

# Show Me the Money: State Contributions Toward STD Prevention, 2007

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The importance of state investment in sexually transmitted disease (STD) prevention has been discussed since the mid-1990s; however, little has become known about state public health funding for STD prevention. To establish a baseline understanding of state STD prevention funding, financial data for fiscal year 2007 were gathered by survey of state STD, immunization, laboratory, and hepatitis program directors. Results revealed that on average states funded 25.8 percent of their total STD prevention budgets and invested \$0.23 per capita in STD prevention. The percentage of state funding in the total state STD prevention budget ranged from 0 percent to 70.2 percent, and state investment in STD prevention ranged from \$0.00 to \$1.55 per capita. The direction and expenditure of state STD prevention resources was also examined. This study strengthens the national understanding of what states are doing to fund STD prevention, and it broadens state public health awareness of the overall STD prevention investment at the state level. The inclusion of Medicaid data and expenditure of federal resources by states would strengthen the study and assist longitudinal analyses focused on the impact of investment on epidemiologic indicators.

**KEY WORDS:** federal funding, public health administration, public health funding, sexually transmitted diseases, state funding

Sexually transmitted diseases (STDs) continue to be a major public health challenge in the United States, with an estimated 19 million new infections annually, half of which are among persons 15 to 24 years of age.<sup>1,\*</sup> Chlamydia, among the most prevalent of STDs, remains

largely undiagnosed, and several communities have experienced consecutive years of syphilis outbreaks. The cost to treat STDs in the United States has been estimated at \$14.7 billion annually.<sup>1,\*</sup> While the observed increase in chlamydia among women could in part be attributed to the increase in screening efforts, the upward trend in STD infection rates generally and in prevention and treatment costs continues in part because, for years, public health and STD prevention efforts have been woefully underfunded.

While states have been the primary financier of public health services generally,<sup>2</sup> the conventional wisdom in STD prevention has held that the federal government, specifically the Centers for Disease Control and Prevention (CDC), provides the lion's share of the funding for STD prevention in states. This, however, remains unsubstantiated because there have been few efforts to measure state contributions in specific public health programs<sup>3-6</sup> and none measuring state contributions to STD prevention. What has been established is that the current level of national financing for STD prevention is inadequate to the task, and while there is no shared national knowledge of what states are investing in STD prevention, states themselves have indicated that there is a paucity of local funding for their STD prevention efforts.<sup>7</sup> A 2001 effort to measure state STD infrastructure found that state STD programs were in need of local financing as they were largely dependent upon less than adequate federal funding.<sup>8,9</sup>

This study seeks to clarify what states are doing to finance their STD prevention efforts by examining

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whether and to what extent states invested in their STD prevention efforts in fiscal year (FY) 2007. This study was funded by a grant from the CDC to the American Social Health Association (ASHA).

## ● Methods

State public health efforts in STD prevention are not limited to STD prevention programs. State immunization and hepatitis programs often contribute to the STD prevention effort through the financing of sexual health vaccines, educational efforts, or both; state laboratories are often direct recipients of state resources for STD-related services. Examining state STD prevention investment across these programs is challenged because the programs are often managed separately, sometimes functioning in different divisions of a department of health (or even different state agencies), and therefore budget knowledge and program awareness are not shared.

In recognition of these challenges and to help form a more comprehensive picture of state investment in STD prevention, four separate surveys were developed to gather state financial data from FY 2007. Data were gathered from the state laboratory directors and the directors of state STD, hepatitis, and immunization programs in all 50 states and the District of Columbia using an on-line survey instrument that asked respondents to report financial data for their specific programs as it related to STD prevention in 2007. Two examples of survey questions follow: *How much state general revenue (GR) for STD prevention did your [STD Program/State Laboratory/Hepatitis Program/Immunization Program] DIRECTLY receive in FY 2007?* and *How much state GR did your [STD Program/State Laboratory/Hepatitis Program/Immunization Program] DIRECTLY receive for STD-related vaccines in FY 2007 (Hepatitis A and B, HPV)?*

Survey questions were developed through a convenience sample of states and with the advice of a steering committee composed of the participating programs and their national associations,\* the CDC, and members of the ASHA board of directors. Surveys were pilot tested by representatives from the participating programs in California, Illinois, and North Carolina, and the final data collection tools were launched on a survey Web site hosted by ASHA in May 2008. For the purpose of this report, the term “state” refers to all states and the District of Columbia.

