Bipartisan Policy Center

Public Health Forward: Modernizing the U.S. Public Health System

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Call to Action for State, Territorial, and Local Policymakers to Move Public Health Forward

THE OPPORTUNITY

COVID-19 exposed numerous, long-standing, and deep fractures in our public health system and highlighted pervasive disparities among communities regarding factors that affect an individual's physical and mental health – access to affordable and nutritious food options, safe and affordable housing, financial security, and quality, affordable medical care. The infusion of federal relief funds presents policymakers with a historic opportunity to correct these problems and set a new course for health in the United States that advances health equity and enables each person to achieve their best health.

Public health serves a critical yet often invisible role in health. Although a disproportionate amount of attention is placed on medical care and the treatment of diseases, illnesses, and injuries, public health takes a community-wide approach to improving health and the social factors that contribute to good health. Healthy behaviors, social and economic factors, the physical environment, and other issues account for 80% of health outcomes, while clinical care is responsible for only 20%.[1] Through such activities as promoting healthy eating and active living, controlling infectious disease outbreaks, and preventing injuries, public health efforts allow Americans to live longer, healthier lives and is essential to the viability and prosperity of communities across the country. However, many Americans do not recognize the value that public health systems bring to their communities until these systems are most needed.

Public Health Forward: Modernizing the U.S. Public Health System defines a vision for health in the 21st century and provides a practical, prioritized, bipartisan set of actions for policymakers and public health officials to guide strategic investments and decision-making to achieve this vision. These actions are informed by evidence, build on previous consensus frameworks and objectives, and represent work by national thought leaders that has the support of public health practitioners across the country. **The nation's safety, security, and economic prosperity depends on a strong public health system.** *We respectfully urge state and local policymakers to act now to fully realize the potential of this unique moment and secure the future of the public's health.*

In 2026, the United States is becoming a healthier nation because elected and public health officials seized the historic opportunity to invest in new and transformative ways to modernize the governmental public health system. The system is prepared to respond to a range of public health challenges, including a pandemic, obesity, mental illness, substance abuse, and climate change. In a healthier America:

- **Advances in health equity continue to be made** because public health departments partner with various sectors (e.g., housing, food, transportation), stakeholders (e.g., businesses, faith-based organizations, community-based organizations (CBOs), health care), and community members, and also engage in Tribal consultation, toward the shared goal of providing a fair and just opportunity for all to achieve good health and well-being.

- **Sufficient, predictable, and flexible public health funding supports the public health system** to sustain healthy communities. States, territories, and localities act quickly to protect the public from expected and unexpected health issues. This means that all public health departments have the necessary resources to support nationally agreed-upon core programs and cross-cutting skills and to meet national public health practice standards.

- **A robust, modern, interoperable, and secure public health information system delivers real-time, accurate, and actionable data** to help public health officials detect new or growing threats, identify groups that may be at risk, and respond quickly with tailored policy, practice, and program interventions. Public health departments also translate and share data with policymakers and other stakeholders in a timely manner.

- **Modernized laws, policies, and statutes** protect and promote the public's health in a manner that reflects ongoing threats and challenges, enables public health officials to make decisions without political influence, and ensures public health responsibilities remain intact and protected.

- **A highly skilled, trained, and diverse public health workforce** provides evidence-informed programs and services that address community health needs, encourage healthy behaviors, and act swiftly to respond to emerging threats. Staff feel valued and incentives exist to pursue long careers in governmental public health.

RECOMMENDED ACTIONS FOR STATE, TERRITORIAL, AND LOCAL POLICYMAKERS

Financing

1. **Provide flexible funding and maximize existing assets to support public health services and capabilities, including those needed to address health inequities.**

   A. Request assessments on the state of public health systems, specifically nationally agreed-upon core programs and cross-cutting skills needed to support public health everywhere.

      i. Devote funds for conducting these assessments, developing and implementing strategies to fill the gaps, engaging in continual quality improvement, and otherwise working toward meeting national public health practice standards.

   B. Direct appropriate agencies to work together and support this alignment by co-funding programs and strategies to improve health, based on routine needs assessments and improvement plans.

   C. Develop, advocate, and support budgetary mechanisms to facilitate blending and braiding funds from multiple sources, as well as accompanying measures to ensure transparency and accountability.

   D. Allocate funding for health departments to hire and retain a health equity leader who will have direct accountability to state, territorial, and local health directors, and develop measures that demonstrate health equity practices and their achievements.

2. **Evaluate the social and economic impact of public health programs and strategies.**

   A. Invest in public health system evaluation to illustrate the effects of allocations and investments at the state, territorial, and local levels.

Data and Information Technology

1. **Strengthen the collection of timely and actionable public health data to guide programs, respond to emergencies, and address health inequities.**

   A. Invest in modern, efficient, and interoperable information technology that equips state, territorial, and local health departments to:

      i. Collect, analyze, and share timely, accurate, subcounty data on health and health-related issues disaggregated by race, ethnicity, and other key sociodemographic characteristics.

      ii. Work with partners to ensure that data submitted are complete and of high quality.

   B. Require that public health data are reported to agencies at all levels of government using interoperable electronic mechanisms.

2. **Invest in data sharing between public health departments and health care entities.**

   A. Remove or support the removal of technical and legal barriers to data system interoperability with health care systems and Tribal health entities while ensuring that sufficient security safeguards are in place to achieve compliance with the Health Insurance Portability and Accountability Act (HIPAA).

   B. Ensure that data sharing regulations are secure without being onerous.

      i. Proactively support and incentivize partnerships that utilize official Memorandum of Agreement (MOU) documents to guide their collaboration.

   C. Through legislation, require adherence to standards of the Office of the National Coordinator for Health Information Technology and the Centers for Disease Control and Prevention (CDC) for the collection and sharing of common data points.

Workforce

1. **Invest in the recruitment and retention of a diverse and inclusive governmental public health workforce.**

   A. In partnership with local health departments, perform a statewide public health workforce needs assessment and fund public health department assessments of organizational culture.

   B. Establish or promote robust and equitable employment programs on the state, territorial, and local levels to recruit, hire, and retain the next generation of public health practitioners, with a particular focus on individuals from communities experiencing health inequities.

2. **Improve hiring and promotion policies and processes to ensure high-quality public health services.**

   A. Modernize existing civil service requirements and institute competitive pay structures to accommodate roles and responsibilities specific or unique to public health.

   B. Approve budgets that ensure:

      i. The training and professional development of the public health workforce involved with implementing core programs and applying

all necessary cross-cutting skills.

  ii. Salary structures that are commensurate with roles and responsibilities and that are competitive with salaries for similar positions in nongovernmental agencies.

Public Health Laws and Governance

1. **Review, evaluate, and modernize public health governance structures and statutory responsibilities.**

 A. Conduct or promote a bipartisan, comprehensive review of existing policies and revise as needed to reflect the current roles and responsibilities of government in protecting and promoting health, including the ability of public health departments to make decisions without undue political influence.

  i. Work across various levels of government to determine the proper federal, state, territorial, and local framework for preemption, establishing minimum and maximum requirements, particularly in light of recent state action to roll back public health powers and place limits on local elected officials.

  ii. Consider how structures, processes, roles, and responsibilities should remain the same or change during a public health emergency; this task should include ensuring flexibility in personnel and procurement processes.

  iii. Examine whether existing funding streams are sufficient to support the revised public health governance structures and statutory authorities; elevate funding needs to relevant appropriators to fill gaps.

  iv. Ensure the law as written promotes trust through the removal of stigmatizing language, particularly as it relates to populations experiencing health inequities.

 B. For policymakers in jurisdictions adjacent to or containing sovereign Tribal Nations and health systems, review lines of communication and opportunities for formalized partnerships.

 C. Ensure that public health department leaders are empowered to make decisions without inappropriate political influence and have access to counsel with expertise in public health law.

2. **Support and clearly communicate the roles of public health departments to the public.**

 A. Invest in evidence-informed messaging and effective communication by health departments, using multiple platforms.

     i. Use all media outlets, including online and social media vehicles.

     ii. Use media outlets serving subpopulations, including those in different languages.

B. Coordinate messaging with and across public health departments, both during emergency and non-emergency situations.

     i. Ensure messaging is culturally competent.

     ii. Use language that elicits a sense of trust in government.

C. Engage with constituents during public health emergencies to correct misinformation and explain the role of public health departments.

D. Provide forums for stakeholders in public health, the business community, and health care to identify shared goals and strategies that reflect public health authorities, public health protection, and a strong and stable economy.

Partnerships

1. **Incentivize partnerships between public health departments and other sectors (e.g., housing, food, transportation) and stakeholders (e.g., business, faith-based organizations, health care).**

   A. Allocate funding to support the development and maintenance of partnerships that aim to provide a fair and just opportunity for all to achieve good health and well-being.

2. **Establish a dedicated body charged with routinely monitoring, assessing, and influencing the implications for health in all government sector policy discussions.**

   A. Establish and participate in an advisory board that integrates and articulates health considerations into policymaking across all government sectors to improve the health of people and communities.

   B. Conduct health impact assessments on legislation to identify potential connections between health and factors that affect health (e.g., housing, affordable and nutritious food options, employment, and environment).

Community Engagement

1. **Invest in long-term relationship-building and partnership development with residents and community-based organizations (particularly those serving communities experiencing health inequities) and in Tribal consultation.**

A. Allocate funds to public health departments for community collaboration and develop output measures that account for progress toward building trust and working in partnership.

B. Engage in routine Tribal consultation to support intergovernmental public health planning that recognizes Tribal authority, autonomy, and self-governance.

C. Act as liaisons between public health departments and citizen representatives, especially from communities historically experiencing health inequities, who can elevate on-the-ground concerns and offer their input on public health issues.

2. **Invest in increasing the capacity of community-based organizations (CBOs) and provide resources to support collaboration with public health departments.**

A. Allocate funds to support the capacity-building of CBOs.

B. Lead regular town halls and forums with CBOs and public health officials to present evidence-based information that deepens understanding of health inequities, their causes, and their consequences.

Call to Action for State, Territorial, and Local Public Health Departments to Move Public Health Forward

THE OPPORTUNITY

COVID-19 exposed numerous, long-standing, and deep fractures in our public health system and highlighted pervasive disparities among communities regarding factors that affect an individual's physical and mental health – access to affordable and nutritious food options, safe and affordable housing, financial security, and quality, affordable medical care. The infusion of federal relief funds presents policymakers with a historic opportunity to correct these problems and set a new course for health in the United States that advances health equity and enables each person to achieve their best health.

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Financing

1. **Provide flexible funding and maximize existing assets to support public health services and capabilities, including those needed to address health inequities.**

   A. Develop accountability measures for all funding streams.

   B. Assess public health systems, including evaluating current investments and capacity, identifying gaps in core programs and cross-cutting skills, and analyzing whether they meet national public health standards.

   C. Embed principles of health equity in core programs and cross-cutting skills and dedicate resources as needed to ensure they are operational.

   D. Collaborate with the state Medicaid agency to identify opportunities to co-fund health initiatives targeting communities experiencing health inequities.

   E. As appropriate, explore resource sharing arrangements with neighboring departments to fill in gaps or increase effectiveness and efficiency of foundational public health services.

