Texas Public Health Funding and Policy Committee
Texas Local Health Department Survey: An Analysis

Prepared by:

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INTRODUCTION AND BACKGROUND

In 2011, the 82nd Texas Legislature passed Senate Bill 969, which established the Public Health Funding and Policy Committee (Committee). Committee members appointed by the Health Commissioner included:

- Two regional health directors, each of whom is serving as a health authority in a municipality or county;
- One local health entity representative of a municipality or county with a population of 50,000 or less;
- One local health entity representative from a municipality or county with a population greater than 50,000 but less than 250,000;
- One local health entity representative from a municipality or county with a population of at least 250,000;
- Two local health entity representatives, each of whom serves in a municipality or county as the health authority; and

To meet this charge, in part, the members developed and conducted a survey with full service and non-participating Local Health Departments (LHDs) in Texas. The aim of the survey was to identify public health services provided by Texas LHDs and to determine funding needs (Texas Department of State Health Services, 2013).

Description of Local Health Department Types

While LHDs receive funding and guidelines from and work in collaboration with the Texas Department of State Health Services (DSHS), they are organizationally and politically autonomous from the state health department (Centers for Disease Control and Prevention, 2007). Local health departments in Texas are characterized as full service LHDs (formerly State-Participating Health Departments) and non-participating LHDs. The number of full service and non-participating health departments varies, but it is unknown whether this is due to shifts in federal, state, and local funding, changes in service or program priorities, or if the nature of the Texas public health system impedes information sharing between LHDs and the State, when these changes occur.

Full service local health departments. Full service refers to LHDs that receive preventive health block grant contracts from DSHS, as well as most other programmatic contract funds related to tuberculosis (TB), Human Immunodeficiency Virus (HIV), sexually transmitted diseases (STD), Title V, etc. Non-participating LHDs typically do not. By receiving state funds, full service LHDs have specific requirements and services they must provide as a condition of funding. As a result, full service LHDs most often provide a wide array of public health services, such as immunizations, restaurant and septic tank inspections, maternal and child health care services, public health education, dental services, and HIV and STD testing and counseling. Reports on the number of full service LHDs range from 59 to 67. For the purpose of this report, we will be using 59, which is the number provided by DSHS staff.

Non-participating local health departments. Non-participating LHDs receive little to no state funding or assistance, but are still eligible for certain federal funds. The only way for non-participating LHDs to become a full service LHD is through a reapportionment of existing or creation of new funds. Some non-participating LHDs are larger health departments, however most are small and provide mainly environmental services such as animal control and septic tank and restaurant inspections. Reports on the number of non-participating LHDs ranges from 70 to 83. For the purpose of this report, we will be using 70, as indicated by DSHS staff.

METHODS

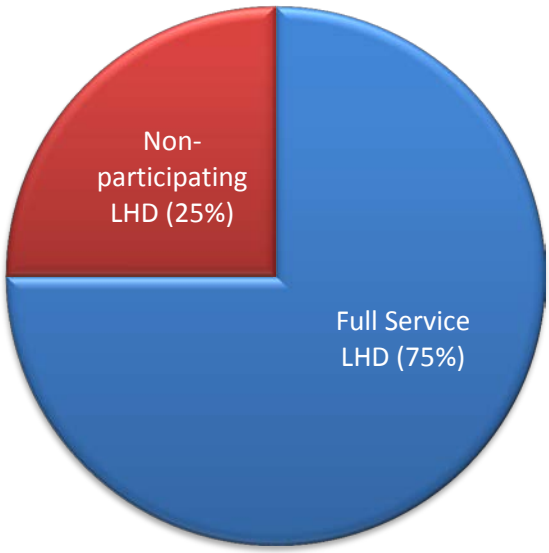
The Committee established a sub-committee to work with DSHS staff to develop and disseminate a survey to 129 known directors of local health departments and districts. The web-based survey was disseminated in September 2012, with official announcements and follow-up to increase survey response rate (Texas Department of State Health Services, 2013). The Texas A&M Health Science Center School of Rural Public Health (SRPH) offered to conduct survey data analysis and prepare a summary report. The SRPH Office of the Dean contributed funding for doctoral students, with guidance from faculty, to support these activities. Quantitative data were received as a Microsoft Excel file that was imported into STATA 12.0 for analysis. Qualitative data were examined for common themes.

RESULTS

Local Health Department Respondent Profile

Fifty-six LHDs responded to the survey. One survey was dropped from analysis for an incomplete response resulting in a 43 percent response rate (n=55). Forty-one respondents (75%) were from full service LHDs and 14 (25%) were from non-participating LHDs as illustrated in Figure 1. Of the original 129, 59 (46%) were full service LHDs and 70 (54%) were non-Participating LHDs. The response rate, by LHD category, was 70 percent for full service LHD and 20 percent for non-participating LHD. While the response rate was fairly high for full service LHDs, it was low for non-participating LHDs. For this reason, in part, we caution against generalizing results throughout the report.

Figure 1. Local Health Department Respondents by Type of Local Health Department



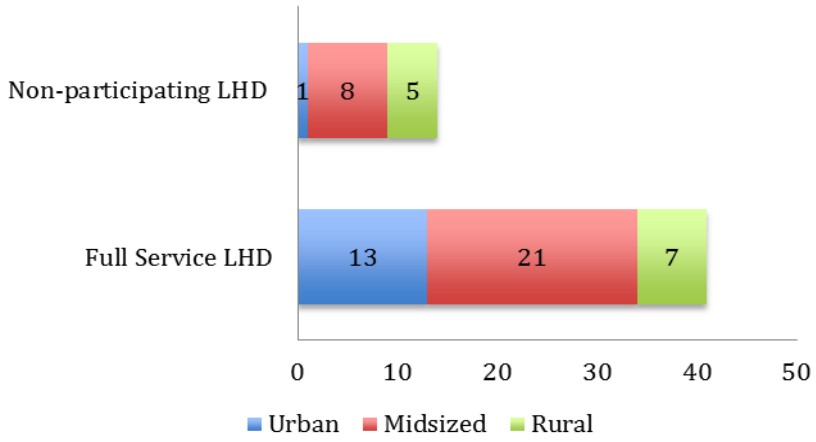
Description of local health department categories. Local health departments are located in various types and sizes of cities, towns, and populations. Senate Bill 969 categorizes LHDs service areas as rural, midsized or urban using the following definitions:

- Urban is a municipality or county with a population of at least 250,000;
- Midsized is a municipality or county with a population greater than 50,000 but less than 250,000; and
- Rural is a municipality or county with a population of 50,000 or less (Texas Senate Bill 969, 2011).

Of the 55 respondents, fourteen (25%) LHDs were in urban locations, 29 (53%) LHDS were in midsized locations, and 12 (22%) were in rural locations. Of the 41 full service LHDs respondents, half (51%, n=21) were located in midsized populations. Thirteen (32%) served urban populations and seven (17%) served

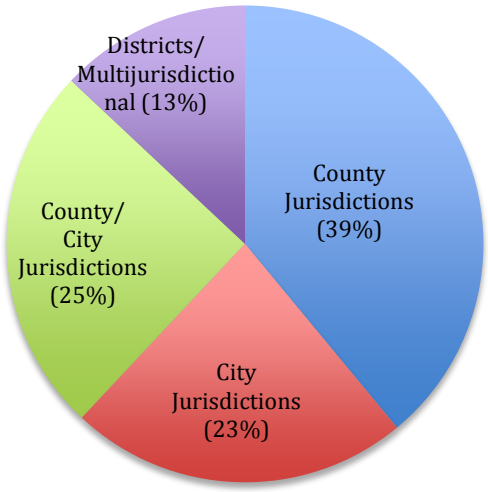
rural populations. Similar proportions were found in the 14 non-participating LHD respondents. One (7%) LHD was urban, eight (57%) were midsized, and five (36%) were rural. Figure 2 shows respondents based on LHD type and category (size of population served).

Figure 2. Local Health Department Respondents by Category



Other respondent characteristics. LHD respondent jurisdictions include county, city, county/city, districts, and multiple jurisdictions. Thirty-nine percent (n=22) are county jurisdictions; 23 percent (n=13) are city jurisdictions; 25 percent (n=14) are county/city jurisdictions; and 13 percent (7) are health districts or multijurisdictional. Figure 3 displays respondents by type of jurisdiction.

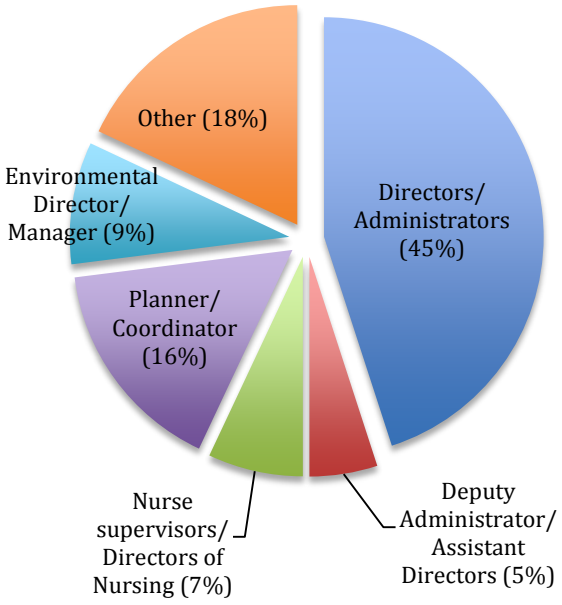
Figure 3. Local Health Department Respondents by Jurisdiction Type



The survey was sent electronically to the LHD directors but was not necessarily completed by them. Nearly half of the respondents (n=25) were LHD directors or administrators. Few (n=3) were deputy administrators or assistant directors. Other reported positions of survey respondents included nurse supervisors or directors of nursing (7%; n=4); planners or coordinators (16%; n=8); and environmental

managers/directors (9%; n=5). Eighteen percent of respondents (n=10) indicated an "other" position within the health department. While there was some variation in the "other" job category, the most frequent response was administrative assistant/administrative coordinator. Figure 4 depicts the variety of survey respondents.

Figure 4. Local Health Department Respondents by Job Category



Local Health Department Programs and Services

Service categories. Public health programs and services offered at LHDs encompass a wide array of service categories and vary from department to department, as do the activities within each service category. Service categories included in the survey were immunization services; tuberculosis services; HIV/STD services; disease surveillance and epidemiologic services; community preparedness services; laboratory services; public health regulatory services; direct clinical care services; WIC services; and oral/dental health services.

The most commonly provided service categories reported by the 55 respondents were immunization services (92%), community preparedness services (78%), disease surveillance and epidemiologic services (76%), public health regulatory services (76%), HIV/STD services (71%), and public health regulatory services (76%). Approximately half of the respondents reported provision of tuberculosis services (69%), direct clinical care services (46%), WIC services (46%), and laboratory services (37%). Oral/dental health services was the least reported service with only 16 percent (n=9) reporting provision of this service. Figure 5 shows the percentage of local health department respondents that reported provision of the different public health service categories. Each of the service categories and the associated activities will be described in more detail throughout the report.

