Health Communications Research to Support the National Plan to Eliminate Syphilis from the United States

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with

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Silver Spring, MD

November 2001

INTRODUCTION

In 1998, government agencies and community groups joined together to implement a National Plan to Eliminate Syphilis from the United States by the year 2005. This plan was officially launched by the Surgeon General and the CDC Director in October 1999. Eliminating this age-old enemy will be a historic public health event comparable to the elimination of malaria and cholera, two other historic infectious diseases.

Syphilis elimination is defined as the absence of sustained transmission (i.e., no transmission after 90 days of the report of an imported index case). The goal for syphilis elimination is to reduce the number of primary and secondary syphilis cases to fewer than 1000 nationally and to have 90% of counties syphilis-free by 2005. Because a vaccine is not currently available, syphilis cannot be completely eradicated. However, controlling it at very low levels eliminates it as a public health threat. Many other industrialized countries have succeeded in bringing syphilis down to elimination levels.

Health communications efforts were recognized as integral to the syphilis elimination efforts. The World Health Organization, in its Health Promotion Glossary, defines health communications as *a key strategy to inform the public about health concerns and to maintain important health issues on the public agenda. The use of the mass and multimedia and other technological innovations to disseminate useful health information to the public increases awareness of specific aspects of individual and collective health as well as importance of health in development.*

The Centers for Disease Control and Prevention (CDC) defines health communications as *"the crafting and delivery of messages and strategies, based on consumer research, to promote health of individuals and communities."*

Health communications programs can inform, influence, and motivate institutional or public audiences or both. Such programs are used to increase awareness of a health issue, problem, or solution; to increase demand for health services; to demonstrate or illustrate skills; to remind or reinforce knowledge, attitudes, or behavior; and to affect attitudes to create support for individual or collective action. In keeping with the pivotal role health communications plays, the Syphilis Elimination Communication Plan was developed in August 2000 to support the National Plan.

The Syphilis Elimination Communication Plan strives to help syphilis elimination gain momentum at the national and local levels. It was apparent that sustained support for the syphilis elimination plan must come from three key target audiences: policymakers, health care providers and associations, and community representatives from affected communities. As stated, the Syphilis Elimination Communication Plan “will help develop synergy among syphilis elimination activities across the U.S., at the national, state, and local levels, and among the target audiences.”

Effective health communications programs must be based on an understanding of the needs, knowledge, attitudes, beliefs and practices (KABP), and perceptions of their target audiences. Therefore, formative research is a critical component of any health communications effort with a social marketing focus. It provides an understanding of the target audiences. The results allow for developing targeted communications materials that are effective and well received. In November 2000, the Division of STD Prevention started such communications research with Prospect Associates, Ltd., a communications research company, to gain a better understanding of the selected target audiences. Prospect Associates worked very closely with the health communications specialists and program consultants at the CDC headquarters, with STD project directors and with the STD program managers.

This report provides information about the formative research activities involving these target audiences and the results of such activities. The results helped guide the development of concepts and messages for syphilis elimination communications materials that will be produced in 2002.

METHODS

Overview

Qualitative methods involving open-ended key informant interviews were used to assess respondents' attitudes and beliefs about the importance of syphilis as a public health problem, barriers to recognition of syphilis as a public health problem, and barriers to garnering support for syphilis elimination. Since this is qualitative research, we cannot statistically generalize these findings to targeted audiences, nor can we assess the degree to which these results generalize.

Research Sites

Research was conducted in nine counties. Eight of these sites were designated as high-morbidity areas (HMA) based on 1998 data, and the ninth was a potentially re-emergent area (PRA). The basis for the selection of HMAs was the membership of each county in one of the five identified clusters of HMAs in the United States, as well as input about affected populations and program characteristics by DSTD staff members. New York City was identified as a PRA based on the recent rise in syphilis cases in men who have sex with men (MSM). Research in Los Angeles and New York City focused strictly on the MSM community.

Selection of sites:

All HMAs were clustered into groups before any site was selected. The purpose of such clustering was twofold.

- Derive "like" clusters of 28 High-Morbidity Areas (HMA);
- Select seven counties representative of the variability of each of the HMA clusters in which to conduct formative research.

The staff at Prospect Center conducted an environmental scan for pertinent information on the 28 HMAs. The scan included professional literature searches, Internet searches, and a review of material provided by or requested from CDC.

The scan was guided by theoretical considerations gleaned from a careful review of available literature on syphilis elimination, and by the needs of the communications task that would follow. The specific information sought for is listed below.

- Demographic characteristics that may affect syphilis elimination (e.g., race and age distribution);
- Characteristics of individuals with syphilis;
- Prevalence of other social problems (e.g., poverty, drug use, and crime);
- Prevalence of other sexually transmitted diseases;
- Prevalence of HIV infection;
- A sense of health policies and availability of resources;
- Political climate that may be conducive to syphilis elimination.

The environmental scan also sought indicators of syphilis awareness of targeted groups (i.e., health care providers, community leaders, and politicians), as well as specific barriers to obtaining syphilis treatment (e.g., availability of free clinics). Unfortunately, much of this information was available only from Rapid Ethnographic Community Assessment Process (RECAP) reports. However, RECAP was not performed in all of the counties. Therefore, information from available RECAP reports was summarized.

Information obtained for each of the HMAs was entered into a data matrix. The matrix format allowed identification of specific information gaps for individual counties. This was the first step in choosing appropriate variables to form the HMA clusters. For a few counties that lacked specific data on gonorrhea and HIV rates, state averages were used instead.

Once the matrix was complete for each variable, the second step was to look at variability within variables and at the relationships between separate variables. These analyses revealed that the rate of drug use did not vary greatly from county to county, nor did percentages of individuals in various age groups. However, median income, unemployment, education level (percentage of people without a high school diploma), the homicide rate, the rate of teen pregnancies, and the rate of unwed motherhood were all related to the poverty rate. These findings helped simplify our analysis by allowing us to reduce the number of variables needed to devise the clusters.

The variables finally selected for initial cluster analyses were

- Percentage of African Americans among county residents;
- Percentage of syphilis cases among African Americans as compared to total syphilis cases in the county;
- Poverty rate;
- Gonorrhea rate;

- HIV rate;
- Syphilis rate.

The first two variables correspond to the disproportionately high incidence of syphilis in African Americans, and represent the extent to which syphilis is confined to the African American community.

As noted above, the poverty rate is a proxy for a number of social problems with which it is correlated that may either facilitate the spread of syphilis or compete with syphilis for the attention of policy makers and community activists as an important issue, or both.

HIV and gonorrhea rates have similar importance with respect to syphilis awareness. However, high HIV rates may suggest the existence of established coalitions and programs that can become partners with syphilis elimination programs. And based on information in some of the RECAP reports, symptoms of gonorrhea are often mistaken for symptoms of syphilis, even by health care professionals.

Two additional variables were devised. First, using U.S. Census designations, two regional variables, "South" and "North" (broadly defined to include the Northeast, Midwest and West) were devised. 19 of the 28 HMAs were in the South. Of the nine Northern counties, one was in the Northeast, two were in the West, and six were in the Midwest.

Second, it was explored whether each county was predominantly urban or rural area by using Metropolitan Statistical Area (MSA) designations for population density. Any county designated as MSA 2 or above was considered urban, and those designated as zero or one were labeled rural. A county's population density may be a proxy for variables such as access to health care, due to the availability of health care providers or due to transportation issues. Furthermore, as noted by the *Syphilis In the South* report, concerns about the anonymity of office and clinic visits for either STD testing or treatment are greater in small, rural communities where "everyone knows everyone else."