2. **Evaluate the social and economic impact of public health programs and strategies.**

   A. Develop a dashboard to track high-level expenditures and progress toward meeting shared goals and targets.

Data and Information Technology

1. **Strengthen the collection of timely and actionable public health data to guide programs, respond to emergencies, and address health inequities.**

   A. Consistently collect data needed to identify, document, and address health inequities in local communities.

   B. Work with partners to submit data to public health departments that is timely, accurate, and complete.

   C. Share and display this data in real time, with user-friendly data dashboards available to other governmental agencies and the public.

2. **Invest in data sharing between public health departments and health care entities.**

A. Develop and implement policies and procedures that adhere to the standards of the Office of the National Coordinator for Health Information Technology (ONC) and the Centers for Disease Control and Prevention (ONC/CDC).

B. Ensure that those reporting data are adhering to ONC/CDC standards.

C. Enter into data-sharing agreements with Medicaid agencies.

Workforce

1. **Invest in the recruitment and retention of a diverse and inclusive governmental public health workforce.**

   A. Determine the number and type of staff needed to provide public health services.

   B. Formalize partnerships and programs with academic institutions including Historically Black Colleges and Universities, Hispanic-Serving Agricultural Colleges and Universities, and Tribal Colleges and Universities—local boards of health, and technical training programs to build a cross-disciplinary workforce and provide students with experiential opportunities in public health.

   C. Work with partners to expand internships, fellowships, workforce pipeline, loan-repayment, and other career on-ramp programs.

      i. Provide tailored opportunities to individuals in under-represented populations.

   D. Hire outreach workers who live in communities experiencing health inequities to assist with building trusting relationships and engaging community members.

   E. Assess organizational culture and make changes as needed to ensure the workplace is culturally competent and supportive of all staff.

2. **Improve hiring and promotion policies and processes to ensure high-quality public health services.**

   A. Partner with leaders in government reform to update merit systems, civil service requirements, position descriptions, and human resources systems.

   B. Provide professional development opportunities, giving public health workers the skills and knowledge needed to meet modern public health challenges (e.g., change management, data science skills, and cultural and linguistic competencies).

   C. Work to secure a full complement of health supports to prevent burnout and turnover, including mental health services and comprehensive paid leave.

Public Health Laws and Governance

1. **Review, evaluate, and modernize public health governance structures and statutory responsibilities.**

   A. Direct counsel with public health law expertise to review existing regulations and ensure they are relevant, provide the ability to protect the health of the public, and are legally sound.

   B. Ensure that opportunities for public input in rule-making processes are widely publicized, transparent, and easily accessible.

      i. Specifically solicit feedback from those who will be most affected by new rules.

2. **Support and clearly communicate the roles of public health departments to the public.**

   A. Develop and maintain ongoing relationships with local and statewide media.

   B. Develop, routinely update, and implement a communications plan that articulates public health responsibilities.

   C. Maintain the expertise to develop and implement a risk communications strategy.

Partnerships

1. **Incentivize partnerships between public health departments and other sectors (e.g., housing, food, transportation) and stakeholders (e.g., business, faith-based organizations, health care).**

   A. Clearly delineate shared goals, respective responsibilities, and collaboration guidelines for decision-making, conflict resolution, and data sharing; use this as a foundation for sustainable collaborations.

2. **Establish a dedicated body charged with routinely monitoring, assessing, and influencing the implications for health in all government sector policy discussions**

   A. Provide examples and evidence-informed practices to support health impact assessments and policy discussions.

Community Engagement

1. **Invest in long-term relationship-building and partnership development with residents and community-based organizations, particularly those serving communities experiencing health inequities, and engage in Tribal consultation.**

A. Dedicate staff time to long-term community engagement efforts.

B. Compensate community members and organizations for their time and expertise on planning and implementing health improvement strategies and actions.

C. Invest in and formalize consultation practices between state and local health departments and Tribal health departments to address community-wide health planning and decision-making.

2. **Invest in the capacity of community-based organizations (CBOs) and provide resources to support collaboration with public health departments.**

A. Formalize public health planning and processes that rely on input from, and share decision-making with, CBOs and the people they serve.

B. Work with CBOs to identify opportunities to strengthen their organizational capacity and dedicate staff time and funds to mentor and train on topics such as grant writing, grant reporting, data collection and analysis, project evaluation, and publishing academic papers.

Introduction

COVID-19 has made clear that the nation's safety, health, and economic prosperity depend on its ability to minimize the effects of devastating public health threats. Even in the absence of an emergency, a robust governmental public health system is needed to ensure conditions in which all people can achieve their fullest potential for health and well-being. Although clinical health care plays an important role in treating disease, public health plays an equally important but largely invisible role in keeping people healthy.

Public health seeks to protect the health of entire populations through the promotion of healthy lifestyles; the research and applied practice of disease and injury prevention; and the detection and prevention of, as well as response to, infectious diseases.[3] In the 20th century, the average lifespan in the United States increased by 30 years, with 25 of those years attributable to public health advances.[4] These advances included safer food and water, improvements in motor vehicle safety due to the addition of features such as seat belts and changes in highway design, and widespread vaccinations, which have drastically reduced the rate of many diseases, especially for children. And yet, decades of decreased funding for public health has hampered its ability to make meaningful advances in tackling challenges such as the obesity and opioid epidemics. Chronic underfunding also means that most public health departments do not have the bandwidth to support a growing crisis in mental health or sufficiently prepare for anticipated health crises related to climate change.

Pervasive health inequities, driven by socioeconomic differences in urban, rural, and Tribal communities that have existed for much of the country's history, were also illuminated during the pandemic. These inequities prevent the United States from meeting its full potential, not only as it relates to the health of affected individuals but also to the estimated $93 billion in excess medical care costs and $42 billion in lost productivity per year attributed to health disparities.[5] Because 80% of a person's health can be attributed to socioeconomic factors such as access to nutritious food, quality education, and a safe physical environment,[6] public health should partner with other sectors and government agencies to address these sources of health and reduce inequities.

In addition, the pandemic has worsened behavioral health, with individuals reporting higher levels of stress and more disorders, including depression and anxiety. Traditionally, the health care system has taken a clinical approach to help such individuals. A public health approach to behavioral health as pioneered by cities such as New York and Philadelphia offers promise by strengthening community-based services to meet behavioral needs along a

continuum, not just those requiring clinical intervention, and emphasizing prevention and early intervention.[7]

Compounding all of these challenges, it is an unfortunate reality that public health also has a deep trust problem. Polls conducted in the spring of 2020 showed great support for public health, with 85% of Republicans and 74% of Democrats rating public health officials such as those at the CDC as "doing an excellent/good job responding to the coronavirus outbreak."[8] And yet, an RWJF/Harvard poll conducted from mid-February to mid-March 2021 found something markedly different: Only 44% of respondents trusted the recommendations of their local health department a great deal or quite a lot, and 41% trusted those from their state health department a great deal or quite a lot, leaving the remainder only somewhat trusting them or not trusting them at all.[9] Politicization, misinformation, and mixed communication initiatives are some of the factors responsible for these findings. The lack of trust undermines public safety and the purpose of public health now and in the future.

Public Health Forward: Modernizing the U.S. Public Health System defines a vision for a modernized public health system in the 21st century and provides a framework of practical, prioritized, and bipartisan actions for policymakers and public health officials to guide strategic investments and decision-making to help translate the vision into a reality with a focus on equity. The federal government continues to provide critical leadership and funding to navigate the current pandemic and has a responsibility to make significant investments and changes in public health for the post-pandemic future. Long-term, increased, sustainable funding and policy leadership from the federal government will be crucial to support this five-year vision, framework, and set of actions, as most public health departments are concerned over their funding levels, notwithstanding the recent infusion of money.[10]

Researchers have estimated that it would cost $10.94 billion in additional resources annually, or $34.20 per capita, to fund what experts consider a minimum package of public health services for each state and local public health department.[11] Separate from this project, the Bipartisan Policy Center recently published a report that called for Congress to pass $4.5 billion in permanent annual funding to be distributed to states, localities, tribes, and territories to support foundational public health capabilities, and to reform the existing Prevention and Public Health Fund and increase its annual funding to $4 billion to support public health programs and meet local needs. Departments and agencies with jurisdiction over public health such as the CDC, U.S. Department of Agriculture, and U.S. Department of Health and Human Services (HHS) all make meaningful contributions through the development of regulations, standards, and effective public health messaging and guidance. However, this report's focus is on governmental public health systems at the state, territorial, and local levels, where most public health policy is enacted and

<u>critical decisions are made regarding the stewardship and allocation of federal funds</u>. While Tribal health systems and public health departments are critical to community health, this report is not intended to provide recommendations to support the modernization of these systems. The report does include recommendations to improve consultation and collaboration between U.S. and Tribal governments to support shared public health priorities. Policymakers and public health leaders must embrace this unique moment and strategically plan and implement a well-resourced, modern public health system that builds capacity at all levels of government and in every state, territory, and locality.

THE OPPORTUNITY

The infusion of federal COVID-19 relief funds is an opportunity to strategically invest in and modernize the public health system. Legislation to improve the sustainability of public health departments includes $7.4 billion for the recruitment and hiring of public health workers and $2.45 billion for emergency preparedness and response purposes. In addition, some of the COVID-19 relief funding packages can be invested in public health departments to provide long-term benefits by supporting public health science, policy, systems, and infrastructure. (See Appendix 1: Federal Investments in Public Health in COVID-19 Relief Legislation for additional details.) Policymakers should use the growing awareness of the importance of the public health field to set a new course for health in the United States, while also fostering greater trust in government and science.

Public Health Forward provides recommended actions to policymakers and public health leaders to steward the use of this one-time infusion to provide long-term strategic benefits to state, territorial, and local public health systems. As noted above, greater, sustained, and less siloed funding will be necessary in the near future to ensure these benefits continue.

The report's recommendations build on several national public health frameworks and reports which articulate the foundational requirements for optimal public health systems. These reports include the following:

- *Public Health 3.0* describes the role of public health departments in the 21st century and calls on public health leaders to serve as Chief Health Strategists for their communities and departments to engage in cross-sector partnerships; upgrade and monitor data systems with an emphasis on hyper-local data; hire a diverse and inclusive workforce; and provide foundational public health capabilities.[12]

- *Foundational Public Health Services* defines the cross-cutting skills and capabilities, as well as the core programs, needed in all health departments to fulfill their responsibilities.[13]

- *Public Health COVID-19 Impact Assessment* examines how public health departments fared during the pandemic, including their key contributions and challenges faced, and identifies "priority areas and policy considerations" for policymakers to develop a 21st century public health system.[14]

- Recommendations by the Robert Wood Johnson Foundation's National Commission to Transform Public Health Data Systems are targeted at government at all levels, businesses, CBOs, philanthropy, and other parties to "reimagine how data are collected, shared, and used, and identify the investments needed to improve health equity."[15]

- CDC's Data Modernization Initiative presents a vision of what the modernization strategy was created to do, guides decisions for allocating resources, and provides a structure to track progress and success along the way.[16]

- The National Consortium for Public Health Workforce Development's report, *Building Skills for a More Strategic Public Health Workforce: A Call to Action*, provides a common framework for modernizing the state, local, territorial, and Tribal public health workforce through recruitment, hiring, and retention priorities.[17]

Additionally, a number of states, including Indiana,[18] Kentucky,[19] Ohio,[20] Oregon,[21] Washington,[22] and others[23] have modernized their public health systems or are in the process of modernizing. These states' efforts are a natural learning laboratory and provide examples of this report's recommendations in action.

