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RESEARCH TRIANGLE INSTITUTE

Contract Number 200-88-0643  
Task Order Number 0643-03  
November 1, 1989

Evaluation Design Studies  
Final Report  
Inventory of CDC HIV Activities  
for Evaluation

Submitted to  
Office of Program Planning and Evaluation  
and  
Office of Deputy Director (HIV)

Centers for Disease Control  
1600 Clifton Road NE  
Atlanta, Georgia 30333

Project Officers: Wilma Johnson, OPPE  
Mark Rosenberg, ODD (HIV)  
Nabil Issa, ODD (HIV)

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## TABLE OF CONTENTS

LIST OF FIGURES .....	v
LIST OF TABLES .....	vii
EXECUTIVE SUMMARY .....	ix
<b>I. INTRODUCTION .....</b>	<b>1</b>
A. Purpose of task order ..	1
B. Evaluation of CDC HIV activities .....	1
C. Background and importance of inventory .....	1
D. Definition of evaluation/benefits of evaluation .....	2
E. Types of evaluation .....	3
F. Proposed <b>workplan</b> and task order activities .....	4
<b>II. INVENTORY OF CDC HIV ACTIVITIES .....</b>	<b>7</b>
A. Approach .....	7
1. Definition of an HIV "activity" for evaluation .....	7
2. Methodology and design of database .....	8
3. Program Review document abstractions .....	9
4. <b>Activity</b> review and input from <b>CIOs</b> .....	10
5. Creation of final inventory database and cross-tabulations .....	11
B. Results .....	12
1. <b>Characterization of CDC HIV activities</b> .....	12
a. Descriptive data on HIV activities .....	12
b. Activity classification .....	14
c. Changes in activity classification, FY 89 versus FY 84-88 .....	16
d. Activity evaluability and evaluation status .....	17
2. Limitations of the inventory .....	20
<b>III. INTERVIEWS WITH CIO HIV REPRESENTATIVES .....</b>	<b>53</b>
A. Purpose of interviews .....	53
B. Interview format and guidelines .....	53
C. Interview results .....	53
1. Descriptions of evaluation activities .....	53
2. Perceived evaluation needs .....	56
a. Evaluation needs .....	56
b. Information needs .....	57
3. Barriers to evaluation .....	58
4. Role of <b>ODD(HIV)</b> in evaluation .....	61

<b>IV. LITERATURE REVIEW</b> .....	63
A. Introduction and approach .....	63
B. Setting evaluation priorities .....	64
1. Locus in organization .....	64
2. Procedures .....	65
3. Criteria.. .....	65
4. Guidelines for setting priorities .....	67
C. Comparability of evaluation results .....	69
1. Comparisons of similar programs .....	70
2. Comparisons of different programs .....	75
<b>V. CONCLUSIONS AND RECOMMENDATIONS</b> .....	79
A. Continued focus on evaluation .....	79
B. HIV activities inventory .....	79
1. Further analyses and development of evaluation plan .....	79
2. Remaining information gaps and additional inventory activities .....	80
3. Annual Program Review and information system development .....	81
C. Evaluation options for <b>ODD(HIV)</b> .....	81

ACKNOWLEDGMENTS

APPENDIX A. CDC Centers, Institutes, and Organizations Involved in HIV Activities

APPENDIX B. Inventory Form and Guide

APPENDIX C. Inventory of CDC HIV Activities

APPENDIX D. Listings of Process and Outcome Measures

APPENDIX E. Interview Protocol for **CIO** Representatives

APPENDIX F. Literature Review Bibliography and Sources Interviewed

## LIST OF FIGURES

Figure 1.	HIV Activities by Year . . . . .	22
<b>Figure 2.</b>	<b>FY 89 HIV Activities by Size of FY 89 Budget . . . . .</b>	<b>23</b>
Figure 3.	Transmission Route Prevention Focus . . . . .	24
Figure 4.	PHS Activity Classification . . . . .	25
Figure 5.	Strategic Plan Activity Classification . . . . .	26
Figure 6.	Population Subgroups . . . . .	27
Figure 7.	Cross-cutting Categories . . . . .	28
Figure 8.	Conceptual Model for Process and Outcome Measures . . . . .	29
Figure 9.	Examples of Process and Outcome Measures . . . . .	30
Figure 10.	Types of Evaluation Activities . . . . .	31
Figure 11.	Activity Evaluation Status--Overall . . . . .	32
Figure 12.	Activity Evaluation Status--by <b>CIO</b> . . . . .	33
Figure 13.	Factors Influencing Evaluation Priorities . . . . .	68
Figure 14.	Examples of Program Elements Affecting Comparability of Similar Programs . . . . .	71
Figure 15.	WHO GPA Criteria . . . . .	74
Figure 16.	Evaluation Options for <b>ODD(HIV)</b> . . . . .	82

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## LIST OF TABLES

Table 1.	FY 84-88 and FY 89 HIV Activity Counts, by CIO; 1989 HIV Program Review Document . . . . .	10
Table 2.	Total HIV Activities by Year . . . . .	34
Table 3.	Number of FY 89 Activities by Size of FY 89 Budget . . . . .	35
Table 4.	Extramural Status of Activities . . . . .	36
Table 5.	Joint Activities Between <b>CIOs</b> . . . . .	37
Table 6.	HIV Activities: Transmission Route Prevention Focus . . . . .	38
Table 7.	HIV Activities: PHS Activity Classification . . . . .	39
Table 8.	HIV Activities: Strategic Plan Activity Classification . . . . .	40
Table 9.	HIV Activities: Target Subgroup . . . . .	41
Table 10.	HIV Activities: Population Subgroup . . . . .	42
Table 11.	HIV Activities: Cross-Cutting Categories . . . . .	43
Table 12.	Changes in Activity Classifications . . . . .	44
Table 13.	PHS Classification--Activity Evaluability . . . . .	45
Table 14.	Transmission Route Focus--Activity Evaluability . . . . .	46
Table 15.	Strategic Plan Classification--Activity Evaluability . . . . .	47
Table 16.	Extramural Status--Activity Evaluability . . . . .	48
Table 17.	Types of Evaluation Activities . . . . .	49
Table 18.	Data Collection/Data Processing Methods . . . . .	50
Table 19.	Activity Evaluation Status . . . . .	51

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## EXECUTIVE SUMMARY .

### FINAL REPORT INVENTORY OF CDC HIV ACTIVITIES FOR EVALUATION

Sponsor: Centers for Disease Control  
Office of Program Planning and Evaluation;  
Office of Deputy Director (HIV)

Contractor: Research Triangle Institute  
Center for Policy Studies  
3040 Cornwallis Road  
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Contract Number: 200-88-0643

Task Order Number: 0643-03

Date: November 1, 1989

#### **I. Statement of the Problem**

pgs. 1-6 Faced with the nationwide HIV crisis, Centers for Disease Control (CDC) funding for HIV activities and the number of new activities have increased dramatically over a very short period of time, potentially straining efforts for effective management and evaluation. Effective management and ongoing evaluation are critical, however, as the numerous, rapidly implemented programs mature and strive to become institutionalized, as the demands for treatment services grow and compete for resources currently available for prevention services, and as the political and media attention given to the disease lessens, thus potentially lessening funding support for necessary interventions. Attention must be focused on assessing and documenting the usefulness, efficiency, and effectiveness of the separate activities, and on identifying the linkages among the various HIV programs and between the HIV programs and other activities. Data requirements for process and outcome evaluation of the separate activities at the operational level need to be developed and placed in a larger context for CDC HIV activities as a whole. Results from this task order will be used in the first stages of formulating an ongoing HIV evaluation strategy for CDC.

#### **II. Evaluation Objectives and Methodology**

pgs. 7-10 The task was commenced May 1, 1989, and contained three major objectives:

**A. Inventory of past and current CDC HIV activities.** Working from the 1989 HIV Program Review and supporting material from the individual **CIOs**, the project compiled an inventory of CDC HIV activities, with special attention to their evaluation status. The inventory is intended to: (1) provide information on and an assessment of CDC HIV evaluation efforts to date; and (2) assist **CIOs** and **ODD(HIV)** in targeting future evaluation priorities. The inventory provides a baseline of CDC HIV activities and a benchmark of the evaluation status of HIV activities at CDC.

**B. Structured interviews.** Structured interviews were conducted with representatives from each **CIO** involved in HIV activities to assess the evaluation activities and information needs relating to HIV activities at the **CIO** level. The interviews served to: (1) identify evaluation and information needs of the **CIOs**; (2) identify the barriers to expanded evaluation efforts; and (3) clarify the role of **ODD(HIV)** in CDC HIV evaluation activities.

**C. Literature review.** A literature review was conducted to assess current theory and methods on: (1) prioritizing activities for evaluation; and (2) designing an evaluation system that will maximize comparability/compatibility among evaluation results of differing activities in different **CIOs**. In addition to consulting the published literature, RTI conducted telephone interviews with recognized experts in the area of evaluation research.

### **III. Major Findings and Recommendations**

#### **pgs. IO-51 A. Inventory**

The report provides text, tables, and graphical representation of the inventory of past and present CDC HIV activities. The complete inventory, by **CIO**, is provided in Appendix C. Information on and categorization of HIV activities are in the following areas:

- administrative information: activity name, implementing **CIO** and division, collaborating **CIO(s)**, contact person and telephone number, staffing and budget estimates, whether new, ongoing, or completed, and whether extramural and, if so, number of grants.
- activity classification along numerous dimensions, including: PHS budget categories, transmission route focus, strategic plan classification, and target populations, among others.
- activity evaluation status, both by number of activities and by percent of budget represented.

pgs. 52-60 **B. Interviews**

In-person or telephone interviews were completed with representatives at the **CIO** and division level for all **CIOs** involved with HIV activities at CDC. Major findings from the interviews are presented below; further elaboration is provided in the text.

pg. 55 **Evaluation information needs:**

Development of outcome measures There is need for research to develop valid, reliable, and feasible outcome measures for HIV activities. Difficulty in defining and operationalizing outcome measures is a problem for virtually all activities intended to affect behavioral change. Additionally, outcome measures for activities aimed at basic research need to be extended beyond **the** strictly scientific model to attempt to show their role and impact in the overall effort.

Sustainability of changes. Given that a program can demonstrate a short-term impact, such as through knowledge-attitude-belief-behavior (KABB) surveys, what are the long-term prospects for that change enduring? What ongoing efforts are necessary to maintain it? Is there a point where the changes become part of the "community norms" and thus are self-sustaining? The answers to these questions are critical for the strategic design of HIV programs and interventions, and require plans to be built in for longitudinal analysis of outcomes.

Program achievement of goals and objectives. A basic evaluation issue of interest to all **CIOs** is whether or not an activity is achieving what it was designed to do. Process measures and intermediate outcome measures are relied upon to monitor these issues. Once it is determined that programs are achieving what they were designed to do, however, then the more global, cross-cutting issues can be addressed to determine of what the programs are, in fact, contributing to larger policy and strategic goals.

Available technologies and approaches. The HIV epidemic has resulted in numerous innovative approaches, rapidly developed by agencies and programs at all levels. Many of the potentially useful technologies and approaches are presented through sessions and posters at national and international meetings, and do not appear in the published literature until much later, if at all. Just keeping up with the available technologies, approaches, and materials, let alone documenting their efficacy, is a major difficulty.

Direction of epidemic. Information on which way the epidemic is going, which new groups may be threatened, and the nature of that threat are all critical information being addressed by the surveillance components of

CDC HIV activities. More focused information on particular populations at risk would improve program planning and the cost-effectiveness of the methods used to achieve program goals.

Denominator data of populations at risk. Currently collected surveillance data provide more information on who is infected than on who is at risk. The size and characteristics of many of the potentially affected populations, therefore, are simply not known. Lacking this information, adequate program planning and monitoring of impact both become problematic.

pg. 57

### **Barriers to evaluation:**

Perception of "evaluation." The term "evaluation" is often subject to differing interpretations. Social scientists, from whom the concepts of evaluation research originated, and laboratory scientists, who are concerned primarily with experimental research, have different perspectives. Even among those with the social science perspective, however, substantial variation occurs, and there is often difficulty in defining and operationalizing evaluation measures.

Traditional roles of CDC programs. Many CDC programs, such as those related to sexually transmitted diseases, have their origin in service to and direct involvement with state and local communities. Direct provision of services, versus research, has been the priority. Although the role and value of evaluation is understood and acknowledged, necessary activities to carry out evaluation are often seen as secondary to the essential goal of provision of services. **CIOs** involved in funding or providing direct services addressing the HIV epidemic report that the demand has been so overwhelming that it has been hard to make the time and resources available that are necessary for evaluation.

Structural conflict for limited resources. Increased funding for HIV activities at CDC has been accompanied by increased numbers of programs representing different perspectives and disciplines. **There** is competition among the different perspectives because the absolute amount of available resources is limited. As resources become scarcer, and accountability increases, competition for these resources will become more pronounced. The information that evaluation activities produce, therefore, can be seen as very sensitive, if not proprietary, and the unit may wish to control the release of that information as part of its organizational strategy.

Additionally, the HIV epidemic has contributed to the boundaries between CDC programs becoming blurred. Traditionally, the roles and responsibilities of the separate **CIOs** and divisions were fairly well defined along disease- or role-specific categories. Increasingly, however, cross-

cutting programs are blurring **organizational** roles and jurisdictions. Although cross-cutting programs may be desirable from a programmatic and cost standpoint, the negotiation of responsibilities can be inefficient and can contribute to organizational conflict.

Crisis nature of epidemic. CDC and other agencies have responded to the HIV crisis by very rapid implementation of numerous and varied intervention programs. Systems have in many cases been severely strained just to implement the programs, let alone assure adequate ongoing monitoring and evaluation. Furthermore, attention to evaluation issues in the program design stages has often been minimal.

Use of multiple arantees for oroaram imolementation. The nature of the HIV epidemic is such that state and local agencies and community-based organizations (**CBOs**) are often the best (or only) groups to carry out HIV interventions. Substantial barriers exist to carrying out properly conducted evaluations in these settings, since the agencies or **CBOs** may significantly vary in the time, funding, and existence of adequately trained personnel dedicated to conduct evaluation research activities.

Adeauate time and resources within activities- A final barrier to expanded evaluation efforts is the level of available resources. These resources are expressed not only in terms of manpower and money, but also in terms of time. Even given more personnel, and the funds to support them, the situation is changing so rapidly that by the time valid evaluation results are obtained, the questions the data were designed to answer may have also changed.

pg. 60

#### Role of **ODD(HIV)**:

The role of conducting evaluations of HIV activities is seen as the responsibility of the implementing **CIO(s)**. The role of the **ODD(HIV)** in evaluation is seen in the areas of policy, coordination, and technical assistance.

Settina oolicy reardina evaluation. The unique organizational position of **ODD(HIV)** at CDC and nationally gives it the ability (and responsibility) to provide broad policy direction for evaluation. **ODD(HIV)** is able to prioritize evaluation needs from the central level and focus information requests from a broader perspective than that of individual **CIOs**. Policy setting with regard to evaluation must reflect, however, the needs and interests of those carrying out the programs as well as the needs and interests of the higher organizational levels.

Coordination of HIV activity evaluation. **ODD(HIV)** can serve effectively as a clearinghouse and coordinating center for CDC-wide HIV evaluation activities, and as a liaison with PHS or HHS HIV evaluation activities. In

this role, **ODD(HIV)** can also serve as a buffer with regard to evaluation information requests. **ODD(HIV)** could develop and maintain a systematic, organized, and computerized “minimum data set” of program and evaluation information, designed to ‘answer the largest number of routine information requests.

Evaluation research expertise. Expert knowledge in evaluation research at the **ODD(HIV)** level could conceivably meet the needs of **CIOs** more efficiently than separately developed expertise. Such expert knowledge would be available on a consultant basis to the **CIOs** on request, and would serve to facilitate cross-fertilization of evaluation ideas and sharing of information and resources, as appropriate. An **ODD(HIV)** evaluation specialist could serve a translation function to interpret evaluation results from one project to another. Furthermore, expertise at the **ODD(HIV)** level could also serve: (a) as an advocate for the **CIOs** to CDC and/or PHS or higher levels of management regarding the feasibility and resource implications of proposed evaluation activities; and (b) as an interpreter to the higher levels of management of evaluation results produced by the **CIOs**.

Central oversight and monitoring are important: (a) to coordinate multiple, possibly overlapping evaluation efforts; (b) to provide expert assistance when needed; (c) to assure scientific integrity of evaluation results carried out by those who may have a vested interest in the results; and (d) to encourage or ensure the utilization of evaluation results.

pgs. 63-75 C.     **Literature Review**

The literature review addressed two issues: (1) how priorities are set among different activities requiring evaluation, and (2) how to maximize comparability and compatibility of evaluation results from different activities. An on-line database search was nonproductive in identifying relevant sources, apparently because evaluation strategy and management are not yet well developed as research areas. Instead, an experience-based approach was used, asking leading evaluation researchers and managers for both literature citations and their own analysis of the issues.

Prioritization of evaluation topics is often influenced by the process used to set evaluation agendas, with agency leadership, operational managers, and evaluation offices each introducing a different perspective. The process by which proposed evaluation topics are reviewed may also affect the resulting evaluation agenda. Activity “evaluability,” an assessment of the likelihood that evaluation will produce useful information, is measured by the existence of well-defined objectives, measurable outcome indicators, available data, appropriate program design and identified uses for evaluation findings. Utilization-focused

evaluation emphasizes empirical questions whose answers are not predetermined by political or personal considerations, and topics where managers are personally interested in producing information with which to modify activities. A synthesis of information from literature and expert informants produced a set of characteristics of problems, programs and evaluations which determine the degree to which evaluation will produce policy-relevant findings.

Comparability of evaluation findings should be considered separately for similar programs operating under different conditions, and for programs which contribute in very different ways to broad agency goals. Comparison of similar activities is facilitated by the application of research synthesis techniques, which allow analysis of variation in effect across programs and identification of interactions between program components which may influence effects. Use of common outcome indicators, such as those developed for the World Health Organization's Global Program on AIDS, could greatly facilitate comparative analysis of evaluation findings.

Methodologies of comparing evaluation findings from dissimilar programs are more limited. One approach is to compare programs in terms of their relative success in reaching their respective objectives. This approach, however, does not allow comparison of the activities' relative contribution to agency goals. Cost-benefit analysis, through summation of all positive and negative program effects into monetary units, allows comparison of any programs. However, the methodology is difficult to apply when programs effects are measured in terms of lives saved or extended, or when future outcomes cannot be predicted with confidence. Cost effectiveness analysis avoids the necessity of attaching monetary value to program effects, but can only be used for programs with similar intended outcomes.

#### IV. Summary and Recommendations

pg. 79

##### A. Continued focus on evaluation

The role of evaluation will become increasingly critical in providing information both internal and external to CDC. CDC's continuing attention to evaluation of HIV activities is necessary to address: (1) the changing nature of the HIV epidemic and need for designing sensitive approaches; (2) the difficulty inherent in establishing **impact** or outcome measures relating to HIV; (3) the innovative and inherently untested nature of many of the interventions; and (4) the reliance by CDC on numerous outside agencies and collaborators to implement the interventions.

pgs. 79-81 **B. HIV activities inventory**

The analyses of the inventory presented in this report represent an overview of CDC HIV activities and their evaluation status. The inventory is also a baseline for measuring changes in CDC HIV program focus, and can serve as a directory of HIV activities, with contact persons and telephone numbers available for additional information on any particular activity.

Several areas were apparent for strengthening the information from the inventory analyses. These include: (1) better understanding of and agreement on the terms relating to evaluation; (2) better definition of an HIV “activity,” and the means for gauging its size; (3) better program information in the inventory to identify possible activity synergies or overlaps across **CIOs**; and (4) better information on linkages between, and reporting from, the numerous external grantees.

pgs. 81-84 **C. Evaluation options for ODD(HIV)**

A summary and overview of evaluation options for **ODD(HIV)** include the following:

**Policy:**

- communicate to the **CIOs** the broad policy picture for CDC HIV activities as it relates to evaluation
- interpret evaluation results and policy needs to all levels.

**Coordination:**

- coordinate information needs, evaluation designs, and data collection across **CIOs**
- link and coordinate evaluation staff across **CIOs**
- coordinate with agencies outside CDC
- maintain current, accessible, and cross-referenced data bank of evaluation information from **CIOs**
- handle information requests regarding CDC HIV activities.

**Technical Assistance:**

- help with activity planning to improve evaluability

- provide evaluation training and encourage standardization of approaches
- facilitate and encourage development of innovative approaches to evaluation
- assist in development of outcome measures and instrument design.

Resources:

- provide or identify resources for evaluation efforts.

**Implementation and Quality Control:**

- conduct or sponsor cross-cutting evaluations, meta-analyses, or research syntheses
- set evaluation standards and assure research compatibility
- help develop a minimum data set for all HIV activities
- monitor follow-up and assure the utilization of evaluation results.

## I. INTRODUCTION

### A. Purpose of task order

Under an “evaluation designs” Basic Ordering Agreement with the Office of Program Planning and Evaluation (OPPE) at CDC, Research Triangle Institute (RTI) conducted a task for the Office of the Deputy Director (HIV) [ODD(HIV)] to develop a baseline inventory of all CDC HIV activities and assess the current evaluation status of these activities. CDC intends to develop a comprehensive and systematic evaluation plan for HIV activities; however, work under this particular task order focused only on: (1) developing a comprehensive CDC HIV activity inventory with information on the evaluation status of each activity; (2) conducting interviews with CIO representatives to assess the current level of evaluation activities and the CIOs’ evaluation/information needs relating to HIV activities; (3) reviewing the literature on prioritizing activities for evaluation and designing an evaluation system that will maximize comparability/compatibility among evaluation results; and (4) summarizing information from the inventory, interviews and literature review to recommend evaluation options for CDC HIV activities.

### B. Evaluation of CDC HIV activities

The recently-released draft report from the National Research Council (NRC) panel on the Evaluation of AIDS Interventions provides an excellent overview of evaluation research and measurement of outcomes, and in-depth discussions of evaluating three critical HIV activities designed to intervene at different levels of society: (1) the national AIDS media campaign; (2) the community-based organization (CBO) projects; and (3) the HIV counseling and testing program. Discussion in this final report will focus on results from the task order alone, in particular focusing on the HIV activity inventory, the self-reported evaluation status, and the literature review on the specified questions. This report will not present a discussion of evaluation research issues in general, nor prescribe evaluation designs for particular activities.

### C. **Background and importance of inventory**

CDC's HIV activities span almost all the organizational entities (centers-institutes-organizations--CIOs) encompassed by CDC. These activities include basic laboratory research, epidemiology, surveillance and risk assessment, prevention services and risk management, and policy development, among others. A list of the CIOs involved in HIV activities and their acronyms as used in this report is provided in Appendix A.

Faced with the nationwide HIV crisis, CDC funding for HIV activities and the number of new activities increased dramatically over a very short period of time, potentially straining efforts for effective management and evaluation. Effective management and ongoing evaluation are critical, however, as the numerous, rapidly-implemented programs mature and strive to become institutionalized, as the demands for treatment services grow and compete for resources currently available for prevention services, and as the political and media attention given to the disease lessens, thus potentially lessening funding support for necessary interventions. Attention must be focused on assessing and documenting the usefulness, efficiency, and effectiveness of the separate activities, and on identifying the linkages among the various HIV programs and between the HIV programs and other activities. Data requirements for process and outcome evaluation of the separate activities at the CIO level need to be developed and placed in a larger context for CDC HIV activities as a whole. Results from this task order will be used in the first stages of formulating an ongoing HIV evaluation strategy for CDC.

### D. **Definition of evaluation/benefits of evaluation**<sup>1</sup>

For the purposes of this task order, the following working definition of evaluation was used:

Evaluation is the systematic collection and analysis of data on program implementation and effectiveness for the purposes of decision making.

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<sup>1</sup> The draft NRC report, "Evaluating AIDS Prevention Programs," should be consulted for more detail on these issues.

Properly carried out evaluation can have many positive, useful outcomes. Some of the identified uses and benefits of evaluation are:

- (1) **To provide data for decision-making for program operation, continuation, modification, or termination.** In periods of tight budgets, information from well-conceived and well-implemented evaluations can guide these decisions.
- (2) **To provide solid evidence for program justification, and to satisfy accountability requirements.** Reliable and valid evaluation data can demonstrate that a program is implemented according to regulations and is achieving the results called for by legislation.
- (3) **To suggest strategies for program improvement.** A useful evaluation will not **only indicate what** works; it will pinpoint ways in which a program can be improved. Inefficient or ineffective program activities, for example, can be identified and replaced.
- (4) **To facilitate identification and comparison of evaluation options.** Evaluation approaches and outcomes from related programs can help managers design future evaluations. A broad base of evaluation information **will provide guidance as to the feasibility, appropriateness,** and likely success of various evaluation activities or requirements.
- (5) **To promote complete specification of program components.** The process of designing an evaluation forces the manager to define more carefully what the intervention is and how, at least in theory, it is supposed to produce the desired impacts. The process of complete description of the intervention model can serve to identify ambiguities and encourage clarity in program design and specification.
- (6) **To provide fertile ground for discovering further program innovations.** A sensitive evaluation and analysis system **will** often identify or lead to the discovery of new ideas and or approaches.

## E. Types of evaluation <sup>2</sup>

Reflecting recent Public Health Service (PHS) focus, five separate types of evaluation were considered with regard to HIV activities, defined as follows:

- (1) **Formative evaluation** occurs during the planning and design stages of an intervention, and results are fed back to the implementors for early adjustments to design or operations.
- (2) **Efficacy evaluation** tests the effectiveness of the interventions in controlled settings under near-ideal (e.g., laboratory) conditions.
- (3) Process evaluation answers the questions “What was done, to whom, and how?” Process evaluation is normally an ongoing process which monitors the implementation of an intervention.
- (4) **Outcome or impact evaluation** measures the effects of the intervention as actually delivered, and assesses whether observed impacts or outcomes are actually attributable to the intervention.
- (5) Cost-effectiveness/cost-benefit **evaluations** take measures of effectiveness from outcome evaluations and compare the effectiveness (or benefits if the outcomes can be measured in monetary terms) with the cost of the intervention.

## F. Proposed workplan and task order activities

A final and approved task **workplan** was developed based upon a Request for Support Services for Program Assessment from CDC, dated February 27, 1989. The final **workplan** incorporated comments and suggestions from **ODD(HIV)** on earlier drafts, and reflected comments received on the **workplan** at a meeting of the CDC HIV Evaluation Advisory Group on May 8, 1989. The task was commenced May 1, 1989, and contained four objectives:

- (1) **Inventory of past and current CDC HIV activities.** Working from the 1989 HIV Program Review and supporting material from the individual **CIOs**, the project compiled an inventory of CDC HIV activities, with

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<sup>2</sup> See the NRC draft report on evaluation (referenced earlier) for more detail. This section is limited to our task order.

special attention to their evaluation status. The inventory is intended to: (a) provide information on and an assessment of CDC HIV evaluation efforts to date; and (b) assist **CIOs** and **ODD(HIV)** in targeting future evaluation priorities. The inventory provides a baseline of CDC HIV activities and a benchmark of the evaluation status of HIV activities at CDC.

- (2) **Structured interviews.** Structured interviews were conducted with representatives from each **CIO** involved in HIV activities to assess the evaluation activities and information needs relating to HIV activities at **CIO** level. The interviews served to: (1) identify evaluation and information needs of the **CIOs**; (2) identify the barriers to expanded evaluation efforts; and (3) clarify the role of **ODD(HIV)** in CDC HIV evaluation activities.
- (3) **Literature review.** A literature review was conducted to assess current theory and methods on: (1) prioritizing activities for evaluation; and (2) designing an evaluation system that will maximize comparability/compatibility among evaluation results of differing activities in different **CIOs**. In addition to consulting the published literature, telephone interviews were conducted with recognized experts in the area of evaluation research.
- (4) **Conclusions and recommendations.** Conclusions and recommendations were prepared from the literature review, the interviews and the inventory to produce a set of evaluation options and recommended next steps regarding the evaluation of CDC HIV activities.

Results from each of these activities are discussed in the subsequent sections of this report.



## II. INVENTORY OF CDC HIV ACTIVITIES

### A. Approach

#### 1. Definition of an HIV “activity” for evaluation

One of the initial conceptual difficulties for the inventory task was the definition of an HIV activity for evaluation. Activities within each CIO needed to be defined at the lowest level that allowed meaningful and unambiguous differentiation from other activities, while also having sufficient independence to be evaluated. Over-specification of activities, on the one hand, would lead to numerous “partial” and interdependent activities about which insufficient information would be available. Over-aggregation of activities, on the other hand, would lead to a lack of ability to adequately characterize the activity for evaluation. In some cases, an activity as it was specified for evaluation did not overlap with the activity as it was implemented, thus making collection of administrative information (FTEs, budgets, etc.) difficult or impossible.

Many CDC HIV activities are carried out by external grants, contracts, and cooperative agreements. For the purposes of the inventory of activities for evaluation, grant and cooperative agreement programs were considered a single HIV activity if they resulted from a common announcement, thereby having some common specification of evaluation requirements across all the awards. Thus, the Minority and other CBO prevention projects (from CPS) and the prevention and surveillance cooperative agreements (from CPS and CID) were each considered as one activity although they each reflect different activities at the state and local level.

An additional example of multiple activities being considered a single activity for the purposes of assessing evaluation status is in the area of laboratory research. Laboratory research activities related to HIV infection are not discrete interventions in themselves, but typically contribute to knowledge regarding the infection in a “building-block” manner. Process evaluation of these activities takes the form of monitored adherence to protocols that have been reviewed and approved, and publication of results in peer-reviewed journals. Impact evaluation of laboratory activities on the

epidemic itself, however, would require a broader and more integrated view, involving assessment of the role, scope, usefulness, and necessity of the “research and development” function fulfilled by laboratory research.

Finally, the starting point for the definition of an HIV activity was for those **CIOs** and discrete activities funded directly through **ODD(HIV)**. HIV funding at CDC, however, can come through other sources, such as the U.S. Agency for International Development (**USAID**) interagency funding support for IHPO. Additionally, the standard operation and traditional functions of other **CIOs** contributes significantly to the overall CDC HIV effort, as in the case of CDC’s Epidemiology Program Office (EPO). EPO is involved in CDC’s HIV effort (1) through the actions of its epidemiologic intelligence **service** (EIS) officers serving throughout the country and participating in HIV investigations and support as necessary, and (2) through periodic publication of articles and special HIV/AIDS supplements in the MMWR. In recent years nearly 1 in 4 articles have been HIV/AIDS-related. Although they are not necessarily directly funded and separately identified HIV activities, the ongoing efforts of EPO (as well as PHPPO in the area of lab training and proficiency) should be recognized as integral to the overall HIV mission at CDC.