Counties were clustered according to region and density. In other words, rural Southern counties, urban Southern counties, and urban Northern counties were compared separately. There were no rural Northern counties among the counties under consideration. SAS *Proc Fastclus* was used to analyze the clusters. This program requires the user to specify the number of clusters into which to classify the set of observations. Three clusters within each category were specified. The major considerations here were the number of counties in each population density group and the regional categories. The computer procedure uses random starting points to begin classifying individual observation, which sometimes leads to particular observations being classified into different clusters on subsequent runs. Therefore, we performed this procedure several times. There were no variations in how the algorithm classified counties on different runs.

Statistical cluster analysis represented only an initial analytical tool. By grouping HMAs together, the clusters allowed us to view the range of similarities and differences between

locations. The goal of the selection process was to ensure the diversity of the selected sites in order to obtain information about individuals who face different types of challenges in syphilis elimination, and as a result have different communications needs. Several approaches were used to achieve this goal, depending on the number of sites classified into each cluster. For relatively small clusters, the main approach was to select sites that best represented a set of challenges common to other similar locations. For larger clusters, the approach was to select sites most representative of the variability within clusters, based on key variables. Finally, in one case, a site that was very different from all other HMAs in terms of the total percentage of African Americans and the percentage of African Americans in the syphilitic population was selected.

The results of the cluster analysis are presented in Table 1. In the North, Cluster 1 (N=6) is the largest, consisting of metropolitan areas that on average are 30% African American, but with 87% of all syphilis cases in African Americans. In contrast, a small cluster consisting of Los Angeles County, CA, and Maricopa County, AZ (Phoenix) has a lower percentage of African Americans overall, and of syphilis cases in African Americans as compared to total number of cases (36%). In other respects, however, the two clusters appear similar. St. Louis (city) was classified as a cluster in and of itself, because the values of its variables are higher than the average values for Cluster 1. In other words, St. Louis appears to experience more problems associated with poverty, STDs, and HIV. One of the reasons why St. Louis is a statistical outlier is that it is an independent city and hence represents an exclusively urban area. In other respects, though, St. Louis is similar to Wayne County, MI, which contains Detroit, and to Philadelphia County, PA, which consists almost exclusively the city of Philadelphia.

Three Southern HMA counties were considered rural (based on the MSA standard), so statistical cluster analysis was not necessary. These three counties were simply considered as one cluster.

For the same reasons that St. Louis is a cluster unto itself, our analysis classified Baltimore city, MD as a separate and singular cluster. Baltimore is an independent city that does not include any suburban or rural areas. Baltimore is similar to the second rural South cluster, consisting of Shelby County, TN, Fulton County, GA, Orleans (LA) Parish, and Washington, DC. This cluster consists of large metropolitan areas (Memphis, Atlanta, New Orleans, and Washington) in what may be considered the traditional South. All locations have a substantial percentage of African Americans, who as a group comprise account for over 80% of the syphilis cases in the four sites. The poverty rate is near or over 20% for each area in the cluster.

The third cluster is composed of smaller Southern metropolitan areas (e.g., Nashville, TN, in Davidson County, and Jackson, MS in Hinds County); and of larger metropolitan areas in Texas (Dallas County, and Harris County [Houston]), Prince Georges County, MD (a suburb of Washington DC), and Oklahoma City, OK. In general, locations in this cluster have lower percentages of African Americans, lower poverty rates, lower gonorrhea rates, and lower HIV and syphilis rates than counties classified into Cluster 2.

Table 1: Results of the Cluster Analysis for All HMAs

Urban North							
Cluster One							
County	State	% Black	% Black Syph. Cases	Poverty Rate	Gonorrhea Rate	AIDS Rate	Syphilis Rate
Cook	IL	27	80	15	486	20	7
Wayne	MI	42	92	21	627	12	8
Marion	IN	23	91	13	374	15	20
Philadelphia	PA	43	88	24	541	30	6
Franklin	OH	18	18	12	306	8	6
Milwaukee	WI	24	24	16	536	11	6
MEAN	**--**	**30**	**88**	**17**	**478**	**16**	**9**
Cluster Two							
Maricopa	AZ	4	28	14	129	10	6
Los Angeles	CA	11	45	23	70	29	1
MEAN	**--**	**8**	**37**	**18**	**99**	**19**	**4**
Cluster Three							
St. Louis	MO	52	52	30	848	12	17
Rural South							
County	State	% Black	% Black Syph. Cases	Poverty Rate	Gonorrhea Rate	AIDS Rate	Syphilis Rate
Tuscaloosa	AL	28	81	18	250	13	46
Lancaster	SC	26	87	15	392	21	81
Robeson	NC	25	50	24	257	11	40
MEAN	**--**	**26**	**73**	**19**	**300**	**15**	**56**
Urban South							
Cluster One							
County	State	% Black	% Black Syph. Cases	Poverty Rate	Gonorrhea Rate	AIDS Rate	Syphilis Rate
Baltimore	MD	65	96	24	949	52	69
Cluster Two							
Shelby	TN	46	97	19	580	26	30
Fulton	GA	54	89	21	761	32	21
Orleans	LA	64	95	34	577	43	22
Washington	DC	63	84	21	676	39	15
MEAN	**--**	**57**	**91**	**24**	**649**	**35**	**22**
Cluster Three							
Davidson	TN	25	92	14	334	26	39
Dallas	TX	21	76	15	364	30	6
Harris	TX	20	74	19	185	46	3
Guilford	NC	27	85	12	257	8	26
Jefferson	KY	18	90	14	178	18	14
Mecklenburg	NC	27	88	11	303	11	12
Oklahoma	OK	15	56	17	331	14	11
Forsyth	NC	25	83	11	257	11	19
Hinds	MS	53	86	22	378	13	21
Prince Geo.	MD	57	96	8	203	37	7
Wake	NC	21	72	8	257	14	9
MEAN	**--**	**28**	**82**	**14**	**277**	**21**	**15**

Table 2 summarizes the characteristics of the selected research sites, including the input from the CDC program assessments and local RECAP reports.

Target Audience and Sampling

Data were collected from key informants representing the three target audiences specified in the DSTD National Communication Plan to Eliminate Syphilis.

- Elected officials/community opinion leaders;
- Health care providers;
- Representatives of community-based organizations and local chapters of national organizations.

Table 3 summarizes the specific sub-segmentations within each target audience and recruitment requirements for each sub-segment. In all, it was planned to conduct nine interviews per target audience at each site (a total of 27 interviews per site).

A snowball sampling technique was used to identify and recruit potential key informants within each target audience. Snowball is a technique that involves obtaining information on possible respondents, usually from initial institutional contacts. Identified respondents are then asked to recommend other potential respondents and so on. Each potential respondent is screened in order to ensure his or her eligibility. Snowball sampling represents the most efficient approach to obtaining a sample of respondents in the situation when the sampling frame is poorly defined.

"Snowballing" started with the CDC program consultants based at the CDC headquarters in Atlanta and the CDC personnel in each of the research sites. This was the initial segue into creating a potential respondent list at the selected sites. Individuals recommended by these sources were asked for more potential respondents, emphasizing that we would like to talk to individuals not necessarily involved in syphilis elimination but who could contribute valuable input. The majority of "snowballing" was conducted prior to the site visits; however, some snowballing was conducted on site.

For certain audience sub-segments, the snowball sampling approach was supplemented by a sampling frame from lists that were obtained either through public sources or via previous efforts to construct a contact database of individuals involved in syphilis elimination. For example, each research site had an easily accessible list of elected officials at different jurisdictional levels. Similarly, a list of local chapters of national organizations was usually available.