\*National associations representing the participating programs included NASTAD: National Alliance of State and Territorial AIDS Directors, which represented state hepatitis directors; NCSDD: National Coalition of STD Directors; AIM: Association of Immunization Managers; and APHL: Association of Public Health Laboratories.

The computation of state STD prevention resources was accomplished by combining reported data from returned surveys for each state. States with at least one returned survey were included in the analysis. Programs that did not return surveys were treated as if \$0.00 was reported as state revenue for STD prevention from that program.

Secondary data were collected to compute four state STD funding indicators and to allow for various comparative analyses. Federal grant data for STD prevention were provided by the CDC and combined with reported state STD prevention funding to compute the percentage of state funding in the total state STD prevention budget. Federal grants included the following FY 2007 CDC grants to states: Comprehensive STD Prevention Systems, extramural STD funding, and Adult Hepatitis B Vaccine funding.<sup>†</sup> Federal funding for STD prevention training centers (PTCs) was not included in the state calculations because of its regional distribution. Federal PTC funding was included to calculate the reported federal STD prevention per capita expenditure. The percentage of state funding in the STD prevention budget was calculated as the percentage of state funding in the total state STD prevention budget (state and federal revenue) for that state.

State public health funding data for 2006 through 2007 were gathered from the Healthier America Project of Trust for America’s Health to compute the percentage of state public health funding directed toward STD prevention.<sup>‡</sup> It was calculated by dividing reported state funding for STD prevention by the reported state funding for public health and multiplying this number by 100.

Census data from the US Census Bureau for the year 2006 were used to calculate per capita funding for national comparison. Per capita state STD prevention funding was calculated by dividing the amount of

<sup>†</sup>Immunization federal grants (317 and Vaccines for Children) were not included in the calculation of the federal share of the STD investment for this study because it was not possible at this time to track whether and how they were directed toward STD prevention on a state-by-state basis. Both grants can be directed toward STD prevention, and some states probably are doing so. STD extramural funding was included in the federal grant calculation because it is directed toward the total STD effort in a state. Funding for STD prevention training centers was not calculated as part of the federal grant contribution because it is distributed by region.

<sup>‡</sup>The Healthier America Project of Trust for America’s Health supplied state contributions to public health for the fiscal year 2006/2007 via an online tool. See Trust for America’s Health.<sup>10</sup> See also Levi et al.<sup>3</sup> Public health funding is defined as all health spending except Medicaid, SCHIP (State Children’s Health Insurance Program) or comparable health coverage programs, mental health funding, and services related to developmental disabilities or severely disabled persons.

**TABLE 1 • State STD prevention funding indicators, 2007 (N = 51)**

	Per capita state STD prevention funding	Per capita state public health funding	% of state public health funding directed to STD prevention	% of state funding in STD prevention budget
Mean	\$0.23	\$43.14	0.61	25.8
Median	\$0.14	\$34.60	0.30	21.2
Minimum	\$0.00	\$3.51	0.00	0.0
Maximum	\$1.55	\$156.24	3.68	70.2
Standard deviation	\$0.31	\$34.89	0.71	19.6

Abbreviation: STD, sexually transmitted disease.

reported state funding for STD prevention by the state population. Per capita state public health funding was calculated by dividing the reported state public health funding by the state population.

State STD surveillance data for 2006 were gathered from the CDC for comparison with the above-mentioned financial indicators. These included rates of chlamydia among women (per 100 000 population), rates of primary and secondary syphilis (per 100 000 population), rates of congenital syphilis (per 100 000 population), and rates of gonorrhea (per 100 000 population).\*

## ● Findings

Program directors from all states and the District of Columbia responded to the survey, though only six jurisdictions (11.8%) returned surveys from every program. STD programs responded most, with an 84 percent (43 surveys returned) response rate. Sixty-three percent (32 surveys) of the laboratory directors responded, 59 percent (30) of surveys among immunization managers were returned, and 41 percent (21) of hepatitis directors returned surveys.

