



2019

National Profile of Local Health Departments



NACCHO
National Association of County & City Health Officials
The National Connection for Local Public Health

Acknowledgments

Public health is at the forefront of public attention and discourse worldwide in a way that is unparalleled in modern times. COVID-19 brought the normally hidden work of public health into the limelight and has held it there with a variety of fascinating results. “Epidemiologist” is now a common word, news outlets routinely discuss the merits of population testing metrics, and for months, the nation tuned into briefings by the White House Coronavirus Task Force headed by Vice President Pence.

During the pandemic, data from the National Profile of Local Health Departments (Profile) studies have been in great demand. The data have been highlighted by NACCHO and its national partners in communications to policymakers, as well as featured in newspapers, magazines, and newscasts all over the country.

Profile data are an incredible source of context for the current COVID-19 pandemic response. In fact, the Profile study is the only longitudinal study of its kind focused on the infrastructure and practice of local health departments (LHDs). As such, it highlights the impact of the continued underfunding of public health around the country. As health departments tackle the largest pandemic in modern history, the workforce is strained, resources are redirected to the response, essential services are disrupted, and leaders are faced with political pressures ranging from firings to death threats.

In support of LHDs, NACCHO and its funding partners at the Centers for Disease Control and Prevention (CDC) and the Robert Wood Johnson Foundation (RWJF) remain committed to providing evidence regarding the state of local public health that is objective, accurate, and useful. To reinforce these efforts, NACCHO is teaming with ZS Associates and LiveStories to create interactive products that allow LHDs to access their data, compare it to state and regional benchmarks, and combine it with health and healthcare metrics from other national datasets to create ready-made reports on their local public health context.

Finally, I want to give special recognition to the NACCHO Profile Team that managed the daily work of the 2019 Profile study in challenging conditions during the pandemic. They fielded hundreds of emergency requests for data; worked from home during the stay-at-home orders; endured endless Zoom calls with kids, partners, and pets in the background; staffed NACCHO’s Incident Command System in support of the federal response; and still delivered a quality product on time.

Aaron Alford
Senior Director, Research & Evaluation

NACCHO is pleased to present the 2019 National Profile of Local Health Departments (Profile) to local health departments (LHDs), policymakers, public health researchers, and the public health community. The Profile study is the only one of its kind that collects data about LHD infrastructure and practice at the national level.

LHDs are the backbone of the nation's public health system as the "boots on the ground" for delivery of public health services. Our rapidly changing world and crises like the COVID-19 pandemic emphasize the need for timely information and data to support public health practice, especially at the local level. The Profile study provides accurate and useful information about LHDs nationwide that are essential for making data-driven decisions and engaging in evidence-based services. Such data are especially critical today, as we face national and global challenges that affect the health and well-being of every community. In an era of unstable funding, LHDs increasingly depend upon reliable and useful data to help them make difficult choices under sometimes less-than-ideal operating conditions. With data from the Profile study, the public health community can prevent and combat disease and health inequities and make sound decisions to improve and enhance the physical and mental health of every individual.

The key to unleashing the power of data is action. Using data to drive decision-making is one of the best recommended uses of this Profile. NACCHO looks forward to working with all of its diverse stakeholders in public health to continue identifying new and interesting ways to use this powerful dataset to drive additional research, influence important policies, educate others on the importance of local governmental public health, and demonstrate the impact of public health in communities across our country.



Jennifer Kertanis
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Our nation's experience with the COVID-19 pandemic and previous public health emergencies has revealed how critically important it is to collect inclusive health data at the community level. NACCHO's Profile study provides the only comprehensive picture of activities, workforce, funding, and priorities of local health departments (LHDs) across the country. These data are key for decision-makers seeking evidence-based support to address the unique needs of their specific communities. It's my hope this report will encourage policymakers to begin collecting even more equity-focused data, with the goal of supporting the infrastructure, funding, staffing, and programming of our nation's LHDs in ways that provide everyone in America a fair and just opportunity for health and well-being.

A handwritten signature in black ink, appearing to read "Richard E. Besser".

Richard E. Besser
President and CEO
Robert Wood Johnson Foundation (RWJF)



The Centers for Disease Control and Prevention (CDC) is pleased to support NACCHO and its work on the National Profile of Local Health Departments (Profile) study. This 2019 Profile report is a valuable resource for all public health professionals, policymakers, federal agencies, researchers, and others to use to understand our nation's current local public health infrastructure. The work of local health departments is critical in protecting the health of the community. I would like to commend NACCHO and the local health departments who provided these data, and their dedication and contribution to public health.

A handwritten signature in black ink, appearing to read "Robert R. Redfield".

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CHAPTER 1

Introduction

This chapter includes the following:

- ▶ Study background and methods.
 - ▶ Questionnaire topics.
 - ▶ Number of local health departments (LHDs) in study population.
 - ▶ Definitions of LHD jurisdiction size, type of governance, census regions, and urbanization.
- 

The National Association of County and City Health Officials (NACCHO) conducted the first National Profile of Local Health Departments (Profile) study from 1989 to 1990. This study helped to define a local health department (LHD) and describe how funding, staffing, governance, and activities of LHDs vary across the United States. In the three decades since, NACCHO has conducted an additional eight Profile studies, including in 2019. All Profile studies have been funded by the Centers for Disease Control and Prevention (CDC); beginning in 2007, NACCHO has also received funding from the Robert Wood Johnson Foundation (RWJF).

Purpose

The purpose of the Profile study is to develop a comprehensive and accurate description of LHD infrastructure and practice. Data from the Profile study are used by many people and organizations across the United States. For example, LHD staff use the data to compare their LHD to others within their state or the nation; data are used to inform public health policy at the local, state, and federal levels and can support projects to improve local public health practice; and data are used in universities to educate the future public health workforce about LHDs and by researchers to address questions about public health practice. NACCHO staff use Profile data to develop programs and resources that meet the needs of LHDs and to advocate effectively for LHDs. NACCHO also generates Geographic Information System (GIS) shapefiles and definitions of Profile study LHD jurisdictions that support visual description and definition of LHDs for researchers and policymakers.

Study Methodology

Study population

Every Profile study uses the same definition of an LHD: an administrative or service unit of local or state government, concerned with health, and carrying some responsibility for the health of a jurisdiction smaller than the state. There are approximately 2,800 agencies or units that meet the Profile definition of an LHD. Some states have a public health system structure that includes both regional and local offices of the state health agency. In those states, the state health agency chooses to respond to the Profile survey at either the regional or local level, but not at both levels.

NACCHO uses a database of LHDs based on previous Profile studies and consults with state health agencies and State Associations of Local Health Officials (SACCHOs) to identify LHDs for inclusion in the study population. For the 2019 Profile study, a total of 2,459 LHDs were included in the study population. Rhode Island was excluded from the study because the state health agency operates on behalf of local public health and has no sub-state units. For the first time, Hawaii was included.

Sampling

All LHDs in the study population received a common set of questions, called the Core questionnaire. A randomly selected group of LHDs also received one of the two sets of supplemental questions (or modules). LHDs were selected to receive the Core questionnaire only or the Core plus one of the two modules using stratified random sampling (without replacement), with strata defined by the size of the population served by the LHD. The module sampling process is designed to produce national estimates but not to produce state-level estimates.

Questionnaire development

The NACCHO Profile team developed both the Core and module questionnaires by first reviewing the 2016 Profile questionnaires to determine how each question performed among respondents and what questions should be kept, modified, or deferred to a future Profile questionnaire. The team also reviewed questionnaires from previous years (e.g., 2013, 2010, 2008, 2005) to identify whether any questions should be repeated in 2019. Lastly, the team developed new questions based on current public health topics. An advisory group—comprising LHD leaders, staff from affiliate organizations, and researchers—and other subject matter experts within NACCHO provided input and feedback on new and revised survey questions. Many questions in the Core and module questionnaires have been used in previous Profile studies and provide an ongoing dataset for comparative analysis; most new items were placed in modules. The Profile team piloted the questionnaire from December 2018 to January 2019 among 28 LHDs (13 completed it for a response rate of 46%). NACCHO interviewed select LHDs to assess whether certain sections and questions performed as expected. The Profile team revised the survey as needed and finalized it for distribution.

Questionnaire distribution

In January 2019, NACCHO sent an e-mail announcement to all 2,459 LHDs in the study population. In the e-mail, LHDs were given the opportunity to designate another staff person as the primary contact to complete the Profile questionnaire. NACCHO launched the final questionnaire from March to August 2019 via an e-mail sent to the designated primary contacts. The e-mail included a link to a web-based questionnaire, individualized with preloaded identifying information specific to the LHD. LHDs could print a hard copy version of their Profile questionnaire by using a link in the questionnaire introduction or could request that NACCHO staff send a copy via e-mail or U.S. mail.

The Profile team conducted extensive efforts to encourage participants to complete the questionnaire. Before and during the administration period, NACCHO disseminated promotional materials about the survey via NACCHO's print and electronic publications (i.e., Public Health Dispatch, NACCHO Connect, NACCHO Voice) and social media channels. NACCHO staff and a nationwide group of Profile study advocates conducted follow-up with non-respondents using e-mail messages and telephone calls. NACCHO also offered technical support to survey respondents through an e-mail address and telephone hotline. The final response rate for the 2019 Profile study was 61%.

Figure 1.1 | Questionnaire topics, by questionnaire type and response rate

Core	Module 1	Module 2
(Core only response rate = 59%)	(Core + Module 1 response rate = 61%)	(Core + Module 2 response rate = 65%)
LHD top executive	LHD interaction with academic institutions	Jurisdiction and governance
Jurisdiction and governance	Partnerships and collaboration	Community health assessment and planning
Workforce	Cross-jurisdictional sharing of services	Human resources issues
Staffing changes	Emergency preparedness	Quality improvement
Programs and services	Access to healthcare services	Public health informatics
Public health policy		Guide to Community Preventive Services
Community health assessment and planning		Evaluation of Profile
Accreditation		
Funding		
Changes in LHD budget		

- ▶ The 2019 Profile study questionnaire included a set of questions (Core questionnaire) sent to all LHDs in the United States; additional supplemental questions were grouped into two modules.
- ▶ LHDs were randomly assigned to receive only the Core questionnaire or the Core plus one of the two modules.
- ▶ Many questions in the Core and module questionnaires have been used in previous Profile studies and provide an ongoing dataset for comparative analysis; most new items were placed in modules.

Figure 1.2 | Number of LHDs in study population and number of respondents, by state

State	Total number of LHDs	Number of respondents	Response rate
All	2,459	1,496	61%
Alabama	66	66	100%
Alaska	2	1	50%
Arizona	15	10	67%
Arkansas	75	71	95%
California	61	34	56%
Colorado	53	27	51%
Connecticut	67	32	48%
Delaware	2	1	50%
District of Columbia	1	1	100%
Florida	67	65	97%
Georgia	18	9	50%
Hawaii	3	2	67%
Idaho	7	7	100%
Illinois	93	76	82%
Indiana	93	34	37%
Iowa	98	44	45%
Kansas	100	52	52%
Kentucky	60	42	70%
Louisiana	10	7	70%
Maine	10	9	90%
Maryland	24	23	96%
Massachusetts	293	110	38%
Michigan	44	28	64%
Minnesota	74	55	74%
Mississippi	3	1	33%

State	Total number of LHDs	Number of respondents	Response rate
Missouri	114	55	48%
Montana	51	12	24%
Nebraska	19	14	74%
Nevada	3	3	100%
New Hampshire	2	1	50%
New Jersey	92	54	59%
New Mexico	5	2	40%
New York	58	37	64%
North Carolina	85	59	69%
North Dakota	28	27	96%
Ohio	113	61	54%
Oklahoma	70	30	43%
Oregon	33	25	76%
Pennsylvania	16	9	56%
South Carolina	4	4	100%
South Dakota	8	7	88%
Tennessee	95	92	97%
Texas	72	36	50%
Utah	13	7	54%
Vermont	12	12	100%
Virginia	35	20	57%
Washington	35	25	71%
West Virginia	48	22	46%
Wisconsin	86	61	71%
Wyoming	23	14	61%

- Overall, 1,496 LHDs responded to the 2019 Profile study for a response rate of 61%.
- Most states had a response rate of 50% or more, with the exception of Connecticut, Indiana, Iowa, Massachusetts, Mississippi, Missouri, Montana, New Mexico, Oklahoma, and West Virginia.
- Alabama, the District of Columbia, Idaho, Nevada, South Carolina, and Vermont had response rates of 100%.

Figure 1.3 | Number of LHDs in study population and number of respondents, by size of population served

Size of population served	Total number of LHDs	Number of respondents	Response rate
All	2,459	1,496	61%
<25,000	979	523	53%
25,000–49,999	510	313	61%
50,000–99,999	385	253	66%
100,000–249,999	293	203	69%
250,000–499,999	142	96	68%
500,000–999,999	100	72	72%
1,000,000+	50	36	72%

- ▶ LHDs serving smaller populations had lower response rates than did those serving larger populations.
- ▶ Because there are relatively few LHDs serving large populations, the higher response rates among LHDs serving larger populations are important for ensuring that findings are representative for LHDs in this category and to the analytic capacity of the study data.

Survey Weights and National Estimates

Unless otherwise stated, national statistics presented were computed using survey weights. NACCHO developed survey weights for the items from the Core questionnaire to account for differential non-response by size of population served; survey weights used to produce statistics from modules also accounted for sampling. By using survey weights, the Profile study provides national estimates for all LHDs in the United States. Beginning in 2019, we used post-stratification (based on year and population size) and finite population correction; the confidence intervals associated with some statistics may differ from items published in previous years due to this change.

Longitudinal comparisons for workforce were constructed using NACCHO Profile data from 2008 through 2019. The 2008–2016 workforce estimates reported in 2019 differ from those estimates reported in previous years due to two factors. First, a small number of LHDs were removed from the analysis over the past years to enhance comparability through 2019. In 2020, NACCHO created a multi-year dataset to analyze trends for various reasons, including in response to the COVID-19 crisis. As part of the process, NACCHO conducted an enhanced data review which revealed a very small number of LHDs with ongoing reporting errors. Though few in number, these LHDs reported more employees and Full-Time Equivalents (FTEs) than the average respondent in their population size category, thus marginally impacted the national estimates. Second, 95% confidence intervals were generated across all years using finite population correction and post stratification, based on categories of population size served. This handles non-response adjustment by population size and accounts for the fact that population size by category is known and limited in size.

Subgroup Analysis

Throughout this report, data are analyzed by various LHD jurisdiction characteristics, namely size of population served, type of governance, United States census regions, and degree of urbanization.

Size of population served

Statistics are compared across LHDs serving jurisdictions of different population sizes. LHDs are classified as small if they serve fewer than 50,000 people, medium if they serve between 50,000 and 500,000 people, and large if they serve 500,000 or more people. For certain statistics that are highly dependent on size of population served (e.g., finance and workforce statistics), a larger number of population subgroups are used.

Type of governance

Statistics are compared across LHDs' relationship to their state health department. Some LHDs are agencies of local government (referred to as locally governed). Others are local or regional units of the state health department (referred to as state-governed). Some are governed by both state and local authorities (called shared governance). Refer to Chapter 2 (Jurisdiction and Governance) for more details.

United States census region

Statistics are also compared across United States census regions. All LHDs in each state are classified as being in the North, South, Midwest, or West, per the U.S. Census Bureau (http://www.census.gov/econ/census/help/geography/regions_and_divisions.html).

Degree of urbanization

Statistics are compared across LHD jurisdiction degree of urbanization. Each LHD in the Profile study population was classified as serving either an urban or rural jurisdiction. This classification system used the National Center for Health Statistics (NCHS) Urban-Rural Classification Scheme definitions (https://www.cdc.gov/nchs/data_access/urban_rural.htm) and the Economic Research Service (ERS) Frontier and Remote Area Codes (<https://www.ers.usda.gov/data-products/frontier-and-remote-area-codes/>). Each LHD was coded as urban or rural based on whether the majority of people it served were from urban or rural settings (calculated for each census tract the LHD serves). This classification system is new to the 2019 Profile. The estimates associated with some statistics may differ from items published in previous years due to this change.

Study Limitations

The Profile study is a unique and comprehensive source of information on LHD finances, infrastructure, workforce, activities, and other important characteristics. However, several limitations should be considered when using the results of this study. Given the large scope of this study, the level of detail available does not provide extensive information on all dimensions of the topics addressed. For example, the Profile provides information about whether or not an LHD provides a specific program or service but does not provide any information about the scope or scale of that program or service. All data are self-reported by LHD staff and are not independently verified. LHDs may have provided incomplete, imperfect, or inconsistent information for various reasons.

While the Profile questionnaire includes definitions for many items, not every item or term is defined. For example, the questionnaire does not include definitions for each of the 67 programs and services included in the Profile questionnaire. Consequently, respondents may have interpreted questions and items differently.

Responding to the Profile questionnaire is time-intensive; consequently, respondents may have skipped some questions because of time restrictions. In addition, responses to some questions may have been based on estimation to reduce burden. In particular, questions on finance were difficult for LHDs to answer and yielded large amounts of missing data. Refer to Chapter 6 (Finance) for more details.

Comparisons with data from prior Profile studies are provided for some statistics, but these comparisons should be viewed with caution because both the study population and the respondents are different for each Profile study. In addition, comparisons are not tested for statistical significance.



CHAPTER 2

Jurisdiction and Governance



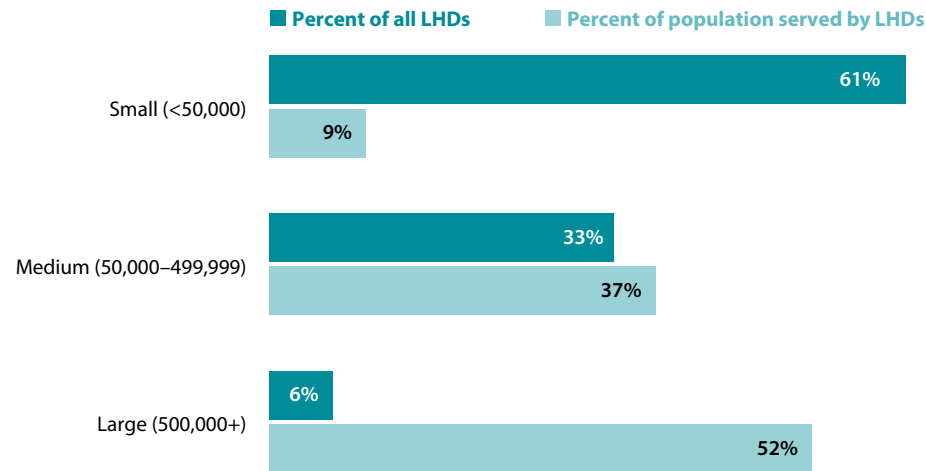
This chapter includes the following:

- ▶ Population sizes served by local health departments (LHDs).
- ▶ Geographic jurisdictions served by LHDs.
- ▶ Governance of LHDs.
- ▶ Combined Health and Human Services Agencies.
- ▶ Local boards of health.

Figure 2.1 | Size of population served by LHDs in the study population

Size of population served	N	Percent
<10,000	404	16%
10,000–24,999	575	23%
25,000–49,999	510	21%
50,000–74,999	248	10%
75,000–99,999	136	6%
100,000–199,999	238	10%
200,000–499,999	198	8%
500,000–999,999	100	4%
1,000,000+	50	2%
Total	2,459	

- There are approximately 2,800 LHDs in the United States, but not every unit is included in the Profile study. LHDs operating under a centralized government structure may include multiple levels (e.g., county units and multi-county regions or districts). The state health agency selects one level for inclusion in the Profile.
- 2,459 LHDs were included in the 2019 Profile study population.
- LHDs serve different sized jurisdictions across the U.S. Of the 2,459 LHDs included in the 2019 Profile study population, 61% serve fewer than 50,000 people.

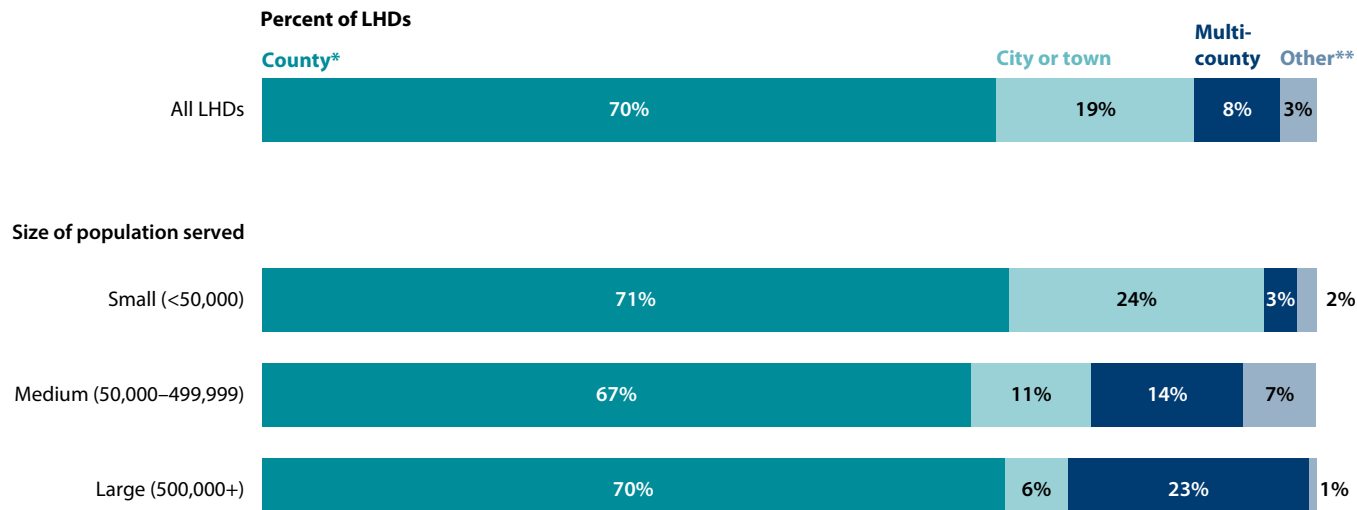
Figure 2.2 | Percent of United States population served by LHDs

N=2,459

- ▶ Throughout this report, small LHDs are classified as those that serve populations of fewer than 50,000 people; medium LHDs serve populations of between 50,000 and 500,000 people; and large LHDs serve populations of 500,000 or more people.
- ▶ Although only 6% of all LHDs are classified as large, they serve about half of the U.S. population.
- ▶ The majority of LHDs are small, but together, they serve less than 10% of the U.S. population.

Technical note

The total population served by all LHDs included in the study represents 98% of the total U.S. population.

Figure 2.3 | Geographic jurisdictions served by LHDs, by size of population served

*County includes city-counties

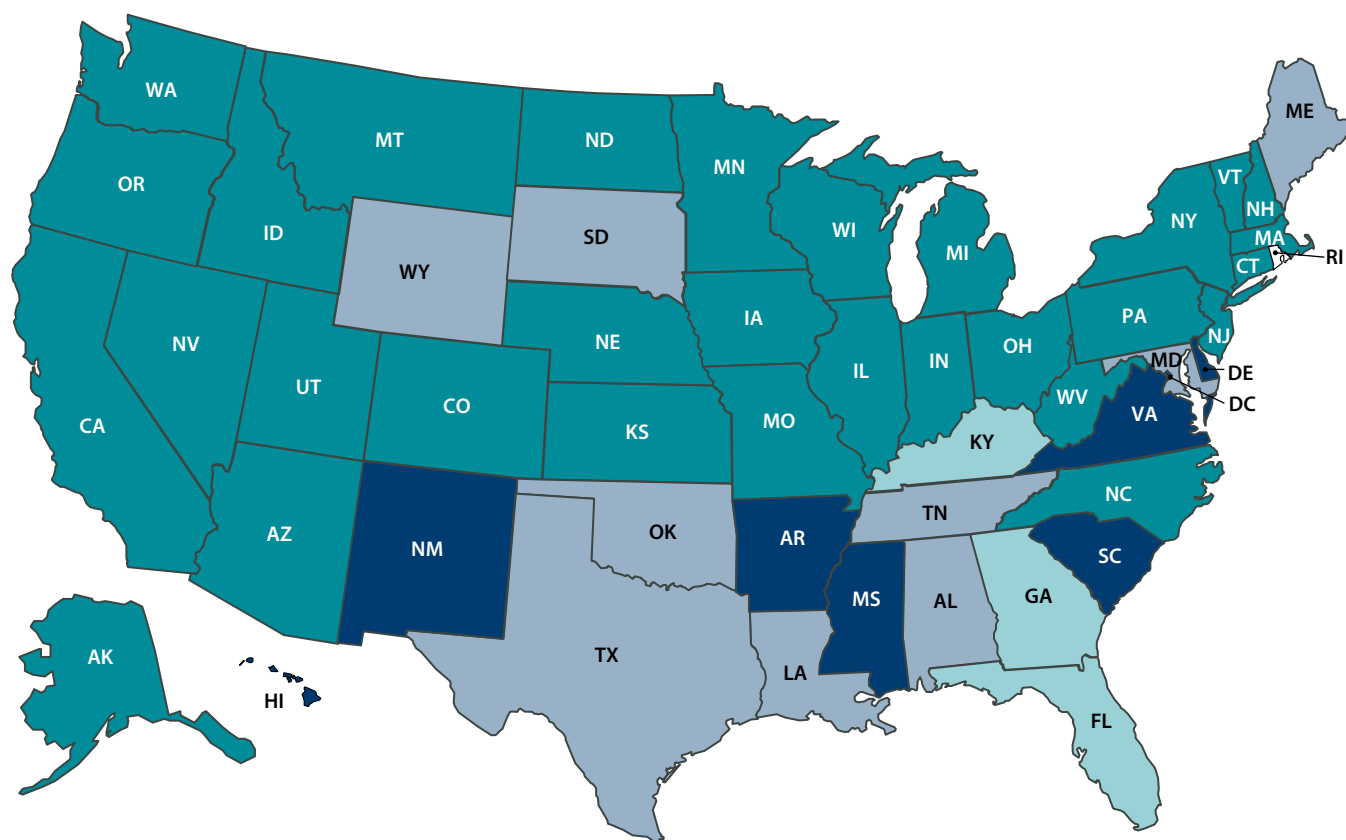
**Other includes LHDs serving multiple cities or towns

N=2,459

- Approximately two-thirds of LHDs are county-based, and an additional 8% serve multiple counties. One-fifth of LHDs serve cities or towns.
- Large LHDs are less likely to serve cities or towns but are more likely to serve multiple counties than small LHDs.

Figure 2.4 | Type of LHD governance, by state

- **Local** (all LHDs in state are units of local government)
- **State** (all LHDs in state are units of state government)
- **Shared** (all LHDs in state governed by both state and local authorities)
- **Mixed** (LHDs in state have more than one governance type)



RI was excluded from the study

N=2,459

- Of the 2,459 LHDs included in the 2019 Profile study population, 1,887 are locally governed, 404 are units of the state health agency, and 168 have shared governance.
- In 30 states, all LHDs are locally governed. These states are referred to as decentralized.
- All LHDs in Florida, Georgia, and Kentucky have shared governance.
- All LHDs in Arkansas, Delaware, Hawaii, Mississippi, New Mexico, South Carolina, and Virginia are units of the state health agency. These states are referred to as centralized.

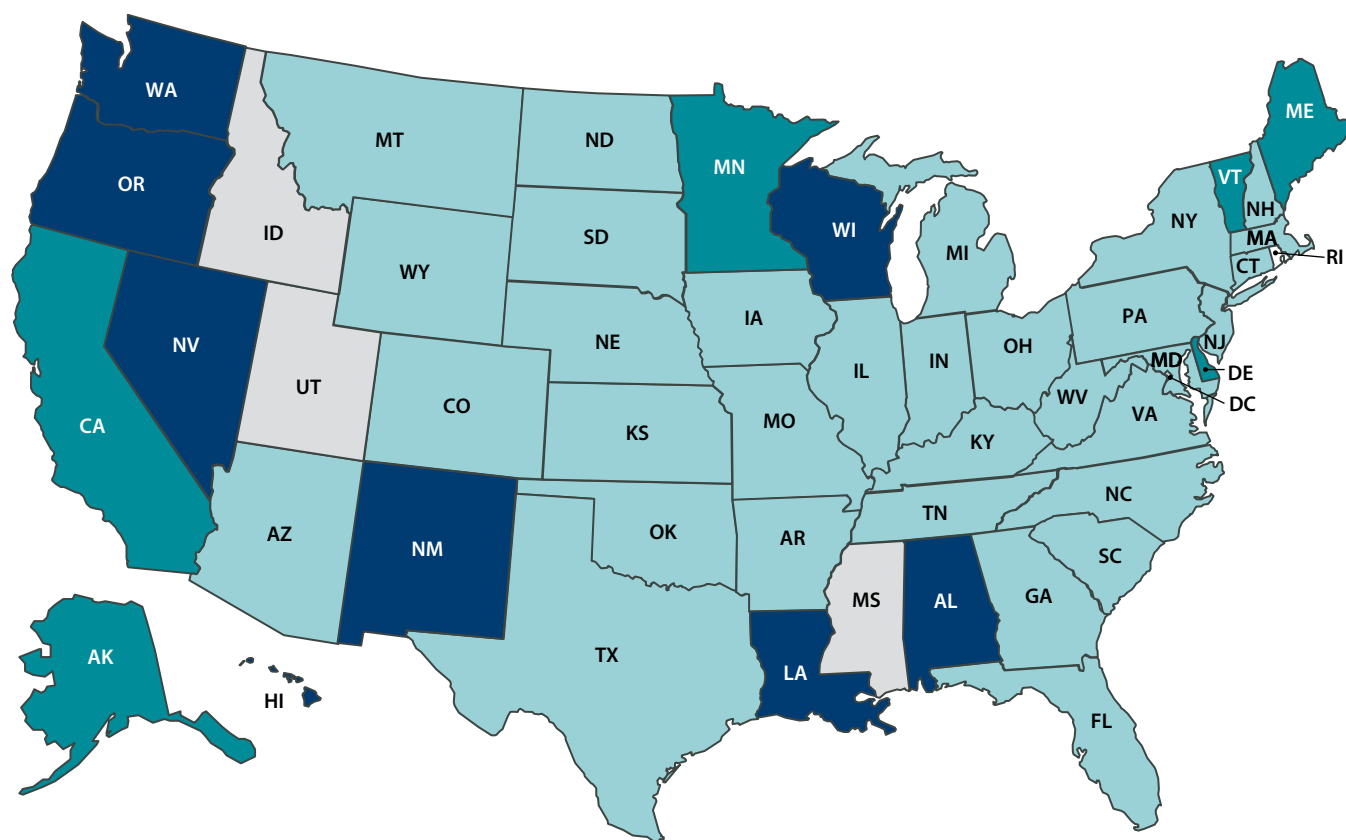
Figure 2.5 | LHDs as a part of a combined Health and Human Services Agency (HHSA), by state

■ More than 50% of LHDs

■ 33%–50% of LHDs

■ Less than 33% of LHDs

■ DC, ID, MS, and UT had insufficient data



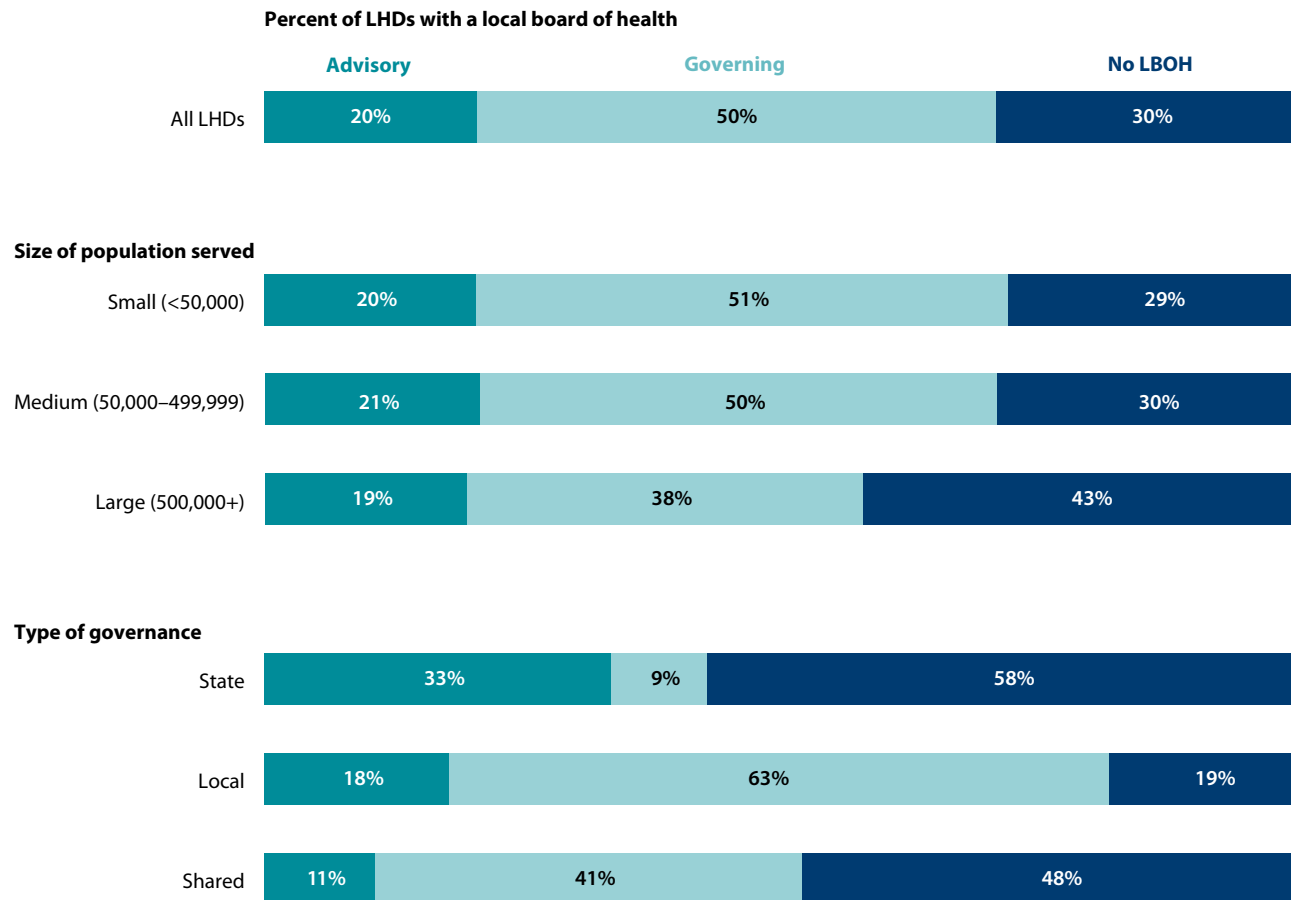
RI was excluded from the study

n=1,479

- One in five LHDs are currently part of a combined Health and Human Services Agency (HHSA).
- More than half of LHDs in six states are part of a combined HHSA; at least one-third of LHDs in eight states are a part of a combined HHSA; and fewer than one-third of LHDs in the remaining states are a part of a combined HHSA.

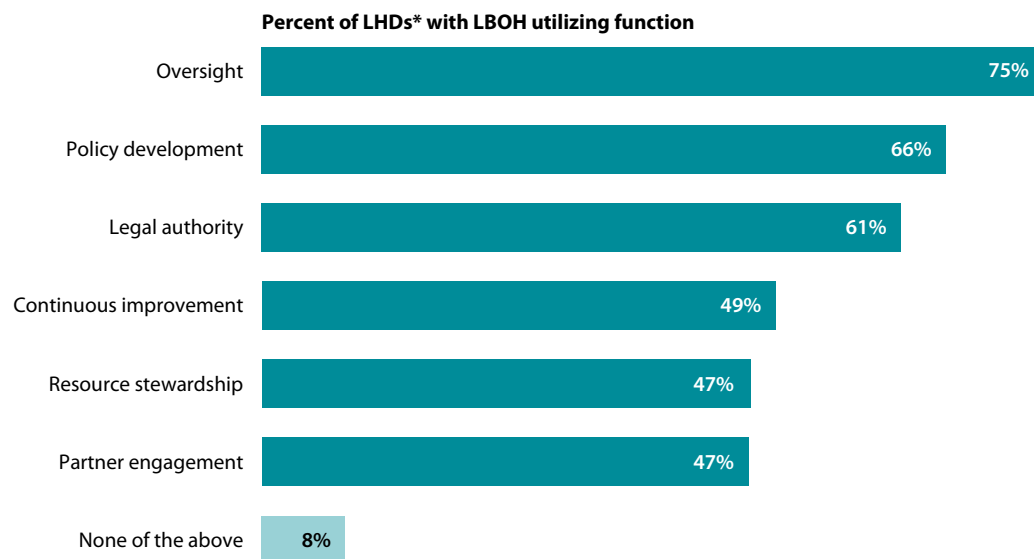
Combined Health and Human Services Agency (HHSA)

A combined health and human services agency can be defined as an agency that administers all programs dealing with health and welfare. A combined health and human services agency provides a broad range of health and social services to promote wellness, self-sufficiency, and a better quality of life by integrating health and social services through a unified service-delivery system.

Figure 2.6 | LHDs with a local board of health (LBOH), by size of population served and type of governance

n=1,469

- ▶ Seventy percent of LHDs have a local board of health (LBOH).
- ▶ A larger proportion of small LHDs have LBOHs compared to large LHDs.
- ▶ Locally governed LHDs are more likely to have a LBOH compared to LHDs that are state-governed or with shared governance.
- ▶ A higher proportion of LHDs have LBOHs with a governing role compared to an advisory role. However, state-governed LHDs are more likely to have an advisory LBOH than a governing body.

Figure 2.7 | Functions that local boards of health (LBOHs) utilize on a continuous basis

*Among LHDs with a LBOH
n=1,016

- The National Association for Local Boards of Health (NALBOH) identifies six functions of public health governance.
- Most LHDs have LBOHs that provide oversight, while fewer have LBOHs that provide resource stewardship and partner engagement functions.

Local board of health functions

Oversight is to assume ultimate responsibility for public health performance in the community by providing necessary leadership and guidance in order to support the public health agency in achieving measurable outcomes, such as by hiring or firing the agency head.

Policy development is to lead and contribute to the development of policies that protect, promote, and improve public health while ensuring that the agency and its components remain consistent with the laws and rules to which it is subject.

Legal authority is to exercise legal authority as applicable by law and understand the roles, responsibilities, obligations, and functions of the governing body, health officer, and agency staff, such as by adopting public health regulations and imposing or enforcing quarantine or isolation orders.

Continuous improvement is to routinely evaluate, monitor, and set measurable outcomes for improving community health status and the public health agency's/governing body's own ability to meet its responsibilities.

Resource stewardship is to assure the availability of adequate resources to perform essential public health services, such as by approving the LHD budget, setting and imposing fees, imposing taxes for public health, or requesting a public health levy.

Partner engagement is to build and strengthen community partnerships through education and engagement to ensure the collaboration of all relevant stakeholders in promoting and protecting the community's health.

Refer to the 2015 Local Board of Health Profile for additional data on these functions (available at www.naccho.org/resources/lhd-research/national-profile-of-local-boards-of-health).



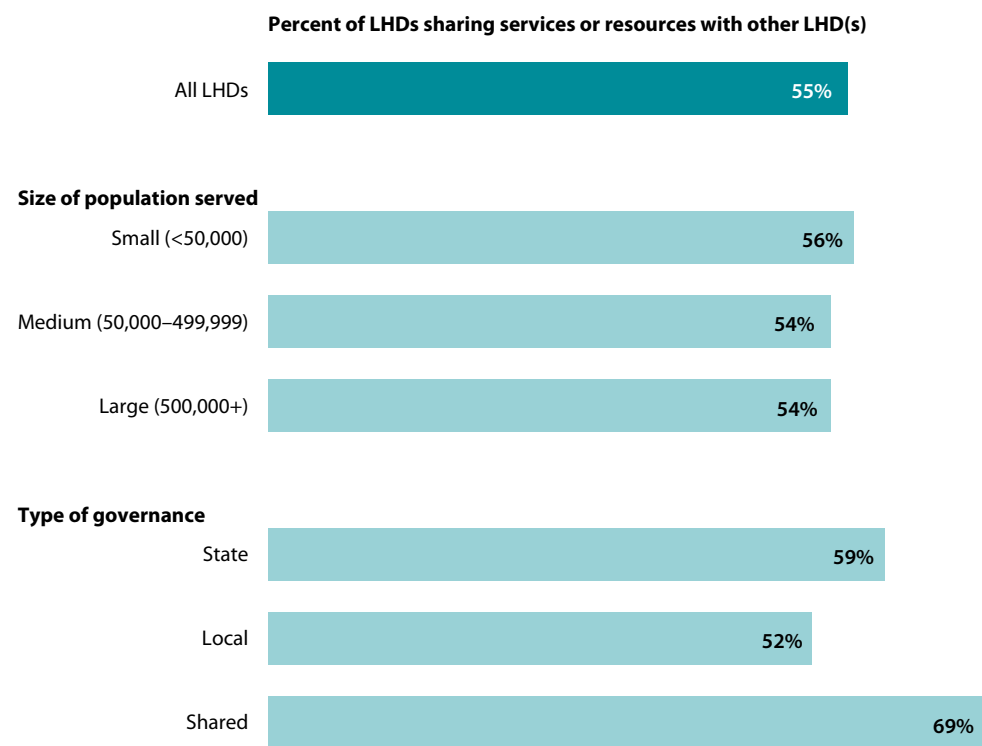
CHAPTER 3

Partnerships



This chapter includes the following:

- ▶ Cross-jurisdictional sharing of services.
- ▶ Local health department (LHD) partnerships and collaborations.
- ▶ LHD engagement with academic institutions.

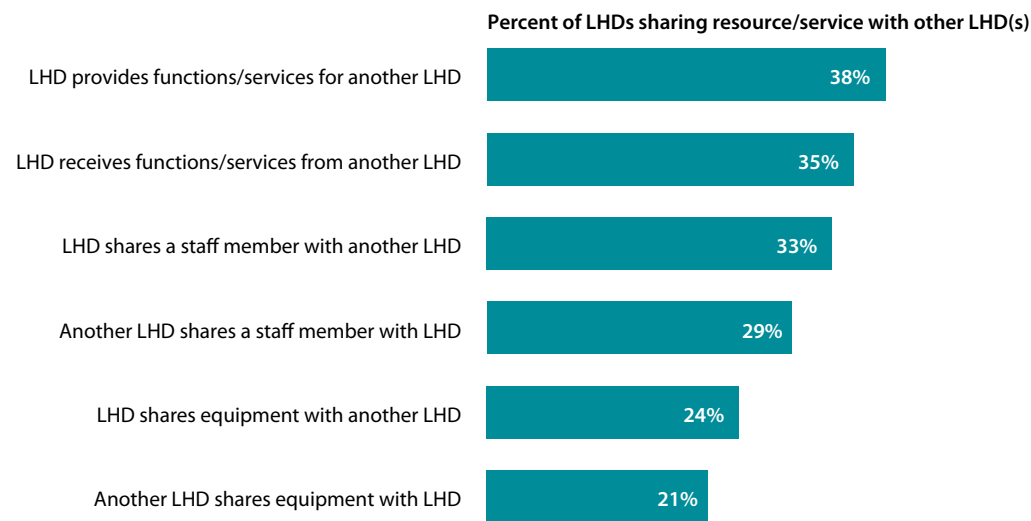
Figure 3.1 | Cross-jurisdictional sharing of services, by size of population served and type of governance

n=369

- ▶ More than half of LHDs share resources (such as funding, staff, or equipment) with other LHDs on a continuous, recurring, non-emergency basis, regardless of size.
- ▶ A larger proportion of LHDs with shared governance share resources than locally governed LHDs.

