2023 Colorado Public Health Workforce Gaps and Needs Assessment

FINAL REPORT

FALL 2023

CALPHO
Colorado Association of Local Public Health Officials

COLORADO HEALTH INSTITUTE
Informing Strategy. Advancing Health.

COLORADO
Local Public Health & Environmental Resources

trailhead INSTITUTE
For public health innovation

Executive Summary

Public health employees faced significant challenges throughout the COVID-19 pandemic. They worked within politically charged environments, faced threats, and were asked to juggle multiple roles while learning new skills. The findings of this report, a collaboration between the Colorado Department of Public Health and Environment's Office of Public Health Practice, Planning, and Local Partnerships; the Colorado Association of Local Public Health Officials; Trailhead Institute; and the Colorado Health Institute, offers new data and insights into the complex landscape of public health in Colorado.

Key takeaways include:

Many local public health agencies do not have adequate funding, staffing, or systemic support to sustain their workforce and provide essential services. All local public health agencies are legally mandated to ensure certain foundational public health capabilities, yet few are adequately funded to do so. One in four public health agencies in Colorado likely need additional staff to meet a benchmark of at least six full-time equivalent employees. And just five of the 55 agencies across the state say they have adequate funding to cover all required public health capabilities.

Over one in 10 public health employees in Colorado plans to leave their position in the next six months. This would strain an already overburdened workforce. The average Colorado public health agency lost eight permanent employees in the past year, and this turnover is happening at all job levels. Between March 2020 and June 2023, 27 Colorado counties had to find a new public health agency executive director at least one time. People in term-limited positions are more likely to say they are planning to leave than permanent staff.

Colorado's public health workforce, while largely satisfied with their roles, organizations, and compensation, struggles to maintain their own well-being. One in three Colorado public health workers reported feeling bullied, threatened, or harassed, and nearly half reported having their public health expertise undermined and challenged by those outside of the health department. These estimates are twice the national average, and those in environmental health positions experience these challenges at even higher rates.

This analysis highlights both strengths and areas that demand immediate attention. By addressing these challenges head-on and building upon the strengths of the public health sector, Colorado can better support its dedicated professionals and protect the health and well-being of its residents.

Introduction

Coloradans' well-being depends on local and state public health work, but nothing can happen without the people behind these efforts. To best support the public health workforce, state and public health leadership must understand who our state's public health workforce employees are, what their needs are, and how this might change in the next few years.

A partnership between the Colorado Department of Public Health & Environment (CDPHE)'s Office of Public Health Practice, Planning, and Local Partnerships (OPHP); the Colorado Association of Local Public Health Officials (CALPHO); Trailhead Institute; and the Colorado Health Institute (CHI) is working to address these issues. The group, called the Colorado Public Health Workforce Gaps and Needs Assessment team, aims to:

- Understand the needs of Colorado's public health workforce to inform future workforce development initiatives.
- Develop and launch a new survey to obtain missing information deemed most critical for advocacy and planning.
- Develop a process to combine existing and new data to outline the current state of the public health workforce in Colorado.

This report from the Colorado Public Health Workforce Gaps and Needs Assessment team shares findings from two new primary data collection efforts completed as part of this work. It compares Colorado data to national statistics from the Public Health Workforce Interests and Needs Survey (PH WINS).

Background

Public health employees encountered significant challenges during the COVID-19 pandemic. They worked within politically charged environments, faced threats, and were asked to juggle multiple roles while learning new skills. From March 2020 through June 2023, 27 Colorado counties had a Local Public Health Agency (LPHA) executive director turn over at least once. Despite these barriers, our workforce stepped up and leaned in to meet the needs of Colorado's communities. They now have more experience and understand what they need to succeed.

Colorado public health partners are committed to better supporting our local public health workforce. In April 2020, multiple partners formed the Colorado Public Health Workforce Collaborative (CPHWC) to champion transformation within the sector. The CPHWC aims to build and sustain a skilled and diverse public health workforce that reflects the communities it serves and prepare an inclusive public health ecosystem to produce positive and equitable outcomes.

In summer 2023, the CPHWC published RESTORE: The Colorado Blueprint for Innovative Public Health Workforce Development, which outlines four focus areas to modernize the public health workforce in Colorado. The CPHWC also developed workgroups to study these areas. One area of focus for the CPHWC data workgroup is "inform[ing] public health decisions with workforce data to identify trends, gaps, and develop metrics." Findings from this Colorado Public Health Workforce Gaps and Needs Assessment can inform the Blueprint's data needs and assess progress in years to come.

Data Landscape

The CPHWC data workgroup scanned local, state, and national workforce data sources to understand what information is already available. Sources included:

State sourced data

- CALPHO Cost Assessment, 2019
- Colorado Public Health Administrative Directors (CoPHAD) Salary Survey, 2014, 2017, and 2021
- Office of Public Health Practice, Planning, and Local Partnerships (OPHP) Annual Survey, 2009, 2013, 2014, 2015, 2019, and 2021
- Employers Council reports, annual through 2022

Nationally sourced data

- National Association of County & City Health Officials (NACCHO) Profile, 2019
- American Community Survey, annual through 2021
- Public Health Workforce Interests and Needs Survey (PH WINS), 2014, 2017, and 2021
- U.S. Bureau of Labor Statistics workforce data
- National public health professional association data (e.g., nursing, epidemiology)

Locally sourced data

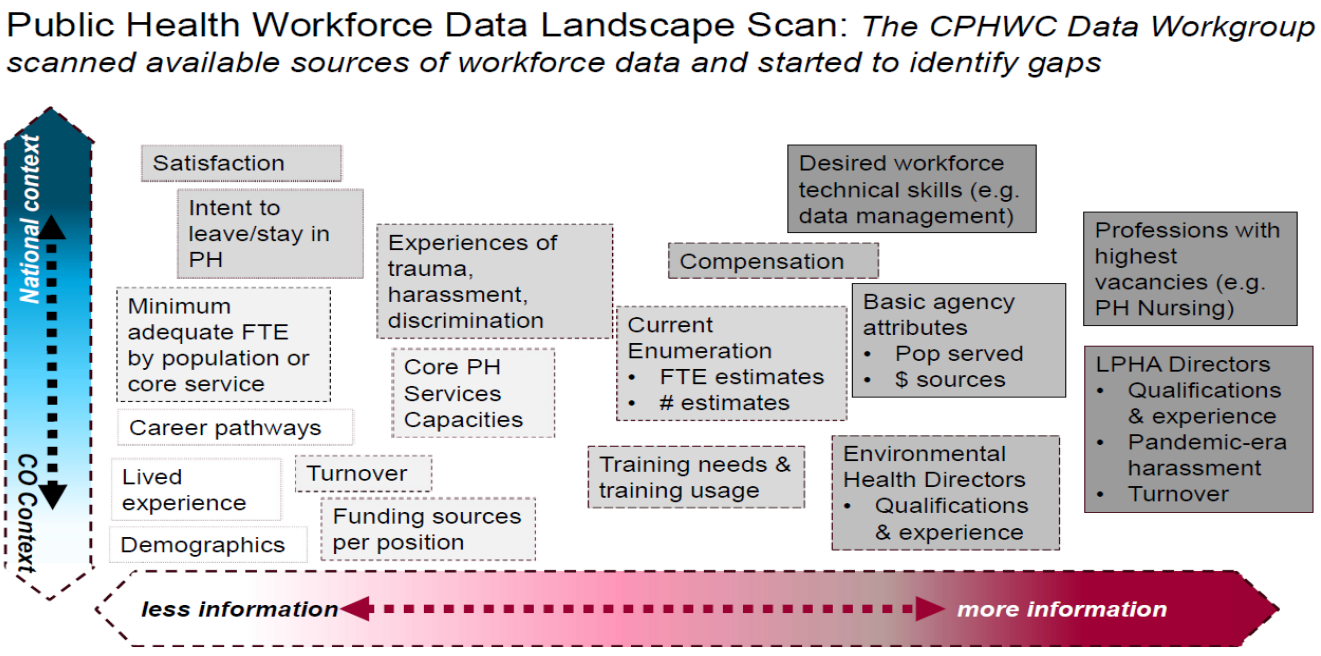
- Internal agency records
- Other county or state governmental workforce surveys

Community characteristics and health outcomes data

- Centers for Disease Control (CDC) Social Vulnerability Index, biennial through 2018
- Robert Wood Johnson Foundation County Health Rankings, annual through 2022
- Agency community health assessments, community health improvement plans, strategic plans, accreditation records, and other guiding documents

Despite the number of sources, there are many limitations and caveats in the datasets as well as missing data points for various research questions. See Appendix A for details on the initial data assessment. Figure 1 visualizes the landscape of data as identified by CPHWC.

Figure 1. Public Health Workforce Data Landscape Scan



Addressing the Workforce Data Gaps

Needs Assessment Methods

To address gaps in the data, members of the Colorado Public Health Workforce Gaps and Needs Assessment team utilized two primary data collection surveys in 2023: the OPHP LPHA Annual Survey and the Colorado Governmental Public Health Staff Survey. This report shares findings from these sources.

The LPHA Annual Survey is administered every year by OPHP. In 2023, all 55 LPHAs in Colorado completed the survey, which gathered information on full-time equivalent (FTE) employees, funding, employee retention, foundational capabilities and services, and local Boards of Health. When this survey was administered (February through June 2023), 55 LPHAs in Colorado were serving all of Colorado's 64 counties. In 2024, San Juan Basin Public Health will separate into two agencies, increasing the total number of LPHAs to 56.

The Colorado Workforce Gaps and Needs Assessment team also launched a new voluntary individual-level public health workforce survey in February 2023 that was administered by CHI. All governmental public health employees, including state and local staff, were eligible to complete the survey. Questions mirrored those in the LPHA Annual Survey and PH WINS to allow for comparisons with other state and national data.[1] Questions focused on people's lived experience, competencies, job satisfaction, and demographics.

A total of 1,372 governmental public health employees completed the individual workforce survey, most of whom were employed by LPHAs. Findings reflect only the experiences of respondents who completed the assessment, which had an estimated response rate of about 30%. Each LPHA's executive director received their agency's data in the form of a two-page profile specific to their agency. This assessment includes state-level information and does not reveal individual responses.

Future Workforce Data Strategies

This report includes information from a snapshot in time and is a summary of what the state knows about the public health workforce to date. Partners across Colorado and the nation are collaborating on additional data collection efforts, including salary data, how to determine workforce size, and the utilization of PH WINS data. As these results become available and our understanding grows, it will be important for local and state stakeholders to complete a more comprehensive analysis that incorporates these findings. However, as workforce data continue to be published, it is important that public health leaders consider how the field can improve its data efforts. For example, CDPHE and others might explore the potential benefits of a centralized data system that interconnects and automates information, potentially increasing efficiencies and reducing barriers to sample size and sparing employees from survey fatigue. Future initiatives could offer an even more comprehensive understanding of the entire public health workforce.

Colorado Public Health Workforce Gaps and Needs Assessment Results

Workforce Capacity

Full-Time Equivalents

In February 2023, Colorado had 4,416 state and local public health workforce employees (including full-time, part-time, permanent, and term-limited employees). There were 2,438 employees at LPHAs and 1,978 at CDPHE.

The LPHA Annual Survey asks several questions about the number of full-time equivalent (FTE) staff at each LPHA and the distribution of these FTEs within foundational capabilities. In 2023, the average LPHA had 40.9 FTEs on staff (the median was 13.5). Total FTE counts ranged from 1 to 272. It is important to note that many LPHAs enhance their FTE count by utilizing cross-jurisdictional partnerships and sharing staff members with their non-public health county divisions. Although the agency may only employ one FTE, there may be employees working in public health in different settings. See 'Sharing Services' later in this report additional detail.

LPHA sizes and populations differ. Tables 1 and 2 compare LPHAs with those of similar size and in similar regions. For this analysis, comparisons are reported between groups based on NACCHO size designations and Colorado Counties, Inc. (CCI) regional districts.

NACCHO size designations define large LPHAs as those serving more than 500,000 people, medium LPHAs as those serving 50,000-500,000 people, and small LPHAs as those serving fewer than 50,000 people. Colorado has five large, 11 medium, and 39 small LPHAs.[2]

The Colorado Public Health Workforce Gaps and Needs Assessment team chose CCI districts because county commissioners (who are many times part of a county board of health) use these geographic districts in their efforts. Colorado has five regional districts as defined by CCI.[3] Appendix B includes a list of each LPHA, its size designation, its CCI district, and its urban/rural/frontier designation as defined by the Colorado Rural Health Center.[4]

The Colorado Workforce Gaps and Needs Assessment team reviewed various models for determining the minimum number of FTEs an LPHA needs to carry out all foundational public health duties. As of January 1, 2020, state and local health departments in Colorado must ensure the provision of five foundational public health services across seven foundational public health capabilities.[5] Foundational capabilities are the cross-cutting capacities and expertise needed to support the foundational services and any health program. The seven foundational capabilities are: Assessment and Planning, Communications, Policy Development and Support, Partnerships, Organizational Competencies, Emergency Preparedness and Response, and Health Equity and Social Determinants of Health.

In 2022, the de Beaumont Foundation, the Public Health Accreditation Board, the Centers for Disease Control and Prevention, and other partners developed a process to estimate the FTEs needed to provide the foundational public health services by LPHA size of population served across the U.S.[6] This process resulted in the creation of the Public Health Workforce

Table 1. Average Full-Time Staff (FTEs) by NACCHO Size Designation

NACCHO Size Designation	Number of CO LPHAs	Mean FTEs	Median FTEs	Range of Permanent FTEs	Range of Term-Limited FTEs	Range of Contract Worker FTEs
Large (>500,000)	5	201.0	186.0	158 – 218	0 – 54	0 – 59
Medium (50,000-500,000)	11	77.8	67.4	24 – 117	0 – 46	0 – 5.5
Small (<50,000)	39	9.9	7.0	0.5 – 29	0 – 6	0 – 24

Table 2. Average FTEs by CCI District

CCI District[7]	Number of CO LPHAs	Mean FTEs	Median FTEs	Range of Permanent FTEs	Range of Term-Limited FTEs	Range of Contract Worker FTEs
Eastern District	5	17.7	6.5	3 – 48	0 – 4.5	0 – 1.5
Front Range District	10	145.8	166.0	27.9 – 218	0 – 54	0 – 59
Mountain District	13	12.6	8.5	39.7 – 141	0 – 6	0 – 1
Southern District	13	17.9	9.0	2 – 100	0 – 4	0 – 24
Western District	14	21.7	8.8	0.5 – 90	0 – 17	0 – 3

Calculator which provides decentralized small and medium local health departments the tools to understand their workforce capacity needs.[8] The Colorado Workforce Gaps and Needs Assessment team conducted a high-level review using the calculator, to determine which LPHAs are likely understaffed and whether their workforce is sufficient to meet community public health needs and requirements.

In Colorado, there are 55 LPHAs, which serve populations ranging from fewer than 700 in San Juan County to over 720,000 in El Paso County. Within the lowest quintile of populations served by LPHAs, the average population is 2,885. Using the Public Health Workforce Calculator, the minimum FTE for a population of 2,885 people needed to deliver an average level of foundational public health services is 6.2. Therefore, the Colorado Workforce Gaps and Needs Assessment team used 6.0 FTE as our threshold for the minimum number of full-time staff needed for an LPHA to adequately provide core public health services in Colorado.

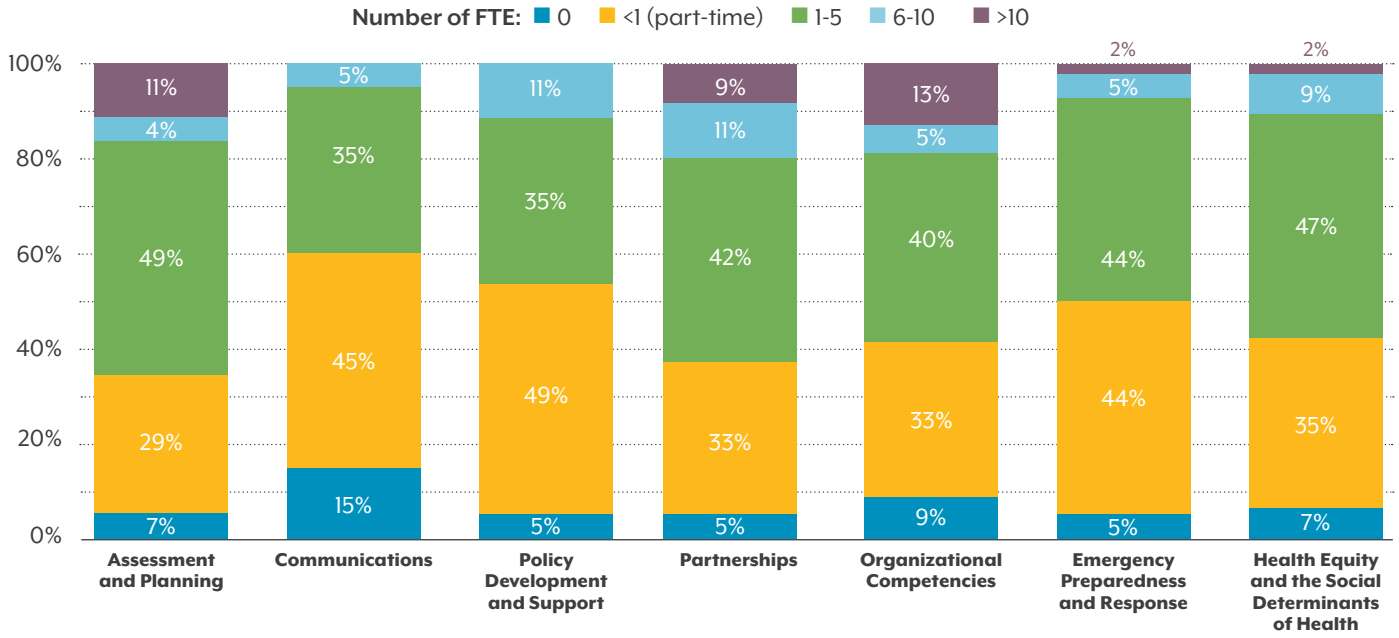
The team continues to assess other workforce shortage models to better understand and measure alternate benchmarks and will refine this approach pending additional stakeholder feedback and developed models.

About one in four Colorado LPHAs (13) does not meet this minimum benchmark:

- Baca County Public Health Agency (3 FTEs)
- Cheyenne County Public Health Agency (3 FTEs)
- Conejos County Public Health and Nursing Service (3 FTEs)
- Custer County Public Health Agency (3 FTEs)
- Dolores County Public Health Agency (3 FTEs)
- Gilpin County Public Health Agency (1 FTEs)
- Jackson County Public Health Agency (2 FTEs)
- Kiowa County Public Health Agency (2 FTEs)
- Ouray County Public Health Agency (4 FTEs)
- San Juan County Public Health Service (2.25 FTEs)
- Rio Blanco County Department of Public Health and Environment (5 FTEs)
- Routt County Public Health Agency (5 FTEs)
- Saguache County Public Health Agency (5 FTEs)

Additionally, LPHA Annual Survey respondents were asked to provide a range of how many FTEs they have within each public health foundational capability. Eight in 10 LPHAs have at least one FTE in all foundational capabilities, and only one LPHA reported it did not have any FTEs in any of the capabilities. (See Figure 2.) Many LPHAs enhance their workforce by sharing services with external entities or their county government. Therefore the reported FTE here may not fully reflect all staff contributing to LPHA functions.