The belief that the federal government carries most of the STD prevention burden for states was reinforced when calculating state contributions toward STD prevention for FY 2007. As Table 1 indicates, the mean percentage of state contribution toward the total state STD prevention budget was 26 percent (median 21.2%), with a range of 0 percent to 70 percent. Nine states (17.6%) reported sharing at least 50 percent of the financial responsibility for STD prevention in their jurisdictions. One state, Louisiana, reported 70 percent funding of their total state STD prevention budget. The average per capita state contribution for STD prevention was \$0.23. As a point of reference, in 2007, the federal government contributed \$181 319 992 for STD prevention

in states (including a regional distribution of funding for STD PTCs), a per capita amount of \$0.60. When comparing state STD prevention funding with state public health funding, it appears that states spent just over one-half of 1 percent of their public health funding for STD prevention.

Table 2 presents state-by-state STD financial and epidemiologic indicators (incidence per 100 000 population or disease rates). An important question that will be answered over time and with subsequent analyses is whether there is a relationship between increased state investment and reductions in rates of sexually transmitted infections. Current analyses yielded correlations between the per capita state contribution to STD prevention and 2006 rates of chlamydia among women ( $r = 0.295$ ,  $P < .05$ ), rates of primary and secondary syphilis ( $r = 0.618$ ,  $P < .01$ ), and rates of gonorrhea ( $r = 0.414$ ,  $P < .01$ ). This indicates that in 2007, states with higher per capita state STD contributions also tended to have higher reported rates of primary and secondary syphilis and higher reported rates of chlamydia among women.

As shown in Table 2, a few states emerged as leaders in state funding for STD prevention when viewing their national ranking across key investment indicators. Five states (Louisiana, Rhode Island, Connecticut, Arkansas, and Florida) were in the top 10 for key STD prevention funding indicators. Three jurisdictions (District of Columbia, New Mexico, and Hawaii) were in the top 10 for per capita state funding in STD prevention and also, though not shown, for per capita funding for public health.

## ● How State Funding Reaches the STD Prevention Effort

State funding reached the STD prevention effort in various ways. Some states directed funding to STD prevention through a line item in the state budget designated for STD prevention. For others, the state agency (eg,

\*See Centers for Disease Control and Prevention.<sup>11-13</sup>

**TABLE 2 • State STD financial indicators for fiscal year 2007 and key epidemiologic indicators (2006) (N = 51)**

State	% of state funding in STD budget	Per capita state STD prevention funding	Rates of chlamydia among women, 2006	Rates of primary and secondary syphilis, 2006	Rates of congenital syphilis, 2006	Rates of gonorrhea, 2006
Alabama <sup>a,b</sup>	53.7	\$0.57	763.6	7.0	15.1	234
Alaska	10.3	\$0.09	957	1.7	0.0	94.9
Arizona	12.4	\$0.04	632.2	3.4	17.1	100.2
Arkansas <sup>a,b</sup>	54.0	\$0.52	466.3	2.8	18.1	154.9
California	29.4	\$0.15	537.2	5.1	12.1	93.4
Colorado	10.4	\$0.05	521.2	1.5	2.9	79.2
Connecticut <sup>a,b</sup>	55.9	\$0.47	454.5	1.8	0.0	74.4
Delaware	21.2	\$0.14	607.3	2.4	0.0	176.0
District of Columbia <sup>b</sup>	23.7	\$1.35	867.4	21.1	12.6	342.8
Florida <sup>a,b</sup>	50.2	\$0.33	425.1	4.0	9.6	134.8
Georgia	0.0 <sup>c</sup>	\$0.00	666.2	6.4	6.5	216.8
Hawaii <sup>a,b</sup>	62.5	\$0.63	650.7	1.4	0.0	69.4
Idaho	31.2	\$0.14	341.9	0.2	0.0	14.4
Illinois	10.4	\$0.06	611.6	3.4	8.3	158.2
Indiana	6.5	\$0.02	468.2	1.5	0.0	139.2
Iowa	13.8	\$0.05	408.9	0.6	0.0	66.3
Kansas	38.2	\$0.21	455.2	1.0	2.5	80.5
Kentucky	48.2	\$0.25	298.4	1.7	1.8	78.5
Louisiana <sup>a,b</sup>	70.2	\$1.55	614.9	7.6	19.9	240.6
Maine	2.0	\$0.01	247.4	0.7	0.0	10.4
Maryland	8.9	\$0.11	600.6	5.4	25.5	130.8
Massachusetts	44.1	\$0.19	338.9	1.9	0.0	38.0
Michigan <sup>a</sup>	50.1	\$0.30	542.6	1.2	10.0	154.9
Minnesota	20.7	\$0.06	357.6	0.9	1.4	64.4
Mississippi	33.5	\$0.26	988.6	2.9	0.0	257.1
Missouri	3.0	\$0.01	571.4	2.9	3.9	175.9
Montana	0.0	\$0.00	412.1	0.1	0.0	20.7
Nebraska	44.0	\$0.20	500.0	0.4	0.0	81.5
Nevada	1.2	\$0.00	521.8	5.7	42.6	115.6
New Hampshire <sup>a</sup>	51.5	\$0.28	223.4	1.0	0.0	13.7
New Jersey	18.2	\$0.09	370.6	2.0	13.0	63.0
New Mexico <sup>a,b</sup>	46.2	\$0.70	760.8	4.1	24.7	89.9
New York	13.6	\$0.09	489.2	3.8	6.0	90.7
North Carolina	19.0	\$0.14	618.8	3.6	5.0	199.4
North Dakota	8.8	\$0.05	386.0	0.2	0.0	24.0
Ohio	19.9	\$0.08	518.7	1.6	0.0	167.4
Oklahoma	5.3	\$0.02	539.3	2.0	3.9	139.5
Oregon	26.9	\$0.14	359.8	0.8	0.0	40.1
Pennsylvania	14.8	\$0.08	445.4	2.1	0.0	92.2
Rhode Island <sup>a,b</sup>	60.5	\$0.72	390.9	1.3	0.0	47.2
South Carolina	0.0 <sup>c</sup>	\$0.00	873.7	1.6	3.5	242.5
South Dakota	28.6	\$0.15	492.7	1.7	0.0	47.3
Tennessee <sup>b</sup>	38.0	\$0.34	603.2	4.2	7.5	162.6
Texas	37.4	\$0.20	525.9	4.7	20.7	133.2
Utah	24.1	\$0.07	281.2	0.9	3.9	36.0
Vermont	7.6	\$0.03	283.7	0.5	0.0	11.6
Virginia	34.8	\$0.31	460.0	2.5	2.9	85.6
Washington	17.3	\$0.10	413.5	2.9	0.0	67.3
West Virginia	0.0 <sup>c</sup>	\$0.00	238.0	0.6	0.0	52.5
Wisconsin	3.6	\$0.01	522.7	1.2	0.0	125.1
Wyoming	31.1	\$0.30	416.1	0.0	0.0	23.6

