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The Impact of Budget Cuts on Sexually Transmitted Disease Programmatic Activities in State and Local Health Departments With Staffing Reductions in Fiscal Year 2012

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Abstract

Staffing reductions in state and local health departments in fiscal year 2012 were concentrated in disease investigation specialists and clinicians (local) and disease investigation specialists and administrative staff (state). Local health departments with budget cuts were significantly more likely to report reduced partner services if they had staffing reductions.

Public health sexually transmitted disease (STD) programs at state and local health departments (LHDs) typically focus on surveillance, clinical, laboratory, partner services, community outreach, mobilization, health promotion, and provider education.[1] Programs typically strive to allocate their budgets in a manner to achieve the greatest reduction on STD morbidity and transmission that is possible with available funding. As funding levels change, programs may change activities or staffing. Changes in staffing or programmatic activities may impact STD prevention and population-level STD rates.

Federal, state, and local public health fundings are important because they aid in the prevention of diseases, including transmission of infectious diseases, and improve population health.[2] For example, research has shown that higher levels of US federal public health funding for STD/HIV was associated with subsequent declines in gonorrhea.[3] A separate study found that syphilis elimination funding was associated with lower rates of syphilis in subsequent years.[4] However, at the federal level, funding from the Centers for Disease Control and Prevention for STD prevention declined 24% between 2002 and 2008.[5] Thus, it is important to monitor STD-related budgets, staffing levels, and prevention activities. We examined STD budget and staffing changes and associated changes in programmatic activity at state and LHDs.

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The findings and conclusions in this article are those of the authors and do not necessarily represent the official position of the US Centers for Disease Control and Prevention.

MATERIALS AND METHODS

We surveyed 311 LHDs and all state health departments (SHDs) using methods described previously.[6] The survey was conducted in late 2013 and early 2014. The response rate was 48% for LHDs and 61% for SHDs. As previously described, cities directly funded by the CDC's Division of STD Prevention that were included in the SHD sample were considered LHDs for this analysis.[6] Respondents were asked if they had experienced a decrease in full-time employee (FTE) staffing levels during their 2006 to 2011 fiscal years and were asked the same question separately about FTE reductions during their 2012 fiscal year. Those who indicated there had been staffing reductions in the department's 2012 fiscal year were asked to identify the job categories in which FTEs decreased. Respondents were also asked to identify if there had been budget cuts to their STD programs during their 2011 or 2012 fiscal years and were asked to identify areas in which budget cuts were applied: reduced clinical services, initiated or increased fees or copays, or reduced partner services.

We used SAS (SAS Institute, Incorporated, Cary, NC) to calculate the responses to the change in staffing level questions and also tabulated a frequency distribution of FTE reductions for LHDs and SHDs that experienced reductions in fiscal year 2012. χ^2 Tests were used to test differences pairwise for LHDs versus SHDs for several analyses. First, we examined reductions in specific staffing categories. We also examined staffing reductions in fiscal year 2012 versus staffing reductions in fiscal years 2006 to 2011. Finally, we examined potential associations between specific staff reductions and budget cuts impacting related services. The LHD responses were weighted based on jurisdiction size and region to be representative of the 1225 LHDs nationally that indicated they offered STD testing or treatment in a 2010 survey.[7] For analyses that compared LHDs and SHDs, all SHDs were assigned a weight of 1.

RESULTS

Staffing category reductions for fiscal year 2012 are reported in Table 1. Overall, 17.5% of LHDs and 26.9% of SHDs reported staffing reductions in fiscal year 2012 (supplemental content Table 1, http://links.lww.com/OLQ/A295). Of programs that had staffing reductions in fiscal year 2012, the most common categories that were reduced were clinicians (64.9%) and disease investigation specialists (DIS) (47.6%) in LHDs and DIS (57.1%) and nonmanagerial administrative staff (57.1%) in SHDs. The percentages of LHDs and SHDs reporting overall net staffing changes in fiscal years 2006 to 2011 and fiscal year 2012 are in the supplemental content (Table 1, http://links.lww.com/OLQ/A295). The percentage of LHDs that reported a decrease was 35.3% in fiscal years 2006 to 2011 and 17.5% in fiscal year 2012 versus 53.8% and 26.9% of SHDs, respectively. Few LHDs (3.2%; 2.9%) or SHDs (11.5%; 7.7%) reported staffing increases in either timeframe, respectively.

