Public Health Departments Providing Sexually Transmitted Disease Services

By David J. Landry and Jacqueline Darroch Forrest

Results of a 1995 survey reveal that 1,437 local health departments—half of those in the country—provide sexually transmitted disease (STD) services and receive about two million client visits each year. Their clients are predominantly individuals with incomes of less than 250% of the poverty level (83%), women (60%) and non-Hispanic whites or blacks (55% and 35%, respectively); 36% of clients are younger than 20, and 30% are aged 20–24. On average, 23% of clients tested for STDs have chlamydia, 13% have gonorrhea, 3% have early-stage syphilis, 18% have some other STD and 43% have no STD. Virtually all public STD programs offer testing and treatment for gonorrhea and syphilis; only 82% test for chlamydia, but 97% provide treatment for it. Some 14% offer services only in sessions dedicated to STD care, 37% always integrate STD and other services, such as family planning, in the same clinic sessions, and 49% offer both separate and integrated sessions. STD programs that integrate services with other health care typically cover nonmetropolitan areas, have small caseloads, serve mainly women and provide a variety of contraceptives. In contrast, those that offer services only in dedicated sessions generally are in metropolitan areas and have large caseloads; most of their clients are men, and few provide contraceptive methods other than the male condom.

(Family Planning Perspectives, 28:261-266, 1996)

n estimated 12 million cases of sexually transmitted diseases (STDs) are diagnosed among American men and women each year. Some of these are nonviral and therefore curable, such as chlamydia (four million cases of which are estimated to occur annually), gonorrhea

David J. Landry is senior research associate and Jacqueline Darroch Forrest is senior vice president and vice president for research, The Alan Guttmacher Institute (AGI), New York. Alan Friedlob and Stephen Fitzgerald, Centers for Disease Control and Prevention (CDC), Atlanta, provided helpful advice throughout the project. David Custer, National Association of County and City Health Officials, Washington, D. C., provided information about local health departments. In addition, the authors appreciate the suggestions received from Linda Alexander, formerly with the American Social Health Association, Research Triangle Park, N. C.; Willard Cates, Jr., Family Health International, Research Triangle Park, N.C.; Leslie M. Hardy, formerly with the Institute of Medicine, Washington, D. C.; Edward W. Hook III, University of Alabama, Birmingham; Vivian Lee, formerly with the U.S. Public Health Service, Region X, Seattle; Kathleen E. Toomey, Georgia Department of Human Resources, Atlanta; and Gillian Vanblerk, Prince Georges County Health Department, Cheverly, Md. The authors thank Lisa Kaeser, AGI, Washington, D.C., for her input into the development of the survey and Kathleen Manzella. Thu Vu and Heidi Jones, AGI, New York, for their assistance in fielding the survey and in data tabulation and analysis. The research on which this article is based was supported by the U.S. Department of Health and Human Services (DHHS) under grant FPR000057, through an interagency agreement with the CDC. The conclusions and opinions expressed in this article do not necessarily represent the views of DHHS or the CDC.

(800,000), syphilis (101,000)² and trichomoniasis (three million).³ For viral STDs, however, there is no cure; these include human papilloma virus (between 500,000 and one million cases annually), genital herpes (200,000–500,000), sexually transmitted hepatitis B (53,000) and the human immunodeficiency virus, or HIV (which is responsible for 90,000 cases of AIDS annually).⁴ STDs other than HIV have received relatively little attention, although they may have such consequences as infertility, cancer, infection of offspring and death.⁵

The federal government spent approximately \$89.7 million in 1994 through the Division of STD/HIV Prevention of the Centers for Disease Control and Prevention (CDC) to control the spread of syphilis, gonorrhea, chlamydia and, to a lesser extent, other STDs not including HIV. Some \$6.4 million of these funds were combined with \$1.9 million from the Office of Population Affairs for targeted gonorrhea and chlamydia testing of family planning clinic clients and other women at high risk for infections leading to infertility; \$11 million supported educational programs, STD surveillance, research projects and direct CDC program operations. However, most of the funding (\$72.3 million) went to state and local health departments to support STD surveillance, as well as screening and notification of partners of infected clients.⁶ State and local health departments are expected to cover most of the costs of STD treatment themselves, but comprehensive data on their spending levels are not available.⁷

Many public health departments offer a variety of services, such as family planning and maternal and child health care. In 1994, for example, 1,413 health departments served 2.1 million contraceptive clients at 3,124 sites.⁸ Title X of the Public Health Service Act, which provides categorical funding for family planning services, requires that testing for STDs be provided to family planning clients when medically indicated.9 In 1994, 66% of all Title X-funded agencies were public health departments; the remainder were hospitals, Planned Parenthood affiliates, community and migrant health centers and independent agencies.¹⁰

A good deal of information has been available about the provision of family planning services, in part because of the support for data collection and analysis within the Title X program. 11 Data from nationally representative surveys of the agencies that run family planning clinics indicate that most routinely test for at least some STDs at initial or annual visits. In 1992, 78% of health departments that offered family planning services routinely tested clients for gonorrhea, 59% for syphilis, 36% for chlamydia and 8% for herpes. Almost all other agencies tested for these STDs when it was medically indicated. About a quarter of health departments offering contraceptive services did so in sessions integrated with other medical services; most of the others offered both integrated and separate contraceptive sessions.12

In contrast to the detailed information available about family planning services, little is known about the breadth of STD services provided by local health departments or about the clients they serve. Instead, much of the information available has been from public health clinics whose primary purpose is to provide STD services, and it has concerned services specifically supported by the categorical STD funding administered by the CDC.