Figure 2. Percentage of LPHAs by FTEs per Foundational Capability



Sharing Services

LPHAs often share services with their county governments to prevent duplication and increase efficiency, especially if they do not have adequate funding. The five foundational capabilities included in LPHA Annual Survey questions on shared services were Assessment and Planning, Communications, Policy Development and Support, Organizational Competencies, and Emergency Preparedness and Response. Communications was the most common foundational capability that LPHAs shared with county governments, and Policy Development and Support was the least common. Three LPHAs shared or were supported in all five of the listed foundational capabilities. Eighteen LPHAs did not share any capabilities with their county government. (See Table 3.)

LPHAs also often share, contract, or have support from external entities in efforts related to the Colorado Health Assessment and Planning System, Vital Records, and Emergency Preparedness and Response. Over half of all LPHAs in Colorado reported sharing or contracting with external entities for at least one of these capabilities. Nine LPHAs reported sharing or contracting services related to all three. (See Table 4.)

Over half of LPHAs (56%) contract for support with one or more of the five foundational services. The most common foundational service for which LPHAs contracted with other entities was Environmental Public Health. Chronic Disease, Injury Prevention, and Behavioral Health Promotion were the least common. One LPHA reported contracting with another entity to support all five foundational services. (See Table 5.)

Table 3. LPHAs Sharing Foundational Capabilities with County Government

Foundational Capability	Percentage of LPHAs
Assessment and Planning	29%
Communications	38%
Policy Development and Support	22%
Organizational Competencies	31%
Emergency Preparedness and Response	33%
None	33%

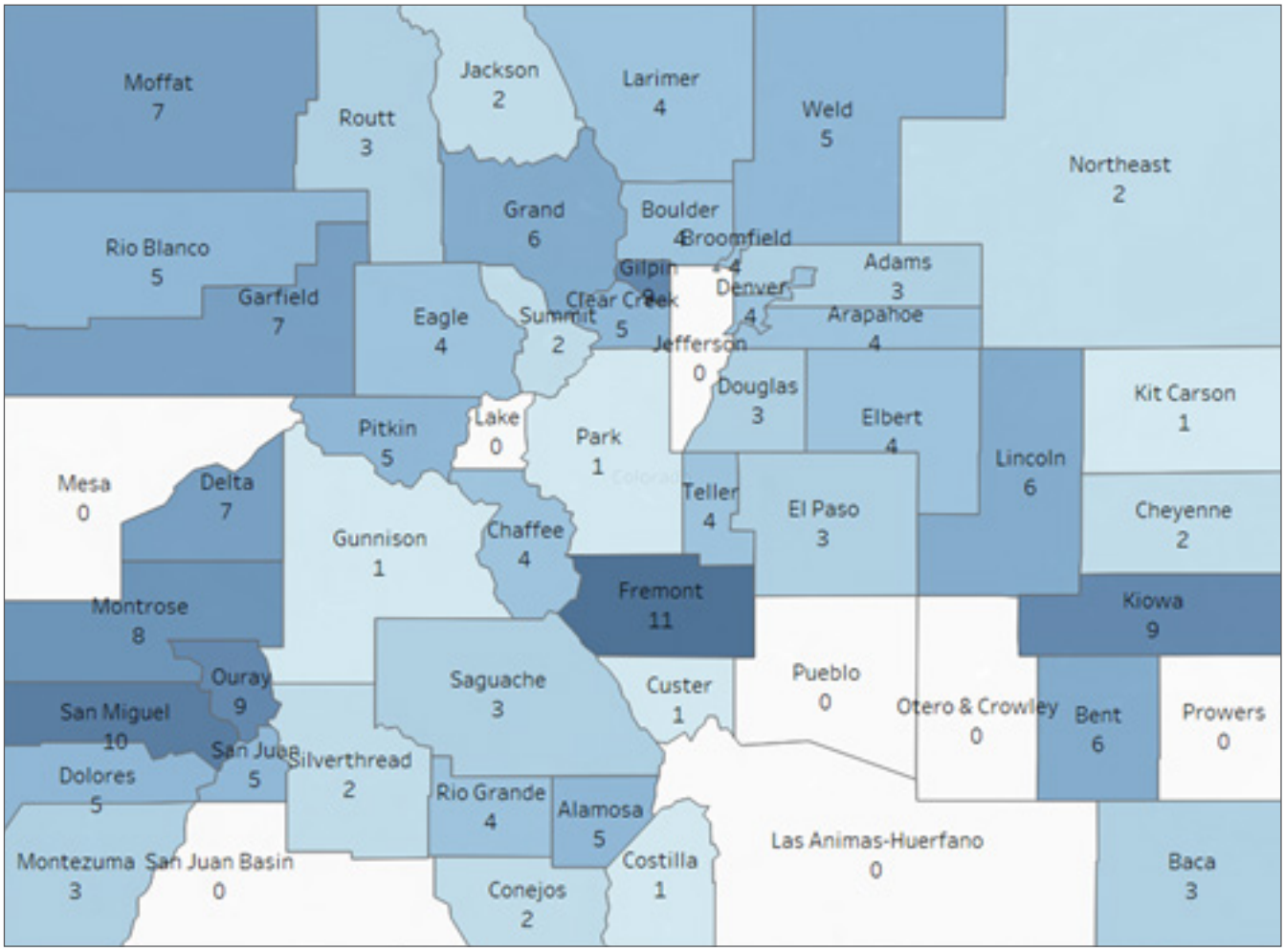
Table 4. LPHAs with Foundational Capabilities Shared, Contracted, or Supported by External Entities

Foundational Capability	Percentage of LPHAs
Assessment and Planning: Colorado Health Assessment and Planning System	29%
Assessment and Planning: Vital Records	27%
Emergency Preparedness and Response	47%
None	42%

Table 5. LPHAs with Foundational Services Contracted to Another Entity

Foundational Service	Percentage of LPHAs
Communicable Disease Prevention, Investigation, and Control	29%
Environmental Public Health	35%
Maternal, Child, Adolescent, and Family Health	31%
Chronic Disease, Injury Prevention, and Behavioral Health Promotion	18%
Access to and Linkage with Health Care	22%
None	44%

Figure 3: Count of Core Service Sharing with County Government and External Entities



Organizational Capacity

Funding Sources

Funding sources are crucial indicators of organizational and workforce stability. Inconsistent funding or even a small change in financial support can influence a department's ability to support its staff's time. Most LPHA revenue comes from federal dollars (30%), and local funding makes up around 23% of the average LPHA revenue. (See Figure 4.)

Over a third of employees reported they were funded with general funds and grants, while about a quarter reported they were funded by a mix of sources. (See Figure 5.) Those who were largely grant funded reported more uncertainty with their future at their job and organization, reflecting the volatility of their funding. (See Satisfaction section for more information.) Total annual revenue per LPHA ranges from $125,592 to $109,793,173 (mean: $6,451,991; median: $1,494,000).

A note on accreditation: The following agencies have received initial accreditation from the Public Health Accreditation Board: Denver, El Paso, Jefferson, Mesa, Pueblo, and Weld. Due to the extensive administrative requirements and personnel needed, accreditation status may not be the truest measure of capacity or whether an agency is meeting national standards in staffing or funding by competency area.

Revenue does differ by region. For example, LPHAs in the Eastern District rely more heavily on state funding compared with other regions. LPHAs in the Front Range District have more diversified funding streams, with money distributed more evenly across categories, although they have a significant amount of "other" funding. (See Figure 6.)

Larger agencies also relied heavily on "other" types of funding, while smaller and medium agencies relied on federal money passed through the state as well as state funding. This "other" bucket may be volatile enough to influence agencies' ability to effectively sustain their workforce. (See Figure 7.)

Figure 4. Average Percentage of LPHA Revenue by Source

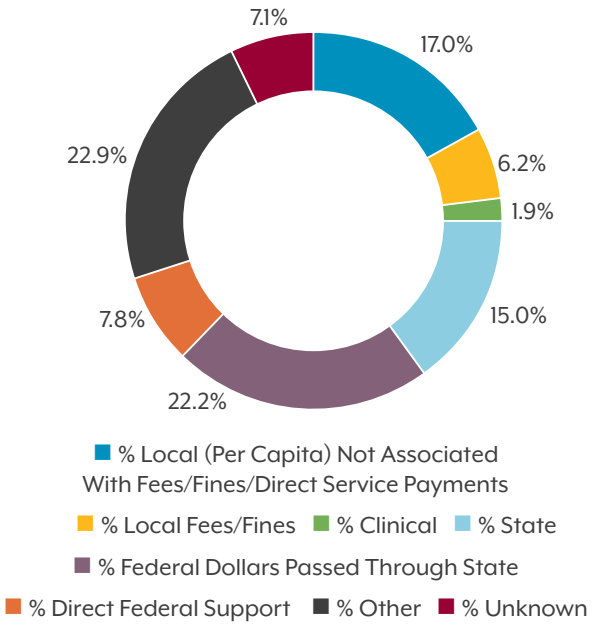


Figure 5: Percentage of Employees Supported by Funding Source Type

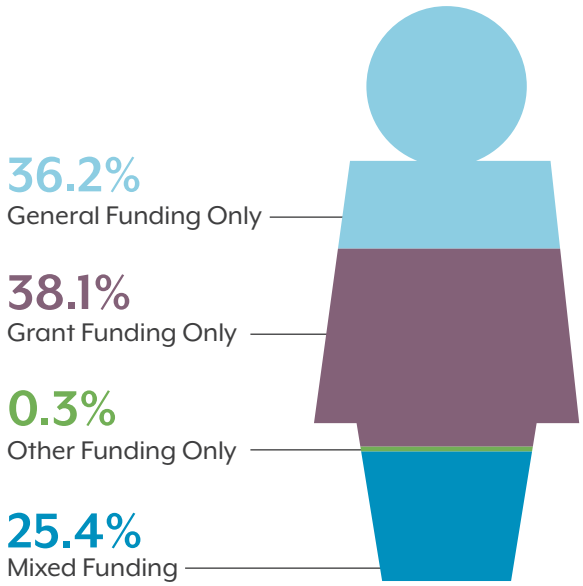


Figure 6. Average Percentage of LPHA Revenue by Source, by CCI District

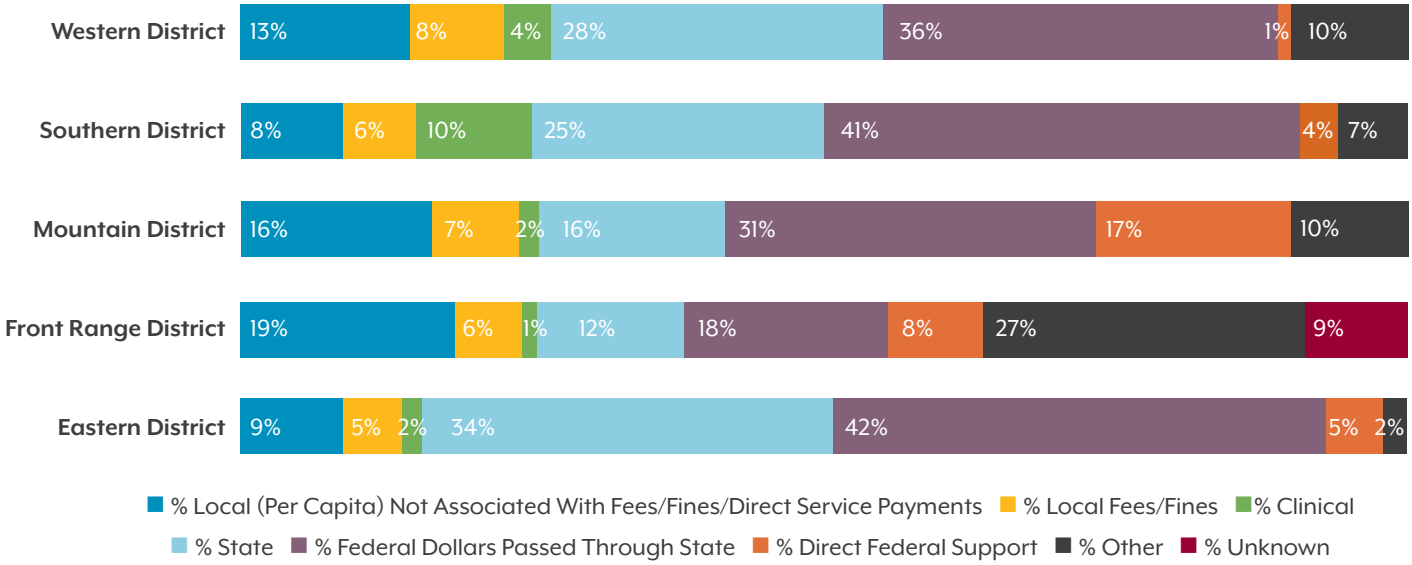
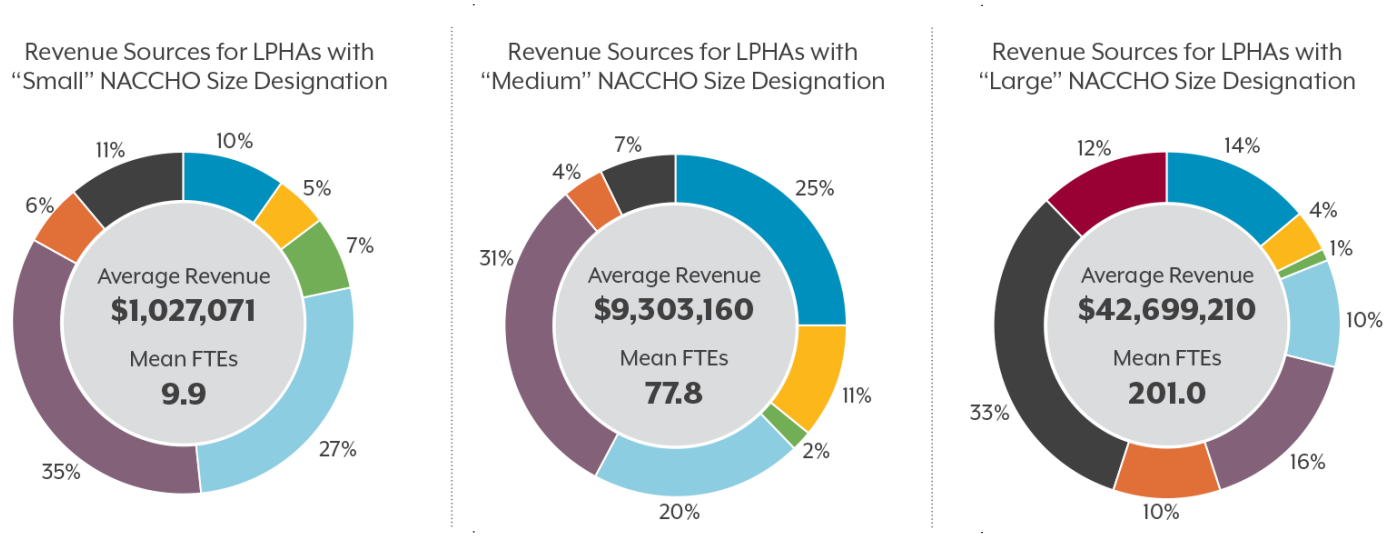


Figure 7. Average Percentage of LPHA Revenue by Source, by NACCHO Size Designation



*Percentages do not add up to 100% due to rounding

Adequate Funding

The LPHA Annual Survey asked four questions related to LPHAs' abilities to fund their workforce within the key public health foundational capabilities. Just five LPHAs reported that they have adequate funding to support all seven foundational capabilities, and 23 LPHAs (42%) reported that they lack adequate funding across all capabilities. LPHAs are least likely to have adequate funding for Policy Development and Support and most likely to report having adequate funds for Assessment and Planning. (See Table 6.)

We saw some differences across size designations between those with and without adequate funding in specific capabilities, although overall, size did not correlate with adequate funding. Larger LPHAs were more likely to have adequate funding for Health Equity and the Social Determinants of Health (40%) compared with small (18%) and medium (9%) agencies. Large (40%) and medium (36%) agencies were also more likely to have adequate funding for organizational competencies compared with small (18%) agencies.

Table 6. LPHA Self-Reported Funding Adequacy by Foundational Capability

Foundational Capability	Number of LPHAs	Percentage of LPHAs
Assessment and Planning	20	36%
Communications	17	31%
Policy Development and Support	9	16%
Partnerships	18	33%
Organizational Competencies	13	24%
Emergency Preparedness and Response	18	33%
Health Equity and the Social Determinants of Health	10	18%
None	23	42%

Local Boards of Health

The LPHA Annual Survey also asked about board members and their expertise. Advocates for increasing the funding for these foundational capabilities must consider the training and capacity-building needed for these board members. A large variance exists in the number of board members who work with each agency. (See Figure 8.)

Thirty-five Boards of Health are made up of county commissioners only, 10 are independent boards, and 10 are a mix. Thirty-one of the 55 LPHAs (56%) provided data on the health expertise of their boards. Of those, about two-thirds indicated their boards had at least one member with health expertise (65%). This leaves about one in three boards without any. Boards that are independent or mixed all had at least one member with health expertise, whereas only around a third of county commissioner-only boards had at least one member with expertise. (See Table 8.)

Figure 8. LPHAs by Number of Board of Health Members

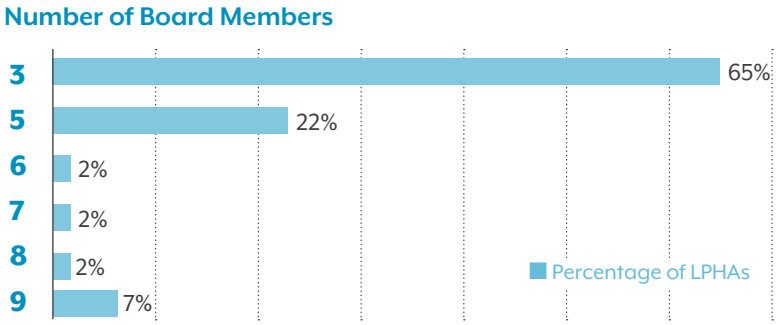


Table 7. Board of Health Members by Expertise or Job

Expertise or Job	Number of Members	Percentage of Board Members
Other Elected Official	1	<1%
City Council Member	4	2%
Medical Officer	6	3%
Community-Based Organization	14	6%
Community Member	74	33%
County Commissioner	127	56%
Total	**226**	**100%**

Table 8. Board of Health Expertise by Board Type

Board Type	Number of Boards With at Least One Member With Health Expertise	Total Boards That Provided Data	Percentage With Health Expertise
County Commissioners Only*	5	16	31%
Independent±	7	7	100%
Mixed	8	8	100%
All Types	20	31	65%

* County Commissioners Only: The entire board of County Commissioners serve as the Board of Health for the county without additional, appointed members

± Independent: A Board that is appointed by County Commissioners, that operates separately from County Commissioners

Workforce Stability

Tenure

The average public health workforce employee has been on the job for nearly a decade. (See Table 9.)