In short, we already know what needs to be done, and we urge policymakers and public health officials to seize this unique moment and take action.

METHODOLOGY

The *Public Health Forward* project team was led by a Steering Committee representing national philanthropic foundations, public health membership associations, the Bipartisan Policy Center, and two public health practice consultants. An Advisory Board of national high-level public health leaders and experts also provided valuable input. A research team from the Johns Hopkins Bloomberg School of Public Health reviewed literature on public health frameworks in several focus areas (see Appendix 2) and supported several qualitative research activities to ensure that the project reflected the needs and recommendations from the perspective of public health leaders, practitioners, and community members who have experienced health inequities.

The project team conducted an inclusive mixed methods outreach process that included project oversight, guidance, and key input from critical stakeholders in alignment with the *Public Health Forward* project goals. This mixed-methods

process was designed to capture real-time perspectives from high-level decision-makers, experts, and front-line practitioners on needs, challenges, and best practices to support public health responsiveness, improved health outcomes for all populations, and performance improvement and innovation. The project's Steering Committee, a Public Health Advisory Board of national public health leaders, and a bipartisan task force representing former elected officials, health care, businesses, and faith-based leaders provided general oversight and guidance to the project team to inform the project goals and recommendations. The team received additional input and feedback throughout the project via:

- Roundtable discussions with experts in each of the six priority areas.

- Listening sessions and town halls with state and local public health officials and staff members (including those in rural areas and big cities); Tribal public health stakeholders; and community-based organizations.

- Follow-up one-on-one interviews to gather additional information on health equity, data transformation, and public health funding challenges.

- An online survey using the Qualtrics XM platform to gather feedback from more than 650 public health stakeholders to understand public health priorities, public health practice opportunities and challenges, and COVID-19 considerations affecting public health system modernization.

- An online survey to gather feedback from roundtable participants on the final actions and recommendations.

All meetings, roundtables, listening sessions, and town halls were conducted and recorded via Zoom. The survey results and session transcripts were analyzed to thematically categorize the responses.

The Vision

In 2026, the United States is becoming a healthier nation because elected and public health officials seized the historic opportunity to invest in new and transformative ways to modernize the governmental public health system. The system is prepared to respond to a range of public health challenges, including a pandemic, obesity, mental illness, substance abuse, and climate change. In a healthier America:

- **Advances in health equity continue to be made** because public health departments partner with various sectors (e.g., housing, food, transportation), stakeholders (e.g., businesses, faith-based organizations, community-based organizations (CBOs), health care), and community members, and also engage in Tribal consultation, toward the shared goal of providing a fair and just opportunity for all to achieve good health and well-being.

- **Sufficient, predictable, and flexible public health funding supports the public health system** to sustain healthy communities. States, territories, and localities act quickly to protect the public from expected and unexpected health issues. This means that all public health departments have the necessary resources to support nationally agreed-upon core programs and cross-cutting skills and to meet national public health practice standards.

- **A robust, modern, interoperable, and secure public health information system delivers real-time, accurate, and actionable data** to help public health officials detect new or growing threats, identify groups that may be at risk, and respond quickly with tailored policy, practice, and program interventions. Public health departments also translate and share data with policymakers and other stakeholders in a timely manner.

- **Modernized laws, policies, and statutes** protect and promote the public's health in a manner that reflects ongoing threats and challenges, enables public health officials to make decisions without political influence, and ensures public health responsibilities remain intact and protected.

- **A highly skilled, trained, and diverse public health workforce** provides evidence-informed programs and services that address community health needs, encourage healthy behaviors, and act swiftly to respond to emerging threats. Staff feel valued and incentives exist to pursue long careers in governmental public health.

Framework for a 21st Century Public Health System

The country faces tremendous public health challenges beyond the pandemic, including the growing prevalence of obesity and chronic health conditions such as diabetes, mental illness and substance abuse, and the emerging effects of climate change. The mission is daunting but identifying key actions for state and local policymakers and public health officials will enable the United States to prioritize and take the necessary steps in the next five years to plan and implement a system to address these and future, unknown challenges. To manifest its vision of a 21st century public health system, the task force proposes the following framework that consists of action in six core areas.
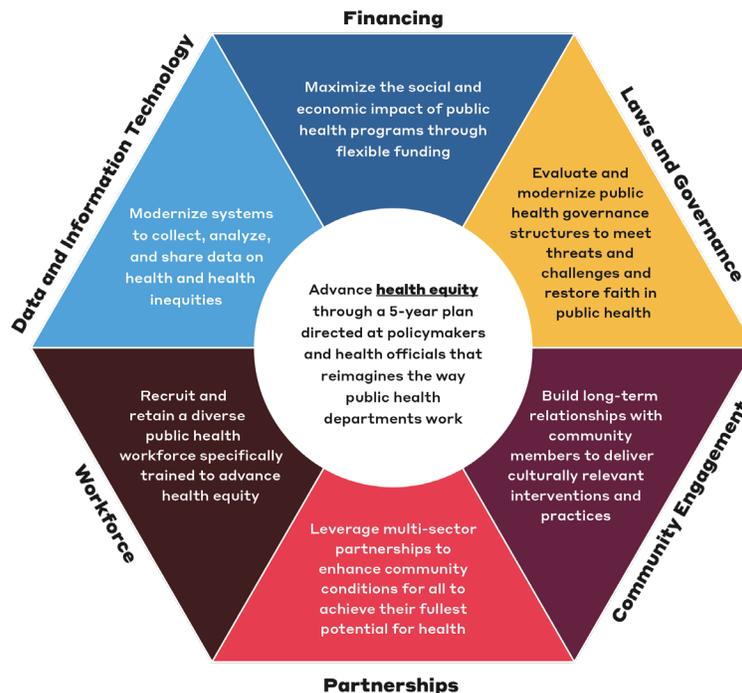
This framework is designed for elected and public health officials to implement together, and the actions are intended to be tailored to meet the unique needs and realities of each community. This framework, and the actions it supports, is intentionally centered on health equity, which requires addressing the conditions necessary for all people to achieve their fullest potential for health and well-being. These actions, as part of a public health transformation, will drive tangible improvements in health outcomes such as infant mortality, the prevalence of chronic diseases that are the leading cause of death and disability, and mental wellness, and will enable the country to better prevent and address pandemics, natural disasters, lead contamination of water, and other major incidents.

Recommended Actions

Because of federalism, funding resources are directed in most cases to states and territories, where public health policy typically resides. Therefore, this report's focus is the state/territory and its subdivisions. That said, big cities in particular retain many authorities through statute or federal or local funding mechanisms that can lead to implementation of different policies and practices than their state counterparts. The public health system in each state or territory consists of policymakers and public health departments at all levels of government (including, in some places, Tribal Nations), the health care sector, community-based organizations, and others who contribute to the public's health and well-being. In this document, we call on elected policymakers to enact policies that will transform the public health system in their state, and we urge public health department leaders to take specific actions critical to fully implementing policies.

FINANCING

Vision: Sufficient, predictable, and flexible funding supports the public health system and enables it to sustain healthy communities across the country and act quickly to protect the public from expected and unexpected health issues. All public health departments need the resources, support, and skills to provide core programs, address challenges unique to their jurisdictions, and meet national public health practice standards.

For many years, public health departments have been forced to rely on limited and inconsistent funding—often in the form of state and federal grants that are restricted to addressing specific diseases and health conditions—to do their work.[24] This siloed approach makes it nearly impossible for public health departments to build the cross-cutting competencies and skills needed to address challenges and health inequities experienced by low-income, rural, Tribal Nations, and communities of color. Accordingly, restrictive funding sources inhibit public health departments by reducing their nimbleness to respond to emerging problems and limiting their ability to address priority issues specific to their jurisdiction and advance health equity. Finally, budget cuts over the past two decades have further hampered the ability of many public health departments to offer basic public health services, not only for COVID-19 and other infectious diseases but for all public health threats and conditions.

Basic public health services, comprising core programs and the skills needed to implement them, are detailed in Foundational Public Health Services, a

framework developed by national thought leaders and embraced by public health practitioners. Public health departments need sufficient, predictable, and flexible funding to support these core programs and skills – not only in the pandemic's immediate aftermath but also in the long term. Flexible funding refers to multisource funding that gives recipients latitude in usage, particularly to meet local needs that may vary by community, and it stands in contrast to restricted funding. Sound accountability mechanisms are also necessary. Achieving public health accreditation, or being on a pathway to accreditation, is one way for public health departments to demonstrate their adherence to national standards (which include sound fiscal practices). Funding should also incorporate the supports needed for public health departments to participate in the accreditation process.

Resource sharing offers another potential strategy for enhancing the financing of public health departments. By pooling resources and sharing staff, expertise, funds, and programs, local public health departments often accomplish more together than they could alone. Cross-agency resource-sharing agreements take many different forms (in terms of precisely what is shared and how activities are governed) and are driven by what the partners want to achieve. When established by willing partners and developed in a thoughtful and comprehensive manner, sharing arrangements can improve the efficiency and effectiveness of programs and strategies, and thus may merit consideration in some circumstances.[25]

Finally, a solid understanding of the social and economic value of the public health system would well serve the public and policymakers. Many public health functions are invisible and taken for granted; for example, the public typically sees tap water and food as safe for consumption. Sadly, public health programs and services become visible only when a problem arises, for example when inspections identify contamination, or departments issue public warnings and address hazards. More evidence about the effect of public health interventions would provide further accountability and additional justification about the importance of investing in public health.

Action #1: Provide flexible funding and maximize existing assets to support public health services and capabilities, including those needed to address health inequities.

A clear need exists to redesign how funds are allocated and appropriated. We encourage policymakers to blend and braid funds from multiple sources to provide a single pool of funding that supports core programs and cross-cutting skills for all state and local jurisdictions. Accountability mechanisms should be built in to track how funding from each source is spent and what was achieved, with greater focus on outcomes and less focus on reporting. Also, where

appropriate, policymakers can support cross-agency service sharing (following best practices and adapting models developed by the Center for Sharing Public Health Services[26]) as another way of ensuring that jurisdictions are served by core programs and cross-cutting skills in an effective and efficient manner.

Although this report's focus is on short-term activities, long-term funding strategies are needed to sustain a robust public health system. Implementing the recommendations will establish the foundation needed to build a modern public health system that is equipped to meet health challenges while providing a structure to be supported in the long-term by sustainable funding mechanisms.

Policymakers

1. Request assessments on the state of public health systems, specifically nationally agreed-upon core programs and cross-cutting skills needed to support public health everywhere.

   A. Devote funds for conducting these assessments, developing and implementing strategies to fill the gaps, engaging in continual quality improvement, and otherwise working toward meeting national public health practice standards.

2. Direct appropriate agencies to work together and support this alignment by co-funding programs and strategies to improve health, based on routine needs assessments and improvement plans.

3. Develop, advocate, and support budgetary mechanisms to facilitate blending and braiding funds from multiple sources, as well as accompanying measures to ensure transparency and accountability.

4. Allocate funding for health departments to hire and retain a health equity leader who will have direct accountability to state, territorial, and local health directors, and develop measures that demonstrate health equity practices and their achievements.

