

HEALTH POLICY 101

U.S. Public Health 101

This is one chapter of KFF's Health Policy 101, a resource for students and educators of health policy. View its other chapters at the links below or at: kff.org/health-policy-101

Medicare 101

Medicaid 101

The Affordable Care Act 101

Employer-Sponsored Health Insurance 101

The Uninsured Population and Health Coverage

Health Care Costs and Affordability

The Regulation of Private Health Insurance

Health Policy Issues in Women's Health

Race, Inequality, and Health

LGBTQ+ Health Policy

U.S. Public Health 101

International Comparison of Health Systems

The U.S. Government and Global Health

The Role of Public Opinion Polls in Health Policy

Congress, the Executive Branch, and Health Policy

The Politics of Health Care and the 2024 Election

Introduction

I have long planned to create an online resource or mini "textbook" for faculty and students interested in health policy. One of the stumbling blocks is that there is no agreed upon definition of "health policy."

We took a stab at it of sorts at KFF in our headquarters when we created a physical timeline—as shown in the photo above—of the central events in the history of our field on a wall in our headquarters in San Francisco. But, of course, you can't all visit our offices to see our health policy history wall—and many of you may have quibbles if you did.

For us at KFF, our definition reflects our views and what we do: Health policy centers around, well policy—what the government does, and public programs like Medicare, Medicaid, and the ACA, and heavily emphasizes financing and coverage.

We also focus relentlessly on people, not health professionals and health care institutions (I have never been fond of the word "provider"). Others have a more expansive definition and that's fine. What I ultimately settled on doing is far simpler: Organizing the basic materials we have on the issues we work on, recognizing that they do not represent every topic of interest to the faculty and students we hope to assist.

The result is the following chapters. We will add chapters over time as we develop them. Our organization changes to play our role as an independent source of analysis, polling, and journalism on national health issues, and as that happens, we will add more content on subjects not covered in this first installment. We will also add chapters as we get feedback from you. And we will update the "101" at least annually as data and circumstances change.

Let me know if this is helpful and how it can be improved. You can reach me at daltman101@kff.org.

Dr. Drew Altman CEO, KFF

Table of Contents

What is Public Health?	2
A Brief History of Public Health in the U.S.	2
Key Public Health Frameworks, Services, Capabilities and Characteristics	2
Social Determinants of Health	6
How Is Public Health Governed and Delivered in the U.S.?	7
Federal Government	8
The President (Executive Branch)	8
U.S. Congress (Legislative Branch)	11
Federal Courts (Judicial Branch)	11
State, Local, and Territorial Governments	11
Across States, Public Health Governance Varies	11
Common Public Health Activities at the State Level	13
Local and Tribal Health Agencies	13
Non-governmental/Community-Based Actors	13
Public Health Funding	14
Public Health Workforce	19
Public Health Communication Challenges in an Era of Declining Trust	19
Current Topics in U.S. Public Health	21
Case Surveillance, Reportable and Notifiable Diseases	21
Federal Declarations and Powers During Public Health Emergencies	22
Water Fluoridation	23
Future Outlook	24
Resources	25

What is Public Health?

While there is no singular definition of public health, it has broadly been defined as "the science and art of preventing disease, prolonging life, and promoting health," and "what we do together as a society to ensure the conditions in which everyone can be healthy". Definitions and objectives for public health have evolved over time, as it is not a static concept (see Box 1). Public health encompasses a wide variety of programs and activities, including controlling the spread of communicable disease, preventing chronic diseases, improving nutrition, improving air and water quality, promoting safer workplaces, reducing automobile accidents, and more.

The overarching focus for a public health system is to help with disease prevention, health promotion, and to close gaps in <u>health disparities</u> in groups of people. These groups can range from small communities to populations at the national and even global levels. Public health's focus on <u>health equity</u> in groups of people <u>can</u> <u>be contrasted</u> with clinical medicine, which is mostly focused on preventing and treating illness in individuals.

Box 1: Selected Definitions of "Public Health"

- "the science and art of preventing disease, prolonging life, and promoting health through the organized efforts and informed choices of society, organizations, public and private communities, and individuals." –
 C-E A. Winslow (1920)
- "the fulfillment of society's interest in assuring conditions in which people can be healthy" Institute of Medicine (1988)
- "collective effort to identify and address the unacceptable realities that result in preventable and avoidable health outcomes, and it is the composite of efforts and activities carried out by people committed to these ends" Turnock (2001)
- "what we do together as a society to ensure the conditions in which everyone can be healthy." DeSalvo, et.al (2017)

A Brief History of Public Health in the U.S.

In the United States, public health evolved as a practice and a discipline over time with roots that extend back to the <u>early history</u> of the nation (the first governmental public health agency, the Marine Hospital Service, was formed in 1798). As scientific understanding about causes and effective interventions for diseases improved over time, public health practices <u>evolved and expanded</u> across the country. The 19th century saw a "great sanitary awakening" in the U.S., as illness came to be understood as an indicator of poor social and environmental conditions, and investments in hygiene and sanitation grew to combat disease in communities around the country, especially in large cities. After the U.S. Civil War, states began to set up boards of health to oversee growing investments and attention to public health activities in communities. The first state-level agency for

public health was created in New York in 1866; Massachusetts established its first state board of health in 1869 and other states and jurisdictions followed. As the understanding of the germ theory of disease grew, state and local health departments created infectious disease laboratories in the 1890s. In the early to mid-20th century, state and local health departments grew in size and responsibilities and many of the public health interventions and focus areas that we see today were established and expanded.

In addition, a number of milestones occurred in the 20th century to grow the federal government's role in public health, including new legislation such as the Food and Drug Act of 1906 (allowed federal oversight of manufacture, labeling and sale of foods) and the Sheppard-Towner Act of 1922 (authorized federal government funding of state-level public health efforts for the first time, in this case for maternal and child health programs). As part of the social welfare reforms undertaken via the "New Deal" in the 1930s and the "Great Society" in the 1960s, federal responsibilities, oversight, and funding for public health grew significantly. Many core federal departments and agencies we still have today were established during this period. From the late 1960s through today, U.S. public health efforts have experienced periods of decline and periods of growth often linked with broader social trends, changing perceptions about health threats, and economic and fiscal conditions in the country. During the first Trump Administration and continuing through the Biden Administration, the COVID-19 pandemic represented one of the greatest public health challenges of the last 100 years and led to an expansion of the government's public health response. However, the expansion has proven temporary and during the second Trump Administration, public health efforts face resource cuts and an uncertain future.

