

NACCHO's 2019 Profile Study: Changes in Local Health Department Workforce and Finance Capacity Since 2008



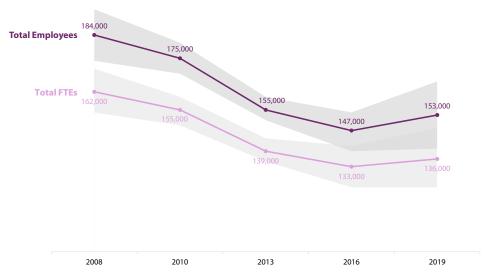
Introduction

The National Association of County and City Health Officials (NACCHO) has conducted the National Profile of Local Health Departments (Profile) study since 1989 to develop a comprehensive and accurate understanding of LHD infrastructure and practice. Among these, workforce and financial capacity are two critical infrastructure components that enable local health departments (LHDs) to protect the health and wellbeing of the populations they serve. The purpose of this research brief is to present updated data on workforce and financial trends in LHDs over the past decade., which impact the ability of LHDs to respond to COVID-19 and all other public health priorities.

Workforce

Since 2008, the estimated number of LHD full-time equivalents (FTEs) decreased from 162,000 to 136,000 in 2019—a decrease of approximately 16%. The total number of employees parallels that of FTEs, with an overall decrease of 17% in the LHD workforce over that period. During roughly that same time period, the overall population increased by about 8%.¹ Despite a slight increase in the number of both FTEs and all employees from 2016 to 2019 (Figure 1), the workforce has not fully recovered from the cuts suffered during and after the Great Recession.

Figure 1. Estimated size of LHD workforce over time



n=1.467–2.232. Shadow depicts 95% Confidence Interval. See methods section for explanation of revised estimates.

Registered nurses play a critical role in the public health workforce, especially in small and medium LHDs. Staff totals for registered nurses have declined approximately 36% from an estimated 33,200 in 2008 to 21,200 in 2019 (Figure 2). Findings from NACCHO's 2017 Forces of Change survey show that many LHDs experience difficulty in filling nursing positions due to barriers including geographic location and pay that is not competitive.² This challenge in hiring some clinical staff may affect LHDs capacity to maintain robust programming to meet community needs. For example, approximately 20% of LHDs reported a reduction in provision of at least one of six key clinical services (i.e., immunization, maternal and child health, and screening for high blood pressure, diabetes, blood lead, and communicable diseases) in 2018. Although other common occupations at LHDs,

including epidemiologists and preparedness staff, have shown more steady numbers over the years, this does not necessarily mean that staffing is at sufficient levels for these occupations. Particularly in small LHDs, it is not uncommon for a staff member to wear multiple hats and fulfill numerous roles depending on need. Together, these data illustrate the strain on the overall capacity of the LHD workforce, especially in times of critical response.

Every year since the Great Recession, some LHDs have reported jobs lost due to layoffs or attrition, from a high of 44% in 2011 to 23% in 2019 (Figure 3). The higher number of jobs lost in 2011 may be due to the effects of the 2008 recession, but it is troubling that nearly one quarter of LHDs are still losing jobs in the present day.

Registered Nurse 28,300 25.800 23 600 21,200 14,500 13,800 13,700 13.300 **Environmenta** 12,600 **Health Staff** 2.900 2.900 2.900 2.600 **Epidemiologist** 1 300 Preparedness Staff 1,100 2,200 2.300 2 000 1 800 2010 2013 2016 2019 n=1,114-1,796

Figure 2. Estimated size of select occupations over time

Figure 3. Percent of LHDs reporting job losses due to layoffs or attrition over time



n=432-1,938. Source: NACCHO Forces of Change Survey 2011, 2014, 2015, 2017, 2018; NACCHO Profile Survey 2013, 2016, 2019

Finance

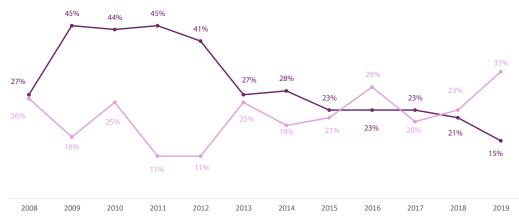
In the years following the Great Recession (2009 to 2012), between 41% and 45% of LHDs reported lower budgets compared to the previous fiscal year (Figure 4). These budget cuts have been on the decline since 2014, with only 15% of LHDs reporting lower budgets relative to the previous fiscal year in 2019—the lowest since 2008. However, many LHDs continue to experience flat funding; the majority of LHDs (52%) saw no increase in funds in 2019, and 62% expect flat funding in the next fiscal year, despite

inflation, population growth, and the increasing complexity of public health challenges. Although 24% of LHDs reported in 2019 that they *expect* next year's budget to be greater relative to the current year, this progress could be short-lived if LHD budgets are hit by the COVID-19-related economic downturn as they were by the 2008 recession.

