Transportation of Infectious Substances

April 2020
This material is meant as a guide to certain parts of the Transportation of Dangerous Goods Regulations and is not meant to be a substitute for them. It is the responsibility of handlers, offerers and transporters of dangerous goods to consult the Regulations for the exact requirements. Alberta EDGE (Environmental and Dangerous Goods Emergencies) of Alberta Transportation can provide accurate information regarding the Regulations 24 hours a day.

Alberta EDGE (Environmental and Dangerous Goods Emergencies)

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These telephone lines are recorded to assist in responding to the emergency (natural/manmade) and/or inquiry regarding dangerous goods and to ensure that the information is accurate. Direct any questions regarding the recording to the Regulatory Compliance Officer responding to your call or contact the Manager of Alberta EDGE at 780-427-8660. Legal Authority: Dangerous Goods Transportation and Handling Act, Section 13(1).
OVERVIEW

Introduction

It is estimated that only 10% of the 100 million medical laboratory specimens transported annually in Canada are infectious. Health care professionals in medical or research laboratories and in clinics must deal with these specimens in a safe manner yet the transportation of these items must not be made too difficult or expensive.

Transportation of Dangerous Goods (TDG) Regulations classifies Infectious Substances into two categories: **Category A** or **Category B**.

For clarification, the criteria for classifying micro-organisms into four Risk Groups is normally used in microbiology laboratories and medical facilities and was originally developed by the World Health Organization. The criteria is based on the risks that micro-organisms pose in the laboratory environment and do not appropriately reflect the lesser risks they pose in transport. The risk group criteria is designed to establish containment levels for specimens in a laboratory that would protect employees who directly handle and manipulate specimens.

**Universal Precautions**

The health care profession is taught to handle all samples and specimens as though they were hazardous when only a small fraction of them are infectious. The TDG Regulations do not dispute this universal precaution - it is a workplace policy. Many specimens, however, are not considered dangerous by the TDG Regulations and therefore are not handled in the same way as regulated specimens. Health care professionals should review their current practices when preparing a specimen or culture for shipment.
CLASSIFICATION (PART 2)

What Is an Infectious Substance?

The TDG Regulations define an infectious substance as a substance known or reasonably believed to contain viable micro-organisms such as bacteria, viruses, rickettsia, parasites, fungi and other agents such as prions that are known or reasonably believed to cause disease in humans or animals and that are listed in Appendix 3 to Part 2 (Classification) or that exhibit characteristics similar to a substance listed in Appendix 3 [Section 1.4]. The table is NOT an exhaustive or complete list and is provided for guidance to those who must classify infectious substances. If a substance is not listed in Appendix 3, it is still considered an infectious substance when it meets the definition AND exhibits characteristics similar to an infectious substance on the list.

The “substance” might be blood, tissue, organs, bodily fluids or cultures that contain pathogenic micro-organisms. The numbers and types of disease causing microorganisms is well known to medical researchers.

How infectious is this specimen?

Infectious substances are divided into two categories according to the degree of hazard: Category A and Category B. Section 1.4 of the TDG Regulations defines the categories:

- **Category A** means an infectious substance that is transported in a form such that, when it is released outside of its means of containment and there is physical contact with humans or animals, it is capable of causing permanent disability or life-threatening or fatal disease to humans or animals. Category A infectious substances are transported in a form that poses the highest risk of infection during transportation. Category A consists of Virus and Bacteria listed in the first four Tables in Appendix 3 to Part 2 of the TDG Regulations.

- **Category B** means an infectious substance that does not meet the criteria for inclusion in Category A. Category B consists of Virus, Bacteria and Fungi listed in the last three tables in Appendix 3 to Part 2 of the TDG Regulations.

Category B infectious substances may be responsible for causing disease in human or animals, but the conditions in transport are such that the likelihood of contracting the disease upon exposure is extremely remote. Category B infectious substances present less risk because they are not easily transmissible and basic precautions and hygienic practices will serve to prevent infection in the event of an incident.

How do we classify Infectious Substances?

Infectious Substances are classified as **Class 6.2, Infectious Substances** dangerous goods in the TDG Regulations. Class 6.2 has two categories: **Category A and Category B**. The lists of Category A and Category B infectious organisms are in Appendix 3 in Part 2 (Classification) of the TDG Regulations. The lists however, are not exhaustive or complete and are used only to provide guidance for classification of pathogens. Agents that exhibit
characteristics similar to a substance in the lists should also be included in the classification [Subsection 2.36(1)].

- Category A is identified by two UN numbers and shipping names, as appropriate:
  - UN2814, INFECTIONOUS SUBSTANCE, AFFECTING HUMANS; and
  - UN2900, INFECTIONOUS SUBSTANCE, AFFECTING ANIMALS only.
- Category B is identified by one UN number and shipping name:
  - UN3373, BIOLOGICAL SUBSTANCE, CATEGORY B.