On average, LPHAs lost almost eight permanent employees in the past year, including through retirements. Within each LPHA, there were an average of 1.5 employees eligible or planning to retire in 2023.

About 14% of employees planned to leave their organization within the next six months. PH WINS national-level data shows more than a quarter reported that they intend to leave in the next year. If we extended our time period, we may see this percentage increase for Colorado as well. (See Figure 9.) About a quarter (25%) of term-limited staff agreed or strongly agreed that they intend to leave within the next six months compared with 11% of permanent staff.

Many employees are term limited, which affects continuity of services and care, and about 12% of respondents in the individual-level survey reported they were term-limited employees. The public health category had the highest proportion of respondents who are term-limited, and those with an environmental position had the lowest proportion. (See Table 11.) Seventy-two percent of environmental employees are supported by general funding alone, compared with 21% in public health, 22% in clinical, and 51% in administrative roles. Appendix C includes additional details on how each position category is classified.

Table 9. Average Number of Years in Current Position, Agency, and in Public Health Practice

Current Position	Current Agency	Public Health Practice
Mean: **4.6 years**	Mean: **5.6 years**	Mean: **9.0 years**
Median: **2.0 years**	Median: **3.0 years**	Median: **6.0 years**

Table 10. Percent of LPHA Employees Eligible or Planning to Retire in Next Four Years

2023	2024	2025	2026
1.5	1.1	1.0	1.2

Figure 9. LPHA Employee Level of Agreement with Statement:

"I intend to leave my position with the health department in the next six months"

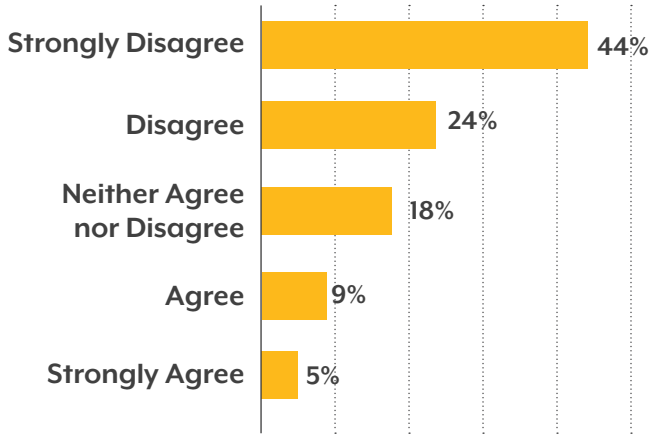


Table 11. Colorado LPHA Term-Limited Employees by Position Type

Position Category	Total Number of Employees	Number of Term-Limited Employees	Percentage of Employees who Are Term-Limited
Public Health	717	131	18%
Clinical/Medical	298	32	11%
Environmental	220	9	4%
Administrative	407	22	5%
All Positions	1,358	166	12%

Please note the total number of employees varies widely by position, which complicates comparisons.

Workforce Qualifications

Demographics

The Colorado Workforce Gaps and Needs Assessment team sought to understand how the demographic characteristics of the Colorado governmental public health workforce compare with Colorado's population.

LPHA staff are slightly less racially and ethnically diverse than Colorado's population overall.[9] (See Table 12.) American Indian or Alaska Native, Asian, Black or African American, and Hispanic / Latino/a/x Coloradans are the most under-represented in the LPHA workforce.

Most respondents (82%) identified as female, 17% as male, and less than 2% as non-binary or other. This is similar to national gender identity demographics as reported in the 2021 PH WINS data.[10]

Table 12. Race/Ethnicity of LPHA Employees and Colorado Residents*

Race/Ethnicity	Percentage of LPHA Employees	Percentage of Colorado Residents
American Indian or Alaska Native	2%	4%
Asian	3%	5%
Black or African American	3%	6%
Hispanic / Latino/a/x	17%	22%
Middle Eastern or North African	1%	NA‡
Native Hawaiian or Other Pacific Islander	1%	<1%
White	83%	82%
Some other race/ethnicity	2%	16%
Don't know	<1%	NA‡

*Percentages exceed 100% because respondents can select more than one option

‡Data not reported by Census Bureau

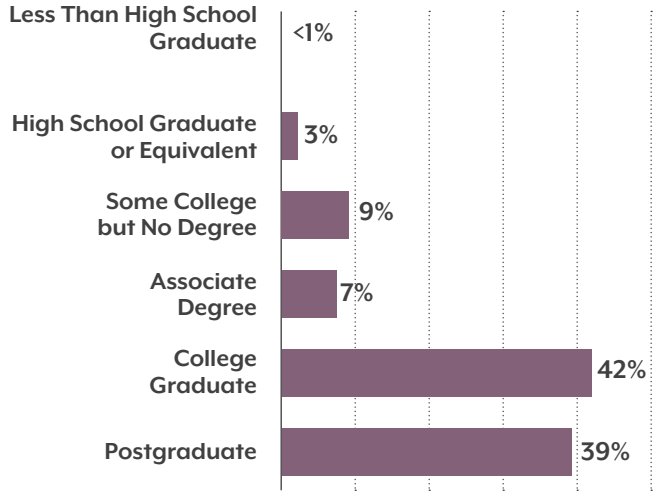
Qualifications

Colorado's public health workforce is highly educated. More than half have a college degree or higher (42% and 39%, respectively). (See Figure 10.) This is similar to national data reported by PH WINS.[11]

This workforce survey also asked respondents various questions about their lived experience. State- or national-level data for many lived experience indicators do not exist or are unreliable, so comparisons in this category are limited.

We know that Colorado is home to 413,271 veterans. While this represents about 8% of the population, only 4% of LPHA employees said they were part of this community.[12] In addition, about one in 10 Coloradans are a new American or immigrant.[13] In comparison, about 8% of respondents identified as a first-generation immigrant from another country. Lastly, there are substantially more public health employees identifying as LGBTQ+ (9%) than there are adults who identify as LGBTQ+ in Colorado (5%).[14]

Figure 10. LPHA Employees by Highest Level of Education Received

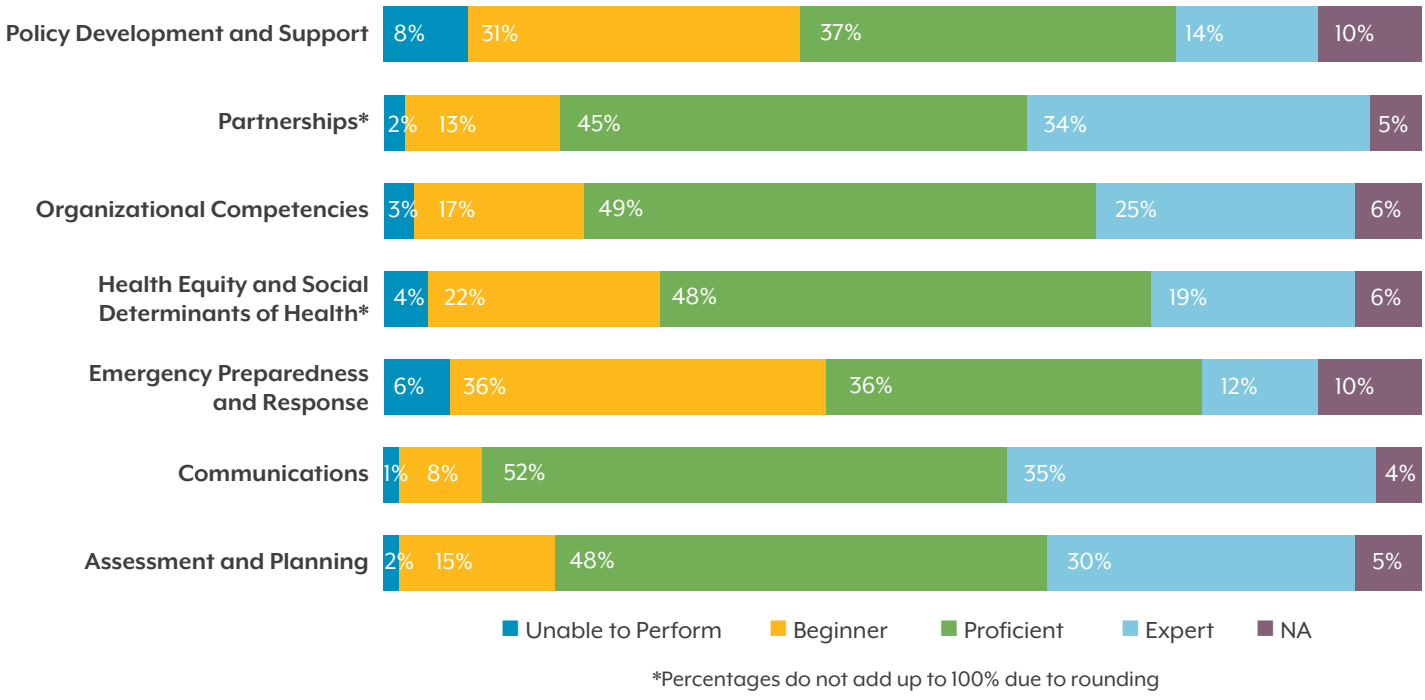


Over a quarter of respondents reported growing up or living in the county where they currently work. Local knowledge and understanding help employees develop programs that reflect the communities they serve. (See Table 13.)

Table 13. Lived Experience of LPHA Employees in Colorado

Lived Experience	Number of Respondents	Percentage of Respondents
Veteran or Active-Duty Military	59	4%
Member of the LGBTQ+ Community	119	9%
Member of a Tribal Community	11	<1%
First-Generation Immigrant from Another County	107	8%
Refugee from Another Country	5	<1%
Migrant Family (Moving from Place to Place Within the U.S.)	13	1%
Living/Have Lived Without Stable Housing	151	11%
Living/Have Lived Without Stable, Reliable Income	233	17%
Living/Have Lived Without Stable Access to Food	157	12%
Person Affected by Trauma	449	34%
Grew Up or Live in the County That I Work For	367	27%

Figure 11. Self-Reported Foundational Capability Skills of Public Health Workforce



*Percentages do not add up to 100% due to rounding

The workforce survey asked all respondents to report their skill level within each of the seven foundational capabilities.

Overall, employees could improve skills related to emergency preparedness and policy development.

In both categories, about 40% of respondents noted that they are unable to perform or have beginner-level skills in these competencies. Most respondents also said that these capabilities are somewhat or very important to their jobs. (See Figure 11.)

Workforce Satisfaction

The workforce survey asked three questions to better understand employees' experiences as a part of the governmental public health system. These questions mirror those from PH WINS to allow for national comparisons.

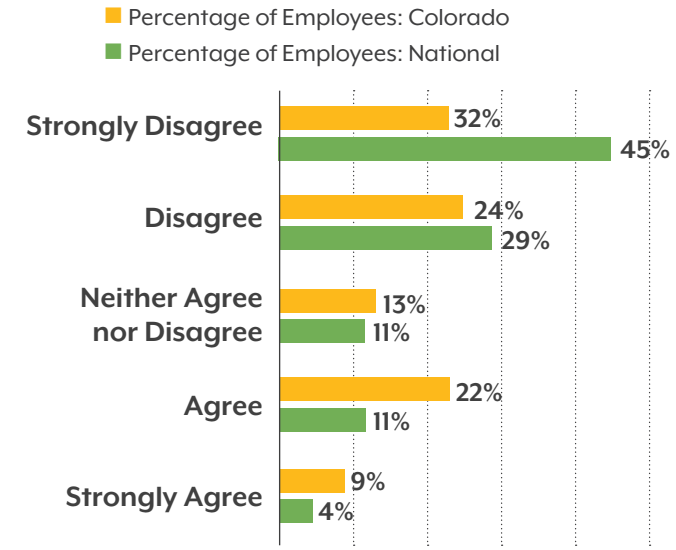
Feeling Bullied, Threatened, or Harassed

According to PH WINS, 15% of public health employees nationally felt bullied, threatened, or harassed by people outside of their health department due to their role as a health professional. This percentage was double in Colorado, where over 30% of respondents felt bullied, threatened, or harassed.

The environmental category had the highest proportion of respondents who agreed or strongly agreed that they felt bullied, threatened, or harassed because of their position (45%) compared with those with a clinical or medical position (26%).

In addition, smaller-size agencies had a higher proportion of employees who felt bullied, threatened, or harassed by people outside of the health department because of their role. Lastly, employees living in the Mountain and Southern Districts were more likely to have felt bullied, threatened, or harassed than those in the Eastern District. However, small sample sizes in certain CCI districts may complicate comparisons. (See Figures 12-15.)

Figure 12. Percentage of LPHA Employees Who Agree They Felt Bullied, Threatened, or Harassed by People Outside of the Health Department Because of Their Role as a Public Health Professional



*Percentages do not add up to 100% due to rounding

Figure 13. Percentage of LPHA Employees Who Felt Bullied, Threatened, or Harassed by People Outside of the Health Department Because of their Role as a Public Health Professional by Position Type

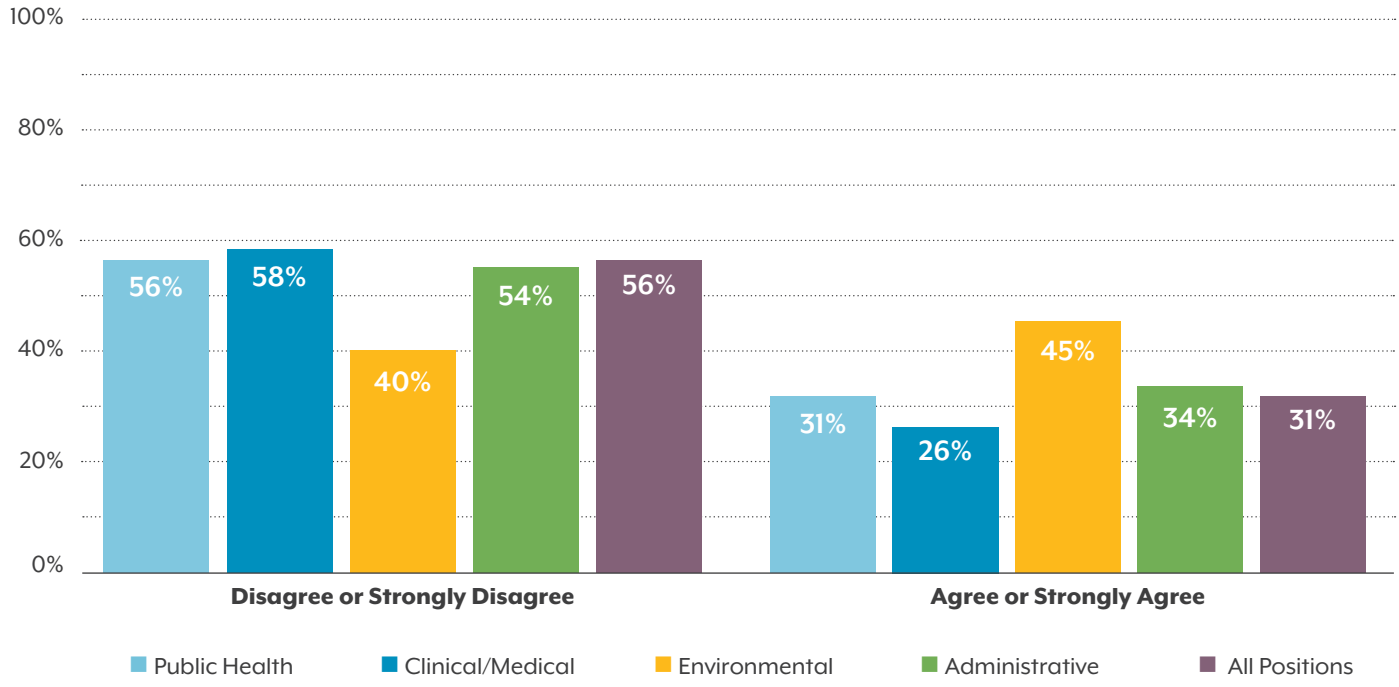


Figure 14. Percentage of LPHA Employees Who Felt Bullied, Threatened, or Harassed by People Outside of the Health Department Because of Their Role as a Public Health Professional, by NACCHO Size Designation