Table 2: Summary of Characteristics of the Selected Research Sites

										From CDC's Program Assmts./RECAP Reports or Lit. Review					
		Race Demographics			Syphilis Severity		Quality of Life			CBO Participation		Access to Medical Services			Jails
	HMA Site	% AA	% NA	% Hisp	'98 Syphilis Rate	% AA	Poverty	PCP/pop	'97 AIDS Rate	Focus	Reach	Hours	Fees	Staff	Screening
RS	Lancaster Co. (*SC*) Region: South	25.80%	0.10%	0.50%	High (81.2)	Med (87%)	Med	Low (36.3)	Med						
UN 1	Wayne Co. (*Detroit, MI*) Region: MidWest	42.00%	0.40%	2.90%	Med (7.9)	High (92%)	Med	Low (75.1)	Med (12.4)	Women	Med	Poor	Free	Med	Poor
UN 2	Maricopa Co. (*Phoenix, AZ*) Region: West	4.10%	0.20%	19.50%	Low (6.4)	Low (28%)	Med	Low (77.9)	Low (9/6)			Poor	Free	Med	
	Los Angeles Co. (*CA*) Region: West	11.10%	0.60%	43.70%	Low (1.2)	Low (45%)	High	Med (94)	Med (28.7)				Free		Some
US 2	Shelby Co. (*Memphis, TN*) Region: South	45.60%	0.20%	1.30%	High (30.0)	High (97%)	Med	Med (115.1)	Med (25.7)	At-risk	Low	Poor	Slight	Good	High
	New Orleans (*LA*) Region: South	63.70%	0.10%	4.00%	Med (22.4)	High (95%)	High	High (169.7)	High (43.1)	At-risk, MSM, youth	High	Poor	Free	Good	Med
US 3	Davidson Co. (*Nashville, TN*) Region: South	24.90%	0.20%	1.40%	High (39.3)	High (92%)	Med	High (165.1)	High (25.6)	At-risk, AA	Med	Good	Slight	Med	Some
	Mecklenburg Co. (*Charlotte, NC*) Region: South	26.60%	0.40%	2.30%	Med (11.9)	Med (88%)	Low	Med (110.1)	Low (10.7)	AA	Med	Poor	Free	Med	Med

Key:

AA = African American
CBO = Community-Based Organizations
Hisp = Hispanic
HMA = High-morbidity area
MSM = Men who have sex with men
NA = Native American
PA = Program Assessment
PCP = Primary Care Provider
RS = Rural South
UN = Urban North
US = Urban South

Table 3: Guidelines for CDC Syphilis Interviews

Policy Makers/Opinion Leaders	
OPINION LEADERS	GOAL: 6
Religious Leaders	2
Community Activists	2
Other	2
ELECTED OFFICIALS	GOAL: 3
State Legislative Representative	1
County Representative	1
City Representative	1
Health Care Providers	
PUBLIC SECTOR	GOAL: 5
State Health Department Staff	1
Local Health Department Staff	1
DoH Health Educator/Outreach Worker	1
Medical Practitioner (especially ER, either M.D. or R.N.)	2
PRIVATE SECTOR	GOAL: 4
STD Clinic Practitioner (M.D., R.N., or Clinic Director)	2
Professional Medical Organization Rep. (M.D. or R.N.)	2
LABORATORY	GOAL: 1
Public or Private STD Lab	1
Community-Based Organization Representatives	
UNIQUE LOCAL COALITIONS/ORGANIZATIONS	GOAL: 3
STD/HIV Focus	1
Non-Health Focus	2
LOCAL CHAPTERS OF NATIONAL ORGANIZATIONS	GOAL: 6
Health Focus	2
Non-Health Focus	2
Mix	2

Interview Instrument

The interview instrument collected data on

- Perceived importance of syphilis in the community;
- Factors influencing perception of syphilis as an important problem;
- Barriers to recognition of syphilis as a public health concern in the community and by colleagues of the respondents (including stigmatization and association with particular populations);
- Barriers to garnering support for the Plan to Eliminate Syphilis;
- Suggestions for overcoming these barriers;
- Tone and content messages suggested by respondents to persuade his or her colleagues to support the Plan to Eliminate Syphilis;
- Channels through which respondents currently obtain information;
- Preferred ways of receiving information on syphilis elimination;

- Credibility of sources of syphilis elimination information and credibility of CDC as such a source;
- Public health and social welfare issues considered important in the community and the relationship of these issues with syphilis (if any);
- Relationship between HIV and syphilis.

In addition, health care service providers who rendered services directly to patients were asked about

- Issues and barriers to screening patients for syphilis;
- Issues and barriers to reporting syphilis cases.

The majority of interviews were conducted in person during visits to the site. Interviewers took notes during the interview, and, with permission of the respondents, they audio taped the interview. A team of two researchers stayed at each location for 5 days. Due to time constraints and scheduling conflicts, obtaining the quota of 27 interviews at each site was not feasible. Therefore, some interviews were conducted via telephone. With the consent of the respondent, telephone interviews were also audio taped.

Table 4 outlines the number of interviews conducted. The total number of interviews conducted at all research sites is 238. Based upon the guidelines set forth, the maximum number of interviews has been attained in all categories except in the Policy Maker/Opinion Leaders and Local Chapters of National Organizations – Health Focus audiences.

Table 4: Number of In Person and Telephone Interviews at Each Research Site

Site/Date Completed	In-Person Interviews	Phone Interviews	Total
Los Angeles, CA 4/16-20, 2001	22	4	26
Phoenix, AZ 4/23-27, 2001	19	9	27
Charlotte, NC 4/30-5/4, 2001	22	3	25
Lancaster County, SC 4/30-5/4, 2001	14	11	25
Memphis, TN 5/7-11, 2001	25	2	27
New York, NY 5/14-18, 2001	27	N/A	27
New Orleans, LA 5/14-18, 2001	27	N/A	27
Nashville, TN 5/21-25, 2001	24	3	27
Detroit, MI 5/21-25, 2001	27	N/A	27
Total	**207**	**31**	**238**

Please refer to Table 5 for a closer look at the breakdown of interviews by target audience at each research site.

Data Analysis

Development of Summary Coding Forms

To analyze this rich qualitative data, common themes in the answers given to each question were identified and labeled. Two senior researchers from Prospect selected a sample of interviews and, after carefully reading them, classified the answers into underlying semantic themes. The purpose of developing themes was to collect the data into similar statements without imposing the researchers' interpretations on the answers. For example, when analyzing responses to the question about barriers to recognition of syphilis as a public health problem, general statements, such as "nobody knows about it" or "nobody has heard about it," were classified as a "low awareness" theme. Although also a sign of low awareness, more specific statements, such as "people think syphilis is a thing of the past" or "most consider it a disease sailors got in the 1940s," convey the misperception that syphilis is a thing of the past, so these answers were classified as a "forgotten" theme.

A number of such themes were identified for each question in the interview instrument. A checklist for each audience segment was developed, summarizing the major themes derived by sampling the interviews.

Data Extraction

Using the checklist as a guide, each site was analyzed separately by audience segment. Incidences of statements reflecting derived themes were checked off until clear convergence was reached (i.e., the majority of an audience segment expressed the same theme). Emerging themes were added as necessary. Unique responses and quotes representative of themes were recorded verbatim.

Once each audience segment was completed per site, the researchers looked at similarities and differences in attitudes and beliefs of audience segments. For example, it was determined whether there was a difference in the degree to which audience segments considered syphilis an important public health issue. It was also explored whether a particular audience segment was more likely to note lack of awareness or social taboo as a barrier to recognizing syphilis as an issue and garnering support for syphilis elimination. Unique or infrequent responses made by different audience segments were summarized in a theme. Interviewers who conducted research at each site were asked to briefly summarize their impressions and insights about the location. The results of these data analyses were compared to the interviewer impressions. Findings for each location were summarized in a top line report. Results for sites representing the same cluster (Memphis, New Orleans, Mecklenburg and Nashville) were combined, noting differences between locations when significant. Note that although Los Angeles and Phoenix were initially classified in the same cluster, the specificity of research objectives in Los Angeles warranted a separate top line.

