Table of Contents

Introduction ................................................................................................................................. 4
Regulatory Authority .................................................................................................................. 4
Definitions .................................................................................................................................. 4
Responsibilities .......................................................................................................................... 6
Training ....................................................................................................................................... 6
Activities that Constitute HM/DG Shipping ............................................................................. 6
HM/DG Permits and Agreements ............................................................................................... 7
International Shipping .............................................................................................................. 7
Excepted Quantities .................................................................................................................... 7
Classification of Infectious Substances ..................................................................................... 8
Category A .................................................................................................................................. 8
Category B .................................................................................................................................. 9
Biological Products .................................................................................................................... 11
Genetically Modified Microorganisms and Organisms ............................................................ 11
Medical or Clinical Wastes ........................................................................................................ 11
Infected Animals ....................................................................................................................... 11
Patient Specimens .................................................................................................................... 12
OHSU Classification Flowchart ............................................................................................... 13
IATA Packing Instructions ........................................................................................................ 14
IATA Packing Instructions 620-Category A ............................................................................. 14
IATA Packing Instructions 650-Category B ............................................................................. 18
Forms ......................................................................................................................................... 25
Shipper’s Declaration for Dangerous Goods ............................................................................. 25
Dangerous Goods in Excepted Quantities Form and Instruction ............................................. 26
Table of Dangerous Goods Allowed to be Shipped as Excepted Quantities............................. 31
Commercial Invoice ................................................................................................................ 32
Example Commercial Invoice ................................................................................................ 33
Shipping Label Examples ......................................................................................................... 34
FAA/DOT Infectious Substance ............................................................................................... 34
Dry Ice ....................................................................................................................................... 35
UN 3373 .................................................................................................................................... 36
Introduction

Oregon Health & Science University’s (OHSU) Dangerous Goods Shipping Program provides guidance on shipping dangerous goods (DG) to meet regulatory requirements. This document establishes procedures and responsibilities under the OHSU Dangerous Goods Shipping Program.

This program applies to all OHSU facilities shipping dangerous goods, including the Marquam Hill (Central) Campus, the West Campus, and clinics. As part of this program OHSU faculty, staff, and students who are involved in transportation related activities will be informed about DG transportation regulations through online training. Individuals who package, label, transport, or prepare shipper’s declarations must complete the online Dangerous Goods Shipping Training every 2 years and follow all DOT and IATA regulations. Hazardous materials (HM) are considered DG; however, additional training is necessary to ship hazardous chemicals.

Regulatory Authority

The International Civil Aviation Organization (ICAO) is the United Nations (UN) body that regulates all international civil aviation involving UN member states. ICAO promulgates the Technical Instructions for the Safe Transport of Dangerous Goods by Air. The Technical Instructions include requirements applicable to the shipping of DG by air.

The International Air Transport Association (IATA) is a trade association of the world’s major airlines that publishes the Dangerous Goods Regulations (DGR), which comply with the ICAO Technical Instructions. The annually updated DGR provides practical assistance to shippers involved in all aspects of dangerous goods transport by air.

Shipments of HM and DG are regulated by the United States Department of Transportation (DOT), which has incorporated the DGR regulations into the Code of Federal Regulations (CFR) Title 49 Sections 1710180. Additionally, the Federal Aviation Administration (FAA) is the regulatory body within the DOT which enforces CFR 49. The FAA investigates incidents regarding potential violations of CFR 49 and may levy substantial fines to individuals and/or institutions failing to comply with requirements.

Definitions

The following provides a brief outline of IATA definitions.

**Biological Substances** are those products derived from living organisms which are manufactured and distributed in accordance with the requirements of appropriate national authorities, which may have special licensing requirements, and are used either for prevention, treatment, or diagnosis of disease in humans or animals or for development, experimental or investigational purposes related thereto. They include, but are not limited to, finished or unfinished products such as vaccines.

**Cultures** are the result of a process by which pathogens are intentionally propagated. This definition does not include human or animal patient specimens as defined in the paragraph below.
**Dangerous Goods (DG)/Hazardous Materials (HM)** are substances that could adversely affect the safety of the public, handlers, or carriers during transportation. The terms hazardous materials and dangerous goods are often used interchangeably when discussing shipping. HM/DG regulations may apply to commercial products, chemical mixtures, items containing or contaminated with hazardous substances, and newly synthesized compounds. Various types of batteries, fuel containers, solvents, biological samples, and cleaning products are examples of materials that are regulated for shipment. There are nine classes of HM:

<table>
<thead>
<tr>
<th>Class</th>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Explosives</td>
<td>Fireworks, Ammunition, Gelignite</td>
</tr>
<tr>
<td>2.1</td>
<td>Flammable Gases</td>
<td>Acetylene, Hydrogen LPG</td>
</tr>
<tr>
<td>2.2</td>
<td>Non-flammable, Non toxic gases</td>
<td>Nitrogen, Carbon dioxide, refrigerant gases</td>
</tr>
<tr>
<td>2.3</td>
<td>Toxic Gases</td>
<td>Chlorine (gas), Ammonia</td>
</tr>
<tr>
<td>3</td>
<td>Flammable Liquids</td>
<td>Ethanol, Methanol, Hexane</td>
</tr>
<tr>
<td>4.1</td>
<td>Flammable Solids</td>
<td>Sulfur</td>
</tr>
<tr>
<td>4.2</td>
<td>Spontaneously Combustible</td>
<td>White phosphorous, Activated carbon</td>
</tr>
<tr>
<td>4.3</td>
<td>Dangerous when wet</td>
<td>Sodium metal, Calcium carbide</td>
</tr>
<tr>
<td>5.1</td>
<td>Oxidizing Substances</td>
<td>Sodium peroxide, Calcium hypochlorite (pool chlorine)</td>
</tr>
<tr>
<td>5.2</td>
<td>Organic Peroxides</td>
<td>Methyl Ethyl Ketone peroxide</td>
</tr>
<tr>
<td>6.1</td>
<td>Toxic substances</td>
<td>Sodium cyanide</td>
</tr>
<tr>
<td>6.2</td>
<td>Infectious Substances</td>
<td>Clinical or medical waste</td>
</tr>
<tr>
<td>7</td>
<td>Radioactive substances</td>
<td>Tritium</td>
</tr>
<tr>
<td>8</td>
<td>Corrosives</td>
<td>Hydrochloric Acid, Sodium Hydroxide</td>
</tr>
<tr>
<td>9</td>
<td>Miscellaneous dangerous goods</td>
<td>Asbestos, dry ice</td>
</tr>
</tbody>
</table>

**Infectious Substances** are substances which are known or are reasonably expected to contain pathogens. Pathogens are defined as microorganisms (including bacteria, viruses, rickettsiae, parasites, fungi) and other agents such as prions, which can cause disease in humans or animals.

**Note:** *Toxins from plant, animal or bacterial sources which do not contain any infectious substances or toxins that are not contained in substances which are infectious substances should be considered for classification in Division 6.1 and assigned to UN 3172.*

**Patient Specimens** are human and or animal materials, collected directly from humans or animals, including, but not limited to, excreta, secreta, blood and its components, tissue and tissue fluid swabs,
and body parts being transported for purposes such as research, diagnosis, investigational activities, disease treatment, and prevention.

Medical or clinical wastes are wastes derived from the medical treatment of animals or humans or from bioresearch.

