

## Reducing Exposure to Hazardous Drugs

### What are Hazardous Drugs? Cancer chemotherapy medications.

- Hazardous drugs can enter the body through inhalation of dusts or aerosols, absorption through the skin, and ingestion from oral contact with contaminated hands.
- It is essential that gloves are worn at all times when handling hazardous drugs to prevent skin surfaces from coming into contact with these potentially harmful substances. Double gloving and changing gloves after they have been worn for longer than 30 minutes or immediately if they are torn, punctured, or contaminated with a spill is recommended. Hands should always be washed before gloves are put on and after they are removed.
- Personal protective gowns are recommended during hazardous drug preparation to protect the worker from unintended exposure to drug particles in the air and on surfaces. Gowns worn during administration should be changed when leaving the patient care area and immediately if contaminated.
- Eye and face protection should be used whenever there is a possibility of exposure from splash or uncontrolled aerosolization of hazardous drugs. A face shield, rather than safety glasses or goggles is recommended because of the improved skin protection afforded by the shield. Similar circumstances also warrant the use of a respirator.
- Examples of operations that can cause splattering, spraying, and aerosolization include:
  - withdrawal of needles from drug vials;
  - drug transfer using syringes and needles or filter straws;
  - breaking of ampoules in order to open them;
  - and expulsion of air from a drug-filled syringe
- When removing PPE, care must be taken to avoid introducing hazardous drug contamination into the environment.
- Clean work surfaces with an appropriate deactivation agent and cleaning agent before and after each activity and at the end of the work shift.
- Be aware of the various types of waste generated by preparing and administering hazardous drugs: partially filled vials, unused IVs, needles and syringes, gloves, gowns, and contaminated materials from spill cleanups.

### References:

1. **ECU Health Medical Center**  
ECU Health policy VH-PH55 Hazardous Medications  
ECU Health policy ECU Health IC-18 Isolation-Prevention/Donning and Removing PPE
2. **American Society of Health –System Pharmacists.**  
ASHP guidelines on handling hazardous drugs.
3. **Centers for Disease Control and Prevention National Institute for Occupational Safety and Health. (2004).**  
*Preventing Occupational Exposures to Antineoplastic and Other Hazardous Drugs in Health Care Settings.* Cincinnati: NIOSH- Publications Dissemination.