Cross-jurisdictional sharing of services

Cross-jurisdictional sharing of services is a phrase used to refer to the various means by which jurisdictions work together to provide public health services. LHDs across the country are looking to cross-jurisdictional sharing as a way to help them more efficiently and effectively deliver public health services. The information provided in this section reflects sharing resources on a continuous, recurring, non-emergency basis.

Figure 3.2 | Type of cross-jurisdictional sharing of services

n=359–363

- More than one-third of LHDs receive functions or services from another LHD or provide functions or services for another LHD.
- LHDs are more likely to share resources with another LHD than they are to receive them. For example, one-third of LHDs share staff members with another LHD, while 29% have another LHD share a staff member with them.

Cross-jurisdictional sharing of services

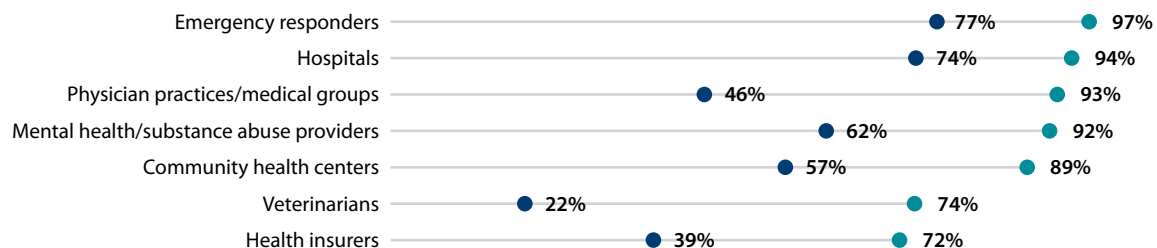
Cross-jurisdictional sharing of services is a term used to refer to the various means by which jurisdictions work together to provide public health services. LHDs across the country are looking to cross-jurisdictional sharing as a way to help them more efficiently and effectively deliver public health services. The information provided in this section reflects sharing resources on a continuous, recurring, non-emergency basis.

Figure 3.3 | LHD partnerships and collaborations in the past year

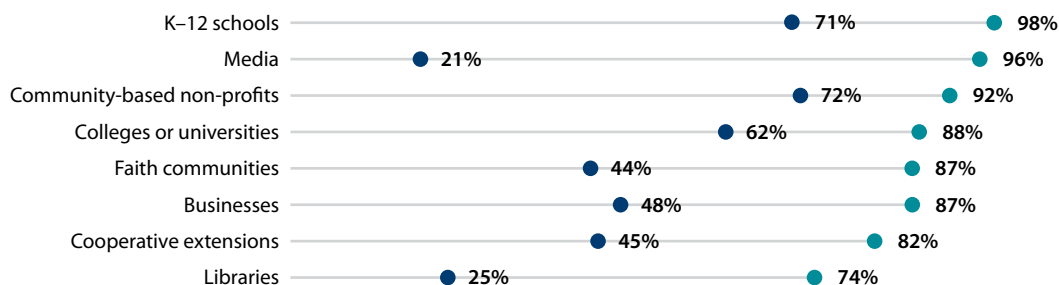
● Percent of LHDs working with organization in any way

● Percent of LHDs regularly scheduling meetings, have written agreements, or share personnel/resources with organization

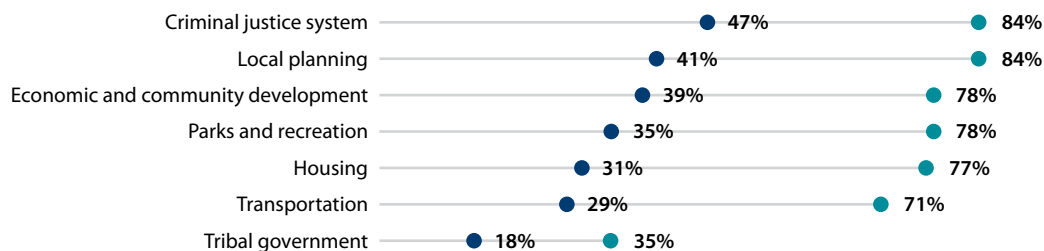
Healthcare partners



Community-based partners (e.g., education, non-government)



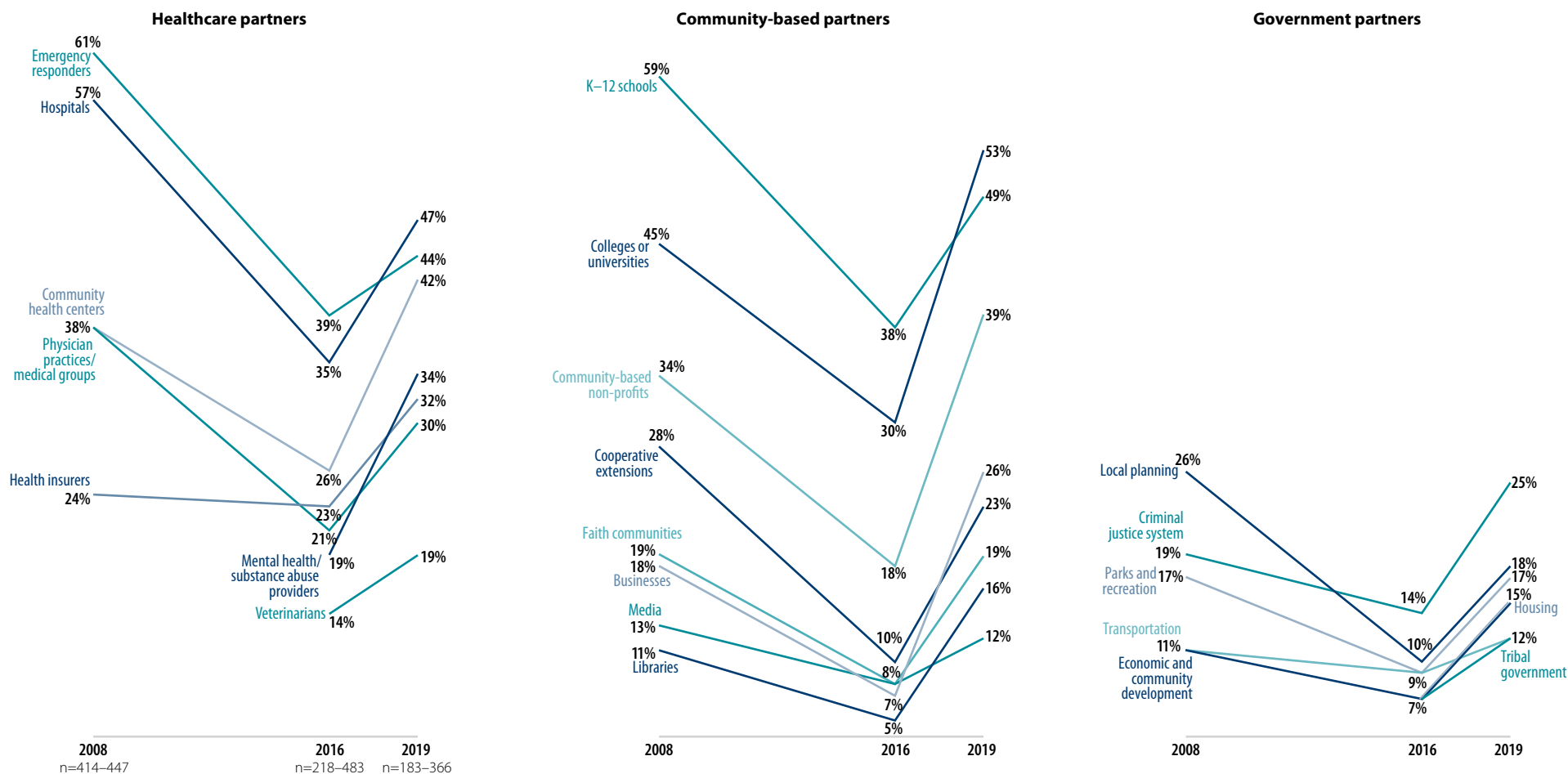
Government partners



n=183-366

- ▶ LHDs work with a variety of partners in their communities in a variety of ways, such as sharing information, regularly scheduling meetings, establishing written agreements, and sharing personnel/resources.
- ▶ More than 95% of LHDs work with some partners, including emergency responders, K-12 schools, and the media. Collaborations with other partners are less universal, including tribal governments, transportation agencies, and health insurers.
- ▶ Overall, LHDs are less likely to collaborate in ways beyond exchanging information (i.e., regularly scheduling meetings, establishing written agreements, or sharing personnel/resources). This difference is particularly large for the media (only 21% collaborate beyond information exchange while 96% exchange information) and veterinarians (only 26% collaborate beyond information exchange while 74% exchange information).

Figure 3.4 | Formal* LHD partnerships and collaborations, over time Percent of LHDs that *share personnel/resources and/or have written agreements

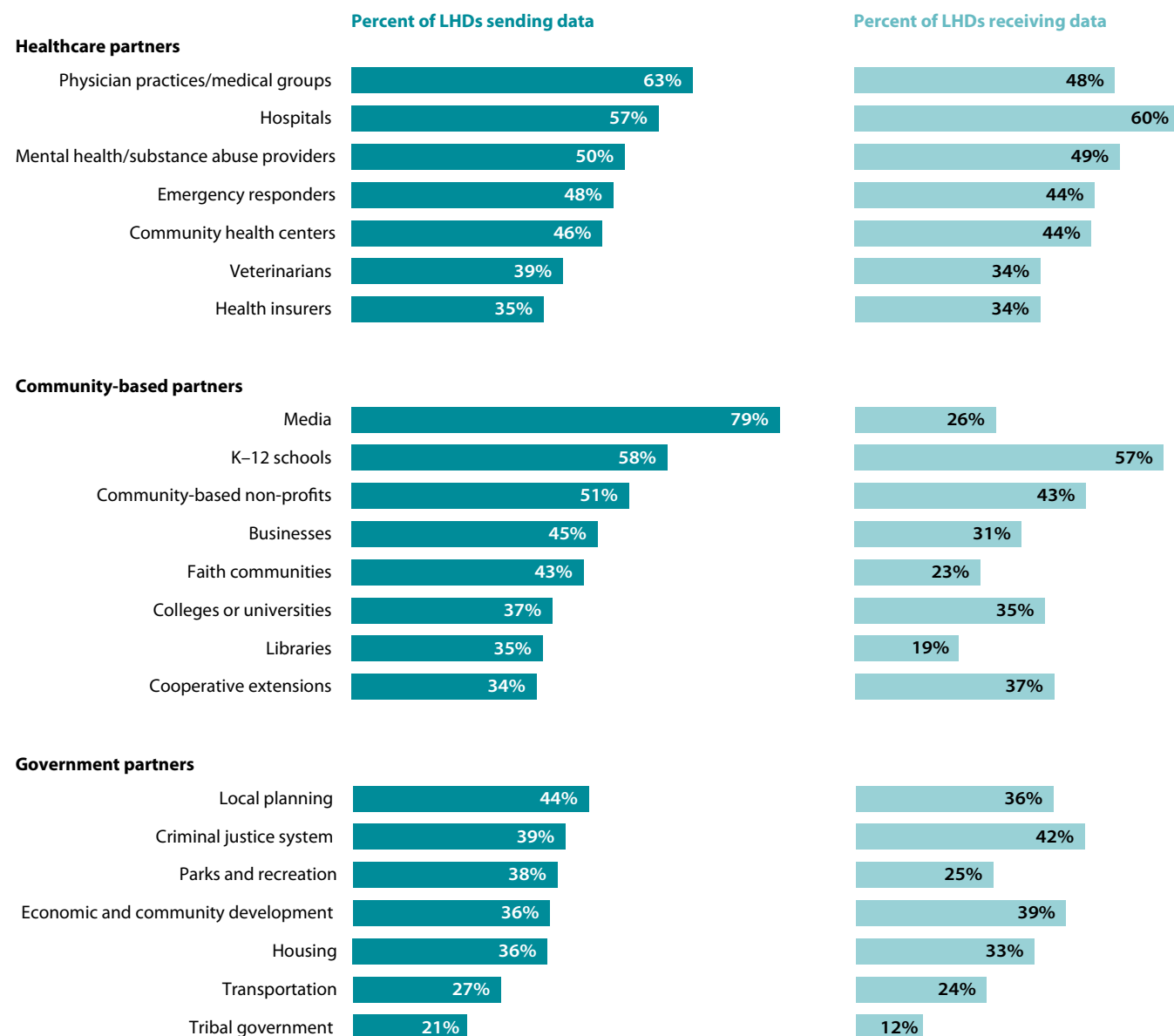


► Although the proportion of LHDs reporting formal collaborations with many organization types decreased between 2013 and 2016, it increased between 2016 and 2019.

► Despite these increases, the proportion of LHDs reporting formal collaborations with many organization types has not recovered to 2013 results. In particular, formal partnerships with emergency responders, hospitals, and K-12 schools saw the greatest overall declines.

► Conversely, LHDs were more likely to report formal partnerships with health insurers, colleges or universities, and businesses in 2019, compared to 2013.

► LHDs are generally less likely to have formal partnerships with government partners than with either healthcare or other community-based partners.

Figure 3.5 | Direction of information exchange between LHDs and partner organizations in the past year

n=183-365

- ▶ With most partners, a greater proportion of LHDs sent data than received data when sharing information in the past year. In particular, LHDs were three times as likely to send data to media partners than to receive data.
- ▶ In the past year, more than half of LHDs shared data (sent and received) with hospitals and K-12 schools.
- ▶ Few LHDs shared data (sent or received) with transportation agencies and tribal governments.

Figure 3.6 | Engagement with academic institutions in the past year, by size of population served

	All LHDs	Size of population served		
		Small (<50,000)	Medium (50,000–499,999)	Large (500,000+)
LHD accepts students from academic institutions as trainees, interns, or volunteers	76%	66%	91%	93%
LHD actively recruits graduates from academic institutions	31%	17%	50%	67%
LHD staff serve on an academic institution advisory group	28%	16%	42%	67%
LHD staff serve as faculty in academic institutions	23%	8%	40%	76%
Faculty/staff from academic institutions have served in a consulting role for LHD	23%	10%	39%	58%
Academic instruction collaborates with LHDs on research studies	22%	11%	33%	67%
LHD contracts with academic institution to provide public health services	11%	8%	14%	22%
LHD has formal relationship with academic institutions to provide training or professional development for LHD staff	11%	5%	16%	35%
Academic institutions have agreements or policies on providing LHD with access to scientific and professional journals	8%	3%	15%	25%
None of the above	21%	30%	6%	4%

n=373

- Some LHDs engage and partner with academic institutions. Three-quarters accept students from academic institutions (as trainees, interns, or volunteers) but fewer actively recruit graduates from institutions.
- Fewer than one-third of LHDs have staff that serve on an academic institution advisory group or as faculty.
- Medium and large LHDs are more likely to engage in partnership activities with academic institutions than small LHDs. Notably, almost all larger LHDs accept students from academic institutions.
- In 2019, LHDs were less likely to have a formal relationship with academic institutions to provide training or professional development for LHD staff than in 2016 (25%, not shown).

Figure 3.7 | Engagement with academic institutions in the past year, by degree of urbanization

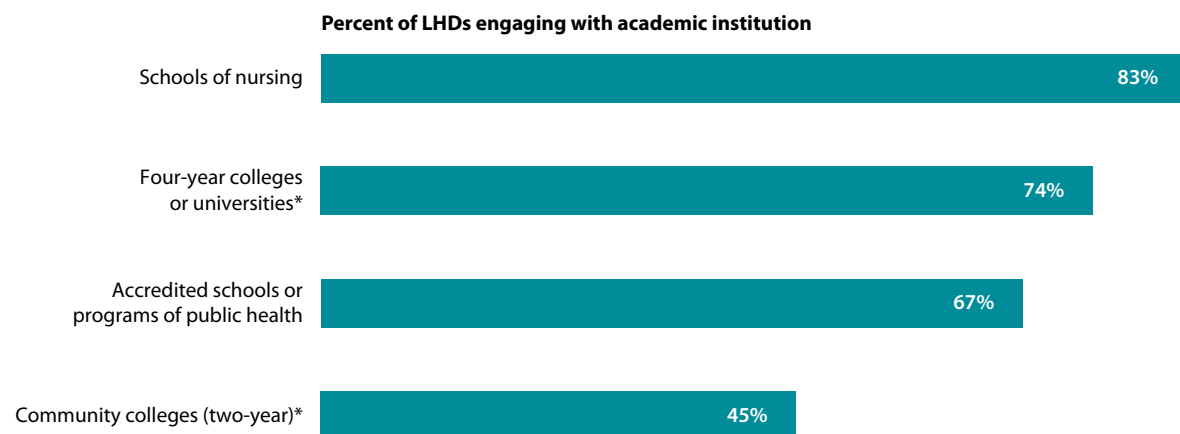
	All LHDs	Degree of urbanization	
		Urban	Rural
LHD accepts students from academic institutions as trainees, interns, or volunteers	76%	80%	72%
LHD actively recruits graduates from academic institutions	31%	41%	20%
LHD staff serve on an academic institution advisory group	28%	37%	18%
LHD staff serve as faculty in academic institutions	23%	35%	11%
Faculty/staff from academic institutions have served in a consulting role for LHD	23%	33%	12%
Academic instruction collaborates with LHDs on research studies	22%	29%	14%
LHD contracts with academic institution to provide public health services	11%	14%	8%
LHD has formal relationship with academic institutions to provide training or professional development for LHD staff	11%	14%	7%
Academic institutions have agreements or policies on providing LHD with access to scientific and professional journals	8%	12%	4%
None of the above	21%	15%	26%

n=373

- LHDs in urban areas are more likely to engage with academic institutions. For example, 41% actively recruit graduates from academic institutions, compared to only 20% of LHDs in rural areas. Similarly, 35% of urban LHD staff serve on faculty in academic institutions, compared to only 11% of rural LHD staff.

Technical note

A new schema for categorizing urban and rural LHDs was used for 2019 estimates. These data may not be comparable to previous year estimates. Refer to page 18 for more information on the methodology.

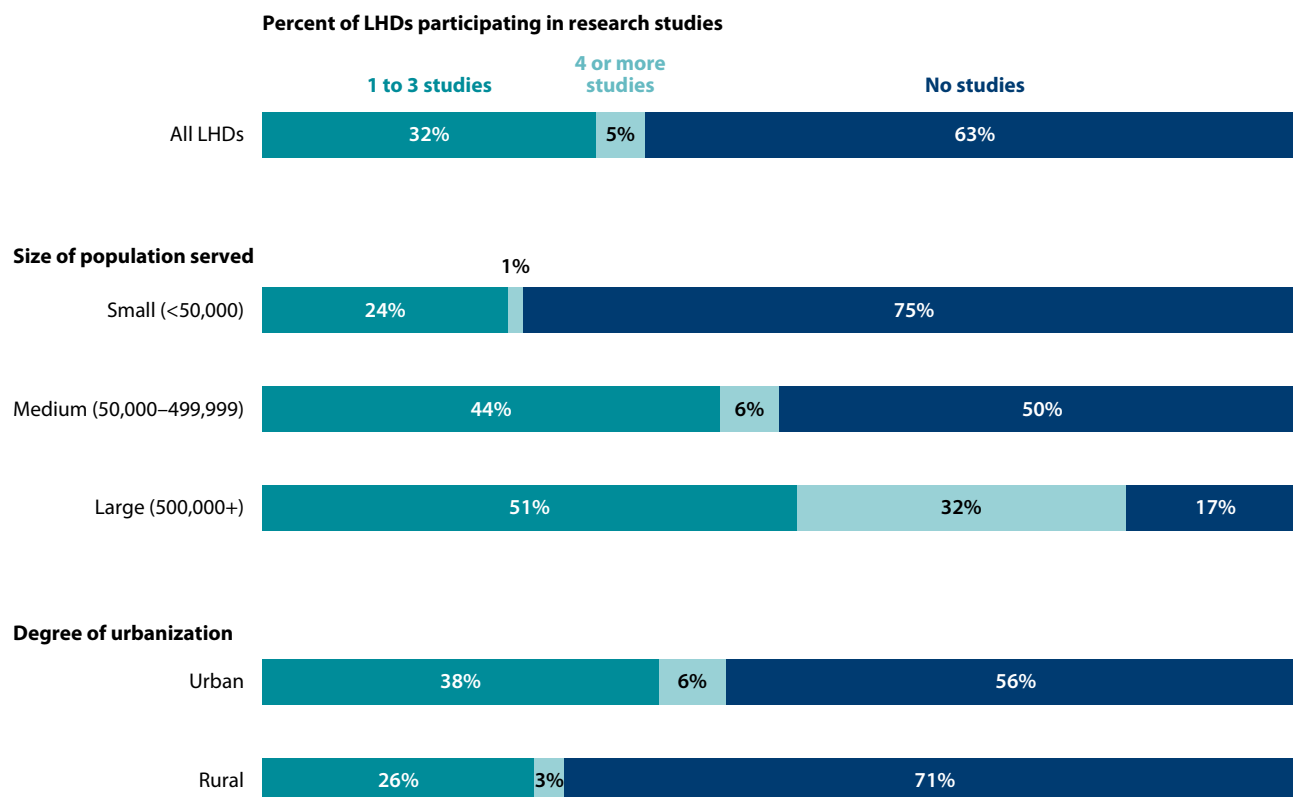
Figure 3.8 | Engagement with specific academic institutions in the past year

*In schools or programs other than nursing or public health

n=311

- ▶ LHDs are more likely to be engaged with Schools of Nursing than other kinds of academic institutions.
- ▶ Two-thirds of LHDs partner or interact with accredited schools or programs of public health.
- ▶ Less than half of LHDs engaged with two-year community colleges in the past year.

Figure 3.9 | Number of research studies in which LHDs participated during the past year, by size of population served and degree of urbanization



n=303

- ▶ One in three LHDs reported participating in at least one research study during the past year.
- ▶ Large LHDs were more likely to participate in research studies than small and medium LHDs. In particular, one-third of large LHDs participated in more than three studies during the past year.
- ▶ LHDs in urban areas participate in a greater number of research studies than those in rural areas.

Technical note

A new schema for categorizing urban and rural LHDs was used for 2019 estimates. These data may not be comparable to previous year estimates. Refer to page 18 for more information on the methodology.

Figure 3.10 | Participation in research activities during the past year, by size of population served

	All LHDs	Size of population served		
		Small (<50,000)	Medium (50,000–499,999)	Large (500,000+)
Collecting, exchanging, or reporting data for a study	29%	19%	39%	64%
Disseminating research findings to key stakeholders	18%	9%	30%	50%
Applying research findings to practices within own organization	17%	7%	29%	56%
Analyzing and interpreting study data and findings	17%	10%	24%	58%
Identifying research topics and questions that are relevant to public health practice	15%	8%	21%	50%
Recruiting study sites and/or study participants	11%	6%	13%	52%
Helping other organizations apply research findings to practice	11%	6%	14%	39%
Developing or refining research plans and/or protocols for public health studies	9%	3%	13%	35%
None of the above	62%	74%	47%	16%

n=324

- More than half of LHDs did not participate in research activities during the past year. The most common research activity LHDs did participate in was collecting, exchanging, or reporting data for a study.
- Large LHDs were more likely to report participating in research activities than small LHDs. For example, 56% of large LHDs applied research findings to practices within their own organization, compared to only 7% of small LHDs.



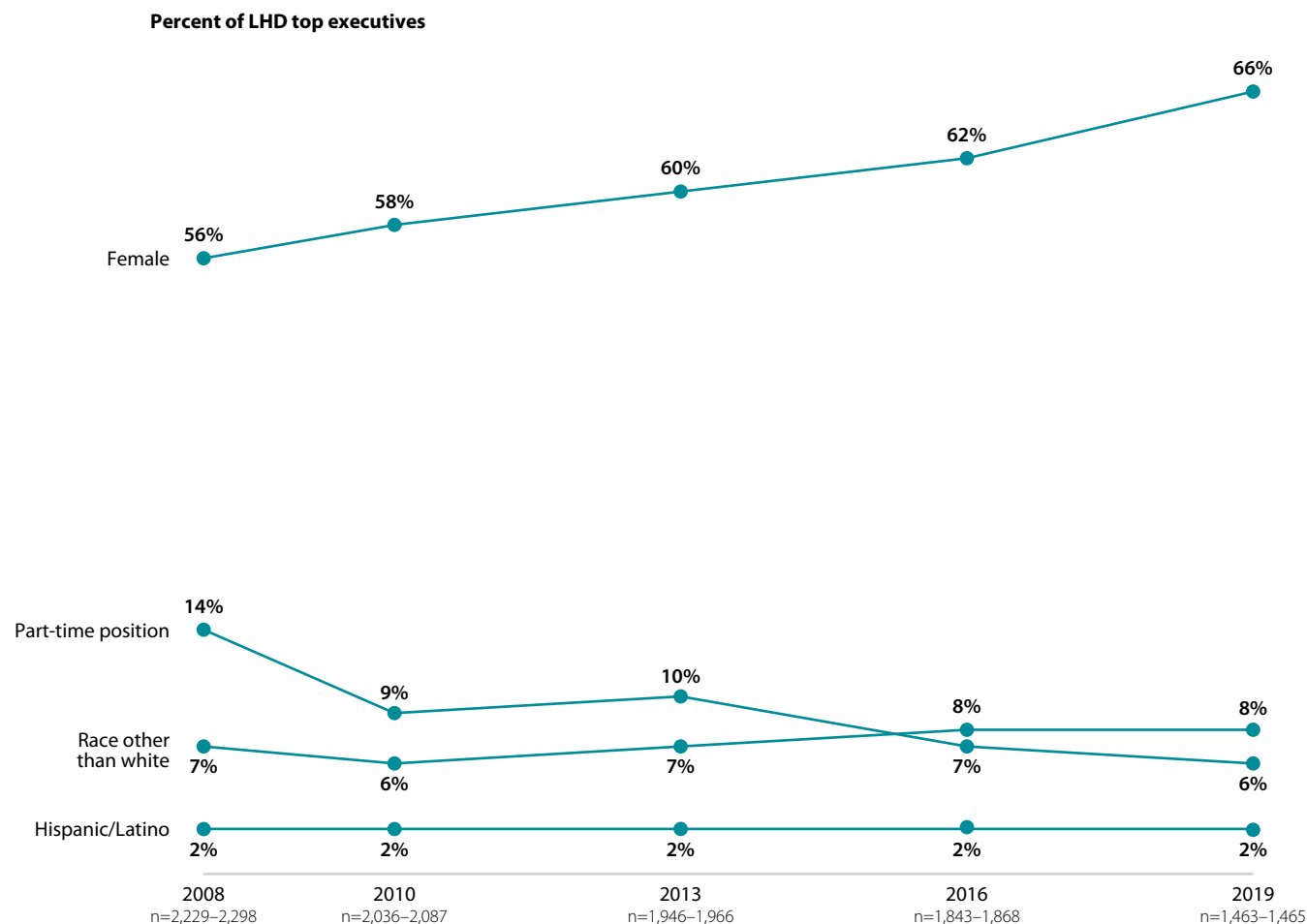
CHAPTER 4

Leadership

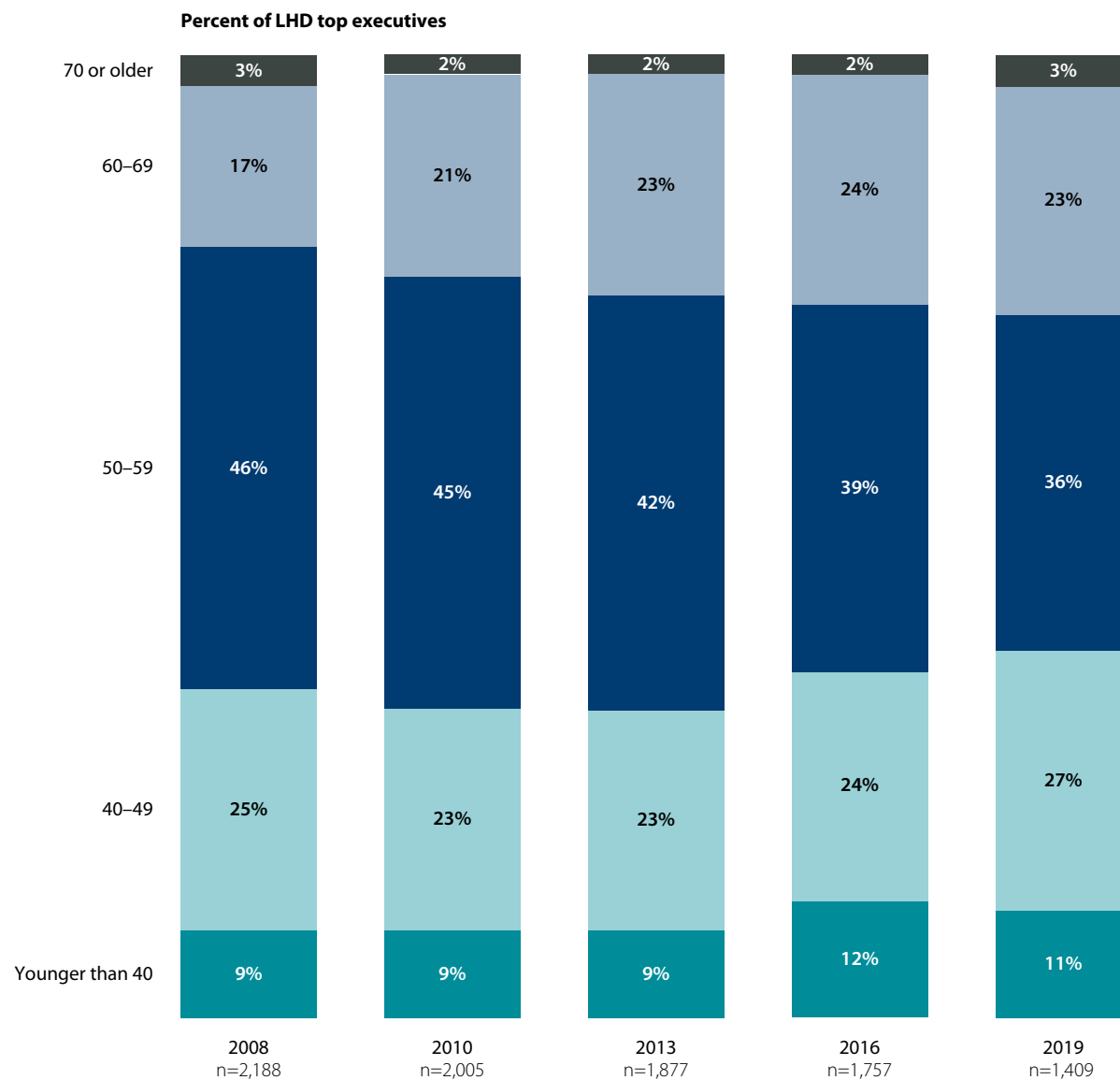


This chapter includes the following:

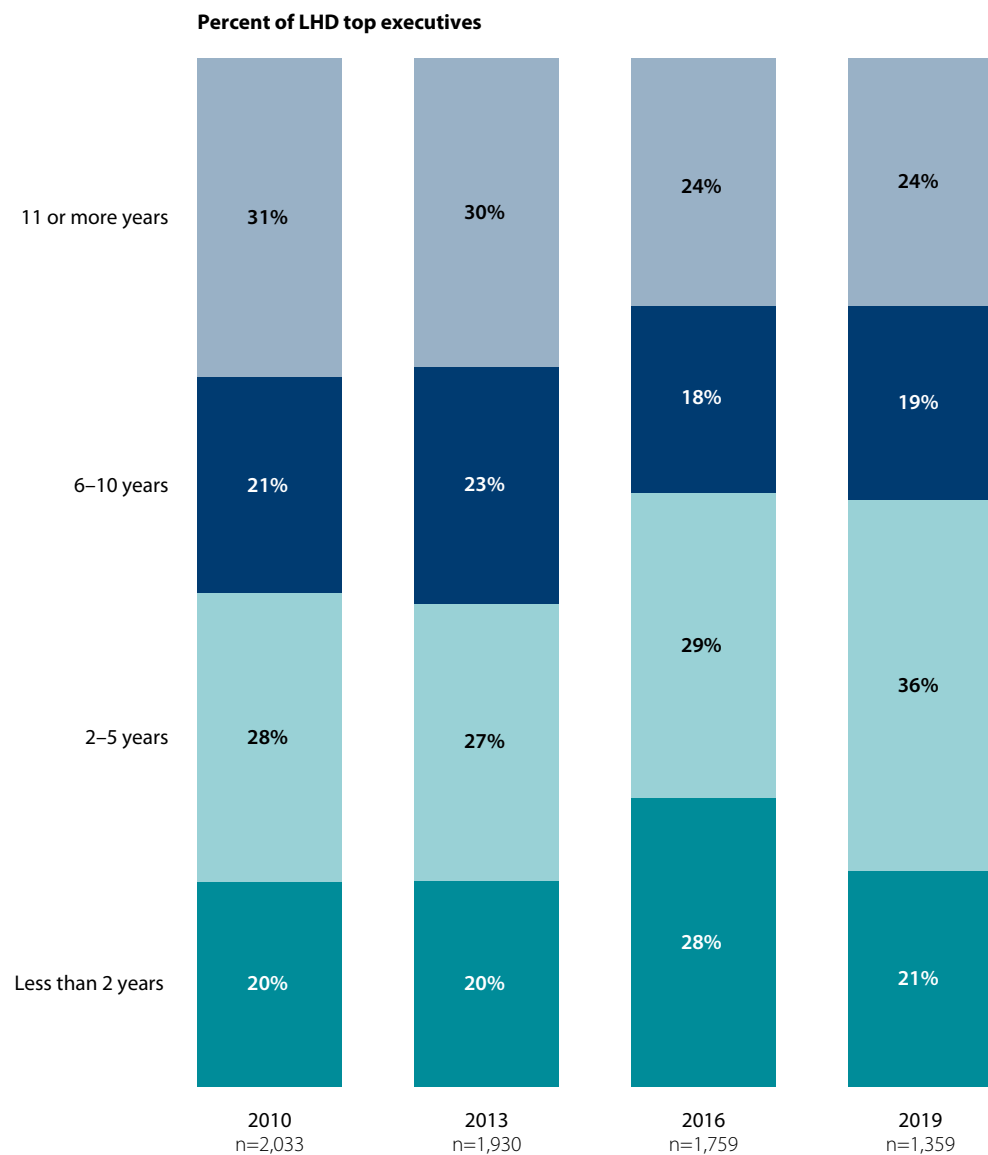
- ▶ Characteristics of local health department (LHD) top executives, including age, tenure, and degrees held.
- ▶ Characteristics of new versus experienced LHD top executives.

Figure 4.1 | Characteristics of LHD top executives

- ▶ Two-thirds of top executives identify as female; since 2008, the percentage of female top executives has increased steadily, from 56% in 2008 to 66% in 2019.
- ▶ Fewer than 10% of top executives are Hispanic/Latino or a race other than white, and this percentage has remained low since 2008.
- ▶ The percentage of top executives that are part-time positions has decreased by more than half since 2008, from 14% to 6% in 2019.

Figure 4.2 | Age of LHD top executives, over time

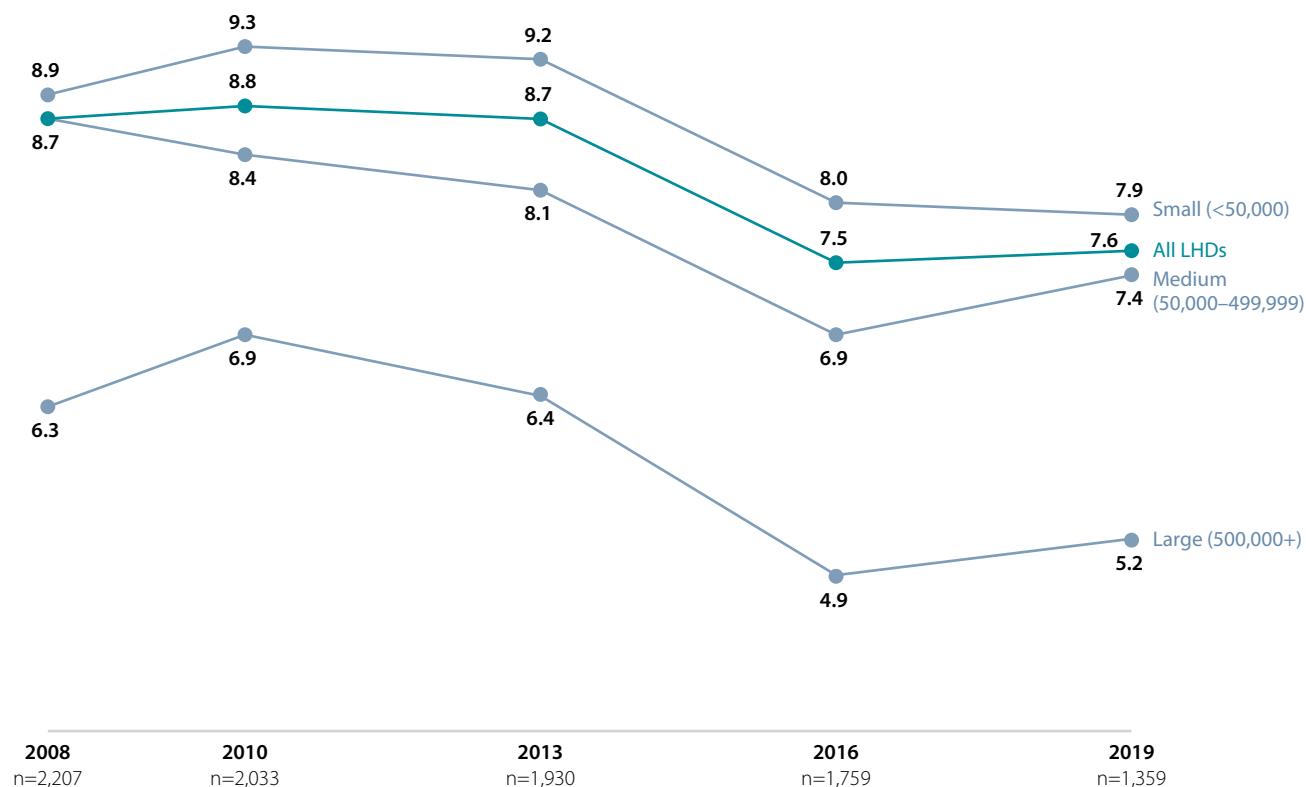
- ▶ Almost two-thirds of top executives are 50 or older, and one-quarter are 60 or older. Eleven percent are younger than 40.
- ▶ Since 2008, the proportion of top executives in their fifties has declined. Meanwhile, the proportions of both older (60+) and younger (less than 50) top executives have grown.

Figure 4.3 | Tenure of LHD top executives, over time

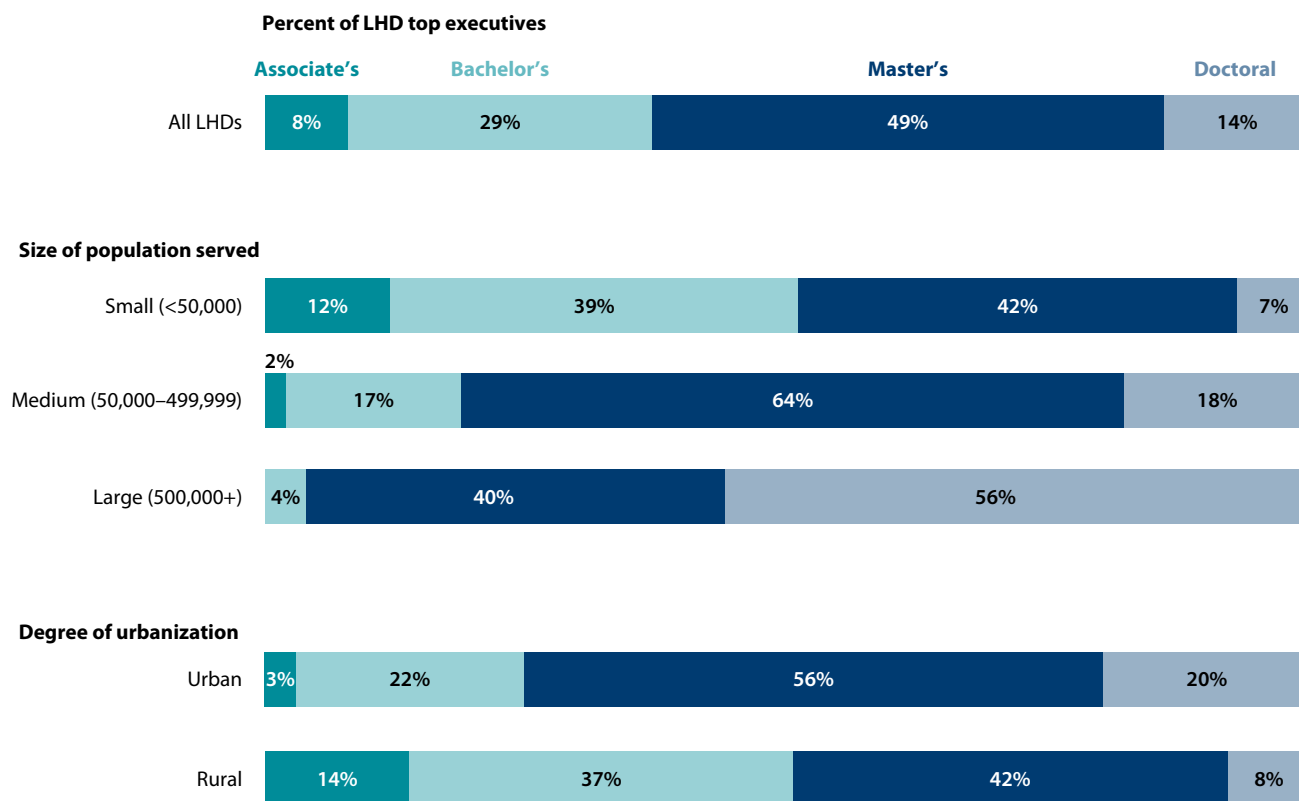
- Compared to 2010 and 2013, top executives have been in their positions for fewer years. Since 2013, the percentage of top executives who have been in their positions less than five years has increased, while the percentage of top executives who have been in their positions for six or more years has decreased.

Figure 4.4 | Average tenure (in years) of LHD top executives, over time and by size of population served

Mean number of years



- ▶ Since 2008, the average tenure for top executives decreased from 8.7 years to 7.6 years. However, the average tenure has remained steady over the past three years.
- ▶ Although average tenure has decreased overall since 2008 among LHDs serving different population sizes, it has increased slightly for medium and large LHDs over the past three years.
- ▶ Top executives at large LHDs remain in their positions for fewer years on average than top executives at medium or small LHDs.

