, Gregory M. (1995) ..... 13

Dyal, William W. (1991) ..... 14

Dyal, William W. (1995) ..... 15

Evans, CA. (1984) ..... 15

Fielding, Jonathan and Halfon, Neal. (1994) ..... 17

Friede, AF ..... 18

Gable, CB. (1990) ..... 19

Gerzoff, RB et al. (1996) ..... 19

Gold, Marsha (Mathematica Policy Research), et al. (July 1995) ..... 20

Gordon, Randolph, Gerzoff, Robert, and Richards, Thomas. (1997) ..... 21

Handler, Arden and Turnock, Bernard J. (1996) ..... 22

Handler, Arden; et al. (1994) ..... 23

Handler, Arden S.; et al. (1995) ..... 23

Harmon, RG. (1996). ..... 24

**Health Objectives for The Nation. (1994)** ..... 25

**Health Objectives for The Nation. (1994)** ..... 26

**Institute of Medicine. (1988)** ..... 26

**Institute of Medicine** ..... 27

**Institute of Medicine. (1995)** ..... 28

**Joint Council of Governmental Public Health Agencies Work Group on Access, Assurance, and Reimbursement for Primary Care, et al. (1995)** ..... 29

**Joint Council of Governmental Public Health Agencies Work Group on Human Resources Development, et al. (1995)** ..... 30

**Kaufman, M.; et al. (1988).** ..... 31

**Liang, AP; Renad, PG; Robinson, CG; Richards, TB (1993)** ..... 32

**Marando, Vincent L. and Melchior, Alan C. (1995)** ..... 33

**Maternal and Child Health Bureau. (1995)** ..... 33

**Miller, Arden C.; Moore, Karen S.; and Richards, Thomas B. (1993)** ..... 34

**Miller, C. Arden; et al. (1994)** ..... 35

**Miller, C. Arden; et al. (1994)** ..... 36

**Miller, C. Arden; et al. (1993)** ..... 36

**Miller, C. Arden; et al. (1995)** ..... 38

**Mullet, Maurice; et al. (1995)** ..... 39

**National Association of County and City Health Officials. (1991)** ..... 39

**Pickett, George and Romani, John. (1989)** ..... 40

**Public Health Foundation. (1995)** ..... 41

**Richards, Thomas B.; et al. (1995)** ..... 42

**Roper, William L.; et al. (1992)** ..... 43

**Schenck, Sarah E.; et al. (1995)** ..... 44

Schade, CP. (1995) ..... 45

Scott, H. Denman; et al. (1990) ..... 46

Studnicki, James (1995) ..... 46

Studnicki, James; et al. (1994) ..... 48

Suen, Jane; et al. 1995) ..... 48

Turnock, Bernard J.; et al. (1995) ..... 49

Turnock, Bernard J. and Handler, Arden. (1996) ..... 50

Turnock, Bernard J.; et al. (1994) ..... 50

Turnock, Bernard J.; et al. (1994) ..... 51

U.S. Advisory Commission on Intergovernmental Relations. (1994) ..... 52

U.S. Department of Health and Human Services. (1991) ..... 53

U.S. Department of Health and Human Services. (1991) ..... 54

U.S. Department of Health and Human Services, Health Resources and Services Administration, Bureau Of Health Professions. (1988) ..... 54

Dhhs Publication No. (Hrp) 0907160, GPO ..... 55

U.S. Public Health Service. (1995) ..... 55

U.S. Public Health Service. (1994) ..... 56

Washington State Department of Health. (1994) ..... 57

Wasserman, MP. (1992) ..... 58

**Association of Schools of Public Health. (1991). "The Infrastructure for Public Health: Ascertaining the Capacity of the Governmental Presence in Health at the Community Level." Washington, D.C.**

The concept of an infrastructure for public health emerged from discussions that began in 1986 about state and local department relationships in Michigan. The state health department asked the Department of Public Health Policy and Administration at the University of Michigan's School of Public Health to review the fiscal and other policies influencing the state/local public health relationship and to make recommendations for improving the situation. Between 1988 and 1989, the basic elements of a local health department were studied and the infrastructure concept was developed and defined. This report describes the infrastructure project, the results of the study, and recommendations for the application of the Infrastructure concept to the further development of local public health in Michigan.

The Infrastructure, that which lies under and supports the structure of the health department, is defined as the executive ability, responsibility and authority to determine and implement health policy and the knowledge, skills, and support systems need to:

- Maintain an ongoing system for monitoring of community health status and services;
- Assure the use of appropriate and necessary public health knowledge and technology in all aspects of agency operations;
- Inform and assist the community in appropriate actions necessary to promote health and prevent disease and injury;
- Assure the efficient allocation and management of and appropriate accounting for the resources available to the agency; and
- Incorporate the function, knowledge and expertise of the public health agency into an ongoing community health planning process.

The purpose of the infrastructure project was to assess the validity of the infrastructure definition by determining if it could be used to evaluate a health department. The data were collected from surveys completed by state health officials and from on-site visits to the local health departments in Michigan.

In general, the criteria within the infrastructure project were found to be useful. The criteria could be applied by volunteer site visitors and they resulted in distinctions between health departments. The reviewers were able to examine each health department in its own context and adjust their assessments to the demands and resources of the community. The reviewed agencies found the site visits useful in that they offered an opportunity to step back from a preoccupation with program evaluation and consider the cognitive capabilities of the organization as a whole. It **is** believed **that the Infrastructure concept could be applied to local health departments in other** states.

**Related Article: See** Pickett, George and Romani, John. "The Infrastructure of Local Public Health Agencies and Its Support by State Health Agencies."

**Association of State and Territorial Health Officials. (1993). "Results of the Survey on Data and Information system issues for White House Task force on Health Care Reform". Washington, D.C.**

This report discusses the results of a survey conducted by staff from the Association of State and Territorial Health Officials (ASTHO) and the Public Health Foundation (PHF) in conjunction with members of a work group of the White House Task Force on Health Care Reform. Public health agencies rely extensively on data systems and their capacity to collect, analyze, and utilize information for programmatic decision-making. Current public health data systems are fragmented, driven by categorical funding streams and/or federal funding requirements. In March 1993, staff from ASTHO and PHF met with members of the Work group on Short-Term Steps Toward Administrative Simplification, a work group of the White House Task Force on Health Care Reform. The White House work group was seeking suggestions on how to streamline the relationship between federal/state/local health agencies with respect to data and information systems. The work group was seeking answers to some of the following questions:

- What is the cost of duplicative, burdensome federal reporting requirements?
- Which federal reporting requirements are particularly burdensome?
- What can be done to improve the utility of public health information systems?
- What are major barriers to developing public health-wide integrated information systems?
- What are the obstacles to integrating public health and private sector information systems?

The survey, conducted by ASTHO and PHF, was administered to the state health officer in each of the nation's state health agencies (SHAs). Thirty-eight SHAs responded to the survey. The time period of response was only two days; therefore survey questions for which it would have been impractical to request hard data, were framed to elicit the respondents' best qualitative judgment. The SHAs identified problems in responding to reporting requirements for a number of programs, but the most frequently cited program for having burdensome reporting requirements was the MCH Services Block Grant. This data system was cited as burdensome due to the excessive amount of data requested and the difficulty in reporting a number of data elements. Other programs that were cited as having burdensome reporting requirements included Medicaid, Healthy Start; Family Planning, and Clinical Laboratory Improvement Act (CLIA).

The SHAs also reported over 20 major barriers to developing public health-wide integrated information systems. Barriers most frequently cited include: separate and conflicting reporting requirements from federal programs; different philosophies and purposes of data collection among federal agencies and offices; and incompatibility of data systems including hardware, software, client identifiers, and data elements.

**Baker, Edward L.; Melton, Robert J.; Stange, Paul V.; Fields, Mimi L.; Koplan, Jeffrey P.; Guerra, Fernando A.; and Satcher, David. (1994). "Health Reform and the Health of the Public." Journal *of the American* Medical *Association* 272(16): 1276 -1282.**

Merely reforming the national health care financing system may not substantially improve the nation's health status. The concept of health care reform should not focus strictly on medical care; rather, it should also encompass the strengthening of public health and the forging of community health partnerships. This article presents a background and framework for determining how the health of the public can be improved during a period of substantial change within the health care system.

The nation's public health agencies, in the past, have focused on communities as a whole and on populations to assure the existence of healthy living conditions. The vitality of the public health system has been undermined in the past two decades by escalating pressures on state and local governments to give medical care to the poor and uninsured. Consequently, "public health" has become confused with "public funded" or charity medicine. The nation needs to revitalize and refocus the public health system by considering the core values and core functions. Reformers need to integrate two principal values, prevention and community, into the public health mission.

Financial and programmatic constraints of government in the 1990s has compelled health departments to aggressively seek partnerships, coalitions, and shared resources to achieve objectives. These partnerships will lessen the role that public health agencies play in providing personal health services; instead public health agencies will focus on population based services to the entire community. These partnerships will focus on three main areas: (1) providing information to the community derived from the assessment of health status, health needs, disease threats, and health services; (2) Leading the community in planning and mobilization of governmental and non-governmental services; and (3) assuring the availability of quality individual, family, and public health services to the entire community. To ensure communication of information to health officials in the public and private sector, this article recommends the development of "health data institutes" that would provide extensive, up-to-date community health information. This information would be based on data generated by managed care providers, public health agencies, community hospitals, and other sources.

**Battelle Human Affairs Research Centers. (1990). "Estimating Expenditures for Disease Prevention and Health Promotion Activities in the United States: A Feasibility Study and Proposal." Report to the Centers for Disease Control and Prevention.**

Improving the health of the nation has always existed as a national objective. Finding the most effective means for achieving it with shrinking resources becomes a major policy issue. Despite the lack of attention given to it, disease prevention and promotion has played a major role in improving the health of the nation in the past century. Many current diseases are considered chronic diseases but there is still faith that these diseases can also been prevented or lessened by disease prevention/health promotion efforts. In the past 15 years, interest in disease prevention and promotion has been renewed by the local, state, and national government.

However, despite the interest in these activities, little data have been collected to evaluate the level of disease prevention/health promotion expenditures in the United States. A better understanding of the existing services and the distribution of funds would enable policy makers to compare this strategy to other methods, including treatment and rehabilitation. This report examines diseases prevention and health promotion programs to determine the feasibility and advisability of undertaking a study to assess their expenditures and distribution.

This report begins with discussion of a conceptual health model that determines that health is affected by four basic inputs: heredity, behavior (personal habits), environment, ‘and health care services. This model demonstrates that health policy must incorporate or address all four inputs, not just the provision of medical services. This model also provides a framework for describing the spectrum of prevention activities. According to the report, disease prevention activities can be defined as “interventions to improve the health of individuals and society at a future date by reducing the risk of illness and injury”. Prevention activities may either be primary (reducing the risk for well people of becoming ill or injured) or secondary (reducing any adverse health effects once the illness has commenced). In a 1979 report by the Surgeon General, disease prevention activities fit into the following three types:

1. Preventive Health Services: High blood pressure control, Family planning, Pregnancy and infant health, Immunization, Sexually transmitted diseases

2. Health Protection: Toxic agent control, Occupational safety and health, Accident prevention and injury control, Fluoridation and Dental Health, Surveillance and Control of Infectious Diseases

3. Health Promotion: Smoking and health, Misuse of alcohol and drugs, Nutrition, Physical fitness and exercise, Control of stress and violent behavior

The question then emerges: where does this fall within the framework for public health? According to an IOM report (1988), the substance of public health was depicted as organized ‘community efforts aimed at the promotion of health and prevention of disease. The federal government performs public health function through the Department of Health and Human Services (HCFA and PHS). The federal government conducts some activities (assessment and policy) but contracts the majority of their services to state, local, and private organization (direct public health services). The state governments have state health agencies that bear the primary responsibility for public health. These agencies, on the whole, set public health priorities, carry out national and state mandates, respond to public health hazards, and assure the availability of medical services for the uninsured. The local governments provide the most direct community health services, including childhood immunizations, health education, restaurant inspections, rat and rabies control. and communicable disease control.

Based on their interviews with health officials at all levels and their analysis of the different entities that provided disease prevention and health promotion services, the Battelle Center drafted the following plan to estimate national prevention expenditures. The plan was comprised of the following steps:

1. All expenditures that meet the definitions of diseases prevention and health promotion must be examined. If possible, data should be broken up into primary and secondary prevention activities.

2. Estimates will be aggregated in two ways, all expenditures under HCFA's national health expenditure estimates, and all expenditures that meet the basic definition of prevention.

3. Some prevention activities (including school health activities privately funded, private local organizational activities, and expenditures for certain materials) will not be incorporated in the estimates.

4. Estimates will be made for the following categories: federal expenditures (DHHS and other federal agencies), prevention expenditures by SHAs and LHDs, expenditures for preventive medical services given to individuals, expenditures for worksite promotion programs, and expenditures by private foundations and associations.

5. Aggregate the different components to determine a national total of disease prevention expenditures.

Following the collection of data and analysis of the aggregated data, the findings were to be presented to the Centers for Disease Control and Prevention to enable them to have a greater understanding of the role of disease prevention programs on the health of the nation.

**Bean, NH Jr. (1992). "PHLIS: An Electronic System for Reporting Public Health Data from Remote Sites."** ***American Journal of Public Health*** **82(8):** ***1273-6.***

The Centers for Disease Control and Prevention, in conjunction with state health departments, conducts disease surveillance that provides databases of information to public health workers. However, the data are often not helpful because of the lag time that exists between the time of the diseases' occurrence and the availability of the data. The Public Health Laboratory Information System (PHLIS) system was created to eliminate or significantly decrease the lag time that had occurred. PHLIS is a PC-based electronic reporting system for capturing, editing, and analyzing data locally and for transmission to state and federal agencies. PHLIS was developed for installation at any site and to capture any type of information related to disease surveillance. PHLIS accommodates data transmission regardless of dissimilarities in the data composition. The system is also flexible to capture any type of information (e.g. epidemiological, laboratory, special studies, surveys) from multiple sources (e.g. hospitals, laboratories, state or county offices).

Each program site has the capability to create and control its own module (a data set that contains records concerning a specific pathology, survey, study, etc.) in conjunction with state programs. Modules act independently of each other and often have their own unique design (e.g. frequency of data transmission, data entry screen, and destination hardware for the data). Changing the structure of a particular module does not affect modules at other sites. Once the modules are constructed, data can be collected at any site through PHLIS and then disseminated to workers and constituents at other modules/sites.

PHLIS was initially implemented in seven states without site visits or training but with a telephone consultation by a CDC staff member. The program was designed to be completely menu driven and only requires a computer with 5 12 kB memory to implement PHLIS. As state officials implement new records at the module, the data are incorporated into the master file and become a permanent record on the system. PHLIS also notes where data records have been requested and sent to facilitate data tracking; most importantly, the data can be imported in numerous different forms and are not restricted to one program (e.g. Epi Info, dBASE, and ASCII). The immediate benefits of the program are:

1. Electronic transmission of reports reduces data entry burdens within the states;

2. Access to timely national summaries ensures that the data are current;

3. This program increases the interaction among public health workers, stimulates reporting, and fosters awareness; and

4. Allows for quick identification of unusual disease cluster by state epidemiologists who cope with these problems.

The program is currently installed in 41 of the 45 state laboratories that have requested the program and PHLIS is available to local health departments without any cost.

**Burke, T. A.; Shalauta, N. M.; Tran, N. L.; and Stern, B. S. (1997) "The Environmental Web: A National Profile of the State Infrastructure for Environmental Health and Protection"** ***Journal of Public Health Management and Practice*** **3(2): 1- 12.**

Since the first Earth Day in 1971, there has been greater national commitment to the protection of the environment and awareness of environmental health issues. Numerous state governments and the federal government have enacted legislation addressing all aspects of the environment. Consequently, a huge and complex infrastructure has evolved to administer these laws and implement these regulatory approaches. At the same time, the environmental responsibilities of traditional public health agencies have decreased and have led over the years to fragmentation of the environmental health responsibilities, poor coordination of services and/or programs, and inadequate attention to the public health dimensions of environmental issues. This article examines the organization of the national environmental health and protection infrastructure in order to address the issue of environmental fragmentation.

The goals of this study were to conduct a descriptive analysis of the structure, functions, and funding of state environmental health and protection services, and to examine the impact of the major federal environmental statutes on the organization of the state infrastructure. This study collected the following information from each of the 50 states:

1. Organizational Charts: What agencies throughout the state are responsible for implementing major federal **environmental laws (e.g. the EPA, the Department of Health, the Department of Agriculture).**

2. Environmental Health and Protection Programs: What are the major programs that shape the state environmental health and protection infrastructure and who administers these programs?

3. Core Functions of Environmental Health and Protection: What do environmental health and protection agencies do? (e.g. regulation, enforcement, monitoring, health surveillance)

4. State Budgets for Environmental Health and Protection: How do expenditures for regulatory functions compare with expenditures for public health functions?

The findings from this study might suggest that indeed environmental fragmentation has occurred since hundreds of state agencies throughout the county are responsible for implementing different aspects of the major national environmental laws. However, the authors believe, based on their findings, that environmental diversification (not fragmentation) has occurred. The public health agencies may no longer play the lead role in environmental regulatory programs but the role of these agencies in surveillance, epidemiology, and monitoring still exists. The national environmental laws, in the past twenty years, have established an arsenal of regulating authorities but have not expanded state capacities to address human health and the environment. These laws have driven funding toward regulatory activities but have failed to support traditional public health activities. In fact, the results from this study suggest that many state environmental agencies are not equipped currently to take on a health risk-based approach to environmental protection.

This study has shown that these federal environmental laws have led to the creation of a dynamic billion dollar state infrastructure for environmental health. While the goal of these laws is the protection of public health, these laws have not led to extensive development of the states' capacity to evaluate environmental health risks. Future environmental progress will depend upon an improved understanding of the relationship between human health and the environment.

**"The Caucus on Public Health Manpower Statistics," Abstracts of Articles on Public Health Manpower. (October 1988).**

This report provides abstracts on articles related to public health manpower issues. Abstracts include a summary of the article and key findings. Twenty-five articles are abstracted with copies of selected tables of contents and other selections from the articles. Report includes articles on Schools of Public Health, historical public health personnel policy and data, comprehensive data by specialty, reports to Congress and the President, health services administrators, environmental health work force, public health nutritionists, epidemiologists, state health agencies, work force data collection, training and employment of preventive medicine physicians, and public health manpower training.

**Centers for Disease Control and Prevention (CDC). (1994). "A Report on Public Health Information and Surveillance Systems." Atlanta, GA: CDC/ASTDR Steering Committee for Public Health Information and Surveillance System Development.**

The CDC/ATSDR Steering Committee on Public Health Information and Surveillance System Development was convened to begin implementing the creation of an integrated public health surveillance and health information system. This report examines the information required to support core public health functions and current public health practices of CDC; the extent to which information needs for public health can be met by systems proposed for health reform; and, issues relevant to confidentiality. The Committee also developed a list of principles to guide the further development (by CDC and others) of automated heath information systems.

The first set of recommendations identifies information needs and provides specific suggestions for the assessment, evaluation, and implementation for consolidating and streamlining CDC public health surveillance and health information systems. The second set of recommendations are tied to health care reform and are targeted as advocacy areas for CDC in the implementation of a health reform data system.

**Centers for Disease Control and Prevention (CDC). (1994). "Tool for Integrating Performance Systems (TIPS) in Public Health Agencies." Atlanta, GA.**

The public health community, like most organizations, is experiencing ever-increasing demands for their services while simultaneously having to deal with ever-diminishing resources. Doing more with less places great demands on public health management officials. In 1992, CDC initiated a project to develop an automated tool to assist public health agencies in integrating organizational goals, objectives, and activities with staffing. To achieve its goal, the Tool for Integrating Performance Systems (TIPS) was founded on four basic management principles:

1. Successful organizations' operations are based upon specific, clearly defined goals, objectives, and activities;

2. Effective planning involves periodic, appropriate, and expedient linkage of agency goals, objectives, and activities with staffing resources;

3. Planning is crucial to achieving organizational goals, objectives and activities; and

4. Identification and initiation of appropriate personnel interventions for overcoming staff deficiencies is fundamental to achieving one's goals and objectives.

TIPS has six major components, three that specifically assist public health agencies in meeting the challenges facing their management. The three components are as follows:

- Program Analysis: This component assists users in identifying and linking planned work (e.g., goals, objectives) to the staff who will perform the work. Users are asked to list their goals, objectives, and activities developed using processes like APEX*PH* and the individuals or groups who were responsible for these activities. TIPS can then provide a variety of

integrated planning documentation linking goals, objectives, and activities to staffing assignments.

- Person Analysis: This component assists users in determining if groups have the ability to perform the activities to which they have been assigned in the Program Analysis. This component will automatically provide the user with person analysis instruments, present survey methodology alternatives, facilitate the input of survey data, and automatically format the results.

- Integrating Program and People: This component will assist users in identifying an appropriate action or combination of actions that will enable a staff member to perform an activity to which they have been assigned.

**Christenson, Gregory M. (1995). "Application of Core Function Concepts to Local Health Department Occupational Safety and Health Activities."** ***American Journal of Preventive Medicine Supplement*** **1 l(6): 45-50.**

This article discusses the results of a national survey of LHD occupation safety and health (OSH) activities during 1992-1993 in categories corresponding to the three core public health functions: assessment, policy development, and assurance. This survey was conducted in an attempt to illustrate how core function concepts might be useful in the evaluation of specific local health department (LHD) programs. The questionnaire was mailed to LHDs, defined as "an administrative or service unit of local or state government, concerned with health, and carrying some responsibility for the health of a jurisdiction smaller than a state, in 49 states (Rhode Island had no LHDs meeting the study definition) and the District of Columbia.

The results of the survey suggest that the majority of LHDs have relatively little activity in the area of OSH. OSH issues appear nested relatively deeply within the priorities of most LHDs, in comparison to the multiple other issues these LHDs confront. Although OSH activity by most LHDs may be limited largely to referrals, LHDs potentially can serve a role in preventing occupational diseases and injuries. This study was limited due to a lack of comparative studies and data. Nonetheless, the general pattern of results in the survey were consistent with a conceptual framework described in the 1950's by the California Department of Public Health and California Conference of Local Health Officers. The conceptual framework proposed a sliding scale of activities specific to the needs of a local community in the area of OSH. As part of the minimum information base given to all LHDs, an important item is developing materials, like APEX*PH*, to assist in conducting self-appraisal of the OSH activities. The core function concepts can be a useful adjunct in evaluating the specific LHD programs such as OSH. However, further research is needed to refine and improve core function indicators providing insights into specific LHD programs, as well as into overall LHD performance.

**Dyal, William W. (1991). "Public Health Infrastructure." Paper written for the Public Health Practice Program Office of the Centers for Disease Control and Prevention, 1 - 17.**

This report further defines the three core public health functions developed by the Institute of Medicine (IOM). Public health infrastructure is a rather abstract concept that is difficult to define in concrete terms. The infrastructure has been defined as a governmental presence at any level which is responsible for the health of the community. Every community, regardless of its structure, must be served by a governmental entity charged with the public health responsibility. In 1988, an IOM report supported that concept by stating that government responsibility to protect and promote the public's health is represented by public health agencies, state and local departments, and the U.S. Department of Health and Human Services. The IOM report defined three core public health functions: assessment, policy development, and assurance. Based on these core functions, one might redefine the public health infrastructure as "the capacity required by the governmental representatives of the public health system to effectively carry out the core functions of public health.

To assess the performance and expand the capacity of the public health infrastructure, it is necessary to further define this concept. The author recommends the following partitions that give a conceptual framework for further defining the public health infrastructure:

- System participants: official government public health agencies as well as the private providers and voluntary organizations;
- System capacity or inputs: community leadership, human resources, fiscal/physical resources, information resources, and the system organization necessary to carry out the core functions of public health;
- System practices or processes: those organizational practices that are necessary and sufficient to assure that the core functions are being carried out efficiently and effectively;
- System services or outputs: health services intended to prevent death, disease, and disability and to promote improved quality of life; and
- System results or outcomes: indicators of health status, risk reduction and quality of life enhancement.

The core functions were elaborated upon to define the ten basic public health practices. If the practices represent the function of the public health infrastructure, then the strength of the infrastructure is based on the components of its capacity. The following components of capacity are viewed as essential for a strong infrastructure:

- Community leadership: community actions that anticipate and respond to evolving conditions and establish priorities;
- Human resources: the people, their knowledge, their skills and abilities;

- Fiscal/physical resources: money, equipment, facilities;
- Information resources: data, information, and communication systems; and
- Organization resources: relationships among participants and the managers of system practices.

**Dyal, William W. (1995). "Ten Organizational Practices of Public Health: A Historical Perspective."** ***American Journal of Preventive Medicine Supplement*** **11(6):** ***6-8.***

This article discusses the identification of the ten organizational practices that define the practice of public health. Prior to 1988, no consensus definition existed of the public health system, its function, or the capacity needed to carry out those functions. In 1988, the Institute of Medicine (IOM) took a major step forward when it defined the functions of government public health agencies as assessment (monitoring the health of the American people), policy development (promoting the development of scientifically sound public health policy), and assurance (guaranteeing the benefits of public health for all citizens). The effort to further describe and measure the practice of public health began in January 1989 when the Centers for Disease Control and Prevention (CDC) convened a meeting of public health leaders. Consensus was reached that these core functions provided an appropriate framework.

A beginning effort was made to identify the specific practices or processes required to carry out the core functions. The result of this two-year effort was the delineation of 10 organizational practices that functionally define the practice of public health, provide a basis for measuring the three core functions of public health, and also describe a continuum of public-solving activity from problem identification to evaluation in order to redirect resources and interventions. Although extensive external examination and validation of these 10 organizational practices is called for, early application and investigation of this framework seem promising.

**Evans, CA. (1984). "A National Survey of Dental Public Health Services in Local Health Departments: a Report of Findings".** ***Journal of Public Health Dentistry*** **44(3):** ***112-119.***

Public health programs and services, in the past twenty years, have had to cope with decreasing federal and state funding support. These pressures have led to cuts in the budget and staffing levels of local dental public health programs. During budget appropriations, dental programs are not given high priority and therefore tend to be the first targets of elimination. This study was conducted because of concerns expressed by members of the American Association of State and Territorial Dental Directors. Their concerns arose when states began eliminating dental programs and when dental director positions remained vacant for prolonged periods of time.

A preliminary survey was sent to state dental directors in order to identify a key contact person and to receive a listing of all dental programs run by the local governments independently from the state. After a second letter was mailed to nonrespondents, the researchers identified 145 potential programs in 30 different states. Surveys were then mailed to administrators of those

programs and after a second letter was mailed to nonrespondents, the researchers received completed surveys from 109 programs, a response rate of 75 percent. The goals and objectives of the survey were the following:

- To identify and list all local dental directors and their respective dental public health programs operating in the United States. For purposes of this survey, local dental public health programs were defined as programs and services administered by city and/or county health departments. Neighborhood health center programs migrant health center projects, or programs of similar nature were not included.

- To survey all dental programs where the local department of public health operates independent of direct administration by the state health department.

- To develop a brief description of the current status and salient features of these local programs.

- To assess the effect of the current Administration policies and the state of the general economy on the operation of these programs.

- To identify current issues and estimates of future trends predicted to affect local dental programs in public health.

The surveys requested program budget information to assess the effect of reductions in public health services budgets. The surveys also questioned the fluoridation status of the surrounding community as a matter of background information. Staffing patterns and salary levels were requested in order to provide a general profile of the dental staff and the salary structures employed by local health departments. The data were reviewed to determine clarity of response and ambiguous responses were eliminated.

The survey requested narrative responses describing three categorical features of local program operation: dental health education, dental disease prevention, and clinical services. The majority of respondents reported providing health education services in elementary school (76%), junior high school (56%), and day care centers (50%). Only a minority of program directors reported providing education services to high schools (32%), senior citizens (35%), or Head Start programs (20%). Less than half of the respondents reported having implement either fluoride-rinse programs or using occlusal sealants in either fluoridated communities, nonfluoridated communities, or in institutional settings. The majority of programs that delivered clinical services offered dental services to low-income children.

Between 1981 and 1982, the sum total of all reported budgets declined more than eight hundred thousand dollars from $25.9 million to $25.1 million. However, not all programs experienced budget reductions; the programs that did fall prey to budget cuts reported losses of up to 30 percent of the 1981 baseline budget.

The survey objectives were met and several important conclusions were drawn from the results of the survey:

1. Programs responding to the survey reported a sum total budget loss exceeding $2.5 million between 1981 and 1983.

2. Major budget losses were concentrated in a few programs which faced drastic reductions or were terminated. Most programs reported maintenance of their budget level or a slight increase.

3. Most programs expressed concern regarding future budget status, funding crises, and general issues of program survival.

4. Local dental directors possessing master of public health and dental degrees, on average, manage budgets twice as large as directors holding the dental degree only, but report a modest difference in salary level.

5. The status of dental public health services in local health departments deserves periodic monitoring.

**Fielding, Jonathan and Halfon, Neal. (1994). "Where is the Health in Health System Reform?"** ***Journal of American Medical Association* 272(16): *1292 - 1296.***

The purpose of this article is to suggest ways that policies focusing on health security can also promote health concurrently. In the past few years, little attention has been given to health promotion. Health care reform that focuses its energies solely on refinancing will miss critical opportunities to implement proven preventive strategies nationwide. If improving health through disease prevention and health promotion is to be a goal of the health system, one needs to understand health as a continuum influenced by numerous factors including genetic factors, family conditions, and environmental conditions (i.e. pollution and poverty). The common thread for an efficient and effective health care system is prevention.

The authors recommend the development of a four-level preventive program that does the following: (1) motivates changes in personal health behaviors that are detrimental to the individual; (2) provides a health care system that delivers proven clinical preventive services in an effective manner; (3) expands and reinvigorates public health programs and links the programs to personal health care services; and (4) addresses other preventive goals as they arise through legislation. The prevention standard has ten key components:

1. Empower individuals to make healthful choices.

2. Include individual/client preventive services in the core benefit set.

3. Support community and population based preventive activities of proven efficacy and efficiency.

4. Ensure that other health-related governmental policies are consistent with preventive health goals.

5. Guarantee support for core public health functions.

6. Provide for data collection, analysis, and reports on a routine basis that show changes in the population health on all levels. Identify those services that have proven unsuccessful.

7. Fund research on more efficient and effective programs.

8. Ensure accountability of community and personal medical services providers for achievement of population health status goals.

9. Provide incentives for increased numbers of primary care providers with training in personal/clinical preventive services.

10. Undertake public education to improve the understanding of prevention and promote behavioral change of communities and individuals.

In order for this approach to prove successful, the directors of the programs need to constantly review the evidence of the effectiveness of the programs, services, and policies. According to this article, if these steps are taken, a prevention standard could be used as a guiding principle for health care reform, for the promotion of health for the nation, and for the ensuring of health security.

**Friede, AF. "Data 2000: CDC Wonder Information System Linking Health People 2000 Objectives to Data Sets."** ***American Journal of Preventive Medicine 10(4): 230-4.***

Healthy People 2000 is a statement of national priorities for improving the health of the American people over the next decade. These objectives are categorized into 22 different priority areas; the first 21 areas related to health protection, health promotion, and preventive services. The final area addresses the need for an infrastructure to monitor the progress toward these objectives and to identify emerging health issues at the local, state, and federal level. At the time of publication, many HP 2000 objectives lacked a baseline measure or an identified data source to monitor progress; also, many data sources did not have the pertinent information on subpopulation groups in the communities.

Data2000 addressed these needs by linking HP2000 objectives to existing data sets to enable people to monitor the progress on these objectives. Data2000 provides a list of data sets for each objective, the strengths and weaknesses of the data sets, information about demographic and geographic coverage, listings of where data are available, and descriptions of the projected data sets if possible. To facilitate access to Data2000, the program was located within CDC Wonder, a comprehensive on-line public health information service. Data on the service are obtained from standard public-use files, data prepared especially for Wonder, and printed tables converted to electronic form. Data are updated on an ongoing basis. All public health professionals have access to CDC Wonder and therefore Data2000 at no extra cost.

Two hundred and four data sets were identified; 147 data sets provided monitoring and baseline data while 39 data sets provided only base line data and 18 data sets provided only monitoring

data. Ninety-one of the 300 Healthy People 2000 objectives were missing a baseline and monitoring data set. The creation of Data2000 has stimulated the creation of numerous new surveillance systems. However, this system will only be useful provided that there is a sustained effort to ensure the quality and validity of the data.

**Gable, CB. (1990). "A Compendium of Public Health Data Sources." American *Journal of Epidemiology 131:* 381-394.**

Epidemiologists and other researchers in public health need the best available data to monitor disease trends and to design health programs. A considerable amount of quantitative data has been collected and analyzed that might prove helpful to researchers and epidemiologists. However, many public health officials and private health professionals have been unaware of the data source collection activities that exist. The purpose of the paper is to identify and describe public health data sources and to provide guidance on obtaining data from these sources. The data in these sources are from vital records, health surveys, surveillance reports, and the US Census. In this compendium, there are 107 sources of data on natality, morbidity, mortality, health and health care, maternal and child health, the nutrition surveillance, and the Census. The phone numbers and contact offices within the federal agencies responsible for these data bases are provided as guides to help researchers obtain this information. These data are useful for examining the relations between behavior, exposure, health and diet, trends in mortality and morbidity for specific diseases, and patterns in food consumption and composition. The data source listings give the category of the data source, the agency responsible for data collection, the title of the data source, and a brief description of the data.

**Gerzoff, RB et al. (1996). "Recent Changes in Local Health Department Spending". *Journal of Public Health Policy* 17(2): *170-180.***

The entire health care delivery system, including public health agencies, is undergoing rapid change. In 1994, forty four states implemented some component of managed care into their health programs. Medicaid dollars are now being shifted toward the private sector with less discretionary spending by the governments; therefore, public health agencies are having difficulties fulfilling their roles. This study explores the differences in US expenditures to LHDs in 1989 and 1993 and then examines the factors that are associated with those changes.

Data for this study were gathered from two separate questionnaires mailed to local health departments in the United States by the National Association of County and City Health Officials; the questionnaires were completed in January 1989 and November 1992. The responses rates for the 1989 and 1992 questionnaires were 77% and 72% respectively. Expenditures were adjusted to constant 1993 dollars using statistics from the Bureau of Labor Statistics. The analyses were limited to determining if budgets had increase or decreased.; the median annual budget increases and decreases were used to summarize national and regional trends in budget changes.

Adjusted for medical care inflation, nearly half of the departments experienced budget decreases (median value of $88,500) while the remaining departments experienced budget increases

(median value of $188,000). The percentage reported increases or decreases in LHD budgets differed greatly by states and census division. The LHDs in the Pacific Region reported the highest percentage of budget increases while New England reported the highest percentage of decreases in the budget. LHDs with larger jurisdictions were much more likely to report budget increases; however, the administrative relationship between LHDs and state agencies had no impact on the likelihood of a budget increase or decrease. This analysis indicates that funding of the public health system in the United States on the whole has stagnated during the 1990s. While little changes occurred nationally in spending on public health, there were significant variations among the different regions of the county.

There are some limitations to this study:

- Local health departments may have been reorganized during the interim between the two surveys.
- LHDs may have transferred programs to or received programs from other agencies.
- Neither survey included definitions or procedures for estimating budgets.
- Because of missing values, many respondents were excluded from each analysis.

During a period where the demands on LHDs have increased, nearly half of the local health departments' budgets did not keep pace with inflation. The infrastructure and capacity needed to deliver public health services cannot be established until stable long-term, funding is assured.

**Gold, Marsha (Mathematica Policy Research), Burnbauer, Lauren and Chu, Karyen. (July 1995). "Dealing with the Baseline: Where do We Start in Monitoring Access in States." Proceedings from the 25th Public Health Conference on Records and Statistics and the National Committee on Vital and Health Statistics 45th Anniversary Symposium. Washington D.C.**

This report presents findings from a 1994 telephone survey of policymakers in all 50 states funded by the Robert Wood Johnson Foundation and fielded in January to March 1994. The paper aims to 1) assess both policymakers' confidence in data relevant to access and the characteristics of available data; 2) assess funding trends and barriers to improving the utility of data; and 3) identify the key policy issues related to enhancing data for monitoring access.

The telephone survey involved interviews with key senior state officials in the legislative and executive branches of all 50 states and the District of Columbia. Interviews were conducted by telephone with senior health policy advisors in eight functional areas including: the governor's health aide, health analysis for legislative committees, budget department staff, health reform staff, Medicaid staff, public health staff, vital statistics staff, and health resources and utilization analysis staff. Responses were received from 442 of 452 potential respondents, with at least seven responses for each state.

The study found that states appear relatively confident in data that supports ongoing operations of stable programs such as monitoring Medicaid or operating individual public health programs. State data systems are perceived as not well-suited to supporting assessments of program needs or to guiding decisions about restructuring health care systems in a changing environment.

**Gordon, Randolph, Gerzoff, Robert, and Richards, Thomas. (1997) "Determinants of US Local Health Department Expenditures, 1992 through 1993." American *Journal of Public Health* 87(1): *91-95.***

Public health expenditures constitute a small percentage (4 percent) of all health care expenditures and the prospect of additional resources is limited. Consequently, health departments need to develop effective strategies to analyze the efficiency of public health spending and its value to the public. This article presents findings from a study that examined local health department (LHD) expenditures and their relationship to several departmental characteristics (e.g. size of the population in the department's jurisdiction). The study sought to describe local health department spending patterns by using per capita expenditures.