## 2. **Methodology and design of database**

We used a microcomputer database (IBM-compatible hardware, dBase III+<sup>(c)</sup> software) as the means for organizing and manipulating the inventory. Tentative database items were proposed and refined over the development of the approved workplan; these items were broadly classifiable into three areas:

- (a) **Administrative information.** Management information data important for activity identification, analysis, and follow-up included the following: project name, implementing **CIO** and division, collaborating **CIOs**, contact person for the activity and telephone number, staffing and budget estimates for the purpose of “benchmarking” the activity vis-a-vis others, current year of activity, and extramural status of activity and number of outside contracts and grants.
- (b) **Activity classification information.** Numerous classification schemes have been developed for HIV/AIDS-related activities. These include the

PHS budget categories, and classification schemes based on target groups, transmission routes, and CDC HIV strategic plan categories. A consistent problem regarding all these schemes has been the **forced-choice** nature of requiring selection of one-and-only-one category to best classify an activity. Given the multi-dimensional nature of most HIV interventions, this restriction limits the usefulness of any particular scheme. Further, development of additional typologies in the future, reflecting new policy interests, is a near certainty. We dealt with these issues by including a number of the typologies that have been developed (including the most recent Phase III strategic plan classification) and adopting an “indicate all that apply” approach which avoids the “pigeon holing” problem. To the extent the classifications offered under the typologies are exhaustive, they also allow existing activities to be placed under new typologies by mapping the already-described characteristics into the new classification categories.

- (c) **Evaluation status information.** The inventory solicited information on each activity regarding its evaluability, quantifiable process and outcome measures, data collection/data processing methods, type of evaluation activities, and the activity’s current evaluation status.

### 3. **Program Review document abstractions**

We used the March 1989 HIV Prevention Program Review document as the baseline for identifying HIV activities. All activities listed in the document were initially abstracted and entered as separate records into the database. Typically, the information available from the Program Review description included activity name, implementing CIO, collaborating **CIO(s)**, current year or prior year status, transmission route focus, and various other classification categories. Additional information sometimes included the implementing division within the CIO, the extramural status of the activity, and the number of grants or contracts involved.

From the exhaustive database of all activities contained in the Program Review document, we then identified redundant and/or duplicate entries, and separate entries for components of larger activities. Based upon our review of the entries, activities

were combined or deleted, accumulating information from one entry to another. In the case of some of the larger **CIOs**, the number of activities was cut by 50 to 70 percent; in the case of smaller **CIOs**, the redundancy found on the first round adjustments was substantially less. Table 1 provides the initial and first round counts of activities, by **CIO**.

Table 1. **FY 84-88 and FY 89 HIV Activity Counts, by CIO; 1989 HIV Program Review Document**

<u>Implementina CIO</u>	<u>Initial Activity Counts</u>	<u>First Round Adjustments*</u>
<b>ODD(HIV)</b>	3	2
<b>CCDPHP</b>	31	19
<b>CEHIC</b>	<b>1</b>	1
<b>CID</b>	<b>251**</b>	77
<b>CPS</b>	119	64
<b>IHPO</b>	0	0
<b>NAIEP</b>	53	24
<b>NCHS</b>	19	12
<b>NIOSH</b>	<b>10</b>	9
<b>PHPPPO</b>	<b>4**</b>	3
<b>Total</b>	<b>491</b>	211

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 \* Prior to **CIO** review.

\*\* Not including discrete laboratory research activities.

#### 4. **Activity review and input from CIOs**

Following the initial work on the activity inventory database, partially completed "inventory report forms" were generated for each **CIO**, incorporating all information from the Program Review document, including information from multiple "activities" combined into a single activity. These partially completed forms were given to HIV program representatives in each **CIO**, along with an informal guide regarding the inventory itself, and definitions for the information requested. Additionally, we met one or more times with each of the **CIO** representatives and their staff to explain the objectives of the inventory task, and the need for direct **CIO** involvement. **CIO**

representatives were requested to review the partially completed inventory forms, identify duplicate or incorrect activities, recombine or reorganize as appropriate, and provide the additional critical information which was not available from the Program Review document. We also requested that **CIOs** identify and provide information on activities that began since the Program Review document was prepared, about which we would not have been aware.

**CIOs** typically sorted their set of forms by the responsible division or branch within the CIO, and requested that the appropriate staff make additions, clarifications, or provide the necessary input on the forms. A CDC Presidential Management Intern served as an on-site CDC staff person to answer questions or provide assistance, as requested.

Finally, one of the ten involved **CIOs** chose to develop its own inventory of FY 89 activities without using the consolidated forms developed from the Program Review document as was done by the others. This **CIO** also consolidated all FY 84-88 completed activities with the FY 89 activities; the result was HIV activities being reported at a more-aggregate “program” (versus “activities”) level than for the other **CIOs**. The **impact** of this on the analyses is noted both in the discussion of results and on the tables.

One important aspect should be mentioned regarding the inventory. The results, ultimately, are self-reported by the **CIOs**. No independent verification of activity characteristics, evaluation status, or evaluability was carried out as part of the task order. We strived for consistency, however, through the initial and ongoing discussions regarding the inventory, and the description and instructions that accompanied the forms. Where known discrepancies and alternative interpretations of terms exist, they are noted on the tables.

A copy of the Inventory Form, as well as the guide provided to all **CIO** representatives to assist in completing the activity forms, are included as Appendix **B**.

##### 5. Creation of final inventory database and cross-tabulations

The inventory forms were edited for consistency and face validity upon return from the **CIOs**, and additions, corrections, and deletions to the database were made as indicated. The resulting “Inventory of CDC HIV Activities for Evaluation” is

provided in list form as Appendix C. The final database was converted to **PC-SAS**<sup>(c)</sup> format for the production of cross-tabulations and counts, as described in the next section.

## **B. Results**

### **1. Characterization of CDC HIV activities**

This section summarizes results from the inventory and cross-tabulations of inventory data. Simple statistics are presented for some of the variables.

#### **a. Descriptive data on HIV activities**

Number of activities. FY 89 and FY 84-88. The inventory process resulted in a total of 133 separate HIV activities identified across 10 **CIOs** specifically funded for HIV **activities**.<sup>3</sup> The total reflects adjustments to the defining of discrete activities from the Program Review document, as well as new activities not included in that document. There were 118 discrete HIV activities ongoing in FY 89 (63 of which were continuations from earlier years), and 15 that were completed during FY 84 through FY 88.<sup>4</sup> Figure 1 displays the overall breakout by year of HIV activities; Table 2 shows the number of activities by period for each CIO. (For easier reading, the remaining figures and tables for this chapter appear at the end of the chapter, on pages 22-51.)

Relative size of activities. A goal of the inventory activity was to be able to benchmark the size of the activities by a number of different means, including number of **FTEs**, current budget levels, and future budget levels. A number of **CIOs** had trouble providing **FTE** or budget data for a number of reasons, including: (1) activities involved collaboration with other **CIOs** or were extramural, and budget and **FTE** information was either not available or potentially misleading; and (2) the HIV activity for the inventory (relating to evaluation) was defined differently than the HIV activity as

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<sup>3</sup> Nine of the **CIOs** are funded through **ODD(HIV)**; the tenth (IHPO) receives funding for HIV activities through an agreement (PASA) with **USAID**. In addition, the CDC Epidemiology Program **Office** (EPO) has ongoing programs that address different aspects of preventing HIV infection, although EPO has no specific HIV funding.

<sup>4</sup> Information on the total number of **FY 84-88** completed activities is incomplete because data were not available from one CIO.

it is administered, or part of the activity was non-HIV and **FTEs** and budgets could not be disentangled. Through follow-up with the **CIOs** we were able to obtain “best estimate” FY **89** budgets for all reported FY 89 activities. Since some of the figures were acknowledged approximations, they were stratified into ranges. Figure 2 shows the overall distribution of HIV activities by size. Sixteen percent of the reported activities are “zero budget”, meaning they are HIV-related, but without current or separate HIV funding. Twelve percent of activities are large projects over \$5 million in current year budget. Table 3 shows the number of activities by **CIO** for each of the budget ranges. Overall, **FTE** and budget ranges for CDC HIV activities were tremendous, ranging from zero to more than 40 **FTEs** and zero to tens of millions of dollars with regard to budgets.

Extramural activities. As noted earlier, a significant number of the CDC HIV activities are carried out extramurally through grants, contracts, and cooperative agreements. For the purposes of the inventory, an activity was considered “extramural” if it was reported that any part of the activity involved outside, CDC-funded collaborators, regardless of the scope of their involvement. **The** extramural scope of different activities varied, therefore, from nearly 100 percent to very small, defined aspects of the activity. Table 4 shows the extramural status of CDC HIV activities. Seventy percent, or 93 activities, were reported as having extramural components. The remaining 30 percent (40 activities) were classified as entirely within CDC.

Linkages among CIOs. The nature of the HIV epidemic has resulted in the need for extensive collaborative efforts among the **CIOs**, as evidenced by the creation and ongoing coordination role of **ODD(HIV)**. Among the 133 total HIV activities, 71 (54 percent) indicated one or more collaborating **CIOs**. Table 5 presents a matrix of lead versus collaborating **CIOs**; the individual cells show the number of activities in which a particular **CIO** collaborated with another **CIO**.

Not surprisingly, **ODD(HIV)** had collaborative relationships with each of the other **CIOs**; however, it was the only **CIO** that did. **CPS** and **CID** were most often listed as collaborating **CIOs**; furthermore, they were highly interactive with each other, with 9 **CPS** activities listing **CID** as the collaborating **CIO**, and 5 **CID** activities listing **CPS** as the collaborating **CIO**.

## b. Activity classification

Corresponding to the many different classification systems and typologies, CDC HIV activities were classified along a number of different dimensions. To avoid the forced-choice, “pigeonholing” problem mentioned earlier, multiple selection of categories was allowed. Percentages presented in the tables, therefore, are column percents for that category in relationship to the total number of HIV activities. Because of multiple categories in any one classification scheme, the column percents **cannot** be summed to 100 percent.

Finally, if no specific transmission route, target subgroup, or population subgroup was indicated, then the activity was assumed to encompass the general population or the entire HIV at-risk or infected population.

Transmission route prevention focus. The transmission route prevention focus uses the categories specified in the Program Review document:

- prevention of sexual transmission;
- prevention of IVDA-associated transmission;
- prevention of perinatal transmission;
- prevention of transmission through blood and blood products;
- prevention of occupation-related transmission;
- prevention of transmission through management of the infected individual; and
- prevention of transmission through promotion of healthy lifestyles

Activities were classified in the inventory as addressing HIV through one or more of these categories. Figure 3 shows the transmission route prevention focus overall, and Table 6 shows frequencies by CIO. Of the total number of activities, 62 (47 percent) addressed some aspect of sexual transmission, 55 (41 percent) IVDA-associated transmission, and 49 (37 percent) healthy lifestyles promotion. Across CIOs, prevention of transmission through blood and blood products was addressed by activities in all CIOs except one.

PHS activity classification. Activities by PHS categories of biomedical research, epidemiology, surveillance, prevention, treatment and service delivery, and regulation are shown overall in Figure 4 and by CIO in Table 7. Over 75 percent of all activities

reported a prevention component or aspect. The next largest categories were **31** percent reporting epidemiology and 27 percent reporting surveillance. Consistent with the mission of CDC, almost all **CIOs** had activities involving surveillance or prevention; on the other hand, very few activities had any involvement with regulation. Additionally, biomedical research is highly centralized, essentially in only two **CIOs**.

Strategic plan classification. The draft outline for the CDC Strategic Plan (HIV), Phase III, proposes four categories and subcategories, as follows:

- I. Risk Assessment
  - A. Surveillance
  - B. Epidemiology
- II. Technology Development & Transfer
  - A. Technology and Evaluation
  - B. Information and Technology Transfer
- III. Prevention
  - A. Primary Prevention
  - B. Secondary Prevention
- IV. Capacity Building
  - A. State/local level
  - B. Regional/national level
  - C. International capacity

Figure 5 shows the strategic plan classification of CDC HIV activities overall, and Table 8 **shows** the classification of activities by CIO. Of the total, 61 percent of activities have aspects relating to risk assessment, almost evenly split between surveillance and epidemiology. Eighty-three percent of activities have aspects relating to technology development and transfer, and 92 percent to prevention. Finally, 100 percent have some aspect of capacity building included as part of the activity. Eleven percent are oriented toward capacity building in **international** programs.

Target subgroups. Target subgroups reflect emphases on particular categories at-risk of having or transmitting HIV infection. As shown in Table 9, CID and CPS had the largest number of activities with a target group focus, although patterns are hard to discern. The largest number of activities are directed at **IVDAs** (mostly from CPS and CID) and adolescents and young adults (CCDPHP, CID, CPS).

Population subgroups. Figure 6 and Table 10 show population subgroup focus overall and by CIO, across population subgroups. Of the total number of activities, 59

(44 percent) had aspects related to women, 73 (55 percent) had aspects related to minorities, and 19 (14 percent) had aspects related to newborns. As for the other activity classification schemes, categories are not mutually exclusive, and percents do not add up to 100 percent.

Functional categories. Functional categories derive from the March 1989 HIV Prevention Program Review document, and allow cross-cutting classification of the activity along the dimensions of evaluation, behavioral science, international health, data management and analysis, and training and workshops. Figure 7 and Table 11 show the reported activity functional categories overall and by **CIO**. Of the total number of activities, 60 (45 percent) had explicit evaluation components, 42 (32 percent) related to behavioral science, 17 (13 percent) to international health, 52 (39 percent) to data management and analysis, and 42 (32 percent) involved training and workshops.

**C. Changes in activity classification, FY 89 versus FY 84-88**

**The** inventory classified activities as either completed FY 84-88 or FY 89, and either new or continued from previous years. Several areas of growth in number of activities were identifiable from the data, as shown in Table 12.<sup>5</sup> Activities begun in **FY 89** reflected emphases on programs addressing women and minorities, sexual and IVDA-associated transmission prevention and promotion of healthy lifestyles. Additionally, the proportion of activities addressing the management of infected individuals has grown, as has the proportion of activities directed at women and minorities. Few new programs were begun in FY 89 addressing preventing transmission through blood and blood products, or specifically toward preventing perinatal transmission. The proportion of activities directed toward evaluation and data management and analysis also substantially increased between FY 84-88 and FY 89 activities, while the proportion toward training and workshops has gone down.

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<sup>5</sup> Note that this discussion relates to the number of activities only, and may not reflect relative amounts of budget or personnel resources.

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**d. Activity evaluability and evaluation status**

The evaluation status of all CDC HIV activities was reported along several dimensions, including activity evaluability, types of evaluation activities, identified process and outcome measures, ongoing evaluation activities, data collection/data processing methods, and activity evaluation status. It should be noted that these data are self-reported by the **CIOs**, subject to definitional interpretation within the guidelines provided and discussions held. Results along each of the dimensions are described below.

Activity evaluability. Several characteristics determine whether evaluation is likely to provide useful information for planning and improving future activities (Wholey, 1979). The questions in this section of the inventory form asked for a ranking from 1 to 5 of some of these characteristics for each HIV activity. The following are brief descriptions of each of the characteristics ranked. The last question asked for an overall or summative ranking of activity evaluability.

Plausible intervention design: refers to a set of activities, resources and timetable that can reasonably be expected to lead to achievement of the activity's objectives.

Clear objectives: are there written, quantifiable, and realistic program objectives for the activity?

Measurable outcome indicators: are there measurable and valid outcome indicators to assess achievement of program objectives?

Available data: will valid data on program outcomes be available in a timely fashion and at reasonable cost?

Adequate resources: are there sufficient funds and personnel committed to carry out planned activities?

Potential for replicability: can evaluation results be used to design a similar activity in the future, or improve the continued implementation of this one?

Overall: Ranking of activity on a scale of 1 to 5, with 1 being 'minimally evaluable' and 5 being 'completely evaluable.'

Tables 13 through 16 present mean evaluability criteria scores by types of activities, using the activity classification categories.

With regard to PHS activity classification categories (Table 13), and omitting regulation for which there were only four activities, biomedical research had the highest overall mean evaluability score, and the highest mean scores on three of the six criteria. Prevention activities consistently had the lowest scores on the evaluability criteria with the exception of adequate resources. Treatment and service delivery activities had the lowest mean score for adequate resources.

Table 14 presents the mean evaluability scores for activities classified by transmission route prevention focus. Activities related to occupational transmission of HIV consistently had the lowest evaluability criteria scores of activity in this classification scheme, with the exception of the replicability of the intervention. The highest mean scores for plausible intervention design, clear objectives, and measurable outcome indicators were for activities involving management of infected individuals. Not unexpectedly, activities related to promotion of healthy lifestyles had the lowest score on the criterion of activity replicability.

Evaluability scores for activities classified according to the strategic plan classification are presented in Table 15. Risk assessment categories (surveillance and epidemiology) generally had the highest scores for each of the criteria, while information and technology transfer and prevention activities generally had the lowest overall perceived evaluability.

Finally, it is interesting to note from Table 16 that extramural activities are considered more evaluable on all criteria and overall than activities that are strictly within **CDC**.

Identified process and outcome measures. The section of the inventory on process and outcome measures solicited description of specific measures used for monitoring the activity. Given that the only restrictions were the two categories “process” and “outcome,” the responses to this section of the inventory were quite varied. Some forms were returned with only two-three words written under each heading; others had lengthy paragraphs written at the bottom of the page. However, a framework with which to classify the varied responses emerged. Figure 8 provides the conceptual organization for the two general types of activity measures.

The four different categories of the process and outcome measures are roughly parallel. This similarity is undoubtedly due to similarities between the intended objectives of an activity, and the actual components of the activity that are implemented in trying to reach those objectives. This relationship is portrayed in Figure 9, with examples from a cross-section of **CIO** activities.

Ultimately, there is one unifying objective behind all CDC-HIV activities: the prevention of HIV infection and associated morbidity and mortality across the entire population. Because this common theme exists, there were many redundant process and outcome measures listed by the various **CIOs**. However, in addition to this redundancy within the two categories, there also existed some overlap across categories. While a few cases of “across category” overlap were due to misunderstandings about the definitions process and outcome, the majority of overlaps were actually consistent with the nature of the individual projects. For example, it is appropriate for a **survey** activity to have as an outcome measure “the number of people who use IV drugs.” This is exactly what is supposed to be determined with the survey. However, for a project with a goal of altering the behavior of IV drug users, determining the number of people who use IV drugs can only serve as a process measure. The end measure would have to be a determination of the behavior changes among the IV drug-using population. Appendix D provides a **typology** for and an edited listing of activity process and outcome measures reported by the **CIOs**.

Types of evaluation activities. Figure 10 and Table 17 classify the types of completed, underway, or planned evaluation activities, overall and by **CIO**, according to the definitions presented earlier. Process evaluation, as expected, was the most common type of evaluation activity, with 81 activities (61 percent) reporting it. Formative evaluation was reported for 56 (42 percent), effectiveness/impact evaluation for 50 activities (38 percent), and cost-effectiveness evaluation for 4 activities, or 3 percent.

Data collection/data processing methods. Paper and forms-based data collection was reported for 64 percent of the activities, as shown by **CIO** and overall in Table 18. Microcomputer-based systems were reported in place for most of the **CIOs**, however. Microcomputer-based data processing was reported for 58 activities (44

percent). Mini- or mainframe-based computing was reported for the **CIOs** most heavily involved in surveillance, epidemiology, and data processing (39 activities, 29 percent).

Activity evaluation status. Self-reported HIV activity evaluation status is shown in Figures 11 and 12 and is presented **two** ways: (1) in terms of numbers of activities in each category; and (2) as the percent of the reported overall or **CIO** HIV budget represented by the activities in the category. Table 19 presents the tabular information overall and by **CIO**. By activity count, 3 activities, representing 1 percent of the overall HIV budget, have been evaluated, 57 activities (78 percent of the budget) have evaluations underway, **38** activities (17 percent of the budget) have an evaluation planned, and 20 new or ongoing activities, representing only 4 percent of the budget are either inappropriate for evaluation or have no evaluation plans.

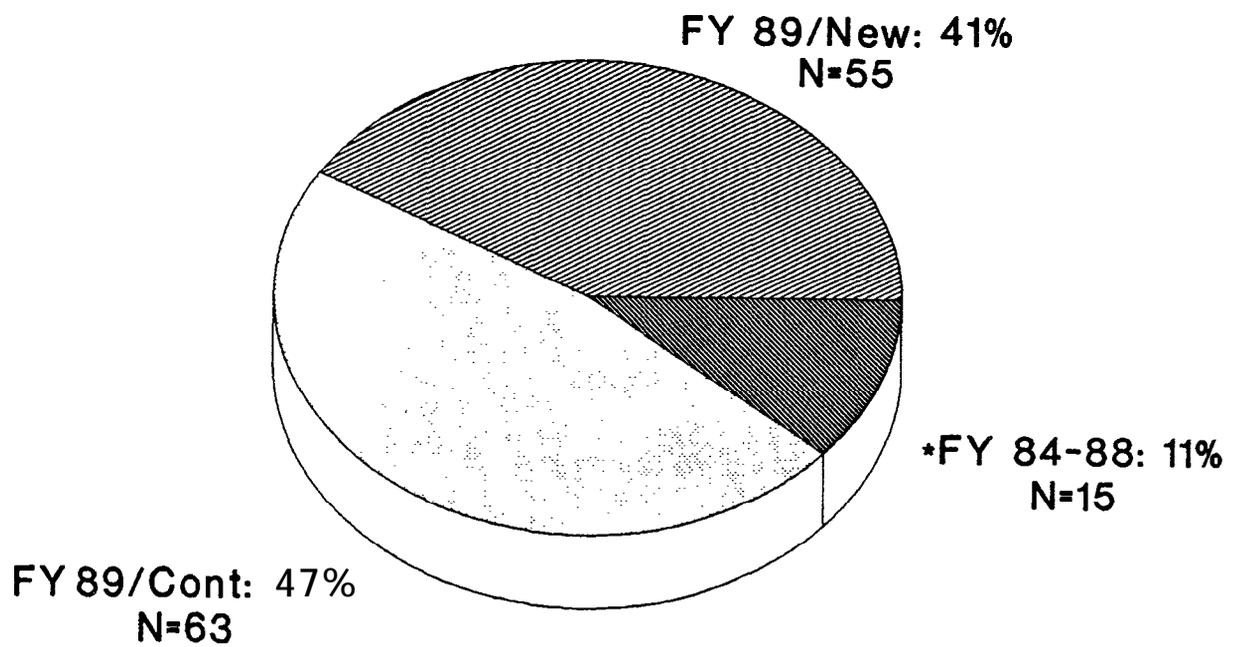
## 2. **Limitations of the inventory**

Important limitations to the inventory activity include the following:

- (a) There was unavoidable variation in the definition of an HIV activity across and, in some cases within, **CIOs**. In one particular case, a **CIO** choose not to consider any FY 84-88 activities. In another case, a smaller division within a **CIO** included as HIV activities numerous small but discrete projects rather than aggregating them together. To the extent the differences in definition of HIV activities were identified, they were either adjusted for (by use of size measures, for example) or appropriate notes were made on the tables and figures.
- (b) The orientation of most of the previously-developed classification typologies are toward evaluation of social science-based intervention programs, not data systems or bench science research programs. Thus, classifications related to specific transmission route focuses, such as sexual and IVDA-related, and target subgroups, such as persons with hemophilia, as well as the concepts and questions related to evaluation and evaluability were either inapplicable or difficult to answer for some of the activities carried out by the basic science or data collection and management **CIOs** such as CID or NCHS.

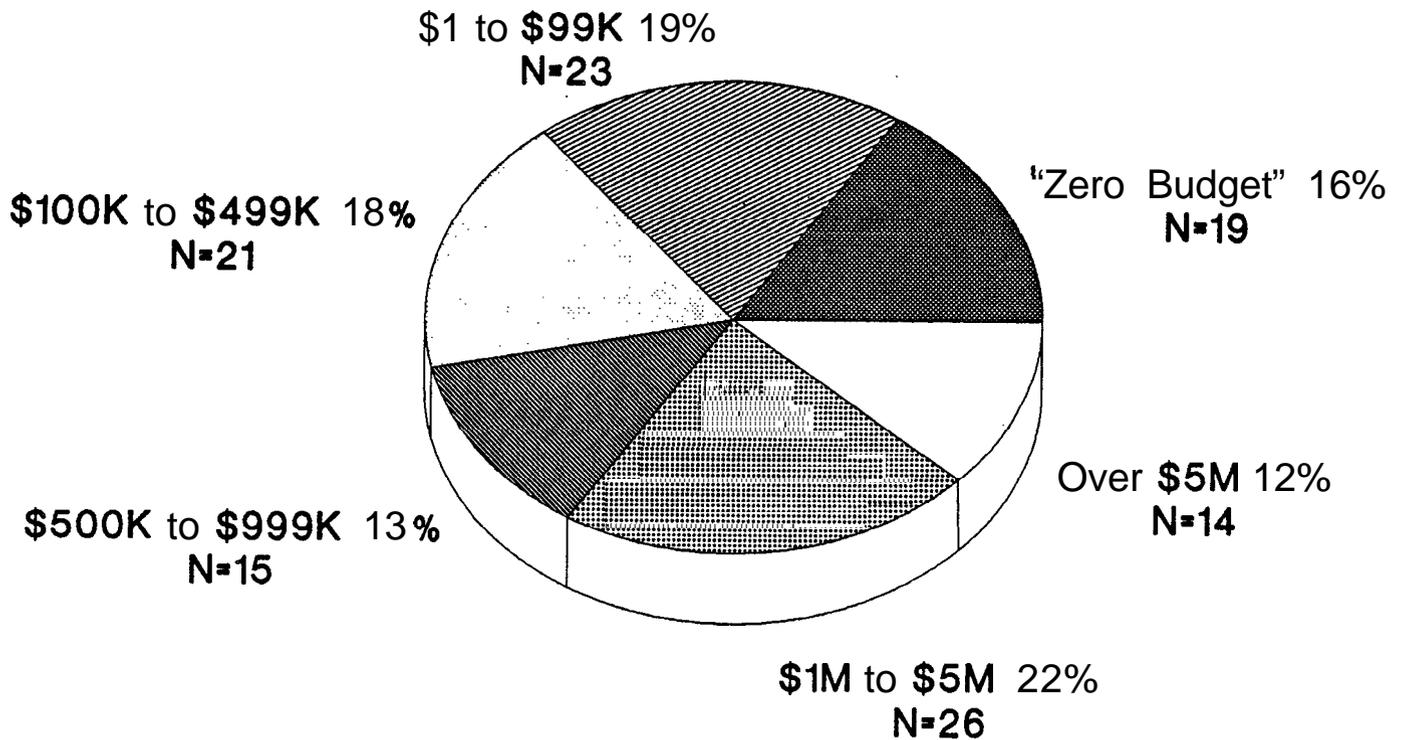
- (c) Related to the above limitation, item non-response was found to be an unavoidable problem for some activities. In cases where sub-activities or components of activities were identified for evaluation, administrative information, such as **FTEs** and budget, were often not available at the more detailed level, and systematic item non-response occurred for these activities. The implications were that “benchmarking” the size and scope of activities became difficult and required follow-up. Usable budget figures were ultimately obtained only for FY 89 activities, and not for the FY 84-88 completed activities. Additionally, item non-response took the form of “not applicable” or blank entries for activities that generally did not fit into the category of HIV interventions. In most cases “not applicable” or blank entries were entirely appropriate and acceptable responses; however, the implication of item non-response in other cases comprises validity threats of unknown magnitude, which can only be assessed by follow-up beyond the scope of the present task.
- (d) A fourth limitation is a largely unknown degree of variation in the interpretation of the information requested on the inventory form. Although discussions were held with **CIO** representatives, and a user’s guide provided (included in Appendix **B**), responses to the form and subsequent **conversations** indicate that application of terms, specifically those relating to evaluation, varied among the **CIO** respondents. In particular, research versus service delivery **CIOs** frequently interpreted terms differently. To the extent that these different interpretations were not resolved through follow-up, unknown bias is introduced into the inventory results.
- (e) Finally, it was beyond the scope and time of the task to assess independently the quality of evaluation plans and ongoing activities, either in terms of completeness, feasibility, control for validity threats, or reliability and validity of evaluation measures. Data on HIV activities and descriptions of evaluation efforts were self-reported by the **CIOs** either through the Inventory Report Form or through the structured interviews.

Figure 1. HIV Activities by Year  
Total = 133



\*Information on FY 84-88 activities not included for one CIO.

Figure 2. Number of FY 89 Activities  
by Size of FY 89 Budget  
Total. = 118



As reported by the CIOs.