In this article, we report findings from

the first survey ever of a nationally representative sample of public health department STD programs. Our survey focused on services related to STDs other than HIV because so little is known about them. We examined health departments because they are the primary type of provider receiving public funding for STD services, and we attempted to obtain information about their entire range of STD services, not simply those supported by categorical STD funds.

Methods

Sample Design

The sample frame of agencies that provide clinical STD services was an extract from the 1992–1993 National Profile of Local Health Departments, a mail survey conducted by the National Association of County and City Health Officials (NACCHO) in collaboration with the CDC. The file lists all 2,888 agencies in the United States meeting the NACCHO definition of a local health department: "an administrative or service unit of local or state government, concerned with health, and carrying some responsibility for the health of a jurisdiction smaller than the state."13 In the survey, which attained a 72% response rate, NACCHO found that 59% of reporting agencies provided STD services directly, 7% did so through contracts with other providers and 34% did not provide STD services.

In designing the sample for our survey, we sought to ensure an adequate representation of local health departments in areas where the STD incidence was relatively high. As a crude proxy for overall STD levels, we used the county-wide incidence and rate of syphilis, the only STD for which these data are available at the county level. We considered a county to have a high level of syphilis if, for every year from 1990 to 1994, it had five or more cases and a rate greater than the Healthy People 2000 target of 10 syphilis cases per 100,000 population.¹⁴ A lower incidence and case rate denoted that a county had a low level of syphilis.

Our survey sample was drawn from the NACCHO listing of health departments, according to three strata. One stratum was made up of health departments in counties with a high level of syphilis. From their responses to the NACCHO survey—or, for nonrespondents, from information we obtained by telephone—we ascertained whether these agencies provide STD services. All 440 agencies in this stratum that directly provide STD services were included in the sample.

A second stratum consisted of agencies

in counties with low levels of syphilis that identified themselves in the NACCHO survey as direct providers of STD services. We included 266 of these 760 agencies in our sample. The third stratum was made up of health departments in counties with low levels of syphilis that had not reported their STD service status to NACCHO. We randomly selected 500 of these 856 agencies and matched them to the CDC's 1994 STD clinic database. ¹⁵ We telephoned all of the matched clinics to verify their STD service status and included 94 of the 157 that are direct providers.

The results of a pretest mailed to 60 health departments indicated that agencies with small STD caseloads were less likely than others to complete a 13-page questionnaire devoted to STDs. Therefore, to increase the response rate, we sent a shorter questionnaire, containing a subset of questions, to health departments in the counties with low levels of syphilis. The results presented here are based upon the questions common to both forms.

Questionnaires were mailed to the "STD Services Director" in each of the sampled agencies in September 1995. At least two additional mailings were sent to nonresponding agencies, and follow-up telephone calls were placed through the rest of the year. We found that 35 of the sampled health departments had not directly provided any STD services in 1995; these agencies were dropped from the study.

Information was obtained from 587 agencies, for a final response rate of 77% overall (73% in counties with high levels of syphilis and 82% in counties with low levels). To compensate for differences in the probability of surveying health departments in areas with high and low levels of syphilis and for differences in response rates, we weighted the data to reflect the actual distribution of health departments that directly provided STD services in 1995 (as found when the sample frame was updated to reflect the 35 health departments that were dropped because they had not provided STD services in 1995).

We group health departments according to the setting in which they provide STD services: exclusively in clinic sessions dedicated to STDs; in the same sessions as other services, such as family planning or maternal and child health; or in both separate and integrated sessions, either within the same facility or at different sites.

Data

The reporting period for information about policies and services was July 1995 or the last two weeks of July, depending

on which version of the survey respondents received. Although the numbers of staff and hours devoted to STD services may have been unusually low in July because of vacations, we chose this period because the survey was fielded in September and pretesting indicated that some health departments did not have staffing records extending several months in the past. The survey also asked about resources and caseloads in 1994.

Surveyed health departments were requested to provide information about clinical services related to screening, testing and treatment for STDs, not including HIV or AIDS unless the resources are so integrated that the information could not be separated. In addition, respondents were asked to report on all of the STD services their agency provides, not only those supported by categorical STD funds or specifically classified as STD services.

Agencies were also asked to report the total number of staff (full- and part-time) providing STD services, the number of hours staff spent on direct STD care and the number of hours spent on STD community presentations and street outreach. They were asked not to include hours spent on administrative activities. To estimate a uniform monthly reporting period, we doubled the number of hours for respondents reporting for a two-week period.

Financial data were poorly reported and must be viewed as very rough estimates. Only 34% of respondents could provide the total dollar amount of their agency's budget that went to support the provision of STD services in 1994 (or their equivalent fiscal year).

