REPLICATION: *Safer Sex Intervention (SSI)*

Grantee:	Hennepin County Human Services and Public Health Department
Partners:	9 service agencies (Annex Teen Clinic, Brooklyn Center Health Resource Center, Cedar Riverside People's Center, Hennepin County Medical Center, Hennepin County Public Health Clinic, Minneapolis Department of Health and Family Support--School-based Clinics, Neighborhood Health Source, myHealth for Teens & Young Adults, Whole Woman's Health) and one training and technical assistance partner, Teenwise Minnesota
Setting:	19 health clinics (seven school-based clinics, five community-based clinics, four teen health clinics, one hospital-based pediatric clinic, one STI/public health clinic, and one clinic for homeless youth)
Target Population:	sexually active females ages 13-19 who are not pregnant
Curriculum & Delivery:	one-on-one intervention with three subsequent booster sessions delivered at one, three and six months after the initial session. Curriculum is delivered by female health educators hired by the partner service agencies and trained by Teenwise Minnesota and the Hennepin County Program Manager

Programmatic Context

Hennepin County Human Services and Public Health Department

Hennepin County Human Services and Public Health Department is one of nine organizations selected to participate in the Teen Pregnancy Prevention Replication Study. The study is a rigorous five-year evaluation of replications of evidence-based interventions aimed at preventing teen pregnancy, sexually transmitted infections (STIs) and other sexual risk behaviors. The interventions are funded by the Office of Adolescent Health (OAH) through the federal Teen Pregnancy Prevention (TPP) Program. A brief overview of the study design and a description of the TPP Program can be found on the OAH website (http://www.hhs.gov/ash/oah/oah-initiatives/for-grantees/evaluation/#Federal-LedEvaluation).

Hennepin County Human Services and Public Health Department has played a longstanding leadership role in serving at-risk youth and ensuring the health and well-being of youth and families. For more than 30 years, the department has provided programming and research support for early childhood education, improving high school graduation rates, and the prevention of adolescent drug and alcohol use. Various departments have contracted for or offered direct teen pregnancy prevention programming. However, these programs were often funded through discretionary funding, and as a result, did not always last as funding priorities changes from year to year. Services were offered throughout the county, in varying

concentrations, and did not necessarily target adolescents most at-risk for teen childbearing or communities with the highest teen birth rates. While many of the programs were considered promising practices, most had not been shown to have evidence of effectiveness.

In 2007, the Hennepin County Board passed resolution 07-5-241 creating the Teen Pregnancy Prevention Project, now known as the Better Together Hennepin: Healthy Communities, Healthy Youth Initiative. This was in response to increased concern about the high rates of teen births in the county, and a large and growing racial and ethnic disparity in teen birth rates. The initial goal of this initiative was to implement teen pregnancy prevention pilot projects in Richfield and Brooklyn Center, cities with teen birth rates among the highest in the county and far above the national rate, and evaluate their outcomes.

Between September 2007 and May 2009, Hennepin County Research and Planning Department issued subcontracts to 10 community service providers to implement 12 different programs (most are evidence-based) at 14 locations in the target communities.

Selection of Safer Sex Intervention

In September 2010, the Hennepin County Research and Planning Department was competitively awarded a federal Teen Pregnancy Prevention Replication grant, administered by OAH. The grant is to implement the *Safer Sex Intervention (SSI)* with sexually-active females ages 13-19. Hennepin County, as the grantee, chose to subcontract with local service providers to deliver the *SSI* intervention.[1]

In selecting *SSI*, Hennepin County began with consideration of the key supports necessary to assist youth. As part of the earlier Better Together Hennepin Initiative, Hennepin County had already identified four key supports that all youth need: comprehensive sex education, connections with caring adults, an array of healthy youth development opportunities, and accessible reproductive health services. While there was a substantial amount of programming in the first three areas, there existed a significant opportunity to build up programming in the last category (accessible reproductive health services).

To this end, the County organized an advisory group to consider the clinic-based programs on the Office of Adolescent Health's list of evidence-based programs. The advisory group, consisting of 12-15 individuals from local teen clinics, community-based clinics, and school-based clinics, identified *SSI* as the program that would work best in their clinics. The vision was to implement *SSI* throughout Hennepin County, particularly in the eight cities with the highest teen birth rates.

Implementation of the Program Model

Settings for the Program

SSI was implemented in 19 clinics across Hennepin County: seven school-based clinics, five community-based clinics, four teen health clinics, one hospital-based pediatric clinic, one STI/public health clinic, and one clinic for homeless youth. The clinics vary in geographic location (urban vs. suburban) and the populations served.