Public health departments

1. Develop accountability measures for all funding streams.

2. Assess public health systems, including evaluating current investments and capacity, identifying gaps in core programs and cross-cutting skills, and analyzing whether they meet national public health standards.

3. Embed principles of health equity in core programs and cross-cutting skills and dedicate resources as needed to ensure they are operational.

4. Collaborate with the state Medicaid agency to identify opportunities to co-fund health initiatives targeting communities experiencing health inequities.

5. As appropriate, explore resource sharing arrangements with neighboring departments to fill in gaps or increase effectiveness and efficiency of foundational public health services.

Action #2: Evaluate the social and economic impact of public health programs and strategies.

The social and economic value of public health is often underestimated and misunderstood, despite the numerous studies that find huge cost savings and gains in the 20th century and the first decade of the 21st century from public health improvements. A systematic review of public health interventions in high-income countries, including the United States, Australia, and the United Kingdom, found that the median return on investment for all public health interventions was 14 to 1.[27]

More recent public health accomplishments include healthier newborns, greater prevention of cardiovascular diseases, and greater occupational safety.[28] Because it may not always be possible to quantitively assess certain public health programs and strategies, evaluations should be holistic in determining the impact on population health, reflecting changes to health outcomes, community feedback, and qualitative analysis.

Policymakers

1. Invest in public health system evaluation to illustrate the effects of allocations and investments at the state, territorial, and local levels.

Public health departments

1. Develop a dashboard to track high-level expenditures and progress toward meeting shared goals and targets.

Costing the Foundational Public Health Services in Ohio, released in 2019, assesses the current levels of spending on core public health programs and functions, and the resource gaps that exist, in every local public health department across the state.[29] The tool used to determine cost is based on the Foundational Public Health Services, a key reference for the actions and recommendations in this report. Based on the data, the report estimated the financial investment needed by local public health departments to fully implement the Foundational Public Health Services. Based on Ohio's 2018 population, a little more than $45 million in investments were needed to fully implement foundational capabilities in the state.[30]

Vision: A robust, modern, interoperable, and secure public health information system delivers real-time, accurate, and actionable data to policymakers, public health departments, and other stakeholders to help public health officials detect new or growing threats, identify groups that may be at risk, and respond quickly with well-targeted policies and programs.

Data-driven decision-making, critical to public health practice, requires accurate and real-time information about disease prevalence and diagnoses, potential threats, and disparities in health outcomes, particularly for communities experiencing health inequities. Because data provide the basis for improving community health outcomes and evaluating public health programs, high-quality data are central to ensuring transparency and accountability. However, many public health departments rely on non-existent or obsolete and siloed information technology systems.[31] Additionally, much of the data sent to public health agencies is transmitted in outdated ways, such as by fax or the U.S. Postal Service. Moreover, the quality of data sent is often poor due to incomplete information.

These deficiencies were very apparent during the pandemic, reinforcing the decades-old need to significantly upgrade and modernize data and information technology systems in public health departments and to make them interoperable with health care providers.

Action #1: Strengthen the collection of timely and actionable public health data to guide programs, respond to emergencies, and address health inequities.

As a first step, it is critical to establish data and information technology systems that facilitate the collection of high-quality data in a timely fashion. Data need to consistently include age, race, ethnicity, disability status, and other indicators that characterize populations experiencing health inequities. As these systems are established and improved, the workforce needs to be trained to fully realize their potential.

Policymakers

1. Invest in modern, efficient, and interoperable information technology that equips state, territorial, and local health departments to:

    A. Collect, analyze, and share timely, accurate, subcounty data on health and health-related issues disaggregated by race, ethnicity, and other key sociodemographic characteristics.

B. Work with partners to ensure that data submitted are complete and of high quality.

2. Require that public health data are reported to agencies at all levels of government using interoperable electronic mechanisms.

Public health departments

1. Consistently collect data needed to identify, document, and address health inequities in local communities.

2. Work with partners to submit data to public health departments that is timely, accurate, and complete.

3. Share and display this data in real time, with user-friendly data dashboards available to other governmental agencies and the public.

Action #2: Invest in data sharing between public health departments and health care entities.

State and local public health departments currently operate a mismatched network of siloed public health information systems – most of which do not talk to each other, other government agencies, or the health care delivery sector.[32] This patchwork is particularly challenging in areas with restricted internet access, such as some rural communities and Tribal nations. Common data points collected by public health and health care systems, as well as shared using electronic case reporting, are needed for the automated exchange of clinical information. In addition, separate data systems need to be shared, linked, and synthesized in real time, while protecting data security and individual privacy. This interoperability between systems is crucial if health departments are going to be able to address urgent health threats to address urgent health threats. Success with interoperability will also aid subsequent efforts to develop interoperable systems with other partners, such as community-based organizations.

Policymakers

1. Remove or support the removal of technical and legal barriers to data system interoperability with health care systems and Tribal health entities while ensuring that sufficient security safeguards are in place to achieve compliance with the Health Insurance Portability and Accountability Act (HIPAA).

2. Ensure that data sharing regulations are secure without being onerous.

   A. Proactively support and incentivize partnerships that utilize official Memorandum of Agreement (MOU) documents to guide their collaboration.

3. Through legislation, require adherence to standards of the Office of the National Coordinator for Health Information Technology and the Centers for Disease Control and Prevention (CDC) for the collection and sharing of common data points.

Public health departments

1. Develop and implement policies and procedures that adhere to the standards of the Office of the National Coordinator for Health Information Technology (ONC) and the Centers for Disease Control and Prevention (ONC/CDC).

2. Ensure that those reporting data are adhering to ONC/CDC standards.

3. Enter into data-sharing agreements with Medicaid agencies.

In 2013, the Oregon Legislature passed House Bill 2134, which instructed the state Department of Human Services and the Oregon Health Authority (OHA) to collaborate in the adoption of uniform standards for data on race, ethnicity, preferred spoken and written languages, and disability status (REALD) for all programs that use demographic data. The OHA Office of Equity and Inclusion worked with stakeholders to develop these standards.[33] The Legislature passed House Bill 4212 in 2020 that, among other things required health care providers to collect information on race, ethnicity, language, disability, and other demographic information at health care encounters related to COVID-19, and to share this information with the Oregon Health Authority (OHA). The use of these standards in data collection has helped the OHA identify health inequities in COVID-19 in terms of infections and access to health care, which in turn informs targeted strategies to assist populations.[34]

WORKFORCE

Vision: A highly skilled, trained, and diverse public health workforce provides *evidence-informed programs and services that address community health needs, encourage healthy behaviors, and act swiftly to respond to emerging threats. Staff feel supported and are incentivized to pursue long careers in governmental public health.*

The governmental public health workforce has been declining for more than a decade, a direct reflection of funding cuts to health departments, an aging workforce, burnout, and high rates of turnover. According to a new analysis, the nation needs an additional 80,000 full-time equivalent positions in state and local health departments—an 80% increase in the current workforce— just to provide the core programs that every community needs.[35] Clearly, state and local public departments entered the pandemic with a staffing deficit, impeding their ability to deliver their core capabilities, much less to quickly and comprehensively address the most significant public health crisis of the century.

As the pandemic has ground on, the ongoing firings, resignations, and personal safety threats to public health officials due to criticism of pandemic lockdowns and mask mandates have deepened the staffing challenges. A lack of competitive salaries and cumbersome, bureaucratic hiring processes further hamper efforts to recruit, hire, and retain staff. Public officials have used much of the supplemental funding allocated to states, territories, and localities to hire temporary staff and meet pressing needs.[36]

The public health workforce is essential to advancing health equity. A workforce representative of various life experiences, whether Black, Indigenous, or other people of color; residents of rural or urban communities; LGBTQ+ people; immigrants; people with disabilities; people with low incomes; and others who face unique public health challenges have unique insights into ways of achieving health and the opportunity to thrive. A diverse workforce also signals to the public that the department is a welcoming place and facilitates trust among populations that may otherwise be distrustful or feel like outsiders.

Rural communities, which are navigating significant health challenges, are especially underfunded and understaffed. Residents often have to travel long distances to access health care, as they struggle with recruitment and retention of providers.[37] The same is true for Tribal health departments, which face significant challenges in their efforts to meet the needs of Native American communities in both rural and urban areas, while struggling to recruit and retain staff, especially in remote locations.[38]

As the nation continues to navigate the pandemic and build the long-term infrastructure needed to sustain public health, public health departments must:

- Employ a sufficient number of staff to deliver the full range of public health services in their jurisdiction;
- Hire a workforce that reflects the diversity of the community served;
- Build robust and equitable pathways to employment and advancement; and
- Cultivate working environments that foster inclusive and supportive cultures to support retention.

Action #1: Invest in the recruitment and retention of a diverse and inclusive governmental public health workforce.

To build up to optimal staffing levels, public health departments need to be able to recruit from a diverse pool of people who are aware of governmental public health, interested in joining the workforce, and equipped with the knowledge, capabilities, experience, and commitment to health equity to partner effectively with communities. There is a particular need to expand opportunities and reduce barriers for Black and Indigenous communities, people of color,

and people with differing abilities, all of whom are under-represented in governmental public health, particularly in leadership positions.[39]

Many who enter the public health field do so through direct experience working in a health department (e.g., through an internship or fellowship). People who might otherwise be interested in joining the field do not have enough exposure to governmental public health to spark their interest, or they may have poor perceptions of governmental public health jobs and a lack of understanding about the work. Moreover, public health education and training is expensive and not all internships are paid, making these opportunities inaccessible to people from lower-income backgrounds. A number of institutions play important roles in building awareness and training potential health department staff: Historically Black Colleges and Universities; Hispanic-Serving Agricultural Colleges and Universities; Tribal colleges and universities; other minority serving institutions; community colleges; and rural-serving institutions.[40]

Finally, managers/supervisors should devote time to creating inclusive, engaging work environments that incentivize staff to stay and thrive. Policymakers could contribute to staff morale by touring public health departments in their jurisdiction – and in the process, they would gain valuable insights on the day-to-day operations of public health.

Policymakers

1. In partnership with local health departments, perform a statewide public health workforce needs assessment and fund public health department assessments of organizational culture.

2. Establish or promote robust and equitable employment programs on the state, territorial, and local levels to recruit, hire, and retain the next generation of public health practitioners, with a particular focus on individuals from communities experiencing health inequities.

Public health departments

1. Determine the number and type of staff needed to provide public health services.

2. Formalize partnerships and programs with academic institutions—including Historically Black Colleges and Universities, Hispanic-Serving Agricultural Colleges and Universities, and Tribal colleges and universities—local boards of health, and technical training programs to build a cross-disciplinary workforce and provide students with experiential opportunities in public health.

3. Work with partners to expand internships, fellowships, and workforce pipeline, loan-repayment, and other career on-ramp programs.

    A. Provide tailored opportunities to individuals in under-represented populations.

4. Hire outreach workers who live in communities experiencing health inequities to assist with building trusting relationships and engaging community members.

5. Assess organizational culture and make changes as needed to ensure the workplace is culturally competent and supportive of all staff.

Action #2: Improve hiring and promotion policies and processes to ensure high-quality public health services.