Table 5: Breakdown of Interviews by Target Audience at Each Research Site

TARGET AUDIENCE	LA (CA)	Phoenix (AZ)	New Orleans	Detroit (MI)	Mem. (TN)	Nash. (TN)	Char. (NC)	Lanc. (SC)	NYC	Total
Policy Makers/Opinion Leaders										
Religious Leaders (2)	2	2	2	2	2	2	0	2	2	16
Community Activists (2)	2	2	2	2	2	2	2	1	2	17
Other Opinion Leaders (2)	2	2	2	2	2	2	3	2	2	19
State. Rep. (1)	1	1	1	1	1	1	0	0	1	7
County Rep. (1)	1	1	1	1	1	1	2	1	0*	9
City Rep. (1)	1	1	1	1	1	1	0	1	2	9
Health Care Providers										
Public Sector										
State Health Dept. Staff (1)	1	1	1	1	1	1	1	1	1	9
Local Health Dept. Staff (1)	1	1	1	1	1	1	1	1	1	9
DoH Health Educator/Outreach Worker (1)	1	1	1	1	1	1	1	1	1	9
Medical Practitioner (2)	2	2	2	2	2	2	2	2	2	18
Private Sector										
STD Clinic Practitioner (2)	2	2	2	2	2	2	2	2	2	18
Professional Medical Assoc (1)	1	1	1	1	1	1	1	1	1	9
Laboratory (1)	1	1	1	1	1	1	1	1	1	9
Community Based Org. Reps.										
Unique Local Coalitions/Org.										
STD/HIV Focus (1)	1	1	1	1	1	1	1	1	1	9
Non-Health Focus (2)	2	2	2	2	2	2	2	2	2	18
Local Chapters of National Organizations										
Health Focus (2)	1	2	2	2	2	2	2	2	2	17
Non-Health Focus (2)	2	2	2	2	2	2	2	2	2	18
Mix (2)	2	2	2	2	2	2	2	2	2	18
Total	**26**	**27**	**27**	**27**	**27**	**27**	**25**	**25**	**27**	**238**

***NYC did not have county officials, only state and city officials**

To derive findings applicable to all sites and target audiences, the top line reports were reviewed, referring to the summary code sheets and raw data as necessary.

FINDINGS

Below is an overview of the findings from each of the three target groups, with the addition of the elected officials sub-segment. Following the overall findings, there is a discussion of key findings that reflect various topics addressed in the research, such as

Perception of Syphilis as an Important Public Health Problem and *Relationship Between Syphilis and HIV* among several other key issues.

TARGET GROUPS

Policy Makers/Opinion Leaders
(including religious leaders, community activists, and elected officials)

Opinion leaders (not including elected officials)

Perceived severity of the problem

- In general, those already involved with syphilis elimination efforts ranked syphilis as an important problem, and the rest rated it as either moderate or not important.
- Reasons for higher ranking as an important problem are as follows:
- Belief that syphilis is on the rise;
  - ✓ Belief that rates are high or that the number in their community is higher than in others;
  - ✓ The consequences of the disease.
- Feelings that other problems are more important were given as reasons for lower rankings.
- At least one person in this audience segment argued that although ranking as an HMA causes high concern, the actual number of syphilis cases were not a source of concern.
- As was the case with local officials, most respondents noted that their colleagues are not aware of syphilis as a public health problem.

Barriers to recognition of syphilis as a public health issue and to garnering support for syphilis elimination

- Lack of awareness was the most frequently mentioned barrier in this category.
- Social taboos regarding discussions of sexual matters was noted as a possible reason for the lack of awareness.
- Some respondents said that they thought the failure or unwillingness of clergy to be involved was a barrier.
- Members of the faith community who were interviewed noted moral problems of clergy involvement (e.g., difficulty in talking about sex in church), and a few tended to view STDs in general as indications of personal moral shortcomings.
- There is a consensus of other respondents from different audience segments that, although "abstinence only" messages may be palatable to clergy, safer sex messages would not be. However, several respondents noted that clergy could simply raise awareness about the issue.
- Syphilis was noted as just one of many health issues that the church is now being asked to address in community outreach efforts.

Overcoming barriers

- Need for media "buzz" and PSAs were the most common suggestions.
- Increase in funding and getting legislators to commit to the issue were also mentioned.
- Providing the clergy with options other than directly preaching to their congregations, so that they can get syphilis-related messages out to their community.
- Few respondents noted tying syphilis to other STD prevention efforts.

Suggested messages

- There was little consensus on a preferred spokesperson. Suggestions include local and national celebrities as well as local and national political leaders.
- Typically, this audience segment preferred fact-filled messages, emphasizing the consequences of syphilis and local rates of infection.
- For church leaders in particular, it was suggested that syphilis messages be framed as a public health issue, not a moral issue.

Preferred way of gathering and receiving information

- Typically, mass media and the Internet were noted as preferred means of gathering information.
- The audience was split in terms of whether they preferred receiving information on syphilis elimination as a hard copy or electronically.
- Members of the clergy also suggested some effective media for communicating messages to their congregations. These include church bulletins and videos that enable them to avoid directly addressing syphilis as a sexually related health issue.

Elected officials

Perceived severity of the problem

- About half of elected officials rated syphilis at least as a moderately important public health problem (on a scale of 1-10: 7 or lower), and the other half rated it as an important public health issue (8 or higher).
- Of those, elected officials who rated syphilis as a moderately important public health issue, almost all noted that they consider other public health problems to be more urgent.
- Most of the elected officials who considered syphilis to be an important public health issue mentioned the increase in the number of syphilis cases in their area.
- Those who brought up the number of reported syphilis cases tended to frame it in terms of comparison, either as an increase or as a ranking in the country (e.g., Baltimore may be number one, but we are number two).
- Reasons for higher ranking of importance are as follows:
    - ✓ Consequences of syphilis, including the possibility that it can spread beyond the currently affected population,
    - ✓ Clinical prognosis of untreated syphilis,

- ✓ Mother-to-child transmission.
- ❑ Vast majority of elected officials noted that syphilis is "not on the radar screen" of their colleagues.

Barriers to recognition of syphilis as a public health issue and to garnering support for syphilis elimination

- ❑ Lack of awareness by both elected officials and the public-at-large were mentioned as barriers to the recognition of syphilis as a public health issue and to garnering support by the community and elected officials.
- ❑ However, most respondents noted that their colleagues would support a syphilis elimination plan in principle.
- ❑ A number of elected officials noted that syphilis is just something that it is not talked about in their community. Several of them mentioned stigma and social taboos as an explanation of why.
- ❑ Lack of advocacy organizations or spokespersons was mentioned as another barrier.
- ❑ In addition, several elected officials noted the perception of syphilis being "somebody else's problem" as a barrier to garnering political support.
- ❑ Only a few respondents noted stigma and social taboo as barriers to elected officials' involvement due to not wanting to be associated with a "dirty topic." However, political costs were not specifically brought up.
- ❑ One respondent noted that "nobody wants to spend money on people who do not practice safe sex," a remark that may imply political costs.
- ❑ A number of elected officials had the perception that elected officials would get involved when there is an epidemic.
- ❑ Respondents from LA noted that during an outbreak in that community, elected officials did "jump on the band wagon" but that they lost interest once the outbreak subsided.

Overcoming barriers

- ❑ Most of the respondents suggested that increasing public awareness about this issue in general is the way to overcome barriers to both recognition of syphilis as an important public health issue and to garnering support.
- ❑ One theme that emerged from responses was that the community needs to "talk about syphilis" in order for elected officials to take notice.
- ❑ A number of elected officials also mentioned the need for community advocacy, especially by African American clergy.
- ❑ Some mentioned linking syphilis elimination efforts to HIV efforts as the way to garner support for syphilis elimination.
- ❑ One respondent suggested framing syphilis as a child health issue by putting emphasis on congenital syphilis.
- ❑ Several respondents said that an increase in federal funding would also increase political support for syphilis elimination.

