

Strengthening Local Public Health in Massachusetts

A CALL TO ACTION

Results of a Statewide Workforce Assessment
Conducted for the
Coalition for Local Public Health



Massachusetts Public Health Association
Massachusetts Health Officers Association
Massachusetts Association of Public Health Nurses
Massachusetts Association of Health Boards
Massachusetts Environmental Health Association

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A collaboration of the Cambridge Health Alliance, CareGroup, and Partners Healthcare

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Acknowledgements:

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Strengthening Local Public Health in Massachusetts: A Call to Action

The members of the Coalition for Local Public Health are proud to release this report, but we are disturbed by its findings. Policy makers and the public should be disturbed, too. Our local public health infrastructure in Massachusetts is ill prepared to meet the challenges of a range of public health emergencies, including pandemic influenza. In fact, most of our local health departments are struggling just to protect residents and businesses from normal health threats.

Local boards of health and health departments are essential components of keeping Massachusetts communities safe and healthy. Local public health responsibilities are broad, ranging from running immunization and health education programs to protecting our food and water supplies.

Resources Are Not Keeping Pace With Responsibilities

Top federal and state officials stress that local governments must be prepared to protect their communities in cases of natural disasters, terrorism, and other hazards. We are told that the lesson of Hurricane Katrina is not to expect that federal or even state officials will be able to rapidly ride to the rescue for cities and towns.

Federal dollars were pumped into emergency preparedness beginning in 2002, but the amount of new federal investment fell far short of making up for state budget cuts to public health programs and local aid. Massachusetts also lacked a county health system common to most states, so our cities and towns received comparatively less direct federal support for emergency planning. The Massachusetts Department of Public Health used federal dollars to build a promising regional structure for local public health, but with federal support already in decline now, we are concerned about how that structure will be sustained. Meanwhile, growing demands on local public health officials exceed resources, and state planning is conducted without adequate local input.

Local Health Departments Are Understaffed and Overworked

This study, which may be the most detailed survey any state has conducted about its local public health infrastructure, paints an alarming picture:

- Many local public health departments in Massachusetts are stretched too thin to meet growing expectations in the wake of September 11, 2001.
- Over 70 percent of local health officials report that they do not have enough staff to consistently fulfill their responsibilities to the public.
- Local public health budgets are not keeping pace with inflation.
- There are vast and striking differences between public health resources available to smaller and larger communities and between communities in western and eastern Massachusetts.
- Nearly one fifth of our public health workforce will be eligible to retire in the next two years. Health inspectors and public health nurses are already in short supply.
- Educational requirements and salaries for essential public health personnel vary dramatically, and many public health board members lack the training or skills to make informed decisions about local health issues.

Strategies To Protect Our Families and Communities

Members of the five statewide organizations that comprise the Coalition for Local Public Health have unique knowledge about how prepared we really are—and aren't—to protect our families and communities. We are the people "on the ground," including public health nurses, local health officers, environmental health officials, and health board members.

In 2003, we issued a report, *A Case for Improving the Massachusetts Local Public Health Infrastructure*, warning Department of Public Health officials about inadequate capacity to respond rapidly to routine and acute health events. Some of our recommendations were incorporated into state emergency preparedness planning, but the Department did not have—and still lacks—adequate resources to ensure that local communities can protect their populations from preventable health threats.

With new facts available to inform public discussion, we offer this study as an urgent call to action. The local public health infrastructure in Massachusetts needs reorganization. It needs sustained investment of state resources. It needs public and private sector champions with vision and dedication who will collaborate with local health officials.

To strengthen disease prevention and health promotion capacity throughout the state, Massachusetts must:

- 1. Refine and sustain a regional structure for local public health in Massachusetts.** The CLPH is participating in a planning effort to develop a regionalized state model with the University of Massachusetts McCormack Institute and the Cambridge Health Alliance. A successful regional structure will facilitate collaboration and resource sharing among localities, develop mechanisms for alternative service delivery, improve coordination and planning involving municipal and state health officials, and respect the authority of local Boards of Health.
- 2. Provide direct state funding to adequately support disease and injury prevention, health promotion, and emergency preparedness at the municipal level.** Municipal funding for local public health should be complemented by state funding through the General Treasury and/or from dedicated, institutionalized sources. State funding should be allocated through a regional public health structure that includes minimum standards for essential public health services in every community, including public health nursing, health inspection services, disease surveillance and reporting, and risk communication.
- 3. Strengthen workforce development and competency** through increased training opportunities for local boards of health and staff, and through the development of minimum educational levels and credentialing for certain positions.

The Coalition for Local Public Health respectfully urges members of the legislature, the administration, business leaders, and community leaders to heed this call and take action.

For the Coalition for Local Public Health,

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June 28, 2006

Executive Summary

Over the last decade, advocacy efforts to improve local public health infrastructure in the United States have been hindered by a lack of basic information about the public health workforce and the resources available to them. In 2005, the Massachusetts Coalition for Local Public Health (CLPH) pooled member resources to fund a statewide survey to gather basic information about the local public health workforce and infrastructure in the Commonwealth. The CLPH commissioned the Institute for Community Health (ICH) to develop and implement this survey. This report is the first complete presentation of the data collected through this study.

Background

Challenges facing public health systems have increased significantly in the years following September 11, 2001. Cuts in funding for local and state public health systems coincided with an increase in expectations for these systems to be involved in emergency preparedness planning and practice. While federal and state officials recognize the critical role that public health officials play in responding to biological agents such as anthrax, smallpox, and virulent strains of influenza, many local public health departments are stretched too thin to meet growing expectations and demands placed on the public health infrastructure. The threat of bioterrorism and other intentional and natural disasters has confronted local, state and federal policy makers with a need to assess and address weaknesses in local public health infrastructure.

Methods:

Self-administered surveys were distributed to local public health authorities in Massachusetts between June and December, 2005. The study was introduced at regional and sub-regional public health emergency preparedness meetings across the state and via direct email to local public health leaders. Completed surveys were sent to ICH and entered into an Access database. Data were analyzed in SAS 9.0.

Results:

A total of 191 out of 352 local public health authorities participated in this study, representing a 54% response rate. Participating public health authorities represent a mixture of rural, suburban and urban communities serving a variety of population sizes across the Commonwealth. Below is a summary of key findings from the study:

Local Boards of Health

- Nearly all participating communities reported having a local board of health comprised of 3-5 members. Only 26.7% of all board of health members included in this survey have participated in a training and education program offered by the Massachusetts Association of Health Boards. As one of the only training programs for local boards of health in the state, this finding raises concerns that the many board members do not have the resources or skills to make informed decisions about local public health issues.

Public Health Budgets

- Local public health authorities rely primarily on municipal funds to support programs and services. Despite an increase in expectations and responsibilities placed on local public health authorities over the last 3 years, the majority of communities reported very small increases in municipal funding for public health services.
 - Public health departments serving communities with populations of less than 40,000 (88% of sample) reported an average increase of 3% in municipal funding between 2004 and 2006. This small increase is likely to reflect cost of living salary adjustments and is

insufficient to cover the costs associated with the expansion of responsibilities for local public health authorities.

- Public health departments serving communities with populations greater than 40,000 (12% of sample) reported the greatest increases in municipal funding over the last 3 years. However, the reported 10% average increase is still insufficient to support the hiring of additional staff to meet expanding demands and responsibilities.
- With the exception of communities with populations less than 5,000 residents, most local public health authorities receive some funding from private, state, and federal contracts and grants. Larger communities (>40,000) bring in more outside funding than smaller ones.

Staffing Patterns

- There are vast differences across the state with respect to staffing of local public health departments. Approximately 63% of communities with populations of 10,000 or less reported having no full time public health staff to serve their residents. This stands in stark comparison to communities with populations of 20,000 or more, all of whom reported at least one full time staff member.
- Many essential public health services, especially in smaller communities, are contracted out to private individuals and agencies.
- A number of communities may not be providing essential public health services to their community because of gaps in staffing.
 - 12% of all participating public health authorities do not have a public health director, agent or commissioner.
 - At least 23% of reporting municipalities are not able to offer services provided by public health nurses (e.g., flu vaccine clinics, health screenings, etc).
 - Gaps in public health services are greatest among communities with populations of 10,000 or less.

Descriptions of Essential Personnel

- Nearly one-fifth (18%) of the public health workforce will be eligible to retire in the next 2 years. Unless efforts are made to increase the entry of public health nurses, inspectors and other personnel into the municipal workforce, many communities will not have the staffing resources to provide residents with essential public health services.
- There is little consistency across participating municipalities in the educational requirements and salary rates for essential public health personnel. There is a trend towards greater educational requirements and salary rates for public health personnel serving larger communities, but the variability remains great across all population sizes.

Additional Staffing Needs

- Approximately 45% of all reporting public health authorities believe that they do not have enough staff to meet the needs of the public and fulfill their responsibilities to local and state officials. An additional 26% reported only sometimes having enough staff to perform expected responsibilities.
- When asked about additional public health staff needed to meet local and state needs, 46% requested additional inspectional services staff and 27% reported needing public health nurses and administrative support staff.

Discussion

The data presented in this report provides a snapshot of the capacity and resources of local public health authorities in Massachusetts. In general, we found vast differences in the local public health infrastructure across the Commonwealth; the most striking differences are

between smaller and larger communities and between departments in the eastern and western parts of the state. Differences include disparities in staffing patterns, formal education of public health personnel, and annual budgets. The findings raise questions about the modest increases in municipal funding for local public health authorities over the last three years. In particular, are the increases sufficient to support the capacity of the public health workforce to meet expanding responsibilities mandated by local, state and federal entities? With nearly three-quarters of participants reporting that they do not or only sometimes have enough staff to fulfill their obligations to the public, further investigation of the gap between financial resources and local capacity is needed. Finally, the data presented here coincide with other studies that have found an aging public health workforce. Nearly one-fifth of all public health personnel included in this study will be eligible to retire in the next two years. This finding begs the question of whether or not there are sufficient numbers of trained individuals entering the local public health workforce to fill the gaps that are likely to occur over the next few years.

The need for a stronger public health infrastructure is not merely a local concern, but one that spans across local, state and federal jurisdictions. Basic information on local public health authorities is needed to inform thoughtful and sustainable plans for improvements in the infrastructure and capacity of public health systems. Despite some basic limitations, the results of this survey represent an important step towards the achievement of these goals. We hope that the data will be used to support current advocacy efforts and lay the foundation for future inquiries into the resource, education, and capacity needs of the local public health authorities in Massachusetts.

Introduction

In 1988, the Institute of Medicine (IOM) issued a landmark report on the state of local public health in the United States.¹ In this report, IOM defined public health as “what society does collectively to assure the conditions for people to be healthy.” The report provided strong evidence suggesting that the organizational infrastructure needed to protect the public’s health was in disarray. In particular, it provided evidence that the network of city and county health departments, local boards of health, state and territorial health departments, national health associations, and public and private organizations that make up the public health system were under severe stress.

Public health authorities bear a number of responsibilities within local and state jurisdictions. Historically they have been responsible for assessment, assurance and policy functions that include such activities as leading and coordinating public health campaigns, controlling epidemics, carrying out disease and injury surveillance, collecting vital statistics, ensuring good medical and dental care for the indigent, environmental control, and health education.² State and municipal budget cuts of the late 1990s and early 2000s forced many public health authorities to lay off critical members of the public health workforce and scale back on the services they are able to provide the public.³

Challenges facing public health systems have increased significantly in the years following September 11, 2001. Cuts in funding for local and state public health systems coincided with an increase in expectations for these systems to be involved in emergency preparedness planning and practice.⁴ While federal and state officials recognize the critical role that public health officials play in responding to biological agents such as anthrax, smallpox, and virulent strains of influenza, many local public health departments are stretched too thin to meet growing expectations and demands placed on the public health infrastructure. The threat of bioterrorism and other intentional and natural disasters has confronted local, state and federal policy makers with a need to assess and address weaknesses in local public health infrastructure.^{5, 6}

Since the release of the 1988 IOM report, a number of calls have been made to improve the infrastructure of local, state and federal public health systems.^{2,3,7} Calls for improvements in public health infrastructure have highlighted the limitations and challenges of local, state and federal public health systems. However, there is little evidence available today to assess whether this increase in attention has produced tangible improvements.