Figure 5. Public Health Services Provided by Respondent LHDs

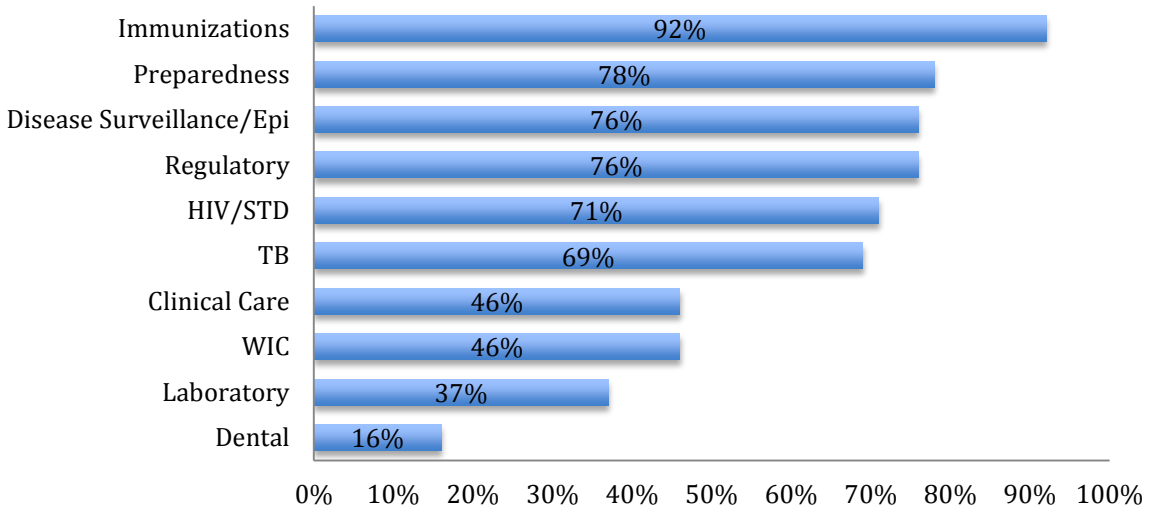


Figure 6 below illustrates the percentage of local health departments that provide public health services by LHD category. Fewer non-participating LHDs reported provision of the same services reported by full service LHDs, however, this is not unexpected given the distribution of respondents from non-participating and full service LHDs. Similar comparisons are made in Figure 7 which provides a breakdown of each service category by LHD survey respondents' service population type – rural, midsized, or urban.

Figure 6. Public Health Services Provided by LHD Respondent Category

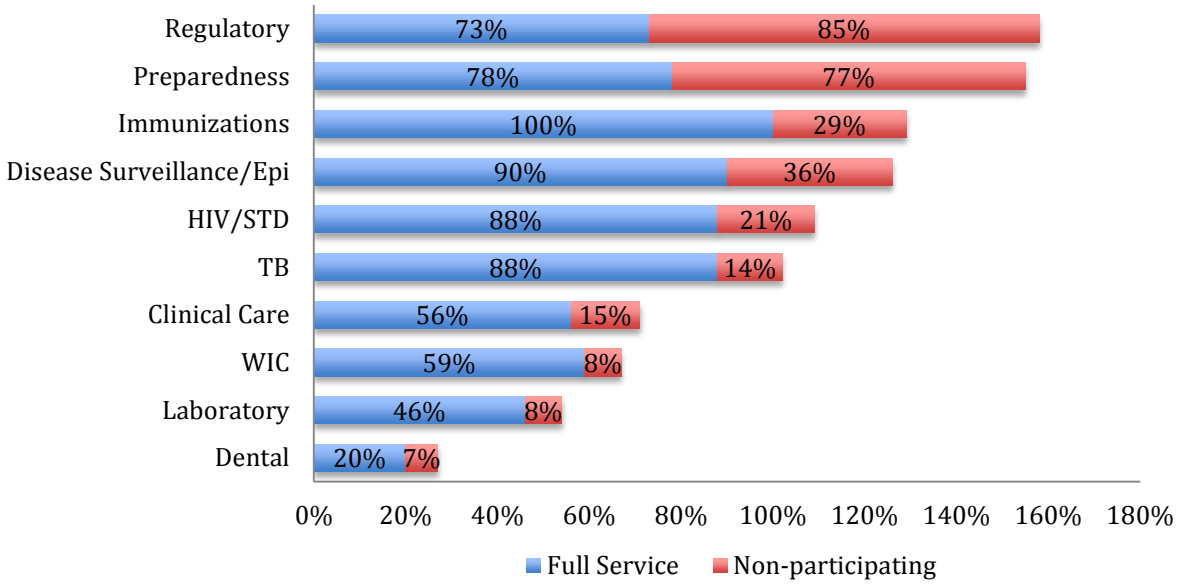
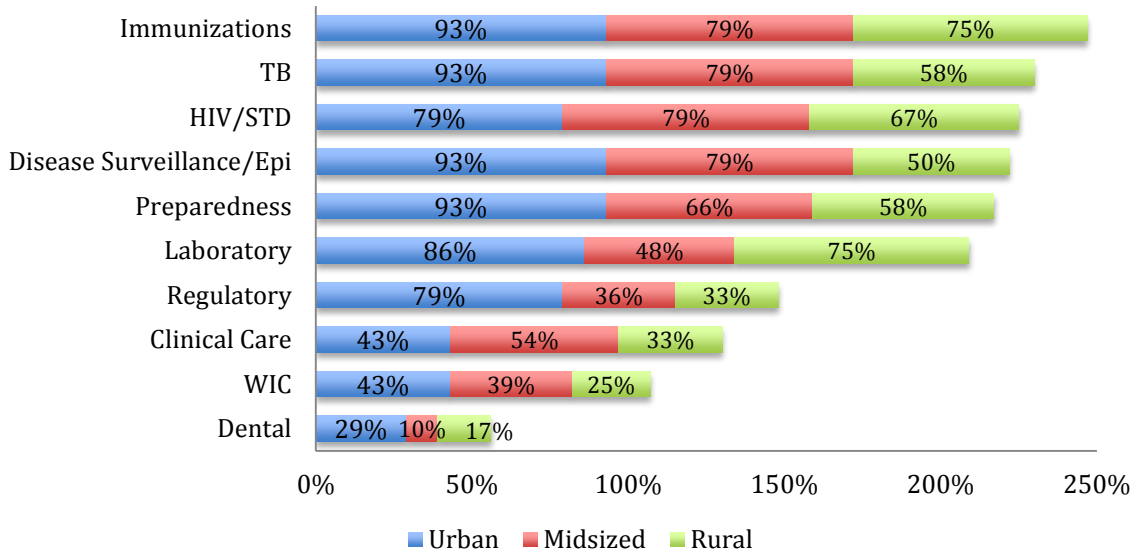


Figure 7. Public Health Services Provided by LHD Respondent Category



Funding sources. Funding for Texas public health programs comes from multiple sources, including direct federal funding, state funding, through contracts with Texas Department of State Health Services (DSHS) and other state agencies, local funding, and other funding.

State funding includes contracts with a mix of state and federal funds. Previous DSHS reports indicate funding primarily comprises two sources: approximately one-quarter from the Preventive Health and Human Services (PHHS) block grant from the Centers for Disease Control and Prevention and three-quarters from state general revenue. Local funding comprises city and/or county funding. Other funding sources included program revenue or fees for services, as well as private/nonprofit grants, donations, or foundation funds. Funding sources and amounts were based on Fiscal Year 2011 (Sept. 1, 2010 through Aug. 31, 2011). For all services except laboratory services and regulatory services, respondents were asked if DSHS was the organization's only source of funding for that particular service.

If a respondent LHD only received DSHS funding for a service, they were not asked the remaining questions about other sources of funding ***or*** the associated service category activities. If the respondent answered no (i.e., DSHS is ***not*** the sole source of funding), follow up questions asked them to identify the types of funding that support the service, including DSHS contracts, other state funding, direct federal funding, local funding, and other funding. While it was the intention of the Committee for respondents to include federal flow through dollars as state contract funds, it cannot be verified that all respondents answered this way.

According to the respondent LHDs, overall funding amounts, from all sources, ranged from $100.00 to just under $107,000,000. Nearly one-third (32%; n=18) of LHD respondents reported budgets totaling less than $1,000,000. Sixteen LHDs (29%) reported budgets between $1,000,000 and $2,999,999. Twenty-two LHD respondents (39%) indicated a total budget of greater than or equal to $3,000,000.

Ten responding LHDs (18%) reported direct federal funding; nine were full service LHDs and one was a non-participating LHDs. Six were urban, full service LHDs, three were midsized, full service, and one was a midsized, non-participating LHD. Ten LHDs (18%) do not receive any state funding. One was a midsized,

full service LHD, one is an urban, non-participating, five are midsized, non-participating, and three are rural, non-participating LHDs. Five non-participating LHDs receive some state funding. Only three LHDs (5%) do not receive any local funding, one of which is a non-participating LHD and two of which are full service LHDs. Nineteen LHDs (34%) receive funding from other sources, such as program revenue, private grants, non-profit grants, donations, or foundation funds. Eight of these LHDs are non-participating and eleven are full services LHDs. Figure 8 shows LHD respondents by funding source. Figure 9 shows the percentage of LHDs, by type, that receive funding by source.

Figure 8. Total LHD Respondent Funding by Source

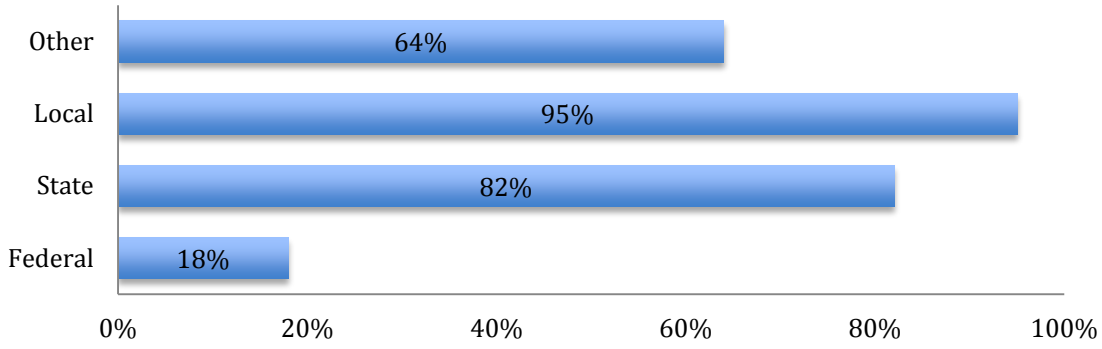
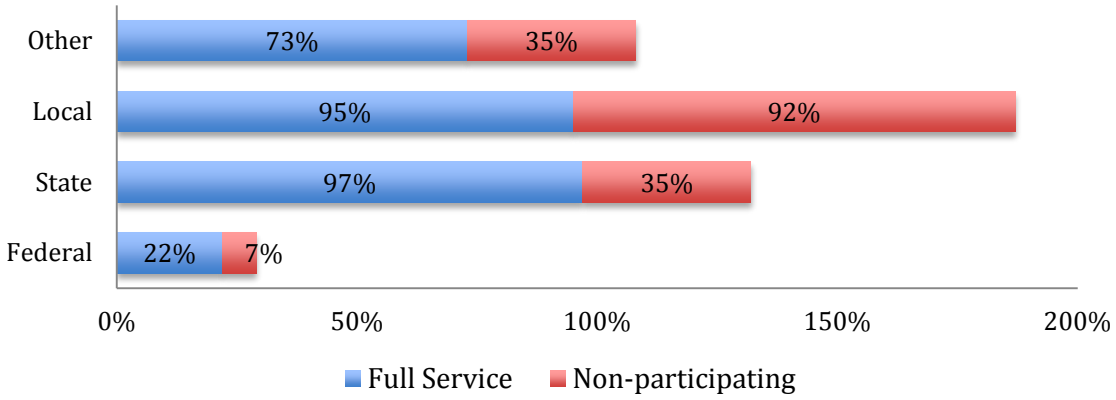


Figure 9. Total LHD Respondent Funding



Local Health Department Reported Service Descriptions

Immunization services. Forty-five survey respondents (82%) reported providing immunization services. Ninety-one percent are full service LHDs (n=41) and 9 percent are non-participating LHDs (n=4). Most responding LHDs reported they serve midsized populations (51%; n=23), 20 percent serve rural areas (n=9), and 29 percent serve urban areas (n=13).

