

**MONTANA PUBLIC HEALTH**

# **PUBLIC HEALTH WORKFORCE ASSESSMENT**

---

Montana Public Health Workforce Development Group

**DECEMBER 2020**



**TABLE OF CONTENTS**

Executive Summary ..... 3  
Background & Methods ..... 5  
    Why Support Workforce Development?..... 5  
    Overview & Purpose of Report ..... 5  
    Survey Design ..... 6  
Results..... 7  
    Demographics ..... 7  
    Core Competency Skill Levels & Training Motivation ..... 13  
    All Tiers - Tier 1, 2, & 3 ..... 13  
    Tier 1 ..... 14  
    Tier 2 ..... 16  
    Tier 3 ..... 17  
Recommendations ..... 18

**ACKNOWLEDGEMENTS**

Understanding and addressing public health workforce strengths, interests, and needs are essential to improving the health of Montanans. Obtaining the findings in this report would not have been possible without the contributions of staff throughout Montana’s state, local, and tribal health departments. We want to thank those who participated in the survey, as well as the Montana Healthcare Foundation for its generosity and University of Montana’s Center for Children, Families, and Workforce Development for the many hours dedicated to the project. We want to convey our gratitude for the support we received, which will have a long-lasting impact on Montana’s public health workforce development.

**CONSIDERATIONS**

The Montana Public Health Workforce Assessment was distributed from June 24, 2019 until September 13, 2019. 50 of Montana’s health departments elected to participate. 465 of 902 staff completed the survey in full and consented to be included in the following report. The survey was designed using the Core Competencies for Public Health Professionals, Public Health Workforce Interests and Needs Survey, and the Public Health Accreditation Board’s Standards and Measures for Accreditation. Workforce needs that have emerged due to the COVID-19 pandemic are not reflected in this report.

**QUESTIONS & COMMENTS**

For data and other inquiries about this report, please contact:

**Alexis Tobin, MA**

*Montana Department of Public Health and Human Services*  
406.444.0210  
alexis.wolf@mt.gov

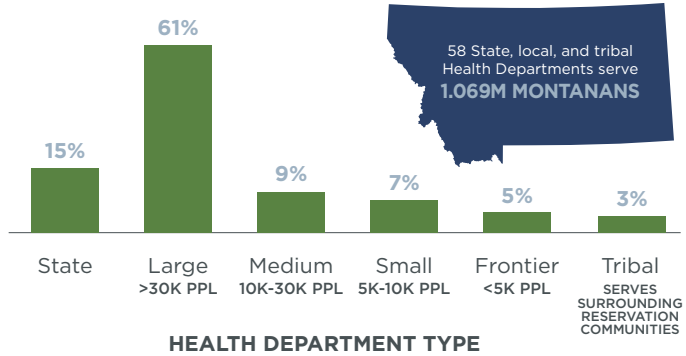
**Emily Weiler, BS**

*Montana Public Health Training Center*  
406.243.4055  
Emily.Weiler@mso.umt.edu

# Executive Summary

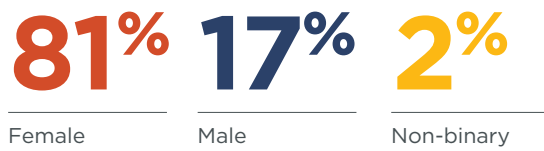
MONTANA PUBLIC HEALTH WORKFORCE ASSESSMENT (465 RESPONDENTS)

