Improving the Public Health Laboratory Infrastructure

Prior to 1999, the public health laboratory infrastructure in the United States was on the decline. Most state and local public health laboratories were not capable of rapid molecular testing for biological threat agents. The ones that could test for threat agents were using traditional culture testing methods that take more time to yield results. Because getting test results within hours, not days, is critical in the event of a biological or chemical attack, it was clear that the LRN was needed to improve laboratory capacity in the public health system.

In a 1998 Association of Public Health Laboratories survey of state public health laboratories, 12 of 38 responding states reported having Biosafety Level 3 (BSL-3) capability. BSL-3 laboratories have the ability to test for infectious agents that could cause serious or potentially lethal diseases. It has been a goal of the LRN to increase BSL-3 capability to at least one BSL-3 laboratory in each state. Today, there are 46 states with at least one LRN-member public health lab with BSL-3 capability.

Since 1999, funding provided for the LRN has enabled many state and local public health laboratories to renovate their facilities to comply with strict safety and containment standards; allow the purchase of state-of-the-art testing equipment; fund more than 400 laboratory worker positions annually; and provides member laboratories with the necessary supplies to support tests developed by the LRN. Today, LRN laboratories can perform rapid tests for high-priority biological agents that cause anthrax, smallpox, and plague.