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THE INSTITUTE FOR PUBLIC POLICY & ECONOMIC DEVELOPMENT



Public Health Infrastructure in Pennsylvania

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The Institute

Turning Information into Insight

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Introduction

According to the Institute of Medicine, the three core functions of public health are assessment, policy development, and assurance. Federal, state, and local authorities play a role in performing these core functions and delivering essential health services. Although states have primary responsibility for implementing public health, the structure and roles of state and local departments of health vary by state.

The Pennsylvania public health system is a mixed structure with three different authorities primarily responsible for public health matters: the state Department of Health, county and municipal health departments and local health authorities. There are currently six county health departments and four municipal health departments, which cover 41 percent of Pennsylvania's population. In the remaining 61 counties and municipalities that do not have a local health department, public health services are provided by a combination of various governmental agencies and other non-governmental organizations.

While the public health infrastructure is a critical component in protecting and promoting health of residents, it is often an afterthought until a crisis or emergency occurs, then short-term, reactionary funding is used to address the immediate needs. Public health agencies have historically faced funding limitations and a declining workforce. According to the nonprofit Trust for America's Health, less than 3 percent of the estimated \$3.6 trillion the United States spends annually on health is directed toward public health and prevention. Between 2008 and 2017, local public health agencies across the nation lost nearly one-quarter of their workforce.¹

The COVID-19 pandemic highlighted the fragmentation of the nationwide public health infrastructure, and the lack of a coordinated pandemic preparedness response. It prompted the question of how the public health system should be changed in order to more effectively structure public health functions, and improve our ability to respond to public health emergencies.

This report examines the public health infrastructure in Pennsylvania, including historical context, policy issues, and implications for resilience to future public health emergencies. It reviews the role of public health agencies, and includes an analysis of different public health agency governance structures, highlighting variations in workforce capacity and funding. It examines how the COVID-19 pandemic has intensified challenges in the public health infrastructure, and how the system could be restructured to more effectively respond to public health emergencies. The report concludes with a set of policy recommendations for improving the public health system.

Role of Public Health

The Institute of Medicine has defined the mission of public health as "fulfilling society's interest in assuring conditions in which people can be healthy" and determined the core functions of government public health agencies include:²

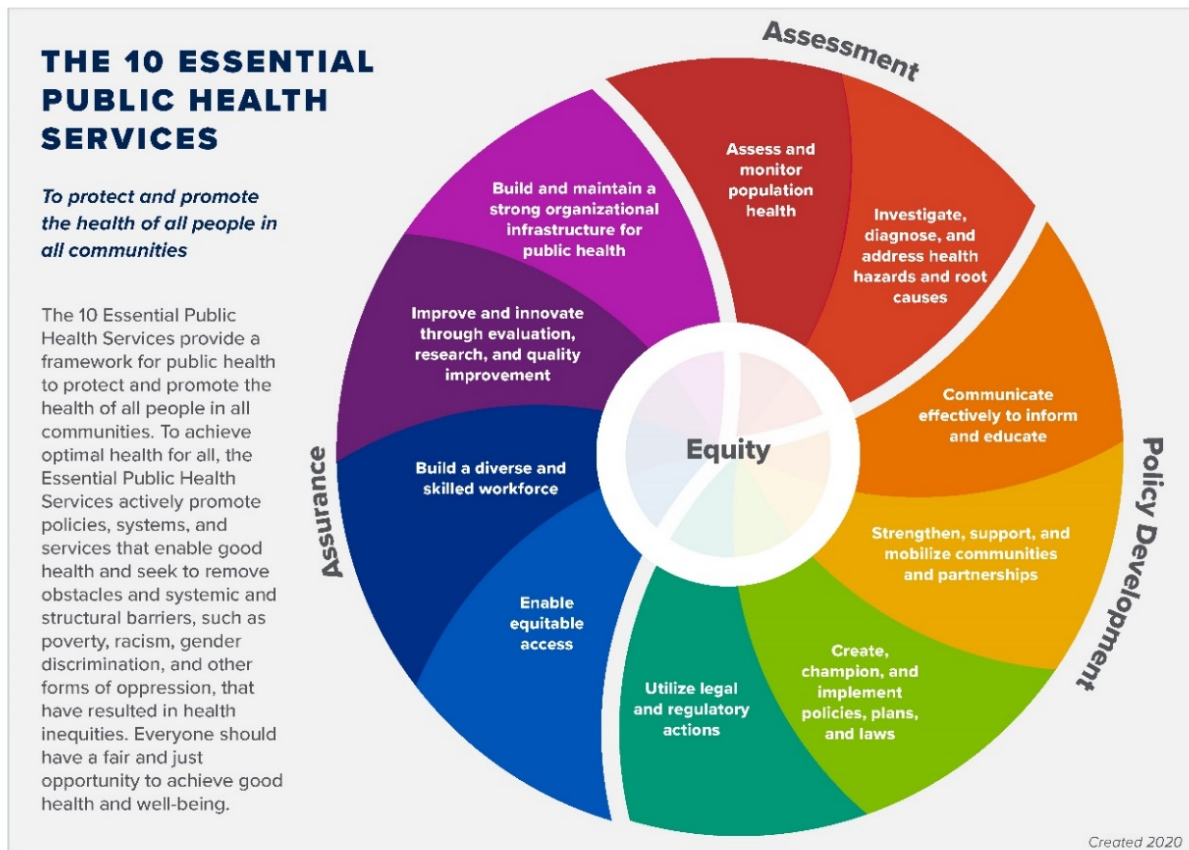
- **Assessment** - "Regularly and systematically collect, assemble, analyze, and make available information on the health of the community, including statistics on health status, community health needs, and epidemiologic and other studies of health problems."
- **Policy development** - "Develop comprehensive public health policies by promoting use of the scientific knowledge base in decision-making about public health and by leading in developing public health policy."

¹ (Trust for America's Health, 2020)

² (Institute of Medicine (US) Committee for the Study of the Future of Public Health, 1988)

- **Assurance** - "Assure constituents that services necessary to achieve agreed upon goals are provided, either by encouraging actions by other entities (private or public sector), by requiring such action through regulation, or by providing services directly."

These core functions established the framework for the ten essential public health services that should be provided by local health agencies to protect and promote the health of all people in all communities. These essential health services were updated in 2020 through a collaboration by the Public Health National Center for Innovations (PHNCI) and the de Beaumont Foundation.³



In 2016, the US Department of Health and Human Services launched the Public Health 3.0 initiative, a model which focuses on partnering across multiple sectors and leveraging data and resources to address social, environmental, and economic conditions that affect health and health equity. Recognizing that many population health challenges require community-based interventions, Public Health 3.0 goes beyond healthcare and traditional public department functions and programs to address social determinants of health. At the core of this initiative is the notion that local communities will lead the charge in taking public health to the next level by engaging public health departments with community stakeholders from both the public and private sectors to form cross-sector partnerships and foster shared funding, services, governance, and collective action.⁴

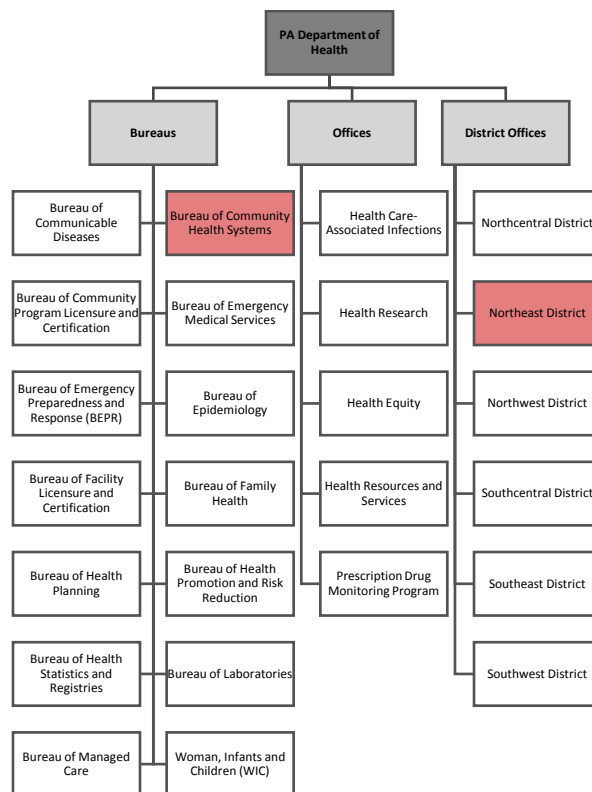
³ (Centers for Disease Control and Prevention, 2021)

⁴ (DeSalvo, et al., 2017)