Funding sources for immunization services. DSHS serves as the sole funding source for 22 percent (n=10) of respondents who provide immunization services. Of those who provide immunization services, 90 percent were full service LHDs. Analysis found that sole funding from DSHS contracts was most commonly reported

by LHDs serving midsized populations (80%) than those serving rural or urban areas (10%, each). For those reporting additional funding sources (n=35), the most commonly reported sources for immunization services were other DSHS contracts (86%) and local sources (89%). When examined by LHD type, full service LHDs were more likely than non-participating LHDs to report receipt of all additional types of funding. Figure 10 shows the distribution of types of funding sources by LHD category.

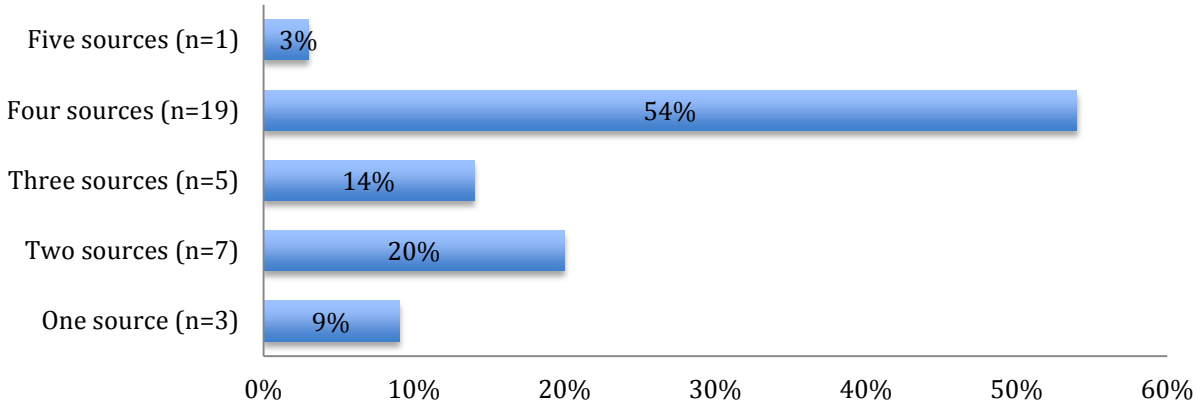
Figure 10. Reported Sources of Immunization Service Funding if Not Solely Funded by DSHS * (n=35)

	DSHS Contract (%)	Other State (%)	Direct Federal (%)	Local (%)	Other Sources (%)
Type					
Full Service n=32	93	67	100	94	96
Non-participating n=3	7	33	0	6	4
Category					
Urban n=12	33	0	100	36	17
Midsized n=15	47	67	0	42	50
Rural n=8	20	33	0	23	33

* Data reported is the percentage of LHDs reporting each funding source, not dollar amounts from those sources.

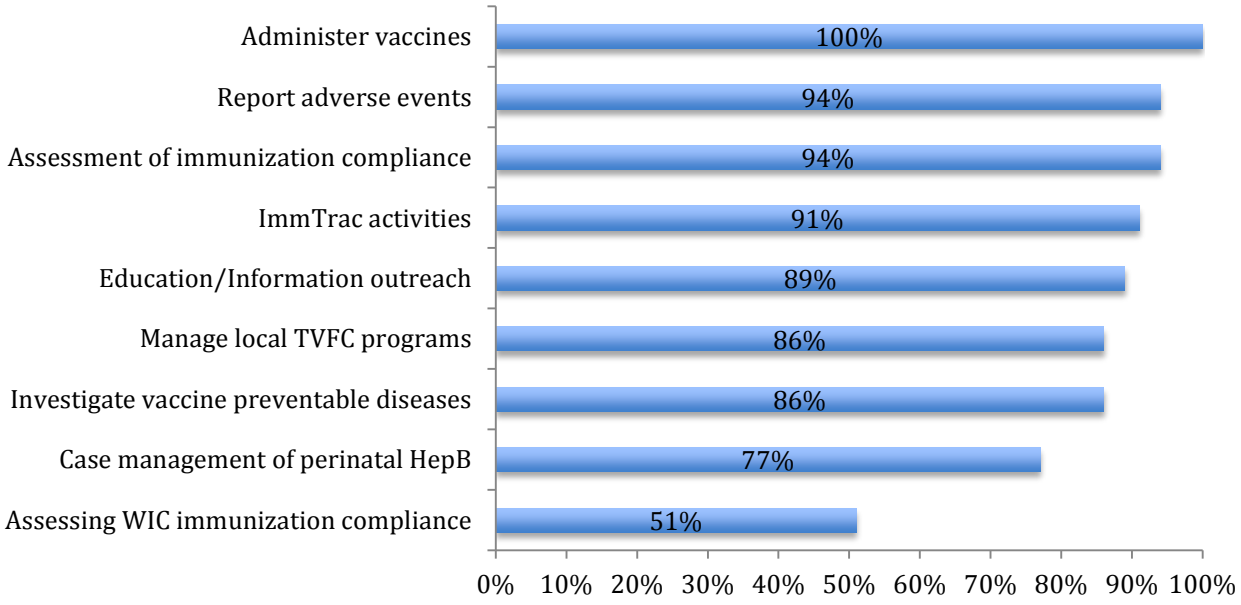
For those receiving immunization funding from multiple sources, over half (n=19) reported receiving such funding from four additional sources with a mean of three funding sources. Figure 11 shows the percentage of local health department respondents, not solely funded by DSHS, by number of funding sources. Full service LHDs were most likely to report more than one source of funding while non-participating LHDs were most likely to report only one additional source, which most frequently was from other state agency contracts for immunization services. A greater percentage of midsized LHDs have multiple sources of funding compared to urban and rural LHDs.

Figure 11. Number of Funding Sources



Immunization services. Immunization services examined in this survey included assessment of immunization compliance, investigating vaccine preventable diseases, reporting adverse events, administering vaccines, conducting case management of perinatal Hepatitis B, managing local Texas Vaccines for Children programs, performing ImmTrac activities, conducting education/information outreach, and assessing WIC immunization compliance. Only one service was offered by all 35 LHDs that reported provision of immunization services – administration of vaccines. The number of services offered by LHDs ranged from zero to eight, with a mean of seven services. Full service LHDs were more likely to provide a larger range of services than non-participating LHDs. The distribution of other immunization services is shown in Figure 12.

Figure 12. Immunization Services Provided by Local Health Departments



The survey asked participants to write in additional services provided related to immunization services that did not fall within the purview of the services listed in the survey. Other immunization services reported included providing immunization audits for independent school districts (ISDs) and day care centers, providing immunizations services to WIC clients, and participating in the National Electronic Disease Surveillance System (NEDSS).

When immunization services were analyzed against number of funding sources, the greater the number of services provided, the greater the number of additional funding sources were reported by responding LHDs (see Figure 13). As displayed in the table below and reported above, few LHDs reported receiving only one or two additional funding sources.

Figure 13. Number of Immunization Services Provided by Number of Funding Sources

	1 Source n=2	2 Sources n=7	3 Sources n=4	4 Sources n=19	5 Sources n=1
1 Service	0	0	0	0	0
2 Services	0	0	0	1	0
3 Services	0	0	1	0	0
4 Services	2	0	0	0	0
5 Services	0	0	0	0	0
6 Services	0	1	0	0	0
7 Services	0	4	2	10	0
8 Services	0	2	1	8	1

Tuberculosis services. Thirty-eight survey respondents (69%) reported providing tuberculosis services. Of those providing tuberculosis services, 95 percent were full service LHDs (n=36) and 5 percent were non-participating LHDs (n=2). Forty-five percent serve midsized populations (n=17), 24 percent serve rural areas (n=9), and 31 percent serve urban areas (n=12).

Funding sources for tuberculosis services. DSHS was reported as the sole source of funding for 18 percent of LHD (n=7) respondents who provide tuberculosis services, all of which were full service LHDs. DSHS contracts were somewhat more equal among urban, midsized and rural for tuberculosis services, with a distribution of 29, 43, and 29 percent, respectively. For those reporting additional funding sources (n=31), the most commonly reported sources for tuberculosis services were local sources (97%), other funding (49%), and DSHS contracts (26%). Direct federal funding was only reported as a funding source in full service LHDs and in LHDs serving urban populations. Midsized, rural and urban LHDs all reported funding from DSHS contracts, local funding, and other income for tuberculosis services, with fewer rural LHDs receiving funding than urban and midsized LHDs. A greater proportion of midsized LHDs receive funding from all three sources. Figure 14 shows the distribution of other funding sources by LHD category and type.

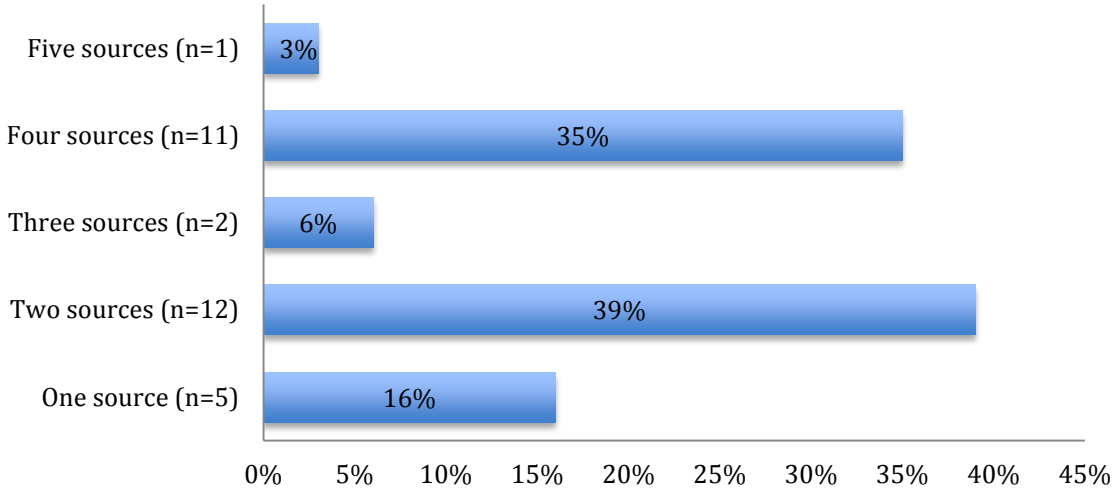
Figure 14. Reported Sources of Tuberculosis Funding if Not Solely Funded by DSHS * (n=31)

	DSHS Contract (%)	Other State (%)	Direct Federal (%)	Local (%)	Other Sources (%)
Type					
Full Service n=29	96	0	100	93	100
Non-participating n=2	4	0	0	7	0
Category					
Urban n=10	43	0	100	33	27
Midsized n=14	43	0	0	47	53
Rural n=7	13	0	0	20	20

* Data reported is the percentage of LHDs reporting each funding source, not dollar amounts from those sources.

A greater proportion of local health departments reported two or four sources for tuberculosis funding (39% and 35%, respectively). Figure 15 shows the percentage of LHDS which receive funding from multiple sources. Full service LHDs were more likely to have multiple funding sources. A greater percentage of non-participating LHDs only had one source, which are local sources or DSHS contracts.