Some 15% of respondents were unable to determine the number of STD visits that occurred in their facilities in 1994, and 30% could not ascertain the number of STD clients served; 8% could provide neither of these numbers. Agencies that provide STD services only in integrated sessions were more likely than others to be missing information on visits (23% vs. 9–10%). Telephone follow-up revealed that many agencies did not have a data system capable of retrieving this information.

In addition, the definition of an STD visit or client is not consistent across health departments. For example, some respondents included among STD visits any family planning or maternal and child health care visit that included testing or treatment for STDs. In contrast, many provided data on clients seen within their "STD program," but could not identify STD services delivered during family planning or maternal and child health sessions.

Substantial proportions of respondents were unable to indicate the distribution of their agency's STD clients by poverty status (44%) or by age, sex and race or ethnicity (25–27%). An even larger proportion (52%) could not give complete information about the distribution of clients tested for STDs by whether they were found to have chlamydia, gonorrhea, early-stage syphilis (less than one year), any other STD or no STD. (Agencies responding to the long-form questionnaire were asked for a somewhat more detailed distribution.)

Some agencies reported that they could supply information for visits rather than for clients; others may have reported infections diagnosed or treated rather than visits or clients. Some agencies did not maintain STD surveillance statistics or had data only on reportable STDs (chlamydia, gonorrhea, HIV and syphilis). In all, 86% of respondents were able to report the number of cases of chlamydia, gonorrhea and syphilis.

The 95% confidence interval for overall observations is within four percentage points of the proportion cited. The confidence intervals for observations regarding agencies that offer separate sessions, integrated services or both are within 11, six and seven percentage points, respectively, of the proportions cited.

Results

STD Programs

In 1995, 50% of all local health departments (1,437 agencies) directly provided STD services. Even including another 7% that contracted with other providers to offer such services, as the NACCHO survey found, ¹⁶ STD services are considerably less common among these agencies than are other health services. For example, 96% of local health departments provide immunizations, 69% offer family planning services and 75–80% provide such environmental health services as restaurant inspections or licensing and sewage disposal. ¹⁷

As Table 1 shows, health departments that directly provide STD services are located predominantly in nonmetropolitan areas (65%) and generally operate in communities with 25,000 or more residents (64%). By contrast, according to information from the NACCHO database, only 47% of agencies without STD services serve communities this large (not shown).

Some 74% of agencies with STD services include HIV-related care as part of these services, 21% separate the two and 5% do not provide HIV services. On average, health departments with STD programs offer these services at 1.8 sites; in all, these 1,437 agencies have 2,587 STD service sites, and 67%

have only one STD service site (not shown).

While health departments that deliver STD services exclusively in dedicated sessions represent only 14% of all local health departments that offer such services, they account for 37% of STD visits to departments. health Only 11% of visits are to the 37% of agencies that use integrated sessions, and 52% of visits are to the 49% that use both separate and integrated sessions.

Agencies that offer only separate STD sessions differ in some key respects from those that integrate STD and other health services. They are considerably more likely to be located in metropolitan areas (72%, compared with 23–33% of the other

agencies) and to serve areas with populations of 100,000 or more (53% vs. 11–28%). Even though they serve larger populations, health departments with only separate STD sessions typically have fewer STD service sites than other agencies—an average of 1.5, compared with 1.7–2.0. Some 85% provide STD care at only one site, compared with 61–67% of other health departments (not shown).

The average number of STD visits across all types of health departments in 1994 was 1,519, for an estimated national total of two million STD visits (not shown). However, the median annual number of STD visits was much lower—300 (Table 1). In spite of having fewer STD service locations, the health departments that provide STD services only in separate sessions reported more than twice as many visits as agencies that use a mix of separate and integrated sessions (903 vs. 374) and six times as many as those that always integrate STD services into other health care sessions (147).

Among all health departments that offered STD treatment, STD patients represented a median of 6% of the total caseload in 1994; the median proportion ranged from 16% in agencies that provide only separate STD sessions to 5% in the others. The median number of employees delivering STD services per agency was four, and to-

Table 1. Selected characteristics of public health departments providing STD services, by whether these services are offered separately or integrated with other health care, 1995 survey (unweighted N=587)