Numerous issues pose barriers to the hiring and advancement of the public health workforce, including lengthy and cumbersome hiring processes, outdated job descriptions and job requirements, low salaries (making it exceptionally difficult to attract candidates with student loan debt), limited student loan forgiveness programs, and professional growth opportunities that do not keep pace with the expectations of today's workers. In addition, the elimination of entry-level jobs due to budget cuts has made it difficult for early-career professionals to enter the field.[41] Recruiters also need to recognize that academic degrees and prior work experience in specific programmatic areas are not the only qualifications to consider; rather, a variety of skills and experiences, even in the absence of post-high school degrees, equip candidates to support communities with advancing health equity. All these barriers and issues must be addressed when officials seek to recruit the public health workforce of the future.

Policymakers

1. Modernize existing civil service requirements and institute competitive pay structures to accommodate roles and responsibilities specific or unique to public health.

2. Approve budgets that ensure:

   A. The training and professional development of the public health workforce involved with implementing core programs and applying all necessary cross-cutting skills.

   B. Salary structures that are commensurate with roles and responsibilities and that are competitive with salaries for similar positions in nongovernmental agencies.

Public health departments

1. Partner with leaders in government reform to update merit systems, civil service requirements, position descriptions, and human resources systems.

2. Provide professional development opportunities, giving public health

workers the skills and knowledge needed to meet modern public health challenges (e.g., change management, data science skills, and cultural and linguistic competencies).

3. Work to secure a full complement of health supports to prevent burnout and turnover, including mental health services and comprehensive paid leave.

The Tennessee Legislature passed the Tennessee Excellence, Accountability and Management (TEAM) Act in 2012 to reform the state human resources system.[42] A key component was the establishment of a pay-for-performance program to recognize and reward employees with salary increases or bonuses based on performance. The state also was the first in the nation to create the position of Chief Learning Officer to direct professional growth and build a learning environment in the state government.

PUBLIC HEALTH LAWS AND GOVERNANCE

Vision: Modernized laws, policies, and statutes to protect and promote the public's health in a manner that reflects ongoing threats and challenges and ensures public health authority remains intact and protected.

Public health laws vary by state, and governance of public health ranges from centralized to decentralized systems. As a result, public health roles vary, as do the related interactions between the state and local levels. Perhaps not surprisingly, there also is wide variation among communities in support and willingness to finance public health functions and services, and the willingness of potential public health partners to collaborate on mutually beneficial goals related to improved health outcomes.

Public health departments need a consistent set of legal responsibilities, given by policymakers, to be able to provide core programs and implement all actions in this report. The public health system has a legal responsibility that it cannot abandon, as most of what it does is through policy, rules, and laws.

Action #1: Review, evaluate, and modernize public health governance structures and statutory responsibilities.

Variation in decision-making structures and resources available to health departments across the nation has led to stark differences in outcomes between jurisdictions, both before and during the pandemic.[43] Moreover, many public health governance structures are outdated and were designed and developed

generations ago. This makes it difficult for them to address the challenges and opportunities of the 21st century, including health equity, social determinants of health (SDOH), technological advances, and emergency response challenges.[44,45] Similarly, antiquated public health laws require modernization.

In 2021, more than half of all states considered bills to limit state and local public health powers, and 10 states have enacted laws doing so. Most of these laws shift power from local public health experts to state politicians (who typically do not have public health expertise), which not only limits localities' ability to implement tailored, effective actions to stop the spread of COVID-19 but also has long-term negative consequences, including the deepening of mistrust of public health officials.[46] These laws and other factors, such as the sharp increase in personal threats and the pressures of the pandemic, have led to more than 300 state and local public health officials to resign, retire, or be fired since April of 2020.[47] The long-term consequences associated with further limiting the authority of the public health system to deliver services is an ongoing threat to the safety, economic prosperity, and security of the United States.

Policymakers

1. Conduct or promote a bipartisan, comprehensive review of existing policies and revise as needed to reflect the current roles and responsibilities of government in protecting and promoting health, including the ability of public health departments to make decisions without undue political influence.

   A. Work across various levels of government to determine the proper federal, state, territorial, and local framework for preemption, establishing minimum and maximum requirements, particularly in light of recent state action to roll back public health powers and place limits on local elected officials.

   B. Consider how structures, processes, roles, and responsibilities should remain the same or change during a public health emergency; this task should include ensuring flexibility in personnel and procurement processes.

   C. Examine whether existing funding streams are sufficient to support the revised public health governance structures and statutory authorities; elevate funding needs to relevant appropriators to fill gaps.

   D. Ensure the law as written promotes trust through the removal of stigmatizing language, particularly as it relates to populations experiencing health inequities.

2. For policymakers in jurisdictions adjacent to or containing sovereign Tribal Nations and health systems, review lines of communication and opportunities for formalized partnerships.

3. Ensure that public health department leaders are empowered to make decisions without inappropriate political influence and have access to counsel with expertise in public health law.

Public health departments

1. Direct counsel with public health law expertise to review existing regulations and ensure they are relevant, provide the ability to protect the health of the public, and are legally sound.

2. Ensure that opportunities for public input in rule-making processes are widely publicized, transparent, and easily accessible.

   A. Specifically solicit feedback from those who will be most affected by new rules.

Action #2: Support and clearly communicate the roles of public health departments to the public.

Although recognition of and support for public health is high in many states and localities, in some places the reverse is true. Public health measures instituted to protect against further spread of COVID-19 have generated harassment of public health officials, legal challenges to emergency powers and measures, and refusal to follow mask mandates and vaccination recommendations.[48] These displays of opposition not only have caused local disruptions but also have contributed to the nationwide difficulties to end the pandemic.

Policymakers

1. Invest in evidence-informed messaging and effective communication by health departments, using multiple platforms.

   A. Use all media outlets, including online and social media vehicles.

   B. Use media outlets serving subpopulations, including those in different languages.

2. Coordinate messaging with and across public health departments, both during emergency and non-emergency situations.

   A. Ensure messaging is culturally competent.

   B. Use language that elicits a sense of trust in government.

3. Engage with constituents during public health emergencies to correct misinformation and explain the role of public health departments.

4. Provide forums for stakeholders in public health, the business community, and health care to identify shared goals and strategies that reflect public health authorities, public health protection, and a strong and stable economy.

Public health departments

1. Develop and maintain ongoing relationships with local and statewide media.

2. Develop, routinely update, and implement a communications plan that articulates public health responsibilities.

3. Maintain the expertise to develop and implement a risk communications strategy.

In Indiana, a 15-member Governor's Public Health Commission — established in an executive order issued by Gov. Eric Holcomb — will examine the state's preparedness for health emergencies, funding plans, governance models at the state and local levels, data collection measures, and adolescent health care access. The Commission is tasked with producing long-term recommendations and is led by former state policymakers and health officials.[49]

PARTNERSHIPS

Vision: Public health departments partner with various sectors (e.g., housing, food, transportation) and stakeholders (e.g., business, faith-based organizations, health care) toward the shared goal of providing a fair and just opportunity for all to achieve good health and well-being.

A community's health is like a building—it depends on a strong and stable foundation. Quality education, accessible and nutritious food options, safe and affordable housing, access to health care, and employment opportunities enable positive health outcomes for everyone in important ways.[50] Building thriving communities requires that many sectors—not only health—work closely to construct a solid foundation that supports long-lasting good health for everyone. This foundation comprises both programs and policies, and thus requires partnerships with different sectors in the community and different government sectors.

Providing fair and just opportunities requires the work of those in business, education, health care, community development, faith communities, community-based organizations, social services, and many other sectors— neither public health nor any other sector can do this alone. Therefore, cross-sector partnerships that identify collaborative solutions to community health challenges and advance health equity are essential. Partnerships can be especially critical in areas with workforce shortages, e.g., by leveraging staff time and expertise to achieve shared goals and by collaborating on recruitment efforts. Building partnerships, coalitions, and other collaborative relationships requires continuous effort, but all too often public health departments lack the

means—the funding, necessary time, resources, and capacity—to sustain these partnerships.[51]

Government sectors also need to work together to ensure policies enhance health and the conditions that support health, and at the very least do not inadvertently cause harm. Public health departments can provide data, evidence-informed strategies and practices, and other insights to discussions regarding the impact of policies on the community's health and well-being.

Action #1: Incentivize partnerships between public health departments and other sectors (e.g., housing, food, transportation) and stakeholders (e.g., business, faith-based organizations, health care).

Through partnerships with a multitude of sectors, health departments are best equipped to access real-time data collected by others to track and monitor health impacts, gain a complete picture of the jurisdiction's needs and assets, inform and guide resource allocation, identify shared priorities, and forge collaborative and collective solutions to advance them.[52] Through partnerships, public health departments can support and further efforts to address health issues that may not fall directly within their responsibilities, e.g., addressing mental and behavioral health issues and preventing or lessening the effects of climate change. Flexible funding for cross-sector partnership development (as opposed to categorial disease-specific funding) enables partners and coalitions to work on a range of issues specific to their jurisdictions' health and well-being, a departure from the typical current funding practices that are often short term and disease-specific.

Policymakers

1. Allocate funding to support the development and maintenance of partnerships that aim to provide a fair and just opportunity for all to achieve good health and well-being.

Public health departments

1. Clearly delineate shared goals, respective responsibilities, and collaboration guidelines for decision-making, conflict resolution, and data sharing; use this body of work as a foundation for sustainable collaborations.

Action #2: Establish a dedicated body charged with routinely monitoring, assessing, and influencing the implications for health in all government sector policy discussions

Integrating health considerations into policy and decision-making across all government sectors can help secure a government-wide commitment to public health.[53] This approach recognizes that health is created by numerous factors

beyond public health departments and the health care sector, leverages all government sectors' interests and resources to achieve mutually beneficial goals, and helps to avoid adverse health effects inadvertently resulting from a policy generated by any sector. This partnership can take the form of a special council or board; alternatively, an existing body can add the impact of health in all policies to its agenda on a regular basis.

Policymakers

1. Establish and participate in an advisory board that integrates and articulates health considerations into policymaking across all government sectors to improve the health of people and communities.

2. Conduct health impact assessments on legislation to identify potential connections between health and factors that affect health (e.g., housing, affordable and nutritious food options, employment, and environment).

Public health departments

1. Provide examples and evidence-informed practices to support health impact assessments and policy discussions.

The North Carolina Department of Health and Human Services formed the Healthy Environments Collaborative (HEC) in 2006. The Collaborative brought together the state Health, Transportation, Commerce, and Cultural and Natural Resource agencies to set common goals and identify opportunities for collaboration.[54] Since the HEC's inception, the Collaborative has awarded grants to municipalities to modify the physical environment to promote more walking and biking, encouraged communities to include health in their comprehensive plans, and educated the public about the links between health, transportation, built and natural environments, and the economy.

The Kansas City Chamber of Commerce, partnering with the Kansas City, Mo., Health Department and the Blue Cross and Blue Shield of Kansas City, helped pave the way for new laws across the region restricting tobacco sales to youth under 21. The health department supported the business case for the initiative with data analytics and connections to stakeholders.

Vision: Public health departments partner with community members toward the shared goal of providing a fair and just opportunity for all to achieve good health and well-being.