Local Response

In Massachusetts, the Coalition for Local Public Health (CLPH) is a collaboration of five associations that are working together to improve local public health infrastructure in the Commonwealth. The five public health associations that make up the CLPH include the Massachusetts Association of Health Boards, Massachusetts Association of Public Health Nurses, Massachusetts Environmental Health Association, Massachusetts Health Officers Association, and the Massachusetts Public Health Association. Their goal is to strengthen three core areas of practice that generally define basic public health infrastructure (CDC). These core areas are: 1) public health workforce, 2) Information, data and communication systems, and 3) organizational and systems capacity. The CLPH seeks to improve these core areas through education and advocacy, including work with members of the legislature and municipal officials about the responsibilities, strengths and limitations of local public health across the state. The coalition also coordinates the work of its member organizations in emergency preparedness planning with the Massachusetts Department of Public Health and in collaborative efforts to strengthen the public health infrastructure with academic partners and other public and private entities.

Like many health-related advocacy groups across the nation, the CLPH has been limited in its advocacy efforts by a lack of basic information about the local public health infrastructure across the state. Although there have been a few federal initiatives to gather basic information about local and state public health authorities, response rates have typically been small and unable to provide information about specific states that can be used for advocacy purposes.

In April 2005, the Coalition for Local Public Health (CLPH) in Massachusetts pooled member agency resources to fund a statewide survey of local public health departments. The purpose of the study was to gain a better understanding of local public health infrastructure in Massachusetts. Areas of interest included annual budgets, descriptions and responsibilities of the local public health workforce, and additional staffing needs. The CLPH commissioned the Institute for Community Health, a non-profit research and evaluation organization located in Cambridge, to develop and implement the study.

In this report, we present the results of this statewide survey. The primary purpose of the report is to provide members of the CLPH with a complete reporting of the data that we collected through this survey. It is a data heavy report. Such a report will allow members of the CLPH to review the data collected and assess how it may be used for advocacy purposes. This report also provides an important first glimpse at the strengths and gaps in local public health resources across the state.

To our knowledge, no other state has collected such detailed information about their local public health infrastructure. Federal public health agencies are under-going a number of changes to prepare state and local public health authorities to expand and/or take on new responsibilities for response to bioterrorism and other public health threats, such as natural disasters and pandemic influenza. The data collected through this study may serve as a baseline assessment of the resources and capacity of local public health authorities across the Commonwealth to take on these responsibilities.

Background: Local public health in Massachusetts

In Massachusetts, funding for public health services is primarily the responsibility of local town and city governments. The Commonwealth of Massachusetts is comprised of 352 cities and towns that are independently organized and governed by constitutional home rule. Home rule legislation allows the people of every city and town the right to self-governance in local matters, limited only by the state constitution and the standards and requirements established by state law. Although accountable to the state on a regulatory level, local communities are able to develop their own charters and structure their own legislative bodies. Each city and town is also responsible for providing residents with essential public health and public safety services.⁸

The configuration of local public health in Massachusetts is unique in comparison to other states in the nation. Although it ranks 13th in the nation for population size and 44th in land area, Massachusetts has more local public health departments than any other state in the U.S. Rather than regional or centralized public health services, each of the cities and towns in the Commonwealth function autonomously. Most municipalities have a local board of health, which is responsible for overseeing the provision of public health services. The state provides few incentives or staff support to assist local public health departments.⁷ With the majority of municipalities serving less than 10,000 residents, many local public health authorities have limited funding for a complete assortment of public health services.

Despite the burden of local jurisdictions to fund public health services, the state of Massachusetts has had a reputation for its commitment and success in the field of public health. In general, the people from this state have been healthy compared to other states.⁹

Massachusetts ranked 9th overall in a 2005 national survey of state health rankings.¹⁰ This ranking is the lowest it has been for decades and considerably lower than it was just 15 years ago when then state was ranked first in the nation.¹¹ Today Massachusetts faces racial and ethnic health disparities and a growing obesity epidemic, and it lags behind national averages in rates of substance abuse, asthma, violent crime, infectious disease, and cancer deaths. These downward trends coincide with state budget cuts for public health services over the past few years.⁹ Between fiscal year 2001 and 2004, the State Department of Public Health had a 30% cut in funding, for a total of \$158 million in cuts. Even with increases included in the FY07 Senate budget, DPH funding will be 24 percent less than in FY2001, adjusted for inflation, according to the Massachusetts Budget and Policy Center.¹² These reductions at the state level have placed an increase in burden on local governments to cover the costs of protecting public health. Few municipalities are able to meet these demands for funds. As a result, many local public health authorities have faced challenges in meeting increasing demands with decreasing or stagnant budgets.

Although there have been some efforts to gather information about the public health workforce, infrastructure and capacity in Massachusetts, most studies have been cross-sectional and gathered from urban communities. Data are needed from urban, suburban and rural communities across the state to assess the strengths and gaps in local public health infrastructures.¹ Basic information about the public health workforce, staffing patterns, responsibilities and financial standing is also needed to inform strategies for improving the public health infrastructure. This study represents an important step towards the fulfillment of these needs.

Study Methods

In March of 2005, the Institute for Community Health began working with members of the Coalition for Local Public Health to design a survey for public health authorities across the state. Once the survey was finalized, the study was submitted to the Cambridge Health Alliance Institutional Review Board (IRB) for review and approval. Because participants targeted for participation in the survey are public officials and the questions of interest are part of the public record, the IRB approved the study as exempt from review.

Distribution of surveys to local public health authorities began in June 2005 and continued through December 2005.

Description of Survey Measures

The survey gathered basic information about local public health authorities across the Commonwealth. Although there were many questions that CLPH members had of local public health authorities, the group recognized the importance of limiting the burden of the survey on a workforce that is already stretched too thin. After several weeks of discussion, CLPH members decided on a core set of areas that would be investigated with this study. These areas included:

- ◆ Organizational structure (e.g., information about type and number of board of health members)
- ◆ Annual budgets for 2004-2006, including municipal allocations and additional sources of funding (e.g., federal, state grants, fees, etc)
- ◆ Staffing patterns, including number public health employees and contracted services
- ◆ Workforce capacity and responsibilities (e.g., educational requirements and attainment of essential public health employees, salaries, core responsibilities)
- ◆ Additional staffing needs

The survey was designed to take approximately 25 minutes to complete. Most individuals completing the surveys were able to do so in the time expected. However, representatives from larger cities and towns reported needing more time to complete the survey. The total amount of time needed for completion varied, ranging from approximately 15 minutes to several hours.

Sample

Local public health departments make up the primary sample of this study. In general, public health directors/agents/commissioners were targeted to complete the surveys for their departments. In a number of smaller towns, surveys were completed by administrative staff or board of health members.

Recruitment

The study was introduced through regional and sub-regional public health emergency preparedness meetings in an effort to reduce the burden of completing the survey on local health officials and maximize the limited resources available to complete the study. Massachusetts has seven public health emergency preparedness regions, which are further divided into approximately 15 sub-regions and coalitions. From June to September 2005, Dr. Hyde (the principal investigator from ICH) traveled across the state to introduce the study to local public health officials during their monthly emergency preparedness meetings. An introductory letter and copy of the survey was emailed to public health officials in advance of the meeting so that participants would have an opportunity to review the study ahead of time and come prepared with questions. Copies of the survey and introductory letter were also distributed during the meetings. Public health representatives were asked to complete the survey and return it to Dr. Hyde at the Institute for Community Health via mail, email or fax.

Although it was not expected that representatives from every public health department would be reached via these methods, CLPH members anticipated that we would be able to reach the majority of public health representatives. After three months of survey distribution, slightly less than one-third (n=110) of public health departments had completed their surveys. A conference call was held with CLPH members to discuss ways of increasing response rates. Based on recommendations from this meeting, an attempt was made to contact each city and town that had not responded to discuss the importance of the study and request their participation. Surveys were emailed or faxed as requested. This strategy was somewhat successful, raising the total response rate to 159. Many telephone numbers and emails listed in official directories were outdated or wrong.

Preliminary data were presented at the Massachusetts Health Officers Association meeting in November 2005. At that time, the group put out a final call for response. All regional and sub-coalition leaders were asked to remind their groups to complete the survey and return it to ICH by mid-December. Members of the CLPH also helped increase response rates by contacting representatives in their professional networks from departments who had not completed surveys. Data collection officially ended on December 15th, 2005. A total of 191 surveys were completed and returned.

Data Management and Analysis

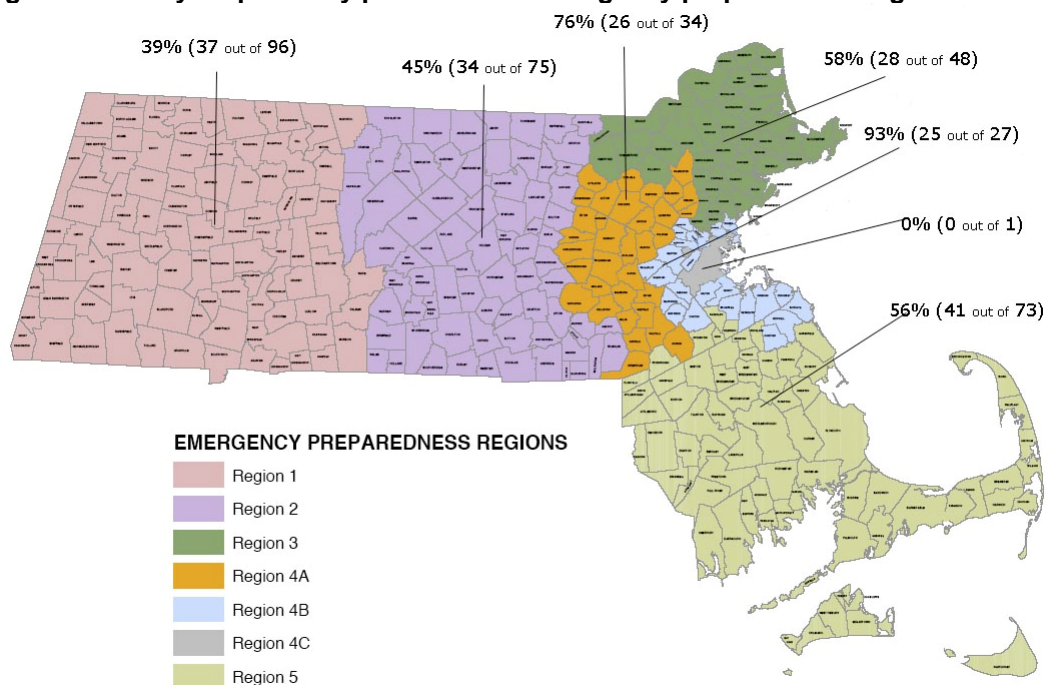
All survey data were entered into an Access database and imported into SAS 9.0 for analysis. Frequencies were generated on all variables to clean the data (e.g., identify unusual or suspect responses) and explore the range of responses provided. Once the dataset was cleaned, the data were analyzed by public health emergency preparedness region and by population size. In the descriptive analyses presented in this report, data are presented in the aggregate (i.e., summary of all responses) and by population size.