Figure 3. Transmission Route Prevention Focus

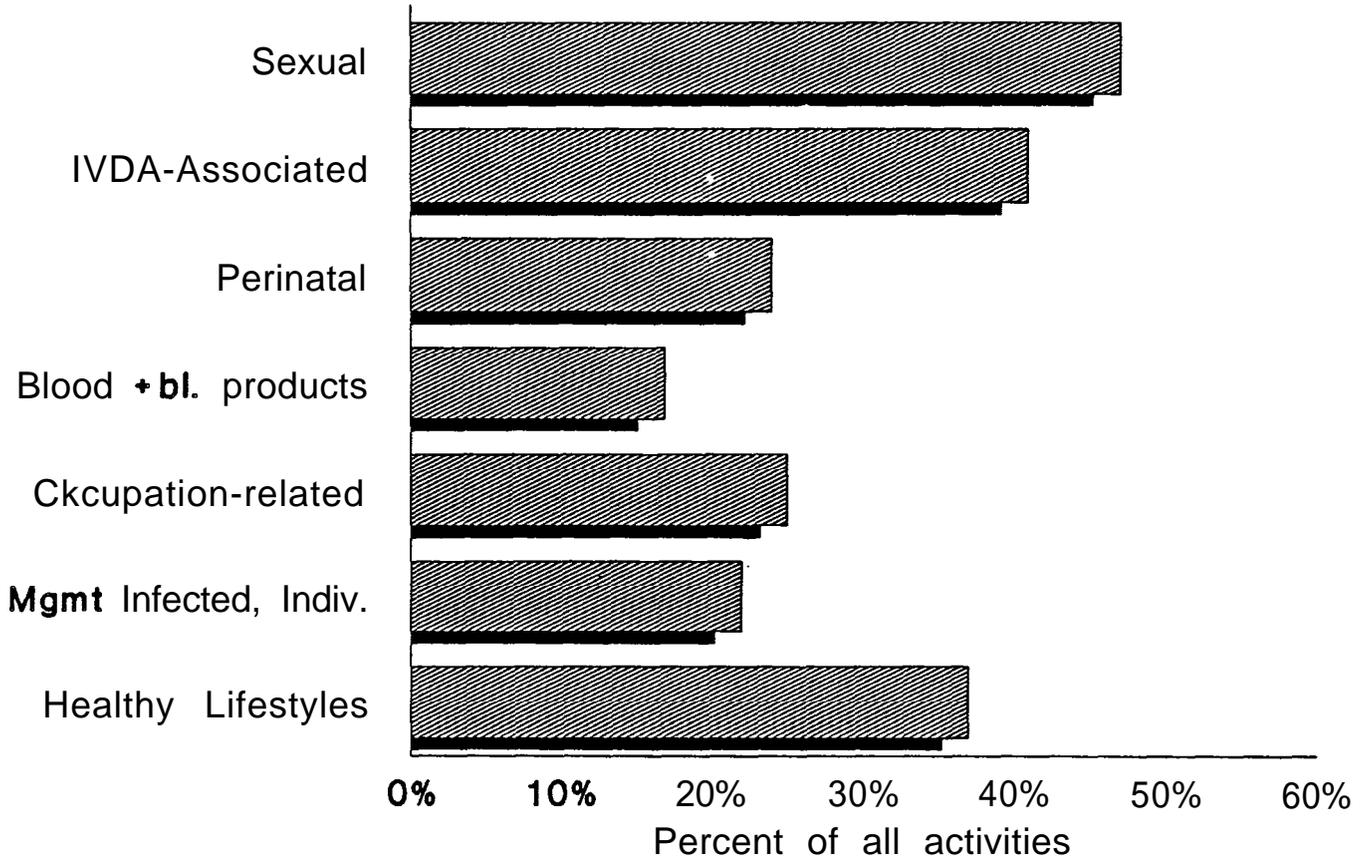


Figure 4. PHS Activity Classification

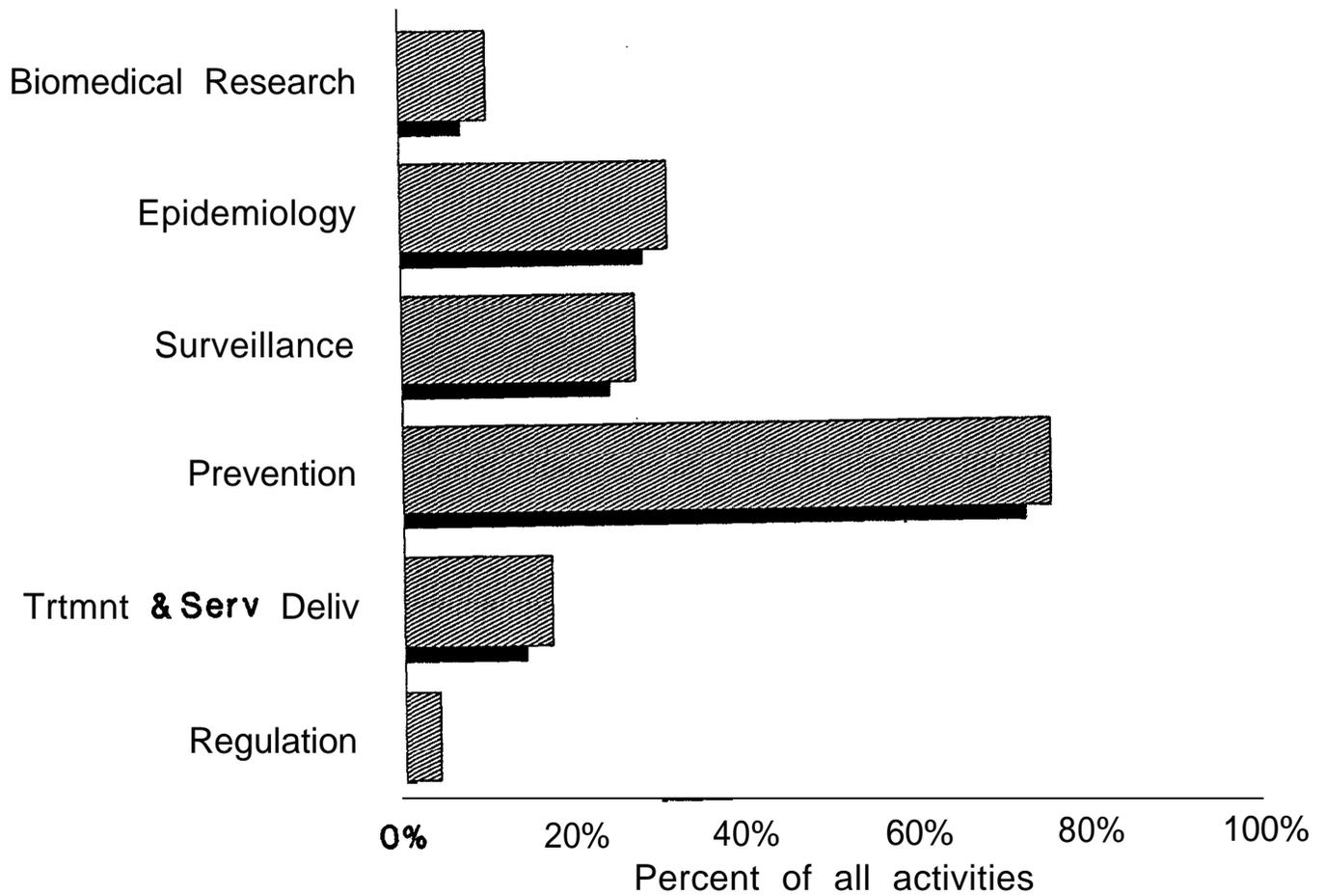


Figure 5. Strategic Plan Activity Classification

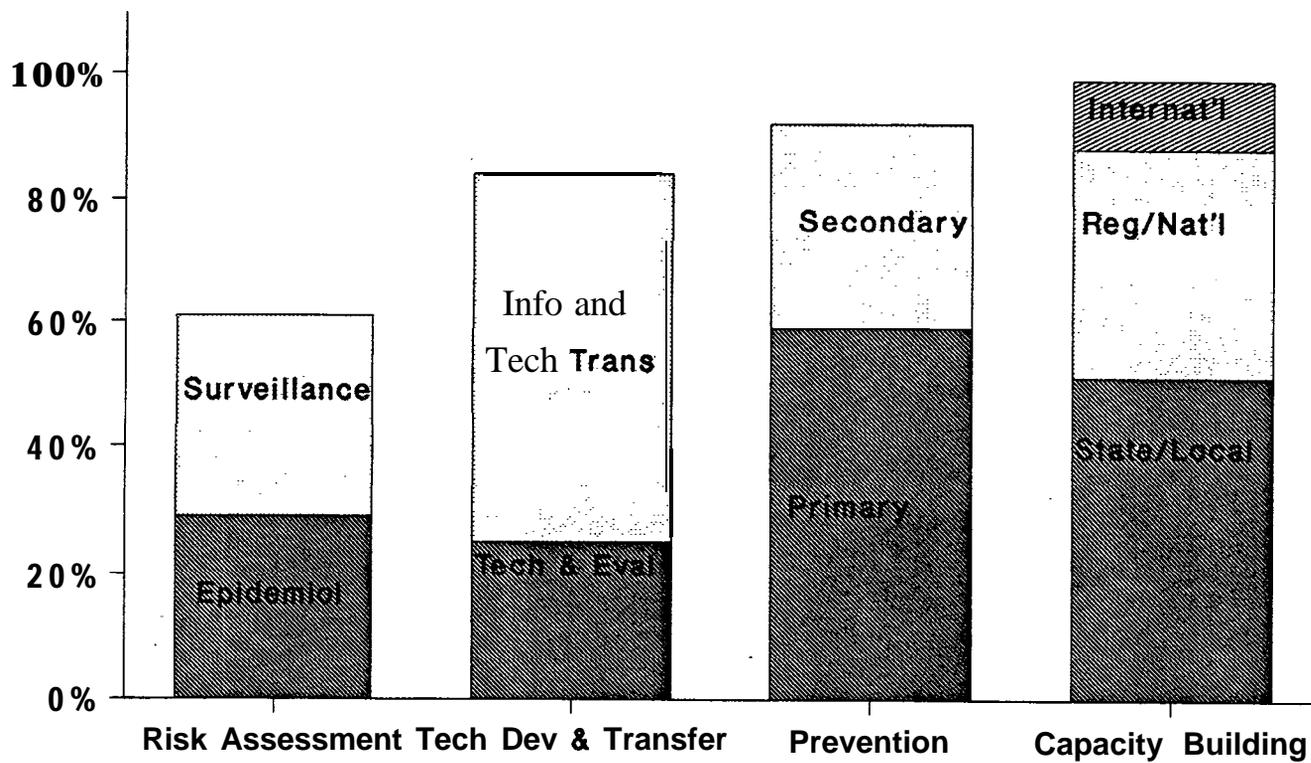


Figure 6. Population Subgroups

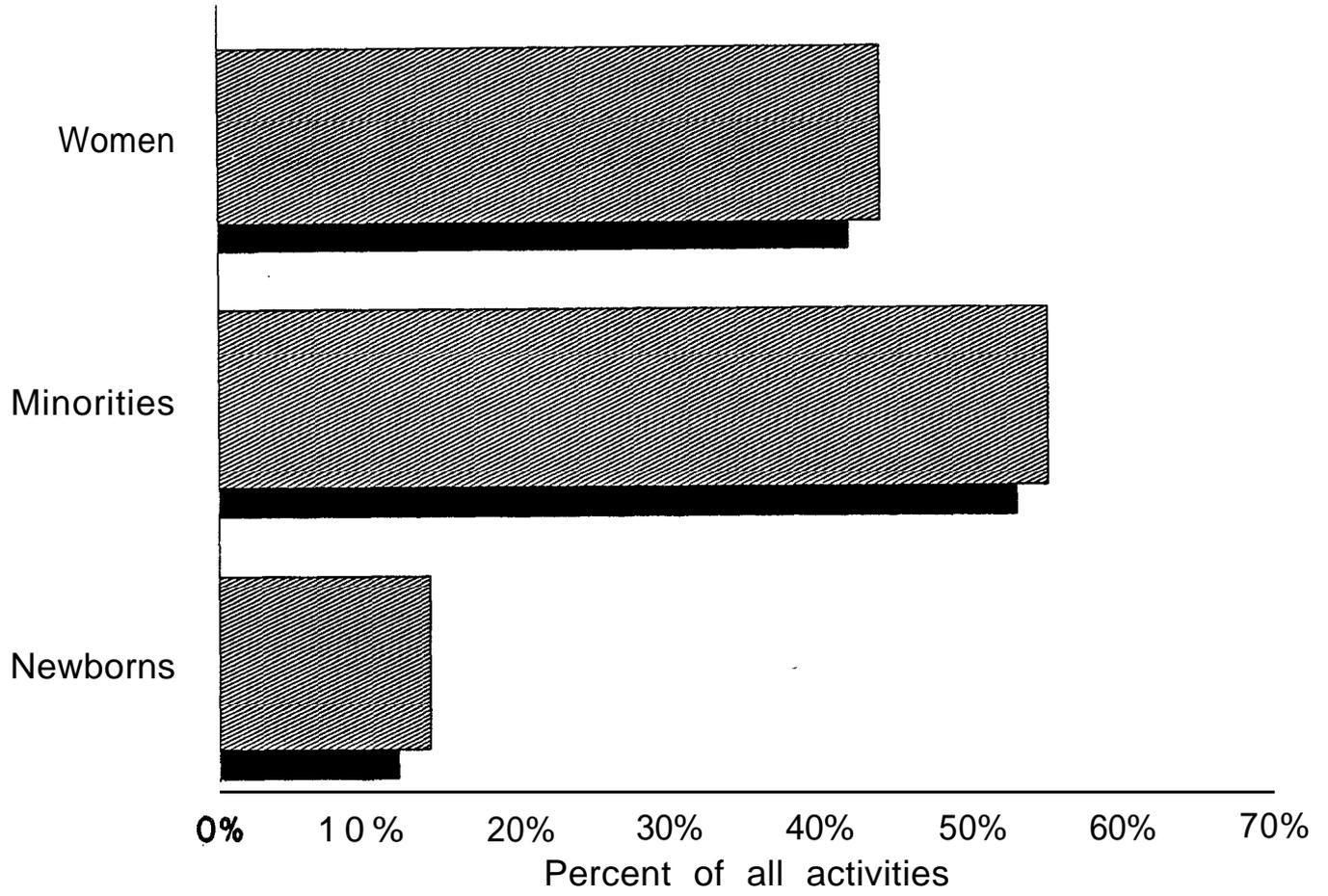


Figure 7. Cross-Cutting Categories

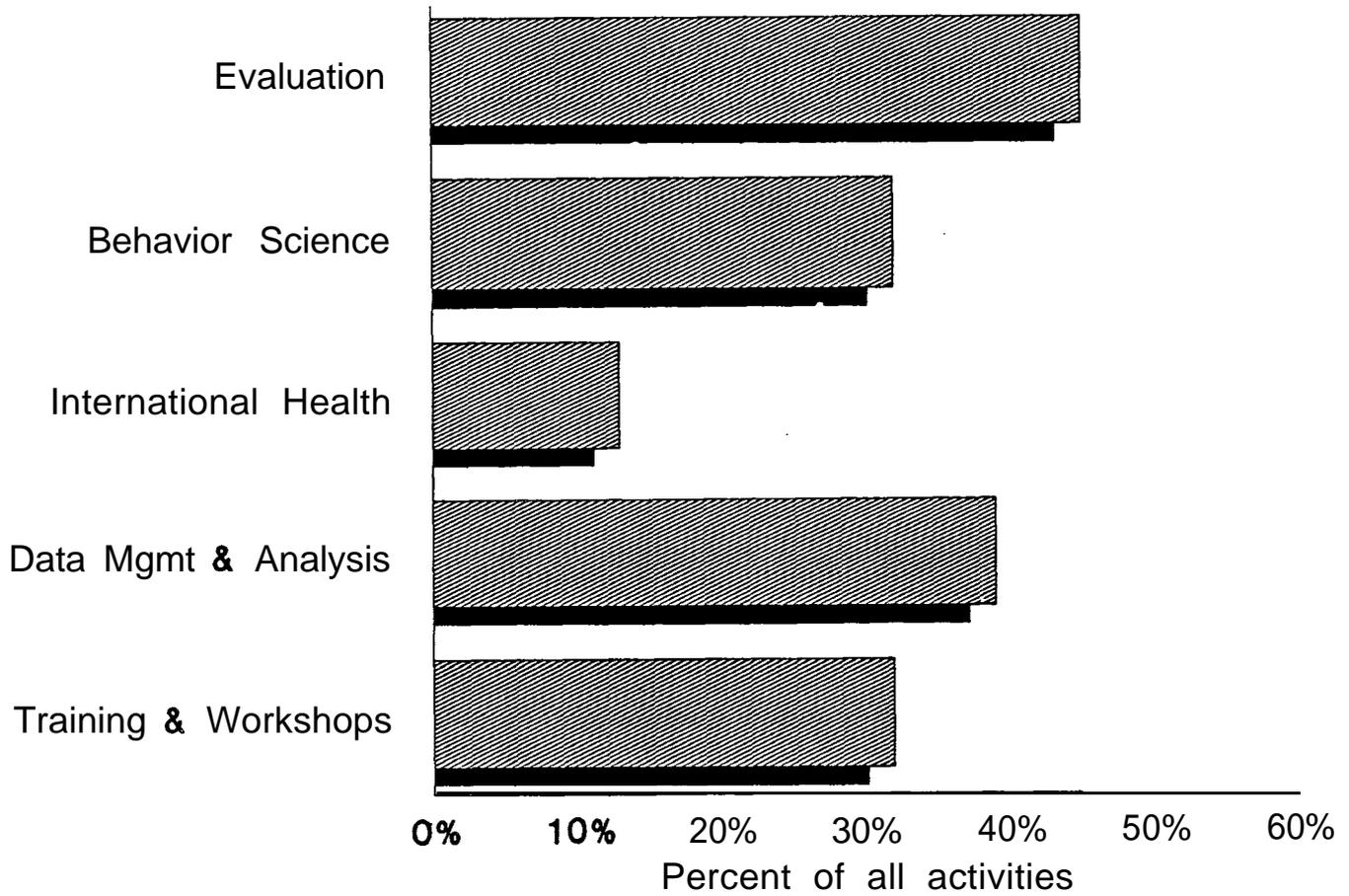


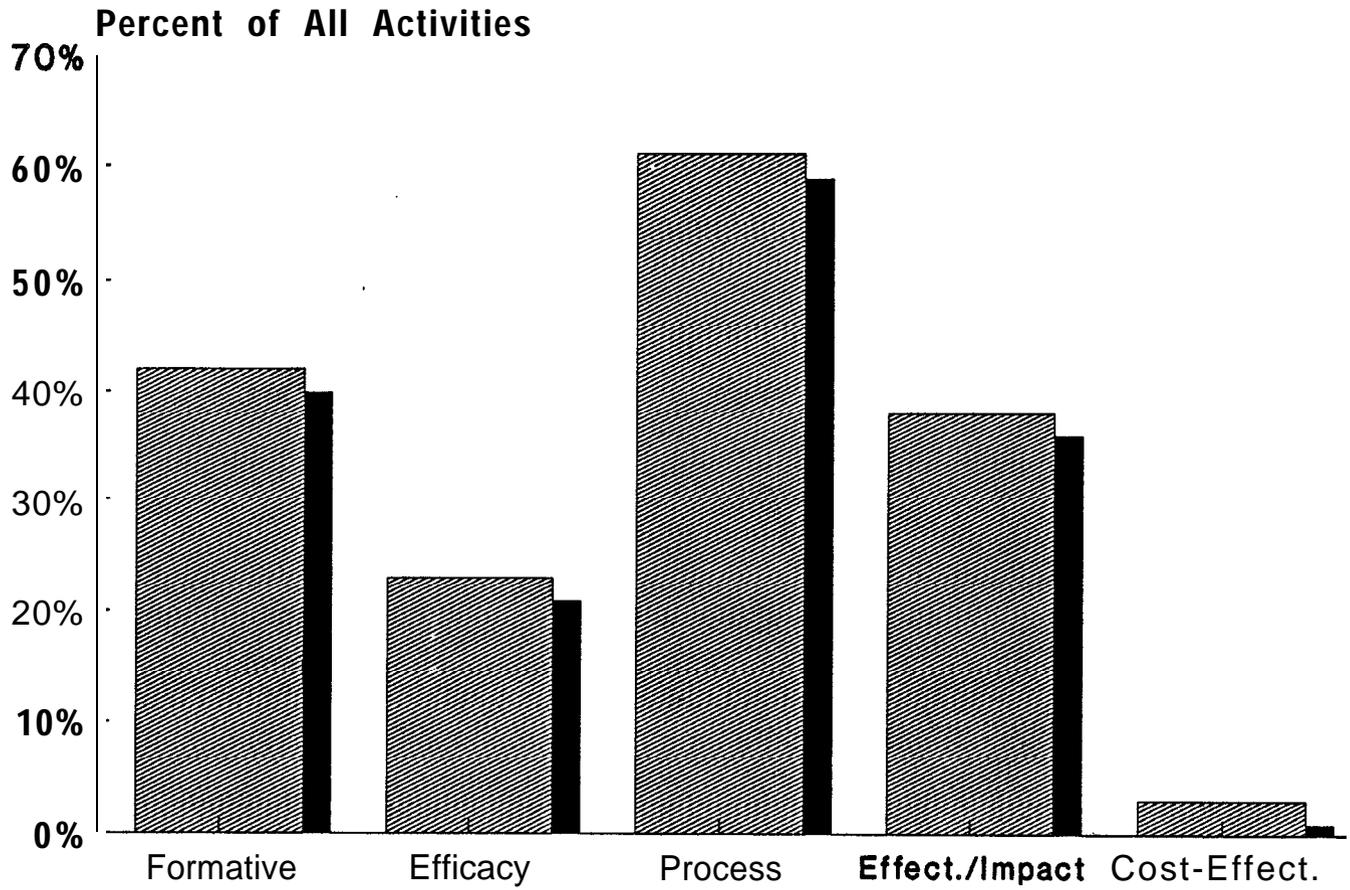
Figure 8. Conceptual Model for Process and Outcome Measures

<u>Process Measures</u>	<u>Outcome Measures</u>
<p>1. Needs Assessment and Measures of Participation</p> <ul style="list-style-type: none"> <li>• analysis of need for service</li> <li>• recruitment and enrollment of clients and programs</li> </ul>	<p>1. Activity Scope</p> <ul style="list-style-type: none"> <li>• no. of people reached</li> <li>• no. of people treated</li> <li>• no. of people trained</li> </ul>
<p>2. Research Progress</p> <ul style="list-style-type: none"> <li>• progress in laboratory and research methodologies</li> </ul>	<p>2. Shifts in <b>KABB</b></p> <ul style="list-style-type: none"> <li>• changes in knowledge, attitudes, beliefs, and/or behaviors</li> </ul>
<p>3. Activity Implementation and Monitoring</p> <ul style="list-style-type: none"> <li>• narrative reports on activity implementation/ resource consumption</li> <li>• quality control measures</li> <li>• shared information/ technical advice</li> </ul>	<p>3. Project Output</p> <ul style="list-style-type: none"> <li>• impact statements</li> <li>• final reports/ recommendations</li> <li>• updated epidemiological data</li> </ul>
<p>4. External Evaluation</p> <ul style="list-style-type: none"> <li>• survey/questionnaire evaluation</li> </ul>	<p>4. Planning and Networking</p> <ul style="list-style-type: none"> <li>• no. newly established contacts or working relationships</li> <li>• no. collaborative efforts</li> <li>• no. new workplans</li> </ul>

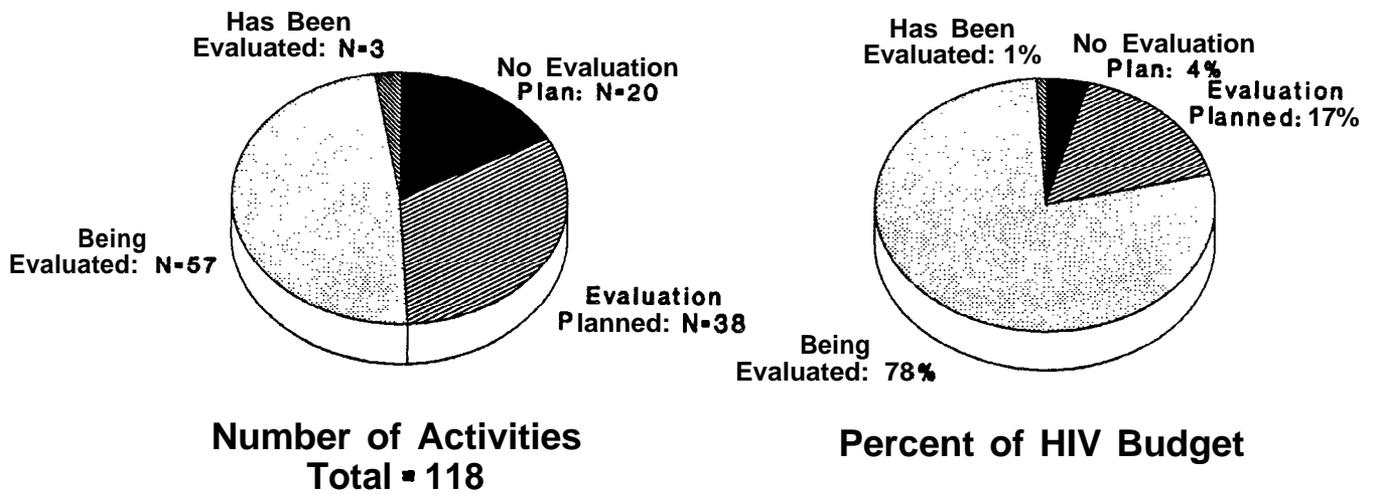
Figure 9. Examples of Process and Outcome Measures

	<u>Process Measures</u>	<u>Outcome Measures</u>
1.	<p>Needs Assessment and Measures of Participation</p> <ul style="list-style-type: none"> <li>• no. of pulmonary TB patients identified with AIDS</li> <li>• no. of persons seeking testing</li> <li>• no. calls to hotline</li> <li>• no. of prostitutes contacted</li> </ul>	<p>1. Activity Scope</p> <ul style="list-style-type: none"> <li>• percent of children vaccinated</li> <li>• no. of schools which adopt guidelines</li> <li>• no. of people enrolled in treatment</li> </ul>
2.	<p>Research Progress</p> <ul style="list-style-type: none"> <li>• development of new, rapid diagnostic tests for <b>TB/HIV</b></li> <li>• new laboratory standards and protocols</li> </ul>	<p>2. Shifts in KABB</p> <ul style="list-style-type: none"> <li>• self-reported decrease in unprotected intercourse</li> <li>• improved performance of laboratories</li> </ul>
3.	<p>Activity Implementation and Monitoring</p> <ul style="list-style-type: none"> <li>• progress on approved agency <b>workplan</b></li> <li>• site visits to observe infection control procedures</li> <li>• quarterly narratives to assess implementation of recipient activities</li> </ul>	<p>3. Project Output</p> <ul style="list-style-type: none"> <li>• production of AIDS guidelines and curriculum</li> <li>• statement of risks and benefits of various vaccines</li> <li>• development of mathematical models</li> </ul>
4.	<p>External Evaluation</p> <ul style="list-style-type: none"> <li>• student evaluation of course format and quality of lecturers</li> <li>• performance evaluation panels</li> <li>• survey of recipients</li> </ul>	<p>4. Planning and Networking</p> <ul style="list-style-type: none"> <li>• formal working relationship with WHO</li> <li>• collaboration among local <b>CBOs</b></li> <li>• no. self-sustaining programs</li> </ul>

Figure 10. Types of Evaluation Activities



**Figure 11. Activity Evaluation Status  
FY 89 New and Continuing  
Activities, All CIOs**



## Figure 12. FY 89 HIV Activity Evaluation Status by CIO

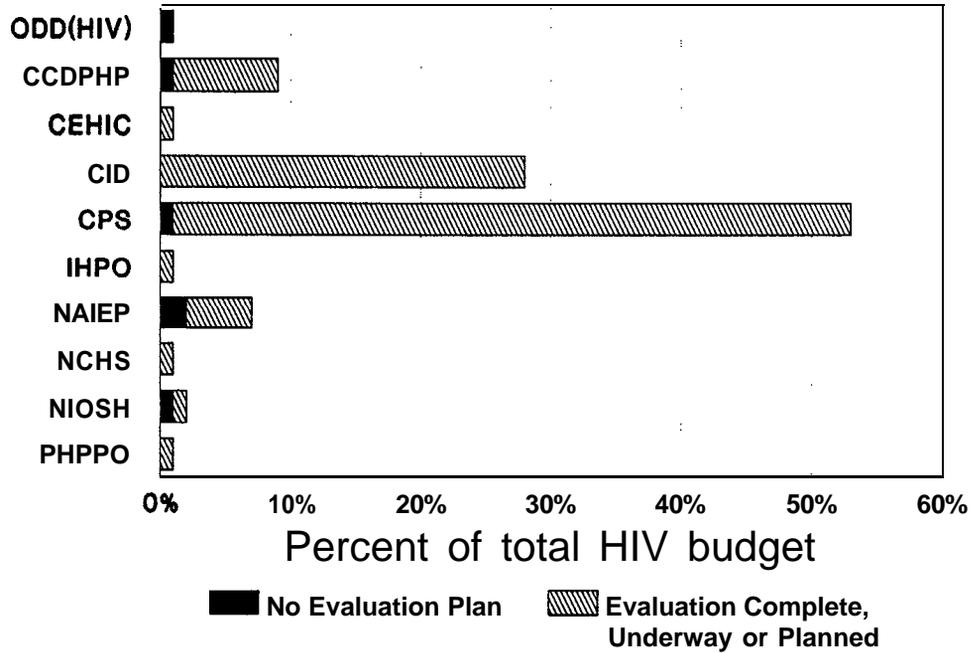
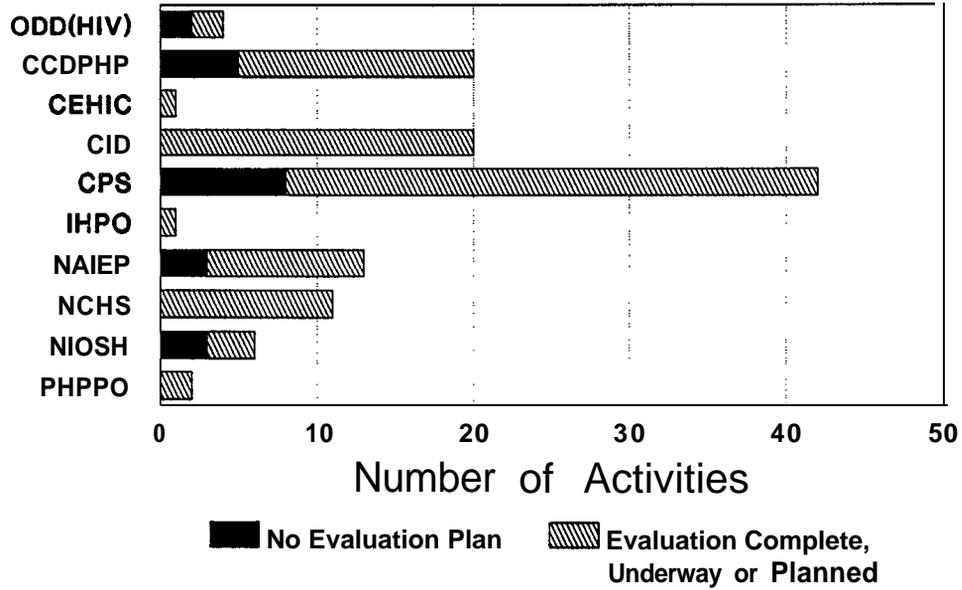


Table 2

Total HIV Activities by Year

CIO	FY 89/New		FY 89/ Continued		FY 84 - 88 Complete		Total Activities
	N	Pct.*	N	Pct.	N	Pct.	N
	ODD(HIV)	1	33%	1	33%	1	33%
CCDPHP	11	55%	9	45%	0	0%	20
CEHIC	0	0%	1	100%	0	0%	1
CID/*	2	10%	18	90%	n/a		20
CPS	21	42%	21	42%	8	16%	50
IHPO	1	100%	0	0%	0	0%	1
NAIEP	8	47%	5	29%	4	23%	17
NCHS	6	54%	5	45%	0	0%	11
NIOSH	5	62%	1	12%	2	25%	8
PHPPPO	0	0%	2	100%	0	0%	2
<b>Total . **</b>	<b>55</b>	<b>41%</b>	<b>63</b>	<b>47%</b>	<b>15</b>	<b>12%</b>	<b>133</b>

\* Percent of all activities for the indicated CIO or overall for the category.

