

# Safe Transport of Hazardous Materials

A release or spill of hazardous material during transport can impact the person moving the material, as well as students, staff, or faculty. When transporting hazardous materials within the department you must not work alone, you must wear the appropriate personal protective equipment (PPE), and you must always use a chemical carrier and/or a lipped cart with secondary containment. Plan ahead and try to avoid busy times or congested areas when people are moving between classes.

# Personal Protective Equipment

- At minimum, eye protection, long pants, lab coat (100% cotton), and closed-toed shoes should be worn.
- If wearing gloves, the one-glove policy must be obeyed in all common areas outside of the lab.

### Secondary Containment

- Secondary containment must always be used when transporting hazardous materials. Options include, but are not limited to, chemical carriers, heavy duty (double wall certified) boxes with spill container, and/or large plastic containers.
- While shopping for or picking up hazardous materials in Chemistry Stores you must immediately place the item into secondary containment. Customers are welcomed to temporarily borrow chemical carriers.
- If carrying the hazardous materials by hand, do not carry more than two bottle carriers or safety cans. Otherwise use a cart.

### Carts and Dollies

- Use a lipped cart or dolly to transport the hazardous materials. If you don't have a lipped cart, you may use an unlipped dolly or cart as long as the hazardous materials placed within secondary containment box and the box has been secured to the cart with an appropriate bungee cord.
- When using a cart, place hazardous materials in a box and/or carrier on top of a lipped cart. Ensure that the cart is not overloaded. Do not place solvent bottles, safety cans, and other chemical containers on the same level as heavy items, such as dry ice. If your cart does not have a lip and if it is possible, you may secure the secondary containment box with an appropriate bungee cord. Also, be aware of uneven and damaged flooring, and navigate with caution.

#### Approved examples of secondary containment are seen below.











Approved examples of using a cart are seen below.



Red jerry cans and safety cans as seen below, do not require secondary containment.



# Spills

Spill clean-up procedures and response varies on the amount and material of spill. You may be able to respond to a small contained lab spill if you have been trained, have the appropriate PPE, the proper clean-up materials, and if you are not working alone. If appropriate equipment and trained personnel are not available on-site, the clean-up should not proceed. Common spill clean-up procedures can be found <u>here</u>. Spill carts are available and contain clean-up materials for some common spills. They are located outside of CHEM A237, A352, B170, C124E, E219, E315, E415 and inside of D113 (hydrofluoric acid spill kit).

### **Emergency Spill Response**

For spills larger than 1 L of a flammable, toxic or highly hazardous chemicals, and/or for spills that have an immediate threat to anyone's safety follow the procedures listed below.

- 1. Immediately evacuate the area, and call 9-1-1.
- 2. Do not attempt to clean up the spill.
- 3. Go to the designated muster location and do not re-enter the area.
- As soon as it is possible, report the incident to Campus Security at 604-822-2222, request for UBC First to attend to any injuries and/or chemical exposure incidents. Campus Security will immediately contact UBC SRS for support.
- 5. HAZMAT and/or the fire department will help with proper spill clean-up procedures.
- 6. Do not re-enter the affected areas until the Emergency Director has notified everyone when it is safe to re-enter.