Pennsylvania Public Health System

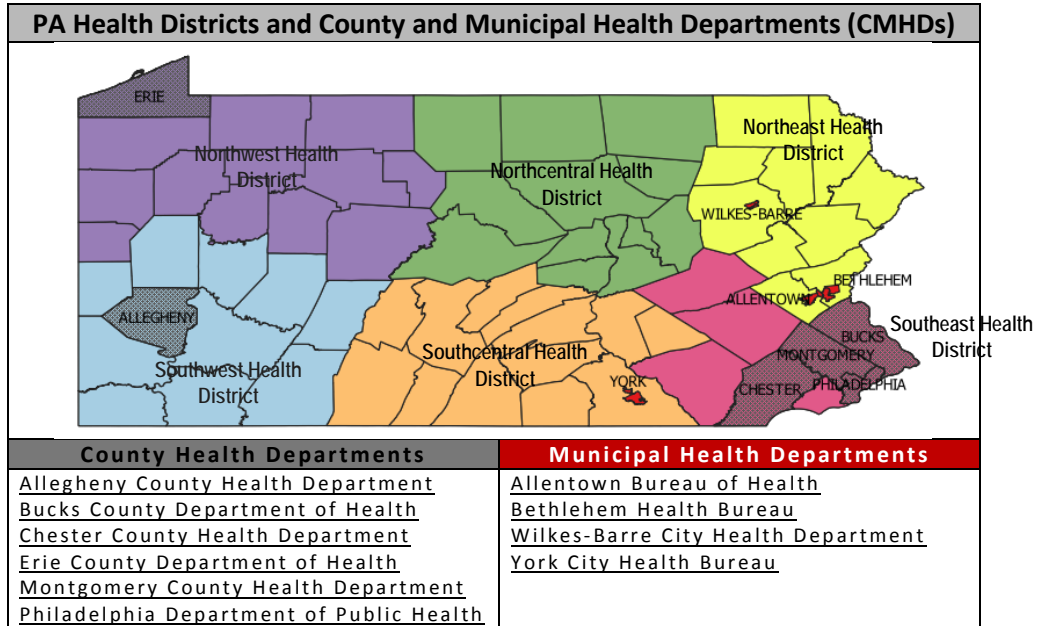
In Pennsylvania, there are three different authorities responsible for public health matters: the Department of Health (DOH), county and municipal health departments and local health authorities. The PA DOH was established in 1905, and operates under the current mission “to promote healthy behaviors, prevent injury and disease, and to assure the safe delivery of quality health care for all people in Pennsylvania” and vision of “a healthy Pennsylvania for all”.⁵ The Pennsylvania Local Health Administrative Law (Act 315) enacted in 1951 authorized the creation of single-county or joint county departments of health to improve local health administration throughout the state. Act 315 provides funding for local health departments in counties and municipalities that meet the requirements. For decades, state funding rates under Act 315 were stable at \$6 per capita. The Law was amended by Act 12 in 1976 to add support for environmental health initiatives, and provided \$1.50 per capita to local health departments for these services. Local health departments are also funded through state and federal grants, and local funding from counties and municipalities is required to cover a portion of the costs.

The current structure of the PA DOH consists of the following 16 distinct bureaus. The Bureau of Community Health Systems operates as the public health implementation arm responsible for operating a network of state health centers and supporting public health programs throughout the state through six health district offices. There are three district administrators covering all six health districts; each district administrator is assigned to two health districts. The Lackawanna and Luzerne County region falls under the Northeast District office, which also includes Wyoming, Susquehanna, Wayne, Pike, Monroe, Carbon, Lehigh and Northampton Counties. The district administrator covering the Northeast District also has oversight of the Southeast District. In addition, the DOH includes five offices focused on health care-associated infections, health research, equity, and resources and services, and prescription drug monitoring.



⁵ (Pennsylvania Department of Health, 2021)

The local public health infrastructure in PA currently consists of six county health departments, four municipal health departments, and a network of state clinics in the remainder of the state. The county and municipal health departments (CMHDs) cover 41 percent of Pennsylvania’s population at a local level.⁶ Part of the local region is served by the Wilkes-Barre City Health Department and state health centers located in Lackawanna County (Scranton) and Luzerne County (Wilkes-Barre).



In 2019, the PA Department of Health achieved national accreditation through the Public Health Accreditation Board. Thirty-four states and more than 240 health departments nationwide have earned national accreditation, including the Allegheny County, Erie County, the Bethlehem Health Bureau and the Philadelphia Department of Public Health in Pennsylvania.

The county and municipal health departments in Pennsylvania are located in more urban, populated areas. Local health departments are paid a per capita rate by the state to provide a set of mandated public health services. It would be difficult for counties and municipalities in less populated rural areas to establish local health departments and provide the required services with the level of per capita financing that is currently in place.

In the remaining 61 counties and municipalities that do not have a local health department, public health services are provided by a combination of various governmental agencies and other non-governmental organizations. Public health services are implemented either through a municipal board of health or through the Department of Health’s six district health offices and health centers. The Department of Environmental Protection provides environmental public health services, and the Department of Agriculture conducts restaurant inspections in counties and municipalities that lack certified inspectors. The Commonwealth Response Coordination Center, housed within PEMA (Pennsylvania Emergency Management Agency) also plays a role during public health disaster declarations. Although the Department of Human Services is separate from the Department of Health, it also provides services related to public health, including overseeing the state’s health information exchange and Medical Assistance programs.

⁶ (Pennsylvania Department of Health, 2021)

Local Health Department Expansion Efforts

Other PA counties and municipalities have studied forming county, municipal or regional health departments. Lehigh and Northampton Counties discussed forming a joint health department in the late 1980s and again starting in 2009. The counties formed a health board and created a budget, and planned on folding the existing Allentown and Bethlehem municipal health departments into the new bi-county department. However, the plans were discontinued in 2012 after changes in state funding formulas would have required more local funding.

Lancaster County has pursued forming a health department several times. In 2007, the PA DOH granted Lancaster County permission to establish a county health department, however, it was not implemented following a change in county leadership and funding uncertainty. Instead, the county has used a public/private partnership approach to try and address gaps in public health services through the Partnership for Public Health in Lancaster County.

In 2010, Delaware County, one of the most heavily populated counties in the state, commissioned a study by Johns Hopkins University to identify gaps in health services. Although the study did not recommend the creation of a county health department, it did identify a need to better coordinate public health initiatives, to create a centralized system for distributing health information, and to increase public health funding. The COVID-19 pandemic forced Delaware County to seek support from neighboring counties for public health activities, with the PA DOH granting a request in March 2020 for Chester County to lead Delaware County's COVID-19 public health response.

The pandemic has prompted other counties and municipalities to consider the need for a more local public health department presence. Most recently, officials from seven counties in Southwestern Pennsylvania (Beaver, Butler, Lawrence, Washington, Green, Fayette and Westmoreland Counties) met in February to discuss forming an exploration committee to study forming a regional health department after experiencing difficulties relying on the state DOH during the pandemic.

Scranton city and Lackawanna County officials are also exploring the possibility of forming a city health department, county health department, or a hybrid combination of both.

Spotlight – Wilkes-Barre Health Department

The Wilkes-Barre Health Department was formed in 1999 and currently serves approximately 40,000 city residents. According to the mission statement of the Health Department, "The purpose of the Wilkes-Barre City Health Department is to prevent disease and to promote and protect the health of Wilkes-Barre City residents. The Department does so by assessing the needs of the public, offering public health services and creating sound public health policies." The Health Department includes the following bureaus:

- Bureau of personal health
- Bureau of environmental health
- Bureau of preventive health
- Bureau of public health preparedness
- Bureau of administration

The Health Department has focused on three main areas in responding to the pandemic: identifying cases through COVID testing, isolating cases through contact tracing, and administering vaccinations. The Health Department has been administering approximately 1,400 doses per week to the public, including non-residents. Vaccination clinics have been held throughout the city, including in sites to accommodate underserved populations such as public housing units and homeless shelters. The Health Department's Public Health Preparedness plan helped the Department prepare for mass vaccination clinics by conducting annual drive-through flu clinics.