Any substance known or believed to contain infectious substances, which meets the criteria of Category A or Category B is regulated under the TDG Regulations and must be classified as:

- UN2814, INFECTIONOUS SUBSTANCE, AFFECTING HUMANS, Class 6.2;
- UN2900, INFECTIONOUS SUBSTANCE, AFFECTING ANIMALS only, Class 6.2;
- UN3373, BIOLOGICAL SUBSTANCE, CATEGORY B, Class 6.2; or
- UN3291, CLINICAL WASTE, UNSPECIFIED, N.O.S., (BIO) MEDICAL WASTE, N.O.S., or REGULATED MEDICAL WASTE, N.O.S., Class 6.2, Packing Group II.

Class 6.2, Infectious Substances, are not assigned packing groups but are included in either Category A or Category B. The exception is UN3291, which is not included in Category A or B. Instead, it is assigned Packing Group II.

Class 6.2, Infectious substances can be either transported as cultures or contained in patient specimens. The risk of infection is higher in cultures due to the high concentration of infectious substances as opposed to patient specimens. Generally, infectious substances in the form of cultures must be transported as Category A. Infectious substances that are included in Category A and that are in a form other than a culture may be handled, offered for transport or transported as Category B in accordance with the conditions set out in paragraphs 1.39(a) to (c) of Part 1 (Coming into Force, Repeal, Interpretation, General Provisions and Special Cases) of the TDG Regulations. Thus, infectious substances contained in patient specimens may be transported as Category B [Subsection 2.36(2)].

Regardless of form, due to its pathogenicity, some infectious substances must always be shipped as Category A. The following 19 infectious substances included in Category A, and any substance that exhibits characteristics similar to these substances, must always be handled, offered for transport or transported as **UN2814, INFECTIONOUS SUBSTANCE, AFFECTING HUMANS, Class 6.2, Category A**:

- Crimean-Congo Hemorrhagic fever virus;
- Ebola virus;
- Flexal virus;
- Guanarito virus;
- Hantaviruses causing hemorrhagic fever with renal syndrome;
- Hantaviruses causing pulmonary syndrome;
- Hendra virus;
- Herpes B virus (Cercopithecine Herpesvirus-1);
- Junin virus;
- Kyasanur Forest virus;
- Lassa virus;
- 6 -

- Machupo virus;
- Marburg virus;
- Monkeypox virus;
- Nipah virus;
- Omsk hemorrhagic fever virus;
- Russian Spring – Summer encephalitis virus;
- Sabia virus; and
- Variola (smallpox virus) [Subsection 2.36(3)].

**Who is responsible for classifying Infectious Substances?**

The consignor is responsible for determining the classification of dangerous goods. In the case of infectious substances, this activity is normally done by, or in consultation with, a doctor, scientist, veterinarian, epidemiologist, genetic engineer, microbiologist, pathologist, nurse, coroner or laboratory technologist or technician [Section 2.2].

Assistance for classifying infectious substances may be obtained from:

- **Director, Office of Laboratory Security – Public Health Agency of Canada (PHAC):** Administers regulations that apply to laboratory safety and the importance of human pathogens in Canada
  
  - Phone: (613) 957-1779
  - Email: PHAC.pathogens.pathogenes.ASPC@canada.ca

- **Director, Biohazard Containment and Safety – Canadian Food Inspection Agency (CFIA):** Regulates animal pathogens
  
  - Phone: (613) 773-5327
  - Email: biocon@inspection.gc.ca

You may also obtain assistance by calling **Alberta Transportation, Dangerous Goods** at 1-800-272-9600 (toll free within Alberta) or at (780) 422-9600.

The consignor may use a classification determined by the PHAC or the CFIA [Subsection 2.2(3.1)].

**Medical or Clinical Waste?**

Medical or clinical wastes include sharps, soiled linen, etc., which are derived from the medical treatment of animals or humans or from bioresearch. Dangerous goods that are medical or clinical waste must be classified as:

- **UN2814, INFECTIOUS SUBSTANCE, AFFECTING HUMANS, Class 6.2 if:**
  
  - The medical or clinical wastes contain Category A infectious substances;

- **UN2900, INFECTIOUS SUBSTANCE, AFFECTING ANIMALS only, Class 6.2 if:**
  
  - The medical or clinical wastes contain Category A infectious substances;

- **UN3291, CLINICAL WASTE, UNSPECIFIED, N.O.S., Class 6.2, Packing Group II, or (BIO) MEDICAL WASTE, N.O.S., Class 6.2, Packing Group II, or REGULATED MEDICAL WASTE, N.O.S., Class 6.2, Packing Group II if:**
  
  - The medical or clinical wastes contain Category B infectious substances, or
  - The shipper has reasonable grounds to believe that they have a low probability of containing infectious substances [Section 2.36.1].
The TDG Regulations, except for Part 1 (Coming Into Force, Repeal, Interpretation, General Provisions and Special Cases) and Part 2 (Classification), do not apply to decontaminated medical or clinical wastes that previously contained infectious substances, unless the decontaminated medical or clinical wastes meet the criteria for inclusion in another class [Special Provision 128].