Community engagement is vital to public health's mission. Effective community engagement drives public health to prioritize the *right* interventions, policies, practices, and approaches to community-driven health priorities with community-driven approaches, which can and should be informed by people who have experienced health inequities and by communities that may not have been consulted in the planning of public health activities. Working alongside community members and sharing decision-making with them to collect data, design and implement programs, and evaluate public health's effectiveness enhances public health practice and outcomes.

Action #1: Invest in long-term relationship-building and partnership development with residents and community-based organizations (particularly those serving communities experiencing health inequities) and in Tribal consultation.

Establishing trust is a prerequisite to successful partnerships and collaborations. Therefore, public health departments must consistently expend time and effort to build the trusted relationships needed for authentic community engagement. Performative, halfhearted, and time-limited community outreach efforts not only damage trust but also can do more harm than good. Routine contacts and meetings are required to facilitate deep and sustained community participation in public health programming. Meetings need to be held in communities to make it easier for residents to participate; in the process, health departments will also demonstrate their commitment to eliciting input and centering the community's voice in identifying priorities and shaping program strategies. Moreover, CBOs and the people they serve should be appropriately compensated for the time, effort, and unique expertise they devote to improving public health efforts.

While sovereign and autonomous, Tribal Nation leaders and public health departments are critical partners in the U.S. governmental public health system. Through their authority and self-governed resources, Tribal public health systems often consult and collaborate with U.S. public health departments to provide needed services, such as response and recovery from natural disasters and supporting low-capacity U.S. health departments during the COVID-19 pandemic. However, consultation practices are not uniform, and U.S. policymakers and public health leaders must ensure practices that respectfully honor the public health authorities of Tribal Nations.

Policymakers

1. Allocate funds to public health departments for community collaboration and develop output measures that account for progress toward building trust and working in partnership.

2. Engage in routine Tribal consultation to support intergovernmental public health planning that recognize Tribal authority, autonomy, and self-governance.

3. Act as liaisons between public health departments and citizen representatives, especially from communities historically experiencing health inequities, who can elevate on-the-ground concerns and offer their input on public health issues.

Public health departments

1. Dedicate staff time to long-term community engagement efforts.

2. Compensate community members and organizations for their time and expertise on planning and implementing health improvement strategies and actions.

3. Invest in and formalize consultation practices between state and local health departments and Tribal health departments to address community-wide health planning and decision-making.

Action #2: Invest in the capacity of CBOs and provide resources to support collaboration with public health departments.

All too often community-based organizations that serve communities experiencing health inequities are under-resourced; as a result, they do not achieve their full potential and thus their influence and potential impact are often underappreciated. As an example, CBOs may not have the capacity to participate in meetings due to other demands. Moreover, the input of CBOs often is ignored or minimized in favor of opinions by people from well-resourced organizations that brought an executive team member to the table. And sometimes greater weight is put on input from people with advanced academic credentials as opposed to those with the most experience with the population being served or the health issue being addressed.

Given that improved population health outcomes largely depend on reducing health disparities,[55] the value of strengthening the ability of CBOs that serve communities experiencing health inequities to meet their missions and simultaneously engage as equal players in health improvement collaborations cannot be understated. As such, CBOs should share in decision-making and receive help to expand their capacity.

Policymakers

1. Allocate funds to support the capacity-building of CBOs.

2. Lead regular town halls and forums with CBOs and public health officials to present evidence-based information that deepens understanding of health inequities, their causes, and their consequences.

Public health departments

1. Formalize public health planning and processes that rely on input from, and share decision-making with, CBOs and the people they serve.

2. Work with CBOs to identify opportunities to strengthen their organizational capacity and dedicate staff time and funds to mentor and train on topics such as grant writing, grant reporting, data collection and analysis, project evaluation, and publishing academic papers.

PHRASES (Public Health Reaching Across Sectors) is a program that provides research-based tools and messaging to help public health leaders effectively communicate the value of public health and to build stronger relationships with partners and communities. One recommendation for better communication with the housing, education, health systems, and business sectors is, "Demonstrate your familiarity with the sectors you wish to engage." This requires recognizing the diversity within each sector and speaking specifically to each audience's interests and perspectives in a way that builds trust and the credibility of public health.[56]

Conclusion

The pandemic has had a devastating and lasting impact. More than 740,000 Americans have died and unknown thousands continue to suffer from long-term symptoms after recovery from the virus.[57] About 66 million eligible Americans are unvaccinated, at the time of publication,[58] and misinformation on the virus and vaccines is rampant in some areas of the country.

The federal government made substantial investments to bolster public health deficiencies and respond to the pandemic. Despite the funding influx, some states and localities have legally and politically undermined public health departments trying to carry out their mission to combat COVID-19 and meet other public health challenges.[59]

The vision, framework, and actions laid out in this report are a guide so that elected and health officials can prepare their communities for the next pandemic or public health challenge and improve the quality of life of their neighbors.

We cannot learn the wrong lessons from the pandemic. This moment is an opportunity for elected and health officials to reimagine public health in a bipartisan fashion, with the goal of an equitable, effective, and sustainable public health system.

Appendix 1: Federal Investments in Public Health in COVID-19 Relief Legislation

Congress provided $305.6 billion through five COVID-19 relief bills to the Public Health Services Agencies and the Public Health and Social Service Emergencies Fund (PHSSEF)[60].

Allocations include:

- $280 billion to PHSSEF, an account controlled by the Health and Human Services secretary that receives annual appropriations to operate some HHS offices, including the Office of the HHS Assistant Secretary for Preparedness and Response, but often for one time or short-term funding.

  Within this amount, $53.4 billion is allocated to medical countermeasures and boosting surge capacity:

  - At least $24.2 billion for the Biomedical Advanced Research and Development Authority.
  - Up to $19.25 billion for the Strategic National Stockpile, which stores medicines and medical supplies for distribution to jurisdictions during public health emergencies.

- $15.3 billion for the CDC.
  - Broadly available funding:
    - At least $2.45 billion for grants to state, local, territorial, and tribal governments "to carry out surveillance, epidemiology, laboratory capacity, infection control, mitigation, communications, and other preparedness and response activities."
    - $800 million for global disease detection and emergency response.
    - $600 million for the Infectious Disease Rapid Response Reserve Fund (IDRRRF).
    - $500 million for "public health data surveillance and analytics infrastructure modernization."
    - $1 billion to expand and improve COVID-19 testing.

- $8.75 billion for vaccine-related funding, $4.5 billion of which must go toward state, local, territorial and tribal grants.

- $4.7 billion for the Substance Abuse and Mental Health Services Administration.

- $3 billion for the National Institutes of Health (NIH).

- $1.3 billion for the Health Resources and Services Administration.

- $1.1 billion for the Indian Health Service.

- $196 million for the Food and Drug Administration.

- $12.5 million for the Agency for Toxic Substances and Disease Registry (headed by the CDC director).

  - $7.5 million for the Geospatial Research, Analysis and Services Program "to support spatial analysis and Geographic Information System mapping of infectious disease hot spots, including cruise ships."

  - $5 million to Pediatric Environmental Health Specialty Units and state health departments "to provide guidance and outreach on safe practices for disinfection for home, school, and daycare facilities."

Note: The American Rescue Plan provided substantial mandatory funding for a long list of public health activities. This departure from regular order is expected to be temporary. The appropriations committees will resume their role overseeing public health funding in the appropriations bills that will be worked on in summer of 2022.

The American Rescue Plan[61] provided additional public health funding of nearly $90 billion.

Allocations include:

- Vaccines/therapeutics: ($15.05 billion).

  - $7.5 billion to the CDC for COVID-19 vaccine activities.

  - $1 billion to the CDC for vaccine confidence activities.

  - $6.05 billion for research and development, manufacturing, and purchase of vaccines, therapeutics and other medical supplies for COVID and other pandemics.

  - $500 million to FDA to evaluate continued effectiveness of COVID-19 products.

- Testing and data: ($50.8 billion).

  - $47.8 billion to HHS for testing, contact tracing, surveillance, and mitigation activities.

  - $1.75 billion to HHS/CDC for genomic sequencing.

- $750 million to HHS/CDC to combat COVID-19 globally.
- $500 million to HHS/CDC for data infrastructure modernization.

- Workforce: ($7.76 billion).

  - $7.66 billion to HHS for public health workforce.
  - $100 million for Medical Reserve Corps.

- Other public health investments: ($8.98 billion).

  - $7.6 billion to HHS for community health centers for COVID-19 mitigation.
  - $800 million to HHS for National Health Service Corps (loan repayment).
  - $200 million to HHS for Nurse Corps (loan repayment).
  - $330 million to HHS for medical education and training--expanding primary care programs, maintaining existing staff, boosting federal response to public health emergencies.
  - $50 million to HHS for family planning grants.

- Mental health/substance use disorders: ($3.88 billion).

  - $1.5 billion to HHS for community mental health grants.
  - $1.5 billion to HHS for substance use prevention and treatment.
  - $80 million to HHS and HRSA for MH and SUD training in rural/ underserved areas.
  - $20 million to HHS/CDC for wellness campaign for health care professionals.
  - $40 million to HHS/HRSA for grants to promote mental health among health workforce.
  - $30 million to HHS for local SUD services.
  - $50 million to HHS for local behavioral health services.
  - $10 million to HHS for national child traumatic stress network.
  - $30 million to HHS for advancing wellness in education.
  - $20 million to HHS for youth suicide prevention.
  - $100 million to HHS for behavioral health workforce training.
  - $80 million to HHS for pediatric mental health care telehealth access programs.
  - $420 million to HHS for community behavioral health clinics.

Appendix 2: Public Health Focus Area Background

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**Prepared by the Johns Hopkins Bloomberg School of Public Health**

PUBLIC HEALTH FINANCE

The Importance of Public Health Finance

Public health finance includes the acquisition, utilization, and management of public health resources,[62] including those required to deliver public health services to populations. It also includes the impact of resources on the health and health equity of those populations.[63] As depicted below, resources for public health come from a range of sources with the bulk of funding provided by federal and state governments. Funds typically flow from federal to state, territorial and tribal health departments, and then to local governments.

