

TRAINING FOR PUBLIC HEALTH AND PRIVATE CLINICAL LABORATORY PROFESSIONALS

WHAT IS THE PUBLIC HEALTH ISSUE?

- Public health and private clinical laboratories must be capable of responding effectively to various public health threats, including emerging infectious diseases, foodborne diseases, environmental hazards, bioterrorism, and chemical terrorism events.
- Laboratory personnel require training for increased rapid recognition and prevention of the spread of communicable disease and environmental threats.
- Laboratorians must be capable of using state-of-the-art testing systems and new technology to more effectively deal with significant public health threats.

WHAT HAS CDC ACCOMPLISHED?

CDC and the Association of Public Health Laboratories co-sponsored the National Laboratory Training Network (NLTN) which provides clinical, environmental, and public health laboratory training. NLTN conducts training exercises on topics of public health significance for laboratory professionals throughout the United States providing the nation's laboratory workforce with training in cutting-edge technology, such as that used to detect bioterrorism agents. The training includes hands-on training in state-of-the-art laboratory settings.

NLTN developed the “Newborn Screening Symposium—Collection, Reporting, and Follow-up,” training program, to address the high rejection rate of improperly collected heel stick specimens from newborns. In one case, an analysis of data collected 3 months prior to the training and 3 months following the training showed a 7% reduction in the heel stick rejection rate. As a result, more than 4,000 newborns were not subjected to additional painful heel sticks and their newborn screenings for genetic disorders were not delayed.

Examples of Program in Action

- In 2003, NLTN conducted 20 classes, which trained about 400 workers from publicly funded HIV testing and counseling sites to perform rapid HIV testing.
- CDC developed an interactive CD-ROM tutorial to assist laboratorians in selecting and using appropriate testing methods to detect antimicrobial-resistant strains of bacteria. This CD-ROM provides the most extensive information on antimicrobial resistance testing available to date.
- Training in newborn screening tests provided improved recognition, detection, diagnosis, and management of genetic disorders in newborns.
- A Bioterrorism Reference Guide was developed by CDC for use in clinical laboratories. The guide contains information on the isolation and identification of bioterrorism agents. In addition, CDC produced bioterrorism training videos, as well as the Bioterrorism “Job Aid,” which can be customized by individual states.

WHAT ARE THE NEXT STEPS?

CDC and NLTN will continue to provide updated training to the nation's laboratorians to ensure laboratory workforce competency as well as high-quality laboratory testing.

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

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