Suggested messages

- Generally, elected officials suggested serious and factual messages, emphasizing the number of reported syphilis cases and consequences of untreated syphilis.
- Local community leaders were most often suggested as appropriate spokespeople. Nationally recognized personalities were also suggested as effective spokespersons.

Preferred way of gathering and receiving information

- Besides the Internet, elected officials noted mass media and information from authoritative sources (e.g., Health Department) as the way they typically receive information.
- In all audience segments, elected officials had a slight preference for hard copy material.

<u>Health Care Providers</u>
(including public sector and private sector)

Perceived severity of the problem

- As a group, health care providers ranked the severity of syphilis somewhat higher than all of the other groups.
- Competing issues were often given as the reason for lower ranking.
- Several respondents in this target audience, specifically pointed to epidemiological data to justify lower ranking.
- Consequences of syphilis and the sense that syphilis is a serious disease were given as reasons for higher ranking.
- Another reason for high ranking was increases in the number of reported cases of syphilis.
- Most respondents noted that their colleagues are not aware of syphilis as an important health care problem.

Barriers to recognition of syphilis as a public health issue and to garnering support for syphilis elimination

- Almost all respondents said that their colleagues would support a syphilis elimination plan. Several respondents mentioned that especially physicians would be intrinsically interested in eliminating a disease. Few were skeptical about the feasibility of this effort, with some noting lack of vaccine.
- Most frequently mentioned barrier was the lack of public and professional awareness about syphilis.
- Lack of patients' interest in testing was also mentioned.
- A number of respondents mentioned the lack of resources.

Overcoming barriers

- Many respondents noted that informing health care providers was the way to overcome some of the barriers mentioned above.
- Increase of public awareness of syphilis was also frequently noted.
- Some respondents pointed out the necessity of patient education.
- Many respondents mentioned the need for increased resources.

Suggested messages

- Physicians had an especially strong preference for a medical authority, such as the Surgeon General, to be the spokesperson. CDC and professional organizations also were cited as sources of information.
- Health care providers almost unanimously preferred serious, fact-filled messages emphasizing
  - ✓ The consequences of syphilis;
  - ✓ Data on prevalence;
  - ✓ Relevance of syphilis to one's practice;
  - ✓ Treatment protocols and guidelines.
- Some clarification as to what elimination means may be necessary.
- The idea that syphilis can be eliminated was also suggested as a message.
- Several respondents suggested case study format for messages.

Preferred way of gathering and receiving information

- Health care providers were most likely to mention professional literature and meetings as their sources of information.
- Short and to-the-point newsletters from an organization with authority about such matters were mentioned as a preferred format.

Community-Based Organization Representatives
(including unique local coalitions/organizations and local chapters of national organizations)

Perceived severity of the problem

- In general, the patterns of perceived importance of syphilis as a public health issue were identical to the ones in the Policy Makers/Opinion Leaders target group. Those who were involved in syphilis elimination efforts considered it to be a more important issue. Those who were not involved gave syphilis elimination efforts a score in a middle range.
- As was the case with opinion leaders, the perception that other issues are more important lead to lower ranking.

- Higher ranking was typically justified in terms of higher reported number of syphilis cases and consequences of the disease.
- Most respondents reported that syphilis is not high on their colleagues' agenda.

Barriers to recognition of syphilis as a public health issue and to garnering support for syphilis elimination

- Most respondents thought that their colleagues would support syphilis elimination efforts, granted that they perceive syphilis as an important issue.
- Lack of awareness, including belief that syphilis is the "thing of the past" was the most often cited barrier, followed by reluctance to talk about syphilis due to moral stigma.
- Competition with other issues (notably HIV) in terms of media attention, resource allocation, and political focus was also noted as a barrier.
- A related issue specified by this segment is that syphilis is often "lumped" with other STDs, but contrasted with HIV.
- It was also mentioned as a barrier that syphilis does not fit within the missions of community-based organizations.
- Association of syphilis with particular subgroups within a community was seen as another potential barrier. Either these associations were led to a belief that syphilis is not relevant to one's community, or respondents said that the groups that syphilis is associated with typically do not have the power to put it on the political agenda.

Overcoming barriers

- PSAs, media buzz, and involving community organizations were often suggested.
- Many respondents emphasized involvement of the clergy.
- A few respondents mentioned lobbying political leaders.
- For CBOs working with HIV/AIDS, emphasizing the relevance of syphilis elimination (both as an indication of efficacy of safer sex education intervention and as a co-morbidity) to their mission was suggested.

Suggested messages

- As a group, CBOs preferred serious, fact-filled messages that emphasize
  - ✓ Prevalence;
  - ✓ Consequences of the disease;
  - ✓ Draw relevance of the problem to their community.
- Several respondents suggested that more lighthearted approaches could be used if community at large was being targeted.
- A few mentioned a need for culturally appropriate messages; however, this point was made in relationship to a broader community audience.

Preferred way of gathering and receiving information

- Generally, mass media and the Internet were mentioned as primary sources of information. Representatives of local chapters of national organizations, or those whose CBOs are affiliated with a national organization, identified newsletters and reports from such national organizations as good sources of information.
- Both hard copy and electronic venues were mentioned, with preference being a matter of personal choice.

ISSUES

Perception of Syphilis as an Important Public Health Problem

In general, those who were formally involved in syphilis elimination efforts ranked syphilis as an important issue, whereas those who were not involved or were only tangentially involved, ranked syphilis as low or moderately important. Typically, all target audience groups thought that their colleagues also did not consider syphilis an important issue, regardless of their involvement with syphilis elimination efforts.

The most common reason cited for the lower rankings of the importance of syphilis was the presence of more pressing issues such as HIV or other public health and social welfare concerns. Several respondents noted that syphilis is treatable and does not pose a serious threat. As one respondent said, "Nobody is afraid of syphilis." Several individuals cited epidemiological data to argue that the *actual* number of syphilis cases is low, or some expressed a belief that the *actual* number of cases is small. Reflecting this theme, in the words of one politician, "We would need an epidemic to pay attention." It should be noted that, although data were not collected to confirm this, the impression is that individuals who cited epidemiological data to explain low importance ranking seemed to have expertise in epidemiology and statistics. This may be an important point, since literature on decision-making (i.e., Kahneman and Tversky, 1979) suggests that the "average" individual typically does not do well with numerical data, preferring other heuristic strategies on which to base decisions.

On the other hand, the most common reason noted for higher ranking of importance also was prevalence. The important distinction between those who used prevalence to argue that syphilis is an important issue versus those who argued that it is not was that the former tended to use prevalence in a *relational* sense. Such statements as "We are number one in the States in the number of syphilis cases," or "The number of syphilis cases is rising," exemplify the underlying theme of comparison associated with a higher perception of syphilis as a problem.

The clinical consequences of syphilis, including the possibility of prenatal transmission, were also mentioned as reasons for considering syphilis an important issue, especially by those not involved in syphilis elimination. Furthermore, certain respondents expressed a general perception that syphilis, as well as other STDs, are inherently important as public health issues. One underlying reason for this attitude expressed by some respondents was

contagion of syphilis, but several other respondents did not elaborate on why they thought syphilis was inherently important.

The fact that syphilis is treatable was used to explain the lower ranking of importance. Paradoxically, the same fact was used to justify the higher rankings of importance. The fact that syphilis is treatable was framed, in the words of several respondents, as the disease being "unnecessary." It seems that the implication here is that syphilis should not exist, and the fact that it still does makes it an important public health issue.

