

# Appendix K - Transport of Diagnostic Specimens

The following guidelines are based upon currently available information from the Centers for Disease Control and the Department of Transportation. Packaging rules vary depending on the type of transport required, so refer to the appropriate section. For additional information on shipping hazardous materials, including infectious substances, contact EH&S's Hazardous Materials and Waste Office at (206) 685-2848.

## A. Definition of Diagnostic Specimen

1. Diagnostic Specimens are any human or animal materials being transported for diagnostic or investigational purposes. This included clinical laboratory or research specimens.
2. Cultures or stocks are defined as materials prepared and maintained for growth or storage of an organism, and are not diagnostic specimens (see separate procedure for shipping cultures). Samples suspected to contain Risk Group 4 organisms (such as smallpox or Ebola viruses) must also be transported like a culture or stock.
3. Biological projects subject to other federal licensing are exempt from these transport regulations. Examples include blood products collected for transfusion, and tissues and organs intended for transplant.

## B. Primary Specimen Containers

1. Specimens of blood or other potentially infectious materials must be in a leakproof container. The container must be tightly closed, and recognizable as containing specimens so that all personnel handling it will practice Universal Precautions. This container is referred to as the primary container. For example, a test tube or a urine cup is a primary container.

## C. Transport by Dedicated Courier

1. A dedicated courier is defined as a transporter who carries specimens within a building or UW sponsored couriers transporting specimens in vehicles owned by the UW. It does not include taxi, commercial shipping companies, US Mail or employees transporting specimens in their private vehicle.
2. The primary container must be placed within a watertight secondary container. For example, seal the test tube in a leakproof plastic bag. It is good practice to place absorbent material between the bag and tube to cushion the tube and absorb leakage from improperly sealed tubes.
3. Couriers will transport specimens inside a rigid or crush resistant carrier that contains absorbent material.

## D. Transport by Commercial Carrier

1. The Department of Transportation requires that diagnostic specimens be triple packaged when transported by commercial carriers. Examples of commercial carriers include taxi, Federal Express, or privately owned vehicles. The Health Science Express Shuttle also requires packaging as outlined below. Check with the specific carrier for current requirements.
2. The primary container must be placed inside leakproof secondary packaging along with sufficient absorbent material to contain the entire contents of the primary container if it spilled. Examples would be a test tube and a paper towel placed inside a sealed plastic bag, or a urine container and an absorbent gel sheet inside a zip-lock bag.

3. If the primary containers are fragile, they must be individually wrapped or separated from each other so as to prevent contact.
4. Secondary packages must be placed in an outer transport container that is labeled with the words "Diagnostic Specimen". This outer packaging can be a cardboard box with a Styrofoam liner, a cooler or other sturdy container that can be tightly closed. Some carriers also require a biohazard label on the outer packaging.
5. The secondary packages must be secured within the outer packaging such that the specimens will not shift around during transport.
6. If dry ice is used, the outer packaging must allow for the release of carbon dioxide gas.
7. If regular ice is used, the package must be leakproof.
8. If the specimen may be transported by aircraft, either the primary or secondary packaging must be pressure-resistant. Examples of pressure-resistant secondary packaging are plastic containers with O-rings, or Safe-T-Pac+ envelopes.
9. Unless being transported by the original packager, the outer transport container must show the following information in addition to the "Diagnostic Specimens" label:
  - i. The name, department, building, box number and phone number of receiving party
  - ii. The name, address and phone number of the sender
  - iii. The date sent.