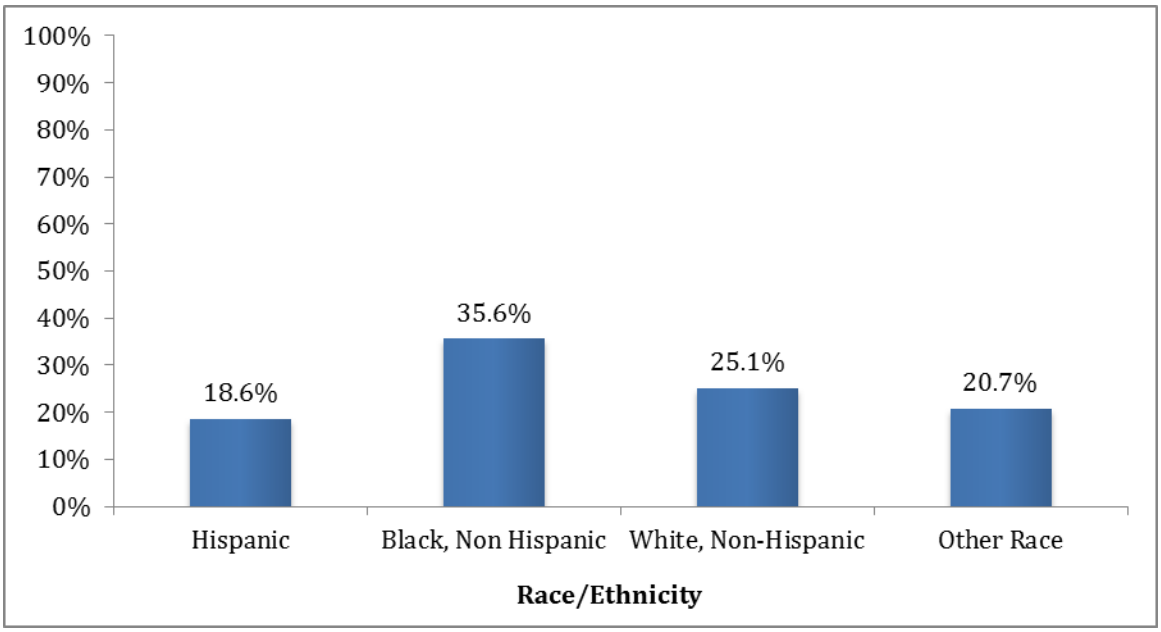
Population Served

The data described below are drawn from a baseline survey completed before the intervention was implemented. Enrollment for the study began in the fall of 2012.

[1] A summary of the curriculum and citations for the original research are provided in the Study Overview.

Demographic Profile: By design, *SSI* is specifically intended for females. In this replication, the average age of young women was just under 17 years. As a group, participants have diverse racial and ethnic backgrounds, with 18% Hispanic, just over one-third Black, one-quarter White, and 20% Other (Exhibit 1).[2]

Exhibit 1: Race/Ethnicity of the Hennepin County Study Sample at Baseline



Risk Profile: Sexual Behavior

The program targets sexually active young women (or those contemplating sexual activity). Nearly all of the young women reported that they had ever been sexually active (i.e., engaged in oral or anal sex or sexual intercourse). Eighty five percent had been sexually active in the prior three months, and just over 80% had engaged in sexual intercourse during that same period (Exhibit 2).

[2] The total sample size for Hennepin County is 1177. The sample sizes for each of the risk variables vary depending on individual item non-response. The percentages shown in the figures are for those who responded. The percentages of missing responses range from 1%-5%, depending on the risk variable. More detailed tables with sample sizes can be found in the Appendix.

Exhibit 2: Sexual Risk Behavior of the Hennepin County Study Sample at Baseline[3]

