



US Public Health Programs and Assets Being Used to Respond to the COVID-19 Pandemic

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Overview

As of this writing, there are more than 200,000 confirmed cases of COVID-19 in the United States, with 4,500 deaths. The US emergency preparedness, response, and recovery enterprise consists of a broad range of stakeholders and assets operating at federal, state, and local levels. The entities and capacities that would figure most prominently during a major infectious disease outbreak are described below, along with descriptions of key US health security funding mechanisms.

Federal Response Assets

There are 8 core public health agencies housed within the US Department of Health and Human Services (HHS) that are designated as components of the US Public Health Service.¹ These include the Centers for Disease Control and Prevention (CDC), the federal government's lead public health agency. Housed within CDC is the Epidemic Intelligence Service, which supports more than 100 public health investigations into disease outbreaks and other threats each year, both domestically and abroad. The Food and Drug Administration (FDA) oversees regulatory efforts for drugs, food, medical devices, tobacco products, and other consumer products. Though not explicitly a response agency, the FDA may play an important regulatory role in responding to public health emergencies with respect to monitoring supply chains, licensing medical countermeasures, and authorizing use of unapproved countermeasures when no licensed alternatives exist. Finally, the NIH support basic, clinical, and translational biomedical and behavioral research underpinning medical countermeasure development.

Other key federal response assets include: (1) the Laboratory Response Network, an integrated network of state and local public health, federal, military, and international laboratories that can respond to bioterrorism, chemical terrorism, and other public health emergencies; and (2) the US Public Health Service Commissioned Corps, a team of more than 6,500 public health professionals who fill essential public health, clinical, and leadership roles at federal departments and agencies. During emergencies, members of the Commissioned Corps can be deployed to aid in emergency response. Among other crises, the Corps has responded to the Amerithrax attacks; the 2004 Indian Ocean earthquake and tsunami; Hurricanes Katrina, Rita, Ike, and Sandy; and the 2014 West Africa Ebola outbreak in Liberia.²

The Office of the Assistant Secretary for Preparedness and Response (ASPR) focuses on preparedness planning and response; building federal emergency medical operational capabilities; countermeasure research, advanced development, and procurement; and providing grants to strengthen the capabilities of hospitals and healthcare systems in public health emergencies and medical disasters.³ The Biomedical Advanced Research and Development Authority, which is part of ASPR, provides an

integrated, systematic approach to the development and purchase of necessary vaccines, drugs, therapies, and diagnostic tools for public health and medical emergencies.⁴ ASPR also houses the Public Health Emergency Medical Countermeasures Enterprise (PHEMCE), which coordinates federal efforts to enhance medical countermeasure preparedness for chemical, biological, radiological, and nuclear threats, as well as for emerging infectious diseases.⁵

The Strategic National Stockpile—the nation's largest supply of pharmaceutical and medical supplies for use in a public health emergency severe enough to cause local supply shortages—also is part of ASPR.⁶ ASPR also houses the Medical Reserve Corps, a national network of volunteer public health and healthcare professionals, organized locally to improve the health and safety of their communities, and the National Disaster Medical System, which, at the request of federal, state, local, tribal, or territorial authorities, deploys teams of medical professionals to provide patient care, offer veterinary services, and support fatality management, among other efforts.^{7,8} In addition, the Hospital Preparedness Program (HPP),⁹ which funds and guides healthcare preparedness efforts across the country, and the Technical Resources, Assistance Center, and Information Exchange (TRACIE) are part of ASPR.¹⁰

The US Department of Defense (DoD) further strengthens the US health security enterprise through several programs and systems for monitoring emergent threats and responding to unfolding emergencies. For example, the Global Emerging Infections Surveillance program informs force health protection decision making and enhances global health security by strengthening surveillance, outbreak response, collaboration, and coordination across the global DoD laboratory network.¹¹ Additionally, the Electronic Surveillance System for the Early Notification of Community-based Epidemics monitors and provides alerts for rapid or unusual increases in the occurrence of infectious diseases and biological outbreaks.¹² The Defense Health Agency also enables army, navy, and air force medical services to provide a medically ready force to combatant commands in both peacetime and wartime.¹³

Finally, the US Department of Agriculture plays an important role in monitoring animal and plant pathogens with potential implications for human health. The National Animal Health Reporting System and the National Animal Health Monitoring System, for example, provide information on the presence of reportable animal diseases in the United States and provide national studies on animal health and health management practices for US livestock and poultry, respectively.¹⁴