Figure 4.5 | Highest degree obtained by LHD top executive, by size of population served and degree of urbanization

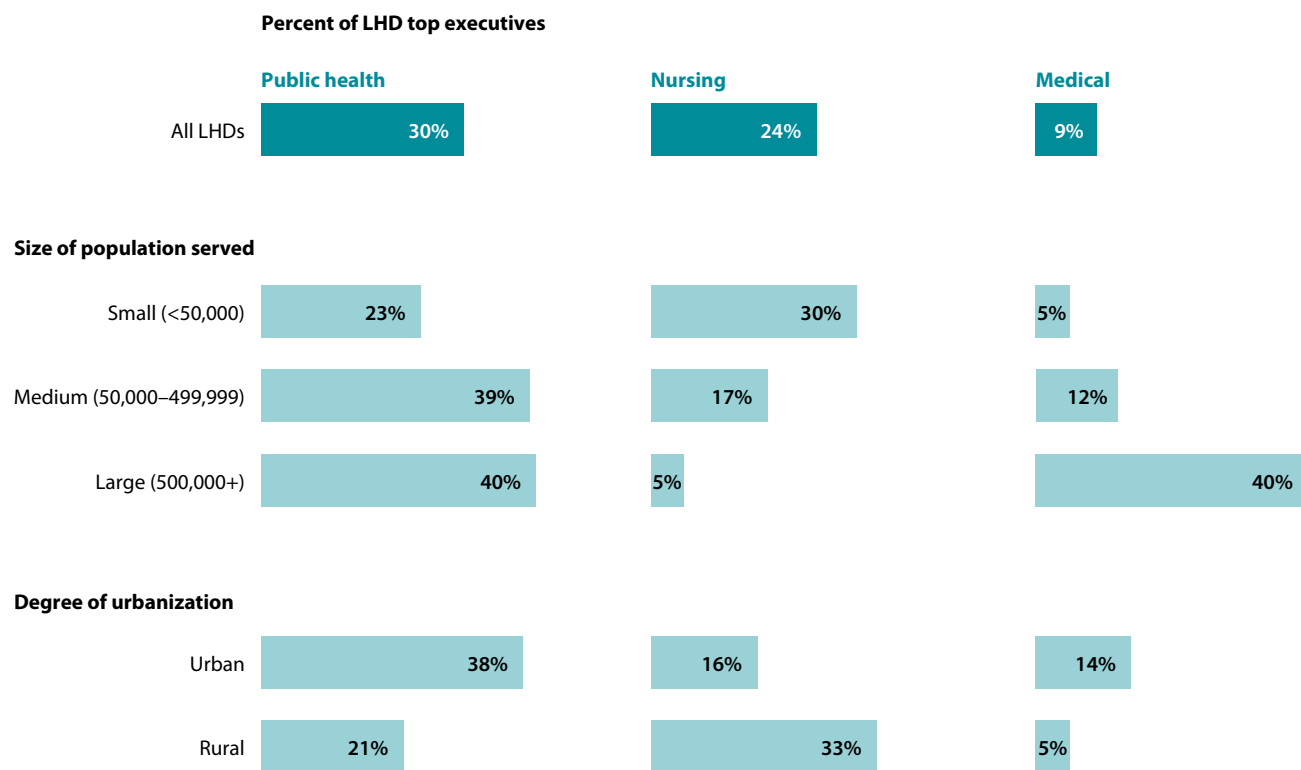
n=1,422

- ▶ The highest degree held by top executives is most often a Master's degree, followed by a Bachelor's degree. Fewer top executives hold Associate's or Doctoral degrees.
- ▶ Top executives at large LHDs are much more likely to have graduate degrees (96%) than top executives at small LHDs (49%).
- ▶ Similarly, top executives at LHDs serving urban areas are much more likely to have graduate degrees (76%) than top executives at LHDs serving rural areas (50%).

Technical note

A new schema for categorizing urban and rural LHDs was used for 2019 estimates. These data may not be comparable to previous year estimates. Refer to page 18 for more information on the methodology.

Figure 4.6 | Specialized degrees obtained by LHD top executive, by size of population served and degree of urbanization



n=1,447

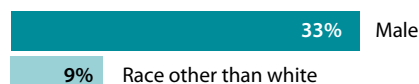
- ▶ Slightly less than one-third of top executives hold a public health degree, nearly one-quarter hold nursing degrees, and 9% hold medical degrees.
- ▶ Top executives at large LHDs are more likely to have public health or medical degrees than nursing degrees. On the other hand, top executives at small LHDs are more likely to have nursing degrees than public health or medical degrees.
- ▶ Top executives at LHDs serving rural areas are more likely to have nursing degrees than top executives at LHDs serving urban areas.

Technical note

A new schema for categorizing urban and rural LHDs was used for 2019 estimates. These data may not be comparable to previous year estimates. Refer to page 18 for more information on the methodology.

Figure 4.7 | Characteristics of new versus experienced LHD top executives**Percent of LHD top executives****New:** Top executive for less than three years**Experienced:** Top executive for three or more years**Younger than 40 years old****Have a graduate degree**

n=1,300–1,337

Gender and race identity**Have a specialized degree in public health or medicine**

- In some ways, new top executives (i.e., top executives who have been in their positions for less than three years) are different than experienced top executives. For example, new top executives are more likely to be younger than 40 than experienced top executives.
- On the other hand, new top executives are typically of similar gender identity and race as experienced top executives, i.e., mostly white females.
- New top executives are also slightly less likely to have a graduate degree or a specialized degree in public health or medicine than their more experienced counterparts.



CHAPTER 5

Workforce

This chapter includes the following:

- ▶ Current numbers of local health department (LHD) staff (employees and Full-Time Equivalents (FTEs)).
- ▶ Changes in numbers of LHD staff (2008 to 2009).
- ▶ Annual LHD job losses and gains.
- ▶ Employees retiring from LHD workforce.
- ▶ Occupations employed by LHDs.

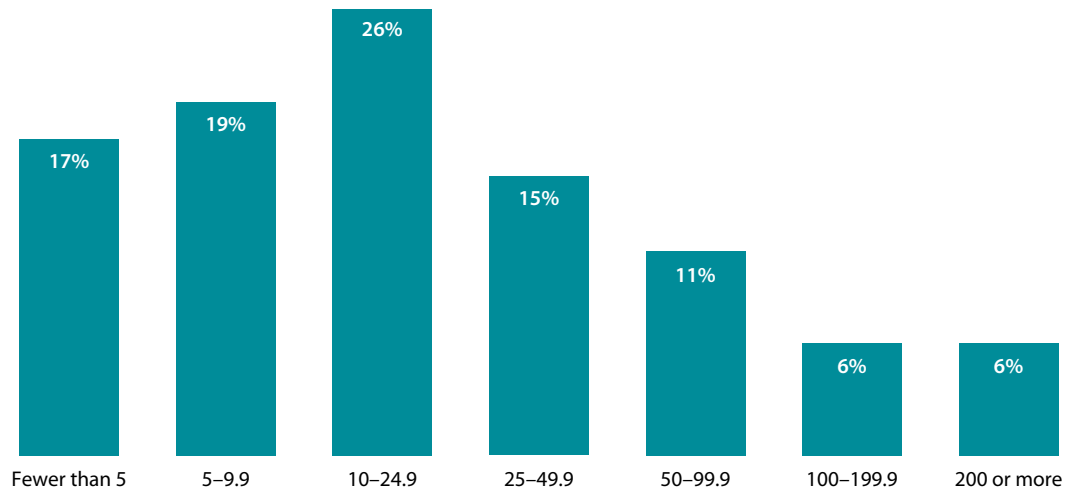
Technical note

Statistics were calculated using all valid data available, regardless of missing information in other occupations, total employees, and total FTEs.



Figure 5.1 | Number of Full-Time Equivalents (FTEs)

Percent of LHDs



n=1,468

- ▶ Almost all LHDs employ less than 50 FTEs, with 35% employing less than 10 FTEs and 41% employing between 10 and 50 FTEs.
- ▶ Only 10% of LHDs employ between 50 and 100 FTEs, and 12% employ 100 or more FTEs.

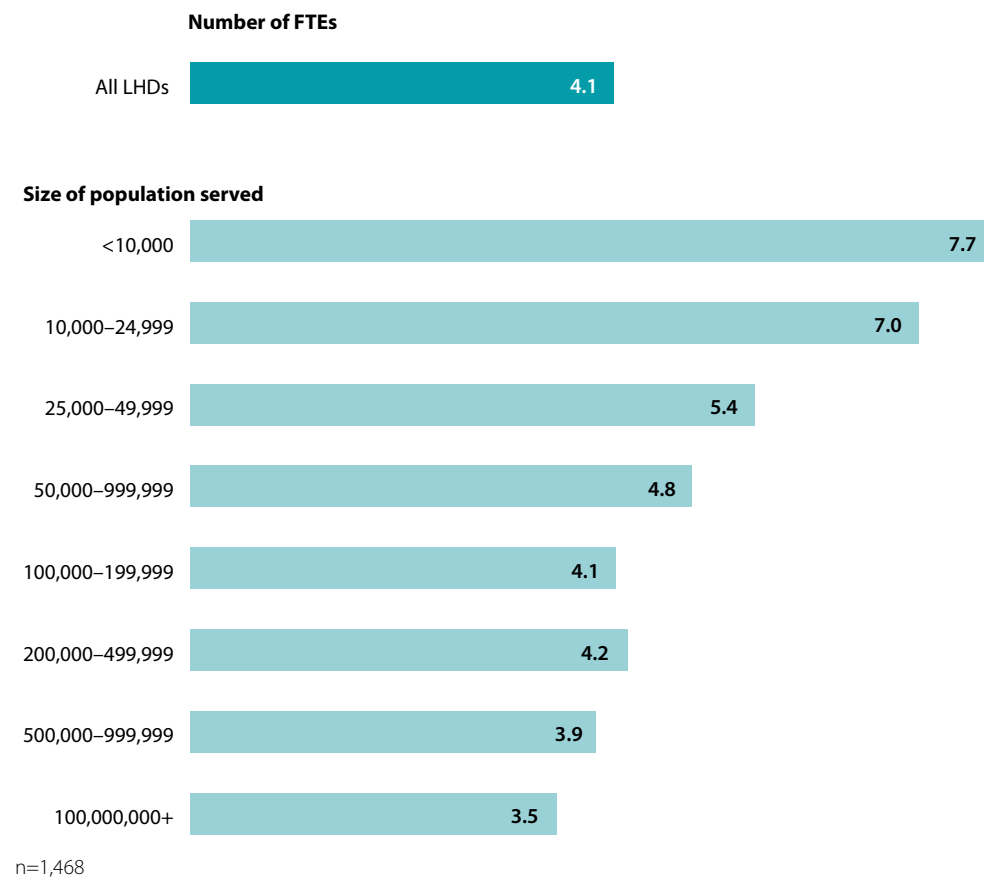
Figure 5.2 | Mean and median number of employees and Full-Time Equivalents (FTEs), by size of population served

Size of population served	Number of employees		Number of FTEs	
	Mean	Median	Mean	Median
All LHDs	62	20	56	17
<25,000	12	8	10	6
25,000–49,999	23	15	20	13
50,000–99,999	38	30	34	26
100,000–249,999	70	60	64	54
250,000–499,999	155	114	143	104
500,000–999,999	304	255	269	218
1,000,000+	846	489	769	456

n(employees)=1,467

n(FTEs)=1,468

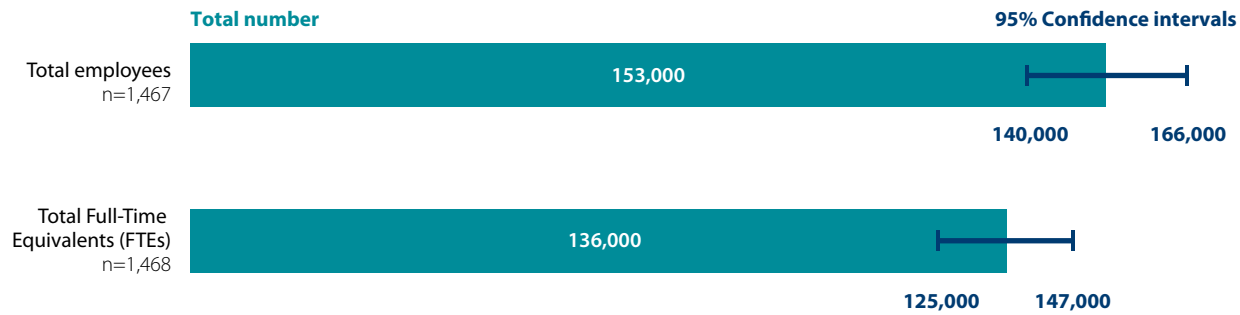
- ▶ On average, LHDs employ 62 employees or 56 FTEs.
- ▶ However, these numbers vary greatly by the size of population served by the LHD. While LHDs that serve less than 25,000 people employ 12 employees or 10 FTEs on average, LHDs that serve over one million people employ 846 employees or 769 FTEs on average.

Figure 5.3 | Full-Time Equivalents (FTEs) per 10,000 people, by size of population served

- ▶ Among all LHDs, the overall workforce capacity is 4.1 FTEs per 10,000 people.
- ▶ LHDs that serve smaller populations employ a greater number of FTEs per 10,000 people than LHDs that serve larger populations.

Technical note

The number of LHD FTEs per 10,000 people served by the LHD is a useful way to measure overall workforce capacity and facilitates comparisons across LHDs serving different jurisdiction sizes. These statistics are computed by summing the FTE staff (for all LHDs or for LHDs in specific jurisdiction size categories), dividing by the total population of those jurisdictions, and multiplying by 10,000.

Figure 5.4 | Estimated size of the LHD workforce

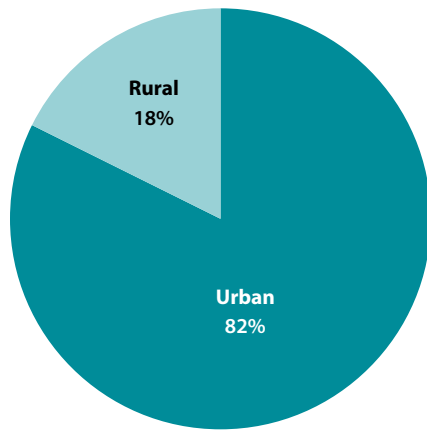
- Approximately 153,000 employees or 136,000 FTEs are employed by LHDs.

Technical note

The confidence intervals reflect the uncertainty of these estimates.

Figure 5.5 | Distribution of Full-Time Equivalents (FTEs), by degree of urbanization

Percent of LHD FTEs

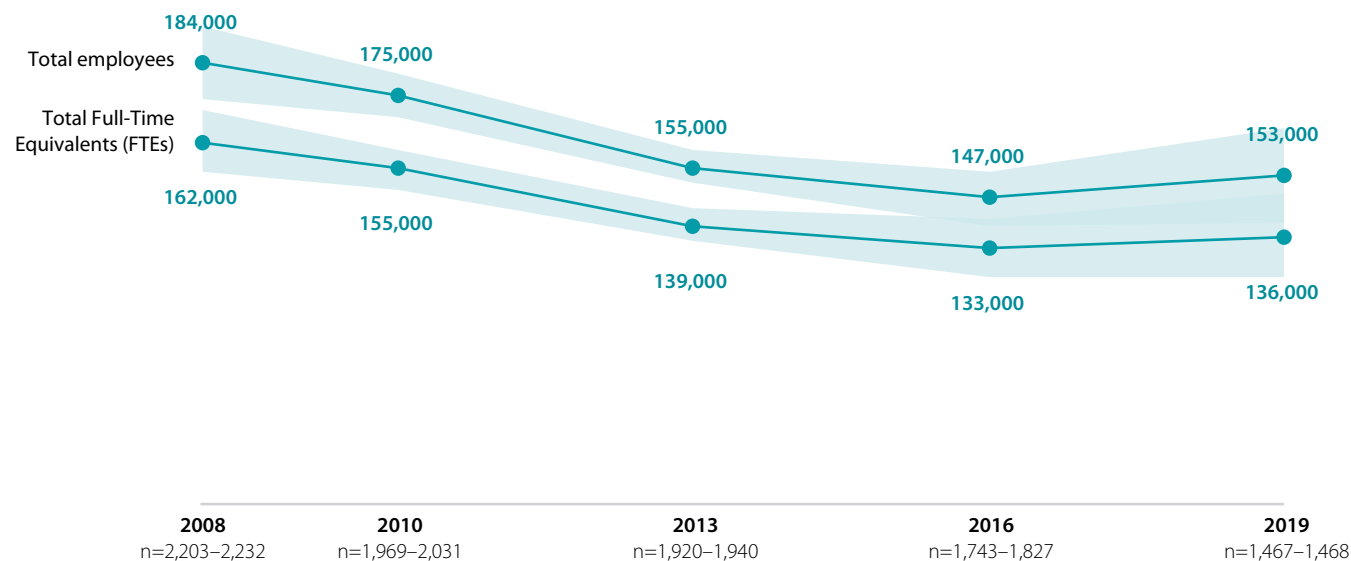


n=1,468

- More than three-quarters of LHD FTEs (82%, or 112,000 FTEs) are employed by LHDs that serve urban areas. Only 18% of LHD FTEs (24,000 FTEs) are employed by LHDs that serve rural populations.

Technical note

A new schema for categorizing urban and rural LHDs was used for 2019 estimates. These data may not be comparable to previous year estimates. Refer to page 18 for more information on the methodology.

Figure 5.6 | Estimated size of LHD workforce, over time**Total number**

Light teal shading depicts 95% Confidence Interval.

- ▶ Since 2008, the estimated number of LHD employees has decreased from 184,000 in 2008 to 153,000 in 2019—a decrease of 17%.
- ▶ Similarly, the estimated number of FTEs employed by LHDs has decreased from 162,000 in 2008 to 136,000 in 2019—a decrease of 16%.

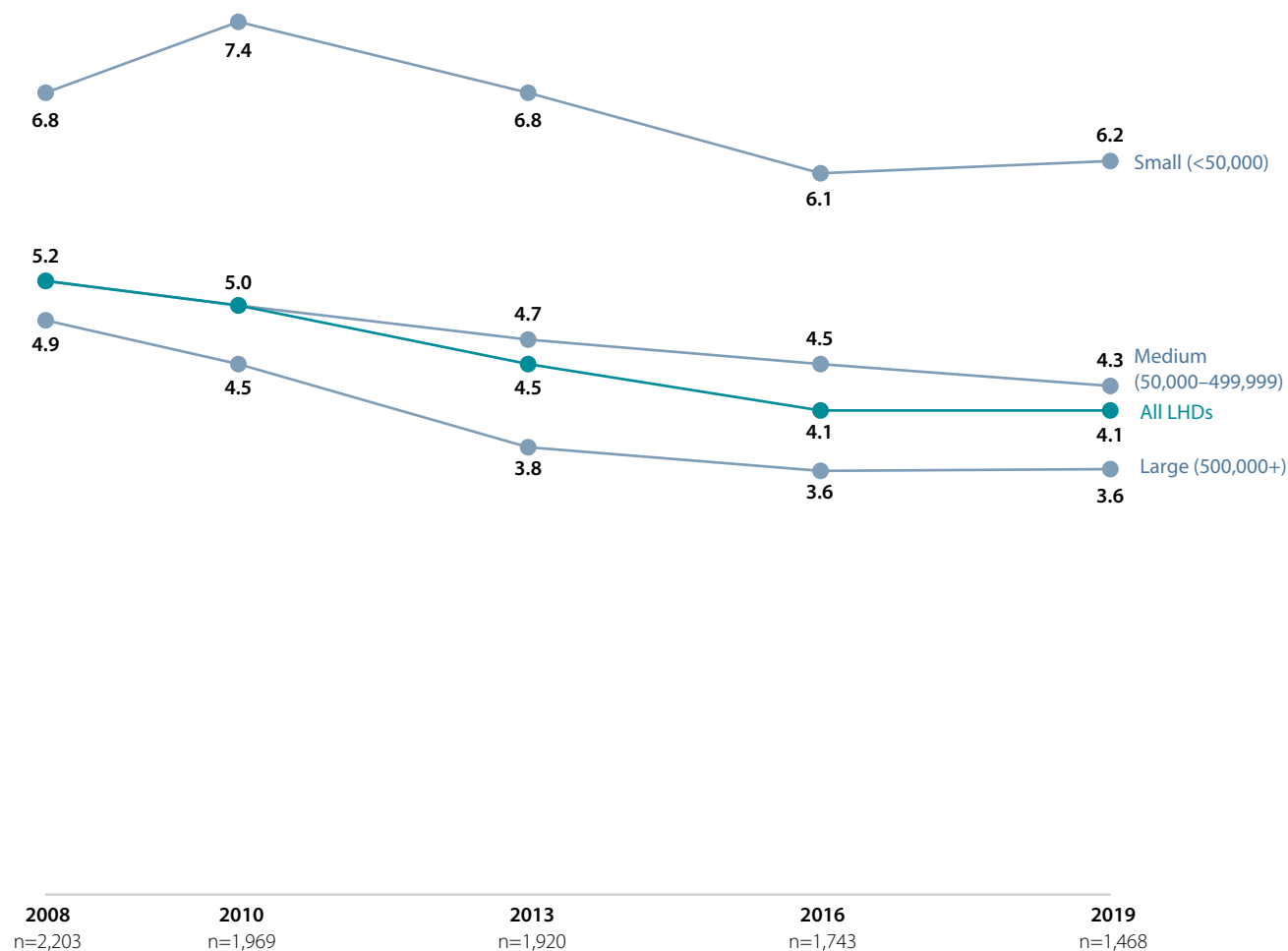
Technical note

Estimates for 2008–2013 workforce are different from previous reports due to new weighing and cleaning methodologies. Refer to page 17 for more information on the methodology.

The confidence intervals reflect the uncertainty of these estimates (because of incomplete data and great variability in numbers of LHD staff).

Figure 5.7 | Full-Time Equivalents (FTEs) per 10,000 people, over time and by size of population served

Number of FTEs per 10,000 people



- Overall, LHDs lost 21% of their workforce capacity since 2008. While 5.2 FTEs per 10,000 people were employed at LHDs in 2008, only 4.1 FTEs per 10,000 people were employed in 2019.
- Large LHDs have experienced a greater loss in workforce capacity than smaller LHDs.

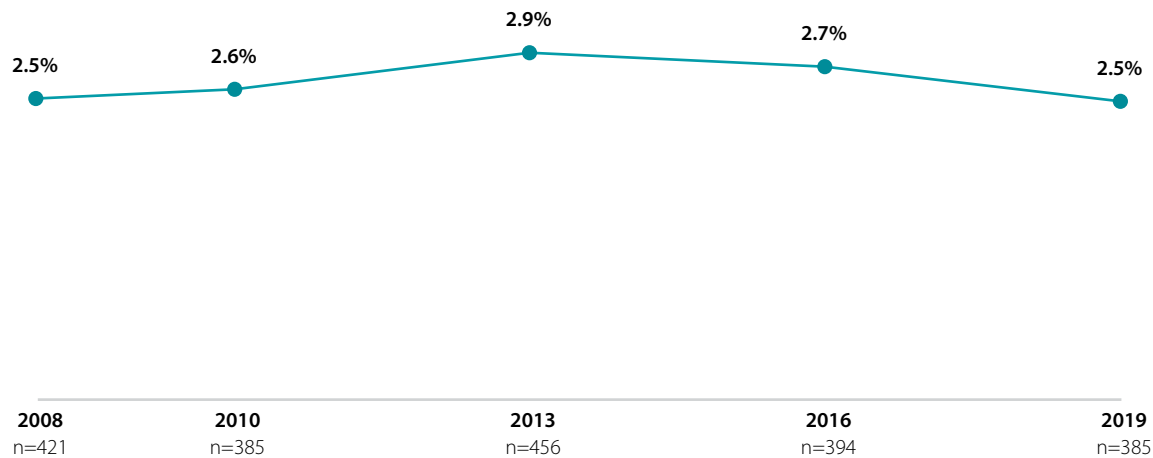
Technical notes

This figure shows changes in overall LHD workforce capacity (measured in FTEs per 10,000 people) between 2008 and 2019. See notes on Figure 5.3 for more information on how these statistics are computed.

Estimates for 2008–2013 workforce are different from previous reports due to new weighing and cleaning methodologies. Refer to page 17 for more information on the methodology.

Figure 5.8 | LHD workforce that retired, over time

Percent of LHD workforce



- ▶ Less than 3% of the total LHD workforce retired in 2019.
- ▶ Overall, the percentage of the LHD workforce that is retiring has not changed since 2008. However, it did peak in 2013 and has been decreasing steadily since then.

Figure 5.9 | Occupations employed at LHDs, by size of population served

	All LHDs	Size of population served						
		<25,000	25,000–49,999	50,000–99,999	100,000–249,999	250,000–499,999	500,000–999,999	1,000,000+
Agency leadership	83%	73%	84%	87%	94%	97%	94%	100%
Animal control worker	9%	4%	8%	14%	10%	11%	24%	14%
Behavioral health staff	16%	8%	11%	21%	18%	33%	55%	46%
Business and financial operations staff	53%	38%	49%	54%	72%	79%	90%	100%
Community health worker	35%	23%	28%	44%	47%	70%	73%	71%
Environmental health worker	74%	60%	77%	86%	87%	91%	90%	74%
Epidemiologist/statistician	28%	9%	14%	26%	55%	85%	94%	100%
Health educator	59%	38%	59%	68%	83%	87%	93%	91%
Information systems specialist	18%	3%	10%	14%	37%	60%	70%	74%
Laboratory worker	16%	4%	8%	17%	28%	42%	54%	89%
Licensed practical or vocational nurse	33%	24%	31%	33%	38%	50%	62%	77%
Nursing aide and home health aide	21%	20%	23%	19%	21%	20%	23%	34%
Nutritionist	49%	28%	48%	59%	71%	84%	85%	89%
Office and administrative support staff	90%	85%	87%	96%	97%	96%	99%	100%
Oral healthcare professional	20%	10%	14%	26%	29%	35%	48%	71%
Preparedness staff	62%	45%	60%	70%	80%	94%	96%	97%
Public health physician	30%	15%	22%	34%	47%	67%	80%	94%
Public information professional	23%	9%	13%	20%	38%	67%	75%	86%
Registered nurse	94%	90%	95%	95%	98%	100%	96%	100%

n=1,473

- ▶ Almost all LHDs employ registered nurses and office and administrative support staff. Fewer LHDs employ animal control workers, behavioral health staff, or laboratory workers.
- ▶ Large LHDs are much more likely than small LHDs to employ epidemiologist/statisticians, information systems specialists, public information professionals, and public health physicians. The proportion of LHDs employing office and administrative support staff and nursing or home health aides is approximately the same across jurisdiction sizes.

Figure 5.10 | Staffing patterns (in median Full-Time Equivalents (FTEs)) at LHDs, by size of population served

<10,000	10,000–24,999	25,000–49,999	50,000–99,999
4 Total FTEs	8 Total FTEs	14 Total FTEs	28 Total FTEs
1 Registered nurse	2 Registered nurses	3.8 Registered nurses	6 Registered nurses
1 Office and administrative support staff	2 Office and administrative support staff	3 Office and administrative support staff	5 Office and administrative support staff
0.9 Agency leadership	1 Agency leadership	1 Agency leadership	1 Agency leadership
	1 Environmental health worker	1.4 Environmental health worker	3 Environmental health workers
		0.6 Health educators	1 Health educator
		0.5 Preparedness staff	1 Preparedness staff
		0.2 Nutritionist	1 Nutritionist
			1 Business and financial operations staff
100,000–249,999	250,000–499,999	500,000–999,999	1,000,000+
60 Total FTEs	119 Total FTEs	238 Total FTEs	480 Total FTEs
10 Registered nurses	17 Registered nurses	29.5 Registered nurses	48 Registered nurses
10 Office and administrative support staff	18.5 Office and administrative support staff	30.8 Office and administrative support staff	75 Office and administrative support staff
3 Agency leadership	6 Agency leadership	7.5 Agency leadership	10 Agency leadership
7 Environmental health workers	14 Environmental health workers	25 Environmental health workers	36 Environmental health workers
2 Health educators	3 Health educators	6 Health educators	12 Health educators
1 Preparedness staff	2 Preparedness staff	3 Preparedness staff	5 Preparedness staff
2 Nutritionists	4.1 Nutritionists	8 Nutritionists	19 Nutritionists
2 Business and financial operations staff	4 Business and financial operations staff	8 Business and financial operations staff	21 Business and financial operations staff
0.5 Epidemiologist	1 Epidemiologist/statistician	3 Epidemiologist/statisticians	8 Epidemiologist/statisticians
0.1 Public health physician	1 Public health physician	1 Public health physician	3 Public health physicians
	2.4 Community health worker	6.5 Community health workers	14 Community health workers
	1 Information systems specialist	2 Information systems specialist	5 Information systems specialists
	1 Public information professional	1 Public information professional	1 Public information professional
	0.2 Licensed practical or vocational nurse	2 Licensed practical or vocational nurse	4 Licensed practical or vocational nurse
		1.8 Laboratory worker	10 Laboratory worker
		1 Behavioral health staff	2.7 Oral healthcare staff

n=1,114–1,468

- ▶ Staffing patterns of LHDs vary by the size of population served.
- ▶ LHDs serving the smallest jurisdictions typically employ registered nurses, office support staff, a top executive, and environmental health workers.
- ▶ LHDs serving medium-sized jurisdictions typically also employ some additional occupations, including health educators, preparedness staff, nutritionists, business and financial operations staff, epidemiologists, public health physicians, and community health workers.
- ▶ LHDs serving jurisdictions over one million people typically employ nearly 500 FTEs including nearly 50 registered nurses, more than 75 office support staff, and many employees in specialized occupations, including information systems specialists, public information professionals, laboratory workers, and oral healthcare staff.

Figure 5.11 | Estimated number of Full-Time Equivalents (FTEs) in select occupations

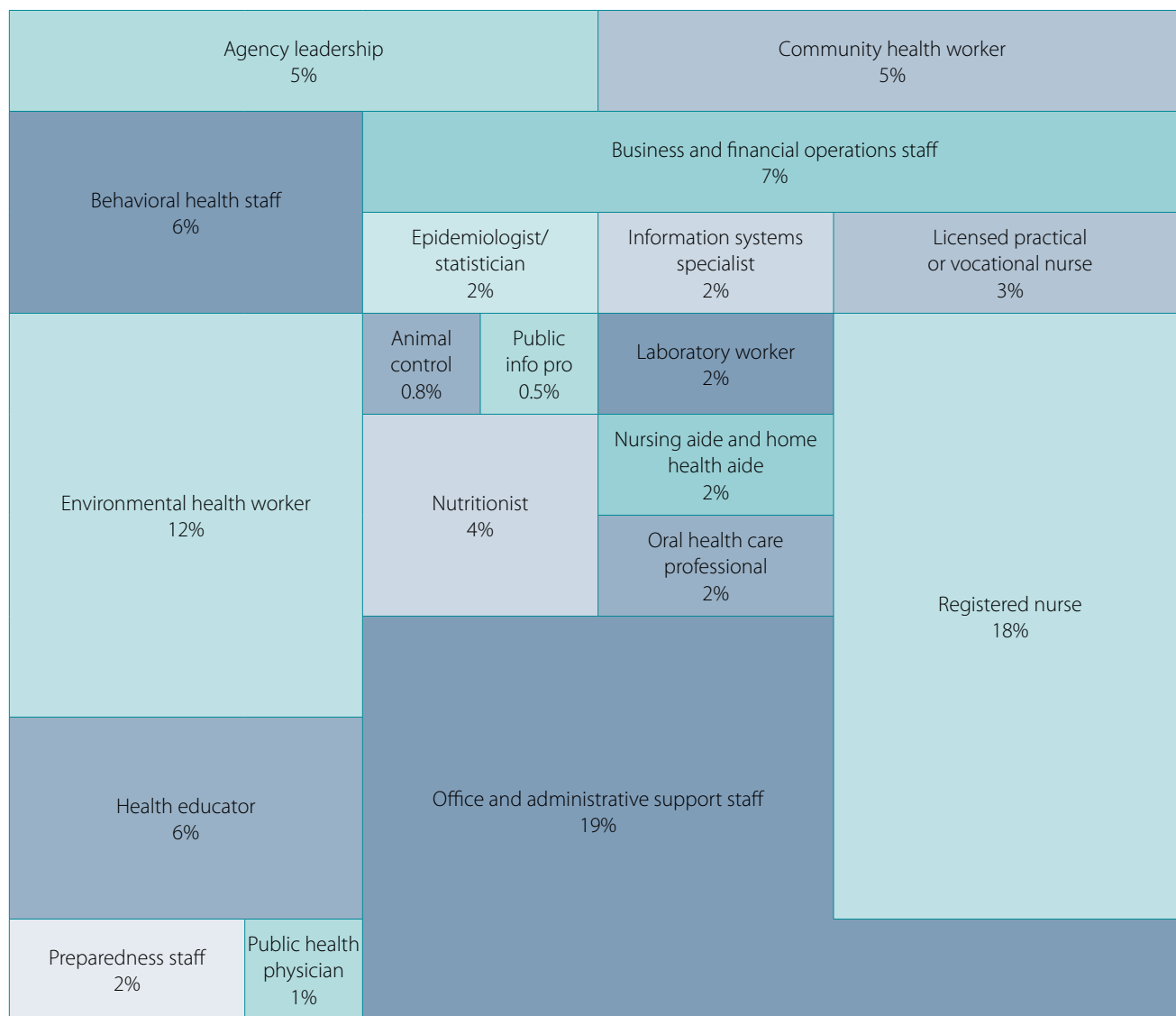
Occupation	Number of FTEs	95% Confidence intervals	
Agency leadership	5,800	5,500	6,100
Animal control worker	1,000	800	1,200
Behavioral health staff	6,700	4,500	8,900
Business and financial operations staff	8,900	5,900	11,900
Community health worker	5,600	4,800	6,300
Environmental health worker	14,500	12,500	16,500
Epidemiologist/statistician	2,900	2,000	3,800
Health educator	7,500	5,100	9,900
Information systems specialist	2,200	1,300	3,100
Laboratory worker	2,100	1,500	2,700
Licensed practical or vocational nurse	3,600	1,900	5,400
Nursing aide and home health aide	2,200	1,800	2,600
Nutritionist	5,100	4,700	5,500
Office and administrative support staff	23,100	20,800	25,500
Oral healthcare professional	2,200	1,900	2,500
Preparedness staff	2,300	2,100	2,400
Public health physician	1,300	900	1,600
Public information professional	600	550	700
Registered nurse	21,200	18,800	23,700

n=1,110–1,129

- Approximately 23,100 FTEs are office and administrative support staff and 21,200 FTEs are registered nurses.
- Only 1,000 FTEs are animal control workers and 600 FTEs are public information professionals.

Technical note

Numbers do not add to totals because listed occupational categories were not exhaustive of all LHD occupations.

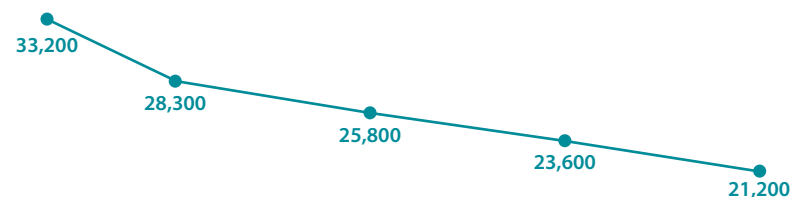
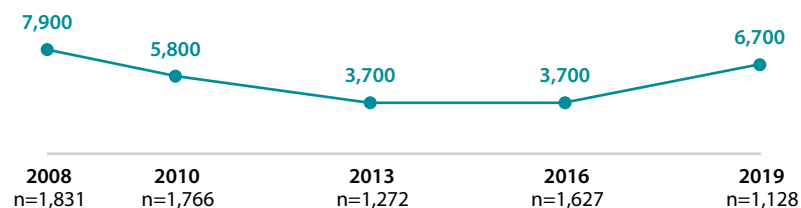
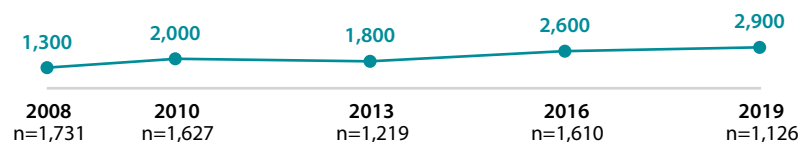
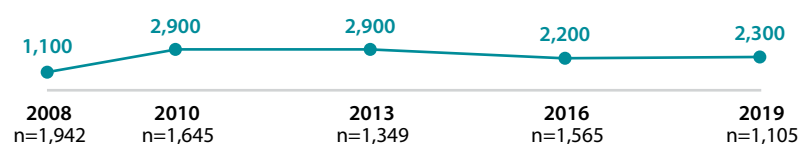
Figure 5.12 | Workforce composition

n=1,110–1,129

- More than one-third of the LHD workforce is composed of office and administrative support staff or registered nurses.
- Twelve percent of the LHD workforce is environmental health workers.
- A total of less than 15% of the LHD workforce comprises oral healthcare professionals, information systems specialists, epidemiologists/statisticians, preparedness staff, public health physicians, laboratory workers, animal control workers, and public information professionals.

Technical note

This diagram depicts the overall composition of the LHD workforce across the United States. The area of each box corresponds to the fraction of the LHD workforce that comprises the occupation. Estimates for overall workforce composition are approximated using occupational categories that were included in the survey questionnaire, which is not exhaustive of all LHD occupations.

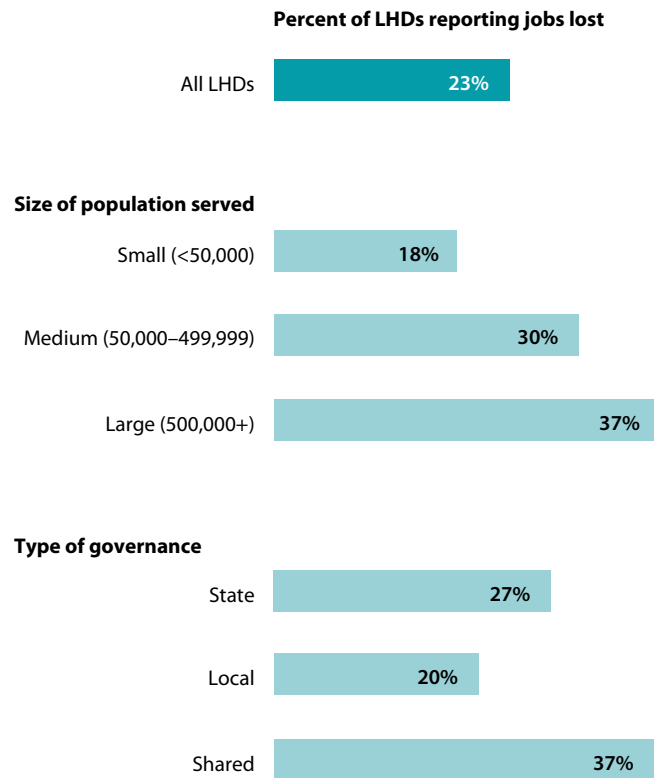
Figure 5.13 | Estimated size of select occupations, over time**Number of Full-Time Equivalents (FTEs)****Registered nurses****Behavioral health staff****Epidemiologist/statistician****Preparedness staff**

► The estimated number of registered nurses decreased by 36% from 2008 to 2019.

► In 2013 and 2016, the estimated number of behavioral staff decreased by more than half, compared to 2008. However, this occupation experienced some growth in 2019, with an estimated 3,000 FTEs added since 2016.

► The estimated number of epidemiologists and preparedness staff more than doubled from 2008 to 2019.

Figure 5.14 | Job losses among LHDs due to layoffs and/or attrition in the past year, by size of population served and type of governance



n=1,451

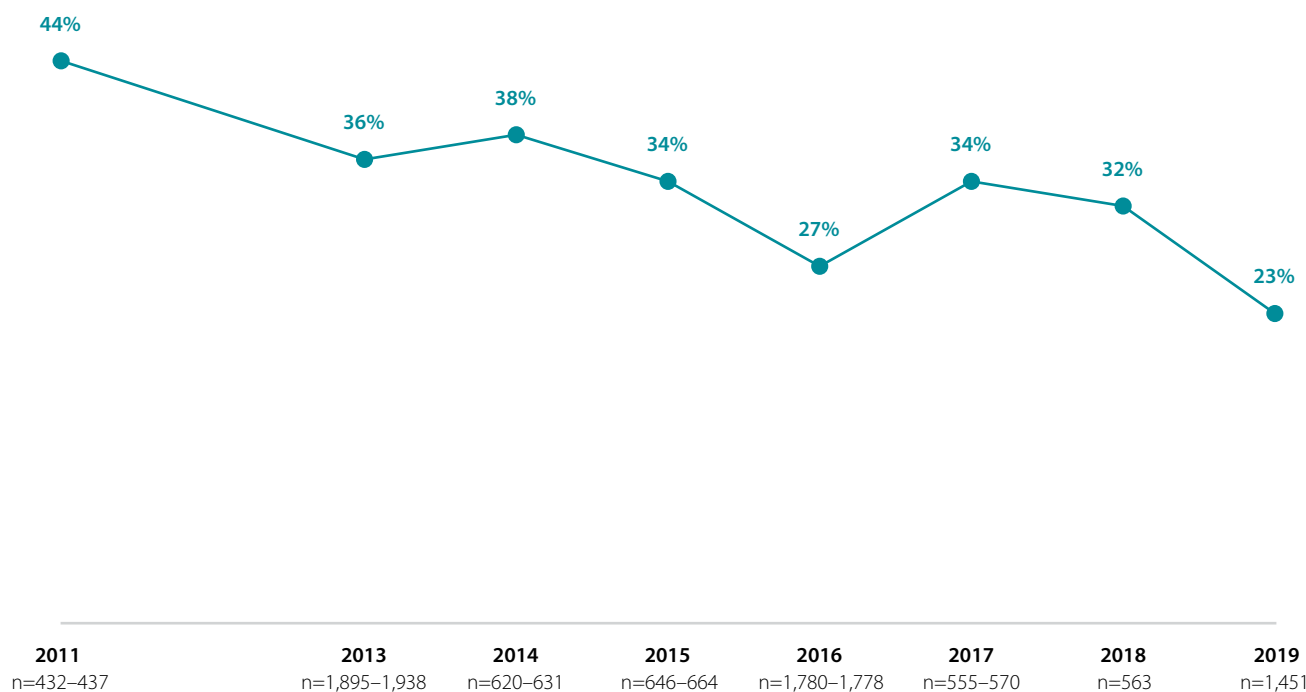
- ▶ Twenty-three percent of LHDs reported at least one job lost during calendar year 2018, due to layoffs and/or attrition.
- ▶ A larger proportion of large and medium LHDs reported losing at least one job compared to small LHDs.
- ▶ Similarly, LHDs with shared governance were more likely to report losing at least one job compared to state-governed or locally governed LHDs.

Technical note

The 2019 Profile included questions about loss of LHD staff (by layoffs or attrition) during calendar year 2018. Similar questions have been included in 12 other NACCHO surveys administered periodically since the beginning of the Great Recession. Figures 5.14 through 5.16 present findings based on these data from 2019 and earlier surveys.

Figure 5.15 | Job losses among LHDs due to layoffs and/or attrition, over time

Percent of LHDs reporting jobs lost



- Since 2011, the percentage of LHDs reporting at least one job lost due to layoffs and/or attrition has decreased. While 44% of LHDs reported losing at least one job during the 2010 calendar year, 23% of LHDs reported losing at least one job during the 2018 calendar year.

Technical notes

N's vary because questions regarding layoffs and attrition were asked in separate questions with different numbers of observations across survey years.

The 2019 Profile included questions about loss of LHD staff (by layoffs or attrition) during calendar year 2018. Similar questions have been included in 12 other NACCHO surveys administered periodically since the beginning of the Great Recession. Figures 5.14 through 5.16 present findings based on these data from 2019 and earlier surveys.

