



Highlights of [GAO-08-1092](#), a report to congressional committees

### Why GAO Did This Study

Biosafety labs under the U.S. Bioterrorism Act are primarily regulated and must be registered with either the Centers for Disease Control and Prevention (CDC) or the U.S. Department of Agriculture (USDA) under the Select Agent Regulations. Currently, all operational biosafety level (BSL) 4 labs are registered with the CDC and thus are regulated by the CDC, not USDA. BSL-4 labs handle the world's most dangerous agents and diseases. In fact, of the four BSL designations, only BSL-4 labs can work with agents for which no cure or treatment exists.

GAO was asked to perform a systematic security assessment of key perimeter security controls at the nation's five operational BSL-4 labs. To meet this objective, GAO performed a physical security assessment of the perimeter of each lab using a security survey it developed. GAO focused primarily on 15 physical security controls, based on GAO expertise and research of commonly accepted physical security principles.

### What GAO Recommends

GAO recommends that the Director, CDC, take action to implement specific perimeter controls for all BSL-4 labs to provide assurance that each lab has a strong perimeter security system in place. HHS agreed that perimeter security is an important deterrent against theft of select agents. However, HHS indicated that the vulnerabilities GAO identified are the result of risk-based planning and that further study is required prior to additional regulation.

To view the full product, including the scope and methodology, click on [GAO-08-1092](#). For more information, contact Gregory D. Kutz at (202) 512-6722 or [kutzg@gao.gov](mailto:kutzg@gao.gov).

## BIOSAFETY LABORATORIES

### Perimeter Security Assessment of the Nation's Five BSL-4 Laboratories

#### What GAO Found

Select Agent Regulations do not mandate specific perimeter security controls that need to be in place at each BSL-4 lab, resulting in significant differences in perimeter security between the nation's five labs. While three labs had all or nearly all of the key security controls GAO assessed—features such as perimeter barriers, roving armed guard patrols, and magnetometers in use at lab entrances—two labs demonstrated a significant lack of these controls. Specifically, one lab had all 15 security controls in place, one had 14, and another had 13 of the key controls. However, the remaining two labs had only 4 and 3 key security controls, respectively. The check marks in the table below indicate the presence of specific security features at the labs GAO assessed, illustrating the varying levels of perimeter physical security controls present at the labs for 5 of the 15 security controls GAO assessed.

**Selected Results of Perimeter Security Assessment**

Security controls	Lab A	Lab B	Lab C	Lab D	Lab E
Command and control center	✓	✓		✓	
Closed-circuit television (CCTV) monitored by the command and control center	✓	✓		✓	
Active intrusion detection system integrated with CCTV		✓		✓	
Camera coverage for all exterior lab building entrances	✓	✓		✓	
Visible armed guard presence at all public entrances to lab	✓	✓			

Source: GAO.

Although the presence of the security controls GAO assessed does not automatically ensure a secure perimeter, having most controls provides increased assurance that a strong perimeter security system is in place and reduces the likelihood of unauthorized intrusion. For example, the two labs with fewer security controls lacked both visible deterrents and a means to respond to intrusion. One lab even had a window that looked directly into the room where BSL-4 agents were handled. In addition to creating the perception of vulnerability, the lack of key security controls at these labs means that security officials have fewer opportunities to stop an intruder or attacker.

The two labs with fewer security controls were approved by the CDC to participate in the Select Agent Program despite their weaknesses. During the course of our review, GAO noted that the three labs with all or nearly all of the key security controls GAO assessed were subject to additional federal security requirements imposed on them by agencies that owned or controlled the labs, not because of the Select Agent Regulations.