State and Local Response Assets

Health departments are the backbone of US state and local public health infrastructure. The National Association of County and City Health Officials reported in 2016 that there are approximately 2,800 local health departments in the United States and 50 state health departments.¹⁵ That same year, CDC estimated that the US public health workforce consisted of approximately 500,000 professionals.¹⁶

Federal Emergency Response Funds

- **ACA Prevention and Public Health Fund:** This fund invests in a broad range of evidence-based activities, including community and clinical prevention initiatives; research, surveillance, and tracking; public health infrastructure; immunizations and screening; tobacco prevention; and public health workforce and training.¹⁷
- **Public Health Emergency Fund (PHEF):** A declaration of a public health emergency by the HHS secretary authorizes access to federal funds from the PHEF. Under the Public Health Service Act, the secretary may “access ‘no-year’ funds appropriated to the Public Health Emergency Fund to rapidly respond to immediate needs resulting from the [public health emergency].”¹⁰
- **Project Bioshield Act of 2004—Special Reserve Fund:** The Pandemic and All-Hazards Preparedness Reauthorization Act of 2013 reauthorizes the Project Bioshield Special Reserve Fund at \$2.8 billion for FY2014-2018. These funds may be used for medical countermeasure procurement, research, and development.¹⁸

Key Federal Legislation and Frameworks

- **Pandemic and All-Hazards Preparedness Act (PAHPA):** PAHPA creates and expands programs to enhance the public health system’s capacity to monitor and respond to public health emergencies. The act expands grant programs for state and local public health emergency preparedness activities and mandates the use of evidence-based benchmarks and standards to measure levels of preparedness.¹⁹
- **Food, Drug, and Cosmetic Act (FD&C Act):** Section 564 of the FD&C Act confers the FDA commissioner with Emergency Use Authorization authority, which allows him or her to authorize unapproved medical products or unapproved uses of licensed medical products to be used during emergencies to prevent, diagnose, and/or treat conditions caused by chemical, biological, radiological, or nuclear agents when no viable alternatives exist.²⁰
- **National Response Framework (NRF):** The NRF defines the roles and responsibilities of federal, state, and local entities during a broad range of emergencies and disasters. The NRF’s Public Health and Medical Services Annex includes Emergency Support Function #8, which provides a mechanism for offering coordinated federal assistance to state, tribal, and local responding entities during a public health emergency.²¹
- **National Emergencies Act (NEA):** The NEA authorizes the president to declare a national emergency and activate emergency provisions in other statutes and executive orders. For example, under the NEA, the HHS secretary may

temporarily waive or modify administrative requirements under the Social Security Act to ensure the availability of healthcare services for Medicare, Medicaid, and Children’s Health Insurance Program beneficiaries during an emergency.²²

- **Public Health Service Act:** Section 319 of the Act authorizes the HHS secretary “to facilitate coordination among federal, state, local, tribal, and territorial entities and public and private health care entities affected by the PHE; to make grants, provide for awards, enter into contracts and conduct investigations including further supporting the Public Health Emergency Preparedness, Hospital Preparedness and Regional Health Care Emergency Preparedness awards; facilitate and accelerate advanced research and development of medical countermeasures; strengthen biosurveillance and laboratory capacity; support initial emergency operations related to preparation and deployment of National Disaster Medical System teams; and carry out other activities determined applicable and appropriate by the Secretary.”²⁸

Key Federal Initiatives

- **Public Health Emergency Preparedness (PHEP) Cooperative Agreement:** PHEP has provided over \$11 billion to public health departments across the nation. This funding helps health departments build and strengthen their abilities to effectively respond to a range of public health threats, including infectious diseases, natural disasters, and biological, chemical, nuclear, and radiological events.²³ In 2014, CDC provided \$145 million in supplemental Ebola funding to PHEP awardees to support state and local public health preparedness planning and response efforts.²⁴
- **Hospital Preparedness Program (HPP):** HPP promotes a sustained national focus to improve patient outcomes, minimize the need for supplemental state and federal resources during emergencies, and enable rapid recovery.⁹ In response to the West Africa Ebola outbreak, HPP received \$214 million in supplemental Ebola funding.²⁵
- **Cities Readiness Initiative (CRI):** State and large metropolitan public health departments use CRI funding to develop, test, and maintain plans to quickly receive medical countermeasures from the Strategic National Stockpile and distribute them to local communities.²⁶

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