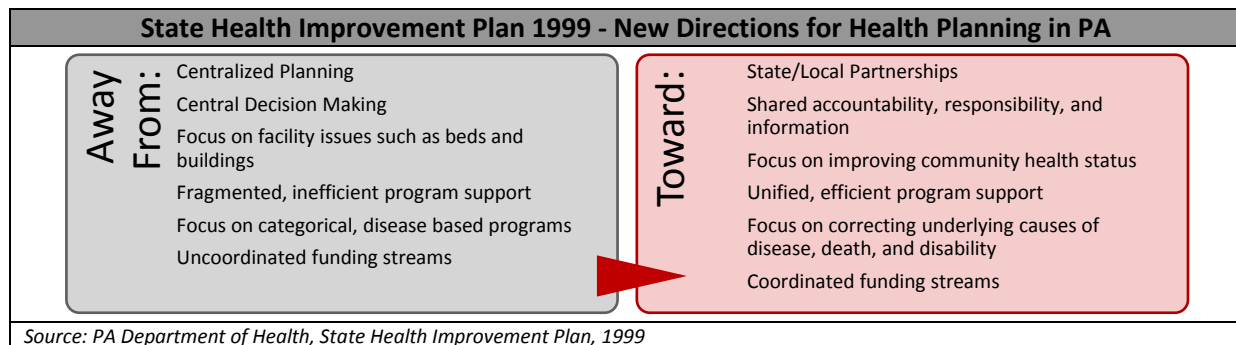
No one anticipated the enormity of pandemic and effect it would have employees due to the amount of work involved in responding. Due to the complexities and how widespread the impact has been, the Department would look to identify additional resources to support the response effort in future emergencies. Some lessons learned from this public health emergency are that the infrastructure needs to be enhanced to improve the response to people's social, behavioral, and emotional needs during the pandemic. Outreach needs were not met as quickly as they should have been, including mental health support for those isolated during the pandemic, and support for those experiencing food insecurity. In addition, sharing information through public health messaging and the speed at which it is distributed needs to improve.

Recent History of PA Public Health System

There have been changes in the organizational structure of the PA public health system and the strategies used to shift towards a collaborative, partnership approach over the past few decades. In the 1990s, then Governor Ridge introduced a proposal to privatize all state health centers and the state public health laboratory in an effort to increase efficiency of healthcare services and reduce costs. In response, the state legislature passed Act 87 to prevent the full-scale privatization efforts, but established pilot programs to privatize state health centers in three counties (Butler, Berks, and Dauphin Counties) for a one-year period and contract certain clinical services (HIV counseling and testing, immunizations, and screening, testing and treatment for both STDs and tuberculosis) to private bidders.

An evaluation of the pilot effort was not in support of privatizing the public health system, concluding that it weakened the public health system while not providing evidence of cost reductions. It recommended that further assessment of the capacity of the public health system and study of best practices in public health service delivery were needed to help develop the future PA public health strategy.⁷

In 1999, the PA DOH released a multi-year State Health Improvement Plan (SHIP) which shifted the focus of health planning from a centralized, facility oriented approach to one focused on the development of public, private and community partnerships for program implementation based on shared responsibility and accountability. It authorized a new health improvement model based on finding solutions to local health problems through collaborative work.⁸



The goals of the improvement plan included: increasing community empowerment by planning based on local needs, linking community health plans with the allocation of state resources, fostering the coordination of health resources through partnerships between local governments and state and local partners, and shifting to a shared responsibility model for community health planning. This collaborative approach to community health was intended to foster stronger local decision making and improve DOH responsiveness to local need. It was also intended to improve coordination of resources while increasing the effectiveness of DOH programs and community health efforts. Seven community based health improvement pilot partnerships from the six Department of Health service districts participated in testing the State Health Improvement Plan.

In 2013, the administration under then-Gov. Tom Corbett planned to close 26 of the 60 state health centers that existed at that time and relocate those nurses to health centers in neighboring counties. The plan was to eliminate the costly leases for underused centers, and make community nurses more mobile. Some leaders advocated for co-locating with other agencies or federally qualified health centers instead of spending money

⁷ (Lopez, Rhodes, & Herzenberg)

⁸ (Pennsylvania Department of Health, 1999)

on facilities. Opponents argued the action violated Act 87 which was enacted in 1996 and requires the Department of Health to operate state health centers and provide a minimum of public health services. Fourteen of the 26 state health centers were closed before a lawsuit brought before the Pennsylvania Supreme Court halted the closures. Around this time, health staffing levels at state health centers started declining. Some state health centers have since reopened.

Pennsylvania’s State Health Care Innovation Plan released in 2013 included programs designed to strengthen PA’s public health system by building an infrastructure at the local, regional and statewide levels to identify public health issues, and target resources to develop programs and system inter-connections to address population health issues.⁹ This would include the creation and implementation of a new State Health Improvement Plan developed in partnership with the DOH and public health stakeholders. The ten county and municipal departments and participants in the Health Improvement Partnership Program (HIPP) would partner with regional hubs to coordinate public health improvement plans in each region. The plan was to coordinate local resources to address public health issues using these CMHDS and HIPPs as connectors to community-based organizations focused on improving community health, such as hospitals, academic institutions, and non-profit entities.

Following collaboration between state agencies and community partners, the Pennsylvania’s State Health Improvement Plan 2015-2020 was developed. This multi-year strategic plan was intended to enable the stakeholders of the state’s public health system to coordinate efforts and provide more efficient and integrated programs. As part of the SHIP planning process, a State Public Health Performance survey examined the planning, implementation, capacity, and resources of the public health system in PA, and identified the strengths and weaknesses of the system. While ‘collaboration to improve health and the public health system’ was identified as a strength, ‘inability to mobilize and sustain partnerships’ was identified as a weakness.¹⁰ This suggests that while the DOH has improved efforts to collaborate with community partners and other public health stakeholders, improvements are still needed to develop sustainable partnerships to coordinate public health resources in communities. Other weaknesses that were identified included critical structural components needed to support the public health system, including financial resources and public health workforce development.

Findings from the State Public Health System Performance Survey, 2015-2020 Strategic Plan	
<p>Strengths</p> <ul style="list-style-type: none"> • Surveillance • Laboratories • Coordination of response to public health threats • Threat/hazard response and planning • Collaboration to improve health and the public health system • Knowledge of public health law and associated actions 	<p>Weaknesses</p> <ul style="list-style-type: none"> • Financial resources • Failure to eliminate barriers to access to care • Access to health insurance • Public health workforce development • Research • Inability to mobilize and sustain partnerships • Evaluate public and personal health care services

Source: Pennsylvania Department of Health, 2016

The PA Department of Health has continued to update its strategic plan. As part of the development of the 2020-2023 Strategic Plan, an updated assessment of the strengths, weaknesses, opportunities and threats

⁹ (Commonwealth of Pennsylvania, 2013)

¹⁰ (Pennsylvania Department of Health, 2016)

(SWOT) of the PA public health system was completed. The analysis identified several overlapping attributes related to the organization and processes of the public health system that were assigned to multiple categories. While ‘infrastructure and resource availability’ was identified as a strength, it was also identified as a weakness and threat. Stakeholders identified the ‘overarching organization alignment’ of the system with all categories – as a strength and opportunity, and as a weakness and threat. ‘Partnerships and relationships’ were identified as a strength that would both present both opportunities and threats.

Overlapping Attributes from PA Public Health System SWOT Analysis, 2020-2023 Strategic Plan				
Attribute	Strength	Weakness	Opportunity	Threat
Infrastructure and resource availability	X	X		X
Overarching organization alignment	X	X	X	X
Partnerships and relationships	X		X	X
Process effectiveness, consistency and efficiency		X	X	X
Career and professional development		X		X
Rural area support			X	X

Source: Pennsylvania Department of Health

The overlapping assignment of these variables suggest there are contradictory views related to the current structure and processes of the PA public health system. As the DOH collaborates with community partners to create a more effective public health system, it may be necessary to reevaluate and improve the current infrastructure and organizational alignment to be more responsive and better equipped to address public health needs.

Governor Wolf announced a whole-person health reform package in October 2020 that focuses on both physical and behavioral health and promoting affordability, accessibility and value in health care. The proposal aligns with the Public Health 3.0 initiative to address social, environmental, and economic conditions that affect health and health equity. Part of the health reform plan includes the formation of five Regional Accountable Health Councils (RAHCs) across the state under the Department of Human Services to collectively develop regional transformation plans built on community needs assessments to reduce disparities, address social determinants of health, and align value-based purchasing arrangements. According to a news release, the five RAHCs were launched in March 2021 to provide opportunities for strategic health planning across the health care system and better collaboration between health care providers and social service organizations. RAHC members include managed care payers; providers in hospitals, health systems, and smaller practices; and community-based organizations that assist with food and housing insecurity and other social needs. A list of members of each regional RAHC, including the Northeast region RAHC serving Lackawanna and Luzerne Counties, is available through this [link](#) from the Department of Human Services.¹¹

Role of Local Health Departments

The role of public health departments vary based on the structure of departments and the administration of services at the state, county and local level. According to the PA DOH, local health departments provide public health programs in the following areas: administrative and supportive services; personal health services; and environmental health services. The overall goal of local health department programs is to “reduce morbidity and mortality among the local service population and to promote healthy lifestyles.”¹²

Administrative and supportive services can include the development and implementation of public health programs based on defined objectives, and the collection and reporting of health statistics. Examples of personal health services provided by county or municipal health departments can include immunization

¹¹ (Pennsylvania Department of Human Services, 2021)

¹² (Pennsylvania Department of Health, 2021)

clinics, STI/HIV clinics, chronic disease assessments and screenings, and care for health needs from community health nurses. Environmental health services include inspection and education to protect residents from unhealthy environmental conditions. Examples of these services can include rental, lead risk, and food establishment inspections, and waste and water pollution programs.