Public health powers and responsibilities <u>derive from the U.S. Constitution</u> and are shared across federal, state, and local levels of government - each of which has unique roles in such efforts that can vary state by state and even community by community. While many of public health efforts are funded and implemented through public (i.e. governmental) programs, private actors are also involved in funding and delivering public health services in the U.S. Given the many actors involved and the variations across federal, state and local roles and approaches, public health in the U.S. has often been referred to as a "<u>patchwork</u>" system.

Key Public Health Frameworks, Services, Capabilities and Characteristics

Public health efforts are typically guided at the broadest level by strategies or frameworks outlining the services, capabilities and activities that help deliver on the mission to protect and promote communities' health. A key framework for U.S. public health over the last few decades has been the 10 Essential Public Health Services (EPHS) framework, originally developed in 1994 by a federal workgroup (with input from outside experts), and updated in 2020. The EPHS highlights ten key public health service areas that include: monitoring population health status and community needs, investigating and addressing hazards and health problems, and using legal and regulatory actions to improve and protect the public's health (see Table 1).

Table 1

10 Essential Public Health Services

- 1: Assess and monitor population health status, factors that influence health, and community needs and assets
- 2: Investigate, diagnose, and address health problems and hazards affecting the population
- 3: Communicate effectively to inform and educate people about health, factors that influence it, and how to improve it
- 4: Strengthen, support, and mobilize communities and partnerships to improve health
- 5: Create, champion, and implement policies, plans, and laws that impact health
- 6: Utilize legal and regulatory actions designed to improve and protect the public's health
- 7: Assure an effective system that enables equitable access to the individual services and care needed to be healthy
- 8: Build and support a diverse and skilled public health workforce
- 9: Improve and innovate public health functions through ongoing evaluation, research, and continuous quality improvement
- 10: Build and maintain a strong organizational infrastructure for public health

Source: CDC. 10 Essential Public Health Services https://www.cdc.gov/public-health-gateway/php/about/index.html

The "Foundational Public Health Services (FPHS)" framework is another key resource. This framework emerged from a 2013 convening of stakeholders who, in response to a recommendation from the Institute of Medicine, set out to define "a minimum package of public health capabilities and programs that no jurisdiction can be without." The FPHS, which is now overseen by the Public Health Accreditation Board (PHAB), outlines eight "foundational capabilities" and five "foundational areas" that are central for delivering public health services to communities (see Table 2). These foundational areas include: communicable disease control, environmental public health, and maternal, child & family health, while foundational capabilities include assessment & surveillance, emergency preparedness & response, and communications.

The EPHS and FPHS frameworks overlap but are also seen as complementary, with the EPHS describing activities the public health system overall should undertake in communities, and the FPHS representing a minimum package of governmental public health activities that should be present everywhere.

Table 2

Foundational Public Health Services and Capabilities Framework

Foundational Areas for Public Health Services	Communicable Disease Control Chronic Disease & Injury Prevention Environmental Public Health Maternal, Child, & Family Health Access to & Linkage with Clinical Care
Foundational Capabilities for Public Health Services	Assessment & Surveillance Community Partnership Development Equity Organizational Competencies Policy Development & Support Accountability & Performance Management Emergency Preparedness & Response Communications

Source: Public Health Accreditation Board (PHAB). Foundational Public Health Services https://phaboard.org/center-for-innovation/public-health-frameworks/the-foundational-public-health-services/

Other strategies and frameworks have been formed and shaped through numerous governmental and non-governmental expert bodies and reports. Particularly influential have been recommendations and guidance from the National Academy of Medicine (previously the Institute of Medicine), which published a milestone report on the U.S. public health system in 1998 and key follow-up reports in 2002 and 2017.

In addition to these frameworks and capabilities, public health can be identified through certain <u>defining</u> <u>characteristics</u>, which include:

- **Being science-based**. Effective public health policies and activities draw from the best available science and evidence and are adapted and updated as new information and scientific understanding improves.
- **Focusing on prevention**. Ultimately, the goal of public health interventions is to prevent disease or otherwise improve health outcomes in groups of people. When public health works, the result is often the absence of disease, and/or longer, healthier lives in a community. This means the benefits derived from public health interventions disease prevented are often unseen and hard to quantify.
- Addressing health inequities. Underlying the public health approach is a recognition that all people have an equal right to better health. However, in reality there are significant health disparities across different demographic groups and geographic areas. Therefore, public health interventions often emphasize addressing health needs in underserved, marginalized, disadvantaged, and otherwise vulnerable populations in support of health equity.

Social Determinants of Health

The health of a population can be greatly affected by non-medical factors, which would include things like educational access and quality, health care access and quality, neighborhood characteristics, social and community practices, and economic health and stability. These other, broader societal and community-wide factors are known as the "social determinants of health" (SDOH, see Figure 1). Unequal access to SDOH can feed health disparities. For example, communities that have less access to grocery stores with healthy foods face greater challenges with nutrition, which raises the risks of heart disease, diabetes, obesity and other conditions in these communities compared to others with health food options. During an epidemic or pandemic, the lack of sick leave policies and precarious economic circumstances can leave workers – especially low-wage workers – with little flexibility to take time off from work, raising their risk of infection and for continued community transmission. In general, racial and ethnic health and health care disparities can result in higher rates of illness and death for minority populations across a wide range of health conditions.

Many public health programs recognize the importance of social determinants of health, and sometimes work in partnership with other public and private efforts to help develop and implement complementary approaches aimed at improving health equity. The CDC recommends that public health departments consider how social determinants affect health in their communities, highlighting how a focus on implementing the 10 Essential Public Health Services can help address inequities that arise from these social conditions. Still, there are limits to how directly public health programs can address these issues given that they often involve broad social conditions such as employment, discrimination, housing, and education.