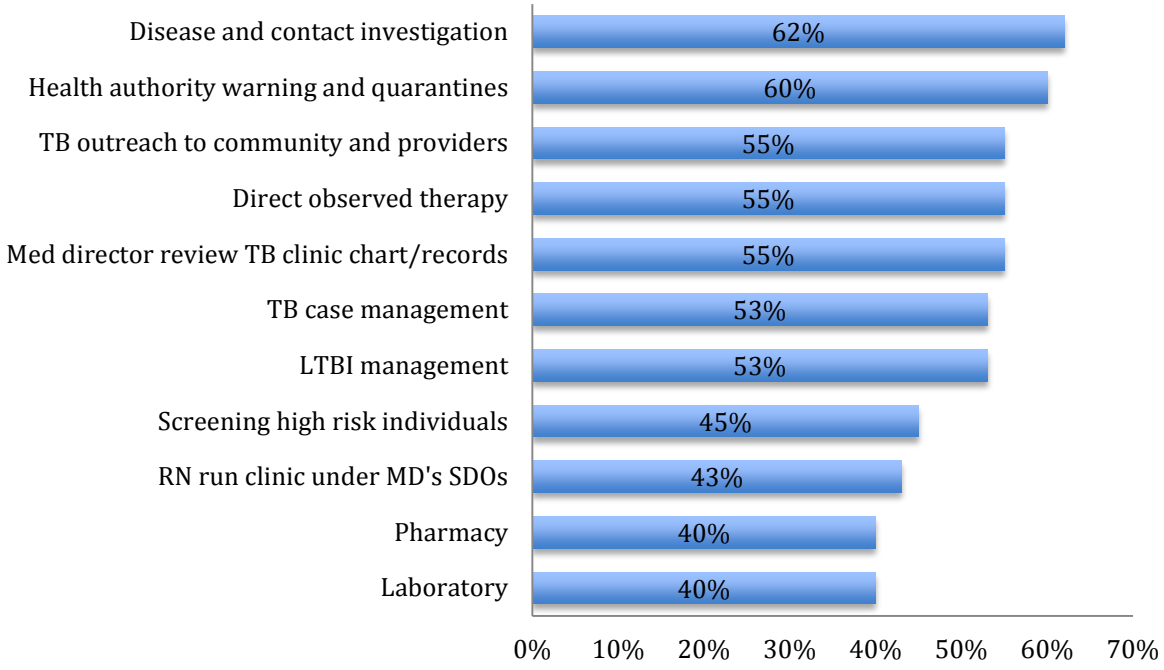
Figure 15. Number of Funding Sources



Tuberculosis services. Tuberculosis services examined in this survey included disease and contact investigation, health authority warning and quarantines, medical director reviews of TB clinic charts/records, registered nurse-run TB clinics under a medical doctor's standing direct orders, screening for high risk individuals, latent TB infection management, TB case management, direct observed therapy, laboratory services, pharmacy services, and TB outreach to the community and providers.

The number of services offered by LHDs ranged from one to eleven, with a mean of nine services provided. The two most commonly reported services were disease and contact investigation and health authority warning and quarantines. The least commonly reported tuberculosis service reported by respondents was pharmacy and laboratory services (40% of respondents each). Figure 16 displays the percentage of respondents providing each of the tuberculosis services. In the case of each of these services, full service LHDs were much more likely to provide a large range of services compared to non-participating LHDs.

Figure 16. Tuberculosis Services Provided by Local Health Departments



Other tuberculosis services reported in addition to the core tuberculosis services listed by respondents included targeted testing, bi-national programs and activities, correctional facility/county jail services, LVN run clinic under MD SDO'S, food pantry services for TB patients and families in isolation, and human services referrals for other services, e.g. housing.

Similar to immunization services, when the number of tuberculosis services provided is analyzed by the number of tuberculosis funding sources received, as the number of services provided increases, so does the number of funding sources. Health departments offering seven or more of the 11 tuberculosis services were the only health departments to also receive funding from three or more services. Further breakdown of services and funding sources can be found in Figure 17.

Figure 17. Number of Tuberculosis Services Provided by Number of Tuberculosis Funding Sources (n=30)

	1 Source n=4	2 Sources n=12	3 Sources n=2	4 Sources n=11	5 Sources n=1
1 Service	1	0	0	0	0
2 Services	1	0	0	0	0
3 Services	0	0	0	0	0
4 Services	0	1	0	0	0
5 Services	0	0	0	0	0
6 Services	0	0	0	0	0
7 Services	1	1	0	1	0
8 Services	1	2	0	0	0
9 Services	0	2	1	4	0
10 Services	0	4	1	0	0
11 Services	0	2	0	6	1

HIV/STD services. Thirty-nine survey respondents (71%) reported providing HIV/STD services. Most (92%; n=36) were full service LHDs and 8 percent were non-participating LHDs. Nearly half (49%) serve midsized populations (n=19), 18 percent serve rural areas (n=7), and 33 percent serve urban areas (n=13).

HIV/STD funding sources. DSHS is the sole source of funding for 28 percent of LHD respondents (n=11) who provide HIV/STD services; all of which were full service LHDs. Seventy-three percent of those solely funded by DSHS served midsized populations (n=8), 9 percent served rural (n=1), and 18 percent were urban (n=2). For those reporting additional funding sources (n=28), the most commonly reported sources for HIV/STD services came through local funding (93%), followed by other sources (39%) and DSHS contracts (32%). By LHD type, full service LHDs were more likely than non-participating to receive funding from all five possible additional funding sources. Midsized and urban LHDs more frequently reported receiving HIV/STD funding from DSHS contracts. LHDs which provide HIV/STD services reported an average of two additional funding sources if not solely funded by DSHS. Figure 18 shows the distribution of additional funding sources by LHD category and type.

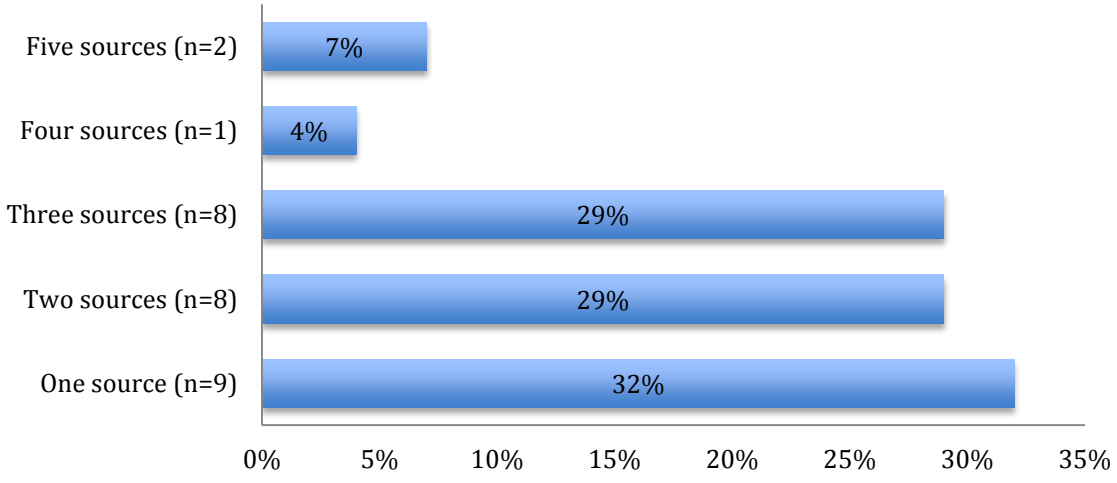
Figure 18. Reported Sources of Funding for HIV/STD Services if Not Solely Funded by DSHS * (n=28)

	DSHS Contract (%)	Other State (%)	Direct Federal (%)	Local (%)	Other Sources (%)
Type					
Full Service n=25	91	100	100	88	91
Non-participating n=3	9	0	0	12	9
Category					
Urban n=11	45	0	0	19	27
Midsized n=11	45	100	0	42	45
Rural n=6	9	0	100	38	27

* Data reported is the percentage of LHDs reporting each funding source, not dollar amounts from those sources.

For those receiving HIV/STD funding from sources other than DSHS alone, most received funding from three or less additional sources. Figure 19 shows the percentage of local health department respondents, not solely funded by DSHS, by number of funding sources. Full service LHDs are more likely to report having funding from multiple sources and rural LHDs were more likely to receive funding from fewer sources.

Figure 19. Number of Funding Sources



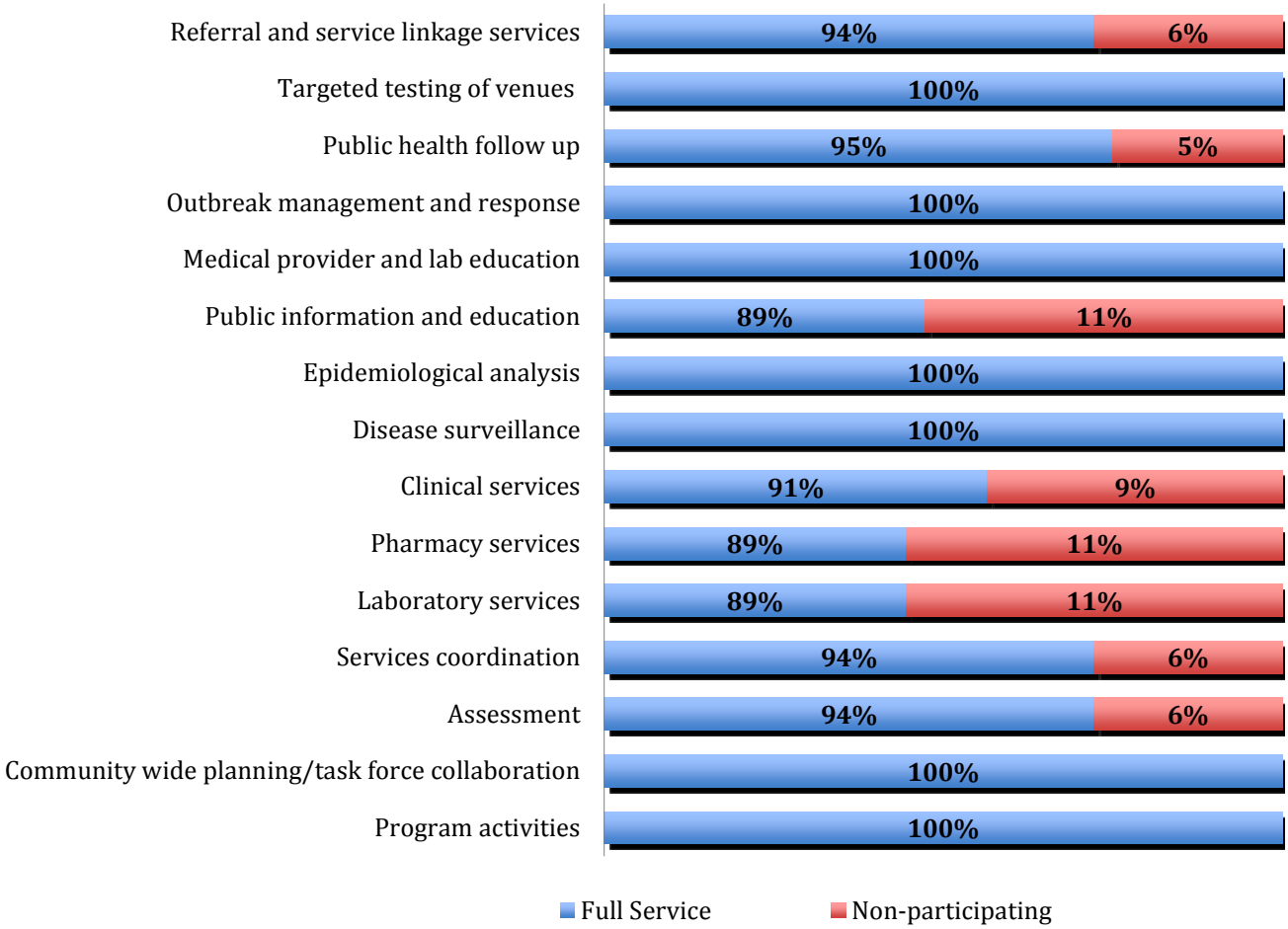
HIV/STD services. HIV/STD services examined in this survey include HIV/STD program activities, community wide planning/task force collaboration, assessment, services coordination, laboratory services, pharmacy services, clinical services, disease surveillance, epidemiological analysis, public information and education, medical provider and lab education, outbreak management and response, public health follow up, targeted testing of venues that may yield new HIV/STD cases, and referral and service linkage services.

