Shipping On Dry Ice

When shipping biological materials by air on Dry Ice, remember the following:

- Place Dry Ice outside the biological material’s secondary packaging or, alternatively, in an over-pack. Styrofoam coolers must be shipped inside a cardboard box.

- Use packaging that is designed and constructed to permit the release of carbon dioxide gas and to prevent a build-up of pressure that could rupture the packaging. Do not seal the edges of the package with tape!

- Label the over-pack with the Class 9 Dangerous Goods label, and also mark the package with “Dry Ice UN 1845” and the weight of the Dry Ice in kilograms.

- If Dry Ice is used for the shipment of a biological substance it does not have to be declared on a Declaration of Dangerous Goods form, but should be noted on the Air Waybill (there is usually a check box for this purpose).

- If Dry Ice is used for the shipment of infectious substances, it should be declared on the Declaration of Dangerous Goods form along with the infectious substance, and used with appropriate DOT approved packaging.

- Other dangerous goods rules may apply in some cases, such as shipping samples fixed in ethanol. If you have any questions please call EH&S.

RESOURCES

Importation of Agents Infectious to Humans
Permits to import from foreign countries required through the Centers for Disease Control (CDC).
http://www.cdc.gov/od/eaipp/

Export of Infectious Materials
Export of such materials is regulated through the U.S. Department of Commerce. www.commerce.gov

Import or Interstate Shipment of Materials

Infectious to Animals
Permits to import or transfer animals or animal-derived materials through the USDA’s Animal and Plant Health Inspection Service (APHIS).
www.aphis.usda.gov/animal_health/permits

Appendix B: Basis for the Classification of Biohazardous Agents by Risk Group (RG)

FedEx Pointers on Shipping Biological Samples

Contact Environmental Health and Safety for assistance with:

- Hazard determination / classification
- Packaging requirements
- Labels
- Shipping Classification
- Training

www.oregonstate.edu/ehs

Shellfish and Oyster Aquaculture - Oregon State University
For shipping purposes, biological substances are any human or animal material including, but not limited to: excreta, secreta, blood and its components, tissue and tissue fluids, which are being transported for diagnostic or investigational purposes. (Excludes live infected animals.)

- Blood and fluid samples
- DNA or Recombinant DNA
- Tissue samples
- Cells
- Some plant pathogens or samples may be upgraded to Biological Substance Category B or Infectious Substances depending on the risk associated with the pathogen or sample — even though not specifically covered by these regulations.
- Active or inactive biological cultures, stocks, slants or stabs.

**Category A Infectious Substances must be shipped as Infectious Substance to Humans or Animals.** See a posted Category A substances list at: 
http://oregonstate.edu/ehs/SD0034

Contact EH&S for Category A shipping.

For assistance with shipping biological samples, contact EH&S at 737-2273.

**SHIPPING REQUIREMENTS**

**Biological Substances Category B** must be packed using the triple packaging system consisting of:

- Leak-proof primary receptacles
- Leak-proof secondary packaging with sufficient liquid- and shock-absorbing material between the primary receptacles and the secondary packaging, and
- An outer package clearly marked with the “Biological Substance Category B” and “UN3373” labels.

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**UN3373 Biological Substance Category B**

- Contents of outer package must not exceed 4L or 4kg, and each inner container must not exceed 1L.
- If an Air Waybill is used, the “Nature and Quantity of Goods” box must show the text “UN3373”, “Biological Substance Category B”, and number of packages.
- An itemized list of contents between secondary package and outer package
  - (a Shipper’s Declaration for Dangerous Goods is not required)

Category B packaging must meet design and testing requirements. Contact EH&S for Category B shipping packages.

**EXEMPT ANIMAL OR HUMAN SPECIMEN**

If a specimen has a minimal likelihood that pathogens are present, then the sample may be labeled as “Exempt Animal Specimen” or “Exempt Human Specimen.” This determination should be based on the known medical history, symptoms, and the individual circumstance of the source human or animal and endemic local conditions. EH&S can help with determination.

Exempt packaging requirement

- A leak-proof primary receptacle(s);
- A leak-proof secondary packaging; and
- An outer packaging adequate for its capacity, mass and intended use, and with at least one surface at least 10cm x 10cm
- Outer package contains sufficient absorbent material to contain any leakage.
- Package marked “Exempt Animal Specimen” or “Exempt Human Specimen”

**NON-INFECTIOUS ANIMAL SPECIMENS IN PRESERVATIVE**

The preservative, such as formaldehyde or alcohol, may be considered a hazardous material, but these items can be readily shipped if prepared according to IATA Special Provision A180. See instructions at:

http://oregonstate.edu/ehs/iata-a180