**Are Routine Blood Samples considered Infectious Substances?**

A routine blood test sample may or may not be an "Infectious Substance" according to the TDG Regulations. If the healthcare professional has reason to believe that the sample contains an infectious micro-organism in Category A or B, it must be declared on the shipping document as:

- UN2814, INFECTIOUS SUBSTANCE, AFFECTING HUMANS, Class 6.2, Category A, or
- UN3373, BIOLOGICAL SUBSTANCE, CATEGORY B, Class 6.2, Category B.

The above decision is made, not according to statistical probability, but a real belief that a particular sample has an infectious micro-organism in it. The term “reason to believe,” means that there is sufficient belief to suggest that the routine blood sample contains infectious substances included in Category A or Category B. This is a professional judgement that the healthcare professional must make according to factors such as medical history, symptoms and so on, in order to determine if the sample is regulated as an infectious substance. For example, organizations that transport blood bags and tubes from blood donor clinics to laboratories should not automatically have a “reason to believe” that the blood collected contains infectious substances.

An important point to remember is that there is no violation of doctor/patient confidentiality by declaring the specimen an “Infectious Substance” on the shipping document, or on the requisition form to the laboratory, since there are many organisms under the Infectious Substance category. The TDG Regulations do not require the patient's name or any personal reference to be included when shipping infectious substances. Laboratory personnel are instructed to keep such information confidential as well.

The following examples are intended to help clarify the situation. For additional information, please refer to the EXEMPTIONS section of this publication.

**A. The following specimens are not regulated as infectious substances:**

Routine blood sample taken from persons who, the medical professional has no reason to believe have been in contact with an infectious disease caused by one of the organisms listed in Appendix 3 of Part 2 (Classification) of the TDG Regulations, are exempt under the "Human or Animal Specimens Believed Not to Contain Infectious Substances Exemption" [Section 1.42]. In order to use the exemption, the specimens must be contained in a means of containment that is marked with the words “Exempt Human Specimen” and that is designed, constructed, filled, closed, secured and maintained so that under normal conditions of transport, including handling, there will be no release of the specimens. These are specimens taken for routine tests, such as a pregnancy test, blood chemistry test, blood cell count and deferential test.
An employer may wish to screen all new employees for infectious diseases. If testing for an infectious substance, but not for the diagnosis of an infectious disease, the specimens may be transported as an “Exempt Human Specimen” as per the “Human or Animal Specimens Believed Not to Contain Infectious Substances Exemption” as long as the medical professional has no reason to believe that the employees have been in contact with an infectious substance [Section 1.42].

B. The following specimens are all regulated as Class 6.2, Infectious Substances, under the TDG Regulations:

A patient is **known** to have an infectious disease and is being tested for something else. This second test may be for an organism listed in Appendix 3 of Part 2 (Classification) of the TDG Regulations or it could be a chemistry test, for diabetes, as an example. If there is reason to believe that the specimen being submitted contains an infectious substance in it, the person shipping it declares it as

- UN2814, INFECTIOUS SUBSTANCE, AFFECTING HUMANS, Class 6.2, Category A, or
- UN3373, BIOLOGICAL SUBSTANCE, CATEGORY B, Class 6.2, Category B.

A specimen is taken to check for a suspected disease. It is **not known** if the patient has the disease, but the probability warrants asking for the test. This is based on the medical professional's experience as a diagnostician and their judgment after examining the patient. The sample should be sent as

- UN2814, INFECTIOUS SUBSTANCE, AFFECTING HUMANS, Class 6.2, Category A, or
- UN3373, BIOLOGICAL SUBSTANCE, CATEGORY B, Class 6.2, Category B.

The below table is a guide for classification of infectious substances contained in patient specimens.

<table>
<thead>
<tr>
<th>Classification of Human or Animal Specimens</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Patient Specimen Condition</strong></td>
</tr>
<tr>
<td>Classification</td>
</tr>
</tbody>
</table>
Biological Products?

Biological products are derived from living organisms, such as virus, therapeutic serum, blood, blood derivative, or vaccines applicable to the prevention, treatment, or cure of a disease or condition of human or animals.

A biological product known or reasonably believed to contain a pathogen that meets the definition of Category A or Category B infectious substances must, as appropriate, be assigned to:

- UN2814, INFECTIOUS SUBSTANCE, AFFECTING HUMANS, Class 6.2;
- UN2900, INFECTIOUS SUBSTANCE, AFFECTING ANIMALS only, Class 6.2; or
- UN3373, BIOLOGICAL SUBSTANCE, CATEGORY B, Class 6.2.
A shipping document must be prepared if you are shipping Category A Infectious Substances (UN2814 or UN2900). The biological/technical name of the infectious substance is not required to be included on the shipping document.

However, a shipping document is not required if you are shipping Category B Infectious Substances (UN3373) [Section 1.39]. Please be reminded that certain Category A Infectious Substances can be shipped as Category B Infectious Substances if NOT in culture form [Subsection 2.36(2)]. This does not include the specific infectious substances included in Category A, and any substance that exhibits characteristics similar to these substances, which must always be handled, offered for transport or transported as Category A Infectious Substances [Subsection 2.36(3)].