## MONTANA PUBLIC HEALTH WORKFORCE SUMMARY

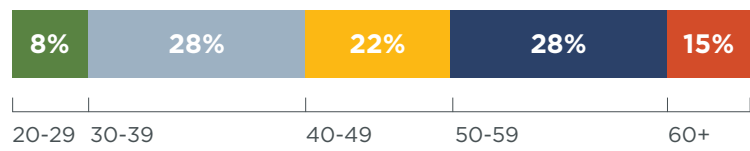


## MONTANA PUBLIC HEALTH WORKFORCE DEMOGRAPHICS

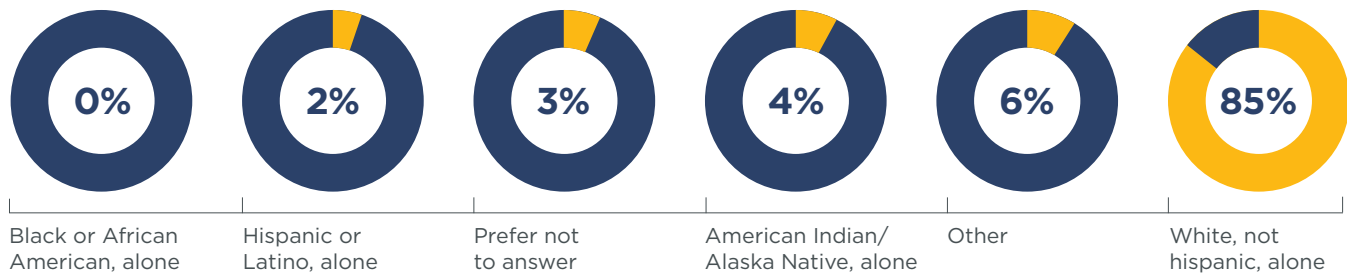
### GENDER



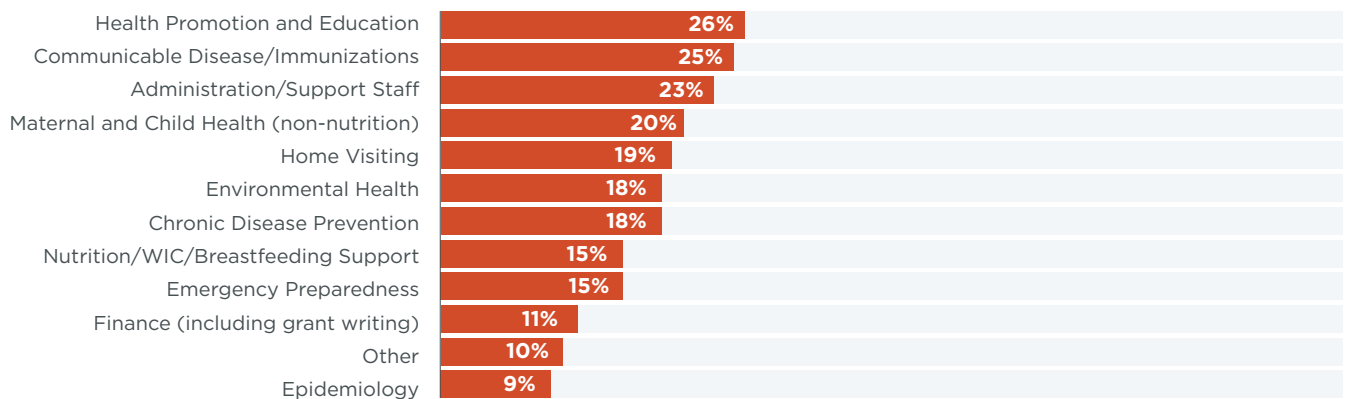
### AGE



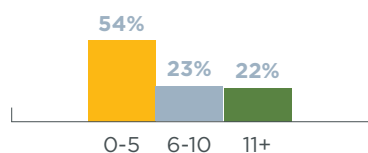
### ETHNICITY



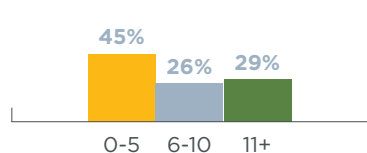
### AREA OF WORK



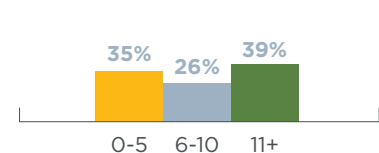
### YEARS IN CURRENT POSITION



### YEARS IN CURRENT DEPARTMENT

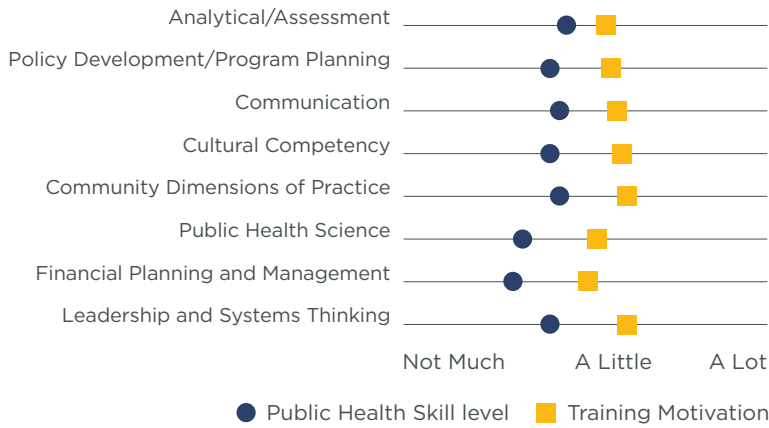


### YEARS IN PUBLIC HEALTH



# MONTANA PUBLIC HEALTH WORKFORCE COMPETENCIES AND TRAINING SUMMARY: SELF-REPORTED

## CORE COMPETENCIES FOR PUBLIC HEALTH PROFESSIONALS



### Analytical/Assessment

▲ Highest Skill Proficiency

### Financial Planning and Management

▼ Lowest Skill Proficiency

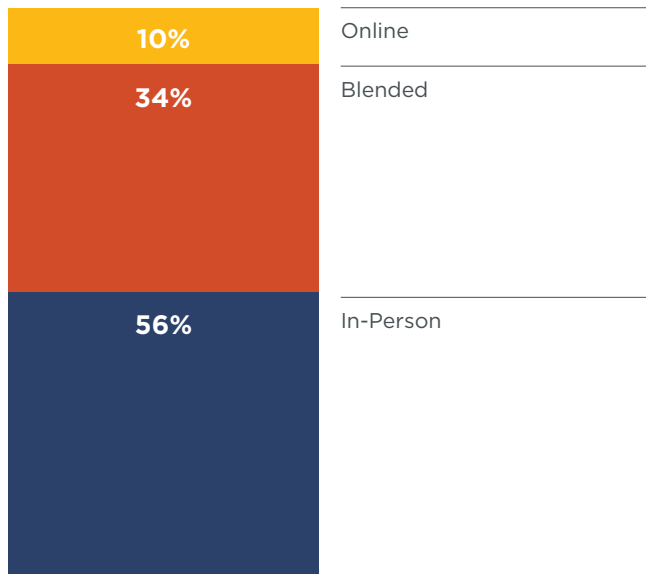
### Leadership and Systems Thinking

▲ Highest Motivation to Train

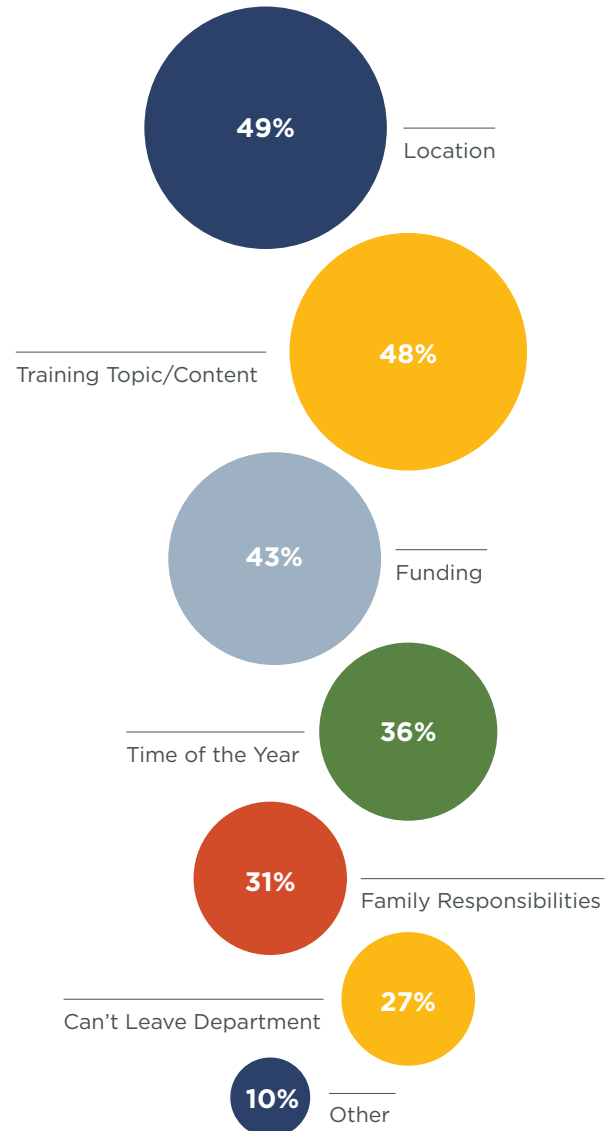
### Financial Planning and Management

▼ Lowest Motivation to Train

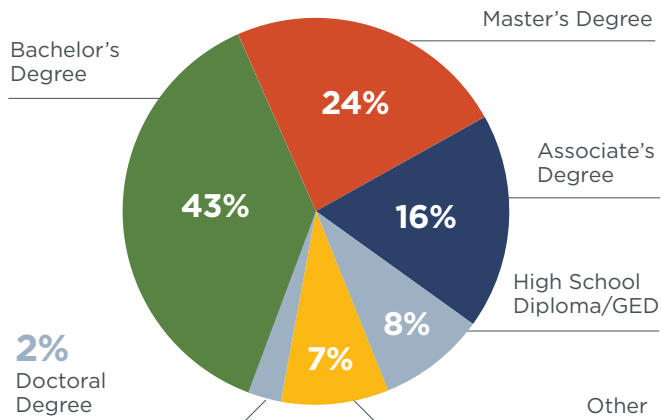
## PREFERRED TRAINING TYPE



## BARRIERS TO TRAINING



## HIGHEST LEVEL OF EDUCATION



The Montana Public Health Workforce Assessment was distributed from June 24, 2019 until September 13, 2019. 50 of Montana's health departments elected to participate. 465 of 902 staff completed the survey in full and consented to be included in the following report.

# Background & Methods

## Why Support Workforce Development?

The success of public health programs, policies, and practices depends on the experience and skills of the staff planning, implementing, and evaluating them. This makes it necessary to support public health staff in their skills development through training and education or workforce development programs. Reports and assessments completed by national public health organizations and agencies have indicated that workforce development should be a top priority to maintain quality and ensure sustainability of public health services. These include:

- [10 Essential Public Health Services](#)
- [Public Health Accreditation Board \(PHAB\) Standards and Measures](#)
- [Public Health 3.0](#)
- [Public Health Workforce Interests and Needs Survey \(PH WINS\)](#)

To ensure that a community's current and emerging health needs are met, the public health workforce must be supported and prepared, both with adequate skills and expertise. This makes investing in workforce development initiatives and activities particularly important.

## Overview & Purpose of Report

Montana has a decentralized public health system, which makes it challenging to identify skill levels and needs of the public health workforce. To support the state's public health workforce development efforts, specifically those of the Montana Public Health Workforce Development Group (MTPHWFD Group), the 2019 Montana Public Health Workforce Assessment was developed and distributed to health departments statewide. The survey was open from June 24, 2019 until September 13, 2019.

Although the survey was sent to all Montana health departments, 50 elected to participate. Out of the 902 reported staff from statewide health departments, 465 participated. Only complete responses, where the individual consented to participate in this report, are included. The following report shows the data collected from the 465 survey respondents, accounting for 40 local health departments, 2 tribal health departments, and the state health department - Montana Department of Public Health and Human Services (DPHHS), Public Health and Safety Division (PHSD).