Finally, some respondents ranked syphilis as a more important problem due to its relationship to HIV. Two specific points were made. First, increase in syphilis signifies the failure of safe sex/HIV prevention efforts due to the similar methods of transmission. The second point, made less frequently, was that syphilis increased the probability of contracting HIV. Judging from the number of people who mentioned the relationship between HIV and syphilis in response to another question, this relationship is not well known, but it appears to be significant to those who know about it.

Barriers to Recognition of Syphilis as Public a Health Problem and to Garnering Support for Syphilis Elimination

By far, the most frequent response to the question regarding barriers to recognition of syphilis as a public health issue was the lack of awareness that it still exists and lack of knowledge about the disease itself. Statements such as "Nobody thinks about it," or "It is not on the radar screen," exemplify this point. In fact, most respondents stated that their colleagues would support a syphilis elimination plan when it was explained to them. Many qualified their statement with "only if they become aware of the problem."

More specific answers may provide clues as to why awareness of syphilis is low. On one hand, a number of respondents suggested that there is a perception of syphilis as a thing of the past. In one example, syphilis was portrayed as a disease associated with times long gone when American GIs going overseas were warned about it. Several respondents also mentioned knowing that Al Capone died of it, again suggesting a historical context. Therefore, according to some, it is a forgotten issue, and several respondents noted that perhaps people see it as something no longer relevant.

Another theme was that syphilis is "lumped" with other STDs that are often contrasted with HIV. "There is HIV and then there are STDs, and syphilis is just one of them." This point also implies that HIV "overshadows" syphilis.

Many respondents noted the lack of discourse about syphilis: "It is something not talked about." As stated above, "not talking about something" does not necessarily mean that individuals are not aware of the issue. In fact, reflecting on a similar theme, one respondent noted that her colleagues are "aware of syphilis but not involved." However, the lack of discourse can surely be considered as a contributing factor to the lack of awareness and knowledge. According to a number of responses, sexual taboos and stigma associated with syphilis may be important reasons for the lack of discourse: "Syphilis is not something talked about in polite society," was one response. Another statement,

"People do not like to talk about dirty things," illustrates a stigma associated with syphilis as the disease of the "unwashed," or as one respondent put it, "a second-class disease."

The characterization of syphilis as "a second-class disease" leads to another important point. Although made less frequently, a number of respondents noted an association of syphilis with particular populations or groups, defined by their behaviors, as a barrier to both recognition of syphilis as a problem and to garnering support for syphilis elimination. Some respondents noted a lack of relevance of syphilis to opinion and policy makers and, hence, a lack of awareness: "It is not a middle class disease." In the words of another respondent, syphilis would not get attention because "People are more likely to treat drug abusers than help the poor, the ignorant, or the prostitutes." Several respondents expressed the opinion that since syphilis is associated with minorities or the poor, who have little political clout and tend not to vote, it would not become a part of a political agenda. In the words of another respondent, "Nothing will be done to eliminate syphilis at the national level because it is seen as a poor, black disease." This theme was somewhat more common than a theme of political cost of associating with taboo or sex-related topics as a barrier to garnering support for syphilis elimination. However, other voices suggested emphasizing relevance of the issue to their community as a way of mobilizing support and involvement.

Lack of advocacy organizations and spokespersons was also noted as a barrier to raising awareness of syphilis as a public health issue. As one respondent put it, "Nobody wants to be a syphilis spokesperson." Another respondent offered this opinion:

> *"If we could get a person to hook into this, it would be great. Some issues elected officials love to get linked with—syphilis is not one of them. You don't want to be the syphilis king or queen. So about the only one out there plugging it is someone like me who is a public health official, and sometimes people think I'm talking dirty."*

A few respondents noted the distrust of government institutions in the African American community as a barrier to garnering support. For example:

> *"The word 'syphilis' sounds an alarm of mistrust in the African American community. Myths about the syphilis experiment have taken on new life."*

The issue of the Tuskegee experiment was also brought up, but with some reservation and not very frequently.

> *"Older people know about Tuskegee, but it has not registered with the younger generation."*

The distrust of government institutions appears to be more general than focused on this specific historical tragedy.

> *"Black community distrusts government. They don't like people handling their blood. People are afraid of being tested because of mistrust."*

"As a health educator, I also educate the community about the Tuskegee Study. People know a little about it and that's a problem. A lot of people saw HBO's Miss Everett's Boys. *A lot heard about the Clinton apology, but few understand it. It's important to talk to them about it because of government conspiracy theories."*

In relation to questions about garnering support, the most commonly mentioned barrier was the lack of funds and resources. In fact, one site noted that support and involvement in syphilis elimination activities waned as the funding ran out.

Competing issues were also noted as an obstacle to recognition and garnering support. Some respondents drew a relationship between competing issues, funding, and resources. Some representatives of community-based organizations (CBO) and community leaders noted that they are already being asked to do more with less.

Significantly, although mentioned less frequently, some respondents questioned the need for programs specifically targeting syphilis separately from other STDs, including HIV. This was mentioned in the context of discussions about barriers to recognition of importance and garnering support. The expressed rationale was the similarity among all STDs in terms of at-risk populations and the method of transmission. "Why should we have one program for HIV and another for syphilis?" wondered one respondent.

Among health care providers, the lack of knowledge of the disease and its consequences was noted as a barrier. In particular, physicians were receptive to the idea of syphilis elimination. The goal of medical science is to conquer disease. It is "like slaying a dragon," in the words of one physician. However, several health care providers expressed skepticism about the feasibility of eliminating syphilis; some felt that the task would be impossible without a vaccine.

Another barrier noted that is specific to health services providers is the reimbursement issue. For example, one respondent noted that

"Private health care providers are not participating with Health Departments to help eliminate syphilis because of money. Both parties need to see a benefit in getting involved. Private health care physicians don't see a financial incentive."

Several respondents noted that this is an issue with managed care. In Detroit, where indigent care is contracted to HMO type organizations, this problem extends beyond those with medical insurance.

It should be noted that in Los Angeles, awareness of syphilis as a public health issue was relatively high due to a recent and well-publicized outbreak. However, according to some respondents, the level of awareness dipped once there was a perception that the outbreak was under control.

Relationship Between Syphilis and HIV

The relationship between syphilis and HIV prevention efforts was explored by a specific question. The same issue also arose when respondents were asked to name other public health problems of concern to their community. HIV was most frequently and consistently mentioned as a public health issue, and always as more serious than syphilis. In general, most respondents pointed out the similarity between HIV and syphilis in terms of means-of-transmission and the at-risk populations. The importance of teaching safer sex practices was also mentioned as a prevention strategy. As noted earlier, a few individuals knew or had heard that syphilis increased the risk of HIV infection. Those who had considered this as a significant fact said that it increased the importance of syphilis as a public health issue.

The most frequently perceived difference between HIV and syphilis (as well as other STDs) was that HIV gets all the attention and funding, often at the expense of other STDs. Several respondents also noted "turf" wars, meaning that organizations involved in HIV may object to initiatives that take their limelight or resources. However other respondents noted that HIV efforts are logical programs on which to piggyback syphilis elimination efforts.

Some individuals also mentioned that there is less stigma associated with HIV than with syphilis, especially in MSM groups. Whereas HIV has been widely discussed and socially accepted, at least by the MSM groups, syphilis connotes "dirtiness" and is associated with the "lower classes" (a similar issue to one discussed above). One informant also noted that the prevalence of IV transmission has somewhat lessened the association between HIV and promiscuous sex, whereas this is not the case for syphilis. On the other hand, several respondents noted the association between homosexuality and HIV in the African American community, whereas syphilis is considered a "heterosexual" disease.