Local Health Department Public Health Programs		
Administrative and Supportive Services	Personal Health Services	Environmental Health Services
<ul style="list-style-type: none"> • Administration and program direction • Budget • Accounting • Personnel administration • Public health education • Public health statistics • Public health laboratory services 	<ul style="list-style-type: none"> • Chronic disease • Communicable disease control • Maternal and child health services • Public health nursing services 	<ul style="list-style-type: none"> • Food protection • Water supply • Water pollution control • Bathing places • Vector control • Solid wastes • Institutional environment • Recreational environment • Housing environment
<p><i>Source: PA Code Chapter 15 State Aid to Local Health Departments</i></p>		

Typically, in counties and municipalities without a local health department, the district health office staff provides coordination, consultative and administrative support to the health centers in communicable disease reporting and investigation, epidemiology, informational and referral, chronic disease prevention and intervention programs, and environmental health services. The state health centers provide communicable disease clinical services, immunization, and HIV testing, counseling and education.¹³ The DOH can also contract with local non-profit agencies to provide public health services.

Staffing at the state health centers varies. Some centers have several nurses and an administrative support person. Others have one nurse and no administrative support person for a state health center covering an entire county. In prior years, each district office had nurse consultants available who had different areas of expertise, such as is chronic disease management and diabetes. These regional nurse consultants would provide back-up support to state health center staff when needed, in addition to focusing on providing education and prevention services across the district in their areas of expertise. Over time, most of these regional nurse consultant positions were eliminated, and the district offices and state health centers are strictly focused on providing minimal mandated public health services.

Staff in the Wilkes-Barre health department’s Bureau of Personal Health Services have been conducting contact tracing during the pandemic as part of their communicable disease control services. Counties and municipalities without a local health department have relied on neighboring departments or the state DOH to coordinate contact tracing efforts. The DOH formed public-private partnerships with healthcare networks, academic institutions, and other outside organizations to assist health departments with contract tracing efforts. The DOH is working with Lehigh Valley Health Network to manage contact tracing in the state’s northeast region.

Community-based health partners have played an important role in providing support for public health initiatives in PA. The Community-Based Health Care (CBHC) Program was established in 2013 through Act 10 to provide community-based health care clinics focused on the uninsured, underinsured and underserved population. The clinics are designed to expand and improve access to health care, reduce over-utilization of emergency room services, and encourage collaboration among clinics, hospitals, and other health care

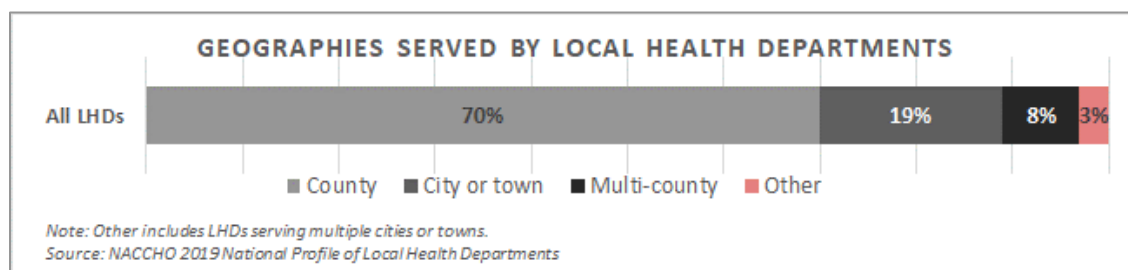
¹³ (Cardelle, 2008)

More than half of states (27) employ a decentralized or largely decentralized structure with local health units led by local governments or regional departments. In New Jersey, which operates under a decentralized structure, every town must be served by a local health department. Local boards of health can join together to form municipal or regional departments, or use a county department.¹⁴ Around one-quarter of states (14 total) follow a centralized or largely centralized structure, with state employees primarily leading local health units. Pennsylvania is one of six states following a mixed governance structure of state and local governance. The remaining four states have a shared or largely shared structure. According to a literature review, there have been limited studies on the relationship between organizational structure and public health system performance, and the findings have been mixed.¹⁵

According to the 2019 NACCHO National Profile of Local Health Departments, there are approximately 2,800 local health departments in the United States.¹⁶

- Over 60 percent of local health departments serve populations of less than 50,000. Combined, these small local health departments serve less than 10 percent of the U.S. population.
- One-third of local health departments are medium agencies, serving 37 percent of the population.
- The remaining six percent of health departments are large, serving populations of 500,000 or more. Together, these large health departments serve about half of the total U.S. population.

Over two-thirds of local health departments are county-based. Another eight percent serve multiple counties, while over one in five serve a single or multiple cities or towns. Although more research is needed, there have been consistent findings across studies of public health agencies that the larger the population size served by an agency, the more likely it is to provide defined essential public health services.¹⁷



Variations in Workforce Capacity and Funding

Several studies have found an association between staffing patterns and characteristics and overall performance of public health departments. Not surprisingly, local health departments with larger numbers of staff and higher staff per population served performed better on most essential public health services.¹⁸

As of 2019, Pennsylvania's public health agency workforce consisted of 1,343 employees and 106 temporary and contract workers. Pennsylvania was ranked 48th among states for the number of full-time equivalent (FTE) public health workers per capita, with 8.72 FTEs per 100,000. This is nearly five times lower than the national average of 40.56 FTEs per 100,000. According to an analysis of the nation's public health

¹⁴ (Bond, 2017)

¹⁵ (Hyde & Shortell, 2012)

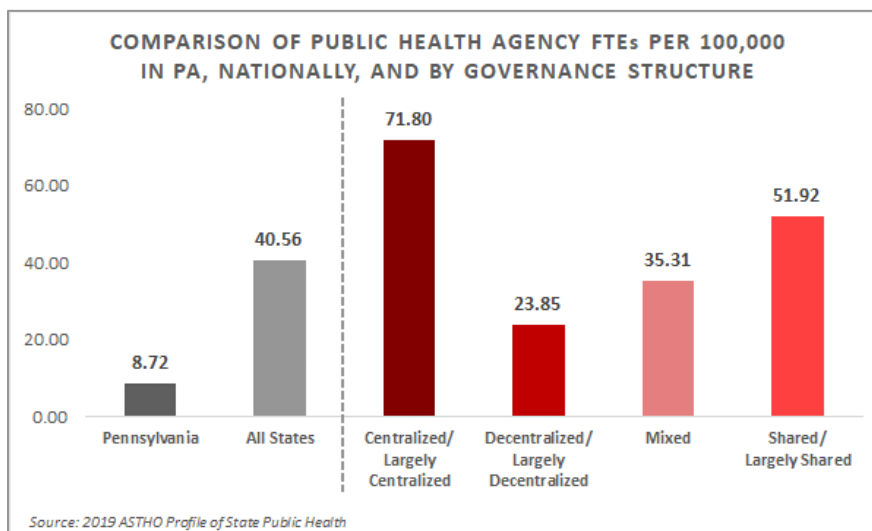
¹⁶ (National Association of County and City Health Officials (NACCHO), 2019)

¹⁷ (Hyde & Shortell, 2012)

¹⁸ (Hyde & Shortell, 2012)

infrastructure by Kaiser Health News and the Associated Press, Pennsylvania’s public health agency staffing per resident declined 17 percent from 2010 to 2019.¹⁹

In comparison to other states that also have a mixed governance structure, Pennsylvania has the fewest workers per capita, and is far below the average of 35.31 FTEs per 100,000 for these states. States with a centralized structure of state employees leading local health units have the highest number of public health workers per capita (71.8 per 100,000), while those with a decentralized structure led by local governments have the fewest workers per capita (23.85 per 100,000).²⁰