Findings from the survey will be used for the following:

- Identify public health workforce strengths and opportunities for improvement
- Identify public health workforce interests and needs
- Provide data for public health workforce development plans
- Understand demographic characteristics of the public health workforce
- Support public health succession planning and retention efforts

## Survey Design

The following resources framed the survey design:

- A. [The Core Competencies for Public Health Professionals](#): Developed by the Council on Linkages Between Academia and Public Health Practice, and based on the 10 Essential Public Health Services, the Core Competencies are foundational skills desirable for professionals working in the practice, education, and research of public health. The competencies are organized into eight skill domains within public health and three career tiers of public health:
  1. Analytical/Assessment
  2. Communication
  3. Community Dimensions of Practice
  4. Cultural Competency
  5. Financial Planning and Management
  6. Leadership and Systems Thinking
  7. Policy Development/Program Planning
  8. Public Health Sciences
- B. [The Public Health Workforce Interest and Needs Survey](#) (PH WINS): Created by the Association for State and Territorial Public Health Officials (ASTHO) and the de Beaumont Foundation, PH WINS is a national survey completed by the governmental public health workforce, providing data on demographics, training needs, and interests. PH WINS utilized the Core Competencies to establish a national public health workforce competency baseline. Questions were created for each of the Core Competency domains and sub-competencies to assess skill levels of the public health workforce.
- C. [The Public Health Accreditation Board's](#) (PHAB) Standards and Measures for Accreditation: PHAB's accreditation process assesses a health department's capacity to carry out the ten essential public health services, manage an effective health department, and maintain strong and effective communications with the governing entity. Within the Standards and Measures for Accreditation are criteria on maintaining a competent public health workforce:
  - PHAB Standard 8.1 - Encourage the development of a sufficient number of qualified public health workers
  - PHAB Standard 8.2 - Ensure a competent workforce through the assessment of staff competencies, the provision of individual training and professional development, and the provision of a supportive work environment

The survey design included the following question types:

- Respondents self-identified their appropriate career tier
- Respondents self-assessed their current proficiency in core competencies within each of the eight skill domains on a 1 to 4 scale (1=None, 2=Aware, 3=Knowledgeable, 4=Proficient)
- Respondents self-assessed their motivation to attend training for each competency on a 1 to 4 scale (1=No Motivation, 2=Slightly Un-Motivated, 3=Slightly Motivated, 4=Very Motivated)
- Respondents completed demographic questions
- Respondents completed questions about training opportunities, methods, and attendance

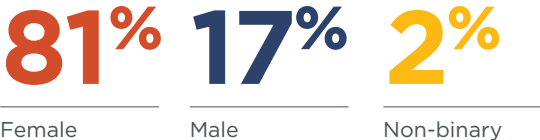
The Montana Public Health System Improvement Task Force (PHSITF), MTPHWFD Group, Lead Local Public Health Officials, and University of Montana Institutional Review Board vetted and tested the survey prior to distribution.