Characteristic Total Separate Integrated Both Weighted % 100.0 14.0 37.3 48.7 % of STD visits 100.0 37.1 10.9 52.0 % DISTRIBUTIONS Region Metropolitan 34.6 72.0 22.8 32.9 Nonmetropolitan 65.4 28.0 77.2 67.1 Population served <25,000 35.8 7.6 42.8 38.4 25,000-49,999 19.9 15.2 27.2 15.5 50,000-49,999 19.3 45.5 9.4 19.5 ≥500,000 5.5 7.6 1.7 8.0 HIV/AIDS services Part of STD services 74.1 70.7 68.5 79.7 Treated separately 20.8 19.5 24.2 18.5 No HIV services 5.1 9.8 7.3 2.1 Total 100.0 100.0 100.0 100.0 MEDIANS Annual no.	morginiou it-cory				
% of STD visits 100.0 37.1 10.9 52.0 % DISTRIBUTIONS Region Metropolitan 34.6 72.0 22.8 32.9 Nonmetropolitan 65.4 28.0 77.2 67.1 Population served <25,000 35.8 7.6 42.8 38.4 25,000-49,999 19.9 15.2 27.2 15.5 50,000-99,999 19.5 24.1 18.9 18.6 100,000-499,999 19.3 45.5 9.4 19.5 ≥500,000 5.5 7.6 1.7 8.0 HIV/AIDS services Part of STD services 74.1 70.7 68.5 79.7 Treated separately 20.8 19.5 24.2 18.5 No HIV services 5.1 9.8 7.3 2.1 Total 100.0 100.0 100.0 100.0 100.0 MEDIANS Annual no. of STD visits 300 903 147 374 STD clients as % of total caseload 6 16 5 5 No. of staff providing STD services monthly 4 5 4 5 No. of staff providing STD services monthly 4 5 4 5	Characteristic	Total	Separate	Integrated	Both
% DISTRIBUTIONS Region Metropolitan 34.6 72.0 22.8 32.9 Nonmetropolitan 65.4 28.0 77.2 67.1 Population served <25,000 35.8 7.6 42.8 38.4 25,000–49,999 19.9 15.2 27.2 15.5 50,000–99,999 19.5 24.1 18.9 18.6 100,000–499,999 19.3 45.5 9.4 19.5 ≥500,000 5.5 7.6 1.7 8.0 HIV/AIDS services Part of STD services 74.1 70.7 68.5 79.7 Treated separately 20.8 19.5 24.2 18.5 No HIV services 5.1 9.8 7.3 2.1 Total 100.0 100.0 100.0 100.0 MEDIANS Annual no. of STD visits 300 903 147 374 STD clients as % of total caseload 6 16 5 5 No. of staff providing STD services monthly 4 5 4 5 No. of staff hours spent	Weighted %	100.0	14.0	37.3	48.7
Region Metropolitan 34.6 72.0 22.8 32.9 Nonmetropolitan 65.4 28.0 77.2 67.1 Population served <25,000	% of STD visits	100.0	37.1	10.9	52.0
Metropolitan 34.6 72.0 22.8 32.9 Nonmetropolitan 65.4 28.0 77.2 67.1 Population served <25,000					
Nonmetropolitan 65.4 28.0 77.2 67.1 Population served <25,000		24.6	72.0	22.0	22.0
Population served <25,000 35.8 7.6 42.8 38.4 25,000-49,999 19.9 15.2 27.2 15.5 50,000-99,999 19.5 24.1 18.9 18.6 100,000-499,999 19.3 45.5 9.4 19.5 ≥500,000 5.5 7.6 1.7 8.0 HIV/AIDS services Part of STD services 74.1 70.7 68.5 79.7 Treated separately 20.8 19.5 24.2 18.5 No HIV services 5.1 9.8 7.3 2.1 Total 100.0 100.0 100.0 100.0 MEDIANS Annual no. of STD visits 300 903 147 374 STD clients as % of total caseload 6 16 5 5 No. of staff providing STD services monthly 4 5 4 5 No. of staff hours spent					
<25,000	Nonnetropolitari	03.4	20.0	11.2	07.1
25,000–49,999 19.9 15.2 27.2 15.5 50,000–99,999 19.5 24.1 18.9 18.6 100,000–499,999 19.3 45.5 9.4 19.5 ≥500,000 5.5 7.6 1.7 8.0 HIV/AIDS services Part of STD services 74.1 70.7 68.5 79.7 Treated separately 20.8 19.5 24.2 18.5 No HIV services 5.1 9.8 7.3 2.1 Total 100.0 100.0 100.0 100.0 100.0 MEDIANS Annual no. of STD visits 300 903 147 374 STD clients as % of total caseload 6 16 5 5 No. of staff providing STD services monthly No. of staff hours spent					
50,000–99,999 19.5 24.1 18.9 18.6 100,000–499,999 19.3 45.5 9.4 19.5 ≥500,000 5.5 7.6 1.7 8.0 HIV/AIDS services Part of STD services 74.1 70.7 68.5 79.7 Treated separately 20.8 19.5 24.2 18.5 No HIV services 5.1 9.8 7.3 2.1 Total 100.0 100.0 100.0 100.0 MEDIANS Annual no. of STD visits 300 903 147 374 STD clients as % of total caseload 6 16 5 5 No. of staff providing STD services monthly 4 5 4 5 No. of staff hours spent					
100,000–499,999 19.3 45.5 9.4 19.5 ≥500,000 5.5 7.6 1.7 8.0 HIV/AIDS services Part of STD services 74.1 70.7 68.5 79.7 Treated separately 20.8 19.5 24.2 18.5 No HIV services 5.1 9.8 7.3 2.1 Total 100.0 100.0 100.0 100.0 100.0 MEDIANS Annual no. of STD visits 300 903 147 374 STD clients as % of total caseload 6 16 5 5					
≥500,000 5.5 7.6 1.7 8.0 HIV/AIDS services Part of STD services 74.1 70.7 68.5 79.7 Treated separately 20.8 19.5 24.2 18.5 No HIV services 5.1 9.8 7.3 2.1 Total 100.0 100.0 100.0 100.0 100.0 MEDIANS Annual no. of STD visits 300 903 147 374 STD clients as % of total caseload 6 16 5 5 No. of staff providing STD services monthly 4 5 4 5 No. of staff hours spent					
HIV/AIDS services Part of STD services 74.1 70.7 68.5 79.7 Treated separately 20.8 19.5 24.2 18.5 No HIV services 5.1 9.8 7.3 2.1 Total 100.0 100.0 100.0 100.0 100.0 MEDIANS Annual no. of STD visits 300 903 147 374 STD clients as % of total caseload 6 16 5 5 No. of staff providing STD services monthly 4 5 4 5 No. of staff hours spent					
Part of STD services 74.1 70.7 68.5 79.7 Treated separately 20.8 19.5 24.2 18.5 No HIV services 5.1 9.8 7.3 2.1 Total 100.0 100.0 100.0 100.0 MEDIANS Annual no. of STD visits 300 903 147 374 STD clients as % 90 of total caseload 6 16 5 5 No. of staff providing STD services monthly 4 5 4 5 No. of staff hours spent 4 5 4 5	2500,000	5.5	7.0	1.7	6.0
Treated separately 20.8 19.5 24.2 18.5 No HIV services 5.1 9.8 7.3 2.1 Total 100.0 100.0 100.0 100.0 MEDIANS Annual no. of STD visits 300 903 147 374 STD clients as % of total caseload 6 16 5 5 No. of staff providing STD services monthly 4 5 4 5 No. of staff hours spent 4 5 4 5	HIV/AIDS services				
No HIV services 5.1 9.8 7.3 2.1 Total 100.0 100.0 100.0 100.0 MEDIANS Annual no. of STD visits 300 903 147 374 STD clients as % of total caseload 6 16 5 5 No. of staff providing STD services monthly 4 5 4 5 No. of staff hours spent 4 5 4 5	Part of STD services	74.1	70.7	68.5	79.7
Total 100.0 100.0 100.0 100.0 100.0 MEDIANS Annual no. of STD visits 300 903 147 374 STD clients as % of total caseload 6 16 5 5 No. of staff providing STD services monthly 4 5 4 5 No. of staff hours spent					18.5
MEDIANS Annual no. of STD visits 300 903 147 374 STD clients as % of total caseload 6 16 5 5 No. of staff providing STD services monthly 4 5 4 5 No. of staff hours spent	No HIV services	5.1	9.8	7.3	2.1
Annual no. of STD visits 300 903 147 374 STD clients as % of total caseload 6 16 5 5 No. of staff providing STD services monthly 4 5 4 5 No. of staff hours spent	Total	100.0	100.0	100.0	100.0
Annual no. of STD visits 300 903 147 374 STD clients as % of total caseload 6 16 5 5 No. of staff providing STD services monthly 4 5 4 5 No. of staff hours spent	MEDIANS				
STD clients as % of total caseload 6 16 5 5 No. of staff providing STD services monthly 4 5 4 5 No. of staff hours spent		300	903	147	374
No. of staff providing STD services monthly 4 5 4 5 No. of staff hours spent		000	000		0
STD services monthly 4 5 4 5 No. of staff hours spent	of total caseload	6	16	5	5
No. of staff hours spent	No. of staff providing				
		4	5	4	5
on STD services monthly 40 94 12 64					
	on STD services monthly	40	94	12	64