Health Disparities are Driven by Social and Economic Inequities



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Source: KFF. Race, Inequality, and Health. https://www.kff.org/health-policy-101-race-inequality-and-health/?entry=table-of-contents-what-factors-drive-racial-and-ethnic-health-disparities

How Is Public Health Governed and Delivered in the U.S.?

As indicated in the name, "public" health is primarily shaped and supported through the public sector, i.e., governments. In the U.S., public health powers and responsibilities are shared across federal, state, and local levels of government. Legal authorities for public health powers are derived from the U.S. Constitution and relevant federal, state, and local laws (see Box 2 for an overview of the legal basis for U.S. public health powers). A set of public health departments and agencies at each of these levels forms the organizational backbone of the U.S. public health system. However, many private sector actors such as non-governmental community-based organizations, academic institutions, private companies, philanthropies, and others also have roles in the public health system.

Box 2: Legal Basis for State and Federal Public Health Powers

The U.S. Constitution does not mention public health specifically, but certain powers granted to the federal government and to states in the Constitution have been interpreted as encompassing public health. For example, under the 10th Amendment's "police powers" clause, states are granted primary responsibility for enacting and enforcing laws to promote the health, safety, and general welfare of people in their jurisdictions, which is understood to include public health. This means that in the U.S., state governments often have primary responsibility for enacting public health measures and deciding on public health policies. During public health emergencies, states also have primary authority to impose and rescind certain measures within their jurisdiction such as business restrictions and school closings.

The Constitution also grants some powers to the federal government. Under the Constitution's "commerce clause," the federal government has <u>exclusive authority</u> to regulate *interstate* and *foreign* commerce. For public health, this means the federal government has authority to impose quarantines or other health measures that concern the spread of diseases into the U.S. from foreign countries and/or across state lines. The federal government's Constitutionally derived power to tax and spend for the general welfare provides it the ability to use federal resources in support of public health activities in states and localities nationwide.

Even so, the lines between where federal and state public health powers begin and end – and how these powers are balanced with other legal concerns – are not always perfectly clear and can shift over time. Sometimes, existing rules or practices are challenged in court or changed through new legislation. For example, the Supreme Court in its Jacobson v Massachusetts decision in 1905 established that states can enforce compulsory vaccination laws, setting a precedent that public health concerns can sometimes outweigh individual rights. This and subsequent rulings upholding this principle have been a legal cornerstone for state-level vaccination requirements, such as those for school-aged children. However, in recent years many state legislatures have passed laws intended to weaken vaccination requirements or eliminate them entirely. In addition, during the response to COVID-19, many government-imposed public health interventions such as mandatory masking, social distancing, and vaccination requirements were challenged through legal action.

Federal Government

Each of the <u>three branches</u> of the federal government (Executive, Legislative, and Judicial) has a role in shaping and implementing public health in the U.S.

The President (Executive Branch)

Federal responsibilities and oversight of public health are spread across numerous executive branch agencies and departments overseen by the President (also see "Congress and the Executive Branch and Health Policy). The President, White House, and executive branch agencies also have the authority to set certain aspects of national public health policy, such as determining under which circumstances and for what diseases that individuals entering the U.S. may be subject to quarantine, isolation, and/or other public health measures, invoking border and migration control measures for public health issues such as those allowed under Title 42, and instituting public health controls or other measures on interstate travel and commerce.

The key federal departments and agencies involved in oversight and implementation of public health in the U.S. include:

Department of Health and Human Services (HHS), which has 13 operating divisions and is overseen by a secretary, with multiple assistant secretaries responsible for specific offices and programs. For example, the Office of the Assistant Secretary of Health (OASH) oversees key HHS public health offices and regional offices, as well as the U.S. Public Health Service Commissioned Corps. Also within OASH is the Office of the Surgeon General, which has historically served as a center for expertise on many public health issues and has at times released influential reports, affecting U.S. public health policy and practice in areas such as tobacco, HIV/AIDS, and drunk driving. The following are the core public health-focused operating divisions within HHS:

- Centers for Disease Control and Prevention (CDC) is considered the leading public health agency of the federal government. CDC is comprised of a central Office of the Director, and nine national centers covering different areas of U.S. public health, and a center for global health. CDC houses experts, laboratories, communication services, and other capabilities directed to improve the public's health and respond to emergencies. One of CDC's core functions is to support state and local public health efforts through funding and technical assistance. CDC's budget includes an annually appropriated discretionary amount provided by Congress each year (CDC's FY2024 enacted budget for its core public health programs was \$9.25 billion), and also several programs whose budget is determined by specific Congressionally-mandated program authorizations, such as the Vaccines for Children program (in FY2024 the budget for these mandatory programs totaled \$8.03 billion). During outbreaks and other health emergencies, Congress has often provided additional emergency supplemental funding to support CDC response activities. CDC is led by a director, historically appointed by the President without need for Senate confirmation. Due to a law passed by Congress in December 2022, the CDC director position is a Senate-confirmed position as of January 2025.
- Food and Drug Administration (FDA) is responsible for protecting public health by ensuring the safety, efficacy, and security of human and veterinary drugs, biological products, and medical devices. FDA also works to maintain the safety of (some of) the U.S. food supply, cosmetics, and products that emit radiation. FDA review and authorization/approval is necessary for all prescription drugs and all vaccines intended for use in humans, along with many other medical products and health devices. The total program level budget at FDA (the amount of money the FDA can spend for its activities) is comprised of both Congressionally appropriated funds and user fees collected via regulatory review of many of the products under FDA's purview. In FY2024, the FDA's total program level budget was \$7.2 billion, of which \$3.3 billion (46%) came from user fees. FDA is led by a commissioner, a Senate-confirmed position.
- Administration for Strategic Preparedness and Response (ASPR) is an operating division within HHS that leads medical and public health preparedness for, response to, and recovery from disasters and other public health emergencies. This includes activities to support development of medical countermeasures for health emergencies, a stockpile of emergency medical supplies and equipment for use during emergency responses, and support and technical assistance to state and local public health agencies to improve their response

capacities. It is <u>comprised</u> of multiple centers, including the Center for Preparedness, the Center for Response, the Center for the Biomedical Advance Research and Development Authority (<u>BARDA</u>), and the Center for the <u>Strategic National Stockpile</u>. ASPR's operating budget for <u>FY2024</u> was \$3.65 billion. ASPR is led by an Assistant Secretary for Preparedness and Response, a Senate-confirmed position.