It is the responsibility of the consignor to prepare a proper shipping document when offering dangerous goods for transport [Subsection 3.1(1)]. The document is similar to a standard bill of lading but must contain specific information needed to describe the dangerous goods. According to the definition of shipping document in Section 1.4 of the TDG Regulations, a shipping document must be in paper format; electronic format is not acceptable. The shipping document is given to the initial carrier and must accompany the dangerous goods consignment throughout its journey [Sections 3.1 and 3.2]. If the carrier agrees, the consignor can give that initial carrier an electronic copy of the shipping document [Subsection 3.1(1)]. A carrier who accepts an electronic copy of a shipping document must produce a paper copy of the shipping document [Subsection 3.2(2)]. The consignor shall keep a copy of the shipping document for a period of two years after the date the shipping document was prepared or given to a carrier [Subsection 3.11(1)(a)]. Each carrier who transported the dangerous goods must keep a copy of the shipping document for two years after the date the dangerous goods are no longer in transport [Subsection 3.11(2)(a)].

The following is the minimum required information, which must appear on a shipping document:

<table>
<thead>
<tr>
<th>Shipping Document Information</th>
<th>When Required</th>
<th>Where in The Regulations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name and address of consignor</td>
<td>Always</td>
<td>3.5(1)(a)</td>
</tr>
<tr>
<td>Date</td>
<td>Always</td>
<td>3.5(1)(b)</td>
</tr>
<tr>
<td>Description of goods in the following order</td>
<td></td>
<td>3.5(1)(c)</td>
</tr>
<tr>
<td>a. UN number</td>
<td>Always</td>
<td>3.5(1)(c)(i)</td>
</tr>
<tr>
<td>b. Shipping name</td>
<td>Always</td>
<td>3.5(1)(c)(ii)</td>
</tr>
<tr>
<td>c. The technical name of at least one of the most</td>
<td>Special Provision 16 of</td>
<td>3.5(1)(c)(ii)(A)</td>
</tr>
<tr>
<td>dangerous substances that contributes to the hazard(s)</td>
<td>Schedule 2 applies</td>
<td></td>
</tr>
<tr>
<td>d. The words &quot;Not Odourized&quot;</td>
<td>For liquefied petroleum gas that has not been odourized</td>
<td>3.5(1)(c)(ii)(B)</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>------------------------------------------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>e. Primary classification</td>
<td>Always</td>
<td>3.5(1)(c)(iii)</td>
</tr>
<tr>
<td>f. Compatibility group</td>
<td>For Class 1</td>
<td>3.5(1)(c)(iv)</td>
</tr>
<tr>
<td>g. Subsidiary classifications</td>
<td>Dangerous goods meet criteria for inclusion in more than one class</td>
<td></td>
</tr>
<tr>
<td>h. Packing group in Roman numerals</td>
<td>Classes 1, 3, 4, 5, 6.1, 8 and 9</td>
<td>3.5(1)(c)(vi)</td>
</tr>
<tr>
<td>i. The words “toxic by inhalation” or “toxic – inhalation hazard”</td>
<td>Special Provision 23 of Schedule 2 applies</td>
<td></td>
</tr>
<tr>
<td>The quantity in the International System of Units (SI) for each shipping name(^1,2)</td>
<td>Classes 2, 3, 4, 5, 6, 7, 8, and 9</td>
<td>3.5(1)(d)</td>
</tr>
<tr>
<td>Number of articles or NEQ</td>
<td>Class 1</td>
<td>3.5(1)(d)</td>
</tr>
<tr>
<td></td>
<td>Subject to Special Provision 85 and 86</td>
<td>3.5(1)(d)</td>
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<tr>
<td></td>
<td>One or more small means of containment requiring a label</td>
<td>3.5(1)(e)</td>
</tr>
<tr>
<td></td>
<td>Always</td>
<td>3.5(1)(f)</td>
</tr>
<tr>
<td></td>
<td>Means of containment fumigated with dangerous goods and in transport</td>
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<tr>
<td></td>
<td>Always except for a large means of containment that contains a residue</td>
<td>3.6.1</td>
</tr>
<tr>
<td></td>
<td>Quantity/concentration requiring an ERAP</td>
<td>3.6(1)</td>
</tr>
<tr>
<td></td>
<td>Classes 4.1 and</td>
<td>3.6(3)(b),</td>
</tr>
</tbody>
</table>
Notes:

1. If the means of containment contains a residue, the words “Residue – Last Contained” may be added before or after the description of the dangerous goods instead of the quantity of the dangerous goods. The TDG Regulations define residue as “dangerous goods remaining in a means of containment after its contents have been emptied to the maximum extent feasible and before the means of containment is either refilled or cleaned of dangerous goods and purged to remove any vapours.” The words “Residue – Last Contained” must not be used for dangerous goods included in Class 2, Gases, that are in a small means of containment or for dangerous goods included in Class 7, Radioactive Materials [Subsection 3.5(4)].