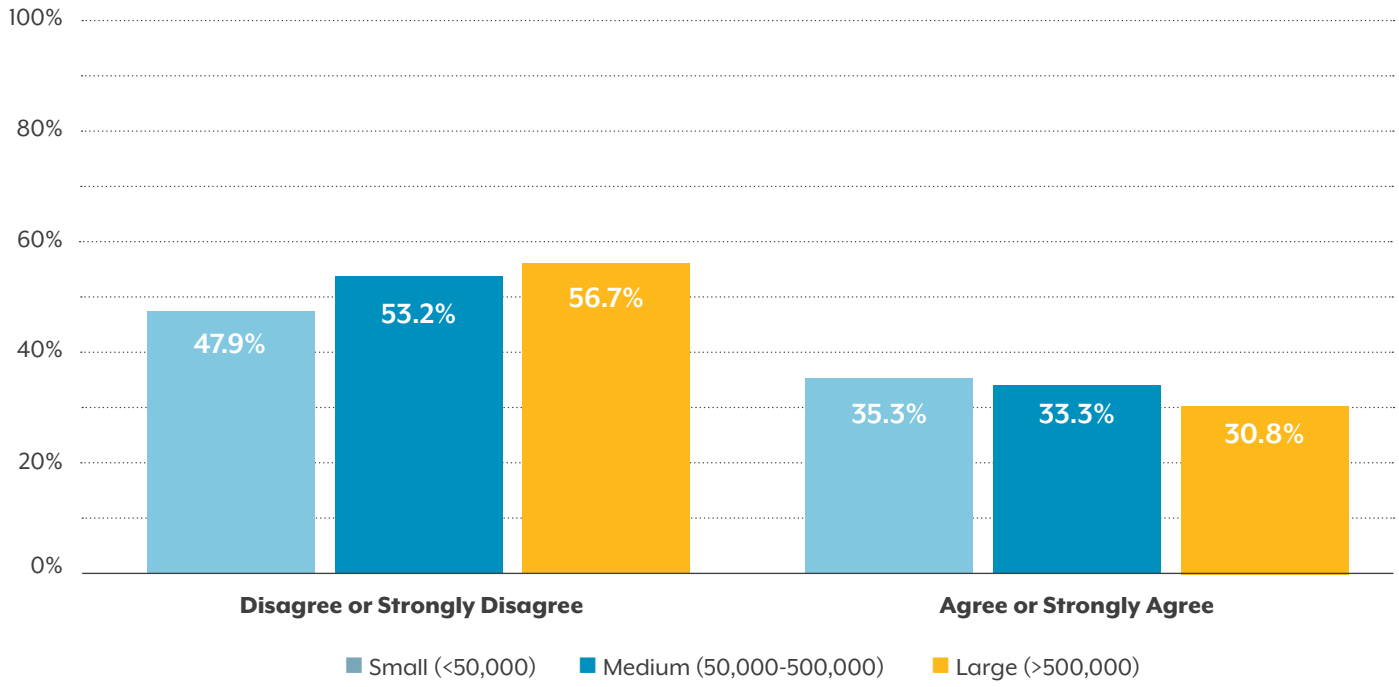
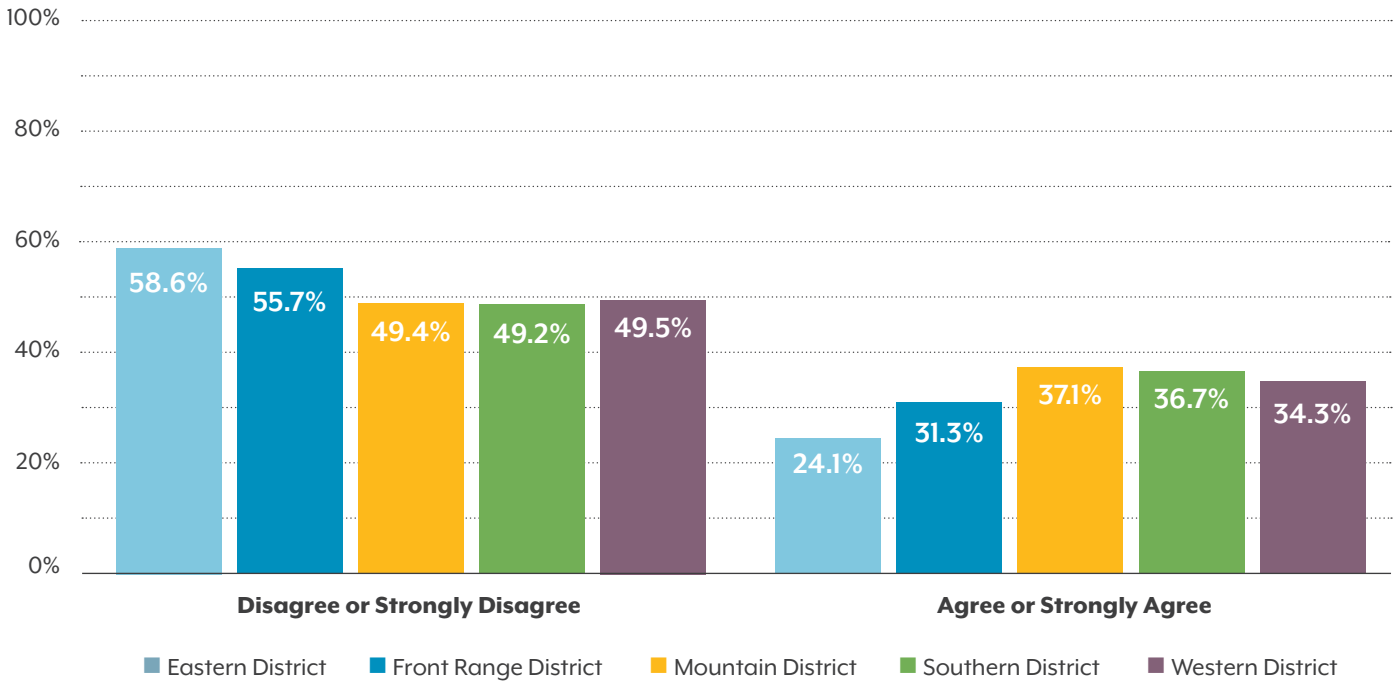


Figure 15. Percentage of LPHA Employees Who Felt Bullied, Threatened, or Harassed by People Outside of the Health Department Because of Their Role as a Public Health Professional, by CCI District

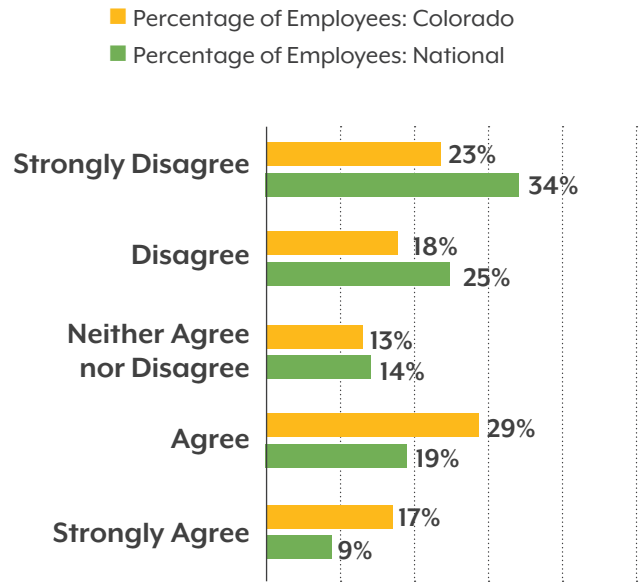


Feeling Expertise Challenged

Twenty-eight percent of employees nationally felt their public health expertise was undermined or challenged by people outside of the health department, compared with 46% in Colorado.[15] Employees with an environmental position had the highest proportion of respondents who agreed or strongly agreed that they were undermined (55.0%), and employees with an administrative position had the highest proportion of respondents who disagreed or strongly disagreed with this statement (43.9%).

There was no discernable difference between NACCHO size designations or CCI district. Note that differences in sample sizes between CCI district may complicate comparisons. (See Figures 16-19.)

Figure 16. Percentage of LPHA Employees Who Agree Their Public Health Expertise Was Undermined or Challenged by People Outside of the Health Department*



*Percentages do not add up to 100% due to rounding

Figure 17. Percentage of LPHA Employees Who Agree Their Public Health Expertise Was Undermined or Challenged by People Outside of the Health Department, by Position Type

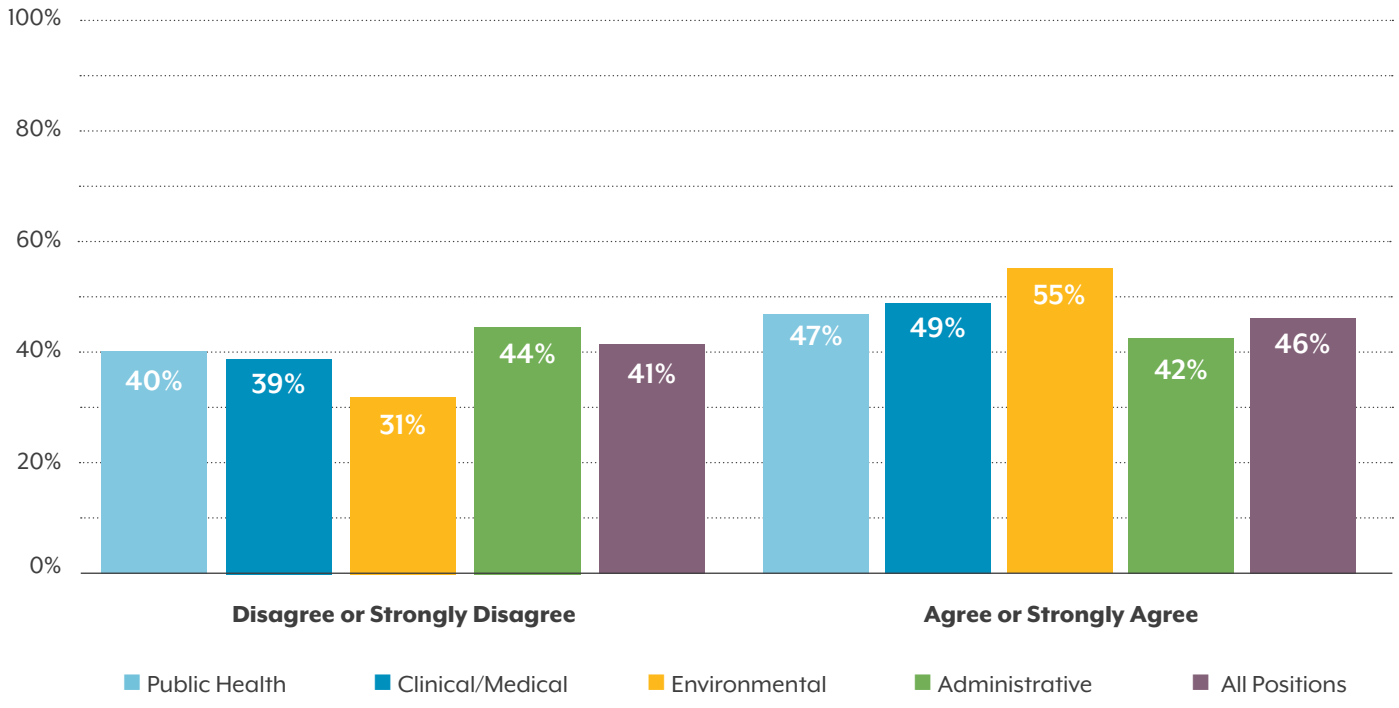


Figure 18. Percentage of LPHA Employees Who Agree Their Public Health Expertise Was Undermined or Challenged by People Outside of the Health Department, by NACCHO Size Designation

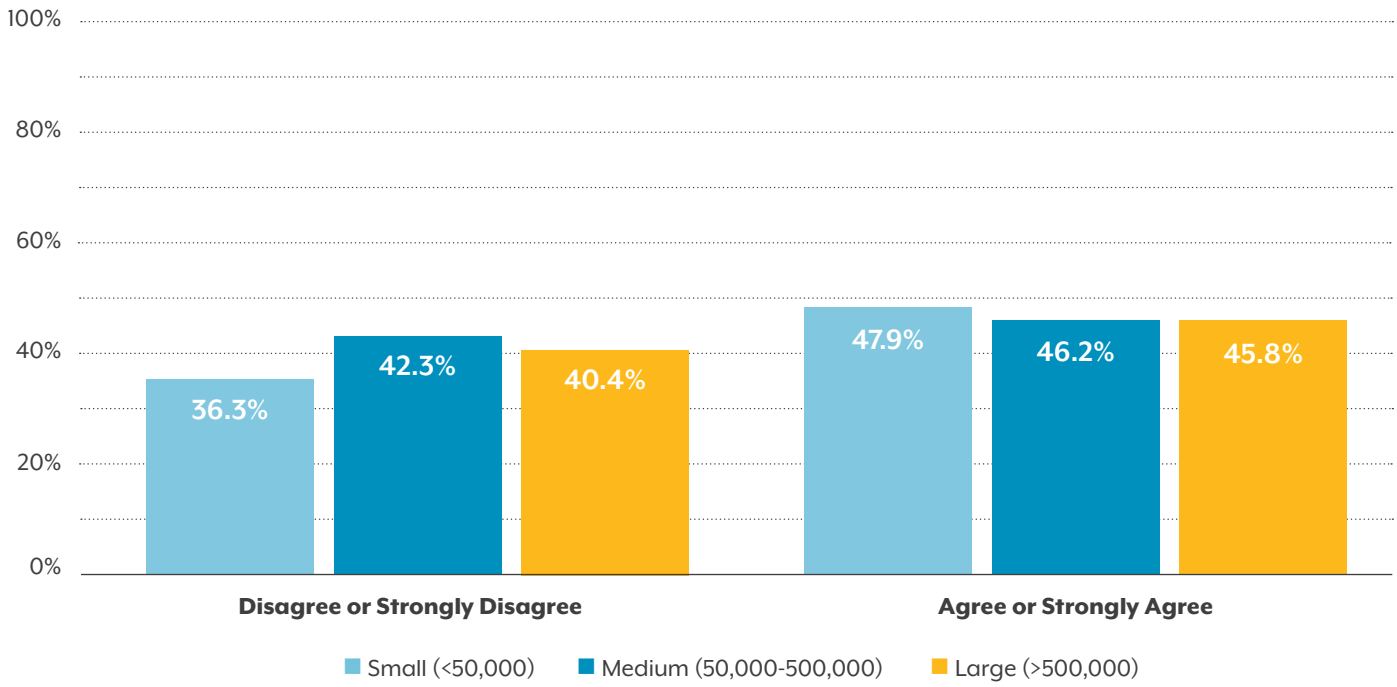
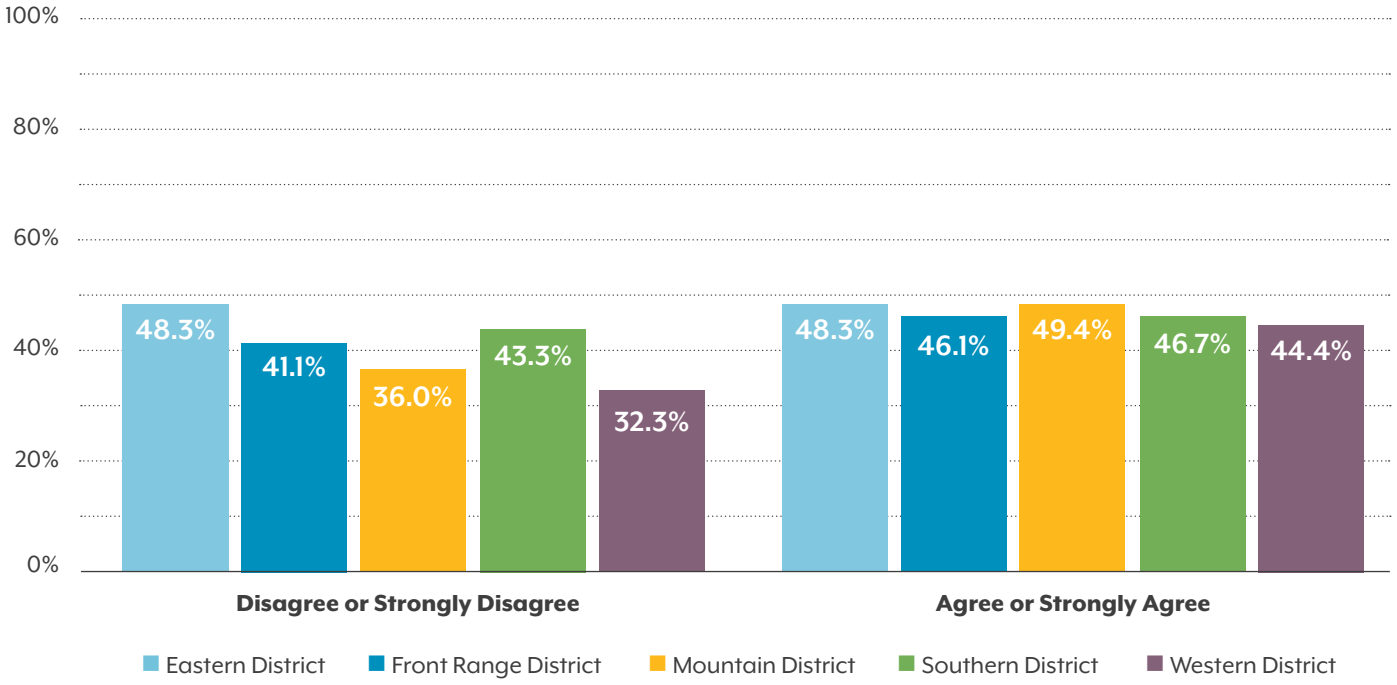


Figure 19. Percentage of LPHA Employees Who Agree Their Public Health Expertise Was Undermined or Challenged by People Outside of the Health Department, by CCI District



Satisfaction

Figures 20-23 describe public health workers' satisfaction with their jobs, organizations, and pay. The survey asked respondents to rate their level of satisfaction in a way similar to the PH WINS survey.

In the state of Colorado,

- **59%** of governmental public health workers are somewhat or very satisfied with their pay, compared with 49% of governmental public health workers nationally.
- **75%** of governmental public health workers are somewhat or very satisfied with their organization, compared with 68% of governmental public health workers nationally.
- **82%** of governmental public health employees are somewhat or very satisfied with their job, compared with 79% of governmental public health employees nationally.

Overall, Colorado governmental public health employees in 2023 were more satisfied with their jobs, organizations, and pay than respondents of the 2021 PH WINS survey.[16] About 14% of Colorado respondents noted they intend to leave their position with the health department in the next six months.

However, satisfaction with job, organization, and pay does seem to differ among racial and ethnic groups and by positions, terms, and how individuals are funded.

Race/Ethnicity. Asian and Hispanic / Latino/a/x respondents were the most likely to express satisfaction with their jobs, while Black and African American or American Indian and Alaska Native respondents were more inclined to report feeling somewhat or very dissatisfied with their job experiences.

Regarding organizational satisfaction, there was less variability among racial and ethnic groups, but Black and African American employees were more likely to express satisfaction with their current organization. Respondents identifying as Asian were more prone to report feelings of dissatisfaction with their organizations.

A larger proportion of respondents identifying as American Indian or Alaska Native and Asian indicated that they were somewhat dissatisfied or very dissatisfied with their compensation.

Funding Types. Overall, employees who are funded by general funding alone tend to be more satisfied than employees who are funded by grants or contracts alone. This includes satisfaction with their organizations (79% versus 72%), pay (67% versus 57%), and their jobs (86% versus 53%).

Positions. Respondents in public health positions were most likely to report that they were somewhat or very dissatisfied with their job (25%), compared with those in environmental health positions (7%). Two-thirds of administrative staff (66%) were satisfied with their pay compared with about half of public health, clinical/medical, and environmental health staff.

Employee Types. Satisfaction with the job may also differ between permanent and temporary employees. The proportion of permanent employees who said they were somewhat or very satisfied with their job (82%) is higher than that of temporary or term-limited employees (77%).

CCI District. In the Mountain District, a greater percentage of respondents expressed some level of satisfaction with their organization (91%) and pay (69%) compared with the Eastern District (69% and 55%, respectively). Nevertheless, job satisfaction was nearly equal in both districts, with 90% in the Eastern District and 88% in the Mountain District. It's worth noting that differences in respondent sample sizes could potentially make regional comparisons more complex. The percentage of employees satisfied in the Front Range, Southern, and Western districts was comparable in relation to job (81%), organization (76%), and pay (around 60%).

LPHA Size. There were no major differences in satisfaction with pay, organization, or job satisfaction by NACCHO size designation.