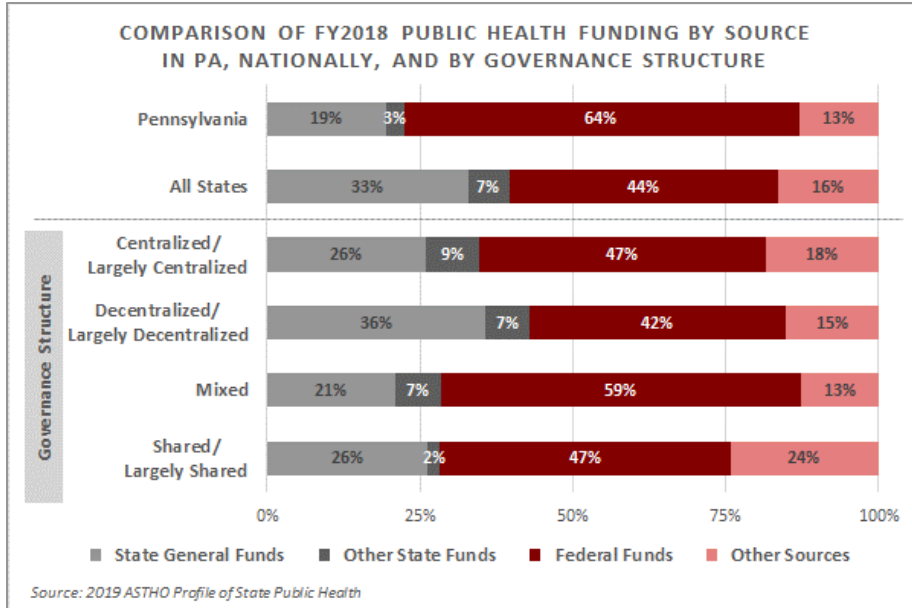
The public health system in the U.S. relies heavily on federal grants. State and local health departments can apply for categorical grants for specific functions. Departments build their programs and services around federal grant funding, leaving the viability of these services at risk if funding is reduced or eliminated. Health departments also rely on a range of state and local funding sources. The economic impact of the pandemic on state and local budgets has put additional pressure on the availability of public health funding. Lack of a consistent funding stream, and variations in funding sources, have led to differences in per capita funding for public health across the country.

In Pennsylvania, the majority of public health funding for FY2018 came from federal funds (64 percent). Twenty-two percent of funding came from state general funds or other state funds, and the remaining funding came from other sources, which could include Tobacco Settlement Funds, fees and fines collected by the agency, payment for direct clinical services, foundation and other private donations, and any funding that the state receives from county or local government. Other states with mixed governance structures for their public health agency had a higher portion of state funding (28 percent), and less federal funding (59 percent).

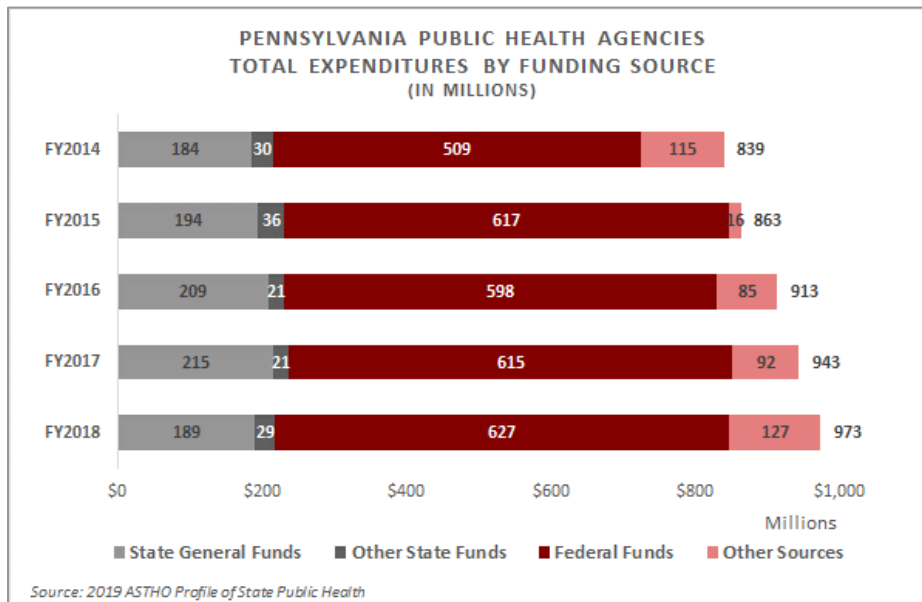
States with a mixed governance structure had the highest portion of federal funding for public health expenditures, while those with a decentralized structure led by local governments had the highest portion of state funding (43 percent).

¹⁹ (Weber, Ungar, Smith, Recht, & Barry-Jester, 2020)

²⁰ (Association of State and Territorial Health Officials, 2020)



Spending by public health agencies in Pennsylvania increased by 16 percent between FY2014 and FY2018, with annual increases ranging from three to six percent. In 2018, expenditures by PA public health agencies reached \$973 million. The USDA accounted for half of the federal funding (\$319.1M), while the CDC accounted for nearly 20 percent (\$117.5M).²¹ However, according to an analysis of the nation’s public health infrastructure by Kaiser Health News and the Associated Press, Pennsylvania’s state public health agency spending per resident declined 10 percent from 2010 to 2019.²² A separate analysis by the State Health Access Data Assistance Center found that Pennsylvania falls far below other states in per-capita state public health spending, ranking 46th in the nation and spending \$15 per capita on public health.²³

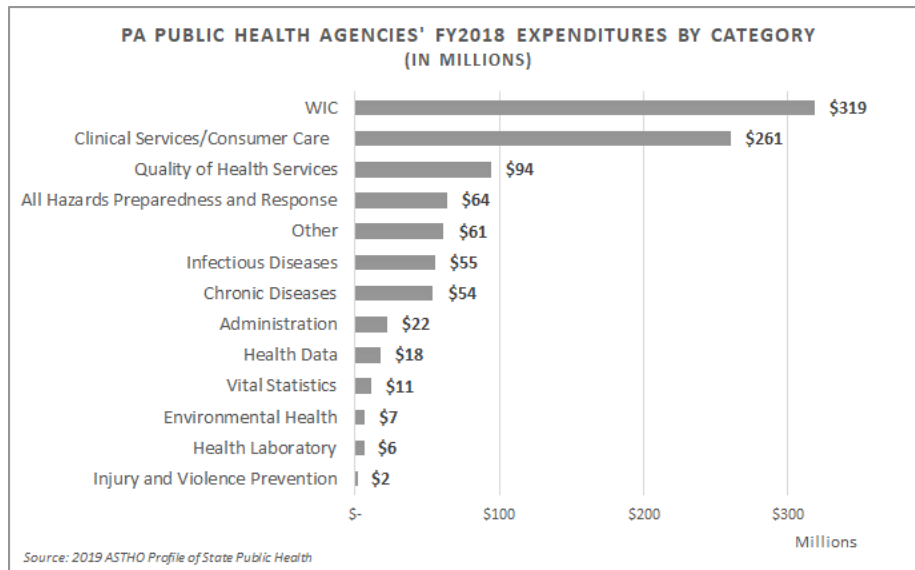


²¹ (Association of State and Territorial Health Officials, 2020)

²² (Weber, Ungar, Smith, Recht, & Barry-Jester, 2020)

²³ (SHADAC, 2019)

The federally-funded Women, Infants, and Children (WIC) program accounted for one-third of total Pennsylvania public health agencies' expenditures in FY2018. Clinical services/consumer care programs were the next highest category of spending, accounting for 27 percent of total expenditures.²⁴



Public Health Infrastructure Challenges

The pandemic highlighted the importance of being prepared to respond to public health emergencies. The non-profit group Trust for America's Health publishes an annual *Ready or Not* report series which tracks states' readiness for public health emergencies. States are assigned into three performance tiers – high, middle and low – based on ten key indicators identified in partnership with the National Health Security Preparedness Index (NHSPI). In the most recent report released in March 2021, Pennsylvania's ranking fell from the high to the low tier. Fourteen other states were in the low tier, 15 states were in the middle tier, and 20 states and D.C. were in the high tier.²⁵

One of the factors contributing to Pennsylvania's decline in tier designation was lack of participation in the Nurse Licensure Compact. The compact allows registered nurses and licensed practical or vocational nurses to practice in multiple jurisdictions with a single license, and jurisdictions to borrow medical personnel when they need to surge capacity. Thirty-four states currently participate in the compact, allowing them to quickly adjust their nurse staffing levels if needed. Pennsylvania has had multiple bills drafted to support joining the compact, including most recently in 2020, but despite support from the Pennsylvania State Nurses Association (PSNA), the legislation has failed to be adopted.

The COVID-19 pandemic highlighted challenges in the existing public health information technology infrastructure used for collecting and reporting data on COVID cases, which made it difficult to obtain accurate and timely information on infection-rate data. Inconsistencies in the collection of race and ethnicity data among Pennsylvania counties made it difficult to understand how different demographic groups were impacted, potentially putting more vulnerable populations at risk. Despite data modernization initiatives

²⁴ Clinical services/consumer care expenditures include: most maternal & child health programs (e.g., newborn screening, family planning, home visits, prenatal care), oral health, non-clinical school health services, non-clinical services in correctional facilities, sex education, infectious disease treatment (e.g., Tuberculosis, HIV/AIDs, other STDs), and substance abuse clinical preventive services; syringe and needle exchange/disposal.

