

LABORATORY READINESS

WHAT IS THE PUBLIC HEALTH ISSUE?

The current nationwide network of laboratories performing testing for events of public health significance is a loose association of public health and private clinical laboratories. The nation's well-being depends upon timely identification of disease outbreaks and environmental events; rapid communication and dissemination of pertinent information; and containment of any adverse results. The public health laboratory community and private medical community must work together to effectively detect public health threats and provide timely reports of such threats to minimize any negative impact of such health events.

Enhanced communication and collaboration among public health laboratories and frontline clinical laboratories (e.g., hospital, academic medical center, independent laboratories) are necessary to protect the nation from biological and chemical terrorism events, emerging infectious diseases, foodborne diseases, and environmental factors impacting public health.

WHAT HAS CDC ACCOMPLISHED?

CDC is working with partners to develop an enhanced laboratory communication and collaboration network called the National Laboratory System (NLS), throughout the American public health system. Such a network will benefit the public by providing

- Better detection, response, and tracking of infectious diseases.
- Increased capacities to collect, analyze, and distribute test data.
- Improved assessment of current laboratory practices, equipment, and staffing needs.
- An effective mechanism for developing policy and adopting appropriate guidelines across states and regions.

Examples of Program in Action

NLS pilot projects in Michigan, Minnesota, Nebraska, and Washington have demonstrated the value of collaboration and communication throughout the public and private laboratory communities.

- In Minnesota, clinical bioterrorism laboratories were recruited for a program linking the laboratories to enable rapid communications. This communications system was effective during the anthrax attacks and has also been used during other public health threats. A proficiency testing module was also used to assess testing accuracy in clinical laboratories.
- In Michigan, a specimen transportation system was created to reduce delays in critical testing for public health threats.
- In Nebraska, a statewide anti-bioterrorism laboratory system was created which leveraged existing laboratory capacity in the private sector.
- In Washington, training to improve detection of antimicrobial resistance was provided to more than 700 individuals at 161 sites, covering 16 states.

WHAT ARE THE NEXT STEPS?

Successful implementation of NLS requires continued coordination, communication, and interaction between state and local public health laboratories, and the constituent hospital and independent laboratories that provide testing of public health importance.

For additional information on this or other CDC programs, visit www.cdc.gov/program

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