

ENVIRONMENTAL HEALTH & SAFETY

Safely Transporting Chemicals on Campus

1. **Purpose:** Establish guidance for preventing chemical transportation incidents on campus.
2. **Scope:** This policy applies to all toxic, flammable, corrosive, reactive, or otherwise hazardous chemicals used in a laboratory setting. This includes, but is not limited to, movements between store rooms and laboratories, between different laboratories, and within individual laboratories. Laboratory faculty, students, and staff participating in the on-campus transportation of chemicals are expected to follow the guidance established within this policy.
3. **Exclusions:** This policy does not apply to laboratory moves in which professional moving services will be contracted, moves to an external institution, or laboratory clean-outs. It also does not apply to Central Receiving staff delivering chemicals. Household or office movers are not permitted to move chemicals.
4. **Responsibilities**
 - a. **Environmental Health & Safety:** Provides laboratory faculty, students, and staff with the guidance, knowledge, and training necessary to safely transport chemicals on campus.
 - b. **Principal Investigators/Professor:**
 - i. Outfit laboratories with the equipment necessary to safely transport chemicals on campus.
 - ii. Ensure the laboratory staff and students receive the guidance and training necessary to safely transport chemicals on campus.
 - iii. Enforce the guidance provided by this policy.
 - c. **Students and Staff:** Adhere to the guidance provided in this policy.
5. **Procedures**
 - a. Individuals transporting chemicals must be familiar with the hazards presented by the chemicals being manipulated, and possess an understanding of how to react in the event of an incident.
 - b. Individuals transporting chemicals must receive, and maintain current Laboratory Safety Training.
 - c. Individuals transporting chemicals must wear appropriate Personal Protective Equipment (PPE). A buttoned lab coat and safety glasses must be worn while transporting chemicals. Lab appropriate attire, to include long pants and closed-toed shoes, must also be worn while transporting chemicals. Additional personal protective equipment may be required if deemed necessary by a risk assessment. A pair of chemical resistant gloves must be maintained in a pocket for use as-needed. To prevent the spread of contamination from laboratories into public spaces, do not wear gloves in public, unless a spill or other incident dictates the precaution.
 - d. Chemicals must be transported in break-resistant secondary containers that are capable of containing all materials in the event of breakage or spill. Secondary containers are defined as commercially available bottle carriers made of rubber or

plastic, with carrying handle(s). Or, if the chemicals are too numerous to safely carry with a bottle carrier, an easily maneuverable cart with leak resistant sides of several inches in height on all four sides must be used. Chemicals are to be loaded onto the lowest shelf of the cart to maintain the lowest center of gravity and minimize the height a bottle may drop. Chemicals must not be carried without the secondary containment and support described in this policy.

Incompatible chemicals must be carefully segregated by moving incompatibles at different intervals and/or by using separate secondary containment vessels.

- e. Plan your route to minimize travel time and distance while transporting chemicals. Be familiar with uneven surfaces, ramps, and blind corners along your route. Use added caution when moving material up or down grade.
- f. If it is necessary to use a passenger elevator, use should be restricted to low-use times such as early in the morning or late in the afternoon. If this is not possible, be sure to warn passengers, or prohibit passengers from riding with you.
- g. Chemicals cannot be transported outside of laboratory buildings except by EH&S staff properly in transporting chemicals.
- h. Chemicals shall not be transported on Ring Road, in a personal vehicle, or on any form of public transportation, including the shuttle service. The transportation of many of the chemicals used in University laboratories through public property and infrastructure is regulated by the U.S. Department of Transportation.
- i. Environmental Health & Safety must be contacted for chemical movements outside of the laboratory buildings.
- j. Chemicals must be attended at all times while being transported.
- k. Report all chemical spills to EH&S.