Responsibilities
Compliance with the OHSU Dangerous Goods Shipping Program is critical and requires cooperation by all entities. The OHSU Environmental Health & Radiation Safety (EHRS) and Research Safety Program (RSP) will administer the program and assist shippers with compliance. OHSU Logistics Central Mail and Shipping and Delivery & Fleet Services will assist the shipper with paperwork and coordinate with FedEx. All Dangerous Goods shipments must be sent through OHSU Logistics Central Mail and Shipping.

Department heads must identify all faculty, staff, and students who require training and ensure that they are trained before being allowed to ship, transport, and/or receive DG. Additionally, faculty, staff, and students must properly handle, classify, package, label, and document all shipments of DG and must not ship materials for which they are not trained and certified (i.e. hazardous chemicals, radioactive materials, etc.).

FedEx is the OHSU approved carrier for air shipments of Dangerous Goods. OHSU Logistics Delivery & Fleet Services may provide assistance transporting Dangerous Goods between Marquam Hill and the West Campus. When shipping via Logistics Delivery & Fleet Services, please keep in mind that materials must meet IATA/DOT packaging and labeling requirements. Logistics Delivery & Fleet Services may provide additional guidance and request additional information about your shipment, as necessary (Materials Safety Data Sheets, hazard class, etc.).

Training
OHSU provides Dangerous Goods Shipping Training via BigBrain. Individuals who package, label, transport, or prepare shipper’s declarations must complete the online Dangerous Goods Shipping Training every 2 years and follow all DOT and IATA regulations. The OHSU Dangerous Goods Shipping Training focuses on Class 6 Infectious Substances shipping. If a hazardous chemical, radioactive material or other HM is being shipped EHRS/RSP must be contacted to assist with shipping the material.

As updates to the regulations occur, EHRS/RSP will provide information regarding changes that impact OHSU shippers. The updates will be incorporated into the online training annually.

Activities that Constitute HM/DG Shipping
Activities that constitute HM/DG shipping require the Dangerous Goods Shipping Training. Activities may include:

- Mailing a HM/DG off campus, out of state, or internationally.
- Shipping a HM/DG off campus, out of state, or internationally via FedEx, United Parcel Service (UPS), etc.
- Sending a HM/DG item off campus via OHSU Logistics Delivery & Fleet Services group.
• Carrying a HM/DG item with you when you travel. For example, driving a HM/DG from the Marquam Hill Campus to the West Campus or carrying a HM/DG in your suitcase when you travel domestically or internationally.

• Shipping equipment containing batteries. If you are shipping equipment containing batteries, please call the Shipping office or EHRS/RSP.

**HM/DG Permits and Agreements**
Please be advised that your shipment may require a special permit or agreement prior to shipping. When shipping animals, animal products, animal pathogens, plant pests, soil, genetically engineered plant or plan pests a United States Department of Agriculture (USDA) Animal and Plant Health Inspection Service (APHIS) permit may be necessary. Additionally, when exporting or importing a Center for Disease Control (CDC) permit may be necessary for human pathogens. Additionally, when exporting the United States Fish and Wildlife Service may require a Convention on International Trade in Endangered Species of Wild fauna and Flora (CITES) permit to ship any endangered species/products (all non-human primate tissues, fluids, and most extracts).

Though not a shipping requirement, Material Transfer Agreements (MTAs) should be in place between OHSU and the organization with which you are sending/receiving goods. Information on MTAs can be found at the [Technology Transfer & Business Development](#) website.

**International Shipping**
Export licenses may be necessary when shipping DG to another country or outside of the continental United States. Before you ship to another country, be sure to verify that the recipient has an import permit, if required. The import permit must be included in the shipping paperwork. For additional information, contact the [Office of Export Control](#).

**Excepted Quantities**
OHSU personnel may have reason to ship samples that contain small amounts of chemicals such as formaldehyde or ethanol. IATA Dangerous Goods Regulations contain provisions for shipping limited quantities of Dangerous Goods that can save you time and money.

‘Excepted Quantities’ and ‘Limited Quantities’ are the two types of shipping methods for small amounts of chemicals. At OHSU, the on-line training provides guidelines for shipping ‘Excepted Quantities’ only. This is applicable to shipments where each inner container (tube), contains no more than 30ml or 30g, and each complete package contains no more than 500ml. **Do not fill tubes more than 90% full; allow for expansion during flight.** Absorbent material sufficient to absorb the contents must be placed in a secondary package that can withstand pressure changes and placed in a good quality box (does not have to be new) with an inventory of the contents. This does not require a Dangerous Goods Shipping Declaration.

To ship other amounts of chemicals including ‘Limited Quantities,’ you must contact EHRS/RSP (Central Campus 503-494-7795, West Campus 503-690-5390) or the Shipping Office (Central Campus 503-494-7380, West Campus 503-690-5256) for assistance.
Classification of Infectious Substances

Infectious substances must be classified in Division 6.2 and assigned to UN 2814, UN 2900, UN 3291 or UN 3373, as appropriate. Infectious substances are divided into the following categories.

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 or animals. Indicative examples of substances that meet these criteria are given in Table I.

Table I

<table>
<thead>
<tr>
<th>UN# and Proper Shipping Name</th>
<th>Microorganisms</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>UN 2814</strong> Infectious Substances affecting humans</td>
<td><strong>Japanese Encephalitis virus cultures</strong>&lt;br&gt;<strong>Junin virus</strong>&lt;br&gt;<strong>Kyasanur Forest disease virus</strong>&lt;br&gt;<strong>Lass virus</strong>&lt;br&gt;<strong>Machupo virus</strong>&lt;br&gt;<strong>Marburg virus</strong>&lt;br&gt;<strong>Monkeypox virus</strong>&lt;br&gt;<strong>Mycobacterium tuberculosis</strong> cultures&lt;br&gt;<strong>Nipah virus</strong>&lt;br&gt;<strong>Omsk hemorrhagic fever virus</strong>&lt;br&gt;<strong>Poliovirus cultures</strong>&lt;br&gt;<strong>Rabies virus cultures only</strong>&lt;br&gt;<strong>Rickettsia prowazekii cultures</strong>&lt;br&gt;<strong>Rickettsia rickettsia</strong> cultures&lt;br&gt;<strong>Rift Valley fever virus cultures only</strong>&lt;br&gt;<strong>Russian spring-summer encephalitis virus cultures</strong>&lt;br&gt;<strong>Sabia virus</strong>&lt;br&gt;<strong>Shigella dysenteriae</strong> type 1 cultures&lt;br&gt;<strong>Tick-borne encephalitis virus cultures</strong>&lt;br&gt;<strong>Variola virus</strong>&lt;br&gt;<strong>Venezuelan equine encephalitis virus cultures</strong>&lt;br&gt;<strong>West Nile virus cultures</strong>&lt;br&gt;<strong>Yellow fever virus cultures</strong>&lt;br&gt;<strong>Yersinia pestis</strong> cultures</td>
</tr>
</tbody>
</table>
Infectious substance affecting animals

<table>
<thead>
<tr>
<th>UN 2900</th>
<th>Infectious substance affecting animals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>African swine fever virus cultures</td>
</tr>
<tr>
<td></td>
<td>Avian paramyxovirus Type 1 - Velogenic Newcastle disease virus cultures</td>
</tr>
<tr>
<td></td>
<td>Classical swine fever virus cultures</td>
</tr>
<tr>
<td></td>
<td>Foot and mouth disease virus cultures</td>
</tr>
<tr>
<td></td>
<td>Lumpy skin disease virus cultures</td>
</tr>
<tr>
<td></td>
<td><em>Mycoplasma mycoides</em> – Contagious bovine pleuropneumonia cultures</td>
</tr>
<tr>
<td></td>
<td>Peste des petits ruminants virus cultures</td>
</tr>
<tr>
<td></td>
<td>Rinderpest virus cultures</td>
</tr>
<tr>
<td></td>
<td>Sheep pox virus cultures</td>
</tr>
<tr>
<td></td>
<td>Goat pox virus cultures</td>
</tr>
<tr>
<td></td>
<td>Swine vesicular disease virus cultures</td>
</tr>
<tr>
<td></td>
<td>Vesicular stomatitis virus cultures</td>
</tr>
</tbody>
</table>

**NOTE:** An exposure occurs when an infectious substance is released outside of the protective packaging, resulting in physical contact with humans or animals.