Figure 5.16 | Number of jobs lost and added, over time and by size of population served

	Number of positions eliminated	Number of positions added	Net change
All LHDs			
Change in 2011	9,970	3,700	-6,270
Change in 2012	4,090	3,680	-410
Change in 2015	2,720	3,570	850
Change in 2017	730	900	170
Change in 2018	2,590	4,740	2,150
Small LHDs (<50,000)			
Change in 2011	2,200	600	-1,600
Change in 2012	820	620	-200
Change in 2015	620	720	100
Change in 2017	110	90	-20
Change in 2018	540	740	200
Medium (50,000–499,999)			
Change in 2011	4,500	1,350	-3150
Change in 2012	2,030	1,650	-380
Change in 2015	1,460	1,640	180
Change in 2017	380	320	-60
Change in 2018	900	400	-500
Large (500,000+)			
Change in 2011	3,270	1,740	-1,530
Change in 2012	1,240	1,400	160
Change in 2015	640	1,210	570
Change in 2017	250	490	240
Change in 2018	1,150	2,140	990

n(Jun 2011)=604 n(Jan 2012)=617 n(2012)=1,773 n(2015)=1,261 n(2017)=545 n(2018)=1,424

- ▶ Among all LHDs, there was a net loss of 6,270 jobs in the 2011 calendar year; the net job loss decreased to 410 jobs in 2012. In 2018, the number of jobs added exceeded the number of jobs eliminated, for a net increase of 2,150 jobs across all LHDs.
- ▶ During 2018, small and large LHDs showed net gains of 200 and 990 staff, respectively. Meanwhile, medium LHDs showed a net loss of 500 staff.

Technical notes

This figure summarizes data on numbers of LHD positions added and eliminated during five calendar years. The net change is the number of positions added, minus the number of positions eliminated. **Net loss figures are shown in orange** and **net gain figures in green**.

The 2019 Profile included questions about loss of LHD staff (by layoffs or attrition) during calendar year 2018. Similar questions have been included in 12 other NACCHO surveys administered periodically since the beginning of the Great Recession. Figures 5.14 through 5.16 present findings based on these data from 2019 and earlier surveys.

NACCHO estimated 2011 statistics using data from two surveys in which LHDs reported jobs lost and added: in January through June 2011 (labeled as Jun 2011) and July through December (labeled as Jan 2012).

Estimates for 2008–2013 workforce are different from previous reports due to new weighing and cleaning methodologies. Refer to page 17 for more information on the methodology.

Only LHDs who reported values for all variables on job cuts and additions are included in the analysis.



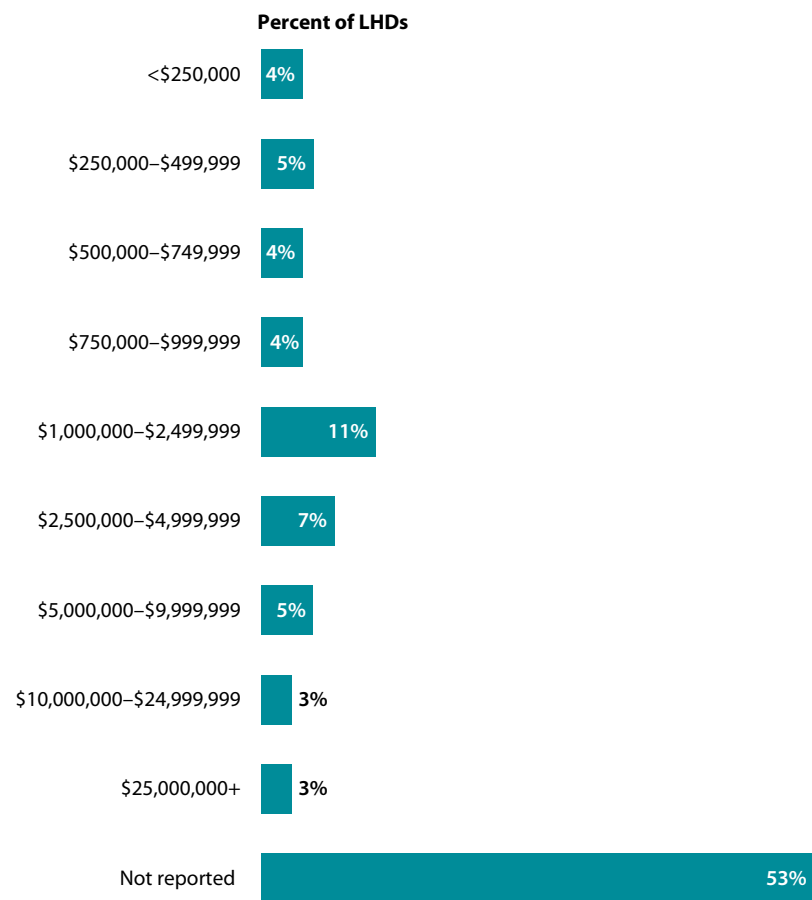
CHAPTER 6

Finance



This chapter includes the following:

- ▶ Total annual local health department (LHD) expenditures.
- ▶ Annual per capita LHD expenditures and revenues.
- ▶ LHD revenue sources.
- ▶ Annual per capita LHD revenue sources.
- ▶ Changes in LHD budgets over time.

Figure 6.1 | Total annual expenditures

n=1,496

- ▶ Total annual LHD expenditures range from less than \$250,000 to \$25 million or more.
- ▶ Seventeen percent of LHDs report annual expenditures of less than \$1 million; 3% of LHDs report expenditures of \$25 million or more.
- ▶ More than half of LHDs were not able to report their annual expenditures.

Figure 6.2 | Mean and quartiles of total annual expenditures

Size of population served	Mean	25th percentile	50th percentile (Median)	75th percentile
All LHDs	\$8,380,000	\$600,000	\$1,660,000	\$5,270,000
<25,000	\$800,000	\$270,000	\$530,000	\$980,000
25,000–49,999	\$1,850,000	\$680,000	\$1,220,000	\$2,350,000
50,000–99,999	\$3,100,000	\$1,330,000	\$2,750,000	\$3,920,000
100,000–249,999	\$6,850,000	\$3,400,000	\$5,500,000	\$8,250,000
250,000–499,999	\$16,100,000	\$8,040,000	\$11,650,000	\$20,390,000
500,000–999,999	\$46,900,000	\$17,110,000	\$28,100,000	\$52,630,000
1,000,000+	\$174,000,000	\$45,560,000	\$62,500,000	\$102,400,000

n=712

- On average, LHDs spend \$8.4 million per year, or a median of almost \$1.7 million per year.
- Comparing the 25th and 75th percentiles for each population category illustrates the great diversity in funding levels among LHDs serving jurisdictions of similar sizes.

Figure 6.3 | Median and quartiles of annual per capita expenditures and revenues, by size of population served and type of governance

	Expenditures			Revenue		
	25th percentile	Median	75th percentile	25th percentile	Median	75th percentile
All LHDs	\$23	\$41	\$68	\$22	\$40	\$67
Size of population served						
<25,000	\$23	\$51	\$78	\$22	\$53	\$85
25,000–49,999	\$21	\$37	\$66	\$20	\$36	\$64
50,000–99,999	\$22	\$38	\$58	\$19	\$38	\$54
100,000–249,999	\$24	\$37	\$53	\$22	\$35	\$53
250,000–499,999	\$23	\$34	\$62	\$21	\$36	\$63
500,000–999,999	\$24	\$41	\$68	\$25	\$41	\$62
1,000,000+	\$29	\$37	\$53	\$27	\$31	\$53
Type of governance						
State	\$22	\$33	\$53	\$20	\$31	\$48
Local	\$21	\$40	\$67	\$20	\$39	\$63
Shared	\$46	\$73	\$101	\$22	\$39	\$66

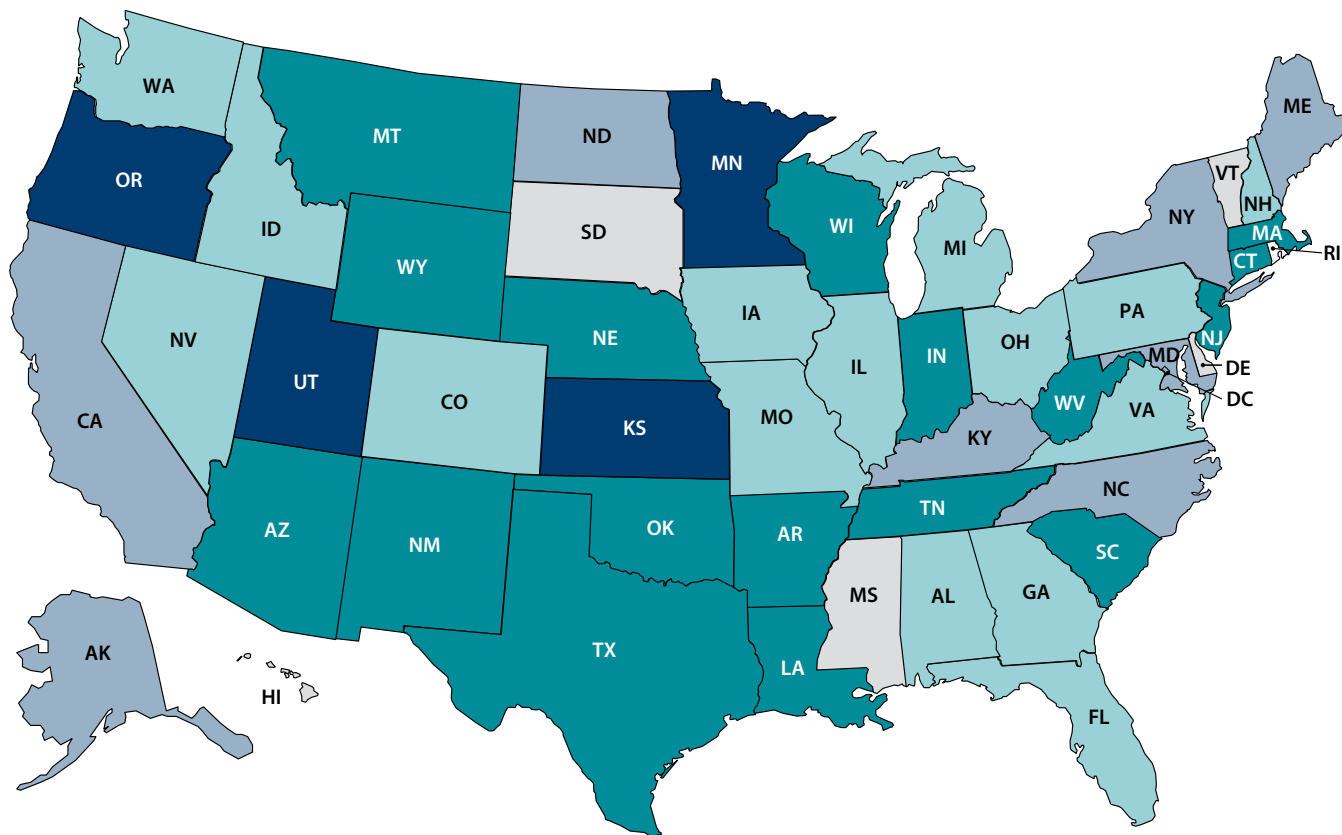
n(expenditures)=712

n(revenue)=701

- ▶ Median annual per capita expenditures were similar to annual per capita revenues across LHDs.
- ▶ On average, LHDs serving the smallest populations (fewer than 25,000 people) have higher per capita revenues and expenditures than LHDs serving larger populations.
- ▶ LHDs with a shared governance structure receive and spend more on average than LHDs with exclusively local or state governance.

Figure 6.4 | Overall median annual expenditures per capita, by state

■ <\$30 ■ \$30–\$49.99 ■ \$50–\$69.99 ■ \$70+ ■ Insufficient expenditure data



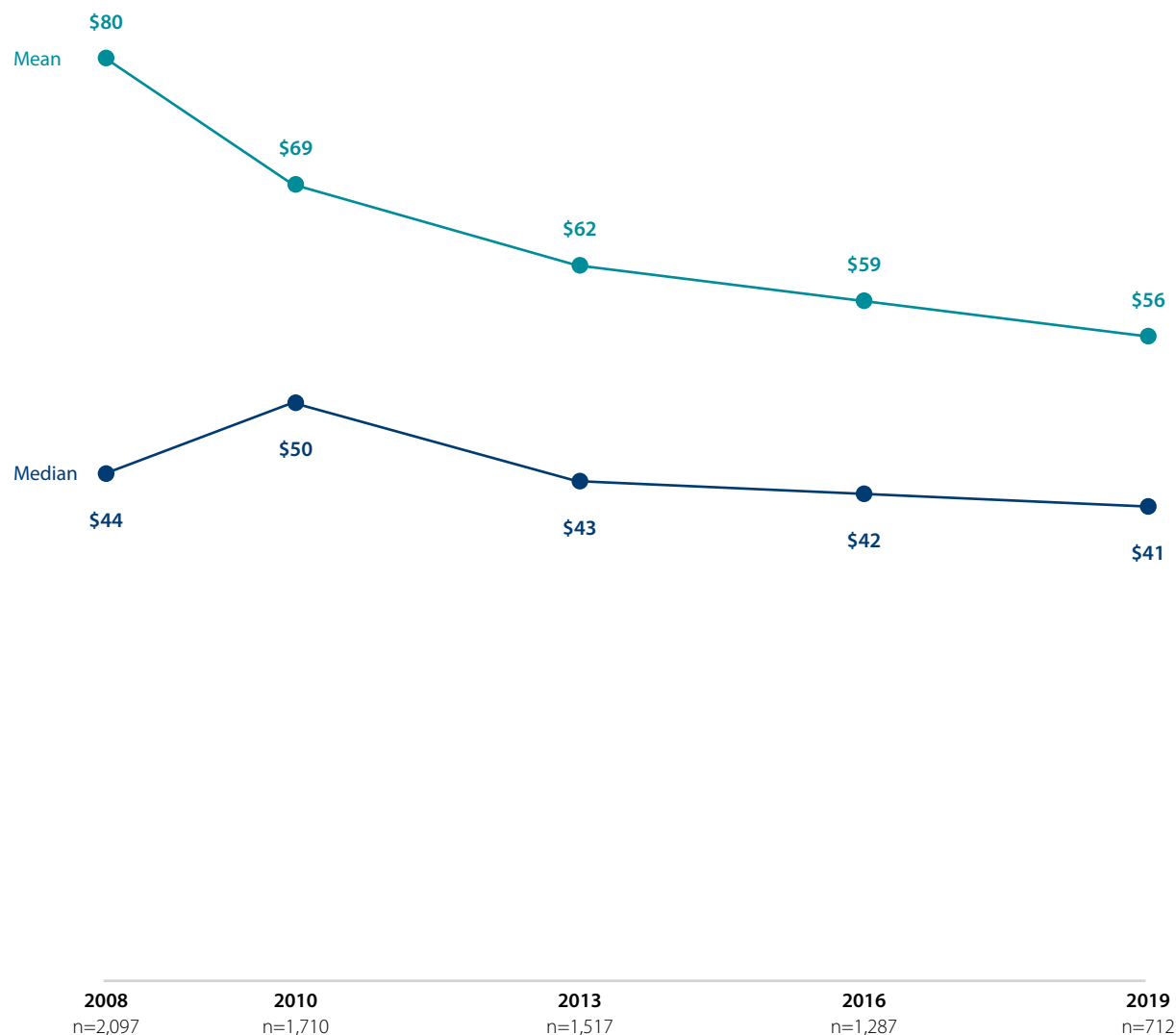
RI was excluded from the study

- ▶ Overall annual LHD expenditures per capita vary greatly by state, with LHDs in New Mexico and Arizona spending less than \$5 per person and LHDs in Maryland, Maine, and the District of Columbia spending more than \$100 per person.
- ▶ Annual LHD expenditures per capita were less than \$30 in 17 states, \$30 to \$50 in 15 states, \$50 to \$70 in four states, and more than \$70 in eight states and the District of Columbia.

Technical notes

Statistics presented in this map are computed by summing the expenditures reported by LHDs in each state and dividing by the total population of the reporting jurisdictions. This reflects the overall level of LHD expenditures in the state and is a weighted average that takes into account the population of each jurisdiction.

State estimates were not computed using weights to account for non-response.

Figure 6.5 | Median and mean* annual per capita expenditures, over time

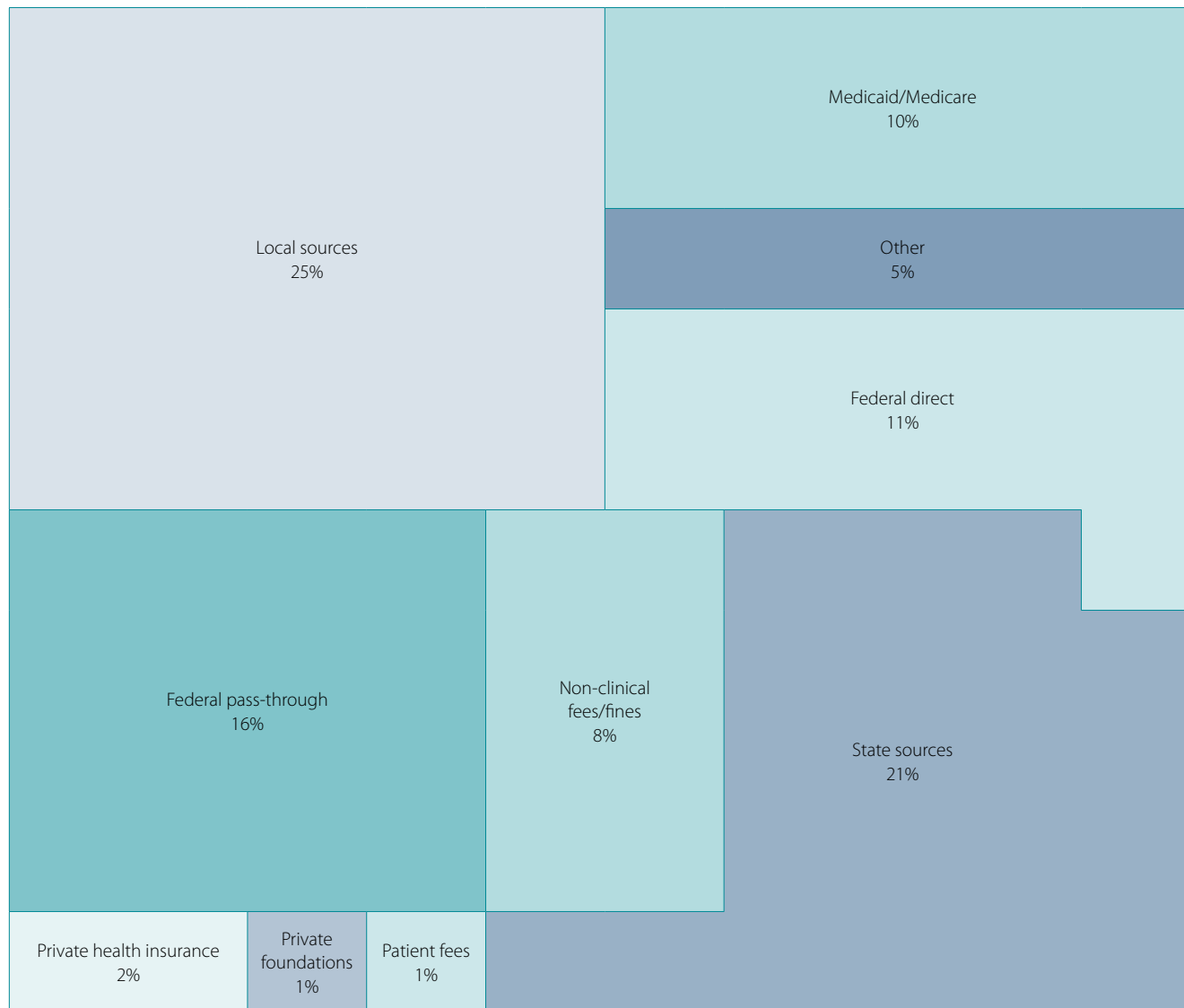
*Inflation adjusted estimates with post-stratification weights, outliers are not excluded.

- Over time, average LHD expenditures per capita have decreased 30%, from \$80 in 2008 to \$56 in 2019.
- On the other hand, median per capita expenditures increased between 2008 and 2010 (from \$44 to \$50), but then decreased 18% between 2010 and 2019 (from \$50 to \$41).

Technical notes

In 2019, we used an updated post-stratification weighting method to improve upon estimates from previous years. This will result in some minor discrepancies between 2016 reporting of prior year data and 2019 reporting of the same data. Refer to page 17 for more information on the methodology.

Additionally, the statistics for 2008, 2010, 2013, 2016 are reestimated to reflect 2019 inflation rates based on the Bureau of Labor Statistics' Consumer Price Index. This will also result in some discrepancies between 2019 reporting on prior year data and 2016 reporting on prior year data.

Figure 6.6 | Revenue sources

n=391–597

- ▶ LHDs receive funding from a variety of sources, including local, state, federal, and clinical sources.
- ▶ One-fourth of LHD revenues come from local sources, and 21% come from state sources.
- ▶ Thirteen percent of LHD revenues are payments for clinical services (Medicare, Medicaid, private insurers, or patient personal fees).

Technical note

This diagram depicts the overall composition of LHD revenue sources. The area of each box corresponds to the fraction of all revenues that source provides.

Figure 6.7 | Median and mean annual per capita revenue sources, by LHD characteristics

	Local		State		Federal direct and pass-through		Clinical*	
	Median	Mean	Median	Mean	Median	Mean	Median	Mean
All LHDs	\$11	\$18	\$6	\$14	\$8	\$13	\$4	\$13
Size of population served								
Small (<50,000)	\$13	\$20	\$7	\$16	\$9	\$17	\$8	\$18
Medium (50,000–499,999)	\$9	\$14	\$6	\$10	\$8	\$10	\$3	\$8
Large (500,000+)	\$9	\$19	\$6	\$11	\$10	\$19	\$2	\$7
Type of governance								
State	\$1	\$3	\$5	\$9	\$8	\$12	\$4	\$6
Local	\$13	\$21	\$5	\$12	\$8	\$13	\$3	\$12
Shared	\$12	\$15	\$13	\$26	\$14	\$24	\$8	\$25
Degree of urbanization								
Urban	\$10	\$17	\$5	\$9	\$7	\$10	\$2	\$6
Rural	\$12	\$19	\$9	\$19	\$11	\$19	\$9	\$21
Census region								
Northeast	\$18	\$18	\$2	\$7	\$1	\$3	\$0	\$2
Midwest	\$21	\$21	\$4	\$8	\$8	\$13	\$5	\$16
South	\$14	\$14	\$9	\$16	\$10	\$17	\$6	\$19
West	\$19	\$19	\$7	\$33	\$15	\$25	\$2	\$7

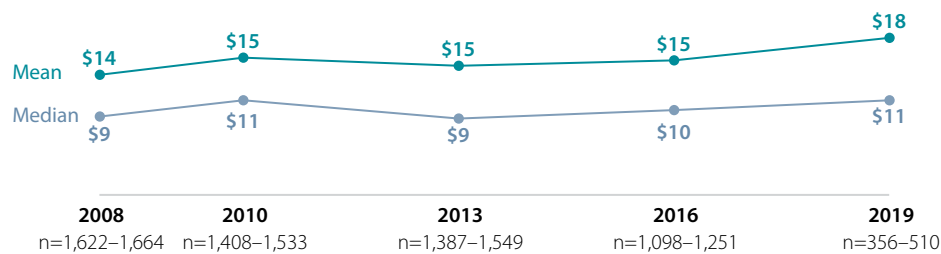
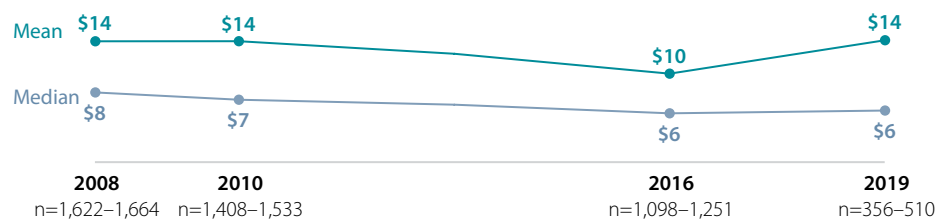
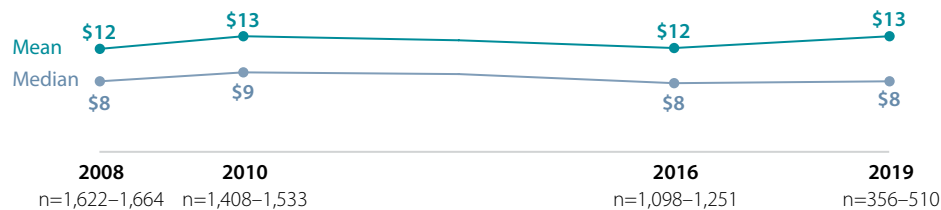
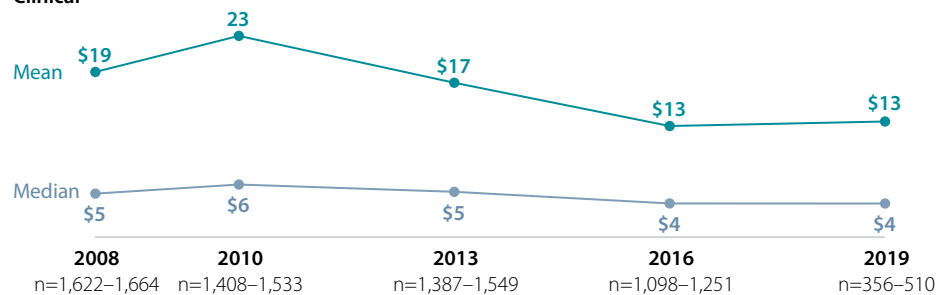
*Includes Medicaid/Medicare, private health insurance, and patient personal fees.

n=365–510

- ▶ On average, small LHDs receive more per capita from non-federal sources than medium and large LHDs.
- ▶ LHDs with shared governance receive more per capita from non-local sources than LHDs with exclusively local or state governance. Locally governed LHDs receive more per capita from local sources than state-governed LHDs or LHDs with shared governance.
- ▶ Rural LHDs receive more per capita from all sources than urban LHDs. The difference in clinical revenues among rural and urban LHDs is particularly striking (mean of \$21 per capita for rural jurisdictions versus \$6 per capita for urban jurisdictions).
- ▶ LHDs in the South receive less per capita from local sources than LHDs in other regions; LHDs in the West receive more per capita from state and federal sources than LHDs in other regions. LHDs in the South and Midwest receive more per capita from clinical sources than LHDs in the Northeast or West.

Technical note

A new schema for categorizing urban and rural LHDs was used for 2019 estimates. These data may not be comparable to previous year estimates. Refer to page 18 for more information on the methodology.

Figure 6.8 | Median and mean annual per capita revenue sources, over time**Local****State****Federal direct and pass-through****Clinical***

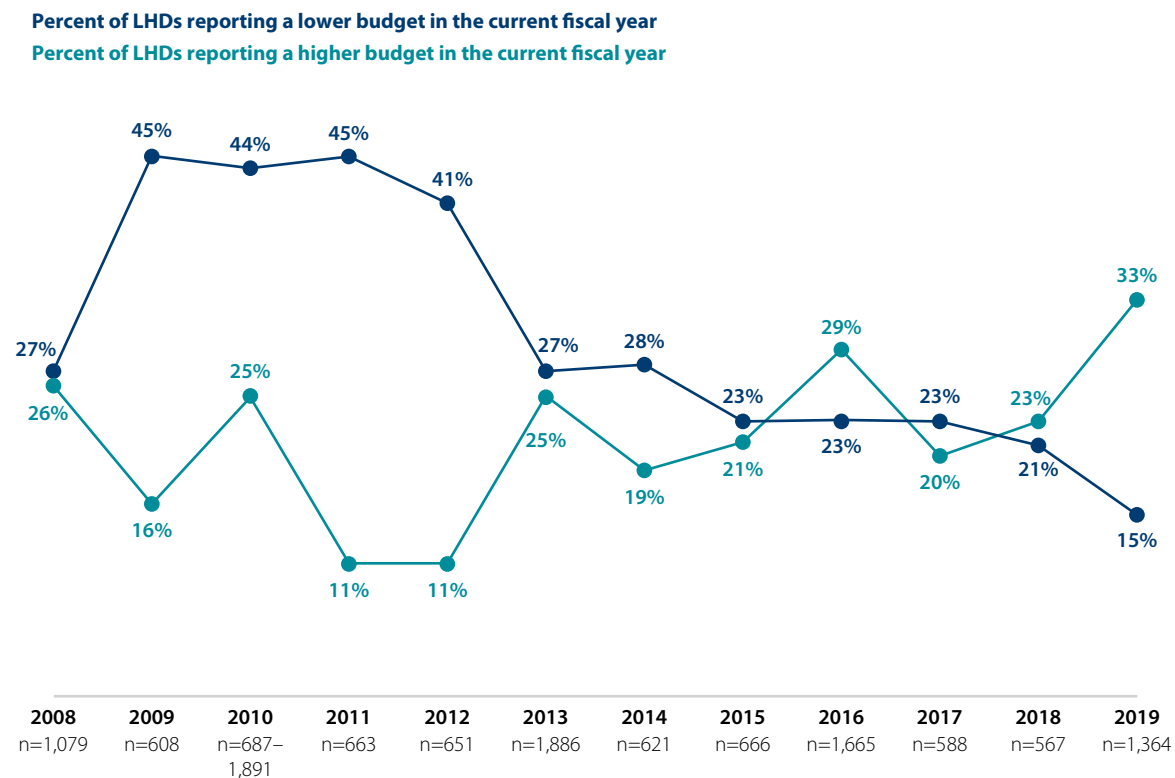
*Includes Medicaid/Medicare, private health insurance, and patient personal fees.

- ▶ Average per capita revenues from local sources remained relatively consistent between 2008 and 2016. Between 2016 and 2019, average per capita revenues from these sources increased by 20%.
- ▶ For state and federal sources (direct and passed through by state agencies), average per capita revenues in 2019 were similar to those in 2008.
- ▶ On the other hand, average per capita revenues from clinical sources have decreased by 32% since 2008.

Technical notes

In 2019, we used an updated post-stratification weighting method to improve upon estimates from previous years. This will result in some minor discrepancies between 2016 reporting of prior year data and 2019 reporting of the same data.

Additionally, the statistics for 2008, 2010, 2013, 2016 are reestimated to reflect 2019 inflation rates based on the Bureau of Labor Statistics' Consumer Price Index. This will also result in some discrepancies between 2019 reporting on prior year data and 2016 reporting on prior year data.

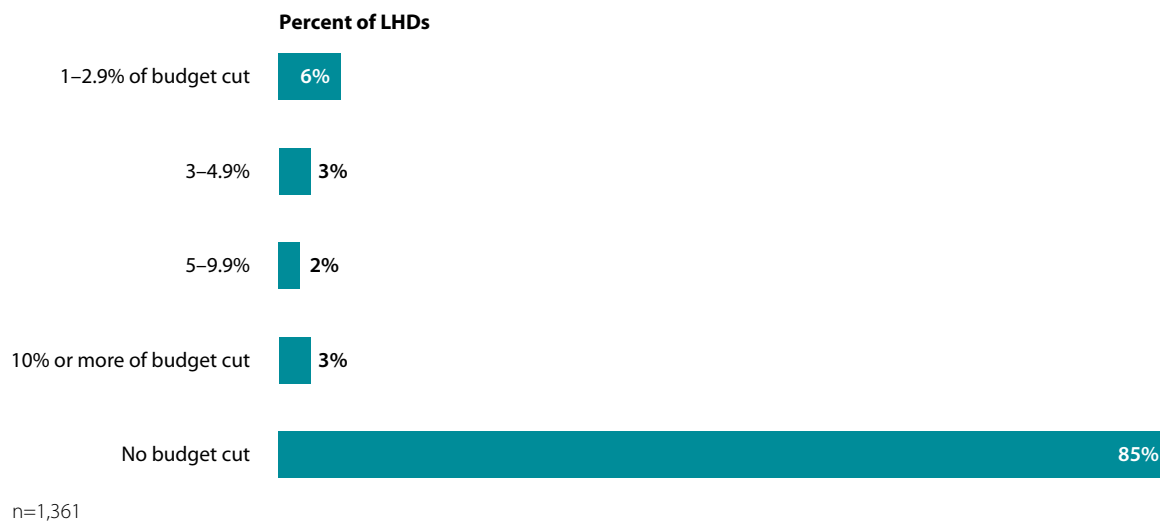
Figure 6.9 | Changes in LHD budgets, over time

- NACCHO has tracked changes in budgets at LHDs since 2008. From 2009 and 2012, between 41% and 45% of LHDs reported having a lower budget compared to the previous fiscal year. In recent years, fewer LHDs have reported budget cuts; 15% of LHDs reported having a lower budget in 2019.
- On the other hand, the percent of LHDs reporting a higher budget compared to the previous fiscal year has slowly started to increase over time. While only 11% reported a higher budget in 2011 and 2012, 33% of LHDs reported a higher budget in 2019.

Technical note

The 2019 Profile included questions about budget changes relative to the previous fiscal year. Similar questions have been included in 12 other NACCHO surveys administered periodically since the beginning of the Great Recession. Figures 6.9 and 6.10 present findings based on those data.

Figure 6.10 | Percent of LHD's budget cut in the current fiscal year compared to the previous fiscal year



- While most LHDs did not report a lower budget compared to the previous fiscal year, 5% of LHDs reported their budget was cut by at least 5%.

Technical notes

The data reported in this chapter should be interpreted with some caution. Collecting error-free data on LHD financing across the United States remains challenging. Large amounts of missing data from the 2019 Profile study led to a greater degree of approximation than was necessary for other chapters of this report.

Five states (Delaware, Hawaii, Mississippi, South Dakota, Vermont) had insufficient finance data, so reliable state-level estimates cannot be developed for per capita expenditures. Data for the District of Columbia were not included in the analysis of total expenditures, total revenues, and revenues from various sources, because its status as both a local and state health department results in extreme values relative to other LHDs.

Comparisons with statistics from past Profile studies should be made with caution, especially for subgroups (e.g., state-governed LHDs, LHDs from certain states, or LHDs serving large jurisdictions). Some of the observed differences from year-to-year result from a large difference in the group of LHDs that provided financial data in each Profile year.

The 2019 Profile included questions about budget changes relative to the previous fiscal year. Similar questions have been included in 12 other NACCHO surveys administered periodically since the beginning of the Great Recession. Figures 6.9 and 6.10 present findings based on those data.



CHAPTER 7

Programs and Services



This chapter includes the following:

- ▶ Clinical and population-based programs and services provided in the past year.
- ▶ Programs and services most likely to be provided in rural or urban jurisdictions.
- ▶ Programs and services provided by more or fewer local health departments (LHDs) compared with 2008.
- ▶ Change in level of LHD service provision in the past year.

Figure 7.1 | Clinical programs and services provided directly by LHDs in the past year

Program/service	% of LHDs	Program/service	% of LHDs
Immunization		Maternal and child health services	
Childhood immunizations	88%	Women, Infants, and Children (WIC)	68%
Adult immunizations	88%	Early and periodic screening, diagnosis, and treatment	38%
Screening for diseases/conditions		Well child clinic	30%
Tuberculosis	86%	Prenatal care	30%
Other STDs	70%	Other clinical services	
HIV/AIDS	62%	Oral health	30%
High blood pressure	56%	Home health care	15%
Body Mass Index (BMI)	52%	Substance abuse	15%
Diabetes	39%	Behavioral/mental health	12%
Cancer	31%	Comprehensive primary care	11%
Cardiovascular disease	25%		
Treatment for communicable diseases			
Tuberculosis	83%		
Other STDs	52%		
HIV/AIDS	46%		

n=1,226–1,461

- LHDs provide many different types of clinical programs and services directly, including adult and child immunizations, screening and treatment for chronic and communicable diseases or conditions, and maternal and child health services.
- Adult and child immunizations are the clinical services most often provided by LHDs.
- The proportion of LHDs providing other clinical services varies greatly; only 11% provide comprehensive primary care services, while 86% provide tuberculosis screening.

Figure 7.2 | Population-based programs and services provided directly by LHDs in the past year

Program/service	% of LHDs	Program/service	% of LHDs	Program/service	% of LHDs
Epidemiology and surveillance		Regulation, inspection, and/or licensing		Other environmental health services	
Communicable/infectious disease	90%	Food service establishments	78%	Food safety education	78%
Environmental health	84%	Schools/daycare	72%	Public health nuisance abatement	72%
Maternal and child health	70%	Septic systems	68%	Vector control	55%
Syndromic surveillance	65%	Recreational water (e.g., pools, lakes, beaches)	66%	Indoor air quality	32%
Chronic disease	51%	Body art (e.g., tattoos, piercings)	58%	Hazmat response	23%
Behavioral risk factors	47%	Private drinking water	56%	Land use planning	19%
Injury	37%	Children's camps	55%	Air pollution	19%
Population-based primary prevention		Hotels/motels	55%	Radiation control	16%
Tobacco	78%	Lead inspection	52%	Noise pollution	16%
Nutrition	75%	Campgrounds & RVs	49%	Other population-based services	
Chronic disease programs	60%	Health-related facilities	42%	School health	37%
Physical activity	59%	Tobacco retailers	41%	Laboratory services	33%
Opioids	45%	Food processing	41%	School-based clinics	29%
Injury	40%	Public drinking water	37%	Animal control	17%
Substance abuse (other than opioids)	37%	Housing (inspections)	33%	Emergency medical services	4%
Mental illness	18%	Milk processing	11%		

n=1,136–1,466

- LHDs also provide many different types of population-based programs and services directly, including epidemiology and surveillance; primary prevention; regulation, inspection, or licensing; and environmental health services.
- The most common population-based programs and services provided across LHDs include communicable/infectious disease surveillance, environmental health surveillance, population-based tobacco prevention services, regulation of food service establishments, food safety education, and population-based nutrition services.

Technical notes

School health programs may include both clinical services and population-based prevention programs.

LHD laboratories may test clinical or environmental specimens; the Profile questionnaire includes a single item intended to include both types.

Figure 7.3 | Adult and child immunization services provided directly by LHDs in the past year, by size of population served and degree of urbanization

Program/service	All LHDs	Size of population served			Degree of urbanization	
		Small (<50,000)	Medium (50,000–499,999)	Large (500,000+)	Urban	Rural
Childhood immunizations	88%	86%	92%	90%	81%	96%
Adult immunizations	88%	86%	91%	92%	80%	93%

n=1,451–1,461

- Most LHDs provide adult and child immunizations, regardless of jurisdiction size or degree of jurisdiction urbanization.

Technical note

A new schema for categorizing urban and rural LHDs was used for 2019 estimates. These data may not be comparable to previous year estimates. Refer to page 18 for more information on the methodology.

Figure 7.4 | Screening and treatment for diseases and conditions provided directly by LHDs in the past year, by size of population served and degree of urbanization

Program/service	All LHDs	Size of population served			Degree of urbanization	
		Small (<50,000)	Medium (50,000–499,999)	Large (500,000+)	Urban	Rural
Screening for diseases/conditions						
Tuberculosis	86%	83%	89%	95%	91%	81%
Other STDs	70%	64%	75%	95%	65%	74%
HIV/AIDS	62%	54%	71%	92%	59%	65%
High blood pressure	56%	59%	51%	59%	51%	61%
Body Mass Index (BMI)	52%	52%	50%	61%	45%	58%
Diabetes	39%	37%	40%	50%	37%	41%
Cancer	31%	28%	34%	43%	31%	31%
Cardiovascular disease	25%	24%	27%	32%	26%	25%
Treatment for communicable diseases						
Tuberculosis	83%	81%	86%	91%	77%	90%
Other STDs	52%	62%	73%	91%	63%	71%
HIV/AIDS	46%	43%	50%	55%	41%	51%

n=1,411–1,447

- ▶ LHDs are more likely to provide screening for chronic and communicable diseases/conditions than treatment. For example, 62% of LHDs screen for HIV/AIDS, while 46% provide treatment services for HIV/AIDS.
- ▶ Medium and large LHDs are more likely to provide screening and treatment services, with the exception of screening for high blood pressure and BMI.

Technical note

A new schema for categorizing urban and rural LHDs was used for 2019 estimates. These data may not be comparable to previous year estimates. Refer to page 18 for more information on the methodology.

Figure 7.5 | Maternal and child health services provided directly by LHDs in the past year, by size of population served and degree of urbanization

Program/service	All LHDs	Size of population served			Degree of urbanization	
		Small (<50,000)	Medium (50,000–499,999)	Large (500,000+)	Urban	Rural
Women, Infants, and Children (WIC)	68%	64%	71%	82%	59%	76%
Early and periodic screening, diagnosis, and treatment (EPSDT)	38%	41%	37%	27%	29%	48%
Well child clinic	30%	30%	29%	31%	26%	34%
Prenatal care	30%	28%	32%	31%	25%	35%

n=1,226–1,455

- Many LHDs provide WIC services. However, the proportion of LHDs directly providing WIC varies by the degree of jurisdiction urbanization. Specifically, LHDs in rural areas are more likely to provide this service than those in urban areas.
- Fewer LHDs provide other direct clinical services to mothers and children, such as EPSDT, well child clinics, and prenatal care.

Technical note

A new schema for categorizing urban and rural LHDs was used for 2019 estimates. These data may not be comparable to previous year estimates. Refer to page 18 for more information on the methodology.

Figure 7.6 | Other clinical services provided directly by LHDs in the past year, by size of population served and degree of urbanization

Program/service	All LHDs	Size of population served			Degree of urbanization	
		Small (<50,000)	Medium (50,000–499,999)	Large (500,000+)	Urban	Rural
Oral health	30%	26%	36%	49%	30%	31%
Home health care	15%	18%	11%	11%	11%	19%
Substance abuse	15%	13%	18%	24%	16%	14%
Behavioral/mental health	12%	9%	16%	22%	10%	13%
Comprehensive primary care	11%	8%	14%	15%	11%	10%

n=1,434–1,453

- Few LHDs provide other clinical services, such as home health care, substance abuse services, behavioral/mental health services, or comprehensive primary care.
- With the exception of home health care, large LHDs are more likely to provide these services than small or medium LHDs.

Technical note

A new schema for categorizing urban and rural LHDs was used for 2019 estimates. These data may not be comparable to previous year estimates. Refer to page 18 for more information on the methodology.

Figure 7.7 | Epidemiology and surveillance services provided directly by LHDs in the past year, by size of population served and degree of urbanization

Program/service	All LHDs	Size of population served			Degree of urbanization	
		Small (<50,000)	Medium (50,000–499,999)	Large (500,000+)	Urban	Rural
Communicable/infectious disease	90%	88%	94%	98%	88%	93%
Environmental health	84%	81%	90%	86%	86%	82%
Maternal and child health	70%	65%	77%	86%	65%	76%
Syndromic surveillance	65%	58%	76%	84%	67%	64%
Chronic disease	51%	45%	56%	82%	51%	50%
Behavioral risk factors	47%	41%	52%	74%	47%	47%
Injury	37%	31%	43%	64%	37%	37%

n= 1,246–1,466

- ▶ Almost all LHDs provide communicable/infectious disease surveillance; most provide environmental health surveillance, maternal child health surveillance, syndromic surveillance, and chronic disease surveillance.
- ▶ Large LHDs are more likely to provide these services than small or medium LHDs.

