Biosafety Best Practices for Vanderbilt Research Labs:

Transporting Biological Research Materials on Campus

Almost all life science-related research teams will need to transport biological materials between lab areas in support of their lab analyses. Common examples include cell cultures, viral vectors, body fluid and tissue specimens and infectious agents. Containment procedures are used in the lab to protect personnel from unnecessary contact with these materials. When they are transported from one lab location to another, it is important to apply the same containment principles in order to minimize the potential for a release of these materials while en route.

1. Store biological research materials in a primary container that is designed for the type of material contained within and securely close the container. Avoid glass whenever possible.
2. Place primary containers in a hard-walled secondary container constructed of materials that can be effectively cleaned and disinfected.
    - If the materials need to be transported on dry ice, enclose the Styrofoam container in a secondary container that is twice the size of the liner to allow sufficient expansion space for the dry ice during transport, or create a few small holes in the lid. **(Assure that the lid is loosened when you reach your destination to avoid pressure buildup as dry ice sublimes!)**
3. Securely close the secondary container in such a way that if it were dropped, the container will not come open or release contents. Use screw top or latchable lids, sturdy rubber bands or other positive means of closure.
    - Avoid the use of wet ice to reduce liquid spill potential. If the materials need to be transported in wet ice, assure that the container meets the criteria for a secondary container as described above. Otherwise, place the ice container within another container that does meet the criteria.
4. If the primary containers (not requiring dry or wet ice) are breakable, and/or they contain sufficient liquid content to create a puddle if spilled, separate the primary containers with absorbent cushioning materials.
5. If the secondary container is used for transporting materials requiring BSL-2 containment, label the container with the biohazard symbol and lab identification information. (See examples shown to right.)

6. If the quantity of materials to be moved are more than can be effectively carried in one hand, use a cart. Avoid stacking items when possible. **Remember: Do not touch common contact surfaces in public areas with gloved hands!** If you wear gloves for handling the secondary container, you must have one hand ungloved for touching doorknobs, elevator buttons and other common contact surfaces while en route.

7. When transporting biological materials from one lab facility to another, avoid traveling through public areas where food is served or consumed. Also avoid transport routes through stairwells, carpeted areas, high traffic public areas, and outdoor areas.
8. Be prepared to contact VU EHS Biosafety at (615) 762-0121 or (615) 343-8918 if a biomaterials spill occurs during transport in a public area. Carry a charged cell phone and have these numbers programmed so they are readily accessible if needed. If a spill occurs, stay with the spill, and divert others away from the area until help arrives.

If you need to transport biological research materials locally, but off-campus, please contact VU EHS Biosafety at VUBiosafety@vanderbilt.edu or (615) 343-8918 for assistance.