# Results

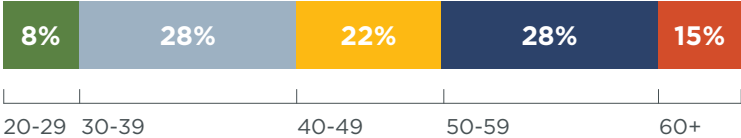
**465** out of 902 reported statewide public health employees participated in the Montana Public Health Workforce Assessment survey. The following are the demographics and competency results reported from the 465 participants. Only complete responses where the individual consented to participate in the survey and report are included.

## DEMOGRAPHICS

### GENDER



### AGE



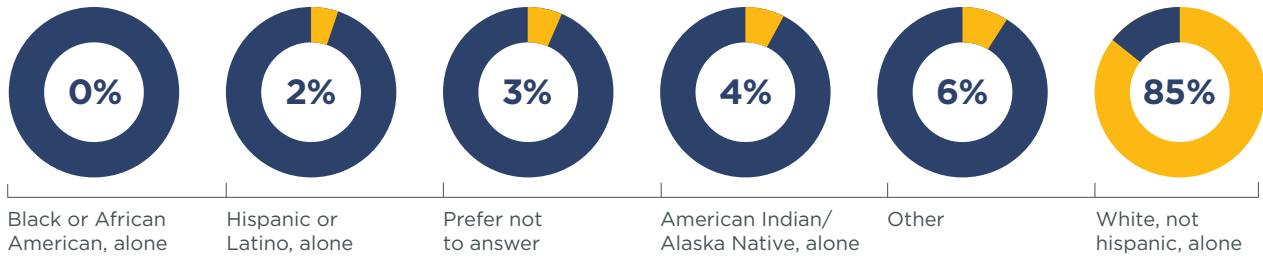
#### Strengths

- Of those surveyed, 58% are under age 50. Efforts to use the seasoned workforce to invest in succession planning and retention activities should be made.

#### Opportunities

- Of those surveyed, 81% are female, 17% are male, and 2% are non-binary. Efforts to close the gender gap should be made, including promoting public health education and careers.

## ETHNICITY



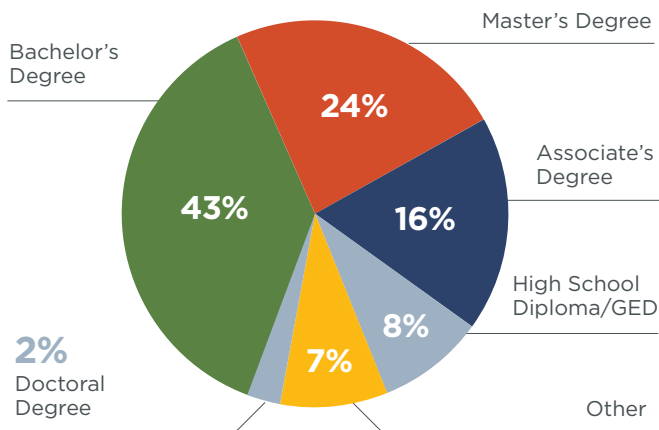
### Strengths

- In general, race and ethnicities among the statewide public health workforce are proportionally representative to Montana's population.

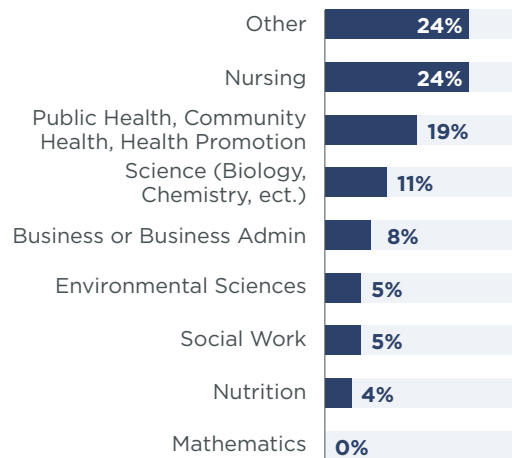
### Opportunities

- While the statewide public health workforce is proportionally representative to Montana's population, efforts to increase cultural responsiveness should be made.
- Though the public health workforce is representative of the state's population overall, they are not representative of the populations experiencing the greatest health disparities. For Montana to reach health equity goals, the public health workforce make up should be more representative of those communities.

## HIGHEST LEVEL OF EDUCATION



## SUBJECT STUDIED



### Strengths

- Of those surveyed, 43% have Bachelor's Degrees and 24% have Master's Degrees.
- Of those surveyed, 44% have degrees in subjects that support public health.

### Opportunities

- Only 19% of those surveyed have degrees in Public Health, Community Health or Health Promotion. Efforts to increase education and training in foundational public health skills should be made.