²⁵ (Trust for America's Health, 2021)

aimed at improving public health surveillance, there are still barriers to system interoperability that make it difficult to share data among public health agencies at the federal, state and local levels quickly and efficiently.

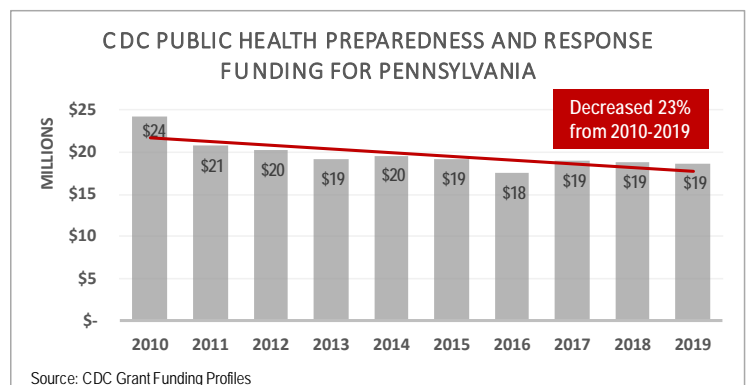
A lack of coordination in allocating available resources and issues with supply chain logistics made it difficult to ensure adequate materials were directed to regions most in need. States were responsible for implementing testing and contact tracing programs, but Pennsylvania and other states lacked the public health staffing capacity and resources to efficiently launch these coordinated efforts across the commonwealth. Community health centers stepped in to fill gaps in COVID-19 testing, especially for underserved populations, while the DOH formed public-private partnerships with outside organizations to assist with contract tracing efforts.

The latest challenge for the state’s public health infrastructure has been the vaccine rollout. The challenges and need for a regional COVID-19 vaccination strategy were highlighted by The Institute Advisory Board Issues Statement in February 2021.²⁶ Counties and municipalities with a local health department were allocated vaccines to distribute within the areas they serve, while the those without a local health department that fall under the district health offices did not receive vaccines. Vaccine distribution in these areas has been through a network of health providers and pharmacies. The patchwork approach to vaccine distribution across the state has been hampered by shifting guidance on distribution, inadequate infrastructure, resources and supplies, and insufficient reporting on the schedule and delivery of vaccines to states. In addition, variations in state and regional health information technology and interoperability, as well as established functioning of statewide public health vaccine registries, have further complicated communication, reporting, monitoring, and second dose assurance. Although the state has since taken steps to address some of these issues, it initially resulted in wide-scale confusion and frustration, and highlighted disparities in access to care. A recent report published by The Institute on Equity & COVID-19 highlights other disparities in the pandemic’s impact on various demographic groups.

Public Health Funding

Limitations in public health resources have been intensified by a declining trend in public health funding, which has led to gaps in services and increased vulnerability in responding effectively to public health needs. Public health funding in large part filters down from the federal government to state and local governments and agencies. According to the nonprofit Trust for America’s Health, less than 3 percent of the estimated \$3.6 trillion the United States spends annually on health is directed toward public health and prevention. State and local health departments that have been coping with reduced funding and declining workforces are now responsible for implementing testing plans, deploying contact tracing programs to track the spread of the virus, and coordinating vaccine distributions.

Historically, public health funding increases when there is a crisis or widespread outbreak, only to be reversed when the crisis subsides. Federal funding for the Public Health Emergency Preparedness program decreased 28% since 2002 to \$675 million in 2020, while funding for the Hospital Preparedness Program decreased by almost half to \$275.5 million from 2004 to



²⁶ (The Institute Advisory Board, 2021)

2020.²⁷ CDC funding for Pennsylvania's Public Health Preparedness Response decreased 23 percent from \$24.2 million in 2010 to \$18.7 million in 2019.

In response to the COVID-19 pandemic, \$2.2 billion in supplemental federal CARES Act funding was provided to the CDC to fund prevention, preparedness, and response efforts, of which \$950 million was to go to state, local territorial and tribal public health response. Pennsylvania was awarded \$29.3 million for COVID-Public Health Emergency Preparedness and Response through the CARES Act.

The recently passed American Rescue Plan Act of 2021 includes funding to support public health initiatives, including the following allocations:

- \$7.5 billion to the CDC to track, administer and distribute COVID-19 vaccines. These funds may also go to state and local public health departments for vaccine distribution and administration.
- \$47.8 billion to the Department of Health and Human Services (HHS) for COVID-19 testing, contract tracing and mitigation activities. These funds may be use to implement a national COVID-19 testing strategy, and provide assistance to state and local public health departments for diagnosing and tracing coronavirus infections.
- \$7.66 billion to HHS to maintain and expand the U.S. public health workforce, including through grant support to public health departments to recruit and hire new public health workers and related administrative support as well as providing PPE and other supplies to new workers.
- \$7.6 billion to HHS to be awarded for grants and cooperative agreements to community health centers for COVID-19 vaccine distribution, testing, contract tracing, equipment, staff, infrastructure, and community education and outreach.

While the short-term funding helps address immediate gaps in response efforts, sustained funding is needed to help strengthen the public health and emergency preparedness infrastructure.

Input from Regional Public Health Leaders

The Institute interviewed several regional leaders in public health to get their input on the current structure of the PA public health system, and whether there are any improvements that could be made to improve public health services and more effectively respond to public health emergencies. Some have seen a shift from a more regional approach focused on prevention and education with the support of state health district offices and nursing staff, to a more fragmented approach focused on providing the minimum public health services as staffing and funding levels have declined. This can lead to tremendous variability across the state in terms of public health services.

While there are state health centers established in counties without a health department, these facilities often lack the staff to support public health prevention and education activities, while providing required services. When outbreaks occur, such as with the pandemic, additional resources are needed to respond to public health needs. This included hiring additional nursing and support staff, outsourcing some tasks, and enlisting support from other health providers to meet the immediate needs.

Some believe having a local health department presence is beneficial because they are able to provide public health services to the community in a timelier, direct manner than areas without a public health department. Local health departments across the state have regularly communicated to share information and leverage best practices in responding to the pandemic. District offices that serve areas without health departments often are not capable of providing the same level of public health services

²⁷ (Trust for America's Health, 2020)

due to funding and staffing constraints. One example is the vaccine distribution – areas with CMHDs received vaccines from the state to distribute, while district offices did not. In the absence of a local health department, health care providers often take on role of public health.

There is support for a more regional approach to public health, and a comprehensive plan that encompasses all aspects of public health instead of a piecemeal approach. Regional leaders have also noted the benefit of a collaborative approach and having a network with a broad range of partners in responding to public health emergencies. Many other areas within the overall health realm are regionalized. The health insurance and care delivery systems are mainly comprised of providers serving a broad region, and social service agencies often adopt a regional model.

Regionalizing the public health approach aligns with the Public Health 3.0 initiative which focuses on partnering across multiple sectors and leveraging data and resources to address social, environmental, and economic conditions that affect health and health equity, while letting local communities lead the charge in engaging partners to drive collective action.

Restructuring the Public Health System

While some states, counties and municipalities support a local governance structure for public health agencies, others states have chosen a more centralized or regional approach. Collaboration is critical during public health emergencies, and consolidation or cooperation across regions can provide greater efficiency and increased capacity and resources to respond to public health emergencies, while reducing disparities in services.

The NACCHO National Profile of Local Health Departments surveys have consistently shown that the majority of local health departments serve relatively small populations, with over 60 percent of local health departments serving populations of less than 50,000. A more locally focused public health infrastructure may be able to develop stronger links to local communities and more efficient collaboration and communication between local health departments and government, hospital and community leaders. This can facilitate better information sharing and improve the ability to respond more quickly to the community's public health needs. The pandemic has prompted some counties and municipalities to consider the need for a more local public health department presence.

However, due to challenges with resources and funding, these smaller, siloed health departments face challenges in providing a full spectrum of essential public health services and responding to large scale public health emergencies. Some studies suggest there is a benefit to consolidation or regional cooperation of public health agencies, as the greater the population served by an agency, the more likely they will be to provide essential public health services and develop a coordinated response to emergencies.

Across the country, state, county and local health departments are increasingly looking to partnerships with outside organizations and community stakeholders to improve public health and prevention programs and address infrastructure limitations. Some agencies are sharing resources across jurisdictions through both informal collaborations or by consolidating public health agency functions. Some of these initiatives which were recognized by The Center for Sharing Public Health Services in their 2020 Small Grant Program.²⁸

- **The Northern Michigan Public Health Alliance** – cross-jurisdictional sharing (CJS) arrangement between seven local health departments in a rural, 31-county region. Awarded a grant to convene a steering

²⁸ (Pezzino, 2020)

committee to implement the first phases of the Mobilizing for Action through Planning and Partnerships (MAPP) Health Equity Supplement (HES), which will allow a greater focus on equity and social determinants of health in the next Community Health Assessment / Community Health Improvement Plan cycle.