• Other HHS Operating Divisions: Other HHS agency programs also play a role in public health, including by helping to build capacity, respond to outbreaks and serve communities, even if they may be more directly focused on clinical care and services, including HRSA's community health center program and Ryan White HIV/AIDS Program, and SAMSHA's programs on substance abuse and mental health.

In addition, several other departments and agencies outside of HHS that play a role in promoting the nation's public health. These include:

- *U.S. Department of Agriculture* (USDA), which supports U.S. agriculture through assistance to farmers, and also oversees programs aimed at improving health, ending hunger, ensuring food safety, and other areas. USDA also protects public health through regulating aspects of the nation's food supply, and also providing food services for children and low-income people across the country. USDA's Food Safety and Inspection Service (FSIS) regulates processors of meat, poultry, and eggs, and helps respond to foodborne disease outbreaks. The department's Food and Nutrition Service oversees programs to provide food and nutrition education in schools as well as the Supplemental Nutrition Assistance Program (SNAP), which provides food benefits to low-income families.
- *Environmental Protection Agency* (*EPA*) helps protect human health related to environmental risks through research and regulation in areas including <u>product safety</u>, <u>indoor air quality</u>, <u>drinking water</u>, and aspects of <u>food safety</u>.
- **Department of Defense** (DoD) oversees programs focused on the health and safety of active-duty military members and their families, and also supports a number of public health functions such as health surveillance and emergency response.
- **Department of Homeland Security** (<u>DHS</u>) provides support to help state and local public health agencies improve preparedness and response to terrorism and other public health threats.
- *Occupational Safety and Health Administration* (*OSHA*) in the U.S. Department of Labor works to promote safe and healthy working conditions nationwide through setting and enforcing standards, and implementing training, outreach, education, and other assistance programs for worker safety.

Department of Veterans Affairs (VA) oversees programs focused on the health of military veterans and their families, including <u>public health programs</u> to help promote health and prevent disease in these populations.

This is not meant to be a comprehensive list; other federal agencies also have responsibilities and activities important for public health.

U.S. Congress (Legislative Branch)

Congress (the House of Representatives and the Senate) makes laws, conducts oversight of the Executive branch, and determines the level of federal spending; all roles that are relevant to the U.S. public health system. Much of the federal funding for public health is for discretionary programs rather than mandatory ones (see Funding below), so Congress must come to agreement and pass bills annually to determine how much money goes to these programs. Congress may pass additional, emergency funding to states and localities for public health efforts during national emergencies, such was done numerous times during COVID-19. Congress may also pass laws that change federal practices related to public health, such as a 2022 law that made the CDC director a Senate-confirmed position. Oversight responsibilities for public health in the legislative branch are divided across a number of different Congressional committees with jurisdiction over different aspects of public health policy, and oversight of different Executive branch agencies and departments working in public health.

Federal Courts (Judicial Branch)

U.S. federal courts, up to and including the Supreme Court, pass judgment on how or whether federal public health laws and policies can be carried out and settle disputes between the federal government, individuals, states, and private companies over how public health activities are regulated and implemented. The legal basis for many current public health practices, such as vaccination requirements, rests on federal court decisions and precedents (see Box 2). Federal courts have also weighed in on the legality of a number of federal public health policies enacted during the response to COVID-19, such the CDC masking requirement for public transportation issued in January 2021 that was challenged and ultimately overturned by a federal court in April 2022, and the COVID-19 vaccination mandate for federal workers implemented by the Biden Administration in September 2021 that was ultimately rescinded after legal challenges were raised in federal courts.

State, Local, and Territorial Governments

States are given primary responsibility for many public health powers under the U.S. Constitution (see Box 1). Each of the 50 states plus Washington D.C., five U.S. territories (American Samoa, Mariana Islands, Guam, Puerto Rico, and the Virgin Islands), and three associated states (Marshall Islands, Micronesia, and Palau) have public health departments that are responsible for implementing public health programs in their jurisdictions. Funding for public health programs at the state and local levels comes from a combination of federal, state, and other sources (see funding section below).

Across States, Public Health Governance Varies

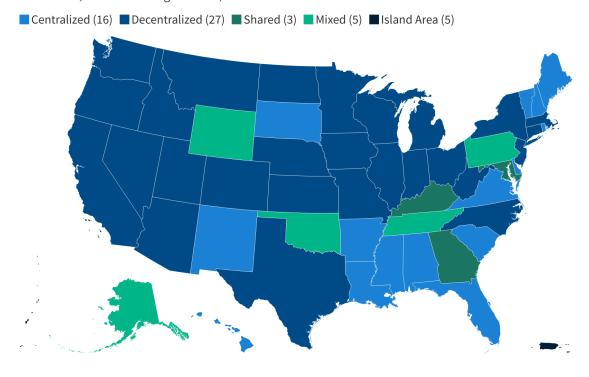
How public health is governed <u>differs</u> across these states and territories. Some have a very centralized governance model, where most or all parts of the state are served by local units of the state health agency and primary decision-making powers reside with state representatives. Others have a more decentralized governance structure, where most or all parts of the state are served by local public health agencies that may be

independent of the state health agency. Still others have a mixed or shared approach to public health governance between the state and local decisionmakers. A <u>2022 analysis</u> by the Association of State and Territorial Health Organizations (ASTHO) found that of the 50 states and D.C., 16 are centralized, 27 decentralized, and 8 have a mixed or shared approach to governance (See Figure 2).

Figure 2

Governance Structures of U.S. State and Territory Public Health Agencies

Includes the 50 states, DC, and five U.S. territories (American Samoa, Guam, Northern Mariana Islands, Puerto Rico, and the U.S. Virgin Islands)



Note: Data as of 2022. District of Columbia has a centralized governance structure. The following ASTHO members are not included: Federated States of Micronesia, Republic of the Marshall Islands, and Republic of Palau.