Results

A. Description of Responding Communities

A total of 191 out of 352 local public health authorities participated in the Coalition for Local Public Health workforce assessment. This represents approximately 54% of all public health authorities in the state. The distribution of responses across public health regions within the state was fairly consistent. Figure 1 highlights the proportion of local public health authorities reporting within each public health emergency preparedness region.

Figure 1: Survey response by public health emergency preparedness region



Of the 191 local public health authorities that responded, approximately 21% represent communities with populations of less than 5,000 people, 15.8% of populations between 5,000-10,000 people, 27.9% 10,000-20,000 people, 13.7 % of 30,000-40,000 people and 12.1% with populations over 40,000 people.

| Response rates by population size | % (n) |
|-----------------------------------|-----------|
| Less than 5,000 | 21.1 (40) |
| 5,000-10,000 | 15.8 (30) |
| 10,000-20,000 | 27.9 (53) |
| 20,000-30,000 | 13.7 (26) |
| 30,000-40,000 | 9.5 (18) |
| Greater than 40,000 | 12.1 (23) |

The population groups defined above are used throughout this report to highlight patterns in the data by population size.

B. Boards of Health

Under Massachusetts General Laws, Boards of Health are responsible for disease prevention and control, health and environmental protection and promoting a healthy community. Local Boards of Health serve as the local arm of both the Massachusetts Department of Public Health and the Massachusetts Department of Environmental Protection. To fulfill their duties, they develop, implement and enforce health policies, oversee inspections to maintain minimum standards for sanitation in housing and food service, and assure that the basic health needs of their community are being met.¹³

The majority of municipalities in Massachusetts are served by Boards of Health that are comprised of 3 members. Local Board of Health members are elected or appointed through a process specified in their local Charters. Among municipalities who participated in this survey, most local boards of health are comprised of elected members (55.3%) followed by appointed members (41%).

| Type of Board | % (n) |
|---------------|----------|
| Elected | 55 (104) |
| Appointed | 41 (77) |
| Advisory Only | 2 (4) |
| Selectmen | 2 (3) |

When looking at types of board of health across population size we see that smaller municipalities (under 20,000) are more likely to report having elected health board members than larger ones.

| Population Size | < 5,000 | 5-10,000 | 10 -20,000 | 20-30,000 | 30- 40,000 | > 40,000 |
|-----------------|---------|----------|------------|-----------|------------|----------|
| | % (n) | % (n) | % (n) | % (n) | % (n) | % (n) |
| Advisory Only | 0 | 7 (2) | 0 | 0 | 0 | 9 (2) |
| Appointed | 20 (8) | 27 (8) | 35 (18) | 42 (11) | 67 (12) | 87 (20) |
| Elected | 78 (31) | 67 (20) | 63 (32) | 58 (15) | 33 (6) | 0 |
| Selectmen | 3 (1) | 0 | 2 (1) | 0 | 0 | 4 (1) |

Across the state, there is a wide range of experience among health board members. Of the 643 board of health members reported on in this survey, 288 (45%) have been members for one year or less, 102 (16%) have been members for 1-5 years, 136 (21%) have been members for 6-10 years, and 117 (18%) have been members for over 10 years. The occupations of board of health members varied significantly, with some members employed in health-related professions and many not.

Given the diversity of experience in public health, we were interested in whether or not local board of health members had participated in a standard training on local public health issues and responsibilities. The Massachusetts Association of Health Boards (MAHB) is the only agency in the state that provides local boards of health with a training and certification program. The certification program is designed to provide participants with information and skills needed to perform duties and fulfill responsibilities as board of health members. Areas covered in the training include environmental health, community health, public health law and emergency

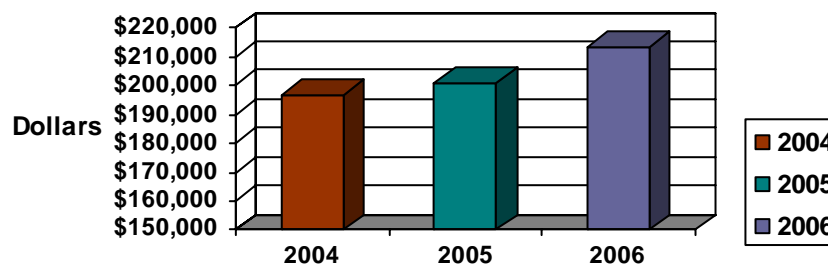
preparedness. Of the 643 board members that we obtained information from, only 26.7% had participated in the MAHB certification program. More than half of all members had not participated (51.4%) and there was uncertainty about participation for approximately 22% of members. With only slightly more than one-quarter of health board members participating in formal training on public health issues, there is a need to assess and ensure that these members have the information, resources and skills necessary to make important health decisions for local residents.

C. Public Health Budgets

One of the greatest concerns of local public health authorities is the funding available to support the activities and responsibilities of local departments. As mentioned in the introduction to this report, cuts in funding for local public health during the late 1990s and early 2000s had an untold impact on the public health services provided by local municipalities.

In the CLPH survey, we asked about municipal and other sources of funding over a 3-year period, between 2004 and 2006. In 2004, the average municipal budget across the state was \$196,737 and in 2005 it was \$200,972. This represents an average increase of about 2%. In 2006, the average projected budget was \$213,577, which represents a 6% increase over the previous year. As the table below highlights, there has been an average increase of 8% in municipal budgets since 2004.

Annual Municipal Public Health Budgets



As the table below highlights, this modest increase in annual municipal budgets is not evenly distributed across the state. Rather, the largest increases in municipal budgets was reported among public health departments serving communities with populations greater than 40,000. These departments account for 12% of our total sample. Across the other 88% of reporting health departments that serve communities of 40,000 residents or less, the average increase in municipal budgets between 2004 and 2006 was 3%. This slight increase likely reflects annual cost-of-living salary adjustments rather than an increased investment in public health services.

| Year | Population Size | | | | | |
|--|-----------------|-----------|------------|-----------|------------|------------|
| | < 5,000 | 5-10,000 | 10 -20,000 | 20-30,000 | 30- 40,000 | > 40,000 |
| 2004 | \$43,317 | \$72,466 | \$132,111 | \$246,552 | \$277,112 | \$497,289 |
| 2005 | \$47,547 | \$76,572 | \$137,593 | \$245,589 | \$289,546 | \$532,415 |
| 2006 | \$43,480 | \$74,421 | \$141,050 | \$253,749 | \$280,199 | \$547,754 |
| Total % Increase (2004 to 2006) | + \$163 | + \$1,954 | + \$8,940 | + \$7,197 | + \$3,086 | + \$50,465 |

The small annual increase in municipal budgets reported among the majority of public health authorities is one of the most disconcerting findings of this study. The responsibilities of local public health officials are expanding without a commitment of local funds to support essential public health programs and services.

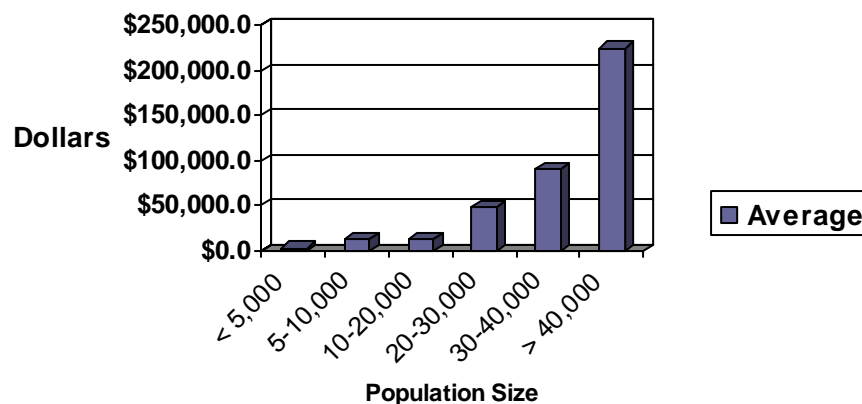
Snapshot of Budgets for 2005

Although municipal funding is a primary source of revenue for local public health departments, it is not the only source. Many local health departments take in revenue from fees, fines and/or surcharges. They also may receive funding through service contracts and local, state, federal and private grants. Below we present a snapshot of these other sources of funding for FY 2005. In addition to aggregate data, we highlight the differences in these sources of funds and total annual budgets by population size.

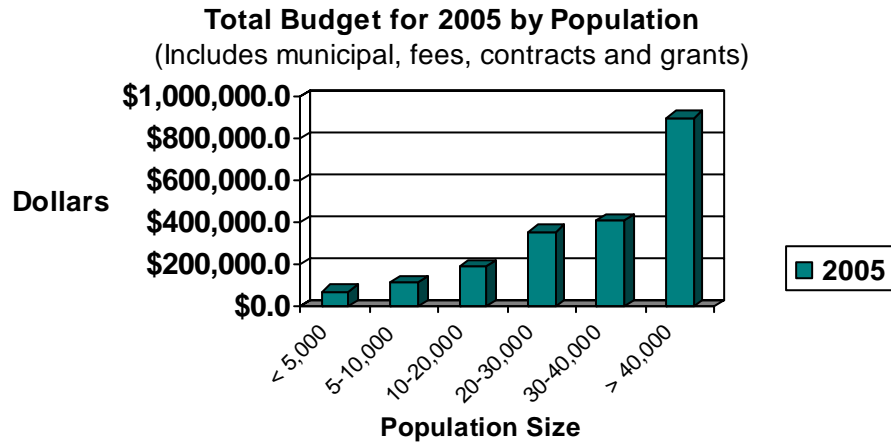
Nearly all local public health departments (88%) reported taking in some money from local residents through fees, fines and/or surcharges. The mean revenue for all reporting towns (n=168) generated from fees in 2005 was \$66,518 (range \$300-\$500,000). As would be expected, larger municipalities reported taking more money through these means than smaller ones.

More than half (53%) of all public health authorities also reported bringing in funding from private, state and federal contracts and grants. Across all population sizes, the average amount of funding received through these sources in 2005 was \$63,962. However, when looking at the distribution of these funds by population size, we see a significant difference between smaller communities and larger ones.

Average Revenue from Contracts and Grants Received in 2005



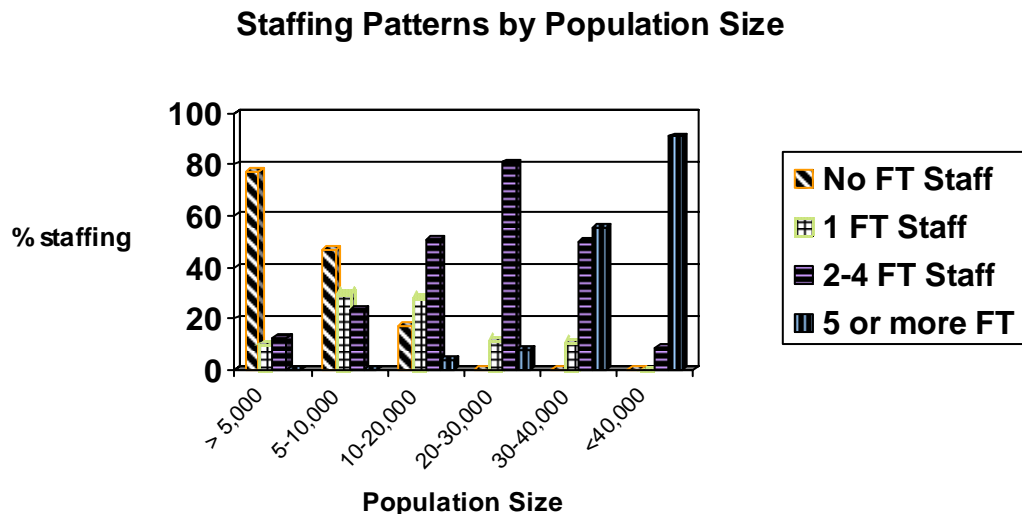
Approximately 40% of local public health authorities receive state funding for special projects. An additional 15% also receive federal funding in 2005. The procurement of state and federal funding contributes to differences in annual budgets across population sizes.