Technical note

A new schema for categorizing urban and rural LHDs was used for 2019 estimates. These data may not be comparable to previous year estimates. Refer to page 18 for more information on the methodology.

Figure 7.8 | Population-based primary prevention services provided directly by LHDs in the past year, by size of population served and degree of urbanization

Program/service	All LHDs	Size of population served			Degree of urbanization	
		Small (<50,000)	Medium (50,000–499,999)	Large (500,000+)	Urban	Rural
Tobacco	78%	75%	82%	90%	76%	81%
Nutrition	75%	68%	83%	94%	71%	78%
Chronic disease programs	60%	54%	69%	82%	61%	60%
Physical activity	59%	53%	66%	72%	58%	59%
Opioids	45%	37%	55%	67%	48%	42%
Injury	40%	34%	48%	59%	40%	40%
Substance abuse (other than opioids)	37%	34%	40%	46%	37%	37%
Mental illness	18%	15%	21%	33%	20%	15%

n= 1,343–1,449

- Most LHDs provide population-based primary prevention services focused on tobacco use, nutrition, chronic diseases, and physical activity.
- Large LHDs are more likely to provide these services than small or medium LHDs.

Technical note

A new schema for categorizing urban and rural LHDs was used for 2019 estimates. These data may not be comparable to previous year estimates. Refer to page 18 for more information on the methodology.

Figure 7.9 | Regulation, inspection, or licensing services provided directly by LHDs in the past year, by size of population served and degree of urbanization

Program/service	All LHDs	Size of population served			Degree of urbanization	
		Small (<50,000)	Medium (50,000–499,999)	Large (500,000+)	Urban	Rural
Food service establishments	78%	73%	87%	83%	86%	71%
Schools/daycare	72%	66%	79%	81%	76%	67%
Septic systems	68%	65%	73%	77%	74%	63%
Recreational water (e.g., pools, lakes, beaches)	66%	61%	75%	76%	74%	59%
Body art (e.g., tattoos, piercings)	58%	52%	68%	62%	63%	52%
Private drinking water	56%	54%	61%	55%	59%	54%
Children's camps	55%	49%	65%	64%	64%	46%
Hotels/motels	55%	52%	60%	50%	56%	53%
Lead inspection	52%	46%	61%	64%	59%	45%
Campgrounds & RVs	49%	42%	61%	56%	51%	48%
Health-related facilities	42%	39%	45%	47%	44%	39%
Tobacco retailers	41%	39%	43%	44%	47%	34%
Food processing	41%	40%	43%	35%	42%	39%
Public drinking water	37%	33%	43%	41%	37%	37%
Housing (inspections)	33%	32%	34%	33%	42%	23%
Milk processing	11%	10%	12%	17%	12%	10%

n= 1,234–1,463

- LHDs are most likely to provide regulation, inspection, or licensing services of food service establishments, schools/daycares, septic systems, and recreational water.
- With the exception of public drinking water, LHDs serving urban jurisdictions are more likely to provide regulation, inspection, and/or licensing than LHDs serving rural jurisdictions.

Technical note

A new schema for categorizing urban and rural LHDs was used for 2019 estimates. These data may not be comparable to previous year estimates. Refer to page 18 for more information on the methodology.

Figure 7.10 | Environmental health services provided directly by LHDs in the past year, by size of population served and degree of urbanization

Program/service	All LHDs	Size of population served			Degree of urbanization	
		Small (<50,000)	Medium (50,000–499,999)	Large (500,000+)	Urban	Rural
Food safety education	78%	74%	84%	83%	81%	75%
Public health nuisance abatement	72%	68%	77%	72%	79%	64%
Vector control	55%	49%	63%	69%	63%	46%
Indoor air quality	32%	29%	34%	46%	38%	25%
Hazmat response	23%	19%	27%	40%	27%	18%
Land use planning	19%	15%	25%	33%	25%	13%
Air pollution	19%	17%	21%	35%	26%	11%
Radiation control	16%	14%	18%	24%	18%	14%
Noise pollution	16%	14%	16%	20%	26%	4%

n=1,136–1,430

- Approximately three-quarters of LHDs provide food safety education and public health nuisance abatement. Few provide noise pollution control or radiation control.
- LHDs serving urban jurisdictions are more likely to provide these environmental health services than LHDs serving rural jurisdictions.

Technical note

A new schema for categorizing urban and rural LHDs was used for 2019 estimates. These data may not be comparable to previous year estimates. Refer to page 18 for more information on the methodology.

Figure 7.11 | Other population-based services provided directly by LHDs in the past year, by size of population served and degree of urbanization

Program/service	All LHDs	Size of population served			Degree of urbanization	
		Small (<50,000)	Medium (50,000–499,999)	Large (500,000+)	Urban	Rural
School health	37%	36%	37%	48%	34%	41%
Laboratory services	33%	27%	36%	68%	31%	34%
School-based clinics	29%	31%	27%	18%	23%	35%
Animal control	17%	17%	18%	20%	21%	13%
Emergency medical services	4%	2%	6%	10%	6%	1%

n=1,419–1,461

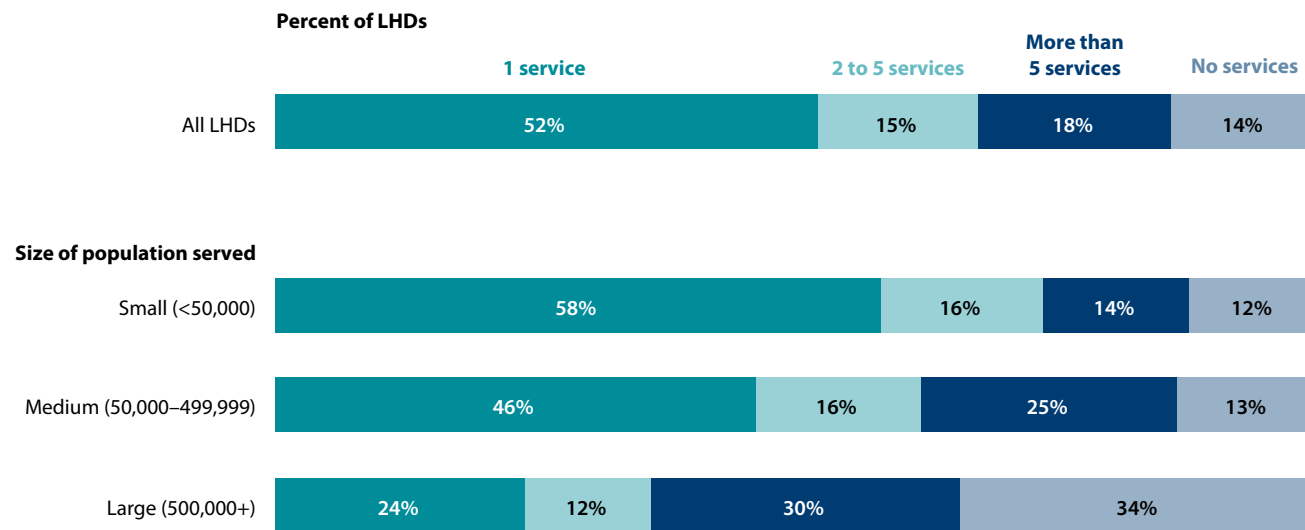
- ▶ More than one-third of LHDs provide school health services. Meanwhile, only 4% of LHDs provide emergency medical services, and almost one in five LHDs provide animal control services.
- ▶ With the exception of school-based clinics, large LHDs are slightly more likely to provide these services than small or medium LHDs.

Technical notes

School health programs may include both clinical services and population-based prevention programs.

LHD laboratories may test clinical or environmental specimens; the Profile questionnaire includes a single item intended to include both types.

A new schema for categorizing urban and rural LHDs was used for 2019 estimates. These data may not be comparable to previous year estimates. Refer to page 18 for more information on the methodology.

Figure 7.12 | Number of services contracted out by LHDs, by size of population served

n=1,486

- ▶ More than half of all LHDs (and one-fourth of large LHDs) contract out for one service (i.e., pay another organization to perform this service on behalf of the LHD).
- ▶ Only 18% of all LHDs and 30% of large LHDs contract out for more than five services.

Figure 7.13 | Programs and services provided most frequently via contracts

Program/service	Percent of LHDs contracting service
HIV/AIDS treatment	10%
Laboratory services	10%
HIV/AIDS screening	8%
Tuberculosis treatment	7%
Cancer screening	7%
Lead inspection	7%
Oral health	7%
STD screening	6%
STD treatment	6%
Population-based tobacco prevention services	6%
Behavioral/mental health services	6%
Tuberculosis screening	6%
Population-based primary substance use prevention	6%
Behavioral risk factor surveillance	6%

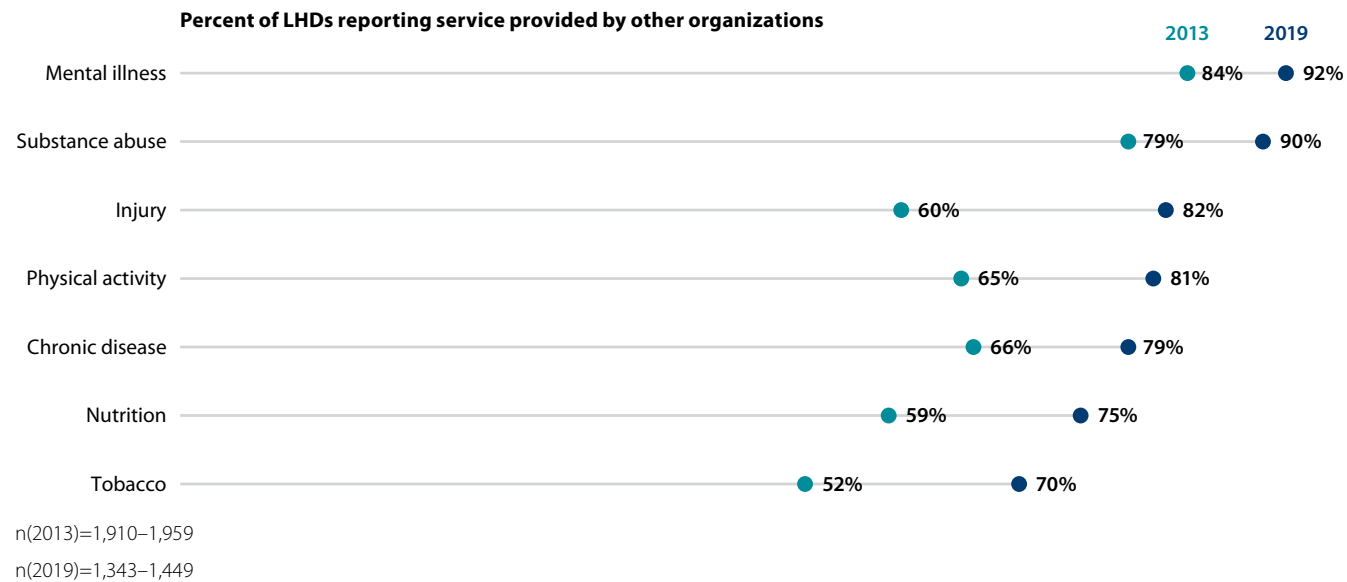
n=1,383–1,453

- ▶ LHDs are most likely to contract out their HIV/AIDS treatment or laboratory services.
- ▶ Six of these services (laboratory services, HIV/AIDS treatment, STD screening, population-based tobacco prevention services, STD treatment, and cancer screening) have been among the top 10 services most likely to be contracted out since 2005 (not shown).

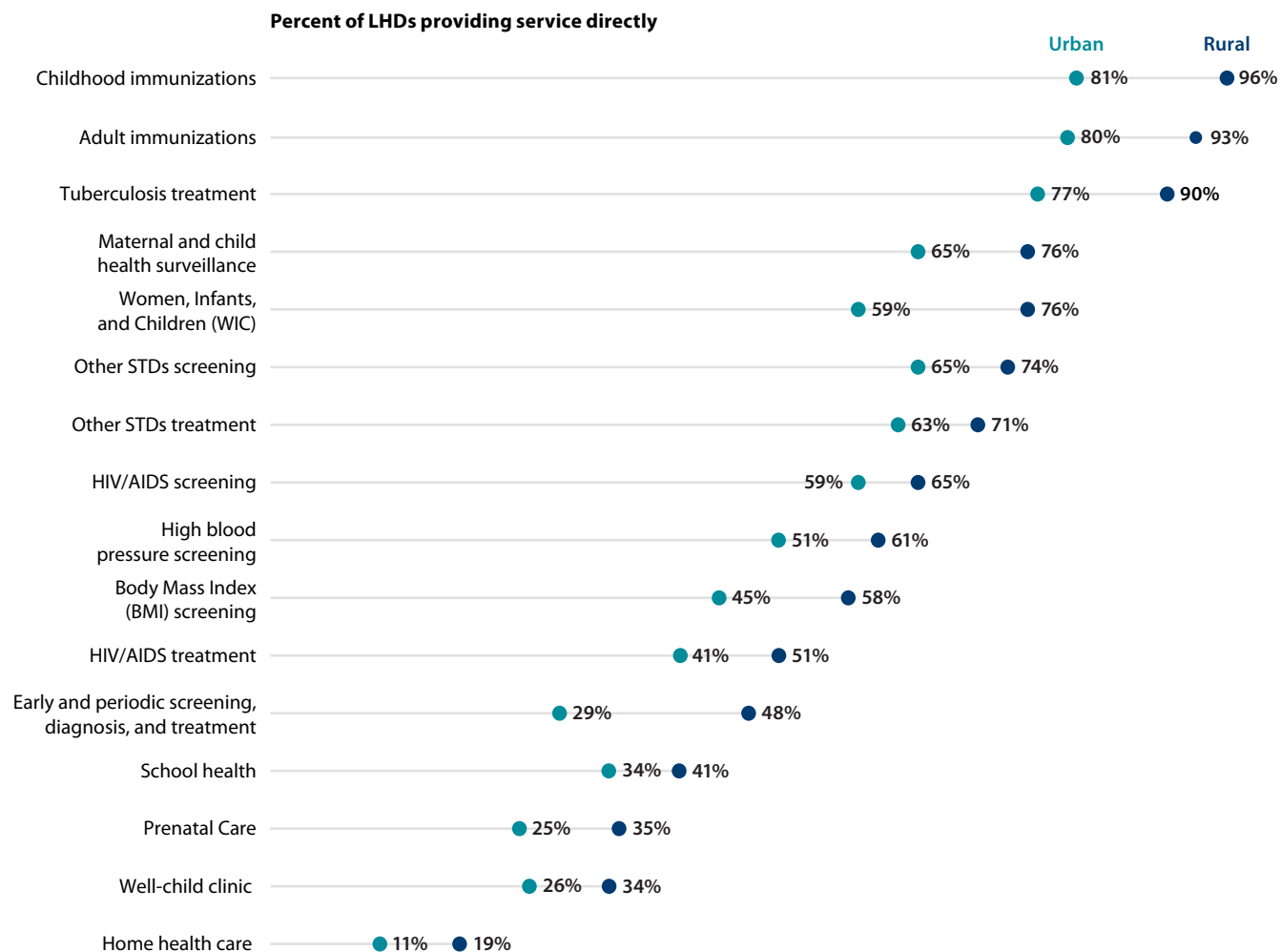
Technical note

LHD laboratories may test clinical or environmental specimens; the Profile questionnaire includes a single item intended to include both types.

Figure 7.14 | Provision of population-based primary prevention services by other organizations independent of LHD funding



► Since 2013, the proportion of LHDs reporting that primary prevention services are provided by other organizations independent of LHD funding increased for every activity, from a low of an 8 percentage point increase for mental illness prevention to a high of a 22 percentage point increase for injury prevention.

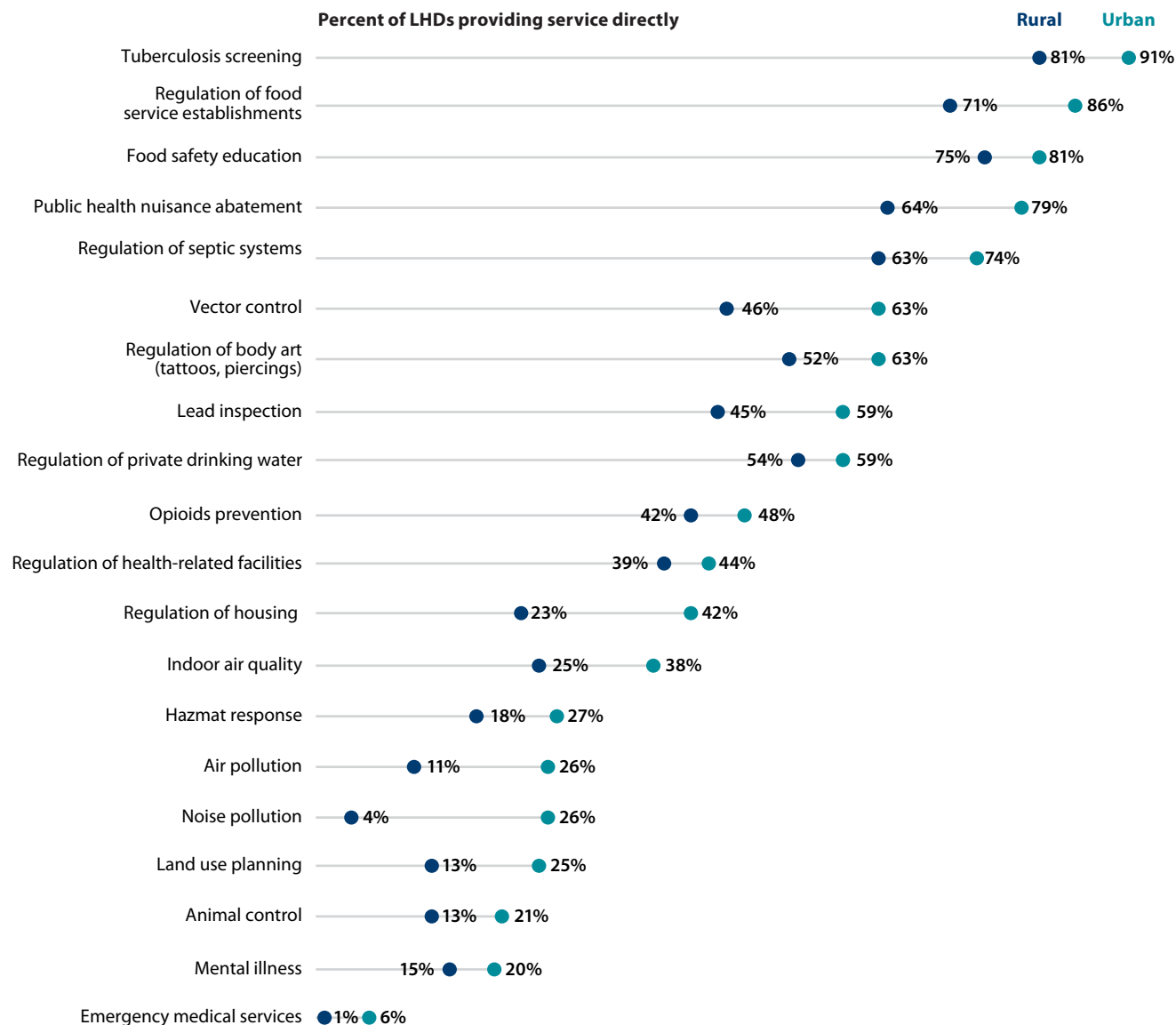
Figure 7.15 | Programs and services more likely to be provided in rural jurisdictions

n=1,226–1,461

- This figure includes 17 services that rural LHDs are more likely to provide than urban LHDs (i.e., with differences of at least 5 percentage points and $p < 0.05$ using chi-square test).
- Overall, LHDs serving rural jurisdictions are more likely to provide certain clinical services, including childhood and adult immunizations, maternal and child health services, and screening/treatment for various conditions.

Technical note

A new schema for categorizing urban and rural LHDs was used for 2019 estimates. These data may not be comparable to previous year estimates. Refer to page 18 for more information on the methodology.

Figure 7.16 | Programs and services more likely to be provided in urban jurisdictions

Regulation includes inspections and/or licensing.

n=1,136–1,463

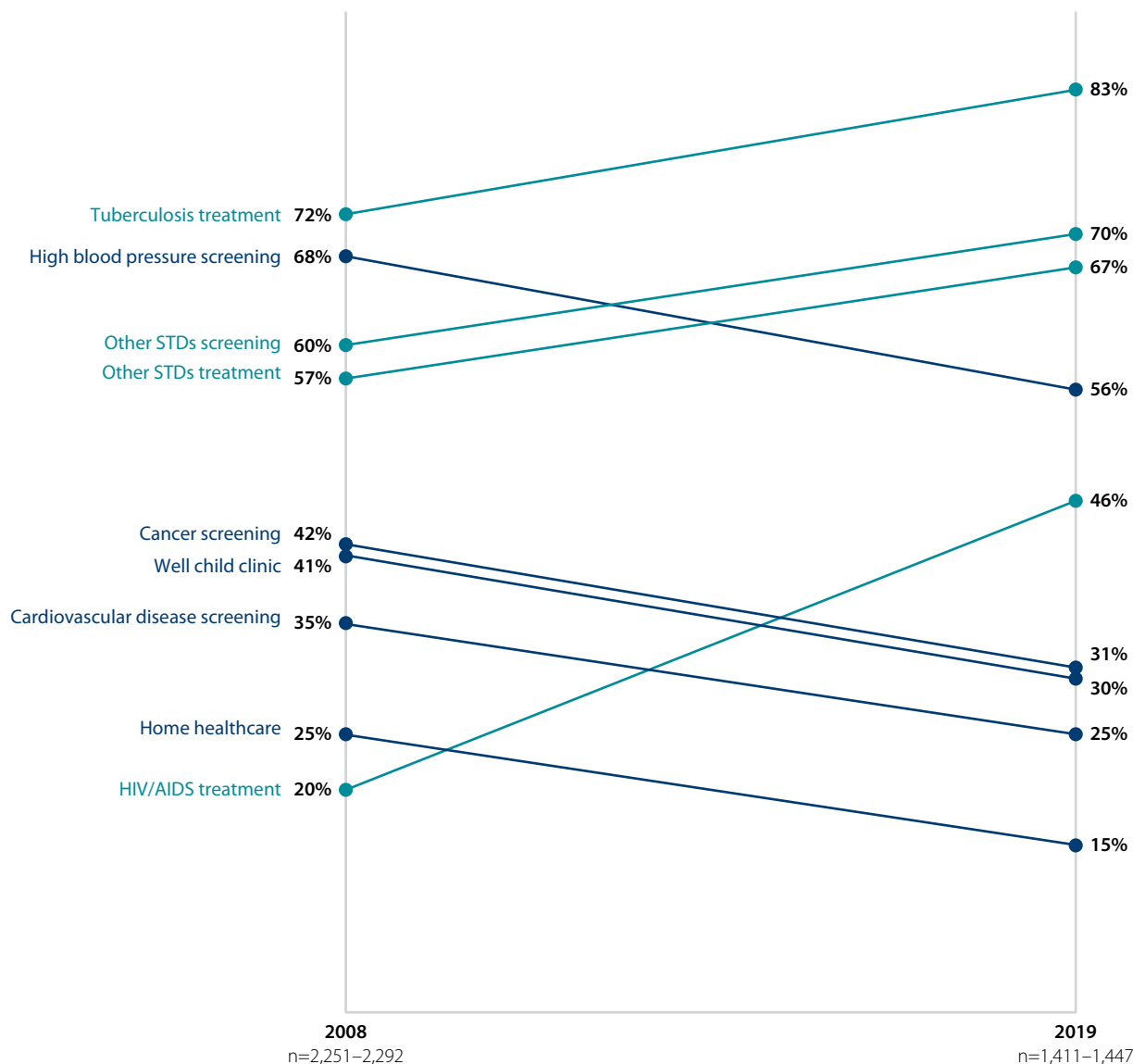
- This figure includes 20 services that urban LHDs are more likely to provide than rural LHDs (i.e., with differences of at least 5 percentage points and $p < 0.05$ using chi-square test).
- Overall, LHDs serving urban jurisdictions are more likely to provide regulation, inspection, and licensing services, as well as environmental health services.

Technical note

A new schema for categorizing urban and rural LHDs was used for 2019 estimates. These data may not be comparable to previous year estimates. Refer to page 18 for more information on the methodology.

Figure 7.17 | Change in percent of LHDs providing clinical programs and services since 2008

Percent of LHDs providing service directly



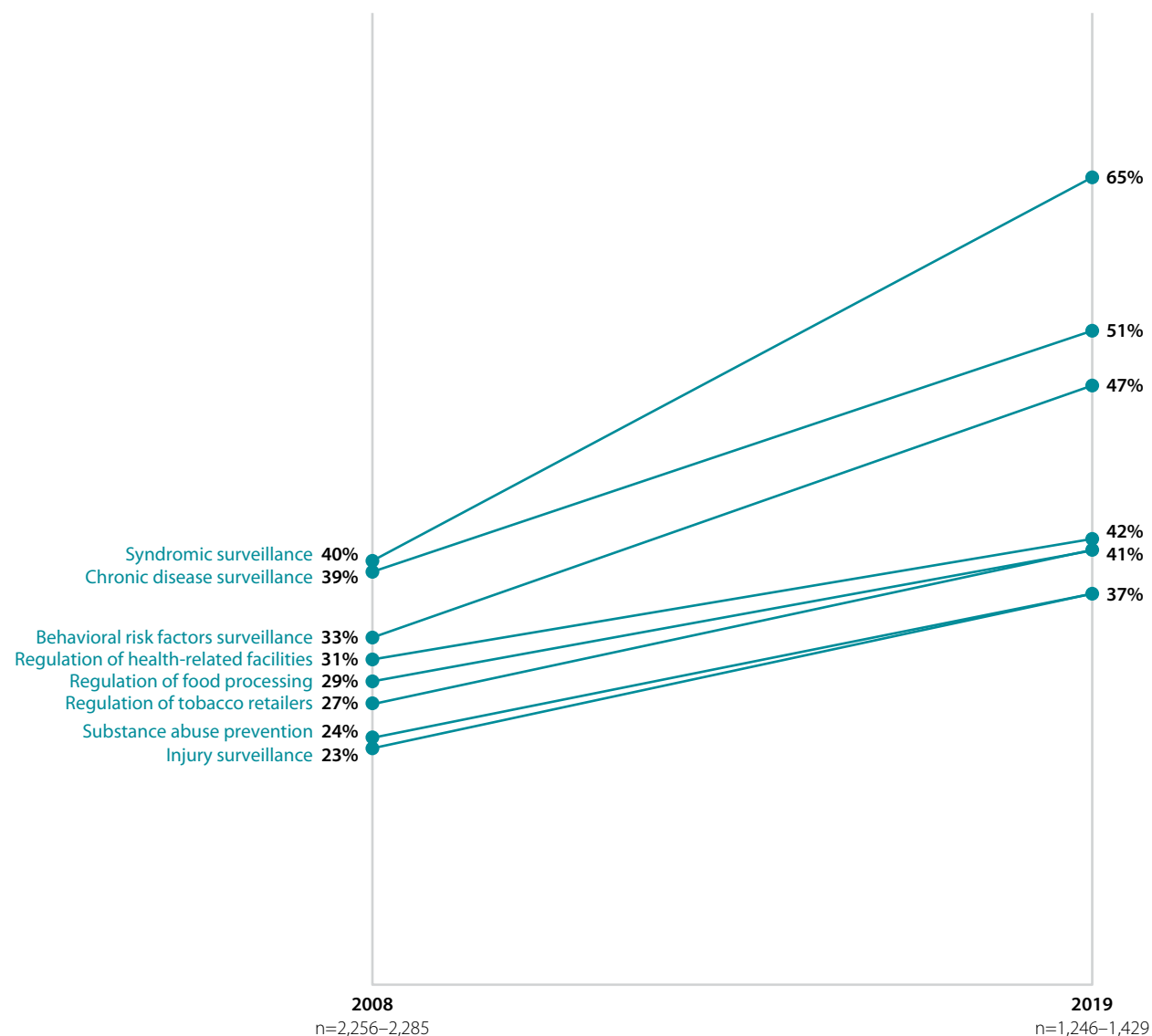
- This figure shows the nine clinical services for which the percentage of LHDs providing that service directly changed by at least 10 percentage points since 2008.
- The percentage of LHDs providing four of these nine services increased. In particular, 20% of LHDs directly provided HIV/AIDS treatment in 2008. This has increased by 26 percentage points, to 46% of LHDs providing this service directly in 2019.
- Conversely, the percentage of LHDs providing five of the services decreased. The provision of high blood pressure screenings decreased the most, with the percentage of LHDs providing this service directly dropping 12 percentage points.

Technical note

The Profile questionnaire includes two sections on LHD programs and services. One section asks LHDs to indicate whether or not they provide that service (regardless of scope) and a second asks LHDs to indicate how 11 service areas have changed since the previous fiscal year (i.e., increased, reduced, did not change). Figures 7.17 and 7.18 show the change in the overall percentage of LHDs that indicated they provided that service (regardless of scale or scope) over time by comparing results from the 2019 Profile to previous Profiles. Figures 7.19, 7.20, and 7.21 show the percentage of LHDs that reported how service areas have changed in scale or scope since the previous fiscal year.

Figure 7.18 | Change in percent of LHDs providing population-based programs and services since 2008

Percent of LHDs providing service directly

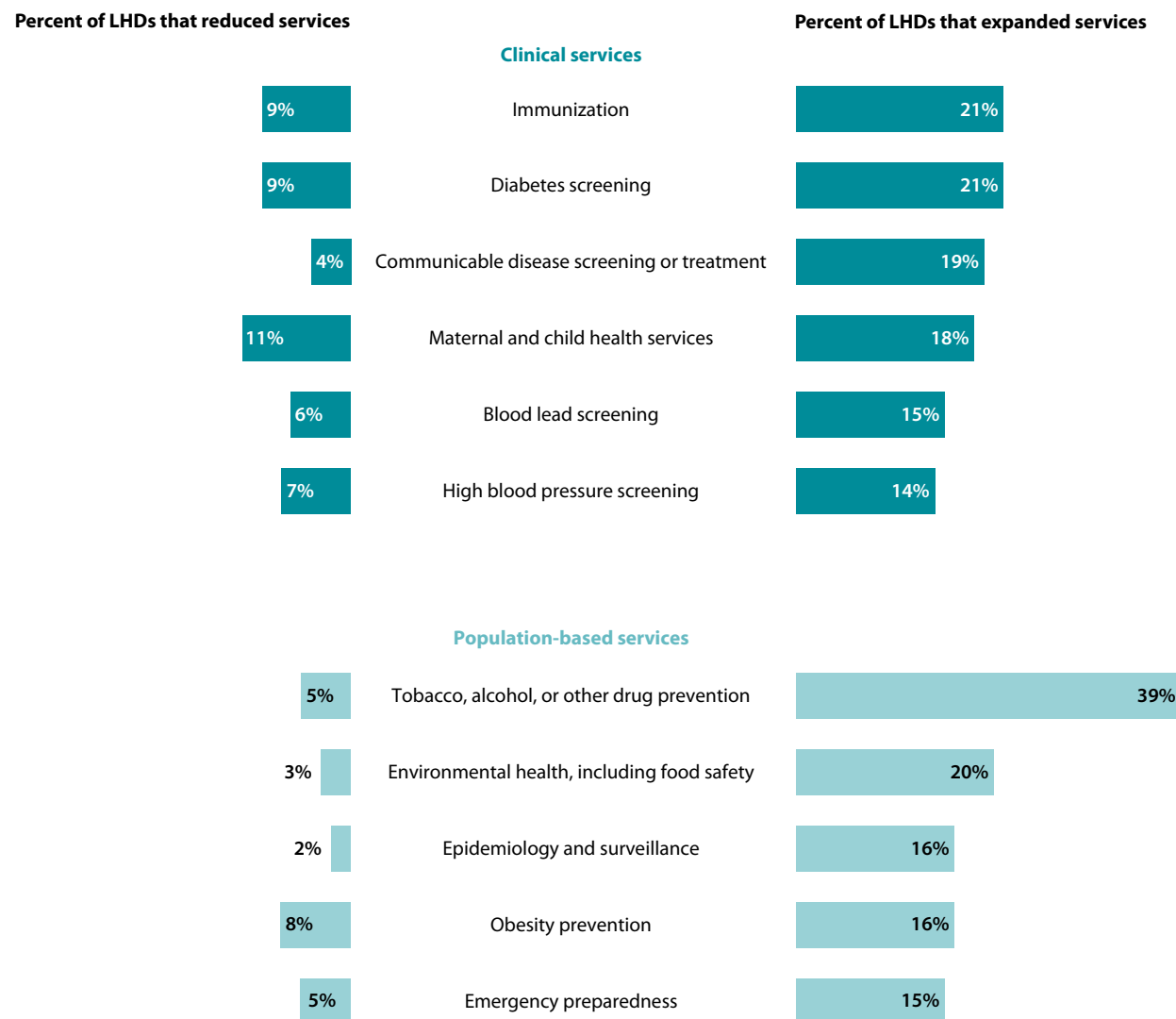


Regulation includes inspections and/or licensing.

- This figure shows the eight population-based services for which the percentage of LHDs providing that service directly changed by at least 10 percentage points since 2008.
- For all of these programs and services, the percentage of LHDs providing them directly increased. In particular, syndromic surveillance provision increased by 25 percentage points, with 40% of LHDs providing this service directly in 2008, compared to 65% in 2019.

Technical note

The Profile questionnaire includes two sections on LHD programs and services. One section asks LHDs to indicate whether or not they provide that service (regardless of scope) and a second asks LHDs to indicate how 11 service areas have changed since the previous fiscal year (i.e., increased, reduced, did not change). Figures 7.17 and 7.18 show the change in the overall percentage of LHDs that indicated they provided that service (regardless of scale or scope) over time by comparing results from the 2019 Profile to previous Profiles. Figures 7.19, 7.20, and 7.21 show the percentage of LHDs that reported how service areas have changed in scale or scope since the previous fiscal year.

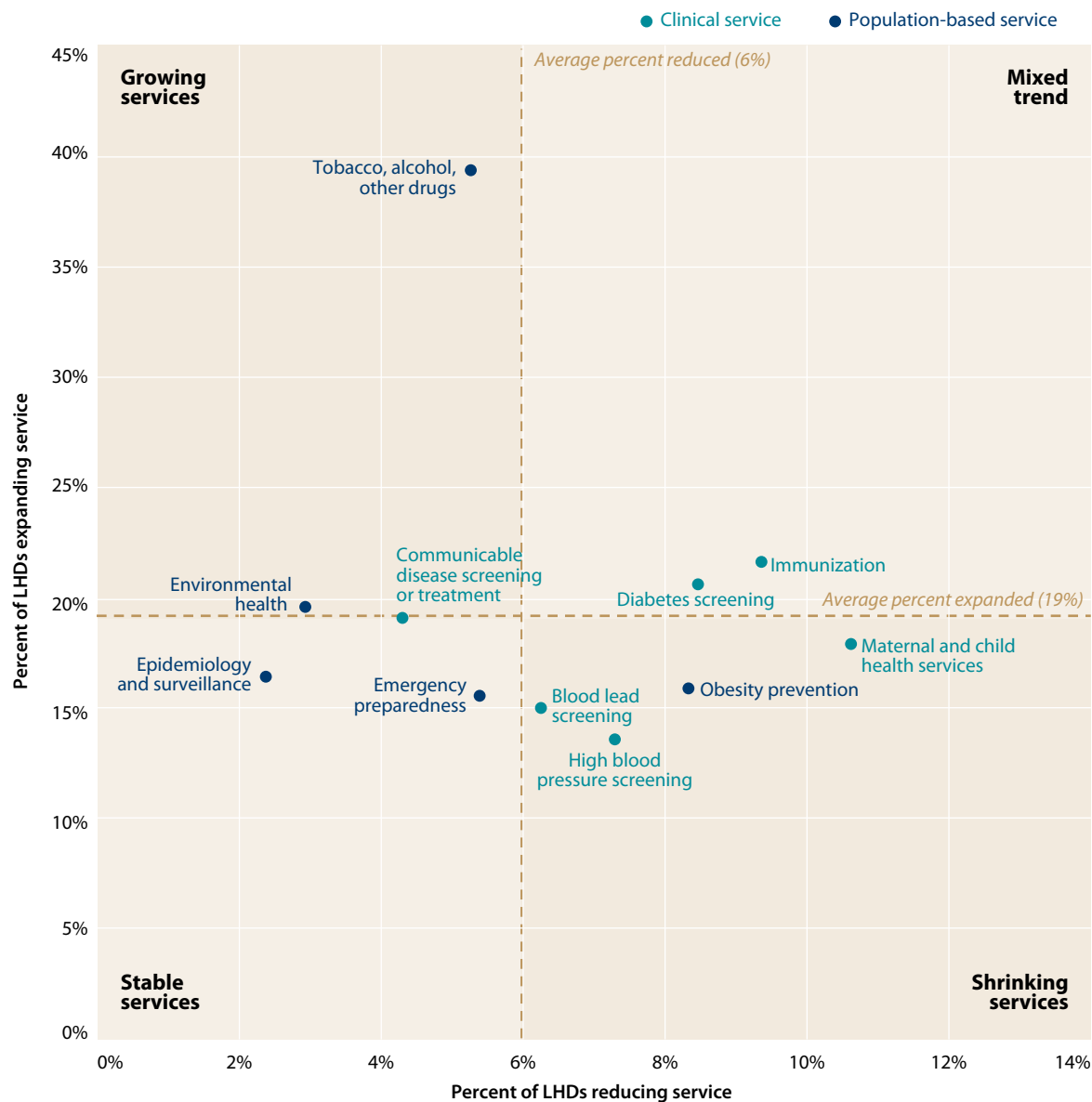
Figure 7.19 | Changes in provision of services in the past year

n=602–1,407

- A larger proportion of LHDs expanded, rather than reduced, both clinical and population-based services in the past year compared to the previous year. Expansion was more common than reduction in all categories, and the difference was greater for clinical services than for preventive services (except tobacco, alcohol or other drug prevention).
- Notably, 39% expanded their tobacco, alcohol, and other drug prevention services, compared to only 5% of LHDs that reduced these services.

Technical note

The Profile questionnaire includes two sections on LHD programs and services. One section asks LHDs to indicate whether or not they provide that service (regardless of scope) and a second asks LHDs to indicate how 11 service areas have changed since the previous fiscal year (i.e., increased, reduced, did not change). Figures 7.17 and 7.18 show the change in the overall percentage of LHDs that indicated they provided that service (regardless of scale or scope) over time by comparing results from the 2019 Profile to previous Profiles. Figures 7.19, 7.20, and 7.21 show the percentage of LHDs that reported how service areas have changed in scale or scope since the previous fiscal year.

Figure 7.20 | Growing, stable, and shrinking services in the past year

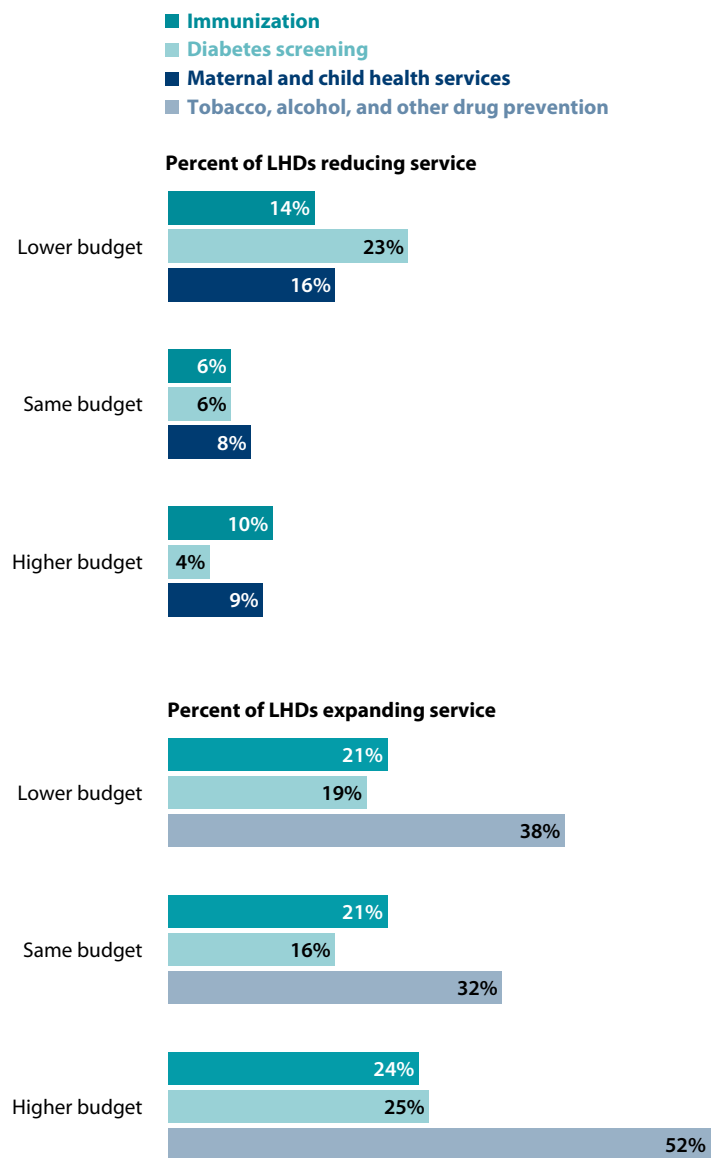
n=602–1,407

This diagram illustrates how LHDs are changing their levels of service provision in 11 programmatic areas. The horizontal and vertical lines represent the average percentages of LHDs expanding and reducing services across these 11 programmatic areas. The direction and distance from the average lines illustrate whether programs are being expanded and reduced more or less than average.

- ▶ Programs in the lower left quadrant are *stable* services—those that few LHDs are expanding or reducing. These include epidemiology and surveillance, communicable disease screening and treatment, and emergency preparedness.
- ▶ Programs in the upper left quadrant are *growing* services—those that relatively few LHDs are reducing and more are expanding. These include tobacco, alcohol, and other drug abuse and environmental health programs.
- ▶ Programs in the lower right quadrant are *shrinking* services—those that relatively more LHDs are reducing and few are expanding. These include blood lead screening, maternal and child health services, obesity prevention, and blood pressure screening.
- ▶ Programs in the upper right quadrant are services where the trends are *mixed*—those that relatively high percentages of LHDs are expanding and reducing. These include immunization and diabetes screening.
- ▶ Though most quadrants include both clinical and population-based services, population-based services are more likely to be stable or growing than clinical services.

Technical note

The Profile questionnaire includes two sections on LHD programs and services. One section asks LHDs to indicate whether or not they provide that service (regardless of scope) and a second asks LHDs to indicate how 11 service areas have changed since the previous fiscal year (i.e., increased, reduced, did not change). Figures 7.17 and 7.18 show the change in the overall percentage of LHDs that indicated they provided that service (regardless of scale or scope) over time by comparing results from the 2019 Profile to previous Profiles. Figures 7.19, 7.20, and 7.21 show the percentage of LHDs that reported how service areas have changed in scale or scope since the previous fiscal year.

Figure 7.21 | Changes in provision of services, by changes in budgets in the past year

- ▶ In general, the services that LHDs are most likely to expand or reduce are the same in LHDs with varying budget situations. However, the degree to which LHDs are expanding or reducing the programs varies by budget situation.
- ▶ LHDs with lower budgets than the previous fiscal year are more likely to reduce services than LHDs with higher or unchanging budgets.
- ▶ LHDs with higher budgets compared to the previous fiscal year are slightly more likely to expand and less likely to reduce services than LHDs with lower or unchanging budgets.
- ▶ In particular, LHDs are likely to expand services related to tobacco, alcohol, and other drug prevention regardless of changes in their budgets.