2. Multiple Deliveries: If the quantity of dangerous goods required on a shipping document or the number of small means of containment changes during transport, the carrier must show the changes on the shipping document or on a document attached to the shipping document [Subsection 3.5(5)]. How the carrier shows the change in quantity is the carrier’s choice. The carrier can change the number used to express quantity or the carrier may mark on the shipping document, or on a document attached to the shipping document, the additions or the subtractions from the number to express quantity. The quantity of dangerous goods is expressed in kilograms for solids, in liters for liquids and in kilograms or litres for gases. It may also be expressed as a number of items.

3. The telephone number of someone who is not the consignor, such as CANUTEC (Canadian Transport Emergency Centre), but who is competent to give the technical information about the dangerous goods in transport, may be used instead. To use CANUTEC’s telephone number, the consignor must receive permission, in writing, from CANUTEC. A consignor who uses the telephone number of an organization or agency other than CANUTEC must ensure that the organization or agency has current, accurate information on the dangerous goods the consignor offers for transport and, if the organization or agency is located outside Canada, the telephone number must include the country code and, if required, the city code [Subsection 3.5(2)].

4. Consignor’s Certification: “I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, are properly classified and packaged, have dangerous goods safety marks affixed or displayed on them, and are in all respects in proper condition for transport according to the Transportation of Dangerous Goods Regulations.” [Section 3.6.1].

5. Class 7, Radioactive Materials, have special documentation requirements. Additional requirements can be found in the “Packaging and Transport of Nuclear Substances Regulation”. Contact the Canadian Nuclear Safety Commission for more details. Dangerous goods shipped by air must be documented in a prescribed form known as the "Shipper’s Declaration for Dangerous Goods" [Section 12.2].
Infectious substances shipped by air must be documented in a prescribed form known as "Shipper’s Declaration for Dangerous Goods". For details on alternate and additional documentation requirements, consult Part 3 (Documentation) of the TDG Regulations or call Alberta Transportation, Dangerous Goods at 1-800-272-9600 (toll free within Alberta) or at (780) 422-9600.
# Dangerous Goods Shipping Document for Road Transport on Canadian Shipments

<table>
<thead>
<tr>
<th>CONSIGNOR</th>
<th>DESTINATION (City-Town)</th>
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<tbody>
<tr>
<td>Name:</td>
<td>Name:</td>
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<tr>
<td>Address:</td>
<td>Address:</td>
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</table>

<table>
<thead>
<tr>
<th>Name of Carrier</th>
<th>Prepaid</th>
<th>Collect</th>
<th>Transport Unit Number</th>
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<tbody>
<tr>
<td></td>
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<table>
<thead>
<tr>
<th>Point of Origin</th>
<th>Shipping Date</th>
<th>Shipper’s No.</th>
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<tbody>
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</table>

## REGULATED DANGEROUS GOODS

<table>
<thead>
<tr>
<th>UN Number</th>
<th>Shipping Name</th>
<th>Primary Class</th>
<th>Subsidiary Class</th>
<th>Packing Group</th>
<th>Quantity</th>
<th>Packages Requiring Labels</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>

24-Hour Number: ___________________

ERAP Reference ___________________ and Telephone Number ___________________

## Consignor’s Certification

I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, are properly classified and packaged, have dangerous goods safety marks properly affixed or displayed on them, and are in all respects in proper condition for transport according to the Transportation of Dangerous Goods Regulations.

Name of Consignor: ___________________

Special Instructions

## NON-REGULATED GOODS

<table>
<thead>
<tr>
<th>Packages</th>
<th>Description of Articles</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Received in apparent good order

Consignee’s Signature | Shipper’s Signature

Received in Apparent Good Order

Driver’s Signature | Driver’s No.

Please note that this sample shipping document contains some information that is not required in the TDG Regulations. The additional information reflects current industry practices.
TRAINING (PART 6)

Anyone who handles, offers for transport or transports dangerous goods must be adequately trained and have a valid TDG training certificate or must perform those activities in the presence and under the direct supervision of an adequately trained person who holds a TDG training certificate [Subsection 6.1(1)].

A person is adequately trained if the person has sound knowledge of the topics listed below that relate directly to the person’s duties and dangerous goods the person is handling, offering for transport or transporting:

- The classification criteria and test methods in Part 2 (Classification);
- Shipping names;
- The use of Schedules 1, 2 and 3;
- The shipping document and train consist requirements in Part 3 (Documentation);
- The dangerous goods safety marks requirements in Part 4 (Dangerous Goods Safety Marks);
- The certification safety marks requirements, safety requirements and safety standards in Part 5 (Means of Containment);
- The ERAP requirements in Part 7 (Emergency Response Assistance Plan);
- The report requirements in Part 8 (Reporting Requirements);
- Safe handling and transportation practices for dangerous goods, including the characteristics of the dangerous goods;
- The proper use of any equipment used to handle or transport the dangerous goods;
- The reasonable emergency measures the person must take to reduce or eliminate any danger to public safety that results or may reasonably be expected to result from an accidental release of the dangerous goods
- For air transport, the aspects of training set out in Chapter 4, Training, of Part 1, General of the ICAO Technical Instructions for the persons named in that Chapter and the requirements in Part 12 (Air) of the TDG Regulations; and
- For marine transport, the requirements of the IMDG Code and the requirements of Part 11 (Marine) of the TDG Regulations [Section 6.2].