gether they spent a median of 40 hours each month on these services. The median number of hours per month spent on STD services ranged from 12 among agencies that offer only integrated sessions to 94 among those that use dedicated sessions.

More than 50% of agencies reported no staff hours for STD community presentations or street outreach activities, but there was considerable variation among those that did provide outreach. Some 31% of agencies that always have separate STD sessions conducted more than 20 hours of outreach in one month, compared with 9–14% of those that sometimes or always use integrated sessions.

Among agencies reporting on their budget for the provision of STD services, 24% spent less than \$10,000 annually; 26% spent \$10,000–\$39,999; 19% spent \$40,000–\$99,999; and 31% spent \$100,000 or more. The median annual funding devoted to STDs was \$34,909.

Client Characteristics

Overall, 36% of health department STD clients are younger than 20, and 15% are 30 or older (Table 2, page 264); 60% are women. The proportion of clients who are women is 46% in agencies providing only separate STD sessions, 68% in those that always integrate STD services with other care and 59% in health departments that offer

Table 2. Percentage distribution of health department STD clients, by selected characteristics

Characteristic	%
Age-group <15 15-17 18-19 20-24 25-29 ≥30	2.9 13.3 19.4 29.5 20.1 14.8
Sex Female Male	60.4 39.6
% of poverty level <100% 100-249% ≥250%	45.4 37.5 17.1
Race/ethnicity White non-Hispanic Black non-Hispanic Hispanic Other	55.0 34.5 8.7 1.8
Type of STD Chlamydia Gonorrhea Syphilis (<1 year) Other None*	22.9 12.8 3.0 18.3 43.0
Total	100.0

*Represents clients who underwent testing and were found to have

both separate and integrated STD sessions (not shown).

Some 45% of clients obtaining STD services from public health departments have a family income below the federally designated poverty level, and another 38% have an income between 100% and 250% of the poverty level. On average, 55% of STD clients are non-Hispanic white, 35% are black, 9% are Hispanic and 2% are members of other racial or ethnic groups.

