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# Chemical Lab Safety Rules Activity

## Participant Guide

### Description and Estimated Time to Complete

This activity allows you the opportunity to demonstrate your knowledge of the basic safety rules for chemical labs. These rules are covered in the *Chemical Safety Lab Rules Primary Knowledge unit*. In this activity you will develop safety checklists for two lab procedures. These checklists should include the safety rules that must be followed in order to safely complete each procedure.

Please review the unit on *Chemical Safety Lab Rules* prior to completing this activity.

### Estimated Time to Complete

Allow at least 60 minutes.

### Introduction

Employers, employees, students, instructors – anyone working with or around hazardous chemicals

- must understand what they are working with,
- must know how to protect themselves and others, and
- must have access to and be able to interpret information about the chemicals in their work or educational environment.

Everyone must know and practice the safety rules for working in a lab or manufacturing environment and the safety rules for working with and around chemicals. Several of these safety rules are required in order to be "OSHA Compliant". [OSHA – Occupational Safety & Health Association] In case of an audit, everyone in the facility must be seen applying all safety rules.

In this activity you will develop two safety checklists for employees to follow for two specific procedures.

### Activity Objectives and Outcomes

#### Activity Objectives

- Create a safety checklist for at least two laboratory scenarios.
- Demonstrate your understanding of the safety rules by applying them in a work or laboratory environment.

#### Activity Outcomes

When finalizing a checklist, ask the following question:

*"If a person applies the safety rules included in this checklist, can he or she complete the required procedure safely?"*

### **Attitude & Behavior**

When developing the checklist, you are performing a task usually given to a supervisor or manager; therefore, it is your responsibility to ensure that the rules necessary to ensure safety when performing a procedure are included in the checklist.

### **Dependencies**

Knowledge of hazardous materials, and the terminology and characteristics associated with chemicals would add to the effectiveness of this activity.

### **Resources**

SCME's *Chemical Lab Safety Rules Primary Knowledge Unit*.

## **Chemical Safety Rules Activity Procedure**

1. Below are three scenarios for which safety checklists are used in a manufacturing or laboratory environment.
2. Choose two of these scenarios and develop a Safety Checklist for each.
3. Use the Checklist templates provided at the end of this activity. There are twenty lines provided in each checklist. The checklists you develop may require more or less than twenty rules.

### ***Scenarios***

#### **Employee Checklist When Entering the Laboratory**

Develop a checklist for new employees. The checklist should include safety items that new employees should check prior to entering a chemical lab and upon entry into the lab. This checklist is to be used by both new and existing employees.

#### **Pouring Solvents Checklist**

Develop a procedural checklist for transferring solvents from a large manufacturer's container to smaller bottles to be used at the workstations. This checklist should include preparation, performing the procedure, and cleanup. It should also include the procedure for exposure and spill.

#### **Lab Check for End of Shift Checklist**

Develop a procedural checklist for the person(s) responsible for turning the lab over to the next shift. The purpose of this checklist is to ensure that the lab is in a clean and safe condition for the next shift of employees.

**Checklist:** \_\_\_\_\_

Safety Rules	Complete
1.	<input type="checkbox"/>
2.	<input type="checkbox"/>
3.	<input type="checkbox"/>
4.	<input type="checkbox"/>
5.	<input type="checkbox"/>
6.	<input type="checkbox"/>
7.	<input type="checkbox"/>
8.	<input type="checkbox"/>
9.	<input type="checkbox"/>
10.	<input type="checkbox"/>
11.	<input type="checkbox"/>
12.	<input type="checkbox"/>
13.	<input type="checkbox"/>
14.	<input type="checkbox"/>
15.	<input type="checkbox"/>
16.	<input type="checkbox"/>
17.	<input type="checkbox"/>
18.	<input type="checkbox"/>
19.	<input type="checkbox"/>
20.	<input type="checkbox"/>

**Checklist:** \_\_\_\_\_

Safety Rules	Complete
1.	<input type="checkbox"/>
2.	<input type="checkbox"/>
3.	<input type="checkbox"/>
4.	<input type="checkbox"/>
5.	<input type="checkbox"/>
6.	<input type="checkbox"/>
7.	<input type="checkbox"/>
8.	<input type="checkbox"/>
9.	<input type="checkbox"/>
10.	<input type="checkbox"/>
11.	<input type="checkbox"/>
12.	<input type="checkbox"/>
13.	<input type="checkbox"/>
14.	<input type="checkbox"/>
15.	<input type="checkbox"/>
16.	<input type="checkbox"/>
17.	<input type="checkbox"/>
18.	<input type="checkbox"/>
19.	<input type="checkbox"/>
20.	<input type="checkbox"/>

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