



Vision: To be the Healthiest State in the Nation

Thought Exercise in Accidents and Incident Response

Purpose

This is a thought exercise to be used by any person working in a laboratory to demonstrate an individual's knowledge of biosafety information and regulations. This exercise will also test the ability to apply that knowledge to a practical situation such as a biohazard spill.

The people participating in this exercise will discuss what actions would be taken in situations like the following scenarios. They will also discuss what hazards are present, how to properly dispose of the cleaned up waste, how to disinfect any areas that are contaminated, and what could go wrong when dealing with any of the scenarios.

Activity

Bring a group of employees together to discuss scenarios of different types. Ask the following questions/present the following scenarios:

Scenario #1: You have been asked to come to a BSL-2 laboratory where a trainee technician has reported an incident in which a glass flask has fallen off the bench top and broken on the floor.

Scenario #2: You have been called to the receiving area of the laboratory where there is a sample that has been received in a leaking package. This package has passed through the building to the sample reception area.

Scenario #3: While removing blood from a sealed tube, a technician became distracted and pricked their finger with a syringe.

Record the employees' answers and make notes of the responses. Develop a written after action report that describes the drill/exercise conducted, who attended, and what the responses to the scenario were. Create an improvement plan that will describe what was learned and what could be improved.

Instructor's Guide

This exercise should be a thought exercise with a focus on discussion between participants on what to do in each scenario they are given. The goal is to have students think about the risk assessment that was completed and make educated mitigation control decisions based on that. The instructor is there primarily as a guide, not just to give correct answers. The instructor's role is to monitor whether the information the students are basing their decisions on is valid. There will be more than one correct answer for the scenarios. However, some important points should come out in the course of discussion among the participants and instructor. These can include:

Scenario #1:

- What kind of personal protective equipment (PPE) is worn?
- Is disinfection of the area required? If yes:
 - What will you use to absorb the liquid?
 - What kind of disinfectant should be used?
 - Is it appropriate for the biological agent(s) present?
 - What is the proper contact time?
- How do you safely pick up the broken glass?
- Where will the waste from the clean-up go?
- Should there be an incident report?

Scenario #2:

- How will the leaking package be contained?



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- How should the liquid that leaked throughout the incident be cleaned up?
 - What will you use to absorb the liquid or wipe surfaces?
 - What kind of disinfectant should be used?
 - Is it appropriate for the biological agent(s) present?
 - What is the proper contact time?
- Who should be notified?
- Should an incident report be made?

Scenario #3:

- What are the first steps that should be taken for the person who accidentally stuck themselves?
- Is there a post-exposure plan already in place in your institution for accidents like this?
- Where is medical help located for this type of exposure?

Sources

1. Sandia National Laboratories Global Biorisk Management Curriculum (GBRMC) Contributor Content, Practical Exercises, BSL2 Course: Accident Scenarios (PE_03.1_Accident scenarios_Handout)
 - 1.1. <http://www.biosecurity.sandia.gov/gbrmc/index.html>

These resources are the product of research from respected biosafety sources that were combined to help create a biorisk program. Please follow your own professional judgement, your institution's established guidelines, and any applicable local, state, and federal requirements.