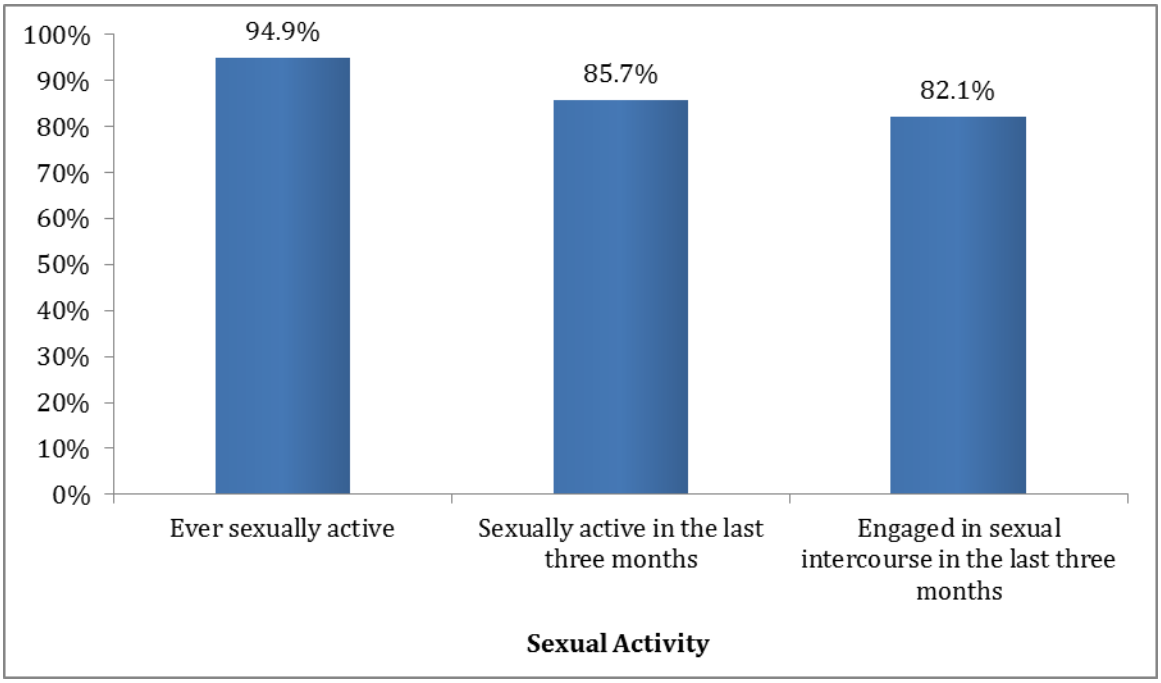
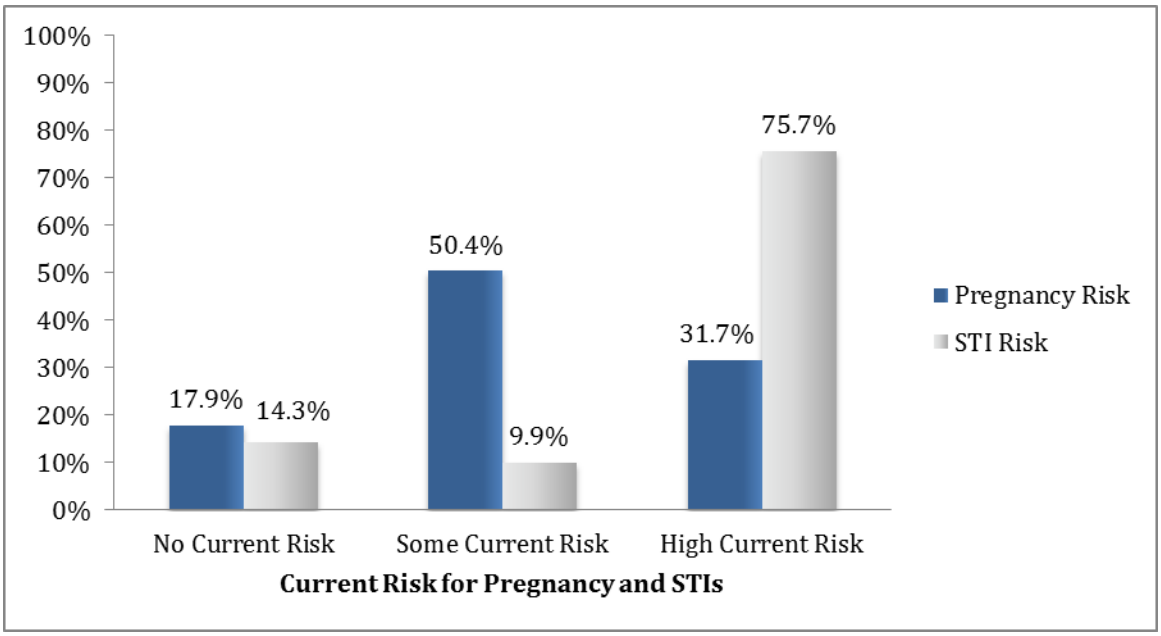


Exhibit 3 shows the distribution of study participants with respect to two kinds of risk, based on their sexual behavior in the 90 days prior to the survey: current risk of pregnancy, and current risk of sexually transmitted infection (STI). Those who did not engage in sexual activity in the 90 days preceding the survey are categorized as at "no current risk" for either. In addition, those who did not engage in sexual intercourse in the last 90 days are categorized as at "no current risk" for pregnancy. Youth are categorized as being at "some current risk" of pregnancy if they reported consistent use of birth control during sexual intercourse and at "some current risk" of infection if they reported consistent use of condoms during any sexual activity. At "high current risk" for infection are those who did not use condoms during intercourse and/or oral/anal sex. At "high current risk" for pregnancy are those who did not use condoms or birth control.