The budgetary picture for 2005 highlights the overall differences in funding for local public health authorities by population size. Communities with populations over 40,000 reported an average annual budget of approximately \$900,000. This stands in stark contrast to communities under 5,000, whose total annual budgets are approximately \$75,000.

D. Staffing Patterns

Staffing patterns also vary by population size. As population size increases, the number of local public health authorities with full time staff also increases. Approximately 78% of communities with populations less than 5,000 reported having no full time staff. Approximately 47% of public health departments serving populations between 5,000-10,000 reported having no full time staff. These patterns stand in contrast to municipalities with a population of 20,000 residents or more, 100% of who reported having at least 1 full time staff.



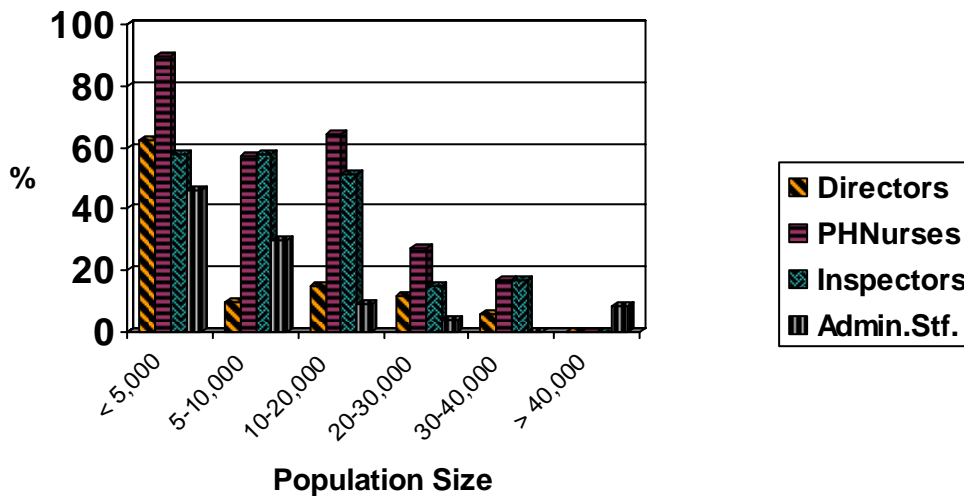
In the table below, we present a second way of looking at staffing patterns by population size. For each population category, we present the percentage of municipalities with the specified staffing level. In parentheses is the range in number of staff at each level.

| | < 5,000 N=40 | 5-10,000 n=30 | 10-20,000 n=53 | 20-30,000 n=26 | 30- 40,000 n=18 | > 40,000 n=23 |
|----------------------------------|-------------------|-------------------|-------------------|-------------------|--------------------|-------------------|
| % of municipalities with: | % (Range in #) | % (Range in #) | % (Range in #) | % (Range in #) | % (Range in #) | % (Range in #) |
| Full Time (at least 1 FT) | 22 (1-3) | 53 (1-4) | 83 (1-7) | 100 (1-7) | 100 (1-18) | 100 (3-55) |
| Part Time (20-34 hours per week) | 20 (1) | 60 (1-4) | 47 (1-3) | 73 (1-4) | 67 (1-20) | 39 (1-16) |
| Part Time (< 20 hours per week) | 45 (1-6) | 53 (1-2) | 49 (1-5) | 50 (1-5) | 50 (1-8) | 43 (1-10) |

As the table above highlights, there is a strong relationship between population size and staffing patterns. Among municipalities with less than 5,000 residents, 78% of local public health departments report having no full time staff and 80% with no part time staff working between 20-34 hours. Approximately 47% of municipalities with populations between 5,000 and 10,000 reported no full time public health staff and only 40% reported having part-time staff working between 20-34 hours. On the other hand, larger municipalities (20,000 or more residents) all reported having at least one full time staff employed in the public health department.

With many smaller public health departments reporting no full time or part time staff, many different public health departments reported not having essential public health personnel on staff.

Percent of Depts. Without Following Staff



Across the state, public health inspectors and nurses are the least likely to be employed by local public health departments. In smaller communities, public health directors are also missing from the municipal workforce.

Contract Positions

Many public health departments contract with individuals and agencies to provide the essential public health services their communities need. We asked each participant to list the contractors the health department works with and to describe their primary responsibilities. The list of different types of contractors was long. We simplified the list by creating general personnel categories.

| Contracted Public Health Services | % of towns with contracts (n) |
|--|--|
| Nurses | 35 (67) |
| Inspectors | 39 (74) |
| Special Programs | 8 (17) |
| Animal Inspection | 5 (10) |
| Emergency Preparedness | 2 (4) |
| Dental | 2 (4) |
| Health Agents | 10(19) |
| Epidemiologist | 1 (2) |
| Other | 9 (19) |

The most commonly contracted services are public health nursing and inspectional services. This is not surprising given that 38% (n=73) of all public health departments reported having no inspectional services employees on staff and 51% (n=96) reported having no public health nurse employees. In addition, 21% (n=40) of communities reported not having a public health director/agent/commissioner.

In earlier presentations of these data, a number of individuals have asked about the gaps in services that we might be able to tease out of the data. For example, many have asked how many municipalities do not provide any public health nursing services to residents. This was not a question directly asked in the survey. We have estimated these gaps by identifying departments without personnel on staff and then comparing these communities to those who reported contracting these services. In our best estimate, the following gaps were found:

- ◆ Of the 21% (n=40) of communities reporting no public health director/agent/commissioner, only 17 contract with someone to provide these services. This means that as many as 12% (n=23) of all reporting departments have no director.
- ◆ Of the 96 towns reporting no public health nurses on staff, 53 reported contracting these services out. The majority of departments contract with a visiting nurse association to provide these services. We estimate that as many as 23% (n=43) of municipalities in our sample are not able to provide public health nursing services to residents.
- ◆ Out of the 73 towns reporting no inspectional service employees, only 25 reported contracting these services out. It is possible that up to one quarter of reporting municipalities are unable to provide residents with inspectional services. However, this may be an overestimate since many public health directors are certified to provide inspectional services. At least some communities with no inspectional services personnel on staff or on contract may have their inspectional service needs by the public health director/agent/commissioner.

It should be noted that the majority of public health departments without the above mentioned positions are concentrated in smaller communities with populations of 10,000 residents or less.

Aging public health workforce

Local, state and federal public health advocates have recently voiced concerns over the future of the public health workforce. In part, these concerns stem from recent surveys that have highlighted an aging workforce that exceeds the number of new professionals entering the

field.¹¹ Limited fiscal resources and non-competitive salaries are primary factors underlying the growing gap between need and availability of public health personnel.

The growing gap between need and availability of public health professionals is evident in Massachusetts. Among the 507 public health employees for whom we were able to obtain information, approximately 18% are eligible to retire in the next two years. Slightly less than a quarter (23%) of all inspectors will be able to retire, followed by public health nurses (22%). Approximately 15% of public health directors/commissioners/agents will also be eligible for retirement.

| Eligible to Retire | |
|--------------------|---------|
| | % (n) |
| Directors | 15 (22) |
| Nurses | 22 (20) |
| Inspectors | 23 (25) |

The need to cultivate new public health professionals in the state may be one of the most important findings of this study.

E. Information about Specific Public Health Positions

We turn now to the data we collected about specific public health positions that are typically found within local public health departments. In this section, we report on data collected about public health directors, nurses, inspectors, and administrative support staff. The types of data reported on include:

- ◆ Educational requirements and attainment
- ◆ Certification requirements and attainment
- ◆ Average salary rates
- ◆ Representation by collective bargaining groups
- ◆ Primary responsibilities

This information was only collected on public health employees, not contractors or other personnel. We were able to collect information on approximately 507 public health employees across the state. However, given the diversity in number and types of public health employees, we use public health authorities as the primary unit of most analyses.

A number of analysis decisions should be highlighted upfront. First, many public health professionals hold multiple education degrees. For educational attainment, we report on the highest degree obtained. Second, average annual salaries were not as straightforward to calculate as we anticipated. A number of towns reported on the amount they have budgeted per position rather than calculate what the position would be paid if they were working full time. Given the number of positions hired at less than full time, we extrapolated annual salaries when necessary. It is possible that some of the annual salaries are lower than one would anticipate. The data we report on here is as good as that which was provided to us by participants. Although there are some gaps and missing data, it provides one of the only snapshots of public health personnel in the state.

1. Public Health Directors

We received information on a total of 151 public health directors/agents/commissioners through this survey. There are a number of ways that local communities refer to the head of their public

health department. These include public health director, agent or commissioner. For ease of reporting, we refer to the head of the department from here on out as the public health director.

Education and Licenses

Respondents were asked to provide information about the educational requirements for a public health director in their community and the educational attainment of the person currently in that position. In general, we found little consistency in the educational requirements for this position. The most commonly reported requirement was a bachelor's degree (BA or BS). Approximately 64% of municipalities require that health directors have a Bachelors of Arts or Bachelors of Science degree. Nearly 86% of municipalities with health directors reported that the person in that position holds a BA/BS or higher. In terms of graduate degrees, only 17% of municipalities required health directors to hold a Masters Degree. Approximately 37% reported their director earned a MA, MS or MPH and 2% reporting having a doctoral level degree.

| Education of Public Health Directors | Education Required | Education Obtained |
|--------------------------------------|--------------------|--------------------|
| | % (n) | % (n) |
| No Educational requirements | 6 (9) | 6 (9) |
| High School Diploma | 8 (12) | |
| Associate Degree | 5 (8) | 8 (11) |
| Bachelor Degree | 63 (93) | 47 (68) |
| Master Degree | 17 (25) | 37 (53) |
| PhD Degree | 1 (1) | 2 (3) |
| Missing | (3) | (7) |

Participants also reported that their municipalities required their public health directors to have obtained a wide array of professional certifications. Most certifications are for inspectional services. This is a good indication that many public health directors play a number of roles in their communities, including public health inspector. As will be highlighted later, many (83%) are responsible for providing at least some inspectional services.

Annual Salaries

Little data is available across the state or nation to assess the range and consistency of salaries for public health personnel. Among reporting municipalities, there is a large range in salaries for public health directors (approximately \$80,000).

| Salaries for Public Health Directors | Mean | Minimum | Maximum |
|--------------------------------------|----------|----------|-------------|
| Salary Range Minimum | \$56,314 | \$30,014 | \$92,000.0 |
| Salary Range Maximum | \$66,359 | \$35,000 | \$110,000.0 |

Public health directors serving smaller communities often make less than those serving larger ones. Salaries are also associated with educational attainment, with higher salaries found among directors holding a masters degree or higher.

Representation by collective bargaining groups

Public health directors are not typically represented by unions or collective bargaining groups. Only 22% of public health directors reported such representation. However, many health directors supervise employees that are represented by collective bargaining groups.

| Represented by Union | % (n) |
|-----------------------------|--------------|
| Yes | 22 (31) |
| No | 78 (113) |

Primary responsibilities of public health directors

The table below highlights the number of different responsibilities that public health directors hold within their departments. It is not surprising that most public health directors reported juggling a number of different responsibilities, from supervision of staff to emergency preparedness planning and inspectional services. There are likely to be many more roles and responsibilities that public health directors hold in their communities. The list below highlights some of the most important public health services they provide.

| Reported Responsibilities for Public Health Directors | % (n) |
|--|--------------|
| Emergency Preparedness Planning | 96 (144) |
| Supervising Staff | 91 (137) |
| Updating Health Nuisance Ordinances | 89 (133) |
| Establish Health Ordinances | 89 (134) |
| Develop and Monitor Budgets | 87 (131) |
| Conduct Environmental Inspections | 83 (125) |
| Participate on Local Emergency Planning Committee | 83 (125) |
| Conduct Sanitary Inspections | 81 (122) |
| Monitor Contractors/Providers | 80 (120) |
| Community Health Planning | 69 (103) |
| Participate in Advocacy to Improve Health | 64 (96) |
| Grant Writing | 57 (86) |

2. Public Health Nurses

Public health nurses provide a number of essential services to the local communities they serve. These services include vaccinations for communicable diseases, follow-up on reported cases of communicable diseases, and health screenings and education to the public. Over the last decade, many public health advocates have argued that there is a crisis in public health nursing. In Massachusetts, local and state budget cuts between 1999 and 2003 led many municipalities to reduce or eliminate their public health nurses. Increasing gaps between needs and service provision has led to greater advocacy efforts on the part of public health nurses in Massachusetts.