Data on local health department expenditures were obtained from surveys sent by the National Association of County and City Health Officials in 1992 - 1993. For the purposes of this study, local health departments were defined as "administrative or service unit[s] of government, concerned with health, and carrying some responsibility for the health of a jurisdiction smaller than the state." The nine questions (and 29 potential model variables) that comprised the survey requested data on full time staff members, services provided by the LHD (either directly or contractually), the diversity of funding sources, and the type of jurisdiction the local health department served. Responses were received from 2079 of the 2888 potential respondents.

According to the data, the range of unadjusted per capita expenses ranged from less than $1 to $227; the mean for all departments was $26 and the median was $20. Nearly seventy percent of the variability in per capita health expenditures was attributable to the population size of the department's jurisdiction. The relationship between population and expenditure was not linear and was greatest in jurisdictions with populations between 190,000 and 250,000. It is difficult to compare local health departments because there are no standards that define what items are included in a total public health budget. However, the per capita figures can be helpful in determining the relative value placed on public health in comparison to other budget items.

In conclusion, the average annual per capita spending for local health departments studied was $26. However there was a broad range of local health department spending among jurisdictions of similar size. This finding reflects the equally diverse needs and priorities placed on the local public health system and suggests an opportunity to evaluate the relationships between health expenditures and health status.

**Handler, Arden and Turnock, Bernard J. (1996). "Local Health Department Effectiveness in Addressing the Core Functions of Public Health: Essential Ingredients."** ***Journal of Public Health Policy*** **17(4):** ***460-483.***

In 1990, the Public Health Practice Program Office of the Centers for Disease Control characterized the ten public health practices that related to assessment, policy development, and assurance. These public health practices would serve as building blocks of performance measure for effective local public health practice. A study conducted in 1993 utilized these ten public health practices in an effort to distinguish effective local public health agencies from ineffective agencies. The objective of the study, discussed in this articles, was to describe more extensively the key structural and service characteristics of an effective local public health agency. The study included data from a 1993 survey of local public health practice and the 1992-1993 NACCHO profile of local health agencies.

In Spring 1993, the University of Illinois surveyed a stratified random sample of local health departments in the US with respect to their performance of practices measures related to the ten public health practices. The sample was selected using a database constructed from the two datasets discussed above. Even with second mailing and telephone calls to nonrespondents, the study only received 3 17 completed surveys, constituting only 43% of the sample. The local health departments completed the University of Illinois School of Public Health Survey that requested information on the level of compliance with the performance measures for the ten public health practices. In addition, the LHDs also completed the 1992-1993 NACCHO profile survey which requested information on the structure and functioning of the LHDs.

The LHDs were judged to be effectively carrying out the three core functions of public health if, based on the University of Illinois survey, they fulfilled the majority of the performance measures for each function (policy development, assessment, and assurance). The effectiveness of the LHDs was also based on the following data obtained from the NACCHO survey: health department jurisdiction size, health department type (county, city, city-county, rural, other), total annual expenditures, number of staff, relationship between state health agency and LHD, work experience and work status of agency executives, budget sources, and others.

According to the study, the following variables (structural and input) seemed to be associated with effective health departments: full-time executives, larger annual expenditures, greater number of staff, and numerous funding sources. Effective health departments were more likely to have a female than male top agency head although the degree and the tenure of the top executive had little impact on the effectiveness of the LHDs. With regard to services, the effective LHDs are significantly more likely to provide selected personal preventive and treatment MCH services, services related to controlling chronic diseases, health education, cases management, and HIV/AIDS testing. Generally, it appears that the effective LHDs are more likely to have a full-time agency head who is able to tap diverse funding sources to provide a mix of community and personal prevention and treatment services that reflect the community's consensus as to what is most needed to improve the public's health.

**Handler, Arden; Schieve, Laura A.; Ippoliti, Pamela; Gordon, Audrey K., and Turnock, Bernard J. (1994). "Building Bridges between Schools of Public Health and Public Health Practice."** ***American Journal of Public Health*** **84(7):** ***1077 - 1080.***

In 1988, the Institute of Medicine published a report, *The Future of Public Health*, that cited many inadequacies in the current public health system and recommended more interaction between public health academia and the public health agencies. This article discusses the results from a survey conducted by the Chicago School of Public Health in 1992, to determine the level of collaboration between the public health agencies and schools of public health. Different surveys were administered to the two different entities, though the difference between the two surveys was minimal. The school of public health survey (school survey) distinguished between governmental public health agencies (i.e. CDC) and governmental public health-related agencies (department of social services). The state health agencies survey (agency survey), was aimed at obtaining more qualitative answers, therefore most of the data presented in this article are from the school survey.

All twenty-one schools that completed the survey reported participation in some practice activities with government health agencies and government health-related agencies. The majority of these activities occurred without a formalized agreement between the two entities and the collaboration often was conducted on an individual or department basis. Seventy-three percent of the state agencies that responded (37 agencies) reported participating in activities with an accredited school of public health. It is expected that as formal interaction between these entities increases and as additional resources are committed to these activities, the training of the public health workforce will be more fully integrated with the practice of public health. The goal is a more effective and more practice based public health workforce that will emerge better able to tackle the public health problems.

**Handler, Arden S.; Turnock, Bernard J.; Hall, William; Potsic, Steven; Munson, Judith; Nalluri, Ravi; and Vaughn, Edward H. (1995). "A Strategy for Measuring Local Public Health Practice."** ***American Journal of Preventive Medicine Supplement*** **11(6):** ***29-35.***

This article discusses the results of a survey conducted to test the 10 public health practice indicators defined by the Centers for Disease Control and Prevention (CDC). The national health objectives for the year 2000 call for 90 percent of the population to be served by a local health department (LHD) that is effectively addressing the core functions of public health. Achieving this objective requires approved definitions for effectiveness as well as a system for ascertainment. In 1990 when this objective was established, no baseline data were available, and no accepted methods of measuring health department effectiveness were in use. One approach to the development of a surveillance system to measure the effectiveness of LHDs has been to translate the three core public health functions characterized by the Institute of Medicine and the 10 practices delineated by the CDC into performance measures. The performance measures that characterize the 10 public health practices and their related core functions were developed and field-tested with state local liaison officials (LHLOs) and local health departments over a two-year period.

The results from the survey seem promising. Of the 30 initial performance standards, over 50 percent rated at least 26 standards as high in importance. There was a high level of agreement (87 percent) in the LHLO's rating of the appropriateness of the indicators associated with the 30 standards. The authors believe that this approach to measuring local public health practice makes a significant contribution to efforts seeking to establish the effectiveness of LHDs. The results of the survey led to the establishment of a proposed surveillance instrument comprising 10 performance standards and 29 associated indicators. The purpose of the survey was to obtain input and consensus of LHDs and local health liaison officials as to the appropriateness and usefulness of performance measures. This framework, once consensus is reached, is a major step to assessing the effectiveness of LHDs in meeting their core functions and practices.

**Harmon, RG.** (1996). **"Training and Education for Public Health: The Role of the U.S. Public Health Service."** ***American Journal of Preventive Medicine* 12(3): *151-155.***

Many comprehensive surveys were conducted on the public health work force in the 1970s and 1980s; however, these surveys have not been continued in the 1990s. In addition, there was no clear definition of training and education for public health (TEPH). TEPH was defined by the author as the provision to health professionals, workers, and students of instruction or knowledge devoted predominantly to theory, services, or research about organized community efforts to prevent injury or disease and promote health in a defined population.

The most updated data on the status and unmet needs of the public health work force in the United States are found in the report *Health Personnel in the United States-Eighth Report to Congress: 1991.* This report includes findings and recommendations from the IOM *Future of Public Health* report which described the public health system as "in disarray" due to the lack of qualified public health personnel in an unrewarding professional environment. The eighth report estimated that the public health work force of 1989 was comprised of over 500,000 professionals, 44 percent of whom were trained public health professionals. State and territorial agencies employed 130,000 FTE staff and the vacancy rate for these professionals was thirteen percent. Overall, shortages of public and community health personnel existed in at least the following specialties: epidemiology, biostatistics, environmental and occupational health, public health nutrition, public health nursing, and preventive medicine. Schools of public health continue to report a shortage of qualified faculty, especially physicians.

A recent report by the Pew Health Professions Commission notes the diversity of the academic training for public health professionals. The report cited seven accredited health education programs, eleven community medicine programs, 69 nonaccredited MPH programs, and numerous other programs offering MPH-related degrees. The report suggests that these programs serve as a potential asset to interdisciplinary collaboration and a barrier to standardization. The report also notes that there is not adequate data on the number of graduates from public health schools or on the programs available to interested students.

The TEPH activities of the Public Health Service amounted to $217 million in fiscal year 1.993, only one percent of the total PHS spending. The NIH had the smallest percent allocation of its training funds to TEPH because the majority of NIH training is for biomedical research. The

report on TEPH activities makes a few important recommendations based on the literature and data received from PHS agencies:

1. Distance and computer-based learning technologies and opportunities should be expanded, especially for those people working in remote areas.

2. A core, practice based continuing education curriculum should be developed and maintained for public health.

3. PHS categorical grants should explicitly allow reasonable expenses for TEPH.

4. State-based TEPH activities should be expanded, especially through federal block grants and state public health training institutes.

5. Public health work force research should be expanded to better assess and track the current and future status of this valuable asset.

If the HP2000 objectives are to be met, more attention needs to be given to the TEPH activities. There needs to be a redirection of training support from basic biomedical research and curative specialty to public health education. The clients and providers of public health services at the local level would benefit greatly from the implementation of these recommendations.

**Health Objectives for the Nation. (1994). "Public Health Core Functions - Alabama, Maryland, Mississippi, New Jersey, South Carolina, and Wisconsin, 1993." *Morbidity and Mortality Weekly Report* 43(1): *13* - 15.**

Three core functions of public health (assessment, policy development, and assurance) were defined in an Institute of Medicine report. The Centers for Disease Control and Prevention has elaborated on these functions, defining 10 core public health practices integral to the operation of state and local health agencies. To assess the core functions, officials of local health departments in six different states were surveyed by Association of State and Territorial Health Official (ASTHO) liaisons.

The questionnaire included 26 questions about the three core functions. Respondents were asked to evaluate whether the 10 practices existed in their jurisdiction and to assess the adequacy of the performance of the practice by the entire community. The mean percentage score for performance by the community was 56 percent (46 percent for assessment, 53 percent for policy development, and 68 percent for assurance). The mean percentage score for the perceived adequacy of performance by the community was 32 percent (27 percent for assessment, 29 percent for policy development, and 40 percent for assurance).

The results from this survey have two major limitations: (1) the survey was conducted as a pilot survey and therefore the findings cannot be extrapolated to the national level; and (2) the diversity in the organization and activities of the different public health agencies restricts comparability of the findings.

**Health Objectives for the Nation. (1994). "Selected Characteristics of Local Health Departments - United States, 1992 - 1993."** ***Morbidity and Mortality Weekly Report* 43(45): *839 - 843.***

One major Year ***2000*** objective is to increase to at least 90 percent the proportion of the population served by a local health department that is effectively carrying out the three core functions. To characterize the activities, staff, and expenditures of local health departments (LHDs) in the United States, the National Association of County and City Health Officials (NACCHO) in conjunction with the Centers for Disease Control and Prevention (CDC) collected data from 1992- 1993. For this survey, an LHD was defined as an administrative or service unit of local or state government concerned with health and carrying some responsibility for the health of a jurisdiction smaller than a state." Questionnaires were mailed to ***49*** states and the District of Columbia where they were completed by directors of LHD. Follow-up mailings and telephone call were made to nonrespondents.

Data maintained by the LHDs for surveillance activities included communicable diseases (82 percent), vital records (53 percent), chronic diseases (42 percent), and other health conditions. Staff and annual expenditures tended to increase as the jurisdiction for the health departments grew. The percentage of LHDs reporting activity in specific services also generally rose in relation to the size of the population served.

The findings of this survey are being used to develop plans for a surveillance system for the year 2000 national health objective 8.14 and may also be used as a baseline for evaluating potential changes in the role of the LHDs associated with changes in the U.S. health-care system.

**Institute of Medicine. (1988). "The Future of Public Health". Washington, D.C.**

This study was undertaken to address a growing perception among the Institute of Medicine membership and others concerned with the health of the public, that the nation has lost sight of its public health goals and has allowed-the system of public health activities to fall into disarray. The authors see the government's role in public health as comprised of three functions: assessment, policy development, and assurance. These functions, discussed further below, correspond to major phases of public health problem-solving which include: identification of problems; mobilization of necessary effort and resources; and assurance that vital resources are in place and that crucial services are received.

- Assessment: Activities include surveillance, identification of needs, analysis of causes of problems, collecting and interpreting data, case-finding, and monitoring trends. Assessment is inherently a public health function because policy formulation is expected to take in all relevant available information. Government has an important responsibility to broaden its base of knowledge in order to ensure that policy is not driven by purely short-range issues constrained by current knowledge.

**Recommendation:** The report recommends that every public health agency regularly and systematically collect, assemble, analyze, and make available information on the health of the

community, including statistics on health status, community health needs, and other studies of problems.

- Policy development: Public health agencies' special role in policy development mean that the agencies must raise crucial questions that no one else raises; initiate communication with affected parties, including the public-at-large; consider long range issues in addition to crises; build bridges between fragmented concerns; and plan ahead as well as react. The agencies should be equipped for this role by their technical knowledge and professional expertise.

**Recommendation:** The report recommends that the public health agencies promote the use of scientific knowledge base in the decision making about public health and lead in developing public health policy.

- Assurance: A core public sector function is to make sure that the necessary services are provided to reach agreed upon goals, either by encouraging private sector action, requiring private sector action, or providing the services directly. The assurance function in public health includes the implementation of legislative mandates as well as maintaining statutory responsibilities. Carrying out this function requires the exercise of authority, a responsibility that must be maintained within the public sector.

  **Recommendation:** The report recommends that public health agencies assure their constituents that services necessary to achieve agreed upon goals are provided.

**Institute of Medicine. "Public Health Roundtable." National Academy of Sciences Institute of Medicine.**

In the report "The Future of Public Health", an IOM committee defined the mission of public health as fulfilling society's interest in assuring conditions in which people can be healthy. This definition has been revised to be a more simplistic mission, healthy people in health communities. The IOM report defined the core public health functions as assessment, policy development, and assurance; these functions have been extrapolated into ten different services.

Despite the national consensus about public health functions and services, there is much diversity in each state's ability to carry out these functions and services. Many agencies actually direct the majority of their resources to the delivery of personal health care services to the indigent and uninsured and therefore face numerous obstacles to carrying out these essential public health care services. In recent years, the public health role has also become the responsibility of private sector providers and health organizations. The current national debate about health care reform represents a great opportunity for public health agencies to reassert themselves as providers of essential public health services.

The IOM has established a Public Health Roundtable to discuss the role of public health in the current health care debate. The roundtable consists of twenty members including representatives from the federal government, state and local public health departments, academic health centers, private sector, and other appropriate organizations. The committee will discuss selected public

health topics at three different meetings and issue a brief report with their discussion that also updates the 1988 report "The Future of Public Health."

**Institute of Medicine. (1995). "Vision Statement and Workplan." Report issued by Committee on Using Performance Monitoring to Improve Community Health, 1 - 8.**

The IOM Committee on Using Performance Monitoring to Improve Community Health intends to address the roles that public health and personal health care systems play in influencing the health of the community. The Committee also intends to consider how these performances can be monitored and how the public health performance monitoring (PHPM) system can be used to foster collaboration among the different sectors of the community. The committee's goal is to develop prototypical sets of indicators for specific public health concerns that communities can use to monitor the performance of community public health agencies. The committee will collect information on existing and planned systems related to public health performance monitoring and prepare a report that discusses the theory and practicality of the PHPM. For PHPM to work, the committee foresees the need for an infrastructure for public health information. The information infrastructure would need to monitor a variety of indicators that contribute to the health of populations; employ measurement strategies far more sophisticated than those in current use; provide information on the health status of a community; inform decisions about how to improve the health of the public; and document change in community health.

For PHPM to develop into an important tool, an ongoing conceptual development process is critical. Each user will face its own decisions, look at health questions from a subjective point of view, and analyze particular opportunities differently. Therefore, the committee will not give a prescriptive set of PHPM indicators but rather will develop a framework for such a system that allows the communities to modify the PHPM system when different issues are being addressed. Indicators for smoking that could comprise the framework include the following:

- Tradition vital statistics;
- Results from behavioral risk and attitude surveys;
- Use rates for tobacco and other substances;
- Quit rates;
- Smoking cessation program availability; and
- Local government action.

Following their meetings, the Committee will convene with a final report of their findings and a presentation of their results and conclusions.

**Joint Council of Governmental Public Health Agencies Work Group on Access, Assurance, and Reimbursement for Primary Care, National Association of County and City Health Officials, and the Association of State and Territorial Health Officials. (1995). "The Role of Essential Public Health Services in Strengthening the Nation's Health Care System." Washington, D.C.**

The Joint Council of Governmental Public Health Agencies is comprised of representatives of two national organizations that represent the directors of local and state public health departments - the National Association of County and City Health Officials (NACCHO) and the Association of State and Territorial Health Officials (ASTHO). The Joint Council's mission is: to serve as a forum for issue resolution and policy development related to public health practice; and to strengthen the infrastructure and the capacity of governmental public health agencies to carry out core public health functions within their jurisdictions. The Joint Council's Work Group on Access, Assurance, and Reimbursement for Primary Care - one of three Joint Council Work Groups - is charged with integrating preventive services into the evolving national and state health care reform strategies. This report details the Work Group's recommendations for integrating the essential public health services into the health care delivery system.

The report is comprised of four different sections: Preventive Health Services, Improving the Capacity for the Provision of Essential Public Health Services, Monitoring and Reporting Systems for Essential Public Health Services, and Financing Essential Public Health Services.

While preventive health services take two different forms (clinical preventive services and essential public health services), this policy statement focuses on essential public health services to ensure that policy makers do not overlook the critical role that these services will continue to play in controlling health care costs, assuring access to services, and improving the nation's health. The Work Group drafted the following recommendations:

- **Recommendation 1:** All levels of government should make concerted efforts to focus existing resources on the provision of essential public health services. These services include mechanisms to identify and solve community health problems; provide education about healthful lifestyles; take action to assure the availability of safe air, water, and food supplies; and work with the community to provide outreach programs for those persons who fall through the gaps.

- **Recommendation 2:** Recognizing that hard-to-reach populations have particular health care needs which require acute care and clinical preventive services, the federal government should continue to support its grant-making process for programs that demonstrate coordinated efforts and community involvement in implementing programs which serve these populations.

- **Recommendation 3:** Funding streams that provide incentives for relocating primary care and preventive medicine clinicians to underserved areas and recruiting clinicians, especially racial and ethnic minorities, into primary care and preventive medicine professions should continue to be encouraged.

- **Recommendation 4:** To assure that health care services are delivered and are of high quality, all levels of government should work together to establish accountability procedures for health care providers.

- **Recommendation 5:** Identifying a minimum data set needed to assess the success of health care reforms and assisting state and local public health agencies in designing uniform data collection systems should be a joint process involving federal, state, and local governments.

- **Recommendation** 6: In order to strengthen the infrastructure of public health, the Joint Council supports the current federal movement toward flexible funding of public health programs. Permitting state and localities the flexibility needed to address infrastructure initiatives will eliminate duplicative efforts and allow public health agencies to more effectively address the health needs of their communities.

**Joint Council of Governmental Public Health Agencies Work Group on Human Resources Development, National Association of County and City Health Officials, and the Association of State and Territorial Health Officials. (1995). "Taking Training Seriously: A Policy Statement on Public Health Training." Washington, D.C.**

The Joint Council of Governmental Public Health Agencies is comprised of representatives of two national organizations that represent the directors of local and state public health departments - the National Association of County and City Health Officials (NACCHO) and the Association of State and Territorial Health Officials (ASTHO). The Joint Council's mission is: to serve as a forum for issue resolution and policy development related to public health practice; and to strengthen the infrastructure and the capacity of governmental public health agencies to carry out core public health functions within their jurisdictions. The Joint Council's Work Group on Human Resources Development - one of three Joint Council Work Groups - is charged with assessing public health workforce and staffing needs, as well as approaches to meeting those needs. This report details the Work Group's recommendations for coordinating a public health training system that encompasses workers in federal, state, and local government.

The report outlines the importance of training for the public health workforce and barriers to this training. It also defines characteristics of effective public health training and training priorities focused on the 10 essential public health services. The Work Group drafted the following recommendations:

- **Recommendation 1:** The federal government should assume a leadership role in strengthening the nation's public health training infrastructure.

- **Recommendation 2:** The state health agency should become the primary locus of activity for planning and creating a comprehensive training system.

- **Recommendation 3:** All levels of government need to make funds available for public health training.

- **Recommendation 4: Any** health care reform or similar legislative efforts should explicitly dedicate monies to continuing education.

- **Recommendation 5:** Private foundations should be apprised of the critical need for improved public health training and invited to support the development of effective models. Also, corporate America should be approached to share in a collaboration making use of their experience and financing abilities.

The report includes an appendix of model training programs in the US.

**Kaufman, M et al. (1988). "Nutrition services in state and local public health agencies: How do we measure up in 1987?"** ***Journal of American Dietetic Association 88: 1576-80.***

In 1985, a comprehensive study of local health agencies was conducted to determine their capacity to meet or respond to nutrition objectives. The results from this study found that the nutritionists were not collecting sufficient data to measure the achievement of the objectives; the study also found deficits in the numbers of personnel qualified to design and implement comprehensive nutrition services, In 1987, the Association of State and Territorial Public Health Nutrition Directors conducted a second survey to assess the progress toward these objectives and to identify factors that might be affecting public health nutrition program development.

The survey was mailed to 50 state and 5 territorial public health nutrition directors in the United States. The surveys asked questions regarding administrative placement, staffing levels and salaries, funding used for public health nutrition services, and education preparation for these positions. By March 1987, the researchers received completed surveys from all fifty state and four of the five territories. The researchers checked the data to ensure its completeness and reliability for the study.

The administrative placement of nutrition services in 1987 was comparable to the results in the 1985 survey. In each survey, 24 SHAs reported a nutrition program unit headed by a nutrition director; twelve SHAs reported nutrition consultants in categorical program units that had no nutritional program director. The administrative management of the WIC program differed greatly among the different states. The survey in 1987 noticed that there was a decrease of 883 public health nutritionist positions from the results tallied in 1985. Researchers attribute this decrease in employment to the shifting of funds in the public health system.

The authors drew the following conclusions from their study:

1. The results indicated a negative trend in a decreased number of state personnel systems that required graduate coursework in public health. As the reclassification of job specifications occurs in the public health arena, the value of coursework should be reconsidered.

2. Approximately half of the public health nutrition leaders perceived that their nutrition services were given low priority and lacked adequate administrative and legislative support. Public health nutrition leaders need to take a proactive position while agencies are developing their strategic plans.

3. Within the program functions, the majority of public health leadership time was allocated to the maternal and child health program, consistent with WIC as a major funding source.

Public health nutritionists need to work with legislators to lobby for resources that are needed to provide the nutrition services necessary to achieve the health promotion and disease prevention objectives.

**Liang, AP; Renad, PG; Robinson, CG; Richards, TB. (1993). "Survey of the Leadership Skills Needed for State and Territorial Health Officers, United States, 1988". *Public Health Report* 108(1): 116-120.**

According to the 1988 Institute of Medicine report, there is a great need for leadership in public health Effective public health leaders are essential to attain the objectives discussed in the Healthy People 2000 report. During their efforts to develop effective training and career development experiences for public health leaders, the Public Health Foundation (PHF), the Association of State and Territorial Health Officials (ASTHO), the National Association of County Health Officials (NACHO), the United States Conference of Local Health Officials (USCLHO), and the Public Health Practice Program Office (PHPPO) of the CDC conducted a training needs assessment survey of all state and territorial health officers in 1988. This survey reports what knowledge, skills, and abilities health officers perceived as essential.

The questionnaires were mailed to the 55 State and territorial health officers, requesting their name, title, highest level of education, and years of experience on the job. The survey asked the health officials to assign a score between 1 and 5 to three characteristics of each skill: its importance to the job, as an initial ability of a new health officer, and as a desired ability of someone in that job.

The survey had a response rate of 61 percent and 70 percent of the health officers that completed the survey had at least ten years experience in the public health field. The top ten skills needed ranged in mean scores from 4.81 to 4.95. These skills were in six different competence areas: public image, interpersonal skills, communication skills, policy development and program planning, legal issues, and agency management.

The findings in this survey are consistent with the three functions of a health department's CEO - political leadership, management of the agency's resources, and a ceremonial representation - as defined by Hanlon and Pickett. The IOM report which spawned this study found that public health officers often needed to improve their public image, develop stronger relations with the legislative branch, and needed to be more connected to their constituency. Based on the data from this study, the authors agree with the IOM report that effective leadership in the public health sector should not be left to chance. Federal, state, and local governments need to initiate programs to properly train and develop the skills of the future public health leaders.

**Marando, Vincent L. and Melchior, Alan C. (1995). "Public Health as a Country Government Priority; Problems and Solutions for the Political Arena."** ***American Journal of Preventive Medicine Supplement*** **11(6):** ***17-23.***

This article addresses the issue of the priority given to public health by top county officials. Specifically, this research deals with the overall placement of public health on the political agendas of county government leaders and identifies the political barriers that restrict support for attaining public health goals. The data used in this study were gathered through survey mailed to 1,430 top county officials in 596 U.S. counties. The survey results were supplemented by observations made during site visits to 12 counties selected from four states.

The analysis of the survey responses suggests that public health issues are low on the agendas of county government leaders. This is due, in part, to a lack of recognition by top county leaders of important public health problems and a low level of community group advocacy for public health issues. The lack of awareness of important public health problems by the county governmental officials and the low levels of advocacy can be related to two underlying problems that hinder public health in the political arena. First, public health is associated with prevention activities, which have little political salience. Second, there is a lack of incentives that public health officials can use to encourage others to support their agencies. These barriers are not insurmountable; a key strategy is to identify salient political issues that overlap with public health concerns and engage county governmental officials in symbolic activities that help them to associate public health with more salient issues.

**Maternal and Child Health Bureau. (1995). "Public MCH Program Functions Framework: Essential Public Health Services to Promote Maternal and Child Health in America". Washington, D.C.**

From the outset of renewed attention to restructuring the health system, public health experts and advocates concerned with maternal and child health have worked to assure accountability for addressing the needs of women, children, youth, and their families. The Public Maternal and Child Health Program Functions Framework operationalizes the core public health functions specifically for maternal and child health. The following five basic tenets influenced the development of the framework and continue to guide the process by which policies and programs affecting women, children, and families are developed and implemented.

1. Separate standards for women and children are needed.

2. Shifts in cultural and ethnic makeup of the population demand special attention in health services design and delivery.

3. Quality needs to be addressed at three levels - at the community level, at the level of integrated provider networks, and at the level where services are given to women and children.

4. Governmental mechanisms are essential to assure responsiveness of the system to the unique needs of women, children, and families.

5. A long period of transition will ensue.

The MCH Functions Framework is comprised of three main components: a list of ten essential public health services to promote maternal and child health in America; an outline detailing MCH program functions specific to MCH that apply at all levels of government and to all MCH populations; and selected examples of local, state, and federal activities implementing MCH program functions.

The MCH Functions Framework is intended as a tool for policy makers and MCH staff as they formulate legislation and develop budgets, provide leadership in addressing public health problems, create linkages and partnerships with other agencies and organizations, and plan for the future. In this context, the framework can be used to assess agency and program capacities, to focus training and quality assurance efforts, and to develop guidelines for local contractor endeavors.

**Miller, Arden C.; Moore, Karen S.; and Richards, Thomas B. (1993). "The Impact of Critical Events of the 1980s on Core Functions for a Selected Group of Local Health Departments."** ***Public Health Reports*** **108(6):** ***695 - 700.***

This article discusses the results of a case study that measured the perceived impact of critical events of the 1980s on public health performance for a selected group of local health departments. Directors of 14 public health departments were surveyed for their perceptions on the impact of 20 critical events of the 1980s on public health performance. The departments were selected in 1979 for their high level of performance and were the subject of intensive case studies in 1979, 1983, and 1992. The case study reports included detailed information on each department with regard to organization, administration, financing, budget, staff, programs, services, and relationships with other providers. The critical events were scored against the core functions of public health - assessment, policy development, and assurance. The case study focused on the impact of the following twenty critical events:

* AIDS/HIV infections
* Block grant financing
* Change in support from the State
* Reorganized local administration
* Change in local political leadership
* Change in status of private providers
* Demographic changes
* Changes in the local economy
* Loss of federal grants
* Change in support from local jurisdictions
* Reorganized administrative relationship to State
* Change in departmental leadership
* Change in fee income
* Change in status of local planning agency
* Substance Abuse
* Change in status of community health centers

* Availability of Objectives for the Nation for 1990

* Availability of APEXPH *(Assessment Protocol for Excellence in Public Health)*

* Availability of the Institute of Medicine report, "The Future of Public Health"

* Change in status of community health centers

The combined effect of all the events were perceived to be more positive than negative. The strongest impacts were exerted by the AIDS/HIV epidemic, by the change in fee income, and by the Institute of Medicine report. The positive impact of the AIDS/HIV epidemic is attributed to the re-establishment of a public perception of the necessity of public health. The strongest negative influences were exerted by the loss of federal grants and the changes in the local economy.

The report concludes by emphasizing the favorable reports on efforts to clarify the role and responsibilities of public health. The definitions of public health practice show promise as valuable tools for evaluation and planning.

**Miller, C. Arden; Moore, Karen S.; Richards, Thomas B.; and McKaig, Catharine. (1994). "A Screening Survey to Assess Local Public Health Performance."** ***Public Health Reports*** **109(5):** ***659 - 664.***

This article presents the results of studies conducted to develop a national surveillance system which would measure the extent that populations are served by local health departments (LHDs) carrying out the core functions of public health. This effort to develop a national surveillance system was in response to one of the national Healthy People 2000 Objectives: "Increase to at least 90 percent the proportion of people that are served by a local health department that is effectively carrying out the core functions of public health." Fourteen LHDs were surveyed using a protocol with 8 1 different indicators, 'indicators that were broken down into two distinct groups (systems or programmatic indicators and task- or resource-oriented indicators). To simplify the survey protocol so that it might be administered to a larger number of local public health jurisdictions, a subset of 26 indicators were selected; this survey was also administered to LHDs.

The results showed a close correlation between scores for the full survey responses and those from the subset of indicators. Researchers also found that of the 26 indicators, four questions accounted for 96 percent of the variance in responses for overall performance. These results suggest that evaluations of local public health performance are feasible through surveying directors of local health departments. A three-tiered approach is suggested: responses to four questions could be used to screen overall public health performance; responses to 26 questions could be used to yield information about performance of each of the three core public health functions; and responses to 84 questions could be used to yield more detailed information about performance for each of 10 public health practices.

**Miller, C. Arden; Moore, Karen S.; Richards, Thomas B.; and Monk, Jeanne D. (1994). "A Proposed Method for Assessing the Performance of Local Public Health Functions and Practices."** ***American Journal of Public Health* 84(11): *1743 - 1749.***

In recent years, the functions and practices identified with public health have been substantially clarified. An Institute of Medicine report defined the three core public health functions: assessment, policy development, and assurance. Work groups in conjunction with the Centers for Disease Control and Prevention have elaborated on these functions linking them to ten core public health practices. This article discusses a proposed method whereby determinations can be made of the extent to which a local public health jurisdiction is served by core public health functions, as well as the extent to which the functions are rendered by the health department.

Eighty one performance indicators were linked to the ten practices based on their relevance for an entire public health jurisdiction. Indicators were drawn from numerous sources including the Assessment Protocol for Excellence in Public Health (APEX*PH*) tool. The survey was sent to directors of 14 health departments throughout the country; the surveys were then completed by the directors and staff members to ensure data quality assurance. Further validation of data and results was conducted through discussions with objective state health officials knowledgeable about the public health status within the participating jurisdictions.

Performance differences among the three core functions were narrow (assessment = .60; policy development = .54; assurance = .59). Among the 10 public health practices, the health departments tended to focus on implementation, analysis, and management while neglecting evaluation, prioritization, and assessment. The proportion of community-based public health performance attributed to the health departments was consistent throughout the 10 practices. In contrast, local health departments contributed least to gathering data on health status but contributed most to analyzing the existing data from available sources, according to the study.

Increasing the precision of the definitions and indicators for effective public health practice invites efforts to measure progress toward achievement of the Year 2000 Objective 8.14, "Increase to at least 90 percent the proportion of people who are served by a local health department that is effectively carrying out the core functions of public health." Experience from this study suggests that the procedure is too elaborate for mass screening of communities and health departments, but it may have utility for detailed community diagnosis and analysis of public health performance. It is important to remember that the findings and conclusions are based on the perceptions of the respondents, the majority of whom had worked for at least 7 years as directors.

**Miller, C. Arden; Moore, Karen S.; Richards, Thomas B.; Kotelchuck, Milton; Kaluzny, Arnold D. (1993) "Longitudinal Observations on a Selected Group of Local Health Departments: A Preliminary Report."** ***Journal of Public Health Policy 14: 34 - 50.***

In the 1980s, the Institute of Medicine released a report on the future of public health that identified three essential public health functions (assessment, policy development, and assurance). The Public Health Practice Program Office (PHPPO) of the Centers for Disease Control and Prevention (CDC) conducted work groups to provide definitions for these functions

by associating them with ten specific public health practices. The Public Health Practice Program Office was next interested in the prospects of setting up a national surveillance system that would measure the extent that the population is served by local health departments carrying out the core functions of public health. The CDC in conjunction with the Association of Schools of Public Health decided to restudy 15 health departments that had been examined extensively in 198 1. This earlier study examined the variability of public health at the local level and examined the role of health departments as guarantors of essential basic care to their constituency. The 1993 study reexamined these 15 health departments in hopes that these LHDs might provide insights into the types of indicators that could be systematically collected and monitored in a surveillance system.

The fifteen health departments were chosen based on their performance (particularly in the delivery of personal health services), their size, and their geographic composition. The findings from the earlier study were examined and established as the baseline for comparison for a three stage study. A series of protocols were sent to health department directors for data collection and arrangements were made for either tapes telephone interviews or mailed responses. The three stages of the study included:

- Stage I. The first survey provided information on organization; administration; staffing; financing; programs; and relationships to community, regional, and state agencies. These items were compared to the data from 1979.

- **Stage II.** The second survey instrument was designed to measure the impact of critical events of the 1980s on local health department performance. Measurements relied on perceptions of health department directors and their immediate associates as indicated on a 7-point scale from strongly negative to strongly positive effects on assessment, policy development, and assurance functions. Twenty variables were assessed (e.g., HIV/AIDS infections, block grants, demographic changes).

- **Stage III.** The final survey gathered information on 81 indicators that were keyed to the 10 public health practices. The intended product was a graphic profile illustrating the extent that the community is covered by each of the practices and the proportional contribution made by the health department for coverage of each practice.

Some preliminary observations from the follow-up study of these departments included:

- Growth in budget and staff and even larger growth in pressure for services, especially personal health care;

- Reorganization that splits away some programs of comprehensive ambulatory care and responsibility for public hospitals, while increasing the aggregation of human services agencies, including public health, under locally organized umbrella agencies;

- **Increase in preventive, screening, and categorical programs under public health sponsorship;**

- Drastic change in patterns of financing, featuring nearly total loss of direct federal grants, and increase in fee income;
- Increase in the number of community and migrant health centers in the public health jurisdictions under study;
- Diminished collaborative interaction with private practitioners; and
- Continued close collaboration between health departments and community health centers in several communities.

Generalizations about local public health cannot be made with certainty based on these health departments. These particular departments were chosen because their services and activities were viewed as exemplary. However, these departments can serve as bellwethers for the direction of local public health in the United States. The most conspicuous changes in these departments between 1979 and 1991 were growth, continued pressure to expand services, and change in the financing structure. The health departments in this study demonstrate that departments need to be dynamic, adaptive, innovative, and responsive to national policy as well as local circumstances. The administrative changes, diversity of their organizations, and the incorporation of a complex array of agencies suggest that public health analysis should focus on an entire community rather than a particular agency or department.

**Miller, C. Arden; Richards, Thomas B.; Davis, Sonia M.; McKaig, Catharine A.; Koch, Gary G.; Sharp, Tonya J.; and Christenson, Gregory M. (1995). "Validation of a Screening Survey to Assess Local Public Health Performance."** ***Journal of Public Health Management Practice*** **l(1): 63 - 71.**

A protocol for assessing local public health performance was developed and tested in 36 jurisdictions that were subjected to the longitudinal study. The assessments were based on questions from 26 of the 84 indicators linked to the three core public health functions and ten public health practices. Survey results were obtained the directors from each of the 36 departments and from knowledgeable community health care officials.

With the exclusion of three outliers, the results from the indicators seemed to present an accurate picture of the health departments that were queried. Validation of the 26-indicator screening survey as an instrument to assess local public health performance requires the acceptance of the 84-indictor protocol as the standard. Development of this protocol from indicators recommended by public health officials provides reassurance. The acceptance of the data by local health officials also seems to add credibility to the findings. On the whole, the findings reported give support for the screening survey implemented in this study as a valid assessment of local public health performance. It is important to note that the study only gives the expert's perception of the public health performance within the participating jurisdictions.

