



SAFETY ALERT

Campus Incident—Chemical Spill

RISK MANAGEMENT & SAFETY

Date: August, 2014
Category: Chemical Hygiene
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Description

A glass vial with a screw top lid containing pyridine and potassium cyanide broke. The vial was dropped and struck the floor when it was being transported by hand into the lab. Direct skin contact was made from the chemical onto graduate student's leg and foot. The student left campus and went to personal residence to clean up. The student was evaluated and released without medical treatment. Lab personnel cleaned up the spill.

Findings

- Water from the general lab sink was used to wash off chemical that landed on leg. Emergency shower was not used.
- The student left campus and went to personal residence to clean up.
- At the time of the incident, the graduate student was wearing personal protective equipment (PPE) consisting of safety glasses and nitrile gloves. The graduate student was wearing shorts.
- Three vials were being carried by hand at one time. One slipped from hands and fell to floor.
- Lab personnel attended to the spill and cleaned it up. Safety glasses and nitrile gloves were worn while cleaning up.

Root Causes

Primary

- Lab procedures requiring containment when carrying chemical containers were not followed.
- Personal protective equipment requirements while working with and cleaning up chemicals were not followed.

Secondary

- Personnel did not use emergency shower because it does not provide privacy, has no floor drain, and there is no tempered water.
- The student drove a vehicle to his residence to clean up.

Recommended Actions

- Develop lab specific procedures for transporting chemicals, using PPE, and train lab personnel. Train lab personnel on emergency response procedures.
- Investigate modifying emergency showers to include privacy curtain and tempered water. Train lab personnel that water accumulation from activation of emergency shower is acceptable.