Less than 20% of the study participants are considered not currently at risk for pregnancy or infection (i.e., they had not engaged in sexual intercourse or other sexual activity in the 90 days prior to the survey). Of those who engaged in sexual intercourse, almost two-thirds reported consistent use of a contraceptive; the remainder, who failed to use birth control consistently were at higher current risk for pregnancy. More than three-quarters failed to use condoms consistently to protect against infection when they engaged in any sexual activity (i.e., sexual intercourse, anal or oral sex).

[3] Sexual activity is defined as sexual intercourse and/or oral sex and/or anal sex.

Exhibit 3: Current Risk of Pregnancy or Infection of the Hennepin County Study Sample at Baseline



Risk Profile: Perceptions about Sex

While very few participants reported pressure from peers to have sex (Exhibit 4), two-thirds believed that most or all of their peers were engaging in sexual intercourse. A slightly smaller percentage believed that their peers were engaging in oral sex. In the case of oral sex, a substantial proportion of participants reported no knowledge of peers' behavior (Exhibit 5).

Exhibit 4: Extent of Peer Pressure to Have Sex of the Hennepin County Study Sample at Baseline

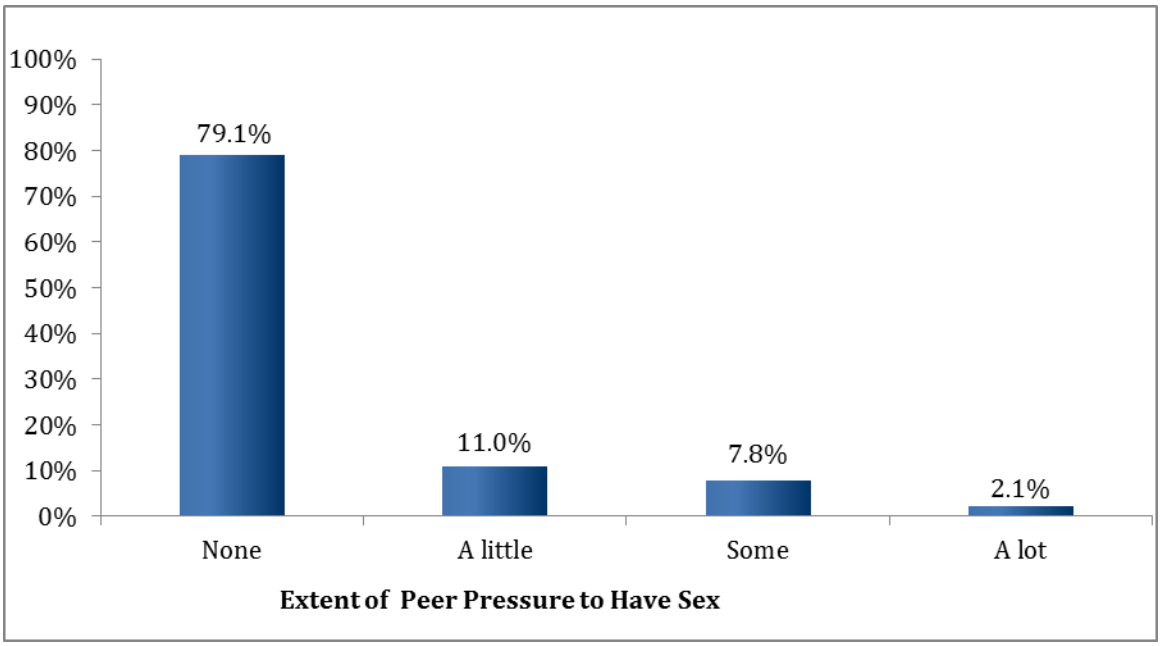
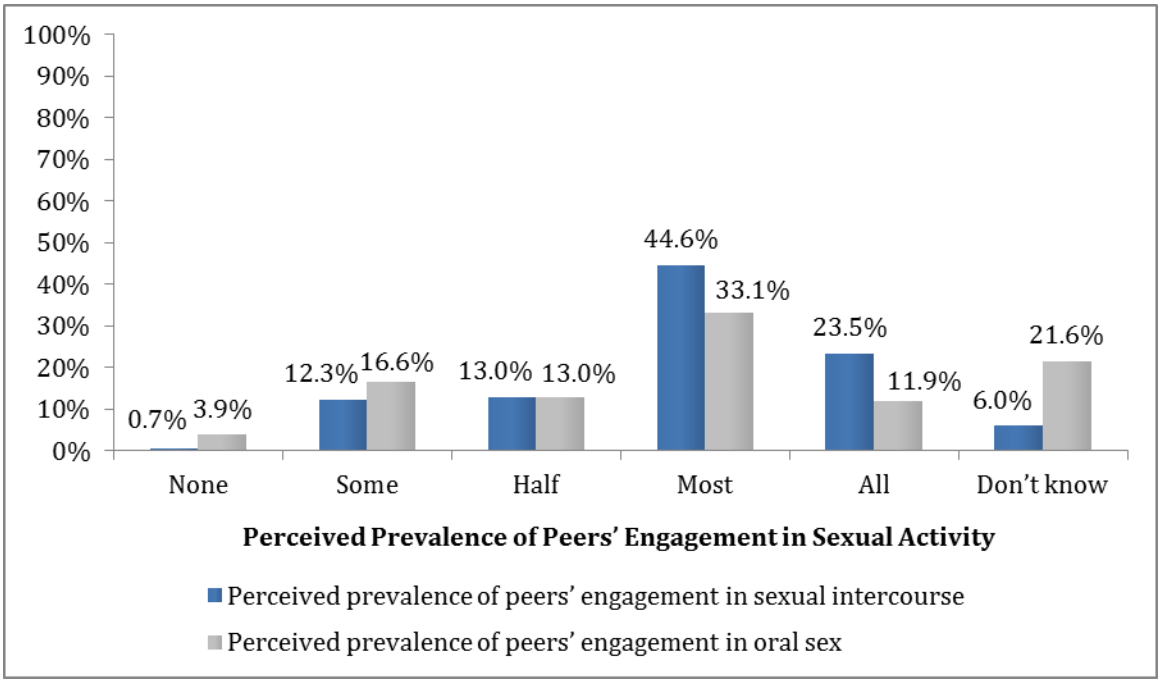