The least number of services reported by an LHD was one, however as many as 15 were reported by some LHDs. The average number of services offered was nine.

Figure 20 shows the distribution of LHD types providing various HIV/STD services. Full service LHDs were much more likely to provide all fifteen HIV/STD services, with non-participating LHDs primarily providing eight of the fifteen. Urban and midsized LHDs were more likely than rural LHDs to provide more services.

Survey respondents were able to list other HIV/STD services not included in the survey's HIV/STD service listing. Written in responses regarding other HIV/STD services offered included collaboration with local organizations, serving as resource for private doctors, providing referrals to local service organizations, serve as HIV/STD planning coalition lead agency, coordinate with local health departments for targeted testing and epidemiological services, and HIV testing for STD clinic patients and at "special event" testing.

Figure 20. HIV/STD Services Provided by Local Health Departments



Disease surveillance and epidemiologic services. Forty-two survey respondents (76%) reported providing disease surveillance and epidemiologic services. Eighty-eight percent were full service LHDs (n=37) and 12 percent were non-participating LHDs (n=5). Fifty-five percent serve midsized populations (n=23), 14 percent serve rural areas (n=6), and 31 percent serve urban areas (n=13).

Funding sources for disease surveillance and epidemiologic services. DSHS was the sole source of funding for 36 percent of LHD respondents (n=15) who provided disease surveillance and epidemiologic services; 93 percent of which were full service LHDs. A greater proportion of midsized LHDs (60%) relied solely on DSHS contracts for disease surveillance and epidemiologic services compared to their urban and rural counterparts (27% and 13%, respectively).

For LHDs reporting additional funding sources (n=27), local funding is the primary additional funding source for disease surveillance and epidemiologic services with 96 percent of LHDs reported local funding sources such as city or county funds. Other additional sources of funding reported included DSHS contracts (59%), direct federal funds (4%), and other sources (7%). Most full service LHDs received funding from all sources, with the exception of other state agencies.

Figure 21 depicts the distribution of LHD type and category by additional funding sources disease surveillance and epidemiologic services. A greater proportion of midsized and urban LHDs reported funding from DSHS contracts compared to rural LHDs where the main source of funding was from local sources. Urban LHDs are much more likely than rural or midsized to receive direct federal funding for disease surveillance and epidemiologic services. Other funding sources such as fees or program revenue were only reported by midsized and urban LHDs.

Figure 21. Reported Sources of Funding for Disease Surveillance and Epidemiological Services if Not Solely Funded by DSHS *

(n=27)

	DSHS Contract (%)	Other State (%)	Direct Federal (%)	Local (%)	Other Sources (%)
Type					
Full Service n=23	94	0	100	88	100
Non-participating n=4	6	0	0	12	0
Category					
Urban n=9	50	0	100	35	50
Midsized n=14	44	0	0	50	50
Rural n=4	6	0	0	15	0

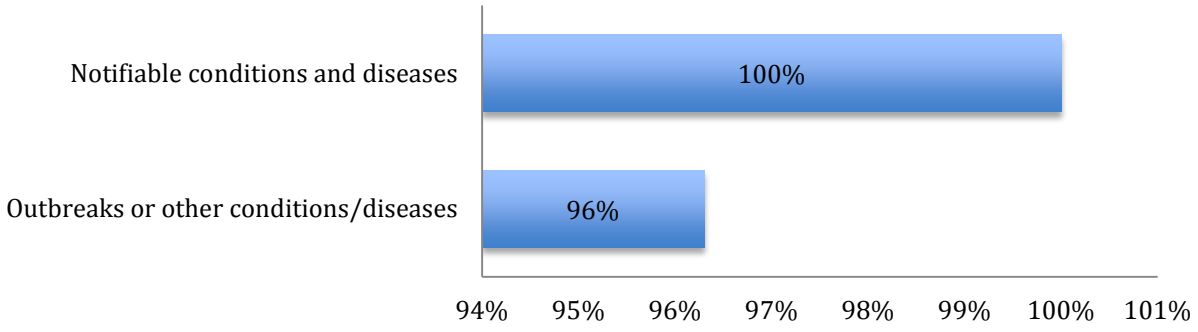
* Data reported is the percentage of LHDs reporting each funding source, not dollar amounts from those sources.

The number of funding additional sources ranged from one to three, however, respondents were more likely to rely on one or two sources for disease surveillance and epidemiologic services (41% and 52%, respectively). Only seven percent received funding from three sources for disease surveillance and epidemiological services.

Non-participating LHDs were much more likely to have one funding sources, which wasost frequently local sources. Full service LHDs were more likely to have two to three sources. Rural LHDs were more likely to rely on one source (local), whereas urban LHDs were more likely to rely on two or three sources. Midsized LHDs were more likely to rely on one or two sources.

Disease surveillance and epidemiologic services. Disease surveillance and epidemiologic services examined in this survey included providing notifiable conditions and diseases services and providing services for outbreaks or other conditions/diseases. A greater proportion of full service LHDs provide these services. Midsized LHDs are more likely than urban LHDs, which are more likely than rural LHDs to provide disease surveillance and epidemiologic services. The number of services offered by LHDs ranges from one to two, with a mean of two services. Figure 22 shows the distribution of types of disease surveillance and epidemiologic services. Full service LHDs were found to be more likely to provide a large range of services compared to non-participating LHDs.

Figure 22. Disease Surveillance and Epidemiologic Services Provided by Local Health Departments



Based on qualitative data collected, other disease surveillance and epidemiologic services include providing education and training, participating in local advisory groups, participating in Urban Area Security Initiative Bio-surveillance and Response, conduct special surveys funded by CDC to assess behavioral HIV surveillance, drug use, and other topics, surveillance for rabies, zoonotic, West Nile Virus, etc.

Figure 23. Number of Disease Surveillance and Epidemiological Services Provided by Number of Funding Sources (n=27)

	1 Source	2 Sources	3 Sources	4 Sources	5 Sources
1 Service	1	0	0	0	0
2 Services	10	13	2	1	0

Community preparedness services. Forty-two survey respondents (78%) reported provide community preparedness services. Seventy-six percent were full service LHDs (n=32) and 24 percent were non-participating LHDs (n=10). Fifty-two percent serve midsized populations (n=22), 17 percent serve rural areas (n=7), and 31 percent serve urban areas (n=13).

Community preparedness funding sources. DSHS was reported as the only source of funding for 50 percent of LHD respondents (n=21) who provide community preparedness services. Of those who reported DSHS as their sole funder for community preparedness services, 86 percent were full service LHDs. Nearly half of those solely funded by DSHS were midsized LHDs (48%), 19 percent were rural, and 33 percent are urban.

For those reporting additional funding sources (n=21), most LHD received funding for community preparedness programs and services from local sources (90%) and DSHS contracts (71%). Neither full service nor non-participating LHDs receive community preparedness funding from other state agencies or direct federal funding. Midsized and urban LHDs reported more community preparedness funds from DSHS contracts than other funding sources. Local and other sources of funding were most often reported by midsized LHDs than rural or urban. Figure 24 shows the distribution of funding sources by LHD category and type. A majority of respondents reported receiving funding from at least two or more sources.

Figure 24. Reported Sources of Funding for Community Preparedness Services, if Not Solely Funded by DSHS *

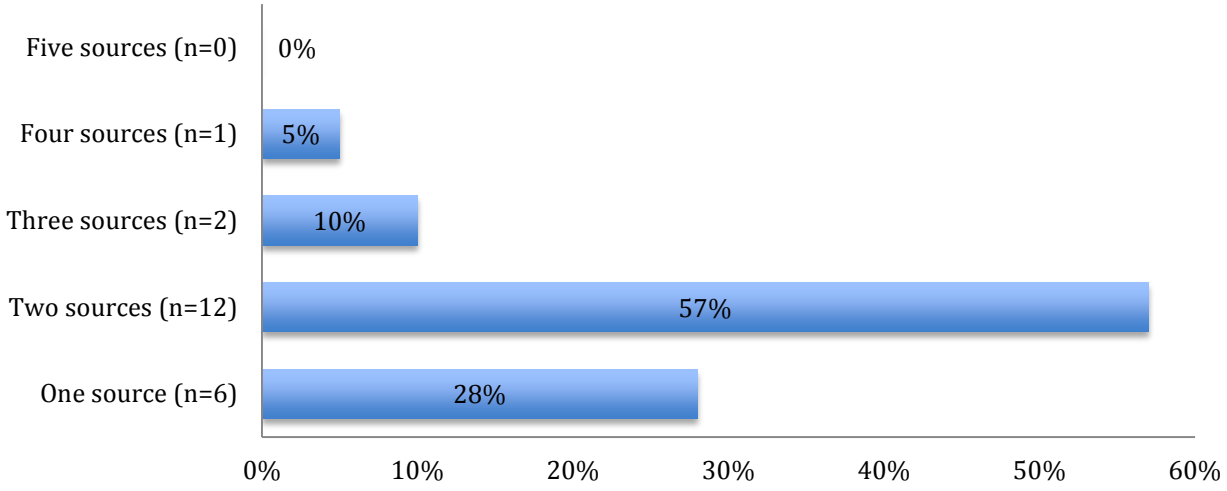
(n=21)

	DSHS Contract (%)	Other State (%)	Direct Federal (%)	Local (%)	Other Sources (%)
Type					
Full Service n=14	93	0	0	63	67
Non-participating n=7	7	0	0	37	33
	DSHS Contract (%)	**Other State (%)**	**Direct Federal (%)**	**Local (%)**	**Other Sources (%)**
Category					
Urban n=6	33	0	0	26	33
Midsized n=12	60	0	0	58	67
Rural n=6	7	0	0	16	0

* Data reported is the percentage of LHDs reporting each funding source, not dollar amounts from those sources.

For those receiving community preparedness funding from multiple sources, one-quarter (n=5) reported two sources. Full service LHDs are much more likely to have two or three sources of funding, whereas non-participating LHDs were more likely to only have a single funding source, usually local or other funding sources. A greater percentage of midsized LHDs have multiple sources of funding compared to urban and rural LHDs. Figure 25 shows the percentage of local health department respondents, not solely funded by DSHS, by number of funding sources.