Technical notes

This figure shows the three programmatic areas LHDs were most likely to report reducing and expanding. Note that immunization and diabetes screening appear in both categories.

The Profile questionnaire includes two sections on LHD programs and services. One section asks LHDs to indicate whether or not they provide that service (regardless of scope) and a second asks LHDs to indicate how 11 service areas have changed since the previous fiscal year (i.e., increased, reduced, did not change). Figures 7.17 and 7.18 show the change in the overall percentage of LHDs that indicated they provided that service (regardless of scale or scope) over time by comparing results from the 2019 Profile to previous Profiles. Figures 7.19, 7.20, and 7.21 show the percentage of LHDs that reported how service areas have changed in scale or scope since the previous fiscal year.



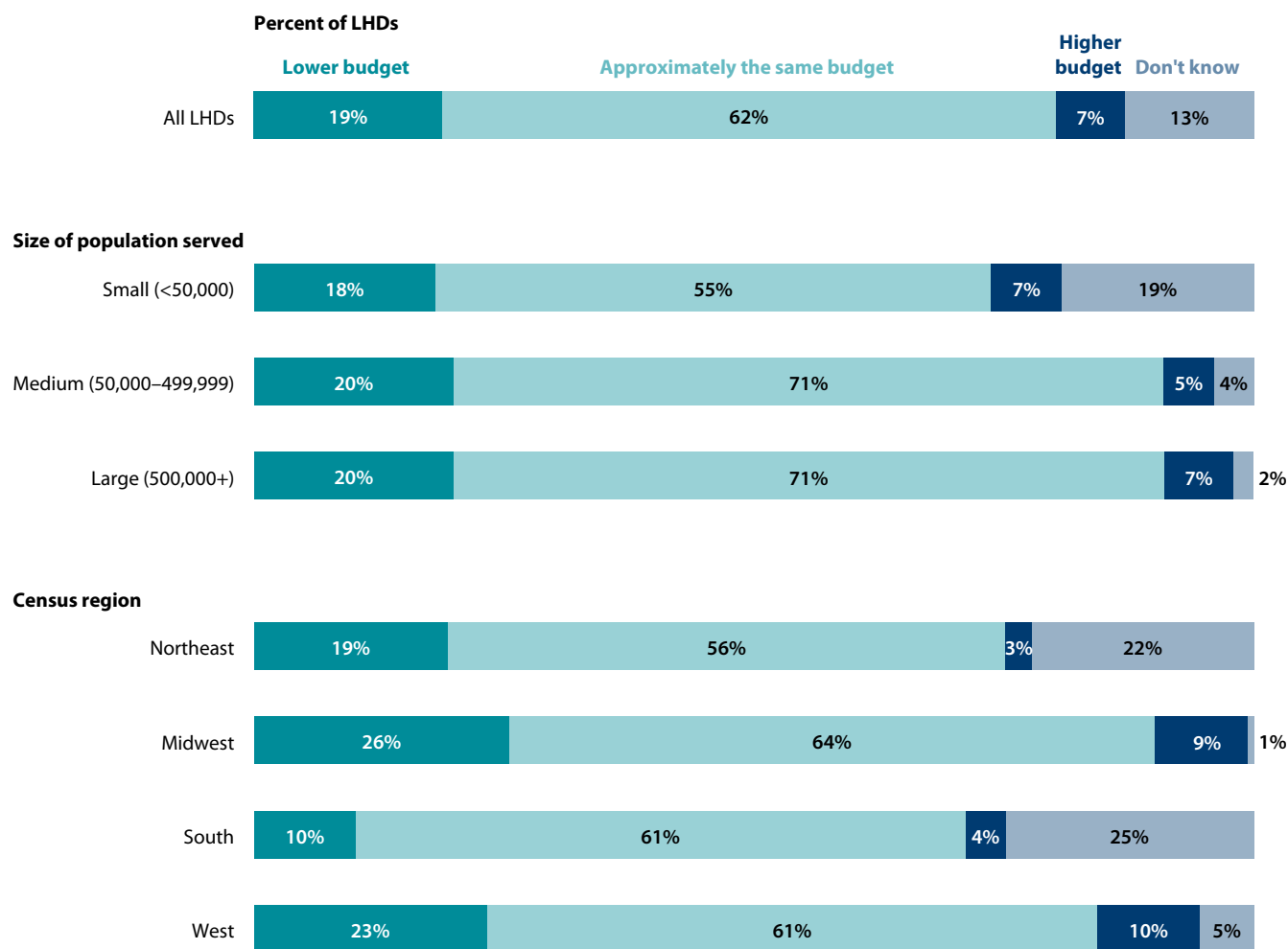
CHAPTER 8

Emergency Preparedness and Response



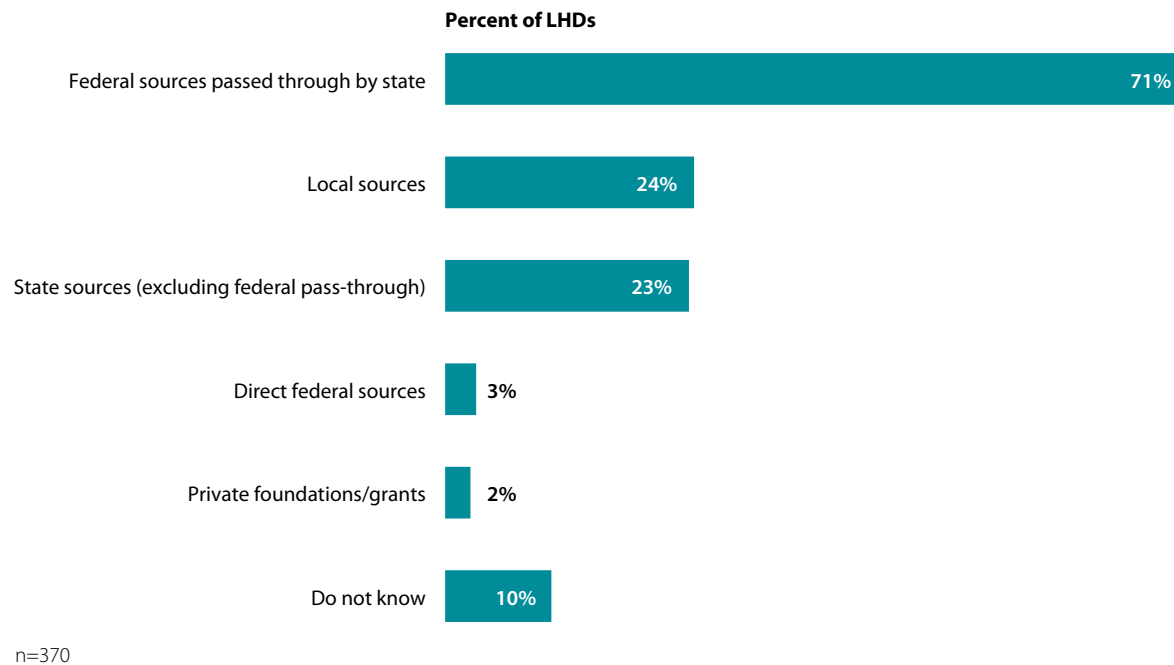
This chapter includes the following:

- ▶ Local health department (LHD) budget changes and sources for emergency preparedness activities.
- ▶ Response to all-hazards events.
- ▶ Source and use of volunteers in emergency preparedness activities and emergencies.

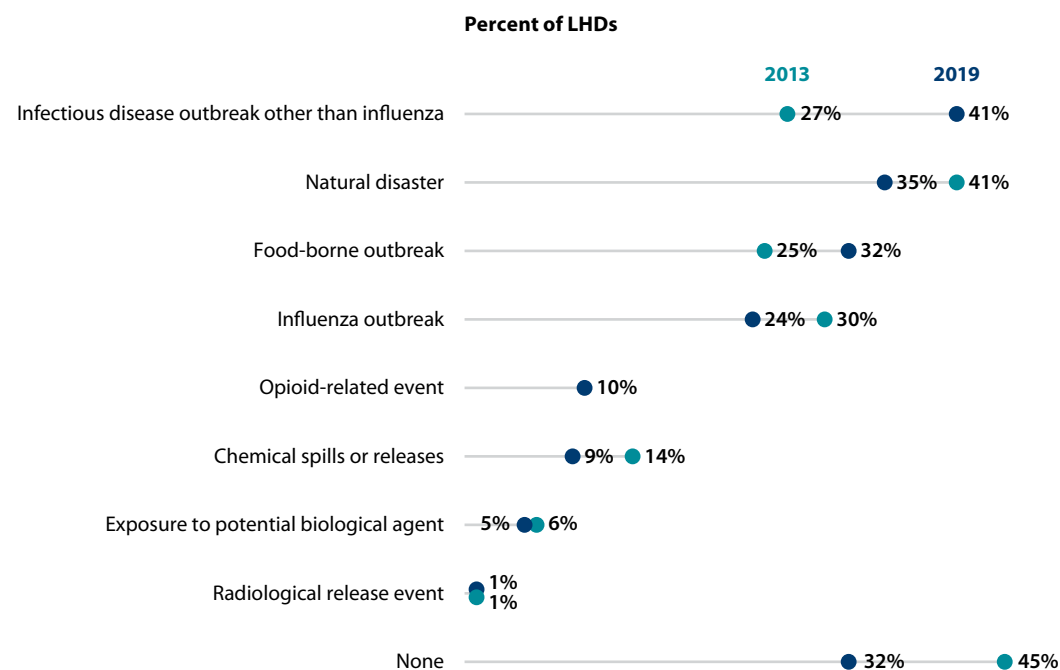
Figure 8.1 | Changes in LHD budgets for emergency preparedness activities, by size of population served and census region

n=371

- ▶ Approximately one-fifth of LHDs report a lower budget for emergency preparedness in the current fiscal year compared to the previous fiscal year, while 7% report a higher budget.
- ▶ The proportion of LHDs reporting a change in emergency preparedness budgets was similar among LHDs serving populations of different sizes.
- ▶ LHDs in the West and Midwest were more likely than LHDs in South and Northeast to report a lower budget for emergency preparedness.

Figure 8.2 | Funding sources for emergency preparedness activities

- ▶ The majority of LHDs received funding from federal sources passed through the state for emergency preparedness activities.
- ▶ Few LHDs received funding directly from the federal government or through private foundations/grants.

Figure 8.3 | Response to specific all-hazards events in the past year, over time

n(2013)=484–495

n(2019)=353

- More than two-thirds of LHDs reported responding to an all-hazards event in the past year. This proportion has increased by 13 percentage points compared to 2013.
- In 2019, LHDs most commonly responded to outbreaks of infectious disease (other than influenza).
- LHDs were less likely to have responded to a natural disaster, influenza outbreak, chemical spills or releases, and exposure to a potential biological agent in 2019 than in 2013.

Figure 8.4 | Response to specific all-hazards events in the past year, by size of population served

	All LHDs	Size of population served		
		Small (<50,000)	Medium (50,000–499,999)	Large (500,000+)
Infectious disease outbreak other than influenza	41%	28%	58%	77%
Natural disaster	35%	28%	40%	70%
Food-borne outbreak	32%	18%	50%	72%
Influenza outbreak	24%	14%	36%	54%
Opioid-related event	10%	7%	15%	8%
Chemical spills or releases	9%	6%	10%	29%
Exposure to potential biological agent	5%	1%	10%	19%
Radiological release event	1%	1%	0%	2%
None	32%	45%	14%	2%

n=353

- Large LHDs were almost twice as likely as small LHDs to have responded to an all-hazards event in the past year. In particular, 77% of large LHDs responded to an infectious disease outbreak (other than influenza), compared to 28% of small LHDs.

Figure 8.5 | Response to specific all-hazards events in the past year, by census region

	All LHDs	Census region			
		Northeast	Midwest	South	West
Infectious disease outbreak other than influenza	41%	36%	41%	41%	44%
Natural disaster	35%	28%	32%	39%	38%
Food-borne outbreak	32%	38%	34%	28%	31%
Influenza outbreak	24%	27%	22%	23%	28%
Opioid-related event	10%	7%	9%	14%	3%
Chemical spills or releases	9%	16%	9%	4%	14%
Exposure to potential biological agent	5%	6%	4%	4%	10%
Radiological release event	1%	2%	1%	0%	0%
None	32%	31%	35%	28%	36%

n=353

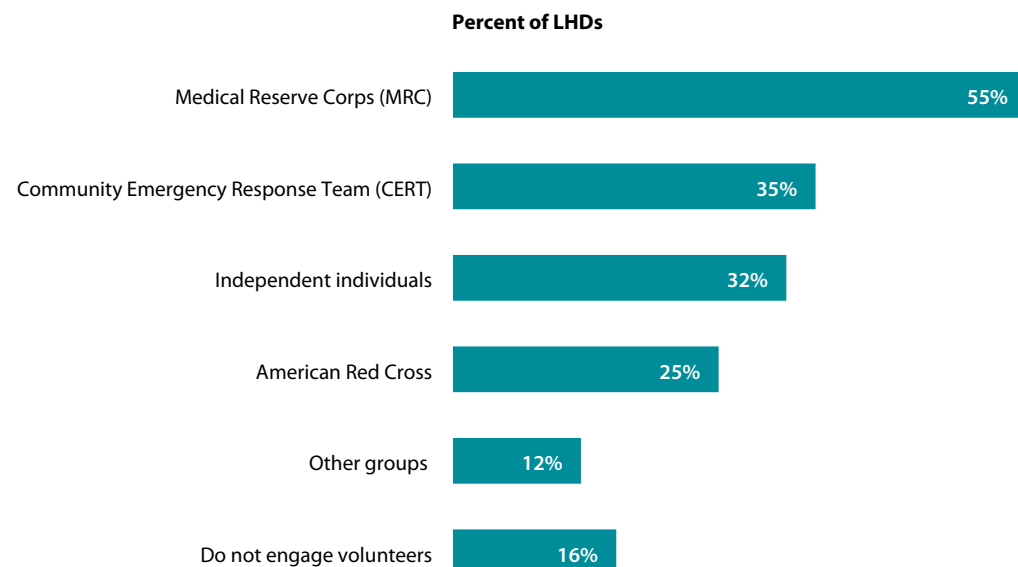
- ▶ LHDs in the South are slightly more likely to have responded to an all-hazards event in the past year, compared to LHDs in other regions. In particular, these LHDs are approximately twice as likely to respond to an opioid-related event.
- ▶ A greater proportion of LHDs in the West reported responding to chemical spills or releases and exposure to a potential biological agent.

Figure 8.6 | Number of LHD responses to specific all-hazards events in the past year

	No events	1 event	2 events	3 events	4 or more events
Infectious disease outbreak other than influenza	59%	21%	5%	4%	12%
Natural disaster	65%	22%	11%	2%	1%
Food-borne outbreak	68%	14%	6%	4%	7%
Influenza outbreak	77%	11%	3%	2%	8%
Opioid-related event	91%	5%	2%	0%	2%
Chemical spills or releases	91%	5%	1%	1%	2%
Exposure to potential biological agent	95%	5%	0%	0%	0%
Radiological release event	99%	1%	0%	0%	0%

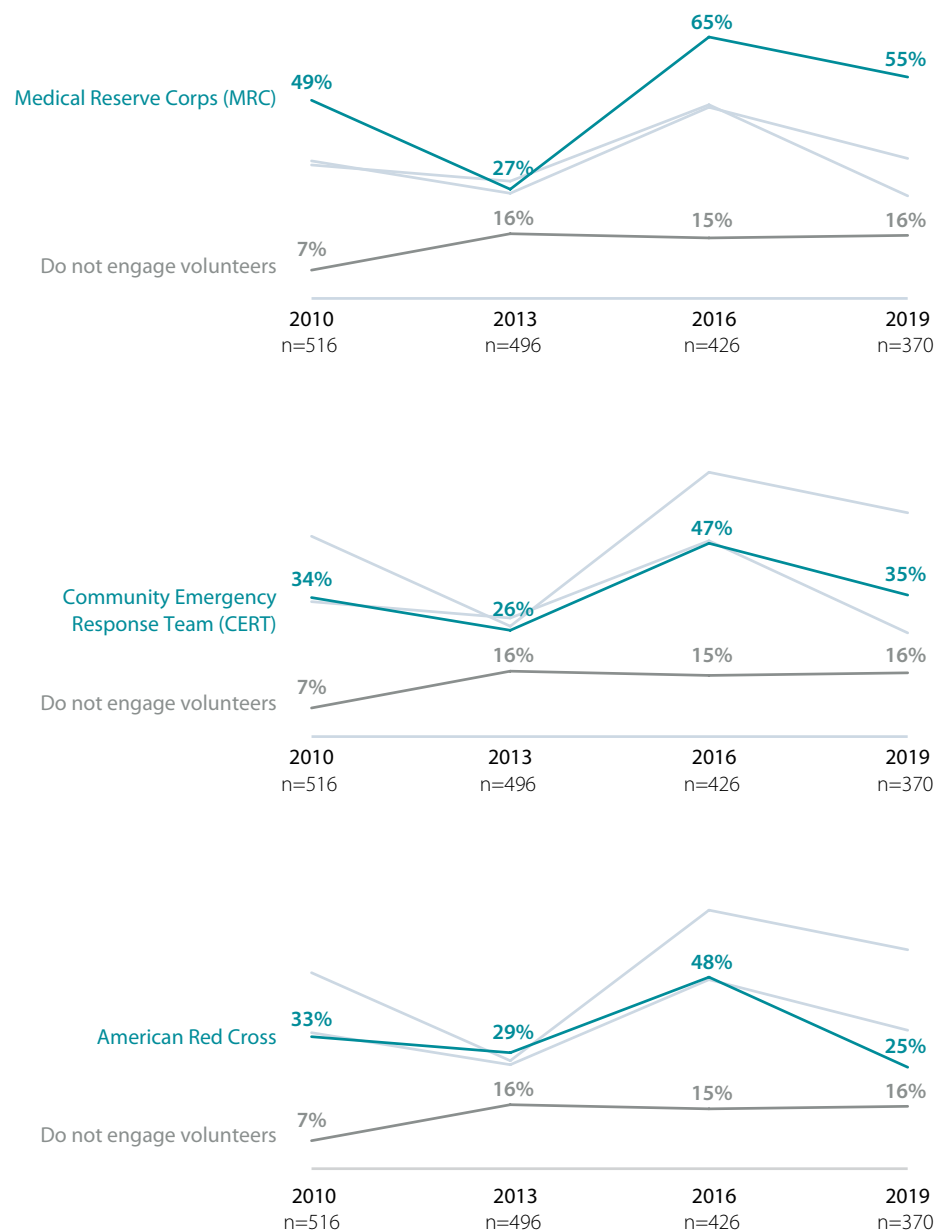
n=349–353

- For all event types, most LHDs reported not responding.
- Among LHDs that did respond to the event type, most LHDs reported one event in the past year. A total of 12% of LHDs responded to four or more outbreaks of infectious disease (other than influenza), and 11% responded to two natural disaster events.

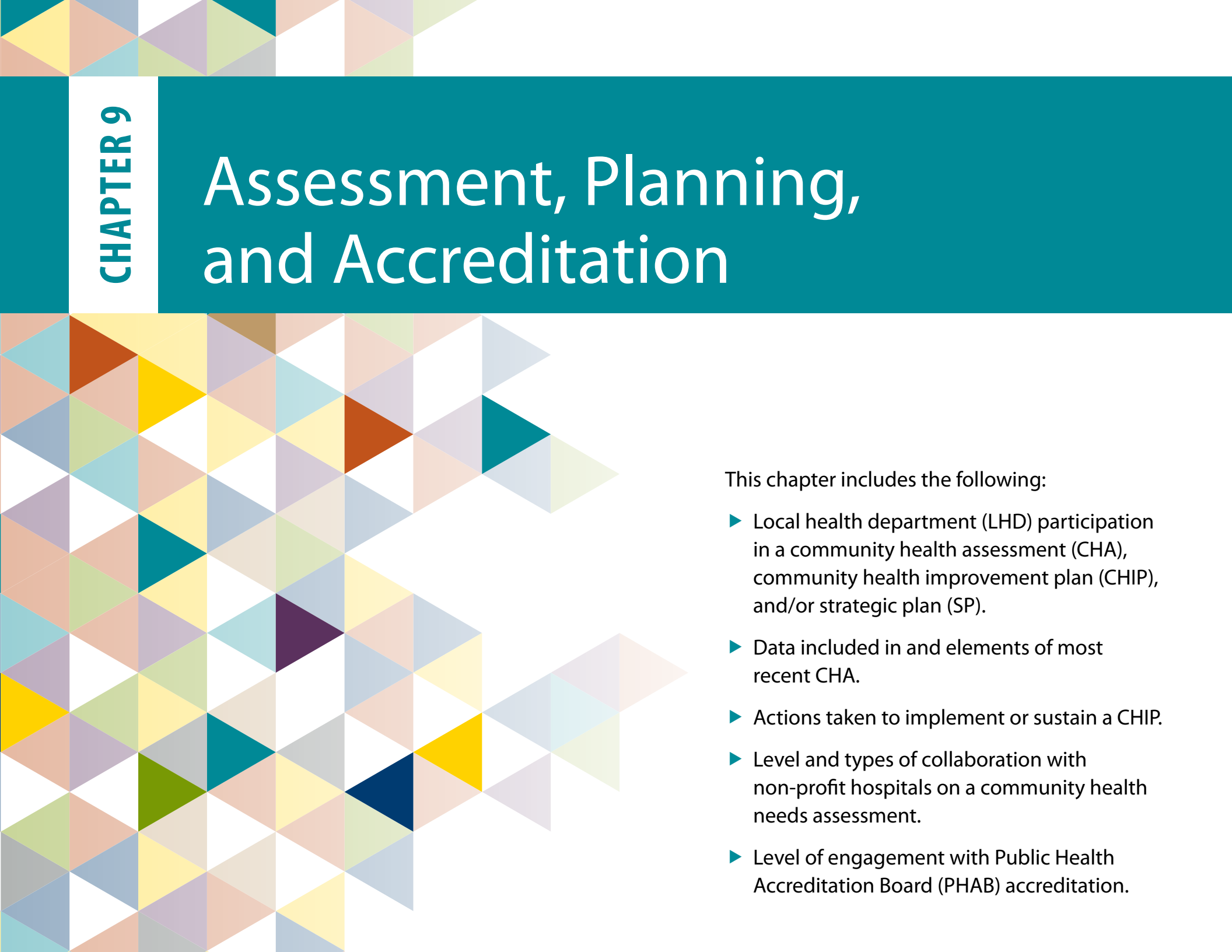
Figure 8.7 | Use of select volunteer groups in emergency preparedness activities

n=370

- ▶ LHDs are most likely to engage volunteers from the Medical Reserve Corps (MRC) for emergency preparedness activities.
- ▶ A similar proportion of LHDs engage volunteers from the Community Emergency Response Team and independent individuals.
- ▶ Sixteen percent of LHDs do not engage volunteers in emergency preparedness activities.

Figure 8.8 | Use of select volunteer groups in emergency preparedness activities, over time

- ▶ Compared to 2016, LHDs were less likely to engage volunteers from MRC, CERT, or American Red Cross in 2019.
- ▶ However, the proportion of LHDs that engaged volunteers from the MRC increased overall from 49% in 2010 to 55% in 2019. Conversely, 33% of LHDs engaged volunteers from the American Red Cross in 2013, compared to 25% in 2019—a decrease of 8 percentage points.



CHAPTER 9

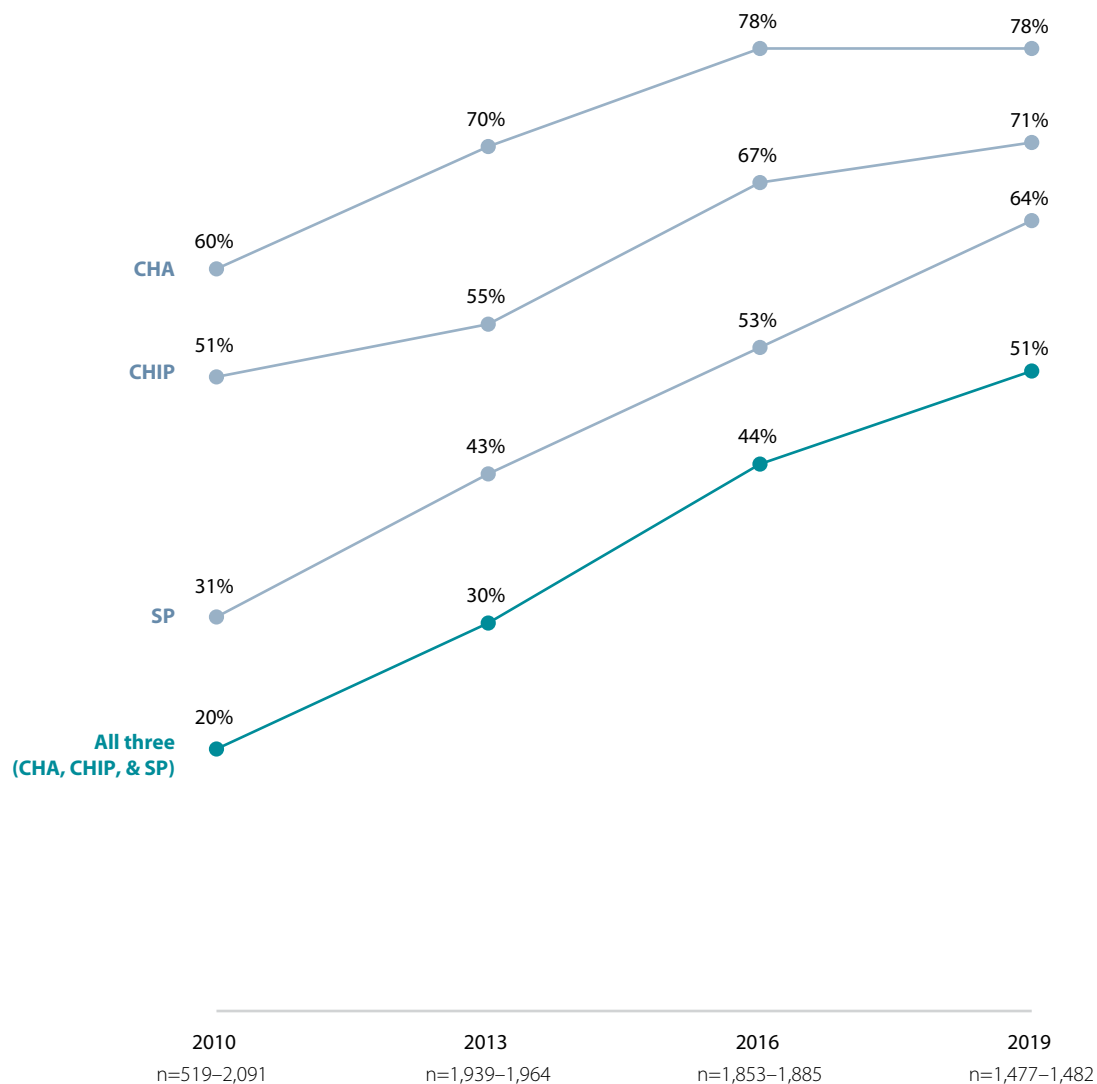
Assessment, Planning, and Accreditation

This chapter includes the following:

- ▶ Local health department (LHD) participation in a community health assessment (CHA), community health improvement plan (CHIP), and/or strategic plan (SP).
- ▶ Data included in and elements of most recent CHA.
- ▶ Actions taken to implement or sustain a CHIP.
- ▶ Level and types of collaboration with non-profit hospitals on a community health needs assessment.
- ▶ Level of engagement with Public Health Accreditation Board (PHAB) accreditation.

Figure 9.1 | Participation over time in a community health assessment (CHA), community health improvement plan (CHIP), and/or strategic plan (SP) within five years

Percent of LHDs participating in CHAs, CHIPs, or SPs

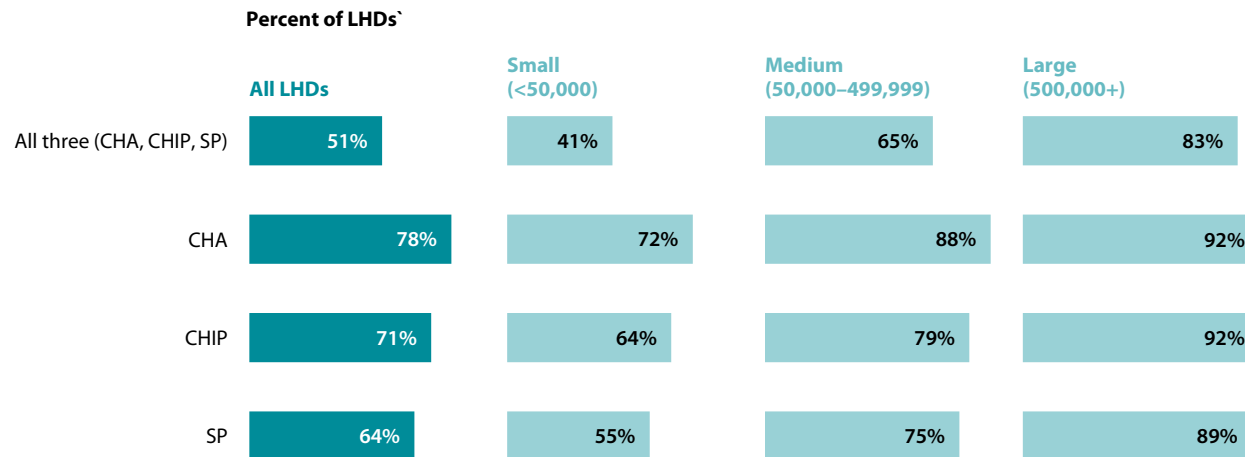


- Participation in a CHA, CHIP, and SP within the past five years has increased among all LHDs, compared to 2010. In particular, LHDs were twice as likely to develop a comprehensive, agency-wide strategic plan in 2019. The proportion of LHDs completing a CHA has remained steady since 2016.
- In 2019, just over half of LHDs completed all three processes, a requirement for PHAB accreditation.

Technical note

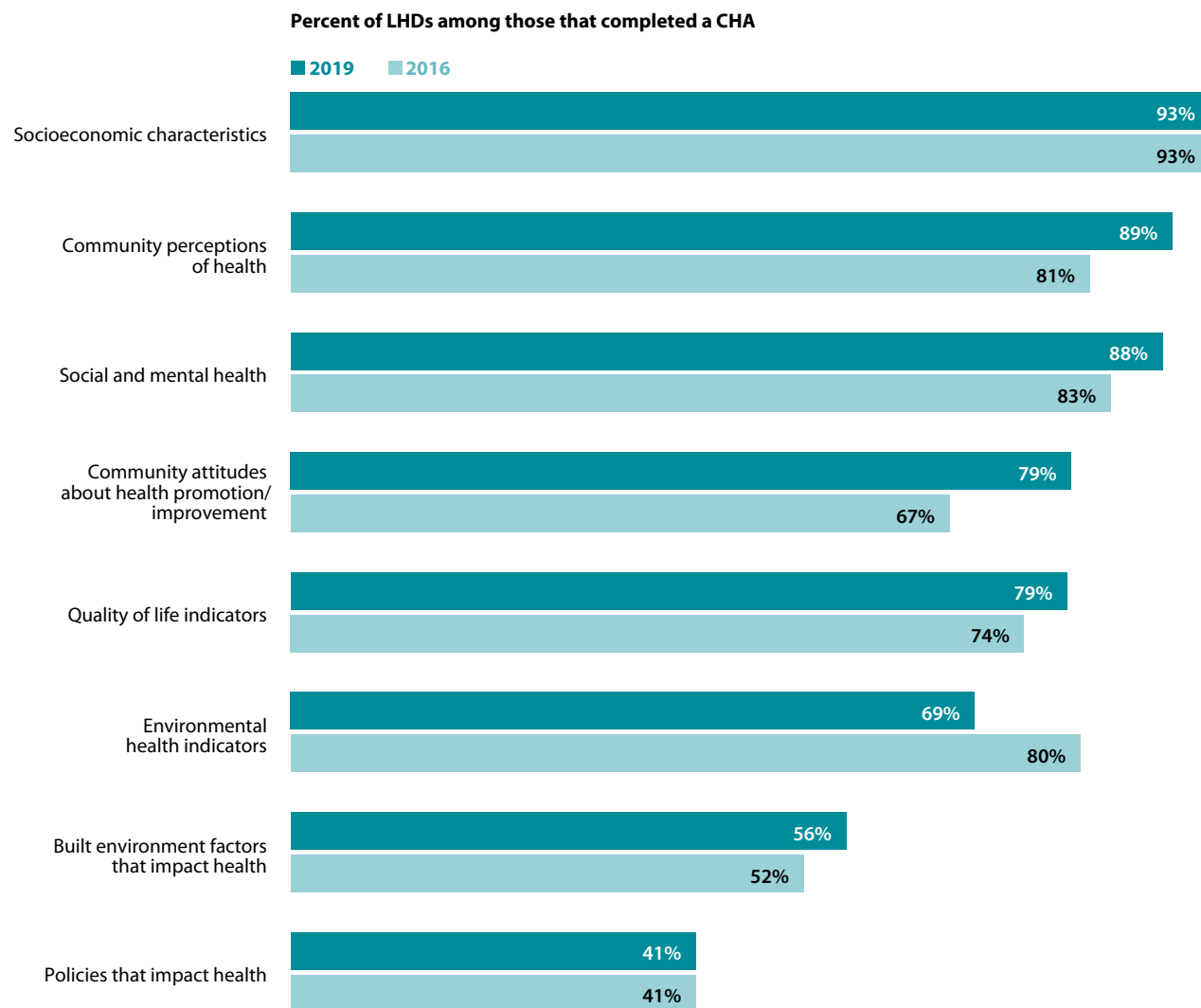
In 2010, the strategic planning question was included in a module, resulting in a lower number of respondents.

Figure 9.2 | Participation in a community health assessment (CHA), community health improvement plan (CHIP), and/or strategic plan (SP) within five years, by size of population served



n=1,477–1,482

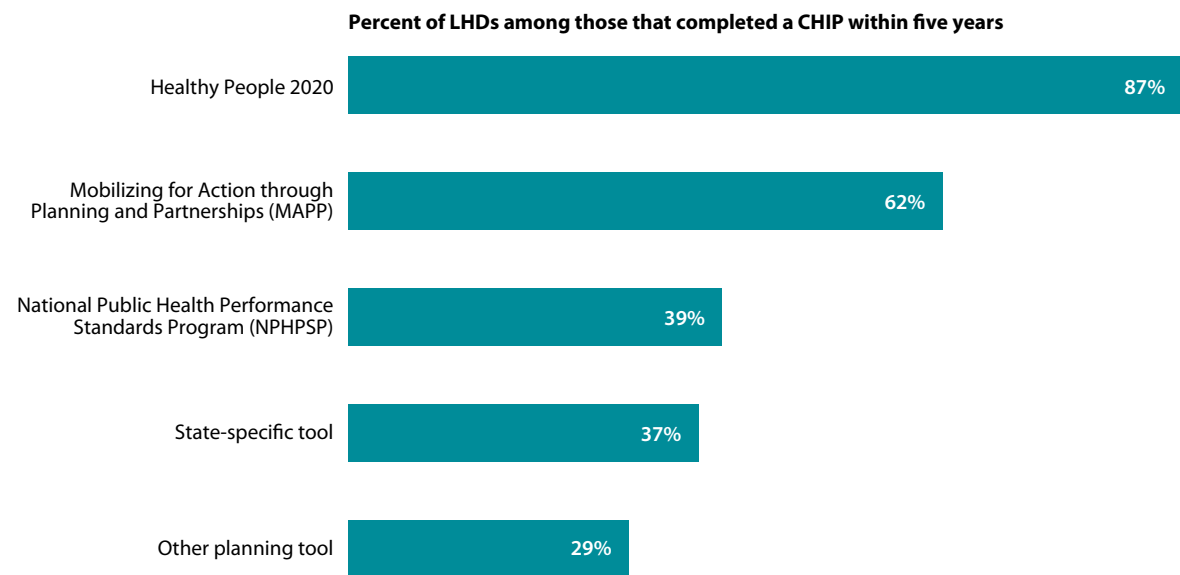
- Large LHDs were the most likely to complete a CHA, CHIP, and SP, while small LHDs were the least likely.

Figure 9.3 | Data included in most recent community health assessment (CHA), over time

n(2016)=392

n(2019)=334

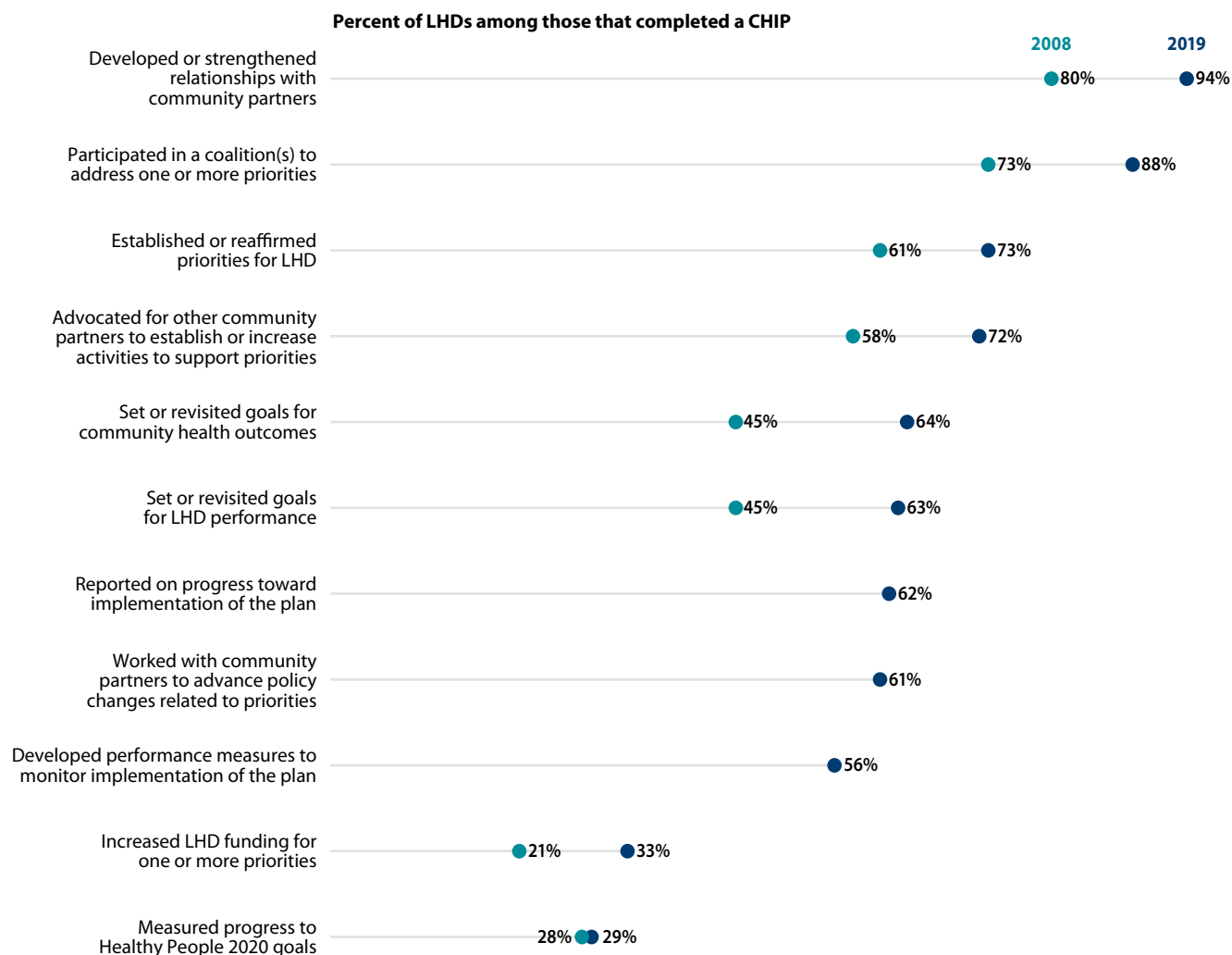
- ▶ LHDs use a variety of data sources in their CHAs, including data on socioeconomic characteristics, community perceptions of health, and social and mental health. LHDs are less likely to use data on the built environment factors that impact health or data on policies that impact health.
- ▶ Compared to 2016, a greater proportion of LHDs are using data on community perceptions of health, social and mental health, and community attitudes about health promotion/improvement.
- ▶ Conversely, the proportion of LHDs using environmental health indicators in their CHAs decreased by 11 percentage points from 2016 to 2019.

Figure 9.4 | Use of tools for most recent community health improvement plan (CHIP)

n=650–1,023

- ▶ The most commonly selected tool LHDs used for their most recent CHIP was HP2020.
- ▶ More than half of LHDs with a CHIP used MAPP, while fewer LHDs used NPHPSP or other planning tools.
- ▶ LHDs were most likely to use HP2020 as a reference tool (not shown).
- ▶ Large LHDs were more likely to implement tools (rather than as a reference) than small or medium LHDs (not shown).

Figure 9.5 | Actions taken in the past three years to implement or sustain a community health improvement plan (CHIP), over time



n(2008)=315–335

n(2019)=301

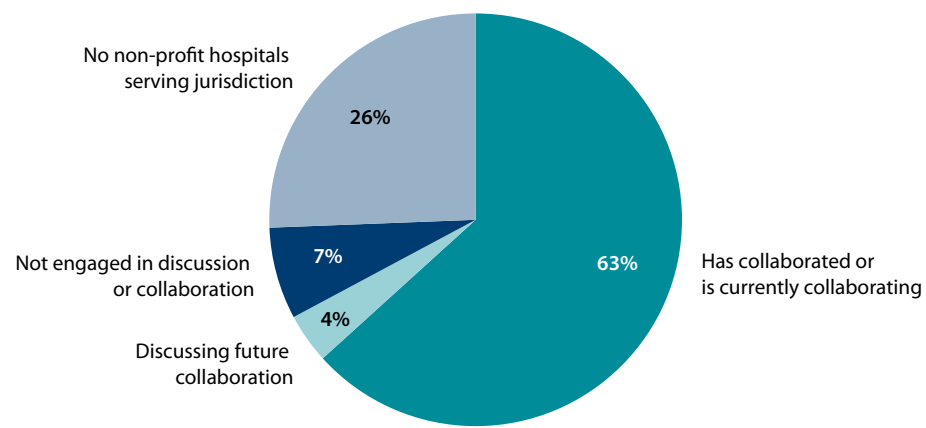
- ▶ LHDs take a variety of actions to implement or sustain their CHIPs, including developing or strengthening relationships with community partners, participating in a coalition to address one or more priorities, and establishing or reaffirming priorities for LHDs.
- ▶ Compared to 2008, larger proportions of LHDs have taken these actions. Notably, nearly two-thirds of LHDs set or revisited goals for community health outcomes and LHD performance in 2019, compared to less than half in 2008.

Technical note

Missing data is due to items not being included on the 2008 Profile questionnaire.

Figure 9.6 | Level of collaboration with non-profit hospitals on most recent community health needs assessment (CHNA)

Percent of LHDs



n=1,367

- ▶ Just under two-thirds of LHDs collaborated or are currently collaborating with a non-profit hospital on a CHNA; 4% are discussing future collaboration; 7% are neither collaborating nor discussing collaboration.
- ▶ One in four LHDs reported no non-profit hospital serves their jurisdiction. One-third of small LHDs, 14% of medium LHDs, and 5% of large LHDs reported this (not shown).