Figure 20. Satisfaction With Pay, Job, and Organization, U.S. and Colorado*

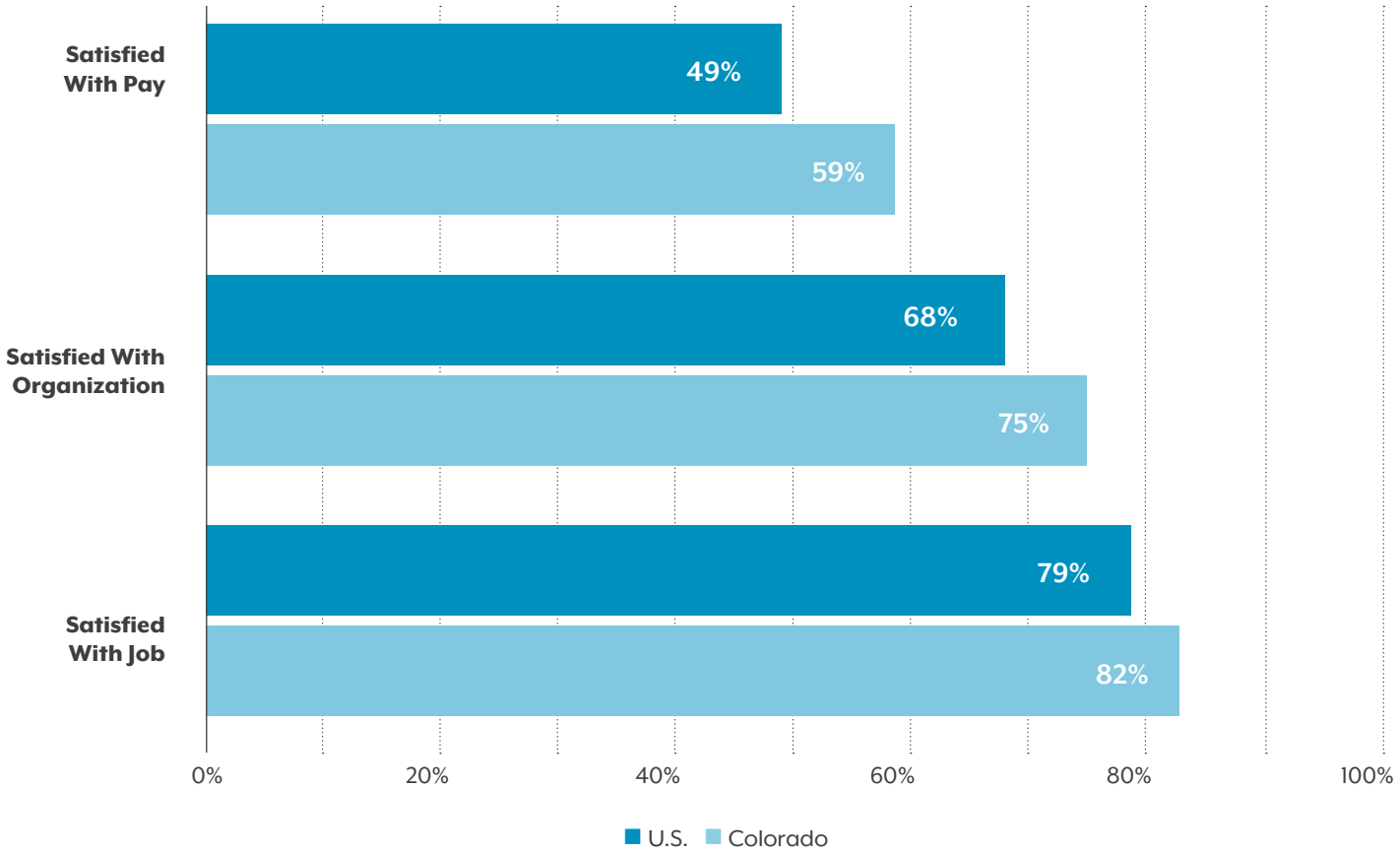


Figure 21. Pay Satisfaction by Race/Ethnicity

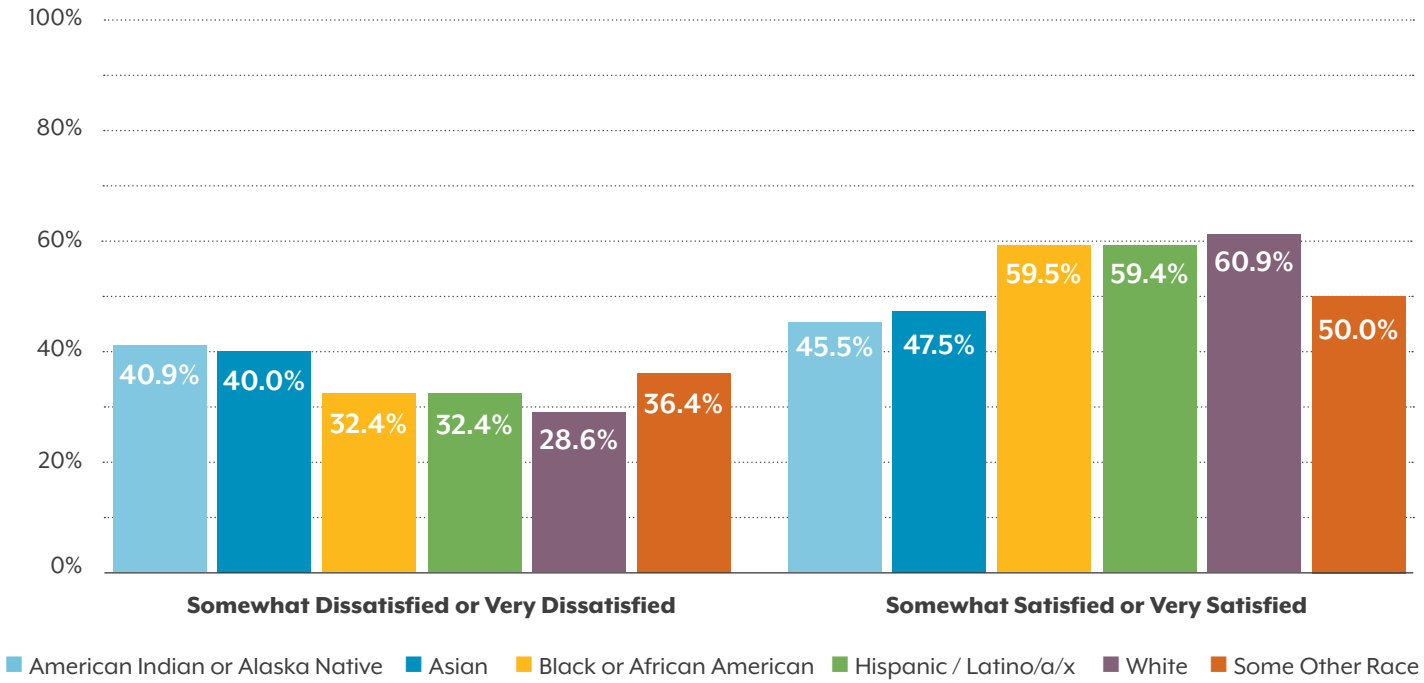


Figure 22. Satisfaction With Organization by Race/Ethnicity

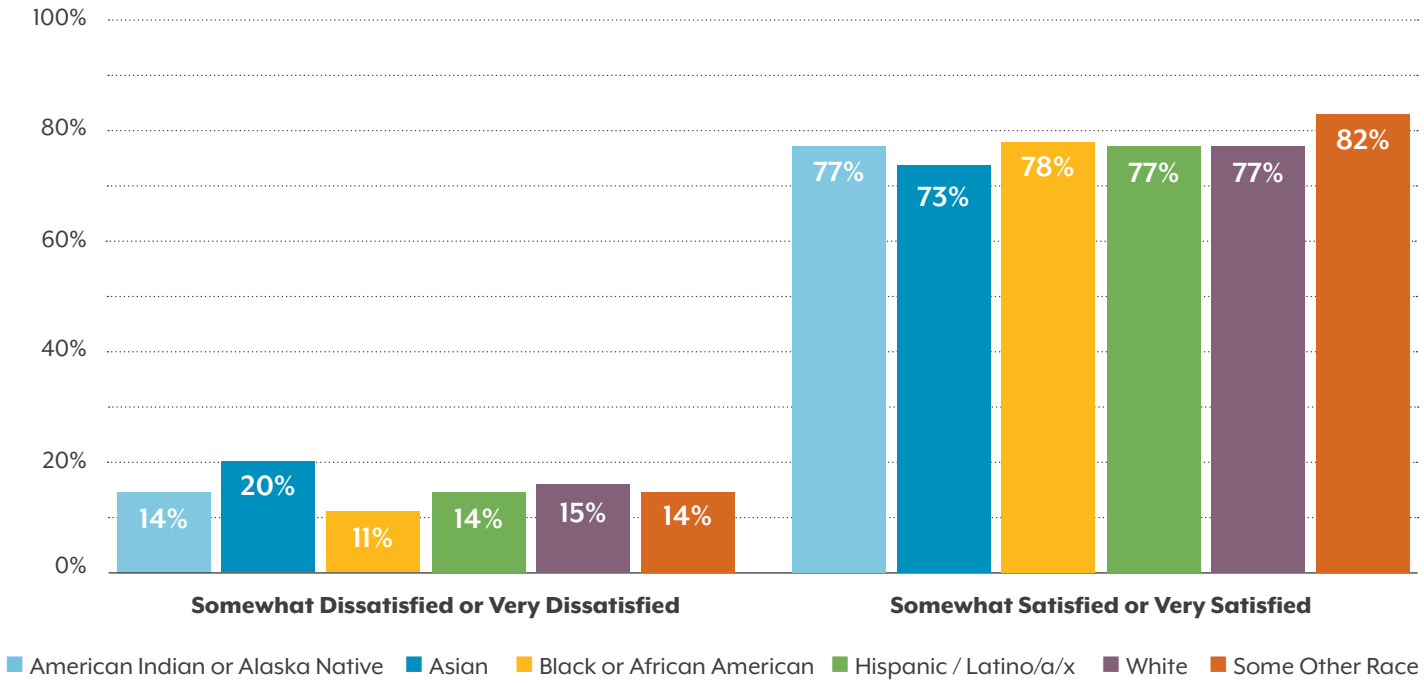
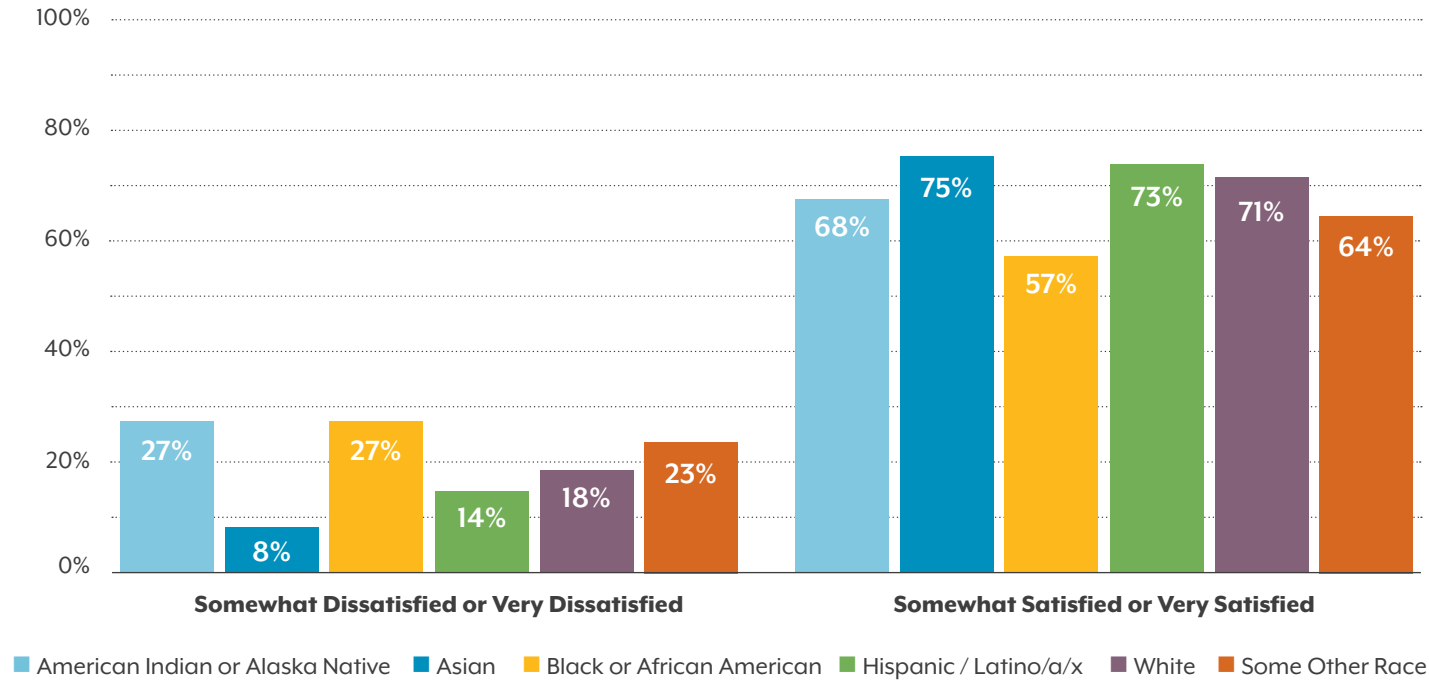


Figure 23. Job Satisfaction by Race/Ethnicity



Respondents were given the option to provide comments about their workplace environment and level of job satisfaction. Qualitative data showed a range of experiences with leadership and the public health field. Despite challenges, many employees said they enjoyed their job; this satisfaction was attributed to their supportive colleagues and the recognition they receive for their fulfilling, mission-driven work. When employees perceived strong leadership support and experienced clear communication and defined roles, their overall job satisfaction was notably higher.

> "People are satisfied when they feel heard and valued, [there] are clear roles and growth: I feel that overall I am highly satisfied with my work and role. I enjoy the employee engagement opportunities and the ability to meet others in the health department. I overall feel that I am listened to and free to express my concerns."

However, concerns about job security due to budget constraints, grant funding, pay raises, organizational changes, and lack of upward mobility led others to feel uncertain about their futures.

> "I love the work I do and believe strongly in the mission. I am proud of the work I (with my team) do for the residents of Colorado. I receive appreciation from my coworkers and immediate supervisors. On the downside, my job is extremely underpaid compared to private sector opportunities, and I also feel public health as a career has been further marginalized and disrespected over the past 3 years. I have a term-limited position which has been extended numerous times. I expect to continue in my job for the foreseeable future, but I would really like to feel more secure and feel appreciated by senior leadership."

> "It is very stressful to be in a grant-funded position and not know whether my job will last longer than the term of the grant. I wish my position could be a regular permanent funded role."

Employees were also navigating demanding workloads at times with limited resources, often contending with political oversight and challenging external environments. On many occasions, outside pressures and bureaucracy made it challenging to perform their roles effectively, particularly when they perceived a lack of leadership support. These issues significantly impacted employee well-being and contributed to burnout.

> "Workloads are too high across the board and creating burnout. Sustainable funding for core public health MUST be increased."

> "Extremely satisfied with my immediate supervisor, my colleagues I work with on a regular basis, and my second-level supervisor. My organization is not as effective as it could be on many issues, and the level of bureaucracy we need to wade through makes it challenging to effect real change or make changes on a rapid basis."

> "The degree of political oversight of public health post [COVID-19] persists in areas it never existed before and makes it harder to do the work and maintain staff morale."

> "There's a lot of talk about [diversity, equity, and inclusion] and anti-racism, but the behavior of leadership and lack of meaningful structural changes internally demonstrate blind spots or inauthenticity."

Limitations

The Public Health Workforce Gaps and Needs Assessment team identified a few areas of improvement for future data collection efforts. Many questions on the OPHP LPHA Annual Survey were subjective, including how LPHA leadership defined adequate funding for their agency. In the future, it may be important to identify common definitions for standards such as these. In addition, some respondents may have been unaware of all components that fall under each of the core public health services, and newer leadership may still be learning about service sharing within their agency.

We only administered the public health individual employee survey to governmental employees. There are many organizations that support the public's health and well-being, and we are missing data from these teams, including those organizations that LPHAs may contract with to support services. Lastly, the survey was optional and does not include the perspectives of the entire workforce. See Appendix D for survey questionnaires.

Recommendations for Addressing Workforce Gaps

Colorado has made commendable strides in addressing the needs of our governmental public health workforce following the tumultuous period of the COVID-19 pandemic. However, public health has much more work to do to better support the experiences of these essential workers. The health of Coloradoans improves if and when we are able to make positive shifts in the following areas.

Funding and Systems

Public health sustains its workforce with a variety of funding sources, and many of those come with requirements, rules, and regulations. Public health leaders are also tasked with braiding multiple funding streams to support their staff. However, many times, these funding streams are categorical and limit if and how they can blend with other sources. Employees who are funded by grants, contracts, or a mix, which many times are categorized funding, are less satisfied with their job, organization, and pay than those with general funding alone. This may be because they feel less secure about their funding's future or because they are limited in how to spend their dollars. Some agencies also relied heavily on "other" types of funding, which may be unstable to sustain their workforce long-term. Local, state, and federal funders should offer more uncategorized funding opportunities that all agencies can use to retain and build their workforce. Per capita funding is also helpful for stabilizing agencies. The state and federal government has released infrastructure and workforce grant opportunities since COVID-19, and while we recommend these funding sources continue, they should only be part of the core public health portfolio.

Categorized funding:
Used for a designated purpose.

Uncategorized funding:
Used to support core public health services.

> "It is challenging to sustain long-term public health programming due to a lack of sustainable funding and staffing. The 'public health funding roller coaster' includes a ramp up phase followed by the need to cut or reallocate resources due to an emergency. That is the biggest problem to maintain capacity: sustainable, predictable, sufficient funding."[17]

On top of these funding restrictions, many LPHAs are still unable to perform core work related to foundational services and capabilities. As noted, 23 LPHAs reported that they lack adequate funding across all capabilities. Additional stable funding sources for Policy Development and Support and Health Equity and Social Determinants of Health are crucial to addressing health disparities and implementing systems change strategies to improve health.

> "Ideally, [LPHAs] need more flexible and sustainable funding to address their workforce needs and capacity to improve their ability to perform core services. They are always just putting out fires then trying to fill open positions."[18]

Over half of LPHAs rely on external entities to support foundational capabilities. Although sharing services can improve efficiency, we do not know why or how services are shared. Additional research is needed to understand whether LPHAs are contracting out due to necessity or for other reasons.

One third of Colorado's local Boards of Health have no health expertise. We must consider the recruitment, training, and capacity building of board members as we advocate for increased funding to develop their skills. OPHP offers training and office hours for board members, which they should continue to promote widely and often — especially to boards consisting only of county commissioners, since only a third currently have health expertise.

Recruitment

Colorado has more work to do to ensure we have a public health workforce that reflects the diversity of the communities served. Although the current data is based on people who chose to participate in the survey, the overall workforce does not holistically reflect the racial and ethnic demographics of our state. Recruiting a more diverse workforce is important as we continue to invest in community engagement as a key strategy for improving health.