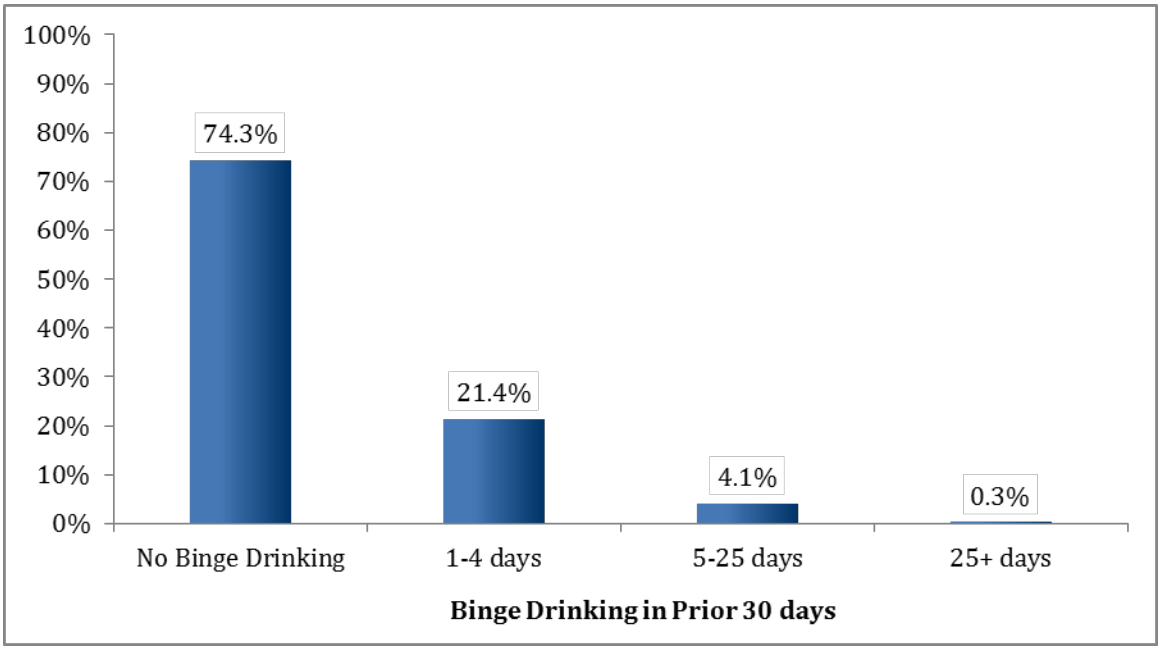
Exhibit 5: Perceived Prevalence of Peers' Engagement in Sexual Activity of the Hennepin County Study Sample at Baseline