Over 80% of LHDs that experienced staffing reductions in fiscal year 2012 also had staffing reductions in fiscal years 2006 to 2011, whereas only 34% of LHDs that experienced no staffing reductions in fiscal year 2012 had reductions in fiscal years 2006 to 2011 (Table 2; $P < 0.0004$). Overall, 17% of all LHDs had staffing reductions in both time periods (data not shown). Of the few LHDs who reported staffing increases in either fiscal year timeframe,

none had increases in both timeframes. Of the 3 LHDs who reported staffing increases in fiscal year 2012, the majority (54.1%) reported staffing decreases in fiscal years 2006 to 2011 (not shown).

Table 3 shows individual programmatic impacts of cuts in LHDs that did and did not experience staff reductions in fiscal year 2012. Compared with LHDs with no staffing reductions, LHDs with staffing reductions in fiscal year 2012 were significantly more likely to report that fewer STD cases other than early syphilis were followed up for treatment and that fewer partner services were offered for chlamydia and gonorrhea ($P < 0.05$). LHDs with staffing reductions in fiscal year 2012 were less likely to report no budget cuts to STD programs than LHDs with no staffing reductions ($P < 0.001$). Local health departments reporting clinical staff reductions were significantly more likely to report STD clinic closures (12.8%; 95% confidence interval [CI], 0.0%–30.9%) than LHDs with no staffing reductions (1.0%; 95% CI, 0.0%–3.1%) ($P < 0.05$, supplemental content, Table 2, http://links.lww.com/OLQ/A296).

DISCUSSION

This analysis showed that LHDs with staffing reductions in fiscal year 2012 were also likely to have experienced staffing reductions in the preceding five fiscal years, indicating the potential for a long-term reduction in program capacity over the same timeframe in which reported rates of all reportable STDs have increased.[8] Staffing reductions were common in LHDs that experienced budget cuts and rare in LHDs without budget cuts. Almost half (46%) of LHDs with no staff reductions reported no budget cuts to their STD program versus only 4% of LHDs with staff reductions. We found, particularly at the local level, that STD cuts were implemented in ways that might reduce programmatic activity. Staff reductions at the local level were concentrated in DIS and clinician staff, and LHDs with staff reductions were significantly more likely to reduce partner services and, for LHDs with reductions in clinician staff, close STD clinics. Studies in other fields and qualitative studies of public health responses to budget cuts have similarly found that staffing reductions are common and that restrictions in nonmandated services are typically part of the response to declines in budgets.[9–11] Previous ecological analyses have shown that STD prevention funding and partner notification have an impact on STD prevalence, with greater funding and greater programmatic activity being associated with lower STD prevalence.[3,4,12]

The STD clinics are a critical component of public health STD control.[13–15] Previously published data from this survey showed that LHDs that used STD clinics as the primary referral site for STD care versus another type of clinic were significantly more likely to offer extragenital chlamydia and/or gonorrhea testing (74.7% vs. 36.4%) and gonorrhea culture (68.5% vs. 46.2%) ($P < 0.05$).[16] Extragenital testing is an important clinical service for men who have sex with men (MSM), and gonorrhea culture is an important tool in monitoring and detecting antimicrobial resistance.[17,18] Reducing the frequency of either type of testing could lead to missed infections and increased transmission.[19–21] Reducing the number of clinicians in public health clinics could lead to such a reduction. At the state level, some staffing cuts have been applied in managerial or administrative areas, but these options may be less available in LHDs.

This analysis is subject to limitations. The number of respondents at both the LHD and SHD levels was relatively small. We were not able to analyze nonrespondent characteristics to assess if respondent HDs differed from nonrespondents. We were not able to assess which health departments had staff in the categories listed in the survey and what percentage of staff in categories that were represented in any given health department were retained or cut. LHDs and SHDs may have had varying start dates for their fiscal years, so a staffing reduction might have been reported as occurring in fiscal years 2006 to 2011 in one program and fiscal year 2012 in another even if imposed on the same day. Given the relatively small number of respondents who experienced staffing reductions in fiscal year 2012, the ability to identify specific programmatic impacts associated with the reductions was limited. However, even given these limitations, some significant impacts in programs with staffing reductions in fiscal year 2012 were apparent.

