

US PUBLIC HEALTH PROGRAMS AND ASSETS TO RESPOND TO A PANDEMIC

Prepared by: Sanjana Ravi

FEDERAL RESPONSE ASSETS

- 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. 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 epidemic in Liberia.¹
- **Core Public Health Agencies**: Eight public health agencies are housed within the Department of Health & Human Services and are designated as components of the US Public Health Service. These include, but are not limited to:²
 - **Centers for Disease Control & Prevention (CDC):** the federal government's lead public health agency.
 - Epidemic Intelligence Service (EIS): supports more than 100 public health investigations into disease outbreaks and other threats each year in the US and worldwide.
 - Strategic National Stockpile (SNS): the nation's largest supply of pharmaceuticals and medical supplies for use in a public health emergency severe enough to cause local supplies to run out.³
 - Food & Drug Administration (FDA): regulates drugs, food, medical devices, tobacco products, and other consumer products.
 - National Institutes of Health (NIH): funds basic, clinical, and translational biomedical and behavioral research.
- Laboratory Response Network (LRN): maintains 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.⁴
- Medical Reserve Corps (MRC): a national network of volunteer public health and healthcare professionals, organized locally to improve the health and safety of their communities.⁵
- Office of the Assistant Secretary for Preparedness and Response (ASPR): focuses on preparedness planning and response; building federal emergency medical operational capabilities; countermeasures research, advance development, and procurement; and grants to strengthen the capabilities of hospitals and healthcare systems in public health emergencies and medical disasters.⁶



- **Biomedical Advanced Research and Development Authority (BARDA):** provides an integrated, systematic approach to the development and purchase of the necessary vaccines, drugs, therapies, and diagnostic tools for public health medical emergencies.⁷
- Public Health Emergency Medical Countermeasures Enterprise (PHEMCE): coordinates federal efforts to enhance chemical, biological, radiological and nuclear threats and emerging infectious diseases preparedness from a medical countermeasure perspective.⁸
- US Department of Defense (DoD):
 - **Global Emerging Infections Surveillance (GEIS) program:** informs force health protection decision making and enhances global health security by strengthening surveillance, outbreak response, collaboration, and coordination of the global DoD laboratory network.⁹
 - Electronic Surveillance System for the Early Notification of Communitybased Epidemics (ESSENCE): monitors and provides alerts for rapid or unusual increases in the occurrence of infectious diseases and biological outbreaks.¹⁰
 - **Defense Health Agency (DHA):** enables the army, navy, and air force medical services to provide a medically ready force and ready medical force to combatant commands in both peacetime and wartime.¹¹
- US Department of Agriculture:¹²
 - National Animal Health Reporting System (NAHRS): provides information on the presence of reportable animal diseases in the United States.
 - National Animal Health Monitoring System (NAHMS): provides national studies on animal health and health management practices of US livestock and poultry.

STATE AND LOCAL RESPONSE ASSETS

• State and local health departments: The National Association of County & City Health Officials reported in 2016 that there are approximately 2,800 local health departments in the US and 50 state health departments.¹³ In 2016, CDC estimated that the US public health workforce consisted of approximately 500,000 professionals.¹⁴

MAJOR FUNDING MECHANISMS

- ACA Prevention and Public Health 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.¹⁵
- **Public Health Emergency Fund (PHEF):** declaration of a public health emergency by the HHS secretary authorizes access to federal funds from the PHEF. In June 2016, PHEF



contained \$57,000, but in the event of an emergency declaration, Congress is authorized to increase the fund to 30 million.¹⁶

- Pandemic and All-Hazards Preparedness Act (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.¹⁷
- **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
- Hospital Preparedness Program (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.¹⁹
 - o In 2014, HPP received \$166 million in supplemental Ebola funding.²⁰
- **Public Health Emergency Preparedness (PHEP) Cooperative Agreement:** 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.²¹
 - 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.²²
- **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 CDC's Strategic National Stockpile and distribute them to local communities.²³

REFERENCES

- US Department of Health and Human Services. Commissioned Corps of the U.S. Public Health Service. About us. HHS website. Updated January 9, 2018. <u>https://usphs.gov/aboutus/. Accessed January 31, 2018.</u>
- Redhead CS, Dabrowska A. Public Health Service Agencies: Overview and Funding (FY2010-FY2016). Washington, DC: Congressional Research Service; 2015. <u>https://fas.org/sgp/crs/misc/R43304.pdf. Accessed January</u> 31, 2018.
- US Centers for Disease Control and Prevention. Strategic National Stockpile. CDC website. Updated January 19, 2018. <u>https://www.cdc.gov/phpr/stockpile/index.htm. Accessed</u> January 31, 2018.