We report here on information that was obtained from a total of 140 public health nurses employed by 94 local public health authorities.

Educational Requirements and Attainment

Most public health departments reported educational and training requirements for their public health nurses. Nearly three-quarters (73%) of reporting departments required registered nurses

(RNs). An additional 27% required that their nurses hold a Bachelors of Science in Nursing (BSN) or higher. The table below demonstrates that public health nurses in Massachusetts meet, and even exceed the minimal educational requirements established in their communities. Of particular note is that 44% (n=40) hold a BSN degree.

| Education of Public Health Nurses | Education Required | Education Obtained |
|-----------------------------------|--------------------|--------------------|
| | % (n) | % (n) |
| Licensed Practical Nurse (LPN) | 0(0) | 0(0) |
| Registered Nurse (RN) | 81 (66) | 79 (42) |
| Bachelor of Science Nurse (BSN) | 27 (24) | 48 (40) |
| Other Masters degree | 0 | 9 (8) |
| Missing | 2 | 4 |

Salaries for Public Health Nurses

The data we received on the salaries for public health nurses is probably the least reliable of all data reported on in this report. Since most public health authorities do not employ full time nurses, many participants provided information on the amount of funding allocated for public health nursing services. We utilized the information available to identify salary ranges for this group.

| Salaries for Public Health Nurses | Mean | Minimum | Maximum |
|-----------------------------------|----------|----------|----------|
| Salary min | \$46,618 | \$30,000 | \$75,000 |
| Salary max | \$55,526 | \$36,000 | \$87,000 |

It should be noted that the lower end of the salary range is very low in comparison to other estimates of salaries for public health nurses. We are unable to explain why our findings differ from others. It may be attributed to a reporting error. However, it is also possible that some municipalities do not offer competitive salaries for public health nurses.

Representation by collective bargaining groups

Only about one-third of all municipalities reported having collective bargaining agreements with public health nurses. This finding is surprising given that nurses working in other fields are often represented by unions or other collective bargaining agreements.

| Represented by Union | % (n) |
|----------------------|---------|
| Yes | 37 (34) |
| No | 63 (58) |

Primary responsibilities of Public Health Nurses

Public health nurses provide a number of health promotion and prevention services to local residents. Almost all public health nurses are responsible for reporting and following up on communicable diseases reported to them by local health care providers and the State Department of Public Health. Most also provide vaccines, such as influenza, for residents and health screening and outreach. More than half of public health nurses also participated in local

emergency preparedness planning for their communities.

| Reported Responsibilities for Public Health Nurses | % (n) |
|--|--------------|
| Disease Investigation/Reporting | 99 (93) |
| Disease Surveillance | 98 (92) |
| Vaccine Administration | 98 (92) |
| Health Screening and outreach | 85 (80) |
| Referrals to Services | 85 (80) |
| Participation in Emergency Preparedness Planning | 79 (74) |
| Community health education | 78 (73) |
| Case Management | 73 (69) |
| Local Collaboration | 59 (55) |
| Participation on the Local Emergency Preparedness Planning Committee | 52 (49) |
| Regional/state collaboration and coalition building | 48 (45) |
| Home Care | 39 (37) |
| Policy Development | 37 (35) |
| Administration/Management of Staff | 24 (23) |
| Grant Writing | 22 (21) |
| Private School Nursing | 13 (12) |

School Nurses

Although most communities throughout the state have nurses located on public school campuses, only 14 municipalities reported having school nurses employed through the public health department. We were unable to identify any characteristics in the data that would explain why some communities have school nurses employed through the health department and others through the school district. However, we did find that these public health departments tended to be located within municipalities that were large enough (>20,000) to support different types of public health staff.

Of 14 communities with school nurses on the public health staff, 3 reported having nurses located in elementary schools, 2 in middle schools, and 8 towns in high schools. Three communities also have nurses placed in parochial schools.

Educational Attainment

The educational attainment of the school nurses was generally high, with 9 municipalities reporting that they have at least some school nurses with a Bachelors of Science in Nursing.

Four communities also reported that their schools are served by RNs. One community employs an LPN to provide nursing services within the public schools.

Salary

Annual salaries for school nurse are, on average, slightly lower than they are for public health nurses. The mean salaries across the state range from \$39,293 to \$50,704.

| Salaries for school nurses | Mean | Minimum | Maximum |
|-----------------------------------|-------------|----------------|----------------|
| Salary minimum | \$39,293 | \$26,108 | \$70,000 |
| Salary maximum | \$50,704 | \$39,000 | \$80,000 |

Representation by collective bargaining agreements or unions

Unlike public health nurses, the two-thirds of municipalities with school nurses as public health employees had collective bargaining agreements with this group. We are uncertain as to whether or not this higher rate of representation is due to requirements of school districts or if these nurses are simply employed within the public health departments that have collective bargaining agreements with their public health nurses.

| Representation by union | % (n) |
|--------------------------------|--------------|
| No | 33 (4) |
| Yes | 67(8) |

Responsibilities of school nurses

School nurses provide a number of important services to school-aged children that help to keep them healthy. Nearly all municipalities with school nurses on the public health staff reported that primary responsibilities include the oversight of prescription drug use during school hours (100%), review of immunization records (93%), and the provision of health education to students (93%) and parents (79%). Nearly all school nurses also provide training to school personnel on important health issues.

| Reported responsibilities | % (n) |
|---|--------------|
| Physical examinations | 36 (5) |
| Hearing tests | 70 (10) |
| Vision tests | 70 (10) |
| Postural screenings | 0 |
| Other screenings | 10 (2) |
| Review Immunizations records | 93 (13) |
| Provide oversight of prescription drug medication | 100 (14) |
| Provide health education to students | 93 (13) |
| Provide health education to parents | 79 (11) |
| Develop individual educational plans | 43 (6) |
| Train other school personnel on health issues | 86 (12) |
| Drug and alcohol education and prevention | 64 (9) |
| Tobacco education and prevention | 57 (8) |
| Participate in Emergency Preparedness planning | 43 (6) |
| Grant Writing | 21 (3) |

3. Inspectional Services

As indicated earlier, inspectional services in Massachusetts are the most likely to be contracted out to private individuals and agencies. Using the data we have available, it is difficult to determine the total number of public health departments who have inspectional service employees. Although 38% (n=73) reported not having any public health inspectors employed through the health department, we believe in at least some of these departments, the public health director fulfills inspectional services responsibilities. With this in mind, we report here on inspectional service staff that do not hold other positions in the public health department. The data represents a total of 223 public health inspectors from 115 local communities.

Educational and licensing requirements and attainment

The educational data obtained on local public health inspectors is probably among the least accurate data collected through this survey. Like most other public health positions, we found little consistency in the educational requirements for this position. However, we are unable to accurately report on the educational attainment of public health inspectors because of a failure to include a full array of educational categories. We believe that most inspectors are likely to hold an Associates Degree (AA). However, this category was not included in the survey. The table below highlights degrees obtained by public health inspectors in 63 municipalities, all of whom have a BA/BS or higher.

| Educational Degrees for public health inspectors | Education Obtained |
|---|---------------------------|
| | % (n) |
| Bachelor Degree | 43 (49) |
| Masters | 10 (12) |
| PhD | 2 (2) |
| Missing municipalities | (52) |

Unlike educational requirements for public health inspectors, most municipalities require some certifications to perform essential inspectional services. As the table below highlights, the most certifications or licenses required by participating municipalities include: 1) food manager (47%), 2) registered sanitarian (43%), and 3) soil evaluator (30%). More than three-quarters (70%) of all municipalities with health inspectors have are able to conduct restaurant inspections. Approximately half (50%) are also have someone certified to conduct soil evaluations.

| Certifications for public health inspectors | Required | Obtained |
|--|-----------------|-----------------|
| | % (n) | % (n) |
| No certifications | 21 (24) | 3 (4) |
| Registered Sanitarian | 43 (49) | 38 (43) |
| Certified Health Officer | 12 (14) | 15 (17) |
| Professional Engineer | 2 (2) | 3 (4) |
| Licensed Soil Evaluator | 30 (35) | 50 (52) |
| Certified Food Manager | 47 (54) | 70 (80) |
| Lead Determinator | 27 (31) | 42 (48) |
| Certified Pool Operator | 28 (32) | 47 (54) |
| Certified Environmental Tech. | 2 (2) | 6 (7) |
| Registered Nurse | 1 (1) | 1 (1) |
| Other | 6 (7) | 43 (49) |

Salaries for public health inspectors

The salaries for public health inspectors varied significantly across the state. The minimum annual salary was as low as \$24,000 a year and the maximum was \$90,000. However, the mean range was between \$42,349 and \$52,165. Because the educational data we collected on public health inspectors is incomplete, we are unable to determine what accounts for the variability in salaries across municipalities. Like the other public health positions, we suspect the variability to be associated with both educational attainment and size of the population served.

| Salaries for PH Inspectors | Mean | Minimum | Maximum |
|-----------------------------------|-------------|----------------|----------------|
| Salary minimum | \$42,349 | \$24,000 | \$88,000 |
| Salary maximum | \$53,165 | \$42,292 | \$90,000 |

Representation by collective bargaining agreements or unions

Similar to public health nurses, only about one-third of municipalities have collective bargaining agreements with their public health inspectors.

| Representation by union | % (n) |
|--------------------------------|--------------|
| No | 65 (69) |
| Yes | 35 (37) |

Responsibilities of public health inspectors

In general, the responsibilities of public health inspectors were focused on an array of inspectional services for their communities. Nearly all (97%) reporting municipalities have inspectors who are responsible for inspection of restaurants and other food facilities. Most municipalities also have inspectors responsible for checking the quality and safety of camps and other recreational areas (83%) and commercial or industrial places. Slightly more than half of all communities also have at least one inspector who participates in emergency preparedness planning activities.

| Reported Responsibilities | % (n) |
|--|--------------|
| Inspection of restaurants | 97 (111) |
| Inspection of commercial or industrial places | 83 (95) |
| Inspection of public parks, beaches | 59 (68) |
| Inspection of camps or outdoor recreational facilities | 83 (95) |
| Inspection of new or renovated buildings | 37 (43) |
| Inspection of septic tanks and other water systems | 67 (77) |
| Monitoring of drinking water | 33 (38) |
| Monitoring of air quality | 34 (39) |
| Participation in Emergency Preparedness Planning | 51 (59) |
| Participation on Local Emergency Preparedness Planning Committee | 35 (40) |
| Grant Writing | 10 (12) |

4. Administrative Staff

Finally, we gathered basic information about administrative staff that provide support to local public health authorities across the state. Many communities reported having at least some assistance from administrative staff, although the amount of time funded varied by population size. In this section, we report on a total of 205 administrative support staff from 153 different communities.