**Mullet, Maurice; Rawding, Nancy; Brown, Carol K.; Custer, David; and Suen, Jan. (1995). "Descriptive Epidemiology of Local Public Health Systems."** ***American Journal of Preventive Medicine Supplement* 11(6): *9-16.***

A comprehensive, accurate description of the activities, capacities, and needs of local health departments (LHDs) is essential in understanding the role they play in the nation's health system. LHDs carry the unique oversight responsibility of assessing health status and assuring the health of the residents in their jurisdictions. LHDs are also responsible for the development of policy to protect the health of their community. This article discusses the selected data from the *1992-*1993 *National Profile of Local Health Departments* conducted by NACCHO and CDC. The study is an update of the first *Profile* study, conducted in 1989. The 1992 surveys were sent to 3,262 local public health units and included important definitions about LHDs and their functions. With the ongoing potential for change in the U.S. health care system, reliable data establishing baselines and monitoring trends in public health at the local level are important.

The data collected helped to provide a comprehensive overview of local public health agencies in 1992-1993. Data were obtained on the following characteristics: staff, total annual expenditures, planning'activities, selected personal health services, and selected environmental health services. This *Profile* is integral to understanding the activities, capacities, and needs of LHDs as they work toward assuring that healthy people live in healthy communities.

**National Association of County and City Health Officials. (1991). "Assessment Protocol for Excellence in Public Health (APEX*PH*) Workbook" Tool designed by NACCHO and the CDC in conjunction with the American Public Health Association, the Association of Schools of Public Health, the United States Conference of Local Health Officers (USCLHO), and ASTHO.**

Development of the APEXPH tool began in 1987 as a cooperative project of the authors. The APEXPH workbooks were first offered to local health departments and are a means of enhancing their capacity and strengthening their role in their communities. The workbook is intended to be a voluntary tool to guide health department officials in two principal areas of activity: (1) assessing and improving the capacity of the department, and (2) working with the local community to assess and improve the health status of the community. The NACCHO APEXPH tool is administered by local health officials to assist in identifying areas for improving their capacity to deliver public health services and is not intended to serve as a mechanism for data collection at the local level.

The tool has established indicators to measure the capacity of local health departments to offer certain services; their success is determine by their ability to meet the indicators. Data elements captured to assess LHD capacity include:

- Indicators for authority to operate;
- Indicators for community relations;
- Indicators for community health assessment;

- Indicators for public policy development;
- Indicators for assurance of public health services;
- Indicators for financial management;
- Indicators for personnel management;
- Indicators for program management; and,
- Indicators for policy board procedures.

The responses to the APEX*PH* questions are scored and compared to highlight areas that the local health departments need to improve.

Several states have implemented the APEX*PH* project statewide or have encouraged the use of the tool in local health departments and one state has even mandated the implementation of the APEX*PH* tool. On the whole, the responses to the workbooks have been positive. The tool provides local health departments with a means of evaluating their organizational infrastructure and community partnerships, identifying areas of weakness, and developing a community advisory committee for setting priority goals for addressing their limitations.

**Pickett, George and Romani, John. (1989). "The Infrastructure of Local Public Health Agencies and Its Support by State Health Agencies." Paper written by the Resource for Public Health Policy and the Department of Public Health Policy and Administration, School of Public Health, University of Michigan.**

This report discusses the infrastructure of local public health agencies and their support by state health agencies. It is often assumed that there are "local public health agencies" in virtually every community of the United States but the pattern is highly variegated. They generally receive some degree of state financial support; the size of this support and methods used to allocate amongst competing jurisdictions also vary by state. In an attempt to define 'local public health" functionally and explore various options for providing state support, this article proposes a new concept of an "infrastructure."

Two inherent problems with counting things such as health departments are definition and ascertainment. The Association of State and Territorial Health Officials (ASTHO) defined a local health department as an official public health agency which is in whole or in part responsible to a substate entity and meets this criteria: (1) it has a staff of one or more full-time professional public health employees; (2) it delivers public health services; (3) it serves a definable geographic area; and (4) it has identifiable expenditures and/or budget in the political subdivisions it serves. It is important to understand that all communities are served by a public health agency but often it is not a "local" public health agency but rather one organized and managed by the state. This report poses the following questions for discussion:

- Should all communities be support on the same basis?

- Is the purpose of that support to obliterate difference in capacity, or are difference acceptable?
- Can all local health departments be relied upon to provide a governmental presence in health?
- If the state is to provide financial support, is that simply to assure the existence of a presence or is it to provide specified services?
- If the latter, would the state be justified in looking for alternative vendors, or are their other reasons for supporting a local, official, public health agency even if it does not assure access to basic services?

Data were obtained from Michigan local health departments; the data were collected from state contracts that showed costs for the programs and sources of revenues used. In addition, eight local health departments were visited and interviews with staff were conducted. A questionnaire was developed and supplementary telephone interviews were conducted with staff in eleven state health agencies.

Most respondents described an infrastructure in concrete terms: things or people which could be identified and counted. Previous experience with such systems had indicated that the transfer of intergovernmental payments using such devices encouraged the participants to focus on objects rather than functions and to label positions in such a way as to optimize fiscal gain. Therefore, an attempt was made to describe the functions of a local health department under headings of more qualitative measurement. The report also proposes a financial strategy for supporting this infrastructure.

**Related Articles: Resource for Public Health Policy, Department of Public Health Policy and Administration, School of Public Health, University of Michigan. (1988). "*Strengthening the Public Health Delivery System: Providing the Infrastructure for Local Public Health.*"**

**Public Health Foundation. (1995). "Measuring State Expenditures for Core Public Health Functions." *American Journal of Preventive Medicine Supplement* 11(6): *58-75.***

In 1993, the U.S. Public Health Service, with the assistance of the Public Health Foundation, launched a pilot study to develop state and national expenditure estimates for the core functions of public health. This article discusses the results and implications of this study. The core public health functions selected for the data collection effort were the following:

1. Health related data, surveillance, and outcomes monitoring;
2. Investigation and control of diseases, injuries, and response to natural disasters;
3. Immunizations, family planning, and STD and TB clinical services;
4. Protection of environment, housing, food, water, and the workplace;

5. Laboratory services;

6. Public information and education and community mobilization;

7. Targeted outreach and linkage to personal services;

8. Accountability/quality assurance;

9. Training and education; and

10. Leadership, planning, policy development, and administration.

This framework of core public health functions cross-cut categorical programs and accounting structures, such as immunization or chronic disease, and instead examines functions such as disaster and emergency response capability and promoting healthy behaviors. Based on the ten delineated core functions, a work group, which included state representatives, drafted guidelines and a study that were sent to state health department staff in eight states.

According to the data collected, state agencies reported spending $2.8 billion ($44 per capita) on the 10 core public health functions in Fiscal Year 1993. The total U.S. health spending in FY 1993 was estimated at $900 billion ($3500 per capita). The largest share of the core public health function expenditures (30 percent) support protection of the environment, housing, food, water, and the workplace. Mental health services also constituted a significant share of the public health function expenditures.

There were some limitations to this methodology and survey. Estimates for local health department spending were difficult to establish in states where the local public health systems are highly decentralized. Furthermore, expenditures of other state agencies that contribute to performance of core public health functions were not captured through this study.

This study demonstrates the feasibility of collecting core public health function expenditure data from states. The study provides a tool for other states to use and adapt for their own planning and policy development. Finally, this study shows that a national estimate of core public health functions spending can be produced with reliability and validity.

**Richards, Thomas B.; Rogers, John J.; Christenson, Gregory M.; Miller, C. Arden; Gatewood, Denise D.; and Taylor, Marcia S. (1995). "Assessing Public Health Practice: Application of Ten Core Function Measures of Community Health in Six States."** ***American Journal of Preventive Medicine Supplement*** **11(6): 36-40.**

As part of the efforts to develop methods for surveillance of community performance of the core functions of public health, a 26-item questionnaire was developed to collect information from the local health departments (LHDs). Items were selected to provide an estimate for each of the three core functions: assessment, policy development, and assurance. This article reports on the efforts to analyze the survey responses to determine item difficulty, item discrimination, whether

the items identified discrete factors, and the extent to which these factors correspond with the three core functions of public health.

The results indicate that 15 of the 26 indicators could be retained following item difficulty and discrimination analysis. The factor analysis of these 15 items identified four factors: community assessment and development of a community health action plan; setting priorities based on established problems and resources; maintenance of codes and standards assuring a basic minimum safety net of public health services for those in poverty; and fostering partnerships.

The study has three main strengths. One, the study had a response rate of 94 percent, indicating that LHDs were receptive to assessing their agencies or departments. Second, the 26 items were developed based on earlier studies fielded in 14 LHDs. Three, the four factors are reasonably consistent with components of public health practices and essential public health services. However, the study also has some significant limitations. One, the survey responses reflect relatively subjective information. Second, conclusions about item difficulty and discrimination may not be representative of all states since there is tremendous diversity in the communities throughout the United States. Third, interpretation of factors is a relatively subjective process and a number of reasonable alternatives might be suggested.

The report concludes that survey questionnaires with a relatively small number of items can be developed for evaluating public health performance at the local level. The 15 indicators retained are more useful for making an overall estimate of public health performance rather than specific estimates for each of the core functions.

**Roper, William L.; Baker, Edward L., Jr.; Dyal, William W.; and Nicola, Ray M. (1992). "Strengthening the Public Health System."** ***Public Health Reports*** **107(6):** ***609 -615.***

Although the contributions of the American public health system over the past century have enabled Americans to live longer, the system now faces more complex health problems that demand comprehensive approaches and increased capacity in the local and state public health agencies. This report describes the five key determinants that need to be improved in order to strengthen the infrastructure of the public health system. The five key determinants are the following:

1. Professional knowledge, skills, and abilities of the public health workforce;
2. Ability of individual public health officials and their agencies to provide dynamic community leadership;
3. Ability of public health workers to access relevant information;
4. Ability of public health organizations to engage with the community in planning, priority setting, and constituency building; and
5. Ability of public health agencies to obtain and utilize fiscal resources.

In their discussion of these key determinants, the authors recommended strategic approaches to improve these elements. To address the need of human resources development, training programs should be integrated into normal work activities and should avoid creating substantial travel costs. To address the issue of information resource development, the authors recommend the creation of a single multi-function work station that has the capacity to transmit data, text, video, and audio. The CDC is currently working to consolidate its technologies into a single CDC Information Network for Public Health Officials.

It is important to realize that strengthening the public health system requires incentives for local and state health agencies to build a stronger public health system. Therefore, strategies should be developed to encourage involvement from officials on all levels.

**Schenck, Sarah E.; Miller, C. Arden; and Richards, Thomas B. (1995). "Public Health Performance Related to Selected Health Status and Risk Measures."** ***American Journal of Preventive Medicine Supplement*** **11(6): 55-57.**

Many public health interventions are targeted for high-risk locales. Consequently, health status and public health efforts may appear inversely related. This article discusses a survey that seeks to relate public health performance to health status or risk measures. The study hypothesized that differences in local need might prompt divergent public health responses and that the diversity might give an appearance of disarray. Data were collected from 62 local health departments that were chosen for diversity, representing all regions of the country rural as well as urban, and jurisdictions with both high and low public health performance according to standard surveys. The survey consisted of 84 indicators, each one linked to one of the 10 public health practices subsumed under the core public health functions of assessment, policy development, and assurance. Data were also collected for each jurisdiction on seven health status, socioeconomic, and budget measures:

- Infant mortality;
- Low birthweight;
- Educational attainment;
- Unemployment;
- Poverty;
- Per capita income; and
- Per capita local public health spending.

For the following indicators (infant mortality, low birthweight, and educational attainment), the **distribution of jurisdictions showed high-performing jurisdictions to be more often associated** with adverse status of the indicator and low-performing jurisdictions tended to be associated with

favorable status. With unemployment and poverty as the indicators, 91 percent and 76 percent, respectively, of jurisdictions perform at levels appropriate to need.

The analysis of public health performance when related to selected health status and risk measures allows an interpretation that public health endeavors may appropriately differ in different jurisdictions, thus contributing to an appearance of disarray. The analysis further suggests that, with relation to locally determine need, public health performance is mostly on target within the 80 percent to 90 percent appropriateness, a more favorable evaluation than those that measure performance against a theoretical optimum.

**Schade, CP. (1995). "A Preliminary Comparison Between Local Public Health Units in the Canadian Province of Ontario and in the United States."** ***Public Health Reports*** **110: 35-41.**

One question that public officials often ask is "how much is enough?' when operating local health units. The heterogeneity of local health units in the United States does not enable comparison between different localities or states. However, one possible source of comparative data exists in Canada where the public health departments deliver few personal services and focus on community preventive programs. The health departments in Ontario serve as the prototypical Canadian health departments and were the source of comparison for this study. In 1983, Ontario reformed its public health system and implemented the following changes: adoption of a list of mandatory health programs, creation of a set of guidelines for each health unit, and the inclusion of funds from the Province government.

Two questions were being asked in this survey:

- Were the personnel and funding levels in a place comparable to the United States where personal health services are available in the private sector?
- What are some structural lessons the US health departments can learn from the Canadian experience with regards to optimal size and program content?

Data for this survey came from numerous different sources including the Ontario Ministry of Health, the NACHO surveys from local health departments, data from the Public Health Foundations, and demographics from the Census of Government.

It was found that the United States local health departments on average served under fifty thousand people while their counterparts in Ontario served over one hundred thousand people. The health units in Ontario have budgets that are highly correlated to their size; Ontario spends substantially more on public health services than the United States in the majority of their jurisdictions.

There is a pronounced tendency in Ontario for increased costs in smaller populated areas, probably due to the sparsity of population throughout the district and the need to meet mandatory service requirements. In contrast, the US spends more in the largest distribution jurisdictions ,

probably a consequence of the large amount of personal medical services delivered to the indigent.

Why is there such a discrepancy in services delivered by Canadian versus American health departments? The report indicates that one reason could be the lack of adequate personnel in the United States to deliver the necessary services. Another explanation could be that LHDs are actually delivering more services but are underreporting the number of services. There is not enough evidence to answer the questions posed above but the study was important because it led to the realization that there is a minimum size necessary for a LHD to be viable. The report also suggests a need for extra financial and administrative support for smaller agencies in sparsely populated areas.

**Scott, H. Denman; Tierney, John T.; and Waters Jr., William J. (1990). "The Future of Public Health: A Survey of the States."** ***Journal of Public Policy 11(3): 296-304.***

A survey of state health agencies was conducted to determine agreement and disagreement of state health officers with the recommendations contained in ***The Future of Public Health*** issued by the Institute of Medicine in 1988. The survey also measured the extent to which the IOM recommendations were judged currently in place or in the process of being implemented in the states. This report describes the results of the survey.

The survey showed almost unanimous consensus among the nation's state health officers for the vast majority of the recommendations. There was less consensus concerning the appropriateness of locating substance abuse, Medicaid, mental health, and regulation of health professions within state departments of health. However, a significant proportion of health officers favored a health agency location for these responsibilities.

**Studnicki, James. (1995). "Evaluating the Performance of Public Health Agencies: Information Needs."** ***American Journal of Preventive Medicine Supplement* 11(6): *74-80.***

The ability to evaluate the performance of this nation's public health agencies remains very limited. In the absence of a meaningful performance appraisal system, the successes or failure of various programs attempting to improve the state of public health practice will continue to be the subject of conjecture rather than measurement. This article discusses the information needs to developing a performance appraisal capability for public health disarray. There are three essential steps that need to be taken:

First, description is the first step in understanding. A number of efforts have been made in describing and categorizing public health activity. The Centers for Disease Control and Prevention has categorized the core functions of public health agencies into 10 core practices. Pickett and Hanlon, on the other hand, have identified the basic capability required of local public health agencies that include the ability to:

- Maintain an ongoing system for monitoring and analyzing community health status and services;
- Assure the use of appropriate and necessary public health knowledge and technology in all aspects of agency operations;
- Assure the use of appropriate and necessary public health knowledge and technology in all aspects of agency operations;
- Inform and assist the community in appropriate actions necessary to promote health and prevent disease;
- Assure efficient allocation and management of and appropriate accounting for the resources available to the agency; and
- Incorporate the functions, knowledge, and expertise of the public health agency into an ongoing community health planning process.

These efforts have begun to describe the activities but do not assess the performance of the activities.

Second, valid performance appraisal requires increasing homogeneity regarding the public health activities performed throughout the United States. Program inputs and outputs must become somewhat uniform before program outcome comparisons are meaningful. Through the application of uniform practice definitions and guidelines to direct public health activity, the ability to appraise the local health department (LHD) performance will be enhanced.

Third, performance comparison between health departments of similar type over time, using uniformly derived measures of practice activity, will provide the basis for a national performance monitoring system. Such a system will also enable the states to understand how a health department's external environment and internal environment interact in enhancing or inhibiting performance.

The Comparative Performance Reporting System (CPR) has been developed at the University of South Florida College of Public Health. This system measures three management dimensions: (1) strategic congruence; (2) operating efficiency; and (3) programmatic effectiveness. The CPR system database is composed of a comprehensive set of data elements organized in four sets: (1) health status indicators; (2) contextual modifiers (i.e. demographic, socio-economic or health resource characteristics); (3) operating efficiency indicators; and (4) effectiveness indicators. A pilot test was conducted on counties in Florida and the results showed that it is indeed possible to collect the data necessary to perform an audit that assesses the strategic congruence, efficiency, and effectiveness of an LHD. The report concludes that the CPR model is a useful tool in evaluation of LHD performance and in identification of community health status. Several issues require resolution prior to further testing but these issues are not insurmountable.

**Studnicki, James; Steverson, Barbara; Blais, Holly N.; Goley, Elizabeth; Richards, Thomas; and Thornton, James N. (1994). "Analyzing Organizational Practices in Local Health Departments."** ***Public Health Report*** **109(4):** ***485 - 490.***

Few researchers have examined the problem of comparing the performances of local health departments (LHDs). A contributing factor is the lack of a uniform method for describing the range of public health activities within the LHDs. The Centers for Disease Control and Prevention (CDC) in conjunction with other national health organizations defined the three core functions and **10** associated practices of the local health departments. For this study, the **10** practices were refined and the CDC defined how each practice was implemented within the health department. The study tested the utility of the 10 organizational practices, to see if the practices translated into observable and measurable events performed by the LHD. The researchers assessed the utility of the practices by identifying the percentage of time devoted by each employee to each of the 10 practices and determining the manpower expenditures and hours allowed to the practices. This article discusses the results from the study conducted on a LHD in Florida.

According to the study, the assurance function (program implementation, management, evaluation activities, and educational services) accounted for 88.7 percent of the hours and 85.6 percent of the personnel expenditures; the program-related operational practices on the other hand accounted for only 77.2 percent of the hours and 73.5 percent of the expenditures. Nonoperational activities represented by the assessment and policy development core functions and program management and evaluation of programs tended to be the responsibility of more highly paid employees.

The author suggests that the data might be misconstrued and that the validity and the reliability of the organizational practices as a method of characterizing the full range of health department activities should be questioned. Those involved with the study expected and observed a low level of resources for assessing the health needs of the community. However, they did not anticipate the very low levels of human and fiscal resources that were found. The author also suggest that with refinement, the methodology could provide a highly effective basis for describing and analyzing the activities and performances of LHDs.

**Suen, Jane; Christenson, Gregory M.; Cooper, Angela; and Taylor, Marcia. (1995). "Analysis of the Current Status of Public Health Practice in Local Health Departments."** ***American Journal of Preventive Medicine Supplement*** **11(6):** ***51-54.***

This article discusses the performance by local health departments of core public health functions. A post hoc analysis based on these essential functions was implemented using the 1994 data set from a cooperative project with the Centers for Disease Control (CDC) and National Association of County and City Health Officials (NACCHO). A score was created for each core public health function:

1. **Health related data, surveillance, and outcomes monitoring;**

2. **Investigation** and control of diseases, injuries, and response to natural disasters;

3. Protection of environment, housing, food, water, and the workplace;

4. Laboratory services;

5. Public information and education and community mobilization;

6. Accountability/quality assurance;

7. Training and education; and

8. Leadership, planning, policy development, and administration.

Surveys were constructed where no survey item was assigned to more than one core public health function. Following assignment, index scores were computed and tabulated based on the positive responses divided by the number of local health departments (LHDs) that responded.

Larger LHDs, serving 86.5 percent of the population served by LHDs, consistently scored high in their performance of the eight core public health functions delineated. In only two cases though did the computed core function index scores exceed performance above the 50 percent level. Therefore, it is clear that most LHDs could significantly improve their performance in all eight core public health functions, with the caveat that not all LHDs report activities or had responsibility for all the functions.

**Turnock, Bernard J.; Handler, Arden; Hall, William; Potsic, Steven; Munson, Judith; and Vaughn, Edward H. (1995). "Roles for State-Level Local Health Liaison Officials in Local Public Health Surveillance and Capacity Building."** ***American Journal of Preventive Medicine Supplement*** **11(6): 41-44.**

In 27 state health agencies, local health liaison units or officials (LHLOs) are formally assigned responsibility for fostering a close working relationship between the state health agency and local health departments (LHDs). Yet in most other states, other agency staff carry out these responsibilities informally. Even where formal LHLOs exist, the assigned functions and specific activities vary, with little consistency across states other than serving as a potential or, in most cases, a real and vital linkage between LHDs and the state agency. This linkage places the LHLO in a unique position to have extensive knowledge, data, and information on LHD activities and to play as important role in assessing and improving local public health practice.

This report examines aspects of the LHLO-LHD relationship in terms. of potential LHLO roles in LHD practice surveillance and capacity building. Three separate surveys of LHLOs and LHDs indicate that both support the development of surveillance tools to measure LHD effectiveness as a means to enhance capacity building efforts. Although LHLOs may not know or have the specific information immediately available to assess local public health practice for LHDs in their state, they report being able to obtain the information if necessary and with sufficient time. Further, LHDs are willing to share information concerning local public health practice with their state health department, particularly with their state LHLO. These findings suggest that LHLOs

could be extensively involved in surveillance strategies beyond merely collecting and aggregating information provided by LHDs.

**Turnock, Bernard J. and Handler, Arden. (1996). "Is Public Health Ready for Reform? The Case for Accrediting Local Health Departments."** ***Journal of Public Health Management Practice* 2(3): *41-45.***

Reform of the governmental public health system in the United States has been stymied by changes in the political, economic, and medical care landscapes since public health was called to action by the Institute of Medicine report in 1988. The public health community has been unable to capitalize on the first-ever national health objective to assure that Americans are adequately served by the governmental presence in health (Objective 8.14 of 1988 IOM report). At the unveiling of this objective in 1990, the public health system lacked the benchmark data, methods of ascertainment, and operational definitions for the concepts to be measures. In mid- 1995, these elements were still not set up or operational. This article discusses how a national program for accrediting local health departments could enable the public health community to address objective 8.14.

The national accreditation program could build on the framework established by the Assessment Protocol for Excellence in Public Health (APEX*PH*), complement current statewide certification and standard setting initiatives, and facilitate the effective implementation of any new federal block grants established for the purpose of promoting core functions. This article discusses the organizations that should be involved in the accreditation of the local health departments and why the local health departments should be accredited. The article provides a more comprehensive definition of LHDs and their core functions and responsibilities to the community.

**Turnock, Bernard J.; Handler, Arden; Dyal, William W.; Christenson, Gregory; Vaughn, Edward H.; Rowitz, Louis; Munson, Judith W.; Balderon, Thomas; and Richards, Thomas B. (1994). "Implementing and Assessing Organizational Practices in Local Health Departments."** ***Public Health Reports* 109(4): *479 - 484.***

One of the most difficult forms of public health practice to characterize involves governmental public health agencies, especially at the local level. A lack of consensus within the public health community as to the purpose and the content of organizational public health practice inhibits efforts to increase the capability of public health to address effectively its core functions of assessment, policy development, and assurance. Meaningful capacity building efforts must establish both benchmarks and expectations for the organizational practice of public health. Those markers must be established so that the impact of practice on outcomes and health status can be examined.

This article discusses a model established by the Centers for Disease Control and Prevention (CDC) to identify 10 organizational practices within the local health departments. The basic goal of the study was to determine if states had sufficient information to measure local health department (LHD) effectiveness based on these 10 practices. The CDC developed a preliminary

design of a surveillance system that linked 32 indicators to the practice measures and that allowed states to assess the effectiveness of the LHDs. Based on the initial results of the study, early applications of the 10 practice framework have been promising for capacity building purposes. The practices have facilitated the characterization and measurement of LHD effectiveness, establishment of basic certification standards within a state-local public health system, and the focus on the effectiveness of organizations in developing public health leadership. Continuous examination and revision of the model are necessary but the model may be useful in further efforts to characterize and measure public health practice and its impact on the public's health.

**Turnock, Bernard J.; Handler, Arden; Hall, William; Potsic, Steven; Nalluri, Ravi; and Vaughn, Edward H. (1994). "Local Health Department Effectiveness in Addressing the Core Functions of Public Health."** ***Public Health Reports*** **109(5):** ***653 - 658.***

Objective 8.14 of the year 2000 National Health Objective calls for 90 percent of the population to be served by local health departments effectively carrying out the three core functions of public health - assessment, policy development, and assurance. This article discusses the results of a random national sample of local health departments that were surveyed to determine self-reported compliance with 10 public health practice performance measures that operationalize core functions. These performance measures were defined as follows:

1. Assess: Is there a community needs assessment process that systematically describes the prevailing status and health needs of the community?

2. Investigate: Are timely investigations of adverse health events and health hazards conducted on an ongoing basis?

3. Analyze: Has an analysis been completed which includes determinants and contributing factors, adequacy of existing health resources, and the population groups most impacted?

4. Advocate: Is there a network of support and communication relationships which include health related organizations, the media, and the general public?

5. Prioritize: Has there been a prioritization of the community health needs which are being identified from a community needs assessment?

6. Plan: Are there available a current health action plan for the community and a long range strategic plan for the health department?

7. Manage: Does your local health department have an identified organizational structure?

8. Implement: Are the priority health needs effectively addressed through the implementation of mandated programs and services?

9. Evaluate: Are your programs and services delivered in compliance with applicable professional and regulatory standards?

10. Inform: Is the public informed and educated about the current health status, health care needs, positive health behaviors, and important health care policy issues?

Overall compliance with the 10 performance measures was 50 percent, based on weighted responses of 208 responding health departments. Compliance was highest for practices related to the assurance function and least for practices related to policy development. Using the two different definitions developed by the investigators, 19 and 3 1 percent of the health departments were judged to be effective in addressing the core functions of public health. These data suggest that less than 40 percent of the U.S. population was served by a health department effectively addressing the core functions of public health in 1993. It seems that considerable capacity building within the public health system will be needed to achieve the year of 2000 target of 90 percent.

**U.S. Advisory Commission on Intergovernmental Relations. (1994). "Local Government Responsibilities in Health Care." Washington, DC.**

Local governments and health departments currently play a major role in national health care, spending an estimated $85 billion per year or one out of eight dollars on health care. Local governments spend their finances on many difference health related activities, including maintaining the health of the community, providing health care for the uninsured and low-income residents, granting health benefits to employees, and assisting with the financing of the state Medicaid program. The Advisory Commission on Intergovernmental Relations (ACIR) realizes that the local governments need to be involved in the health care policy reforms. This report seeks to give greater information on local health expenditures, the local governments' relations to health care reform, and the needs for supplementary information.

The article reports data on many health related activities of local governments:

1. Local Government Hospitals: Data were collected on the number and type of existing hospitals, their expenditures and revenues, their relation to health care reform, and other data needed to better understand the role of these hospitals in the provision of health care services.

2. Employee Healthcare Costs: Data were collected on the number of local employees receiving benefits and the types of insurance plans employed in the state and on the information needed to better understand the government's role in providing health insurance.

3. Retiree Healthcare Costs: Same data collected as under Employee Health Costs.

4. Public Health Services: Data were gathered on the sources of funding for public health services, changes in public health expenditures, and a partial listing of services that fall under the jurisdiction of public health according to the definition used by the Census Bureau. According to this report, more data are needed on the specific purposes of public health expenditures and their relation to state and national health care efforts.

5. Medicaid responsibilities: In this final section, local governments discussed their role in the State Medicaid program, discuss the cost-sharing formulas for the program, and the role of local governments in the Medicaid and health care reform debates.

As highlighted by the different tables and graphs, local governments all play a role in providing health care but their means of providing these services vary throughout the county. Health care reforms and changes may have very different effects on local governments depending on the services rendered. The state and national governments need to consider the role of local governments prior to implementing any substantial reforms.

**U.S. Department of Health and Human Services. (1991). "Consensus Set of Health Indicators for the General Assessment of Community Health Status in the United States."** ***Morbidity and Mortality Weekly Report* 40(27): *449 - 451.***

***Healthy People 2000*** establishes a framework for the development of an explicit prevention program for the nation (Year 2000 Health Objectives Planning Act). This article presents a set of 18 health status indicators that have been developed to assist communities in assessing their general health status and in tracking the efforts to reach the Year 2000 objectives.

**Eighteen Health Status Indicators:**

- Indicators of health status outcome

**1.** Race/ethnicity specific infant mortality, as measures by the rate (per 1000 live births) of deaths among infants < 1 year of age.

- Death Rates (per 100,000 population) for:

**2.** Motor vehicle crashes

**3.** Suicide

**4.** Breast cancer

5. Homicide

6. Worked related injury

7. Lung cancer

8. Cardiovascular disease

9. All other causes

- Reported incidence (per 100,000 population) of:

**10.** Acquired immunodeficiency syndrome

**11.** Measles

12. Tuberculosis

**13.** Primary and secondary syphilis

- Indicators of risk factors:

**14. Incidence of low birth weight, as measures by percentage of total number of live-born infants weighing** <2500g at birth.

15. Births to adolescents (ages 10-17 years) as a percentage of live births

16. Prenatal care, as measured by percentage of mothers delivering live infants who did not receive prenatal care during the first trimester.

17. Childhood poverty, as a percentage of children under 15 years of age or families living under the poverty level.

18. Proportion of persons living in counties exceeding U.S. EPA standards for air quality in previous year.

The article also discusses modifications to existing data collection systems to emphasize additional measures of outcomes, risk factors, and processes that will be helpful for planning prevention programs devoted to achieving the year 2000 objectives.

**U.S. Department of Health and Human Services. (1991). "Characteristics of Local Health Departments: A Selected Bibliography". Atlanta.**

This report provides an overview of the growth of local health departments and a synopsis of key articles that discuss the expenditures, organization, workforce, and services/programs of local health departments. The local health departments have grown from one in 1908 to 3,241 in 1989 according to data from the National Association of County Health Officials (NACHO); the primary jurisdiction of these local health departments is the county.

The articles on the expenditures for local public health focus on cost per service or fees per service rather than on the trends of expenditures by local health departments. The organizational structure of the health departments, as discussed by the articles, can be identified as one of four types: centralized, decentralized, shared, or mixed. The articles on the workforce comment on the trend toward nonphysician health professionals serving as heads of the LHDs. There has been a continuing lack of interest by most physicians in careers in public health agencies, shortages of physicians in smaller communities and rural areas where many local health units are located, and a growing number of nonphysician health professionals with academic preparation in public health. In the articles about services and programs, authors comment on the fact that LHDs now tend to go beyond prevention to provide therapeutic diagnostic services and general medical care programs.

Generally, this publication highlights studies that describe characteristics of local health departments using quantitative methods. The abstracts provide a historical orientation to issues that need additional research and a helpful guide to the scant quantitative information that currently exists on local department workforce, services and programs, expenditures, and organization.

**U.S. Department of Health and Human Services, Health Resources and Services Administration, Bureau of Health Professions. (1988). "Evaluating the**

**Environmental Health Work Force". DHHS Publication No. (HRP) 0907160, GPO, Washington, D.C.**

During 1986 and 1987, Levine Associates, under contract with the Health Resources and Services Administration, conducted an intensive evaluation of the environmental health work force and developed recommendations concerning the means by which deficiencies could best be corrected. The methodology for this evaluation was to: 1) develop a taxonomy of the major environmental health specialties; 2) develop resource materials including a compilation of existing studies; 3) commission background papers on the status of the work force in each specialty area; and 4) convene fifty of the leading experts in the nation in a workshop. A compilation of previous studies on the work force, the background papers, and the experts' collective knowledge and expertise were used as resource materials in making estimates.

The workshop participants were organized into five groups according to the similarity of their specialties to arrive at a consensus on supply, demand and need for each specialty area. The five groups addressed the following areas: 1) air and water quality; 2) milk and food protection and institutional safety and health; 3) hazardous materials management and epidemiology, toxicology and risk assessment; 4) occupational safety and health radiological health; and, 5) land use planning and management, solid waste management, housing, vector control, injury control, and consumer protection and safety. Following the workshop, the participants in academia developed estimates of the supply, demand, and need for faculty in environmental health using the results of the five groups' position papers.

The study found a need for 121,000 professional in the various environmental health specialty areas and a need for more adequately trained individuals. Workshop participants also provided recommendations for addressing the severe gaps in data that make work force evaluation and planning extremely difficult. The final report from the project attempts to analyze the environmental health work force in its entirety from the standpoint of supply, demand and need.

**U.S. Public Health Service. (1995). "Making a Powerful Connection: The Health of the Public and the National Information Infrastructure." Washington, D.C.**

The National Information Infrastructure (NII) initiative focuses on enhancing the basic infrastructure for telecommunications and computer technology in all sectors of the U.S. economy. Over this network, public and private information sources and data processing utilities will be able to transmit, store, process, and display information in many forms and provide information retrieval and processing services on demand. From the outset, health has been identified as one of the key sectors that can benefit from NII technology. Relatively little attention has been paid to applications that could improve the capacity of communities to carry out nonclinical or population-based functions of public health. Rather, NII grants have thus far primarily supported applications of high performance computing and telemedicine to the delivery of medical care to individuals. In April 1995, the Public Health Service sponsored a conference during which leaders in NII delineated the barriers that currently discourage application of NII technologies to information problems of population-based public health. The major barriers include:

- Lack of nationally uniform policies to protect privacy while permitting critical analytic uses of health data;
- Lack of nationally uniform, multipurpose data standards that meet the needs of diverse groups who record and use health information;
- Insufficient awareness of the applicability of NII technologies in meeting the information needs of population based public health; and
- Public health workforce that lacks essential information technology skills.

This report discusses the capabilities needed to overcome these barriers, the information data needs of the public health officials, and the ways in which NII can support public health in the future. The extent to which public health achieves, its mission depends on the availability of accurate, complete, timely, and comparable information. One could claim that collection, analysis, use, and communication of health-related information is the quintessential public health services. Three types of information needs (data collection and analysis, communication, and support in decisionmaking) cut across all of the essential services of public health. Meeting these needs depends on not only a supportive technical infrastructure, but also on personnel with the skills to use emerging technologies.

NII technology has great potential for meeting the information needs of population-based public health. The rapid, transparent connectivity of NII is well suited to facilitate the communication of data, voice, and high-resolution images. NII can also provide the necessary infrastructure to develop integrated databases, support analyses of these data, and make better use of data.

**U.S. Public Health Service. (1994). "A Time for Partnership: Report of State Consultations on the Role of Public Health." Prevention Report, 1 - 12.**

Public health has the opportunity to transform its mission and direction and to define its role during this period of health care reform. To open a dialogue on these issues, the U.S. Public Health Service (PHS) conducted a ten month consultation project. This report describes the results of those meetings. State Town Hall meetings were held in fifty states and in the District of Columbia to bring together community leaders to discuss the role of public health in the health care reform. Questions explored include:

- What are the respective roles of public health agencies at the Federal, state, and local levels?
- What effect would universal insurance coverage have on State and local health departments?
- Where will public health be in twenty years?
- How are the challenges to public health changing?

The meetings at the State Town Halls varied in structure and participation due to the diversity in organizational structure and staff.

In the past twenty years, public health has had a shift in responsibility from population-based public health to provider of last resort. Public health agencies now focus much of their time and energy on the delivery of medical services to the indigent and uninsured. The debate on health care reform could serve as a vehicle for refocusing attention on traditional public health services. Public health agencies work to:

- Prevent epidemics and the spread of disease;
- Protect against environmental hazards;
- Prevent injuries;
- Promote and encourage health behaviors and mental health;
- Respond to disasters and assist communities in recovery; and
- Assure the quality and accessibility of health services.

During the town meetings, the participants were able to offer recommendations for the U.S. Public Health Service. Many recurrent themes conveyed a sense of priorities perceived at the state level that are discussed below. First, states feel that it is essential to establish a secure source of Federal funding for population-wide essential public health services. Second, greater flexibility in program design and management would facilitate the administration of the categorical health programs. Third, there should be an increase in Federal Government support for State data collection, analysis, and dissemination of information.

The report recommends that the role of PHS should be to expand and strengthen existing partnerships with a range of public and private participants. Working with states to make the best use of Federal and State funds and resources, PHS can serve as the coordinator, providing expertise when necessary.

**Washington State Department of Health. (1994). "Public Health Improvement Plan: A Progress Report." Report written by the Washington State Department of Health.**

The Washington Public Health Improvement Plan is the blueprint for improving health status in Washington through prevention and improved capacity for public health service delivery. The plan is based on specific objectives and requirements of the Health Services Act of 1993 and has three main goals: control health system costs, ensure universal access to needed health services for all state residents, and improve the health of the state's population. The act recognizes that population based public health services provided by state and local public health departments and districts are a critical part of health system reform and directs the Department of Health to develop the Public Health Improvement Plan (PHIP) every biennium.

