Epidemiology and Laboratory Capacity for Infectious Diseases (ELC)

The Epidemiology and Laboratory Capacity for Infectious Diseases (ELC) program is the nation’s support system to state and local health agencies for general infectious disease threats. Specifically, ELC provides financial and technical assistance for both cross-categorical and disease-specific epidemiology, laboratory, and health information systems capacity. The overall purpose of the ELC program is to assist state health agencies improve surveillance for, and response to, infectious diseases and other public health threats by (1) strengthening epidemiologic capacity; (2) enhancing laboratory practice; (3) improving information systems; and (4) developing and implementing prevention and control strategies. Capacity built and sustained by the ELC helps prevent disease through enhanced surveillance of known and emerging infectious diseases and other public health threats, leading to more rapid response to disease outbreaks and better development, implementation, and evaluation of public health interventions.

ELC funding is provided to all 50 states, five of the largest cities, the District of Columbia, and the U.S. territories and affiliated islands. Since 2010, funding through the Affordable Care Act’s (ACA) Prevention and Public Health Fund (PPHF) has become a large part of overall ELC program resources, representing 51% of the $90 million awarded under ELC in FY 2013 and nearly half of the approximately 1,000 state/local staff funded. Maintaining adequate funding is essential in assuring the United States has the resources to deal with diseases such as influenza, West Nile virus, foodborne outbreaks, among many others. For example, support provided through the ELC facilitated the transfer of molecular subtyping capability to states and the growth of PulseNet into a national tool. PulseNet is critical in assisting frontline state and local programs detect and ultimately respond to numerous foodborne disease outbreaks. In recent years, the ELC has also helped to facilitate the broader implementation of the Foodborne Disease Centers for Outbreak Response Enhancement (FoodCORE), the establishment of the Integrated Food Safety Centers of Excellence, and the initiation of waterborne programs in select states.

ELC Grant Program Funding, 1995-2013
Infrastructure gains from ELC funding include: infectious disease investigation, antimicrobial resistance prevention programs, and epidemiologic information systems. Importantly, the ELC program also allows state health departments to adapt to evolving health threats, such as foodborne disease investigation in recent years.

1 Excludes HIV, STDs, tuberculosis and some forms of hepatitis.
Fact Sheet

The ELC Program Supports Critical Infectious Disease Work in State and Local Health Agencies

Identifying and Responding to Outbreaks: State and local ELC-funded personnel, equipment, and supplies help detect and respond to many outbreaks each year. Recent examples include dengue in Florida, multiple multi-state foodborne disease outbreaks, and nationwide outbreaks of fungal meningitis, West Nile Virus, and influenza. Finally, the ELC is CDC’s primary source of financial support for domestic health departments dealing with waterborne, rabies, parasitic, tickborne, and fungal diseases.

Maintaining and Enhancing Core Capacity for Public Health: The ELC not only provides funding for basic public health infrastructure in the states, but, with the advent of Affordable Care Act funding, the ELC has also been able to provide select enhancements for grantees. Funded activities are numerous and include standardization of foodborne illness questionnaires, development of necessary disease programs, and implementation of laboratory techniques that provide molecular typing capability where there was previously none. As a number of grantees have noted, the capacity built and maintained by the ELC is critical to the detection and response to a number of infectious diseases.

Enhancing State Health Information Systems: In recent years, states have used ELC funds to develop and enhance Electronic Laboratory Reporting (ELR) and interoperable surveillance systems that comply with Meaningful Use requirements. Furthermore, ELC funding supports the National Electronic Disease Surveillance System (NEDSS), the National Healthcare Safety Network (NHSN) to report healthcare-associated infections, the Nationwide Health Information Network, and other health information systems that can be used for monitoring and/or reporting of infectious diseases.

Providing Flexible Support to Enable Rapid Response: In a number of jurisdictions, ELC funding supports cross-cutting, non-disease-specific laboratorians, epidemiologists, and informaticians that may be employed across multiple program areas as a part of regular responsibilities, or directed to specific program areas when surge capacity is required or during outbreak response. This type of position may serve as one tool to help grantees maximize efficient use of staff resources while maintaining the ability to detect and respond to outbreaks, ideally minimizing the impact of particular infectious disease outbreaks on communities they serve.

Monitoring Influenza: ELC funding has led to more robust monitoring of the seasonal influenza burden in the United States. ELC supports the ILINet surveillance program and other surveillance and testing activities. This work allows for better understanding of antiviral resistance in circulating influenza viruses, provides the basis for new recommendations for seasonal influenza treatment, and was key to situational awareness and decision making during the 2009 H1N1 influenza pandemic.