## LICENSES & CERTIFICATIONS

### LICENSE TYPE

22%

Nursing  
(RN, LPN)

10%

Sanitarian (RS)

7%

Other

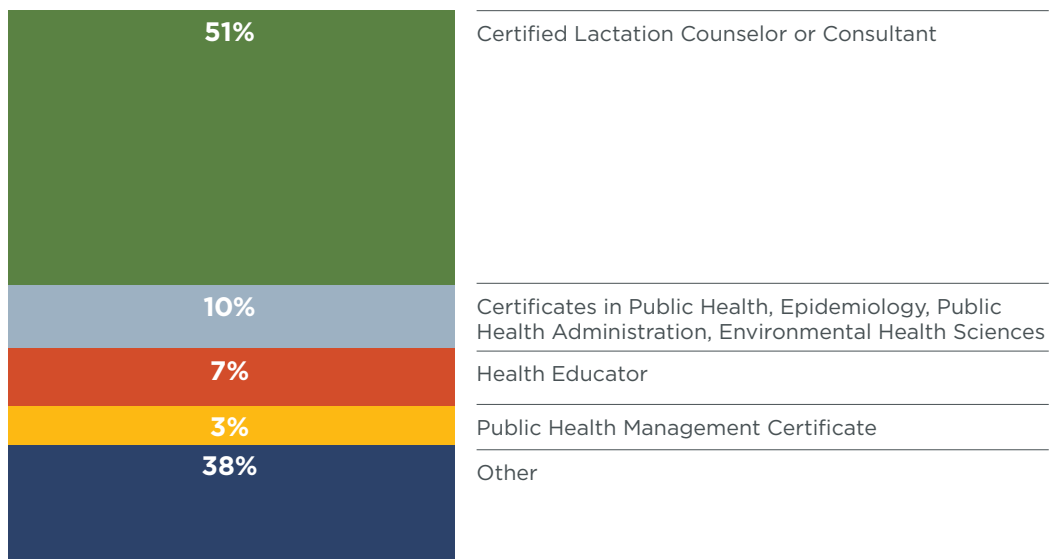
3%

Dietician/  
Nutritionist

0%

Doctor (MD)

### CERTIFICATE TYPE



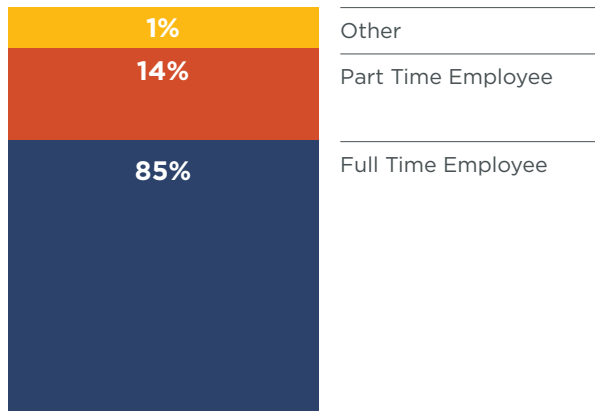
#### Strengths

- Of those surveyed, 42% are professionally licensed. Efforts should be made to support license maintenance, if the license held is relevant to a job position.

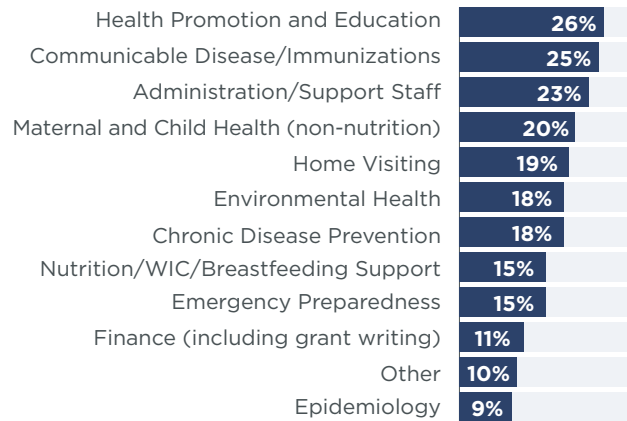
#### Opportunities

- Of those surveyed, 21% have a public health certification. Efforts to increase credentialed public health professionals should be made.

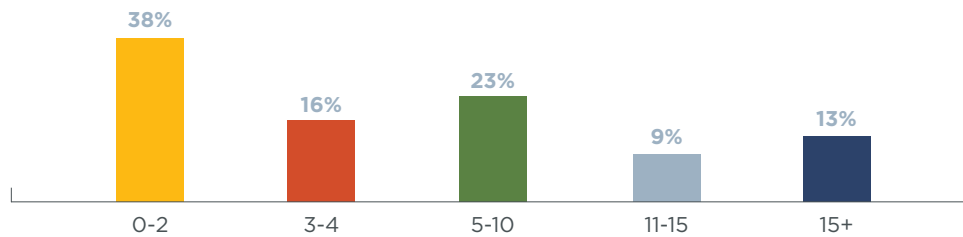
## CURRENT EMPLOYMENT STATUS



## PUBLIC HEALTH PROGRAM/DEPARTMENT



## YEARS IN CURRENT POSITION



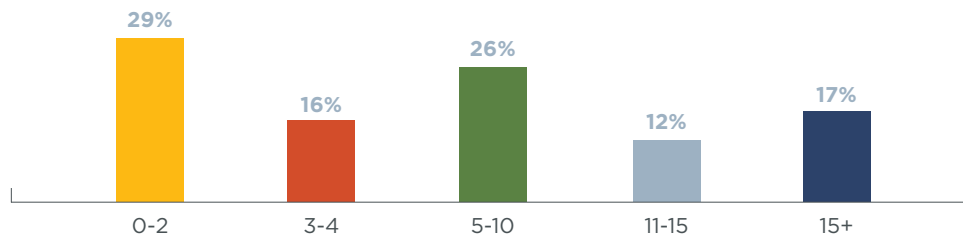
### Strengths

- Of those surveyed, 23% have been in their position for 5-10 years, and 13% for more than 15 years. Efforts should be made to foster leadership skills among this group and provide opportunities to learn from them.

### Opportunities

- Of those surveyed, 38% are new to their position. Efforts should be made to support new public health staff to promote retention and strengthen skills.