(a) Infectious substances meeting these criteria which cause disease in humans or both in humans and animals must be assigned to UN 2814. Infectious substances which cause disease only in animals must be assigned to UN 2900.

(b) Assignment to UN 2814 or UN 2900 must be based on the known medical history and symptoms of the source human or animal, endemic local conditions, or professional judgment concerning individual circumstances of the source human or animal.

**NOTE 1:** The proper shipping name for UN 2814 is *Infectious substance, affecting humans*. The proper shipping name for UN 2900 is *Infectious substance, affecting animals* only.

**NOTE 2:** Table I is not exhaustive. Infectious substances, including new and emerging pathogens, which do not appear in the table, but which meet the same criteria must be assigned to Category A. In addition, if there is doubt as to whether or not a substance meets the criteria it must be included in Category A.

**NOTE 3:** In Table I, the microorganisms written in italics are bacteria, mycoplasma, rickettsia or fungi.

**Category B**

An infectious substance which does not meet the criteria for inclusion in Category A. Infectious substances in Category B must be assigned to UN 3373.

**NOTE:** The proper shipping name of UN 3373 is *Biological substance Category B*.

Exceptions

Substances which do not contain infectious substances or substances which are unlikely to cause disease in humans or animals are not subject to these Regulations unless they meet the criteria for inclusion in another class.
Substances containing micro-organisms, which are non-pathogenic to humans or animals are not subject to these Regulations unless they met the criteria for inclusion in another class.

Substances in a form that any present pathogens have been neutralized or deactivated such that they no longer pose a health risk are not subject to these Regulations unless they meet the criteria for inclusion in another class.

Environmental samples (including food and water samples), which are not considered to pose a significant risk of infection are not subject to these Regulations, unless they meet the criteria for inclusion in another class.

Dried blood spots, collected by applying a drop of blood onto absorbent material, or fecal occult blood screening tests and blood or blood components which have been collected for the purposes of transfusion or transplantation and any tissues or organs intended for use in transplantation are not subject to these Regulations.

Patient specimens for which there is minimal likelihood that pathogens are present are not subject to these Regulations if the specimen is packed in a packaging which will prevent any leakage and which is marked with the words “Exempt human specimen” or “Exempt animal specimen,” as appropriate. The packaging must met the following conditions:

a) The packaging must consist of three components:
   a. A leak-proof primary receptacle(s);
   b. A lead-proof secondary packaging; and
   c. An outer packaging of adequate strength for its capacity, mass and intended use, and with at least one surface having minimum dimensions of 100 mm x 100 mm;

b) For liquids, absorbent material in sufficient quantity to absorb the entire contents must be placed between the primary receptacle(s) and the secondary packaging so that, during transport, any release or leak of a liquid substance will not reach the outer packaging and will not compromise the integrity of the cushioning material;

c) When multiple fragile primary receptacles are placed in a single secondary packaging, they must be either individually wrapped or separated to prevent contact between them.

**NOTE:** In determining whether a patient specimen has a minimal likelihood that pathogens are present, an element of professional judgment is required to determine if a substance is exempt under this paragraph. That judgment should be based on the known medical history, symptoms and individual circumstances of the source, human or animal, and endemic local conditions. Examples of specimens which may be transported under this paragraph include the blood or urine tests to monitor cholesterol levels, blood glucose levels, hormone levels, or prostate specific antigens (PSA); tests required to monitor organ function such as heart, liver or kidney function for humans or animals with non-infectious diseases, or therapeutic drug monitoring; tests conducted for insurance or employment purposes and are intended to determine the presence of drugs or alcohol; pregnancy tests; biopsies to detect cancer; and antibody
detection in humans or animals in the absence of any concern for infection (e.g. evaluation of vaccine induced immunity, diagnosis of auto-immune disease, etc.).

**Biological Products**
For the purposes of these Regulations, biological products are divided into the following groups:

(a) those which are manufactured and packaged in accordance with the requirements of appropriate national authorities and transported for the purposes of final packaging or distribution, and use for personal health care by medical professionals or individuals. Substances in this group are not subject to these Regulations;

(b) those which do not fall under paragraph (a) and are known or reasonably believed to contain infectious substances and which meet the criteria for inclusion in Category A or Category B. Substances in this group must be assigned to UN 2814, UN 2900 or UN 3373, as appropriate.

**NOTE:** Some licensed biological products may present a biohazard only in certain parts of the world. In that case, competent authorities may require these biological products to be in compliance with local requirements for infectious substances or may impose other restrictions.

**Genetically Modified Microorganisms and Organisms**
Genetically modified organisms (GMOs) and microorganisms (GMMOs) not meeting the definition of infectious substance must be classified according to Subsection 3.9 of the IATA Regulation.

**Medical or Clinical Wastes**
Medical or clinical wastes containing Category A infectious substances must be assigned to UN 2814 or UN 2900, as appropriate. Medical or clinical wastes containing infectious substances in Category B, must be assigned to UN 3291. For the assignment, international, regional or national waste catalogs may be taken into account.

**NOTE:** The proper shipping name for UN 3291 is Biomedical waste, n.o.s. or Clinical waste, unspecified, n.o.s. or Medical waste, n.o.s., or Regulated medical waste, n.o.s.

Decontaminated medical or clinical wastes which previously contained infectious substances are not subject to these Regulations unless they meet the criteria for inclusion in another class.

**Infected Animals**
A live animal that has been intentionally infected and is known or suspected to contain an infectious substance must not be transported by air unless the infectious substance contained cannot be consigned by any other means. Infected animals may only be transported under terms and conditions approved by the appropriate national authority.

Unless an infectious substance cannot be consigned by any other means, live animals must not be used to consign such a substance.
Animal material affected by pathogens of category A or which would be assigned to category A in cultures only, must be assigned to UN 2814 or UN 2900 as appropriate.

**Patient Specimens**
Patient specimens must be assigned to UN 2814, UN 2900 or UN 3373 as appropriate except if they comply with 3.6.2.2.3 of the IATA Regulation.
OHSU Infectious Substance Classification Flow Chart

Substance for classification

- Have any pathogens been neutralized/inactivated?
- Is it known not to contain infectious substances?
- Are any microorganisms present non-pathogenic to humans/animals?
- Is it a dried blood spot/fecal occult blood?
- Is it an environmental sample, e.g. food and water that is not considered to pose a significant health risk?
- Is it for transplant/transfusion?

NO TO ALL

Does it meet the definition of a Category A substance?