Educational requirements and attainment

The majority of municipalities reported minimal educational requirements for administrative support staff. Approximately 17% reported no educational requirements and more than two-thirds (68%) required a high school diploma. When looking at educational attainment we find that almost half of all administrative support staff have an Associates Degree (AA) or higher.

| Educational requirements and attainment of administrative support staff | Education Required | Education Obtained |
|--|---------------------------|---------------------------|
| | % (n) | % (n) |
| No educational requirements | 17 (25) | |
| High School Diploma | 68 (102) | 56 (82) |
| Associate Degree | 11 (17) | 21 (31) |
| Bachelor Degree | 5 (7) | 20 (29) |
| Masters Degree | 0 | 2 (3) |
| Doctoral Degree | 0 | 0.7 (1) |
| Medical Degree | 0 | 0 |
| Other | 0 | 0 |

Salary for administrative support staff

Salaries for administrative support staff are generally lower than salaries for all other positions within a public health department. The mean salary range was between \$30,051 and \$37,156.

| Variable | Mean | Minimum | Maximum |
|-----------------|-------------|----------------|----------------|
| Salary minimum | \$30,051 | \$18,000 | \$53,000 |
| Salary maximum | \$37,156 | \$19,000 | \$59,505 |

Representation by collective bargaining agreements or unions

Administrative support staff are the most likely public health employees to have collective bargaining agreements with their municipalities. Nearly two-thirds of all municipalities reported having such agreements with their support staff.

| Representation by a union | % (n) |
|----------------------------------|--------------|
| No | 38 (54) |
| Yes | 62 (87) |

Responsibilities of administrative support staff

Across most municipalities, administrative support staff fulfill traditional roles in the organization and management of a department. These roles include interfacing with the public by answering phones, organizing a variety of applications and forms that come into the department, and ordering supplies. Approximately two-thirds of municipalities also reported that their support

staff are responsible for tracking revenues coming in to the public health department and monitoring budgets. Nearly one-third of municipalities also include their administrative support staff in local emergency preparedness planning.

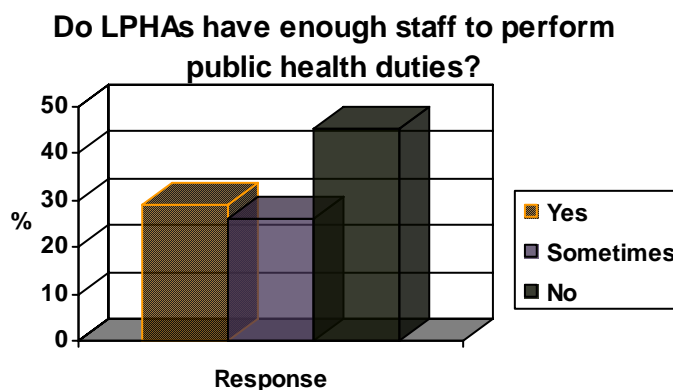
| Reported responsibilities for administrative support staff | % (n) |
|--|----------|
| Answer phone calls | 96 (147) |
| Schedule appointments for public health clinics | 63 (96) |
| Schedule appointments for public health staff | 69 (106) |
| Order supplies for the public health department | 93 (143) |
| Track/log applications filed with public health departments | 91 (139) |
| Organize/file reports and applications for the public health departments | 96 (147) |
| Keep track of revenues brought in to the public health department | 93 (143) |
| Manage budgets | 61 (94) |
| Take notes/minutes at meetings | 76 (116) |
| Participate in Emergency Preparedness | 31 (47) |
| Participation in local Emergency Planning Committee | 14 (22) |
| Grant Writing | 11 (17) |

5. Other Staff

Few reporting municipalities identified other public health staff that employed by the city or town. Out of the 191 reporting municipalities, only one reported having epidemiologists on staff. Nine municipalities reported having project coordinators or staff for special projects and five had staff dedicated to public health education.

F. Additional Staffing Needs

At the conclusion of the survey, we asked local public health authorities whether they had enough staff to perform essential public health responsibilities for their communities. Approximately 45% of all respondents did not believe they have adequate staffing to meet the needs of the public and an additional 26% reported that they sometimes have enough staff. Only 29% of all reporting public health authorities believed that they had enough staff to fulfill their responsibilities to the public.



We asked participants who reported not having enough staff (n=86) or sometimes having enough staff (n=49) to identify their additional staffing needs. We categorized the personnel requested into primary positions. They are presented below in the order of frequency with which they were requested.

Additional staff needs

- ◆ Public health inspectors – 46%
- ◆ Public health nurses – 27%
- ◆ Administrative support staff – 27%
- ◆ Health director/agent/commissioner – 13%
- ◆ Emergency Preparedness Coordinator – 7%
- ◆ Ordinance Enforcement – 3%
- ◆ Animal control officer – 3%
- ◆ Additional Board of Health member – 2%
- ◆ Epidemiologist – 2%
- ◆ Other (misc.) – 7%

Public health inspectors, public health nurses and administrative support staff are among the public health personnel who are in greatest demand at the local level.

Discussion

The need for a stronger public health infrastructure is not merely a local concern, but one that spans across local, state and federal jurisdictions. The data presented in this report provides a snapshot of the capacity and resources of local public health authorities in Massachusetts. Although far from exhaustive in terms of its representation of local public health authorities across the state, it provides an important first step towards the identification of local resource and capacity needs. The data may also be useful for advocacy around public health infrastructure development, which includes establishing staffing and educational standards for local public health authorities.

In general, the data highlight vast differences in local public health infrastructures across the Commonwealth. The most striking differences were found between larger and smaller communities. Municipalities with populations over 40,000 have greater budgets and resources than smaller cities and towns. This is not surprising given that larger municipalities tend to have diverse sources of funding that allow for greater flexibility in the allocation of local resources. Local public health authorities serving larger communities are also likely to be more competitive for state and federal funding for health interventions because of their ability reach a large number of people. However, we found that the majority of public health authorities across the Commonwealth rely primarily on municipal funds for public health services.

Over the last three years, there has only been a minimal increase in municipal budgets for public health authorities. Between 2004 and 2006, local public health authorities reported an average increase of 8% in municipal budgets, with the greatest increases being between 2005 and 2006. Most budgetary increases in municipal funds for public health services were reported among larger urban communities. Local public health authorities serving communities with populations less than 40,000 reported small to no increases in municipal funding over this period. With the cost of living on the rise and local public health officials taking on increasing responsibilities for emergency preparedness planning, there is ample evidence to question if this modest increase in municipal budgets covers the cost of local public health services.

Although differences in public health resources (e.g., funding, staffing) by population size is to be expected, the findings from this study highlight a lack of basic public health resources among communities with populations of 10,000 or less, but particularly those with populations less than

5,000. Many of these communities reported having no full time public health staff. In communities of less than 5,000 residents, most public health authorities employ part-time staff (less than 20 hours a week), the majority of whom provide administrative support. In smaller communities, the majority of essential public health services are contracted out to private agencies. In some communities, we found that essential public health services, such as nursing and inspections, might not be provided at all.

The results of this survey are unable to assess the degree to which communities who contract out their essential public health services are as likely to have their needs met as those who have public health personnel employed by their municipal government. We suspect that there are at least some differences in the fulfillment of local responsibilities, particularly around local emergency preparedness planning and inspectional services. With 71% of all reporting public health authorities acknowledging that they do not always have enough resources to meet the public health service needs of their community, further research is needed to identify gaps in local planning, service provision, and health promotion and education.

Finally, the data presented here highlight a lack of consistency in educational requirements and salaries for local public health personnel. Many municipalities reported that they require public health leaders (i.e., directors, commissioners, agents) to have attained a Bachelor's degree (BA or BS). However, few reported requiring post-graduate education and training in public health. Very few municipalities reported any educational requirements for public health inspectors. Although specialized training in public health may not be essential to perform all of the responsibilities of a local public health authority, it may provide public health personnel with a perspective and skills that are useful for innovative public health planning, education, and advocacy. How best to provide this training and education to the current public health workforce and establish minimal standards for the future public health workforce are key questions that will require collaborative planning and advocacy.

Limitations

This study has a number of limitations that limit its ability to provide information that is generalizable across the state. First, despite a number of recruitment strategies, the data presented here only represent slightly more than half of all local public health departments in the state. Large municipalities, such as Boston and Worcester, are not represented in this study. In part, we believe that a lack of response from these communities may be due to the amount of time it takes for larger public health departments to gather the data we requested. This is especially true for a city like Boston whose public health department has multiple branches and hundreds of employees. On the other end of the spectrum, it is possible that many smaller communities were unable to provide data on their local public health department because they simply did not have any staff to complete the survey.

A related limitation is the disproportionate representation of public health departments across the state. In particular, fewer public health departments in the central and western part of the state are represented than those in the metro Boston areas and northern and southeastern parts of the state. The majority of smaller communities (less than 5,000 residents) are found in western and central Massachusetts. As noted above, the small response rates from these communities may be linked to the limited number of staff available to complete the survey. It may also be related to differences in participation in regional or sub-regional emergency preparedness meetings. Unlike communities in the eastern part of the state, many in central and western Massachusetts do not meet monthly to discuss emergency preparedness planning.

A third limitation of the study is related to the mode of survey administration. As a self-administered survey, the ability to assess the comprehension of the questions asked was limited. During the process of reviewing and entering data responses, we noticed that there

was variability in the ways that some questions were answered. This is particularly true for the salaries of select public health personnel. When there were questions about the responses provided, phone calls were made to clarify responses. However, we were not always able to reach the person who completed the survey. We are therefore cautious in our presentation of the data and remain open to questions about the reliability of some findings.

Given the diversity of public health departments across the state, there were also inconsistencies in the positions held by people who completed surveys for public health departments. Most surveys were completed by the head of local public health departments (i.e., directors, agents or commissioners). However, there were a number of communities who had administrative staff or board of health members complete the surveys. We do not know the degree to which this variability influences the responses provided. It is possible that staff in different positions have varying degrees of knowledge regarding the questions asked. We mention it here as a possible limitation.

Conclusions

There is little question that the expectations and demands placed on local public health authorities over the last decade have expanded. This shift has occurred simultaneous to decreasing or level funds for essential public health services. A number of efforts are underway at the federal and state level to understand how these shifts impact local public health authorities, and to identify gaps in resources, education and training to meet the expanding responsibilities. These efforts to-date have been limited by a lack of basic information about local health public health authorities, including education and training of the public health workforce, staffing patterns, annual budgets, and local responsibilities. A better understanding of local public health capacity and resources is needed to inform thoughtful planning for improvements in local infrastructure.

Despite the limitations of this study, it has produced a wealth of information about local public health authorities that can be used by the members of the Coalition for Local Public Health and other local and state advocacy groups. Given the dearth of basic information about local public health across the state, we hope that the data can be used as a foundation for future inquiries into the resource, education, and capacity needs of local public health authorities in Massachusetts.

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APPENDIX A:

Coalition for Local Public Health
Workforce Assessment Survey

**Coalition for Local Public Health
Assessment of Local Public Health Workforce in Massachusetts**

*The purpose of this survey is to assess the composition of the local public health workforce in Massachusetts and some of the strengths and challenges of local public health departments. This survey is commissioned by the Coalition for Local Public Health (CLPH), a collaborative organization made up of the Mass. Association of Health Boards, Mass. Association of Public Health Nurses, Mass. Environmental Health Association, Mass. Health Officers Association, and the Mass. Public Health Association. The study is being carried out by the Institute for Community Health, a non-profit research group in Cambridge, MA. We hope that the results of the survey will provide basic information about the state's public health workforce. Such information is important for public health planning and advocacy efforts to increase resources for local public health departments across the State. **Thank you** for taking the time to complete this survey.*

Date: _____

City/Town/District: _____

Name of Person Completing Survey: _____

Relationship to/Position in Health Department: _____

Contact Information for Person Completing Survey:

Telephone # _____ Email: _____

Name of Health Agent/Director (if different from above): _____

We anticipate that this survey will take approximately 20-25 minutes to complete. Please answer the questions below to the best of your ability. If you do not know the answer to a question or cannot provide a "best estimate," please let us know by writing "Don't Know" or "DK" next to the question. Someone from the Institute for Community Health will call you at a later date to follow-up on the question. You may also write additional information in the margins or at the conclusion of the survey if the responses provided are not applicable to your city/town.