## YEARS IN CURRENT DEPARTMENT



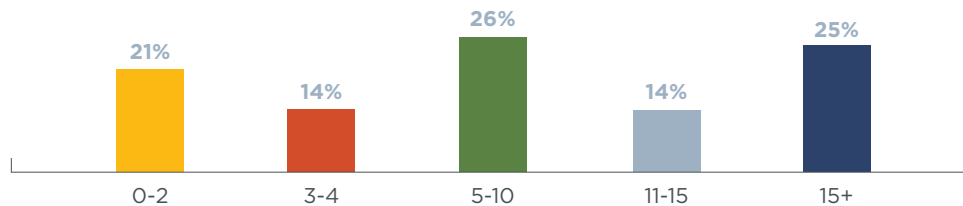
### Strengths

- Of those surveyed, 26% have been with their health department for 5-10 years, and 17% for more than 15 years. Efforts should be made to foster leadership skills among this group and provide opportunities to learn from them.

### Opportunities

- Of those surveyed, 29% have been with their health department for 0-2 years. Efforts should be made to support new public health staff to promote retention and strengthen skills.

## YEARS IN PUBLIC HEALTH



### Strengths

- The current public health workforce is comprised of experienced public health practitioners. 26% of those surveyed have been in public health practice for more than 5 years, 14% for more than 11 years, and 25% for more than 15 years. Efforts should be made to retain seasoned workers and provide those with less experience opportunities to learn from them.

### Opportunities

- A combined 35% of those surveyed have been in public health practice for less than 4 years. Efforts should be made to provide professional development opportunities to those new to public health practice.

## YEARS UNTIL RETIREMENT



### Strengths

- Most of the public health workforce surveyed will not retire for at least 10 years.

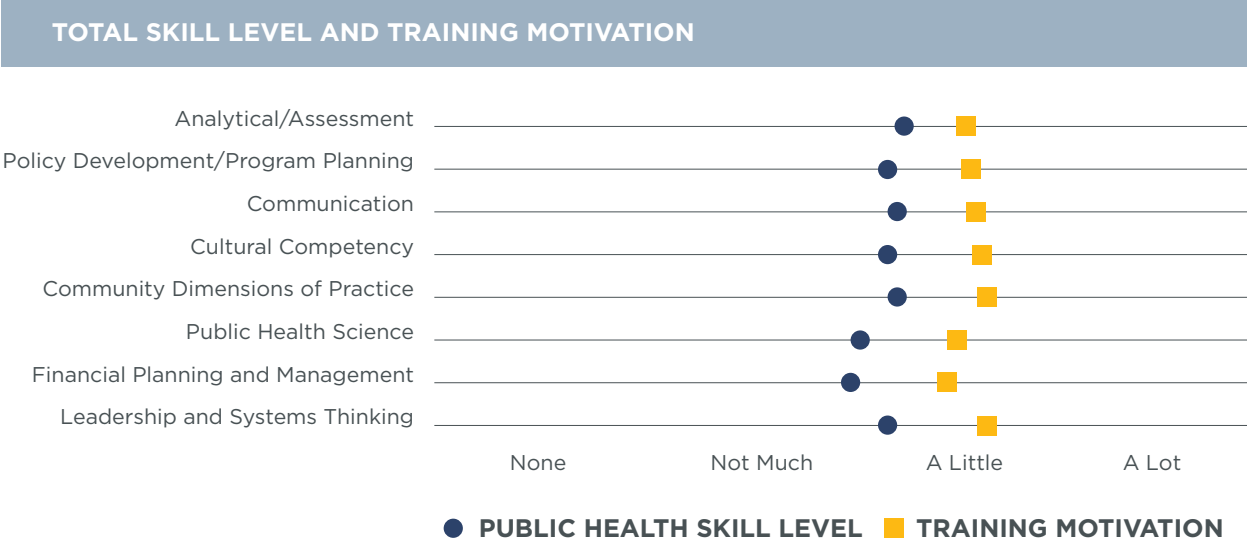
### Opportunities

- With 19% of survey respondents retiring in 0-5 years, and 20% in 6-10 years, efforts to create sustainable succession plans for staff nearing retirement should be made.

# Core Competency Skill Level & Training Motivation

Statewide public health staff self-assessed their current proficiency in the core competencies within the eight public health domains, alongside their motivation to participate in training associated with each competency. The sections below reflect the survey results from each tier of the Montana public health workforce. The sub-competencies within each domain with the lowest reported skill levels and highest reported motivation for training are highlighted, to help prioritize workforce needs and guide workforce development planning.

## ALL TIERS - TIER 1, 2, & 3



Across all tiers, the three lowest skill domains among the statewide public health workforce are:

- 1. Financial Planning and Management Skills;
- 2. Public Health Science Skills; and
- 3. Cultural Competency Skills.

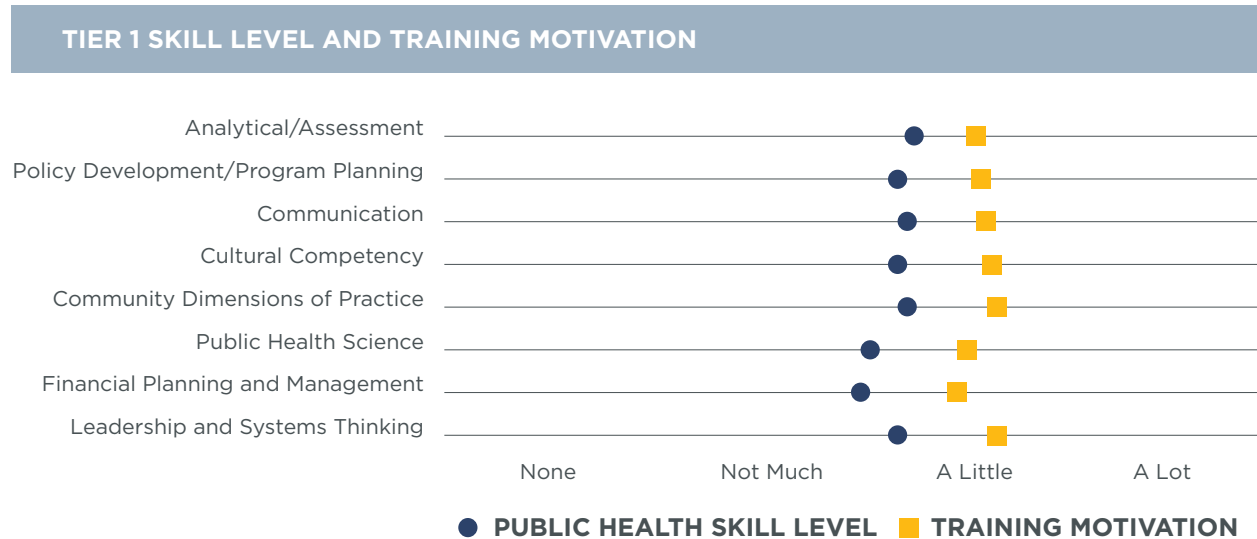
The three skill domains with the highest reported training motivation among the statewide public health workforce are:

- 1. Leadership and Systems Thinking Skills;
- 2. Community Dimensions of Practice; and
- 3. Cultural Competency Skills.