Among clients who received STD services, 57% tested positive for STDs. Chlamydia ranked as the most frequent STD for which health departments provided care; 23% of clients were tested or treated for this infection. (In accordance with CDC guidelines, many health departments do not test for chlamydia; instead, they automatically treat clients who have gonorrhea for chlamydia as well. Therefore, health department treatment of chlamydia may somewhat overstate the prevalence of this infection.) Some 13% of clients had gonorrhea, 3% had early-stage syphilis and 18% had some other STD.

Only 13% of STD clients in agencies where STD services are provided exclusively in separate sessions were found to have chlamydia, compared with 24–27% in other agencies (not shown). Although these differences are not statistically sig-

nificant, they might reflect that health departments with integrated STD services are linked to family planning programs, which may have separate funding to test for and treat chlamydia.

Services Provided

• Service hours. For the most part, STD services are available at health department facilities only during weekday working hours. Some 23% of agencies have an STD service site with hours after 6 P.M.; 5% have a site with weekend hours (Table 3).

While 61% of health departments reported that a new client can get STD services the same day he or she contacts the agency's largest STD service site, 24% said the client has to wait 1–2 days and 15% said the wait is three days or more. Some 4% reported that a new client has to wait at least six days to receive STD testing and any necessary treatment (not shown).

• Services for specific STDs. Health departments that provide care under the general rubric of STD services may not be able to test for or even treat all common STDs. Every responding agency provides both testing and treatment for gonorrhea, although 1–2% do so only by referral to another provider. Testing for syphilis is available directly from 99% of health departments and by referral in the remainder; 93% of agencies directly provide syphilis treatment, 6% do so by referral and 1% do not provide any syphilis treatment.

Service provision is less common for chlamydia. Only 82% of health departments with STD services have at least one site that offers testing for chlamydia; 11% provide it only by referral to another provider and 7% do not provide chlamydia testing either directly or by referral. By contrast, 97% provide chlamydia treatment directly and 2% do so by referral to another provider. Even among agencies that do not directly provide chlamydia testing, 83% directly provide treatment (not shown). The difference between the proportions offering chlamydia testing and treatment is probably another reflection of many agencies' practice of automatically providing chlamydia treatment to clients with confirmed cases of gonorrhea.

• Client history and education and counseling. Almost all (94–99%) health departments providing STD services routinely ascertain new clients' sexual, contraceptive and STD history and offer them education and counseling regarding risk factors for HIV and other STDs. Only 66–78% of agencies routinely inquire about substance use, counsel clients about effective contraceptive use and teach new clients how to more effec-

tively negotiate condom use with their partners. Most agencies that do not routinely carry out these activities do so on indication or by request for selected clients. The proportion of agencies that routinely offer contraceptive education and counseling ranges from 70–77% among those that provide any STD services in integrated sessions to 47% of those that use only separate sessions (not shown).

• Partner notification and treatment. To avoid infecting others, sex partners of persons with diagnosed STDs must know about their exposure to the infection, undergo testing and obtain necessary treatment. Essentially all health departments seek to inform partners of clients with chlamydia, gonorrhea or syphilis, either by having staff notify them or by urging infected clients to tell their partners. However, the proportion of agencies in which staff members notify partners directly varies from 92% if the client has syphilis to 67% if the client has gonorrhea and 53% if the client has chlamydia.

Virtually all health department STD programs require that an infected client's partner come into the clinic to receive testing and, if necessary, treatment for gonorrhea and syphilis (97% and 98%, respectively), but the proportion is slightly lower (89%) for chlamydia. While 9% give clients infected with chlamydia medication for their partner without requiring the partner to come into the clinic, only 2% follow this procedure for clients infected with gonorrhea or syphilis. Some 2% of programs neither require partners of chlamydia patients to come in for treatment nor give them medication without their making a clinic visit.

- •Contraceptives and barrier methods provided. Overall, 98% of health department STD programs provide male condoms, and 20% provide female condoms; 73–76% offer spermicides, oral contraceptives and other methods. Agencies that offer STD services in separate sessions are the least likely to provide methods other than the male condom, even though they generally see as many female as male STD clients. For example, only 22% provide oral contraceptives, compared with 80–88% of agencies where STD services are sometimes or always offered together with other services (not shown).
- Referral for reproductive health services. When an STD client or a client's partner needs contraceptive or other reproductive health services not provided at STD service sites, the majority of agencies provide a referral to a private doctor or to a health department family planning clinic (63%)

and 72%, respectively). Smaller proportions provide referrals to Planned Parenthood or another private clinic (26%) or to a hospital clinic (17%). Health departments that offer only separate STD services are much more likely than others to provide referrals to clinics outside the health department (62% vs. 18–22%—not shown).

Discussion

Only half of the nation's public health departments directly provide any STD services. Data from this first nationally representative survey of these providers indicate that they play an important role in STD diagnosis and treatment, receiving an estimated two million annual visits for STD care and serving mainly poor and low-income clients. Whether, and how, men and women living in areas covered by health departments with no STD services obtain care remains an open question; since many of these agencies are in sparsely populated areas, individuals in need of STD testing or treatment may have a limited choice of accessible clinicbased or private providers.