NO

Is it a patient specimen for which there is only a minimal likelihood that pathogens are present?

YES

Category A

UN 2814 infectious substance, affecting humans or UN 2900 infectious substance, affecting animals (as appropriate)

Packaging Instructions 620

NO

Category B

UN 3373 Biological substance Packaging Instructions 650

SUBJECT TO EXEMPT HUMAN (OR ANIMAL) SPECIMEN PROVISIONS. TRIPLE PACKAGING REQUIRED TO PREVENT LEAKING.

Not subject to the provisions of the DGR unless meeting the criteria of another class or division. Triple packaging required to prevent leaking.

Packing Instructions 954 required for dry ice shipping.
IATA Packing Instructions

IATA Packing Instructions 620-Category A
(IATA Dangerous Goods Regulations)

STATE VARIATIONS: AUG-03, BHG-02, CAG-05/10/11, DQG-03, GBG-05, VCG-04, VUG-02

OPERATOR VARIATIONS: AF-02, AM-06/10, AS-08, BR-14, BZ-07, CA-11, CI-01, CO-07, CS-07, FX-09, HA-03, IJ-06, JK-03, KC-08, LA-07, MS-06, MX-06/11, OU-12/16, SV-12, TK-07, TY-03, UA-14, UU-05

This instruction applies to UN 2814 and UN 2900.

Packagings must meet the requirements of 6.5 and must be marked as required by 6.5.3.1.

General Requirements

Shippers of infectious substances must comply with these Regulations and must ensure that packages are prepared in such a manner that they arrive at their destination in good condition and present no hazard to persons or animals during transport. The packagings must include:

(a) inner packagings, comprising of:

- watertight primary receptacle(s);
- a watertight secondary packaging:
- other than for solid infectious substances, absorbent material, such as cotton wool, in sufficient quantity to absorb the entire contents placed between the primary receptacle(s) and the secondary packaging; if multiple fragile primary receptacles are placed in a single secondary packaging, they shall be either individually wrapped or separated so as to prevent contact between them;

(b) an itemized list of contents, enclosed between the secondary packaging and the outer packaging;

(c) a rigid outer packaging. The smallest external dimension must be not less than 100 mm (4 in).

Whatever the intended temperature of the consignment, the primary receptacle or the secondary packaging must be capable of withstanding, without leakage, an internal pressure producing a pressure differential of not less than 95 kPa (0.95 bar, 13.8 lb/in2 and temperatures in the range of -40C to +55C (-40F to +130F).

Note: The capability of a packing to withstand an internal pressure without leakage that produces the specified pressure differential should be determined by testing samples of primary receptacles or secondary packagings. Pressure differential is the difference between the pressure exerted on the inside of the receptacle or packaging and the pressure on the outside. The appropriate test method should be selected based on receptacle or packaging type. Acceptable test methods include any method that
produces the required pressure differential between the inside and outside of a primary receptacle or a secondary packaging. The test may be conducted using internal hydraulic or pneumatic pressure (gage) or external vacuum test methods. Internal hydraulic or pneumatic pressure can be applied in most cases as the required pressure differential can be achieved under most circumstances. An external vacuum test is not acceptable if the specified pressure differential is not achieved and maintained. The external vacuum test is generally acceptable method for rigid receptacles and packagings but is not normally acceptable for:

- flexible receptacles and flexible packagings;

- receptacles and packagings filled and closed under an absolute atmospheric pressure lower than 95 kPa.

**Additional Requirements**

Inner packagings containing infectious substances must not be consolidated with inner packagings containing unrelated types of goods. Complete packages may be overpacked in accordance with the provisions of 5.0.1.5.

Other dangerous goods must not be packed in the same packaging as Division 6.2 Infectious Substances unless they are necessary for maintaining the viability, stabilizing or preventing degradation or neutralizing the hazards of the infections substances. A quantity of 30 mL or less of dangerous goods included in Classes 3, 8, or 9 may be packed in each primary receptacle containing infectious substances provided these substances meet the requirements of 2.7. When these small quantities of dangerous goods are packed with infectious substances in accordance with this packing instruction, no other requirements in these Regulations need be met.

When the infectious substances to be transported are unknown but suspected of meeting the criteria for inclusion in Category A, the words “Suspected Category A Infectious Substance” must be shown in parentheses following the proper shipping name on the itemized list of contents inside the outer packaging.

All packages containing infectious substances must be marked durably and legibly on the outside of the package with the NAME and TELEPHONE NUMBER OF A PERSON RESPONSIBLE.

**Specific Requirements**

Other than for exceptional consignments, for example, large body parts and whole organs which require special packaging, the following specific requirements apply:

*Substances consigned at ambient or higher temperatures;* Primary receptacles must be of glass; metal or plastic. Positive means of ensuring a leak-proof seal must be provided, such as heat seal, skirted stopper or metal crimp seal. If screw caps are used, these must be secured by positive means, e.g. tape, paraffin, sealing tape, or manufactured locking closure.
Substances consigned refrigerated or frozen (wet ice, prefrozen packs, Carbon dioxide, solid [dry ice]): Ice, Carbon dioxide, solid (dry ice) or other refrigerant must be placed around the secondary packaging(s) or alternatively in an overpack with one or more complete packages marked in accordance with 6.5.3.1. Interior support must be provided to secure the secondary packaging(s) or packages in the original position after the ice or Carbon dioxide, solid (dry ice) has dissipated. If ice is used, the outer packaging or overpack must be leak-proof. If Carbon dioxide, solid (dry ice) is used, the outer packaging or overpack must permit the release of carbon dioxide gas. The primary receptacle and the secondary packaging must maintain their integrity at the temperature of the refrigerant used.

Substances consigned in liquid nitrogen: Plastic primary receptacles capable of withstanding very low temperatures must be used. The secondary packaging must be capable of withstanding very low temperatures and in most cases will need to be fitted over the primary receptacle individually. Provisions for the consignment of liquid nitrogen must also be fulfilled. The primary receptacle and the secondary packaging must maintain their integrity at the temperature of the refrigerant used.

Lyophilized substances: Primary receptacles must be either flame-sealed glass ampoules or rubber-stoppered glass vials fitted with metal seals.

Before an empty packaging is returned to the consignor, or sent elsewhere, it must be disinfected or sterilized to nullify any hazard and any label or marking indicating that it contained an infectious substance must be removed or obliterated.
Category A Infectious Substance Packing Instructions 620 – Example

*If multiple fragile primary receptacles are placed in a single secondary packaging, they must be either individually wrapped or separated so as to prevent contact between them.

**Note 1:** The smallest external dimension of the outer packaging must not be less than 100 mm (3.9 inches)

**Note 2:** The primary receptacle or the secondary packaging must be capable of withstanding without leakage an internal pressure producing a pressure differential of not less than 95 kPa

**Note 3:** Follow package manufacturer’s closure instructions
IATA Packing Instructions 650 - Category B
(IATA Dangerous Goods Regulations)

STATE VARIATIONS: BHG-02, CAG-05, DQG-03, FRG-05, GBG-05, VCG-04

OPERATOR VARIATIONS: AF-02, AM-06/10, AR-02, AS-08, BR-14, BZ-07, CI-01, CO-07, CS-07, FX-09, JJ-06/10, JJ-06, JK-03, KC-08, KE-06, LA-07, LH-05, MN-03, MS-06, MX-06/11, OO-01, OU-12/16, PX-08, SQ-10, SV-12, TN-05, TY-03, UA-14, UU-05

This packing instruction applies to UN 3373 on passenger and cargo aircraft and Cargo Aircraft Only.