Risk Profile: Other Risk Behaviors

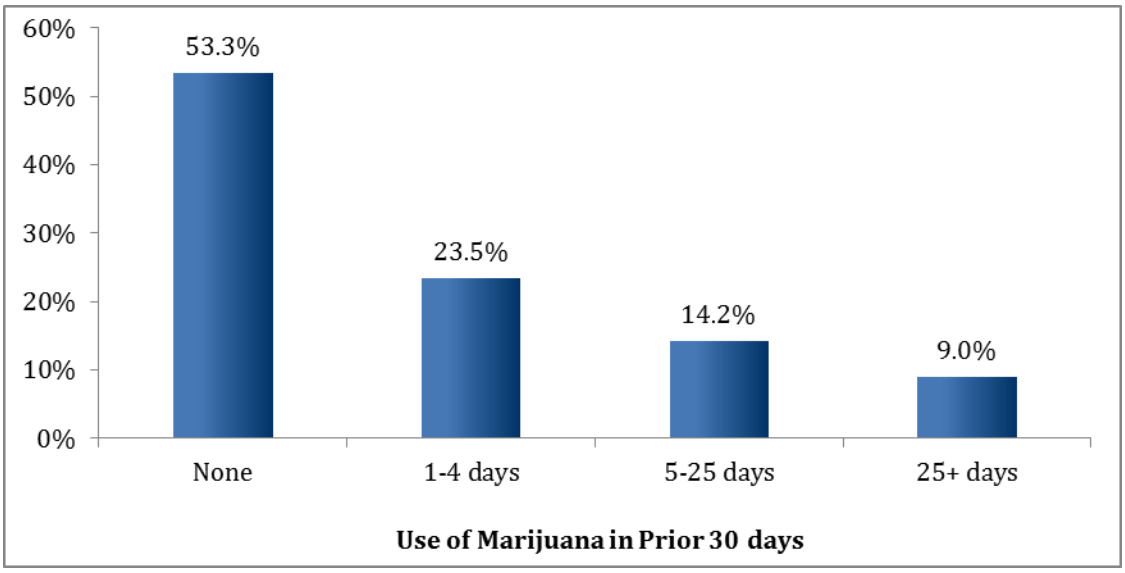
Seventy percent of participants reported that they had not smoked cigarettes at all in the prior 30 days. Most of the others were occasional smokers – although 10 % reported smoking daily during the same period (See Appendix, Table 9). More than one-quarter reported binge drinking (five or more alcoholic drinks in a row) in the 30 days preceding the survey (Exhibit 6).

Exhibit 6: Binge Drinking of the Hennepin County Study Sample at Baseline



More than half of participants reported no use of marijuana in the prior 30 days, while 9% reported essentially daily use (Exhibit 7).

Exhibit 7: Marijuana Use in the Hennepin County Study Sample at Baseline



The Appendix provides data tables for Hennepin County and for the three *SSI* replications combined.

Program Delivery

In Hennepin County, as in the other two replications of *SSI* that are participating in the federal study, the major adaptations to the model as originally designed are that the participant age range is limited to 13-19 years versus 12 to 23 years in the original study, and eligibility for the program is expanded to sexually active female adolescents from the originally-studied population of female adolescents hospitalized for sexually transmitted infections.

The program is delivered one-on-one by a female health educator in a clinic setting. The initial session typically lasts an hour. The booster sessions last ten to twenty minutes and occur at roughly one, three, and six months after the initial session. Hennepin County was given permission to conduct booster sessions via Skype, but this delivery method has not been widely used—most booster sessions are conducted in person.

The clinic settings for the intervention vary in terms of target population and mission and include: seven school-based clinics; five community-based clinics; four teen health clinics; one hospital-based pediatric clinic; one STI/public health clinic; and one clinic for homeless youth..

Staffing and Training

Hennepin County hired a Program Manager to oversee program implementation, monitor the contracted service providers to ensure they implement *SSI* with fidelity, identify the organizations' needs for training and technical assistance, and to obtain or provide that technical assistance. The Program Manager is responsible for documenting and communicating plans and decisions, and identifying issues and risks as

they arise. The primary qualifications for the Program Manager position included: experience with implementing evidence-based programs with fidelity and experience working in clinic-based settings. The County felt that it was important to hire a Program Manager who understands clinic systems, would be respected by clinic staff, and who would know how to help the partnering agencies integrate *SSI* into their clinics.

The nine partnering agencies that deliver the intervention each have a Program Coordinator who hires and supervises the *SSI* Health Educator (there is one health educator at each clinic). Some of the qualifications sought for the Health Educator position included: a positive, open attitude about adolescent sexual health, experience working with teens, and education and/or training in sexual health. The Program Coordinators also noted that they were looking for individuals who felt aligned with the philosophies of motivational interviewing and who understood that the health educator role was more about listening and eliciting 'change talk' than strictly educating.