- US Centers for Disease Control and Prevention. The Laboratory Response Network: partners in preparedness. CDC website. Updated April 13, 2018. <u>https://emergency.cdc.gov/lrn/. Accessed January</u> 31, 2018.
- 5. US Department of Health and Human Services. About the Medical Reserve Corps. Updated May 9, 2018. <u>https://mrc.hhs.gov/pageviewfldr/About. Accessed January 31, 2018</u>.
- US Department of Health and Human Services. Office of the Assistant Secretary for Preparedness and Response (ASPR). Organizational overview. HHS website. Updated April 26, 2018. <u>https://www.phe.gov/about/aspr/pages/default.aspx. Accessed January</u> 31, 2018.
- US Department of Health and Human Services. Office of the Assistant Secretary for Preparedness and Response (ASPR). Biomedical Advanced Research and Development Authority. HHS website. Updated March 29, 2018. https://www.phe.gov/about/BARDA/Pages/default.aspx. Accessed January 31, 2018.
- US Department of Health and Human Services. Office of the Assistant Secretary for Preparedness and Response (ASPR). Public Health Emergency Medical Countermeasures Enterprise. HHS website. Updated December 20, 2017. <u>https://www.phe.gov/Preparedness/mcm/phemce/Pages/default.aspx. Accessed January</u> 31, 2018.
- US Department of Defense. Global Emerging Infections Surveillance. <u>https://health.mil/Military-Health-Topics/Health-Readiness/Armed-Forces-Health-Surveillance-Branch/Global-Emerging-Infections-Surveillance-and-Response. Accessed</u> January 31, 2018.
- US Department of Defense. Electronic surveillance system for the early notification of community based epidemics. <u>https://health.mil/Military-Health-</u> <u>Topics/Technology/Clinical-Support/Centralized-Credentials-Quality-Assurance-</u> <u>System/Decision-Support/Electronic-Surveillance-System-for-the-Early-Notification-of-</u> <u>Community-based-Epidemics. Accessed</u> January 31, 2018.
- US Department of Defense. Defense Health Agency. <u>https://www.health.mil/dha</u>. <u>Accessed</u> May 10, 2018.
- US Department of Agriculture. Animal and Plant Health Inspection Service. Animal health monitoring and surveillance. Updated February 14, 2018. <u>https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/sa_monitoring_and_surveillance_. Accessed January 31, 2018.</u>
- National Association of County & City Health Officials. 2016 National Profile of Local Health Departments. Washington, DC: NACCHO; 2016. <u>http://nacchoprofilestudy.org/wp-</u> content/uploads/2017/10/ProfileReport_Aug2017_final.pdf. Accessed January 31, 2018.
- Dean HD. Achieving health equity through public health workforce diversity [PowerPoint presentation]. June 2, 2016. <u>https://www.cdc.gov/minorityhealth/internships/2016/achievinghealthequitythroughpublic healthworkforcediversity.pdf. Accessed January 31, 2018.</u>



- US Department of Health and Human Services. Prevention and Public Health Fund. Updated December 16, 2016. <u>https://www.hhs.gov/open/prevention/index.html. Accessed</u> January 31, 2018.
- Kodjak A. A permanent fund that could help fight Zika exists, but it's empty. NPR June 3, 2016. <u>https://www.npr.org/sections/health-shots/2016/06/03/480565668/a-permanent-fund-to-help-fight-zika-exists-but-its-empty. Accessed January 31, 2018.</u>
- Association of State and Territorial Health Organizations. Pandemic and All-Hazards Preparedness Act. 2011. <u>http://www.astho.org/Programs/Preparedness/Public-Health-Emergency-Law/Emergency-Authority-and-Immunity-Toolkit/Pandemic-and-All-Hazards-Preparedness-Act-Fact-Sheet/. Accessed January 31, 2018.</u>
- US Congress. H.R.307 Pandemic and All-Hazards Preparedness Reauthorization Act of 2013. <u>https://www.congress.gov/bill/113th-congress/house-bill/307. Accessed January 31,</u> 2018.
- US Department of Health and Human Services. Office of the Assistant Secretary for Preparedness and Response. Hospital Preparedness Program (HPP). Updated March 27, 2018. <u>https://www.phe.gov/hpp. Accessed January</u> 31, 2018.
- 20. Trust for America's Health. FY2016 Labor HHS Appropriations Bill. 2015. <u>http://healthyamericans.org/health-issues/wp-content/uploads/2015/03/FY16-PHEP-HPP.pdf. Accessed January</u> 31, 2018.
- 21. US Centers for Disease Control and Prevention. Public Health Emergency Preparedness (PHEP) Cooperative Agreement. CDC website. Updated May 4, 2018. https://www.cdc.gov/phpr/readiness/phep.htm. Accessed January 31, 2018.
- 22. US Centers for Disease Control and Prevention. . 2014 Ebola response supplemental funding: PHEP supplemental funding for Ebola preparedness and response activities. CDC website. Updated April 18, 2017. <u>https://www.cdc.gov/phpr/readiness/funding-ebola.htm.</u> <u>Accessed</u> January 31, 2018.
- US Centers for Disease Control and Prevention. Medical countermeasure readiness. CDC website. Updated August 24, 2017. <u>https://www.cdc.gov/phpr/readiness/mcm.html.</u> <u>Accessed January</u> 31, 2018.

Date: January 31, 2018