Over 80% of respondents hold college or graduate degrees. Although this educational attainment is valuable, not all positions require a post-secondary degree. For example, roles such as community health workers, case workers, or contact tracers/case investigators do not require a college degree, although over 70% of our respondents held one. Employees' lived experiences are also crucial to improving public health programming and ensuring that our work is relevant to our communities. The breadth of experiences public health brings to the table is evident from the individual-level survey results.

State and local agency leaders have opportunities to recruit more people from other degree programs or those with lived experience. The CPHWC has a plan to assemble a more diverse workforce and attract employees from other fields or sectors. It is also using entry-level engagement programs to develop future public health leaders, such as working with agencies to participate in the Colorado Public Health Works Program, a new apprenticeship initiative. It is recommended that public health leaders draw lessons from the collaborative to gain insights into the most effective approaches for engaging people interested in public health, even if they do not follow the traditional educational pathway into the field.

Education and Training Programs

Most employees noted that every one of the foundational public health competencies is important to their jobs, but about 40% said they were unable to perform or had only a beginner skill level related to emergency preparedness and policy development. These skills were crucial during the COVID-19 response, and despite the dedicated efforts and emphasis over the past three years, employees still perceive room for growth in 2023. Public health partners, such as CALPHO and the Rocky Mountain Public Health Training Center, can help train employees in these skills to prepare for the next pandemic and other emerging trends. Training centers should pay additional attention to these topics, both in the school setting and with professional development opportunities.

Employee Wellness and Retention

Colorado's public health workforce, while largely satisfied with their roles, organizations, and compensation, still report well-being concerns at double the rate of the national average. Disturbingly, nearly half of the workforce in Colorado feels their expertise is undervalued, and about one-third report having felt threatened, in contrast to the roughly one-quarter and 15% figures at the national level, respectively.

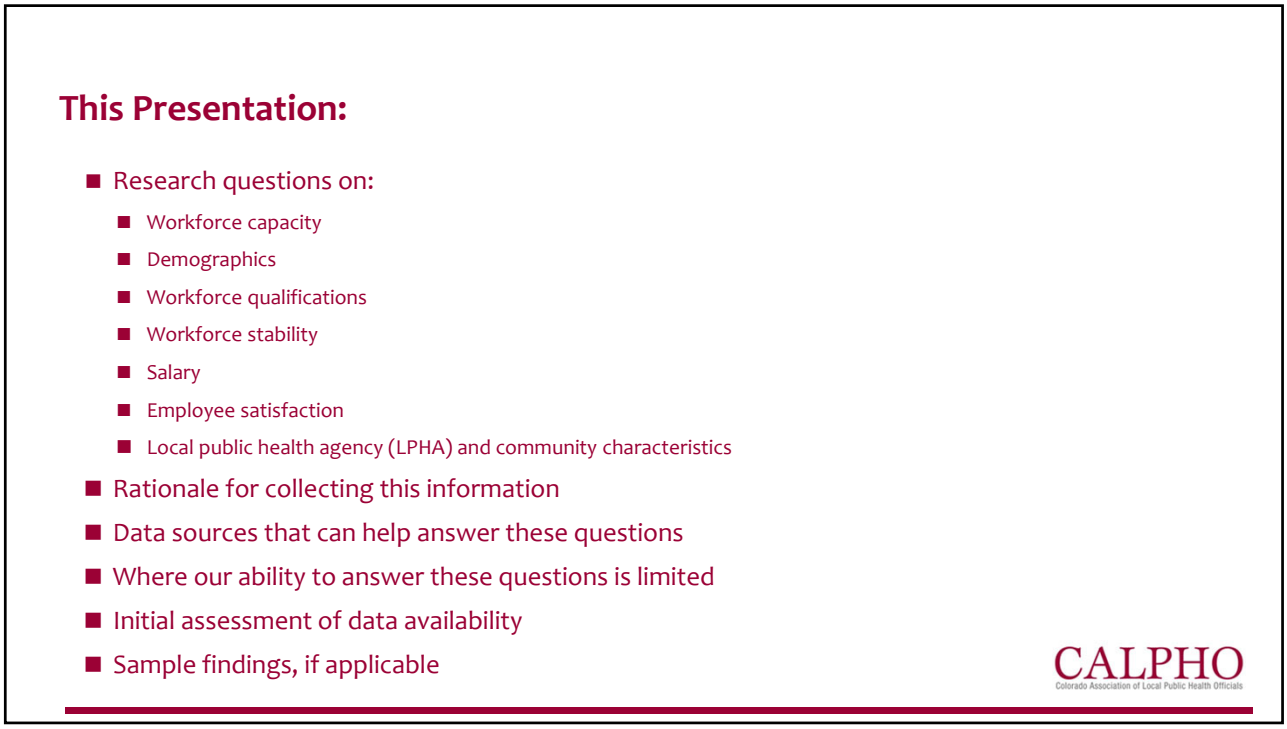
Those in environmental health positions may need extra support. Employees in these public-facing roles had the highest proportion of respondents who felt their public health expertise was undermined by people outside of the health department, and felt bullied, threatened, or harassed because of their position. Professional associations should discuss how they can best support their staff or utilize existing networks such as the Colorado Alliance for Resilient and Equitable Systems (CO-CARES).

CDPHE recently launched CO-CARES to build up public health and health care workers' well-being and resilience. CO-CARES includes resources for organizations and workers to support their recovery in the wake of the COVID-19 response. It will be important to disseminate such efforts across the state so employees are aware of available resources to support their well-being. The state should also create position-specific CO-CARES resources for those in public-facing roles. With more than one in 10 employees planning to leave their role within the next six months, it is imperative the field continues to put resources toward addressing employee well-being.

Final Thoughts

As the field grapples with the end of the COVID-19 emergency, we must ensure that public health's greatest asset — our employees — has the tools, experience, and support to thrive. When public health improves the workforce, including by increasing the amount of funding and staffing of each LPHA, more people live longer, healthier, and happier lives. The CPHWC, in partnership with CDPHE, will continue to assess the data, identify workforce gaps, and find and create solutions to further empower our public health workforce to better serve our communities.

Appendix A: Public Health Workforce Data Review Summary Findings



Workforce Capacity

Research Questions

How many full-time equivalents (FTE) and staff are in the local public health workforce?

Is the workforce sufficient to meet community public health needs and requirements?

How has this changed over time?

How do agency attributes influence key workforce indicators?

How does public health rely on contractors or community to fill gaps?

CALPHO
Colorado Association of Local Public Health Officials

Workforce Capacity

Rationale

- Knowing the number of staff in the public health workforce and whether it is sufficient to deliver required services can help advocate for appropriate funding
- Trends over time indicate what factors or events impact workforce for future planning efforts
- Analysis by agency attribute could point to best practices for workforce recruitment or retention
- Overreliance on contractors to fill gaps could indicate inefficiencies
- Overreliance on community to fill gaps has equity and funding implications

CALPHO
Colorado Association of Local Public Health Officials

Workforce Capacity
Sources

- CALPHO Cost Assessment, 2019
  - FTE counts by foundational capability and foundational service
  - Estimates of FTEs needed for full implementation of foundational capabilities and foundational services
- National Association of County & City Health Officials (NACCHO) Profile, 2019
  - Number of employees by occupational category as defined by NACCHO
  - Number of FTEs by occupational category as defined by NACCHO
- Colorado Public Health Administrative Directors (CoPHAD) Salary Survey, 2014, 2017, and 2021
  - Number of FTEs by position
- Office of Public Health Practice, Planning, and Local Partnerships (OPHP) Annual Survey, 2009, 2013, 2014, 2015, 2019, and 2021
  - Number of FTEs
  - Number of employees (2021 only)
  - Relationships with community-based organizations and contractors to fill gaps

CALPHO
Colorado Association of Local Public Health Officials

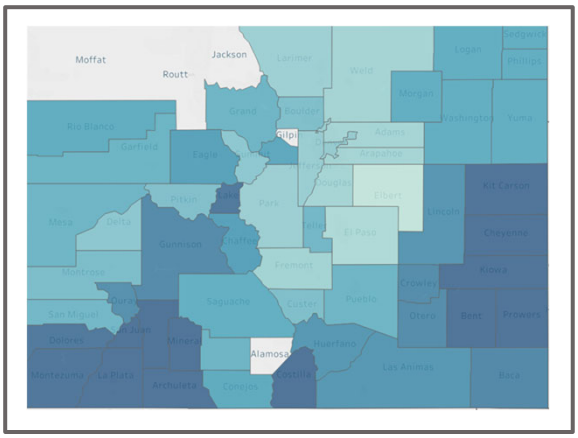
Workforce Capacity
Initial Assessment

What We Know	Limitations and Caveats to What We Know	What We Don't Know
• Number of local public health employees • Number of local public health FTEs • Number of local public health FTEs over time • FTE-to-population ratios • Subjective evaluations of unmet capacity	• No widespread use of data systems, so quality may differ by agency and year • No validated benchmarks on per capita workforce needs by occupation • Bureau of Labor Statistics only provides broad category of position (e.g., "epidemiologist") without information about industry (e.g., hospital vs. government agency)	• Benchmark FTE-to-population ratio • Differences in benchmark by LPHA type / size • Number of local public health employees over time • Scale of support from contractors and community-based organizations • Objective evaluations of unmet capacity • Evaluations of unmet capacity over time • Evaluations of unmet capacity by unique headcount • Staff by program or funding stream

Workforce Capacity

Sample Findings From 2019 OPHP Annual Survey and American Community Survey

FTE-to-Population Ratio, 2018



- FTEs per 100,000 residents varies from 11 to nearly 800
- More urban areas have a lower ratio
- FTE data not consistently reported in OPHP survey
- Counties with large seasonal industries (e.g., agriculture, tourism) have fluctuating populations

11 — 100 + — NOT REPORTED

CALPHO
Colorado Association of Local Public Health Officials

Workforce Capacity

Sample Findings From 2019 CALPHO Cost Assessment

- On average, emergency preparedness, communications, and health equity have the biggest gaps to full implementation
- Gaps reported in CALPHO Cost Assessment are subjective

Foundational Capability	Staffing Increase Needed
Assessment and Planning	+33%
Communications	+91%
Policy Development	+18%
Partnerships	+40%
Organizational Competencies	+34%
Emergency Preparedness	+110%
Health Equity	+90%

CALPHO
Colorado Association of Local Public Health Officials

Demographics
Research Questions

What are the demographic characteristics of Colorado's local public health workforce?

How do these characteristics compare with the state population?

What are the demographics of Colorado's counties?

CALPHO
Colorado Association of Local Public Health Officials

Demographics
Rationale

- The public health workforce should at least understand and at best reflect the racial, ethnic, and lived experience of the communities it serves
- Demographic diversity brings new and different perspectives to the field
- Demographic diversity can help bridge connections to community
- Age can be an indicator of staff experience
- Age can also indicate overall risk of turnover due to retirement

CALPHO
Colorado Association of Local Public Health Officials

Demographics
Sources

- OPHP Annual Survey, 2021
  - Staff race / ethnicity
  - Staff sex / gender
  - Staff median age
- American Community Survey, 2021
  - County and state race / ethnicity
  - County and state sex / gender
  - County and state median age
- NACCHO Profile, 2019
  - Top position race / ethnicity
  - Top position age

CALPHO
Colorado Association of Local Public Health Officials

Demographics
Initial Assessment

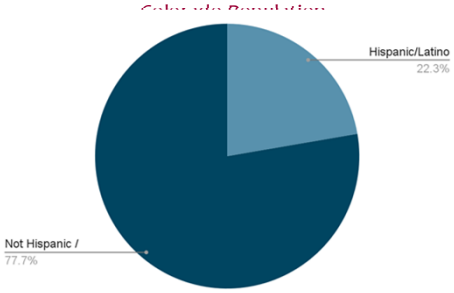
What We Know	Limitations and Caveats to What We Know	What We Don't Know
• Top position demographics • Demographics of other staff • Demographics of Colorado population	• Because OPHP data are self-reported, agencies may report demographics differently • Only have leadership demographics for 27 LPHAs represented in the NACCHO data set	• Demographics by position type • LGBTQ, immigration, or other demographic workforce data • Staff demographics trend data

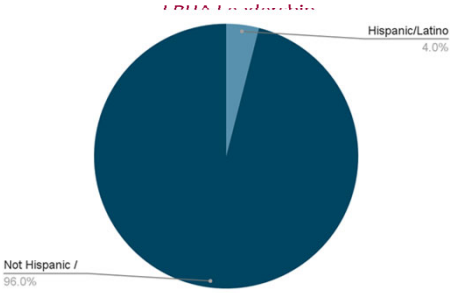
CALPHO
Colorado Association of Local Public Health Officials

Demographics

Sample Findings From 2019 NACCHO Profile

- Nearly a quarter of the state identifies as Hispanic/Latino, yet just one top position within LPHAs was identified as Hispanic/Latino in the NACCHO profile.





CALPHO
Colorado Association of Local Public Health Officials

Workforce Qualifications

Research Questions

How can we characterize the qualifications of the public health workforce?

How does this differ by geography or position?

Do workforce competencies match those needed for Core Public Health Services implementation, community needs, and public health plans?

Does Colorado have the education and training programs needed for a robust public health workforce?

CALPHO
Colorado Association of Local Public Health Officials

Workforce Qualifications
Rationale

- A skilled, qualified, and well-trained workforce can better serve the community, more effectively respond to emergencies, and be more resilient and adaptable to new challenges
- Understanding Colorado's current landscape of education and training programs can help identify gaps
- Understanding gaps in qualification can inform education and training investments

CALPHO
Colorado Association of Local Public Health Officials

Workforce Qualifications
Sources

- OPHP Annual Survey, 2021
  - Top training needs identified in self-assessment
  - Assessment of whether lack of skills is currently an issue
- NACCHO Profile, 2019
  - Top position educational attainment

CALPHO
Colorado Association of Local Public Health Officials

Workforce Qualifications

Initial Assessment

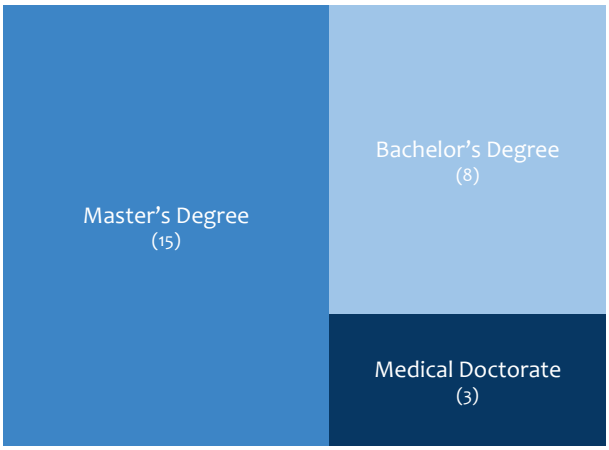
What We Know	Limitations and Caveats to What We Know	What We Don't Know
• Leadership educational attainment • Subjective measure of training needs • Whether overall skill needs are met • Desired certifications and degrees for most public health positions	• Only have leadership demographics for 26 LPHAs represented in the NACCHO data set • Public Health Workforce Interests and Needs Survey (PH WINS) data on educational attainment and training needs are not currently provided at a state level	• Staff lived experience • Non-leadership educational attainment • Lack of skills by position type • Objective measure of training needs • Training needs by position type • Whether workforce competencies match up with community needs and public health plans • Whether Colorado has the needed education and training programs to support a public health workforce

CALPHO
Colorado Association of Local Public Health Officials

Workforce Qualifications

Sample Findings From 2019 NACCHO Profile

- Most LPHA leadership has a Master's degree or higher



CALPHO
Colorado Association of Local Public Health Officials

Workforce Stability
Research Questions

What are are turnover rates within the local public health workforce?

What is the average tenure of the local public health workforce? How long have they been in their role, with the agency, and in governmental public health?

How many local public health workers are nearing retirement?

What are the main barriers to retaining and recruiting staff?

How stable are public health funding sources?

What positions are more likely to be term limited?

CALPHO
Colorado Association of Local Public Health Officials

Workforce Stability
Rationale

- Turnover rates inform whether recruitment or retention is a greater concern in shortages
- Turnover rates inform quantitative analyses on the cost of recruitment and potential savings of retention
- Short workforce tenures can be a pain point for LPHAs, impeding long-term planning, community trust-building, and ability to address upstream health determinants
- As workforce nears retirement, shortages may become more acute
- Identifying barriers/facilitators to recruitment and retention can provide keys to addressing/investing in them
- Knowing whether funding sources are stable can help workforce planning
- Knowing term limitations can help recruitment planning

CALPHO
Colorado Association of Local Public Health Officials

Workforce Stability
Sources

- OPHP Annual Survey, 2021
  - Turnover rates
  - Revenue sources
  - Number of FTEs eligible for retirement in 2022, 2023, 2024, and 2025
  - Barriers to recruiting and retaining workforce
- LinkedIn
  - Position, employer, and governmental public health tenure of leadership

CALPHO
Colorado Association of Local Public Health Officials

Workforce Stability
Initial Assessment

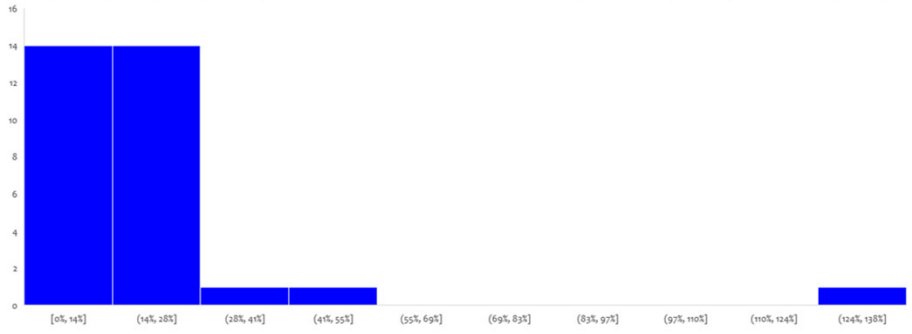
What We Know	Limitations and Caveats to What We Know	What We Don't Know
• Tenure for select leadership • Overall turnover rates • Overall retirement rates • Barriers to recruitment and retention during COVID	• Manual process to search LinkedIn for leadership tenure • Turnover data only indicate number of staff who left the organization, regardless of replacement status	• Turnover by position • Retirement by position • Turnover trends over time • Turnover-related cost data: Cost of hiring and onboarding by occupation and funding stream; consider usefulness of aggregate state data versus LPHA- or position-specific data • Anticipated changes to funding sources • Detail on stability of current funding sources • Barriers to recruitment and retention over time • Whether a position is term-limited

Workforce Stability

Sample Findings From 2021 OPHP Annual Survey

Turnover at most LPHAs is around 20%, but some experienced acutely high turnover in 2021.