> *"We didn't realize how much work was involved in convincing people they should do the program. The health educator has to be enthusiastic and engaging right away. You need someone with a bit of fieriness to them to pull kids in."*

Monitoring Program Implementation

The Hennepin County Program Manager and a staff member from Teenwise, the County's training and technical assistance partner, participated in an *SSI* curriculum training in Boston, MA led by the program developer. The training changed their understanding of *SSI* and how it is meant to be implemented; it became clear that motivational interviewing is the core component of *SSI*. They learned that the program was more flexible and patient-directed than they had initially thought and that there is a distinct difference between just providing education and using motivational interviewing skills to deliver the information.

The Program Manager and Teenwise staff member returned to Hennepin County to train the Health Educators in the SSI curriculum over a two-day period. Beyond the initial training on the model, provided by Teenwise, in-service training is provided by Hennepin County on a wide range of topics (e.g. dealing with youth who have been sexually assaulted; ethics and boundaries of youth workers; relationally and culturally responsive conversations with youth). The most significant need identified by the Program Manager and Teenwise staff was for additional training in motivational interviewing skills. As a result, the County now requires new educators to attend a two-day motivational interviewing class at Minneapolis Community and Technical College, provides yearly two-day refresher trainings (attendance is required) and has encouraged the health educators to seek additional motivational interviewing training on their own.

The Program Manager meets with the health educators monthly in a group to review sections of the curriculum, discuss how those sections have been going and to share strategies and tips to improve the quality of implementation. Creating an opportunity for the health educator to ask questions, get answers and share their experiences has been very important, particularly because the health educators work individually at their own clinics. If the health educators have a question about the program, they typically direct their questions to the Program Manager. They are also able to seek advice, consultation and support from each other through a messaging board set up by Hennepin County.

The health educators complete fidelity logs after each session. These are used both for self-monitoring (to check that all the content was covered) and by the Program Manager to monitor fidelity. Since it is not possible to observe individual *SSI* sessions, the Program Manager and Teenwise staff have annually organized sessions to observe the health educators delivering *SSI* to youth volunteers. After the sessions, the health educators receive feedback from the youth on how they felt during the session and also receive written feedback from the Program Manager and Teenwise staff on fidelity to the program model, strengths and weaknesses, and recommended training or resources.

Summary of Hennepin County Grantee Profile

Hennepin County Human Services and Public Health Department is mounting a large-scale and complex replication of *SSI*, with ten partner agencies and 19 health clinics. The young females in the study sample ranged in age from 13 to 20, with an average age of almost 17 years at baseline. Almost 90 % were sexually active in the three months prior to the survey; most of them had engaged in sexual activity without consistently using a condom, placing them at high risk for STIs. In addition, approximately one-third of the participants were at high current risk for pregnancy because they didn't use any form of contraceptive consistently.

This research is supported by the Office of Adolescent Health and the Office of the Assistant Secretary for Planning and Evaluation in the U.S. Department of Health and Human Services under contract number HHSP23320095624WC Order No. HHSP23337011T awarded in September 2011.

Appendix: Hennepin County Baseline Data Tables

Table 1. Race/Ethnicity in Hennepin County and Overall *SSI* Study Samples at Baseline

	Hennepin County (n= 1177)	Safer Sex Overall (n= 2097)
Hispanic	18.6%	18.3%
Black[1]	35.6%	35.1%
White[1]	25.1%	24.4%
Other Race[2]	20.7%	14.1%

[1] Non-Hispanic
[2] "Other Race" includes Asian, American Indian or Alaska Native, Native Hawaiian or Other Pacific Islander, Multiracial, and open-ended responses to the question "What is your race?"

Table 2. Age in Hennepin County and Overall *SSI* Study Samples at Baseline

	Hennepin County (n= 1177)	Safer Sex Overall (n= 2097)
Mean (SD)	16.9 (1.4)	17.1 (1.5)
Range	13 - 20	13 - 20

Table 3. Grade in School in Hennepin County and Overall *SSI* Study Samples at Baseline

	Hennepin County (n= 1177)	Safer Sex Overall (n= 2097)
7th	0.2%	0.9%
8th	0.8%	2.4%
9th	9.1%	8.1%
10th	14.7%	12.2%
11th	21.8%	17.3%
12th	30.2%	23.7%
Ungraded	1.4%	1.9%
College/technical	15.1%	24.3%
Not in school	6.7%	8.6%

Table 4. Sexual Activity in Hennepin County and Overall *SSI* Study Samples at Baseline

	Hennepin County (n=1177)	Safer Sex Overall (n=2097)
Ever sexually active[1] (n=1169)	94.9%	93.7%
Sexually active in the past 3 months (n=1168)	85.7%	83.2%
Engaged in sexual intercourse in the past 3 months (n=1167)	82.1%	97.2%

[1] Sexual activity is defined as sexual intercourse, oral sex, and/or anal sex.

