



Dartmouth College Hazardous Materials Shipping SOP

I. Purpose:

In the interest of providing a safe workplace and to comply with federal and international regulations for shipping hazardous materials (dangerous goods), the Environmental Health and Safety Office has formulated this policy. The Department of Transportation (DOT) in Title 49 of the Code of Federal Regulations (49 CFR) provides instructions for all modes of transportation. In addition, the International Civil Aviation Organization (ICAO) and the International Air Transport Association (IATA) impose more stringent requirements for air transportation by providing technical instructions. Violations of these regulations may result in significant fines or criminal charges.

II. Scope:

The shipment of hazardous materials is a serious matter that requires compliance with regulatory requirements. All employees, students and affiliated staff who ship hazardous materials shall follow regulatory requirements for the applicable mode of transportation (e.g., air, ground). EHS will provide expertise and support to help shippers meet these responsibilities. Dartmouth requires all shipments to be in compliance with state, federal and international regulations. Mailroom and loading dock staff are trained to help resolve potential problems by encouraging shippers to contact EHS when a HAZMAT (or suspected HAZMAT) package is offered for shipment.

III. Definitions:

- A. "Hazardous material" or HAZMAT is a substance or material which is capable of posing an unreasonable risk to health, safety, and property when transported in commerce, and which has been so designated by the DOT. The term includes hazardous substances, hazardous wastes, marine pollutants, and elevated temperature materials as defined, materials designated as hazardous under 49 CFR §§172.101, and materials that meet the defining criteria for hazard classes and divisions in 49 CFR Part 173.

- B. "Dangerous goods" means articles or substances which are capable of posing a significant risk to health, safety or to property when transported and are classified by ICAO or IATA as dangerous goods.
- C. HAZMAT shipper is anyone who in the course full time, part time or temporary employment directly affects hazardous materials transportation safety; this term includes anyone who:
 - (i) Loads, unloads, or handles hazardous materials;
 - (ii) Designs, manufactures, fabricates, inspects, marks, maintains, reconditions, repairs, or tests a package, container or packaging component that is represented, marked, certified, or sold as qualified for use in transporting hazardous material
 - (iii) Prepares hazardous materials for transportation;
 - (iv) Is responsible for safety of transporting hazardous materials;
 - (v) Operates a vehicle used to transport hazardous materials.
- D. "Infectious substances" are substances which are known or are reasonably expected to contain pathogens. Pathogens are defined as micro-organisms (including bacteria, viruses, rickettsiae, parasites, fungi) and other agents such as prions, which can cause disease in humans or animals.
- E. Category A: An infectious substance which is transported in a form that, when exposure to it occurs, is capable of causing permanent disability, life threatening or fatal disease in otherwise healthy humans.
- F. Category B: An infectious substance which does not meet the criteria for inclusion into Category A.

IV. Procedures:

- A. Registration: EHS identifies HAZMAT shippers. Researchers who work with hazardous materials must register their research with EHS. During this registration process, researchers indicate whether or not they ship hazardous materials.
- B. Training:
 - i. EHS provides general awareness of Hazmat shipping in the General Lab Safety course required for all new employees and students who work in Dartmouth research labs.
 - ii. EHS provides regular HAZMAT shipping training for the Dartmouth community. Labs identified as shippers of HAZMAT must send at least one person from their lab to be trained.
 - iii. Training shall be in accordance with 49 CFR 172 Subpart H and IATA requirements. Recurrent training is required every two years.

- iv. Employees, students and staff shall not offer for shipment packages containing hazardous materials or dangerous goods until they receive applicable training and ensure that the package complies with regulations. Training may be scheduled by contacting the EHS office (646-1762). Employees are required to receive a certificate upon completion of training.
 - v. Employees, students and staff shall meet the initial and recurrent training requirements prior to signing a shipper's declaration or authorizing a hazardous material or dangerous goods package not requiring a shipper's declaration (e.g., dry ice, biological substances.)
- C. Packaging: Only IATA/UN or DOT approved packaging, if required, shall be used when specified. The EHS office provides some limited packaging supplies. Individual departments who utilize their own specialized or reusable containers or packaging must ensure that the package meets all applicable performance test certification, if required, for each type of container used.
- D. Paperwork: Certified shippers must keep, on file, available for inspection, shipping documentation (air bills, shipper's declarations, bill of lading, etc.) for two (2) years after the acceptance of the material by the initial carrier. Shippers must also keep current copies of vendor package certifications (if required) in the file for inspection.

Special Considerations for INFECTIOUS SUBSTANCES

Shipping regulations divide infectious substances (other than waste) into two categories: Category A and Category B. No one at Dartmouth should be shipping a Category A, infectious substance package except for a few select labs (identified and trained by EHS) on an infrequent schedule (generally less than once a year). Category A packages can be easily identified by the presence of the infectious substance hazard label:



Special arrangements, paperwork and notifications will accompany a Category A shipment. If a package with the infectious substance hazard label shown above arrives at any of the mailrooms, mailroom staff will give a copy of the letter to the shipper and contact EHS for follow up.