



CDC's Laboratory Response Network for BIOLOGICAL THREATS

An accurate, timely laboratory diagnosis is one of the foundations of any public health response. CDC's Laboratory Response Network for Biological Threats (LRN-B) enables the United States to detect biological threats and emerging infectious diseases quickly and accurately—anywhere in the United States.

CDC partners with LRN member laboratories to develop and validate new laboratory tests, train scientists who perform the tests, and provide quality-controlled laboratory test kits to ensure the LRN-B is ready to protect the U.S. from biological threats. CDC Preparedness resources support LRN activities at CDC and the Public Health Emergency Preparedness Cooperative Agreement provides support to state and local LRN member laboratories.

Mission:

To provide a rapid laboratory response to biological threats to inform critical decisions about public health and safety

By the Numbers

120+

LRN-B state and local public health member laboratories in the United States

84%

of the U.S. population lives within 100 miles of an LRN-B lab

27,000

specimens LRN-B member laboratories tested for mpox in 2022

5,500

environmental and clinical samples tested by LRN-B labs in 2023



Producing Data for Smart Public Health Decisions

When a public health emergency strikes, authorities need to know what pathogen is causing illness so they can respond appropriately. The rapid, accurate laboratory identification of pathogens from patient or environmental samples provides public health authorities the data they need to deploy the right experts, ship the right medical countermeasures, and communicate the right information.

Maintaining and Improving National Laboratory Capacity

The pathogens LRN-B laboratories can detect and identify require specialized knowledge in microbiology, laboratory techniques, and biosafety. By providing these specialized services, LRN-B laboratories ensure that when deadly pathogens are found, they are identified correctly and handled safely.

Strengthening National Security

LRN-B laboratories have the capability to test for pathogens that cause serious illness and even death. With at least one LRN-B laboratory in all 50 states, the United States stands ready to detect and identify biological threats within hours for a rapid response.

Testing for Old and New Diseases

Created to strengthen the nation's ability to detect biological threat agents—like smallpox and anthrax—the LRN-B network has proven critically important when emerging infectious diseases strike. During the Ebola outbreak in West Africa, CDC worked with its own scientists and external partners to develop and deploy an Ebola lab test into the LRN, ensuring the U.S. was prepared and able to test for this deadly pathogen.

Ensuring High Standards, Enabling High Confidence in Results

Scientists in LRN-B laboratories receive ongoing training to ensure they maintain proficiency in specific methods and performing specific types of tests. CDC and its partners develop rigorous protocols that all LRN-B laboratories follow to ensure that results are accurate.

LRN-B: A Network with Many Partners

- ▲ Founding partners: CDC, FBI, and the Association of Public Health Laboratories
- ▲ American Society of Microbiology
- ▲ American Association of Veterinary Laboratory Diagnosticians
- ▲ U.S. Environmental Protection Agency
- ▲ U.S. Department of Defense
- ▲ U.S. Department of Homeland Security
- ▲ U.S. Department of Agriculture
- ▲ U.S. Department of State
- ▲ U.S. Food and Drug Administration
- ▲ HHS Office of the Assistant Secretary for Preparedness and Response