This report describes the progress in the development of the first (PHIP). This plan is being developed under the direction of a broad-based steering committee with representation from business, labor, the State Legislature, public health professionals, consumers, and health care

providers. This report explains the purpose of the plan and the important role of public health in a reformed health system. It describes required public health capacity and many interventions for improving the health status of Washingtonians. One of the most important purposes of PHIP is to define the capacity standards, identify the resources required to meet them, and set a timetable for providing those resources.

This report includes background material, proposed standards, and proposed interventions regarding thirty-nine key public health problems in the following five general areas: infectious disease, non-infectious diseases, violence and injury, environmental health, and family and individual health. Two types of standards are proposed: outcome standards and threshold standards. These are defined in such terms as health status, death rates, incidence of disease or injury, prevalence of risk factors, and availability of specific services or programs. Outcome standards are long term objectives generally for the year 2000. Threshold standards most often define death rates or levels of illness in a community or population which, if exceeded, should signal alarms for renewed or redoubled action.

**Wasserman, MP. (1992). "A Survey of Local Health Officials Views on Current Resources for Public Health Services".** ***Journal of Public Health Policy 261-6.***

In the past few years, health departments have had to cope with budget cuts due to recessionary and deficit-driven pressures on federal, state, and local governments. There is evidence to suggest that these cuts in the budget have had a significant impact on the delivery of services by LHDs. This report presents some finding from a survey of local health officials conducted by the National Association of County Health Officials.

The information for the study was gathered through the use of a questionnaire that asked local health officials about their recent budget constraints and the perceived impact on health care service provision. The survey was mailed to a non-random sample of local health officials that included members of the National Association of County Health Officials. The survey was mailed in two batches in March 1991 and had a response rate of approximately 77 percent.

According to the data, 39 percent of local health officials indicated that their was a decrease in their budget during fiscal year 1991 and 1992; more than one quarter of the respondents reported having staff reductions during fiscal year 1991 and 1992. During those two years, over 58 percent reported having either reduced their staff or having faced a budget cut. When respondents were questioned about the need to make cuts into particular programs and services, the results below were obtained.

| *Service Area* | *Reported Reduction in Service* |
|---|---|
| • Environmental Health | 33% |
| • Maternal/Child Health | 36% |
| • AIDS Programs | 26% |

- Immunizations 14%
- Mental Health 44%
- Substance Abuse 27%
- EMS 20%
- Correctional Health 16%
- Communicable Disease Control 23%
- Community Health Education/Promotion 43%
- Home Health 36%

Forty percent of the local health officials that responded to the above question believed that access to care would be affected by the budget cuts.

With the increasing demand for service at the local level, simply maintaining the current funding level will not enable the LHDs to attain the Healthy People 2000 objectives. The need to deal with budget cuts and staff reductions exacerbates this problem.

6179

The LEWIN GROUP

# Strategies for Obtaining Public Health Infrastructure Data at the Federal, State, and Local Levels

# Appendix C: Data Dictionary

**U.S. Department of Health and Human Services**
**Office of the Assistant Secretary for Planning and Evaluation**
***December, 199 7***

Fairfax, Virginia
San Francisco, California
Cambridge, Massachusetts

# Strategies for Obtaining Public Health Infrastructure Data at Federal, State, and Local Levels

## Appendix C: Data Dictionary

**U.S. Department of Health and Human Services**

***December* 199 7**

# TABLE OF CONTENTS

**INTRODUCTION** ..... 4

**SECTION I: NATIONAL SURVEYS** ..... 5

**CORE** SURVEY OVERVIEW.. ..... 6
SUPPLEMENTAL SURVEY OVERVIEW ..... 30

**SECTION II: CASE STUDIES** ..... 51

CROSS CUTTING ISSUES.. ..... 53

**ESSENTIAL SERVICE 1:**
MONITOR HEALTH STATUS TO IDENTIFY COMMUNITY HEALTH PROBLEMS ..... 59

**. ESSENTIAL SERVICE 2:**
DIAGNOSE AND INVESTIGATE HEALTH PROBLEMS AND HEALTH HAZARDS IN THE COMMUNITY ..... 64

**ESSENTIAL SERVICE 3:**
INFORM, EDUCATE, AND EMPOWER PEOPLE ABOUT HEALTH ISSUES ..... 68

**ESSENTIAL SERVICE 4:**
MOBILIZE COMMUNITY PARTNERSHIPS TO IDENTIFY AND SOLVE HEALTH PROBLEMS ..... 71

**ESSENTIAL SERVICE 5:**
DEVELOP POLICIES AND PLANS THAT SUPPORT INDIVIDUAL AND COMMUNITY HEALTH EFFORTS ..... 73

**ESSENTIAL SERVICE 6:**
ENFORCE LAWS AND REGULATIONS THAT PROTECT HEALTH AND ENSURE SAFETY. 77

**ESSENTIAL SERVICE 7:**
LINK PEOPLE TO NEEDED PERSONAL HEALTH SERVICES AND ASSURE THE PROVISION OF HEALTH CARE WHEN OTHERWISE UNAVAILABLE ..... 79

**ESSENTIAL SERVICE 8:**
ASSURE A COMPETENT PUBLIC HEALTH AND PERSONAL HEALTH CARE WORKFORCE ..... 84

**ESSENTIAL SERVICE 9:**
EVALUATE THE EFFECTIVENESS, ACCESSIBILITY, AND QUALITY OF PERSONAL AND POPULATION-BASED HEALTH SERVICES ..... 86

**ESSENTIAL SERVICE 10:**
RESEARCH FOR NEW INSIGHTS AND INNOVATIVE SOLUTIONS TO HEALTH PROBLEMS ..... 90

# INTRODUCTION

This data dictionary identifies the information elements that should be collected through the proposed infrastructure data strategy. These information elements were initially identified as priority information needs by user group participants and officials interviewed during the state/local site visits. We have attempted to further define and specify these information needs. To facilitate continuity, these definitions are based, in part, on the data conventions employed by existing data collection instruments (e.g., Expenditure Project, NACCHO survey).

- Section I identifies the information to be collected through national surveys of state and local governments.

- Section II identifies the information to be collected through the case studies of sentinel communities.

While the data dictionary does not provide a finalized survey instrument or a case study protocol, it does begin to identify the range of issues that should be addressed with these data collection tools. It is important to note, however, that additional work will be necessary to refine these "data definitions" to ensure that information is captured in a feasible, reliable manner.

## SECTION I: NATIONAL SURVEYS

A. **Core Survey**

*Units of Analysis:* *(1) State government, Tribal government*

*(2) Local government*

*Proposed Methodology:* *(I) Survey of health departments in all 50 states and the District of Columbia*

*(2) Survey of all 3,000-k local health departments*

**B. Supplemental Survey**

*Units of Analysis:* *(I) State government*

*(2) Local government*

*Proposed Methodology:* *(I) Survey of health departments in all 50 states and the District of Columbia*

*(2) Survey of a representative sample of local health departments*

## CORE SURVEY OVERVIEW

| CORE SURVEY DATA SET | |
|---|---|
| **SYSTEMS** | • Public Health Activities by Essential Service and Organization Responsible for Performance (Inventory of) |
| **RELATIONSHIPS** | • Demographic Profile of Jurisdiction<br>• State/Local Relationship (Nature of)<br>• Local Board of Health Relationship (Existence of) |
| **COMPETENCIES** | • Self-assessed Adequacy of Staff Skills |
| **RESOURCES** | • Public Health Expenditures by Use and Source of Funds<br>• Staffing Levels by Type of Public Health Service |

## Public Health Activities by Essential Service and Organization Responsible for Performance (Inventory of)

**Relevant Infrastructure Element:** Systems

**Relevant Essential Service:** All

Activity Checklist;
Please mark with an "M" all activities that are mandated by the legislature, local board, or board of commissioners; all other services should be marked with a check mark. Please indicate services that are contracted-out.

| | WHO PROVIDES THIS SERVICE? | | | | | | |
|---|---|---|---|---|---|---|---|
| **Activity** | **State Health Agency** | **Local Health Agency** | **State Health Agency only in absence of local health agency presence** | **Another governmental agency or entity (Please specify)** | **Tribal Health Department** | **Private community organizations** | **Service Not Provided** |
| **Essential Service 1: Monitor health status to identify and solve community health problems** | | | | | | | |
| Conduct surveillance, collect data, and maintain registries for: | | | | | | | |
| *Births* | | | | | | | |
| *Birth defects* | | | | | | | |
| *Low birth weight* | | | | | | | |
| *At-risk births* | | | | | | | |
| *Age of mother* | | | | | | | |
| *Deaths* | | | | | | | |
| *Immunizations* | | | | | | | |
| *Behavioral risk factors* | | | | | | | |
| *Cancer* | | | | | | | |
| *Chronic disease* | | | | | | | |
| *Communicable diseases* | | | | | | | |
| *Food-borne illnesses* | | | | | | | |
| *Injuries and trauma* | | | | | | | |
| *Violence, not included in injury/trauma* | | | | | | | |
| *Child abuse/neglect* | | | | | | | |
| *Domestic violence* | | | | | | | |
| *Mental illness* | | | | | | | |
| *Substance Abuse* | | | | | | | |
| *Hospitalizations* | | | | | | | |
| *Air quality* | | | | | | | |
| *Drinking water supply* | | | | | | | |
| *Water borne pathogens* | | | | | | | |
| *Recreational water quality* | | | | | | | |
| *Soil contamination* | | | | | | | |

| | WHO PROVIDES THIS SERVICE? | | | | | | |
|---|---|---|---|---|---|---|---|
| **Activity** | **State Health Agency** | **Local Health Agency** | **State Health Agency only in absence of local health agency presence** | **Another governmental agency or entity (Please specify)** | **Tribal Health Department** | **Private community organizations** | **Service Not Provided** |
| *Nitrogen sampling* | | | | | | | |
| Conduct environmental disease surveillance for: | | | | | | | |
| *Lead poisoning* | | | | | | | |
| *Pesticide poisoning* | | | | | | | |
| *Heavy metal poisoning* | | | | | | | |
| *Respiratory disease triggered by environmentalfactors* | | | | | | | |
| Engage in pollution prevention | | | | | | | |
| Conduct occupational health surveillance and monitor exposures | | | | | | | |
| Identify community perceptions of problems through community surveys | | | | | | | |
| Assess social risks to health | | | | | | | |
| Monitor housing/ neighborhood quality | | | | | | | |
| Engage in epidemiological studies related to the topic areas above | | | | | | | |
| Perform comprehensive, population-based health assessments | | | | | | | |
| Develop performance measures | | | | | | | |
| Essential **Service 2: Diagnose and investigate health problems and health hazards** in **the** community | | | | | | | |
| Provide Early Periodic Screening, Diagnosis and Treatment (EPSDT) services for children: | | | | | | | |
| *Physical assessment* | | | | | | | |
| *Hearing and vision* | | | | | | | |
| *Growth and development* | | | | | | | |
| *Blood and urine screening* | | | | | | | |
| *Nutrition* | | | | | | | |
| **Screen, conduct exams,** and provide counseling for communicable diseases: | | | | | | | |
| *TB* | | | | | | | |

| | WHO PROVIDES THIS SERVICE? | | | | | | |
|---|---|---|---|---|---|---|---|
| **Activity** | **State Health Agency** | **Local Health Agency** | **State Health Agency only in absence of local health agency presence** | **Another governmental agency or entity (Please specify)** | **Tribal Health Department** | **Private community organizations** | **Service Not Provided** |
| *HIV/AIDS* | | | | | | | |
| *STDs* | | | | | | | |
| Trace and notify contacts for communicable diseases: | | | | | | | |
| *TB* | | | | | | | |
| *HIV/AIDS* | | | | | | | |
| *STDs* | | | | | | | |
| Screen and provide counseling for chronic diseases: | | | | | | | |
| *Cancer* | | | | | | | |
| *Diabetes* | | | | | | | |
| *High blood pressure* | | | | | | | |
| *Cardiovascular disease* | | | | | | | |
| *High cholesterol levels* | | | | | | | |
| *Substance abuse* | | | | | | | |
| *Mental illness* | | | | | | | |
| Screen for child abuse | | | | | | | |
| Perform environmental sampling: | | | | | | | |
| *Lead* | | | | | | | |
| *Radon* | | | | | | | |
| *Asbestos* | | | | | | | |
| *Pesticides* | | | | | | | |
| *microbial contaminants* | | | | | | | |
| *other metals* | | | | | | | |
| *Carcinogens* | | | | | | | |
| *water borne illnesses* | | | | | | | |
| Investigate disease outbreaks: | | | | | | | |
| *communicable diseases* | | | | | | | |
| *food borne illnesses* | | | | | | | |
| *populations affected* | | | | | | | |
| Provide diagnostic laboratory services: | | | | | | | |
| *microbiology* | | | | | | | |
| *chemistry* | | | | | | | |
| *hematology* | | | | | | | |
| *pathology* | | | | | | | |
| Provide environmental laboratory services: | | | | | | | |
| *chemistrv* | | | | | | | |
| *microbiology* | | | | | | | |
| *occupational safety and health* | | | | | | | |
| *toxicology* | | | | | | | |

| | WHO PROVIDES THIS SERVICE? | | | | | | |
|---|---|---|---|---|---|---|---|
| Activity | State Health Agency | Local Health Agency | State Health Agency only in absence of local health agency presence | Another governmental agency or entity (Please specify) | Tribal Health Department | **Private community organizations** | **Service Not Provided** |
| Conduct environmental risk assessment | | | | | | | |
| Develop and disseminate reports | | | | | | | |
| Essential Service 3: Inform, educate, and empower people about health issues | | | | | | | |
| Engage in population-wide health promotion and risk reduction campaigns/ make information available about: | | | | | | | |
| Illness/ Injury: | | | | | | | |
| *injury prevention* | | | | | | | |
| *HIV education and information* | | | | | | | |
| *substance abuse* | | | | | | | |
| *mental illness* | | | | | | | |
| *behavioral risks and disease symptoms* | | | | | | | |
| *Rabies* | | | | | | | |
| *violent and abusive behaviors* | | | | | | | |
| *oral health* | | | | | | | |
| Strategies for Improved Living: | | | | | | | |
| *parenting education/ family planning* | | | | | | | |
| *physical activity and fitness* | | | | | | | |
| *risk reduction programs* | | | | | | | |
| *seat belt use* | | | | | | | |
| *nutrition education* | | | | | | | |
| *immunization awareness* | | | | | | | |
| *appropriate use of the health care system* | | | | | | | |
| *clinical preventive service awareness* | | | | | | | |
| Messages Targeted at Specific Populations: | | | | | | | |
| *tobacco use prevention and cessation* | | | | | | | |
| *sexuality education* | | | | | | | |
| ***maternal and infant health*** | | | | | | | |
| Evaluate/develop school health education curricula | | | | | | | |
| Provide worksite health | | | | | | | |

| | WHO PROVIDES THIS SERVICE? | | | | | | |
|---|---|---|---|---|---|---|---|
| **Activity** | **State Health Agency** | **Local Health Agency** | **State Health Agency only in absence of local health agency presence** | **Another governmental agency or entity (Please specify)** | **Tribal Health Department** | **Private community organizations** | **Service Not Provided** |
| promotion programs | | | | | | | |
| Provide nutrition education as part of WIC | | | | | | | |
| Provide substance abuse prevention programs | | | | | | | |
| Assess and evaluate health promotion and risk-reduction campaigns | | | | | | | |
| Ensure that health information distributed is credible | | | | | | | |
| Communicate risks of emerging threats (e.g., environmental, disease outbreaks) to community | | | | | | | |
| Provide information to elected and appointed officials | | | | | | | |
| Disseminate results of health status monitoring | | | | | | | |
| Provide access to public health documents/ materials | | | | | | | |
| Publish and distribute technical reports and high-level information/ guidelines (Such as Surgeon Generals' Reports) | | | | | | | |
| **Essential Service 4: Mobilize community partnerships and action to identify and solve health problems** | | | | | | | |
| *Identify* the potential for mutually beneficial relationships with others | | | | | | | |
| Act as a neutral *convener* of community coalitions | | | | | | | |
| *Collaborate* with other agencies and organizations: | | | | | | | |
| *other government agencies* | | | | | | | |
| *volunteer and non-profit organizations* | | | | | | | |
| *Businesses* | | | | | | | |
| *community groups* | | | | | | | |
| *Hospitals* | | | | | | | |

| | WHO PROVIDES THIS SERVICE? | | | | | | |
|---|---|---|---|---|---|---|---|
| **Activity** | **State Health Agency** | **Local Health Agency** | **State Health Agency only in absence of local health agency presence** | **Another governmental agency or entity (Please specify)** | **Tribal Health Department** | **Private community organizations** | **Service Not Provided** |
| *Physicians* | | | | | | | |
| *other medical care providers* | | | | | | | |
| *managed care organizations* | | | | | | | |
| *Insurers* | | | | | | | |
| *Schools* | | | | | | | |
| *religious* | | | | | | | |
| *advocacy groups* | | | | | | | |
| *consumer groups* | | | | | | | |
| *Media* | | | | | | | |
| Provide technical assistance to facilitate local health agency mobilization | | | | | | | |
| Prioritize partnership and action strategies | | | | | | | |
| Advocate for public health issues (e.g. testify at hearings) | | | | | | | |
| Sponsor health promotion activities | | | | | | | |
| **Essential Service** *5:* **Develop policies and plans that support individual and community health efforts** | | | | | | | |
| Plan for organization and programs, using: | | | | | | | |
| *APEX/PH* | | | | | | | |
| *Healthy Cities* | | | | | | | |
| *PATCH* | | | | | | | |
| *Health Communities 2000: Model Standards* | | | | | | | |
| Develop a state and/or local health improvement plan | | | | | | | |
| Conduct problem-oriented action planning around specific issues | | | | | | | |
| Establish organizational and programmatic agendas and priorities | | | | | | | |
| Plan for community health care resources: | | | | | | | |
| *Certificate of Need (update CON model to reflect changes in health* | | | | | | | |

| Activity | WHO PROVIDES THIS SERVICE? | | | | | | |
|---|---|---|---|---|---|---|---|
| | State Health Agency | Local Health Agency | State Health Agency only in absence of local health agency presence | Another governmental agency or entity (Please specify) | Tribal Health Department | Private community organizations | Service Not Provided |
| *care market)* | | | | | | | |
| *Health Systems Agencies (HSAs)* | | | | | | | |
| *Ryan White AIDS planning/ HIV prevention planning* | | | | | | | |
| *Substance Abuse prevention planning* | | | | | | | |
| *Economic development planning* | | | | | | | |
| *Community Network Planning* | | | | | | | |
| Develop plans for provision of services for Medicaid/Medicare Managed Care | | | | | | | |
| Develop policies, regulations, codes, statutes, and guidelines | | | | | | | |
| Develop new laws and regulations | | | | | | | |
| Promote public health regulations | | | | | | | |
| Develop standards/codes in response to new issues | | | | | | | |
| Support legislative activities: | | | | | | | |
| *Propose legislation* | | | | | | | |
| *Monitor legislation* | | | | | | | |
| *Lobby or educate legislators* | | | | | | | |
| Provide health status resources to identify health status needs | | | | | | | |
| Plan for implementation based on performance based contracts and objectives | | | | | | | |
| Review planning experiences from other states | | | | | | | |
| Disseminate planning documents to appropriate audience | | | | | | | |
| **Essential Service 6:** | | | | | | | |

| | WHO PROVIDES THIS SERVICE:? | | | | | | |
|---|---|---|---|---|---|---|---|
| **Activity** | **State Health Agency** | **Local Health Agency** | **State Health Agency only in absence of local health agency presence** | **Another governmental agency or entity (Please specify)** | **Tribal Health Department** | **Private community organizations** | **Service Not Provided** |
| **Enforce laws and regulations that protect health and ensure saïety** | | | | | | | |
| Inspect and license: | | | | | | | |
| *Barber/beauty shops (some jurisdictions moving away from this)* | | | | | | | |
| *Food and milk control* | | | | | | | |
| *Pet shops (some jurisdictions moving away from this)* | | | | | | | |
| *Private water system* | | | | | | | |
| *Swimming* ***pools*** | | | | | | | |
| *Recreational facilities* | | | | | | | |
| *Restaurants/Bars* | | | | | | | |
| *Housing units* | | | | | | | |
| *Tanning salons* | | | | | | | |
| *Tattoo* ***parlors*** | | | | | | | |
| *Veterinary hospitals* | | | | | | | |
| *Public lodging* | | | | | | | |
| Inspect and license: | | | | | | | |
| *Health facilities* | | | | | | | |
| *Laboratories* | | | | | | | |
| *Mental health facilities* | | | | | | | |
| *Substance abuse treatment facilities* | | | | | | | |
| *Nursing homes* | | | | | | | |
| License and credential health and environmentall professionals | | | | | | | |
| *Physicians* | | | | | | | |
| *Nurses* | | | | | | | |
| *Chiropractors* | | | | | | | |
| *Podiatrists* | | | | | | | |
| *EMS technicians* | | | | | | | |
| *Social workers/ psychologists* | | | | | | | |
| *Health care technicians* | | | | | | | |
| *Occupational Therapists* | | | | | | | |
| *Physical Therapists* | | | | | | | |
| Enforce and ensure radiation control standards | | | | | | | |
| Control animals, rodents, and other vectors | | | | | | | |
| Fluoridate water | | | | | | | |
| Manage hazardous waste | | | | | | | |
| Enforce solid waste disposal standards | | | | | | | |

| | WHO PROVIDES THIS SERVICE? | | | | | | |
|---|---|---|---|---|---|---|---|
| **Activity** | **State Health Agency** | **Local Health Agency** | **State Health Agency only in absence of local health agency presence** | **Another governmental agency or entity (Please specify)** | **Tribal Health Department** | **Private community organizations** | **Service Not Provided** |
| Conduct lead abatement activities | | | | | | | |
| Manage sewage disposal systems | | | | | | | |
| Enforce and ensure immunization requirements for children | | | | | | | |
| Enforce and ensure public safety laws: | | | | | | | |
| *seat belt use* | | | | | | | |
| *motor cycle helmet laws* | | | | | | | |
| *sprinkler system* | | | | | | | |
| *life vests* | | | | | | | |
| *smoke detectors* | | | | | | | |
| Enforce housing codes | | | | | | | |
| Enforce school food service guidelines | | | | | | | |
| Enforce and ensure physical education standards for students | | | | | | | |
| Enforce and ensure occupational safety standards: | | | | | | | |
| *child labor permits* | | | | | | | |
| *worksite inspections* | | | | | | | |
| Undertake law enforcement activity relative to public health concerns: | | | | | | | |
| *Prostitution* | | | | | | | |
| *controlled substances* | | | | | | | |
| Enforce insurance/ personal care laws: | | | | | | | |
| *Regulate managed care organizations* | | | | | | | |
| *48-hour maternity stay* | | | | | | | |
| Implement violence/ injury control mechanisms | | | | | | | |
| Supply emergency response teams: | | | | | | | |
| *toxic spills* | | | | | | | |
| *natural disasters* | | | | | | | |
| *product recalls* | | | | | | | |
| Provide oversight for emergency response teams: | | | | | | | |
| *Training* | | | | | | | |

| | WHO PROVIDES THIS SERVICE? | | | | | | |
|---|---|---|---|---|---|---|---|
| **Activity** | **State Health Agency** | **Local Health Agency** | **State Health Agency only in absence of local health agency presence** | **Another governmental agency or entity (Please specify)** | **Tribal Health Department** | **Private community organizations** | **Service Not Provided** |
| *standard setting* | | | | | | | |
| Ensure EMS – Emergency Regulations | | | | | | | |
| Provide medical examiner, toxicology, or other forensic medicine services | | | | | | | |
| Create linkages with other agencies and between government levels involved with enforcing public health | | | | | | | |
| Enforce public health standards in health facilities | | | | | | | |
| Establish, enforce, and ensure tobacco use and sale legislation | | | | | | | |
| Develop standards/codes in response to new issues | | | | | | | |
| Develop new laws and regulations | | | | | | | |
| **Essential Service 7: Link people to needed personal health** services and assure the provision of health care when otherwise unavailable | | | | | | | |
| Provide/ensure case management and coordinate care: | | | | | | | |
| *assess needs* | | | | | | | |
| *develop service plans* | | | | | | | |
| *coordinate services* | | | | | | | |
| *review and adapt plans* | | | | | | | |
| *conduct inpatient discharge planning* | | | | | | | |
| Provide/ensure diagnostic laboratory and X-ray procedures | | | | | | | |
| Conduct individual screening for: | | | | | | | |
| *Audiology* | | | | | | | |
| *Eye* | | | | | | | |
| *Cancer* | | | | | | | |
| Provide/ensure urgent and emergency services, including ambulance services | | | | | | | |

| Activity | WHO PROVIDES THIS SERVICE? | | | | | | |
|---|---|---|---|---|---|---|---|
| | State Health Agency | Local Health Agency | **State Health Agency only in absence of local health** agency **presence** | **Another** governmental agency or entity (Please specify) | **Tribal** Health Department | **Private** community organizations | **Service Not Provided** |
| Provide/ensure **STD** treatment services | | | | | | | |
| Provide/ensure obstetrical/gynecological and prenatal care | | | | | | | |
| Provide/ensure pediatric care: | | | | | | | |
| well *child care* | | | | | | | |
| *sick child care* | | | | | | | |
| *child with special health needs* | | | | | | | |
| *services for seriously and emotionally disturbed children* | | | | | | | |
| Provide/ensure school health services: | | | | | | | |
| *primary care services* | | | | | | | |
| *pregnancy prevention and testing* | | | | | | | |
| *prenatal care* | | | | | | | |
| *screening services* | | | | | | | |
| Provide/ensure immunizations for: | | | | | | | |
| *Influenza* | | | | | | | |
| *pneumococcal disease* | | | | | | | |
| *Hepatitis B* | | | | | | | |
| *Tetanus* | | | | | | | |
| *Diphtheria* | | | | | | | |
| *Measles* | | | | | | | |
| *Travel-related illnesses* | | | | | | | |
| Provide/ensure genetic services: | | | | | | | |
| *newborn screening* | | | | | | | |
| *AFP testing* | | | | | | | |
| *carrier screening* | | | | | | | |
| *genetic testing* | | | | | | | |
| Provide/ensure specialty medical care: | | | | | | | |
| *diabetes clinics* | | | | | | | |
| *cardiac care clinics* | | | | | | | |
| *allergy treatment* | | | | | | | |
| *Anesthesiology* | | | | | | | |
| *Dermatology* | | | | | | | |
| *Gastroenterology* | | | | | | | |
| *general surgery* | | | | | | | |
| *Neurology* | | | | | | | |
| *Podiatry* | | | | | | | |

| | WHO PROVIDES THIS SERVICE? | | | | | | |
|---|---|---|---|---|---|---|---|
| **Activity** | **State Health Agency** | **Local Health Agency** | **State Health Agency only in absence of local health agency presence** | **Another governmental agency or entity (Please specify)** | **Tribal Health Department** | **Private community organizations** | **Service Not Provided** |
| *Radiology* | | | | | | | |
| *Psychiatry* | | | | | | | |
| *Geriatrics* | | | | | | | |
| Provide/ensure dental care: | | | | | | | |
| *Preventive* | | | | | | | |
| *Restorative* | | | | | | | |
| *Emergency* | | | | | | | |
| Provide/ensure home health services | | | | | | | |
| Provide/ensure substance abuse treatment and counseling | | | | | | | |
| Provide/ensure mental health treatment and counseling | | | | | | | |
| Provide/ensure nutritional counseling services | | | | | | | |
| Provide/ensure occupational, physical, or speech therapy services | | | | | | | |
| Provide/ensure inpatient services: | | | | | | | |
| *Hospitals* | | | | | | | |
| *long term care facilities* | | | | | | | |
| *mental health facilities* | | | | | | | |
| Provide/ensure public health nursing services | | | | | | | |
| Provide/ensure services to specialized populations | | | | | | | |
| Provide/ensure enabling services: | | | | | | | |
| *child care* | | | | | | | |
| *Transportation* | | | | | | | |
| *eligibility assistance* | | | | | | | |
| *employment counseling* | | | | | | | |
| *food bank/delivered meals* | | | | | | | |
| *client-based health education* | | | | | | | |
| *homemaker assistance* | | | | | | | |
| *housing assistance* | | | | | | | |
| *translation services* | | | | | | | |
| Maintain information and referral services | | | | | | | |
| Track and evaluate interventions | | | | | | | |
| **Essential Service 8:** | | | | | | | |

| | WHO PROVIDES THIS SERVICE? | | | | | | |
|---|---|---|---|---|---|---|---|
| **Activity** | **State Health Agency** | **Local Health Agency** | **State Health Agency only in absence of local health agency presence** | **Another governmental agency or entity (Please specify)** | **Tribal Health Department** | **Private community organizations** | **Service Not Provided** |
| **Assure a competent public health and personal health care workforce** | | | | | | | |
| Engage in programs to recruit and retain health txofessionals: | | | | | | | |
| *rural providers* | | | | | | | |
| *Providers for underserved population/area* | | | | | | | |
| ***Providers for inner** city/urban area* | | | | | | | |
| *Alzheimer's care providers* | | | | | | | |
| *nursing home care givers* | | | | | | | |
| *care providers for behaviorally challenged* | | | | | | | |
| *AIDS/HIV physicians* | | | | | | | |
| Create linkages with schools of public health to develop professionals: | | | | | | | |
| *Influence curricula development* | | | | | | | |
| *provide clerkship/training for people already in the field* | | | | | | | |
| *provide internships* | | | | | | | |
| Sponsor continuing professional education and training: | | | | | | | |
| *assess and evaluate training needs* | | | | | | | |
| *require and support continuing education programs* | | | | | | | |
| *develop a referral system to link employees with training or expertise* | | | | | | | |
| Improve career paths for current employees: | | | | | | | |
| *provide for management training* | | | | | | | |
| *establish a career path to develop technician roles* | | | | | | | |
| Fund manpower development grants | | | | | | | |
| Assess cultural competence of workforce | | | | | | | |
| Collaborate and liaison | | | | | | | |

| | WHO PROVIDES THIS SERVICE? | | | | | | |
|---|---|---|---|---|---|---|---|
| **Activity** | **State Health Agency** | **Local Health Agency** | **State Health Agency only in absence of local health agency presence** | **Another governmental agency or entity (Please specify)** | **Tribal Health Department** | **Private community organizations** | **Service Not Provided** |
| with colleagues nationally/internationally: | | | | | | | |
| *support networking (pay for travel, etc.)* | | | | | | | |
| *professional development* | | | | | | | |
| **Essential Service 9: Evaluate effectiveness, accessibility, and quality of personal and population-based health services** | | | | | | | |
| Provide quality control assistance | | | | | | | |
| Certify and accredit local and state health departments | | | | | | | |
| Identify indicators, benchmarks, and performance measures to evaluate performance and to set goals for: | | | | | | | |
| *Access* | | | | | | | |
| *Quality* | | | | | | | |
| *Effectiveness* | | | | | | | |
| Collect information on organizational benchmarks (approaches, outcomes) | | | | | | | |
| Collect and analyze data on: | | | | | | | |
| *service availability* | | | | | | | |
| *utilization* | | | | | | | |
| *cost* | | | | | | | |
| *outcomes* | | | | | | | |
| Collect information from managed care entities | | | | | | | |
| Evaluate and monitor availability of medical manpower and facilities | | | | | | | |
| Work to improve quality of physician services | | | | | | | |
| Provide guidelines for community prevention activities | | | | | | | |
| **Essential Service 10: Research for new insights and innovative solutions to health problems** | | | | | | | |

| | WHO PROVIDES THIS SERVICE: | | | | | | |
|---|---|---|---|---|---|---|---|
| **Activity** | **State Health Agency** | **Local Health Agency** | **State Health Agency only in absence of local health agency presence** | **Another governmental agency or entity (Please specify)** | **Tribal Health Department** | **Private community organizations** | **Service Not Provided** |
| Conduct biomedical, preventive, and clinical investigations | | | | | | | |
| Conduct epidemiological research | | | | | | | |
| Conduct research on information systems effectiveness | | | | | | | |
| Conduct policy analysis | | | | | | | |
| Participate in demonstration projects and pilot projects | | | | | | | |
| Conduct research into organizational structure of public health agencies (e.g., state/local collaboration and roles) | | | | | | | |
| Develop best practice models-of program design | | | | | | | |
| Examine clinical protocols | | | | | | | |
| Coordinate with existing research efforts in the community | | | | | | | |
| Develop/implement new information systems | | | | | | | |
| Fund research efforts in other organizations | | | | | | | |
| Disseminate and implement research findings to appropriate audience | | | | | | | |
| Develop communications and distance learning | | | | | | | |

Has your jurisdiction experienced significant change in terms of the types of public health services provided? Y N

If yes, what changes have occurred?

## Demographic Profile of Jurisdiction

**Relevant Infrastructure Element:** Relationships

**Relevant Essential Service:** All

For what jurisdiction is your health agency responsible? (check one)

_____ Municipality (City or Township)

_____ City/County

_____ county

_____ Multiple Counties (indicate number: )_____

_____ Indian Reservation

_____ District (describe extent of district)_____

_____ Region (describe extent of region )_____

_____ State

Describe the geographic boundaries of your jurisdiction: -

_____

_____

_____

_____

What is the population estimate for your jurisdiction?

_____ Less than 25,000
_____ 25,000-49,999
_____ 50,000-99,999
_____ 1 OO,OOO-249,999
_____ 250,000-499,999
_____ 500,000-999,999
_____ 1 ,OOO,OOO or more
_____ Over 3 ,OOO,OOO

What is the racial/ethnic profile of your jurisdiction?

_____ % White (not Hispanic)
_____ % African American (not Hispanic)
_____ % Hispanic
_____ % Asian/ Pacific Islander
_____ % American Indian or Alaska Native
_____ % Other/ Unknown

What is the gender composition of your jurisdiction?
_____ % Male _____ % Female

What is the age profile of your jurisdiction?

_____ % Under 1 year old
_____ % 1-14 years old
_____ % 15-24 years old
_____ % 25-64 years old
_____ % 65-75 years old
_____ % 75+

What is the socio-economic profile of your jurisdiction?

% Below Poverty: _____

Average Per Capita Income: _____

% Unemployed: _____

% Insured by Medicaid: _____

Average Year of Education Attained: _____

% Uninsured: _____

– % Adult Uninsured: _____

– % Children Uninsured: _____

% Female Headed Households: _____

METHODOLOGICAL NOTE: Although much of this information can be drawn from existing data sources, it will be useful to confirm these data with state/local respondents.

## State/Local Relationship (Nature of)

**Relevant Infrastructure Element:** Relationships

**Relevant Essential Service:** All

Which of the following characterizes the *state's role as a convener of local-level interests* (check all that apply)?

_____ The state acts as a technical advisor to localities

_____ The state facilitates electronic and other forms of communication between localities, or between the state and the locals

_____ The state sponsors conferences or forums to facilitate local-level information sharing

_____ The state analyzes and disseminates information about best practices to the locals

_____ The state actively lobbies the legislature about local-level issues

_____ Other (please specify: _____)

Which of the following characterizes the *state's oversight role* relative to the locals (check all that apply)?

_____ The state audits the locals' adherence to state regulations

_____ The state monitors locals' performance on specific performance measures

_____ The state mandates services that local health departments must provide

_____ The state requires detailed, comprehensive reporting (e.g., health plans or reports) from the locals

_____ The state contracts with the locals to provide specific services, with little other oversight

_____ The state directly provides services in local areas

Which of the following best characterizes the *legislative authority* relationship between the state and locals (please choose one)?

_____ **Centralized** (Locals operate under direct control of, or are part of, the state health agency)

_____ **Decentralized** (Local governments directly operate the local health departments)

_____ **Permissive** (Locals have the option of establishing local health departments, with the state maintaining legislative authority in areas with no local health department)

Which of the following best characterizes the *funding relationships* between the state and locals (check all that apply):

_____ The state provides the **majority** of local health departments' funding (e.g., through state general funds, local appropriations, reimbursements, state-generated grants, and Medicaid reimbursement)
_____ The state provides very **little** of local health departments' funding (e.g., locals supported primarily through municipal funding, fees, federal grants, and sources other than the state)
_____ The amount of state support **varies** by jurisdiction

_____ The state requires locals to submit complete budget information (e.g., expenditures from all sources) to receive funding
_____ The state requires reporting only for those programs or services that it funds directly
_____ Reporting requirements are determined by program

_____ The state determines funding based on an established funding formula (e.g., using demographic or historical funding information)
_____ The state determines funding based on a program-by-program basis
_____ The state determines funding for entire local health departments (e.g., block grants)
_____ The state reimburses the locals on a contract or fee-for-service basis

Has the state or locality recently undergone a major reorganization of its public health services? Y N

If yes, what was the nature of this reorganization? _____
_____
_____
_____

Is the jurisdiction health officer an appointed or a civil service position? _____

If appointed, who appoints? _____

Is the health officer position a cabinet-level post? Y N

Is the health officer required to be an M.D. or D.O.? Y N

## Local Board of Health Relationship (Existence of)

**Relevant Infrastructure Element:** Relationships

**Relevant Essential Service:** All

Is there a local board of health that serves your jurisdiction? **Y N**

What is the extent of the local board of health's jurisdiction?

