

Emergency Scenarios with Case Review

Hazardous Exposure & Universal Precautions

The following emergency scenario is to review hazardous exposure and universal precautions in your clinic, and to review teaching points.

- 1) The person facilitating scenarios can print out the pages below.
- 2) Undertake the role-play as if it were actually occurring in your clinic.
- 3) Following role-play, gather the staff to review questions for debriefing and teaching.
- 4) Repeat scenario for further practice as time allows.
- 5) Record date of scenario and topic on your emergency scenario log (as appropriate)

Emergency Scenario:

Scenario a – Hazardous Materials Exposure

There is a moderate sized chemical spill of a cleaning material.

1) How does OSHA inform about hazardous materials in the workplace?

A MSDS (material safety data sheet) should be available for materials in the workplace. Information regarding proper use, handling, storage, and disposal of specific chemicals should be in the OSHA manual or provided by your clinic manager.

2) What are common hazardous materials at our health centers?

Formaldehyde (Ultram), miscellaneous solvents, acids, cleansers and disinfectants.

3) What information is available about common hazardous materials, and where is this information kept at your site?

Potential health effects.

Routes of exposure

Possible symptoms of exposure

The potential for the chemical to react, explode, etc.

The required personal protective equipment necessary

Emergency procedures in case of spills.

In OSHA manual or MSDS form

4) If there was a small spill of a hazardous chemical, what should be done?

The person familiar with the hazards of a chemical should clean up small spills.

Spills should be cleaned up quickly to prevent spread of chemical vapors.

Read and follow directions for clean up.

If the spill is much larger and poses an immediate danger to staff or clients (such as a highly flammable material), evacuate the area and deny entry to others, notify a supervisor, and contact County Hazardous Materials Emergency Response Team (check #).

5) Prevention of spills?

Use amount of product specified (more is not better).

Use care with measuring and handling hazardous substances.

6) What should you do with a half empty container of unwanted chemical product?

a) Pour down the drain

b) Wrap 3 times in newspaper, then put in garbage can

c) Put in red bag

d) Contact environmental service authority for legal disposal or recycling

Scenario b – Body Fluid Exposure

Employee is moving red bag material with blood, and has a splash onto skin with open wound and also into eye.

1) What key steps should be taken?

Wash exposed areas.

Can use betadine or hibiclens on skin; and soap and water.

Can use eye wash area of sink (or bottle of eyewash).

Inform supervisor and / or clinician.

Contact employee health for recommendations regarding testing and possible post-exposure prophylaxis. A decision about medical care should be made promptly.

Additional resource for exposure to bodily fluids: PEP Line **1-888-HIV-4911** or **(1-888-448-4911)**

Assistance to finish disposing of waste safely.

2) What are universal precautions?

“Universal precautions” are a set of precautions designed to prevent transmission of blood borne pathogens for all health care workers whose jobs bring them into contact with potentially infectious bodily fluids. Under universal precautions, blood and certain body fluids of all patients are considered potentially infectious.

Gloves should be worn: For touching blood and body fluids requiring universal precautions, mucous membranes, or non-intact skin of all patients, and for handling items or surfaces soiled with blood or body fluids to which universal precautions apply. Gloves should be changed after contact with each patient. Hands and other skin surfaces should be washed immediately or as soon as patient safety permits if contaminated with blood or body fluids requiring universal precautions. Use in situations where the health care worker judges that contamination may occur.

To prevent needle-stick injuries, needles should not be recapped by hand, purposely bent or broken by hand, removed from disposable syringes, or otherwise manipulated by hand. After they are used, disposable syringes and needles, scalpel blades, and other sharp items should be placed immediately in puncture-resistant containers for disposal. The puncture resistant containers should be located as close as practical to the use area.

3) What standards does OSHA require PPGG to make available to employees?

- a. Facilities and/or products for hand washing
- b. Access to personal protective equipment needed to implement safety precautions.
- c. Containers for disposal of used sharps.
- d. Free immunization against Hepatitis B
- e. Free treatment and follow-up after an exposure to blood or potentially infectious bodily fluids.
- f. A copy of the blood borne pathogen standard.