An employer who has reasonable grounds to believe than an employee has adequate TDG training and will perform duties to which the TDG training relates must issue a TDG training certificate to that employee. The TDG training certificate may be in paper or electronic format. A TDG training certificate must include the following information:

- The name and address of the place of business of the employer;
- The employee’s name;
- The date the training certificate expires, preceded by the words "Expires on"; and
- The aspects of handling, offering for transport or transporting dangerous goods for which the employee is trained, including the specific topics set out in Section 6.2, Adequate Training, of the TDG Regulations [Subsection 6.3(1)].

The training certificate must be signed by the employee and by the current employer or an employee acting on the employer’s behalf [Subsection 6.3(3)(a)].
A self-employed person who has reasonable grounds to believe that they are adequately trained and will perform duties to which the TDG training relates must issue to themselves a TDG training certificate [Subsection 6.3(2)]. In case of a self-employed person, the TDG training certificate must be signed by that person [Subsection 6.3(3)(b)].

The TDG training certificate does not have a standard format. However, the certificate must include all the information required by Section 6.3, Issuance and Contents of a Training Certificate, of the TDG Regulations.

For transport by road vehicle, the TDG training certificate expires 36 months after its date of issuance [Subsection 6.5(b)]. For transport by aircraft, the TDG training certificate expires 24 months after its date of issuance [Subsection 6.5(a)].

The employer or self-employed person must keep an electronic or paper copy of the TDG training certificate and a record of training or a statement of experience from the date the TDG training certificate is issued until two years after the date it expires [Section 6.6].

The TDG training certificate must be immediately presented to an inspector who requests it [Section 6.8].

Always assume training is required. The only time training is not required is when there is an exemption (i.e., Special Case) which exempts from Part 6 (Training) of the TDG Regulations. Most exemptions are found in Sections 1.15 to 1.50 in Part 1 (Coming Into Force, Repeal, Interpretation, General Provisions and Special Cases).
AN EXAMPLE OF A FORMAT FOR A TRAINING CERTIFICATE

CERTIFICATE OF TRAINING

Name of Employee

has completed training related to the handling/offering for transport/transporting of dangerous goods as indicated on the reverse. This training is in accordance with the requirements of the Transportation of Dangerous Goods Regulations

Name of Employer

Address

City

Province

Expires on: ____________ Date of Issue: ____________

Employer’s Signature

<table>
<thead>
<tr>
<th>Class and Division</th>
<th>Training Received</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classification</td>
<td>Classification</td>
</tr>
<tr>
<td></td>
<td>Shipping names</td>
</tr>
<tr>
<td></td>
<td>Use of Schedules 1, 2 and 3</td>
</tr>
<tr>
<td></td>
<td>Shipping document &amp; train consist</td>
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<tr>
<td></td>
<td>Dangerous Goods Safety Marks requirements</td>
</tr>
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<td></td>
<td>Certification safety marks requirements, safety requirements and safety standards</td>
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<td></td>
<td>ERAP requirements</td>
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<td></td>
<td>Release and anticipated release reporting requirements</td>
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<tr>
<td></td>
<td>Safe handling and transportation practices</td>
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<tr>
<td></td>
<td>Proper equipment use</td>
</tr>
<tr>
<td></td>
<td>Emergency action requirements</td>
</tr>
<tr>
<td></td>
<td>Air transport</td>
</tr>
<tr>
<td></td>
<td>Marine transport</td>
</tr>
</tbody>
</table>

Employee’s Signature
PACKAGING REQUIREMENTS (PART 5)

The key to efficient control and minimization of risk during transport of infectious substances lies in the use of appropriate packaging. Appropriate packaging provides the necessary and sufficient barriers to prevent leakage of the substance from the package. Triple packaging, required for both Category A and Category B substances, comprises of a leak-proof primary packaging which is packed in a leak-proof secondary packaging in such a way that it cannot break, be punctured or leak the contents into the secondary packaging. The leak-proof secondary packaging is secured in a strong outer packaging. Absorbent materials are placed between the primary packaging and the secondary packaging in a quantity sufficient to absorb the entire contents of the primary packaging. The use of triple packaging has over the years provided effective containment of infectious substances.

The packaging requirements for Category A and Category B infectious substances are listed in Section 5.16 in Part 5 (Means of Containment) of the TDG Regulations.

Packaging Standards for Transporting Infectious Substances

The TDG Regulations specify adequate packaging for the transportation of infectious substances. A means of containment containing dangerous goods included in Category A or Category B of Class 6.2, Infectious Substances must be designed, manufactured, marked, tested, selected and transported in compliance with CAN/CGSB-43.125, "Packaging of Category A and Category B Infectious Substances (Class 6.2) and Clinical, (Bio) Medical or Regulated Medical Waste", published by the Canadian General Standards Board (CGSB) [Subsection 5.16(1)]. This Standard specifies the requirements for packaging infectious substances in three types of packaging:

- **Type P620** packaging is a high integrity package intended to transport an infectious substance of Category A in a form of culture or infectious substance of Category A meeting the requirements of Subsection 2.36(3), Infectious Substances, in the TDG Regulations.
- **Type P650** packaging is for routine uses intended for transporting an infectious substance of Category B or an infectious substance of Category A that does not meet the Standard's requirements for transporting infectious substances in Type P620 packagings.
- **Standardized and non-standardized packagings** permitted in Part III of the Standard are for the disposal of clinical, (bio) medical or regulated waste.