. \* Information for FY84-88 activities not available for this CIO.

\*\* . Information on total FY 84-88 completed activities does not include information from one CIO.

Table 3

FY 89 HIV Activities by Size of FY 89 Budget\*

CIO	"Zero Budget" Activities*		\$1 to \$99K		\$1 00K to \$499K		\$500K to \$999K		\$1M to \$5M		Over \$5M Activities		Total
	N	Pct.***	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N
ODD(HIV)	0	0%	1	50%	0	0%	1	50%	0	0%	0	0%	2
CCDPHP	8	40%	1	5%	4	20%	4	20%	2	10%	1	5%	20
CEHIC	0	0%	0	0%	1	100%	0	0%	0	0%	0	0%	1
CID	0	0%	1	5%	2	10%	2	10%	12	80%	3	15%	20
CPS	2	4%	14	33%	4	9%	7	18%	7	14%	8	19%	42
IHPO	0	0%	0	0%	1	100%	0	0%	0	0%	0	0%	1
NAIEP	1	7%	4	30%	2	15%	1	7%	3	23%	2	15%	13
NCHS	8	42%	1	9%	2	18%	0	0%	2	18%	0	0%	11
NIOSH	2	33%	0	0%	4	66%	0	0%	0	0%	0	0%	6
PHPPO	0	0%	1	50%	1	50%	0	0%	0	0%	0	0%	2
<b>Total</b>	<b>19</b>	<b>16%</b>	<b>23</b>	<b>19%</b>	<b>21</b>	<b>18%</b>	<b>15</b>	<b>13%</b>	<b>26</b>	<b>22%</b>	<b>14</b>	<b>12%</b>	<b>118</b>

\* As reported by the CIO on the Task Inventory Form.

\*\* HIV-related activities without current or separate HIV funding.

\*\*\* . Percent of all activities for the indicated CIO or overall for the category.

Table 4

Extramural Status of HIV Activities

CIO	Extramural		Not Extramural		Total
	N	Pct.*	N	Pct.	N
<b>ODD(HIV)</b>	2	66%	1	33%	3
CCDPHP	16	80%	4	20%	20
<b>CEHIC</b>	0	0%	1	100%	1
CID	17	<b>85%</b>	3	15%	20
<b>CPS</b>	31	62%	19	38%	50
<b>IHPO</b>	0	<b>0%</b>	1	100%	1
<b>NAIEP</b>	<b>11</b>	<b>64%</b>	6	36%	17
NCHS	9	81%	2	18%	11
<b>NIOSH</b>	6	75%	2	26%	8
PHPPO	1	50%	1	50%	2
Total	93	70%	40	30%	133

\* Percent of all activities for the indicated **CIO** or overall for the category.

Table 6

Joint Activities Between **CIOs**

Collaborating CIO

<u>Lead CIO</u>	<b>IDD (HIV)</b>	<b>CCDPHP</b>	<b>CEHIC</b>	<b>CID</b>	<b>CPS</b>	<b>IHPO</b>	<b>NAIEP</b>	<b>NCHS</b>	<b>NIOSH</b>	<b>PHPPO</b>	<b>TOTAL<sup>1</sup></b>
' <b>ODD (HIV)</b>	*	2	1	2	2	1	3	1	1	1	14
<b>CCDPHP</b>	Ø	*	Ø	Ø	3	Ø	0	0	0	0	3
<b>CEHIC</b>	0	0	*	1	0	0	0	0	0	0	1
<b>CID</b>	2	2	1	*	6	0	0	2	1	3	18
<b>CPS</b>	1	1	0	9	*	0	1	0	0	2	14
<b>IHPO</b>	1	0	0	1	1	*	1	0	0	0	4
<b>NAIEP</b>	1	3	0	0	2	0	*	3	0	0	9
<b>NCHS</b>	0	1	0	1	2	0	0	*	0	0	4
<b>NIOSH</b>	0	0	0	4	0	0	0	0	*	0	4
<b>PHPPO</b>	0	0	2	0	0	0	0	0	0	*	2
<b>Total<sup>2</sup></b>	6	9	4	18	16	1	6	8	2	8	71 (54%) <sup>3</sup>

<sup>1</sup>Number of times a CIO led an activity with other **CIOs** collaborating.

\*Number of times a CIO worked with other **CIOs** leading the activity.

<sup>3</sup>Percent of all activities involving collaboration among **CIOs**.

Table 6

## HIV Activities: Transmission Route Prevention Focus

CIO	Sexual		IVDA- Associated		Perinatal		Blood and Blood Products		Occupationally Related		Management of Infected Individuals		Promotion of Healthy Lifestyles Activities		Total
	N	Pct.*	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N
ODD(HIV)	1	33%	1	33%	1	33%	1	33%	0	0%	0	0%	1	33%	3
CCDPHP	15	75%	14	70%	8	40%	1	5%	0	0%	2	10%	14	70%	20
CEHIC	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	1
CID	13	65%	11	55%	10	50%	8	40%	2	10%	7	35%	6	30%	20
CPS	21	42%	22	44%	8	16%	5	10%	11	22%	17	34%	10	20%	50
IHPO	1	100%	1	100%	1	100%	1	100%	1	100%	1	100%	1	100%	1
NAIEP	8	47%	3	17%	1	5%	1	5%	1	5%	0	0%	19	100%	19
NCHS	3	27%	3	27%	3	27%	2	18%	0	0%	0	0%	0	0%	11
NIOSH	0	0%	0	0%	0	0%	2	25%	8	100%	0	0%	0	0%	9
PHPPO	0	0%	0	0%	0	0%	2	100%	2	100%	2	100%	0	0%	2
Total	62	47%	55	41%	32	24%	23	17%	25	19%	29	22%	49	37%	133

\* Percent of all activities for the indicated CIO or overall for the category. Categories are not mutually exclusive and percents do not add to 100%.

Table 7

## HIV Activities: PHS Classification

CIO	Biomedical				Treatment and Service Delivery				Regulation		Total		
	Research		Epidemiology		Surveillance		Prevention		Activities		Activities		
	N	Pct*	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N		
ODD(HIV)	0	0%	3	100%	2	66%	3	100%	0	0%	0	0%	3
CCDPHP	0	0%	a	40%	5	25%	1 a	90%	1	5%	1	5%	20
CEHIC	0	0%	0	0%	1	100%	0	0%	0	0%	0	0%	1
CID	6	30%	15	75%	12	60%	11	55%	6	30%	1	5%	20
CPS	6	12%	13	26%	4	a%	42	64%	11	22%	2	4%	50
IHPO	1	100%	1	100%	1	100%	1	100%	1	100%	0	0%	1
NAIEP	0	0%	0	0%	0	0%	17	100%	1	5%	0	0%	17
NCHS	0	0%	1	9%	11	100%	0	0%	0	0%	0	0%	11
NIOSH	0	0%	0	0%	0	0%	a	100%	0	0%	1	12%	a
PHPP0	0	0%	0	0%	0	0%	0	0%	2	100%	0	0%	2
<b>Total</b>	<b>13</b>	<b>10%</b>	<b>41</b>	<b>31%</b>	<b>36</b>	<b>27%</b>	<b>100</b>	<b>75%</b>	<b>22</b>	<b>17%</b>	<b>5</b>	<b>4%</b>	<b>133</b>

\* Percent of all activities for the indicated CIO or overall for the category. Categories are not mutually exclusive and percents do not add to 100%.

Table 8

## 'HIV Activities: Strategic Plan Classification

C/O	Total Activities	Risk Assessment				Technology Development and Transfer			
		Surveillance		Epidemiology		Technology and Evaluation		Information & Technology Transfer	
		N	Pct. .	N	Pct.	N	Pct.	N	Pct.
<b>ODD(HIV)</b>	3	<b>1</b>	33%	1	<b>33%</b>	<b>1</b>	<b>33%</b>	2	66%
CCDPHP	20	<b>5</b>	25%	5	<b>25%</b>	1	5%	16	80%
CEHIC	1	<b>0</b>	0%	0	<b>0%</b>	1	100%	1	100%
CID	20	<b>11</b>	55%	14	70%	17	85%	<b>17</b>	85%
<b>CPS</b>	50	<b>5</b>	10%	15	30%	6	12%	17	34%
<b>IHPO</b>	1	1	100%	1	100%	1	100%	1	100%
NAIEP	17	0	0%	0	0%	1	5%	16	94%
NCHS	11	11	100%	1	9%	2	18%	2	16%
NIOSH	8	3	37%	6	75%	2	25%	5	<b>62%</b>
PHPPO	2	1	50%	0	0%	1	50%	1	50%
Total	133	38	<b>47%</b>	<b>43</b>	<b>53%</b>	<b>33</b>	<b>30%</b>	<b>78</b>	<b>70%</b>
			<b>81</b>	<b>61%</b>			<b>111</b>	<b>83%</b>	

Table 8, continued

C/O	Total	Prevention				Capacity Building					
		Primary Prevention		Secondary Prevention		State & Local Capacity		Regional & National Capacity		International Capacity	
		N	Pct. .	N	Pct.	N	Pct.	N	Pct.	N	Pct.
<b>ODD(HIV)</b>	<b>3</b>	<b>2</b>	<b>66%</b>	<b>2</b>	<b>66%</b>	<b>2</b>	<b>66%</b>	<b>2</b>	<b>66%</b>	<b>0</b>	<b>0%</b>
CCDPHP	20	17	<b>85%</b>	2	<b>10%</b>	13	<b>65%</b>	8	<b>40%</b>	2	<b>10%</b>
CEHIC	1	0	<b>0%</b>	0	<b>0%</b>	0	<b>0%</b>	0	<b>0%</b>	0	<b>0%</b>
CID	20	10	<b>50%</b>	9	<b>45%</b>	18	<b>90%</b>	18	<b>90%</b>	6	<b>30%</b>
<b>CPS</b>	<b>50</b>	28	<b>56%</b>	14	<b>28%</b>	22	<b>44%</b>	9	<b>18%</b>	4	<b>8%</b>
<b>IHPO</b>	1	1	<b>100%</b>	1	<b>100%</b>	0	<b>0%</b>	0	<b>0%</b>	1	<b>100%</b>
NAIEP	17	15	<b>88%</b>	11	<b>64%</b>	13	<b>76%</b>	14	<b>82%</b>	1	<b>5%</b>
NCHS	11	0	<b>0%</b>	0	<b>0%</b>	1	<b>9%</b>	0	<b>0%</b>	0	<b>0%</b>
NIOSH	8	5	<b>62%</b>	5	<b>62%</b>	0	<b>0%</b>	0	<b>0%</b>	0	<b>0%</b>
PHPPO	2	0	<b>0%</b>	0	<b>0%</b>	1	<b>50%</b>	1	<b>50%</b>	1	<b>50%</b>
Total	133	78	64%	44	36%	70	51%	52	38%	15	11%
			122	92%				137	100%		

\* Percent of all activities for the indicated C/O or overall for the category. Categories are not mutually exclusive and percents do not add to 100%.

Table 9

HIV Activities: Target Subgroups

CIO	Total Activities	Homosexual-													
		IVDAs		Bisexual Men		Adolescents/ Young Adults		Hemophiliacs & Partners		Tuberculosis/ TB At-risk		Blood Donors		Transfusion Recipients	
		N	Pct.*	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.
ODD(HIV)	3	2	66%	2	66%	2	66%	1	33%	1	33%	0	0%	0	0%
CCDPHP	20	5	25%	1	5%	17	85%	0	0%	0	0%	1	5%	0	0%
CEHIC	1	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
CID	20	11	55%	4	20%	10	50%	4	20%	4	20%	6	30%	4	20%
CPS	50	21	42%	10	20%	9	18%	2	4%	12	24%	0	0%	1	2%
IHPO	1	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
NAIEP	17	2	11%	4	23%	5	26%	0	0%	0	0%	2	11%	1	5%
NCHS	11	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
NIOSH	1	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
PHPPO	2	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
<b>Total</b>	<b>133</b>	<b>41</b>	<b>31%</b>	<b>25</b>	<b>19%</b>	<b>43</b>	<b>32%</b>	<b>7</b>	<b>5%</b>	<b>17</b>	<b>13%</b>	<b>9</b>	<b>7%</b>	<b>10</b>	<b>8%</b>

Table 9, continued

CIO	Total Activities	Immigrants/ Refugees		Health Care Workers		Dental Care Workers		Public Safety Workers		Prostitutes		Other	
		N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N	Pct.
		ODD(HIV)	3	1	33%	1	33%	0	0%	1	33%	1	33%
CCDPHP	20	0	0%	7	35%	0	0%	0	0%	3	15%	9	45%
CEHIC	1	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
CID	20	4	20%	3	15%	2	10%	1	5%	4	20%	7	35%
CPS	50	4	8%	5	10%	11	22%	1	2%	10	20%	10	20%
IHPO	1	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
NAIEP	17	2	11%	4	23%	3	17%	2	11%	0	0%	10	58%
NCHS	11	0	0%	0	0%	0	0%	0	0%	0	0%	4	36%
NIOSH	1	0	0%	1	100%	3	37%	3	37%	0	0%	0	0%
PHPPO	2	0	0%	2	100%	0	0%	0	0%	0	0%	0	0%
<b>Total</b>	<b>133</b>	<b>11</b>	<b>8%</b>	<b>30</b>	<b>23%</b>	<b>19</b>	<b>14%</b>	<b>4</b>	<b>6%</b>	<b>18</b>	<b>14%</b>	<b>41</b>	<b>31%</b>

\* Percent OF all activities for the indicated CIO or overall for the category. Categories are not mutually exclusive and percents do not add to 100%.

Table 10

HIV Activities: Population Subgroups

CIO	Women		Minorities		Newborns		Total Activities
	N	Pct. .	N	Pct.	N	Pct.	N
ODD(HIV)	2	66%	2	66%	1	33%	3
CCDPHP	7	35%	12	60%	3	15%	20
CEHIC	1	100%	0	0%	1	100%	1
CID	10	50%	10	50%	8	40%	20
CPS	20	40%	28	56%	3	6%	50
IHPO	1	100%	0	0%	1	100%	1
NAIEP	8	47%	11	64%	0	0%	17
NCHS	10	90%	10	90%	2	18%	11
NIOSH	0	0%	0	0%	0	0%	8
PHPP0	0	0%	0	0%	0	0%	2
<b>Total</b>	<b>59</b>	<b>44%</b>	<b>73</b>	<b>55%</b>	<b>19</b>	<b>14%</b>	<b>133</b>

\* Percent of all activities for the indicated CIO or overall for the category.  
Categories are not mutually exclusive and percents do not add to 100%.

Table 11

HIV Activities: Cross-cutting Categories

C/O	Evaluation		Behavior Science		International Health		Data Mngmt and Analysis		Training and Workshops		Total Activities
	N	Pct.*	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N
<b>ODD(HIV)</b>	3	100%	2	66%	<b>1</b>	33%	1	33%	0	0%	3
CCDPHP	6	30%	9	45%	2	10%	2	10%	9	45%	20
<b>CEHIC</b>	0	0%	0	0%	0	0%	0	0%	<b>1</b>	<b>100%</b>	1
CID	18	90%	12	60%	7	35%	19	95%	6	30%	20
<b>CPS</b>	21	42%	14	28%	5	10%	14	28%	<b>17</b>	34%	50
<b>IHPO</b>	0	0%	0	0%	1	100%	1	100%	1	100%	1
<b>NAIEP</b>	9	52%	2	11%	<b>1</b>	5%	3	17%	5	29%	17
NCHS	1	9%	3	27%	0	0%	11	100%	0	0%	11
<b>NIOSH</b>	1	12%	0	0%	0	0%	0	0%	2	25%	8
PHPPPO	1	50%	0	0%	0	0%	1	50%	1	50%	2
Total	60	45%	42	32%	17	13%	52	39%	42	32%	133

\* Percent of **all** activities for the indicated **C/O** or overall for the category. Categories are not mutually exclusive and percents do not add to 100%.

Table 12

## Total HIV Activities by Year

	FY 84 - 88		FY 89/		FY 89/New		Total
	Complete*		Continued		Activities		
	N	Pct.**	N	Pct.	N	Pct.	N
Transmission Route Prevention Focus:							
Sexual	4	27%	40	63%	18	33%	62
IVDA-Associated	3	20%	32	51%	20	36%	55
Perinatal	1	7%	22	35%	9	16%	32
<b>Blood and Blood Products</b>	1	7%	17	27%	5	9%	23
Occupation-Related	7	47%	11	17%	7	13%	25
Management of Infected Individuals	1	7%	15	24%	13	24%	29
Promotion of Healthy Lifestyles	6	40%	24	38%	19	34%	49
Population Subgroup							
Women	5	33%	27	43%	27	49%	59
Minorities	7	47%	33	52%	33	60%	73
Newborns	0	0%	15	24%	4	7%	19
Cross-Cutting Categories							
Evaluation	4	27%	31	49%	25	45%	60
<b>Behavior Sciences</b>	3	20%	22	35%	17	31%	42
<b>International Health</b>	1	7%	10	16%	6	11%	17
Data Management and Analysis	1	7%	27	43%	24	44%	52
Training and Workshops	6	40%	24	38%	12	22%	42
Total:	15	41%	63	47%	55	12%	134

\* Information on total FY 84-88 completed activities does not include information from one CIO.

\* . Percent of all activities in database for time period across CIOs.

Table 13

PHS Activity Classification  
Means by Evaluability Categories

Evaluability Criteria	Biomedical Research	Epidemiology	Surveillance	Prevention	Treatment and Service Delivery	Regulation
Plausible intervention design	4.75	4.09	3.89	3.81	4.30	2.80
<b>*n =</b>	12	32	18	80	20	5
Clear objectives	4.92	4.68	4.81	4.11	4.75	4.40
<b>n =</b>	12	37	21	83	20	5
Measurable outcome indicators	4.75	4.24	4.48	3.60	4.15	3.00
<b>n =</b>	12	37	<b>21</b>	83	20	5
Available data	4.25	4.17	4.29	3.36	3.89	2.80
<b>n =</b>	12	36	21	81	19	5
Adequate resources	3.00	3.72	3.38	3.47	3.00	4.20
<b>n =</b>	12	36	21	80	19	5
Replicability	4.67	4.43	4.27	3.92	4.53	2.25
<b>n =</b>	12	37	22	73	19	4
Overall	4.42	4.35	4.32	3.58	4.10	2.50
<b>n =</b>	12	37	22	85	20	4

\* n = number of activities

Table 14

Transmission Route Prevention Focus  
Means by Evaluability Categories

Evaluability Criteria	Sexual	IVDA- Associated	Perinatal	Blood and Blood Products	Occupationally Related	Management of Infected individuals	Promotion of Healthy Lifestyles
Plausible intervention design n = 50	3.84 50	3.77 44	3.88 26	3.68 19	3.35 23	4.04 24	3.39 33
Clear objectives n = 53	4.30 53	4.23 48	4.56 27	4.55 20	4.04 23	4.58 26	4.08 36
Measurable outcome indicators n = 53	3.98 53	3.92 48	4.00 27	3.85 20	3.17 23	4.23 26	3.78 36
Available data n = 52	3.65 52	3.57 47	3.93 27	4.05 20	3.18 22	3.69 26	3.6 35
Adequate resources n = 51	3.69 51	3.70 47	3.67 27	3.60 20	3.00 22	3.42 26	3.57 35
Replicability n = 52	4.06 52	4.00 47	4.19 27	4.25 20	4.36 14	4.26 23	3.83 35
Overall n = 54	3.93 54	3.88 49	4.00 27	4.00 20	3.32 22	4.04 26	3.64 39

\* n = number of activities

Table 15

Strategic Plan Activity Classification  
Means by Evaluability Categories

Evaluability Criteria	Risk Assessment		Technology Development and Transfer	
	Surveillance	Epidemiology	Technology and Evaluation	Informatron and Technology Transfer
Plausible intervention design	3.88	4.43	4.41	3.48
n =	22	35	29	80
Clear objectives	4.83	4.69	4.76	4.08
n =	24	39	29	64
Measurable outcome indicators	4.50	4.49	4.34	3.59
n =	24	39	29	64
Available data	4.35	4.21	4.21	3.68
n =	23	38	29	63
Adequate resources	3.43	3.76	3.62	3.4
n =	23	38	29	63
Replicability	4.46	4.41	4.52	4.06
n =	24	39	29	54
Overall	4.33	4.42	4.31	3.59
n =	24	38	29	68

Table 15, continued

Evaluability Criteria	Prevention		Capacity Building		
	Primary Prevention	Secondary Prevention	State/Local Capacity	Regional/National Capacity	International Capacity
Plausible intervention design	3.69	3.70	3.56	3.52	4.31
n =	82	40	57	42	13
Clear objectives	4.14	4.12	4.22	4.11	4.54
n =	65	40	60	44	13
Measurable outcome indicators	3.68	3.72	3.72	3.57	4.23
n =	65	40	60	44	13
Available data	3.41	3.52	3.58	3.45	4.00
n =	63	40	59	44	13
Adequate resources	3.61	3.37	3.36	3.32	3.69
n =	62	40	59	44	13
Replicability	3.91	3.72	4.02	3.82	4.54
n =	56	40	56	38	13
Overall	3.61	3.77	3.71	3.62	4.08
n =	67	40	62	45	13

\* n = number of activities

**Table 16**Extramural Status of Activities  
Means by Evaluability Categories

Evaluability Criteria	Extramural	Not Extramural
Plausible intervention design n =	3.9 68	3.27 30
Clear objectives n =	4.41 73	3.74 31
Measurable outcome indicators n =	4.01 73	3.1 31
Available data n =	3.7 74	3.03 29
Adequate resources n =	3.59 73	3.1 29
Replicability n =	4.13 71	3.71 24
Overall n =	4 75	3.03 32

\* n = number of activities

Table 17

Types of Evaluation Activities

CIO	Formative		Efficacy		Process		Effectiveness/ impact		Cost- Effectiveness		Total Activities
	N	Pct.*	N	Pct.	N	Pct.	N	Pct.	N	Pct.	N
ODD(HIV)	0	0%	1	33%	2	66%	2	66%	0	0%	3
CCDPHP	7	35%	3	15%	12	60%	1	5%	1	5%	20
CEHIC	0	0%	0	0%	1	100%	0	0%	0	0%	1
CID	17	85%	8	40%	20	100%	14	70%	1	5%	20
CPS	21	42%	12	24%	29	58%	23	46%	2	4%	50
IHPO	1	100%	0	0%	1	100%	1	100%	0	0%	1
NAIEP	8	47%	3	17%	12	70%	5	29%	0	0%	17
NCHS	0	0%	0	0%	0	0%	0	0%	0	0%	11
NIOSH	2	25%	3	37%	2	25%	4	50%	0	0%	8
PHPP0	0	0%	0	0%	2	100%	0	0%	0	0%	2
<b>Total</b>	<b>56</b>	<b>42%</b>	<b>30</b>	<b>23%</b>	<b>81</b>	<b>61%</b>	<b>56</b>	<b>38%</b>	<b>4</b>	<b>3%</b>	<b>133</b>

\* Percent of all activities for the indicated CIO or overall for the category. Categories are not mutually exclusive and percents do not add to 100%.

Table 18

## Data Collection/Data Processing Methods

C/O	Paper/Forms		Microcomputer		Mini/Mainframe		Total
	Based		Based		Based		Activities
	N	Pct. *	N	Pct.	N	Pct.	N
<b>ODD(HIV)</b>	2	66%	1	33%	0	0%	3
CCDPHP	<b>13</b>	65%	7	35%	5	25%	20
<b>CEHIC</b>	1	100%	1	100%	0	0%	1
CID	18	90%	19	95%	16	80%	20
<b>CPS</b>	30	60%	25	50%	9	18%	50
<b>IHPO</b>	0	0%	0	0%	0	0%	1
<b>NAIEP</b>	9	52%	4	23%	1	5%	17
NCHS	4	36%	1	9%	6	54%	<b>11</b>
<b>NIOSH</b>	6	75%	0	0%	1	12%	8
PHPPO	2	100%	0	0%	1	50%	2
Total	85	64%	58	44%	39	29%	133

- \* Percent of all activities for the indicated **C/O** or overall for the category. Categories are not mutually exclusive and percents do not add to 100%.

Table 19

**FY 89 New and Continued HIV Activity Evaluation Status:**  
 Number of Activities and Percent of **CIO** HIV Budget

<b>CIO</b>	Has Been Evaluated		Currently Being Evaluated		Evaluation Planned		No Evaluation Planned	
	N	Pct.*	N	Pct.	N	Pct.	N	Pct.
<b>ODD(HIV)</b>	0	0%	0	0%	0	0%	2	100%
CCDPPH	1	1%	7	89%	7	6%	5	2%
<b>CEHIC</b>	0	0%	1	100%	0	0%	0	0%
CID	0	0%	16	96%	4	3%	0	0%
<b>CPS</b>	1	0%	16	72%	17	24%	8	2%
<b>IHPO</b>	0	0%	0	0%	1	100%	0	0%
<b>NAIEP</b>	0	0%	4	34%	6	36%	3	28%
NCHS **	0	0%	11	100%	0	0%	0	0%
<b>NIOSH</b>	1	33%	0	0%	3	33%	3	33%
PHPP0	0	0%	2	100%	0	0%	0	0%
Total ...	3	1%	57	78%	38	17%	20	4%

\* Percent of TOTAL **CIO** HIV BUDGET represented by the activities in this category or overall.

\*. Data quality evaluation as well as project evaluation activities.

\*\* . Total **FY 89** new and continued activities = 118.



### **III. INTERVIEWS WITH CIO HIV REPRESENTATIVES**

#### **A. Purpose of interviews**

Interviews were held at CDC with CIO and division-level representatives on two different occasions during the conduct of the task. For the two CIOs for which in-person interviews could not be set up, telephone interviews were conducted. The purpose of the interview component of the task was to accumulate information to help ODD(HIV) formulate its role in evaluation of CDC HIV activities, and assist in guiding the direction of future evaluation efforts.

#### **B. Interview format and guidelines**

An overview and informal interview guide was prepared and distributed prior to the meetings with the CIO representatives; a copy is included as Appendix E. Areas covered during the interviews included: descriptions of past, current, and planned evaluation activities relating to HIV activities and programs in each CIO; perceived evaluation and information needs of each CIO; barriers to evaluation and limitations of existing evaluations; and the appropriate roles of ODD(HIV) and the CIOs in the conduct of evaluations.

#### **C. Interview results**

##### **1. Descriptions of evaluation activities**

To date, evaluation of most CDC HIV activities has been limited, focused largely on process evaluation of extramural grants and cooperative agreements. Reporting mechanisms have been through quarterly narrative reports from the grantees, which do not lend themselves easily to any quantitative analyses. A system is now being implemented in at least one CIO, however, to standardize quarterly report summaries and enter them into a computer database. Other computerized data from external grantees consist largely of financial information used for monitoring of expenditures. Although standard requirements for evaluation are written into grants and cooperative agreements, both lack of expertise and resources, as well as the urgency of service delivery needs, have resulted in grantees de-emphasizing evaluation

and data collection efforts. Further, there have been no systematic efforts to collect standardized data across grant programs and CIOs.

One of the most important observations to come out of the interview process with the various CIOs, however, is that awareness of evaluation issues and evaluation activities themselves are expanding, as shown in the results of the inventory analysis (Table 17). Further, most CIOs report new or planned additional staff whose responsibilities include evaluation; examples include the evaluation specialist now with NAIEP, the evaluation research section within DASH in CCDPHP, the recently-created planning and evaluation specialist position within the dental disease prevention activity of CPS, and the researchers directly involved in evaluation of the HIV programs in CPS/DSTD, among others. Clearly, these staff additions reflect a growing appreciation of the necessity of evaluation.

Brief examples of current evaluation activities include the following. More detailed protocols/descriptions are available from the particular CIO and implementing division.

Survey to evaluate dissemination and use of CDC health care worker guidelines for prevention of occupationally acquired HIV and HBV(NIOSH).

NIOSH is implementing an in-depth evaluation of these guidelines through a contract with Battelle. Although evaluations of similar scope may not be appropriate for all guidelines issued by CDC relating to HIV, the comprehensive nature of this evaluation provides examples of: (1) accessing existing data both within and outside CDC; (2) collecting and analyzing additional data under contract; (3) conducting validation studies by an alternative method.

There are four objectives: (1) description of the extent of dissemination and institutional adoption of the guidelines; (2) description of the extent of compliance by health care workers; (3) description of factors that influence compliance with the guidelines; and (4) validation of the extent of compliance through observational studies. The first objective is being met through compiling and analyzing already-existing survey data collected by the hospital infection program in CID (for hospitals) and by the Occupational Safety and Health Administration (for non-hospital settings). The second and third objectives will be met by conducting in-depth surveys of

workers. -The last objective will be met through a separate contract to conduct observational/case studies for validation of the survey data.

IOX evaluation contract (CCDPHP/DASH). A five year evaluation research contract was initiated in December 1988 with IOX. The objectives of the contract include developing the scientific framework of what DASH should be doing in school-based HIV educational programs, what the schools should be doing, and how to evaluate the programs. Technical assistance will be **provided to** the states and cities to improve evaluation skills. Finally, the contract will implement a controlled trial to determine the effectiveness of school-based educational programs.

Study of the impact of HIV counseling and testing on methadone clients (CPS/DSTD).

A cohort study of the impact of HIV counseling and testing on IV drug users is being implemented in two states by CPS/DSTD. Prospective data collection on the cohort of drug treatment center clients is being combined with description of clinic operations and the counseling process. Additional information from a street outreach study being conducted by NIDA will be combined with the data. Information from this study will be useful not only in assessing the quality and effectiveness of counseling and testing services for IV drug abusers, but also will be used to strengthen the designs of counseling and testing evaluations in other sites.

Expanded initiatives and evaluation of AIDS/HIV surveillance.

An important current evaluation effort in the AIDS Program of CID is the evaluation of the accuracy, completeness, and timeliness of AIDS/HIV case reporting. Under one-year (renewable) cooperative agreements with 12 state/major city health departments, in-depth audits of AIDS case reporting are being carried out through standardized protocols, consensus development workshops, and site visits. Based upon information from CID, a General Accounting Office (GAO) report released in June 1989<sup>6</sup> criticized the existing data sources and methods for counting AIDS cases. This evaluation activity should help address these concerns.