Relationships Between Substance Abuse and Syphilis

Substance abuse (SA) was often mentioned as both a public health and social welfare issue of greater concern than syphilis. The relationship between the two issues was framed in terms of SA contributing to a higher risk of contracting syphilis and other STDs because of

- Less concern about safe sex practices when under the influence;
- Exchange of sex for drugs, money, or both;
- Less concern for personal health overall.

Relationships Between Poverty and Syphilis

Poverty and related issues (such as unemployment and low wages) were the most frequently noted social welfare issues in the community. Some respondents expressed the perception that poverty and syphilis affect the same population. Access to care was frequently mentioned as a defining characteristic of the relationship between those. Several individuals also noted the overall lack of concern with health care issues among the poor.

Role of the Clergy and Religious Community

Several respondents stated point blank that any syphilis elimination effort would fail without the involvement of churches. As one respondent put it, "You need one or two preachers talking about syphilis from the pulpit." Another respondent offered the following insight:

> *"Churches should get more involved in real issues that affect their congregations. If the church starts to talk about it, it would have a cascade effect into private conversation."*

Involvement of churches was also seen as a way to overcome the barrier of mistrust of government institutions.

> *"These communities lack trust in government. They use faith-based organizations that already have a relationship with the inner city."*

The need for involvement of churches was underscored in Detroit where, according to informants, the religious community has great political influence.

Many respondents acknowledged the difficulties in persuading churches to become involved. Some based this observation on their past experiences in working with faith-based communities on the HIV issue. Others based their observations on their perception of the religious community as socially conservative. Such statements as, "They would much rather talk about sin than health," or "They think that talking about sexual behavior promotes it," exemplify this attitude.

There were, however, a few voices of dissent. For example, one community leader reported no difficulty in recruiting churches in syphilis prevention efforts. The insight he and several others offered is that it is important to specify the role churches can play in syphilis efforts in view of religious beliefs. For instance, churches would not be willing to distribute condoms or provide safer sex information, but would be willing to raise awareness of the issue and to provide information about where one could get information or services.

Suggested Approaches to Overcoming Barriers to Messages and Tone

To overcome the barriers to recognizing syphilis as a public health issue, the majority of respondents suggested publicity and media campaigns:

> *"Get the facts out; educate people. You have to be blunt with them and correct the idea that syphilis is gone."*
>
> *"Talk about it anyway. Desensitize people to it. Make it a public health issue and not an individual health issue. For example, two years ago, four people died of carbon monoxide poisoning because a car was left running in the garage. The community elevated the story to a public health issue by making it a positive public health story. Because of this, a law was passed requiring carbon monoxide*

alarms in the home. This could not have been done if the story had not been framed in the right way. For syphilis, tell the community why it is important for the community not to have any syphilis."

In the words of another respondent, "You have to create a media buzz." Several respondents related their suggestions to experiences with the HIV epidemic when HIV the epidemic was not talked about, and then noted the positive benefits of media attention. In fact, literature on agenda setting refers to the HIV epidemic in terms pre-Ryan White and post-Ryan White time frames. Little media attention and little support or concern characterized the former, whereas the "Post-Ryan White" era has been characterized by increased media attention that has eventually led to an increase in public concern and government support for prevention and treatment efforts. Reflecting this point, a number of respondents suggested that increased visibility of syphilis as a public health issue could increase the political support for elimination efforts. Although direct lobbying of politicians was suggested, many more respondents believed that elected officials often look to a "ground swell" from the community to bring key issues to them.

In general, respondents thought messages factual and serious in tone would be most effective in persuading their colleagues. "There is nothing funny about syphilis," one respondent commented. Many expressed the need for facts about prevalence: "There is very little awareness about syphilis and STDs. Memphis' rank shocks people." However several respondents noted that prevalence data might backfire:

"Numbers [of] syphilis backfire sometimes, because they're low but still troublesome. They don't go away, and they will get bigger. You have to make sure people understand this." ——DOH, Nashville

"Some people don't see this as a great priority. People are horrified when they hear that Nashville is number two in the nation. But when you give them the actual numbers, they don't appear to be that way." ——Minister, Nashville

Others suggested stressing the consequences of the disease, the effects of untreated syphilis, and the possibility of prenatal transmission. In addition, several respondents suggested that these messages should clearly state how targeted organizations can get involved. Others suggested that sources of funding should be mentioned. Emphasizing the relevance of syphilis to the community, and, in the case of health care providers, to their practice, was also suggested. Only a few individuals suggested talking about the economic benefits of syphilis elimination. This is not to detract from the importance of this theme as the importance of a public health issue is more likely to be seen in terms of human suffering than economic cost.

The need for culturally sensitive and appropriate messages was also noted. For example, one respondent offered the following suggestion:

"Messages need to be culturally sensitive. Public health marketing for the African American community should be more like the commercial marketing for other products. The Government makes the African American material streety, dumbed

down for what they think is authentic. One of the best ads I've seen targeted to African Americans was a Bud ad. On one page there is a kenta cloth border and in the middle of the picture was a black kid who is presumably studying at a school like MIT. The caption says, 'Math, It's a black thing.' On the next page, same ad, but in the middle is a Bud and the caption repeats, 'Bud, It's a black thing.' It's ingenious. It speaks to the essence of black people."

However, equally strong voices warned against associating syphilis with any particular group. This point was noted earlier when we discussed the association of syphilis with specific populations.

When speaking about overcoming barriers that involve health care professionals, several respondents brought up the need to inform providers, especially on signs and symptoms of the disease, as well as on treatment protocols. The following statement may reflect the extreme situation:

"There is a lack of knowledge even among our own nurses. We held an in-service for them. They have trouble interpreting the lab [results]. I tell them 'When in doubt, treat.' They tend to rely on the DIS (disease intervention specialist) for direction. When they aren't available, they're lost."

Respondents offered a variety of suggestions as to who may be a good spokesperson for syphilis. Many were local celebrities, politicians, or community leaders. One recognizable theme of the suggestions was the need to associate a human face with the disease (incidentally, some respondents noted that Al Capone died of syphilis, but it is doubtful that this association would be helpful). For example, one respondent suggested that a healthy individual who has had the disease, and had been treated should deliver syphilis messages.

Among nationally recognized individuals, the Surgeon General was one of the top spokespersons suggested by different target audiences. Dr. Satcher was mentioned specifically. The Surgeon General is most consistent with the general description of a spokesperson offered by health care providers who, as a group, described a more "serious" and "authoritative" individual. As one physician put it, "Docs will listen to docs."

Beyond suggestions pertaining to media or communication strategies for overcoming barriers to recognition and awareness, a large number of respondents suggested increasing funding for syphilis elimination. In a more cynical expression of this point, one CBO representative noted, "If money is available, it will become an important issue." Several individuals suggested combining syphilis programs with other health care initiatives, such as HIV prevention efforts. Issues regarding piggybacking syphilis with HIV efforts have already been discussed briefly. Some consider the issues of syphilis similar to those of HIV, and, in fact, do not see a need for a syphilis-specific program, while others caution about close association of syphilis and HIV. The two quotes noted below summarize both points of view:

"There's been a lot of HIV awareness and dollars. Meanwhile the syphilis rate went up. We should tie in syphilis with HIV efforts in a nonjudgmental way, especially if the government is going to take the lead."

"In Nashville, HIV is still thought of as a gay disease. African Americans are more likely to see syphilis as a heterosexual disease. African Americans are not identifying HIV as a community problem. That could affect the strategy if you try to link them."

Again, one of the issues may be the unwillingness of at least some HIV advocates to share resources and media attention with another issue. However, it is impossible to measure how pervasive this attitude is in the HIV prevention community, especially in view of the expressed concern about the rise in syphilis cases seen by individuals involved in HIV prevention efforts.

Sources of Information and Preferred Venues of Dissemination

The Internet and mass media (such as newspapers, magazines, and television) were the most frequent sources of information referred to by community leaders and representatives of CBOs. Several representatives of local chapters of national organizations have also noted agency-specific newsletters and publications. List servers were mentioned infrequently. Health care providers frequently mentioned their professional literature and conferences.