_____ Municipality (City or Township)

_____ City/County

_____ County

_____ Multiple Counties (indicate number: )_____

_____ District (describe extent of district)_____

_____ Region (describe extent of region )_____

If a local board of health serves your jurisdiction, does it have statutory authority to: (check all that apply):

_____ Establish local health policy, fees, ordinances, regulations, etc.
_____ Recommend the budget
_____ Approve the budget
_____ Establish community health priorities
_____ Hire the agency head
_____ Other (please specify:_____)

How are your board of health members selected?

_____ Appointed
_____ Elected
_____ Other (please specify: _____)

## Public Health Expenditures by Use and Source of Funds

**Relevant Infrastructure Element:** Resources

**Relevant Essential Service:** All

| | | Source of Funds | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Use of Funds** | **Total Funding** | **% Federal** | **% State** | | **% Local** | | **% Medicaid** | **% Other (specify)** |
| | | | % Funds | % Fees | % Funds | % Fees | | |
| Personal Health Services | | | | | | | | |
| Environmental Health | | | | | | | | |
| Disease Prevention and Epidemiology | | | | | | | | |
| Public Health Laboratories | | | | | | | | |
| Licensing and Certification | | | | | | | | |
| Administration | | | | | | | | |
| **TOTAL** | | | | | | | | |

**METHODOLOGICAL NOTE:** These "Use of Funds" categories are based on our review of the budget documents in 12 states. Although states-vary in their budget classification systems, these categories represent relative common budget divisions. While this information can be derived in a relatively straight forward manner from the state budget documents, some facilitation will be necessary to guide respondents on the appropriate allocation and aggregation of some services and funds. We recommend that those responsible for fielding the survey also obtain budget documents from the state budget officer to ensure that the expenditures of all relevant state agencies are included and allocated appropriately. Some standard allocation rules will need to be established (e.g., Should immunization-related expenditures be captured in "Personal Health Services" or "Disease Prevention"?). Steps will also need to be taken to avoid "double counting" funds once state and local surveys are integrated.

Has your jurisdiction experienced significant changes in funding? Y N
If yes, what changes occurred? _____

## Staffing Levels by Type of Public Health Service

**Relevant Infrastructure Element:** Resources

**Relevant Essential Service:** All

| Type of Public Health Service | Government Employees (FTEs) | Contractors (FTEs) (if available) | Total Staff (FTEs) |
|---|---|---|---|
| Personal Health Services | | | |
| Environmental Health | | | |
| Disease Prevention and Epidemiology | | | |
| Public Health Laboratories | | | |
| Licensing and Certification | | | |
| Administration | | | |
| **TOTAL** | | | |

**NOTE:** While this information can be collected through a written survey, some facilitation will be necessary to guide respondents on the appropriate allocation of some services and personnel. We recommend that those responsible for fielding the survey ensure that all relevant personnel are included and that their time is allocated appropriately. Steps will need to be taken to avoid "double counting" personnel once state and local surveys are integrated.

Has your agency experienced significant changes in staffing levels? **Y** N

If yes, please describe the nature of these changes: _____

_____

_____

_____

## Self-assessed Adequacy of Staff Skills

**Relevant Infrastructure Element:** Competencies

**Relevant Essential Service:** All

How would you assess current competency levels?

_____ Excellent; all needs are being met by current staffs skills
_____ Above average; most needs are being met by staffs skills
_____ Moderate; some skills are deficient in specific areas of the organization
_____ Below average; key skills are deficient or missing in specific parts of the organization
_____ Sub-standard; key skills are deficient or missing in many parts of the organization

In what areas does the health agency need to improve staff skills or competency (circle appropriate level of need)?

**3=High Need** **2=Moderate Need** **1=Low Need** **0=No Need**

| | | | | |
|---|---|---|---|---|
| Program management | 3 | 2 | 1 | 0 |
| Personnel management/ supervision skills | 3 | 2 | 1 | 0 |
| Budgeting | 3 | 2 | 1 | 0 |
| Planning | 3 | 2 | 1 | 0 |
| Communication skills (verbal or written) | 3 | 2 | 1 | 0 |
| Computer operation skills | 3 | 2 | 1 | 0 |
| Computer network/system development skills | 3 | 2 | 1 | 0 |
| Statistics/ data manipulation skills | 3 | 2 | 1 | 0 |
| Interpersonal skills | 3 | 2 | 1 | 0 |
| Health policy development | 3 | 2 | 1 | 0 |
| Inspection competency/ skills | 3 | 2 | 1 | 0 |
| Scientific skills (biology, chemistry) | 3 | 2 | 1 | 0 |
| Clinical skills (history taking, case management) | 3 | 2 | 1 | 0 |
| Epidemiology | 3 | 2 | 1 | 0 |
| Other (please specify: )_____ | 3 | 2 | 1 | 0 |

## SUPPLEMENTAL SURVEY OVERVIEW

| SUPPLEMENTAL SURVEY DATA SET | |
|---|---|
| **SYSTEMS** | • Data Collection and Reporting (Inventory and Periodicity of)<br>• Public Health Inspections (Nature, Number, and Frequency of)<br>• Health Education Programs (Inventory of)<br>• Information Hotlines or Clearinghouses (Inventory of)<br>• Measurement-Based Tools to Support Planning (Existence and Use of)<br>• Perceived Need for Personal Health Services<br>• Self-assessed Adequacy of Existing Public Health Services |
| **RELATIONSHIPS** | • Local Board of Health Relationship (Nature of)<br>• Perceived Contributions of Private Sector in Providing Public Health Services<br>• Characteristics and Size of Medically Indigent Populations |
| **COMPETENCIES** | • Staff Mix by Discipline/Training Background |
| **RESOURCES** | • Information Systems Infrastructure (Nature of)<br>• Unfilled Employment Positions (Number and Description of) |

## Data Collection and Reporting (Inventory and Periodicity of)

**Relevant Infrastructure Element:** Systems

**Relevant Essential Service:** Essential Service 1: Monitor health status to identify and solve community health problems

Do ***you*** collect the following information? Please check all information that applies:

| | | How is data collected? | | How often is the data updated? | What is the most current year available for: | |
|---|---|---|---|---|---|---|
| Data | Do you collect this information? | Paper forms | Electronically (diskettes or online) | Indicate: Real Time (RT), Daily (D), Weekly (W), Monthly (M), Quarterly (Q), or Annually (A) | Internal Analyses | Public Access |
| Births | | | | | | |
| Deaths | | | | | | |
| Communicable disease incidence: | | | | | | |
| *Vaccine Preventable diseases* | | | | | | |
| *STDs* | | | | | | |
| *TB* | | | | | | |
| *AIDS* | | | | | | |
| *Food borne illness* | | | | | | |
| Cancer Registry | | | | | | |
| Immunization registry | | | | | | |
| Hospital discharges | | | | | | |
| Trauma registry | | | | | | |
| Behavioral risk factors | | | | | | |
| Soil sampling: | | | | | | |
| *Lead and heavy metal levels* | | | | | | |
| *Pesticides and contaminants* | | | | | | |
| Water Quality | | | | | | |
| Air Quality | | | | | | |

Do you publish reports on:

_____ Community Health Status? → How often? _____

Services Provided? → How often? _____

_____ Strategic Plans? → How often? _____

_____ Health Priorities? → How often? _____

_____ Publicly available data sources? → How often? _____

Other? → How often? _____

**(please specify: _____)**

## Public Health Inspections (Nature, Number, and Frequency of)

**Relevant Infrastructure Element:** Systems

**Relevant Essential Service:** Essential Service 6: Enforce laws and regulations that protect health and ensure safety

What institutions/ services does the health agency inspect (check all that apply):

| | | How frequently does the health agency license/ inspect? | | | | |
|---|---|---|---|---|---|---|
| | **Does the health agency license/ inspect?** | **Monthly** | **Quarterly** | **Annually** | **Periodically/ no established schedule** | **Only in response to complaints/ problems** |
| Barber/beauty shops | | | | | | |
| Food and milk control | | | | | | |
| Pet shops | | | | | | |
| Public water system | | | | | | |
| Swimming pools | | | | | | |
| Recreational facilities | | | | | | |
| Restaurants/Bars | | | | | | |
| Housing units | | | | | | |
| Tattoo parlors | | | | | | |
| Veterinary hospitals | | | | | | |
| Public lodging | | | | | | |
| Health facilities | | | | | | |
| Laboratories | | | | | | |
| Mental health facilities | | | | | | |
| Substance abuse treatment facilities | | | | | | |
| Nursing homes | | | | | | |

Are there standards in place regarding how inspections should be conducted? Y N

To what extent is the frequency of inspection limited by the number of inspection staff?

_____ Significantly

_____ Somewhat

_____ Not at all

How many inspectors (FTEs) does the health agency employ? _____

To what extent is the frequency of inspection limited by the geographic dispersion of sites to be inspected?

_____ Significantly

_____ Somewhat

_____ Not at all

What percent of required inspections were not completed within the past year? _____%

Do you collect data on the frequency of public health violations? Y N

How many civil violations (e.g., public health code) has your agency pursued within the past 12 months? _____

What percent of the total civil violations does this represent? _____%

In total, what amount of fines have been collected by pursuing civil violations?

_____

## Health Education Programs (Inventory of)

**Relevant Infrastructure Element:** Systems

**Relevant Essential Service:** Essential Service 3 : Inform, educate, and empower people about health issues

Does your health agency maintain a list of health education programs planned or conducted? Y N

Is this list available to the public in advance of the program date? Y N

Does your agency actively market the health education programs offered? Y N

What kinds of "health education programs" are provided? (check all that apply)

_____ Health fairs

_____ Presentations to school or community groups

_____ Workplace wellness programs

_____ Immunization awareness campaigns

_____ Risk reduction campaigns

_____ Wellness campaigns

_____ One-on-one health counseling

_____ Contact tracing

_____ School health clinics

_____ Public service announcements

_____ Information hotlines/ centralized health resources (library, etc.)

_____ Distribution of reports to the community

Do you track the number of people served through these programs? Y N

Do you ever analyze and report the success of various health education campaigns?
Y N

## Information Hotlines or Clearinghouses (Inventory of)

**Relevant Infrastructure Element:** Systems

**Relevant Essential Service:** Essential Service 3: Inform, educate, and empower people about health issues

Do you currently maintain an information hotline for the public? Y N

If so, what topics do you cover?

_____ Vital statistics/ how to obtain birth and death records

_____ Vector control and animal bites

_____ Environmental hazards in the community

_____ Clinic locations and hours

Services provided

_____ Poison control

_____ Substance Abuse

_____ Domestic Violence

_____ Communicable disease outbreak information

_____ Other (please specify:_____)

Do you maintain a public health library or other resource for public use? Y **N**

Do community leaders view your agency as an information resource on health issues?

Y N

What formats are used for making information available to the community?

_____ Telephone referral line
_____ Web site
_____ Printed information/ library
_____ Other (please specify:_____)

## Measurement-Based Tools to Support Planning (Existence and Use of)

**Relevant Infrastructure Element:** Systems

**Relevant Essential Service:** Essential Service 5: Develop policies and plans that support individual and community health efforts

Has the health agency used any of the following programs or tools for organizational planning? (check all that apply):

_____ Healthy People 2000

_____ Healthy Communities 2000: Model Standard

_____ Planned Approach to Community Health (PATCH)

_____ Healthy Cities

_____ Assessment Protocol for Excellence in Public Health (APEX/PH)

How effective have these planning tools been in defining and establishing health priorities in your jurisdiction?

_____ Provided a structured framework that helped focus our efforts

_____ Helped our agency to explain our planning approach to others

_____ Helped us use data to establish priorities

_____ Helped us establish partnerships with community organizations

_____ Helped us communicate our results to interested parties

_____ Provided measures against which to measure our health status

_____ Helped us organize our own priorities effectively

_____ Helped us develop achievable objectives

_____ Did not find the planning tools helpful or effective

_____ Did not use the planning tools

Other (please specify: _____)

Does the health agency have a strategic plan that includes the current year? Y N

When was this plan developed? This year

Last year

l-3 years ago

More than 3 years ago

Does the plan identify health priorities for your jurisdiction? Y N

How were the priorities identified (check all that apply)?

_____ Recent health assessment (including APEX/PH or other tools)

_____ Behavioral Risk Factor Survey results

_____ Survey of community perceptions

_____ Analysis of health data

_____ Current local political or social concerns

State or Federal priorities

_____ Funding sources for those issues

_____ Other (please specify: _____)

Does the strategic plan identify specific actions or measures to monitor or improve health in the priority areas? Y N

Have performance measures been developed for these priority areas? Y N

How often are health priorities reevaluated? Every year

Every two years

Periodically/ no regular schedule

How often are strategic health plans reevaluated and updated?

Every year

Every two years

Periodically/ no regular schedule

What geographic area is included in the strategic plan?

_____ Municipality/ Township

_____ City/ County

_____ county

_____ Multiple Counties (how many? )_____

_____ Region/ District (describe extent of region: )_____

_____ State

Does this geographic area coincide with your jurisdiction? Y N

## Perceived Need for Personal Health Services

**Relevant Infrastructure Element:** Systems

**Relevant Essential Service:** Essential Service 7: Link people to needed personal health services and assure the provision of health care when otherwise unavailable

**How** many outpatient visits were provided by health agency sites in the past **12** months? _____

How many clients does this represent? _____

How many potential clients live within your jurisdiction? _____

What is the racial profile of your current client base?

| | # Male | # Female | # Recent Immigrants |
|---|---|---|---|
| **White (not Hispanic)** | | | |
| **African American** | | | |
| **Hispanic** | | | |
| **Asian/ Pacific Islander** | | | |
| **American Indian** | | | |
| **Other** | | | |
| **TOTAL** | | | |

What is the age profile of your current client base?

| Age | MALE | Female |
|---|---|---|
| **Under 1** | | |
| **1-14** | | |
| **15-24** | | |
| **25-64** | | |
| **65+** | | |
| **TOTAL** | | |

Does the health agency collect information on what clients access the different services?
Y N

Is there an information tracking system to monitor these services? Y N

Has service delivery information been analyzed and/or used to plan future services?
Y N

Estimated percentage of adults living in jurisdiction who are uninsured? _____

**Estimated percentage of children living in jurisdiction who are uninsured?** _____

## Self-assessed Adequacy of Existing Services

**Relevant Infrastructure Element:** Systems

**Relevant Essential Service:** Essential Service 7: Link people to needed personal health services and assure the provision of health care when otherwise unavailable

Has the health agency assessed the adequacy of its personal health services relative to the community's needs? Y N

Overall, are the services offered adequate? Y N

In what areas are services inadequate, and what is the priority for improving these services?

**3=High Priority 2=Medium Priority 1=Low Priority 0=Not a Current Priority**

| Service | Is the service adequate? | | What priority is the service? | | | |
|---|---|---|---|---|---|---|
| Referrals to other personal health care providers | *Y* | *N* | *3* | *2* | 1 | 0 |
| Screening services (e.g., cholesterol, blood pressure, TB tests, HIV/AIDS, other STDs) | Y | N | 3 | 2 | 1 | 0 |
| Immunization services | Y | N | 3 | 2 | 1 | 0 |
| Primary care services | Y | N | 3 | 2 | 1 | 0 |
| Prenatal care services/ well-child services | Y | N | 3 | 2 | 1 | 0 |
| Specialized clinic services | Y | N | 3 | 2 | 1 | 0 |
| Dental services | Y | N | 3 | 2 | 1 | 0 |
| Substance abuse/mental health services | Y | N | 3 | 2 | 1 | 0 |
| Home health care services | Y | N | 3 | 2 | 1 | 0 |
| Case management | Y | N | 3 | 2 | 1 | 0 |
| Nutrition counseling | Y | N | 3 | 2 | 1 | 0 |

## Local Board of Health Relationship (Nature of)

**Relevant Infrastructure Element:** Systems

**Relevant Essential Service:** All

Does your local board of health have statutory authority or currently engage in (check all that apply):

| Stat. Auth | Curr. Activity | Activity | Stat. Auth | Curr. Activity | Activity |
|---|---|---|---|---|---|
| | | Hire or fire health director/ officer | | | Recommend health department priorities |
| | | Supervise or evaluate health director/ officer | | | Establish health department priorities |
| | | Hire or fire other department staff | | | Recommend community public health priorities |
| | | Recommend health department budget | | | Establish community public health priorities |
| | | Approve health department budget | | | Identify sources of funding |
| | | Propose public health regulations | | | Prepare requests for grant funding |
| | | Adopt public health regulations | | | Set and levy fees |
| | | Enforce public health regulations | | | Receive fees directly |
| | | Recommend public health policy | | | Levy taxes |
| | | Establish public health policy | | | aintain public |
| | | Ensure community health assessment | Other (specify): | | |
| | | Conduct community health assessment | | | Other (specify): |

Does the board of health have authority for environmental health programs in your jurisdiction? Y N **Joint Authority**

If No or Joint Authority, what organization/agency has or shares that authority?

_____

Does the board of health have authority for mental health programs in your jurisdiction?

Y N **Joint Authority**

If No or Joint Authority, what organization/ agency has or shares that authority?

## Perceived Contributions of Private Sector in Providing Public Health Services

**Relevant Infrastructure Element:** Relationships

**Relevant Essential Service:** All

How important is the private sector's role in providing public health services?

_____ Significant; many personal and/or population-based public health services are provided by the private sector (through contracts or independently)

_____ Moderate; some organizations provide specific services, but the private sector does not play a major role

_____ Minimal; the public health department has the primary, and often exclusive, role of providing personal and/or population-based public health services.

What is the relative importance of the private sector's role in the following areas:

**3=Significant 2=Moderate 1=Minimal 0=No role for private sector**

| | | | | |
|---|---|---|---|---|
| Personal health services for vulnerable populations | 3 | 2 | 1 | 0 |
| Environmental health services | 3 | 2 | 1 | 0 |
| Health screenings | 3 | 2 | 1 | 0 |
| Health education/awareness campaigns | 3 | 2 | 1 | 0 |
| Public health laboratory investigations | 3 | 2 | 1 | 0 |
| Public health emergency notification/response | 3 | 2 | 1 | 0 |
| Inspections/ enforcement | 3 | 2 | 1 | 0 |
| Health policy development | 3 | 2 | 1 | 0 |
| Health priority development | 3 | 2 | 1 | 0 |
| Data collection/ transmission | 3 | 2 | 1 | 0 |
| Monitoring and notification of health status changes | 3 | 2 | 1 | 0 |
| Community health assessments | 3 | 2 | 1 | 0 |
| Disease control and reporting | 3 | 2 | 1 | 0 |

## Size of Medically Indigent Population

**Relevant Infrastructure Element:** Systems

**Relevant Essential Service:** All

Approximately what percent of your jurisdiction is medically indigent?

_____ % Uninsured

_____ % Medicaid-eligible

How has the size of the total medically indigent population changed in recent years?

_____ Significantly increased
_____ Moderately increased
_____ Remained stable
_____ Moderately decreased
_____ Significantly decreased

If changes have been significant in recent years (increase or decrease) what have been the reasons for this increase/decrease?

_____ Change in economic conditions in the area
_____ Change in eligibility rules for Medicaid
_____ Change in local employers' willingness to provide health insurance
_____ Change in the cost of insurance in the area
_____ Change in which industries are in the area
_____ Change in definition of "medically indigent"
_____ Change in the health agency's jurisdiction
_____ Significant inmigration or outmigration of medically indigent persons
_____ Change in Children's Health Insurance Programs
_____ Other (please specify:_____)

## Staff Mix by Discipline/Training Background

**Relevant Infrastructure Element:** Competencies

**Relevant Essential Service:** All

| Discipline/ Training | Total **FTEs** |
|---|---|
| Administrative Business Staff (accounting, budget) | |
| Administrative Support Staff (clerical) | |
| Animal Control Specialists (not D.V.M.) | |
| Attorneys | |
| Auditors/ Inspectors/ Surveyors | |
| Behavioral or Social Scientists | |
| Biostatisticians | |
| Chemists | |
| Community Outreach/ Field Workers | |
| Computer Specialists | |
| Dentists | |
| Disease Investigators | |
| Environmental Epidemiologists | |
| Environmental Health Engineers/ Specialists | |
| Environmental Engineering Technician and Technologist | |
| Environmental Scientist and Specialist | |
| Environmental Science Technician and Technologist | |
| Epidemiologists | |
| Facility Maintenance Workers | |
| Food Service/ Housekeeping | |
| Health Economists | |
| Health Educators | |
| Health Information Systems/ Data Analysts | |
| Health Policy/ Health Analysts | |
| Health Services Administrators | |
| Industrial Hygienists | |
| Mental Health Counselor | |
| Microbiologists | |
| Nutritionists | |
| Occupational Safety and Health Specialists | |
| Occupational Safety and Health Technician and Technologist | |
| Optometrists | |
| Other Dental Workers | |
| Other Laboratory Specialists | |

| Discipline/ Training | Total FTEs |
|---|---|
| Other Laboratory Workers | |
| Patient Services Specialists | |
| Pharmacists | |
| Physical Therapists | |
| Physicians | |
| Program Specialists | |
| Psychologist, Mental Health Provider | |
| Public Health Advisors/ Disease Intervention Specialists | |
| Public Health Nurses | |
| Public Health Laboratory Technicians and Technologists | |
| Public Relations/Public Information/Health Communications/Media Specialists | |
| Safety Specialists | |
| Social Workers/ Psychologists | |
| Substance Abuse/ Addiction Specialists | |
| Toxicologists | |
| Veterinarians | |
| **TOTAL** | |

**NOTE:** The development of an actual survey instrument should refer to OMB's Standard Occupational Classification (SOC) system, including recent modifications that better reflect public health job classifications.

## Information Systems Infrastructure (Nature of)

**Relevant Infrastructure Element:** Resources

**Relevant Essential Service:** All

What percent of your employees have computers on their desktop? _____%

Of those that have computers, what percent have:

286 or 386 _____%

486 _____%

Pentium _____%

Macintosh _____%

Other _____%

What percent of your employees have access to the Internet? _____%

Of those that have access to the Internet, how many have:

E-mail capability only _____%

Full Internet access _____%

What operating system does the agency use (check all that apply)?

DOS _____

Windows 3.11 or lower _____

Windows 95 _____

OS/2 _____

Other (specify below) _____

What is the level of connectivity between the state and local health entities?

_____ No connection to any local health agencies

_____ E-mail connection to **some or all** local agencies

_____ File transfer to **some or all** local agencies

_____ Statewide WAN allowing online access to state server(s) for **some** local agencies

_____ Statewide WAN allowing online access to state server(s) for **all** local agencies

_____ Other (please explain) _____

_____

Are local health agencies linked internally through a local area network (LAN)? Y N

Have any plans or assessments been conducted to evaluate the level of MIS capability within the state or local health agency? Y N

If so, how recently (circle one)? This year/ongoing

Last year

1- 3 years ago

More than 3 years ago

Is the state currently engaged in transferring data collection processes from paper-based to electronic? Y N

If so, which data/processes? _____

_____

What is your assessment of the level of your overall computer equipment?

_____ Non-existent

_____ Sub-standard

_____ Adequate

_____ Highly sophisticated

Do local health department have access to videoconferences by satellite broadcast?

Y N

Have you developed and adopted:

| | | |
|---|---|---|
| Security standards | Y | N |
| Network standards | Y | N |
| Data transfer standards | Y | N |
| Software standards | Y | N |

For computer support, do you use:

_____ Internal staff → Number _____

_____ Contract staff → Number _____

For what purposes do staff use network capabilities?

_____ E-mail

_____ Data transfer

- communicable disease reports
- vital statistics uploads/downloads

_____ Real-time systems

- scheduling
- case management
- access state databases

How frequently do staff use network capabilities?
_____ daily, _____ weekly, _____ m o n t h l y , less than monthly

## Untilled Employment Positions (Number and Description of)

**Relevant Infrastructure Element:** Resources

**Relevant Essential Service:** Essential Service 8: Assure a competent public health and personal health care workforce

How many budgeted positions are currently unfilled? _____

What percent of the total staff does this represent? _____%

What percent of unfilled positions have been unfilled for:

_____% Less than one month

_____% One to two months

_____% Two to six months

_____% Six months to one year

_____% Over one year

**100%**

For what reasons are positions left unfilled? (check all that apply)

_____ Positions are not funded

_____ Positions are in the process of being eliminated/ reorganized/ redefined

Cannot find qualified personnel to fill the positions

_____ Active recruiting process not yet initiated for positions

_____ Caps on FTEs prevent hiring more staff

Other (please specify: _____)

In the past year, how many staff positions have been vacated? _____

What percent of the total staff does this represent? _____%

How many of these positions represent:

_____ Planned layoffs

_____ Retirement

_____ Individuals leaving voluntarily

_____ Individuals being asked to leave for non-RIF reasons

_____ Long-term disability

_____ Temporary/seasonal positions

_____ Other (please specify: _____)

How many new hires has the health agency acquired within the past year? _____

## SECTION II: CASE STUDIES

| | |
|---|---|
| *Units of Analysis:* | *A nationally representative sample of 15 to 20 Sentinel Communities* |
| *Proposed Methodology:* | *Comprehensive case studies of communities involving the local health department, state health department, other relevant government agencies, and relevant private sector organizations (e.g., managed care plans, hospitals, businesses)* |

Note: Case studies can be used to verify and elaborate on survey responses, assuming the survey is fielded prior to site visits. The surveys will provide introductory information to prepare and brief the site visit team about the relevant sentinel community. Furthermore, results of the information verification process can be used to assess the overall accuracy and quality of the national survey data set. This verification process necessitates some degree of overlan between the case studies and the surveys.

## CASE STUDY **OVERVIEW**

**What is the nature of the public health system in a given community?**

| | |
|---|---|
| ***Systems:*** | What organizational structures are in place to provide public health services and what services are provided? |
| ***Relationships:*** | ***Who*** provides these services and how do their service providers interact? |
| ***Competencies:*** | What skills and capabilities are in place to support these services? |
| ***Resources:*** | What resources (e.g., financial, capital, human) are in place to support these services? |

## CROSS CUTTING ISSUES

SYSTEMS:

- How is government-sponsored public health organized within the community?
  - Do multiple governments have jurisdiction within the community (e.g., city and county governments)? If so, how do these governments interact?
  - What is the organizational structure of the local health department(s)?
  - Is there a local board of health? If so, what are its responsibilities?
  - Do other local government agencies deliver public health services (e.g. occupational health services, environmental health)?
  - Does the local government contract with private sector entities to provide public health services?
- How is the state health department organized? What other state agencies deliver public health services?
- Through what mechanisms do the state/local governments obtain authority for the provisions of public health services?
- Are each of the essential services provided within the community?
- How are these essential services prioritized? By the LHD? By the SHD? By other government agencies? By the local board of health? By the community?
- Through what process are priorities established?
- What information systems are in place to support public health organizations and activities?
  - Computer resources
  - Community-wide network
  - State/Local connectivity
  - Internet access
  - Distance learning infrastructure

- Video conference

- Are these information systems considered adequate to provide necessary services?

**RELATIONSHIPS:**

- How do state/local governments define their respective missions and roles?
- How do states and localities share responsibility for the essential services?
- How are these respective roles and responsibilities changing over time? Are locals assuming greater levels of responsibility for providing public health services? For which services?
- How does the state interact with local public health agencies?
  - Reporting and Oversight
  - Technical Assistance
  - Facilitating local/local communication
- How are local public health agencies held accountable to the communities they serve?
  - Local Board of Health?
  - Executive oversight?
  - Board of Commissioners?
- Through what mechanism is this governance structure established and maintained? (e.g., Is the governance body elected or appointed? Does board hire/fire the health officer?)
- How do state/local public health agencies communicate with governance bodies charged with their oversight?
  - Local Boards of Health/Board of Commissioners communication?
  - State legislatures?
- Who initiates this communication?
- Do state/local health agencies believe they are influential in the promulgation of health policy?
- Do others believe public health agencies are influential in the promulgation of health policy?

- What is the perceived level of governmental responsibility for providing each of the essential services?

  1 = Government should assess if service is provided within community

  2 = Government should assure service is provided and provide if not otherwise available

  3 = Government and private sector share responsibility for provider service

  4 = Government retains responsibility-for provision, but may contract with private sector to deliver

  5 = Government should have sole responsibility

- What role does the private sector play in the provision of the essential services? What public health activities are they engaged in?

  – health plans/managed care organizations?

  – hospitals?

  – community-based organizations (churches, 501 c(3) organizations)?

  – physicians and other private clinical providers?

  – community coalitions?

  – academic institution (universities, research institutes)?

  – charitable foundations?

  – business/employers?

  – media?

- How are these private sector contributions changing over time?

- What role does the community believe the private sector should be playing in the provision of the essential services of public health? Are these expectations changing over time?

- Do state/local governments engage in a process to assess the level and appropriateness of private sector contributions?

- How do the state/local governments interact with Federal public health agencies?

COMPETENCIES:

- Are public agencies viewed as leaders in promoting the health of the community?
  - Recognized as substantive experts?
  - Influential in public and private decision making?
  - Respected as convener able to mobilize multiple parties to address community health problems?
  - Demonstrated vision for the role of proactive public agencies in promoting community health?
- Do public health professionals possess the political skills necessary to influence high level decision makers?
  - knowledge of political process
  - level of political "clout"
  - ability to leverage key constituencies
- Do public health professionals possess the communication skills necessary to inform others?
  - Community at large
  - Media representatives
  - Executives
  - Legislative bodies
  - Health professionals
  - Business leaders
  - Other public health professions
- Do public health professionals possess (or have access to) the business acumen necessary to interact effectively with the private sector?
  - negotiation skills
  - financial management skills
  - contractual expertise

- Do public health professionals possess the management skills necessary to access and coordinate the activities of public health agencies?
  - establishing clear goals/priorities
  - personnel oversight
  - MIS sophistication
  - performance monitoring
  - cross-agency/client collaboration
- Do public health professionals possess or have access to the technical skills necessary to effectively deliver the services they are responsible for providing?
  - analytic
  - scientific (lab technique)
  - statistical
  - teaching
- Do public health professionals possess the knowledge base (e.g. epidemiology, economics, sociology, toxicology) necessary to provide the services for which they are responsible?
- If not, how are skills deficient?
- Do public health professionals possess the cultural competency to provide the services for which they are responsible?
  - knowledge of how beliefs about disease affects health behaviors
  - ability to communicate messages meaningfully to multiple cultural or ethnic groups in a manner that promotes understanding
  - language skills

RESOURCES:

- What level of financial resources are devoted to public health? What are the sources of these funds? How are these funding sources changing over time?
- How are financial resources allocated across the essential services?

**METHODOLOGY WARNING: Extensive facilitation will be necessary to assist in allocation decisions and ensure comparability across sites. The Public Health Foundation has been refining this methodology through the Expenditure Project. Efforts to capture the information through the case study should build on these experiences.**

- Are existing information technologies adequate to provide essential services? If not, what areas are in need of development?

- Are existing physical plant facilities sufficient in size and maintained adequately? If not, what areas are in need of development?

- How many people are employed by the public health agency? How are these human resources allocated across essential services?

**METHODOLOGY WARNING: Extensive facilitation will be necessary to assist in allocation decisions and ensure comparability across sites.**

- How are these human resources allocated across occupational categories?

  – see Federal standards for classification categories.

SYSTEMS:

- What information is collected to monitor community health status? [Refer to survey results for initial assessment and verify accuracy]
  - Mortality?
  - Natality?
  - Cancer incidence?
  - Reportable diseases? Which diseases?
  - Hospital discharges?
  - Behavioral Risks?
  - Environmental conditions (e.g., water quality)?
  - Trauma registry?
  - Immunization Registry?
- Do these datasets provide community-level information?
- Has the community developed data tracking processes to monitor progress towards Healthy People 20 10 objectives? If not, what measures are not available and what data are needed to track these issues?
- Has the community developed data tracking processes to monitor progress towards state- or locally-established health priorities? If not, what measures are not available and what data are needed to track these issues?
- Do state/local public health agencies collect and report community-wide results for HEDIS measures and other health plan performance monitoring systems? Are these data used as benchmarks by health plans? If not, what measures are not available and what data are needed to track these issues?
- How do state/local public health agencies establish data needs and priorities? How do they develop new monitoring systems or surveillance processes to address emerging health concerns?
- What is the dominant form of data collection? Hard copy? Electronic disks/tapes? Electronic on-line, real-time? Electronic on-line batch?

- How frequently are data collected? Rolling basis? Quarterly? Annually?
- How is the validity and accuracy of data reporting ensured?
- How are data analyzed? Longitudinal examinations? Comparisons to benchmarks? Regressions to establish relationships across data points? Integrating data sets to establish relationships and examine causality?
- Are data disaggregated to identify problems for specific populations or geographic areas?
- What analytic tools are employed (e.g., Epi Info, mapping software, graphical interfaces, statistical software, data base management software)?
- Are data sets linked to expand analytic potential (e.g., linking birth records to Medicaid claims to monitor program effectiveness)? What linkages have been made? Were these one time only studies or are they on-going data processing efforts?
- What barriers are perceived to most significantly impede the effective collection and analysis of health information?
  - Poor reporting compliance?
  - Lack of electronic data?
  - Confidentiality concerns?
  - Lack of data standards?
  - Inadequate telecommunications technology?
  - Inadequate computing capabilities?
  - Inadequate analytic competencies?
  - Inadequate staff resources?
- Have comprehensive community health profiles been developed?
- How is information disseminated? To state health officials? To local health officials? To the public? To policy makers and executive decision makers? To private sector community partners?
- Are data released in a timely manner? How "old" are current data sources? What processes are in place to expedite data release (e.g., release of preliminary rates)?
- What tools are used to disseminate information? Hard copy reports? Internet-based publishing of reports? Interactive, Internet-based access to underlying datasets?

Customized Software? On-line information retrieval through Wide Area Networks? Public presentations? Community service messages? High-level briefings of decision makers? Legislative testimony?

- Have appropriate firewalls and other safeguards (e.g., passwords, encryption) been established to protect data security?

- Have national standards for data collection, transmission, analysis, and reporting been implemented?

- How is information typically used? To evaluate programs? To evaluate system performance? To establish public health priorities and plans? To influence health policy debate? To justify budget requests? To mobilize community action? To raise community awareness? To support a performance-based budgeting process?

RELATIONSHIPS:

- What state government agencies are responsible for collecting, analyzing, and disseminating health-related data?

- How does the state share data collection, analysis, and dissemination responsibilities with localities?

- How does the state disseminate community-level information to local health officials?

- How are data resources coordinated and streamlined within the state and/or local government?

- How are private sector data resources leveraged by public health agencies? Do public health agencies participate in private sector efforts to monitor community health and do they access this information if available?

- How do private sector organizations leverage information maintained and disseminated by the public health agency? Do private sector organizations value the role public health agencies play as a data collection agent?

- How has the information monitoring role of governmental public health agencies evolved in response to changing market conditions and increasing managed care penetration? Are managed care plans and consolidated provider networks turning to public health agencies for information to support their own performance monitoring efforts? If so, what type of data is being requested?

- Are new partnerships being established to build community data resources in an organized manner (e.g., capturing health plan number on birth record to streamline HEDIS reporting)?

- To what extent have public health agencies begun to privatize their data monitoring role? Establishing data reporting provisions in service delivery contracts? Contracting with private research institutions and consulting firms to manage information and surveillance systems? Suspending government sponsored surveillance and encouraging private sector monitoring?

- Are changing market conditions affecting the timeliness and compliance levels of state/local reporting requirements? Are efficiency pressures discouraging physicians from complying with reportable disease requirements? Are performance monitoring systems incentivizing improved reporting compliance (e.g., immunization tracking)?

- How do state and local governments leverage information resources at the Federal level? What data sources are used most commonly? For what purposes?

- To what extent do the states and localities rely on the Federal government for technical assistance related to health status monitoring?

**COMPETENCIES:**

- Do public health professionals possess or have access to:
  - Appropriate analytic skills?
    - Defining problem
    - Determining appropriate analytic approach and statistical methods
    - Selecting and defining variables
    - Evaluating the integrity and comparability of data
    - Identifying gaps in data sources
    - Understanding research design issues
    - Ability to make relevant inferences
  - Risk assessment and risk adjustment skills?
  - Analytic tools (e.g., EpiInfo, Statistical software)?
  - Skills related to presenting and packaging information for multiple audiences?

- Have public health agencies been successful in demonstrating the need for data monitoring capabilities and have they persuaded legislatures and local policy makers to support information system capacity?

- In what ways are existing skills and organizational capabilities inadequate for effective monitoring of community health status?

- How are competency development needs evolving in response to the changing health care environment? Packaging information more creatively to inform consumers and purchasers? Promoting the value and expertise of public health in data monitoring?

**RESOURCES:**

- How many staff members are devoted to data analysis?

- How many staff members conduct data analysis on an ad hoc basis?

- Is the existing information systems infrastructure adequate to support monitoring of community health status? In what ways is it inadequate?

- To what extent have public health agencies established fees for data dissemination services (e.g., charging for hospital discharge database extracts)? Are such data services self supporting?