However, even among health departments providing STD services, care could obviously be made more accessible and more appropriate to those who need it. A substantial minority of clients are unable to obtain services on the same day they first seek them; one in six must wait three days or more. Delays in learning whether or not they are infected and in receiving treatment also cause a delay in care for their partner and increase the chance of further transmission of the infection.

The agencies surveyed devote very little staff time to primary STD prevention through community presentations or street outreach; rather, they concentrate on direct patient care, focusing on secondary prevention through treatment and partner notification. In addition, the sheer numbers of reported chlamydia and gonorrhea cases, as well as the short incubation periods of these diseases (relative to that of syphilis), have made it infeasible for a substantial minority of agencies to use their staff to notify partners of infected clients. This increases the importance of teaching clients skills to help them inform their partners. Agency personnel who have worked in integrated settings may have had more exposure than others to issues of client autonomy and more experience with education and counseling. They could help other staff distinguish when nondirective counseling approaches incorporating clients' values and choices are more appropriate than directive styles traditionally used with infected STD clients.¹⁸

Federal STD funding focuses almost entirely on the prevention, diagnosis and treatment of chlamydia, gonorrhea and syphilis, the STDs for which public health department programs most commonly provide services. However, numerous other sexually transmitted infections, some of which are not curable, afflict many women and men. Among health department clients with an STD, almost a third have an STD other than chlamydia, gonorrhea or syphilis. Increased efforts are necessary to ensure that men and women who depend on health departments for STD services can obtain care for the full range of sexually transmitted infections.

Survey information reveals sharp differences among health departments that provide STD services. Agencies that always provide STD services in separate sessions (14% of the total) typically are located in metropolitan areas, serve large numbers of clients, see about as many men as women and provide little contraceptive care. At the other end of the spectrum, health departments that always integrate STD services and other health care (37%) typically have small STD caseloads, provide STD services chiefly to women and offer contraceptive methods other than male condoms, including the pill.

The largest proportion of health department STD programs (49%) use a mix of separate STD sessions and sessions in which STD services are integrated with other services. Not surprisingly, these agencies as a group often have characteristics somewhere between those of agencies in which STD services are totally separate and those of agencies in which they are totally integrated. The survey asked each agency about its entire STD program, rather than about individual clinic sites or types of sessions; therefore, we cannot determine from the data whether responses from agencies using a mixed approach reflect the average characteristics of the program's separate and integrated STD components, or whether these agencies have a different approach than the others.

From the information collected, it is not clear why local health departments have designed their STD programs in the ways they have. By identifying the prevalence of different ways of delivering STD services, our survey data can spur wider discussion about how well current modes of offering STD care meet clients' needs. The variation in the level of integration of STD services across areas with large and small populations and STD caseloads suggests that health department managers have tai-

Table 3. Percentage of health department clinics, by services provided

Service	%
Expanded hours	
Open after 6 Р.м.	22.9
Open weekends	4.7
Gonorrhea services	
Direct testing	99.0
Referral for testing	1.0
Direct treatment	98.5
Referral for treatment	1.5
Syphilis services	
Direct testing	98.7
Referral for testing	1.3
Direct treatment	93.3
Referral for treatment	6.3
Chlamydia services	
Direct testing	81.9
Referral for testing	10.6
Direct treatment	96.9
Referral for treatment	1.7
Client history and education and counseling	
History	
Sexual	99.0
Contraceptive STD	93.6 97.4
Substance use	77.9
Education and counseling	11.5
HIV and other STDs	97.2
Effective contraceptive use	69.6
Negotiating condom use	66.4
-	
Partner notification and treatment Notify partner	
If client has gonorrhea	67.0
If client has syphilis	92.2
If client has chlamydia	52.9
Require partner to come for testing/treatment	
If client has gonorrhea	97.2
If client has syphilis	97.6
If client has chlamydia	89.1
Contraceptives and barrier methods	
Male condom	97.7
Spermicides	76.4
Oral contraceptives	75.0
Female condom	20.4
Other	72.6
Referral for reproductive health services	00 -
Private doctor	62.6
Health dept. family planning clinic	71.5
Planned Parenthood or other family planning clinic	26.2
Hospital clinic	16.5
Telephone hot line	3.1
Othor	10

lored the categorical and general funds available to them to meet the needs of their communities.

Separate STD sessions can be an efficient way to structure services in communities where large numbers of clients seek care. They also may be the most comfortable settings for staff accustomed to dealing with male clients, who may have a very different approach from personnel experienced with female-oriented family planning and maternal and child health services. ¹⁹ However, clients seeking STD diagnosis and treatment often have other reproductive

health needs as well.²⁰ Many separate health department STD programs appear to have such a narrow focus that they ignore other client needs. For example, while almost all of these agencies give out male condoms, most do not offer any female contraceptive methods.

Agencies that integrate STD and other services are much more likely than those that conduct only dedicated STD sessions to be responsive to clients' broader reproductive health needs. Yet, agencies that always integrate services are very small and are located in nonmetropolitan areas; thus, it is unclear whether integrated care suggests a developing trend or is simply an efficient way to provide care in settings with little obvious demand for a specific service. These agencies appear to have a less clearly focused STD program identity. They are the least likely to know how many STD visits they provide or how much money, if any, is specifically allocated to providing STD services. Community education and outreach activities are uncommon in any type of health department STD program, but these agencies are the least likely to provide such services.