Figure 1. Public Health Funding Flows
Adapted from Institute of Medicine. 2012. *For the Public's Health: Investing in a Healthier Future.* Washington, DC: The National Academies Press. https://doi.org/10.17226/13268.
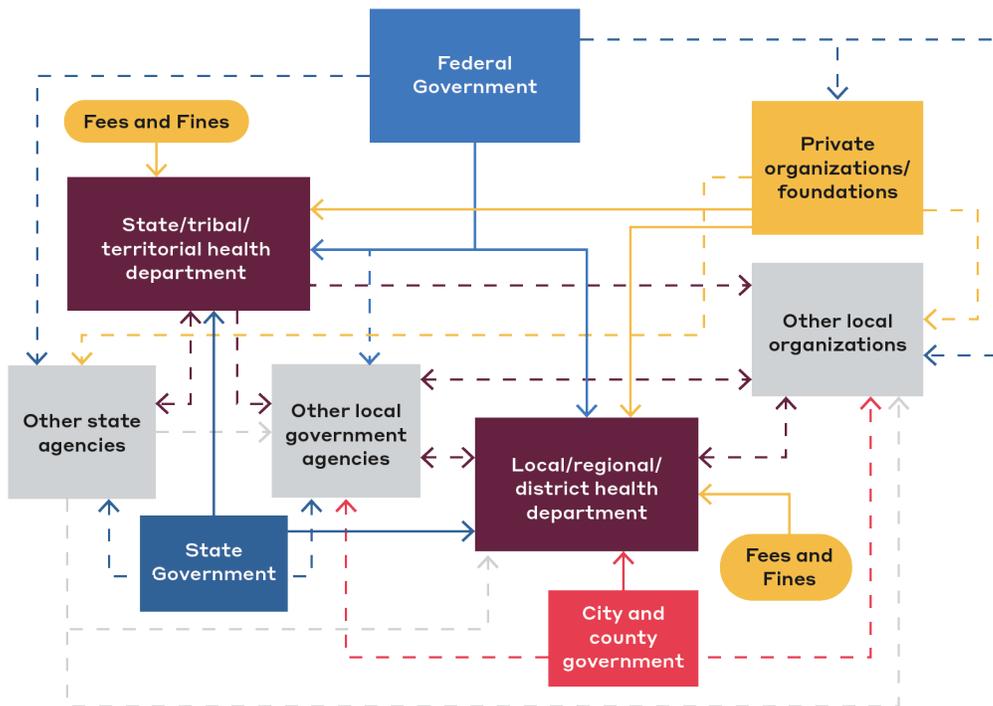
Public Health Finance: Core Issues and Gaps

Core Issues:

- A long-standing neglect of and reduction in public health funding at all levels of government, despite increases in the scope of public health services and needs,[64,65,66] has resulted in reduced state, regional, and local capacity. Communities nationwide are not able to deliver needed public health services and to respond to the COVID-19 pandemic and other public health emergencies.

- The structure, organization, and delivery of public health services varies widely. When coupled with differences in state and local investments and funding disbursements, these variances have resulted in a patchwork system with a wide range of public health spending per capita, from a low of $7 to a high of $140 in 2019.[67]

- Many public health funding streams are **"categorical,"** restricted to specific priority areas (e.g., chronic disease prevention), limiting funds to basic public health system needs (e.g., data systems, staffing) or to ramp up surge capacity in response to emergencies.

- Flexible funding streams allow for the shifting of money as needed, but such flexible streams (e.g., block grants[68] or the Prevention and Public Health Fund[69]) have been vulnerable to funding cuts or reallocation to cover non-health priorities (e.g., tax cuts[70]).

- Leaders in the field have proposed uniform standards and accounting measures to monitor resources and evaluate capacity for delivery of a basic set of public health services; however, without dedicated, long-term funding for such measures, adoption has been limited.[71]

Gaps:

There has been inadequate recognition of:

- Structural variations (e.g., budgeting cycles and practices) across state and local governments which hampers accurate costs estimates; lack of transparency in state and local resource allocations; and little accountability for where and how public health funds are spent;

- Needed additional resources and financial flexibility to address systemic inequities and upstream SDOH through cross-sector partnerships and community engagement in local communities;

- Governance and policy considerations that affect funding; resource allocation laws; and policies and practices dictating the use and distribution of funds to state and local government agencies, communities, and other organizations.

Public Health Finance: Challenges and Opportunities for Action Going Forward

Challenges: Continued Underfunding and Divestment Leads to Poor Health Outcomes

Insufficient and inconsistent ("boom-bust") funding leaves the public health system unprepared to:

- Adequately protect communities from public health emergencies and ongoing public health challenges, such as violence, substance use, and climate change;

- Address health inequities and disparities through equitable provision of services, resources, and supports to communities;

- Adopt a broad vision of public health to foster cross-sector partnerships and community engagement to address upstream determinants of health such as housing, transportation, and employment.

Opportunities for Action: Increasing Sustained Resources for Public Health Is Key to Improving Community Health and Well-Being

- Assure a basic level of public health service delivery in each community;

- Enable nimbleness so agencies can respond to public health emergencies and crises as needed;

- Sustain the ability of public health agencies to collaborate across sectors to address upstream drivers of health and promote health equity and improved health;

- Standardize tracking and monitoring over time to assess and ensure funding is being used to its full capacity and impact in local communities;

- Foster a scale-up of effective resource allocation and distribution practices to local communities;

- Improve data systems and health information to track and address communicable disease outbreaks and public health emergencies, such as extreme weather events and substance use crises in a more timely and targeted manner.

The Importance of Data and Information Technology

Data and information technology encompasses not only the collection, usage, and storage of data but also the platforms, software, and hardware to support individual and population-level public health surveillance. This technology enables the public health system to undertake interventions and monitor and communicate public health outcomes. As demonstrated during the COVID-19 pandemic, all aspects of the nation's data and information technology systems are critical to a well-functioning public health system.

Data and Information Technology: Core Issues and Gaps

Core Issues:

The following are essential to an effective public health system:

- **Modern technology** and **cybersecurity** measures.
- **Staff capacity** to collect, disaggregate, analyze, interpret, report, and communicate data.
- **Data sharing** across health and public health systems and geographic jurisdictions.
- **Access to timely, quality, and meaningful data** (e.g., accurate case counts, disaggregated data), to respond to public health emergencies, evaluate health outcomes, implement accountability measures, and identify health disparities and inequities.
- **Standardized data measures, capacity, and reporting practices** for consistent and comparable reporting, monitoring, and communication across states and local communities.

Gaps:

Key gaps in prior discussions on public health data and information technology modernization include:

Primary focus on a specific component(s) of the system (e.g., interoperability or privacy concerns) rather than the entire system.

- **Exclusion of nontraditional data sources** (e.g., community input, lived experiences, etc.).
- Need for expanded **focus beyond data** to translation of data to benefit impacted communities.
- Need for **partnerships and community engagement** to establish data measures, information systems, and communications that measure, communicate, and advance cross-sector efforts to address the social determinants of health.

Data and Information Technology: Challenges and Opportunities for Action

Challenges: Data and Information Technology Deficiencies Hinder Improved Health Outcomes

- Lack of interoperable data platforms across sectors and jurisdictions results in fragmented and inefficient data exchange and hinders effective public health responses and improved health outcomes;[72,73]

- Use of obsolete technology platforms creates data integrity and quality challenges and leads to delays in real time reporting and response;[72,73]

- Insufficient and ineffective collection and disaggregation of data (e.g., by race, ethnicity, geographic locations) stymies efforts to track, monitor, and reduce health disparities and address the social determinants of health;[72,74]

- Lack of funding and support for data modernization initiatives at the federal, state, and local levels hinders capacity, interoperability, and data access and communications.[72,74,75]

Opportunities for Action: Data Modernization Is Crucial to Improving Health and Health Equity

- Broaden information access and coordination across sectors, public and private entities, and communities to address the social determinants of health;[72,73,76] and

- Improve public health surveillance to better monitor, investigate, prevent, and control disease outbreaks and emerging public health threats.[75,77]

PUBLIC HEALTH WORKFORCE

The Importance of the Public Health Workforce

A strong governmental public health workforce (state, local, and territories) is representative of the communities it serves; has effective leaders; is sufficiently staffed to meet the public's needs; and has the competencies, tools, and skills necessary to respond quickly to emerging public health challenges.[76,78,79,80]
A well-trained public health workforce is the country's first line of defense to prevent disease, advance the health and well-being of all populations, and keep people safe.

The Public Health Workforce: Core Issues and Gaps

Core Issues:

A skilled and diverse public health workforce requires:[76,78,79,80,81]

- A competent **workforce with effective leadership that reflects the population served;**

- Training and education that **incorporate a broad base of skills and competencies,** including technical, strategic, and leadership skills;

- More equitable pathways to successful public health careers, including **recruitment, retention, and career advancement opportunities;**

- Creating a workforce **culture of accountability, inclusiveness, quality improvement, and lifelong learning;** and

- **Cultivating partnerships with schools and programs of public health** to build a pipeline for the future workforce.

Gaps:

There has been inadequate recognition of:

- Public health professionals and institutions do not serve communities equitably and are insufficiently **equipped to address structural inequalities.**

- Inadequate attention to individual employee **career paths and goals poses** challenges for recruitment, retention, and morale.

- **Workforce learning, training, and professional development** lacks sustained financial support, access is limited, and content is often siloed and driven by funding availability;

- **Relationships between health departments and partner organizations** (e.g., academia, health, education, business) are often not optimized due to funding and other organizational constraints. This limits the effectiveness of training, and departments are losing out on recruitment and partnership opportunities.

- Burdensome human resource policies and practices in health departments (e.g., noncompetitive salaries; inadequate facilities and equipment; limited recruitment pools, especially in more rural/remote locations; and bureaucratic and lengthy hiring practices) are barriers to **recruiting and retaining top talent.**

- Discussion is needed as to how best to leverage available mechanisms to bolster the public health workforce such as nongovernmental fast track hires and employee unions.

- Inadequate attention has been given to supporting the **well-being, mental health, and safety** of the **public health workforce** as fundamental to the mission of public health.

Public Health Workforce: Challenges and Opportunities for Action Going Forward

Challenges: Building a Capable Workforce Requires Time and Resources

- Throughout the previous decade, 66,000 state and local public health jobs were lost. Retirements, burnout, firings, harassment, and threats accelerated the exodus during the pandemic. This loss challenges health departments' abilities to maintain the current workforce.[76,80]

- Nearly half of those working in public health are considering leaving the field within five years, either through retirement or plans to leave public health entirely.[76,80]

- Most employees join public health agencies without formal training or education in public health, requiring time and resources to train new staff.[80]

- In response to the pandemic, the public health workforce expanded dramatically, but often through temporary positions, thus focusing on the short term rather than addressing long-term workforce needs.[76]

Opportunities for Action: A Strong Workforce Advances Health and Health Equity

- Adopt interdisciplinary leadership models to build new partnerships and cross-cutting collaborative opportunities.[76,78,79]

- Continue to invest in the development, improvement, and coordination of training in "strategic skills" that equip health departments to meet the complex needs of contemporary public health and an operational focus on improving health outcomes and health equity.[82]

- Broaden recruitment opportunities by fostering new partnerships with hiring organizations and academic institutions, including Historically Black Colleges and Universities, as well as with Hispanic-serving, Tribal, and other minority-serving institutions. Develop training programs focused on public health competencies and real-world experience through service learning, work practicum, and internship opportunities.[76,79,80]

- Target recruitment efforts in local communities, with a focus on building a public health workforce pipeline for people with lived experience from all cultural and economic backgrounds.[76,79]

- Focus resources and systems changes to advance recruitment, retention, and succession planning within the current workforce, including efforts to create advancement and leadership opportunities, improve job satisfaction, and increase low pay.[76,79,80]