Abbreviation: STD, sexually transmitted disease.

<sup>a</sup>Percentage of state funding in the STD prevention budget is among the 10 highest in the United States.

<sup>b</sup>Per capita state STD prevention funding is among the 10 highest in the United States.

<sup>c</sup>Only one program returned a survey from South Carolina and West Virginia. The STD program from these states and from Georgia did not return a survey.

**TABLE 3 • How states distributed funding for STD prevention, 2007 (N = 51)**

	No. of states (%)
State budget line item for disease prevention, clinical services, or similar category directed to the state agency (eg, state health department)	13 (25.5%)
State budget line item for STD directed to specific program (eg, STD program)	12 (23.5%)
State budget line item for STD directed to state agency	8 (15.7%)
No state funding received/no funding path specified	6 (11.8%)
State budget line item for STD, and a state budget line item for disease prevention, clinical services, or similar category directed to the state agency	5 (9.8%)
State budget line item for STD directed to a specific program, and a state budget line item line for disease prevention, clinical services, or similar category directed to the state agency	4 (7.8%)
State budget line item for disease prevention, clinical services, or similar category directed to the state agency and also to a specific program	2 (3.9%)
State budget line item for STD directed to a specific program and also to the state agency	1 (2.0%)

Abbreviation: STD, sexually transmitted disease.

state health department) was the recipient of the line item. In other states, a specific program (such as STD or immunization) was the designated recipient of the funding. State funding also reached the STD prevention effort through state budget designations for public health generally or through a disease prevention or clinical services line item. In these cases, state funding was usually directed to a state agency and then distributed to the appropriate state program. In many cases, the state distributed funding through a combination of channels (see Table 3).

While a state budget line item for disease prevention, clinical services, or similar category directed to the state agency was the most frequently reported means of receiving state funding for STD prevention (25.5%), those states receiving funding only via this mechanism were not generally among the top 10 state STD prevention funders with the exception of Alabama, Louisiana, and New Mexico. Rhode Island, Connecticut, and Arkansas received state funding via a combination of an STD line item directed toward the STD program and a disease prevention and clinical services line item directed to the agency. Hawaii received state funding for STD prevention through an STD line item directed toward the state agency. New Hampshire and Michigan received state funding through an STD line item in the state budget directed to the STD program. Finally, Florida received state funding for STD prevention through a disease pre-

vention and clinical services line item directed to the STD program and also to the agency.