**Please fax, mail or email the survey to:
Justeen Hyde
Institute for Community Health
119 Windsor St (ground floor), Cambridge, MA 02139
Fax: (617) 665-3888
jhude@challiance.org**

DESCRIPTION OF PUBLIC HEALTH DEPARTMENTS

1. What type of Board of Health do you have?

- Elected Appointed Advisory Only Selectmen

2. How many members are on your Board of Health? # _____

3. Please tell us a little about the members of your Board of Health:

| Name | Occupation | Received Board of Health certification from MAHB? | How long a member of Board of Health? |
|------------|------------|--|---------------------------------------|
| 3a. | | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> DK | |
| 3b. | | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> DK | |
| 3c. | | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> DK | |
| 3d. | | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> DK | |
| 3e. | | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> DK | |
| 3f. | | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> DK | |

4. Does your Board of Health operate under a: (please check one)

- Traditional Board of Health Model** (i.e., staff appointed by and reports to the BoH)
 Inspectional Services Model
 Human Services Model
 Other (please specify):

FINANCIAL INFORMATION

In the section below we are going to ask a few questions about the annual budget for you city/town's health department. Information about individual budgets will not be shared with the public.

5. What was the annual municipally approved appropriation (budget) for your city/town's health department in FY 2004 (July 2003-June 2004)? Please exclude appropriations for solid waste, landfill, school-based health, and state and federal grants in your estimate.

\$ _____

6. What was the annual municipally approved appropriation (budget) for your city/town's health department in FY 2005 (July 2004-June 2005)? Please exclude appropriations for solid waste, landfill, school-based health, and state and federal grants in your estimate.

\$ _____

7. In FY 2005, how much revenue did the public health department generate through fees, fines, and/or surcharges? (Please estimate if you don't know exact figure)

\$ _____

8. In FY 2005, how much additional money (estimate) did the public health department bring in through:

- a. State grants \$ _____ None
- b. Federal grants \$ _____ None
- c. Other grants (e.g., foundation, trusts) \$ _____ None
- d. Service contracts \$ _____ None
- e. Other sources of funding \$ _____ None

9. What is the estimated annual municipally approved appropriation (budget) for your city/town's health department in FY 2006 (July 2005-June 2006)? Please exclude appropriations for solid waste, landfill, school-based health, and state and federal grants in your estimate.

\$ _____

STAFFING

There is a general lack of information in the State of Massachusetts about the staffing, responsibilities and resources of local health departments. In this next section we are going to ask that you provide us with as much detail as you can about your local health department. This information will be used to help plan for local public health trainings and advocacy efforts.

10. How many individuals within your city/town health department are employed either full-time or part-time in your department?

| | |
|---|---------|
| a. Full time (35 hours or more per week) | # _____ |
| b. Part time (between 20 and 34 hours per week) | # _____ |
| c. Part time (less than 20 hours per week) | # _____ |
| d. Contracted on per diem basis | # _____ |
| e. Volunteer staff (not paid) | # _____ |

11. Does the health department contract with any individual or agency to perform key responsibilities/duties of the public health department? No Yes

11a. If yes, please tell us what positions are contracted out and the responsibilities that these individuals fulfill.

| Position | # of people contracted | Responsibilities |
|----------|------------------------|------------------|
| 1. | | |
| 2. | | |
| 3. | | |
| 4. | | |

****Below is a series of questions that ask for specific information about each type of staff position that you may have in your health department. If your department does not have a position listed, please write a 0 in the space that asks “number of positions available” and skip to the next position.**

HEALTH DIRECTOR/COMMISSIONER/AGENT (Head of Public Health Department)

12. # of positions available _____ **12a. # of positions filled** _____

13. Is the funding for this position:

- Full time (35 + hrs)
- Part-time (20-34 hrs)
- Part time (19 hrs or less)
- Other: _____

14. Will this person become eligible to retire within the next 2 years? No Yes

15. In the last year, has the person(s) in this position had to reduce their hours because of financial constraints? No Yes

15a. Please describe the reductions (reason and amount)

16. What are the education requirements for a person in this position?

- No educational requirements
- High School/GED
- Masters Degree
- Associate Degree
- Doctoral Degree
- Bachelors Degree
- Medical Degree
- Other _____

17. What formal education does the current Public Health Director/Agent have?

- No educational requirements
- High School/GED
- Masters (MA, MPH, MBA)
- Associate Degree
- Doctorate (PhD)
- Bachelors (BA, BS)
- Medical (MD)
- Other _____

18. What certifications or licenses are required for this position? (Check all that apply)

- No certifications/licenses required
- Registered Sanitarian
- Lead Determinator
- Certified Health Officer
- Certified Pool Operator
- Professional Engineer
- Certified Environmental Health Technician
- Licensed Soil Evaluator
- Registered Nurse
- Certified Food Manager
- Other: _____

19. What certifications or licenses has the person currently in this position earned?

- | | | |
|-------------------------------|---|--|
| <input type="checkbox"/> None | <input type="checkbox"/> Registered Sanitarian | <input type="checkbox"/> Lead Determinator |
| | <input type="checkbox"/> Certified Health Officer | <input type="checkbox"/> Certified Pool Operator |
| | <input type="checkbox"/> Professional Engineer | <input type="checkbox"/> Certified Environmental Health Technician |
| | <input type="checkbox"/> Licensed Soil Evaluator | <input type="checkbox"/> Registered Nurse |
| | <input type="checkbox"/> Certified Food Manager | <input type="checkbox"/> Other: _____ |

20. What is the annual salary range for this position (min-max)

\$ _____ - \$ _____

21. What is the hourly rate for the person(s) who are currently employed in this position?
(check all that apply)

- | | |
|--|---|
| <input type="checkbox"/> \$9.60 - \$12.01/hr | <input type="checkbox"/> \$28.86-\$31.25/hr |
| <input type="checkbox"/> \$12.02-\$14.42/hr | <input type="checkbox"/> \$31.26-\$33.65/hr |
| <input type="checkbox"/> \$14.43-\$16.83/hr | <input type="checkbox"/> \$33.66-\$36.06/hr |
| <input type="checkbox"/> \$16.84-\$19.23/hr | <input type="checkbox"/> \$36.07-\$38.46/hr |
| <input type="checkbox"/> \$19.24-\$21.63/hr | <input type="checkbox"/> \$38.47-\$40.87/hr |
| <input type="checkbox"/> \$21.64-\$24.04/hr | <input type="checkbox"/> \$40.88-\$43.27/hr |
| <input type="checkbox"/> \$24.05-\$26.44/hr | <input type="checkbox"/> \$43.28/hr or more |
| <input type="checkbox"/> \$26.45-\$28.85/hr | <input type="checkbox"/> not paid (volunteer) |

22. Is this position represented by a union or collective bargaining group? No Yes

23. What are the primary responsibilities of the health director/agent in your city/town?
(check all that apply)

- | | |
|---|---|
| <input type="checkbox"/> Supervising staff | <input type="checkbox"/> Community health planning |
| <input type="checkbox"/> Develop and monitor budgets | <input type="checkbox"/> Updating health and nuisance ordinances |
| <input type="checkbox"/> Conduct sanitary inspections | <input type="checkbox"/> Establish health ordinances/bylaws |
| <input type="checkbox"/> Conduct environmental inspections | <input type="checkbox"/> Grant writing |
| <input type="checkbox"/> Monitor contractors/providers | <input type="checkbox"/> Advocate for improvements in health issues |
| <input type="checkbox"/> Emergency preparedness planning | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Participate on Local Emergency Planning Committee (LEPC) | <input type="checkbox"/> Other: _____ |
| | <input type="checkbox"/> Other: _____ |

2) PUBLIC HEALTH NURSES

(Not including school nurses: If you have school nurses, please complete questions in appendix)

24. # of positions available _____ **24a. # of position filled** _____

25. Will any of the public health nurses become eligible to retire in the next 2 years?

- No Yes → How many? # _____

26. How may public health nurses are currently employed through the public health department/district?

For example: If you have two nurses working 35 hrs/wk and one working 20 hrs/wk, you would mark: # 2 @ Full-time and # 1 @ Part-time (15-24 hrs)

- # _____ @ Full time (35 + hrs per week)
- # _____ @ Part-time (25-34 hrs per week)
- # _____ @ Part time (15-24 hrs per week)
- # _____ @ Part time (5-14 hrs per week)
- # _____ @ Part time (less than 5 hours per week)

27. In the last year, has the funding for any public health nurse been reduced because of financial constraints or difficulties?

No Yes → → **a. If yes: How many nurses have had their hours reduced? # _____**

b. Please describe the reductions (reason and amount)

(For example, 2 RNs reduced their time 10 hours because of municipal budget cuts)

28. What educational requirements are required for public health nurses in your health department?

- Licensed Practical Nurse (LPN)
- Registered Nurse (RN)
- Bachelor of Science Nurse (BSN)
- Other: _____

29. What licenses/education have the public health nurses in your department received?

- # _____ with Licensed Practical Nurse (LPN)
- # _____ with Registered Nurse (RN)
- # _____ with Bachelor of Science Nurse (BSN)
- # _____ with Masters Degree
- # _____ with Doctorate
- # _____ with Other (specify) _____

30. What is the annual salary range for this position (min-max) \$ _____ - \$ _____

31. What is the hourly rate for public health nurses in your city/town's public health

For example: If you have two nurses making \$27/hr, you would mark: # 2 @ \$26.45-\$28.85/hr

- | | |
|-------------------------------|------------------------------|
| # _____ @ \$9.60 - \$12.01/hr | # _____ @ \$28.86-\$31.25/hr |
| # _____ @ \$12.02-\$14.42/hr | # _____ @ \$31.26-\$33.65/hr |
| # _____ @ \$14.43-\$16.83/hr | # _____ @ \$33.66-\$36.06/hr |
| # _____ @ \$16.84-\$19.23/hr | # _____ @ \$36.07-\$38.46/hr |
| # _____ @ \$19.24-\$21.63/hr | # _____ @ \$38.47-\$40.87/hr |
| # _____ @ \$21.64-\$24.04/hr | # _____ @ \$40.88-\$43.27/hr |
| # _____ @ \$24.05-\$26.44/hr | # _____ @ \$43.28/hr or more |
| # _____ @ \$26.45-\$28.85/hr | # _____ not paid (volunteer) |

32. Are the public health nurses represented by a union/collective bargaining group?

No Yes

33. What are the primary responsibilities of the public health nurses in your city/town?

(check all that apply)

- | | |
|--|--|
| <input type="checkbox"/> Disease surveillance | <input type="checkbox"/> Administration/management of staff |
| <input type="checkbox"/> Disease investigation/reporting | <input type="checkbox"/> Community health education |
| <input type="checkbox"/> Health screening and outreach | <input type="checkbox"/> Local collaboration/coalition building |
| <input type="checkbox"/> Referrals to services | <input type="checkbox"/> Regional/state collaboration/coalition building |
| <input type="checkbox"/> Case Management | <input type="checkbox"/> Policy development and enforcement |
| <input type="checkbox"/> Vaccine administration/management | <input type="checkbox"/> Participation in E.P. Planning |
| <input type="checkbox"/> Private school nursing | <input type="checkbox"/> Participation on LEPC |
| <input type="checkbox"/> Grant writing | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Home Care | <input type="checkbox"/> Other _____ |

PUBLIC HEALTH INSPECTORS/REGISTERED SANITARIANS

34. # of positions available _____ **34a. # of position filled** _____

35. Will any of the public health inspectors become eligible to retire in the next 2 years?

No Yes → How many? # _____

36. How many public health inspectors are currently employed through the public health department/district?

For example: If you have two inspectors working 35 hrs/wk and one working 20 hrs/wk, you would mark: # 2 @ Full-time and # 1 @ Part-time (15-24 hrs)

- # _____ @ Full time (35 + hrs per week)
- # _____ @ Part-time (25-34 hrs per week)
- # _____ @ Part time (15-24 hrs per week)
- # _____ @ Part time (5-14 hrs per week)
- # _____ @ Part time (less than 5 hours per week)

37. In the last year, has the funding for any public health inspector been reduced because of financial constraints or difficulties?