## TIER 1

Tier 1 includes: Employees who carry out day-to-day tasks of organization. Not in management/supervisory position. Responsibilities include data collection and analysis, fieldwork, program planning, outreach, communications, customer service, and program support.

71% of participating employees fell into this tier.



Across Tier 1, the three lowest skill domains are:

1. Financial Planning and Management Skills;
2. Public Health Science Skills; and
3. Cultural Competency Skills.

The three skill domains with the highest reported training motivation are:

1. Leadership and Systems Thinking Skills;
2. Community Dimensions of Practice; and
3. Cultural Competency Skills.

Below, sub competencies within each domain with the lowest reported skill levels and highest reported motivation for training are highlighted, to help prioritize Tier 1 needs and guide workforce development planning.

### Analytical/Assessment Skills

- Identify valid data for community health assessments
- Identify gaps in data
- Contribute to assessments of community health status and factors influencing health in a community
- Explain how community health assessments use data
- Describe how evidence is used to make decisions

### **Policy Development/Program Planning Skills**

- Describe the organizational strategic plan
- Identify current trends affecting the health of a community
- Gather information for evaluating policies, programs, and services
- Describe how public health informatics is used in developing, implementing, evaluating, and improving policies, programs, and services

### **Communication Skills**

- Identify the literacy of populations served
- Suggest approaches for disseminating public health data and information

### **Cultural Competency Skills**

- Address the diversity of individuals and populations when implementing policies, programs, and services that affect the health of a community
- Describe the effects of policies, programs, and services on different populations in a community

### **Community Dimensions of Practice Skills**

- Describe programs run by governmental and non-governmental organizations designed to improve the health of a community
- Recommend relationships that may be needed to improve health in a community
- Use assets and resources to improve health in a community
- Describe the importance of community-based participatory research

### **Public Health Sciences Skills**

- Identify important events in the history of public health
- Describe how public health sciences are used in the delivery of the 10 Essential Public Health Services
- Recognize limitations of data
- Describe the laws, regulations, policies, and procedures for the ethical conduct of research
- Contribute to the public health evidence base
- Suggest partnerships that may increase use of evidence in public health practice
- Describe evidence used to develop, implement, evaluate, and improve policies, programs, and services

### **Financial Planning and Management Skills**

- Describe the structures, functions, and authorizations of governmental public health programs and organizations
- Describe government agencies with authority to impact the health of a community
- Describe public health funding mechanisms
- Contribute to development of program budgets
- Provide information for proposals for funding
- Provide information for contract and agreement development for programs and services
- Describe financial analysis methods used in making decisions about policies, programs, and services
- Operate programs within budget
- Describe how teams help achieve program and organizational goals
- Use evaluation results to improve program and organizational performance
- Describe program performance standards and measures
- Use performance management systems for program and organizational improvement

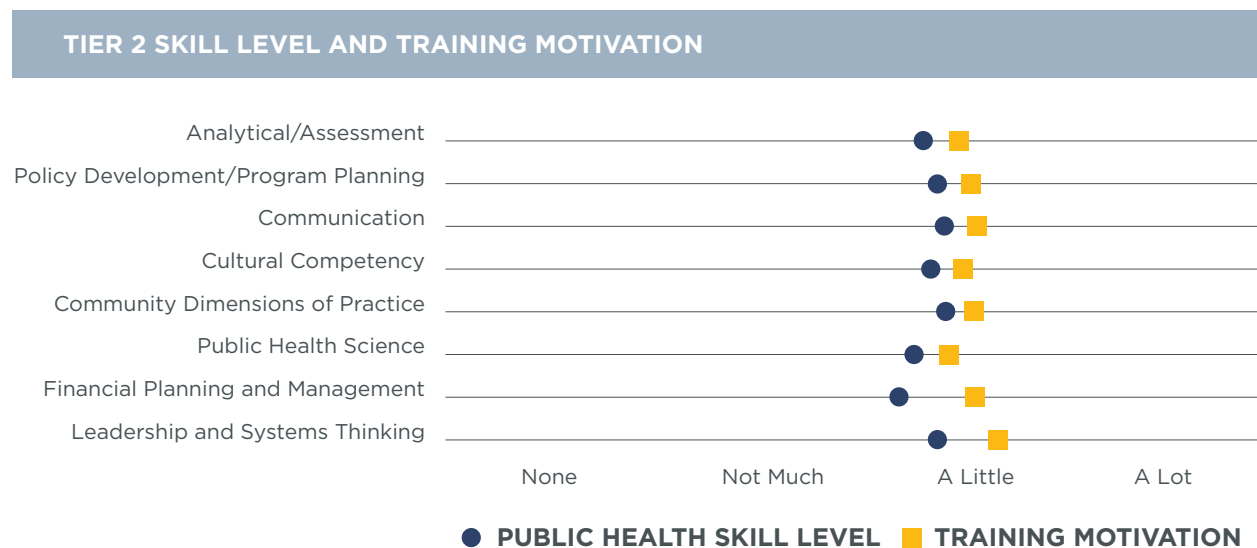
### Leadership and Systems Thinking Skills

- Describe public health as part of a larger system of organizations that influence the health of populations at local, national, and global levels
- Identify internal and external facilitators and barriers that may affect the delivery of the 10 Essential Public Health Services
- Describe the impact of changes on organizational practices

### TIER 2

Tier 2 includes: Employees in a management or supervisory role. Responsibilities include developing, implementing, and evaluation programs; supervising staff; establishing and maintaining community partnerships; managing timelines and work plans; making policy recommendations; and providing technical expertise.

