

Case Study: Designing a Physical Security System

A facility is working with large amounts of cultured *Yersinia pestis* in a laboratory accessed by approximately 30 people. After a risk assessment, the laboratory director fears that terror groups may try to access these cultures

In your group spend 15 minutes to design a physical security system for this facility. Please discuss how you would detect, delay and respond to potential intruders and how you would control access.

1. Identification of the assets

- a. Where in the laboratory space will the agents be stored and used in your protocol?
- b. Where is the isolate repository (freezer room)?
- c. Are there other assets such as equipment used in the protocol that may require physical protection? Explain.

2. Design System

- a. Define any *special exclusion* and *exclusion areas*
- b. Define the *limited areas*

- c. Define the points of entry into the limited and exclusion areas
- d. Define where access control systems should be used, what types, and why
- e. Define where intrusion detection sensors and alarms should be used and explain how alarm information should be communicated and displayed, and to whom?
- f. How will alarms be assessed?
- g. Describe what mechanisms will be incorporated to facilitate delay.

- h. How will the adversary be apprehended?
- i. Which individuals should be included in the review of the physical security system? With whom should MOUs be established? Do any existing MOUs need to be updated?
- j. How do you plan to keep physical security performance up to standards?
- k. Will laboratory personnel require training on physical security? Explain your answer.
- l. Which individuals should be included in the review of the physical security system? With whom should MOUs be established? Do any existing MOUs need to be updated?
- m. Have you included any other special considerations in this physical security system plan?

Notes:

General Facility Callouts

1. Lab 2 (BSL II)
2. Freezer
3. East emergency exit
4. Lab 3 (BSL II)
5. Limited Area entrance
6. Main building entrance
7. Offices and work areas
8. Delivery entrance / West emergency exit 1
9. West emergency exit 2
10. Break area
11. Utility closet
12. Men's restroom
13. Women's restroom
14. Autoclave access area
15. Lab 4 (BSL II)
16. Dressing room
17. Anteroom

Lab 1 (BSL III) Callouts

- A. Airlock
- B. Mechanical room
- C. Lab 1a
- D. Lab 1b
- E. Autoclave
- F. Lab 1c
- G. Change room
- H. Shower
- I. Entry
- J. Central area

