

## **Chemical Hazards and Controls/Interventions**

Chemicals are in everyone's workplace (even though you may not directly use them everyday).

Be aware of products you use at work and their chemical ingredients.

Know what a Material Safety Data Sheet (MSDS) is, where it is and what the sheet tells you. If you don't know ask your supervisor for this information. Note in particular the human health effects of the chemical and how to protect yourself from exposure.

Find out what resources you have in your workplace to give you information on chemicals.

Get trained on the chemicals you work with--find out before you use them.

Medications may be hazardous to workers, especially chemo-therapy drugs. Know who to respond if there is a drug spill.

### **Making a plan and putting it to work.**

- If you have hazardous chemicals at work develop a Hazard Communication plan:
- Talk to your supervisor and co-workers
- Learn about the requirements of the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard 29 CFR 1910.1200
- Identify the policies and procedures you have in place and the information you still need
- Provide Personal Protective Equipment for staff as required
- Include co-workers in developing the plan
- Train and educate staff members on all levels about how and when to use hazardous chemicals properly

### **Controls/Interventions**

Provide policies for handling and clean up of chemicals and medications including steps and training.

Establish procedures and provide supplies for chemical spills particularly for toxic chemotherapy drugs

Provide list of personal protective equipment required and available for safe use of chemicals, equipment, resources and who to call for help.

Prevent exposure whenever possible by eliminating, reducing use or substituting harmful chemicals for safer alternatives.

**Goal:** Participants will list the chemicals they work with, will identify products that may contain hazardous chemicals and will outline the steps of responding to a chemotherapy drug spill.

#### **A. Chemical Exposure**

The facilitator will ask participants to respond to the following questions and lead a report back on responses.

1. Make a list of the chemicals with which you work.
2. Introduce yourself to your neighbor including your name, where you work, and what you do. Compare your list of chemicals. Are they the same? Which chemicals did your neighbor list that you did not?
3. Are there any other products that you use that are made up of potentially hazardous chemicals? What are they? Add them to the list.
4. The facilitator may give participants the employer's list of hazardous products and chemicals required by OSHA Standard 29

CFR 1910.1200. Are there products or chemicals on the list that have not been mentioned already?

5. Participants should choose one chemical that they want to research using Material Safety Data Sheets. What are the human health effects of the chemical? How do you protect yourself during use or a spill?

### **B. Case Study: Chemotherapy Drug Spill**

You arrive at a patient's home, and the caregiver meets you at the door saying, "I just got my box of medications and supplies. When I opened it and started to take things out of the box, everything was wet. I think one of the bags was leaking. And now my hands are burning, and my eyes are watering."

1. What is your first action (concerning the caregiver)?
2. After this is done what should the caregiver do?

You then go to check the box of supplies.

3. How do you find out what personal protective equipment (PPE) to wear before you check the box?

4. What PPE do you need to wear?

You find that the IV bag that was labeled "Ganciclovir" (antiviral/chemotherapeutic agent) is empty, and the bag and all surrounding supplies are wet.

5. What information should you check to find out how to clean up the spill?

6. What materials do you need to clean up the spill?

7. What do you do with the contaminated waste/items?

The caregiver has been cared for, the spill is cleaned up. What else should you do?