

## Transporting Chemicals Safely on Campus

Transporting your chemicals is one of the riskiest procedures you can perform with them because at no other time is accidental release and exposure more likely. However, by using the same care and caution before and during transport that you would for any experimental procedure, you can minimize the danger to yourself, others, and the environment.

The Laboratory Operations & Safety Committee (LO&SC) and the Office of Environment, Health & Safety (EH&S) have established the following guidelines as the minimum acceptable practices for transporting toxic, flammable, reactive, or corrosive chemicals on campus. Individual department or building safety committees may want to establish more stringent requirements for transportation of these materials within campus buildings.

These guidelines do not apply to radioactive materials or to chemicals packaged for household use. For information on transporting radioactive materials, call the Environment, Health & Safety at 642-3073.

### Guidelines for transporting chemicals

- Individuals transporting chemicals must be familiar with the material's hazards and know what to do in the event of a release or spill. Material Safety Data Sheets (MSDSs) are a good source for this information. Materials that are unstable, explosive, or extremely or acutely hazardous should not be moved without first contacting EH&S.
- Hazardous chemicals must be attended at all times while being transported.
- Wear appropriate Personal Protective Equipment (PPE). Safety glasses, lab coats, and impermeable gloves are some of the PPE that should be worn if hazardous chemicals might splash on skin or eyes if spilled during transport.
- Use secondary containment that is capable of containing all materials in the event of a spill. Acceptable secondary containers include plastic bottle carriers with closed tops and handles and liquid-tight carts with lips on all four sides. Contact EH&S at 642-3073 if you have questions about what type of secondary containment is appropriate for your chemicals.
- Never transport non-compatible chemicals in the same secondary containment or in any way that might allow the chemicals to combine or react.
- Use sturdy carts for transporting multiple, large, or heavy containers. Carts used for secondary containment must have a liquid-tight tray with lips on four sides.
- Label primary containers with the material's chemical name and its hazards (e.g., "Acetone Caution—Flammable"). Secondary containment that obscures a primary container's labeling must be labeled with the same information.
- Transport compressed gas cylinders only with the valve covers screwed on and when securely attached to a compressed gas cart.



- Use freight elevators for moving chemicals between floors. If freight elevators are not available, use uncrowded passenger elevators. Stairs should be used only if elevators are not available.
- Avoid transporting chemicals in a passenger vehicle, but if you must, try not to place them in the passenger compartment. If possible, place the containers in the trunk or cargo bed. If chemicals are transported in the passenger compartment, place them away from passengers and open all windows. Never leave chemicals unattended or stored in a vehicle. Vehicles must travel only on UC-owned roads. This means you cannot use Hearst Avenue, Oxford Street or Bancroft Way. Contact EH&S at 642-3073 if a chemical must be transported off campus.
- Transport cryogenics only in approved storage vessels (e.g., dewar flasks with pressure relief mechanisms). Use appropriate PPE including eye protection in the form of face shield or goggles, heavy gloves, heavy apron, and closed-toe shoes.
- Immediately update chemical inventories to reflect the relocation of chemicals.