In each state, contributions for STD prevention were reported by at least one of the four public health programs participating in this study. STD programs most often reported state funding for STD prevention. Of the 43 STD programs responding to the survey, 88 percent (or 38) reported state funding for STD prevention. Of the 32 state laboratory directors responding to the survey, 65.7 percent (or 21) reported state contributions for STD prevention. Immunization managers reported state funding less frequently. Of the 30 immunization programs responding to the survey, 23.3 percent (7) reported state funding for STD-related vaccines, while 6.7 percent (2) reported state funding for STD prevention activities and programming generally. Finally, of the 21 state hepatitis programs reporting, 14.3 percent (3) reported state funding for hepatitis B vaccine (HBV), and 9.5 percent (2) reported state funding for STD program-related activities.

### • Where Did the Money Go? How States Expended State Funding for STD Prevention

States reported how they expended state funding for STD prevention according to standard public health expenditure categories. These included program administration, clinical staff, laboratory and laboratory staff, surveillance and epidemiology, evaluation and quality assurance, medications, STD-related vaccines, health education and social marketing, screening and testing, evaluation, and quality assurance; capacity building, technical assistance, and training; supplies such as test kits and condoms; and partner services—which for some states were not solely provided by those who were engaged in surveillance and field epidemiology (known as disease intervention specialists or “DIS”).

Expenditure data were viewed and interpreted with caution, because they represented only the expenditure of state funding rather than total funds from state, federal, and others. Many states, for example, direct state resources toward funding costs that are not covered by federal resources. When viewed on a national level, laboratory testing and laboratory staff together comprised the largest category of expenditures (28%), followed by disease surveillance and epidemiology and clinical staff (both 16%). The category disease surveillance and epidemiology included field epidemiology conducted by staff such as DIS and other epidemiologists, and it included disease surveillance and monitoring activities such as disease reporting and analysis. Clinical staff included medical staff assigned to clinics or other STD treatment venues. STD-related vaccines

**TABLE 4 ● Reported state funding earmarked for STD-related vaccines by recipient program, 2007**

State	STD program vaccine funding	Immunization program vaccine funding	Hepatitis program vaccine funding	Total state STD prevention budget	STD-related vaccine funding as a % of total state STD funding
California	\$0	\$555 000	\$0	\$5 588 942	9.9
Connecticut	\$0	\$306 000	\$0 <sup>a</sup>	\$1 624 000	18.8
Illinois	\$99 746	\$224 000	\$0 <sup>a</sup>	\$766 849	42.4
Louisiana	\$73 289	\$0 <sup>a</sup>	\$0 <sup>a</sup>	\$6 500 710	1.1
Missouri	\$0	\$0	\$61 700	\$74 700	82.6
New York	\$0	\$1 000 000	\$0 <sup>a</sup>	\$1 761 000	56.8
North Dakota	\$0	\$0	\$30 000	\$30 000	100.0
Ohio	\$0	\$700 000	\$0 <sup>a</sup>	\$900 000	77.8
Oklahoma	\$0 <sup>a</sup>	\$0	\$37 000	\$77 000	48.1
Pennsylvania	\$56 800	\$0 <sup>a</sup>	\$0 <sup>a</sup>	\$1 026 800	5.5
Texas	\$0	\$2 734 000	\$0 <sup>a</sup>	\$4 674 214	58.5
Virginia	\$0	\$1 300 000	\$0 <sup>a</sup>	\$2 315 557	56.1

Abbreviation: STD, sexually transmitted disease.

<sup>a</sup>This state did not return a survey for this program.

included the purchase of HBV, combination hepatitis A/B vaccines (HAV/HBV), and human papillomavirus vaccines (HPV). These vaccine purchases comprised 15 percent of the state expenditures in STD prevention and also include other related expenses such as vaccine administration.

There were several issues with the analysis of how states expended state funding for STD prevention. While every state detailed some of its expenditures, only 54.9 percent or 28 jurisdictions detailed the spending of all reported state funding for STD prevention. Less than half of the states (45% or 23 states) partially categorized the spending of reported funding. In some cases, this was due to the procurement of outcome-based contracts with local communities that did not specify how funding should be expended. Five states (or 9.8%) reported spending more than they received in state contributions.