Source: Association of State and Territorial Health Officials (ASTHO) Profile of State and Territorial Public Health Survey

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This variation in governance leads to very different processes across states for how public health policy is determined and implemented. While more decentralized public health governance can result in public health programs that are more tailored to the needs of specific areas, it can also make coordinated public health action more challenging, especially during outbreaks and pandemics, as occurred during COVID-19.

Common Public Health Activities at the State Level

According to a 2022 survey conducted by <u>ASTHO</u>, the activities most commonly implemented by state public health agencies in 2022 included:

- **communicable disease screening, prevention, and treatment**, such as for HIV/AIDS and sexually transmitted diseases (all 51 state health agencies including D.C. provide these services);
- **public health surveillance** such as tracking chronic and communicable diseases as well as injuries (all 51 state health agencies);
- **immunization** support, including managing orders and distributing vaccines for children and maintaining a childhood immunization registry (all 51 state health agencies);
- **laboratory services** such as foodborne illness testing and influenza virus typing (50 state health agencies, all except Kentucky).

Other very common public health activities across states include: chronic disease prevention, family planning, maternal and child health home visits, tobacco cessation and prevention programs, food safety, inspection and training programs, and cancer screenings.

Local and Tribal Health Agencies

Even as state governments have the primary mandate to oversee public health policies and programs, many public health programs within states and territories are implemented through local (such as regional, county, city, and tribal) health departments. According to the National Association of County and City Health Officials (NACCHO), over 3,300 local health agencies are responsible for implementing public health programs across the country. Depending on the governance model present in each state, these local public health departments may have more or less autonomy regarding public health in their jurisdictions. Some areas may have local boards of health authorized by state laws, which establish guidelines for the operation of public health programs in more local level jurisdictions. In addition, under U.S. law, the 574 federally recognized American Indian and Alaska Native tribes and villages have many powers of self-government, which include responsibilities for implementing public health programs. Given this varied approach across states and at the local level, the U.S. is often referred to as having a "patchwork" public health system.

Non-governmental/Community-Based Actors

Also important for public health are a wide variety of non-governmental, including community-based, actors. This includes the public health professional associations that often advocate for and represent public health practitioners, such as the aforementioned ASTHO and NACCHO, plus the Council of State and Territorial Epidemiologists (CSTE), the Association of Immunization Managers (AIM), the American Public Health Association (APHA), Trust for Americas Health (TFAH), community-based organizations, philanthropic

organizations, and many others. Colleges and universities are also important: there are at least 66 schools of public health, 164 public health programs, and 29 baccalaureate public health programs at institutions of higher learning in the U.S., which support research, training, and education programs in this field. A host of private companies are important for U.S. public health functions, including pharmaceutical and medical device companies, laboratories, and many others.

Public Health Funding

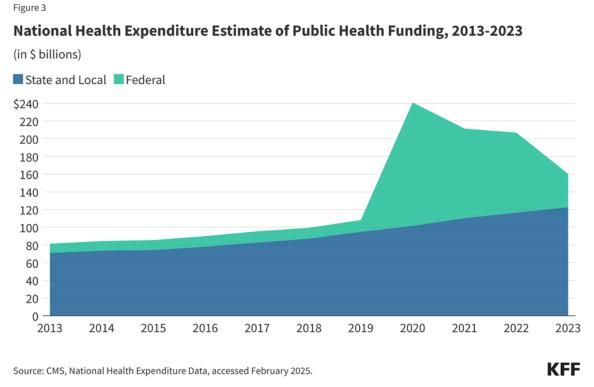
Funding for public health comes primarily from government spending, which includes federal funding (both regular and supplemental appropriations) passed through to state and local governments via grants and cooperative agreements, as well as funding appropriated by state governments, and funds from city, county, district, and other local governmental sources. In addition, there may be non-governmental sources of funding for public health services, such as those from philanthropic and other private organizations. Over the last twenty years there have been periods of funding declines and growth for public health in the United States – sometimes referred to as a "boom-bust cycle" of support. For example, between 2010 and 2019, spending for state public health departments declined by 16% and spending for local public health departments declined by 18%, by some estimates. However, during the COVID-19 pandemic, public health budgets grew due to an influx of federal, state, and other response funding.

Estimating how much funding is directed to public health across the U.S. is challenging for a number of reasons. For one, there is variation across federal agencies & departments, states, and local governments on how "public health" spending is defined and how that data is collected, resulting in a lack of standardization and comparability. Second, public health programs may draw from and blend multiple sources of funding across federal, state, and local sources, making tracking and de-duplicating funding estimates challenging. Also, many public health departments, particularly at the state and local levels, have limited capacity and lack the resources and systems necessary to effectively track and report spending. Recognizing these challenges, there are sources we can look at that provide some idea about how much is spent on public health at the federal, state, and local levels:

• National public health spending estimates. One commonly cited estimate for national-level public health spending is the Centers for Medicare and Medicaid Services (CMS) Office of the Actuary's National Health Expenditure Accounts (NHEA) data, which includes an annual Public Health Activity Estimate (PHE) for federal, and state and local spending on public health (as well as an estimate for all health spending). Figure 3 shows the PHE for federal, state and local public health spending between 2013-2023, ranging from a low of \$80 billion in 2013 to a high of over \$240 billion in 2020. Until 2020, these data indicated that the bulk of public health funding in the U.S. came from state and local sources. This changed during COVID-19, due to a massive increase in federal public health funding in 2020-2022 through supplemental (emergency) appropriations; the latest available data (from 2023) indicate that 3.3% of all U.S. health spending was

directed to public health (\$160 billion out of \$4.87 trillion in total health spending). Some researchers who have studied the PHE believe it to be an <u>overestimate</u> of actual spending on public health.

ave studied the PHE believe it to be an <u>overestimate</u> of actual spending on public health.