General Requirements

The packagings must be of good quality, strong enough to withstand the shocks and loadings normally encountered during transport, including trans-shipment between transport units and between transport units and warehouses as well as any removal from a pallet or overpack for subsequent manual or mechanical handling. Packagings must be constructed and closed so as to prevent any loss of contents that might be caused under normal conditions of transport, by vibration, or by changes in temperature, humidity or pressure.

The packaging must consist of three components:

a) a primary receptacle(s);

b) a secondary packaging; and

c) a rigid outer packaging.

Primary receptacles must be packed in secondary packagings in such a way that, under normal conditions of transport, they cannot break, be punctured or leak their contents into the secondary packaging. Secondary packagings must be secured in outer packagings with suitable cushioning material. Any leakage of the contents must not compromise the integrity of the cushioning material or of the outer packaging.

Packages must be prepared as follows:

(a) For liquid substances:

- The primary receptacle(s) must be leak-proof and must not contain more than 1 L;
- The secondary packaging must be leak-proof;
- If multiple fragile primary receptacles are placed in a single secondary packaging, they must be either individually wrapped or separated to prevent contact between them;
- Absorbent material must be placed between the primary receptacle and the secondary packaging. The absorbent material, such as cotton wool, must be in sufficient quantity to absorb
the entire contents of the primary receptacle(s) so that any release of the liquid substance will not compromise the integrity of the cushioning material or of the outer packaging;

- The primary receptacle or the secondary packaging must be capable of withstanding without leakage an internal pressure of 95 kPa in the range of -40°C to +55°C (-40°F to 130°F).

Note: The capability of a packing to withstand an internal pressure without leakage that produces the specified pressure differential should be determined by testing samples of primary receptacles or secondary packagings. Pressure differential is the difference between the pressure exerted on the inside of the receptacle or packaging and the pressure on the outside. The appropriate test method should be selected based on receptacle or packaging type. Acceptable test methods include any method that produces the required pressure differential between the inside and outside of a primary receptacle or a secondary packaging. The test may be conducted using internal hydraulic or pneumatic pressure (gauge) or external vacuum test methods. Internal hydraulic or pneumatic pressure can be applied in most cases as the required pressure differential can be achieved under most circumstances. An external vacuum test is not acceptable if the specified pressure differential is not achieved and maintained. The external vacuum test is generally acceptable method for rigid receptacles and packagings but is not normally acceptable for:

- flexible receptacles and flexible packagings;
- receptacles and packagings filled and closed under an absolute atmospheric pressure lower than 95 kPa;
- The outer packaging must not contain more than 4L. This quantity excludes ice, dry ice, or liquid nitrogen when used to keep specimens cold.

(b) For solid substances:

- The primary receptacle(s) must be sift-proof and must not exceed the outer packaging weight limit;
- The secondary packaging must be sift-proof;
- If multiple fragile primary receptacles are placed in a single secondary packaging, they must be either individually wrapped or separated to prevent contact between them;
- Except for packages containing body parts, organs or whole bodies, the outer packaging must not contain more than 4 kg. This quantity excludes ice, dry ice or liquid nitrogen when used to keep specimens cold;
- If there is any doubt as to whether or not residual liquid may be present in the primary receptacle during transport then a packaging suitable for liquids, including absorbent materials, must be used.

An itemized list of contents must be enclosed between the secondary packaging and the outer packaging.

At least one surface of the outer packaging must have a minimum dimension of 100 mm x 100 mm.
The completed package must be capable of successfully passing the drop test described in 6.5.1.1 except that the height of the drop must not be less than 1.2 m. Following the appropriate drop sequence, there must be no leakage from the primary receptacle(s) which must remain protected by absorbent material, when required, in the secondary packaging.

For transport, the mark illustrated below must be displayed on the external surface of the outer packaging on a background of a contrasting color and must be clearly visible and legible. The mark must be in the form of a square set an angle of 45°(diamond-shaped) with each side having a length of at least 50 mm, the width of the line must be at least 2 mm, and the letters and numbers must be at least 6 mm high. The proper shipping name “Biological Substance, Category B” in letters at least 6mm high must be marked on the outer package adjacent to the diamond-shaped mark.

![UN 3373](image)

Unless all package markings are clearly visible, the following conditions apply when packages are placed in an overpack:

- the overpack must be marked with the word “Overpack” ; and
- the package markings must be reproduced on the outside of the overpack.

A Shipper's Declaration for Dangerous Goods is not required.

Alternative packagings for the transport of animal material may be authorized by the competent authority in accordance with the provisions in 5.0.6.7.

Specific Requirements

*Refrigerated or frozen specimens: Ice, dry ice and liquid nitrogen*

When dry ice or liquid nitrogen is used to keep specimens cold, all applicable requirements of these Regulations must be met. When used, ice or dry ice must be placed outside the secondary packagings or in the outer packaging or an overpack. Interior supports must be provided to secure the secondary packagings in the original position after the ice or dry ice has dissipated. If ice is used, the outside packaging or overpack must be leakproof. If dry ice is used, the packaging must be designed and constructed to permit the release of carbon dioxide gas to prevent a build-up of pressure that could rupture the packagings.

The primary receptacle and the secondary packaging must maintain their integrity at the temperature of the refrigerant used as well as the temperatures and the pressures, which could result if refrigeration were lost.
Infectious substances assigned to UN 3373, which are packed and marked in accordance with this packing instruction are not subject to any other requirement of these Regulations except for the following:

- the name and address of the shipper and of the consignee must be provided on each package;
- the name and telephone number of a person responsible must be provided on the air waybill or on the package;
- classification must be in accordance with 3.6.2;
- the incident reporting requirements in 9.6.1 must be met; and
- the inspection for damage or leakage requirements in 9.4.1 and 9.4.2.

Note: When the shipper or consignee is also the ‘person responsible’ as referred to in b) above, the name and address need be marked only once to satisfy the name and address marking provisions in both a) and b), above.

Passengers and crew members are prohibited from transporting infectious substances either as or in carry-on baggage or checked baggage or on their person.

If an air waybill is used, the “Nature and Quantity of Goods” box must show “UN 3373”, the text “BIOLOGICAL SUBSTANCE, CATEGORY B” and the number of packages.

Clear instructions on filling and closing such packages must be provided by packaging manufacturers and subsequent distributors to the shipper or to the person who prepares the package (e.g. patient) to enable the package to be correctly prepared for transport.

Other dangerous goods must not be packed in the same packaging as Division 6.2 infectious substances unless they are necessary for maintaining the viability, stabilizing or preventing degradation or neutralizing the hazards of the infectious substances. A quantity of 30 mL or less of dangerous goods included in Classes 3, 8 or 9 may be packed in each primary receptacle containing infectious substances provided these substances meet the requirements of 2.6. When these small quantities of dangerous goods are packed with infectious substances in accordance with this packing instruction no other requirements in these Regulations need be met.
Category B Infectious Substance Packing Instructions 650 – Example

* The proper shipping names “Biological Substance, Category B”; “Clinical Specimen”; and “Diagnostic Specimen” are authorized until December 31, 2006. From January 1, 2007 only the proper shipping name “Biological Substance, Category B” will be authorized.