- **The Metropolitan Area Planning Council (MAPC)** - CJS arrangement between the cities of Revere and Chelsea and the Town of Winthrop in Massachusetts. Awarded a grant to hire a shared regional epidemiologist who will monitor and conduct surveillance of COVID-19 cases and also analyze data pertaining to the social determinants of health.
- **Genesee, Orleans and Wyoming counties in rural New York** – Awarded a grant to work together to improve access to COVID-19 screening and preventive health services via a liaison program for agricultural workers. The grantee will share information and best practices with other rural counties in the region, and support developing a standardized protocol for program implementation, identifying and connecting with relevant community partners, and completing county needs assessments for program monitoring.

Using a centralized governance structure for public health functions absent adequate funding and community level involvement may lead to a less tailored approach to a community's specific needs, and limit the ability to recognize early indicators of public health problems. However, a regional, collaborative approach can improve communication and coordination among agencies, including at the state and federal level, to more efficiently respond to public health needs.

Regardless of whether the PA public health system continues to operate under a mixed structure of state and local control, or considers developing into more of a regionally-focused structure, resources should be focused on developing an integrated network for communicating and collaborating that effectively reaches local areas and is not limited by geographical boundaries.

How Two States with Different Public Health Structures Responded to COVID-19

Recognizing that there are differences among states, and other variables and risk factors that impact states' vulnerability to the pandemic and the nature of their response, these case studies are provided as examples of how states with different public health governance structures responded to the pandemic.

Vermont

Vermont has a centralized governance structure for their public health system, with 12 local public health offices across the state's 14 counties that carry out essential public health services. According to the Vermont Department of Health, the local health offices work in partnership with health care providers, volunteer agencies, schools, businesses and organizations in their communities to improve and extend public health initiatives across the state.

Vermont Local Health Offices



and public health staffing per resident increased from 2010-2018. According to an analysis by Kaiser Health News and the Associated Press, Vermont's state public health agency spending per resident increased by two percent and public health agency staffing increased by 17 percent during this timeframe.

Vermont has been highlighted by some public health leaders as a model for its response to the pandemic. Despite its proximity to some of the hardest-hit states, as of early April 2021 it ranked second in the nation for the lowest number of cases and deaths per capita since the pandemic began. It has consistently had one of the lowest positivity rates in the nation, and is in the top one-third of states for the percentage of population that are fully vaccinated.

Some attribute the state's success in mitigating the spread of the virus to its rural geography, and small and relatively healthy population. Others suggest strict social distancing measures, a statewide mask mandate, and proactive

measures to protect vulnerable and high-risk populations have had an impact. Some public health experts suggest the state's centralized public health system may have also helped in its pandemic response by developing a coordinated response with consistent communication and policies across the system that filtered down to the local level.

Favorable elements in Vermont's public health infrastructure include its emphasis on data monitoring and tracking, and collaboration among partners, including between government offices, medical experts and social service organizations. These relationships have helped the state better address the disproportionate spread of COVID-19 among Hispanic and African-American populations by engaging community organizations to spread public health messaging. Other measures to address high-risk populations included state-supported housing for the homeless, hazard pay, meal deliveries, and free, pop-up testing in at-risk communities.

Recognizing that monitoring health data is an essential function of public health, Vermont publishes an online Public Health Data Explorer which provides county, local health office district and hospital service area data. According to the Department of Health, Vermont is one of 26 states and one city funded by the CDC to develop a state and national tracking network of environmental and health data for the public, policy makers, researchers, and agencies. Vermont also developed a state-specific modeling approach based on timely and consistent data monitoring to forecast the impact

of COVID-19 and guide the state's response and policy decisions.

In order to develop a collaborative and coordinated response to the pandemic across state agencies, and municipal and private partners, the state acted quickly to launch its emergency response operations. Vermont Health Department opened its Health Operations Center on in early February 2020, and activated the State Emergency Operations Center (SEOC) on March 10, 2020. The SEOC was launched to support the work of the Vermont Department of Health and expand the capacity of state government to coordinate the COVID-19 response. According to Governor Phil Scott, more than 200 individuals from more than two dozen state and partner agencies have worked directly in the SEOC to assist Vermont's leading pandemic response.

This group worked in partnership with the Department of Health, other state government employees, and the Vermont National Guard to distribute vaccines, conduct COVID testing and contact tracing, secure and distribute critical supplies and equipment, build data collection and forecasting tools, establish medical surge sites, conduct food distributions, and keep Vermont residents informed. Vermont has a robust infrastructure for coordination between hospitals, health providers, and other community partners, which has been key to its pandemic response.

	Vermont	Washington	Pennsylvania	U.S.
COVID-19 Cases per 100,000 – State Rank	3,248 - 2nd	4,859 - 5th	8,166 - 12th	9,216
COVID-19 Deaths per 100,000 – State Rank	36 - 2nd	69 - 7th	196 - 42nd	167
Tests Performed per 100,000	227,221.79	59,137.1	97,238.02	116,304.4
Cumulative Positivity Rate	0-5%	6-10%	6-10%	6-10%
Percent of Population Receiving at Least One Dose	37.8%	33.2%	35.4%	32.6%
Percent of Population Fully Vaccinated	22.7%	20.8%	19.1%	19%
Supply of Vaccine Doses Administered	79%	78%	79%	77%
State Public Health Governance Structure	Centralized	Decentralized	Mixed	
State Readiness for Public Health Emergencies	High	High	Low	

Sources: CDC COVID Data Tracker, data as of April 7, 2021, Association of State and Territorial Health Officials (ASTHO) 2019 Profile of State Public Health, Trust for America's Health Ready or Not Report 2021.

Washington

Washington was the first state to be impacted by the COVID-19 outbreak, reporting the nation's first case in January 2020 and facing the first widespread nursing home outbreak. However, Washington was able to limit the statewide cases and deaths from COVID-19 through a regional coalition-guided approach that engaged health systems, long-term care facilities, state and local governments, and community organizations to rapidly respond to the outbreak, according to

a panel of experts reviewing the state's response.²⁹ As of early April, Washington ranked fifth in the nation for the lowest number of cases and seventh for the lowest number of deaths per capita since the pandemic began.

Washington has a decentralized public health governance structure with 35 local health departments and districts across its 39 counties. The state has a few types of public health departments: city-county health departments,

²⁹ (American College of Surgeons, 2020)

countywide health districts, multicounty health districts, and a district in a county without a home-rule charter where the board of health is made up of the county commissioners. The local health jurisdictions are local government agencies, not satellite offices of the state Department of Health. Counties have the authority to determine the structure of their public health district.

However, some state leaders feel the pandemic highlighted the need to increase shared public health services across the state. In March 2021, the state House of Representatives passed a bill to restructure the state's public health system by creating four new regional service centers to support local health jurisdictions. The four centers would coordinate shared services across local health jurisdictions and the state. Each center would have a regional health coordinator and a regional health officer who will provide support for local health offices. The bill passed with mixed reactions, with some legislators and county and local leaders expressing concerns that regionalization would eliminate local control and funding. The bill was sent to the state Senate for consideration, and will likely face changes.

Like Vermont, Washington was also ranked in the high performance tier in readiness for public health emergencies, according to Trust for America's Health annual *Ready or Not* report in 2021. While Washington's public health agency staffing per resident increased eight percent from 2010-2018, public health spending per resident declined 12 percent during this time period. In the years prior to the pandemic, state public health officials warned the declining public health funding would impact the system's ability to meet its basic health responsibilities, and that public health data processes needed to be modernized. Gaps in the public health information systems initially led to challenges in reporting and posting COVID-19 data, making it difficult to direct response efforts.

Data, information, and technology innovations are one of the transformational areas identified the state DOH strategic plan. Recognizing the need to boost public health funding, state leaders' recent budget proposal in 2021 includes \$397 million to pay for testing, personal protective equipment, lab costs, epidemiology work and vaccine distribution, and boost Washington's public health system.

The Washington State DOH relies on partnerships with health care entities, state and local community-based organizations, and local health departments and districts to support public health initiatives. These relationships were critical in facilitating the state's pandemic response, enabling early communication and coordination among public health officials, healthcare entities, and high-risk entities like long-term care facilities.

State leaders relied on health experts to lead public messaging and guide the state's response. Shortly after the first case was identified in Washington in January, a collaborative effort was formed to create communication channels across individual health systems. The Northwest Healthcare Response Network (NWHRN), a non-profit coalition comprised of 3,000 health care organizations in 15 counties in western Washington that collaborates on disaster preparedness and response. It coordinated the effort with other entities, including Public Health Seattle and King County (PHSKC), Harborview Medical Center Infection, Prevention and Control, the DOH, and the Washington State Hospital Association.