**Type P620 Packaging**

A Type P620 packaging is the highest integrity packaging for transport of infectious substances. Type P620 packaging is defined as a means of containment that is in compliance with the requirements of the CGSB-43.125 Standard for Type P620 packaging or, if it is manufactured outside Canada, is in compliance with the requirements of Chapter 6.3 and Packing Instruction P620 of the UN Recommendations and the national regulations of the country of manufacture [Section 1.4].

Type P620 packaging is intended to transport an infectious substance of Category A in a form of culture or infectious substance of Category A meeting the requirements of
Subsection 2.36(3), Infectious Substances, in the TDG Regulations. However, this packaging can also be used to transport Category B infectious substances and clinical, (bio) medical or regulated waste.

The requirements for the design, testing and marking of Type P620 packaging is in the CAN/CGSB-43.125 Standard. Facilities that manufacture Type P620 packagings in Canada must be registered with Transport Canada and must have their design registered with Transport Canada.

A Type P620 packaging is a triple packaging system consisting of:

A. An inner packaging comprising of:
   I. Leak-proof primary receptacle(s);
   II. Leak-proof secondary packaging(s);

For liquid infectious substances, an absorbent material must be placed between the primary receptacle(s) and the secondary inner packaging and in sufficient quantity to absorb the entire contents of the primary receptacle(s).

B. A rigid UN standardized outer packaging of adequate strength for its capacity, mass and intended use of which the smallest external dimension is at least 100 mm. The outer packaging shall be selected from Table 1 – Packaging Codes, of the CAN/CGSB-43.125 Standard.

Primary receptacles intended for the transportation of substances consigned at ambient temperature or at a higher temperature must be made of glass, metal or plastic. A positive means of ensuring a leak-proof seal must be provided, e.g., heat seal, a skirted stopper or a metal crimp seal. If screw caps are used, they shall be secured by positive means, e.g., tape, paraffin sealing tape or manufactured locking closure.

If multiple fragile primary receptacles are placed in a secondary inner packaging, the primary receptacles shall be individually wrapped or otherwise separated to prevent contact between them.

Packaging intended to contain a refrigerant such as ice or dry ice shall have the refrigerant placed around the secondary inner packaging(s) or in an overpack. Interior supports must be provided to ensure that the secondary inner packaging(s) or outer packagings are secured in place after the refrigerant has dissipated. If ice is used, the outer packaging or overpack must be leak-proof. If dry ice is used, the outer packaging or overpack must permit the release of carbon dioxide gas. The primary receptacle(s) and secondary packaging(s) must maintain their integrity at the temperature of the refrigerant used. Substances consigned in liquid nitrogen must be transported in packaging that can withstand very low temperatures and that can retain its integrity at liquid nitrogen temperatures. Provisions for the consignment of liquid nitrogen must also be fulfilled. If liquid nitrogen is used, the outer packaging or overpack must permit the release of carbon dioxide gas.
Type P620 packaging must pass tests for internal pressure, drop resistance, impact resistance and quality assurance. The manufacture and testing of Type P620 packaging must be done by facilities registered with Transport Canada.

The marking required on the outer packaging of a Type P620 packaging is specified in Section 5.1, Marking on a Type P620 Packaging, of the CAN/CGSB-43.125 Standard. The outer packaging of a P620 packaging must have several durable and legible markings placed in a location and of such a size as to be readily visible, for example:

- The United Nations packaging symbol \( \text{UN} \);
- The packaging code designating the type of package in accordance with Table 1 in CAN/CGSB-43.125, for example:
  - 4G for fibreboard box, or
  - 4GU for special packaging which meets more stringent requirements, or
  - 4GW which is manufactured to a different specification than the CAN/CGSB-43.125 Standard but is equivalent to a packaging that conforms to the requirements of the Standard;
- The text “CLASS 6.2” means that the type of packaging is suitable for Class 6.2, Infectious Substances;
- The last two digits of the year of manufacture of the package (such as “17”);
- The three-letter country code of the country authorizing the allocation of the marking (the letters “CAN” for packages manufactured in Canada); and
- The name or symbol of the manufacturer (e.g., ABC) and other identification of the container as specified by the country authorizing the allocation of the mark – Transport Canada Design Registration Number (e.g., 8-9999).

### Example of a Type P620 Packaging

![Figure provided by IATA, Montreal, Canada (modified by the TDG Directorate)](image-url)

Classification: Public
Type P650 Packaging

Type P650 is suitable for routine shipments (e.g., biological products). Type P650 packaging is defined as a means of containment that is in compliance with the requirements of CGSB-43.125 for Type P650 packaging or, if it is manufactured outside Canada, is in compliance with the requirements for Packing Instruction P650 of the UN Recommendations and the national regulations of the country of manufacture [Section 1.4].