Table 5. Current Risk of Pregnancy[1] in Hennepin County and Overall *SSI* Study Samples at Baseline

	Hennepin County (n = 1167)	Safer Sex Overall (n=2095)
No Current Risk	17.9%	20.8%
Some Current Risk	50.4%	47.3%
High Current Risk	31.7%	31.9%

[1] *No Current Risk* is if the respondent did not have sexual intercourse in the past 90 days; *Some Current Risk* is if the respondent always used condoms or contraceptives during sexual intercourse in the past 90 days; and *High Current Risk* is if respondents engaged in unprotected sexual intercourse in the past 90 days.

Table 6. Current Risk of Infection[1] in Hennepin County and Overall *SSI* Study Samples at Baseline

	Hennepin County (n = 1167)	Safer Sex Overall (n=2093)
No Current Risk	14.3%	19.4%
Some Current Risk	9.9%	9.4%
High Current Risk	75.7%	71.2%

[1] *No Current Risk* is if the respondent did not engage in sexual intercourse, anal sex, or oral sex in the past 90 days; *Some Current Risk* is if the respondent always used a condom during sexual activity during the past 90 days; and *High Current Risk* is if respondents engaged in any sexual activity without a condom in the past 90 days.

Table 7. Risk of Infection and/or Pregnancy in Hennepin County and Overall *SSI* Study Samples at Baseline

	Hennepin County (n = 1167)	Safer Sex Overall (n=2091)
Sexual Activity and Condom Use		
Not sexually active	14.3%	19.4%
Sexually active with use of condoms	9.9%	9.4%
Sexually active without use of condoms	75.7%	71.2%
Sexual Intercourse and Birth Control Use		
No sexual intercourse	17.9%	20.8%
Sexual intercourse with birth control	50.4%	47.3%
Sexual intercourse without birth control	31.7%	31.9%

.

Table 8. Peer Pressure to Have Sex and Perceived Norms in Hennepin County and Overall *SSI* Study Samples at Baseline

	Hennepin County (n= 1165)	Safer Sex Overall (n= 2091)
Extent of peer pressure to have sex		
None	79.1%	77.7%
A little	11.0%	12.2%
Some	7.8%	8.0%
A lot	2.1%	2.2%
Prevalence of peer sexual intercourse		
None	0.7%	0.77%
Some	12.3%	10.6%
Half	13.0%	11.9%
Most	44.6%	47.0%
All	23.5%	24.6%
Don’t Know	6.0%	5.1%
Prevalence of peer oral sex		
None	3.9%	3.2%
Some	16.6%	14.7%
Half	13.0%	12.4%
Most	33.1%	35.2%
All	11.9%	15.0%
Don’t Know	21.6%	19.5%

Table 9. Frequency of Cigarette Use (past 30 days) in Hennepin County and Overall *SSI* Study Samples at Baseline

	Hennepin County (n= 1172)	Safer Sex Overall (n= 2098)
0 days	71.0%	72.5%
1-4 days	12.0%	11.4%
5-25 days	7.1%	6.3%
> 25 days	9.9%	9.8%

Table 10. Frequency of Alcohol Use (past 30 days) in Hennepin County and Overall *SSI* Study Samples at Baseline

	Hennepin County (n= 1169)	Safer Sex Overall (n= 2095)
Any alcohol use (last 30 days)[1]		
0 days	50.0%	48.5%
1-4 days	38.3%	38.7%
5-25 days	10.6%	11.6%
> 25 days	1.0%	1.2%
Binge drinking (last 30 days)[2]		
0 days	74.3%	73.8%
1-4 days	21.4%	21.1%
5-25 days	4.1%	4.6%
> 25 days	0.3%	0.5%

[1] Alcohol use is defined as having an alcoholic drink such as beer, wine, or other liquor ("just a sip" not counted).
[2] Binge drinking is defined as 5 or more alcoholic drinks in a row.

Table 11. Frequency of Marijuana Use (past 30 days) in Hennepin County and Overall *SSI* Study Samples at Baseline

	Hennepin County (n= 1168)	Safer Sex Overall (n= 2094)
0 days	53.3%	57.6%
1-4 days	23.5%	21.7%
5-25 days	14.2%	11.8%
> 25 days	9.0%	8.8%