STD and family planning programs see many of the same groups of female clients; in many cases, these services are integrated. The extent to which health departments offer both STD and contraceptive services and the high proportion that report integrating service sessions are heartening. Gaps remain, however, from both perspectives. Some may be filled by more referrals between the two types of programs; in other cases, increased collaboration within the service setting will make both STD services and family planning care more inclusive of all clients' needs.

Many of the health services with which STD diagnosis and treatment might be integrated, such as family planning and maternal and child health, are typically viewed as services for women. Yet, almost a third of STD clients in these agencies are the male partners of infected women. In fact, STD diagnosis and treatment is one of the few reasons young men seek reproductive health care from public

providers.²¹ Integration of family planning counseling and education into their care could help these young men become more actively engaged in contraceptive decision-making and use. The experience that STD service providers have had working with male clients might offer valuable insights to family planning providers seeking to increase male involvement in contraceptive use.

However, many health departments do not have access to information that would allow them to characterize clients who seek and receive STD services. The closer the integration of STD services into clinic sessions where other health care is also provided, the less likely the STD services director was to have such information. It is not clear whether the lack of information about people receiving STD care within the health department is due to issues of confidentiality, to the inadequacy of data systems or to a lack of coordination within the health department. In some cases, respondents specifically noted that they were not able to retrieve information about STD services that clients received through other programs in the health department. The absence of this information makes it more difficult to identify dual risks faced by patients and makes surveillance activities within the health department more difficult. It may also represent a downside to the integration of care and creative use of different categorical and noncategorical funds to support a range of services.

Past data indicated that about half of agencies delivering publicly funded family planning services obtained STD diagnostic tests and laboratory services from outside their family planning budgets, most likely from health department funds for STD services. ²² While the numbers of clients receiving STD and contraceptive services are important indicators for the respective categorical funding programs, more work is needed to identify overlap and gaps in STD diagnosis and treatment and contraceptive care, in clients served and in service statistics reported in the various settings where public-sector care is delivered.

References

- 1. Division of STD/HIV Prevention, Centers for Disease Control and Prevention (CDC), *Division of STD/HIV Prevention Annual Report*, 1992, Atlanta, 1993.
- **2.** —, Division of STD/HIV Prevention Annual Report, 1994, Atlanta, 1995, p. 78.
- 3. —, 1993, op. cit. (see reference 1).
- 4. —, 1995, op. cit. (see reference 2), p. 78.
- **5.** P. Donovan, Testing Positive: Sexually Transmitted Disease and the Public Health Response, The Alan Guttmacher Institute, New York, 1993, pp. 4–5.
- **6.** CDC, 1995, op. cit. (see reference 2), pp. 22–27 & 104–109.
- 7. P. Donovan, 1993, op. cit. (see reference 5), pp. 28–33.
- **8.** J. Frost, "Family Planning Clinic Services in the United States, 1994," *Family Planning Perspectives*, **28**:92–100, 1996.
- 9. S.K. Henshaw and A. Torres, "Family Planning Agencies: Services, Policies and Funding," Family Planning Perspectives, 26:52–59 & 82, 1994.
- 10. J. Frost, 1996, op. cit. (see reference 8).
- 11. Ibid.; and S.K. Henshaw and A. Torres, 1994, op. cit. (see reference 9).
- **12.** S. K. Henshaw and A. Torres, 1994, op. cit. (see reference 9).
- **13.** National Association of County and City Health Officials (NACCHO), 1992–1993 National Profile of Local Health Departments, Washington, D. C., 1995, p. 13.
- **14.** U.S. Public Health Service, *Healthy People* 2000: *National Health Promotion and Disease Prevention Objectives*, U.S. Government Printing Office, Washington, D.C., 1990.
- 15. CDC, 1994 STD Clinic Database, Atlanta, 1994.
- 16. NACCHO, 1995, op. cit. (see reference 13).
- **17.** Ibid.
- 18. W. Cates, Jr., "Sexually Transmitted Diseases and Family Planning: Strange or Natural Bedfellows, Revisited," Sexually Transmitted Diseases, 20:174–178, 1993.
- 19. W. Cates, Jr., "Sexually Transmitted Diseases and Family Planning: Strange or Natural Bedfellows?" *Journal of Reproductive Medicine*, 29:317–322, 1984; and W. Cates, Jr., and K. M. Stone, "Family Planning, Sexually Transmitted Diseases and Contraceptive Choice: A Literature Update—Part I," *Family Planning Perspectives*, 24:75–84, 1992.
- **20.** Z. Stein, "Family Planning, Sexually Transmitted Diseases, and the Prevention of AIDS—Divided We Fail?" editorial, American Journal of Public Health, **86**:783–784. 1996.
- **21.** M. M. Schulte and F. L. Sonenstein, "Men at Family Planning Clinics: The New Patients?" *Family Planning Perspectives*, **27**:212–216 & 225, 1995.
- **22.** S.K. Henshaw and A. Torres, 1994, op. cit. (see reference 9).