† If multiple fragile primary receptacles are placed in a single secondary packaging they must be either individually wrapped or separated to prevent contact.

**Note:** Follow package manufacturer’s closure instructions.
IATA Packing Instruction 954-Dry Ice
(IATA Dangerous Goods Regulations)

OPERATOR VARIATIONS: AM-09, AS-11, CA-08, CO-09, CS-09, CZ-04, IC-08, KE-06, LC-09, TY-06, VN-11

This instruction applies to UN 1845, Carbon dioxide, solid (dry ice) on passenger and cargo aircraft and Cargo Aircraft Only.

The General Packing Requirements of 5.0.2 must be met.

- must be in packaging designed and constructed to permit the release of carbon dioxide gas and to prevent a build-up of pressure that could rupture the packaging;
- the shipper must make arrangements with the operator(s) for each shipment, to ensure ventilation safety procedures are followed;
- the Shipper's Declaration requirements of Subsections 8.1 and 10.8.1 are only applicable when the Carbon dioxide, solid (dry ice) is used as a refrigerant for dangerous goods that require a Shipper's Declaration;
- when a Shipper’s Declaration is not required, the following information, as required by 8.2.3 for the Carbon dioxide, solid (dry ice), must be contained in the "Nature and Quantity of Goods" box on the air waybill. Where an agreement exists with the operator, the shipper may provide the information by EDP or EDI techniques. The information should be shown in the following order:
  - UN 1845;
  - proper shipping name (Dry ice or Carbon dioxide, solid);
  - the number of packages;
  - the net quantity of dry ice in each package; and
  - the net weight of the Carbon dioxide, solid (dry ice) must be marked on the outside of each package.

Dry ice used as a refrigerant for other than dangerous goods:

- may be shipped in a unit load divide or other type of pallet prepared by a single shipper provided that the shipper has made prior arrangements with the operator;
- the unit load device, or other type of pallet must allow the venting of the carbon dioxide gas to prevent a dangerous build up of pressure (the marking and labeling requirements of Section 7 do not apply to the unit load device);
- the shipper must provide the operator with written documentation of where agreed with the operator, information by EDP or EDI techniques, stating the total weight of the dry ice contained in the unit load device or other type of pallet.

Notes:

Refer to the relevant airline's loading procedures for Carbon dioxide, solid (dry ice) limitations.

For Air Waybill requirements see 8.2.3. For loading instructions see 9.3.12.
For cooling purposes, an overpack may contain Carbon dioxide, solid (dry ice), provided that the overpack meets the requirements of this packing instruction.

<table>
<thead>
<tr>
<th>UN Number</th>
<th>Quantity per package</th>
<th>Quantity per package</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN 1845, Carbon dioxide, solid, or Dry ice</td>
<td>200 kg</td>
<td>200 kg</td>
</tr>
</tbody>
</table>

**Dry Ice Shipping Checklist**

This checklist should be used when shipping dry ice with non-hazardous materials. Do not ship your material if “NO” is checked for any of these entries.

<table>
<thead>
<tr>
<th>Is the following correct for each entry?</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Quantity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is the quantity of the dry ice per package 200 kg or less?</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Packages and Overpacks</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is packaging designed and constructed to permit the release of carbon dioxide gas and to prevent pressure build up?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are packages free from damage and in proper condition for carriage?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does the packaging conform to packaging instruction 954 and the package is vented to permit the release of gas?</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Markings</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are the words “Carbon dioxide, solid” or “Dry ice” present?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is the UN Number listed as “UN 1845”?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are the full name and address of the shipper and consignee present?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is the net quantity of dry ice within each package listed?</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Labels</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is the Class 9 label affixed to the package?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have irrelevant marks and labels been removed?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Forms

Shipper’s Declaration for Dangerous Goods

Please see the example Shipper’s Declaration for Dangerous Goods form below. The Shipper’s Declaration form is completed electronically at the Shipping Office.
Dangerous Goods in Excepted Quantities Form and Instruction
The Excepted Quantity label must be placed on the outside of the box.

The Hazard Class Number goes here
Name/Address Shipper/Consignee
goes here if not on a shipping label
Formaldehyde (greater than 25%) label. Shipper address not necessary if it appears elsewhere on package.
Formaldehyde solution (greater than 10% but less than 25%) Label. Shipper address not necessary if it appears elsewhere on package.
3

John Doe, PhD
OHSU, Mail code: L334
3181 SW Sam Jackson Pk Rd
Portland, OR 97239

Ethanol Label.
Shipper address not necessary if it appears elsewhere on package.
### Table of Dangerous Goods Allowed to be Shipped as Excepted Quantities

#### Exceptional Limits

<table>
<thead>
<tr>
<th>Packing Group</th>
<th>Quantity Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>1 kg or 1 l</td>
</tr>
<tr>
<td>II</td>
<td>500 g or 500 ml</td>
</tr>
<tr>
<td>III</td>
<td>100 g or 100 ml</td>
</tr>
<tr>
<td>IV</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

- **Class 1: Explosives**
  - Not applicable
  - Pizza slices, puffed or fried
  - Not applicable
  - Not applicable
  - Not applicable
  - Not applicable
  - Not applicable

- **Class 2: Gases**
  - No excepted quantities
  - Not applicable
  - Not applicable
  - Not applicable
  - Not applicable
  - Not applicable

- **Class 3: Flammable Liquids**
  - Not applicable
  - Not applicable
  - Not applicable
  - Not applicable

- **Class 4: Flammable Solids**
  - Not applicable
  - Not applicable
  - Not applicable

- **Class 5: Oxidizers**
  - Not applicable
  - Not applicable
  - Not applicable

- **Class 6: Poisons**
  - Not applicable
  - Not applicable
  - Not applicable

- **Class 7: Radiological Materials**
  - Not applicable
  - Not applicable
  - Not applicable

- **Class 8: Corrosive Materials**
  - Not applicable
  - Not applicable
  - Not applicable

- **Class 9: Other Dangerous Goods**
  - Not applicable
  - Not applicable
  - Not applicable

---

**Note:**

- For excepted in Class 5, 6, and 9, the packing group must be I.
- For excepted in Class 7, the quantity contained in each package shall not exceed 1 l.
- For excepted in Class 9, the quantity contained in each package shall not exceed 1 kg.

---

**Table:**

- **Packing Group I**
  - For liquid, the quantity contained in each package shall not exceed 3 l.
  - For solid, the quantity contained in each package shall not exceed 20 kg.

- **Packing Group II**
  - For liquid, the quantity contained in each package shall not exceed 300 l.
  - For solid, the quantity contained in each package shall not exceed 1000 kg.

- **Packing Group III**
  - For liquid, the quantity contained in each package shall not exceed 3000 l.
  - For solid, the quantity contained in each package shall not exceed 5000 kg.

---

**Exceptional Limits:**

- For liquid, the quantity contained in each package shall not exceed 1 l.
- For solid, the quantity contained in each package shall not exceed 25 kg.
Commercial Invoice

The OHSU Commercial Invoice can be found here.