Histogram of LPHAs by Overall Turnover Rate, 2021



CALPHO
Colorado Association of Local Public Health Officials

Salary

Research Questions

How does public health compensation compare to analogous private and public sector roles?

How does public health compensation compare to local median incomes?

How are public health positions funded?

CALPHO
Colorado Association of Local Public Health Officials

Salary
Rationale

- Salaries are assumed to be a major driver of recruitment and retention challenges
- Comparisons to median incomes and other sectors' wages can establish a benchmark
- Understanding funding sources can help assess opportunities to increase wages

CALPHO
Colorado Association of Local Public Health Officials

Salary
Sources

- CoPHAD Salary Survey, 2017 and 2021
  - Average salaries by position
- American Community Survey, annual through 2021
  - Average salaries by job type
- Employers Council Reports, annual through 2022
  - Salaries for select positions at select agencies

CALPHO
Colorado Association of Local Public Health Officials

Salary

Initial Assessment

What We Know	Limitations and Caveats to What We Know	What We Don't Know
• Public health wages • Public health wages compared to other wages • Changes to wages over time	• Difficult to find closely analogous public and private sector roles for wage comparison	• Detail on how positions are funded

CALPHO
Colorado Association of Local Public Health Officials

Salary

Sample Findings from 2017 and 2021 COPHAD Salary Survey and American Community Survey

- 5 LPHAs reported public health director data in the 2017 and 2021 COPHAD salary surveys
- PH director salaries increased 5% from 2017 to 2021
- Across all industries in Colorado, wages grew 31% in the same time period

CALPHO
Colorado Association of Local Public Health Officials

Employee Satisfaction
Research Questions

What types of public health employees are the least and most satisfied?

What characteristics of a position improve employee satisfaction?

What characteristics of an agency improve employee satisfaction?

CALPHO
Colorado Association of Local Public Health Officials

Employee Satisfaction
Rationale

- Employee satisfaction helps employers target where additional supports may be needed to increase retention

CALPHO
Colorado Association of Local Public Health Officials

Employee Satisfaction
Sources

- TBD

CALPHO
Colorado Association of Local Public Health Officials

Employee Satisfaction
Initial Assessment

What We Know	Limitations and Caveats to What We Know	What We Don't Know
	• PH WINS provides some insight, but responses are limited and may not be state specific	• Information on stress and burnout at state level • Reported satisfaction levels by position type • How decision-making structures impact employee satisfaction

CALPHO
Colorado Association of Local Public Health Officials

LPHA and Community Characteristics

Research Questions

How do the data discussed vary by LPHA characteristics?

How do the data discussed vary by community characteristics?

CALPHO
Colorado Association of Local Public Health Officials

LPHA and Community Characteristics

Rationale

- If certain LPHA characteristics present challenges or opportunities, other agencies may consider adopting similar approaches
- Community context is key for demographic comparisons and knowing how to appropriately scale staff
- Community context helps frame workforce needs around a community's expressed health priorities
- Community context helps paint the entire picture of our workforce's experience

CALPHO
Colorado Association of Local Public Health Officials

LPHA and Community Characteristics

Sources

- Colorado Rural Health Center, annual through 2022
  - Designates counties as urban, rural, or frontier
- Internal records
  - Agency type (district vs. MOU), participation in regional coalitions, participation in larger system
- CDC Social Vulnerability Index, biennial through 2018
  - Relative vulnerability of a community to disaster
- Robert Wood Johnson Foundation County Health Rankings, annual through 2022
  - Amalgamation of social context data
- Agency Community Health Assessments, Community Health Improvement Plans, strategic plans, accreditation records, and other guiding documents

CALPHO
Colorado Association of Local Public Health Officials

LPHA and Community Characteristics

Initial Assessment

What We Know	Limitations and Caveats to What We Know	What We Don't Know
• Agency types • Governance structures • Each community's health priorities and plans for improvement	• Characteristics of partnerships, governance structures, etc. are not standard, so conclusions may be limited	• Detailed financial records

CALPHO
Colorado Association of Local Public Health Officials

Other Considerations

- Data validation needed on some surveys
- What questions do policymakers have?
- How does workforce connect to community health outcomes?
- When are state averages useful?
- Can representative sample agencies be leveraged?
- What are the best practices for data collection and reporting?
- What solutions apply to all county government employees (not just public health), and is there potential for aligning these efforts?
- Measures of community trust and representativeness
  - Consider levels of community trust in LPHA and participation in efforts such as needs assessments
  - Regard community members as part of the public health workforce?

CALPHO
Colorado Association of Local Public Health Officials

Appendix B: List of LPHAs, Their Size, and Region

LPHA	Counties Served	CCI Regional District	NACCHO Size Designation	Population Served	Geography Designation
Adams County Public Health Department	Adams	Front Range District	Large	527,575	Urban
Alamosa County Public Health Department	Alamosa	Southern District	Small	16,592	Rural
Arapahoe County Public Health Department	Arapahoe	Front Range District	Large	655,808	Urban
Baca County Public Health Agency	Baca	Southern District	Small	3,432	Frontier
Bent County Public Health Agency	Bent	Southern District	Small	5,399	Frontier
Boulder County Public Health	Boulder	Front Range District	Medium	327,468	Urban
Broomfield Public Health and Environment	Broomfield	Front Range District	Medium	76,121	Urban
Chaffee County Public Health Department	Chaffee	Mountain District	Small	20,223	Rural
Cheyenne County Public Health Agency	Cheyenne	Eastern District	Small	1,732	Frontier
Clear Creek County Public and Environmental Health	Clear Creek	Mountain District	Small	9,355	Urban
Conejos County Public Health and Nursing Service	Conejos	Southern District	Small	7,579	Rural
Costilla County Public Health Agency	Costilla	Southern District	Small	3,603	Frontier
Custer County Public Health Agency	Custer	Mountain District	Small	5335	Frontier
Delta County Health Department	Delta	Western District	Small	31,602	Rural
Denver Department of Public Health and Environment	Denver	Front Range District	Large	713,252	Urban
Dolores County Public Health Agency	Dolores	Western District	Small	2,455	Frontier
Douglas County Public Health Department	Douglas	Front Range District	Medium	375,988	Urban
Eagle County Public Health Agency	Eagle	Mountain District	Medium	55,285	Rural
El Paso County Public Health	El Paso	Front Range District	Large	740,567	Urban
Elbert County Health and Environment	Elbert	Eastern District	Small	27,799	Urban

LPHA	Counties Served	CCI Regional District	NACCHO Size Designation	Population Served	Geography Designation
Fremont County Department of Public Health and Environment	Fremont	Mountain District	Small	49,621	Rural
Garfield County Public Health Department	Garfield	Western District	Medium	62,271	Rural
Gilpin County Public Health Agency	Gilpin	Mountain District	Small	5,891	Urban
Grand County Public Health	Grand	Mountain District	Small	15,769	Rural
Gunnison County Department of Health and Human Services	Gunnison	Western District	Small	17,267	Frontier
Jackson County Public Health Agency	Jackson	Mountain District	Small	1,302	Frontier
Jefferson County Public Health	Jefferson	Front Range District	Large	576,143	Urban
Kiowa County Public Health Agency	Kiowa	Southern District	Small	1,424	Frontier
Kit Carson County Department of Public Health and Environment	Kit Carson	Eastern District	Small	6,961	Frontier
Lake County Public Health Department	Lake	Mountain District	Small	7,327	Rural
Larimer County Health Department	Larimer	Front Range District	Medium	366,778	Urban
Las Animas-Huerfano Counties District Health Department	Las Animas, Huerfano	Southern District	Small	21,409	Frontier
Lincoln County Department of Public Health	Lincoln	Eastern District	Small	5,510	Frontier
Mesa County Public Health	Mesa	Western District	Medium	158,636	Urban
Moffat County Public Health Agency	Moffat	Western District	Small	13,177	Frontier
Montezuma County Public Health Agency	Montezuma	Western District	Small	26,468	Rural
Montrose County Public Health	Montrose	Western District	Small	43,811	Rural
Northeast Colorado Health Department	Morgan, Logan, Phillips, Sedgewick, Washington, and Yuma	Eastern District	Medium	71,517	Rural
Otero-Crowley Public Health Department	Otero, Crowley	Southern District	Small	23,917	Rural

LPHA	Counties Served	CCI Regional District	NACCHO Size Designation	Population Served	Geography Designation
Ouray County Public Health Agency	Ouray	Western District	Small	5,100	Rural
Park County Public Health Agency	Park	Mountain District	Small	17,939	Urban
Pitkin County Public Health Agency	Pitkin	Mountain District	Small	16,876	Rural
Prowers County Public Health and Environment	Prowers	Southern District	Small	11,854	Rural
Pueblo Department of Public Health and Environment	Pueblo	Southern District	Medium	169,544	Urban
Rio Blanco County Department of Public Health and Environment	Rio Blanco	Western District	Small	6,569	Frontier
Rio Grande County Public Health Agency	Rio Grande	Southern District	Small	11,325	Rural
Routt County Public Health Agency	Routt	Western District	Small	25,007	Rural
Saguache County Public Health Agency	Saguache	Southern District	Small	6,623	Frontier
San Juan Basin Public Health	Archuleta, La Plata	Western District	Medium	70,610	Rural
San Juan County Public Health Service	San Juan	Western District	Small	803	Frontier
San Miguel County Department of Health and Environment	San Miguel	Western District	Small	8,003	Frontier
Silver Thread Public Health District	Hinsdale, Mineral	Southern and Western districts	Small	1,706	Frontier
Summit County Public Health	Summit	Mountain District	Small	30,565	Rural
Teller County Public Health and Environment	Teller	Mountain District	Small	24,857	Urban
Weld County Department of Public Health and Environment	Weld	Front Range District	Medium	350,176	Urban

Appendix C: Position Categories

Position	Category
Advanced medical professional. Includes MDs, DOs, PAs, NPs, and APRNs. (Previously labeled public health physician)	Clinical/medical
Agency leadership	Administration
Animal control worker	Environmental
Business and financial operations staff	Administration
Case manager, care coordinator, or social worker	Clinical/medical
Case investigator/contact tracer	Public health
Community health worker	Public health
Epidemiologist / statistician / data analyst	Public health
Health educator	Public health
Information systems specialist	Administration
Laboratory worker	Clinical/medical
Licensed practical or vocational nurse	Clinical/medical
Medical assistant	Clinical/medical
Medical officer	Clinical/medical
Nursing aide / home health aide	Clinical/medical
Nutritionist	Clinical/medical
Office and administrative support staff	Administration
Oral healthcare professional	Clinical/medical
Other environmental health	Environmental
Preparedness staff	Public health
Program manager, coordinator, planner, or assistant	Public health
Public health or environmental health inspector	Environmental
Policy	Public health
Public information or communications professional	Administration
Registered nurse	Clinical/medical
Prefer not to say	
Other (please specify)	

Appendix D: Surveys

2023 OPHP LPHA Annual Survey Questionnaire

Note: Survey text shared in this appendix includes coding language and skip logic commands.

Start of Block: LPHA Name Start Block

Q1.1 2023 OPHP/LPHA Annual Survey This is the annual survey that fulfills the deliverable for the Local Planning and Support funding (i.e. per capita funding). In this survey we ask about the Core Public Health Services, both the Foundational Services and Foundational Capabilities. In this survey there are questions about the funding and capacity of LPHAs, some are part of the Public Health Gap and Needs Assessment, some will inform work by the Colorado Public Health Association's Public Health Nursing group, and all will help to make the case for public health through point in time and longitudinal, and quantitative/qualitative information. Information Sharing: 1) Individual survey responses will be shared with the Public Health Gap and Needs Assessment Steering Committee (CALPHO, Trailhead, and the Colorado Health Institute). 2) Aggregated at the health statistics region will be shared with the Colorado Public Health Association's Public Health Nursing group for the nursing specific questions. 3) Public facing information/dashboard will be created and have some individual level and some summary information. Please note: there is a link to the Maternal and Child Health questions at the end of this survey. We have the MCH survey as a separate survey link because we know in some cases it will be a different person responding. For your reference here is a pdf with all the questions in the survey: https://drive.google.com/file/d/1NqIhuVBh-d-kYeuu2wlmD3vKxWblWYoS/view?usp=share_link (link will open in new tab)

LPHA Name of LPHA

▼ Adams County Public Health Department (54) ... Weld County Department of Public Health and Environment (53)

Please enter the name and email address of survey respondent

o First and Last Name _____

o Official Email _____

End of Block: LPHA Name Start Block

Start of Block: Block 6

Q49 Background for the next 3 questions: In Fiscal Year 2023 (July 1, 2022 - June 30, 2023), ${LPHA/ChoiceGroup/SelectedChoices} received additional State General Fund dollars through the Local Support dollars through OPHP (i.e. the state per capita funding) through Senate Bill 21-243. SB 21-243 allocated an addition $10 million to LPHAs for three years. The first year was ARPA funding. FY23 and FY24 will be general funded. The funding is set to sunset June 30, 2024. We will use these responses to share the importance of non-categorical public health funding.

Q48 In Fiscal Year 2023 (July 1, 2022 - June 30, 2023), with the additional OPHP Local Support funding, what did you fund?

Q58 How many staff members (headcount) are funded, in full or in part, by this OPHP Local Support funding? (enter 0 if you are not using this for staff)

Q50 In Fiscal Year 2023 (July 1, 2022 - June 30, 2023), with the additional OPHP Local Support funding, are there any successes or important public health efforts to which this funding contributed?

Q51 What will it look like, or what will be the impacts, for ${LPHA/ChoiceGroup/SelectedChoices} if the additional $10 million in OPHP Local Support funding does not continue after June 30, 2024?

Q48 Please enter the total LPHA revenue from all sources (enter numbers only).

Q47 Please enter the percentage of LPHA revenue that comes from the following sources. Enter zero (0), if you do not have that funding source. (must add up to 100%)

Percent of Revenue (%)

Local (per capita) -not associated with fees/fines/direct service payments

Local Fees/Fines

Clinical

State (not federal pass-through)

Federal passed through the State

Direct federal

Other sources (name source below):

Unknown

Q2.1 2023 Annual Survey Core Public Health Services. This block of questions is about the Core Services -the Foundational Services and Capabilities. A short, graphical PDF of the services and capabilities with the respective related functions is here: https://drive.google.com/file/d/1KNvDJjpI_8XUfVJCXS7NFglEXm4t6qq0/view?usp=sharing

Q51 Are you aware that all staff at LPHAs have access to the Public Health Digital Library (PHDL)?

o Yes

o No

Display This Question: If Are you aware that all staff at LPHAs have access to the Public Health Digital Library (PHDL)? = Yes

Q52 Do you know how to access the Public Health Digital Library (PHDL)?

o Yes

o No

How many FTE do you have for each of the following Core Public Health Foundational Capabilities? (hover over each to see the associated functions)

Assessment and Planning (Including Vital Records)

▼ 0 (1) ... >10 (5)

Communications

▼ 0 (1) ... >10 (5)

Policy Dev and Support

▼ 0 (1) ... >10 (5)

Partnerships

▼ 0 (1) ... >10 (5)

Organizational Competencies

▼ 0 (1) ... >10 (5)

Emergency Preparedness and Response

▼ 0 (1) ... >10 (5)

Health Equity and the Social Determinants of Health

▼ 0 (1) ... >10 (5)

For which Foundational Capabilities do you have adequate funding?

▢ Assessment and Planning (Including Vital Records)

▢ Communications

▢ Policy Dev and Support

▢ Partnerships

▢ Organizational Competencies

▢ Emergency Preparedness and Response

▢ Health Equity and the Social Determinants of Health

▢ None of the above

Q2.4 Are any of the following foundational public health capabilities shared with or provided by your county(ies) government(s)?

▢ Assessment and Planning (Vital Records)

▢ Communications

▢ Emergency Preparedness and Response

▢ Organizational Competencies

▢ Policy Dev and Support

▢ None of the above

The following foundational public health capabilities are frequently shared, contracted, or supported by external entities. Does your LPHA receive external (i.e. outside of the LPHA) support for any of the following capabilities?

▢ Assessment and Planning (Vital Records)

▢ Assessment and Planning (i.e. PHIP or CHA)

▢ Emergency Preparedness and Response

▢ We do not receive support from other entities for any of the above capabilities

Do you contract any of the following foundational public health services to another entity or does another entity (anyone other than your LPHA) have a significant role in supporting any foundational services?

▢ Communicable Disease Prevention, Investigation and Control (i.e. Vaccinations)

▢ Environmental Public Health (i.e. Retail food inspection, On site wastewater treatment)

▢ Maternal, Child, Adolescent, and Family Health (i.e. Family planning services; WIC)

▢ Chronic Disease, Injury Prevention, and Behavioral Health Promotion

▢ Access to and Linkage with Healthcare

▢ We do not receive support from other entities for any of the above services

Q2.5 Please rate ${LPHA/ChoiceGroup/SelectedChoices}'s capacity in these Foundational Capabilities.

Assessment and Planning (Including Vital Records)

▼ High (1) ... Low (3)

Communications

▼ High (1) ... Low (3)

Policy Dev and Support

▼ High (1) ... Low (3)

Partnerships

▼ High (1) ... Low (3)

Organizational Competencies

▼ High (1) ... Low (3)

Q2.6 How many FTE does ${LPHA/ChoiceGroup/SelectedChoices} have for each Foundational Service?

Communicable Disease Prevention, Investigation and Control

▼ 0 (1) ... >10 (5)

Environmental Health

▼ 0 (1) ... >10 (5)

MCH and Family

▼ 0 (1) ... >10 (5)

Chronic Disease and Injury Prevention and BH Promotion

▼ 0 (1) ... >10 (5)

Access to/Linkage with Clinical Health Care

▼ 0 (1) ... >10 (5)

Number of employees (all staff: full or part time, permanent or term limited. Must be a whole number)

_____

Number of permanent FTEs (Full Time Equivalents (FTEs), may be a decimal)

_____

Number of term limited FTEs (Full Time Equivalents (FTEs), may be a decimal)

_____

Number of contract worker FTEs (Full Time Equivalents (FTEs), may be a decimal)

_____

How many non-temporary employees have separated from ${LPHA/ChoiceGroup/SelectedChoices}'s workforce over the prior calendar year. Please include retirements in this number. (whole number)

_____

How many current full-time employees will be either eligible for or are planning to retire for each of the following years? (whole number)

2023

2024

2025

2026

Eligible for or are planning to retire

How many positions are being actively recruited by your HR department? (whole number)

_____

Q45 This next question asks about number of employees in specific positions and is part of the Workforce Gap and Needs Assessment. These are only positions directly in your health department.

Q46 Please list the number of FTE (permanent and term-limited) and Headcount in the following positions. FTE may be a decimal, headcount should be a whole number. If you do not have staff for a position type, enter 0. Each cell must be filled in.