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<sup>6</sup> "AIDS Forecasting: Undercount of Cases and Lack of Key Data Weaken Existing Estimates." U.S. General Accounting Office, GAO/PEMD-89-13, June 1989.

Evaluation areas investigated by the NRC panel. Finally, the work and highly visible recommendations of the NRC panel will likely result in three significant and comprehensive evaluations in the area of media campaigns, health education and risk reduction, and evaluating HIV testing and counseling projects.

2. **Perceived evaluation needs**

a. **Evaluation needs**

Evaluation needs identified across several of the **CIOs** included the following:

Development of outcome measures. There is tremendous need for research to develop valid, reliable, and feasible outcome measures for HIV activities. Difficulty in defining and operationalizing outcome measures is a problem for virtually all activities intended to affect behavioral change. Additionally, outcome measures for activities aimed at basic research objectives need to be extended beyond the strictly scientific model to attempt to show their role and impact in the overall effort; in the end, all programs are likely to have to face the same difficult question: “What is the ultimate impact of the research **projects** on the HIV epidemic as a whole?”

The most widely applied evaluation approach for the measurement of intermediate outcomes in HIV intervention programs has been the **knowledge-attitude-belief-behavior (KABB)** survey approach. There are several weaknesses of the approach, however, including: (1) KABB assumes a causal chain based on health beliefs that does not include many of the social beliefs that are part of the HIV epidemic; (2) differences between what individuals say they do and what they actually do are very difficult to estimate accurately; (3) KABB surveys monitor changes due to all possible stimuli and do not allow pinpointing exact causes; and (4) KABB surveys are rarely applied longitudinally to determine if measured changes persist. These and other criticisms notwithstanding, the KABB approach remains an important source of data. **KABB** results can be made more useful and generalizable through standardization of the questions and survey approach across sites (e.g., states, **CBOs**) applying the same intervention. Also, much more work is needed on improving, to the degree possible, the predictive validity of KABB instruments.

Sustainability of changes. Given that a program can demonstrate a short-term impact, such as through KABB surveys, what are the long-term prospects for that change enduring? What ongoing efforts are necessary to maintain it? Is there a point where the changes become part of the “community norms” and thus are **self-sustaining**? The answers to these questions are critical for the strategic design of HIV programs and interventions, and require plans to be built in for longitudinal analysis of outcomes.

Program achievement of goals and objectives. Finally, a basic evaluation issue of interest to all **CIOs** is whether or not an activity is achieving what it was designed to do. Process measures and intermediate outcome measures are relied upon to monitor these issues; however, unrealistic goals and objectives may have been set up to begin with. Further, another common practice (which is often encouraged by overly ambitious program oversight) is to set up outcome measures or other evaluation criteria after a program has been implemented to evaluate the program on desired outcomes which were not part of the original design.

Once it is determined that programs are achieving what they were designed to do, however, then the more global, cross-cutting issues can be addressed of **determining** of what the programs are, in fact, contributing to larger policy and strategic goals.

**b. Information needs**

The reported general information needs for program planning with respect to HIV are the following:

Available technologies and approaches. The HIV epidemic has resulted in numerous innovative approaches, rapidly developed by agencies and programs at all levels. Many of the potentially useful technologies and approaches are presented through sessions and posters at national and international meetings, and do not appear in the published literature until much later, if at all. Just keeping up with the available technologies, approaches, and materials, let alone documenting their efficacy, is a reported major problem for the National AIDS Clearinghouse.

Direction of epidemic. Information on which way the epidemic is 'going, which new groups may be threatened, and the nature of that threat are all critical information needs being addressed by the surveillance components of CDC HIV activities. Focusing on particular populations improves program planning and the **cost-effectiveness** of the methods used to achieve program goals.

Denominator data of populations at risk. Currently collected surveillance data provides more information on who is infected than on who is at risk. The size and characteristics of many of the potentially affected populations, therefore, are simply not known. Lacking this information, adequate program planning and monitoring of impact both become problematic. In some cases, information may be available from other sources, such as other government agencies or already-completed surveys, but in other cases, special efforts may be necessary to gain the necessary data for planning and monitoring.

### 3. **Barriers to evaluation**

Several barriers to expansion of evaluation efforts relating to HIV activities were identified through the interviews and related discussions. These barriers are described below.

Perception of "evaluation." The term "evaluation" is often subject to differing interpretations. The different perspectives of social scientists, -from whom the concepts of evaluation research originated, and laboratory scientists concerned with experimental bench research, have been mentioned earlier. Even among those with the social science perspective, however, substantial variation occurs, and there may be considerable difficulty in defining and operationalizing evaluation measures.

The most extreme misinterpretation of evaluation, however, is as a non-productive and resource-intensive exercise which is seen as a potentially direct threat to program survival. Although rarely articulated in those terms, the possibly threatening nature of evaluation must at least be acknowledged. A list of potential "benefits" to evaluation was developed as part of this task order, and was presented in the introduction.

Traditional roles of CDC programs. Many CDC programs, such as those related to sexually transmitted diseases, have their origin in service to and direct

involvement with state and local communities. Direct provision of services, versus research, has been the priority. Although the role and value of evaluation is understood and acknowledged, necessary activities to **carry** out evaluation are **often** seen as secondary to the essential goal of providing services. **CIOs** involved in funding or providing direct services addressing the HIV epidemic report that the demand has been so overwhelming that it has been hard to make the time and resources available that are necessary for evaluation.

For the research-oriented **CIOs** involved in basic sciences, the “traditional role” barrier takes a different form, reflecting the scientific paradigm of properly designed and executed protocols and subsequent peer-reviewed publications constituting the evaluation itself. As “research and development” operations, these **CIOs** follow rigorous, elaborate, and scientifically correct process evaluation, but largely omit the determination of overall program impact, either on the HIV epidemic as a whole, or **vis-a-vis** other programs addressing the epidemic. One **CIO** reports that their “actual obligation ends with science.” Although it may be entirely appropriate that the research-oriented **CIOs** focus solely on the scientific rigor of their work, impact questions regarding the program as a whole, and the proportion of total resources dedicated to research activities, should be addressed at the policy level.

Structural conflict for limited resources. Increased funding for HIV activities at CDC has been accompanied by increased numbers of programs representing different perspectives and disciplines. There is competition among the different perspectives because the absolute amount of available resources is limited. As resources become scarcer, and accountability increases, competition will become more pronounced. The information that evaluation activities produce, therefore, can be seen as very sensitive, if not proprietary, and the organizational unit may control the release of that information as part of its strategy to maintain the activities it sponsors.

To the extent that there are commonly agreed upon goals and objectives, and a unified agency mission, structural conflict problems can be minimized. Certainly one of the major roles of **ODD(HIV)** is to provide the unifying focus; however, the difficulty of accomplishing this in a traditionally decentralized organization such as CDC should not be underestimated. Finally, the HIV epidemic has probably contributed significantly to

the boundaries between CDC programs becoming blurred. Traditionally, the roles and responsibilities of the separate **CIOs** and divisions were **fairly** well defined along disease- or role-specific categories. Increasingly, however, cross-cutting programs, such as the adolescent health program in CCDPHP, are blurring organizational roles and jurisdictions. Although cross-cutting programs may be desirable from a programmatic and cost standpoint, the negotiation of responsibilities can be inefficient and can contribute to organizational conflict.

Crisis nature of epidemic. As mentioned in the introduction, CDC and other agencies have responded to the HIV crisis by very rapidly implementing numerous and varied intervention programs. Systems have in many cases been severely strained just to implement the programs, let alone assure adequate ongoing monitoring and evaluation. Furthermore, attention to evaluation issues in the program design stages has often been minimal.

Use of multiple grantees for program implementation. The nature of the HIV epidemic is such that state and local agencies and community-based organizations (**CBOs**) are often the best (or only) groups to carry out HIV interventions. Substantial barriers exist to carrying out properly conducted evaluations in these settings, however, since the agencies or **CBOs** may significantly vary in the time and funding available, and the existence of adequately trained personnel to conduct evaluation research activities. Furthermore, the majority of the CBO grantees continue to be one level removed from CDC, being funded through programs such as the Conference of Mayors or the state cooperative agreements. Only as of the current year has CDC established a direct CBO grant program. It will be important to monitor differences in the quality and amount of information received from the directly funded **CBOs** versus those funded through other grantees.

**Finally**, the newness and organizational inexperience of many of the **CBOs** dictates that close monitoring of **process measures and fiscal responsibility** needs to be emphasized for the purposes of management control. Only after this is established can more sophisticated outcome measures be examined.

Adequate time and resources within activities. An overarching barrier to expanded evaluation efforts is, of course, the reported level of available resources.

These resources are expressed in **terms** not only in terms of manpower (**FTEs**) and money, but also in terms of time. Even given more personnel, and the funds to support them, the situation is changing so rapidly that by the time valid evaluation results are obtained, the questions the data were designed to answer may have also changed.

#### 4. Role of **ODD(HIV)** in evaluation

The role of conducting evaluations of HIV activities is seen as the responsibility of the implementing **CIO(s)**. The desirable role of the **ODD(HIV)** in evaluation, however, is variously seen in the areas of policy, coordination, and technical assistance.

Setting policy regarding evaluation. The unique organizational position of **ODD(HIV)** at CDC and nationally gives it the ability (and responsibility) to provide broad policy direction for evaluation. **ODD(HIV)** is able to prioritize evaluation needs from the central level and focus on information requests from a broader perspective than that of individual **CIOs**. Policy setting with regard to evaluation must reflect, however, the needs and interests of those carrying out the programs as well as the needs and interests of the higher organizational levels. As was expressed by one **CIO** interviewee: "... evaluation schemes should be developed from the top down and the bottom up. Both the policy perspective and the program perspective must be considered in the design." Concern was further expressed by several of the **CIOs** that **ODD(HIV)** not attempt to "micro-manage" activities, and that the reporting burden be applied only to the extent of **ODD(HIV)**'s basic information needs.

Coordination of HIV activity evaluation. **ODD(HIV)** could serve effectively as a clearinghouse and coordinating center for CDC-wide HIV evaluation activities, as an archive of evaluation information, and as a liaison with PHS or HHS HIV evaluation activities. In this role, **ODD(HIV)** would also serve as a buffer with regard to evaluation information requests. **ODD(HIV)** could develop and maintain a systematic, organized, and computerized "minimum data set" of program and evaluation information, designed to answer the largest number of routine information requests. Special requests (seemingly always to be filled ASAP) could thus be imposed on the **CIOs** on an exception rather than a regular basis.

Finally, persons involved in evaluation exist at many different levels in the **CIOs**, and have an equal variety of titles, responsibilities, and backgrounds. During the course of interviews for this project, it was apparent that the number of such individuals is increasing. An important follow-up task to improve coordination potential of **ODD(HIV)** would be to gain an understanding of who the evaluation people are, what they do, what their orientation is, and perhaps provide a forum for interaction among them to discuss methodological issues, such as HIV outcome measurement.

Evaluation research expertise. Expert knowledge in evaluation research at the **ODD(HIV)** level could conceivably meet the needs of **CIOs** more efficiently than separately developed expertise. Such expert knowledge would be available on a consultant basis to the **CIOs** on request, and would serve to facilitate cross-fertilization of evaluation ideas and sharing of information and resources, as appropriate. The **ODD(HIV)** evaluation specialist could serve a translation function to interpret evaluation results from one project to another. Furthermore, expertise at the **ODD(HIV)** level could also serve: (a) as an advocate for the **CIOs** to CDC and/or PHS or higher levels of management regarding the feasibility and resource implications of proposed evaluation activities; (b) as an agent to conduct cross-cutting evaluations or **meta-**evaluations; and (c) as an interpreter to the higher levels of management of evaluation results produced by the **CIOs**, effectively translating evaluation results into policy or action recommendations.

The coordination and **expertise functions are joined** in the National Research Council draft report description of the “oversight and monitoring” role of evaluation research management. Oversight and monitoring are important: (a) to coordinate multiple, possibly overlapping evaluation efforts; (b) to provide expert assistance when needed; and (c) to assure scientific integrity of evaluation results carried out by those who may have a vested interest in the results.

## IV. LITERATURE REVIEW

### A. Introduction and approach

This section presents a literature review and synthesis of current thought on **two** issues identified by **ODD(HIV)** as important in the development of an overall evaluation plan for CDC HIV activities:

- (1) How priorities are set among different activities that require evaluation; and-
- (2) How to design an evaluation system that will produce comparable results across evaluations of different program activities.

The investigation of these two questions began with a computer search of major on-line social science databases using a variety of logical combinations of key words.<sup>7</sup> The search included combinations of key word stems such as “program”, “**evaluat-**”, “**compara-**”, and “**priorit-**”. This search, however, was not as helpful in uncovering useful literature references as had been originally anticipated. Most of the articles identified were evaluation reports rather than discussions of theory and strategy. Subsequent review of literature identified by expert sources suggests that the general topic of evaluation strategy may not be sufficiently well-developed to be accessible by on-line databases.

When the computer search essentially proved to be nonproductive, we shifted to a more experience-based approach that relied upon the knowledge of senior evaluation researchers and evaluation managers as the source for literature citations and for recommendations on how best to deal with the issues.

Literature references were solicited from RTI research staff, as well as from the American Evaluation Association, and university-based researchers. We also reviewed recent issues of publications such as the Evaluation Studies Review Annual, New Directions for Program Evaluation, and Evaluation Review for potentially relevant

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<sup>7</sup> Databases searched included: U.S. Political Science Documents, Public Affairs Information Service International (**PAIS**), Sociological Abstracts, and PsychInfo.

articles and citations. Selected citations within articles were further checked for their relevance to the two topics.

Finally, we conducted extensive in-person and telephone interviews with experts contacted to elicit their ideas and recommendations on topics of interest. Since the existing writing on these topics is largely undeveloped, the interviews proved to be the most valuable source of information and review material. A bibliography and the names of individuals interviewed are included as Appendix F.

## **B. Setting evaluation priorities**

Given the virtually unlimited number of questions which could be asked in an evaluation, and the typically limited resources available to support such efforts, organizations must constantly make evaluation management decisions such as:

- How does an organization set its evaluation priorities?
- What activities should be evaluated?
- What types of evaluation should be conducted and what questions should be asked?
- How much time or money should be spent on each evaluation?

Despite the importance of these and other related questions, there is surprisingly little theory or research to guide decision making. There are, however, some approaches that are suggested from descriptions of the organizational processes for setting evaluation agendas.

### **1. Locus in organization**

Authors and the evaluation coordinators interviewed described three general organizational locations from which evaluation priorities can originate. In a “top-down” approach, priorities issued by agency or department leadership identify broad, usually policy-related categories of evaluation designs and topics which are to be examined. **Carlson** and Crane (1989) point out the importance of **centrally-**determined priorities in ensuring that evaluation topics transcend the needs of individual units. Upper management policy may also encourage certain types of evaluations, such as studies of program efficiency or impact.

“Bottom-up” processes begin by eliciting program managers’ priorities, which are likely to focus on operational questions where evaluation information can be used

to improve performance. Typical operational questions include choices between alternative program options, or identification of factors inhibiting program effectiveness. **Barkdoll** and Sporn (1989) stress the importance of soliciting participation of program managers in all phases of the evaluation, including question formulation, in order to insure their cooperation with the evaluation process and their "ownership" of the evaluation findings.

Planning and evaluation offices within organizations frequently introduce a third perspective by: (a) identifying cross-cutting issues whose relevance cuts across individual programs; (b) integrating issues identified by central and program management; and (c) by ensuring that questions raised in earlier evaluation research are addressed by current proposals.

## 2. **Procedures**

Individuals interviewed in Federal agencies described several procedures for eliciting evaluation priorities and then compiling, reviewing, and ranking the priorities until an evaluation agenda is determined. These procedures often have a significant potential influence in determining the eventual evaluation agenda. For example, when the process starts by listing specific operational questions identified by program managers, such as the efficiency of a program's operation, these questions often survive subsequent review steps, since there may be little reason for reviewers to doubt their worthiness as evaluation topics. In the absence of other input, priorities that reflect operational questions may thus come to dominate the final agenda. Procedural differences will also affect the eventual evaluation agenda: whether evaluation questions are prioritized by each submitting unit or centrally, or whether review of the proposed evaluation methodology by scientific advisors is required prior to approval.

## 3. **Criteria**

Wholey (1979) and Patton (1986) have proposed criteria that can be used to identify situations where evaluation is most likely to produce useful information.

Wholey argues that programs need to be "**evaluable**" before any evaluation is likely to worthwhile. To be evaluable, programs should have:

- well-defined objectives with quantifiable outcome indicators for which data can reasonably be obtained;
- plausible links between the program's design and its intended effects; and
- well-defined uses for evaluation results.

The degree to which these three conditions are present in the design and operation of a program will determine the likelihood that the resulting evaluation will produce information that will be both interpretable and useful.

Patton takes a slightly different approach to assessing whether an evaluation will produce information which is not just usable but is actually used. He cites the following criteria to define the types of evaluation questions that will yield useful information:

- they are empirical questions, to which data can be applied, rather than ethical or value questions;
- they are questions which primary users want to answer, and where policy is not predetermined by political or personal considerations;
- they are questions for which information is what is needed, rather than situations where issues of training or organization are already recognized as the problem;
- they are questions in which managers are personally interested; and
- they aim at future action, where findings can be applied to modifiable program components.

Sonnichsen (1989, personal communication) describes evaluation as an advocacy process leading to policy modifications. Since no program is perfect, evaluations will almost certainly result in suggested modifications. Since change, especially when instigated by an external evaluator, is likely to meet resistance, acceptance of evaluation is most likely when it answers questions identified by the program managers. The most appropriate evaluation questions, therefore, are those which relate to issues identified as priorities by program managers, such as inconsistent program results, or the need for information on which to base resource allocation decisions.

Rossi (1972) suggests the concept of "policy space," which he defines as the conditions under which programs or policy decisions are actually open to modification.

An example would be the issue of the relative effectiveness of paid advertising versus public service announcements (PSAs) in reaching certain population subgroups in which the decision or approach is not yet settled. Echoing Patton's interest in contested questions, Rossi argues for designing evaluations to identify the best available choices among actions that could modify those parts of the program that can be changed. For example, although a program's overall funding level may be predetermined, the service delivery practices can be adjusted to increase access for certain client groups, e.g., minority CBOs.

#### 4. Guidelines for setting priorities

A recurrent theme among authors and the experts interviewed was concern about the usefulness of evaluation information in proportion to its cost. They stressed the overriding need for feasible designs which will produce timely and policy-relevant evaluation results that clearly justify the resources expended by the evaluation. While feasibility is a fairly obvious criterion in most situations, policy relevance is a more elusive concept which is far more often discussed than defined.

In their recent draft report to CDC, the NRC panel on the Evaluation of AIDS Interventions recommended that selection of projects for intensive evaluation be based on replicability, feasibility, and the project's potential effectiveness. To ensure broad applicability of evaluation findings, the panel further recommended that evaluations encompass a variety of subgroups, programs and settings, and be conducted with subpopulations at both high and low risk of HIV infection.

Our interviews with evaluation researchers and managers extend these recommendations with the following set of characteristics of problems, programs, and evaluations. Together these characteristics determine whether evaluation activities will produce findings which can be used by managers and decision makers. These factors are summarized in Figure 13.

Problem Scope. Policy clarification is needed most urgently for programs aimed at compelling problems. Consider the number of people affected, the infectiousness of the disease, and its seriousness in terms of morbidity, mortality, quality of life and years of potential life lost.

Program Scope. Programs to which substantial resources are currently or potentially devoted require careful assessment. Consider dollar size, staff and volunteer resources required, whether a program is the sole means of addressing a need or is one of many, and the anticipated expansion of the program.

Figure 13. Factors Influencing Evaluation Priorities

Problem Characteristics Scope

Program Characteristics Scope

Theory

Replicability

Evaluation Characteristics Timeliness

Feasibility

Impact

Program Theory. When the logic by which program resources are applied to a situation in order to produce desired results is clearly specified, evaluation questions often become apparent. Evaluations should focus on the point in the program theory where scientific and technical knowledge are least firm, rather than addressing well-documented phenomena. Operational questions will often rise at the points where experience seems to differ from established theory. Variations in the level of expectation for program success among stakeholders may point to areas for further examination of program theory and experience.

Replicability. Programs which are candidates for wider replication, such as demonstration projects or pilot studies, deserve more intensive scrutiny. On the other hand, as suggested by the discussion of policy space, there is little to be gained by evaluating a program whose existence is completely predetermined, except perhaps to fine-tune its continued operation.

Timeliness. The impact of an evaluation will depend in part upon the fit between the program's development stage and the evaluation questions chosen. Impending legislative re-authorization or budget review suggest the need for the kind of evaluation data which decision makers are likely to find persuasive, which may differ substantially from the needs of planners and managers. Evaluation of program subcomponents early in the life of the program may provide formative information to guide modifications in the development of the larger program. Conversely, evaluating program impact before the program has been in operation long enough for the anticipated effect to have occurred will yield misleading and perhaps disappointing results.

Feasibility. The likelihood that an evaluation design can be successfully completed, at a level of time and effort that is proportional to its impact, is another important criterion. One source suggested that while lengthy evaluation research may advance science, shorter-term evaluations are more likely to provide a tangible return to the organization. Another noted that simply stated questions are more likely to be satisfactorily answered. Finally, practical questions of data availability, resource requirements, and the availability of program staff for participation in the evaluation require consideration.

Impact. One source summed up this criterion by suggesting that all evaluation proposals should end with a section titled "So what?" Defining evaluation outcomes in terms of modifiable program components provides an assessment of potential impact. At one Federal agency, the final evaluation report includes a description of modifications to be implemented in response to evaluation recommendations.

Strategically, it may be more useful to answer a limited question definitively than to generate more discussion or identify areas for further research on a more global question.

### C. **Comparability of evaluation results**

In considering the second question, the comparability of evaluation findings, two issues are of interest. First, to understand the relative, as well as the overall, effectiveness of similar programs operating under different conditions, the analyst has to be able to compare the evaluation activities being conducted for each program

(e.g., through similar evaluation designs and effectiveness measures).

Noncomparability, of course, means that any differences between the evaluation findings of presumably similar programs could reflect differences in the evaluation methods used rather than true differences in program effectiveness. In addition, since some modifications of program design or delivery will almost certainly occur with each implementation, the analyst must weigh the influence of these variations in determining evaluation outcomes. Section C.1 below describes different ways of analyzing evaluation results, given variations in study designs, and presents an approach towards increasing the comparability of evaluation analyses across programs.

Second, it would be desirable to know from an organizational perspective the relative impact of different program activities on the agency's success in achieving its mission, i.e., whether greater benefits are being derived from inherently different programs such as public information campaigns versus counseling and testing, or basic research versus direct service. This type of analysis would enable the agency to better allocate its resources across programs in light of their respective contributions toward overall agency performance. Section C.2 discusses some of the challenges involved in these types of analyses and some possible solutions

### **1. Comparisons of similar programs**

**The** first question is perhaps the far more common one: Given that intended or unintended variations within similar programs are unavoidable, how can comparability of evaluation findings be improved? In compiling evaluation findings across programs, the analyst must first identify inconsistencies of design and implementation which may compromise the validity of generalizations across programs. The influence of these variations on evaluation results can then be assessed. Essentially similar programs may still include variations in one or more components: participant or environmental input, treatment, outcome, and evaluation design and measures. Examples of each of these program elements are shown in Figure 14. Greater comparability of program elements and consistency across goals and objectives will obviously allow greater opportunities for shared analyses. A set of programs in which all elements are shared, for example, would be similar to a multi-center clinical trial with defined eligibility criteria for participants, specific treatment

protocols, and uniform formats for reporting data. Data from all sites could be pooled for analysis, resulting in increased statistical power over that which would have been possible for any single site. Situations of such uniformity are, unfortunately, rare in social programs.

Figure 14. Examples of Program Elements Affecting Comparability of Similar Programs

Input	<ul style="list-style-type: none"> <li>Participants' age, race, risk behaviors</li> <li>Participants' knowledge and beliefs</li> <li>Existing community resources</li> <li>Previous media exposure</li> </ul>
Treatment	<ul style="list-style-type: none"> <li>Program design</li> <li>Instructional materials used</li> <li>Participant interactions</li> <li>Program intensity and duration</li> <li>Staff skills and experience</li> </ul>
Outcome	<ul style="list-style-type: none"> <li>Changes in knowledge</li> <li>Changes in attitudes</li> <li>Changes in behavior</li> <li>Changes in biological status</li> </ul>
Evaluation	<ul style="list-style-type: none"> <li>Sampling design</li> <li>Process and outcome indicators used</li> <li>Follow-up time</li> <li>Analytic methods</li> </ul>

However, certain analyses of evaluation data can be undertaken in situations where there is substantial variability in program clients, design and outcome measures. Research synthesis techniques provide a systematic approach to describing the cumulative findings of previous evaluations. The methods used in research syntheses include highly quantitative approaches which statistically aggregate results of individual studies, as well as research reviews which simply summarize previous findings and describe variations within the literature (Cordray and Lipsey, 1987).

The more quantitative approaches are generally discussed under the heading of **meta-analysis**, which is defined as the statistical analysis of the summary findings of

many empirical studies (Glass, **McGaw** and Smith, 1981). Findings from each study are converted into a common measure of treatment effect size, which can either be averaged across all studies, or examined to identify the factors associated with its variations. More complex statistical methods are available which examine variance in effect sizes, and adjust effect sizes to account for such factors as sampling error (Hedges, 1984; Hunter, Schmidt and Jackson, 1982).

Short of such sophisticated approaches, much can be learned from comparisons of effect sizes across studies, combined with an assessment of which independent variables are associated with larger or smaller effects, or with significant and non-significant findings. For example, simple research synthesis techniques can be used to identify which treatment features are associated with the greatest benefits by comparing the experience of similar client groups in various education programs. Comparisons of evaluation data from similar programs can allow identification of which types of clients report greatest benefits.

Light (1984) describes several situations where research synthesis methods can be used to identify interactions which may determine when, for whom, and perhaps why, a program works or does not. By allowing examinations of various combinations of clients, programs, and outcome measures, research synthesis can provide more specific information than could be gained from any single study. As one example, Light describes a synthesis which compared three data sets involved in examining the progress made by Head Start students in programs using five different curriculum formats. The individual analyses generally reported only small intellectual gains for students. However, comparisons of effect sizes for different combinations of curriculum and **student** groups revealed an interaction effect in which certain curricula were highly effective, but only with specific groups. When the right match was made between curriculum and student, gains were significant. Thus the synthesis uncovered an interactive effect in the data that altered substantially the previous interpretations of the program's effectiveness. Among CDC HIV activities such program interactions undoubtedly exist to a degree greater than is currently apparent. Whether these program interactions are mutually enhancing, partially duplicative, or even counter-productive is a question for future research.

Although it is the differences among program elements which allow such identifications of trends and interactions, it is also apparent that some level of comparability is needed in order for there to be a common ground for analysis. Since substantial variations in client populations and program design are certain to occur, the use of comparable measures of program effect would be particularly useful in allowing comparisons across evaluation studies. As an example, having grantees produce evaluation data tapes using outcome indicators with agreed-upon definitions would encourage secondary data analysis and sharing of lessons learned among programs. One evaluation manager interviewed suggested that this be a prerequisite of any program funding. If carried to an extreme, imposition of standardized protocols for program operations and evaluation might produce comparable findings, but would be undesirable for several reasons, including the need for responsiveness to local conditions and the desire to encourage creativity in program development and evaluation. Short of such imposed uniformity, greater commonality of program components increases the potential for broader analyses than can be performed otherwise.

The experience of the World Health Organization's Global Program on AIDS (GPA) provides a potentially useful example. The **GPA's** Epidemiological Support Unit is responsible for developing systems with which to monitor and evaluate national AIDS control system. Over the past year, ESR working groups have been defining quantitative outcome indicators to be used in measuring the degree to which interventions increase knowledge, increased knowledge leads to modified behaviors, and interventions produce changes in health status. Staff from CDC, ESR and other agencies have developed definitions of outcome indicators related to GPA's primary HIV strategies (prevention of sexual transmission, transmission through blood or blood products, perinatal transmission, and reduction of the impact of HIV infection). Specification of each indicator included definitions of numerator and denominator, and suggested means of obtaining data. The indicators were designed to be appropriate for use in small scale evaluations, on the assumption that they would be used primarily in countries which lack resources to implement large surveys of knowledge, attitudes, behavior or seroprevalence. Care was taken that nothing in the development or

**Figure 15. WHO GPA Criteria**

INDICATORS FOR EVALUATING THE EFFECTIVENESS OF  
AIDS PREVENTION AND CONTROL PROGRAMMES

II. SEXUAL TRANSMISSION

INDICATOR	NUMERATOR	DENOMINATOR	METHOD
<b>C</b> Proportion of penetrative sexual acts in which condom is used	Number of penetrative sexual acts using condom	Total number of penetrative acts among those having non-mutually exclusive partners, over a specified period	<b>KABP:</b>  a) Community survey  <b>b)</b> High risk groups
<b>D</b> Number of condoms sold or otherwise distributed	Number of condoms in a new observation period	Number of condoms in a baseline period	Government and/or corporate records
<b>E</b> Proportion of sexually active individuals who think proper condom use provides protection against AIDS	Number of sexually active individuals who think proper condom use provides protection against AIDS	Total number of sexually active individuals	<b>KABP:</b>  a) Community surveys  <b>b)</b> High risk groups
<b>F</b> Proportion of sexually active individuals who think reduction in the number of sexual partners will reduce risk of AIDS	Number of sexually active individuals who think reduction in number of sexual partners will reduce risk of AIDS	Total number of sexually active individuals	<b>EABP:</b>  a) Community surveys  <b>b)</b> High risk groups
<b>G</b> Proportion of people engaging in risky behavior who perceive themselves to be at risk of HIV infection	Number of people engaging in risky behavior who perceive themselves to be at risk	Number of people engaging in risky behavior (defined as the number of people who have non-mutually exclusive partners minus those in that group who consistently use condoms)	<b>KABP:</b>  a) Community surveys  <b>b)</b> High risk groups

presentation of the indicators would suggest that GPA favored particular intervention strategies. A sample of the proposed indicators is shown as Figure 15.

## 2. **Comparisons of different programs**

Since comparisons of dissimilar activities are necessarily performed routinely by any multi-function organization, it is surprising that the issue is not addressed more directly in the evaluation literature. Three evaluation methodologies can be considered, although none is entirely satisfactory.