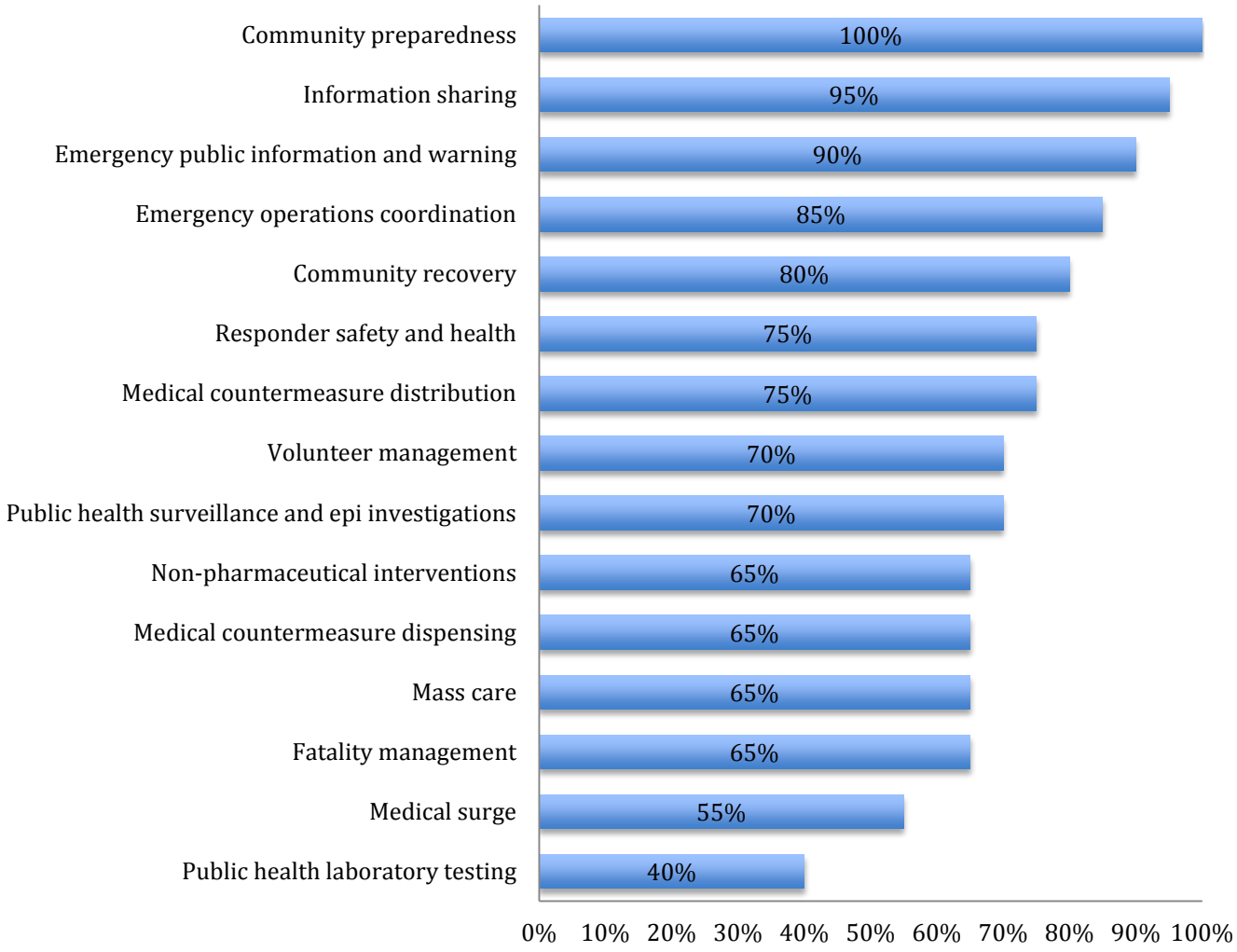
Figure 25. Number of Funding Sources



Community preparedness services. Community preparedness services examined in this survey included providing community preparedness services, providing information sharing, providing emergency operations coordination, providing community recovery services, providing responder safety and health services, providing medical countermeasure distribution, conducting public health surveillance and epidemiology investigations, providing volunteer management, providing fatality management, providing mass care, providing medical countermeasure dispensing, conducting non-pharmaceutical interventions, providing medical surge, and providing public health laboratory testing.

The average number of services offered by LHDs was eleven; the least number of services reported was three (5%; n=1) and the most reported was 15 (25%; n=5). Figure 26 shows the distribution of types of community preparedness services. Full service LHDs were more likely to provide a large range of services. The three most commonly reported services included community preparedness, information sharing, and emergency public information and warning. However, nearly all of the standard community preparedness services were offered by at least half of the survey respondents who reported providing such services. Other community preparedness programs and services offered by respondents that were not on the survey list included services such as first responder education and broader training efforts.

Figure 26. Community Preparedness Services Provided by Local Health Departments



Laboratory services. Laboratory services were provided by approximately one-third (37%; n=20) of all survey respondents. Ninety-five percent were full service LHDs (n=19). Over half served midsized populations (56%; n=11) and 44 percent serve urban areas (n=9); no laboratory services were provided in LHDs serving rural areas.

Laboratory services funding sources. The majority of reported funding for laboratory services came from local sources, such as city and county governments. Other primary sources of funding came from DSHS contracts (45%; n=9) and other sources (37%; n=7), as shown in Figure 27. No respondents reported receipt of laboratory funding from other state agencies or direct federal funding. Full service LHDs are more likely than non-participating LHDs to receive funding from DSHS contracts, other sources, and local sources. Only one non-participating LHD reported providing laboratory services, whose sole source of funding for laboratory services came from local funding. Similarly, the one rural LHD which reported provision of laboratory services also only received local funding.

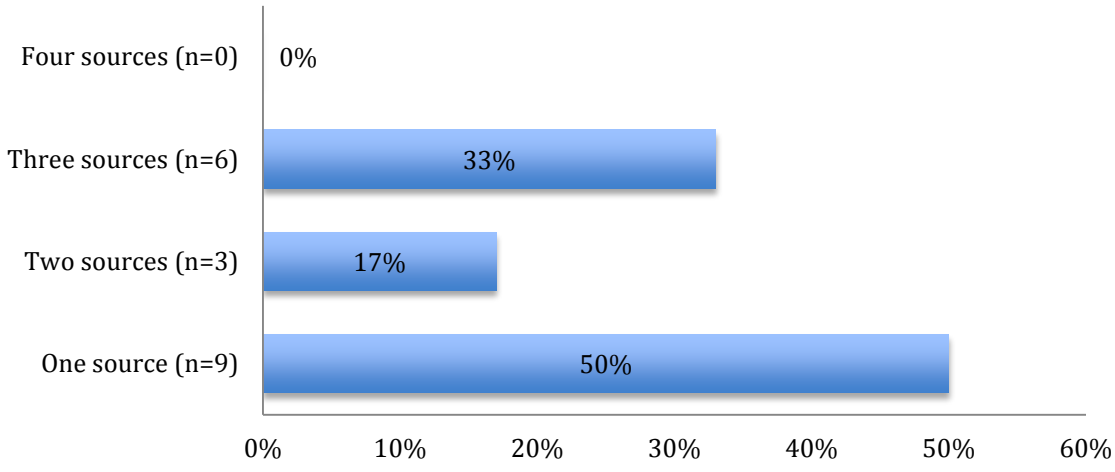
Figure 27. Reported Sources of Funding for Laboratory Services if Not Solely Funded by DSHS (n=20)

	DSHS Contract (%)	Other State (%)	Direct Federal (%)	Local (%)	Other Sources (%)
Type					
Full Service n=17	100	0	0	94	100
Non-participating n=1	0	0	0	6	0
Category					
Urban n=6	44	0	0	33	29
Midsized n=10	56	0	0	56	71
Rural n=2	0	0	0	11	0

* Data reported is the percentage of LHDs reporting each funding source, not dollar amounts from those sources.

Figure 28 shows the percentage of local health department respondents, not solely funded by DSHS, and their reported number of funding sources. Full service LHDs reported one to three funding sources, as did midsized and urban LHDs.

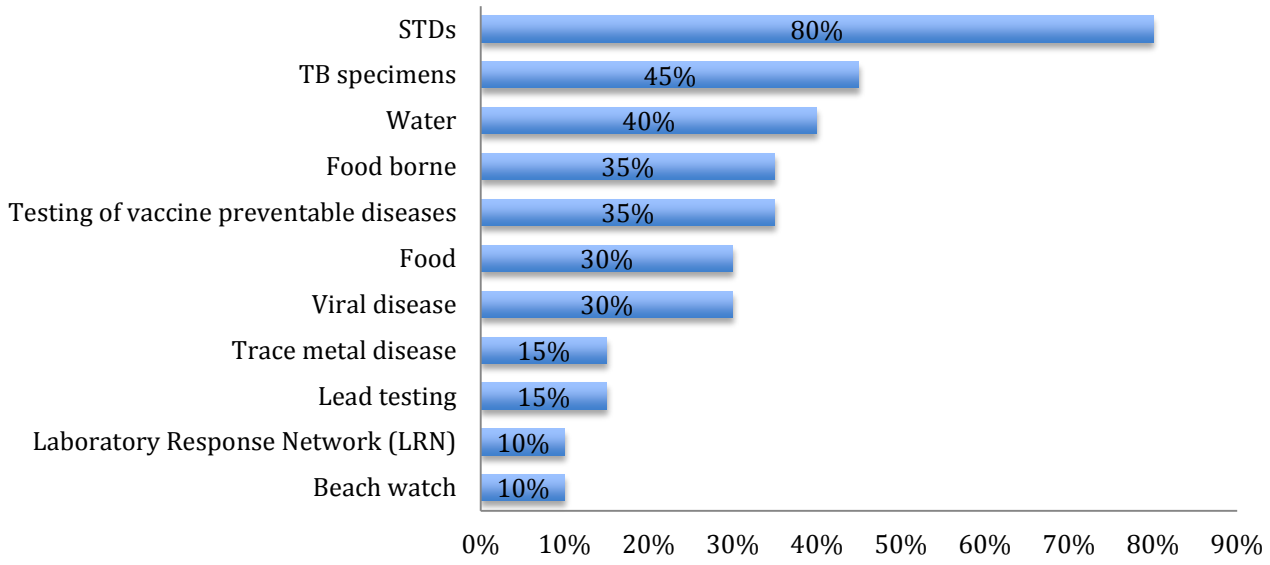
Figure 28. Number of Funding Sources



Laboratory services. Laboratory services examined in this survey included providing STD testing, TB specimen services, water testing, testing of vaccine preventable diseases, food borne disease laboratory testing, viral disease testing, food testing, lead testing, trace metal disease testing, beach watch, and Laboratory Response Network (LRN) services. The number of services offered by LHDs ranges from zero to 11, with a average of three. The most frequently provided laboratory service was STD testing with over three-quarters (80%; n=16) of the respondents reporting this service. Very few respondents reported

operating a Laboratory Response Network (LRN) or a beach watch program. Figure 29 shows the distribution of different of laboratory services. Full service LHDs are much more likely to provide a large range of services.

Figure 29. Laboratory Services Provided by Local Health Departments



Respondents reported other laboratory services offered in addition to, or in lieu of, the types of services listed in the survey. Other laboratory services reported included water sampling for coliforms, services associated with clinical grants to include family planning and primary health care, pregnancy testing, HIV testing, blood draws for latent tuberculosis infection (LTBI) and QuantiFERON (QFT) testing, milk/dairy testing, Clinical Laboratory Improvement Amendments (CLIA) approved clinical testing to support family planning, STD, refugee services, shipping for TB and STD referral specimens, operation of a Biosafety Lab III, and water testing for TCEq and International Water Boundaries Commission.

Public health regulatory services. Forty-one survey respondents (76%) reported providing public health regulatory services. Of these 42 LHDs, 73 percent were full service LHDs (n=31) and 27 percent are non-participating LHDs (n=11). A majority (54%) serve midsized populations (n=23), 20 percent serve rural areas (n=8), and 27 percent serve urban areas (n=11).

Public health regulatory services funding sources. All survey respondents who reported providing public health regulatory services reported receiving additional funding sources. Nearly all (93%) reported receiving local funding (i.e., city or county funding) to conduct regulatory services. Other funding sources such as program fees, revenue, or foundation grants were received by 33 percent of LHDs and 24 percent reported receiving funding from other state agencies. Full service LHDs are more likely than non-participating LHDs to receive funding from all additional sources, including state contracts, other sources, and local sources. Midsized and urban LHDs receive funding from all sources, whereas rural LHDs only receive funding from local and other sources. Figure 30 shows the distribution of funding sources by LHD category and type.