The format in which respondents would prefer to receive syphilis elimination information was difficult to assess. Some individuals preferred such electronic means as e-mail. One respondent noted that the advantage of e-mails was the option of forwarding e-mail to others and of printing out hard copies for distribution. One suggestion was to include Web addresses in the e-mails so that individuals could obtain additional information. However, others were adamantly in favor of receiving information as hard copy, either in the mail or as a newsletter. The choice between electronic and hard copy distribution seemed to be personal preference, with many not indicating a preference at all.

More important than the format in which information was distributed, was the expressed desire for information to be concise and to the point. Many respondents noted that they do not like to have to "wade" through all the information they receive.

The use of case studies that illustrated clinical characteristics of syphilis and showed the importance of the disease to one's practice was recommended for physicians. Another suggestion, again for physicians, was the development of small plastic cards that outline standards of care for syphilis patients.

Credibility of CDC

Most members of all the target audiences expressed a positive attitude toward CDC and considered it a credible source of information. CDC is considered objective and apolitical in the type of information they provide, although some noted that a typical CDC report is voluminous. A number of individuals noted the importance of CDC and its activities. For

example, one respondent told the interviewer that the only reason why he consented to the interview was that they (Prospect Associates) were conducting research on behalf of CDC. Several others noted that they would open an envelope with the CDC logo on it.

However, a number of respondents noted that, whereas CDC is a credible source of information for the members of the target audiences in this research, it is not a good source of information for members of the general community. The most common reason was that CDC is not known on the "street level." Other respondents expressed an opinion that CDC, as a federal agency, may be seen as a part of "Big Government," and, therefore, be distrusted by the community. The suggestion most frequently offered was that CDC should work with local CBOs to reach community members.

Issues in Screening and Reporting

Lack of knowledge and awareness about syphilis on the part of health care providers and patients was mentioned as a barrier to screening. On one hand, the health care providers may not know the signs and symptoms of the disease, or they may not think to screen for it. Patients, who also do not know the signs and symptoms and are not aware of the disease, do not request testing. Reluctance on the part of patients to have their blood drawn has been reported by some respondents. Confidentiality issues were also brought up. Efforts to inform physicians and patients have been suggested as one remedy. Improving confidentiality for patients has also been frequently suggested to increase testing. Several respondents noted reimbursement issues as another obstacle, especially in managed care settings.

The degree to which respondents mentioned issues with reporting varied by site. Typically, in the settings where the laboratory does the actual reporting, respondents tended to see no issues relating to reporting. In the settings where the physicians report syphilis cases, the burden of paperwork has been cited as a possible deterrent to accurate reporting. Overall, reporting does not appear to be a serious problem in larger institutional settings, such as hospitals and public and private health care systems.

On the other hand, a number of respondents reported unwillingness of physicians in private or small group practices to report syphilis cases. Some respondents described the efforts of private physicians to circumvent the reporting requirements, including sending blood samples to private and out-of-state laboratories, as well as treating syphilis without confirming the laboratory analysis.

RECOMMENDATIONS

The following recommendations are limited to the aspects of the Syphilis Elimination Communications Plan. The resolutions of some issues noted in this research are beyond the scope of the communications strategies, and they require different approaches.

- The primary focus of communications efforts is toward the three target audiences. We suggest that communications materials for the community representatives target audience include materials on how to work with the religious community to gain

support for and participation in syphilis elimination efforts, especially in the Latino and African American communities.

- Policy makers/opinion leaders should be targeted in two ways: First, the information needs to come directly from their state health departments, in partnership with CDC, providing very specific information on why syphilis is an important health issue that needs their attention in their community. Second, communications materials need to be developed for community representatives so that they can direct syphilis elimination efforts toward policy makers/opinion leaders, especially toward the elected politicians.

This research uncovered that political leaders typically have working relationships with CBOs and rely on them for support and information about community concerns. In fact, several respondents noted that the political leaders would acknowledge syphilis as an important public health issue, given a community "groundswell" around the issue.

- During the research, no particular recommendation on specific communications vehicles for the target audience surfaced. However, the respondents gave information about the preferred tone of messages. The concept testing phase will provide more insight on more specific recommendations.

- Reported rates of syphilis cases clearly contribute to the perceived importance of syphilis as a public health problem. A number of respondents suggested that the prevalence information might raise awareness of syphilis as public health issue. However, it was noted that the actual number of cases may diminish the significance of syphilis as a public health issue for some people.

  The proposed resolution of this paradox is to present the prevalence information as either a temporal comparison (i.e., syphilis is on the rise) or in comparison to national or state rates (e.g., rates are highest in a given state). Furthermore, information about the clinical severity of untreated syphilis, with emphasis on its contagion and possibility of transmission from mother to unborn child, should accompany the prevalence data. The serious consequences of syphilis would further strengthen the argument that it is a serious health problem worthy of attention and would give more psychological weight to the comparisons suggested above. The rationale here is that the public health problems that are considered life-threatening or that carry an emotional appeal are given attention even when the actual incidence of the disease is low. One respondent cited an example by pointing out a legislative action to mandate carbon dioxide detectors after a publicized incident of carbon dioxide poisoning.

- The theme of "syphilis being unnecessary," as suggested by a few respondents, holds promise as it also counters the de-emphasis of syphilis due to the actual number of cases. For anything that is unnecessary (especially if it has dire consequences), one may argue that even one case is too many. This theme provides a clear motivation for eliminating syphilis.

- Media advocacy strategies may be used to supplement messages directed at target audiences. The present research showed that generating the media "buzz" around the

issue would engage the attention of all target audiences. This strategy would be consistent with the finding that policy makers, opinion leaders, and members of community organizations prefer receiving information from public media sources.

- Concept testing should further explore the effectiveness of messages that emphasize syphilis as an issue in a particular population as distinguished from messages that define the community more inclusively. The present research suggests contrasting views on this issue. On one hand, as noted by some respondents, association with particular demographic groups may detract from the importance of syphilis as a public health issue. On the other hand, some other respondents talked about the need to emphasize the relevance of the issue to more narrowly defined communities and to use culturally appropriate messages.

  History also offers contrasting views on this issue. For example, the HIV epidemic led to mobilization of the gay community to meet the challenge of a disease that affected them most. However, until the tragic death of Ryan White, HIV was relatively unknown in the community at large, and only a few resources were allocated to combat the disease.

- The connection between HIV and syphilis needs to be emphasized to enlist community organizations addressing HIV. Beyond the obvious connection between similar risky behaviors and at-risk populations, the messages should stress that

  - Syphilis infection increases the likelihood of HIV infection;
  - Increases in syphilis infection signal noncompliance with safer sex practices.

  Furthermore, given the reported stigma of HIV as a “gay disease” in the African American community, an argument can be made that syphilis information efforts could be successful in communicating safer sex messages to certain segments of this community that otherwise might not be responsive to HIV outreach.

- Health care providers, especially physicians, would welcome an opportunity to participate in the elimination efforts. However, there appears to be some skepticism stemming from confusion between the eradication of the disease and elimination, with the latter implying containment and the former the complete disappearance. Communications strategies should clarify this point and provide a clear explanation for syphilis elimination as an achievable and worthwhile goal.

- Health care providers should be encouraged to increase screening for syphilis. In locations where labs are not charged with reporting syphilis cases, health care providers should be encouraged to report syphilis cases. Targeting lab personnel would be counter-productive because, for the most part, laboratories do not have a vested interest in under-reporting syphilis cases.

- Providing physicians with informational cards that outline diagnostic and treatment protocols for syphilis would achieve the complimentary goals of providing information to physicians and raising awareness in this target audience.