

Transportation of hazardous materials

Guidelines for the on-campus transport of hazardous materials

College of Natural Sciences and Mathematics

Precautions must be taken when transporting hazardous materials (e.g. chemical, biological) within and between buildings. Whenever a person is transporting hazardous materials, they must be aware of the contents and hazards of each container, personal protective equipment required for handling the material, and what to do in the event of a leak or spill.

The following guidelines shall be followed when hazardous materials are transported between laboratories within and between buildings.

1. Hazardous materials must be in sealed containers, clearly labeled with the contents name and the applicable hazard(s).
2. Hazardous materials must be transported in commercially available bottle carriers designed for this purpose or utility carts with integrated leak-proof shelving or plastic totes securely placed on shelving
 - a. Secondary containers shall be large enough to hold the contents of the container in the event of breakage and be made of a chemically compatible material.
 - b. Transporting volumes of hazardous materials over 100 mL require the use of a 4-wheeled cart such as utility carts with adequate secondary containment.
 - c. When transporting incompatible chemicals between or within buildings, bottles must be segregated by hazard class.
3. Prior to transporting hazardous materials, the exterior of the container must be free of gross contamination and the container must be in good condition.
4. Appropriate personal protective equipment shall be worn for the materials being handled. (Refer to departmental PPE policies and laboratory hazard assessments. Examples include: safety glasses or goggles, lab coat, gloves, close-toed shoes, etc.) If gloves are required for transport, keep one ungloved hand to touch surfaces (e.g. doorknobs, elevator buttons).
5. When moving between floors, use a freight elevator whenever possible. If a freight elevator is not available, do not transport materials in an elevator that is already occupied by others. If people attempt to enter the elevator, inform them that you are carrying hazardous materials and that they should take the next one available.
6. Compressed and Liquified Gas Cylinders and Dewars
 - a. When transporting gas cylinders, the cylinder must be secured to a cylinder dolly. Small cylinders, dewars, or lecture bottles can be transported on carts. Cylinders designed with a threaded valve cap must have the cap in place for transport. Larger liquified gas dewars are typically equipped with wheels for transport.
 - b. Transportation of liquified gas dewars between buildings should be minimized and requires at least 2 individuals to be present.
 - c. Gas cylinders and dewars must never be left unattended while in transport with the exception of transportation in elevators.
 - d. Transportation in elevators
 - i. Do not transport compressed or liquified gas cylinders or dewars in an elevator with any person/s in the elevator car.
 - ii. Post a sign on the vessel in the elevator reading “DO NOT ENTER – ASPHYXIATION HAZARD” or other wording as approved by EH&S to warn potential passengers.
 - iii. Have another person available on the receiving floor to take the container off the elevator at the destination floor.