There are several examples of how collaborations with partners supported the state's pandemic response. The Western Washington Regional COVID Coordination Center (WRC) was established as a regional medical operations center, and these entities partnered with Microsoft, the state hospital association, and the state DOH to build a communication platform to track hospital capacity data and cases in LTCFs. The University of Washington's virology laboratory rapidly developed viral testing capability. Strike teams were deployed to high-risk facilities to provide on-site support, and task forces and community advisory groups were engaged to service vulnerable populations. Most recently, the state established the Vaccine Command and Coordination System (VACCS) Center and Partnered Vaccine Program to set up vaccination sites throughout the state with public and private partners.

Although the decentralized structure of the state public health system allows for local control of public health departments and districts, collaboration and coordination between local and state public health offices, and partnerships with public and private entities and regional stakeholders have been vital to the state's pandemic response.

Policy Recommendations

There are a variety of policy responses that could be considered to more effectively structure public health functions and improve the ability to more effectively respond to public health emergencies.

Advocate for sustained public health funding to help strengthen the existing infrastructure and be better positioned to respond to emergencies. Sustained funding is needed to maintain routine public health capabilities, modernize outdated information technology infrastructure, and detect and have the capacity to respond to emergencies when they occur. Although COVID response legislation has provided short-term relief, policy changes are needed to prioritize public health funding on an ongoing basis.

Invest in modernizing the health information technology infrastructure and improving surveillance capabilities. Creating integrated, real-time data systems can help protect against future threats by bolstering surveillance capabilities and improving access to and exchange of data needed to identify and monitor public health threats. Limitations in the interoperability of the health IT infrastructure among various public health entities made it difficult to collect and consolidate data on COVID-19 cases and testing results and develop an informed, coordinated response. Develop interoperable data systems to provide timely and accurate exchange of health information, and ensure public health agencies have access to data collected by the state.

Require adherence to standards for data collection and reporting across all public health agency entities. The pandemic provided one example of how disparities in the collection and reporting of data, in this case data on COVID cases, including race, ethnicity, and other demographic data, made it difficult to obtain accurate and timely information on infection-rate data. This made it difficult to understand how different demographic groups were impacted, potentially putting more vulnerable populations at risk. Require providers to comply with data reporting requirements in the statewide health information exchange, not just for monitoring infectious diseases, but also more broadly for tracking public health data. Require compliance with the vaccine registry to ensure the ability to track background health data and monitor potential adverse reactions to vaccinations.

Strengthen the public health workforce capacity. Declines in public health staffing have been exacerbated by an aging workforce and low wage levels. According to one estimate, 42 percent of governmental public health workers are over age 50.³⁰ Provide training and professional development to current public health workforce members to equip them with necessary skills. As part of efforts to improve the public health infrastructure, track the adequacy of the workforce and address gaps in corresponding areas. To help address the workforce shortage for public health workers, caregivers, and other health professionals, fund recruitment efforts and work with academic institutions to attract students and promote development of curriculums to prepare them for careers in health fields. Increase support for Area Health Education Centers (AHEC) to expand the health care workforce, especially in rural or underserved communities.

Adopt a regional approach to develop and strengthen public health collaborations across regions to better leverage resources and improve capacity, instead of local or county level public health organizations. Many areas within our region and across the state lack the presence of a county or municipal health department. In our region, consider building regional collaborations of public health entities to promote cooperation and information sharing. Due to the interconnectedness within our region between various organizations, a fragmented approach to public health would not be as effective as a regional collaboration. Although this is the recommended approach for our region, it is recommended as a statewide approach, as other models may be more appropriate in other regions of the state. At a state level, consider participating in collaborative

³⁰ (Barry-Jester, Recht, Smith, & Weber, 2020)

efforts such as the Nurse Licensure Compact to improve workforce capacity when responding to public health emergencies. Re-assess the oversight of public health related services across the various departments within Pennsylvania to improve collaboration and consistency.

Strengthen Nursing Capacity in PA – Join the Nurse Licensure Compact. The compact allows registered nurses and licensed practical or vocational nurses to practice in multiple jurisdictions with a single license, and jurisdictions to borrow medical personnel when they need to surge capacity. Thirty-four states currently participate in the compact, allowing them to quickly adjust their nurse staffing levels if needed.

Strengthen partnerships with other community stakeholders to ensure the delivery of public health services at a local level. Stakeholders within the community involved in healthcare delivery – physicians, hospitals, community health centers – have established relationships with individuals who trust their providers to coordinate their healthcare. Leverage these relationships with community stakeholders to coordinate the delivery of public health services at a local level. Engage these healthcare delivery partners in emergency planning and response efforts. These providers should play a more prominent role in both communicating the importance of COVID-19 vaccines, and managing the vaccine distribution. Collaborate with other stakeholders that support community initiatives, such as The Institute, to help with research to assess and support community needs.

Community Recommendation

In addition to the policy recommendations to improve the public health infrastructure, there should be a coordinated effort to improve community awareness and understanding of public health and what it entails. Public health is often misunderstood as focusing solely on responding to disease outbreaks and emergencies. However, it more broadly encompasses protecting and improving the health of the overall population by promoting health lifestyles, preventing disease and injury, and preventing and responding to infectious diseases. Improving the community's awareness of the role and importance of public health in providing essential public health services should be a key component in the formation of a regional public health system.

Appendix

Key Legislation – PA Public Health Infrastructure

The Department of Health was created by the Act of April 27, 1905, P.L. 312, and modified through the Administrative Code of 1929. Act 315, Pennsylvania's Local Health Administration Law, authorizes state grants to counties and to certain municipalities which have established local departments of health. Act 315 was amended in 1976 by Act 12 to add support for environmental health initiatives.

Highlights of Key Legislation Regarding Pennsylvania Public Health System Infrastructure ³¹				
Title/Subject	Official Citation	Specific Provision	Provision Summary	Purdon's Citation
Municipal boards of health	Act of June 18, 1895 P.L.203, No.124			53 P.S. § 3751
Boards of health in cities and boroughs	Act of June 24, 1895 P.L.232, No.133			53 P.S. §§ 3752-3755
Bureau of Health in cities of the second class	Act of June 26, 1895 P.L.350, No.258			53 P.S. §§ 24561-24691
DOH created	Act of Apr. 27, 1905 P.L.312, No.218			71 P.S. §§ 1401-1435
Department of Public Health in cities of the second class	Act of Apr. 1, 1909 P.L.83, No.49			53 P.S. § 22701
DOH fiscal affairs	Act of Apr. 23, 1909 P.L.137, No.86			71 P.S. §1 412
DPW created	Act of May 25, 1921 P.L.1144, No.425			71 P.S. §§ 1461-1499
County health associations	Act of Apr. 10, 1925 P.L.223, No.148		Boards of health in cities of the third class, boroughs and townships of the first class	53 P.S. §§ 3781-3783
Intergovernmental cooperation in the administration and enforcement of health laws, rules and regulations	Act of Mar. 24, 1927 P.L.61, No.41			71 P.S. § 1410
The Administrative Code of 1929	Act of Apr. 9, 1929 P.L.177, No.175	§ 203	DOH assigned Advisory Health Board	71 P.S. § 63
		§ 206	Secretary of Health designated head of DOH	71 P.S. § 66
		§ 448(f)	Advisory Health Board membership	71 P.S. § 158(f)
		§ 2104	DOH to collect vital statistics	71 P.S. § 534
		§ 2105	State health districts	71 P.S. § 535
		§ 2111	Advisory Health Board	71 P.S. § 541
The Third Class City Code	Act of June 23, 1931 P.L.932, No.317	Art. XXIII	Boards of Health	53 P.S. §§ 37301-37340
The First Class Township Code	Act of June 24, 1931 P.L.1206, No.331	Art. XVI	Boards of Health	53 P.S. §§ 56601-56627
The Second Class Township Code	Act of May 1, 1933 P.L.103, No.69	Art. XXX	Boards of Health	53 P.S. §§ 68001-68010
Local Health Administration Law	Act of Aug. 24, 1951 P.L.1304, No.315		Provides funding to improve local health administration by authorizing	16 P.S. §§ 12001-12028

³¹ (Joint State Government Commission, 2013)

Highlights of Key Legislation Regarding Pennsylvania Public Health System Infrastructure ³¹				
Title/Subject	Official Citation	Specific Provision	Provision Summary	Purdon's Citation
			state grants to counties and to certain municipalities which have established departments of health and meet certain prescribed requirements. Amended by Act 12 in 1976 to add support for environmental health initiatives including, but not limited to, food and water supply protection, water pollution control, public bathing place sanitation, vector control, solid waste management, and institutional, recreational and housing environment inspection.	
<i>Sources: Joint State Government Commission, 2013; Pennsylvania Department of Health</i>				

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