PUBLIC HEALTH GOVERNANCE AND LAW

The Importance of Public Health Governance and Law

U.S. public health governance is the legal authority and responsibility to protect and promote the health of populations. Governance and laws set the structure and boundaries in which public health interventions and policies are developed, implemented, and evaluated. As depicted below, structures vary among states and across localities within a state. In a centralized governance structure, the state maintains authority over most local level public health operations. In a decentralized structure, local governments maintain authority over most local public health operations. During the response to COVID-19, governance variations resulted in differing policies, interventions, and messaging across states and local jurisdictions.
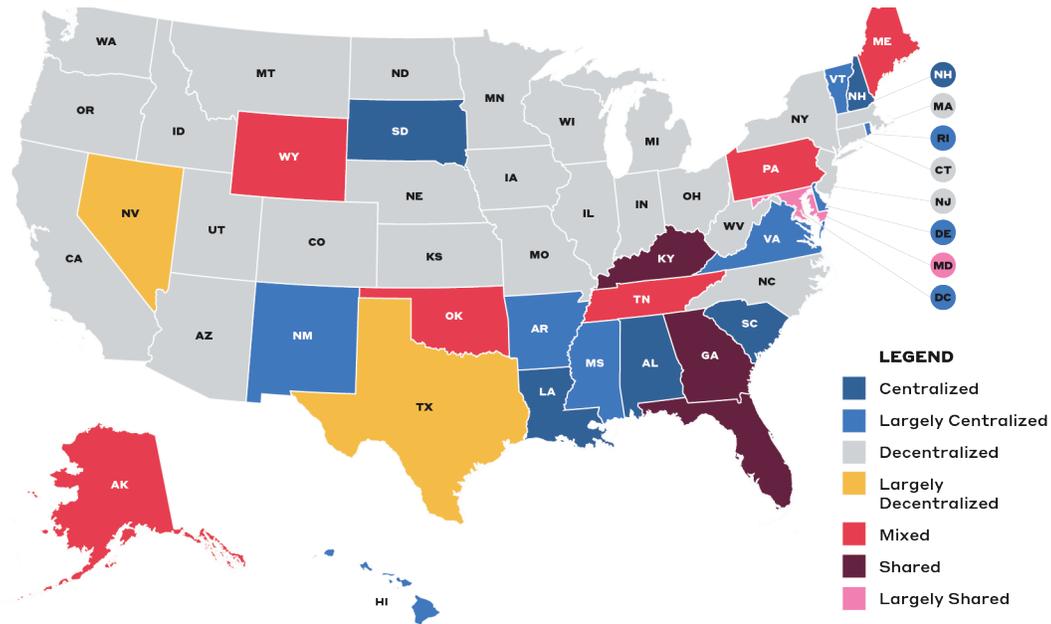
Source: ASTHO Profile of State and Territorial Public Health

Public Health Governance and Law: Core Issues and Gaps

Core Issues:

Core public health governance and law issues include:

• Public health is governed by a **complex and fragmented system** of federal, state, territorial, tribal, and local health agencies, all with missions to advance and protect the public's health;

- Public health operations, interventions, and outcomes are **anchored at the local level,** allowing the local context to inform delivery of public health services to communities;

- **Authority granted by public health laws** are used by public health and elected officials at all governmental levels to declare public health emergencies and institute disease prevention measures; and

- It is imperative to **affirm the mandate** for public health through accountability and coordination across state and local health departments.[76,79,80,81]

Gaps:

Gaps in public health law and governance include:

- Inadequate acknowledgment of public health laws and governance as an important underlying factor in:

- **Health outcomes and health disparities;**

- **Public health system structure and function,** such as resource allocation, workforce capacity, laws and responsibilities, data collection, and reporting;

- **Politicization of public health actions,** often resulting from conflicts across levels of government (e.g., federal preemption over state laws), and conflicts between the executive branch, of which public health agencies are a part, and the legislative branch, which grants authority to public health agencies (e.g., legislative efforts to take away authority from public health officials and prohibit use of public health protections in response to COVID-19);

- Inequitable **application and enforcement of public health laws and interventions.**

Public Health Governance and Law: Challenges and Opportunities for Action Going Forward

Challenges: Inconsistent Governance and Laws Hamper Health Outcomes

- Delegation of authority from federal to state to local during the pandemic fueled tension and distrust of public health officials, ambiguity about decision-making authority, and inconsistency in decisions and communications; [76,80]

- Inconsistent governance and laws contributed to narratives that public health officials were operating outside their scope of authority; this sowed a polarized public health climate, eroded trust in public health expertise, and spurred legislative efforts to roll back public health authority;[76,80]

- Current governance structures were designed and developed generations ago and often are outdated. As made clear in the COVID-19 response, the current structures often do not lend themselves to addressing public health challenges in the 21st century.

Opportunities for Action: Governance and Law Offer Opportunities to Advance Community Health

- Improved **clarity in governance and law can:**
- Create consistent opportunities for accountability (e.g., national health department accreditation); [76,78,80]
- Harmonize statutory authority across jurisdictions;[76]
- Encourage collaboration, consistency, and coordination between and across jurisdictions;[76,80]
- Reduce redundancy and optimize local health department performance;[76]
- Clarify scope of health department authority to foster shared accountability with key governmental and nongovernmental partners.[76]

CROSS-SECTOR PARTNERSHIPS AND COMMUNITY ENGAGEMENT

The Importance of Cross-Sector Partnerships and Community Engagement

Cross-sector partnerships and community engagement are foundational components for improved community health and are critical to advancing health, health equity, effective communication, and nimble responses to public health emergencies and challenges. Although they often overlap, partnerships and community engagement are distinct:

- Cross-sector partnerships focus on coordinating multisector changes to address the social determinants of health.
- Community engagement focuses on building relationships and trust with communities served and affected by the public health system.

Cross-Sector Partnerships and Community Engagement: Core Issues and Gaps

Core Issues:

Effective cross-sector partnerships include:

- Developing and maintaining **multisector coalitions**, which include, but are not limited to, community groups or organizations; private businesses; health-related organizations; policymakers; tribal entities; health and non-health government agencies;[76,78,79,80,81]

- Engaging authentically with community partners to identify and develop **structured processes and strategies** (e.g., community health improvement plan) for identifying and aligning priorities, activities, and resources.[76,78,79,80,81]

Effective community engagement includes:

Establishing mechanisms for multidirectional communication to increase learning and sharing among all stakeholders;[76,79,80,81]

Cultivating and maintaining trust with community members and organizers. [76,78,79,80,81]

Gaps:

Gaps in partnerships and community engagement include:

- **No clear distinction** between partnership and engagement opportunities and challenges;

- Inconsistent **focus on equity;**

- Insufficient emphasis in partnerships and community engagement around **consensus-building, action, and impact;**

- No discussion of **"in-name-only" partnerships and engagement** that tokenizes, rather than authentically engages, stakeholders;

- **The focus on health departments** as anchors for partnerships and engagement opportunities as opposed to empowering communities;

- Insufficient consideration of **additional staff time and other resources required** for partnership development and engagement in trust- and community- building.

Partnerships and Engagement Challenges and Opportunities for Going Forward

Challenges: Partnerships and Engagement Require Additional Time and Resources

Cross-sector partnership barriers include:

- Insufficient and inconsistent financing and turnover contribute to inadequate staff capacity in building cross-sector partnerships;[76,80]

- Consensus-building with stakeholders with differing agendas;[81]

- Lengthy governmental bureaucratic processes and approvals that hinder timely sharing of information;[78]

- Funding and programming restrictions that limit the scope of work to specific issues and outcomes;[78,80]

- Silo culture for programs and partnerships (e.g., housing viewed within the

lens of housing only and not considered a public health issue).[80]

Community engagement barriers include:

- Insufficient and inconsistent funding for nonspecific work such as "coalition-building" or "community engagement and outreach";[76,78,79,80]

- Disparate access to higher education in public health for racial and ethnic minorities, reducing diversity in the public health workforce;[79,80]

- Finding an appropriate balance between community engagement and internal agency limitations (e.g., community priorities may not align with agency funding availability);[76]

- Localizing community engagement to align with different levels of government (e.g., local health department engagement differs from state or tribal agency engagement).[76]

Opportunities for Action: Partnership and Engagement to Improve Community Health

Partnerships offer opportunity to:

- Address the social determinants of health and underlying causes of conditions such as racism and poverty;[78]

- Promote racial equity in public health programs while recognizing cultural differences;[76]

- Coordinate activities, leverage funding, and promote collective action to maximize resources;[76,78,80]

- Establish shared visions for strategic and non-program specific actions;[78]

- Establish pathways for workforce recruitment and development.

Community engagement offers opportunities to:

- Center affected communities in decision-making;[76,78,79]

- Enhance community resiliency and ameliorate historical harms;[78]

- Increase nimbleness in public health responses to emergencies;[76]

- Broaden networks for timely communication of health information to affected populations.[76,80]

HEALTH EQUITY

The Importance of Health Equity

Health equity is the cornerstone of an effective public health system and

promotes a "state in which everyone has the opportunity to achieve their full health potential."[80] Aligning public health efforts with systemic social justice issues, such as racism, oppression, and poverty, is central to improving health and generating more effective health care spending, a more productive workforce, and more stable, economically viable and resilient communities.

Equity: Core Issues and Gaps

Core Issues:

Health equity is a key domain[80] of public health and includes:[76,78,79,80,81]

- Identifying and measuring **system-level health and social disparities** (e.g., racial, cultural, geographical, economic) within communities;
- **Collaborating with community stakeholders** to identify and support culturally appropriate interventions; and
- Ensuring mechanisms for a **diverse public health workforce** that reflects the communities being served.

Gaps:

Gaps in discussions of equity in public health include:

- Inconsistent approaches to **equity** across national public health initiatives (e.g., some stakeholders position equity as a core operational principle while others include it as a general concept to consider);
- Minimal discussion of equity issues **beyond racial and socioeconomic status;**
- Lack of consideration of **additional staff time and resources required** for equity-specific community building work;
- **Focusing on health departments** for community-based health equity work as opposed to empowering communities; and
- Lack of consideration of the **need for consensus-building** with stakeholders on equity priorities and approaches.

Health Equity: Challenges and Opportunities for Action

Challenges: Addressing Health Equity Requires Additional Time and Resources

Barriers are persistent and common at all levels of government and include:

- Insufficient and inconsistent financing for efforts to improve health equity and address the social determinants of health;[76,78,79,80]
- Inadequate staff capacity due to turnover and insufficient and unstable resources;[76,80]
- Challenges with timely and consistent data collection and reporting of disparities (e.g., data broken out by race, ethnicity, and other socioeconomic

demographics);[76,79]

- Disparate access to higher education in public health for racial and ethnic minorities, leading to challenges in workforce diversity;[79,80]

- Mistrust of public health communication and interventions due to historical and current systemic injustices;[76,79"]

- Inconsistent enforcement of public health laws and regulations across communities and populations;[76]

- Funding restrictions that do not allow funds to be used for community-building activities to advance health equity;[78,80]

Opportunities for Action: Health Equity Efforts Can Improve Health

Health equity work focuses on addressing:

- Disparate outcomes in population health (e.g., violence, infections, hospitalizations, mortality;)[76,79]

- Racial, socioeconomic, geographic, and other inequities that lead to poor health outcomes through policy interventions;[76,79]

- Barriers to health care access (e.g., transportation, financial costs, cultural barriers, medical mistrust);[79,80]

- Multidirectional communication with communities to develop meaningful, culturally resonant messaging and educational products;[79]

- Training and mentoring programs to increase diversity in the public health workforce;[79,80]

- Viable and sustainable cross-sector partnerships for "creating health, equity, and resilience in communities;[76,79,80,81]

- Timely, reliable, and granular data to monitor health disparities and improve social determinants of health;[78,79,81]

- Holistic approaches that advance beyond disease-specific programs to address upstream SDOH;[78]

- Strategic planning and implementation for health equity across all programs within a health department;[81]

- Historical divisions between public health and social services for broader system-level change.[76]

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