<table>
<thead>
<tr>
<th>OREGON HEALTH &amp; SCIENCE UNIVERSITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMMERCIAL INVOICE</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DATE</th>
<th>Hold and Notify Telephone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 Deliver to Address Below 2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>From (Your Name) Please Print</th>
<th>To (Consignee’s Name)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Oregon Health &amp; Science University</th>
</tr>
</thead>
<tbody>
<tr>
<td>3181 SW Sam Jackson Pk. Rd. - L224</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>City</th>
<th>State</th>
<th>Zip</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portland</td>
<td>OR</td>
<td>97201-3098</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Your Internal Billing Reference Information</th>
<th>City/Town</th>
<th>State/Province</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Payment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 ☐ Bill Sender. Account Number Received</td>
</tr>
<tr>
<td>2 ☐ Bill Recipient. (Enter Account Number Below)</td>
</tr>
<tr>
<td>3 ☐ Bill 3rd Party. (Enter Account Number Below)</td>
</tr>
<tr>
<td>Account No.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MARKS &amp; NUMBERS</th>
<th>NUMBER OF PACKAGE</th>
<th>COMPLETE DESCRIPTION OF GOODS</th>
<th>WEIGHT</th>
<th>QUANTITY</th>
<th>UNIT VALUE</th>
<th>TOTAL VALUE</th>
</tr>
</thead>
</table>

| THESE COMMODITIES ARE LICENSED FOR THE ULTIMATE DESTINATION SHOWN, DIVERSION CONTRARY TO THE UNITED STATES LAW IS PROHIBITED |

<table>
<thead>
<tr>
<th>TYPE NAME AND TITLE OF SHIPPER</th>
<th>SIGNATURE</th>
<th>DATE</th>
</tr>
</thead>
</table>

June 2012
Example Commercial Invoice

**OREGON HEALTH & SCIENCE UNIVERSITY**

**COMMERCIAL INVOICE**

<table>
<thead>
<tr>
<th>DATE</th>
<th>3/15/2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>From</td>
<td>Joe Researcher</td>
</tr>
<tr>
<td>Phone No.</td>
<td>5034941111</td>
</tr>
<tr>
<td>Commodity</td>
<td>Infectious substance affecting humans</td>
</tr>
<tr>
<td>Delivery Address</td>
<td>RM T3-60</td>
</tr>
<tr>
<td>Contact Person</td>
<td>Katherine Potter</td>
</tr>
<tr>
<td>To</td>
<td>Laval University</td>
</tr>
<tr>
<td>Phone No.</td>
<td>111111111</td>
</tr>
<tr>
<td>Commodity Description</td>
<td>Infectious substance affecting humans</td>
</tr>
<tr>
<td>Weight</td>
<td>50ml</td>
</tr>
<tr>
<td>Quantity</td>
<td>.02</td>
</tr>
<tr>
<td>Unit Value</td>
<td>$1</td>
</tr>
</tbody>
</table>

**MARKS & NUMBERS**

<table>
<thead>
<tr>
<th>MARKS &amp; NUMBERS</th>
<th>NUMBER OF PACKAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMPLETER DESCRIPTION OF GOODS</td>
<td>WEIGHT</td>
</tr>
<tr>
<td>1</td>
<td>Infectious substance affecting humans</td>
</tr>
</tbody>
</table>

**SPECIAL HANDLING**

- [ ] Saturday delivery
- [ ] Saturday Pick-Up
- [ ] Dangerous goods as per attached Shippers Declaration

**COUNTRY**

Canada

**STATE/PROVINCE**

Quebec

**ZIP/Postal Code**

G1V4G2

**SHIPPING**

- [ ] Bill Sender. Account Number Received
- [ ] Bill Recipient. (Enter Account Number Below)
- [ ] Bill 3rd Party. (Enter Account Number Below)

**SIGNATURE**

Joe Researcher

**DATE**

3/15/2012
Shipping Label Examples
Please see shipping labels on the following pages. These labels are for reference only and not appropriate to print and use from this document. Please see the EHRS Dangerous Goods Shipping website for links to printable labels.

FAA/DOT Infectious Substance
Please see the EHRS website links below for the FAA/DOT Infectious Substance shipping label.
Dry Ice
Please see the EHRS website links below for the Dry Ice shipping label.
UN 3373