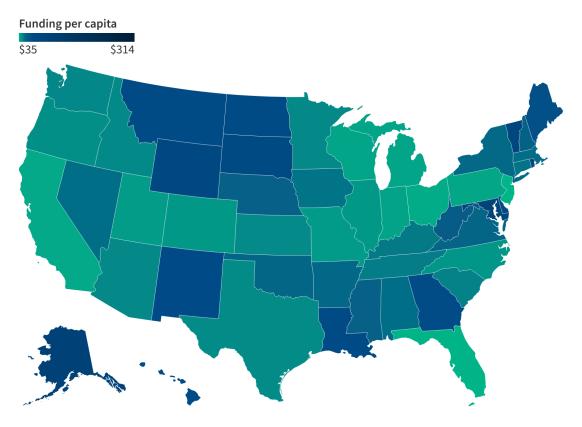


• Individual departments and agencies. Some departments and agencies release data on how much funding they provide to public health programs nationally, which represent a sub-set of national public health spending amounts. For example, CDC provides annual spending data on all its grants, cooperative agreements, and emergency appropriations directed to state and local public health departments (CDC public health funding profiles). CDC reported that it provided over \$15 billion in grants to health departments across the country in FY2023, which includes funding derived from CDC's core discretionary funds as well as mandatory funds for programs such as Vaccines for Children. The top state recipients (per capita) of CDC funds included Washington, D.C., Alaska, Maryland, and Vermont (see Figure 4).

Figure 4

CDC Public Health Funding Per Capita by State, FY 2023





Note: Represents CDC FY 2023 grant funding (obligations) for States and the District of Columbia. Does not include funding for U.S. territories. CDC funding per capita for the District of Columbia in FY 2023 was \$313.75 and its population was 687,324. Source: CDC, Grant Funding Profiles, accessed January 21, 2025; U.S. Census Bureau, Annual Estimates of the Resident Population for the United States, Regions, States, District of Columbia and Puerto Rico: April 1, 2020 to July 1, 2024, accessed February 11, 2025.

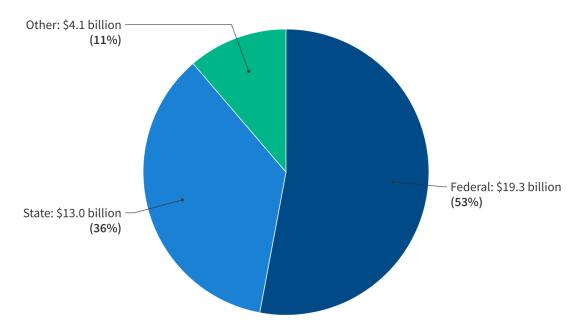
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• State-level public health funding estimates. State spending on public health budgets comes from a combination of federal, state, and other sources. According to the ASTHO, in FY2021 (the latest data available, which came during the COVID-19 pandemic response that featured significant federal supplemental appropriations), federal sources comprised the largest share of state health department budgets (53%), followed by state sources (36%) and other sources (11%, see Figure 5).

Figure 5

State Public Health Expenditures by Source, FY 2021

Total Expenditures: \$36.4 billion



Source: Association of State and Territorial Health Officials (ASTHO), Profile of State and Territorial Public Health, 2022, accessed October 2024.

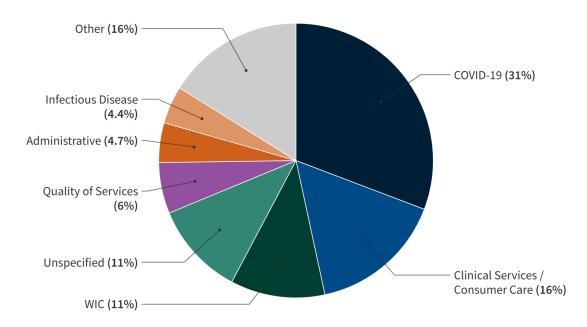
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ASTHO also reports that the largest category of state public health expenditure in 2021 was COVID-19 response activities, followed by clinical care services, and women, infants, and children (WIC) programs (see Figure 6). ASTHO data from 2018 (the most recent pre-pandemic year with data available), show the largest categories of public health expenditure then were clinical services (30%) and Women, Infants and Children (WIC) programs (23%).

Figure 6

State Public Health Expenditures by Category, 2021

Total Expenditures: \$36.4 billion



Note: "Other" is an aggregate of multiple categories including public health funding for chronic diseases, environmental health, hazard preparedness/response, health laboratory, injury prevention, vital statistics, and health data.

Source: Association of State and Territorial Health Officials (ASTHO), Profile of State and Territorial Public Health, 2022, accessed October 2024.

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- Public health spending at the local (city/county/tribal) level: NACCHO reports that in 2021, local health departments drew a majority of their budgets from federal sources (55%, which included pass-throughs (26%), direct funding (25%), and Medicaid/Medicare-related sources (4%)). A further 21% came from state sources, 14% from local sources, and the remaining 10% from other sources. In 2021, NACCHO reports the mean and median annual expenditure *per capita* on public health by local health departments were \$78 and \$49, respectively.
- Funding gap estimates: One study suggests that foundational public health capacities require an overall investment of at least \$32 per person per year from all levels of government but, as of 2019 (prior to the COVID-19 pandemic), investment in public health capabilities was approximately \$19 per person, indicating at least a \$13 gap in annual per-capita spending on public health. While funding increased significantly during the COVID-19 pandemic, much of that support is time-limited.

Public Health Workforce

The public health workforce includes persons working for federal, state, and local health departments as well as those in the private sector working in community-based and voluntary organizations, hospitals and health care systems, and schools. Responsibilities for these workers <u>can include</u> providing health care services in public clinics, collecting and analyzing data; performing health inspections and safety monitoring at places of work, residence, and recreational facilities; developing, administering, and evaluating public health programs and policies; and providing public health education and communication services to communities, among others.

Over the last twenty years local public health departments have faced a general decline in workforce numbers in line with declines in public health budgets, with the notable exception of a rise in workforce funding due to additional federal funding (and more state and local funding) in response to the COVID-19 pandemic, although this support was time-limited. One study estimates between 2009 and 2019 the number of workers at local health departments dropped from 162,000 to 136,000, a 17% decline that translates into a loss of more than 1 worker per 10,000 residents served. Subsequently, additional funding from pandemic response led to growth in the public health workforce, even if temporarily: NACCHO estimates that in 2022 there were 182,000 public health workers at local health departments nationwide, the highest total in at least two decades. Looking specifically at the epidemiologist workforce, the Council of State and Territorial Epidemiologists (CSTE) estimates 5,706 epidemiologists worked at health departments of the 50 states and DC in 2024, which is a 38% increase over the 4,135 reported in 2021. These national numbers, however, mask an uneven distribution of the public health workforce, as rural health departments have low per-capita staffing numbers compared to large, primarily urban health departments.