SYSTEMS:

- What activities are being carried out to diagnose and investigate health problems and health hazards in the community?
  - Disease screenings (TB, HIV/AIDS, EPSDT, Chronic Diseases)
  - Investigations into communicable diseases (e.g., contagious disease, food borne illness, environmental contamination)
  - Laboratory testing and diagnosis
  - Environmental sampling and testing

[Refer to survey results and verify for accuracy]

- Which public health agencies are responsible for these activities? State level? Local level? Which organizational units?
- What information systems are in place to support electronic surveillance of disease? Environmental exposure? Reporting of laboratory results to providers? Do all relevant parties have access to these systems?
- Are these information systems considered adequate?
- What types of testing do the public health labs engage in?
- How many laboratory tests do the public health labs conduct in an annual period?
  - Microbiology
  - Immunology
  - Environmental Chemistry/Microbiology
  - Pathology
  - Toxicology
  - Clinical Chemistry
  - Occupational Health

- Does this represent an increase or decrease in service volume?
- How many investigations are conducted annually? Does this represent an increase or decrease in service volume?
- How are investigations triggered?
- How timely is investigative response?
- How often are environmental samples taken?
  - Water
  - Soil
  - Air
- What types of environmental testing are performed?
  - Heavy metals (Lead, Mercury)?
  - Asbestos
  - Radon
  - Pesticides/Toxins
  - Microbial contaminants
  - Carcinogens

**RELATIONSHIPS:**

- Rising managed care penetration increasing or decreasing public health agencies' responsibility for routine disease screenings?
- How does the public health agency encourage private providers to screen for communicable diseases (e.g., HIV/AIDS)?
- How does the public health agency encourage private providers and laboratories to report screening results?
- Has increasing managed care penetration affected reporting compliance from private (potentially out of state) testing laboratories?
- To what extent are public health labs outsourcing testing to private labs? For which types of testing?

- Are public health laboratories increasingly being asked to assume responsibility for specialized, expensive types of testing that are not commercially viable?

- To what extent do private sector providers rely on public health laboratories to perform specialized testing (e.g., isolate typing, drug resistance testing)? Have hospital consolidations and laboratory consolidations (which in turn lead to a decrease in private lab capacity) led to an increased diagnostic testing burden for public health labs?

- Are managed care providers contracting with public health laboratories to perform basic diagnostic testing for enrolled populations? If not, are public health laboratories experiencing a decrease in testing volume (and perhaps revenue) from Medicaid managed care patients whose tests are now being performed by private labs?

- In cases of public health emergencies (e.g., toxic spills, disease outbreaks), how does the health agency determine who should control and coordinate the public health response? How is the determination made to involve Federal agencies (e.g., CDC, FDA) responsible for responding to health emergencies?

- What mechanisms has the public health agency established with community organizations (e.g., schools, hospitals) to notify providers and community residents of public health emergencies?

- How does the public health agency communicate and interact with worksite-sponsored occupational safety and health programs?

- To what extent do the states and localities rely on the Centers for Disease Control and/or the Food and Drug Administration for technical assistance and expert advice related to disease outbreak investigations? Related to laboratory services and practice? Related to disease screening protocols and technique?

- What is the nature of these interactions? Under what circumstances is Federal involvement initiated?

**COMPETENCIES:**

- Do public health professionals possess or have access to:

  - appropriate scientific and epidemiological skills?

  - Appropriate laboratory science skills?

  - appropriate investigative skills including outbreak/ cluster investigation techniques, interview methods, and qualitative survey approaches?

  - Public relations skills?

**RESOURCES:**

- How many staff members are devoted to laboratory services? Investigative services? Screening services? Environmental sampling services?

- Has funding for diagnostic testing and investigative services remained stable over time?

- How are laboratory testing services funded? To what extent do public health labs rely on fees generated through service provision to sustain operations? Is this changing over time?

- Has the state developed criteria to assess the adequacy of public health lab facilities? Have facility assessments been performed? If so, how many of the existing labs meet these criteria?

- Are laboratory facilities deemed adequate? Are they considered "state of the art"? What capabilities are not appropriately provided for?

## ESSENTIAL SERVICE 3: INFORM, EDUCATE, AND EMPOWER PEOPLE ABOUT HEALTH ISSUES

SYSTEMS:

- What health education activities does the state and/or local health department provide? [refer to survey for initial assessment and validate results]
- What is the format of these health education efforts?
  - Classes (e.g., childbirth classes, CPR)?
  - Workshops for specific groups (e.g., worksite wellness)?
  - Public education campaigns (e.g., billboards, PSAs, broad media coverage)?
  - Season- or situation-specific health warnings in the media (e.g., flu season, heat stroke, dangers of shoveling snow)?
- Where is health education provided (e.g., one-on-one counseling/education, schools, worksites, churches, health fairs, etc.)?
- Has the health agency participated in or sponsored conventions to educate the public or health professionals about specific topics? What topics has the health agency presented on? What has been the health agency's role in developing conference agendas?
- What health education programs are considered to be high priority? How is this priority established? How closely do health education efforts conform to current health issues in the community?
- How are health education efforts tailored to the language and cultural needs of the people living within the community (e.g., information printed or presented in other languages or to particular members of the sub-community)?
- How do results of community health assessments guide the health education planning and programming?
- Are results of community health assessments used as a tool to educate the community? The media? Executive decision makers? Legislative bodies?
- What information is provided to legislators and other policy-makers? How are these stakeholders educated about emerging health issues?
- Does the health agency release national surveillance and survey data needed by health professionals, government agencies, and community-based organizations to measure

progress toward national health objectives (e.g., Healthy People 2000) and inform the community of local level performance?

- Does the health agency maintain a web page of health information for the community? If so, does this web page include information from other community organizations? What kinds of information have you made accessible? How was that information chosen ? Are the internal capabilities to post information to the web sufficient?

**RELATIONSHIPS:**

- What is the local vs. state role in educating the community about health issues and health emergencies? Is the health education role mandated for either level? For specific health issues?

- What are the local vs. state roles in disseminating health status information to community members? What information does the state produce? What information do the locals produce?

- What is the role of the local board of health in informing the public about health issues? Does the board of health have an active role in the development or approval of health education materials or programs ? In determining what media messages should be developed?

- What other organizations are involved with health education efforts (e.g., managed care plans, churches, schools, businesses, not-for-profit organizations)? What kinds of health education programs or campaigns are the private sector organizations involved with? Are their campaigns effective at reaching their audience and changing behavior?

- Does the health department seek to track the health education efforts of private sector organizations?

- How is responsibility for health education coordinated between the public and private sectors? Do private sector programs overlap with or duplicate the programs offered by the health agency?

- Does the health agency maintain frequent contact with the local or state media? Is the health agency effective at leveraging the media and community networks to disseminate health information?

- Does the health agency provide technical expertise to organizations who wish to disseminate information to the community? Is the health agency often viewed as a technical assistant?

- What Federal resources and assistance do the state/local health agencies leverage in conducting its health education activities?

COMPETENCIES:

- What are the qualifications of health educators within the health agency (including clinical staff that interact with patients/clients)? What are the qualification of private sector health educators?

- What experience have the health agency educators had in relaying specific health education messages (e.g., relevant to a specific disease or situation)? Are they clinically or technically qualified to provide specific health messages?

- What experience do staff members have in mass communication? Are staff capable of developing PSAs, dealing with the media, and communicating difficult messages in easy-to-understand formats? Do any of the staff have specific training in mass communications and/or marketing?

- How many staff speak or understand foreign languages? Does the health agency maintain a list of staff members who are available for translation? Has there been an effort within the health agency to identify other cultural difficulties experienced by their clients, and to try to remove those difficulties?

- Does the health agency conduct structured programs for employees (particularly for community outreach employees) concerning the linkages between culture and health behaviors and attitudes?

- Is the health agency perceived as a central source of reliable health information in the community? Is this true in both emergent and non-emergent situations?

- To what extent is the health agency viewed as a leader in identifying health education priorities and encouraging organizations to act upon these priority areas?

RESOURCES:

- How many staff are actively involved in providing health education?

- How is health education funded? Is there sufficient funding for appropriate dissemination of health information and reports? What has been the trend in funding in recent years?

- What health education materials are currently available to support education programs? What other resources or organizations does the health department draw upon to access educational packages and presentations (e.g., foundations, private sector organizations, community-based organizations)?

- Is there sufficient information systems capability to coordinate and publish health information? What is the nature of these systems? Is the capacity sufficient to create and disseminate information in a timely manner for use by policy-makers and the public?

SYSTEMS:

- What activities has the state public health agency engaged in to encourage collaboration within state government? With private sector organizations?
- What activities has the local public health agency engaged in to encourage collaboration within local government? With other community organizations?
  - partnerships to influence changes in the structure of the health care system (e.g. conversions)?
  - partnerships to improve the practice of medical care?
  - partnerships to facilitate the delivery of clinical preventive services?
  - partnerships to promote healthy lifestyles?
  - partnerships to provide care to indigent patients?
  - partnerships to monitor community health?
  - partnerships to monitor health care quality and accessibility?
  - partnerships to leverage resources and political support for public health activities?
  - partnerships to coordinate health resources capacity use?
- How does the public health agency initiate and sustain these partnerships? What have these partnerships accomplished?

RELATIONSHIPS:

- Who does the public health agency partner with?
- What role has the local/state health department played in developing and maintaining partnerships?
- Is the public health agency seen as a leader in mobilizing partnerships?
- Has increasing managed care penetration improved, hindered, or had no effect on partnership opportunities? In what ways has managed care influenced collaboration efforts?

- Does the public health agency actively participate in collaboration efforts initiated by others? (e.g. hospitals)?
- Is the public health agency typically the convener of communities partnerships?
- Are distinctions made between partnerships and contractual relationships?

**COMPETENCIES:**

- Do public health professionals have the leadership skills necessary to mobilize community action?
- Do they have political clout and study within the community?
- Does the community recognize and seek the technical and substantive expertise of health department officials?
- Are public health officials able to recognize and address the interests/perspective of multiple stakeholder groups within the community?
  - providers?
  - health plans?
  - purchasers?
  - consumers?
  - academia?
- Are public health officials capable of communicating their expertise to a wide audience? Can they "package" their messages for multiple audiences?

**RESOURCES:**

- How are collaborative activities typically funded? How much does the public sector contribute? Private sector?
- Are most collaborative activities "in-kind" contributions or do they regularly involve financial investments?

## ESSENTIAL SERVICE 5: DEVELOP POLICIES AND PLANS THAT SUPPORT INDIVIDUAL AND COMMUNITY HEALTH EFFORTS

SYSTEMS:

- Has the state health department developed a health improvement plan? If so, is this plan based on health assessment data? Are funding allocations based on the priorities established in the health plan?
- Has the local health department developed a health improvement plan? If so, is this plan based on health assessment data?
- How is the local planning process tied to revenue sources?
  - Are there specific planning requirements for specific programs?
  - How are plans related to the budget cycle or funding from state or federal sources?
  - Are health plans required for general funding?
  - Is planning activity related to statute requirements?
  - Are funding allocations based on the priorities established in the health plan?
- What planning activities are currently or have recently been conducted? [Refer to survey results and verify responses]
  - Are the plans program-specific, service-specific, or agency-wide?
  - Are the plans strategic, operational, or problem-specific in nature (e.g., a specific disease or response to a sentinel event)?
  - How does the agency's approach to planning for these different circumstances differ?
  - How often are plans updated?
- How has the health agency planned for changes in Medicaid and Medicaid managed care? Has the health agency had a major role in defining the relationships between the health agency and the Medicaid agency in implementing these changes?
- How are plans used? Do plans help establish priorities? Is there tangible evidence of plans being used?
- Is the information systems infrastructure sufficient to provide ongoing monitoring of progress toward plans? Is monitoring conducted at the local or state level?

- How is the state/local health department involved in the development of health policy?

RELATIONSHIPS:

- Does the state provide technical assistance to the locals when developing their plans? What form does this technical assistance take (e.g., hotline, local liaison, planning guide or instructions)? How useful is this technical assistance? What feedback does the state provide about the feasibility or reasonableness of the local-level plans?

- Does the state establish health priorities or health performance measures for the locals?

- How are health plans from multiple related units or agencies coordinated to ensure optimal community health? Are these plans coordinated with respect to providing services to overlapping client bases?

- What role does the health agency have in reviewing and/or approving the health delivery plans of contracted organizations or managed care organizations? Does the health agency have the authority to require that those organizations include specific provisions in their plans? Are those organizations required to submit plans to the health agency?

- How is information collected, analyzed, and packaged to support legislative and programmatic decision-making? What effort has been made to make plans accessible and useful to policy-makers? How are plans translated into legislation?

- How is the community involved in the planning process? Is the community directly involved (e.g., are there focus groups or response periods for the plans)? How is their input incorporated into the planning document? What factors determine how community input will be used in planning for future services or in establishing goals?

- How successful have the health agency's efforts been in developing coalitions and partnerships to improve program planning and increase legislative action on specific issues? What role does the health agency play in developing plans that guide these coalitions?

- What is the role of the Local Board of Health in planning?

  - Review or authorize the plans developed by the health agency?

  - Direct/suggest what the structure or content of the plans will be?

  - Monitor the implementation of plans?

  - Oversee how plans are carried out or how the health agency achieves its plans?

– Establish the health policies in the area? How does the local board of health interact with the health agency in this responsibility?

**COMPETENCIES:**

- Have the planning staff been trained to use planning tools such as APEX/PH or other tools? Are the staff familiar with and do they use established forecasting and planning processes/techniques?

- If staff develop performance measures, what is their background to do so? Does the staff have substantive expertise in determining reasonable performance measures for a given health priority, program, or service?

- Are the staff able to articulate the health, fiscal, administrative, legal, social and political implications of various policy options being considered?

- What experience does the staff have in determining the feasibility and expected outcomes of various policy options?

- How effective are staff in developing plans to implement policies, including establishing goals, outcome and process objectives, and implementation steps?

- Do the staff have or have access to expertise in developing grant proposals for external funds?

- How does the agency leadership encourage the timely and complete development of plans? Does the importance of planning change depending on what is being planned? How does this affect the timeliness of plans?

- Does the leadership have a vision for the agency that is reflected in plans? How is this vision communicated to the staff! If there is no clear vision, what other factors determine the relative importance of planning efforts?

- Does the health agency use its planning process to encourage community focus on health priorities?

- Does the health agency have the leadership to influence policy development at the local and state levels?

**RESOURCES:**

- How many people are devoted to planning? Does this change during the planning cycle?

- How is planning financed? Is there a budgetary line item devoted to planning, or is this activity supported through program or general funds? How much funding is available to develop plans? To disseminate plans?

- How has funding for planning changed in recent years? What have been the causes for these changes?

- Have planning guides or manuals been developed to facilitate the planning process within the health agency? Has the health agency adopted planning tools or structures to facilitate planning (e.g., APEX/PH, HP2000 goals, etc.)? How does the agency rely upon past plans to develop future plans?

## ESSENTIAL SERVICE 6: ENFORCE LAWS AND REGULATIONS THAT PROTECT HEALTH AND ENSURE SAFETY

SYSTEMS:

- What laws and regulations is the state/local health agency responsible for enforcing?
  - occupational health codes?
  - food handling and storage?
  - environmental codes?
  - health facilities codes?
  - recreational facilities codes?
  - solid waste disposal codes?
  - water treatment codes?
- How have regulatory responsibilities been delegated from state to localities?
- How are enforcement proceedings initiated? How many are conducted on an annual basis?
- Have formal protocols been established? Distributed? How?
- What are the consequences of non-compliance?
- What is the incidence of non-compliance?
- Do enforcement activities include a educational component?
- How are codes updated to reflect emerging technologies and new scientific evidence? How often have codes been modified?

RELATIONSHIPS:

- Are regulatory responsibilities integrated with other public health functions (e.g. epidemiology)?
- Is information gleaned from enforcement activities incorporated into health monitoring activities?
- Has the public health agency begun to contract with private sector vendors to provide any inspection or enforcement services?

- Has the public health agency delegated any enforcement/education to private sector?
  - Vendors?
  - Trade Associations?
  - How does the public health agency interact with law enforcement and public safety agencies to ensure compliance with public health codes?
- How do regulated organizations inform and influence the regulatory process?
- What guidance does the Federal government provided related to inspection protocols and regulatory models?
- To what extent does the state/local health agency utilize technical assistance from the Federal government? What agencies are the primary source of this assistance?

**COMPETENCIES:**

- Are public health professionals who are responsible for enforcement activities knowledgeable about relevant laws and regulations?
- Is the regulation workforce perceived to be adequate in terms of size? Skill mix?
- Are they trained in appropriate inspection techniques?
- Do enforcement personnel have the communication skills necessary to educate regulated organizations about compliance issues?
- What are the professional developmental needs of regulators?

**RESOURCES:**

- How are regulatory activities funded?
- Has funding for regulatory efforts remained stable over time?
- Do staff have access to the appropriate equipment and supplies necessary to enforce laws and regulations?

## ESSENTIAL SERVICE 7: LINK PEOPLE TO NEEDED PERSONAL HEALTH SERVICES AND ASSURE THE PROVISION OF HEALTH CARE WHEN OTHERWISE UNAVAILABLE

SYSTEMS:

- What personal health services does the health agency provide? [Refer to survey results and validate responses]
  - What clinics does the health agency (either local or state) operate or fund within the community?
  - What services does the health agency provide or sponsor at these clinics?
  - What other personal health services (e.g., home health care) does the health agency provide? Are these services contracted out or provided internally?
  - What case management services does the health agency provide? Are these case management services coordinated with other agencies' services (e.g. Medicaid, social services, welfare)?
  - Does the health agency operate a referral hotline?
- How have the scope and presence of personal health, mental health and substance abuse services provided by the health agency changed in recent years? To the extent that services are being reduced or curtailed, what communication or coordination has the agency engaged in to ensure that care would still be available in the community? Are 24-hour care services available for behavioral health problems? If yes, what are the levels of these services?
- How do people access personal and behavioral health services? What are the points of entry and what in take mechanisms exist?
- How has the scope and presence of services been impacted by increasing managed care penetration?
- How has the public health agency been involved with community outreach for personal health services? *Are* services advertised? How has the health agency encouraged the use of services, or links to community services? Does the health agency have a plan and methods for linking people to needed personal health services?
- What responsibilities does the health agency have for caring for vulnerable populations? Are there specific personal health services that the health agency must provide for specific populations? What are these, and how does the health agency provide them?

- Does the health agency have sufficient information systems to track their clients' use of personal health and related services? Can the information systems track:
  - Continuity of care, within the public health system and with private organizations and providers
  - Access to care for the chronically ill or disabled?
  - Consumer satisfaction with available health care?
  - Utilization?
- Do clients have a common client identifier that enables tracking and coordination of care?
- What changes in the information systems infrastructure are planned to improve service delivery or data integration?
- Has the health agency developed and adopted confidentiality and security measures for client information? What measures are in place to ensure confidentiality? Who has access to computerized client information?
- How are health services data analyzed? What organizational unit is responsible for this analysis? What analysis is conducted?

**RELATIONSHIPS:**

- What is the state/local relationship with regard to personal health services?
  - What personal health services are provided directly by the state within specific communities? Does this vary depending on whether a local health department is present in that community?
  - What personal health services are the responsibility of the local health department? Does this vary from locality to locality? What personal health services must the local health department provide?
  - How are state and local services coordinated? How are services provided by different agencies (e.g., Medicaid, social services) coordinated?
- What agency or agencies are involved with providing personal mental health or substance abuse services? How are these services coordinated with physical health services? Does the state or local level provide mental health and substance abuse services? What referral mechanisms have been established between the personal health services delivery system and the behavioral health system?
- How are social services coordinated with physical health services for clients using both services? What level of government or agency is responsible for each type of

service? Are these services co-located (e.g., a WIC site co-located with a well-children's clinic)?

- What role is the health agency taking to help other organizations develop primary care resources in underserved areas? Does the health agency provide money or other resources to support specific personal health services in the community?

- What Federally-Qualified Health Centers (FQHCs), community organizations, and private providers serve vulnerable populations in the community? What populations do they serve? What services are available at these sites? What is their capacity for providing care (e.g., staffing level, space capacity, hours of operation)? Are they easily accessible by their target populations? How do these providers interact with the health agency?

- What is the role of managed care organizations in providing care to Medicaid and other vulnerable populations? What services do they cover? For services that are not covered, how are clients made aware of other sites of care in the community?

- How has managed care influenced the personal health care responsibilities of the state/local health department?

- Are public health clinics well positioned to compete with managed care organizations to attract Medicaid patients?

- How are continuity of care issues addressed between the health agency and managed care providers? For what services may Medicaid managed care patients use the public health system of care? What responsibilities does the health agency have toward these patients?

- Is the health agency included as a managed care provider for Medicaid managed care patients? How has the health agency had to alter its care or billing practices to participate as a managed care provider?

- What role does the health agency have in overseeing the performance of managed care entities? What performance measures must the managed care organization meet to continue to provide for these populations?

- Do managed care and other entities (e.g., Medicaid) share information with the health agency regarding common clients? How? Can information be retrieved online on a real-time basis, or are the files updated in batches? At what level is this information integrated (e.g., state server, local level, etc.)?

- What contracted services are provided by private sector organizations? For what services are these organizations contracted? For what populations? What formal or informal communication and oversight does the health agency have over these relationships?

- How has the health agency worked with corporations, churches, and other community organizations to conduct public health nursing or other health services at **community** locations?

- What forums are available among community and governmental providers to address issues of coordination and availability of services? Have these forums been successful in making needed services available?

- Has the health agency actively gained the support of other providers in the community for its role as the safety net provider? How has this support manifest itself? Are other providers interested in maintaining the role of public health in the provision of personal services?

- Has the health agency partnered with community organizations or local providers to provide personal health services? What is the nature of these partnerships (e.g., physicians staffing health clinics on a volunteer basis, collaborative operation of a clinic)?

- What role does the local board of health play in the establishment or maintenance of personal health services? What is the local board of health's role in advocating partnerships between the health agency and community or private organizations to provide personal health services?

- How does the state/local health agency interact with the U.S. Department of Health and Human Services, particularly the Health Resources and Services Administration and the Substance Abuse and Mental Health Services Administration, to monitor the adequacy of health services? To manage existing health resources? To access funding for indigent populations?

COMPETENCIES:

- Do the staff have sufficient qualifications to provide health services or case management services to clients? What is their experience with providing services to indigent populations?

- Are the staff qualified and competent to monitor service contracts? What is the depth of experience in contract management? Are there sufficient staff dedicated to coordinating services with and collecting data from service providers (including managed care)?

- Has the agency mobilized coalitions to advocate for the role of public health as a safety net provider? What other efforts has the health agency initiated to improve the visibility of public health in providing services?

- Is the health agency perceived to be a leader in developing innovative programs to meet the unique needs of its community? By whom? Is the health agency viewed as a leader in identifying gaps in the health system relating to indigent care services?

What community efforts have been developed due to the health department's leadership?

- Does the health agency act as a catalyst for the coordination of health and welfare services in the state or community? What infrastructure has been developed to support these coordination efforts?

RESOURCES:

- How many staff are involved with providing personal health services? How many of these are nurses? Physicians? Other clinicians?

- How are personal health services financed (i.e., sources of revenue)? How has this financing changed with the advent of managed care? Is financing for personal health services dependent on program-specific funding?

- What is the age of the physical plant(s) owned by the health agency in which personal health care services are provided? How recently have these facilities been renovated? What criteria has the health agency established to determine whether a site is adequate (e.g., capacity, technology, facilities)? How many sites meet this criteria?

- Does the health agency have a billing system that is sufficiently flexible to handle capitated payments from managed care organizations? What would be necessary to improve this capability?

- What information systems are in place to track utilization and coordination of personal health services? In what ways are the information systems inadequate?

## ESSENTIAL SERVICE 8: ASSURE A COMPETENT PUBLIC HEALTH AND PERSONAL HEALTH CARE WORKFORCE

SYSTEMS:

- How does the state public health agency assure the competence of the public health workforce at the state level? The local level?
- How does the local public health agency assure the competence of the local public health workforce?
  - minimum education requirement/experience requirement?
  - performance appraisals?
  - formal performance criteria?
  - collaboration with schools of public health to influence curriculum?
  - continuing education progress?
  - professional development activities?
- Has a systematic assessment of staff competency been conducted?
- How are deficiencies being addressed?
- How are emerging professional development needs identified and addressed?
- Has the state/local health agency developed a continuing education plan for public health workers? Has the plan been implemented?
- How does the state public health agency assure the competence of the personal health services workforce?
  - licensure?
  - review boards?
  - disciplinary action?
  - performance criteria and measurement?
  - advocacy activities to ensure adequate resources are devoted to training health professionals and to influence curricula development?

RELATIONSHIPS:

- How does the health agency interact with professional associations and academic institutions to establish training programs, develop performance criteria, establish continuing education plans, and monitor competency levels?

- How does the health agency interact with managed care plans and hospital credential boards to influence panel selection and credential criteria?

- How does the health agency interact with the Federal government, particularly HRSA's Bureau of Health Professions to ensure the competence of the health workforce?

COMPETENCIES:

- Are the state/local health departments viewed as leaders in ensuring the competency of the public and personal health workforce?

- Are public health officials trained and qualified to make these determinations?

## ESSENTIAL SERVICE 9: EVALUATE THE EFFECTIVENESS, ACCESSIBILITY, AND QUALITY OF PERSONAL AND POPULATION-BASED HEALTH SERVICES

SYSTEMS:

- Does the health agency evaluate its own programs? How often? What is the nature of these evaluations? What initiates these evaluators?
  - Are performance indicators in place for specific activities or programs to determine effectiveness? Has evaluation led to changes in activities or programs?
  - What information is necessary to complete each evaluation? How do the evaluations vary by the type of program?
  - Does the health agency use client-based information to conduct these evaluations?
- Does the health agency evaluate its internal processes, staff competencies, and policy effectiveness? What impacts have these evaluations had?
  - Are strategic plans evaluated for feasibility and cost-effectiveness? Who evaluates the plans?
  - Has the health agency assessed its ongoing capacity to implement policies and plans, and to sustain performance-based partnerships?
  - What minimum standards are in place to ensure that the public health workforce is performing at an acceptable level? What is the nature of these standards?
  - What training needs assessments or competency assessments have been conducted within the past year? What have been the results of these assessments?
  - Have there been evaluations of the health agency's public presentations regarding clarity, structure of the presentation, and appropriate communication of necessary information to the audience in question?
- What role does the health agency have in monitoring contracted vendors? What performance standards are in place for these contractors? How does the health agency measure and evaluate their performance? Are these evaluations based on health agency data or contractor-provided information?
- How does the health agency monitor the effectiveness of regulations? Have specific performance measures been established to indicate when regulations are successful? Is the cost-effectiveness of monitoring and enforcing regulations considered when determining regulatory effectiveness?

- Does the health agency have a CQI process in place? What is the nature of this process? Who is involved? How has the CQI process been used to identify and rectify problems?

- What, if any, benchmarks or standards are used to determine when performance is sub-optimal? How were these standards developed?

- Does the health agency evaluate managed care organizations? What role does the health agency have in licensing HMOs? What efforts has the health agency taken to evaluate the effectiveness of managed care organizations in meeting the needs of vulnerable populations?

  - How are managed care organizations' effectiveness measured, and how often are they evaluated?

  - What information is collected from managed care organizations?

- Does the health agency evaluate the health system in general (e.g., services available to specific populations, overall efficiency of health care in the community)? What have been the results of these evaluations?

  - Evaluation of access to and gaps in care or services for the uninsured or indigent?

  - Evaluation of appropriate use of services by clients and appropriate targeting of services to specific populations?

  - Does the health agency conduct evaluations using hospital outcomes data?

  - What performance indicators have been employed?

- What data used for evaluative purposes is collected electronically? How often is this data updated? What are the sources of these data?

  - What data is collected on service availability, cost and outcomes?

  - What data is collected on the resources expended to achieve specific outcomes?

  - What data is collected or analyzed to determine the quality of services (population-based and personal) provided?

- What kinds of evaluations include data from multiple data sources? How is the data for these evaluations collected and used during the evaluation process? Are the data integrated electronically for the purpose of conducting these evaluations? How are the data integrated?

- How are the results of health **care system** evaluations used?

RELATIONSHIPS:

- Are evaluations required (either by program or overall)? By whom? What evaluations are required as part of block grant programs?

- What evaluation does the state conduct directly to monitor locals' performance? Does the state audit locals' adherence to regulations or statute? Does the state analyze the locals' data on health outcomes or services to evaluate performance?

- What evaluations does the state health agency conduct of its own activities? How do these evaluations relate to the local level evaluations (e.g., are the same measures used, are they reported in the same format, is the data from the state and locals compared to determine relative effectiveness)?

- Does the state develop performance measures to be used at the local level? What are these measures? What other measures does the local health agency use to monitor its own performance (e.g., patient satisfaction surveys, complaints)?

- To what extent are the locals or state held accountable for achieving their strategic planning goals? What impacts are there if they do not meet those goals?

- How is the public health agency monitoring the changing public health/ managed care relationship to ensure appropriate services are being provided or are available? What systems are in place to ensure accountability? How is accountability measured?

- What responsibility or effort has the health agency undertaken in evaluating programs offered by other private organizations? What technical assistance does the health agency provide to other organizations as they evaluate themselves?

- How are the results of evaluations communicated to key stakeholders (e.g., state government, budget offices, legislators, state health agency)? What is the frequency of this communication?

- How does participation in quality or health system monitoring groups increase the community's awareness and support of the health agency's evaluation responsibilities?

- Has the health agency formed partnerships or conducted evaluation activities jointly with community organizations (e.g., United Way, community health task forces)? What has been the scope of these evaluations? What have these evaluations found, and how were the results used?

- Has the health agency worked with other organizations or providers to evaluate the gaps in service delivery or service quality in the community? What have been the structures of these partnerships? Why were they formed?

- What partnerships has the health agency engaged in with managed care organizations to evaluate the care provided to Medicaid managed care enrollees? Was this collaboration conducted as part of a state or contractual mandate? What role did each of the partners play? Is the evaluation ongoing?

- How is the local board of health involved in conducting, interpreting, or acting upon health agency evaluations? Does the board of health have evaluation responsibilities of its own? What does it evaluate?

- To what extent has the health agency leveraged materials, performance indicators, and technical assistance from the Federal government (e.g., Agency for Health Care Policy Research, SAMSHA, HRSA, CDC) to support its evaluation activities?

- What Federal program evaluations have been conducted for public health agencies at the state or local level? How were these evaluations used by state and local health departments to guide their own planning?

COMPETENCIES:

- Do staff have appropriate facilitation skills to gather information on effectiveness, accessibility and perceptions of quality from community members?

- Do staff have experience in the methods and limitations of health program evaluation? Are they trained in evaluative techniques?

- What experience do staff have in communicating with managed care organizations and other contractors about their performance? How effective are their communication skills in changing sub-standard performance?

- How experienced are staff members in analyzing data necessary to complete program evaluations?

- How effective is the health agency in effecting change in the health delivery system as a result of evaluative studies conducted? Is the agency viewed as an agent or catalyst for health system change?

RESOURCES:

- What staff resources are dedicated to evaluating programs, the overall health system, or the agency's operations? Where are these staff located (e.g., level of government, organizational unit)?

- What is the level of funding for evaluations? If evaluation is a requirement for specific programs, is the expense of conducting the evaluation included in the program's funding? To what extent are evaluations conducted using general funds? Has the health agency secured grants to evaluate programs, the health care system (including HEDIS or managed care evaluations), or its own operations?

## ESSENTIAL SERVICE 10: RESEARCH FOR NEW INSIGHTS AND INNOVATIVE SOLUTIONS TO HEALTH PROBLEMS

**SYSTEMS:**

- What research is the state/local health agency engaged in relative to:
  - Biomedical and clinical preventive services
  - Epidemiology
  - Health services research
  - Information systems effectiveness
  - Public health outcomes research
  - Cost effectiveness analyses
  - Development of best practice models
  - Policy analyses
  - Demonstration projects
- How are research results disseminated? To public health professionals? To personal health care professionals? To the media? To the general public? To policy makers?
- How does the state/local health agency establish its research agenda?
- How are research findings incorporated into health planning and resource allocation decisions?

**RELATIONSHIPS:**

- Does the state/local health department participate in research efforts sponsored by:
  - the Federal government?
  - Schools of Public Health and other academic institutions?
  - Private sector providers and health plans?
- How does the state/local health agency access results of research sponsored by these entities?
  - Professional conferences

- Peer reviewed literature
- Informal communications
- Continuing education programs

- What mechanisms are in place to encourage cross-disciplinary research?

COMPETENCIES:

- Are public health professionals trained in research design and methodologies?
- Are public health professionals encouraged to keep abreast of new knowledge and emerging discoveries? If so, how?
- Do public health professionals possess the skills necessary to persuade policy makers to allocate resources to the investigation of innovative approaches to health problems?

RESOURCES:

- What level of funding has been available to support public health research?
- Has funding for research increased, decreased, or remained stable over time?
- What revenue sources are used to support public health research?
- Is funding for research incorporated into programmatic allocations or is it treated as a stand alone budget item?

6179

The LEWIN GROUP

# Strategies for Obtaining Public Health Infrastructure Data at Federal, State, and Local Levels

# Final Report

**U.S. Department of Health and Human Services**

***December 1997***

**Contract Number: 282-95-0021**

Fairfax, Virginia
San Francisco, California
Cambridge, Massachusetts

# Strategies for Obtaining Public Health Infrastructure Data at Federal, State, and Local Levels

# Final Report

**U.S. Department of Health and Human Services**

***December 199 7***

**Contract Number: 282-95-0021**

## ACKNOWLEDGEMENT

The Lewin Group would like to recognize and thank the many individuals who contributed their time and expertise to this effort. In particular, we extend our sincere appreciation to the project steering committee who generously provided their guidance and advice throughout the course of the project:

***Sue Addiss,*** *Board Member*
*Public Health Foundation*

***Robert Anderson,*** *Director of Criminal Justice*
*National Association of State Alcohol and Drug Abuse Directors*

***Judith Arnold,*** *Deputy Commissioner*
*New York State Department of Health*

***Anne Barry,*** *Commissioner of Health*
*Minnesota Department of Health*

***Tony D -'Angelo,*** *Principal Statistician*
*Indian Health Service*

***Caswell Evans, Jr.,*** *D. D.S., M.P.H., Assistant Director of Health Services*
*Los Angeles County Department of Health Service*

***Earl Fox,*** *Acting Administrator*
*Health Resources and Services Administration*

***Mary Anne Freedman,*** *Director, Division of Vital Statistics*
*National Center for Health Statistics*

***Kristine Gebbie,*** *Senior Advisor, Public Health Functions*
*Office of Disease Prevention and Health Promotion*

***Donald Goldstone,*** *Ph.D., Director*
*Substance Abuse and Mental Health Services Administration*

***Paul Halverson,*** *Assistant Professor of Health Policy & Administration, Associate Director of Public Health Leadership Program*
*University of North Carolina, School of Public Health*

***Allen Keme,*** *Program Analyst*
*Substance Abuse and Mental Health Services Administration*

***Patrick Lenihan,*** *Deputy Commissioner*
*Chicago Department of Public Health*

***Ron Manderscheid,*** *Chief, Survey & Analysis Branch*
*Substance Abuse and Mental Health Services Administration*

***Noel Mazade****, Director*
*National Association of State Mental Health Program Directors Research Institute*

***Mary McGlothlin****, Director, Washington County Dept. of Health*
*National Association of County and City Health Officials*

***Arden Miller,*** *Professor, Maternal and Child Health*
*University of North Carolina, School of Public Health*

***Mike Millman****, Senior Staff Fellow*
*Health Resources and Service Administration*

***Ray Nicola,*** *Associate Director*
*Division of Public Health Systems, Centers for Disease Control and Prevention*

***Edwin Pratt, Jr.,*** *President*
*National Association of Local Boards of Health*

***John Romani****, Professor of Public Health Administration*
*University of Michigan School of Public Health*

***Bernard Turnock****, Director, Community Health Sciences*
*University of Illinois at Chicago School of Public Health*

***George Van Amburg****, State Registrar and Chief*
*Office of the State Registrar & Division of Health Statistics, Michigan Department of Community Health*

Several people contributed their time and experience to support the steering committee in its work. We would like to thank these individuals for their efforts:

***Mike Barry,*** *Project Manager*
*Public Health Foundation*

***Ron Bialek,*** *M.P.P., Executive Director*
*Public Health Foundation*

***Jackie Bryan,*** *RN, MS, CIC, Director of Health Policy*
*Association of State and Territorial Health Officials*

***D. W. Chen**, M.D., M.P.H., Lieutenant Commander*
*Health Resources and Services Administration*

***Debbie Maiese**, Senior Prevention Policy Advisor*
*Office of Disease Prevention and Health Promotion*

***Nancy Rawding**, M.P.H., former Executive Director*
*National Association of County and City Health Officials*

***Brian Roherty**, Executive Director*
*National Association of State Budget Officers*

***Porn Sinnock**, Chief Health Systems Research Branch*
*Division of Public Health Systems, Public Health Practice Program Office*
*Centers for Disease Control and Prevention*

***Tom Stanitis***

***James Studnicki, Sc.D.**, Professor of Health Policy and Management*
*University of South Florida, College of Public Health*

***Henry Wulf***
***U.S.** Bureau of the Census*

Many state and local health officials offered their guidance and expertise by participating in information user groups and state/local site visits. We are truly grateful for their valuable contributions.