UN3373

Biological Substance
Category B
Exempt Human/Animal Specimen

Exempt Human Specimen

Exempt Animal Specimen
This End Up
OVERPACK

OVERPACK

OVERPACK

OVERPACK

OVERPACK

OVERPACK

OVERPACK

OVERPACK
## OHSU Dangerous Goods Shipping Supply Vendors

<table>
<thead>
<tr>
<th>Supplier</th>
<th>Address</th>
<th>Contact Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>All-Pak, Inc.</td>
<td>1195 Washington Pike, Bridgeville, PA 15017</td>
<td>800 245 2283, 412 257 3001, <a href="http://www.all-pak.com">http://www.all-pak.com</a></td>
</tr>
<tr>
<td>CARGOpak Corp.</td>
<td>3215-A Wellington Court, Raleigh, NC 27615</td>
<td>800 266 0652, <a href="http://www.cagopak.com">http://www.cagopak.com</a></td>
</tr>
<tr>
<td>Custom Pak Inc.</td>
<td>443 Creamery Way, Exton, PA 19341</td>
<td>800 722 7005, <a href="http://www.cpispecimen.com">http://www.cpispecimen.com</a></td>
</tr>
<tr>
<td>Corporate One West</td>
<td>3215-A Wellington Court, Raleigh, NC 27615</td>
<td>800 266 0652, <a href="http://www.cagopak.com">http://www.cagopak.com</a></td>
</tr>
<tr>
<td>1195 Washington Pike, Bridgeville, PA 15017</td>
<td>800 245 2283, 412 257 3001, <a href="http://www.all-pak.com">http://www.all-pak.com</a></td>
<td></td>
</tr>
<tr>
<td>3215-A Wellington Court, Raleigh, NC 27615</td>
<td>800 266 0652, <a href="http://www.cagopak.com">http://www.cagopak.com</a></td>
<td></td>
</tr>
<tr>
<td>Custom Pak Inc.</td>
<td>443 Creamery Way, Exton, PA 19341</td>
<td>800 722 7005, <a href="http://www.cpispecimen.com">http://www.cpispecimen.com</a></td>
</tr>
<tr>
<td>Corporate One West</td>
<td>3215-A Wellington Court, Raleigh, NC 27615</td>
<td>800 266 0652, <a href="http://www.cagopak.com">http://www.cagopak.com</a></td>
</tr>
<tr>
<td>1195 Washington Pike, Bridgeville, PA 15017</td>
<td>800 245 2283, 412 257 3001, <a href="http://www.all-pak.com">http://www.all-pak.com</a></td>
<td></td>
</tr>
<tr>
<td>3215-A Wellington Court, Raleigh, NC 27615</td>
<td>800 266 0652, <a href="http://www.cagopak.com">http://www.cagopak.com</a></td>
<td></td>
</tr>
<tr>
<td>Custom Pak Inc.</td>
<td>443 Creamery Way, Exton, PA 19341</td>
<td>800 722 7005, <a href="http://www.cpispecimen.com">http://www.cpispecimen.com</a></td>
</tr>
<tr>
<td>Corporate One West</td>
<td>3215-A Wellington Court, Raleigh, NC 27615</td>
<td>800 266 0652, <a href="http://www.cagopak.com">http://www.cagopak.com</a></td>
</tr>
<tr>
<td>1195 Washington Pike, Bridgeville, PA 15017</td>
<td>800 245 2283, 412 257 3001, <a href="http://www.all-pak.com">http://www.all-pak.com</a></td>
<td></td>
</tr>
<tr>
<td>3215-A Wellington Court, Raleigh, NC 27615</td>
<td>800 266 0652, <a href="http://www.cagopak.com">http://www.cagopak.com</a></td>
<td></td>
</tr>
<tr>
<td>Custom Pak Inc.</td>
<td>443 Creamery Way, Exton, PA 19341</td>
<td>800 722 7005, <a href="http://www.cpispecimen.com">http://www.cpispecimen.com</a></td>
</tr>
<tr>
<td>Corporate One West</td>
<td>3215-A Wellington Court, Raleigh, NC 27615</td>
<td>800 266 0652, <a href="http://www.cagopak.com">http://www.cagopak.com</a></td>
</tr>
<tr>
<td>1195 Washington Pike, Bridgeville, PA 15017</td>
<td>800 245 2283, 412 257 3001, <a href="http://www.all-pak.com">http://www.all-pak.com</a></td>
<td></td>
</tr>
<tr>
<td>3215-A Wellington Court, Raleigh, NC 27615</td>
<td>800 266 0652, <a href="http://www.cagopak.com">http://www.cagopak.com</a></td>
<td></td>
</tr>
<tr>
<td>Custom Pak Inc.</td>
<td>443 Creamery Way, Exton, PA 19341</td>
<td>800 722 7005, <a href="http://www.cpispecimen.com">http://www.cpispecimen.com</a></td>
</tr>
<tr>
<td>Corporate One West</td>
<td>3215-A Wellington Court, Raleigh, NC 27615</td>
<td>800 266 0652, <a href="http://www.cagopak.com">http://www.cagopak.com</a></td>
</tr>
<tr>
<td>1195 Washington Pike, Bridgeville, PA 15017</td>
<td>800 245 2283, 412 257 3001, <a href="http://www.all-pak.com">http://www.all-pak.com</a></td>
<td></td>
</tr>
<tr>
<td>3215-A Wellington Court, Raleigh, NC 27615</td>
<td>800 266 0652, <a href="http://www.cagopak.com">http://www.cagopak.com</a></td>
<td></td>
</tr>
<tr>
<td>Custom Pak Inc.</td>
<td>443 Creamery Way, Exton, PA 19341</td>
<td>800 722 7005, <a href="http://www.cpispecimen.com">http://www.cpispecimen.com</a></td>
</tr>
<tr>
<td>Corporate One West</td>
<td>3215-A Wellington Court, Raleigh, NC 27615</td>
<td>800 266 0652, <a href="http://www.cagopak.com">http://www.cagopak.com</a></td>
</tr>
<tr>
<td>1195 Washington Pike, Bridgeville, PA 15017</td>
<td>800 245 2283, 412 257 3001, <a href="http://www.all-pak.com">http://www.all-pak.com</a></td>
<td></td>
</tr>
<tr>
<td>3215-A Wellington Court, Raleigh, NC 27615</td>
<td>800 266 0652, <a href="http://www.cagopak.com">http://www.cagopak.com</a></td>
<td></td>
</tr>
<tr>
<td>Custom Pak Inc.</td>
<td>443 Creamery Way, Exton, PA 19341</td>
<td>800 722 7005, <a href="http://www.cpispecimen.com">http://www.cpispecimen.com</a></td>
</tr>
<tr>
<td>Corporate One West</td>
<td>3215-A Wellington Court, Raleigh, NC 27615</td>
<td>800 266 0652, <a href="http://www.cagopak.com">http://www.cagopak.com</a></td>
</tr>
<tr>
<td>1195 Washington Pike, Bridgeville, PA 15017</td>
<td>800 245 2283, 412 257 3001, <a href="http://www.all-pak.com">http://www.all-pak.com</a></td>
<td></td>
</tr>
<tr>
<td>3215-A Wellington Court, Raleigh, NC 27615</td>
<td>800 266 0652, <a href="http://www.cagopak.com">http://www.cagopak.com</a></td>
<td></td>
</tr>
<tr>
<td>Custom Pak Inc.</td>
<td>443 Creamery Way, Exton, PA 19341</td>
<td>800 722 7005, <a href="http://www.cpispecimen.com">http://www.cpispecimen.com</a></td>
</tr>
<tr>
<td>Corporate One West</td>
<td>3215-A Wellington Court, Raleigh, NC 27615</td>
<td>800 266 0652, <a href="http://www.cagopak.com">http://www.cagopak.com</a></td>
</tr>
<tr>
<td>1195 Washington Pike, Bridgeville, PA 15017</td>
<td>800 245 2283, 412 257 3001, <a href="http://www.all-pak.com">http://www.all-pak.com</a></td>
<td></td>
</tr>
<tr>
<td>3215-A Wellington Court, Raleigh, NC 27615</td>
<td>800 266 0652, <a href="http://www.cagopak.com">http://www.cagopak.com</a></td>
<td></td>
</tr>
<tr>
<td>Custom Pak Inc.</td>
<td>443 Creamery Way, Exton, PA 19341</td>
<td>800 722 7005, <a href="http://www.cpispecimen.com">http://www.cpispecimen.com</a></td>
</tr>
<tr>
<td>Corporate One West</td>
<td>3215-A Wellington Court, Raleigh, NC 27615</td>
<td>800 266 0652, <a href="http://www.cagopak.com">http://www.cagopak.com</a></td>
</tr>
<tr>
<td>1195 Washington Pike, Bridgeville, PA 15017</td>
<td>800 245 2283, 412 257 3001, <a href="http://www.all-pak.com">http://www.all-pak.com</a></td>
<td></td>
</tr>
<tr>
<td>3215-A Wellington Court, Raleigh, NC 27615</td>
<td>800 266 0652, <a href="http://www.cagopak.com">http://www.cagopak.com</a></td>
<td></td>
</tr>
<tr>
<td>Custom Pak Inc.</td>
<td>443 Creamery Way, Exton, PA 19341</td>
<td>800 722 7005, <a href="http://www.cpispecimen.com">http://www.cpispecimen.com</a></td>
</tr>
<tr>
<td>Corporate One West</td>
<td>3215-A Wellington Court, Raleigh, NC 27615</td>
<td>800 266 0652, <a href="http://www.cagopak.com">http://www.cagopak.com</a></td>
</tr>
<tr>
<td>1195 Washington Pike, Bridgeville, PA 15017</td>
<td>800 245 2283, 412 257 3001, <a href="http://www.all-pak.com">http://www.all-pak.com</a></td>
<td></td>
</tr>
<tr>
<td>3215-A Wellington Court, Raleigh, NC 27615</td>
<td>800 266 0652, <a href="http://www.cagopak.com">http://www.cagopak.com</a></td>
<td></td>
</tr>
<tr>
<td>Custom Pak Inc.</td>
<td>443 Creamery Way, Exton, PA 19341</td>
<td>800 722 7005, <a href="http://www.cpispecimen.com">http://www.cpispecimen.com</a></td>
</tr>
<tr>
<td>Corporate One West</td>
<td>3215-A Wellington Court, Raleigh, NC 27615</td>
<td>800 266 0652, <a href="http://www.cagopak.com">http://www.cagopak.com</a></td>
</tr>
<tr>
<td>1195 Washington Pike, Bridgeville, PA 15017</td>
<td>800 245 2283, 412 257 3001, <a href="http://www.all-pak.com">http://www.all-pak.com</a></td>
<td></td>
</tr>
</tbody>
</table>