Workforce retention has been <u>an issue</u> before, during, and after COVID-19, and is exacerbated now as pandemicera funding expires. NACHHO and CSTE point to impending workforce losses and note that despite the recent growth in the workforce there is still <u>a large gap</u> between current staffing levels at health departments and what is needed to fully implement Foundational Public Health Services nationwide. In addition, the public health workforce <u>faces</u> stress, burnout, and relatively low pay, which contributes to <u>turnover and retention</u> issues.

Public Health Communication Challenges in an Era of Declining Trust

The Centers for Disease Control and Prevention (CDC) has defined health communication as "the study and use of communication strategies to inform and influence individual and community decisions that enhance health." Public health communication encompasses a broad and long-standing field of research and practice, and in the U.S. communication it is recognized as one of the ten Essential Public Health Services and one of the eight Foundational Capabilities for Public Health.

There is a history of successful implementation of communications approaches to improve the public's health. In the 20th century, for example, there were notable U.S. campaigns to raise awareness about the negative health effects of tobacco use, increase the use of seat belts, and improve nutrition and physical activity, all of which contributed to improved health across the country.

However, implementing effective public health communication strategies can be difficult, especially in the context of a public health emergency such as an outbreak or pandemic. There is a <u>history</u> of U.S. public health authorities facing communication challenges to combat infectious disease epidemics including HIV/AIDS and Ebola. More recently many of these same <u>challenges</u>, along with <u>new ones</u>, arose in the context of the <u>COVID-19</u> pandemic response.

At present, some key challenges for public health communication in the U.S. include:

- A "fractured" system of health communicators and sources of health information that includes governmental institutions at the global, federal, state, and local level along with private organizations and individuals, which together can produce an often overwhelming amount of information, not all of which is trustworthy;
- An evolving set of communication channels for public health information that includes traditional mass media along with a rapidly changing landscape of social media and other online communication networks;
- A marked <u>decline</u> in <u>trust in health institutions</u> and increased skepticism of expert advice in recent years, as demonstrated in KFF polling;
- The politicization of public health science and public health messaging, especially during and after the <u>COVID-19 pandemic</u>;
- More exposure to public health <u>misinformation</u> (the spread of <u>inaccurate or false information</u>) and disinformation (the deliberate spread of false information with the intention to mislead).

Still, there are strategies that can help address these challenges, such as:

- Improving coordination on public health messaging among key messengers in public health;
- Collaborating with information channels such as social media companies to understand and reduce the spread of misinformation;
- Presenting and disseminating information from trusted sources through multiple channels;
- Tailoring messages to intended audiences;
- Engaging in two-way communication that encourages dialogue with members of the public and addresses questions and concerns, especially with those in the "malleable middle" who remain open to updating their opinions on health issues;

- Proactively countering misinformation and disinformation;
- Applying continual improvement strategies to learn from successes and failures in public health communication; and
- Building trusted relationships with communities by engaging consistently over time, rather than only during crises.

Current Topics in U.S. Public Health

Case Surveillance, Reportable and Notifiable Diseases

Disease surveillance, which has been <u>defined</u> as the "ongoing, systematic collection, analysis, and interpretation of health-related data," is a core function of the public health system. This includes collecting case information for diseases of importance, reporting and analyzing that information and investigating it if there is a need. In the U.S., responsibilities for public health surveillance activities are shared among state and local, federal, and private actors, just like for many aspects of public health.

Initial reports on cases of disease may originate from providers such as medical practitioners, hospitals, or laboratories. When a practitioner diagnoses and/or receives a positive lab result for certain conditions, this information is typically reported to the appropriate local and/or state health department, as determined by state disease reporting laws. Such reporting to state and local health departments is mandatory for a specific set of diseases, which are known as **reportable** diseases. The specific list of reportable diseases – most of which are infectious diseases that can pose a threat to public health – can differ between states, depending upon each jurisdiction's health priorities. Reports to state/local health departments will often include some personally identifiable data on the individual(s) diagnosed, to allow public health authorities to investigate and follow-up. This way, state and local health departments can provide necessary services to affected individuals, and also use reported information to locate the source of potential new outbreak or health threats and intervene to prevent further spread.

In turn, state and local health departments may also send *de-identified* data about confirmed cases of certain diseases and conditions that are tracked nationally to the CDC. This notification is voluntary -- the federal government cannot require states to report diseases as that is a public health authority that rests at the state level. CDC does maintain a <u>list</u> of **notifiable diseases** that it requests state and local health departments provide through its National Notifiable Diseases Surveillance System (<u>NNDSS</u>). This list is updated every year using case definitions refined in collaboration between CDC and Council of State and Territorial Epidemiologists (CSTE). In 2023, for example, there were 123 reportable conditions on CDC's notifiable diseases list.

Federal Declarations and Powers During Public Health Emergencies

The COVID-19 pandemic demonstrated how consequential public health emergencies can be. It presented the biggest challenge to the U.S. public health system and the largest public health response in a century, and it has had an effect on how public health is practiced across the country. In the event of a threat that is determined to represent a public health emergency, different components of the executive branch can make public health emergency declarations that unlock different flexibilities and resources for response purposes:

- The President can declare a <u>national emergency declaration</u> pursuant to Section 201 of the <u>National Emergencies Act</u>, which will remain in effect until terminated by the President or through a joint resolution of Congress, or if the President does not issue a continuation notice annually. Such a notice was issued by President Trump for COVID-19 and was <u>extended</u> by President Biden. Declaring a national emergency allows the federal government to waive certain programmatic requirements related to Medicaid and Medicare, among other provisions.
- The Secretary of HHS can declare a "public health emergency (PHE)" under Section 319 of the Public Health Service Act. A PHE lasts for 90 days and must be renewed to continue, and Congress must be notified of the declaration within 48 hours. Declaring a PHE allows the HHS Secretary the flexibility to take a number of different actions, such as: tap into emergency funds, rapidly approve grants and contracts, waive or modify requirements within health programs such as Medicare and Medicaid, adjust Medicare reimbursement policies for certain drugs, hire new temporary staff and reassign personnel, and other actions. Public health emergency declarations over the past decade have included those for COVID-19, opioids, hurricanes, wildfires, and an epidemic of Zika that began in 2016.
- The Secretary of HHS can also make a separate emergency declaration pursuant to Section 564 of the Federal Food, Drug, and Cosmetic (FD&C) Act, which can justify the use of emergency use authorization (EUA) for medical countermeasures needed for emergency response, such as new vaccines, treatments, and/or diagnostics. The EUA mechanism facilitates the availability and use of medical countermeasures determined to be safe and effective, but have not yet been formally approved by FDA. An emergency declaration issued pursuant to Section 564 of the FD&C Act remains in effect until terminated by the HHS Secretary.

