

Paycheck Protection Program and Health Care Enhancement Act: CDC's Plan for Public Health Response and Capacity Building



Context & Background

The Department of Health and Human Services is closely coordinating across the Department to ensure activities funded through the Paycheck Protection Program and Health Care Enhancement Act are complementary, considering evolving factors associated with this novel coronavirus, and support the Agency's highest priority

response activities to protect public health. The Centers for Disease Control and Prevention (CDC) is using these funds to stop the **COVID-19 pandemic, prepare the U.S. for future emerging infectious disease outbreaks**, and address early **lessons learned** from CDC's response to date.

“Of the amount appropriated under this paragraph in this Act, not less than \$1,000,000,000 shall be transferred to the “Centers for Disease Control and Prevention—CDC-Wide Activities and Program Support” for **surveillance, epidemiology, laboratory capacity expansion, contact tracing, public health data surveillance and analytics infrastructure modernization, disseminating information about testing, and workforce support necessary to expand and improve COVID-19 testing.**”
- from the Paycheck Protection Program and Health Care Enhancement Act

Overview of Critical Activities

Domestic Preparedness

Laboratory Response Network (LRN): The COVID-19 pandemic has highlighted many challenges in laboratory testing infrastructure during a national public health response. With more than 120 national, state, and local laboratories, the Laboratory Response Network is an integral part of the National Response Framework and ensures consistent, reliable results by developing and distributing assays, offering specialized training, and supporting secure data reporting. To address COVID-19 and future outbreaks, enhancements include:

- Implementation of health information technology (HIT) infrastructure that supports automated, electronic data transmission and interpretation for LRN laboratories and provides a robust, scalable, and flexible system during public health emergencies
- Creation and implementation of an updated, secure website and portal for the LRN network of laboratories, facilitating communications, data exchange, proficiency testing reporting, procedures, and training

- Development of an improved inventory management system within CDC to increase scalability and flexibility for laboratory reagents needed day-to-day and during outbreak responses

Traveler Health & Quarantine: CDC is enhancing the traveler management program, including the U.S. domestic quarantine program to help contain, mitigate, and prevent the spread and intensity of diseases. CDC is beginning to develop a public health traveler enrollment program to collect health and risk information (e.g., testing information, vaccination status, and health attestations), allowing U.S. public health programs to better manage self-identified travelers before, during, and after travel. CDC also will deliver traveler information to state, tribal, local, territorial, and international partners in more efficient ways to improve data flow so that partners have timely, complete, and accurate information for the post-arrival management (e.g., monitoring, contact tracing, quarantine) of travelers in their jurisdictions.

Workforce Capacity

CDC must maintain a highly qualified, culturally competent, and mobile scientific and programmatic workforce with world-class data and analytic skills. These staff must be supported by a state-of-the-art system that manages both field-based deployments and virtual technical assistance. The COVID-19 response also demonstrated the need to address staffing gaps, a top priority for these workforce funds. These funds are allowing CDC to improve the public health workforce to ensure the U.S. has the capacity to respond to future outbreaks, including training new professionals and improving response capabilities of the current CDC workforce. Specific activities to address immediate and sustainable workforce needs include:

- Bringing new models for delivering technical assistance and training at scale, both in the field and through remote or virtual means
- Ensuring that complex needs for highly specialized scientific support in the areas of epidemiology, surveillance, laboratory capacity, and infection prevention and control can be delivered seamlessly to a diverse set of implementing partners
- Improving fellowship and training programs that provide a multi-disciplinary, deployable workforce ready to respond to COVID-19 and future emergencies and includes data scientists and informaticians who can adapt to transforming data requirements, keeping CDC at the forefront of innovative, data-driven public health solutions
- Enhancing the recruitment and retention of data scientists at the CDC

Paycheck Protection Program and Health Care Enhancement Act: CDC's Plan for Public Health Response and Capacity Building



Laboratory Capacity

CDC is supporting efforts to build stronger laboratory capacity across the U.S. and at CDC, including the integration of genomics and genomic epidemiology in response to COVID-19 activities and other emerging infections.

Laboratory Quality Management at CDC: CDC is leveraging externally derived standards to strengthen laboratory quality management throughout the public health system and utilize the private sector's expertise in this area. There will be immediate impact on COVID-19 laboratory activities by improving the quality of work already underway.

Advanced Molecular Detection (AMD): CDC is supporting the integration of genomics and genomic epidemiology, including the establishment of national sequence-based surveillance conducted as part of the public-private partnership SPHERES (Sequencing for Public Health Emergency Response, Epidemiology, and Surveillance), increasing automation in state and local laboratories and allowing laboratories to run overnight and on weekends to increase throughput, while expanding access to new technologies that will greatly improve turnaround times.

CDC is building on its use of genomic sequence data and novel technologies to improve COVID-19 prevention and control. Next-generation sequencing can improve contact tracing by determining whether a newly infected contact was infected by the index patient or from a different source. CDC is addressing gaps in national AMD infrastructure including strategic sampling for surveillance, laboratory automation, data integration, independent validation and standardization of methods, and ensuring secure, user-friendly methods for sharing genomic data. National sequence-based surveillance, with systematic sampling of viruses from state and local public health laboratories, also provides a picture of genetic diversity of circulating viruses, patterns in transmission and introduction, and context for cluster investigation and mitigation efforts for improved prevention and control of COVID-19.

Communication & Analytic Capacity

The COVID-19 response has demonstrated that new tools and strategies that CDC has developed and deployed to disseminate information need to be applied across CDC.gov to ensure visitors are able to find and access vital public health information easily. CDC is expanding the ways it interacts with its audiences, providing more accessible and timely information through digital channels that complement traditional communication channels.

U.S. Digital Service Engagement

The Pandemic-Ready Interoperability Modernization Effort (PRIME) is a new, multi-year collaboration between CDC and the U.S. Digital Service (USDS) to strengthen data quality and information technology systems in state and local health departments for COVID-19 and beyond. PRIME will improve the timeliness, completeness, and quality of data reported to state and local health departments, CDC and other federal entities, and support CDC's data modernization efforts.

CDC's Paycheck Protection Program & Health Care Enhancement Spend Plan Overview¹

| CDC Strategic Priorities ^{2,3} | Dollars |
|---|--------------------|
| Domestic Preparedness | \$225 million |
| Workforce Capacity | \$75 million |
| Laboratory Capacity | \$150 million |
| Communication and Analytics | \$150 million |
| All Other ⁴ | \$400 million |
| Total | \$1 billion |

¹ The Paycheck Protection Program and Health Care Enhancement Act provided \$10.25 billion transferred from the Public Health Social Services Emergency Fund (PHSSEF) that was awarded to health departments through the CDC Epidemiology and Laboratory Capacity program for testing and contact tracing.

² Working Capital Fund and program support costs will be spread across activities.

³ Estimates based on available information, shifts may occur between .

⁴ Includes direct/indirect support for Public Service Announcements and contingency for CDC's response.