Cost-benefit analysis compares the effects of a program against its costs. It can assess both present and future outcomes. Since a program's inputs and outcomes are expressed in terms of their present monetary value, it can be directly compared to any other **program** using the same cost accounting rules. The resulting benefit/cost ratio can be compared to the ratios computed for other programs, no matter how unlike the programs are in the types of outcomes produced (e.g., decrease in medical costs versus increase in job earnings).

The methodology of cost-benefit analysis, however, is very difficult. Although program inputs may be relatively simple to identify and value, program effects are generally far less so. This is particularly true for programs whose outcomes are in the form of human lives saved or extended. The process of quantifying the value of lives saved in terms of future earnings and societal expenditures cannot represent an inherent creative or personal value of human life, and will instead favor those interventions which save lives of young, white males (Joglekar, 1984). Further, assessing costs and benefits requires substantial amounts of specific information on future incidence, disease progression, and expected health care utilization and costs--data which are not reliably available with regard to AIDS. Small variations in the estimates of these parameters can produce major shifts in the conclusions reached by the analysis. The use of cost-benefit analysis requires considerable analytical skill and experience, and a sensitivity to the limitations of the technique (Joglekar, 1984).

Cost-effectiveness analysis avoids some of the pitfalls of cost-benefit analysis by comparing program costs to program effects, thus allowing comparison of program inputs to those effects which are not readily converted to monetary value.

Cost-effectiveness analysis is thus more practical and more acceptable for use with

programs whose primary effect is prevention of death or disability. However, the **cost-effectiveness** approach is less flexible than cost-benefit analysis since the programs compared have to use the same measures of effectiveness in order for the analysis to yield comparable results. This is because the approach seeks to determine which alternative (i.e., program intervention) produces the most “effect” for the least cost, under the assumption that all programs are aimed at producing the same effect. Thus, programs which measure effects in different units cannot be compared directly (Yates, 1985) except perhaps subjectively by policy makers who have the opportunity to weigh two different program outputs achieved with similar levels of expenditures.

A still more subjective approach to comparing dissimilar programs would entail monitoring the degree to which each program has attained its own defined objectives, and then comparing the relative achievement across programs. Generally referred to as goal attainment scaling, this approach involves definition of program objectives in terms of quantifiable outcomes, collection of outcome measures by means of some kind of performance monitoring system (Poister, 1983), and then scaling the degree of success of each program. Use of this technique for comparison among programs presents obvious difficulties, including the subjectivity of the objectives defined for individual programs, and the lack of any standard with which to compare the significance of the objectives achieved. Such an approach might, for example, favor a completely successful program benefiting one hundred persons over a moderately successful program affecting thousands. While identification of the degree to which programs have met their goals would certainly be useful, goal attainment scaling cannot identify which goals are more worthwhile other than in terms of subjective preference.

Finally, the problem of comparing dissimilar programs is analogous to that of a business that wants to assess the relative contributions made by the research and development unit and the product manufacturing division. Both contribute to the company’s ultimate goal--net profits. Their outputs, however, are not directly comparable, both because they are measured in different units and because they occur at different points along the company’s operations chain. Despite the advantage of possessing at least an objective outcome measure for most analyses (profits),

however, business analysts appear to have no more satisfactory solution to this dilemma than do evaluation theorists. A more commonly used business solution to the problem is for management to make an a priori decision as to the allocation of organizational resources among the different units, based on subjective assessments of strategic and policy options. Programs are then evaluated within their respective area. This approach also appears to be the commonly used method in public sector agencies. To the extent these subjective assessments are informed by opinions and needs of program managers, agreement on overall agency goals and objectives, and up-to-date information on the programs themselves, it may offer the most workable solution.



## V. CONCLUSIONS AND RECOMMENDATIONS

### A. **Continued focus on evaluation**

The policy attention cycle for AIDS/HIV has, according to many observers, reached its peak and is declining, despite the continuing critical nature of the epidemic. All AIDS/HIV programs and activities, whether new or ongoing, are likely to receive increasing scrutiny. Accountability for programs will likely take the form of difficult questions regarding impact and cost-effectiveness; program justifications on face validity or process measures alone will be challenged. Managers will have to define and argue for the importance of particular goals and objectives, as well as justify the amount of money it will take to reach them through a set of activities or interventions.

The role of evaluation will be critical in providing information to address the above issues. **CDC's** continuing attention to evaluation of HIV activities is necessary to address: **(1)** the changing nature of the HIV epidemic and need for designing sensitive approaches; **(2)** the difficulty inherent in establishing impact or outcome measures relating to HIV; **(3)** the innovative and inherently untested nature of many of the interventions; and **(4)** the reliance by CDC on numerous outside agencies and collaborators to implement the interventions.

### B. **HIV activities inventory**

#### 1. **Further analyses and development of evaluation plan**

**The** analyses of the inventory presented in this report represent an overview of CDC HIV activities and their evaluation status. The inventory is also a baseline for measuring changes in CDC HIV program focus, and can serve as a directory of HIV activities, with contact persons and telephone numbers available for additional information on any particular activity. Additional analyses and more focused information can contribute to the development of the overall evaluation plan for CDC HIV activities. Examples of potential value include: **(a) further analysis** of CDC HIV external grants and cooperative agreements, both directly funded and "second level," as with the Conference of Mayors program and state cooperative agreements; and **(b)**

further analysis of evaluability criteria and additional variables, such as fiscal year of the task, size of activity, and types of evaluation activity.

2. **Remaining information gaps and additional inventory activities**

Several areas are apparent for strengthening the information from the analyses. The first of these includes better understanding of and agreement on the terms relating to evaluation. As was pointed out, systematic variation was found among the **CIOs** in the application of the terminology of the inventory, despite briefings in which the inventory was discussed and the written materials provided. One possible solution would be evaluation workshops or periodic meetings of the **CIO** evaluation specialists, as mentioned earlier, to reach consensus on evaluation goals, objectives, and definitions.

A second area of improvement for the inventory would be in the definition of an HIV "activity," and the means for gauging its size. The inventory task was able to obtain only one useful size measure: levels of FY 89 HIV activity budgets. Further follow-up contacts with specific activity leaders could most likely provide **FTE** information; however, the comparability and usefulness of this information for further analyses would be questionable. Part of the problem is that the definition of an activity for evaluation purposes does not necessarily correspond with the way the activity is defined administratively.

Third, program information in the inventory is not sufficiently detailed to identify possible activity overlap across **CIOs**. Information on specific location of activities, specific groups being targeted or surveyed, characteristics of data being collected, etc., would be useful in identifying possible redundancies, synergies, or efficiencies.

Information linkages between, and reporting from, external grantees is another area where information could be improved, particularly regarding the second-level grant programs administered by the state and local health departments. Compiling and systematically organizing and making available program (versus administrative) information from these efforts could be of great interest and value to both planners and program staff.

Although the interviews identified general areas of evaluation or information needs for the **CIOs**, specific evaluation requirements for each activity were not identified. These details are necessary, however, only for the subset of activities for which evaluation is planned, and further depend upon decisions regarding the type and scope of evaluation which are appropriate. Detailed evaluation designs necessarily follow priority setting and evaluability assessment.

Finally, the types of HIV activity evaluation results actually available were not assessed by the inventory. If a central HIV activity evaluation office is established at CDC, then it could serve as a repository of such information.

### 3. **Annual Program Review and information system development**

The inventory component of this task was based on information from the Program Review document. Several weaknesses of the design of that document became apparent during work on the inventory, including the inflexibility of its format, the duplication of information that occurred across sections, and the difficulty of extracting summative information from it. Additionally, **CIOs** reported a great deal of frustration and difficulty in meeting the requirements for the Program Review.

To the extent that the currently completed inventory can serve as a catalog of HIV activities to date, subsequent program reviews can focus only on current and planned activities and thus lessen the reporting load on the **CIOs**. If CDC adopts a uniform but more flexible reporting format for the program review that allows computer entry of the responses (as was done for this task), then analysis of the program review materials would be easier. **ODD(HIV)** and CDC could gain a broader and more sensitive policy view of CDC HIV activities from such analyses.

Information and feedback from the **CIOs** on the inventory form used for this task can also serve as a comprehensive pretest to guide modifications to the format of the subsequent information requests from the **CIOs**.

Finally, the inventory can serve as the starting point for an evaluation component of the management information system (MIS) for CDC HIV activities, which is currently under development by **ODD(HIV)**.

Figure 16. Evaluation Options for ODD(HIV)

**Policy:**

- communicate to the **CIOs** the broad policy picture for CDC HIV activities as it relates to evaluation
- interpret evaluation results and policy needs to all levels

**Coordination:**

- coordinate information needs, evaluation designs, and data collection across **CIOs**
- link and coordinate evaluation staff across **CIOs**
- coordinate with agencies outside CDC
- maintain current, accessible, and cross-referenced data bank of evaluation information from **CIOs**
- handle information requests regarding CDC HIV activities

**Technical Assistance:**

- help with activity planning to improve evaluability
- provide evaluation training and encourage standardization of approaches
- facilitate and encourage development of innovative approaches to evaluation
- assist in development of outcome measures and instrument design

**Resources:**

- provide or identify resources for evaluation efforts

**Implementation and Quality Control:**

- conduct or sponsor cross-cutting evaluations, **meta-analyses**, or research syntheses
- set evaluation standards and assure research compatibility
- help develop a minimum data set for all HIV activities
- monitor follow-up and assure the utilization of evaluation results

### C. Evaluation options for ODD(HIV)

Figure 16 provides a summary and overview of possible evaluation options for ODD(HIV) in the coordination of CDC HIV activities. An acknowledged role for ODD(HIV) is communicating to the CIOs the broad policy picture relating to the HIV epidemic and a high level of awareness of the necessity for accountability. Concerns are expressed, however, regarding the micromanagement of HIV activities by ODD(HIV), and the needs of ODD(HIV) for massive amounts of information. Consideration needs to be given not only to how much information should be provided, but also how often it is necessary to provide it. Certain data items may justify quarterly reporting; other data may only need to be monitored on an annual basis or may be available from an alternative source. Minimizing the reporting burden on the CIOs is an often-articulated goal; one important way of doing this is in judicious data reporting requirements.

The rigor of the evaluation methodologies applied may be constrained by political or ethical considerations, as pointed out in the NRC report regarding evaluation of counseling and testing. It is also generally accepted that HIV evaluation approaches at CDC will have to be flexible, differentiating among activities at different levels of evaluability, and calling for different types of evaluation activities.

For example, extensive formative evaluation prior to widespread implementation may be necessary for new or unproven approaches, emphasis on process evaluation to monitor implementation may be appropriate when the implementing agencies have little program experience, and evaluations focusing on impacts may be necessary to understand one approach versus another. Cost-effectiveness analysis, although certainly not appropriate for all activities, may be called for in the case of expensive, ongoing programs. The NRC draft report recommends that consideration of cost-effectiveness evaluations be postponed until more experience with formative, process, and outcome evaluations is accomplished.

The conduct of evaluations should remain in the domain of the CIOs, with few possible exceptions for evaluations of cross-cutting or larger policy issues. The setting of evaluation priorities, however, should be a shared responsibility. The literature review and synthesis of expert opinion provided clarification on sets of possible criteria for setting evaluation priorities. Explicitly setting evaluation priorities should assist in the preparation

of evaluation plans and document, for both internal and **external** reviewers, the rationale behind choices. CDC should evaluate the appropriateness and usefulness of various criteria sets as presented earlier. In reviewing previous evaluation agendas, do the suggested factors appear to have influenced decision makers' choices? As **CIO** and **ODD(HIV)** decision makers formulate current evaluation agendas, are these criteria useful, or can other factors which guide priority-setting be identified?

**The** literature review also described several approaches for analysis of data from similar programs using research synthesis techniques. Given the need for broadly applicable evaluation findings, an assessment of the **possibilities** of synthesizing program findings should be undertaken. Program descriptions, based on the HIV activity inventory, as well as program results could be mapped to identify areas of similarity appropriate for **meta-analytic** or other techniques. Identified areas of differences among programs could help identify interactions affecting program outcomes.

Finally, synthesizing research and sharing knowledge would be much easier if outcome measures for HIV activities could be compared. Increasing comparability of outcome measures is part, however, of the larger need for consensus understanding of evaluation, mentioned earlier, and will require ongoing interaction among the **CIOs** and **ODD(HIV)**. As discussed in the literature review, part of the effort to standardize outcome measures should involve investigating the applicability of the approach implicit in the WHO GPA set of indicators for use by state, local, and CBO grantees.

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**APPENDIX A. CDC Centers, Institutes, and Organizations  
Involved in HIV Activities**

Office of the Deputy Director (HIV) [**ODD(HIV)**]

National AIDS Information and Education Project (NAIEP)

Center for Infectious Diseases (CID)

Center for Prevention Services (CPS)

Center for Chronic Disease Prevention and Health Promotion (CCDPHP)

National Institute for Occupational Safety and Health (NIOSH)

Public Health Practice Program Office (PHPPO)

International Health Program Office (**IHPO**)

National Center for Health Statistics (NCHS)

Center for Environmental Health and Injury Control (CEHIC)

Epidemiology Program **Office** (EPO)

**APPENDIX B. Inventory Form and Guide**

RECNO:  
XREF: - - -

CIO: \_\_\_\_\_

CDC HIV ACTIVITY INVENTORY REPORT

Activity Name: \_\_\_\_\_  
\_\_\_\_\_

CIO Division: \_\_\_\_\_

FY89 Activity? \_\_\_\_ Cont. from Prior Year: \_\_\_\_ Year Initiated: \_\_\_\_

Collaborating **CIOs:** \_\_\_\_\_

Information Source/Contact Person: \_\_\_\_\_

Telephone Number: \_\_\_\_\_

Current FTE Staff: \_\_\_\_\_

Current Year Budget: \_\_\_\_\_ Future Year Budget: \_\_\_\_\_

Transmission Route Prevention Focus:  
(Mark all that apply)

- Sexual Transmission
- IVDA-Associated Transmission
- Perinatal Transmission
- Transmission Through Blood and Blood Products
- Occupation-Related Transmission
- Management of Infected Individual
- Promotion of Healthy Lifestyles

Activity Classification:  
(Mark all that apply)

- Biomedical Research
- Epidemiology
- Surveillance
- Prevention
- Treat. and Service Del.
- Regulation

Target Subgroup:  
(Mark **all** that apply)

- IVDAs**
- Homosexual/Bisexual Men
- Adolescents/Young Adults
- Hemophiliacs & Partners
- Tuberculosis/TB at-risk
- Blood Donors
- Transfusion Recipients
- Immigrants/Refugees
- Health Care Workers
- Dental Care Workers
- Public Safety Workers
- Prostitutes
- Other

Population Subgroup:  
(Mark all that apply)

- Women
- Minorities
- Newborns

Functional Categories:  
(Mark all that apply)

- Evaluation
- Behavior Science
- International Health
- Data Mgmt and Analysis
- Training and Workshops

RECNO:

Is activity extramural? \_\_\_\_\_ No. of components or grantees: \_\_\_\_\_

Comments: \_\_\_\_\_

Activity Evaluability:

To what extent does this activity have . . . .

	Not at All			Completely Adequate	
.... a plausible intervention design	1	2	3	4	5
.... clear objectives	1	2	3	4	5
.... measurable outcome indicators	1	2	3	4	5
.... available data	1	2	3	4	5
.... adequate resources	1	2	3	4	5
.... potential for replicability	1	2	3	4	5

\_\_\_\_\_ Overall, on a scale of 1 to 5, with 1 being 'minimally **evaluable**' and 5 being 'completely **evaluable**,' how would you describe this activity?

Please list quantifiable process measures defined for this activity:

\_\_\_\_\_

Please list quantifiable outcome measures defined for this activity:

\_\_\_\_\_

Data Collection/Data Processing Methods: (Mark all that apply)

- \_\_\_\_\_ Paper or Forms-based
- \_\_\_\_\_ Microcomputer-based; Software used: \_\_\_\_\_
- \_\_\_\_\_ Mini/Mainframe-based; Software used: \_\_\_\_\_

Types of Evaluation Activities:  
(Mark all that apply)

Activity Evaluation Status:  
(Select best response)

- \_\_\_\_\_ **Formative** Evaluation
- \_\_\_\_\_ Efficacy Evaluation
- \_\_\_\_\_ Process Evaluation
- \_\_\_\_\_ Effectiveness/Impact Evaluation
- \_\_\_\_\_ Cost-Effectiveness Evaluation
- \_\_\_\_\_ Has been evaluated
- \_\_\_\_\_ Currently being evaluated
- \_\_\_\_\_ Evaluation planned
- \_\_\_\_\_ No evaluation plan

Comments: \_\_\_\_\_

\_\_\_\_\_

**Strategic plan classification.**

**Please indicate what aspect(s) of the strategic plan are addressed by this activity. (Mark all that apply.)**

**I\* Risk Assessment:**

**... Surveillance**

**... Epidemiology**

**II. Technology Development & Transfer:**

**... Technology and Evaluation**

**... Information and Technology Transfer**

**III. Prevention:**

**... Primary Prevention**

**... Secondary Prevention**

**IV. Capacity Building:**

**... State/local level**

**... Regional/national level**

**... International capacity**

## **\_ Inventory of Past and Current CDC HIV Activities**

**One of the primary activities under the task order contract "Inventory of CDC HIV Activities for Evaluation" (0643-03) is the effort to compile a complete inventory of past and current CDC HIV activities, with special regard to their evaluation status. The project will compile the inventory primarily from the 1989 CDC HIV Program Review, with supporting material and assistance from the individual CIOs. We will include both current and past (e.g., completed) activities in the inventory. Information on completed activities is useful (1) to gather information on and assess CDC HIV evaluation efforts to date and (2) to assist CIOs and ODD(HIV) in targeting future evaluation priorities. The inventory will provide a baseline of CDC HIV activities and benchmark the evaluation status of HIV activities at CDC.**

### **CDC HIV Activity Inventory Report**

**Activities should be defined at a level of aggregation that will allow meaningful and unambiguous evaluation of the activity or intervention. In the case of grant programs or cooperative agreements, the activity is at the level of the overall announcement, and not at the level of the individual grants or agreements. Multi-year efforts should also be considered a single activity. Generally, activities can be defined as separate line items in CIO or division-level budgets.**

**We have developed a microcomputer database to keep account of individual activities, and a computer-generated form reflecting the database for gathering the necessary information. The following is a brief question-by-question explanation of the different sections in the form to provide guidance for their completion.**

**RECNO, XREF -- ignore**

**CIO, Activity Name, CIO Division -- self explanatory**

**FY89 Activity -- is this activity a current activity? (yes/no)**

**Cont. from Prior Year -- is this activity continued from the prior year? (yes/no)**

**Year Initiated -- for current activities**

**Year Completed -- for completed activities**

**Collaborating CIOs -- which other CIOs are involved in the activity, if any? (use abbreviations)**

**Information Source/Contact Person, Telephone Number**  
-- self explanatory.

**Budgetary and Staffing Information:**

These data for both current and completed activities are to describe the relative size (both in terms of personnel and dollars) of the activity. Staffing and budget amounts, therefore, need only to be approximations, and will not be used in generating totals or subtotals by CIOs or activity types.

**Activity Typologies:**

As has been apparent, many different typologies of HIV activities have been developed in the past few years, and many more will undoubtedly evolve. By using these descriptive typologies in combination and compiling the information in a database, we will be able to categorize activities along a variety of dimensions. Rather than forcing choices (as was done in the 1989 Program Review), these typologies ask for "all that apply" in an attempt to reflect the full scope of an activity. Not all activities will have appropriate classification in all categories, and many activities will have more than one classification in several of the categories.

**Transmission Route Focus** -- the original classification scheme for the 1989 HIV Program Review

**Target Subgroup** -- classification by subgroup characteristic

**Activity Classification** -- PHS budget categories

**Population subgroup** -- demographic category focus

**Functional Categories** -- Cross-cutting categories or classification of activities

**Strategic Plan Classification** -- see attached definitions

**Is activity extramural?** -- Does the activity involve grants or contracts with governmental or non-governmental groups outside CDC? (yes/no)

**No. of components or grantees** -- Approximate or exact number of external groups involved in the activity. Specify "first-level" only, e.g., only the number that CDC directly funds, and not groups that may be funded or subcontracted by the grantee.

## Activity ' Evaluability:

Several characteristics determine whether evaluation is likely to provide useful information for planning and improving future activities. The questions in this section ask for a ranking from 1 to 5 of some of these characteristics for each HIV activity being described. The following are brief amplifications on the characteristics to be ranked. The last question asks for an overall or summative ranking of activity evaluability.

Plausible intervention design: refers to a set of activities, resources and timetable that can reasonably be expected to lead to achievement of the activity's objectives.

Clear objectives: are there written, quantifiable, and realistic program objectives for the activity?

Measurable outcome indicators: are there measurable and valid outcome indicators to assess achievement of program objectives?

Available data: will valid data on program outcomes be available in a timely fashion and at reasonable cost?

Adequate resources: are there sufficient funds and personnel committed to carry out planned activities?

Potential for replicability: can evaluation results be used to design a similar activity in the future, or improve the continued implementation of this one?

Quantifiable process and outcome measures:

The next two questions ask for a listing or critical examples of the quantifiable process and outcome measures for the activity.

Process measures assess whether the activity's components (resources, costs, activities and outputs) are being implemented as planned.

Outcome measures assess the impact of the activity, usually in terms of its stated objectives (although it may also be appropriate or necessary to rely on proxy measures, intermediate outcomes, or unintended outcomes or "side effects").

Data Collection/Data Processing Methods -- self explanatory

## **Type of Evaluation Activities:**

The following are descriptions of different types or levels of evaluation activities that can be implemented.

Formative evaluation occurs during the planning and design stages of an intervention, and results are fed back to the implementors for early adjustments to design or operations.

Efficacy evaluation tests the effectiveness of the interventions in controlled settings under near-ideal (e.g., laboratory) conditions.

Process evaluations answer the questions "What was done, to whom, and how?" Process evaluation is normally an ongoing process which monitors the implementation of an intervention.

Outcome evaluations measure the effects of the intervention as actually delivered, and assess whether observed impacts or outcomes are actually attributable to the intervention.

Cost-effectiveness/Cost-benefit evaluations take measures of effectiveness and match the effectiveness of the intervention (or benefits if outcomes can be measured in terms of dollars) with the costs of the intervention.

**Activity Evaluation Status -- self explanatory**

**Attachment  
Strategic Plan Activity Classification**

This typology coincides with the latest typology for CDC's HIV Strategic Plan. Category definitions are as follows:

**I. Risk Assessment**

Assess over time the status and characteristics of the HIV/AIDS and the risk of HIV infection associated with a variety of settings, occupations, behaviors, practices, and populations.

- A. Surveillance -- collect and analyze surveillance data, conduct seroprevalence surveys, conduct and monitor KABB in relation to HIV infection.**
- B. Epidemiology -- determine HIV infection and transmission patterns, describe natural history, identify behavioral determinants, and assess relative risks.**

**II. Technology Development & Transfer**

Develop and evaluate preventive interventions and diagnostic technologies for HIV, promote the rapid transfer of appropriate methodologies into clinical and public health practice, and promote the use of the scientific knowledge base in the development of public policy related to HIV.

- A. Technology and Evaluation -- (1) develop and evaluate new diagnostic methods for detection of HIV infections and related illnesses, and (2) develop and evaluate new approaches to HIV prevention**
- B. Information and Technology Transfer -- (1) transfer information and technologies, and (2) assess and evaluate the need for and effectiveness of public health policy concerning HIV/AIDS**

**III. Prevention**

Promote and support interventions that prevent HIV transmission and that reduce associated morbidity among HIV-infected persons'.

- A. Primary Prevention -- prevent primary transmission of HIV infection by reducing the prevalence of high risk behaviors and promotion of healthy behaviors**
- B. Secondary Prevention -- prevent the acquisition and transmission of opportunistic and other HIV-related infections.**

(continued)

**(Strategic Plan Classifications, cont'd)**

**IV. Capacity Building**

**Build HIV prevention capacities and promote collaboration among governmental, public, and private agencies and organizations at local, state, regional, national and -international levels.**

- A. State/local level -- technical assistance and financial support to (1) state and local agencies and (2) community-based organizations (CBOs) targeted to special constituencies**
- B. Regional/national level -- technical assistance and financial support**
- C. International capacity -- technical assistance and financial support in international settings through multilateral and bilateral activities.**

**APPENDIX C. Inventory of CDC HIV Activities**

Inventory of CDC HIV Activities for Evaluation

**CIO = ODD(HIV)**

Inventory of CDC-HIV activities for evaluation

Contact Person: **Nabil Issa**                      **Telep No: 404-639-0937**

**Collaborating CIOs: All**

**FY89/New**                      Extramural: Y No. Components: **1**

Functional Categories: Evaluation Data Mgmt & Analysis

Evaluation Status: No evaluation plan

Minority AIDS Conferences: 1987, 1988

Contact Person: Helene Gayle                      **Telep No: 404-639-0906**

Collaborating CIOs: NAIEP

**Completed**                      **Extramural: N**

**Transmission Route: Sexual IVDA Perinatal Transfusion**

**Promotion of Healthy** Lifestyles

Population Subgroup(s): Women Minorities

Functional Categories: Evaluation Behavior Science

International Health

Evaluation Status: Evaluation planned

National Academy of Sciences Report: "AIDS,  
Sexual Behavior, and Intravenous Drug Use"

Contact Person: S. Bowen/J. **Gayle/D. Brownell** **Telep No: 1480/0930/0939**

Collaborating CIOs: CCDPHP, CID, CPS, NAIEP

**FY89/Continued** Extramural: Y No. Components: **1**

Population Subgroup(s): Women Minorities Newborns

Functional Categories: Evaluation Behavior Science

Evaluation Status: No evaluation plan

## Inventory of CDC HIV Activities for Evaluation

**CIO** = CCDPHP  
Division = DASH

Assess HIV-related KBB among a national sample of  
US high school students

Contact Person: Dr. Laura Kann                      Telep No: **404-639-3824**  
Collaborating **CIOs**: None  
**FY89/New**        Extramural: Y No. Components: 1  
Transmission Route:    Sexual **IVDA** Promotion of Healthy Lifestyles  
**Functional** Categories:    Evaluation Behavior Science  
Evaluation Activities: Formative Process  
Evaluation Status:        Currently being evaluated

Assist state depts of **educ** improve their programs  
and interventions (contract to **IOX** Associates)

Contact Person: Dr. Gary Nelson                      Telep No: 404-639-3824  
Collaborating **CIOs**: None  
**FY89/Continued** Extramural: Y No. Components: 71  
Transmission Route:    Sexual **IVDA** Promotion of Healthy Lifestyles  
**Functional** Categories:    Evaluation Behavior Science  
Evaluation Activities: Formative Efficacy Process  
Evaluation Status:        Currently being evaluated

Comprehensive national program: training and  
demonstration centers

Contact Person: Mr. Jack Jones                      Telep No: **404-639-3824**  
Collaborating **CIOs**: None  
**FY89/Continued** Extramural: Y No. Components: 3  
Transmission Route:    Sexual **IVDA** Promotion of Healthy Lifestyles  
Evaluation Activities: Formative Process  
Evaluation Status:        Evaluation planned

Comprehensive natl prog: 71 state & local depts of  
edu provide HIV edu to youth in and out of school

Contact Person: Dr. **Lloyd** Kolbe                      Telep No: **404-639-3824**  
Collaborating **CIOs**: None  
**FY89/Continued** Extramural: Y No. Components: 71  
Transmission Route:    Sexual **IVDA** Promotion of Healthy Lifestyles  
**Functional** Categories:    Evaluation Training & Workshops  
Evaluation Activities: Formative Process  
Evaluation Status:        Currently being evaluated

CIO = CCDPHP

Comprehensive natl prog: The AIDS School Health Education **Subfile**

Contact Person: Mr. Jack Jones                      Telep No: 404-639-3824  
Collaborating **CIOs**: None  
**FY89/Continued** Extramural: Y No. Components: 1  
Transmission Route:     Sexual **IVDA** Perinatal Transfusion  
                                    Promotion of Healthy Lifestyles  
Evaluation Status:       No evaluation plan

Comprehensive natl prog: develop guidelines for school health edu programs that include HIV edu

Contact Person: Mr. Jack Jones                      Telep No: 404-639-3824  
Collaborating **CIOs**: None  
**FY89/Continued** Extramural: N  
Transmission Route:     Sexual **IVDA** Promotion of Healthy Lifestyles  
Evaluation Status:       No evaluation plan

Comprehensive natl prog: work w/natl edu & health organizations to provide HIV education to youth

Contact Person: Jack Jones                            Telep No: 404-639-3824  
Collaborating **CIOs**: None  
**FY89/Continued** Extramural: Y No. Components: 19  
Transmission Route:     Sexual **IVDA** Mgmt of Infected Indivi  
                                    Promotion of Healthy Lifestyles  
Evaluation Status:       Currently being evaluated

Help state & local depts of **educa** to assess **HIV**-related KBB among a sample of high school students

Contact Person: Dr. Laura Kann                      Telep No: 404-639-3824  
Collaborating **CIOs**: None  
**FY89/New**           Extramural: Y No. Components: 71  
Transmission Route:     Sexual **IVDA** Promotion of Healthy Lifestyles  
Functional Categories:    Evaluation Behavior Science  
Evaluation Activities:   Formative Process  
Evaluation Status:       Currently being evaluated

Six natl conferences to help natl, state, & local agencies implt & eval HIV interventns among youth

Contact Person: Mr. Jack Jones                      Telep No: 404-639-3824  
Collaborating **CIOs**: None  
**FY89/Continued** Extramural: Y No. Components: 2  
Transmission Route:     Sexual **IVDA** Promotion of Healthy Lifestyles  
Functional Categories:    Evaluation Training & Workshops  
Evaluation Status:       Has been evaluated

**CIO = CCDPHP**

Support a CDC consultant to WHO to help develop  
internat'l activities to prevent youth HIV infect

Contact Person: Dr. Lloyd Kolbe                      Telep No: **404-639-3824**

Collaborating **CIOs**: None

**FY89/New**            Extramural: Y No. Components: 1

Evaluation Activities: Formative Process

Evaluation Status:        Evaluation planned

Technical assistance to 15 regional curriculum  
centers

Contact Person: Mr. Jack Jones                      Telep No: **404-639-3824**

Collaborating **CIOs**: None

**FY89/New**            Extramural: Y No. Components: 15

Transmission Route:     Sexual **IVDA** Promotion of Healthy Lifestyles

Evaluation Status:        No evaluation plan

Work with national educa & health orgs of the  
Indian Health Svc to provide HIV educa to youth

Contact Person: Mr. Jack Jones                      Telep No: **404-639-3824**

Collaborating **CIOs**: None

**FY89/New**            Extramural: N

Evaluation Activities:    Formative

Evaluation Status:        Evaluation planned

Division = DRH

Behavioral Determinants of Contraceptive **Choices-**

Design of Data Collection Instrument

Contact Person: Dr. Ruby T. Senie                      Telep No: 404-639-3052

Collaborating **CIOs**: None

**FY89/New**            Extramural: N

Transmission Route:     Sexual **IVDA** Perinatal

Population Subgroup(s): Women Minorities

Evaluation Status:        Evaluation planned

Cost Analysis of Family Planning for Prevention  
of Pediatric HIV/AIDS

Contact Person: Dr. Ruby T. Senie                      Telep No: **404-639-3052**

Collaborating **CIOs**: None

**FY89/New**            Extramural: Y No. Components: 1

Population Subgroup(s): Women Minorities

Functional Categories:    Evaluation Behavior Science

Evaluation Status:        Evaluation planned

**CIO = CCDPHP**

Family Planning Regional Training Centers

Contact Person: Yvonne Green      Telep No: **404-639-2467**

Collaborating **CIOs**: CPS

**FY89/New**      Extramural: Y No. Components: 10

Transmission Route:      Sexual **IVDA** Perinatal

Population Subgroup(s): Women

Evaluation Status:      Currently being evaluated

National Pregnancy Mortality Surveillance

Contact Person: Lisa Koonin      Telep No: **404-639-2214**

Collaborating **CIOs**: None

**FY89/New**      Extramural: N

Population Subgroup(s): Women Newborns

Evaluation Status:      Currently being evaluated

Tech Assist to Dept of GYN-OB, Emory Univ.:

Design, Conduct Analysis of HIV Prev Studies

Contact Person: Dr. **Hervert** B. Peterson      Telep No: 404-639-3052

Collaborating **CIOs**: CPS

**FY89/Continued** Extramural: Y No. Components: none

Transmission Route:      Sexual **IVDA** Perinatal

Population Subgroup(s): Women Minorities

Evaluation Status:      Evaluation planned

WHO Collaboration Technical and Managerial Guidelines on AIDS and Family Planning

Contact Person: Dr. Herbert B. Peterson      Telep No: **404-639-3052**

Collaborating **CIOs**: CPS

**FY89/New**      Extramural: Y No. Components: none

Transmission Route:      Sexual **IVDA** Perinatal

Promotion of Healthy Lifestyles

Population Subgroup(s): Women Minorities

Evaluation Status:      Evaluation planned

Division = **SURVL/ANLY**

Behavioral Risk Factor Surveillance

Contact Person: Mr. Gary Hogelin      Telep No: 404-639-2752

Collaborating **CIOs**: None

**FY89/New**      Extramural: Y No. Components: 41

Evaluation Status:      No evaluation plan



Inventory of CDC HIV Activities for Evaluation

**CIO = CEHIC**

Quality Assurance Program for HIV Seropositivity  
Testing of Dried Blood Spot Specimens

Contact Person: Harry **Hannon**

Telep No: 404-488-4131

Collaborating **CIOs**: CID

**FY89/Continued** Extramural: N

Population Subgroup(s): Women Newborns

Evaluation Status: Currently being evaluated

Inventory of CDC HIV Activities for Evaluation

**CIO = CID**

International Activity - Technical Assistance

**Projet SIDA:** Government of Zaire

Contact Person: Dr. William L. **Heyward**      Telep No: **404-639-2060**

Collaborating **CIOs:** None

**FY89/Continued** Extramural: N

Transmission Route:    Sexual Perinatal Transfusion  
                                 Occupation-Related Mgmt of Infected Indivi  
                                 Promotion of Healthy Lifestyles

Activ. **Classif.:**        Biomedical Research Epidemiology  
                                 Surveillance Prevention  
                                 Treat. & Serv. Del.