Figure 30. Reported Sources of Funding for Public Health Regulatory Services if Not Solely Funded by DSHS *

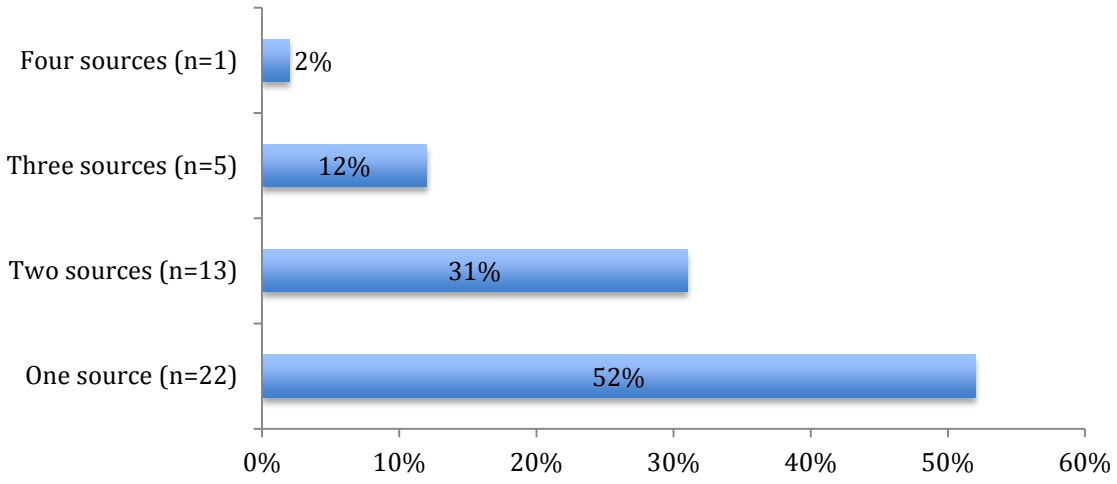
(n=41)

	DSHS Contract (%)	Other State (%)	Direct Federal (%)	Local (%)	Other Sources (%)
Type					
Full Service n=30	33	100	75	72	86
Non-participating n=11	0	25	28	14	0
Category					
Urban n=11	27	30	50	28	36
Midsized n=22	32	70	50	51	50
Rural n=8	0	0	0	21	14

* Data reported is the percentage of LHDs reporting each funding source, not dollar amounts from those sources.

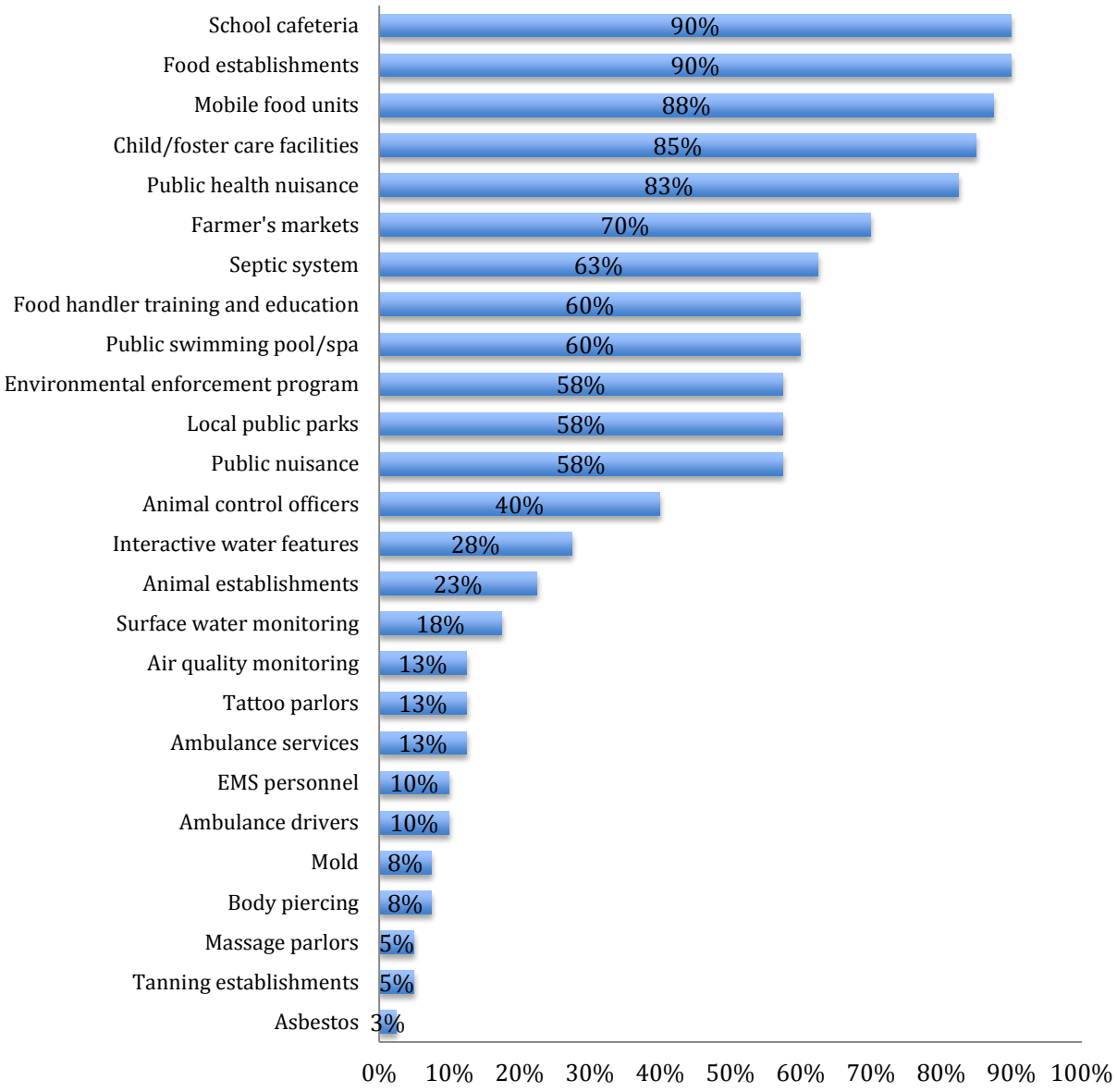
More than half (52%) LHDs receive funding from only one source for public health regulatory services. Figure 31 shows the percentage of local health department respondents, not solely funded by DSHS, by the number of funding sources. Non-participating LHDs only reported receiving funding from one source, yet the source varied between LHDs. One-quarter (25%) reported direct federal funding, 28 percent reported local funding, and 14 percent reported other funding sources such as program fees and/or revenue. Rural LHDs were primarily reported only one funding source compared to urban LHDs who more frequently reported two sources.

Figure 31. Number of Funding Sources



Public health regulatory services. Over 27 types of public health regulatory services were asked about in the survey. The services list included: regulation of food establishments, school cafeteria, mobile food units, child/foster care facilities, public health nuisance, farmer's markets, septic system, public swimming pool/spa, food handler training and education, public nuisance, environmental enforcement program, animal control officers, interactive water features, animal establishments, surface water monitoring, ambulance services, air quality monitoring, local public parks, ambulance drivers, EMS personnel, EMS providers, body piercing, mold, tanning establishments, massage parlors, tattoo parlors, and asbestos. In one case, a LHD only provided one of the listed services. Six LHD respondents offered at least 15 of the possible 27 services. The average number of services offered was ten. Figure 32 shows the distribution of types of public health regulatory services.

Figure 32. Public Health Regulatory Services Provided by Local Health Departments



Public health regulatory services not included in the 27 listed services, but reported as other types of regulatory services included adult foster care regulation, lead contamination assessment/ abatement in buildings/homes, poison prevention and surveillance, rabies control, monitoring sexually oriented businesses, storm water, vital statistics, coordination of epidemiology and public health services for outbreak response, rodent/vector control, plan review, smoking ordinances, and water and soil sampling.

Direct clinical care services. Provision of direct clinical care services were reported by 25 respondents (46%) reported providing direct clinical care services. Most were full service LHDs (92%, n=23) and eight percent are non-participating LHDs (n=2). Sixty percent serve midsized populations (n=15), 16 percent serve rural areas (n=4), and 24 percent serve urban areas (n=6).

Direct clinical care funding sources. DSHS is the sole source of funding for only five percent of LHD (n=3) respondents who provide direct clinical care services. All three are full service, mid-sized LHDs. For those reporting additional funding sources (n=22), the most commonly reported sources for direct care services are local sources (86%), DSHS contracts (77%), and other funding (40%). Full service LHDs were more likely to receive funding from all sources, whereas non-participating LHDs reported direct clinical care funding solely from local sources. Figure 33 shows the distribution of funding sources by LHD category and type.

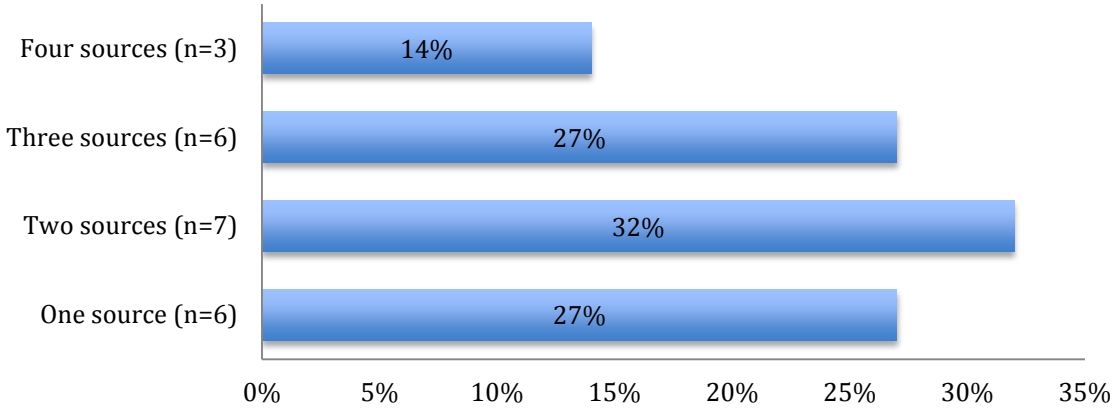
Figure 33. Reported Sources of Funding for Direct Clinical Care if Not Solely Funded by DSHS* (n=22)

	DSHS Contract (%)	Other State (%)	Direct Federal (%)	Local (%)	Other Sources (%)
Type					
Full Service n=20	100	100	100	89	100
Non-participating n=2	0	0	0	11	0
Category					
Urban n=6	29	0	100	32	30
Midsized n=12	53	50	0	47	60
Rural n=4	18	50	0	21	10

* Data reported is the percentage of LHDs reporting each funding source, not dollar amounts from those sources.