We would like to extend our appreciation to ***James Scanlon*** and ***Dale Hitchcock, our*** project officers at the Assistant Secretary for Planning and Evaluation for their assistance and direction. ***Phil Lee,*** M.D., who as Assistant Secretary of Health took a direct personal interest in this important work, played a pivotal role in initiating and sustaining this effort. Special thanks to ***Bobbie Berkowitz,*** Ph.D. and ***Elizabeth Ward*** for their thoughtful comments, constructive advice, and constant support.

We would also like to recognize the important contributions of ***Roz Lasker,*** M.D. whose creativity, insights, and expertise have guided this project since its inception.

The opinions and recommendations presented in this document are those of the authors. Review and comment by our steering committee does not in any way represent their endorsement of these views.

# TABLE OF CONTENTS

EXECUTIVE SUMMARY .....

I. INTRODUCTION ..... 1

A. DEFINITION OF PUBLIC HEALTH INFRASTRUCTURE ..... 2
B. PURPOSE OF PROJECT.. ..... 5

II. METHODS AND RESULTS OF THE NEEDS ASSESSMENT ..... 6

A. NEEDS ASSESSMENT METHODOLOGY ..... 6
B. NEEDS ASSESSMENT RESULTS ..... 7

III. METHODS AND RESULTS OF THE EXISTING DATA SOURCE ASSESSMENT.. ..... 9

A. EXISTING DATA SOURCE ASSESSMENT METHODOLOGY.. ..... 9
B. RESULTS OF EXISTING DATA SOURCE ASSESSMENT.. ..... 10

IV. GUIDING PRINCIPLES FOR THE DATA STRATEGY DEVELOPMENT EFFORT ..... 14

V. STRATEGIES FOR OBTAINING INFRASTRUCTURE DATA ..... 15

A. NATIONAL SURVEYS ..... 15
B. CASE STUDIES ..... 19
C. RESEARCH AGENDA ..... 24

VI. RECOMMENDATIONS ..... 27

VII. STRENGTHS AND LIMITATIONS OF PROPOSED STRATEGY ..... 30

A. STRENGTHS ..... 30
B. LIMITATIONS .. ..... 31
C. SUMMARY ..... 32

## EXECUTIVE SUMMARY

Changes now taking place in the health care system are profoundly affecting the way health services are financed, delivered, and regulated. Both legislative reforms and dynamic market forces, (e.g., devolution of responsibilities to states and localities, increasing managed care penetration, and health system consolidation) are blurring traditional distinctions between personal health care and public health services. At the same time, policy makers are appropriately calling for increased accountability and efficiency from both public and private health providers. Given these trends, the public health community is reevaluating the role it should play in the changing. health care system and is questioning whether the existing public health infrastructure appropriately supports these evolving responsibilities.

Despite these imperatives, policy makers, public health professionals, and researchers currently do not have access to comprehensive information on the capacity and functioning of the public health system. This type of information is crucial for evaluating the impact of market-based changes on public health services, examining the cost-effectiveness of public health interventions, and improving the performance of public health agencies. In an effort to respond to these imperatives, the U.S. Department of Health and Human Services is seeking to obtain better public health infrastructure data at Federal, state, and local levels. The Lewin Group was commissioned to develop a comprehensive data strategy to support this goal.

This report summarizes the proposed strategy for collecting infrastructure-related data. For the purposes of this study, the public health infrastructure is defined as the systems, competencies, relationships, and resources that enable performance of the essential services of public health for every community. The work consisted of three major activities:

- an assessment of information needs about the public health infrastructure,
- the identification and evaluation of existing data sources, and
- the development of alternative strategies for responding to identified "gaps" in available infrastructure-related data.

To ensure an appropriate level of input and participation, a steering committee was established to guide the conduct of the project. The steering committee was composed of representatives of Federal, state, and local health agencies, community providers, and the research community.

The work revealed that public health professionals are struggling to keep abreast of changes in the rapidly evolving health care environment. They are asking themselves fundamental questions:

- How should the responsibilities of public health change to reflect changes in the health care market?
- What unique role should public health play in this dynamic environment given existing needs, resources, and financial support?

- Are the services currently provided by the public health community appropriate given shifting relationships and responsibilities? How should they change over time? What impact are these services having?

- Should state and local health departments continue to provide direct personal health care services?

- What skills, knowledge and competencies will public health professionals need to adapt to these evolving responsibilities? What organizational competencies should public health agencies be developing and maintaining?

A high level of confusion, anxiety, and concern surrounds these issues. Public health practitioners are calling for guidance and assistance in tackling these formidable challenges.

This data strategy development effort served as a lighting rod for the turmoil and debate that are currently facing public health. At a time when people are hungry for *answers* related to how public health resources should be organized, structured, and deployed to prepare for the future, we encountered impatience with our attempts to formulate *questions* related to the existing nature of the public health infrastructure. However, it is important to recognize that improvements in public health performance depend, in part, on developing a systematic understanding of existing capabilities and resources and documenting the impact of existing services on health outcomes.

While the data strategy and vision were not designed to, and can not hope to, resolve all the important challenges facing public health, it can provide a sound information base for responding to these challenges through research. Current public health research focuses almost exclusively on population health risks and resulting health outcomes. But little attention has been paid to examining how variations in the nature and strength of the public health infrastructure influence those risks and outcomes. By developing a clearer picture of what public health services are currently being provided, by whom, with what staff and at what cost, the public health community can begin to rigorously assess the adequacy and performance of the existing infrastructure and plan for necessary modifications.

Recognizing the varied and complex infrastructure-related information needs cited by public health officials, The Lewin Group has developed a multi-faceted infrastructure data strategy that relies on multiple data collection mechanisms. The proposed data strategy consists of three major components:

- **National Surveys** which are designed to provide basic, descriptive information about the nature and structure of governmental public health agencies nationally (both baseline and trend information). In an effort to minimize respondent burden and build on past experience, these surveys should integrate and improve the infrastructure data collection efforts that currently exist, most notably the NACCHO profile of local health departments, the Public Health Foundation Expenditure Project, and the NALBOH survey. To be useful the national surveys must be designed and fielded jointly at the state and local levels to ensure that the relative contributions of state, local, and tribal governments are fully explored and integrated. Given the variation that exists in the organization of government-sponsored public health

nationally, it is critical to explore the responsibilities of state, local, and tribal governments simultaneously and to reflect the contributions of all government agencies engaged in health-related activities (not just state. and local health departments). Periodic surveys of Federal agencies will also be necessary to document Federal contributions to the public health infrastructure. The three national surveys (i.e., local, state and Federal) will provide biennial data on:

- current governmental investments in public health and the relative allocation of financial resources across different types of substantive focus areas (i.e., personal health services, environmental health, disease prevention and epidemiology, public health laboratories, and licensing and certification)
- the types of activities being performed by public health agencies at all levels,
- the level of human resources available to provide public health services,
- the diversity of relationships between state and local governments in providing public health services, and
- the changing nature of the services that state and local health agencies provide.

- **Case Studies** which are designed to provide detailed, complex, qualitative data about the structure, nature, and scope of the public health infrastructure in a select sample of "sentinel" communities. These case studies will examine private sector contributions to the public health system, as well as objectively assess the strength of the governmental public health presence in these communities. The case studies will seek systematically to assess the adequacy of the public health infrastructure in the sentinel communities and explore the evolving relationships of local health departments, state health agencies, private sector providers, and managed care organizations in establishing that infrastructure. The case studies are intended to provide information on:
  - The financial resources invested in each of the essential services of public health, as well as the funding sources for those resources,
  - The composition and strength of the public health workforce,
  - The skills, knowledge base, and competencies of public health professionals,
  - The nature, scope, and strength of available public health services,
  - The relationship between capacity and public health outcomes,
  - The shifting roles and responsibilities of government entities relative to the private sector.
- **Research Agenda** which is designed to provide information on how the public health infrastructure ***should*** be configured. Rather than focusing on the current capacity of public health, the research agenda will seek to identify best practices and develop performance

standards for public health practitioners. Inforrnation collected through the national infrastructure survey and the case studies will help to inform the development of these "optimal" structures and processes. However, additional research-based inquiry will be necessary to reach conclusive findings regarding what public health approaches are most effective under different circumstances. The research agenda will serve to identify these critical areas of investigation.

Each component of the data strategy is designed to support the other components. Survey results can be used to extrapolate case study findings nationally. Both the surveys and the case studies will serve to identify research questions and preliminary hypotheses for the research agenda. Although these data collection mechanisms have been designed to inter-relate and support each other, each could be pursued independently.

The effective implementation of this data strategy hinges on ensuring a long term commitment to data collection and leveraging these new information resources to influence and improve public health practice. To achieve these ends, we offer the following recommendations:

- **A lead agency should be assigned responsibility for strategy implementation.** The fragmentation that currently exists in infrastructure-related data sources reflects in part the delegation of infrastructure monitoring responsibilities at the Federal level. Multiple agencies, most prominently the CDC Public Health Practice Program Office (PHPPO), the Office of Disease Prevention and Health Promotion (ODPHP), and the Health Services and Resources Administration (HRSA), have each assumed the charge of monitoring different aspects of the public health infrastructure. In order to ensure effective coordination of monitoring efforts, a lead agency should be explicitly designated as the focal point of infrastructure data collection efforts.

- **Federal staff representing the lead agency should be actively involved in strategy implementation.** A major objective of the proposed strategy is to build capacity at the Federal level for monitoring and responding to changes in the structure, nature, and scope of the public health infrastructure. To truly achieve this objective, it is crucial that Federal staff members of the lead agency responsible for strategy implementation be actively involved in all aspect of data collection. They should play a major role in designing the national surveys and should participate in the case studies. In this way, the expertise and knowledge base of Federal participants will be enhanced and their ability to assess and advocate for the public health infrastructure will be improved.

- **A steering committee, such as the Public Health Functions Steering Committee, should be designated to guide implementation of the strategy.** Because multiple agencies at the Federal level and several prominent private sector organizations have an interest in monitoring and characterizing the public health infrastructure, it will be crucial to ensure effective communication across these parties. The Public Health Functions Steering Committee and Workgroup serve as an on-going, existing forum that could serve as an appropriate vehicle to guide the implementation of the proposed data strategy. The mission of the Public Health Functions Steering Committee is to clarify issues surrounding changes

in the public health infrastructure and to develop strategies and tools to address the concerns identified. The Committee and its Workgroup represent all of the major stakeholders responsible for infrastructure monitoring and development. This group could assume on-going responsibility for guiding strategy implementation.

- **Potential funding sources for the data strategy should be identified as soon as possible.** We estimate that the biennial costs of completing the national surveys will be $1.75 to $2.5 million and the biennial costs of completing the case studies will be $2 to $2.5 million (depending on how many sites are selected for inclusion). The projected budget for developing the research agenda is estimated at $250,000. It is difficult to estimate the costs of carrying out the agenda given its current lack of specificity. Potential funding sources for implementing these proposed data collection mechanisms should be realistically explored. In addition to exploring Federal funding opportunities, support from private foundations and professional associations should also be pursued. The information will be most valuable if a long term commitment to these data collection mechanisms is made. Therefore, potential funding sources should be evaluated for stability in the future.

- **Data reporting by state and local public health agencies should be linked to funding streams.** The cost estimates cited above do not include the time and resources that will be expended by state and local health departments responding to the surveys and case studies. In order to improve survey response and the quality and reliability of the information collected, these data collection mechanisms should be tied to existing or new funding streams. The perceived importance of these data requests diminishes when respondents feel that the information is not directly linked to funding levels. If at all possible the surveys should be linked to existing Federal grants and the case studies should provide some form of financial incentive for participants.

- **Before implementation proceeds, the data strategy must be refined to reflect important, emerging national initiatives,** such as the development of an infrastructure focus area for Healthy People 2010 and the Turning Points program jointly sponsored by the Robert Wood Johnson Foundation and the W.K. Kellogg Foundation. As they unfold, these initiatives will generate concrete, specific needs for infrastructure-related information. The needs assessment and existing data source assessment should inform these initiatives and the data strategy should be refined to reflect the needs that emerge from these efforts.

- **Implementation of the proposed strategy should integrate existing survey efforts sponsored by NACCHO, ASTHO, and the Public Health Foundation.** A number of existing efforts are focused on characterizing components of the public health infrastructure, most notably the NACCHO survey of local health departments and the Public Health Foundation Expenditure Project. Our intent is not to replace these efforts with the proposed data strategy, but to build on, improve, and coordinate existing data collection mechanisms. As implementation of the proposed data strategy proceeds and responsibilities are assigned, the lead agency should seek to integrate existing initiatives into the cohesive strategy outlined above.

- **The feasibility of using the ten essential services as a data collection tool should be carefully considered. The** ten essential services provide a useful framework for collecting *some* types of infrastructure data, but the practicality of this framework for collecting *all* types of infrastructure information is debatable. The essential services framework is widely accepted as the functional definition of public health and, as such, provides a sound framework for describing what public health does. However, public health is not currently structured, organized, or funded around the ten essential services. This fact makes it extremely difficult to quantify inputs into the public health system (e.g., dollars spent, human resources invested) using the essential services framework.

  Despite these difficulties, the public health community has a long term interest in determining the level of resources available to support each component of its functional mission. Many of the data collection efforts currently underway are aimed at classifying the expenditures and staffing levels of public health by essential service. These efforts have found that it is possible to report such input measures using the essential services framework. However, making these allocations across services requires a high level of subjective decision making. The uniformity of these decisions can be improved through the development of standard decision rules (i.e., instructions on how to classify specific expenses) and a high level of facilitation and oversight to ensure comparability across reporters. Future attempts to collect expenditure and personnel data nationally must balance the desire to develop more functionally-focused estimates of investments in public health with the resource requirements necessary to do so. While. the long term goal of establishing-a common framework for public health services is important, the short term feasibility of implementing this framework as a reporting format must be carefully considered.

- **Plans for information analysis and dissemination should be made prior to strategy implementation. Our** assessment of existing data sources revealed that the most critical limitations in existing infrastructure data sources hinged on how information was analyzed and disseminated, rather than on what data was actually collected. Organizations are often funded to compile infrastructure data, but they are not typically funded to perform comprehensive analyses. In order to address this concern, an analytic and information dissemination plan should be developed prior to strategy implementation. Most importantly, plans should be made to link the information collected to outcomes-based data sets to explore the correlation of public health infrastructure to health outcomes and to examine the cost-effectiveness of public health services.

The proposed infrastructure data collection strategy provides an opportunity for the Federal government to take a leadership role in shaping the future of the public health infrastructure. Public health is currently facing many challenges that are likely to have profound implications for the nature, scope, and structure of the essential services. The development of a systematic approach for tracking changes in the public health infrastructure will enable the public health community to determine optimal approaches to service delivery, establish performance standards for public health agencies, demonstrate the cost effectiveness of public health, identify areas in need of capacity development, relate capacity to outcomes, and advocate for appropriate

resources. The effective implementation of this monitoring effort represents an important step in preparing public health for the 21 st century.

The remainder of this report describes our study and the proposed strategy in more detail. It is divided into seven major sections:

- Introduction
- Methods and Results of the Needs Assessment
- Methods and Results of the Existing Data Source Assessment
- Guiding Principles for the Data Strategy Development Effort
- Strategies for Obtaining Infrastructure Data
- Recommendations
- Evaluation of Strategy's Strengths and Weaknesses

# I. INTRODUCTION

Changes now taking place in the health care system are profoundly affecting the way health services are financed, delivered, and regulated. Both legislative reforms and dynamic market forces are blurring traditional distinctions between personal health care and public health services. Increasing penetration of managed care and consolidations in the health care delivery system are serving to refocus traditional medical care toward population-based health monitoring, health promotion, clinical preventive services, and care coordination. State governments are rapidly reforming their Medicaid programs, moving medically indigent patients into "closed" managed care networks and potentially away from the publicly supported providers that have historically served these patients. Responsibility for personal and population-based services are increasingly being delegated to states and localities, changing traditional relationships, reporting mechanisms, and funding streams. These influences are converging to dramatically reshape the nature of public health service needs.

At the same time, policy makers are appropriately calling for increased accountability and efficiency from public health programs and public and private health providers. Value-based purchasing and performance-based budgeting initiatives demand that both public and private health providers demonstrate the cost-effectiveness of their services. Efforts to monitor quality and improve "returns on investments" are guiding funding decisions for both personal and population-based services.

Given these trends, the public health community is reevaluating the role it should play in the changing health care system and is questioning whether the existing public health infrastructure appropriately supports these evolving responsibilities. Public health professionals are asking themselves fundamental questions:

- How should the responsibilities of public health change to reflect changes in the health care market?
- What unique role should public health play in this dynamic environment given existing needs and resources?
- Are the services currently provided by the public health community appropriate given shifting relationships and responsibilities?
- Should state and local health departments continue to provide direct personal health care services?
- Are resources and staff deployed in the most effective manner?
- What skills, knowledge and competencies will public health professionals need to adapt to these evolving responsibilities?

A high level of confusion, anxiety, and concern surrounds these issues. Public health practitioners are calling for guidance and assistance in tackling these formidable challenges.

Despite the rapidly changing role of public health and the need for assistance in reconfiguring the public health infrastructure, policy makers, public health professionals, and researchers currently do not have access to comprehensive data on the capacity and functioning of the public health system. This type of information is crucial for evaluating the impact of market-based changes on public health services, examining the cost-effectiveness of public health interventions, and improving the performance of public health agencies. In an effort to respond to these imperatives, the U.S. Department of Health and Human Services is seeking to obtain better public health infrastructure data at Federal, state, and local levels to:

- describe the existing structure, functions, and capacity of public health,
- identify critical areas of need for infrastructure improvement and development,
- assess the effectiveness of investments in public health, and
- explore the interrelationships between the public health infrastructure, the health of the population, and medical care costs.

This report seeks to identify a strategy for collecting the information needed to achieve these goals. The remainder of this introduction presents a working definition for the public health infrastructure and describes the major objectives and components of this data strategy development effort.

### A. Definition of Public Health Infrastructure

Considerable consensus has been reached in defining the roles and responsibilities of public health. In 1988 the Institute of Medicine (IOM) report, ***The Future of Public Health,*** stated that the government's responsibility to protect the public's health is met by state and local health departments, other public health agencies (e.g., mental health and substance abuse agencies, environmental health agencies), and by the federal Department of Health and Human Services. The public health system in the United States also includes a wide variety of other public agencies, private providers and voluntary organizations. Together, these system participants discharge the mission of public health which is defined as, "fulfilling society's interest in assuring conditions in which people can be healthy." (IOM, 1988)

In support of this mission, the public health system consists of a network of services to protect, maintain, and improve the health of the public, as well as the ongoing capacity to monitor, anticipate, and respond to health problems. The functions and services performed in response to health needs and the capacity to carry out those. functions are referred to as the public health infrastructure. The working definition of the public health infrastructure' for the purposes of this project is presented below.

---

[1] Based on the definition currently being used by CDC's Public Health Practice Program Office (PHPPO) for the purposes of developing an infrastructure focus area for Healthy People 20 10.

**Definition of the Public Health Infrastructure:**
The systems, competencies, relationships, and resources that enable performance of the ten essential services of public health for every community.

The following examines this definitional construct in greater detail.

### 1. Ten Essential Services of Public Health

The Essential Public Health Services Workgroup identified ten essential services of public health in 1994. Workgroup membership consisted of representatives of the Association of State and Territorial Health Officials, the National Association of County and City Health Officials, the Institute of Medicine, National Academy of Sciences, the Public Health Foundation, the Association of Schools of Public Health, the Environmental Council of States, the American Public Health Association, the National Association of State Alcohol and Drug Abuse Directors, the National Association of State Mental Health Program Directors, and the U.S. Public Health Service (the Centers for Disease Control and Prevention, the Health Resources and Services Administration, and the Office of the Assistant Secretary for Health, Agency for Health Care Policy and Research, Substance Abuse and Mental Health Services Administration, Indian Health Services, National Institutes of Health, Food and Drug Administration).

The ten essential services of public health are to:

1. Monitor health status to identify and solve community health problems
2. Diagnose and investigate health problems and health hazards in the community
3. Inform, educate, and empower people about health issues
4. Mobilize community partnerships and action to identify and solve health problems
5. Develop policies and plans that support individual and community health efforts
6. Enforce laws and regulations that protect health and ensure safety
7. Link people to needed personal health services and assure the provision of health care when otherwise unavailable
8. Assure a competent public health and personal health care workforce
9. Evaluate the effectiveness, accessibility, and quality of personal and population-based health services
10. Research for new insights and innovative solutions to health problems

The effective provision of these services ensures that public health is appropriately discharging its responsibility for preventing epidemics and the spread of disease, protecting against

environmental hazards, preventing injuries, promoting and encouraging healthy behaviors and mental health, responding to disasters and assisting communities in recovery, and assuring the quality and accessibility of health services.

The ten essential services of public health have been widely adopted to convey the basic obligations of public health. Broad consensus exists that the ten essential services framework defines *what* services the entire public health system is responsible for providing. The specific activities that constitute the fulfillment of these responsibilities, the parties charged with carrying out these activities, and the resources deployed to execute these activities are likely to vary considerably across communities.

### 2. *Elements of Public Health Capacity*

Effective performance of the ten essential services is contingent on adequate capacity in the public health system. As the working definition suggests, public health capacity is composed of four major elements: systems, competencies, relationships, and resources. A complete description and assessment of the infrastructure should examine capacity levels in each of these areas:

- **Systems** refer to the protocols, processes, and programs that the public health community has developed to carry out its core functions and essential services. These systems range from informal, commonly accepted approaches to fulfilling the public health mission to structured, systematic methodologies for carrying out activities, analyses, and services. Relevant systems include information management, surveillance, personal health care and preventive service delivery systems, performance monitoring and evaluation, legislation, statutory authority and enabling regulations, governance charters, laboratory systems, administrative, internal and external communication, and management.

- **Competencies** refer to abilities of individuals, organizations, and communities. Individual competencies include the individual knowledge, educational credentials, skills and abilities (e.g., epidemiology, planning, evaluation, health education) of public health professionals. The particular individual competencies manifest in any given community will vary according to a community's needs and priorities, but there may be a minimum set for all communities. Organizational competencies include such areas as visionary leadership, communication, information management, assessment, planning and evaluation, and systems thinking.

- **Relationships** refer to a wide range of collaborations including public/private, public/public and private/private interactions. The more common relationships of the public health agency are with other government agencies, business, civic, faith/religious, medical, managed care, and voluntary organizations. Relationships include reporting relationships between health officials, boards of health, and executive offices. Relationships may be informal or formal.

- **Resources** refer to the basic human, financial, and capital resources needed to build an effective public health infrastructure.

The nature and structure of public health capacity vary widely across communities. The programs and organizational models in place in any given community reflect decisions that have been made regarding how to structure public health capacity to deliver the essential services.

## B. Purpose of Project

The Federal government recognizes that the rapidly changing nature of the health care environment is posing formidable challenges for public health practitioners. In an effort to describe these changes, provide relevant guidance, establish reasonable performance expectations, and ensure effective advocacy for public health, the Federal government is seeking to track the changing nature of the public health infrastructure at Federal, state, and local levels. The development of a systematic monitoring tool represents an important step in providing the information necessary to support improvements in public health performance.

The Public Health Service (PHS) contracted with The Lewin Group to work collaboratively with the public health community to develop a strategy for obtaining comprehensive data on the capacity and functioning of the public health infrastructure. The project was a collaborative effort involving the contractor, the Public Health Service, and representatives of the public health community. The project was intended to be a planning effort aimed at developing alternative approaches to data collection.

The project had three major objectives:

- conduct an assessment of infrastructure-related information needs,
- identify and evaluate existing data sources, and
- develop alternative strategies for responding to identified "gaps" in available infrastructure-related data.

To ensure an appropriate level of input and participation, a steering committee was established to guide the conduct of the project. The steering committee was composed of representatives of Federal, state, and local health agencies, community providers, and the research community. steering committee members were asked to advise on project methodology and review major products and deliverables that were developed throughout the course of the project.

The project did NOT seek to characterize or assess the current strength of the public health infrastructure. However, once implemented the data strategy should provide the information necessary to address these issues. The development of this data strategy represents a first step toward monitoring how the public health system is changing and assessing the impact of these changes on health status.

## II. METHODS AND RESULTS OF THE NEEDS ASSESSMENT

This section of the report presents an overview of the approach used to conduct the information needs assessment and the results that emerged from that process.

### A. Needs Assessment Methodology

The information needs assessment was designed to determine what information was needed to monitor the nature and adequacy of the public health infrastructure. The information needs assessment process consisted of two major components: (1) structured focus groups involving public health officials from all levels of government, as well as representatives of the research community and (2) one-on-one interviews with public health officials at state and local levels.

#### 1. *User Groups*

Two focus group, or "user group" sessions were conducted between June and September 1996. User group participants were asked to respond to a series of questions designed to explore what type of information they would like to receive related to the nature and structure of the public health infrastructure. Participants were asked to provide their perceptions of:

- What activities need to be carried out to ensure the effective provision of each of the essential services of public health?
- What information is needed to explore whether and how these activities are being carried-out?
- Given these information needs, what information is the most critical to collect?

Results from the user group session were synthesized and refined by a small working group which included representatives from Centers for Disease Control, the Public Health Foundation, National Association of County and City Health Officials, and the public health research community.

#### 2. *State and Local Interviews*

The Lewin Group tested the information needs identified by the user groups against the realities of public health delivery and practice in ten case study states: Florida, California, Oregon, New York, Minnesota, Nebraska, Texas, Missouri, Rhode Island, and North Carolina*. These states were chosen because they varied in size, region of the country, and organizational structure of the public health delivery system; and because many of them have participated in previous national studies related to characterizing the public health infrastructure. During extensive one-on-one interviews, state and local officials provided considerable feedback about the feasibility and

[2] The primary purpose of the state and local interviews was to identify existing data sources, as described later. However, information needs were also probed as part of this process.

usefulness of both the "ten essential services" framework and the information needs identified by user group participants.

## B. Needs Assessment Results

The following summarizes the major findings that emerged from the needs assessment process.

- **Users' information needs varied widely in level of complexity and projected ease of collection.** The information needs expressed by user group participants can be characterized as falling into three categories:

  - Straightforward, descriptive information related to the nature and structure of governmental public health agencies,

  - Complex, qualitative information that assesses the strength of the public health infrastructure and examines the shifting relationships of public and private organizations responsible for delivering public health services , and

  - Research-based information that identifies optimal infrastructure configuration.

- **Priority needs focused on the changing nature of public health and the evolving role of government in providing public health services. The** priorities identified were broad in scope and were relatively complex. Most of the information needs identified by user group participants went beyond simple enumeration of the structural characteristics of public health (e.g., counting the number of public health workers in a jurisdiction). For example, public health officials are grappling with the shifting roles of public health relative to managed care organizations and other private sector providers. Therefore, user group participants desired a great deal of information about how those relationships were taking shape and whether public health staff possess the necessary skill base for responding to the evolving environment.

- **State and local offkials are seeking models of well-run programs and effective public health interventions.** State and local officials generally *did not* express a need for public health infrastructure data in isolation. Rather they called for the development of information on best practices. Many of the crucial needs raised during the user groups and the one-on-one interviews focused on how public health *should* be structured, rather than how it *is* currently structured. Obtaining this information would require linking data on existing infrastructure capacity to health outcomes data to identify optimal structures and processes for public health.

- **States and localities were often interested in comparing their performance with other localities or states, but they are generally more interested in health outcome, rather than infrastructure, comparisons.** Many officials believed that infrastructure comparisons would not be valid. Even if data validity challenges could be overcome, state and local officials stressed their preference for receiving information on what outcomes were produced by the infrastructure inputs. Others argue that it is difficult to interpret outcomes in the absence of input or capacity information.

- **While public health professionals rarely demand infrastructure-related data, most recognize the utility of such information.** User group participants had a difficult time articulating specific infrastructure information needs. A considerable degree of facilitation, context-setting, and targeted probing was required to prompt users to identify data needs related to infrastructure issues. The limited demand for "raw" infrastructure data is further reflected in the fact that state and local governments do not generally collect public health infrastructure data for their own planning purposes. Few state and local officials expressed an immediate, operational need for infrastructure-related information. However, most appreciate the necessity of these data for supporting evaluations and best practice development efforts and enthusiastically support these areas of research.

- **Participants had difficulty expressing their infrastructure-related information needs strictly within the ten essential services framework.** Given inter-relationships among the essential services, participants had a difficult time disaggregating infrastructure-related questions into this framework. There was a disconnect between the essential services framework (which is functional in nature) and infrastructure concepts (which are generally structural in nature). Participants struggled with the fact that some fundamental aspects of the public health infrastructure (e.g., human resources) are likely to support multiple essential service functions. Therefore, some of the most important information needs were assigned to a "cross cutting" category, rather than to individual essential services.

- **Despite some limitations, the essential services framework is a good foundation for describing public health.** While participants found that the ten essential services framework offered limited value for describing the *inputs* of public health (i.e., financial resources, human resources, staff competencies, capital capacity), they found it very useful for describing the *processes* of public health (i.e., the activities that public health has assumed responsibility for performing). In fact, several states have used the ten essential service framework to guide their strategic planning efforts as they reevaluate their role in the evolving health care system. Some participants in the Public Health Foundation's Expenditure Project also found that characterizing financial investments according to this framework helped them critically assess their priorities. Many user group participants cautioned us that considerable consensus and support has evolved around the ten essential services framework and this framework should be retained for defining *what* public health is responsible for performing.

## III. METHODS AND RESULTS OF THE EXISTING DATA SOURCE ASSESSMENT

This section of the report presents an overview of The Lewin Group's approach to assessing the adequacy of existing infrastructure data collection efforts and the results that emerged from that process.

### A. Existing Data Source Assessment Methodology

The assessment of existing data sources was designed to identify current and historical efforts to characterize the public health infrastructure in the United States and to assess how well these efforts respond to user information needs. The assessment of existing data sources relied on three major information gathering techniques: (1) literature reviews, (2) interviews with experts knowledgeable about national infrastructure data collection activities, and (3) interviews with state and local officials. Detailed descriptions of each data source identified are provided in Appendix A: Profiles of Existing Mechanisms to Collect Public Health Infrastructure Data.

#### 1. *Literature Review*

We began the assessment of existing data sources with a literature review that allowed us to quickly scan national efforts to collect infrastructure-related data. It also provided an important mechanism for gauging the perceptions, needs, and concerns of the public health community at large related to health system change and the public health infrastructure. Literature was drawn from a number of sources including peer reviewed literature, federal agency reports, federal task force reports, symposium reports, trade association reports, and academic articles. Articles documented through the literature search include conceptual frameworks for collecting public health infrastructure data, results of research efforts to collect infrastructure information, descriptions of current efforts to collect infrastructure information, and general descriptions of the public health infrastructure. Results of the literature review are summarized in Appendix B: Annotated Bibliography.

#### 2. *Expert Interviews*

In-depth interviews with knowledgeable experts were necessary to (1) ensure that all relevant data sources had been identified and (2) fully evaluate these data collection mechanisms. We interviewed a broad variety of experts from Federal agencies, national public health associations, and academic research organizations to identify and assess existing efforts to collect public health infrastructure data nationally. We conducted approximately 30 interviews with public health experts directly involved in designing and managing current data collection efforts and contacted an additional 20 people to describe their experiences responding to these data requests.

#### 3. *Interviews with State and Local Officials*

The Lewin Group conducted site visits in ten case study states to understand what infrastructure data currently exists and how infrastructure-related data currently flows within local

jurisdictions, to the state level, and within state agencies. State and local public health providers produce a broad range of infrastructure-related data through the course of managing their own organizations and administering public health programs. Although these administrative data sets and transaction-based systems (e.g., payroll records, progress reports, departmental budgets, program enrollment and encounter logs) may not be structured in a way that facilitates infrastructure analyses, we explored their potential to provide critical data on public health functioning and capacity. The site visits involved interviews with a number of state and local public health officials, budget officers, and others knowledgeable about the infrastructure data being captured at the state and local levels, and the need for infrastructure data at the state and local levels to make programmatic or operational decisions.

The four main objectives of the state interviews were:

- To identify how (and if) states and localities are capturing infrastructure related information for their own planning, budgeting, and evaluation activities,
- To determine how states and localities are currently responding to national efforts that seek to characterize the public health infrastructure and to assess the extent to which state and localities find these mechanisms valuable,
- To identify and assess the potential usefulness of administrative data sets (e.g. budget demands, payroll records) that could be used to describe the public health infrastructure, and
- To explore potential data collection frameworks to test their feasibility and utility.

The site visits were critical for two reasons. First, we recognize that the ultimate value of the data strategy depends on whether federal, state and local officials find the information useful. Furthermore, the long term viability of the strategy depends on how proposed data collection strategies leverage existing state and local data processes.

### B. Results of Existing Data Source Assessment

The following summarizes the major findings that emerged from the data source assessment process.

- **Although many existing data sources profile particular aspects of the public health infrastructure, few of these data sources provide macro-level information that summarizes the basic structure, capacity, and functioning of public health organizations.** The Lewin Group identified nearly 50 different data collection mechanisms that currently are collecting (or have collected) public health infrastructure information. The vast majority of these data collection mechanisms focused on a narrow aspect of the public health infrastructure in great detail. For example, the Association of State and Territorial Public Health Nutrition Directors conducts a biennial profile of public health nutrition services. These profiles examine, in detail, the organizational structure of nutrition services, the scope of those services, data systems used to support nutrition services, performance monitoring of Year 2000 nutrition objectives, and priority nutritional concerns. However,

only a handful of data sources attempt to provide a "macro-level" profile of public health organizations that reflects a broad range of public health activities. These "macro" data sources include: (1) the now defunct ASTHO reporting system, (2) the NACCHO profile of Local Health Departments, (3) the NALBOH survey of Local Boards of Health, (4) the Census surveys of local, state, and Federal government finances and employment, (5) the Public Health Foundation/ASTHO/NACCHO/NALBOH Expenditure project, (6) the Bureau of Health Professions assessment of training and education needs for state public health workers, (7) the 1990 CDC profile of state and territorial health systems, (8) the CDC assessment of state telecommunications infrastructure, and (9) the NACCHO Electronic Communications Questionnaire.

- **No available data source attempts to provide a holistic profile of the public health system.** The few available data sources that provide high-level information on public health *organizations* generally do not attempt to provide a cohesive profile of the public health *system*. These data sources tend to focus exclusively on either local health departments or state health departments. For example, the NACCHO survey provides detailed information the organizational structure, staffing, programmatic activities, and planning efforts of local health departments. However, no currently available data source explores the inter-relationship between local health departments, state health departments, other government agencies, and private organizations. Because existing data collection efforts rely on different instruments and approaches, it is difficult to piece these disparate data sources together to develop a meaningful understanding of the public health infrastructure in any given jurisdiction. The Public Health Foundation, ASTHO, NACCHO, and NALBOH are beginning a new phase of the public health expenditure project that will seek to measure public health expenditures using the essential services framework at both the state and local level. The new initiative attempts to coordinate state and local survey responses to ensure an integrated profile of public health expenditures that reflects both state and local contributions.

- **Many of the existing data sources identified were "one time only" studies that do not support long term, periodic monitoring of the public health infrastructure.** Given the manner in which most existing data sources have been funded, existing mechanisms fail to provide longitudinal data on the structure and scope of the public health infrastructure. For example, in 1988 the CDC sponsored a study to survey the leadership skills needed by state and territorial health officers. The survey reported the knowledge, skills, and abilities health officers perceived as essential. Because this study was not part of an on-going monitoring mechanism, it is difficult to determine if identified training needs were addressed and how training needs have changed over time. The lack on longitudinal data collection severely compromises the value of existing data sets because trends can not be identified and monitored. Even in case where a long term commitment to a data collection mechanism has been made, the collection instruments have been modified significantly over time, limiting the potential for trend analysis.

- **Because meaningful information has not been optimally disseminated, state and local respondents are often uncertain of the purpose and utility of existing efforts to collect infrastructure data.** Meaningful analyses of infrastructure-related information have been

limited. Even in instances where longitudinal information is available, such analyses are rarely performed. Analyses that attempt to correlate infrastructure data to health outcomes are even less common. State and local health officials expressed frustration over how infrastructure-related information is typically disseminated to them. If information is disseminated at all, it is generally presented as simple tabulations of survey results. Such information has limited value for users because it is merely descriptive rather than conclusion-oriented. Users are left asking the questions: (1) Have significant changes in the public health infrastructure occurred? (2) How do variations in infrastructure affect the performance and effectiveness of public health interventions?

- **There is limited opportunity to draw upon infrastructure data collected and maintained by states.** State and local public health agencies generally do not collect much infrastructure data to support their own planning and evaluation activities. All states collect administratively-oriented infrastructure data to support of their day-to-day operation (e.g., budgeting and expenditures data and human resource data located in personnel files). However, the utility of these administrative data sets to monitor the public health infrastructure nationally is minimal, for several reasons.

  - Because these data sets were designed for specific administrative purposes, the data are generally collected at a level of detail that is inappropriate for high level system monitoring. For example, personnel information is typically captured using specific, contractually defined labor category designations. A state may utilize thousands of labor categories within its health agency. Furthermore, the data are not well suited to aggregation and may not capture the full scope of public health's activities. Labor category designations provide little to no information on the actual responsibilities assumed by staff, making it difficult to aggregate these data into more meaningful categories.

  - Few states have sought to comprehensively monitor the structure, activities, and performance of local health departments. State-level reporting focuses almost exclusively on state-funded programs, rather than on the breadth of local services.