Population Subgroup(s): Women Newborns

Functional Categories:   Evaluation Behavior Science  
                                 International Health  
                                 Data Mgmt & Analysis  
                                 Training & Workshops

Evaluation Activities: Formative Efficacy Process  
                                 Impact Cost Effectiveness

Evaluation Status:      Currently being evaluated

Mathematical & Computer Models for the Prediction  
of AIDS Incidence

Contact Person: Dr. John M. Karon              Telep No: 404-639-2020

Collaborating **CIOs:** None

**FY89/Continued** Extramural: Y No. Components: 1

Evaluation Activities: Formative Process

Evaluation Status:      Currently being evaluated

Hemophilia Surveillance and Epidemiology

Contact Person: John Murphy/Rosemary Ramsey Telep No: 404-639-3712

Collaborating **CIOs:** CPS

**FY89/Continued** Extramural: Y No. Components: none

Transmission Route:    Sexual **IVDA** Perinatal Transfusion  
                                 Mgmt of Infected Indivi  
                                 Promotion of Healthy Lifestyles

Activ. **Classif.:**        Biomedical Research Epidemiology  
                                 Surveillance Prevention  
                                 Treat. & Serv. Del.

Functional Categories:   Evaluation Data Mgmt & Analysis

Evaluation Activities: Formative Efficacy Process  
                                 Impact

Evaluation Status:      Currently being evaluated

CIO = CID

Immunology of HIV Infection

Contact Person: Dr. Steve **McDougal**      Telep No: **404-639-3434**

Collaborating **CIOs**: None

**FY89/Continued** Extramural: N

Activ. Classif.:      Biomedical Research

Evaluation Status:      Currently being evaluated

Behavioral Change Studies (Homosexual Men)

Contact Person: Dr. Lynda Doll      Telep No: 404-639-2013

Collaborating **CIOs**: None

**FY89/Continued** Extramural: Y No. Components: 3

Transmission Route:      Sexual **IVDA** Promotion of Healthy Lifestyles

Functional Categories:      Evaluation Behavior Science

   Data Mgmt & Analysis

Evaluation Activities: Formative Process

   Impact

Evaluation Status:      Evaluation planned

Behavioral Studies (Prostitutes)

Contact Person: Dr. William Darrow      Telep No: **404-639-2013**

Collaborating **CIOs**: None

**FY89/Continued** Extramural: Y No. Components: 3

Transmission Route:      Sexual **IVDA**

Population Subgroup(s): Women Minorities

Functional Categories:      Evaluation Behavior Science

   Data Mgmt & Analysis

Evaluation Activities: Formative Process

   Impact

Evaluation Status:      Evaluation planned

Epi of HIV in Selected Populations: adolescents,  
children, migrant farm workers, college students

Contact Person: Margaret **Oxtoby/Brian** Edlin Telep No: **404-639-2025**

Collaborating **CIOs**: None

**FY89/Continued** Extramural: Y . No. Components: 8

Transmission Route:      Sexual **IVDA** Perinatal

Population Subgroup(s): Women Minorities Newborns

Functional Categories:      Evaluation Behavior Science

   International Health

   Data Mgmt & Analysis

Evaluation Activities: Formative Process

   Impact

Evaluation Status:      Currently being evaluated

CIO = CID

Evaluation of the Surveillance of Pediatric AIDS

Contact Person: Dr. Margaret Oxtoby      Telep No: 404-639-2030

Collaborating CIOs: None

**FY89/Continued** Extramural: Y No. Components: 7

Transmission Route: Sexual **IVDA** Perinatal Transfusion

Population Subgroup(s): Women Minorities Newborns

Functional Categories: Evaluation International Health  
Data Mgmt & Analysis

Evaluation Activities: Formative Process  
Impact

Evaluation Status: Evaluation planned

HIV 2 Surveillance

Contact Person: Dr. Thomas R. O'Brien      Telep No: 404-639-2033

Collaborating CIOs: CPS

**FY89/Continued** Extramural: Y No. Components: 8

Transmission Route: Sexual **IVDA** Perinatal Transfusion  
Promotion of Healthy Lifestyles

Population Subgroup(s): Women Minorities Newborns

Functional Categories: Evaluation International Health  
Data Mgmt & Analysis

Evaluation Activities: Formative Process  
Impact

Evaluation Status: Currently being evaluated

Natural History of AIDS and HIV Infection

Contact Person: Dr. Scott Holmberg      Telep No: 404-639-2033

Collaborating CIOs: None

**FY89/Continued** Extramural: Y No. Components: 7

Transmission Route: Sexual **IVDA** Transfusion  
Mgmt of Infected Indivi  
Promotion of Healthy Lifestyles

Functional Categories: Evaluation Behavior Science  
International Health

Data Mgmt & Analysis

Evaluation Activities: Formative Process  
Impact

Evaluation Status: Currently being evaluated

Perinatal Studies

Contact Person: Dr. Martha Rogers      Telep No: 404-639-2030

Collaborating CIOs: None

**FY89/Continued** Extramural: Y No. Components: 3

Transmission Route: Sexual **IVDA** Perinatal

Population Subgroup(s): Women Minorities Newborns

Functional Categories: Evaluation Behavior Science  
Data Mgmt & Analysis

Evaluation Activities: Formative Process  
Impact

Evaluation Status: Currently being evaluated

**CIO = CID**

**Sexual Transmission of HIV Infection**

Contact Person: Ken Castro / Tom O'Brien   Telep No: 639-2008/2033

Collaborating **CIOs: CPS**

**FY89/Continued** Extramural: Y No. Components: 22

Transmission Route: Sexual **IVDA** Transfusion

Population Subgroup(s): Women Minorities

Functional Categories: Evaluation Behavior Science

Data Mgmt & Analysis

Evaluation Activities: Formative Process

Evaluation Status: Currently being evaluated

**International Activity - Technical Assistance**

**RETRO-C.I.:** Government of Cote D'Ivoire

Contact Person: Dr. William L. **Heyward**   Telep No: 404-639-2060

Collaborating **CIOs: None**

**FY89/Continued** Extramural: N

Transmission Route: Sexual Perinatal

**Activ. Classif.:** Biomedical Research Epidemiology

Surveillance

Population Subgroup(s): Women Newborns

Functional Categories: Evaluation Behavior Science

International Health

Data Mgmt & Analysis

Training & Workshops

Evaluation Activities: Formative Efficacy Process

Evaluation Status: Currently being evaluated

**Characterize Infections in Hospitalized HIV**

**Patients**

Contact Person: Dr. William J. **Martone**   Telep No: 404-639-3171

Collaborating **CIOs: None**

**FY89/New** Extramural: Y No. Components: 2

Population Subgroup(s): Women Minorities Newborns

Functional Categories: Evaluation Data Mgmt & Analysis

Evaluation Status: Evaluation planned

**Health Care Workers**

Contact Person: Dr. David Bell   Telep No: 404-639-1 644

Collaborating **CIOs: NIOSH**

**FY89/Continued** Extramural: Y No. Components: 59

Functional Categories: Evaluation Behavior Science

Evaluation Activities: Formative Efficacy Process

Impact

Evaluation Status: Currently being evaluated

**CIO = CID**

Technology Development to Detect and Characterize  
the Human Immunodeficiency Virus & HIV Infections

Contact Person: Dr. Gerald Schochetman      Telep No: **404-639- 1000**

Collaborating **CIOs**: CEHIC, PHPPO

**FY89/Continued** Extramural: Y No. Components: 2

Transmission Route:      Sexual **IVDA** Perinatal Transfusion

Mgmt of Infected Indivi

Activ. Classif.:      Biomedical Research Epidemiology

Surveillance Treat. & Serv. Del.

Functional Categories: Evaluation International Health

Data Mgmt & Analysis

Training & Workshops

Evaluation Status:      Currently being evaluated

Clinic-Based Surveys (Family of Surveys)

Contact Person: Dr. Ida Onorato      Telep No: **404-639-2086**

Collaborating **CIOs**: **ODD(HIV)**, CCDPHP, CPS, NCHS, PHPPO

**FY89/Continued** Extramural: Y No. Components: 6

Transmission Route:      Sexual **IVDA** Perinatal

Mgmt of Infected Indivi

Promotion of Healthy Lifestyles

Population Subgroup(s): Women Minorities

Functional Categories: Evaluation Behavior Science

Data Mgmt & Analysis

Training & Workshops

Evaluation Activities: Formative Efficacy Process

Impact

Evaluation Status:      Currently being evaluated

Population-Based Surveys (Family of Surveys)

Contact Person: Dr. Lyle Petersen      Telep No: **404-639-2082**

Collaborating **CIOs**: **ODD(HIV)**, CCDPHP, CPS, NCHS, PHPPO

**FY89/Continued** Extramural: Y No. Components: 9

Functional Categories: Evaluation Behavior Science

Data Mgmt & Analysis

Training & Workshops

Evaluation Activities: Formative Process

Impact

Evaluation Status:      Currently being evaluated

Expanded Initiatives and Evaluation of AIDS/HIV

Surveillance

Contact Person: Dr. Ruth L. berkelman      Telep No: 404-639-2040

Collaborating **CIOs**: None

**FY89/New** Extramural: Y No. Components: 12

Activ. Classif.:      Biomedical Research Surveillance

Functional Categories: Evaluation Behavior Science

Data Mgmt & Analysis

Evaluation Activities: Formative Efficacy Process

Impact

Evaluation Status:      Currently being evaluated

CIO = CID

National AIDS Case Surveillance: mixture of active  
and passive surv. from 81-88 (88:all 50 awarded)

Contact Person: Dr. Ruth Berkelman      Telep No: 404-639-2040

Collaborating CIOs: None

**FY89/Continued** Extramural: Y No. Components: 60

Functional Categories: Evaluation Data Mgmt & Analysis  
Training & Workshops

Evaluation Activities: Formative Efficacy Process  
Impact

Evaluation Status: Currently being evaluated

Inventory of CDC HIV Activities for Evaluation

**CIO = CPS**

Division = DDPA

Contract to **AADS** to assess Infection Control teaching curricula within member institutions

Contact Person: Dr. Lawrence J. Furman      Telep No: **404-639-1830**

Collaborating **CIOs**: None

Completed      Extramural: Y No. Components: 1

Evaluation Status:      No evaluation plan

Develop & disseminate educational materials for dental **HCWs** on infection control & risk management

Contact Person: Dr. Lawrence J. Furman      Telep No: 404-639-1 830

Collaborating **CIOs**: PHPPO

Completed      Extramural: N

Evaluation Activities: Formative

Evaluation Status:      Evaluation planned

Distribute and develop recommendations for use & handling of toothbrushes in schools & other instit

Contact Person: Dr. Lawrence Furman      Telep No: 404-639-1 830

Collaborating **CIOs**: None

**FY89/Continued** Extramural: N

Evaluation Status:      No evaluation plan

Educational videotape and workbook on infection control within the dental care environment

Contact Person: Dr. Lawrence Furman      Telep No: 404-639-1 830

Collaborating **CIOs**: None

**FY89/Continued** Extramural: N

Evaluation Status:      No evaluation plan

First National Conference on Infection Control in Dentistry (in cooperation with NIDR, ADA, NIH)

Contact Person: Lawrence J. Furman      Telep No: 404-639-1 830

Collaborating **CIOs**: None

Completed      Extramural: N

Evaluation Status:      No evaluation plan

Grant supported by CDC and HRSA to **AADS** to devel model curriculum guidelines on infection control

Contact Person: Lawrence J. Furman      Telep No: 404-639-1 830

Collaborating **CIOs**: None

**FY89/Continued** Extramural: Y No. Components: 1

Evaluation Status:      No evaluation plan

**CIO = CPS**

HIV Model Plan for State **Dental Health** Programs:

Coop agrmt with Public Health Found, funded by FDA

Contact Person: Lawrence J. Furman      Telep No: 404-639-I 830

Collaborating **CIOs**: None

**FY89/New**      Extramural: Y No. Components: 1

Evaluation Status:      No evaluation plan

International infection control guidelines to dental health care workers

Contact Person: Lawrence J. Furman      Telep No: 404-639-I 830

Collaborating **CIOs**: None

**FY89/Continued** Extramural: N

Evaluation Status:      No evaluation plan

National infection control guidelines to dental health care workers

Contact Person: Lawrence J. Furman      Telep No: 404-639-I 830

Collaborating **CIOs**: CID

**FY89/Continued** Extramural: N

Evaluation Status:      Evaluation planned

Publish & distrib booklet "Preventing the Trans. of Hepatitis B, AIDS, & Herpes in Dentistry"

Contact Person: Lawrence J. Furman      Telep No: 404-639-1830

Collaborating **CIOs**: CID

Completed      Extramural: N

Evaluation Status:      No evaluation plan

Publish and Distribute "Facts About AIDS for the Dental Team: to all U.S. Practicing Dentists

Contact Person: Lawrence J. Furman      Telep No: 404-639-I 830

Collaborating **CIOs**: None

Completed      Extramural: N

Evaluation Status:      No evaluation plan

**Division = DSTD**

AIDS Community Demonstration Projects: Adolescents

Contact Person: Dr. Kevin **O'Reilly**      Telep No: 404-639-2536

Collaborating **CIOs**: None

**FY89/Continued** Extramural: Y No. Components: 3

Transmission Route:      Sexual **IVDA**

Functional Categories:      Evaluation Behavior Science

Evaluation Activities: Formative Process

Impact

Evaluation Status:      Currently being evaluated

**CIO = CPS**

**AIDS Community Demonstration Projects: IVDAs**

Contact Person: Dr. Kevin R. O'Reilly      Telep No: 404-639-2536

Collaborating **CIOs**: None

**FY89/Continued** Extramural: Y No. Components: 5

Transmission Route: Sexual **IVDA**

Population Subgroup(s): Women Minorities

Functional Categories: Evaluation Behavior Science

Evaluation Activities: Formative Process

Impact

Evaluation Status: Currently being evaluated

**AIDS Community Demonstration Projects: Prostitutes**

Contact Person: Dr. Kevin R. O'Reilly      Telep No: 404-639-2536

Collaborating **CIOs**: None

**FY89/Continued** Extramural: Y No. Components: 3

Transmission Route: Sexual **IVDA**

Population Subgroup(s): Women Minorities

Functional Categories: Evaluation Behavior Science

Evaluation Activities: Formative Process

Impact

Evaluation Status: Currently being evaluated

**AIDS Community Demonstration Projects: homosexual/  
bisexual men**

Contact Person: Dr. Kevin O'Reilly      Telep No: 404-639-2536

Collaborating **CIOs**: None

**FY89/Continued** Extramural: Y No. Components: 6

Transmission Route: Sexual

Functional Categories: Evaluation Behavior Science

Evaluation Activities: Formative Process

Impact

Evaluation Status: Currently being evaluated

**AIDS Prevention Program Informational Interchange**

Contact Person: Bob Kohmescher      Telep No: 404-639-1 235

Collaborating **CIOs**: None

**FY89/New** Extramural: N

Evaluation Status: No evaluation plan

**Direct funds to CBOs to educate public & reduce  
prevalence of risky behavior**

Contact Person: Paul Poppe      Telep No: 639-1205

Collaborating **CIOs**: None

**FY89/New** Extramural: Y No. Components: 75

Transmission Route: Sexual **IVDA** Promotion of Healthy Lifestyles

Population Subgroup(s): Women Minorities

Evaluation Activities: Formative Efficacy Process

Impact

Evaluation Status: Evaluation planned

**CIO = CPS**

Evaluation of Intensive Effort to Reduce the Risk  
of HIV Infectn Among Patients Attending STD Clinic

Contact Person: Bob Cannon                      Telep No: 404-639-2570

Collaborating **CIOs**: None

Completed            Extramural: N

Transmission Route:    Sexual **IVDA** Promotion of Healthy Lifestyles

Population Subgroup(s): Women Minorities

Functional Categories: Evaluation Behavior Science

Evaluation Activities: Formative Efficacy

Evaluation Status:    Evaluation planned

Evaluation of Partner Notification **for** HIV and  
Syphilis Prevention

Contact Person: Kathleen Toomey              Telep No: 404-639-2771

Collaborating **CIOs**: None

**FY89/New**            Extramural: N

Transmission Route:    Sexual **IVDA** Perinatal  
                                  Promotion of Healthy Lifestyles

Population Subgroup(s): Women Minorities

Functional Categories: Evaluation

Evaluation Activities: Formative Efficacy Process

                                  Impact Cost Effectiveness

Evaluation Status:    Evaluation planned

HE/RR: agreement with HRSA to provide support  
services to HIV+ people with hemophilia

Contact Person: Jack Spencer                 Telep No; 404-639-2580

Collaborating **CIOs**: CID

**FY89/Continued** Extramural: Y No. Components: 24

Transmission Route:    Sexual **IVDA** Perinatal Transfusion  
                                  Mgmt of Infected Indivi

                                  Promotion of Healthy Lifestyles

Evaluation Status:    Currently being evaluated

HIV Prevention Agreements: Public Information  
(**PSAs**, operation of hotlines, etc.)

Contact Person: Bob Kohmescher             Telep No: 404-639-I 230

Collaborating **CIOs**: None

**FY89/Continued** Extramural: Y No. Components: 63

Evaluation Status:    Currently being evaluated

HIV Prevention Agreements: Counseling and Testing  
Services

Contact Person: Kathy Cahill                 Telep No: 404-639-I 245

Collaborating **CIOs**: None

**FY89/Continued** Extramural: Y No. Components: 63

Transmission Route:    Sexual **IVDA** Perinatal Transfusion

Population Subgroup(s): Women

Evaluation Status:    Currently being evaluated

**CIO = CPS**

HIV Prevention Agreements: HIV prevalence among minorities; assistance to **CBOs** through hth depts

Contact Person: Kathy Cahill                      Telep No: **404-639-1245**

Collaborating **CIOs**: None

**FY89/Continued** Extramural: Y No. Components: 67

Transmission Route:    Sexual **IVDA** Perinatal  
                                  Promotion of Healthy Lifestyles

Population Subgroup(s): Women Minorities

Evaluation Status:     Currently being evaluated

HIV Prevention Agreements: Health Education/Risk Reduction

Contact Person: Bob Kohmescher                      Telep No: 404-639-I 235

Collaborating **CIOs**: CCDPHP, CID

**FY89/Continued** Extramural: Y No. Components: 61

Transmission Route:    Sexual **IVDA** Promotion of Healthy Lifestyles

Functional Categories:   Evaluation Data Mgmt & Analysis

                                  Training & Workshops

Evaluation Status:     Evaluation planned

HIV Prevention Agreements: Partner notification component

Contact Person: Kathy Cahill                      Telep No: 494-639-I 245

Collaborating **CIOs**: None

**FY89/Continued** Extramural: Y No. Components: none

Transmission Route:    Sexual Mgmt of Infected Indivi

Evaluation Status:     Currently being evaluated

HIV prevention courses taught at STD Prevention/ Training Centers

Contact Person: Kim Geissman                      Telep No: 404-639-I 233

Collaborating **CIOs**: None

**FY89/Continued** Extramural: Y No. Components: 10

Transmission Route:    Sexual Occupation-Related

Evaluation Activities: Formative Process

Evaluation Status:     Evaluation planned

Instructor Training for Teaching "HIV Serologic Test Counseling & Partner Notification Techniques"

Contact Person: Robert Emerson                      Telep No: 404-236-I 235

Collaborating **CIOs**: None

**FY89/Continued** Extramural: N

Transmission Route:    Sexual **IVDA** Perinatal Transfusion  
                                  Mgmt of Infected Indivi

                                  Promotion of Healthy Lifestyles

Evaluation Activities: Formative Process

                                  Impact

Evaluation Status:     Currently being evaluated

**CIO = CPS**

Perinatal prevention demonstration projects and  
evaluation of program

Contact Person: Dr. Stuart Berman      Telep No: 404-639-2536

Collaborating **CIOs**: None

**FY89/Continued** Extramural: Y No. Components: 8

Transmission Route: Sexual **IVDA** Perinatal

Population Subgroup(s): Women Newborns

Functional Categories: Evaluation Behavior Science

Evaluation Activities: Formative Efficacy Process  
Impact

Evaluation Status: No evaluation plan

Study of Alternate Strategies for HIV Counseling  
in an STD Population

Contact Person: Dr. Deborah Rugg      Telep No: 404-639-2536

Collaborating **CIOs**: None

**FY89/New** Extramural: Y No. Components: 3

Transmission Route: **Sexual**

Functional Categories: Evaluation

Evaluation Activities: Formative

Evaluation Status: Evaluation planned

Study of the Impact of HIV Counseling and Testing  
on Methadone Clients

Contact Person: Dr. Deborah Rugg      Telep No: 404-639-2536

Collaborating **CIOs**: None

**FY89/New** Extramural: Y No. Components: 4

Transmission Route: Sexual **IVDA**

Population Subgroup(s): Women Minorities

Functional Categories: Evaluation

Evaluation Activities: Formative Efficacy Process

Evaluation Status: Currently being evaluated

Study of the effect of HIV **infectn** on initial man-  
ifestations and response to treatment of syphilis

Contact Person: Dr. Robert Rolfs      Telep No: 404-639-2580

Collaborating **CIOs**: CID, PHPPO

**FY89/Continued** Extramural: Y No. Components: 4

Activ. Classif.: Biomedical Research Treat. & Serv. Del.

Population Subgroup(s): Women Minorities

Functional Categories: Evaluation Behavior Science

Evaluation Status: Evaluation planned

**CIO = CPS**

Training for CDC staff on drug abuse, treatment,  
& HIV prev measures for **IVDAs** (PHS regional mtgs)

Contact Person: Jessica **Gardom**/**Paul** Poppe   Telep No: 639-i **480**/1205

Collaborating **CIOs**: None

**FY89/New**   Extramural: N

Population Subgroup(s): Women Minorities

Evaluation Status:   No evaluation plan

U.S. Conference of Mayors: HIV/AIDS info exchange  
and support to **CBOs** for HIV **educ** outreach programs

Contact Person: Steve Schindler   Telep No: 494-639-I 480

Collaborating **CIOs**: **NAIEP**

**FY89/Continued** Extramural: Y No. Components: 1

Transmission Route:   Sexual **IVDA** Perinatal  
Promotion of Healthy Lifestyles

Population Subgroup(s): Women Minorities

Evaluation Status:   Currently being evaluated

Division = DTBC

Assessment of Efficacy of CDC/ATS-Recommended  
Anti-TB Drug Regimens Among TB Pts w/HIV infection

Contact Person: Harry Stern   Telep No: **404-639-2519**

Collaborating **CIOs**: None

**FY89/New**   Extramural: Y No. Components: 7

Activ. Classif.:   Biomedical Research Epidemiology  
Treat. & Serv. Del.

Population Subgroup(s): Women Minorities

Functional Categories: Evaluation Behavior Science  
International Health  
Data Mgmt & Analysis

Evaluation Activities: Formative Efficacy Process  
Impact

Evaluation Status:   Evaluation planned

Development and Evaluation of New Diagnostic Tests  
for TB in HIV Infected Persons

Contact Person: Dr. Rick O'Brien   Telep No: 404-639-2530

Collaborating **CIOs**: None

**FY89/New**   Extramural: Y No. Components: 2

Activ. **Classif.**:   Biomedical Research

Population Subgroup(s): Women Minorities

Functional Categories: Evaluation Data Mgmt & Analysis

Evaluation Activities: Formative Efficacy Process  
Impact

Evaluation Status:   Evaluation planned



**CIO = CPS**

**TB/HIV Autopsy Studies**

Contact Person: Dr. Alan Bloch                      Telep No: 404-639-2519  
Collaborating **CIOs**: None  
**FY89/New**            Extramural: Y No. Components: 2  
Evaluation Activities: Formative Process  
                                  Impact  
Evaluation Status:     Currently being evaluated

**TB/HIV Cohort Study**

Contact Person: Harry Stern                      Telep No: 404-639-2519  
Collaborating **CIOs**: None  
**FY89/New**            Extramural: Y No. Components: 2  
Evaluation Activities: Formative Process  
                                  Impact  
Evaluation Status:     Evaluation planned

**Trial Preventive Therapy Efficacy Studies Among  
Persons with Both TB and HIV Infection**

Contact Person: Dr. Rick O'Brien                      Telep No: 404-639-2530  
Collaborating **CIOs**: None  
**FY89/New**            Extramural: Y No. Components: 3  
**Activ. Classif.:**     Biomedical Research Epidemiology  
                                  Prevention Treat. & Serv. Del.  
Population Subgroup(s): Women Minorities  
Functional Categories: Evaluation Behavior Science  
                                  International Health  
                                  Data Mgmt & Analysis  
Evaluation Activities: Formative Efficacy Process  
                                  Impact  
Evaluation Status:     Evaluation planned

Division = HIV

**CDC/HRSA Comprehensive HIV Prevention & Treatment  
Pilot Program**

Contact Person: J. Gardom / D. Ken                      Telep No: 404-839-1480  
Collaborating **CIOs**: None  
**FY89/New**            Extramural: Y No. Components: 3  
Transmission Route:     Sexual IVDA Perinatal Transfusion  
                                  Mgmt of Infected Indivi  
                                  Promotion of Healthy Lifestyles  
Population Subgroup(s): Women Minorities Newborns  
Functional Categories: Evaluation Behavior Science  
                                  Data Mgmt & Analysis  
                                  Training & Workshops  
Evaluation Status:     Evaluation planned

**CIO = CPS**

Evaluation of Process and Outcome: Street  
Outreach Programs

Contact Person: Imani Thompson                      Telep No: 404-639-I 480

Collaborating **CIOs**: None

**FY89/New**            Extramural: Y No. Components: none

Functional Categories: Evaluation Data Mgmt & Analysis

Evaluation Status:       Currently being evaluated

Model joint plan for provision of **HIV/STD/TB**  
prevention activities in drug treatment centers

Contact Person: Steve Jones/Jessica Gardom    Telep No: 404-639-I 480

Collaborating **CIOs**: None

**FY89/New**            Extramural: N

Transmission Route:    Sexual **IVDA**

Functional Categories: Evaluation

Evaluation Status:       Currently being evaluated

Division = Immuniz

Evaluation of safety and immunogenicity of  
childhood vaccines in HIV+ children

Contact Person: L. Markowitz / M. Rogers    Telep No: **639-1870/2025**

Collaborating **CIOs**: CID

**FY89/Continued** Extramural: N

**Activ. Classif.:**        Biomedical Research Prevention

Functional Categories: Evaluation International Health

Evaluation Status:       Has been evaluated

Survey of Pediatricians to eval KAB regarding  
immunization of HIV-infected children

Contact Person: Lauri Markowitz                Telep No: 404-639-I 870

Collaborating **CIOs**: None

**FY89/New**            Extramural: Y No. Components: 1

Functional Categories: Evaluation Behavior Science

Evaluation Status:       Evaluation planned

Division = Quarantine

Counseling HIV Positive Nonimmigrant Aliens Who  
Are Granted Waivers of Excludability to Enter U.S.