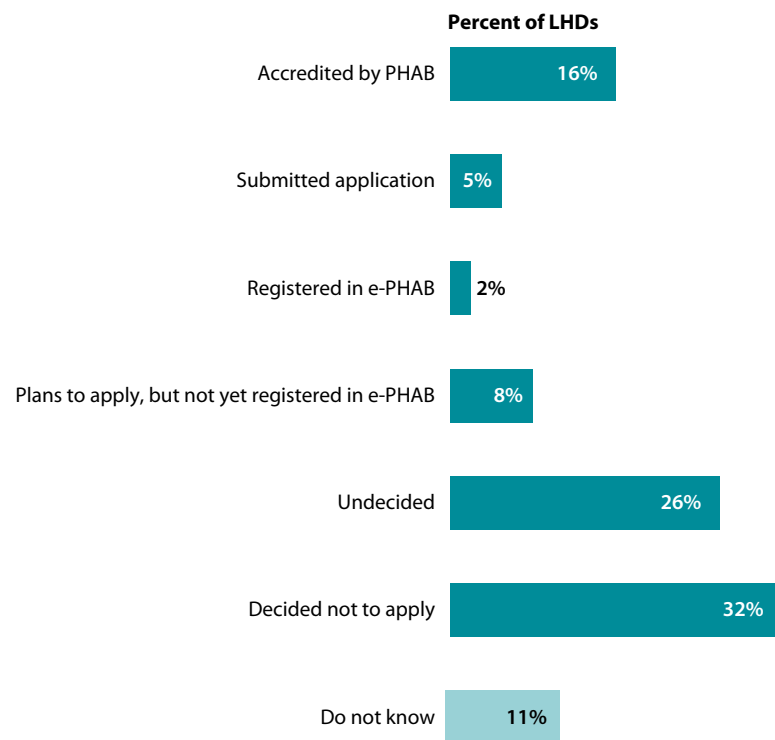
Technical note

The Patient Protection and Affordable Care Act (ACA) includes a requirement that non-profit hospitals must conduct a community health needs assessment (CHNA) at least once every three years. The CHNA must take into account input from persons who represent the broad interests of the community served by the hospital, including those with special knowledge of or expertise in public health.

Figure 9.7 | Types of collaboration with non-profit hospitals on most recent community health needs assessment (CHNA)

	Among all LHDs	Among LHDs collaborating on a CHNA
LHD provided input on strategies to improve community health	38%	63%
LHD and non-profit hospital jointly conducted an assessment that serves as both the LHD's Community Health Assessment and the hospital's CHNA	36%	60%
LHD shared local data resources on health status and/or social determinants of health	35%	58%
LHD assisted in engaging community organizations and residents in CHNA process	32%	53%
LHD provided technical assistance on data collection, analysis, synthesis, or interpretation	17%	26%
LHD coordinated joint efforts by multiple hospitals to pool resources and information for a CHNA	14%	20%
LHD provided technical assistance to hospital on how to design and implement a CHNA	12%	18%
LHD served as an impartial facilitator to ensure a collaborative CHNA process	10%	16%
Not sure	2%	4%
None of the above	1%	1%
	n=392	n=256

- ▶ Among LHDs that are collaborating with a non-profit hospital on a CHNA, more than half assist in engaging community organizations and residents in the CHNA process, share local data resources on health status and/or social determinants of health, jointly conduct an assessment that serves as both the LHD's CHA and hospital's CHNA, and provide input on strategies to improve community health.
- ▶ Approximately one-third of all LHDs collaborate with non-profit hospitals in each of these ways.

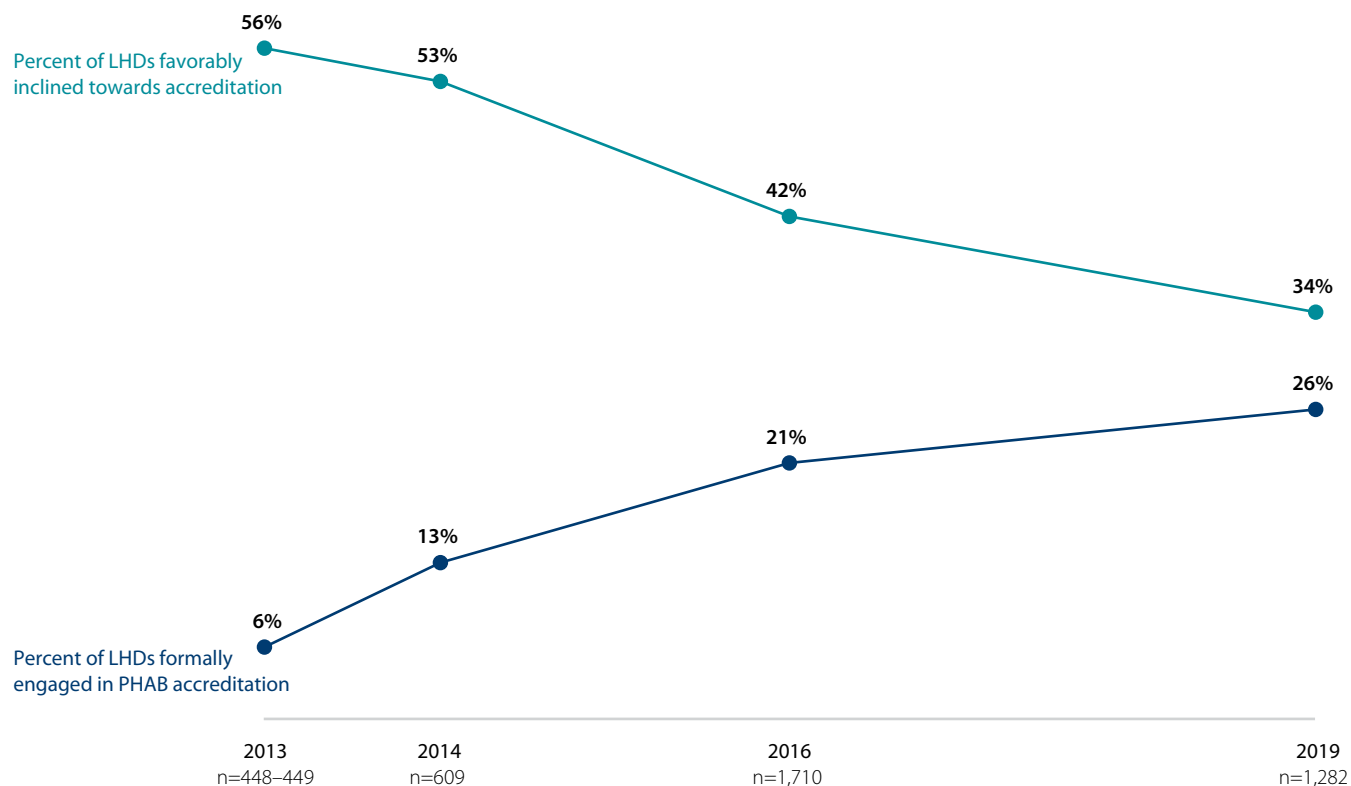
Figure 9.8 | Level of engagement with Public Health Accreditation Board (PHAB) accreditation in 2019

n=1,426

- ▶ In 2019, 16% of LHDs were accredited by PHAB, which is an increase of 9 percentage points since 2016 (not shown).
- ▶ Another 7% of LHDs were engaged in PHAB accreditation (i.e., either submitted an application or registered in e-PHAB).
- ▶ Twenty-six percent of LHDs are undecided about PHAB accreditation, and 32% decided not to apply. This is a shift from LHD engagement in 2016, when 31% were undecided and 20% decided not to apply (not shown).

Technical note

The level of engagement is based on the LHD's perception as of July 2019 and does not reflect PHAB's most recently accredited health departments.

Figure 9.9 | Level of engagement with Public Health Accreditation Board (PHAB) accreditation, over time

- ▶ The percentage of LHDs favorably inclined towards PHAB accreditation has decreased from 56% in 2013 to 34% in 2019.
- ▶ However, the percentage of LHDs formally engaged in PHAB accreditation has increased from 6% in 2013 to 26% in 2019.

Level of engagement in PHAB accreditation

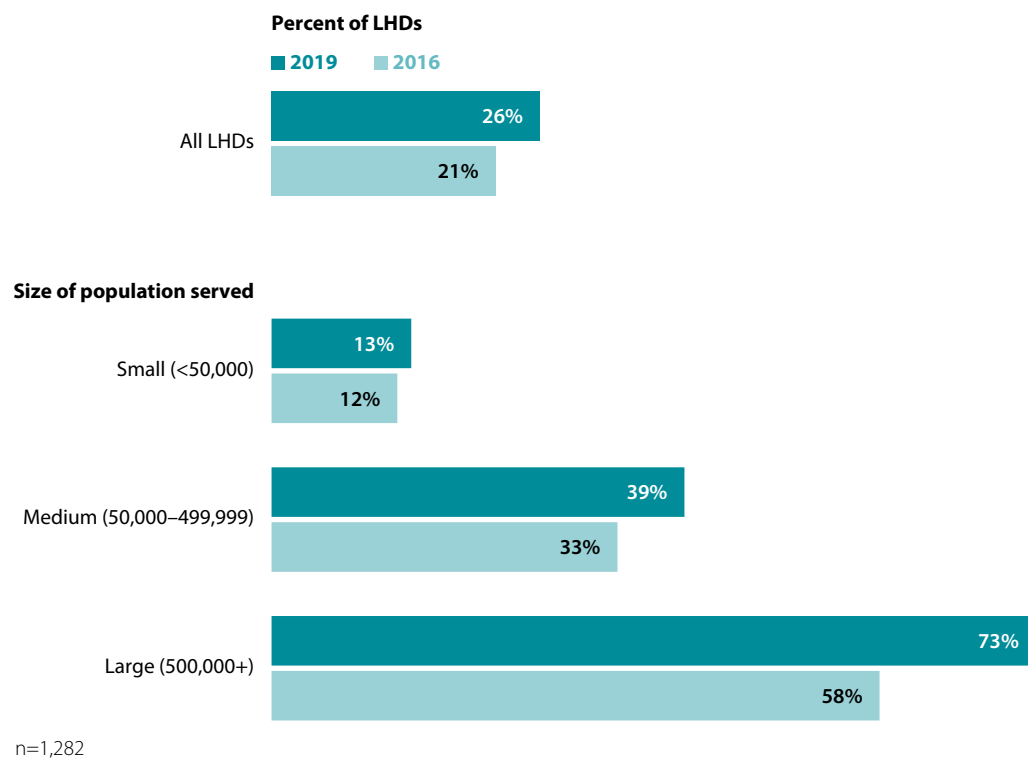
Formally engaged in PHAB accreditation: LHDs that are accredited, have submitted an application or registered in e-PHAB.

Favorably inclined towards PHAB accreditation: LHDs that are formally engaged in PHAB accreditation or plan to apply (all LHDs except those that are undecided or decided not to apply for PHAB).

Technical note

This analysis excludes a number of do not know responses.

Figure 9.10 | Formal engagement in Public Health Accreditation Board (PHAB) accreditation, over time and by size of population served



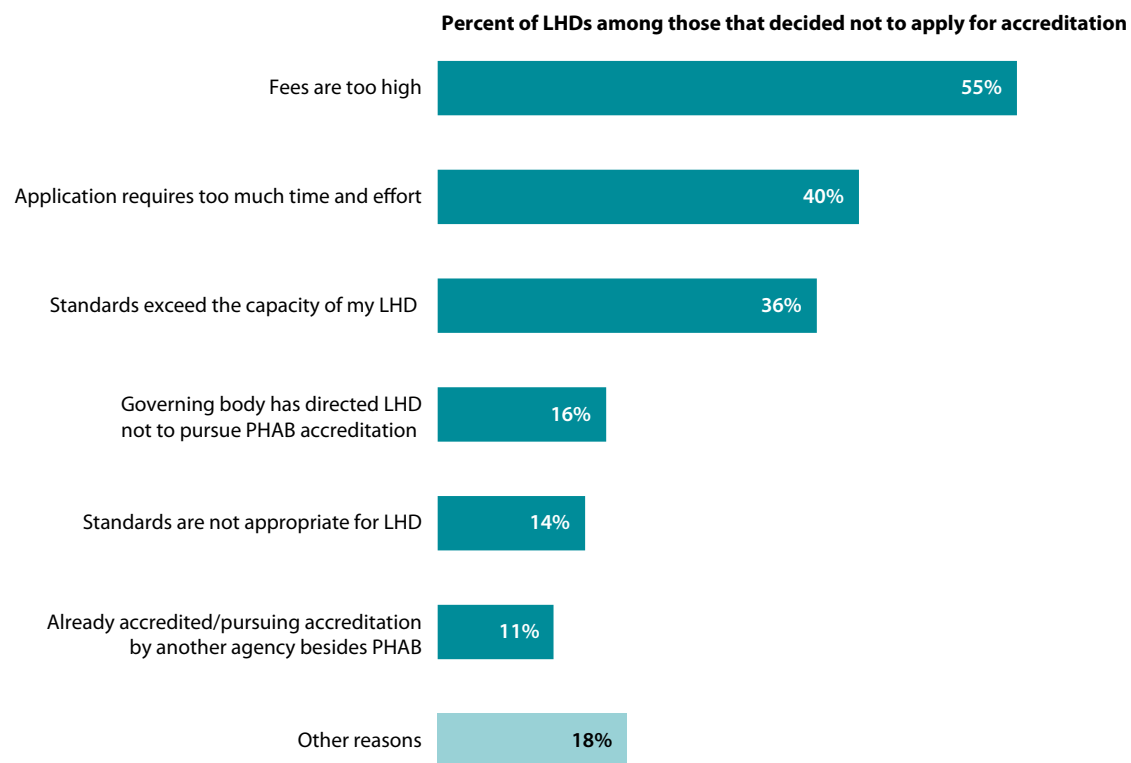
- ▶ Large LHDs are more likely to be formally engaged in PHAB accreditation than small and medium LHDs.
- ▶ The proportion of large LHDs formally engaged has increased by 15 percentage points from 2016 to 2019, compared to very small increases for small and medium LHDs.

Level of engagement in PHAB accreditation

Formally engaged in PHAB accreditation: LHDs that are accredited, have submitted an application or registered in e-PHAB.

Technical note

This analysis excludes a number of do not know responses.

Figure 9.11 | Reasons for not pursuing Public Health Accreditation Board (PHAB) accreditation

n=437

- In 2019, LHDs most commonly reported that the fees are too high as the reason they did not pursue PHAB accreditation.
- LHDs were less likely to report each reason as a factor in not pursuing PHAB accreditation in 2019 than in 2016 (not shown). In particular, 40% of LHDs reported that the application requires too much time/effort in 2019 compared to 66% in 2016.



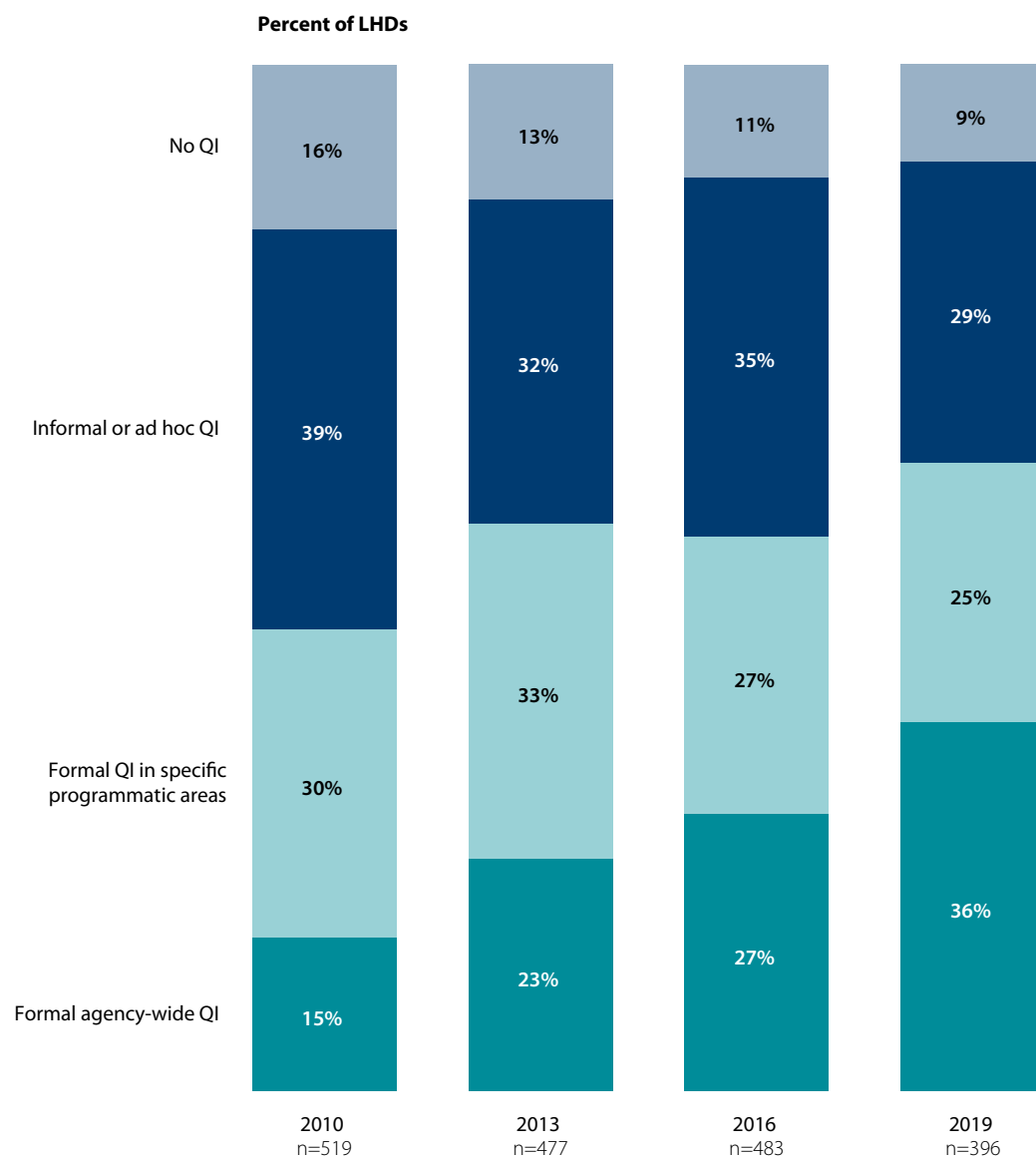
CHAPTER 10

Quality Improvement and Workforce Development

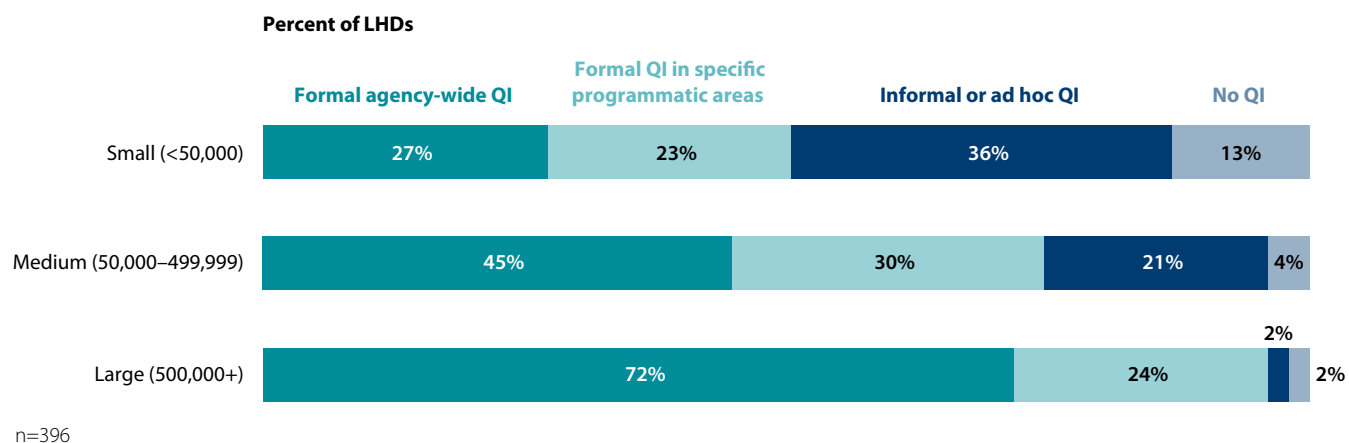


This chapter includes the following:

- ▶ Level of quality improvement implementation at local health departments (LHDs).
- ▶ Number of quality improvement projects.
- ▶ Elements used in quality improvement efforts.
- ▶ Use of core competencies for public health workers.

Figure 10.1 | Level of quality improvement (QI) implementation, over time

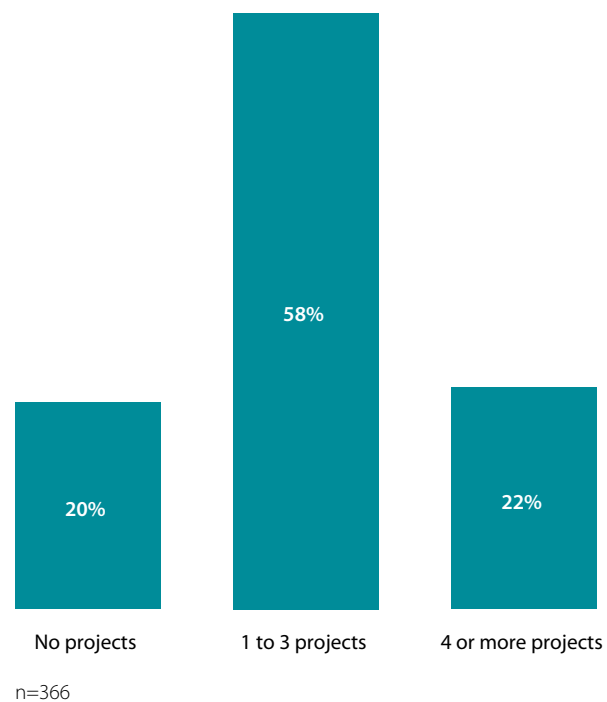
- ▶ Since 2010, the proportion of LHDs reporting informal or no QI has decreased.
- ▶ Between 2016 and 2019, the proportion of LHDs engaged in formal QI increased by 7 percentage points, with LHDs being more likely to report formal agency-wide QI programs.

Figure 10.2 | Level of quality improvement (QI) implementation, by size of population served

- ▶ Large LHDs are more likely to be involved in formal QI programs than small or medium LHDs.
- ▶ Thirteen percent of small LHDs are not involved in any QI at their agency, either formal or informal.

Figure 10.3 | Number of quality improvement (QI) projects implemented in the past year

Percent of LHDs, excluding those not involved in QI activities

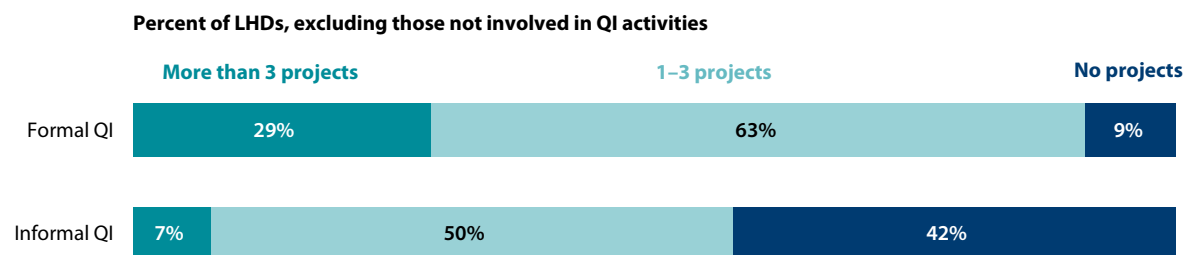


- ▶ Among LHDs involved in QI, most reported having implemented one to three formal QI processes in the past year.
- ▶ The proportion of LHDs reporting more than three formal QI projects in the past year increased from 14% in 2013 (not shown) to 22% in 2019.

QI project

A systematic quality improvement initiative that includes an aim statement; a work plan with tasks, responsibilities and timelines; intervention strategy (ies); and measures for tracking change

Figure 10.4 | Number of quality improvement (QI) projects implemented in the past year, by level of QI implementation

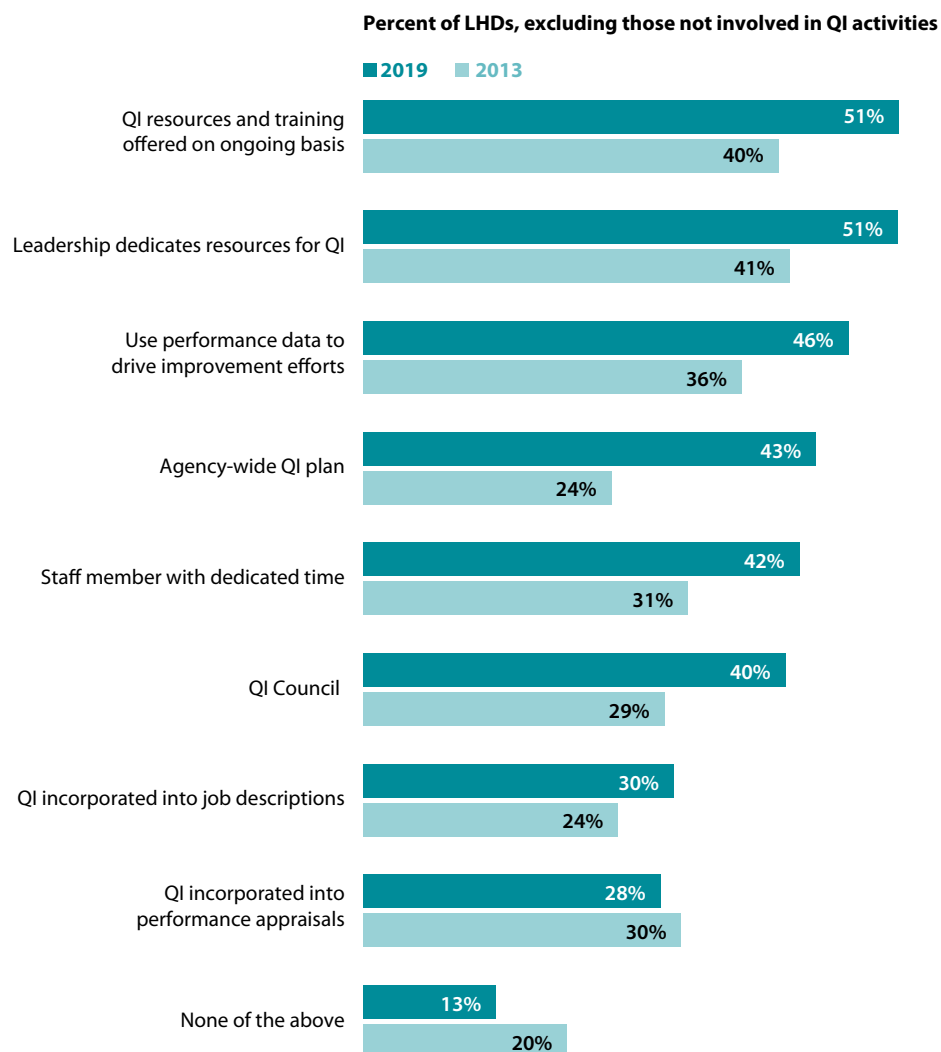


n=363

- LHDs with formal QI programs were more likely to have implemented at least one formal QI project—and four times as likely to have implemented more than three formal QI projects—as LHDs with only informal QI programs.

QI project

A systematic quality improvement initiative that includes an aim statement; a work plan with tasks, responsibilities and timelines; intervention strategy (ies); and measures for tracking change

Figure 10.5 | Elements of an agency-wide quality improvement (QI) program currently in place at LHD, over time

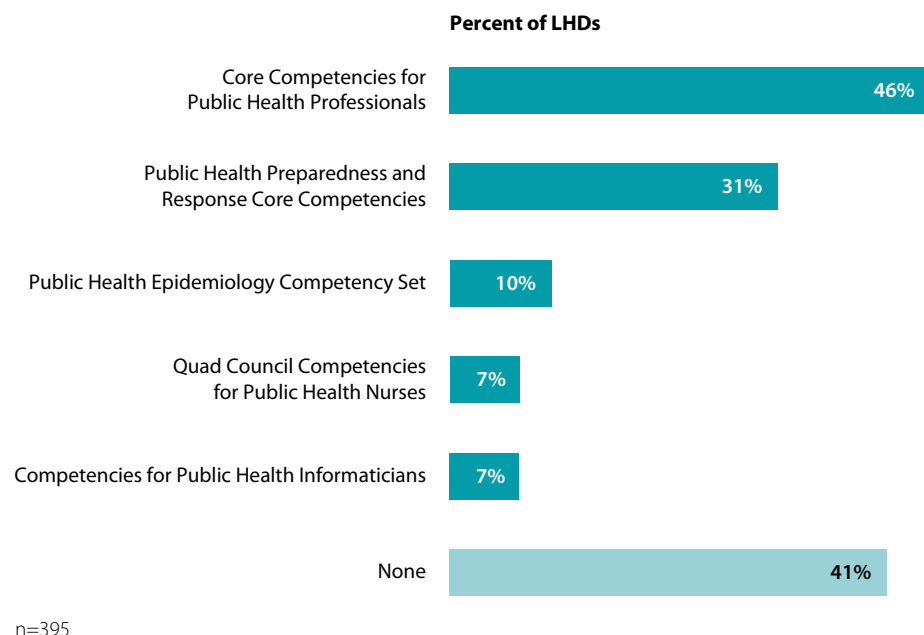
n(2013)=426

n(2019)=365

- More than half of LHDs have QI resources and trainings offered on an ongoing basis at their agency and have leadership that dedicates resources for QI. Fewer LHDs have QI incorporated into job descriptions or performance appraisals.
- With the exception of having QI incorporated into performance appraisals, the proportion of LHDs with these elements in place has increased since 2013.

QI project

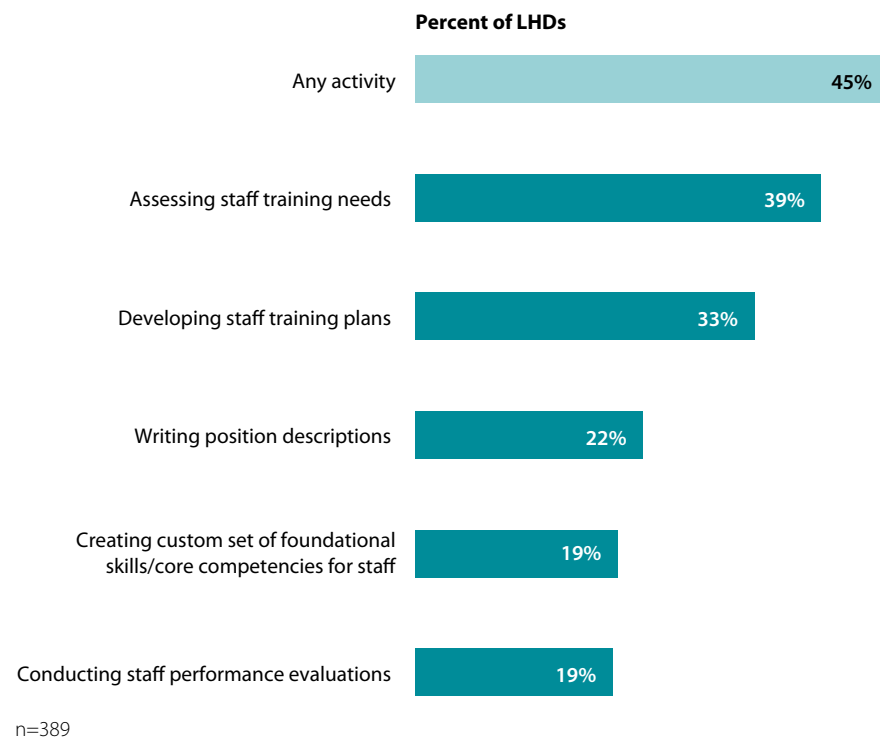
A systematic quality improvement initiative that includes an aim statement; a work plan with tasks, responsibilities and timelines; intervention strategy (ies); and measures for tracking change

Figure 10.6 | Use of any competency sets for workforce development, planning, and action

- ▶ The most commonly used competency set for workforce development, planning, and action is the Core Competencies for Public Health Professionals, with almost half of LHDs using it. Few LHDs use occupation-specific competency sets (e.g., Quad Council Competencies for Public Health Nurses, Competencies for Public Health Informaticians).
- ▶ Notably, 41% of LHDs do not use any competency set for workforce development.
- ▶ Medium and large LHDs were more likely to have used these core competency sets than small LHDs (not shown).

Technical note

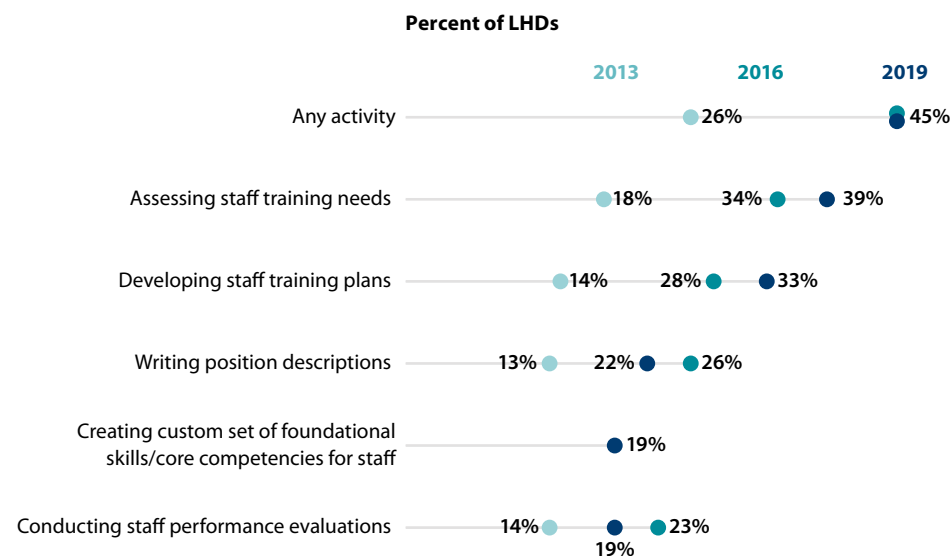
The Core Competencies for Public Health Professionals (developed by the Council on Linkages between Academia and Public Health Practice) are a consensus set of skills for the broad practice of public health. The Core Competencies can provide a framework for workforce development planning and action. More information is available at www.phf.org/link/corecompetencies.htm

Figure 10.7 | Use of the Core Competencies for Public Health Professionals

- ▶ Almost half of LHDs have used the Core Competencies for Public Health Professionals for their public health workers.
- ▶ Most commonly, the core competencies were used by LHDs for staff training purposes, i.e., assessing training needs and developing training plans.

Technical note

The Core Competencies for Public Health Professionals (developed by the Council on Linkages between Academia and Public Health Practice) are a consensus set of skills for the broad practice of public health. The Core Competencies can provide a framework for workforce development planning and action. More information is available at www.phf.org/link/corecompetencies.htm

Figure 10.8 | Use of the Core Competencies for Public Health Professionals, over time

n(2013)=470

n(2016)=462

n(2019)=389

- ▶ After an increase in 2013, the proportion of LHDs using the Core Competencies for Public Health Professionals for their public health workers has remained the same.
- ▶ In 2019, LHDs were more likely to use the competency set to assess staff training needs and develop staff training plans.
- ▶ Conversely, a lower proportion of LHDs used the competency set to write position descriptions and conduct staff performance evaluations in 2019 compared to 2016.

Technical note

The Core Competencies for Public Health Professionals (developed by the Council on Linkages between Academia and Public Health Practice) are a consensus set of skills for the broad practice of public health. The Core Competencies can provide a framework for workforce development planning and action. More information is available at www.phf.org/link/corecompetencies.htm



CHAPTER 11

Public Health Policy



This chapter includes the following:

- ▶ Local health department (LHD) policy development, including tobacco, alcohol, opioids, or other drugs.
- ▶ Public health ordinances and regulations.
- ▶ Access to healthcare services.

Figure 11.1 | Involvement in policy areas in the past two years, by size of population served

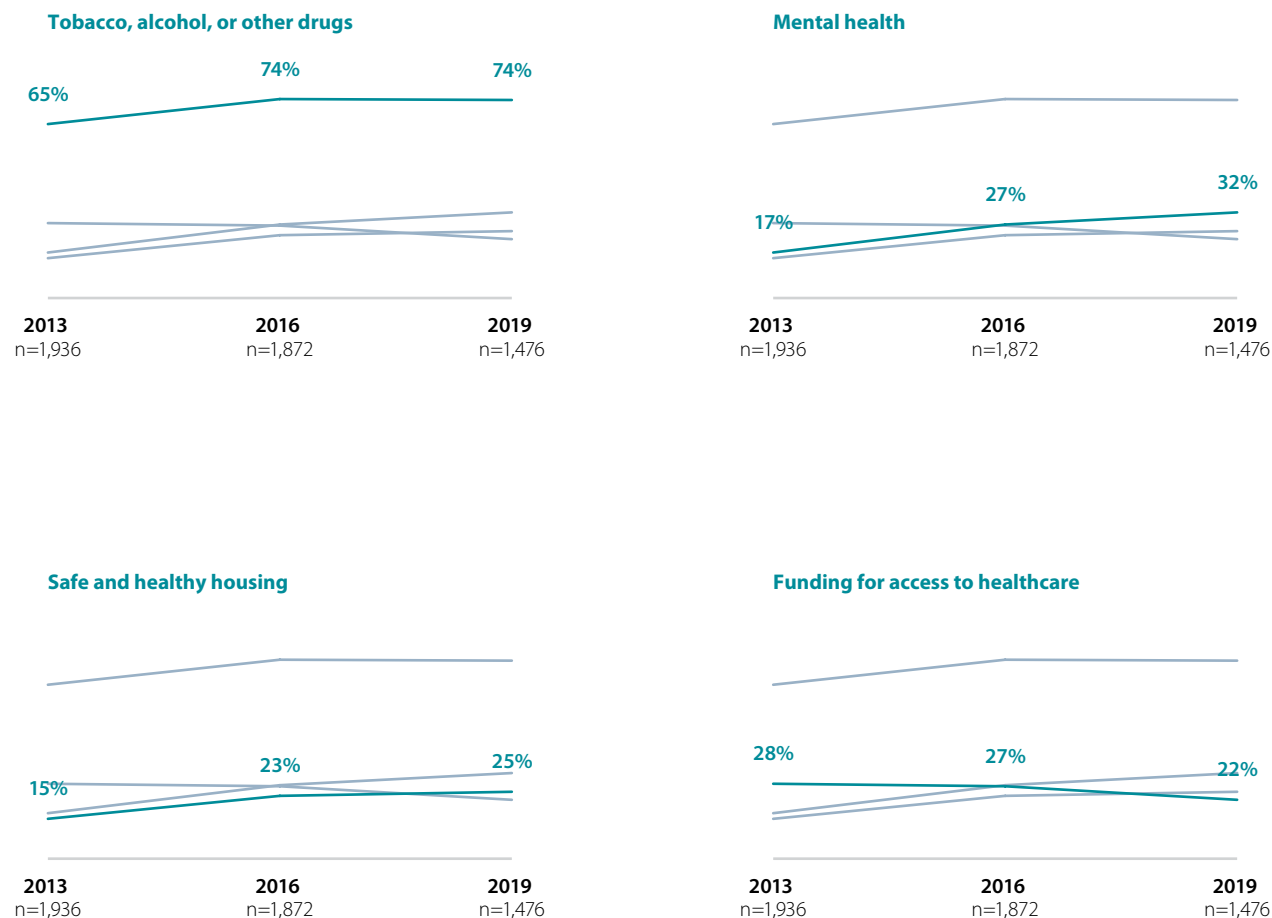
	All LHDs	Size of population served		
		Small (<50,000)	Medium (50,000–499,999)	Large (500,000+)
Tobacco, alcohol, opioids, or other drugs	74%	70%	79%	82%
Emergency preparedness and response	62%	62%	61%	65%
Infectious disease (e.g., vaccination)	60%	57%	60%	85%
Funding for local public health	59%	52%	68%	77%
Food safety	48%	43%	54%	62%
Obesity/physical activity	45%	41%	48%	78%
Waste, water, or sanitation	39%	38%	39%	47%
Mental health	32%	28%	37%	48%
Oral health	27%	24%	30%	44%
Injury and violence prevention	27%	21%	31%	55%
Safe and healthy housing	25%	19%	31%	54%
Funding for access to healthcare	22%	16%	30%	50%
Land use planning	14%	9%	20%	37%
Climate change	7%	4%	10%	24%
Occupational health and safety	6%	7%	5%	10%
None	9%	11%	7%	3%

n=1,476

- ▶ LHDs were involved in a variety of policy areas in the past two years. LHDs were more likely to be involved in traditional public health policy areas (e.g., tobacco, alcohol, opioids, or other drugs; emergency preparedness and response; infectious disease) than policy areas related to social determinants of health (e.g., safe and healthy housing, funding for access to healthcare, land use planning).
- ▶ Large LHDs were more likely to be involved in all policy areas than small LHDs. This difference is greater for areas related to the social determinants of health than for other health-related areas. For example, large LHDs were three times as likely as small LHDs to be involved in policy activities related to access to health care and safe and healthy housing.
- ▶ LHDs governed by state authorities are less likely to be involved in policy areas than LHDs governed by local authorities or LHDs with shared governance (not shown).

Figure 11.2 | Involvement in select policy areas, over time

Percent of LHDs



- ▶ Since 2013, a larger proportion of LHDs have been involved in many policy areas. For example, LHDs were nearly twice as likely to be involved in mental health policy activities.
- ▶ However, LHD involvement in some policy areas has experienced little change more recently. The proportion of LHDs involved in policy activities related to tobacco, alcohol, or other drugs has increased overall since 2013 but has remained stable since 2016. In 2019, 25% of LHDs were involved in safe and healthy housing policy activities compared to 23% in 2016.
- ▶ Notably, LHD involvement in policy activities related to funding for access to healthcare decreased by 6 percentage points since 2013.

Figure 11.3 | Involvement in policy areas related to tobacco, alcohol, opioids, or other drugs in the past two years, by size of population served

	All LHDs	Size of population served		
		Small (<50,000)	Medium (50,000–499,999)	Large (500,000+)
Reducing sale of tobacco to minors	46%	41%	51%	64%
Smoke-free indoor air (e.g., workplace, multi-unit residential)	46%	42%	48%	66%
Regulating e-cigarettes or other electronic smoking devices	43%	40%	47%	59%
Increasing use of medications to prevent drug overdose (e.g., Naloxone, Buprenorphine)	42%	32%	55%	66%
Smoke-free outdoor air (e.g., parks, beaches, playgrounds, sporting events)	41%	39%	43%	51%
Reducing exposure to alcohol or tobacco advertising	23%	23%	24%	27%
Increasing access to clean syringes	18%	11%	25%	38%
Reducing alcohol or drug impaired driving	14%	15%	13%	15%
Diverting certain drug offenders into treatment rather than incarceration	14%	8%	22%	31%
Raising cigarette taxes	13%	12%	13%	21%
Raising alcohol taxes	2%	2%	1%	3%

n=1,437

- ▶ In the past two years, nearly half of all LHDs were involved in policies to reduce the sale of tobacco to minors, while few LHDs were involved in raising taxes on cigarettes or alcohol.
- ▶ Forty-three percent of all LHDs and more than half of large LHDs were involved in policies related to e-cigarette use in the past two years.
- ▶ Large LHDs were more likely to be involved in these policy areas than small LHDs, especially areas related to drug abuse. For example, large LHDs were almost three times as likely as small LHDs to be involved in policy activities related to increasing access to clean syringes and diverting certain drug offenders into treatment rather than incarceration.
- ▶ LHD involvement in some policy areas changed since 2016 (not shown). For example, LHDs were less likely to be involved in smoke-free indoor air policies in 2019 (46%) compared to 2016 (57%). The proportion of LHDs involved in policies to increase use of medications to prevent drug overdose increased by 22 percentage points since 2016.