19% of participating employees fell into this tier.



Across Tier 2, the three lowest skill domains are:

1. Financial Planning and Management Skills;
2. Public Health Science Skills; and
3. Leadership and Systems Thinking Skills.

The three skill domains with the highest reported training motivation are:

1. Leadership and Systems Thinking Skills;
2. Communication Skills; and
3. Policy Development/Program Planning Skills.

Below, sub competencies within each domain with the lowest reported skill levels and highest reported motivation for training are highlighted, to help prioritize Tier 2 needs and guide workforce development planning.

**Analytical/Assessment Skills**

- Develop community health assessments using information about health status, factors influencing health, and assets and resources

**Communication Skills**

- Assess the literacy of populations served Public Health Sciences Skills

**Public Health Sciences Skills**

- Contribute to the public health evidence base

**Financial Planning and Management Skills**

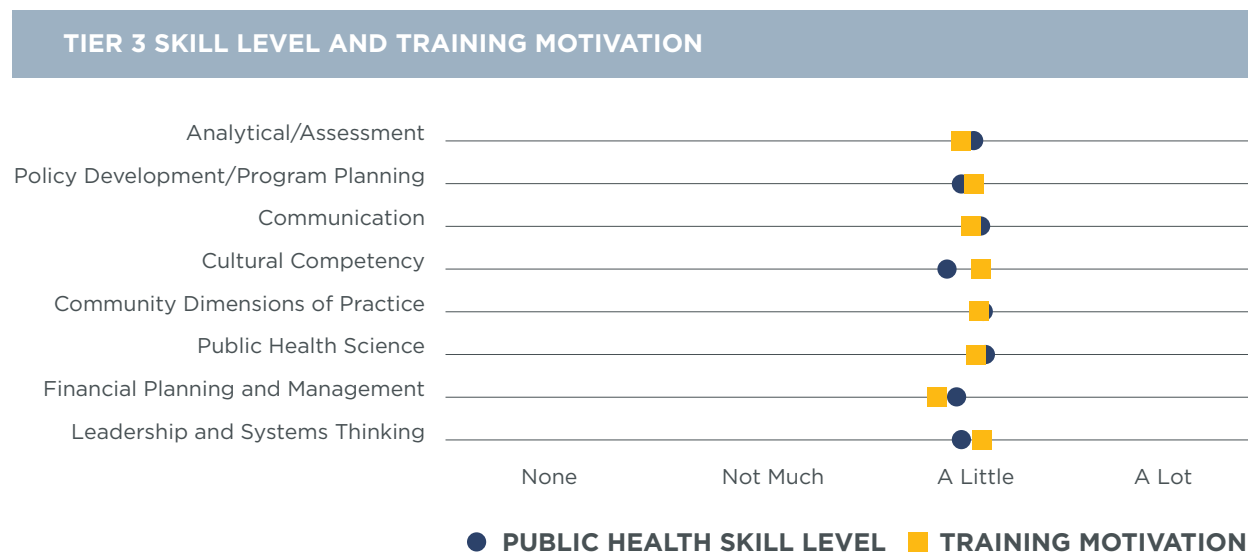
- Explain public health and health care funding mechanisms and procedures
- Negotiate contracts and other agreements for programs and services
- Use financial analysis methods in making decisions about policies, programs, and services

**Leadership and Systems Thinking Skills**

- Analyze internal and external facilitators and barriers that may affect the delivery of the 10 Essential Public Health Services

**Tier 3**

Tier 3 includes: Senior management and leaders of public health organizations. Typically have staff who report to you, may be responsible for overseeing major programs or operations of the organization, setting a strategy and vision for the organization, creating a culture of quality within the organization, and working with the community to improve health.



Across Tier 3, the three lowest skill domains are:

1. Cultural Competency Skills;
2. Leadership and Systems Thinking Skills; and
3. Financial Planning and Management Skills.

The three skill domains with the highest reported training motivation are:

1. Cultural Competency Skills;
2. Leadership and Systems Thinking Skills; and
3. Public Health Science Skills.

No sub competencies within these domains were determined to be greater skills gaps or higher priorities for training than others. This is because most respondents reported being proficient in each skill associated with the domains. However, there was widespread interest in continued training in all domains and individual skills surveyed.

## Recommendations

1. **Finding:** Most survey respondents plan to work more than 10 years before retiring which creates a stable public health workforce for the next decade.

**Recommendation:** Montana health departments and public health organizations engaged in workforce development should reduce barriers for public health staff looking to improve their skills, including, but not limited to; promoting virtual and in-person public health training and education, allowing staff time to participate in training and education, recognizing staff who pursue training and education, and seeking out and/or developing training for staff. Significant opportunities exist to build capacity and expertise within the current workforce and prepare for the future workforce.

2. **Finding:** Most survey respondents rated themselves with low skill in Financial Planning and Management Skills, Public Health Science Skills, and Cultural Competency Skills, and high training motivation in Leadership and Systems Thinking Skills, Community Dimensions of Practice, Cultural Competency Skills.

**Recommendation:** Montana health departments and public health organizations should seek out and/or develop trainings and education programs that emphasize low skill domains and high training motivation. Regional and state resources should be sought out prior to developing a training, since public health agencies and organizations provide and support workforce development opportunities related to statewide public health workforce needs.

3. **Finding:** Most survey respondents reported motivation to train and improve proficiency across all public health core competency skills.

**Recommendation:** Montana health departments and public health professionals should seek out and develop trainings and education programs to increase core competency skill proficiency. To ensure staff are motivated to participate in and complete trainings and education programs, staff should create individual development plans with support from senior leadership. Doing so promotes a culture of learning and growth for the public health workforce.

# Montana Public Health Workforce Development Group Members