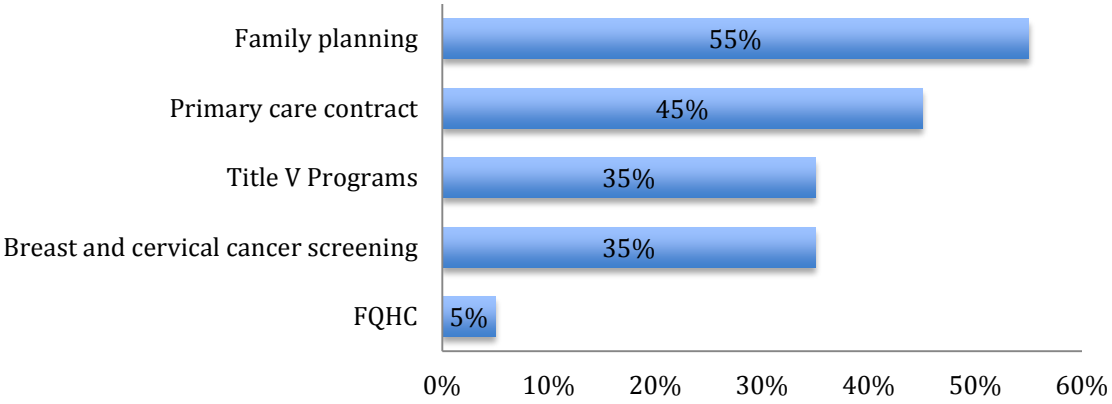
Full service LHDs are more likely to have multiple funding sources for direct clinical care services, including DSHS contracts, local sources, and other sources, including fees/program revenue. Non-participating LHDs that offer direct clinical services indicated only one funding source, as opposed to full service LHDs that were more likely to have two to three funding sources. Rural LHDs reported one funding source, as opposed to midsized or urban LDHDs that reported one to three sources. Figure 34 shows the percentage of local health department respondents, not solely funded by DSHS, and the distribution of additional funding sources for direct clinical care services.

Figure 34. Number of Funding Sources



Direct clinical care services. Direct clinical care services examined in this survey included providing family planning, FQHC services, primary care services, breast and cervical cancer screening, and Title V Programs. The number of services offered by LHDs ranges from zero to four with a mean of two. Figure 35 shows the distribution of types of direct clinical care services. Full service LHDs are much more likely to provide a large range of services compared to non-participating LHDs. All direct clinical care services are provided by full service LHDs; however, the LHDs are located in urban, midsized, and rural communities.

Figure 35. Direct Clinical Care Services Provided by Local Health Departments



Based on respondent report, other direct clinical care services than those listed in the survey included tuberculosis & communicable disease services, well-child/immunization services, family clinical services, communicable disease case management, limited health screenings, indigent health services, HIV/STD services, pregnancy, LTBI and QFT testing, project for breast, cervical and colon cancer, adult health, and rabies depot.

WIC services. Twenty-five survey respondents (46%) reported providing WIC services. Ninety-six percent (n=24) were full service LHDs and 4 percent were non-participating LHDs (n=1). Forty percent (n=10) serve midsized populations, 16 percent (n=4) serve rural areas, and 44 percent (n=11) serve urban areas.

WIC services funding sources. DSHS is the sole source of funding for 92 percent (n=23) of LHD respondents who provide WIC services. The rest of the data yielded very little information, as only two LHD respondents answered the remaining questions regarding funding for services or services offered. Only eight percent (n=2) LHD respondents report additional funding sources for WIC services, which included DSHS contracts, local and other sources such as fees or program revenue. Both respondents were full service LHDs, one in an urban location and one in a rural location..

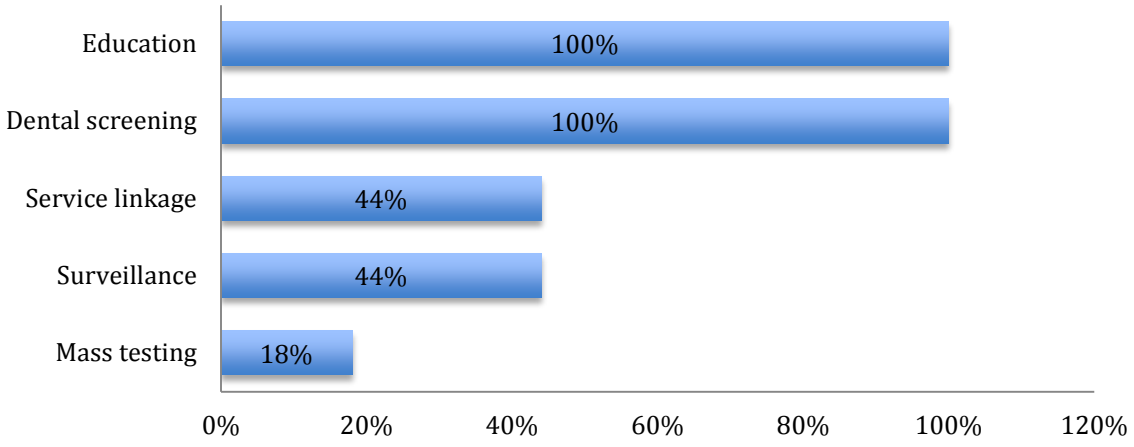
WIC services. WIC services examined in this survey included providing nutrition screening, nutrition education, nutrition supplies, and food voucher/EBT card. Both LHD respondents offer all services. Other WIC services reported by respondents included community gardens.

Oral/dental health services. Nine survey respondents (16%) provided oral/dental health services. Eighty-nine percent were full service LHDs (n=8) and the one remaining LHD was non-participating. Thirty-three percent (n=3) of those providing oral/dental health services serve midsized populations, 22 percent (n=2) serve rural areas, and 44 percent (n=4) serve urban areas.

Oral/dental health funding sources. There were no LHD respondents that indicated DSHS was their sole source of funding. Fifty-five percent (n=5) receive DSHS contracts and 22 percent (n=2) receive other state funds. All (n=9) report local funding as a source and 44 percent (n=4) report other sources.

Oral/dental health services. Oral/dental health services examined in this survey included dental screening, education, surveillance, and service linkages. Figure 36 shows the distribution of types of direct clinical care services. Overall, the majority of full service LHDs offered all services listed in the survey.

Figure 36. Dental/Oral Health Services Provided by Local Health Departments



Other dental/oral health services reported included preventive and corrective procedures, minor urgent oral care, full services to Medicaid children aged 3–21, dental treatments, preventive care for children and adults, direct dental care, comprehensive care in health department safety net clinics, train the trainer education for Community Health Workers, community outreach, and training for student interns and residents.

Ancillary Public Health Services Overview

Primary ancillary services reported by LHD respondents included animal control, EMS/911 services, and code enforcement. Other services include jail health, leadership for health coalitions/councils, indigent health, and miscellaneous services to counties outside of jurisdiction. Larger, more urban LHDs provide a greater number of overall ancillary services.

Qualitative Data Summary

When asked about services for which they depend on the state or region, LHD respondents reported the following:

- To supplement services that cannot be provided through the LHD, in particular direct and clinical care services;
- Very dependent on state funding due to limited local funding
- Epidemiology/Disease investigations and surveillance services - (STD, other outbreaks and reportable diseases)
- State laboratory
- Regulation, inspection and enforcement (swimming pools, restaurants, spas, massage parlors, tattoo parlors)
- Carryout or supplement TB services
- Technical training
- To host regional or statewide meetings
- Air and water quality monitoring
- Chest X-rays paid by region
- HIV/STD or TB medication

When LHD respondents were asked to provide policy and funding suggestions to improve public health services, comments included the following:

TB funding and services suggestions

- Provide sufficient and timely TB funding from the state
- Maintain level funding for tuberculosis services
- Revisit allocation of/formula for TB funding
- Need better, more timely communication when funding amounts are reduced
- Need changes in paperwork/mandatory documentation for TB (LTBI and cases/suspects)

Other funding suggestions

- Funding discussions need to be more inclusive of local health departments:
    - LHDs need more control to tailor funds for local needs
    - What is seen as statewide trends do not reflect or affect local jurisdictions
    - Need contract flexibility to move funds to different categories

    - Transfer all funding to LHDs without burdensome regulations on the locals
        - i.e., funding based on local political boundaries and forcing locals to provide services to anyone that is a Texas resident
- Provide assistance/expertise to LHDs for billing insurance companies for services
- Provide more lead-time in end-of-year funding
- Provide additional funding/resources for:
    - STD services
    - Public health preparedness
    - Foodborne illness surveillance and prevention
    - Regulatory services
    - WIC
    - Indigent dental care

Contract and formula suggestions

- Modify bundling of State contracts to allow for LHDs funding/contracts based on core public health services (rather than specific programs or needs)
- Develop fair funding formulas for all DSHS programs
- Balanced funding for essential services versus direct clinical by all DSHS programs
- Consistent matching calculations
- Fund LHDs based on risk and need and not just on population

Standards, reporting and oversight suggestions

- Revise state grant reporting requirements to be consistent with the federal requirements
    - Would streamline reporting and financial processes
    - LHDs could more efficiently track costs
- Develop standards, i.e. accreditation and provide training to meet the standards
- Need periodic program reviews with DSHS
- Need more efficient delivery models, i.e. allow neighboring LHDs to serve each other
- Need timely State standards/code revisions

Other program and policy suggestions

- Changes in vaccinations has heavily impacted services
    - Problems getting students immunized in rural community (private physicians do not maintain stocks)
    - Re-instate the full range of vaccines for eligible adults
- Change Supplemental Nutrition Assistance Program (SNAP) policy to disallow purchase of candy, sodas, cakes, cookies, etc.

LIMITATIONS

As with any survey, there are limitations to consider when examining the data and results. In the case of this survey and data analysis, there are several that should be considered. First, the survey design was self-report, which may be subject to recall bias and inaccurate reporting. It is unclear as to how much preparation time was allowed or taken for respondents to gather the necessary information to complete the survey, particularly the funding portion, leading to inaccurate information related to funding. Over half of the surveys were completed by someone other than the LHD Director or Administrator. It is assumed that the LHD Director would respond on behalf of the LHD, or the LHD Director would delegate completion of the survey to the most appropriate staff person. Pre-survey instructions were provided to gather relevant information and resources to complete the survey (e.g., list of current programs and services, budgets for the programs and services, contracts, fiscal audit, other revenue sources, a list of the types of permits and inspections your agency performs); however, it is not known if all materials were available to the survey respondent. Secondly, out of 129 LHDs, only fifty-five surveys were utilized in the analysis and is therefore a cross section of these 55 health departments. While the response rate was fairly high for full service LHDs (70%), it was low for non-participating LHDs (20%). We caution against generalizing these results.

There was a fair amount of missing information in the survey data analyzed, particularly related to funding amounts. Further, skip patterns in the survey led to low response rates for certain questions. Along the same line, a skip pattern resulted in LHDs solely funded by DSHS for certain service categories not answering questions regarding the types of services provided. Having this data would have provided additional information in data analysis and interpretation. Given these limitations, additional information may be necessary to understand or draw conclusions from the findings, such as those related to funding and services.

A LOOK FORWARD

While this survey certainly provides a snapshot of the nature of LHD services and funding at this point in time, the above limitations should be considered prior to any future action. Frequently, surveys raise more questions following analysis. For example, during the presentation of the analysis to committee members, it was clear that there was particular interest in examining specific services more in-depth. If there were a particular service (e.g., tuberculosis) that Committee members were interested in examining further, other methods might be explored to gain greater depth and understanding of these survey results.

As mentioned in the limitations section, additional and complete data regarding funding and services could have yielded a dramatically different picture. For example, a more accurate perspective of service activities provided by LHDs could have been presented if LHDs that receive sole funding from DSHS contracts were given an opportunity to provide this information. Further, DSHS possesses contract funding information that might provide further insight into survey results when examining data with respect to funding amounts and sources.

Based on the quantitative and qualitative survey results, LHDs clearly depend on their state and regional partners for support, both in terms of funding and provision of supplemental services. However, they have concerns about how funding decisions are made, how contracts are bundled, and how funding is allocated. Respondents expressed a desire to be included in future discussions, particularly related to developing performance standards, meeting accreditation requirements, bundling contracts to streamline reporting, and allocating and tailoring funds. Given respondents' desire to be included in these discussions, the future holds great opportunities for partnership building and collaboration.

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