The HHS Secretary can also declare an emergency under the Public Readiness and Emergency Preparedness (PREP) Act (pursuant to Section 319F-3 of the Public Health Service Act), which allows the Secretary to provide liability immunity for companies and other actors for their activities and products developed and implemented to respond to a public health emergency. Such a declaration was made for COVID-19 by the Trump Administration and continued by the Biden Administration, which provided liability protections for vaccine manufacturers, etc.

Because most public health powers reside at the state level, the federal government has limited ability to issue nationwide mandates related to public health. However, during declared emergencies, the federal government

does have expanded powers to do so, though the limits to these powers have been a point of contention during and after the COVID-19 emergency declaration. Examples include:

- Mandates for federal workers or federal buildings/lands (mask mandate, vaccine mandate)
- Airline and interstate travel-related mandates (e.g., mask mandates for interstate air, train, or bus travel, contact tracing/information tracking through airlines). A 1944 statute empowers the CDC "to make and enforce such regulations as in [its] judgment are necessary to prevent the introduction, transmission, or spread of communicable diseases from foreign countries into the States . . . or from one State . . . into any other . . . State." However, this authority has been the subject of litigation and a federal judge issued a ruling in 2022 that ended the CDC's mask mandate for public transport during COVID-19.
- Mandates for immigrants and international visitors (such as quarantine and isolation for incoming air passengers)

Even during emergencies, the federal government does not have the power to mandate widespread business or school closures, or vaccine mandates affecting the country's population as a whole. State governments (and sometimes local governments), however, do have those authorities, and the federal government can make recommendations for state and local authorities to follow.

Water Fluoridation

Fluoridating water has been a long-standing public health practice in most communities across the U.S. and has been supported and recommended by the federal government for decades. The CDC considers fluoridation to be one of the most important public health interventions ever implemented. However, there has been growing scrutiny of the practice, and debates in many parts of the country about whether to continue fluoridation.

Robert F. Kennedy Jr., the Secretary of Health and Human Services in the Trump Administration, has long been critical of water fluoridation and has said the Trump administration will recommend that fluoride be removed from public water. Even so, key professional associations, public health experts, and many policymakers continue to support fluoridation as an important tool for improving dental health.

While the federal government does have some role in determining water fluoridation policies nationally, it does not have legal authority to require state and local communities to fluoridate their water, nor to remove fluoridation in areas where it is already policy. Instead, these decisions – just like many public health policy decisions in the U.S. – are made at the state and local levels. There are some states that require water systems of a certain size within their state to provide fluoridated water, while others leave this decision to city, county, or other officials or leave the choice up to voters who decide via local referendums. At the same time, the federal government – specifically the Environmental Protection Agency (EPA) – does have the primary authority to set and regulate the maximum level of fluoridation in public water systems. In addition, the CDC provides recommendations about best practices for achieving public health benefits from fluoridation that communities may choose to adopt.

Future Outlook

The public health system in the U.S. is a decentralized one, with most authorities and programs delegated to the state and local levels. This "patchwork" system can be a strength and a weakness. While it allows for tailoring public health to more local needs, it also makes more coordinated and uniform action more challenging, particularly in times of emergencies; in addition, public health services and capacity vary significantly across the country, meaning that not all communities have the same level of access and there are resulting inequities in community health status. In addition, while the COVID-19 pandemic brought more attention and funding to public health, it also brought more scrutiny and contributed to a more politicized environment concerning public health, setting up new challenges for its future, including for funding and policy.

The presidential transition from the Biden Administration to the Trump Administration has led to a very different approach to public health from the White House. Within a few weeks of taking office, the Trump White House began to implement aggressive cuts to funding, programs, and staff from federal public health programs at HHS, CDC, FDA, NIH and elsewhere. This includes moves to cut support for federal programs related to diversity, equity, and inclusion (DEI) and racial inequities, and those that address the health needs of LGBTQ+ people. Incoming HHS Secretary Kennedy has stated that "nothing is going to be off limits" when it comes to him making public health policy changes at HHS, and that he expects to prioritize the issues of chronic disease, and address conflicts of interest on existing advisory and other federal bodies, while potentially raising concerns about the safety of vaccines and de-prioritizing infectious diseases as a focus for the federal government, even as the country faces infectious disease threats such as measles and avian flu. Given this, the next few years could represent a turning point and challenging period for U.S. public health policy.

Resources

- KFF Health Information and Trust Program
- Trust in Public Health Agencies and Vaccines Falls Amid Republican Skepticism
- How Does the Department of Health and Human Services (HHS) Impact Health and Health Care?
- Water Fluoridation in the U.S.: The Federal Role in Policy and Practice
- <u>Childhood Vaccination Rates Continue to Decline as Trump Heads for a Second Term</u>
- How HHS, FDA, and CDC Can Influence U.S. Vaccine Policy
- State Reported Efforts to Address Health Disparities: A 50 State Review
- New Federal Support for the Public Health Workforce: Analysis of Funding by Jurisdiction
- The Future of Public Health, Institute of Medicine
- The Future of Public Health in the 21st Century, Institute of Medicine
- Public Health 3.0: A Call to Action for Public Health to Meet the Challenges of the 21st Century, National
 Academies of Medicine
- Wallace M, Sharfstein JM. The Patchwork U.S. Public Health System. New England Journal of Medicine.

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