  - Uniformity among the states, or even within states, is poor. Within states, public health is often managed from several agencies, which may capture information differently, and there is often significant variation among localities in their ability to capture and manage information. Different states also have vastly different mechanisms, requirements, and expectations about reporting public health infrastructure data.

- **State and local budget documents could provide useful infrastructure information, but it will be difficult to impose the essential services framework on these data vehicles.** Budget documents are one source of state- and locally- generated infrastructure information that could be leveraged effectively at a national level. State and local budgets typically are structured around broad substantive categories that reflect organizational divisions with further levels of disaggregation reflecting specific programs. For example, Minnesota's budget is organized around budget activities that reflect major organizational units (i.e.,

community health services, family health, health policy and systems compliance, facility and provider compliance, environmental health, disease prevention and control, public health laboratory, and finance and administration). Each budget activity is further divided into budget items that represent particular programs (e.g., Newborn Metabolic Testing as a subcomponent of the Public Health Laboratory). While the structure of Minnesota's budget illustrates the manner in which states organize their budget documents, specific budget delineations vary widely across states and localities based on variations in organizational and programmatic characteristics. Budget categories do tend to converge around the following substantive areas: (1) Personal Health Services, (2) Environmental Health, (3) Disease Prevention and Epidemiology, (4) Public Health Laboratories, (5) Licensing and Certification, and (6) Administration. Functional disaggregation of budgets into the ten essential services is very difficult for states and localities because most programs and organizational units are responsible for performing multiple essential services. Any attempt to allocate funds across services involves subjective judgement. Therefore, any effort to quantify fiscal resources using the essential services framework must provide a high level of guidance, facilitation, and oversight in order to monitor and standardize decision rules.

- **Although limited potential exists for leveraging existing infrastructure data systems at state and local levels, some promising models for data collection have emerged.** While it would be extremely difficult to base a national infrastructure data collection strategy solely on data systems that currently exist at state and local levels, a few states have engaged in innovative efforts that could serve as models for a national approach. Both New York and Missouri have attempted to survey their local health departments to gain a better understanding of the range of public health services being provided at the local level. Such survey instruments should be used to inform a national data collection strategy. These model approaches have been incorporated into the data content presented in Appendix C: Data Dictionary.

## IV. GUIDING PRINCIPLES FOR THE DATA STRATEGY DEVELOPMENT EFFORT

Through out the course of this project, several concepts emerged from the user group sessions, expert interviews, state/local site visits, and steering committee deliberations that have guided the development of the infrastructure data strategy. The following summarizes these guiding principles.

- The data strategy should seek to ***characterize the public health infrastructure in its entirety.*** Therefore it must accommodate and reflect complex, dynamic relationships, including relationships among multiple government agencies, different levels of government, and the public and private sectors.

- The data strategy should seek to ***characterize the infrastructure over time.***

- The ***ten essential services provide the definitional framework*** for public health. Widespread consensus has been forged around using the ten essential services to define the scope of public health responsibilities. This broad definition of public health includes environmental health, mental health, and substance abuse services.

- The data strategy is intended to support the infrastructure-related information needs of ***potential users at Federal, state, and local levels.***

- Although the focus of this effort is to develop a strategy for collecting infrastructure-related data (i.e., structure capacity, process and output data), the ***ultimate goal is to explore the impact of the public health infrastructure on health outcomes and costs.*** To be truly meaningful the data that emerges through the implementation of this strategy must be linked to outcome data sets to identify best practices and develop performance standards.

- The data strategy should be designed to ***maximize information utility while minimizing reporting burdens.***

- The data strategy should ***build, to the extent possible, on existing methods, tools, and mechanisms for collecting infrastructure data.***

- The data strategy should seek to ***provide high-level information regarding the structure, nature, and scope of public health.*** Implementation of this strategy should not preclude more detailed, focused study of specific programmatic areas and related aspects of the public health infrastructure.

## V. STRATEGIES FOR OBTAINING INFRASTRUCTURE DATA

Given the broad variety of information needs users expressed, The Lewin Group has developed a infrastructure data strategy that relies on multiple data collection mechanisms. The proposed data strategy is composed of three major components:

- National Surveys
- Case Studies
- Research Agenda

Although these data collection mechanisms have been designed to inter-relate and reinforce each other, each could be pursued independently. Ideally, the national survey would be used to determine the sampling frame for the case studies, the case study results would be used to refine the national survey instruments, and the surveys and case studies would provide preliminary data and identify research questions for the research agenda. The remainder of this section describes the proposed data strategies in greater detail.

### A. National Surveys

The majority of information needs raised by potential users of infrastructure-related data went beyond simple descriptive information that could easily be captured through a survey mechanism. However, users did cite the need for a limited amount of basic information that would characterize all state and local health departments nationally. Given the rapidly changing health care environment and the evolving role of public health, it will be crucial to monitor infrastructure "vital signs" nationally to assure an adequate public health presence. Such data are needed to answer straightforward questions related to:

- What level of investment are state and local governments making in public health? How are these investments allocated across types of public health activities? How are these investments changing over time?
- How many public health professionals are available to provide services? How are these personnel deployed? Have these deployment strategies changed over time?
- What activities are governmental public health agencies engaged in? Have these activities changed over time?

To respond to these questions, we propose that a minimum or "core" infrastructure data set be collected from all 50 states, tribal governments, and all 3,000+ local health departments. A supplemental data set that probes some of these issues in more detail could be collected from all 50 states, tribal governments, and a sample of local health departments. These data would be used to document variations in the structure and nature of public health nationally and to monitor changes in the infrastructure over time.

### 1. Content

The state and local surveys should be designed to provide basic, descriptive information about the structure and scope of the government's contributions to the public health infrastructure. The surveys would probe:

- ***Activities,*** focused on a "checklist" of relevant activities for each of the essential services.
- ***Organizational profile,*** including the size and boundaries of the health jurisdiction, demographic information on the population served, relevant organizational and governance structure.
- ***Expenditures,*** focused on public health spending in six broad substantive areas[3]: (1) personal health services, (2) environmental health, (3) disease prevention and epidemiology, (4) public health laboratories, (5) licensing and certification, and (6) administration.
- ***Staff resources,*** focused on public health personnel resources (as measured by Full Time Equivalents) in each of the six areas outlined above.

The supplemental survey would probe relationships with the private sector in more detail, exploring relationships to managed care organizations and the reorganization of public health services. The supplemental survey could also pose some open-ended questions related to perceived needs for infrastructure development and the major challenges facing local health departments. Issues examined in the supplemental local survey will also be addressed in the state survey.

Exhibit I summaries the questions that would be addressed through the national surveys. Appendix C: Data Dictionary defines in more detail the data elements that would be collected. While Appendix C provides a fairly detailed description of the issues that should be addressed through the surveys, we anticipate that further work will be needed to develop the survey instruments. Particular attention should be given to tailoring the definitions for state verses local respondents. Proposed survey instruments should be subjected to a rigorous review process involving both potential data users and reporters to ensure that information needs are tempered by projected data collection burdens.

[3] The assessment of existing data sources suggests that it is not currently feasible to collect public health expenditure data by essential service in the absence of a highly facilitated process. Obtaining such information nationally is clearly a long term goal. As funding mechanisms, budget documents, and reporting requirements evolve, it may become possible to obtain expenditure data on each of the essential services using a standardized survey approach.

## Exhibit I

| QUESTIONS ADDRESSED BY CORE DATA SET | |
|---|---|
| SYSTEMS | • What public health activities are being performed for each essential service? What organizational unit is responsible for performing each activity?<br>• What activities are health departments legislatively authorized to perform? What activities are mandated by the state legislature/local board of health? |
| RELATIONSHIPS | • What is the demographic profile of the state/local jurisdiction?<br>• What is the nature of the state/local relationship? How are public health responsibilities shared?<br>• Have local boards of health been established in all or part of the state?<br>• What role do tribal governments play in performing the essential services? How do the tribal governments interact with state and local health agencies? |
| COMPETENCIES | • Are staff skills considered adequate?<br>• What competencies are in need of development? |
| RESOURCES | • What are current expenditures for public health? How are these funds allocated? What revenue sources support these funds?<br>• How many staff members comprise the public health workforce? How is staff time allocated across different types of public health activity? |
| SUPPLEMENTAL DATA SET | |
| SYSTEMS | • What type of data are currently collected? How often are data collected? How is this data reported?<br>• How many public health inspections were conducted in a given year? What types of inspections were conducted? How often are they conducted?<br>• What health education programs does the state/local government sponsor?<br>• What health information hotlines or clearinghouses does the state/local government sponsor?<br>• What measurement-based tools are used to support planning?<br>• Do state/local officials believe the private sector adequately meets the need for personal health care services?<br>• Are existing public health services perceived as adequate? What additional services are believed to be needed? |
| RELATIONSHIPS | • What contributions do state/local officials believe the private sector makes in providing public health services?<br>• What are the characteristics and size of medically indigent populations within the state/locality?<br>· What relationship do local boards of health have to local and state health departments? What are these local boards responsible for? From where do these boards derive their authorization? |
| COMPETENCIES | • What is the training background of the public health workforce employed by the state/local government? |
| RESOURCES | • What is the nature of the existing information systems infrastructure?<br>• How many and what type of employment positions are currently unfilled? |

### 2. Methodology

The national survey would consist of four separate, but related, biennial survey instruments:

- **State survey.** The state-level survey would be mailed to the state health officer in each of the 50 states, territories and the District of Columbia (i.e., ASTHO membership), as well as to health officers of the tribal governments. Guidance should be given to coordinate with other agencies if appropriate. Although the survey would rely on a written instrument for data collection, we anticipate that a high degree of facilitation will be necessary to ensure data validity and comparability across states. Before the survey mailing, telephone contacts should be made to each state to (1) identify key contact(s)[4] for survey response, (2) orient the contact to the survey, and (3) request background documents (e.g., organizational chart for state government and state health department, state budget documents, state health plan and other planning documents, formal health goals (if identified), and authorizing legislation for state and local health departments). Staff should be available to assist states in responding to the survey and should be in contact with state officials on a regular basis to help guide the survey completion effort. Special attention should be given to ensuring that the contributions of all government agencies at the state level (e.g., environmental, mental health, and substance abuse) are included in the survey response. After the survey has been completed, a follow-on interview should be conducted to ensure that states responded to the survey in a comparable manner.

- **Local survey.** The survey of local health departments should be designed and fielded jointly with the state-level instrument to ensure an integrated profile of the government's role in public health for any given jurisdiction. The local survey will represent a core data set that will be collected from all local health departments and local branches of tribal governments. The surveys should be mailed to the local health officer with guidance to coordinate with other local agencies if appropriate. NACCHO has recently identified relevant contacts and mapped local health jurisdictions. The proposed local survey should utilize this information to identify appropriate respondents. Given the number of local health departments that need to be surveyed, it will not be practical to provide extensive facilitation for the local-level survey. Therefore the importance of providing clear, written guidance becomes crucial. Local health officials should be alerted to issues that are likely to involve coordination with other local agencies (e.g., environmental health) and should be advised on how to address these areas of overlap. As with the state survey, local health departments should also be asked to submit existing documentation, such as budgets, state "contracts" that describe mandated and voluntary local responsibilities, and health planning documents.

[4] This assumes that the state health officer will delegate responsibility for survey completion. While we recommend that a single contact be established for coordinating the state response, we anticipate that additional contacts will be established for some data elements to ensure data accuracy. For example, we would recommend contacting the state budget officer in each state to probe expenditure issues, obtain appropriate budget documents, and assure that all relevant types of expenditures are included in the state's response.

- **Supplemental local survey.** In order to make the survey process more manageable, we recommend that the local survey (which will be fielded to the "universe" of all local health departments) be fairly succinct. More extensive information can be obtained through a supplemental data set drawn from a representative sample of local health departments. Again, NACCHO has investigated developing such a sample and this work should be referred to when pursuing the supplemental survey. More extensive guidance and facilitation can be given to local health departments participating in the supplemental survey. In addition to providing more extensive information, the sample can be used to refine the "core" local survey instrument and, thus improve overall data validity. Because local health departments responding to the supplemental survey will be providing both the supplemental and core data sets, this group of respondents can be used as a pilot cohort for the local survey. Based on the experiences and problems reported by this group, the core local survey can be modified to provide additional guidance and clarify ambiguous survey questions.

- **Federal Survey.** Periodic surveys of all Federal agencies engaged in public health-related activities will also be necessary to ensure a complete picture of the public health infrastructure at all levels of government. These surveys should probe some basic, high level information related to: (1) the activities Federal agencies are engaged in to provide the essential services of public health, (2) the level of human resources devoted to the essential services, and (3) the level of financial resources devoted to maintaining these services. This work should build on existing efforts sponsored by the Office of Disease Prevention and Health Promotion to estimate public health expenditures by essential service.

In an effort to minimize respondent burden and build on past experience, these surveys should integrate and improve the infrastructure data collection efforts that currently exist, most notably the NACCHO profile of local health departments, the Public Health Foundation Expenditure Project, and the NALBOH survey.

Documents collected from Federal, state and local respondents (e.g., health plans, budgets, organizational charts) should be compiled in a repository which, in and of itself, will provide a wealth of descriptive information related to the nature and structure of governmentally-sponsored public health agencies[5].

## B. Case Studies

Most of the information needs articulated by public health officials focused on understanding the changing nature of public health, describing the shifting role of government in providing public health services, and assessing the strength of the public health infrastructure. These information needs reflect complex, qualitative issues that do not lend themselves readily to a survey-based data collection approach. Case studies provide a systematic mechanism for monitoring the

[5] Kristine Gebbie recently conducted an extensive study of states' authorizing and related enabling legislation for public health. This work could form the basis of on-going efforts to monitor the legislative authority of public health agencies.

complicated changes now taking place in public health. Information obtained through the case studies would examine:

- How are state and local governments redefining their role in delivering public health services?
- How have responsibilities been shifted to the private sector? Which private sector organizations are assuming these responsibilities?
- Is this evolving public health infrastructure adequately addressing communities' health needs?
- Do public health professionals have the leadership skills and abilities necessary for carrying out the "new" role of public health?

Capturing this information in a meaningful way will require the involvement of knowledgeable parties who can interpret responses, evaluate multiple data points, and integrate information to paint an accurate picture of the nature of public health in a given community.

We propose that extensive, in-depth case studies be conducted to collect comprehensive information on the nature and scope of public health in select communities. Such an approach would accommodate the need to incorporate private sector contributions to public health, as well as the need to reflect complex relationships across levels of government and among different government agencies. A survey-based approach would not provide the flexibility needed to probe these multiple parties and clarify their inter-relationships.

### 1. Content

The case studies are intended to provide detailed, comprehensive information on the nature and scope of the public health infrastructure, including contributions from the private sector. The following summarizes the topics to be addressed:

- **Systems.** The case study should identify the nature and scope of public health services provided, using the essential services framework as a guide. The data and information system capacity required to support these services should also be profiled.
- **Relationships.** A key objective of the case studies will be to determine who is providing what public health services in a community. The case studies should seek to clarify the respective roles of multiple community stakeholders (e.g., state health department, local health department, managed care, private sector providers) in delivering each of the essential services of public health. The case study should also seek to determine how services are coordinated across public health providers and to describe the communication mechanisms and "governance" forums that are used to ensure integration.
- **Competencies.** The case study should seek to assess both the individual and organizational competencies of community stakeholder groups responsible for delivering public health

services. In particular the leadership ability of public health officials and their capacity for dealing with changes in the health care environment should be assessed.

- **Resources.** A comprehensive profile of the total investment in the communities' public health infrastructure would be developed. Expenditures by essential service disaggregated by funding source should be estimated. Because developing these estimates will require a high level of facilitation and direction by the case study team, significant effort will need to be focused on obtaining relevant budget documents, probing organizations regarding their investments in public-health related activities, and ensuring comparability across sites. Expenditures will also be collected by the broad substantive categories identified in the national surveys to assist in extrapolating case study results to a national level. To the extent that states and communities have begun to establish health goals and implement performance based budgeting, expenditures by health goal should also be obtained. Obviously health goals will vary across sites, limiting the comparability of this data. However, it will be useful to determine the extent to which communities are investing in their defined priorities.

  In addition to tracking expenditures, the case studies should also profile human resource investments by essential services. Again, these estimates should seek to be comprehensive, examining public health agencies staff, as well as contractors and private sector contributions. Significant capital resources, such as laboratories and information systems technology should also be examined.

Exhibit II provides an overview of the types of questions that would be addressed through the case studies. Appendix C: Data Dictionary defines the specific issues that would be examined. While Appendix C provides a fairly detailed description of the issues that should be addressed through the case studies, we anticipate that further work will be needed to develop the interview protocol and the data collection tools. Particular attention should be given to tailoring the case study questions identified in Appendix C to the perspectives of different types of interview respondents.

### 2. *Methodology*

We recommend that 15 to 20 communities be selected for case study review. Selection of these "sentinel" communities should ensure a national representative mix in terms of population size, urban/rural mix, geographic distribution, organizational structure of state/local responsibilities, presence of local boards of health, presence of Indian reservations, and relative investment in public health. Results from prior NACCHO surveys should be used to select sentinel communities[6]. Once the proposed national surveys have been fielded, these survey results could be used to select the case study "sample frame".

[6] Some consideration should be given to including communities that participated in the Robert Wood Johnson Community Tracking Study which is extensively studying the health care delivery system in 60 communities throughout the nation. An on-going study sponsored by the Office of Disease Prevention and Health Promotion is examining the nature of the governmental public health presence in 12 of these communities. Although these case studies are focusing exclusively on the local health departments in these communities, they could serve as a foundation for a more comprehensive assessment of the public health infrastructure.

The case studies should rely on structured interview protocols and standard data collection tools that will ensure comparability across sites. Interviews should be conducted with a wide range of respondents at both the community and state level, including:

- State and local health officials representing a wide range of agencies,
- State/local liaisons,
- State and local budget officers,
- Policymakers and executive decisionmakers (including local board of health members),
- Representatives of Tribal governments and Tribal health officials,
- Social service providers,
- Community leaders,
- Business leaders and major employers,
- Representatives of private health care organizations (e.g., managed care organizations, physicians, hospital representatives, community-based organizations, community health centers), and
- The media.

A review and synthesis of relevant background documentation should be conducted to help target and direct the interview protocol. Case studies should be completed every other year to monitor changes in the nature and scope of the public health infrastructure. Once "base-line" results have been established future case studies can focus more extensively on areas where significant change has occurred.

## Exhibit II

| CASE STUDY<br>Overview of Information to Be Collected for Each Essential Service | |
|---|---|
| **SYSTEMS** | • Public Health Activities by Essential Service (Description and Assessment of)<br>• Information Systems by Essential Service (Assessment of) |
| **RELATIONSHIPS** | • State/Local Relationship Overall and by Essential Service (Description and Assessment of)<br>• Organizational Structure Overall and by Essential Service (Description and Assessment of)<br>• Role of Government and Private Sector in Providing Public Health Services<br>• Communication Mechanisms (Nature of)<br>• Constituencies Supporting Public Health (Description of)<br>• Collaborative Activities (Nature of)<br>• Local Board of Health Relationship (Assessment of) |
| **COMPETENCIES** | • Individual Competencies by Essential Service (Assessment of)<br>– Knowledge base<br>– Experience<br>– Analytic Skills<br>– Communication Skills<br>– Management Skills<br>– Negotiation Skills<br>• Organizational Competencies by Essential Service (Assessment of)<br>– Leadership Capabilities in a Changing Environment<br>– Political Influence |
| **RESOURCES** | • Expenditures by Essential Services<br>• Staffing Levels by Essential Service<br>• Information Systems Infrastructure (Assessment of) |

## C. Research Agenda

Potential data users expressed a strong need for information related to how the public health infrastructure ***should*** be configured. Rather than focusing on the current capacity of public health, these information needs centered on identifying best practices and developing performance standards for public health practitioners. Although information regarding the existing capacity of public health will help to inform the development of these "optimal" structures and processes, additional research-based inquiry will be necessary to fully address these concerns.

A widely accepted research agenda should be developed to guide the identification of best practices and performance standards[7]. While potential users expressed broadly defined information needs related to best practices, performance standards, and optimal management information system configurations, they did not cite specific issues or areas of practice that warrant further research and investigation. The development of a comprehensive agenda for public health services research will serve to target and direct such efforts.

### *1. Methodology*

To be truly useful the research agenda must reflect the research needs of a broad variety of information users. Most importantly, the public health services research agenda must respond to the needs of public health practitioners at the state and local. level. The proposed research must be grounded in the challenges faced by "front line" public health officials if it is to be applicable and effective in improving public health performance. To ensure this occurs, we propose that a systematic study of "best practice" information needs be conducted.

The scope of this study focused on identifying information needs and existing information sources related to the current structure of the public health infrastructure. Thus, the general need for more guidance related to best practices and performance guidelines for the "optimal" public health infrastructure was clear. To explore these concerns further the following activities should be pursued:

- **Synthesize Existing Research and Identify Additional Studies Needed.** A great deal of existing research focuses on measuring the effectiveness of alternative public health interventions and developing performance measures for public health. The APEX PH tool provides *a* series of performance indicators designed to assist public health practitioners in conducting systematic self assessments. A number of researchers, most notably Bernard Turnock, Arden Miller, Arden Handler, James Studnicki, and Paul Halverson, have explored using performance standards to assess public health practice. The National Association of

[7] It is important to note the distinction between best practices and performance standards. The former implies identifying models of performance that could be adopted by public health practitioners. The latter implies a system of voluntary or mandatory standards with which public health practice should comply. The development of performance standards will require a higher level of rigorous, outcomes-based examination than the identification of best practices.

City and County Health Officials also developed a guide for local health departments which identifies critical performance areas under each of the essential services. Much of this work is summarized in Appendix B: Annotated Bibliography.

A first step in developing the research agenda will be to synthesize this existing research and identify issues for further study. Much of the existing work identifies reasonable performance expectations (e.g., a community health needs assessment process that systematically describes the prevailing health status and health needs of the community is in place)'. However, only a limited amount of the existing research identifies measurable indicators for these performance standards or attempts to evaluate the predictive power of these standards (i.e., their impact on outcomes).

- **Explore "Best Practice" Questions Through Surveys and Case studies.** The national surveys and the case studies should pose some questions related to the need for "best practice" guidance. State and local health officials could be asked to identify what areas of public health practice are most in need of "best practice" models. Responses to such probes should identify relevant research questions and guide the research agenda. Once appropriate best practices and performance standards have been identified, these measures can be examined through the surveys and case studies[9].

- **Conduct Roundtable Discussions with Researchers and Practitioners.** The survey, case study, and synthesis of existing research will take some time to complete. In order to quickly identify relevant research questions, a series of roundtable discussions could be held to elicit targeted suggestions for the research agenda. Researchers active in the field of public health services and public health officials involved in delivering services could be asked to identify the areas of public health practice most in need of best practice models, as well as the nature of the scientific investigation necessary to validate these models.

### 2. *Content*

Although the methodology cited above will serve to clarify the proposed content of the research agenda, the results of our needs assessment suggest some critical questions with which public health practitioners are currently struggling. These questions center on how public health should interface with the evolving private sector health care delivery system. Key areas of inquiry include:

- Should state and local health departments continue to provide personal health care services to the medically indigent? How can they be sure the private sector will adequately meet the needs of indigent patients, both Medicaid patients and the uninsured?

---

[8] Handler, et al, "A Strategy for Measuring Local Public Health Practice", American Journal of Preventive Medicine, Supplement to Volume 11, Number 6, November/December 1995.

[9] The data dictionary presented in Appendix C reflects much of the current work on performance standard development.

- Assuming health departments continue in this role, how should they structure their relationships with managed care organizations? How should responsibilities be delegated? How should contracts be structured? What compensation arrangements should be made? Should the public health entity assume risk?

- Assuming health departments elect to discontinue their role as service provider, what type of oversight is necessary to ensure the accessibility and quality of care delivered to the medically indigent?

- How should public health monitor changes in the private sector? What role should public health play in overseeing and regulating managed care? What role should public health play in overseeing and regulating for-profit conversions? How should public health educate and inform consumers?

- How do information systems need to be restructured to reflect the changing health care environment?

- What skills and competencies will be needed to respond to the changing environment? How can leadership in these areas be cultivated?

- How should public health communicate its value to policy makers and the public? What mechanisms can be used to build constituencies for public health?

- What minimum level of investment is required to support public health services?

In addition to these broad questions that probe the role of public health relative to the private sector, best practice information is also needed for specific areas of public health practice in each of the essential services (e.g., effective mechanisms for health education).

Public health practitioners have an immediate need for guidance on the issues identified above. Given that it will take some time before the research agenda is developed and carried out, results of the surveys and case studies can provide some preliminary direction regarding recommended structures and processes for public health. However, research-based inquiry will be necessary to validate and refine these findings. Certainly a rigorous, research-based approach will be required before performance standards can be imposed.

## VI. RECOMMENDATIONS

The following summarizes our recommendations for strategy implementation:

- **A lead agency should be assigned responsibility for strategy implementation.** The fragmentation that currently exists in infrastructure-related data sources reflects in part the delegation of infrastructure monitoring responsibilities at the Federal level. Multiple agencies, most prominently the CDC Public Health Practice Program Office (PHPPO), the Office of Disease Prevention and Health Promotion (ODPHP), and the Health Services and Resources Administration (HRSA), have each assumed the charge of monitoring different aspects of the public health infrastructure. In order to ensure effective coordination of monitoring efforts, a lead agency should be explicitly designated as the focal point of infrastructure data collection efforts. This agency should have: (1) strong, established relationships with public health officials at the state and local levels, (2) recognized experience in providing infrastructure support, and (3) operational responsibilities that facilitate state/local communications. This agency should be charged with keeping abreast of all efforts to characterize the Public Health infrastructure and should be widely accepted as a "check point" for any Federal agency or national partner organization wishing to engage in such data collection efforts.

- **Federal staff representing the lead agency should be actively involved in strategy implementation.** A major objective of the proposed strategy is to build capacity at the Federal level for monitoring and responding to changes in the structure, nature, and scope of the public health infrastructure. To truly achieve this objective, it is crucial that Federal staff members of the lead agency responsible for strategy implementation be actively involved in all aspect of data collection. They should play a major role in designing the national surveys and should participate in the case studies. In this way, the expertise and knowledge base of Federal participants will be enhanced and their ability to assess and advocate for the public health infrastructure will be improved.

- **A steering committee, such as the Public Health Functions Steering Committee, should be designated to guide implementation of the strategy.** Because multiple agencies at the Federal level and several prominent private sector organizations have an interest in monitoring and characterizing the public health infrastructure, it will be crucial to ensure effective communication across these parties. The Public Health Functions Steering Committee and Workgroup serve as an on-going, existing forum that could serve as an appropriate vehicle to guide the implementation of the proposed data strategy. The mission of the Public Health Functions Steering Committee is to clarify issues surrounding changes in the public health infrastructure and to develop strategies and tools to address the concerns identified. The steering committee is chaired by the Assistant Secretary for Health and the Surgeon General. The Committee and its Workgroup represent all of the major stakeholders responsible for infrastructure monitoring and development. This group could assume on-going responsibility for guiding strategy implementation.

- **Potential funding sources for the data strategy should be identified as soon as possible.** We estimate that the biennial costs of completing the national surveys will be $1.75 to $2.5 million and the biennial costs of completing the case studies will be **$2 to $2.5 million** (depending on how many sites are selected for inclusion). Costs are likely to decrease somewhat in future years after initial design and development work has been completed. The projected budget for developing the research agenda is estimated at $250,000. It is difficult to estimate the costs of carrying out the agenda given its current lack of specificity. Potential funding sources for implementing these proposed data collection mechanisms should be realistically explored. In addition to exploring Federal funding opportunities, support from private foundations and professional associations should also be pursued. The information will be most valuable if a long term commitment to these data collection mechanisms is made. Therefore, potential funding sources should be evaluated for stability in the future.

  The cost estimates cited above do not include the time and resources that will be expended by state and local health departments responding to the surveys and case studies. In order to improve survey response and the quality and reliability of the information collected, these data collection mechanisms should be tied to existing or new funding streams. The perceived importance of these data requests diminishes when respondents feel that the information is not directly linked to funding levels. If at all possible the surveys should be linked to existing Federal grants and the case studies should provide some form of financial incentive for participants.

- **Before implementation proceeds, the data strategy must be refined to reflect important, emerging national initiatives,** such as the development of an infrastructure focus area for Healthy People 20 10 and the Turning Points program jointly sponsored by the Robert Wood Johnson Foundation and the W.K. Kellogg Foundation. As they unfold, these initiatives will generate concrete, specific needs for infrastructure-related information. The needs assessment and existing data source assessment should inform these initiatives and the data strategy should be refined to reflect the needs that emerge from these efforts.

- **Implementation of the proposed strategy should integrate existing survey efforts sponsored by NACCHO, ASTHO, and the Public Health Foundation.** As described earlier in this report a number of existing efforts are focused on characterizing components of the public health infrastructure, most notably the NACCHO survey of local health departments and the Public Health Foundation/ASTHO/NACCHO/NALBOH Expenditure Project. Our intent is not to replace these efforts with the proposed data strategy, but to build on, improve, and coordinate existing data collection mechanisms. As implementation of the proposed data strategy proceeds and responsibilities are assigned, the lead agency should seek to integrate existing initiatives into the cohesive strategy outlined above.

- **The feasibility of using the ten essential services as data collection tool should be carefully considered.** The ten essential services provide a useful framework for collecting *some* types of infrastructure data, but the practicality of this framework for collecting *all* types of infrastructure information is debatable. The essential services framework is widely

accepted as the functional definition of public health and, as such, provides a sound framework for describing what public health does. However, public health is not currently structured, organized, or funded around the ten essential services. This fact makes it extremely difficult to quantity inputs into the public health system (e.g., dollars spent, human resources invested) using the essential services framework.

Despite these difficulties, the public health community has a long term interest in determining the level of resources available to support each component of its functional mission. Many of the data collection efforts currently underway are aimed at classifying the expenditures and staffing levels of public health by essential service. These efforts have found that it is possible to report such input measures using the essential services framework. However, making these allocations across services requires a high level of subjective decision making. The uniformity of these decisions can be improved through the development of standard decision rules (i.e., how to classify specific expenses) and a high level of facilitation and oversight to ensure comparability across reporters. Future attempts to collect expenditure and personnel data nationally must balance the desire to develop more functionally-focused estimates of investments in public health with the resource requirements necessary to do so. While the long term goal of establishing a common framework for public health services is important, the short term feasibility of implementing this framework as a reporting format must be carefully considered.

- **Plans for information analysis and dissemination should be made prior to strategy implementation.** Our existing data source assessment revealed that the most critical limitations in existing infrastructure data sources hinged on how information was analyzed and disseminated, rather than on what data was actually collected. Organizations are often funded to compile infrastructure data, but they are not typically funded to perform comprehensive analyses. In order to address this concern, an analytic and information dissemination plan should be developed prior to strategy implementation. Most importantly, plans should be made to link the information collected to outcomes-based data sets to explore the correlation of public health infrastructure to health outcomes. While these studies will not provide conclusive evidence that certain structures and processes lead to certain outcomes, they will assist in the development of hypotheses that can be tested more rigorously through the research agenda. Similarly, early consideration should be given to the methods that will be used to disseminate case study results. Site specific reports are likely to be highly sensitive and will not be suitable for public dissemination. Cross-site papers will need to be developed to identify major patterns and variations. Again, analyses that link information to outcomes will enhance the value of cross site report results. Thought should also be given to dissemination mechanisms. Internet technology provides a vehicle for widely circulating both qualitative and quantitative data in a timely fashion. The use of such technology to disseminate survey and case study results should be considered.

## VII. STRENGTHS AND LIMITATIONS OF PROPOSED STRATEGY

The development of this data strategy was an ambitious undertaking that sought to support the characterization of the public health system in its entirety and aid in providing information that would be meaningful to a wide variety of potential users at all levels of government. Prospective users came to this effort with a broad range of expectations regarding what the project would accomplish. Some wanted the effort to focus on the development and implementation of performance standards. Others stressed that the strategy should be purely descriptive, rather than normative. Others wished to focus on financial investments in public health. Still others wanted to focus on infrastructure development needs.

Given the broad goals of this endeavor and the wide variety of information needs we sought to address, we have crafted a strategy that best balances the diverse requirements of many potential users. As is the case with any compromise, some needs are addressed more fully than others. The following highlights some of the major strengths and limitations of the proposed strategy.

### A. Strengths

The following summarizes perceived strengths in the proposed data strategy.

- **The strategy provides a flexible approach to collecting data about multiple organizations.** One of the greatest challenges of this effort was to develop a data collection mechanism that would reflect the characteristics of an entire system. To achieve this end, we designed a data strategy that accommodated the contributions of multiple government agencies and private sector organizations. Furthermore, our proposed strategy ensures that an integrated perspective of state and local responsibilities is reached. This design helps to address variations in state/local relationships nationally and ensures comparability across states.

- **The strategy addresses multiple types of infrastructure-related information needs.** Another major challenge was responding to the varying information needs of potential users at all levels of government in the absence of compelling priorities. We have crafted a strategy that balances infrastructure-related information needs in a rationale and practical manner.

- **The strategy imposes a minimal burden on data reporters.** The proposed data strategy does not require state and local governments to invest in an extensive data reporting system. The national surveys have been designed to be minimally intrusive and the case studies will involve only a small subset of governments which should be compensated for their participation.

- **The strategy builds effectively on existing data collection mechanisms.** A great deal of effort was expended in identifying, assessing, and monitoring the continuing evolution of existing mechanisms to collect infrastructure data. We have developed a strategy that seeks

to leverage these existing data sources to the greatest extent possible and to coordinate existing data resources more effectively.

- **The strategy allows for different levels of investment in the collection of infrastructure-related data.** Although the three components of the data strategy were designed to support each other, any one of these strategies could be pursued alone. This flexibility allows the Federal government to explore multiple levels of resource investment, depending on the funds that are available to support this effort.

## B. Limitations

The following summarizes perceived limitations in the proposed data strategy.

- **The strategy is not fully evaluative.** While the case study approach assesses the relative strength of the public health infrastructure, the data strategy, in and of itself, does not evaluate the impact of public health. Ultimately, additional studies and analyses will needed to be performed using the infrastructure data set drawn from the proposed strategy, as well as existing outcomes-based data sets, to determine which public health structures, processes, and services are most effective under different circumstances.

- **Infrastructure data alone will have limited influence on public health funding decisions.** Many interested parties have suggested that robust infrastructure data could be used to lobby Congress and state legislatures for additional resources to support public health. However, our study suggests that this type of descriptive, structure- and process-oriented data is not compelling for advocacy purposes. Legislative bodies typically make funding decisions based on outcomes that are meaningful to their constituencies. Simply demonstrating that a given jurisdictions devotes fewer resources to public health than the neighboring jurisdiction may not influence policy makers. Unless infrastructure differences are truly dramatic, these decision makers are more likely to require persuasive evidence that differences in funding levels are resulting in differences in health outcomes. Again, the infrastructure data to be collected through the proposed strategy will serve as a requisite component to such analyses, but linkages to outcome data and the development of evidence-based performance measurement are crucial.

- **Additional work is necessary to ensure that state and local health officials are fully informed of the purpose and utility of the infrastructure data collection effort.** Because state and local health officials are seeking public health infrastructure data that identifies best practices and demonstrates the impact of public health, they will likely be frustrated with the initial phases of the data collection effort. As the limitations described above suggest, the true value of infrastructure data lies in linking this information to outcomes to determine "what works". The time horizon for such analyses are longer term than the initial collection of infrastructure data. When state and local officials are responding to the national surveys and the case studies, they will be encountering the infrastructure data in its "raw", unprocessed form. Therefore it is crucial that the analytic, dissemination, and action plan for the infrastructure data be clearly articulated to respondents. Also, efforts should be made to

tie the data collection effort to concrete objectives (e.g., monitoring Health People 2010 progress, block grant funding) to further clarify its relevance.

## C. Summary

This data strategy development effort served as a lighting rod for the turmoil and debate that are currently facing public health. At a time when people are hungry for *answers* related to how public health resources should be organized, structured, and deployed to prepare for the future, we encountered impatience with our attempts to formulate *questions* related to the existing nature of the public health infrastructure. However, it is important to recognize that improvements in public health performance depend, in part, on developing a systematic understanding of existing capabilities and resources.

While the data strategy and vision were not designed to, and can not hope to, resolve all the important challenges facing public health, it can provide a sound information base for responding to these challenges through research. Current public health research focuses almost exclusively on documenting variations in population health risks and resulting health outcomes. But little attention has been paid to examining how variations in the nature and strength of the public health infrastructure influence those risks and outcomes. By developing a clearer picture of what public health services are currently being provided, by whom, with what staff and at what cost, the public health community can begin to rigorously assess the adequacy and performance of the existing infrastructure and plan for necessary modifications.

The proposed data collection strategy provides an opportunity for the Federal government to take a leadership role in shaping the future of the public health infrastructure. Public health is currently facing many challenges that are likely to have profound implications for the nature, scope, and structure of the essential services. The development of a systematic approach for tracking changes in the public health infrastructure promises to identify optimal approaches to service delivery, establish performance standards for public health agencies, demonstrate the cost effectiveness of public health, identify areas in need of capacity development, and enable advocacy for appropriate resources. The effective implementation of this monitoring effort represents an important step in preparing public health for the 2 1 st century.