

TITLE II

National Center for Emerging & Zoonotic Infectious Diseases

Minimum Requirement F.Y. 2022

\$715.53 million

F.Y. 2021 Enacted

\$596.27 million

NCEZID investigates and responds to deadly disease outbreaks internationally to keep them from becoming threats at home.

DESCRIPTION

The National Center for Emerging and Zoonotic Infectious Diseases (NCEZID) at the U.S. Centers for Disease Control (CDC) works to protect people from antibiotic-resistant infections, foodborne outbreaks, emerging diseases, and zoonotic infectious diseases—diseases that spread between animals and people—such as Zika, Ebola, salmonella infection, and SARS-CoV-2, the virus that causes COVID-19.

WHAT DOES IT BUY?

Funding supports the development of diagnostic tools and the investigation of, and response to, disease outbreaks internationally, which includes surveillance, infection control, vaccine delivery, and health care worker training.

WHY IS IT IMPORTANT?

- Globally, [zoonotic infectious diseases](#) sicken 2.5 billion and kill 2.7 million people every year.
- NCEZID investigates and responds to deadly disease outbreaks internationally to keep them from becoming threats at home.
 - » NCEZID assisted health officials in tracking cases, training health workers, and began studying the effectiveness of a new vaccine during the 2017 [monkeypox](#) outbreak in the DRC.
 - » The 2016 [typhoid fever](#) outbreak in Harare, Zimbabwe, during which NCEZID investigated and controlled the outbreak that lasted nearly five months and caused 867 suspected cases and four deaths.
- Rabies kills an estimated [59,000 people](#) each year, with Haiti having the highest rate of human rabies deaths in the Western Hemisphere at [two deaths](#) a week. In Haiti, a CDC program has increased animal rabies surveillance 16-fold, decreased the risk of dying from rabies by 49%, and increased adherence to post-bite rabies vaccination by 230%.

- NCEZID provides advanced laboratory services—including the CDC’s high-containment biosafety labs that enable it to study hazardous pathogens—and advanced molecular detection techniques that allow the CDC to identify illnesses of unknown origin from around the world.

WHY SHOULD AMERICANS CARE?

- NCEZID develops cutting-edge, point-of-care diagnostic tools, enabling faster, accurate detection of infectious diseases that threaten [U.S. health](#), including vector-borne diseases.
 - » Early in the 2016 Zika outbreak, NCEZID scientists developed a diagnostic called the Trioplex that detects Zika virus, dengue, and chikungunya in a single test.
- More than [2.8 million](#) antibiotic-resistant infections occur in the U.S. annually, and as a result take the lives of more than 35,000 people. Modern travel of people, animals, and goods means an antibiotic-resistant organism can quickly become a global threat—yet global action has been limited.
- NCEZID oversees [20 quarantine stations](#), strategically located at U.S. airports, land borders, and seaports where most international travelers arrive.

COVID-19 IMPACTS

- NCEZID’s advanced laboratory services made it a leader of CDC’s COVID-19 response.
- From the earliest days of the outbreak, NCEZID conducted health screenings at U.S. airports, posted travel notices, provided infection control guidance, and distributed laboratory diagnostic kits for COVID-19.
- NCEZID’s Office of Advanced Molecular Detection is leading a new [genomics consortium](#) to coordinate SARS-CoV-2 sequencing that provides crucial information to track the spread of the virus and identify diagnostic and therapeutic product targets.

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WHAT MORE COULD BE DONE?

- In the wake of COVID-19, it is clear that U.S. investment must match the increasing frequency and scale of disease outbreaks worldwide. Some initiatives might include:
 - » Rapidly deployable resources and teams of experts to safely test for dangerous viral hemorrhagic fevers (VHFs), such as Ebola, at their source before becoming global pandemics.
 - » Improved training, surveillance, and diagnostic laboratory capacity for VHFs, monkeypox, other emerging poxvirus diseases, and outbreaks of unknown and emerging pathogens.
 - » Improving molecular diagnostic tools, building on PEPFAR laboratory diagnostic networks, and optimizing diagnostic technologies and laboratory techniques for field deployment in high-risk, remote, or resource-poor regions of the world.
- Increased funding could support domestic and international responses to rabies and progress towards the World Health Organization's goal of ending deaths due to canine rabies by 2030.
- Additional investment could increase capacity, coordination, and tool development for waterborne disease surveillance, communications, outbreak investigations, and emergency preparedness.

FUNDING HISTORY