LHD dollars support key public health activities—including disease surveillance, infectious disease

Figure 4. Budget changes over time

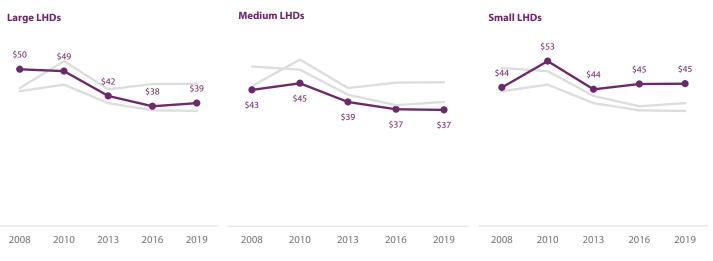
Percent of LHDs reporting a lower budget in the current fiscal year Percent of LHDs reporting a higher budget in the current fiscal year



n=567-1,891. Source: NACCHO LHD Job Losses and Program Cuts Survey 2008, 2009, 2011, 2012; NACCHO Forces of Change Survey 2014, 2015, 2017, 2018; NACCHO Profile Survey 2010, 2013, 2016, 2019

outbreak investigation and control, immunizations, and environmental health activities—to promote the health and wellbeing of the populations they serve. Examination of spending trends over time shows per capita spending has either held steady or declined after accounting for inflation and population changes (Figure 5). Small LHDs have seen median per capita spending remain essentially unchanged in the last decade, after accounting for inflation, while medium and large LHDs report 14% and 22% declines in

Figure 5. Median annual per capita expenditures over time by size of population served, adjusted for inflation



n=712-2,097. Statistics have been adjusted to reflect inflation rates based on the Bureau of Labor Statistics' Consumer Price Index. Light grey lines depict other LHDs sizes not highlighted in purple. Large LHDs serve a population of 500,000+; medium LHDs serve a population of 50,000 to 499,999; small LHDs serve populations of fewer than 50,000.

median per capita, respectively. However, as LHDs are being asked to do more, any increases have not been sufficient to keep up with spending, especially for medium and large LHDs. Population increases and an aging population put a further strain on scarce dollars.

Methodology

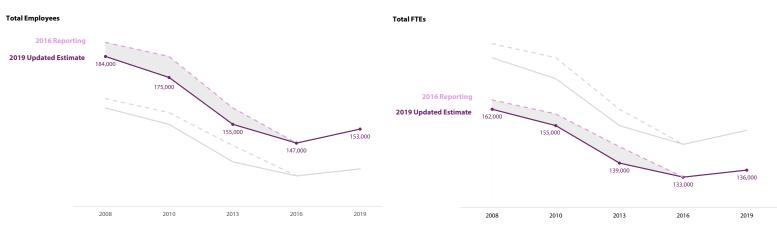
The National Association of County and City Health Officials (NACCHO) National Profile of Local Health Departments (Profile) study is conducted every three years to develop a comprehensive and accurate description of LHD infrastructure and practice. LHDs are defined as "an administrative or service unit of local or state government, concerned with health, and carrying some responsibility for the health of a jurisdiction smaller than the state."

The Profile survey includes a core questionnaire (sent to all LHDs) and two module questionnaires (sent to statistical samples of LHDs). For the 2019 survey, NACCHO distributed the census-style Profile questionnaire to 2,453 LHDs in the United States from March through August 2019. A total of 1,496 LHDs completed the survey (response rate of 61%). Data are self-reported. National estimates were computed using appropriate estimation weights to account for differential non-response and sampling.

Statistics are compared across LHDs serving different population sizes in the LHD jurisdiction. LHDs are classified as small if they serve fewer than 50,000 people, medium if they serve populations between 50,000 and 500,000, and large if they serve 500,000 or more people.

Longitudinal comparisons for workforce were constructed using NACCHO Profile data from 2008 through 2019. Estimates differ from previous reports in two primary ways (Supplemental Figure 1). 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, some of those health departments were large in size. NACCHO is working with those LHDs to obtain better estimates in the future. 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.

Supplemental Figure 1. Comparison of previously-reported and updated workforce estimates, 2008-2019



n(2019 estimates)=1,467-2,232 n(2016 reporting)=1,743-2,234

n(2019 estimates)=1,467-2,232 n(2016 reporting)=1,743-2,234

[RESEARCH BRIEF]

May 2020



References

¹ Population Reference Bureau. (2020). The US Population is Growing at the Slowest Rate Since the 1930s. Retrieved from https://www.prb.org/the-u-s-population-is-growing-at-the-slowest-rate-since-the-1930s/

² National Association of County and City Health Officials. (2017). *The Changing Public Health Landscape: Findings from the 2017 Forces of Change Survey*. Retrieved from http://nacchoprofilestudy.org/forces-of-change

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The mission of the National Association of County and City Health Officials (NACCHO) is to improve the health of communities by strengthening and advocating for local health departments.

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