### ● **STD-Related Vaccines (HBV, Combination HAV/HBV, HPV)**

While several states purchased STD-related vaccines with state funding, only 12 states (23.5%) distributed funding specifically earmarked for STD-related vaccines. Five of these states reported such funding for the first time in the last 2 years. This may reflect an emerging policy priority to finance the purchase of STD-related vaccines. In two states (North Dakota and Missouri), funding for vaccine purchase comprised over 80 percent of the reported state STD funding. Data from the 12 states reporting state funding for STD-related vaccines are found in Table 4.

Most of the state funding earmarked for STD-related vaccines was directed to hepatitis B vaccination for adults, and/or for children who were not eligible for the federal Vaccines for Children program.\* Two states, Texas and Virginia, directed almost all of the earmarked funding toward the purchase of human papillomavirus vaccine.<sup>†</sup>

### ● **Discussion**

As states enter a new era of fiscal austerity and public health efforts are being cut back, it is important to help states understand the benefit of public health investment. It is likely that states are unaware of what it costs them to treat STDs and their sequelae as a result of a lack of investment in STD prevention. Increasing state awareness of the comprehensive investment in STD prevention is also of value, particularly when programs that are not traditional STD programs may not view state revenue to their program as part of the

\*The Vaccines for Children Program is funded by the Centers for Disease Control and Prevention. This program provides vaccines for children through the age of 18 years with the following eligibility: Medicaid eligible or uninsured, or American Indian/Alaskan Native, or children who are underinsured (eg, their health insurance does not provide for vaccine coverage). For more information, see <http://www.cdc.gov/vaccines/programs/vfc/>.

<sup>†</sup>The Texas Immunization program reported directing 98 percent of its STD vaccine funding toward human papillomavirus vaccine. The remaining amount was directed to purchase hepatitis B vaccine for children who were not eligible for the Vaccines for Children program.

state's contribution to the STD prevention effort. If it is true that investment in prevention will reduce future related health costs,<sup>14-18</sup> there should be a continued effort to help states better understand their contributions to STD prevention and, in the long run, to track the impact of these investments on epidemiologic indicators. This study's intent was to measure FY 2007 investment as a baseline for future comparisons. Such longitudinal financial and epidemiologic evaluations might help answer the question of whether funding levels impact epidemiology.

Although the federal government carries most of the STD prevention funding burden, it was found that states are in fact providing some funding for their STD prevention efforts. Still, states can do a better job of funding their own STD prevention efforts, particularly when it is more efficient to prevent cases of STDs than to treat them and their harmful consequences. Such an argument has been made since 1997 and as recently as this year.<sup>19-21</sup>

This study is the first of its kind to detail the state contribution toward STD prevention and to gather this information from more than one public health program engaged in some part of the STD prevention effort. Even as some programs had less than a strong response rate (immunization and hepatitis), data suggest that these programs have been avenues for state investment in STD prevention. As states continue to consider STD vaccines, it is likely that these programs will have an expanded role in STD prevention.

To more fully understand state contributions to STD prevention, it will be necessary to include expenditures for STD testing and treatment from state correctional facilities and state Medicaid programs. Access to these utilization datasets (Medicaid and correctional health) will be particularly difficult, as several states outsource data management, which means that there will be a charge to access data of this kind. Despite the challenge, Medicaid and correctional health programs should be involved in future studies. Such data may also allow for cost-efficiency analyses, so that states can understand what they spend on both ends of the STD spectrum (prevention to treatment of sequelae) in certain populations.

Federal funding for state immunization programs (Vaccines for Children and 317) was not included in the calculation of federal financial resources for STD prevention because data were not available from the CDC detailing whether and how individual states directed this resource for STD prevention. Both federal resources allow funding to be directed toward STD prevention services on the basis of grant requirements and state determination. Future studies will request this information from state immunization directors to

more fully describe the federal investment in STD prevention.

While it was important to know how states directed the state resources for STD prevention, it is not sufficient for an understanding of how states are directing financial resources toward the STD prevention effort. State programs often use state resources to supplement services that federal grants will not cover, or inadequately cover. Future studies will need to track how states expend all resources (federal and state) for STD prevention.

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