Figure 11.4 | Involvement in policy areas related to tobacco, alcohol, opioids, or other drugs in the past two years, by degree of urbanization

	All LHDs	Degree of urbanization	
		Urban	Rural
Reducing sale of tobacco to minors	46%	54%	37%
Smoke-free indoor air (e.g., workplace, multi-unit residential)	46%	46%	45%
Regulating e-cigarettes or other electronic smoking devices	43%	51%	35%
Increasing use of medications to prevent drug overdose (e.g., Naloxone, Buprenorphine)	42%	47%	37%
Smoke-free outdoor air (e.g., parks, beaches, playgrounds, sporting events)	41%	42%	41%
Reducing exposure to alcohol or tobacco advertising	23%	22%	24%
Increasing access to clean syringes	18%	21%	14%
Reducing alcohol or drug impaired driving	14%	14%	15%
Diverting certain drug offenders into treatment rather than incarceration	14%	19%	10%
Raising cigarette taxes	13%	11%	14%
Raising alcohol taxes	2%	1%	2%

n=1,437

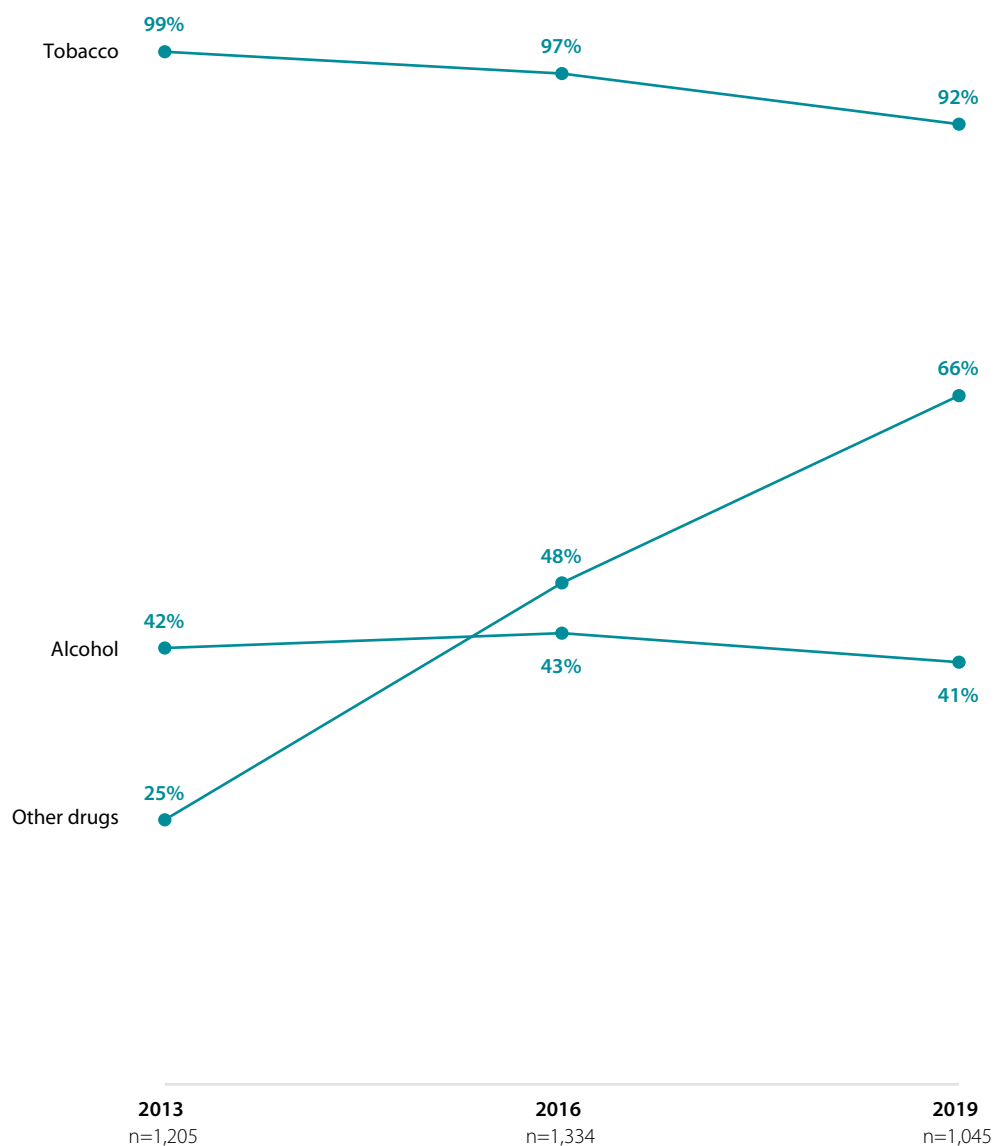
- ▶ LHDs in urban areas were more likely to be involved in these policy areas than LHDs in rural areas. In particular, a much greater proportion of LHDs in urban areas were involved in policies to divert certain drug offenders into treatment rather than incarceration.
- ▶ Conversely, LHDs in rural areas were more likely to reduce exposure to alcohol or tobacco advertising and raise cigarette taxes.
- ▶ Regardless of jurisdiction's degree of urbanization, approximately the same proportion of LHDs were involved in policy activities related to smoke-free air (indoor and outdoor).

Technical note

A new schema for categorizing urban and rural LHDs was used for 2019 estimates. These data may not be comparable to previous year estimates. Refer to page 18 for more information on the methodology.

Figure 11.5 | Involvement in policy areas related to tobacco, alcohol, or other drugs, over time

Percent of LHDs



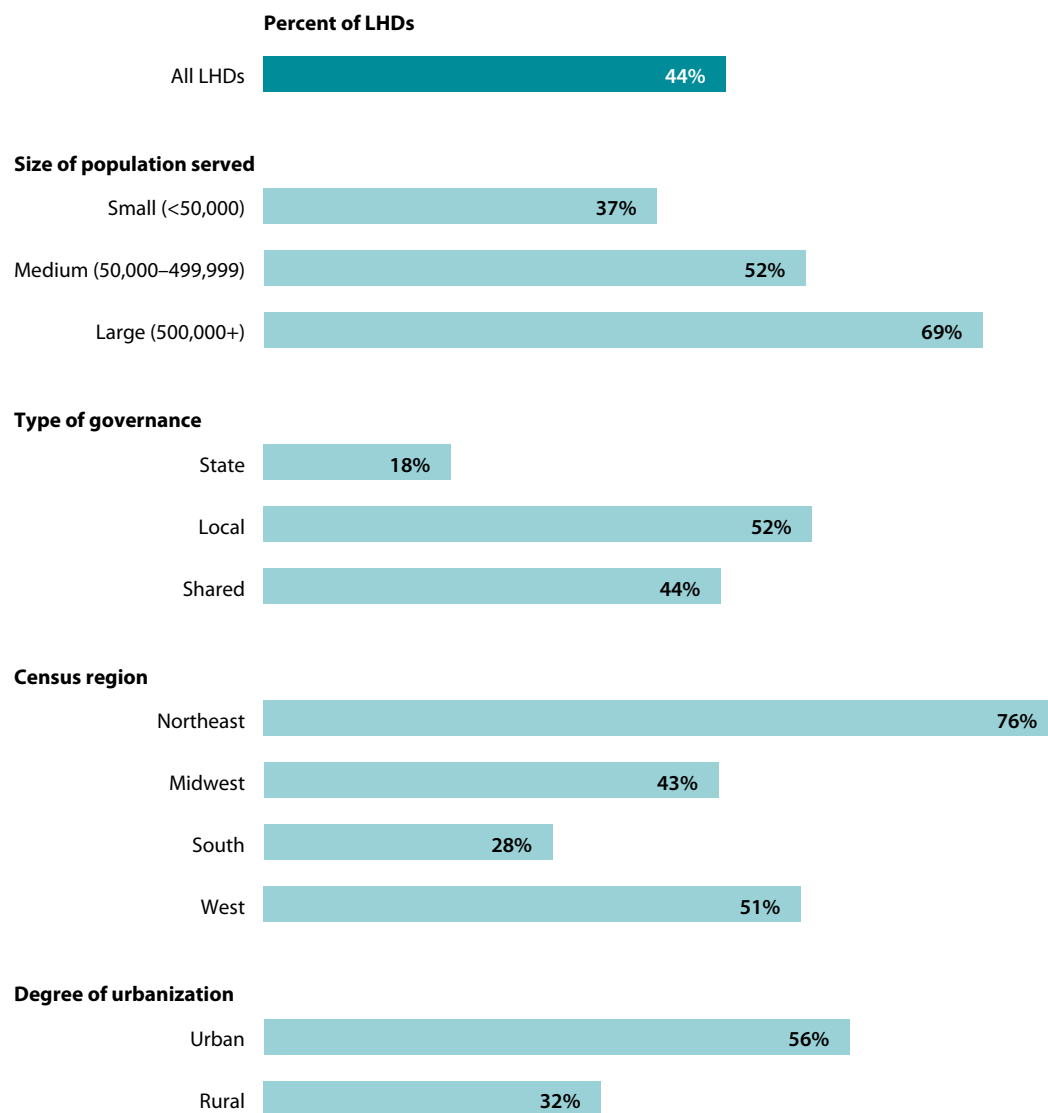
- ▶ Since 2013, LHD involvement in policy activities related to other drug use has more than doubled. The proportion of LHDs involved in tobacco use policies has decreased slightly, while involvement in alcohol use policies has remained steady.

Tobacco includes involvement in “reducing sale of tobacco to minors,” “smoke-free indoor air,” “regulating e-cigarettes or other electronic smoking devices,” “smoke-free outdoor air,” “reducing exposure to alcohol or tobacco advertising,” and “raising cigarette taxes.”

Alcohol includes involvement in “reducing alcohol or drug impaired driving,” “reducing exposure to alcohol or tobacco advertising,” and “raising alcohol taxes.”

Other drugs includes involvement in “increasing use of medications to prevent drug overdose,” “increasing access to clean syringes,” “reducing alcohol or drug impaired driving,” and “diverting certain drug offenders into treatment rather than incarceration.”

Figure 11.6 | Involvement in developing new or revising existing ordinances in the past two years, by LHD characteristics

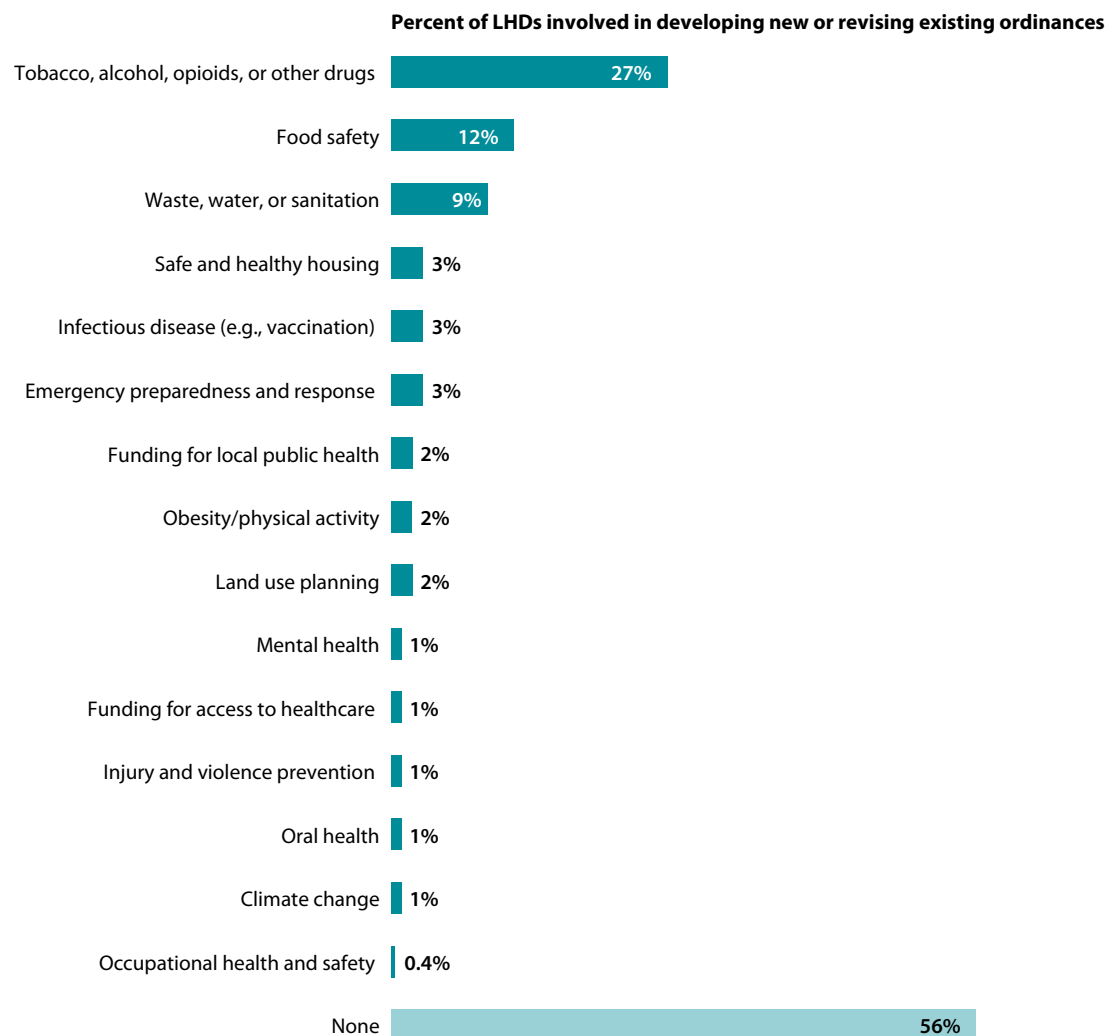


n=1,479

- ▶ Forty-four percent of LHDs reported that a new local public health ordinance or regulation was adopted or substantially revised in their jurisdiction during the past two years.
- ▶ Large LHDs are more likely to report new or substantially revised ordinances or regulations than medium or small LHDs.
- ▶ LHDs governed by state authorities are less likely to report new or revised ordinances or regulations than LHDs governed by local authorities or LHDs with shared governance.
- ▶ LHDs in the Northeast are more likely to report new or revised ordinances or regulations than LHDs in other regions.
- ▶ LHDs in urban areas are more likely to report new or revised ordinances than LHDs in rural areas.

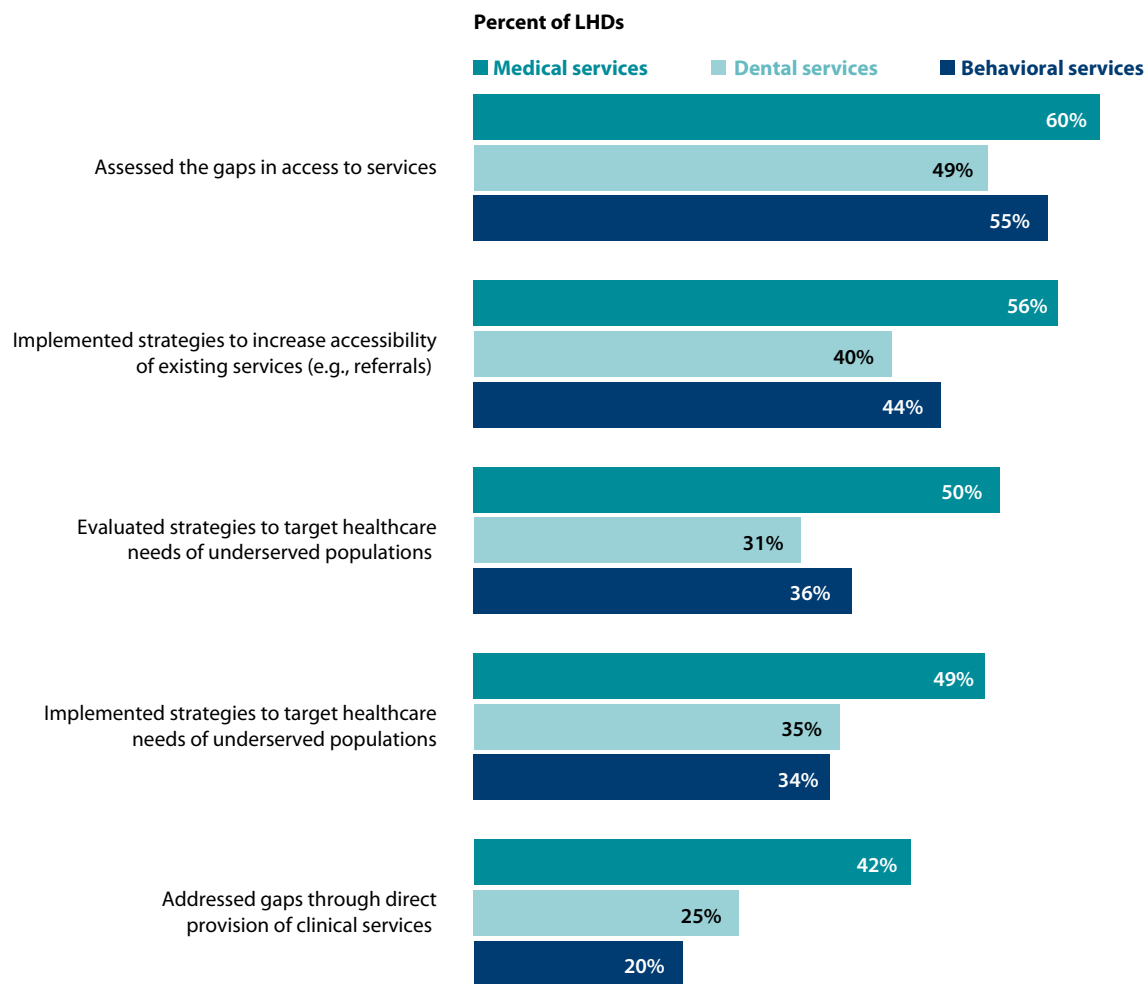
Technical note

A new schema for categorizing urban and rural LHDs was used for 2019 estimates. These data may not be comparable to previous year estimates. Refer to page 18 for more information on the methodology.

Figure 11.7 | Topic areas of new or revised ordinances in the past two years

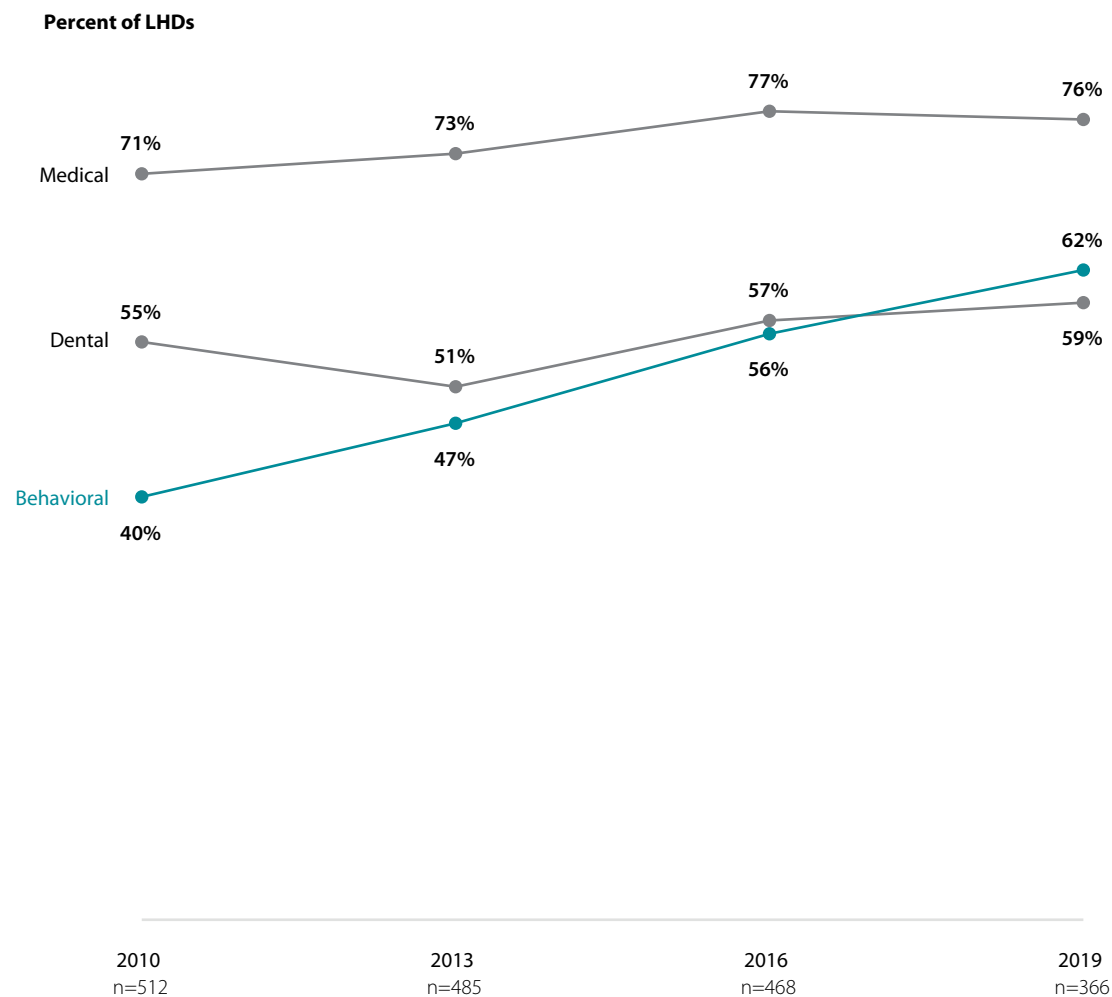
n=1,466

- More than one-quarter of LHDs report new or substantially revised ordinances or regulations related to tobacco, alcohol, opioids, or other drugs in the past two years. Few LHDs report new or substantially revised ordinances or regulations related to other topic areas.

Figure 11.8 | Engagement in assuring access to healthcare services in the past year

n=363–365

- LHDs are more likely to assure access to medical services than dental and behavioral services. For example, 50% of LHDs evaluated strategies to target medical healthcare needs of underserved populations, while 31% evaluated strategies to target dental healthcare needs and 36% to target behavioral healthcare needs.
- Notably, the proportion of LHDs implementing strategies to target medical healthcare needs of underserved populations decreased by 9 percentage points since 2016 (not shown).

Figure 11.9 | Engagement in assuring access to healthcare services, over time

- The proportion of LHDs engaged in assuring access to behavioral healthcare services increased from 40% in 2010 to 62% in 2019, more than the increase seen in both medical and dental healthcare services.



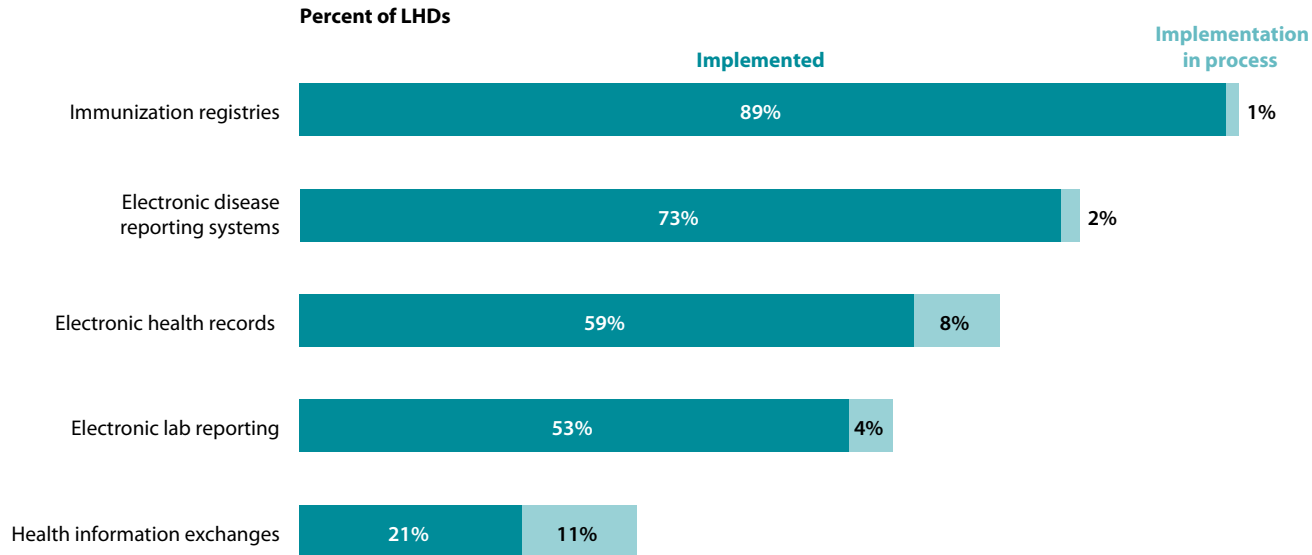
CHAPTER 12

Informatics



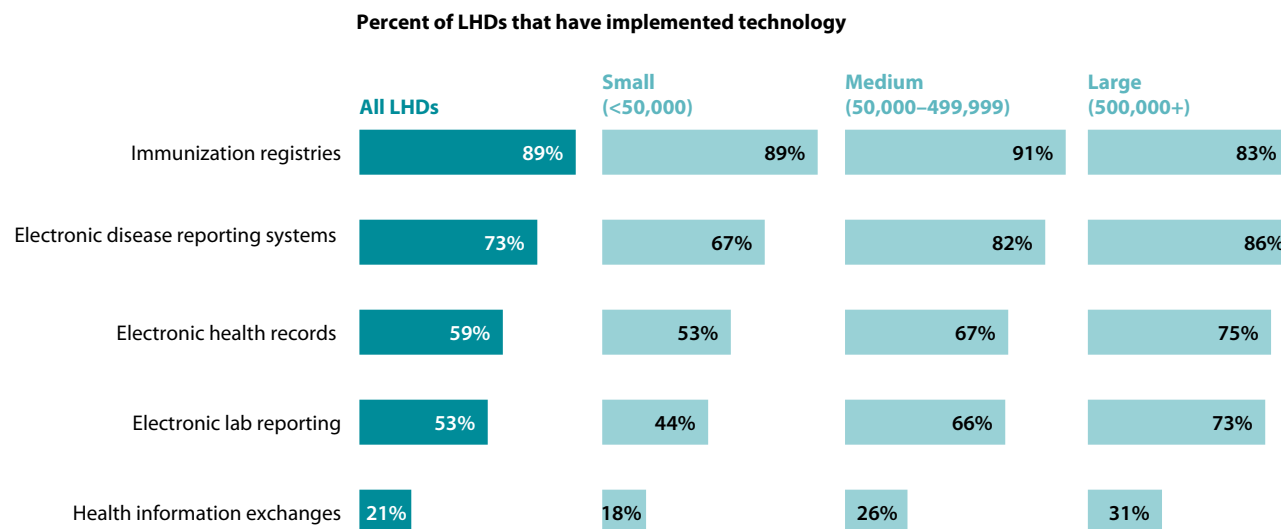
This chapter includes the following:

- ▶ Level of implementation in information technology systems at local health departments (LHDs).
- ▶ Use of communication channels for general announcements or emergency response communications.

Figure 12.1 | Level of activity in information technology systems

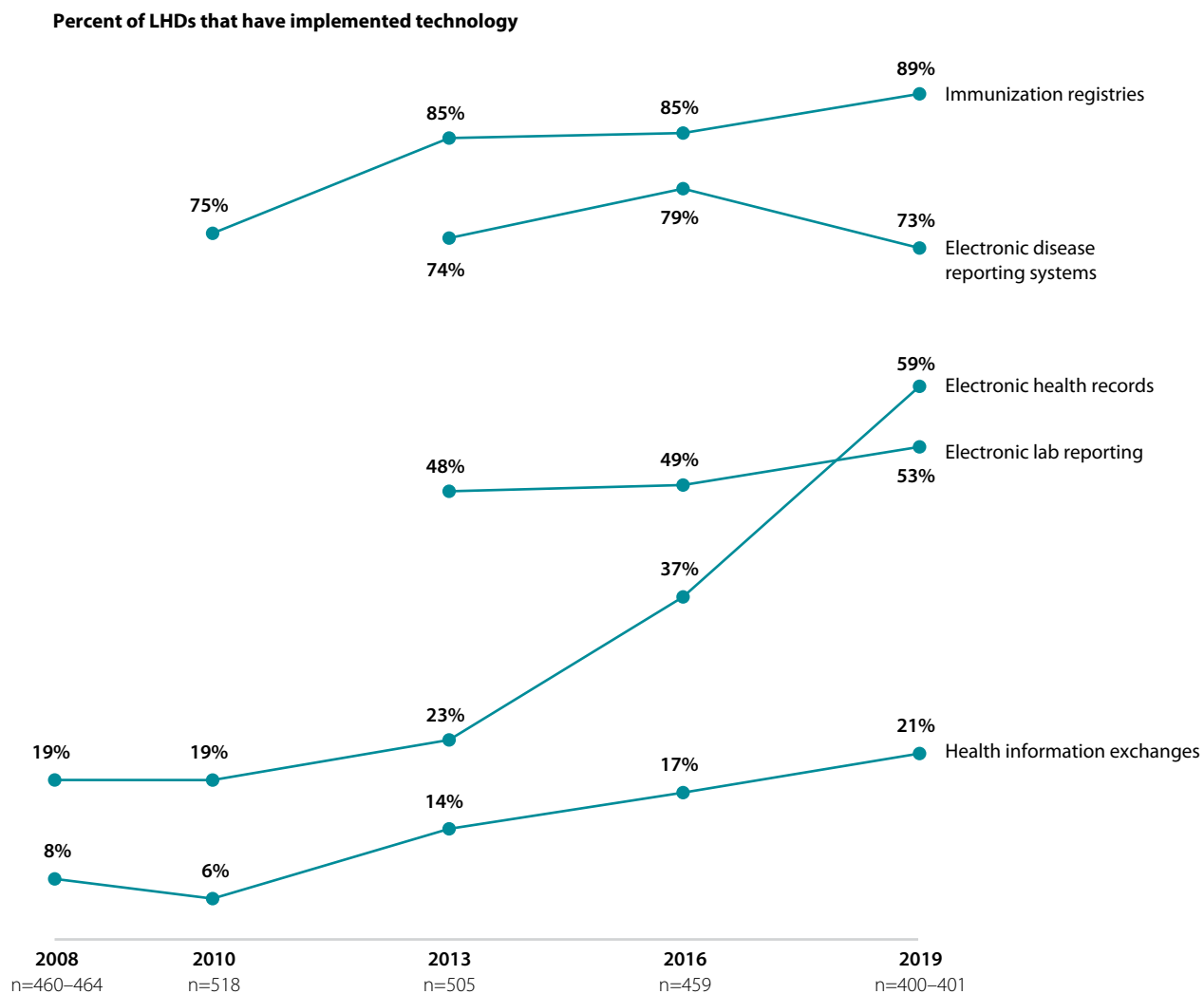
n=400–401

- Most LHDs use immunization registries and electronic disease reporting systems; LHDs are less likely to use electronic lab reporting, electronic health records, and health information exchanges.
- In addition, relatively large proportions of LHDs are in the process of implementing electronic health records and health information exchanges.

Figure 12.2 | Implementation of information technology systems, by size of population served

n=400–401

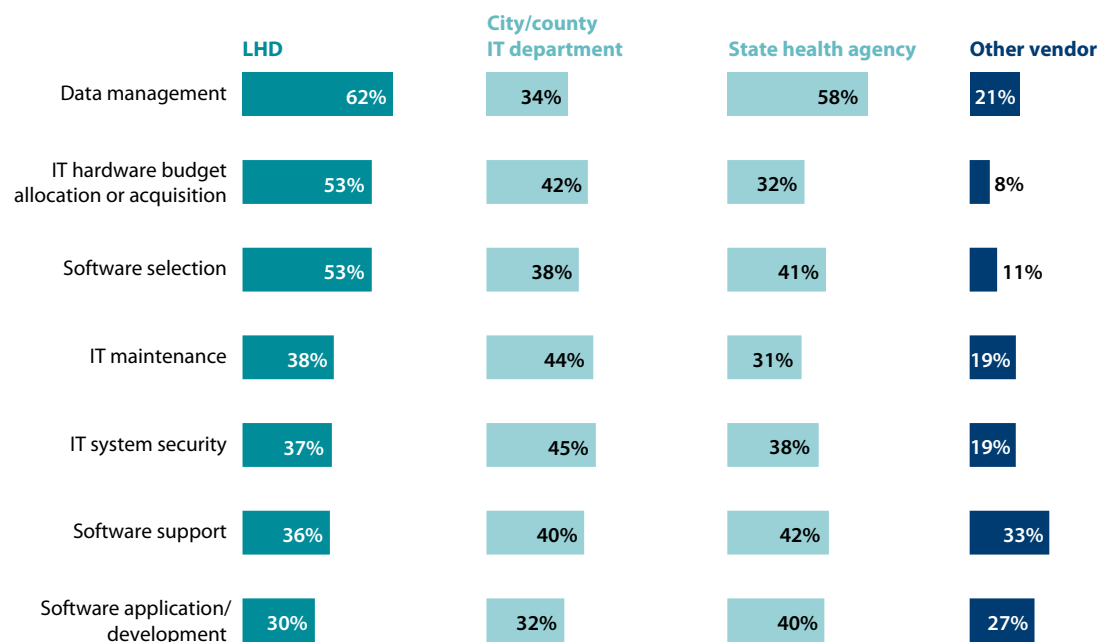
- ▶ With the exception of immunization registries, large LHDs are more likely to have implemented most of these technology systems than LHDs serving smaller populations.
- ▶ The difference in implementation between LHDs serving small and large jurisdictions are greatest for electronic health records and electronic lab reporting.

Figure 12.3 | Implementation of information technology systems, over time

- For most information technology systems, use has increased since 2008. Notably, use of electronic health records increased by 36 percentage points between 2013 and 2019, while use of immunization registries and electronic lab reporting have shown very little change.
- Use of electronic disease reporting systems has decreased since 2016, returning to 2013 levels.

Technical note

Missing trend data is due to items not being included in the Profile questionnaire for the specified year.

Figure 12.4 | Organizations involved in information management for LHDs**Percent of LHDs with organization involved in information management**

n=396–397

- ▶ More than half of LHDs perform their own data management, IT hardware budget allocation or acquisition, and software selection.
- ▶ Several other organizations can be involved in information management for LHDs. For example, the city or county IT department most commonly performs functions related to LHD IT maintenance and system security.
- ▶ For many LHDs, the state health agency is also involved in data management.

Figure 12.5 | Use of communication channels for general or emergency response communications

	Any use	Use for general announcements	Use for emergency response
Print media	86%	85%	48%
Facebook	83%	80%	56%
LHD website	82%	80%	54%
E-mail	80%	75%	38%
Health Alert Network	62%	28%	53%
Broadcast media	57%	52%	45%
Text messaging	50%	44%	23%
Automated phone calling	40%	19%	29%
Fax broadcast/fax blast	37%	29%	25%
Twitter	28%	26%	19%
Other social media (e.g., YouTube, Instagram, Next Door)	27%	26%	15%
Hotline or call center	18%	8%	15%
LinkedIn	8%	8%	1%
Custom app for phone or tablet	7%	6%	4%
Blogs	6%	6%	2%

n=401

- LHDs use a variety of information technology channels for general announcements or emergency response communications. Print media, Facebook, LHD websites, and e-mail are most commonly used overall and are more likely to be used for general announcements than for emergency response. On the other hand, LHDs are more likely to use the Health Alert Network, automated phone calling, and a hotline or call center for emergency communications than for general announcements.
- Few LHDs use LinkedIn, a custom application for phones or tablets, and blogs for any use.

Figure 12.6 | Any use of communication channels, by size of population served

	All LHDs	Size of population served		
		Small (<50,000)	Medium (50,000–499,999)	Large (500,000+)
Print media	86%	85%	87%	96%
Facebook	83%	81%	88%	89%
LHD website	82%	76%	91%	96%
E-mail	80%	77%	84%	98%
Health Alert Network	62%	57%	67%	85%
Broadcast media	57%	48%	69%	79%
Text messaging	50%	49%	48%	60%
Automated phone calling	40%	36%	48%	45%
Fax broadcast/fax blast	37%	33%	42%	43%
Twitter	28%	11%	49%	87%
Other social media (e.g., YouTube, Instagram, Next Door)	27%	13%	44%	71%
Hotline or call center	18%	9%	26%	61%
LinkedIn	8%	3%	13%	34%
Custom app for phone or tablet	7%	6%	7%	13%
Blogs	6%	2%	9%	27%
None	1%	1%	1%	0%

n=401

- Large LHDs are more likely to use the communication channels listed than small LHDs. In particular, a much greater proportion of large LHDs use Twitter, other social media channels, and a hotline or call center to communicate with the public.
- Conversely, approximately the same proportion of LHDs use print media, Facebook, and automated phone calling, regardless of the size of the population they serve.

Figure 12.7 | Any use of communication channels, by type of governance

	All LHDs	Type of governance		
		State	Local	Shared
Print media	86%	65%	92%	92%
Facebook	83%	70%	90%	66%
LHD website	82%	57%	90%	86%
E-mail	80%	59%	87%	82%
Health Alert Network	62%	45%	66%	70%
Broadcast media	57%	52%	57%	66%
Text messaging	50%	40%	53%	42%
Automated phone calling	40%	30%	42%	51%
Fax broadcast/fax blast	37%	16%	42%	42%
Twitter	28%	8%	32%	42%
Other social media (e.g., YouTube, Instagram, Next Door)	27%	16%	30%	29%
Hotline or call center	18%	15%	19%	21%
LinkedIn	8%	6%	9%	7%
Custom app for phone or tablet	7%	3%	7%	8%
Blogs	6%	3%	6%	13%
None	1%	2%	0%	0%

n=401

- ▶ With the exception of Facebook, state-governed LHDs are less likely to use all of the communication channels listed than LHDs with local or shared governance.
- ▶ LHDs governed by both state and local authorities (i.e., shared governance) are more likely to use the Health Alert Network, broadcast media, automated phone calling, Twitter, other social media, a hotline or call center, and a custom application for phones or tablets than LHDs with state or local governance.

Figure 12.8 | Any use of communication channels, by degree of urbanization

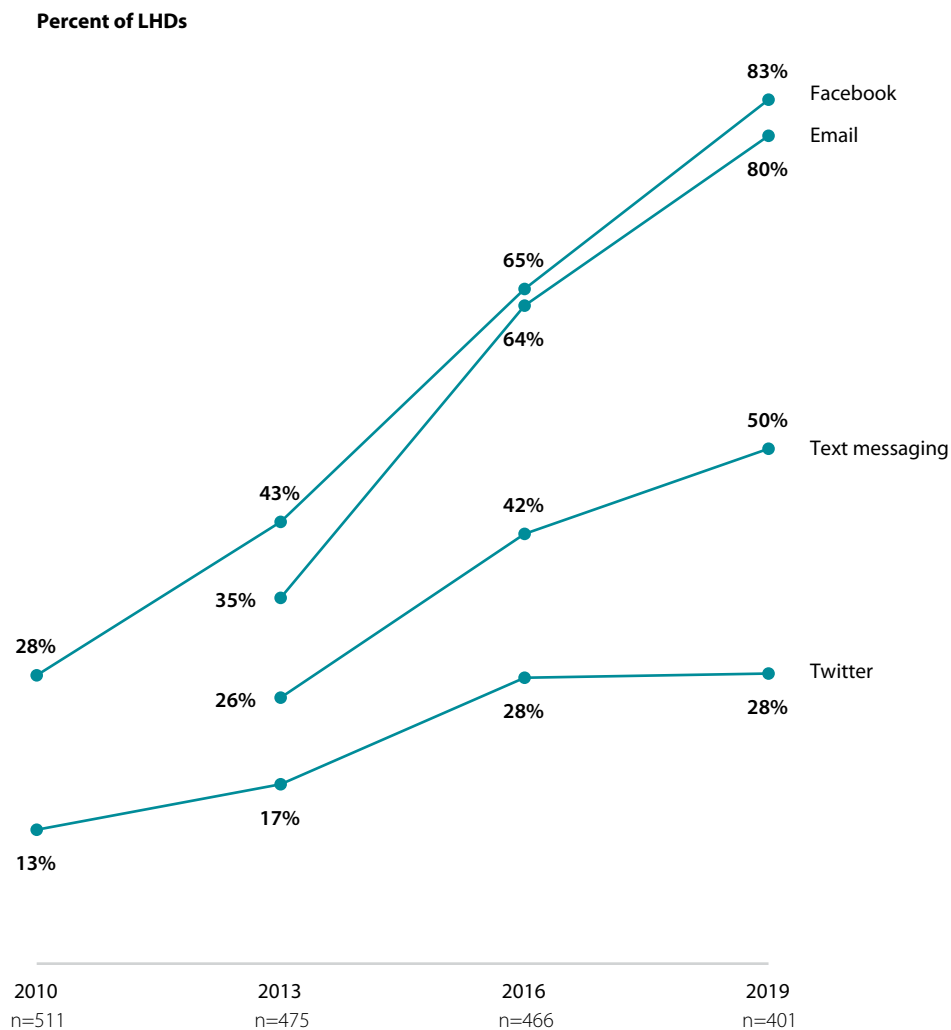
	All LHDs	Degree of urbanization	
		Urban	Rural
Print media	86%	86%	86%
Facebook	83%	82%	85%
LHD website	82%	90%	76%
E-mail	80%	87%	75%
Health Alert Network	62%	65%	59%
Broadcast media	57%	65%	49%
Text messaging	50%	44%	54%
Automated phone calling	40%	44%	36%
Fax broadcast/fax blast	37%	41%	33%
Twitter	28%	46%	11%
Other social media (e.g., YouTube, Instagram, Next Door)	27%	41%	14%
Hotline or call center	18%	27%	10%
LinkedIn	8%	15%	2%
Custom app for phone or tablet	7%	9%	5%
Blogs	6%	9%	3%
None	1%	1%	0%

n=401

- With the exception of Facebook and text messaging, LHDs in urban areas are more likely to use the communication channels listed. In particular, a much greater proportion of LHDs in urban areas use Twitter, other social media, a hotline or call center, and broadcast media to communicate with the public.

Technical note

A new schema for categorizing urban and rural LHDs was used for 2019 estimates. These data may not be comparable to previous year estimates. Refer to page 18 for more information on the methodology.

Figure 12.9 | Any use of communication channels, over time

- LHD use of newer technology to communicate with the public has increased since 2010. For instance, use of Facebook increased dramatically from 28% of LHDs in 2010 to 84% in 2019.
- Use of Twitter increased from 13% in 2010 to 28% in 2016, but has not increased since.

Technical note

Missing trend data is due to items not being included in the Profile questionnaire for the specified year.



NACCHO

National Association of County & City Health Officials

The National Connection for Local Public Health

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