Contact Person: Richard Moyer                 Telep No: 404-639-2784

Collaborating **CIOs**: **ODD(HIV)**, CID

**FY89/New**            Extramural: N

Transmission Route:    Sexual **IVDA** Mgmt of Infected Indivi

Population Subgroup(s): Women Minorities

Evaluation Status:       Evaluation planned

**CIO = CPS**

HIV Addendum to the "Guidelines for Medical Examination of Aliens

Contact Person: Richard Moyer                      Telep No: 404-639-2784

Collaborating **CIOs**: CID

Completed            Extramural: N

Population Subgroup(s): Women Minorities

Evaluation Status:       Currently being evaluated

inventory of CDC HIV Activities for Evaluation

**CIO = IHPO**

AIDS Technical Support Project for U.S.A.I.D.  
(PASA)

Contact Person: Jerry Brimberry                      Telep No: 464-639-1 762

**Collaborating CIOs:** CPS, CID, NAIEP, **ODD(HIV)**

**FY89/New**                      Extramural: N

Transmission Route:     Sexual **IVDA** Perinatal Transfusion  
                                  Occupation-Related Mgmt of Infected Indivi  
                                  Promotion of Healthy Lifestyles

**Activ. Classif.:**            Biomedical Research Epidemiology  
                                  Surveillance Prevention  
                                  Treat. & Serv. Del.

Population Subgroup(s): Women Newborns

Evaluation Activities: Formative Process  
                                  Impact

Evaluation Status:        Evaluation planned

Inventory of CDC HIV Activities for Evaluation

**CIO = NAIEP**

American Red Cross Activities

Contact Person: Dr. Margeret **Scarlett**      Telep No: **404-639-0979**

Collaborating **CIOs**: All

**FY89/Continued** Extramural: Y No. Components: 1

Transmission Route: Sexual **IVDA** Perinatal Transfusion  
Occupation-Related Promotion of Healthy Lifestyles

Population Subgroup(s): Women Minorities

Evaluation Status: No evaluation plan

Clearinghouse policy assess: implications of free  
& unlimited quant dist, cost recov, & user's needs

Contact Person: Lynn Herring      Telep No: **404-639-0956**

Collaborating **CIOs**: All

**FY89/New** Extramural: Y No. Components: 1

Functional Categories: Evaluation

Evaluation Activities: Formative

Evaluation Status: Evaluation planned

Develop initiative to involve church-related  
organizations in HIV info and education efforts

Contact Person: Ken Williams      Telep No: **404-639-0968**

Collaborating **CIOs**: None

**FY89/New** Extramural: N

Evaluation Status: No evaluation plan

Establish eval process with **AMFAR**, other groups, &  
Clearinghouse to review Clearinghouse materials

Contact Person: Lynn Herring      Telep No: **404-639-0956**

Collaborating **CIOs**: None

**FY89/New** Extramural: Y No. Components: 1

Functional Categories: Evaluation

Evaluation Status: Evaluation planned

Eval of **NAIEP's** nat'l media campaign: Develop  
specific questns for NCHS Health Interview Survey

Contact Person: Janine Jason      Telep No: **404-639-0952**

Collaborating **CIOs**: NCHS, CCDPHP

**FY89/New** Extramural: N

Functional Categories: Evaluation

Evaluation Status: Evaluation planned

**CIO = NAIEP**

**Eval of NAIEPs** natl media campaign: Assess paid ad approach & support NAS' eval of mass communication

Contact Person: Dr. Janine Jason                      Telep No: **404-639-0952**

**Collaborating CIOs: ODD(HIV)**

**FY89/New**                      Extramural: Y No. Components: 1

Transmission Route:      Sexual Promotion of Healthy Lifestyles

Population Subgroup(s): Women Minorities

Functional Categories: Evaluation

Evaluation Activities: Formative

Evaluation Status:      Evaluation planned

Evaluation of **NAIEP's** national media campaign:  
monitoring the effectiveness of the campaign

Contact Person: Janine Jason                      Telep No: 404-639-0952

**Collaborating CIOs: CCDPHP, NCHS**

**FY89/New**                      Extramural: N

Population Subgroup(s): Women Minorities

Functional Categories:      Evaluation Behavior Science

   Data Mgmt & Analysis

Evaluation Status:      Currently being evaluated

Evaluation of **NAIEP's** national media campaign:  
Monitor Parents and Youth phase of the campaign

Contact Person: Beverly Schwartz                      Telep No: 404-639-0975

**Collaborating CIOs: NCHS**

**FY89/New**                      Extramural: Y No. **Components: 1**

Transmission Route:      Sexual **IVDA** Promotion of Healthy Lifestyles

Population Subgroup(s): Women Minorities

Functional Categories:      Evaluation Data Mgmt & Analysis

Evaluation Activities:      Formative **Efficacy** Process

Evaluation Status:      Currently being evaluated

Expand coop agrmts: provide financial support to  
natl orgs to **incr** involvement in HIV prevention

Contact Person: Beverly Schwartz                      Telep No: 404-639-0975

**Collaborating CIOs: All**

**FY89/New**                      Extramural: Y No. Components: 11

Transmission Route:      Sexual Promotion of Healthy Lifestyles

Population Subgroup(s): Women Minorities

Evaluation Status:      Currently being evaluated

National AIDS Information Clearinghouse

Contact Person: Lynn Herring                      Telep No: 404-639-0956

**Collaborating CIOs: All**

**FY89/Continued** Extramural: N

Evaluation Activities: Formative Process

Evaluation Status:      Evaluation planned

CIO = NAIEP

National AIDS information Hotline

Contact Person: Lynn Herring

Telep No: 404-639-0956

Collaborating CIOs: CPS

**FY89/Continued** Extramural: N

Evaluation Activities: Formative Process

Evaluation Status: Evaluation planned

National mailer, "Understanding AIDS": developed  
and mailed 106 million copies of brochure

Contact Person: Priscilla Holman

Telep No: 404-639-0968

Collaborating CIOs: All

Completed Extramural: N

Transmission Route: Sexual Promotion of Healthy Lifestyles

Functional Categories: Evaluation

Evaluation Activities: Formative Process

Impact

Evaluation Status: Has been evaluated

Natl Public Info Campaign ("America Responds to  
AIDS") & eval of campaign (monitor the PSA)

Contact Person: Melissa Sheperd

Telep No: 404-639-0979

Collaborating CIOs:

**FY89/Continued** Extramural: Y No. Components: 1

Transmission Route: Sexual Promotion of Healthy Lifestyles

Functional Categories: Evaluation

Evaluation Status: Currently being evaluated

Support for KCET television special on AIDS in the  
Hispanic community

Contact Person: Dr. Isa Fernandez

Telep No: 202-293-7330

Collaborating CIOs: None

Completed Extramural: Y No. Components: 1

Population Subgroup(s): Women Minorities

Evaluation Activities: Formative Process

Evaluation Status: Has been evaluated

Support to Novella Health Foundation for developmt  
of photo novella to use in edu progs for Hispanics

Contact Person: Dr. Isa Fernandez

Telep No: 404-639-0968

Collaborating CIOs: None

Completed Extramural: Y No. Components: 1

Transmission Route: Sexual **IVDA** Promotion of Healthy Lifestyles

Population Subgroup(s): Women Minorities

Evaluation Status: No evaluation plan

**CIO = NAIEP**

Support to national minority conferences and other national and international conferences

Contact Person: Ken Williams                      Telep No: 404-639-0968

Collaborating **CIOs**: All

**FY89/Continued** Extramural: Y No. Components: 10

Transmission Route: Sexual Promotion of Healthy Lifestyles

Population Subgroup(s): Women Minorities

Evaluation Status: No evaluation plan

Three regional tech assistance workshops for health agencies & **CBOs** on use of media, eval, etc.

Contact Person: Cynthia Jorgensen/Lynn HerringTelep No: 404-639-0956

Collaborating **CIOs**: CPS, CCDPHP

Completed Extramural: Y No. Components: none

Functional Categories: Evaluation Training & Workshops

Evaluation Activities: Formative Process

Evaluation Status: Has been evaluated

Inventory of CDC HIV Activities for Evaluation

**CIO = NCHS**

National Health Care Survey (National Hospital  
Discharge Survey / **Nat'l** Amb Med Care Survey)

Contact Person: Ed Bacon                      Telep No: **301-436-8522**

Collaborating **CIOs**: None

**FY89/New**            Extramural: Y No. Components: 2

Population Subgroup(s): Women Minorities

Evaluation Status:     Currently being evaluated

National Health and Nutrition Examination

Contact Person: Gerry **McQuillan**            Telep No: 301-436-7080

Collaborating **CIOs**: None

**FY89/New**            Extramural: Y No. Components: 2

Population Subgroup(s): Women Minorities

Evaluation Status:     Currently being evaluated

National Health Interview Survey/Knowledge and  
Attitude Supplement

Contact Person: Marcie Cynamon            Telep No: **301-436-7085**

Collaborating **CIOs**: CPS

**FY89/Continued** Extramural: Y No. Components: 1

Population Subgroup(s): Women Minorities

Functional Categories: Evaluation Data Mgmt & Analysis

Evaluation Status:     Currently being evaluated

Pretest for National Study of Health and Sexual  
Behavior

Contact Person: Marcie Cynamon            Telep No: **301-436-7085**

Collaborating **CIOs**: CCDPHP, CID, CPS

**FY89/New**            Extramural: Y No. Components: 1

Transmission Route:     Sexual **IVDA** Perinatal Transfusion

Population Subgroup(s): Women Minorities

Evaluation Status:     Currently being evaluated

Estimation of HIV-related deaths: National Vital  
Statistics System

Contact Person: Frances Chevarley            Telep No: **301-436-8884**

Collaborating **CIOs**: None

**FY89/Continued** Extramural: Y No. Components: 50

Population Subgroup(s): Women Minorities Newborns

Evaluation Status:     Currently being evaluated

**CIO = NCHS**

National Maternal and Infant Health Survey

Contact Person: Paul Placek                      Telep No: 301-436-8954

Collaborating **CIOs**: None

**FY89/Continued** Extramural: Y No. Components: 1

Population Subgroup(s): Women Minorities Newborns

Evaluation Status: Currently being evaluated

National Survey of Family Growth

Contact Person: Bill Pratt                      Telep No: 301-436-8731

Collaborating **CIOs**: None

**FY89/Continued** Extramural: Y No. Components: 1

Transmission Route: Sexual **IVDA** Perinatal

Population Subgroup(s): Women Minorities

Evaluation Status: Currently being evaluated

Improvement of HIV-related survey methodologies

Contact Person: Monroe Sirken                      Telep No: 301-436-7110

Collaborating **CIOs**: None

**FY89/New** Extramural: N

Population Subgroup(s): Women Minorities

Evaluation Status: Currently being evaluated

Feasibility Study for National Household

Seroprevalence Survey

Contact Person: Peter Hurley                      Telep No: 301-436-7106

Collaborating **CIOs**: None

**FY89/Continued** Extramural: Y No. Components: 1

Transmission Route: Sexual **IVDA** Transfusion

Population Subgroup(s): Women Minorities

Evaluation Status: Currently being evaluated

National Mortality Followback Survey

Contact Person: Eve Powell-Griner                      Telep No: 301-436-7108

Collaborating **CIOs**: None

**FY89/New** Extramural: Y No. Components: 1

Population Subgroup(s): Women Minorities

Evaluation Status: Currently being evaluated

Revision of Model State Vital Statistics Act and

Regulations

Contact Person: George Gay                      Telep No: 301-436-88-1 5

Collaborating **CIOs**: None

**FY89/New** Extramural: N

Evaluation Status: Currently being evaluated

Inventory of CDC HIV Activities for Evaluation

**CIO = NIOSH**

**AIDS guidelines** for health and public safety  
**workers**

Contact Person: **Phillip W. Strine**                      Telep No: **404-639-0983**  
Collaborating **CIOs:** CID  
**FY89/New**                      Extramural: Y No. Components: 1  
Evaluation Status:            Has been evaluated

CDC HIV/AIDS workplace coordinating committee

Contact Person: **Phillip W. Strine**                      Telep No: **404-639-0983**  
Collaborating **CIOs:** CID  
**FY89/New**                      Extramural: N  
Evaluation Status:            No evaluation plan

Determine extent of adherence to CDC guidelines  
for prev of occupation exposure to HIV & HBV

Contact Person: **Robert Mullan**                      Telep No: **404-639-0983**  
Collaborating **CIOs:** CID  
**FY89/New**                      Extramural: Y No. Components: 3  
Functional Categories: Evaluation  
Evaluation Status:            Evaluation planned

NIOSH cooperative agreement with E.R.C., Inc.

Contact Person: **Robert Muller**                      Telep No: **404-639-0983**  
Collaborating **CIOs:** None  
**FY89/New**                      Extramural: Y No. Components: 5  
Evaluation Status:            No evaluation plan

Published with U.S. DOL "Joint Advisory Notice for  
Protection Against **Occupational** Exposure to HBV & HIV

Contact Person:    Telep No:  
Collaborating **CIOs:** None  
Completed                      Extramural: N  
Evaluation Status:            No evaluation plan

SENSOR Agreements (**FY89**): NJ, NY, OH, OR, CO,  
TX, WI

Contact Person: **Phillip Strine**                      Telep No: (494) 639-0983  
Collaborating **CIOs:** None  
**FY89/New**                      Extramural: Y No. Components: 7  
Evaluation Activities: Formative Efficacy Process  
Evaluation Status:            Evaluation planned

**CIO = NIOSH**

Standards to protect workers

Contact Person: Bryan **Hardin**

Telep No: **513-533-8303**

Collaborating **CIOs**: CID

**FY89/New** Extramural: Y No. Components: 1

Evaluation Activities: Formative **Efficacy** Process

Evaluation Status: Evaluation planned

Task order to MIT: Assessment of risk for  
occupational transmission of HIV

Contact Person: Dr. Robert **Mullan**

Telep No: **404-639-0983**

Collaborating **CIOs**: None

**FY89/Continued** Extramural: Y No. Components: 1

Evaluation Activities: Formative Process

Evaluation Status: Evaluation planned

Task order to **Triodyne** Engineering and UVA:

Assess control technology & personal prot equipmt

Contact Person: Dr. Murray Cohen

Telep No: **404-639-0983**

Collaborating **CIOs**: None

Completed Extramural: Y No. Components: 2

Evaluation Status: Has been evaluated

Inventory of CDC HIV Activities for Evaluation

**CIO = PHPPO**

Evaluation of Laboratory Performance of HIV-1

Antibody Testing

Contact Person: Mr. Thomas Hearn                      Telep No: 404-639-3153

Collaborating **CIOs:** CID

**FY89/Continued** Extramural: **Y** No. Components: 1

Functional Categories: Evaluation Data Mgmt & Analysis

Evaluation Status:       Currently being evaluated

HIV-Related Laboratory Training

Contact Person: Dr. Wanda Jones                      Telep No: 404-639-1 663

Collaborating **CIOs:** CID

**FY89/Continued** Extramural: **N**

Evaluation Status:       Currently being evaluated

## Inventory of CDC HIV Activities for Evaluation

**CIO** = EPO (see note below)

EIS officers, preventive medicine residents, and EPO career staff involved HIV/AIDS-related activities at the state and local level

Contact Person: Mr. George Stroh      Tele. No.: **404-639-3187**  
**FY89/continued**

EIS officer direct assignment to CDC **CIOs** involved in HIV activities

Contact Person: Dr. Richard Dicker      Tele. No.: 404-639-3588  
**FY89/continued**

MMWR periodic publication of HIV/AIDS-related articles and special HIV/AIDS supplements

Contact Person: Ms. Elliott Churchill      **Tele.** No.: 404-639-2100  
**FY89/continued**

EIS officer training HIV/AIDS subject matter

Contact Person: Dr. Richard Dicker      Tele. No.: 404-639-3588  
**FY89/continued**

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Note: EPO does not have discrete HIV activities, and is not directly funded for HIV activities through **ODD(HIV)**. The above activities, however, are part of the ongoing program of EPO that directly contributes to the CDC HIV prevention mission. Evaluation of these activities is not HIV-specific, but is contained in the overall program.

**APPENDIX D. Listings of Process and Outcome Measures**

PROCESS MEASURES:

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1. NEEDS ASSESSMENT AND MEASURES OF PARTICIPATION  
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number of high risk patients and partners accepting C/T

number of persons referred for treatment

acceptance rates to participate by clinic and demographics, item-specific response rates

number of persons seeking C/T for HIV in Drug Treatment Programs

number client contacts, number persons referred for HIV counseling and testing

number persons referred to drug treatment progs, number patients tested, number spouses tested and counseled

number of pulmonary TB patients with AIDS identified

number calls to hotline, number times video shown,

percentage of pediatricians who actually follow immunization records

number initiating and completing TB preventive therapy

number of autopsied **IVDA's** who were HIV tested and cultured for tubercle bacilli

number of persons enrolled with HIV & TB infection

identification of dually infected persons, enrollment in clinical study

number of newsletters, workshops, plays, lectures; number of grants awarded, number of different minority groups tested, number of persons educated

number of courses provided, number of students, number of states represented

number of centers presenting HIV courses, number of courses presented, number of students, number of student hours

number prostitutes contacted through courts or outreach, number accepting risk reduction supplies, number allowing interview

number contacted, number recruited, number counseled, number tested, number followed

number seeking testing, measures of HIV knowledge, perceived threat, and skills

number seeking HIV testing, drug treatment attendance & compliance, psychiatric referrals

number of contacts made by counselors, return rates for follow-up

number subjects enrolled, follow-up rate,

number of partners identified & brought to C&T

number persons returning for post-test counseling in HIV confidential test sites

number HIV+ who accept provider referral services

number persons contacted and given HIV Risk Reduction information through street outreach

number of dental **HCWs** who are aware of CDC guidelines

number teachers/institutional caregivers who use recommendations about use and storage of toothbrushes

number Dental **HCW's** who order and use materials;

number dentists who use materials

requests for the booklet, number dentists who recall receiving the booklet

number infection control experts from **AADS** member schools who participate

number states developing HIV/dental plans

number of patients enrolled in surveillance system

number returning Peace Corps workers who are HIV+

number times workplace coordinating committee meets

number of respondents among member institutions surveyed

## 2. RESEARCH PROGRESS

---

development of new, rapid diagnostic tests for **TB/HIV** infection, collection of biologic specimens

treatment of TB patients with AIDS

delineation of treatment modalities used by local practitioners

laboratory protocols/standards, scientific publications and presentations

development of protocols, manuals, MMWR guidelines

serologic and virologic testing capabilities

development of data collection instrument

monitoring/analyzing data trends

## 3. ACTIVITY IMPLEMENTATION AND QUALITY CONTROL

---

semi-annual narratives from states and major metropolitan areas

providing OSHA with technical advice/information as requested

site visits to observe procedures, narrative reports, number of areas submitting aggregate reports and individual reports

monitoring for classification of specimens

progress on approved **workplan** from AID

market penetration, institutional involvement

analysis of HIV/AIDS reporting by Hemophilia Treatment Centers (**HTCs**) and private physicians

quarterly narratives to assess implementation of recipient activities, aggregate data reports to assess level of screening, follow-up evaluation

planned scope of work/objectives, scheduled work plan with clear milestones

compliance with terms and conditions of contract

carrying out surveys in **41** states in a timely fashion

completion of activity inventory, completion of interviews

completion of conference/workshops

stimulation of initiation of similar activities in states

prepare workshop materials, train staff to conduct workshops, schedule and conduct workshops in selected areas within the country

collect relevant information from HIV prevention projects, write text, mail to HIV prevention coordinating directors and other relevant organizations

analysis of steps necessary to conduct program activities

referrals made, referrals kept, interventions provided/attended

rate of completeness of forms and laboratory tests

quarterly narratives documenting activities conducted

IRB reviews

grantee reports

funding reviews

protocol reviews

WHO appraisals

scientific panel review

protocol development and implementation

publications and presentations

consensus development workshops

site visits

national technical workshops

implementation of HIV testing

laboratory quality assurance performance

consultative visits

guideline development

HIV Counseling and Testing data collected in TB clinics

brochures printed and distributed, number of copies mailed

air time for **PSA's**

developed materials (pamphlets, slides, video tapes, training curricula)

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#### 4. EXTERNAL EVALUATION

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student evaluation of course format and quality of lecturers

performance evaluation panels

surveys of recipients

student assessments

perceptions of value of activity

dental **HCW's** perceptions of usefulness of activity

MPEP survey completed by laboratories

#### OUTCOME MEASURES:

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##### 1. ACTIVITY SCOPE

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percent of children actually vaccinated

number (percent) of dentists reporting that they see HIV+ patients in their **offices**

number **AADS** member schools which adopt guidelines within didactic and clinical educational activities

number of TB patients occurring among persons enrolled

voluntary HIV testing of prenatal population

number of persons found to be HIV+ in drug treatment centers who remain in treatment **followup** program

number of local courses presented

number of counselors trained

number persons referred

number HIV+ partners identified through Partner Notification who were unaware of their infection

TB infection prevalence in contacts of pulmonary TB patients with and without AIDS

number of autopsied **IVDAs** who were culture positive for tubercle bacilli according to HIV status

extent to which booklets recommendations are being implemented in dental practices

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## 2. **SHIFTS IN KABB**

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pre- and post- training measurements of knowledge, changes in KABB

measure whether laboratories enrolled in this program perform better than those which are not

increase in KABB defined by pre/post intervention risk assessment survey, decrease in **STD's**,

enhanced knowledge

state lab performance

change in KAB

number reporting decrease in unprotected sex, number reporting reduced injection exposure

self-reported sex & drug- behavior change

prevalence of contraception use, pregnancy rates, retention rates, self-reported changes in drug use and sexual behavior

repeat **STDs** and safer sex practices including condom use

STD rates, unwanted pregnancy rates, self-reported behavior changes

rates of occurrence of syphilis relapse, serologically defined treatment failure, neurosyphilis

reduced high risk encounters, decreased partners, increased use of condoms

infection control behaviors of users compared to control group of nonusers

changes in infection control/risk management behaviors of participants

compliance with preventive therapy

compliance with medicine prescription

determine whether participants understood the meaning of a positive/negative HTLV III/LAV antibody test

determine whether participants understood the need to encourage persons wishing to learn their antibody status to seek testing in an alternative test site

assess changes in sexual practices in homosexual/bisexual males

assess the relationship between knowledge of HIV-antibody status and changes in high-risk sexual behavior, and situational and conditional factors associated with the persistence of high-risk behaviors

develop psychosocial profiles of men who continue to engage in high-risk sexual behavior, describe situational factors which elicit high-risk behavior, determine why **perscns** do or do not reduce/eliminate their high-risk behaviors

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### 3. PROJECT OUTPUT

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production of AIDS guideline and curriculum

final reports/recommendations

setting health policy and resource planning

projection of number of infected Americans

mathematical models for NY and other urban centers with high incidence of AIDS

complete and up-to-date inventory data

analysis of causes for non-compliance of immunization **recs**

determination of risks and benefits of various vaccines for HIV-infected children

development of educational resources

prevention and control recommendations and guidelines for Health Care Workers and patients.

number of TB-AIDS cases identified within an area, demographic, clinical, risk factor data on TB-AIDS cases by area

toxicity/acceptability of drug, drug failure (development of TB)

assessment of sensitivity and specificity, predictive value of new tests

semi-annual narratives from states and major metro areas

aggregate data report to assess number of TB cases among people who did and did not complete preventive therapy

production of **subfile**, new additions to file, quality of abstraction

complete case ascertainment

feedback from program managers

analysis of seroincidence of repeat HIV tests

measure of HIV seropositivity rate among **IVDAs** and sexual partners as well as AIDS cases and deaths over time within these groups

modifications in program emphasis or conduct

number of infractions of OSHA guidelines -- citations

documents reporting sensitivity, accuracy, and lag times, describes HIV/AIDS clinical status and laboratory, neuropsychiatric, immunologic, growth, endocrine parameters, and mortality

characterization of HIV immunologic mechanisms, work has been performed on stability/inactivation of the virus, especially as related to therapeutic modalities for **hemophilic** patients

recommendations for intervention strategies.

measure of infection rates - nosocomial and outpatient

estimates and projections of persons infected with HIV, HIV-related illnesses, AIDS, and associated mortality.

development of new technologies and procedures that are used by US and the international community for epidemiologic studies of HIV and AIDS

guidelines and recommendations for the prevention and control of HIV infection and AIDS

evaluation of existing pediatric surveillance systems, modification of reporting system for more accurate surveillance procedures, projection of the number of infected infants, determining numbers eligible for treatment program

determine the frequency of and risk factors for HIV transmission from mothers to infants

determine the effect of HIV infection on pregnancy and the effect of pregnancy on the course of HIV infection

describe the natural history of HIV infection in infants

evaluate laboratory techniques for early markers of disease progression

progress reports and scientific presentations.

determine the seroprevalence of HIV antibody in selected populations of children, adolescents, migrant farmworkers and college students, describe demographic and behavioral factors associated with HIV infection in these populations

determined behaviors that place prostitutes and their partners at risk for HIV infection

determine the natural history of HIV infection in homosexual men, **IVDUs**, and transfusion recipients

determine biologic and behavioral factors which increase the sexual transmission of HIV

determine risk factors for HIV transmission **in female prostitutes**

determine the number, location, demographics, and risk factors for HIV-2 in the US

determine/document completeness of AIDS case reporting, AIDS-related mortality reporting, and spectrum of HIV disease.

development of prevention guidelines

collection of data for use in medical management of patients

development of database for decision making by public health planners and policy makers

development of an effective projection model which will enhance the capacity of Public Health **Officials** and other decision makers to formulate HIV/AIDS prevention and control interventions.

self-sustaining programs **in country**

curriculum design and development of instructional material

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#### **4. PLANNING AND NETWORKING**

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formal working relationships/ **workplan** with WHO, collaboration on projects

increased community participation

**number/percent of CBOs that continue to receive** non-USCM funding for AIDS activities, percent that are asked to give technical assistance information about their program or materials

technical assistance and capacity building

policy development/evaluation

consultations and technology transfer

**information communicated to the public and private sectors worldwide to monitor and intervene** in the AIDS pandemic

modifying existing programs/services

contribution to Zaire's national public policy development

**APPENDIX E. Interview Protocol for CIO Representatives**

**CIO Interview Protocol**  
**Inventory of CDC HIV Activities for Evaluation**

**Purpose of Task**

Under an "evaluation designs" basic ordering agreement with the Office of Program Planning and **Evaluation** at CDC, RTI is conducting a task for ODD(HIV) with the goal of constructing an inventory of CDC HIV activities with particular focus on their evaluation status.

Tasks under this activity include: (1) working with program materials and the **CIOs** to construct an inventory of HIV activities and the evaluation status of each activity; (2) conducting structured interviews with CIO representatives to assess the level of evaluation activities and the evaluation and information needs relating to HIV activities in the **CIOs**; (3) reviewing the literature on how to prioritize activities for evaluation and how to design an evaluation system that will achieve comparability and compatibility among evaluation results; and (4) synthesizing information from the inventory, interviews, and literature review to develop and propose evaluation options for CDC HIV activities.

**Purpose of Interview**

The purpose of the interview component of the task is to discuss past, current, and planned evaluation activities relating to HIV activities and programs in each CIO, as well as the perceived evaluation information needs of each CIO. The accumulated information will be important for ODD(HIV) to help formulate the direction of evaluation efforts for CDC HIV activities. It is important that any such plans have full information about existing evaluation activity at the CIO level, as well as take into account the interests and needs of the individual **CIOs**.

Working definition

Evaluation is the systematic collection and analysis of data on program implementation and effectiveness for the purposes of decision making.

Discussion Areas:

Briefly, how would you characterize the HIV activities of your **CIO**? Do activities generally have quantifiable goals and objectives? Are the goals and objectives process-oriented? . . . outcome-oriented?

What types of evaluation issues relating to HIV activities are there at your CIO? What HIV activities within your CIO

- .... have been evaluated?
- .... are being evaluated?
- .... are planned for evaluation?

Interview Protocol (cont'd)

Which of activities are (have been) the most straightforward to evaluate? . . . the most difficult to evaluate?

Have any of the evaluations been in the form of randomized field experiments? What other evaluation designs have been used?

What evaluation needs are there with regard to HIV activities? Who are the primary users of evaluation information? What current management information systems are in place? Who runs them? What reporting requirements must you satisfy?

Do you receive evaluation information/data from external grantees or contractors? What type of information? What form? What is done with the information?

Are any of the external grantee intervention designs in the form of randomized field experiments?

Are there dedicated staff for evaluation/monitoring of HIV activities? What is their background? What resources are allocated for evaluation activities?

What types of data are being collected?  
. . . process measures?  
... outcome (impact) measures?  
... fiscal monitoring data?

What form are these data in? . . . paper, forms-based?  
.... electronically-based? (... what software, hardware?)

How are the data being analyzed? Do reports exist? How is the resulting information presented and disseminated?

What limitations are there to existing evaluations? What information gaps are there in existing data-gathering?

What additional evaluation opportunities exist? Are there any barriers to expanding the evaluation activities of your CIO? How could the evaluation process at your CIO be strengthened or improved?

What information regarding the evaluation activities of other **CIOs** would be useful to the work of your CIO? How would you like to have this information (e.g., printed, on-line, etc.)?

What evaluation activities CDC-wide and coordinated by ODD(HIV) would be of value to your CIO? How can ODD(HIV) be responsive to your needs in this area? How should **ODD(HIV)'s** evaluation activities be structured?

**APPENDIX/ F. Literature Review Bibliography  
and Sources Interviewed**

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**Sources Interviewed**

Cheryl Austein, Office of the Assistant Secretary for Planning and Evaluation

Gerald 'Barkdoll, Food and Drug Administration

Dave Basset, Centers for Disease Control

Annabelle Crane, Health Resources and Services Administration

Jonni Cunningham, Office of the Assistant Secretary for Planning and Evaluation

Howard Freeman, University of California at Los Angeles

Sally S. Johnson, Research Triangle Institute

Wilma Johnson, Centers for Disease Control

Kathy **Rauch**, Centers for Disease Control

Barbara Ray, Alcohol, Drug Abuse and Mental Health Administration

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Lee Sechrist, University of Arizona

George Silberman, General Accounting Office

Ed Simermeyer, Indian Health Service

Richard Sonnichsen, Federal Bureau of Investigation

Melanie Timmerlake, Office of the Assistant Secretary for Health

Michael **Wargo**, General Accounting Office

Joseph Wholey, University of Southern California, Washington Public Affairs Center