

Laboratory Leadership Service

LLS disease detectives apply evidence-based training to prepare public health laboratories for outbreaks and emerging threats.



The Laboratory Leadership Service (LLS) is a fellowship that recruits doctoral-level scientists to serve in laboratories at CDC and health departments across the country. Fellows train in laboratory safety, quality practices, operations management, and leadership. They have responded to every major public health threat since the program launched in 2015.

What Fellows Do

LLS fellows work in public health laboratories nationwide to:

- **Establish quality practices and procedures** that quickly return accurate test results, keep laboratories safe, and contain harmful pathogens.
- **Develop systems** that help laboratories operate more efficiently and improve testing.
- **Investigate disease outbreaks** by responding to Lab-Aids—requests from health departments for assistance addressing urgent public health problems.
- **Deploy for emergencies** alongside CDC's Epidemic Intelligence Service, bringing together laboratory scientists and epidemiologists for improved public health response.
- **Strengthen the capabilities of public health laboratories** by providing specialized skills in a wide range of disciplines, including microbiology, immunology, chemistry, and molecular biology.

Response Readiness & Efficiency

Through **Lab-Aids**, public health department laboratories can request short-term testing or operational assistance. LLS fellows work with CDC experts to lead Lab-Aids.

From 2017 to May 2025, there were:

29 emergency responses

60 fellows deployed

1,304 days spent on Lab-Aid responses

In FY 2024 alone, there were:

13 Lab-Aid requests—
4 times more than in 2023
Fellows responded to all of them

31 fellows deployed



Why this Program Matters

Preparing laboratory scientists as response-ready public health disease detectives:

- **Promotes a culture of laboratory quality and safety**, which protects the health of communities.
- **Improves the nation's ability to respond to health threats** and collaborate across federal, state, and local levels.
- **Enables timely, accurate, and reliable test results**, which are crucial for diagnosing disease, promptly starting treatment, and preventing the further spread of disease.
- **Strengthen public health capability** by creating a pathway to recruit and train laboratory leaders. More than 90% of fellows remain in public health after they finish the program. Most hold leadership positions within 1 year.

A Closer Look

Fellows build testing and operational capabilities to ensure public health laboratories and the communities they serve are prepared for outbreaks and emerging threats. For example, fellows have:



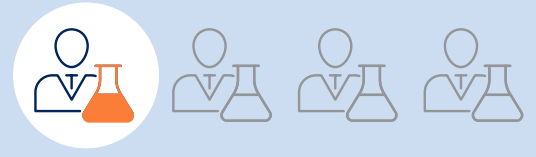
Developed an enhanced surveillance system and rapid testing program in Nebraska to contain a newly detected rabies strain.



Designed and implemented a comprehensive plan for a Midwest laboratory to safely handle and test specimens for the rare but deadly Lassa fever.



Worked with infectious disease laboratories to ensure compliance with clinical testing standards, maintaining their certification and capability to perform essential diagnostic testing.



Nearly **1 in 4** fellows are assigned to a public health laboratory in a state or local health department.

All fellows assigned to health departments lead readiness and response activities.

I rely on the expertise of current and past fellows. I've called Lab-Aids and had LLS fellows travel to my lab to help with outbreak response. I call on my own training as an LLS graduate. This program is essential to the ability of local public health jurisdictions to serve our communities, now and in the future.

— David Payne, LLS Class of 2021,
Laboratory Director,
City of Milwaukee Public
Health Department