No Yes → **a. If yes: How many inspectors have had their hours reduced? #** _____

b. Please describe the reductions (amount and reason)
(For example, 1 RS reduced his/her time 5 hours of budget cuts)

38. What certifications or licenses are required for this position? *(Check all that apply)*

- No certifications/licenses required
 Registered Sanitarian
 Lead Determinator
 Certified Health Officer
 Certified Pool Operator
 Professional Engineer
 Certified Environmental
 Licensed Soil Evaluator
 Health Technician
 Certified Food Manager
 Registered Nurse
 Other: _____

39. What formal education, certifications or licenses has the person(s) currently in this position earned?

- None
 # _____ Registered Sanitarian
 # _____ Registered Nurse
 # _____ Certified Health Officer
 # _____ Bachelors Degree
 # _____ Professional Engineer
 # _____ Masters Degree
 # _____ Licensed Soil Evaluator
 # _____ Doctoral Degree
 # _____ Certified Food Manager
 # _____ Other _____
 # _____ Lead Determinator
 # _____ Certified Pool Operator
 # _____ Certified Environmental Health Technician

40. What is the annual salary range for this position (min – max)? \$ _____ - \$ _____

41. What is the hourly rate for public health inspectors in your city/town’s public health department? *(check all that apply)*

For example: If you have 3 inspectors and 2 are making \$24/hr and 1 is making \$30/hour, you would mark:

- | | |
|-------------------------------|------------------------------|
| # _____ @ \$9.60 - \$12.01/hr | # _____ @ \$28.86-\$31.25/hr |
| # _____ @ \$12.02-\$14.42/hr | # _____ @ \$31.26-\$33.65/hr |
| # _____ @ \$14.43-\$16.83/hr | # _____ @ \$33.66-\$36.06/hr |
| # _____ @ \$16.84-\$19.23/hr | # _____ @ \$36.07-\$38.46/hr |
| # _____ @ \$19.24-\$21.63/hr | # _____ @ \$38.47-\$40.87/hr |
| # _____ @ \$21.64-\$24.04/hr | # _____ @ \$40.88-\$43.27/hr |
| # _____ @ \$24.05-\$26.44/hr | # _____ @ \$43.28/hr or more |
| # _____ @ \$26.45-\$28.85/hr | # _____ not paid (volunteer) |

42. Is this position represented by a union/collective bargaining agreement? No Yes

43. What are the primary responsibilities of the inspectors in your health department? *(check all that apply)*

- Inspection of restaurants and other food serving establishments
 Inspection of commercial (e.g., tanning or tattoo parlors) or industrial places
 Inspection of public parks, beaches
 Inspection of camps or outdoor recreational facilities
 Participation in Local Emergency Planning Committee
 Inspections of new or renovated buildings
 Inspection of septic tanks and other water systems
 Monitoring of drinking water

- Monitoring of air quality
- Participation in emergency preparedness planning
- Grant writing
- Other: _____
- Other: _____

ADMINISTRATIVE SUPPORT STAFF

44a. # of positions available _____ **44b. # of position filled** _____

45. Will any of the administrative support staff become eligible to retire in the next 2 years? No Yes → How many? # _____

46. How many administrative support staff are currently employed through the public health department/district?

For example: If you have one administrator working 35 hrs/wk and one working 20 hrs/wk, you would mark: # 1 @ Full-time and # 1 @ Part-time (15-24 hrs)

- # _____ @ Full time (35 + hrs per week)
- # _____ @ Part-time (25-34 hrs per week)
- # _____ @ Part time (15-24 hrs per week)
- # _____ @ Part time (5-14 hrs per week)
- # _____ @ Part time (less than 5 hours per week)

47. In the last year, has the funding for any administrative support staff been reduced because of financial constraints or difficulties?

No Yes → **a. If yes: How many support staff had their hours reduced? #** _____

b. Please describe the reductions (amount and reason)
(e.g., 1 staff reduced his/her time 10 hours because we lost grant funding)

48. What are the education requirements for a person(s) in this position?

- | | | |
|--|---|--|
| <input type="checkbox"/> No educational requirements | <input type="checkbox"/> High School/GED | <input type="checkbox"/> Masters Degree |
| | <input type="checkbox"/> Associate Degree | <input type="checkbox"/> Doctoral Degree |
| | <input type="checkbox"/> Bachelors Degree | <input type="checkbox"/> Medical Degree |
| | | <input type="checkbox"/> Other _____ |

49. What formal education do the administrative staff have?

| | |
|----------------------------|--------------------------------|
| # _____ High School/GED | # _____ Masters (MA, MPH, MBA) |
| # _____ Associate Degree | # _____ Doctorate (PhD) |
| # _____ Bachelors (BA, BS) | # _____ Medical (MD) |
| | # _____ Other _____ |

50. What is the annual salary range for this position (min – max)? \$ _____ - \$ _____

51. What is the hourly rate for administrative support staff in your city/town’s public health department? *(check all that apply)*

For example: If you have 2 administrative support staff and both are making \$16/hr, you would mark:

| | |
|-------------------------------|------------------------------|
| # _____ @ \$9.60 - \$12.01/hr | # _____ @ \$28.86-\$31.25/hr |
| # _____ @ \$12.02-\$14.42/hr | # _____ @ \$31.26-\$33.65/hr |
| # _____ @ \$14.43-\$16.83/hr | # _____ @ \$33.66-\$36.06/hr |
| # _____ @ \$16.84-\$19.23/hr | # _____ @ \$36.07-\$38.46/hr |
| # _____ @ \$19.24-\$21.63/hr | # _____ @ \$38.47-\$40.87/hr |
| # _____ @ \$21.64-\$24.04/hr | # _____ @ \$40.88-\$43.27/hr |
| # _____ @ \$24.05-\$26.44/hr | # _____ @ \$43.28/hr or more |
| # _____ @ \$26.45-\$28.85/hr | # _____ not paid (volunteer) |

52. Is this position represented by a union/collective bargaining agreement? No Yes

53. What are the primary responsibilities of the administrative staff in your health department? *(check all that apply)*

- Answer phone calls for health department
- Schedule appointments for public health clinics
- Schedule appointments for public health staff
- Order supplies for the public health department
- Track/log applications filed with the public health department
- Organize/file reports and applications for the public health department
- Keep track of revenues brought in to the public health department
- Manage budgets
- Take notes/minutes at meetings
- Participate in Emergency Preparedness Planning
- Participate in Local Emergency Planning Committee (LEPC)
- Grant writing
- Other: _____
- Other: _____
- Other: _____

OTHER STAFF – Please tell us about the other individuals (if any) who are employed through the public health department.

54. What other staff/positions are funded through the public health department?

| Position | # of employees | # of hours per week |
|--|-----------------------|----------------------------|
| a. Epidemiologists <input type="checkbox"/> No <input type="checkbox"/> Yes → | | |
| b. Project Coordinators/Specialists <input type="checkbox"/> No <input type="checkbox"/> Yes → | | |
| c. Project staff <input type="checkbox"/> No <input type="checkbox"/> Yes → | | |
| d. Health education (non-nurse) <input type="checkbox"/> No <input type="checkbox"/> Yes → | | |
| e. Other: _____ | | |
| f. Other: _____ | | |
| g. Other: _____ | | |
| h. Other: _____ | | |

STAFFING NEEDS

55. In the last year, has the health department had enough staff to perform the duties required of the department?

- No
- Some of the time
- Yes

56. What additional staff does the health department need to fulfill its duties/responsibilities?

| Position | Number of people needed | Why is this position not available or filled? | Do you think there is a possibility of filling this position in the next year? |
|-----------------|--------------------------------|--|---|
| | | | |
| | | | |
| | | | |
| | | | |

Appendix A

SCHOOL NURSES – Please complete this section if you have school nurses employed through the public health department in your city/town.

57a. # of positions available _____ 57b. # of position filled _____

58. Will any of the school nurses become eligible to retire in the next 2 years?

No Yes → How many? # _____

59. How many school nurses are currently employed through the public health department/district?

_____ @ Full time (35 + hrs per week)
_____ @ Part-time (25-34 hrs per week)
_____ @ Part time (15-24 hrs per week)
_____ @ Part time (5-14 hrs per week)
_____ @ Part time (less than 5 hours per week)

60. In the last year, has the funding for any school nurse been reduced because of financial constraints or difficulties?

No Yes → → a. If yes: How many nurses have had their hours reduced? # _____

b. Please describe the reductions

(e.g., 2 RNs reduced their time 10 hours)

61. Where are your school nurses located? (check all that apply)

- Elementary schools
 Middle Schools
 High Schools
 Other: _____

62. What educational requirements are required for school nurses in your health department?

- Licensed Practical Nurse (LPN)
 Registered Nurse (RN)
 Bachelor of Science Nurse (BSN)
 Other: _____

63. What licenses/education have the school nurses in your department received?

- # _____ with Licensed Practical Nurse (LPN)
- # _____ with Registered Nurse (RN)
- # _____ with Bachelor of Science Nurse (BSN)
- # _____ with Masters Degree
- # _____ with Doctorate
- # _____ with Other (specify) _____

64. What is the salary range for this position (min-max) \$ _____ - _____

65. What is the hourly rate for school nurses in your city/town's public health department?
(check all that apply)

For example: If you have two nurses making \$27/hr, you would mark: # 2 @ \$26.45-\$28.85/hr

- | | |
|-------------------------------|------------------------------|
| # _____ @ \$9.60 - \$12.01/hr | # _____ @ \$28.86-\$31.25/hr |
| # _____ @ \$12.02-\$14.42/hr | # _____ @ \$31.26-\$33.65/hr |
| # _____ @ \$14.43-\$16.83/hr | # _____ @ \$33.66-\$36.06/hr |
| # _____ @ \$16.84-\$19.23/hr | # _____ @ \$36.07-\$38.46/hr |
| # _____ @ \$19.24-\$21.63/hr | # _____ @ \$38.47-\$40.87/hr |
| # _____ @ \$21.64-\$24.04/hr | # _____ @ \$40.88-\$43.27/hr |
| # _____ @ \$24.05-\$26.44/hr | # _____ @ \$43.28/hr or more |
| # _____ @ \$26.45-\$28.85/hr | # _____ not paid (volunteer) |

66. Are the school nurses represented by a union/collective bargaining group? No Yes

67. What are the primary responsibilities of the school nurses?

- Physical examinations
- Hearing Tests/Screenings
- Vision Tests/Screenings
- Postural Screenings
- Other Screenings (Specify: _____)
- Review immunization records
- Administer immunizations/vaccinations
- Provide oversight of prescription drug medication
- Provide health education to students
- Provide health education to parents
- Develop Individual Educational Plans IEPs
- Train other school personnel on health issues
- Drug and Alcohol education and prevention
- Tobacco education and prevention
- Participate in Emergency Preparedness Planning
- Grant writing
- Other: _____
- Other: _____
- Other: _____