These findings suggest mechanisms through which funding cuts to STD programs may result in higher STD rates. Understanding how funding impacts programmatic activity, together with data on program outcome measures, may improve forecasts of the impact of STD program funding changes at the state and local level.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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TABLE 1.

Reduction of FTE Staffing Among Those Health Departments Reporting Decrease in Staffing Levels in Fiscal Year 2012*

	LHDs		SHDs		
	n	Weighted % (95% CI)	n	Unweighted % (95% CI)	*P*†
DIS	14	47.6 (22.7–72.5)	4	57.1 (7.7–100.0)	0.67
Clinician	13	64.9 (42.3–87.4)	1	14.3 (0.0–49.2)	0.02
Epidemiologist	1	7.6 (0.0–22.7)	1	14.3 (0.0–49.2)	0.23
IT staff	1	8.4 (0.0–25.0)	1	14.3 (0.0–49.2)	0.69
Program manager	3	19.5 (0.0–41.3)	2	28.6 (0.0–73.7)	0.64
Nonmanagerial administrative staff	8	27.0 (5.8–48.2)	4	57.1 (7.7–100.0)	0.15
Evaluator	6	21.7(0.9–42.4)	1	14.3 (0.0–49.2)	0.68
I don’t know	6	32.0 (7.2–56.9)	1	14.3 (0.0–49.2)	0.37

*17.5% of local health department respondents and 26.9% of state health respondents who provided a response to this question indicated a net reduction in staffing in fiscal year 2012 (Supplemental Table 1, http://links.lww.com/OLQ/A295). Additional categories of “health educator” and “other” were omitted from the table because no health departments indicated staffing reductions in those categories.

†*P* value tests the difference between LHDs and SHDs.

For LHD and SHD comparisons, states were assigned a weight = 1.

TABLE 2.

Staff Reductions 2012 by 2006 to 2011, LHDs

	LHDs (N = 94)	
	Had Staff Reductions in FY2012 (n = 24)	Had No Staff Reductions in FY2012 (n = 70)
	Weighted % (95% CI)	Weighted % (95% CI)
Had staff reductions in FY 2006–2011 *		
Yes	80.6 (62.2–99.0)	34.2(21.6–46.8)
No	19.4(1.0–37.8)	65.8 (53.2–78.4)

* "Don't know" recoded as missing. "No change" and "increase in staff" recoded as no staff reductions. $P = 0.0004$.

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TABLE 3.

Staff Reductions by Budget Cuts and the Associated Negative Program Impacts in FY2011–2012

	LHDs (N = 107)	
	No Staff Reductions (n = 84)	Had Staff Reductions (n = 23)
Impact of Cuts	**Weighted % (95% CI)**	**Weighted % (95% CI)**
Did not have budget cuts to STD program	46.4 (34.2–58.6)	4.0 (0–11.8) †
Reduced clinical services		
Specialty STD clinic closures	1.0 (0–3.1)	8.0(0–19.3)
Fewer clinic hours	11.8(3.9–19.8)	25.9(6.1–45.8)
Reduction in routine screening	12.6 (4.3–20.8)	17.6(0–36.3)
Copayments for clinical services		
Initiated fees or copays	5.5 (0–11.1)	11.7(0–23.8)
Increased existing fees or copays	8.0 (1.7–14.2)	12.1 (0–27.4)
Reduction in partner services		
Fewer early syphilis cases followed up for treatment	0	3.1 (0–9.2)
Reduced PS for early syphilis	0	3.1 (0–9.2)
Fewer STD cases other than early syphilis followed up for treatment	2.6 (0–6.6)	23.7 (4.2–43.3) *
Fewer partner services for chlamydia, gonorrhea, and other STD	9.3 (1.8–16.8)	32.1 (9.5–54.8) *
Other	4.2 (0.1–8.4)	8.0(0–17.2)

* $P < 0.05$.

† $P < 0.001$.

All n's are unweighted and percentages are weighted to represent the 1225 LHDs who provided STD services in 2010.