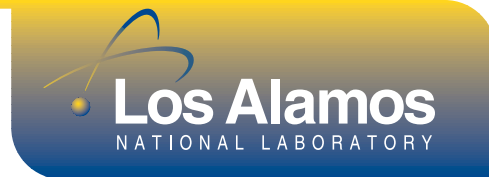


Biosafety Level 3 Facility



The Laboratory is completing a Biosafety Level-3, or BSL-3, facility that will be used for work with pathogens in support of Los Alamos' biothreat reduction mission.

The 3,202 square-foot facility houses a 600-square-foot BSL-2 lab and two 312-square-foot BSL-3 suites. The design of the facility meets or exceeds all biosafety and occupational health guidelines set by the Centers for Disease Control and National Institutes of Health for work with microorganisms, including viruses and bacteria, and toxins requiring BSL-3 containment. Although more than 300 operating BSL-3 facilities throughout the United States are registered for select agent work, no others to date have been designed to meet current security requirements.

The new facility is a single-story, 3,200-square foot rectangular stucco building with a metal roof. The stand-alone building is surrounded by an 8-foot high security fence. Access is controlled by electronic badge readers, monitored by interior motion sensors, and access controlled by a combination of PIN codes and biometric hand geometry sensors.

Most of Bioscience Division's biothreat reduction work is funded

through the Chemical and Biological National Security Program (CBNP), recently moved from the National Nuclear Security Administration (NNSA) of the Department of Energy to the new Department of Homeland Security (DHS). This organization is leading homeland security efforts against potential chemical and biological threats. The Los Alamos National Laboratory Bioscience Division's work has focused on studying mechanisms of pathogenesis — how infectious organisms cause disease — and on developing new detection and identification technologies. Until now, our research has been conducted in BSL-1 and BSL-2 labs. However, many of the organisms considered to be potential threat agents are BSL-3 pathogens. The new BSL-3 facility will allow us to safely handle small amounts of these pathogens so we can more fully explore the mechanisms by which they cause disease, contribute more fully to efforts to block the use or spread of such agents, and develop new diagnostic methods and treatments for the diseases they cause.

In the new BSL-3 facility, researchers will work at the highest safety level recommended for safe handling of

the most likely biothreat agents. At the same time, restricted access and engineering controls such as ventilation barriers will minimize risk of exposure to the public and the environment. The new facility — the first BSL-3 lab in the DOE complex — will enable Laboratory scientists to make new contributions to the mission work of DHS in nonproliferation, counterbioterrorism, and homeland security.

Examples of organisms that could be studied in the BSL-3 research laboratory: *Bacillus anthracis*, *Yersinia pestis*, *Burkholderia*, *Francisella tularensis*, *Brucella*, *Clostridium botulinum*, *Mycobacterium tuberculosis*, *Coxiella burnetii*, Hantavirus, and West Nile virus.

The Biosafety Program at Los Alamos

Biosafety at LANL uses a combination of lab-wide Integrated Safety Management policies and procedures and Laboratory Implementation Requirements (LIR) that incorporate all guidelines and recommendations from the CDC and NIH. The LIR specifies LANL Biosafety Program requirements that shall be implemented for research, maintenance, and other operations that have the potential for contact with bioagents/biohazards. In addition, the Institutional Biosafety Committee (IBC) reviews all proposals involving bioagents, including classified and other work not available to the public. The IBC must approve proposals before work can begin.

The IBC is made up of Laboratory staff members, community health care providers, and at least two members of the public not associated with the Laboratory or any work under review. It meets on a regular basis to review work in progress and new proposals.



Construction of the new BSL-3 facility is complete.



Los Alamos National Laboratory is operated by the University of California for the U.S. Department of Energy's National Nuclear Security Administration