Permanent FTE

Term Limited or Contract FTE

Permanent headcount

Term Limited or Contact headcount

Agency leadership

Animal control worker

Business and financial operations staff

Case investigator/contract tracer

Community health worker

Epidemiologist/statistician/data analyst

Health educator

Information systems specialist

Laboratory worker

Licensed practical or vocational nurse

Medical assistant

Medical Officer

Nursing aide and home health aide

Nutritionist

Office and administrative support staff

Oral healthcare professional

Preparedness staff

Public health or environmental health inspector (for example: childcare, food, health facilities, water quality, etc.)

Public health physician

Public information or communications professional

Registered nurse

Q59 These next series of questions ask about public health nursing and will, in aggregate, provide information to the CPHA Public Health Nursing section.

Q49 Do you employ nurses in your public health agency?

o Yes

o No

Display This Question: If Do you employ nurses in your public health agency? = Yes

Q50 If yes, how many nurses do you employ in your public health agency?

_____

Display This Question: If Do you employ nurses in your public health agency? = Yes

Q51 How many of those nurses are registered nurses (note: LPNs are not registered nurses)?

_____

Q53 Are you actively recruiting for a registered nurse?

o Yes

o No

Q54 Does your LPHA contract clinical services and case management (eg. title ten, TB Case Management, laboratory testing)?

o No

o Yes

Display This Question: If Do you employ nurses in your public health agency? = No And Does your LPHA contract clinical services and case management (eg. title ten, TB Case Management,... = No

Q55 If your LPHA does not have RN on staff and does not have a contract with health clinic to provide clinical work, what position/role is your LPHA using to provide nursing services and case management?

o LPN

o Medical assistant

o Disease intervention specialist

o Community health worker

o Other (please specify) _____

Display This Question: If Do you employ nurses in your public health agency? = Yes

Q56 How long have the registered nurses been performing their jobs at your agency?

o < 1 year

o 1 - 3 years

o 4 - 7 years

o 7-10 years

o 10-20 years

o > 20 years

o Not applicable

Q57 What is the average salary range for these registered nurse positions?

o $49,999 or less

o > $50,000-$60,000

o > $60,000-$75,000

o > $75,000-$85,000

o $85,000 or more

o Not applicable

End of Block: Block 6

Start of Block: Medical Officer Block

Has your Medical Officer changed in the last year?

o Yes

o No

Display This Question: If Has your Medical Officer changed in the last year? = Yes

Please enter the name of your Medical Officer

_____

Display This Question: If Has your Medical Officer changed in the last year? = Yes

Please enter the email of your Medical Officer

_____

End of Block: Medical Officer Block

Start of Block: Board of Health

Q60 Do you have new Board of Health Members since the last survey (May 2022)?

o Yes (1)

o No (2)

Display This Question: If Do you have new Board of Health Members since the last survey (May 2022)? = Yes

Q61 Please enter the email addresses for all of the new Board of Health Members? (use as many text fields below as you need for the new member emails).

o New Board Member 1 email address:
_____

o New Board Member 2 email address:
_____

o New Board Member 3 email address:
_____

o New Board Member 4 email address:
_____

o New Board Member 5 email address:
_____

Display This Question: If Do you have new Board of Health members since the last survey (May 2022)? = Yes

Total Number of all Board Health members

Display This Question: If Do you have new Board of Health members since the last survey (May 2022)? = Yes

LBOH Number of all Board of Health members by category (select the primary category for the individual, each member should only be counted once):

#

County Commissioners

City Council Members

Other Elected Officials

Medical Officer

Community Based Organization (if not in a prior group)

Community Member (if not in a prior group)

Display This Question: If Do you have new Board of Health Members since the last survey (May 2022)? = Yes

How many Board of Health members have the following expertise (some members may have multiple areas of expertise and some none. The sum does not have to equal the total number of board members.):

#

Public health expertise

Environmental Health expertise

Other health expertise

Display This Question: If If How many Board of Health members have the following expertise (some members may have multiple are... Text Response Is Not Empty And And How many Board of Health members have the following expertise (some members may have multiple are... Text Response Is Greater Than 0

Q7.5 Please explain "other" expertise from above:

End of Block: Board of Health

Start of Block: MCH Survey

Q3.1 The next part of this Annual Survey is specific to the MCH work. We recognize that this may be a different person to respond to this portion of the survey. Please complete or have your MCH lead complete this survey: https://coloradopco.co1.qualtrics.com/jfe/form/SV_cBESBdtTm2fv9dQ

End of Block: MCH Survey

2023 Colorado Governmental Public Health Staff Survey

1. This survey is intended for governmental public health employees. Are you an employee of the Colorado Department of Public Health & Environment (CDPHE) or a local public health agency in Colorado?

- ○ Yes → ***Please continue to question 2.***
- ○ No → ***Stop. Please do not complete this survey.***

Experience

2. What is the highest level of school you have completed or the highest degree you have received?

- ○ Less than high school (grades 1-11, grade 12 but no diploma)
- ○ High school graduate or equivalent (e.g. GED)
- ○ Some college but no degree (incl. 2 year occupational or vocational programs)
- ○ Associates Degree (not occupational or vocational programs)
- ○ College graduate (e.g. BA, AB, BS)
- ○ Postgraduate (e.g. MA, MS, MPH, MPA, MSW, MBA, MD, DDs, PhD, JD, LLB, DVM)
- ○ Prefer not to say

3. We'd like to know about your life experience. This information is anonymous and confidential – it will never be attached to you, your name, or any personal information about you. Do any of the following describe you? **Check all that apply.**

- ☐ Veteran or active-duty military
- ☐ Member of the LGBTQ+ community
- ☐ Member of a tribal community
- ☐ First-generation immigrant from another country
- ☐ Refugee from another country
- ☐ Migrant family (moving from place-to-place within the U.S.)
- ☐ Living/have lived without stable housing
- ☐ Living/have lived without stable, reliable income
- ☐ Living/have lived without stable access to food
- ☐ Person affected by trauma
- ☐ Grew up or live in the county that I work for (only applicable to local public health agency employees)
- ☐ None of the above

4. How many years have you been working in your **current position**? Please round to the nearest year.

5. How many years have you been working in your **current agency** in total (in any position)? Please round to the nearest year.

6. How many years have you been working **in public health practice** in total (in any agency, in any position)? Please round to the nearest year.

7. Please select the foundational public health service that best represents the service area you work in. **Check all that apply.**

- ☐ Access to and linkage with health care
- ☐ Assessment and planning (for example, epidemiology, laboratory investigation, surveillance, and program evaluation)
- ☐ Chronic disease, injury prevention, and behavioral health promotion
- ☐ Communications team
- ☐ Communicable disease prevention, investigation, and control
- ☐ Emergency preparedness and response
- ☐ Environmental public health
- ☐ Health equity and the social determinants of health team
- ☐ Health facilities regulation
- ☐ Maternal, child, adolescent, and family health
- ☐ Organizational support (for example, human resources, legal services and analysis, financial management, information technology/informatics, and leadership and governance)
- ☐ Partnerships team
- ☐ Policy development and support
- ☐ Vital records
- ☐ Not applicable
- ☐ Don't know
- ☐ Prefer not to say

8. Please identify the classification that best represents your **current role** in the organization. This question refers to the type of role you serve in. This is NOT the same as your union/civil service title. Some job classifications are listed differently than you'd expect. For example, contact tracer can be found under "Case investigator/contact tracer." **Check all that apply.**

- ☐ Agency leadership
- ☐ Animal control worker
- ☐ Business and financial operations staff
- ☐ Case investigator/contact tracer
- ☐ Community health worker
- ☐ Epidemiologist / statistician / data analyst
- ☐ Health educator
- ☐ Information systems specialist
- ☐ Laboratory worker
- ☐ Licensed practical or vocational nurse
- ☐ Medical assistant
- ☐ Medical officer
- ☐ Nursing aide / home health aide
- ☐ Nutritionist
- ☐ Office and administrative support staff
- ☐ Oral healthcare professional
- ☐ Preparedness staff

- ☐ Program manager, coordinator, planner, or assistant
- ☐ Public health or environmental health inspector (for example, childcare, food, health facilities, retail, water quality, etc.)
- ☐ Public health physician
- ☐ Public information or communications professional
- ☐ Registered nurse
- ☐ Prefer not to say
- ☐ Other (please specify:_____)

9. Which of the following best describes your employment status at your current organization?

- ○ Contractor providing third party services to the health department
- ○ Permanent staff employed directly by the health department
- ○ Intern employed directly by the health department
- ○ Temporary/Term-Limited staff employed directly by the health department

10. Please indicate what percent time you are working for the public health department. For example, enter 50 to indicate 50%, half-time, or .5 FTE. Enter 100 to indicate 100%, full-time or 1.0 FTE, etc.

11. How is your position funded? **Check all that apply**.

- ☐ General Fund
- ☐ Grants
- ☐ Other (please specify:_____)
- ☐ Don't know

Competencies

The following questions are regarding the core public health foundational capabilities. Full definitions of these competencies can be accessed here and are summarized below.

- **Assessment and Planning**: access, collect, analyze, and manage data, including program evaluation, to support planning, policy, and decision making.
- **Communications**: provide clear, consistent, accurate, and timely health and environmental information to internal and external audiences.
- **Emergency Preparedness and Response**: prepare for, respond to, and recover from emergencies with health, environmental and medical impacts.
- **Health Equity and the Social Determinants of Health**: improve systems and institutions that create or perpetuate socioeconomic disadvantage, social exclusion, racism, historical injustice, or other forms of oppression.
- **Organizational Competencies**: support accountability, performance management, quality improvement, human resources, legal services and analysis, financial management, information technology/informatics, and leadership and governance.
- **Partnerships**: create, convene, and support strategic partnerships, including engaging community members and cross-sectoral partners, agencies, and organizations.
- **Policy Development and Support**: inform and implement policies to meet the community's changing health needs.

12. Please indicate how important each competency is in your day-to-day work.

	Not important	Somewhat unimportant	Somewhat important	Very important
Assessment and Planning	○	○	○	○
Communications	○	○	○	○
Emergency Preparedness and Response	○	○	○	○
Health Equity and the Social Determinants of Health	○	○	○	○
Organizational Competencies	○	○	○	○
Partnerships	○	○	○	○
Policy Development and Support	○	○	○	○

13. Please indicate your current skill level for each competency.

	Unable to perform (lacking the necessary skills)	Beginner (able to perform with assistance)	Proficient (able to perform independently)	Expert (able to assist or teach others)	N/A (current position does not require performing this item)
Assessment and Planning	○	○	○	○	○
Communications	○	○	○	○	○
Emergency Preparedness and Response	○	○	○	○	○

Health Equity and the Social Determinants of Health	○	○	○	○	○
Organizational Competencies	○	○	○	○	○
Partnerships	○	○	○	○	○
Policy Development and Support	○	○	○	○	○

Satisfaction

14. Considering everything, how satisfied are you currently with:

	Very dissatisfied	Somewhat dissatisfied	Neither dissatisfied nor satisfied	Somewhat satisfied	Very satisfied
Your job?	○	○	○	○	○
Your organization?	○	○	○	○	○
Your pay?	○	○	○	○	○
Your job security?	○	○	○	○	○

15. Please rate your level of agreement with the following items:

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
I have felt bullied, threatened, or harassed by individuals outside of the health department because of my role as a public health professional.	○	○	○	○	○
I have felt my public health expertise was undermined or challenged by individuals outside of the health department.	○	○	○	○	○

16. Please rate your level of agreement with the following statement: I intend to leave my position with the health department in the next six months. (Do not include intent to leave due to term limitations.)

- ○ Strongly disagree
- ○ Disagree
- ○ Neither agree nor disagree
- ○ Agree
- ○ Strongly agree

17. If you wish, you may provide comments below about your workplace environment or level of job satisfaction:

Demographics

18. What is your age (as of your last birthday)?

- ○ Under 25 years old
- ○ 25-49 years old
- ○ 50-64 years old
- ○ 65 years or older
- ○ Prefer not to say

19. How do you currently identify your gender?

- ○ Female
- ○ Male
- ○ A non-binary person, including Genderqueer Person, Gender Nonconforming Person, Gender Expansive, Two-Spirit, Neither Woman nor Man
- ○ Other/Different Gender Identity
- ○ Don't know
- ○ Prefer not to say

20. Which one or more of the following would you use to describe yourself? **Check all that apply.**

- ○ American Indian or Alaska Native
- ○ Asian
- ○ Black or African American
- ○ Hispanic / Latino/a/x
- ○ Middle Eastern or North African
- ○ Native Hawaiian or Other Pacific Islander
- ○ White
- ○ Some other race/ethnicity
- ○ Don't know
- ○ Prefer not to say

21. Please select the public health agency you work at. As a reminder, individual-level responses will not be shared beyond CHI, who is responsible for analyzing and reporting aggregated data. Your survey responses will be combined with other respondents' and will not contain identifiable personal information.

- ○ Colorado Department of Public Health and Environment
- ○ Adams County Health Department
- ○ Alamosa County Public Health Department
- ○ Arapahoe County Public Health Department
- ○ Baca County Public Health
- ○ Bent County Public Health Agency
- ○ Boulder County Public Health
- ○ Broomfield Department Public Health and Environment
- ○ Chaffee County Public Health
- ○ Cheyenne County Public Health Agency
- ○ Clear Creek County Public and Environmental Health Department
- ○ Conejos County Public Health and Nursing Service
- ○ Costilla County Public Health Agency
- ○ Custer County Public Health
- ○ Delta County Health Department
- ○ Denver Department of Public Health and Environment
- ○ Dolores County Public Health
- ○ Douglas County Health Department
- ○ Eagle County Public Health and Environment
- ○ El Paso County Public Health
- ○ Elbert County Public Health
- ○ Fremont County Department of Public Health and Environment
- ○ Garfield County Public Health
- ○ Gilpin County Public Health Agency

- ○ Grand County Public Health
- ○ Gunnison County Department of Health and Human Services
- ○ Jackson County Public Health
- ○ Jefferson County Public Health
- ○ Kiowa County Public Health
- ○ Kit Carson County Department of Public Health and Environment
- ○ Lake County Public Health Agency
- ○ Larimer County Department of Health and Environment
- ○ Las Animas-Huerfano Counties District Health Department
- ○ Lincoln County Public Health
- ○ Mesa County Public Health
- ○ Moffat County Public Health Agency
- ○ Montezuma County Public Health Department
- ○ Montrose County Public Health
- ○ Northeast Colorado Health Department
- ○ Otero County Health Department
- ○ Ouray County Public Health
- ○ Park County Public Health
- ○ Pitkin County Public Health Agency
- ○ Prowers County Public Health and Environment
- ○ Pueblo Department of Public Health and Environment
- ○ Rio Blanco County Public Health
- ○ Rio Grande County Public Health Department
- ○ Routt County Public Health
- ○ Saguache County Public Health Nursing Service
- ○ San Juan Basin Public Health
- ○ San Juan County Public Health
- ○ San Miguel County Department of Public Health
- ○ Silver Thread Public Health District
- ○ Summit County Public Health
- ○ Teller County Public Health and Department
- ○ Weld County Health Department of Public Health and Environment
- ○ Prefer not to say

Endnotes

1 de Beaumont Foundation. 2021 Public Health Workforce Interests and Needs Survey. (2021) https://phwins.org/national#

2 National Association of County and City Health Officials. 2019 National Profile of Local Health Departments. (2019) https://www.naccho.org/uploads/downloadable-resources/Programs/Public-Health-Infrastructure/NACCHO_2019_Profile_final.pdf

3 Regional Districts. (2020) Colorado Counties, Inc. https://ccionline.org/about/regional-districts/

4 Colorado: County Designations. (2022) Colorado Rural Health Center. https://coruralhealth.org/wp-content/uploads/2013/10/2022-county-designations.pdf

5 Colorado Local Public Health & Environmental Resources. Core Public Health Services. Colorado Department of Public Health & Environment. (2023) https://cdphe-lpha.colorado.gov/resources/resources-by-core-service

6 de Beaumont Foundation. The Public Health National Center for Innovations, Public Health Accreditation Board. Protecting the Public's Health: An Estimate of Staffing Needed to Serve the Nation. (2021) https://phnci.org/uploads/resource-files/Staffing-Up-Final-Report.pdf

7 Regional Districts. (2020) Colorado Counties, Inc. https://ccionline.org/about/regional-districts/

8 Public Health Accreditation Board. Workforce Calculator. (2023) https://phaboard.org/center-for-innovation/workforce/

9 United States Census Bureau. COLORADO: 2020 Census. (2020) https://www.census.gov/library/stories/state-by-state/colorado-population-change-between-census-decade.html

10 de Beaumont Foundation. The Public Health Workforce in the COVID-19 Era: Younger, More Diverse, With High Levels of Stress and Intent to Leave. (2021) https://debeaumont.org/wp-content/uploads/2022/11/2021KeyFindings..pdf

11 de Beaumont Foundation. The Public Health Workforce in the COVID-19 Era: Younger, More Diverse, With High Levels of Stress and Intent to Leave. (2021) https://debeaumont.org/wp-content/uploads/2022/11/2021KeyFindings..pdf

12 Colorado Health Institute. Mission Not Quite Accomplished: Most Veterans Are Covered, But Some Still Lack Care. (2014) https://www.coloradohealthinstitute.org/research/mission-not-quite-accomplished-most-veterans-are-covered-some-still-lack-care

13 American Immigration Council. Immigrants in Colorado. (2020) https://www.americanimmigrationcouncil.org/research/immigrants-colorado

14 Movement Advancement Project. Colorado's Equality Profile. (2019) https://www.lgbtmap.org/equality-maps/profile_state/CO

15 DeBeaumont Foundation. 2021 Public Health Workforce Interests and Needs Survey Well-Being. (2021) https://phwins.org/national/dashboard?&type=public&fi=0_1&topic=6&fe=all_employees&c=nothing&ci=OFF&dl=point_estimate&sort=def

16 de Beaumont Foundation. 2021 Public Health Workforce Interests and Needs Survey Engagement and Satisfaction. (2021) https://phwins.org/national/dashboard?&type=public&fi=0_1&topic=5&fe=all_employees&c=nothing&ci=OFF&dl=point_estimate&sort=def

17 Colorado Community Managed Care Network. Key Findings Report: Local Public Health Agency Interviews. (2023) https://drive.google.com/file/d/1ehlDl4O_x0y4XTJtsYcbAdIn3sOYzPp8/view

18 Colorado Community Managed Care Network. Key Findings Report: Local Public Health Agency Interviews. (2023) https://drive.google.com/file/d/1ehlDl4O_x0y4XTJtsYcbAdIn3sOYzPp8/view


CALPHO
Colorado Association of Local Public Health Officials


COLORADO HEALTH INSTITUTE
Informing Strategy. Advancing Health.


CDPHE
COLORADO
Local Public Health &
Environmental Resources


trailhead
INSTITUTE
For public health innovation