A Type P650 packaging is typically used for UN3373, BIOLOGICAL SUBSTANCE, CATEGORY B, Class 6.2, Category B, but it can also be used for certain Category A Infectious Substances that can be transported as Category B Infectious Substances if NOT in culture form [Subsection 2.36(2)]. However, a Type P650 packaging cannot be used for Category A Infectious Substances that are in the form of a culture, infectious substances included in Category A, and any substance that exhibits characteristics similar to these substances, which must always be handled, offered for transport or transported as Category A Infectious Substances [Subsection 2.36(3)].

The requirements for the design, testing and marking of Type P650 packaging is in the CAN/CGSB-43.125 Standard. Type P650 packagings are not required to be registered with Transport Canada. However, a Type P650 Packaging manufacturer must have and maintain a quality management system for each facility manufacturing the packagings in accordance with Section 9.2, Type P650 Packaging, of the CGSB-43.125 Standard.

A Type P650 packaging shall include a triple packaging system consisting of:

A. Inner packaging comprising of:
   I. Leak-proof or silt proof primary receptacle(s);
   II. Leak-proof or silt proof secondary packaging(s);

B. The rigid outer packaging with at least one surface having a minimum dimension of 100 mm x 100 mm.

The secondary packaging(s) or the outer packaging shall be rigid.

When transporting liquid infectious substances, an absorbent material must be placed between the primary receptacle(s) and the secondary packaging. The absorbent material shall 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.

When transporting solid infectious substances, 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, shall be used.
If multiple fragile primary receptacles are placed in a secondary inner packaging, the primary receptacles shall be individually wrapped or otherwise separated to prevent contact between them.

Packaging intended to contain a refrigerant such as ice shall have the refrigerant placed outside the secondary inner packaging(s) or in the outer packaging or an overpack. Interior supports must be provided to secure the secondary inner packaging(s) or outer packaging(s) in the original position after the refrigerant has dissipated. In the case of ice, the outer packaging or overpack shall be leak-proof. In the case of dry ice or liquid nitrogen, the outer packaging or overpack shall permit the release of gas.

Type P650 packaging must pass tests for internal pressure, drop resistance, impact resistance and quality assurance.

The marking required on the outer packaging of a Type P650 packaging is specified in Section 5.2, Marking on a Type P650 Packaging, of the CAN/CGSB-43.125 Standard. The outer packaging of a P650 packaging must have durable and legible markings placed in a location and of such a size as to be readily visible. The marking shall be displayed on the external surface of the outer packaging on a background of a contrasting colour. The marking shall be in the form of a square on a point with each side having a length of at least 50 mm; the width of the line shall be at least 2 mm and the letters and numbers shall be at least 6 mm high. The illustration below shows the marking for Type P650 packaging:

![UN3373](image)

The marking required on a Type P650 packaging is identical to the Category B Mark found in the Appendix to Part 4 (Dangerous Goods Safety Marks) of the TDG Regulations. Therefore, having an empty packaging with this mark displayed on it could be considered
misleading as it could indicate that a person is transporting UN3373, BIOLOGICAL SUBSTANCE, CATEGORY B. However, Special Provision 165 of the TDG Regulations allows the display of this marking on an empty Type P650 packaging.

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**Example of a Type P650 Packaging**

![Diagram of a Type P650 Packaging]

Figure provided by IATA, Montreal, Canada (modified by the TDG Directorate)

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**Standardized and Non-Standardized Packagings are Permitted in Part III of the CAN/CGSB-43.125 Standard to Transport Infectious Substances Intended for Disposal of Clinical, (Bio) Medical or Regulated Medical Waste**

There are various types of standardized and non-standardized packagings permitted in Part III of the CAN/CGSB-43.125 Standard for the transport of infectious substances of Category A and Category B intended for disposal and clinical, (bio) medical or regulated waste, as follows:
UN Standardized Small Containers
- UN standardized small containers must be a drum, jerrican, box, or composite packaging for liquids or solids as listed in Table 3 – Selected Packaging Codes for UN Standardized Small Containers, of the CAN/CGSB-43.125 Standard, and must meet a Packing Group I or II performance level. The container must be leak-proof. If the container is not leak-proof, a plastic bag with Elmendorf tear and Dart impact strengths, as specified in Table 5 – Plastic Bag, of the CAN/CGSB-43.125 Standard, shall be inserted in the container to contain any possible release of liquids. The small containers associated to the UN packaging code listed in Table 3 of the CAN/CGSB-43.125 Standard shall be UN standardized containers that meet the requirements applicable to this type of container as set out in CAN/CGSB-43.150 (Design, manufacture and use of UN Standardized drums, jerricans, boxes, bags, combination packaging, composite packaging and other packagins for the transport of dangerous goods, classes 3, 4, 5, 6.1, 8, and 9) or the UN Recommendations and the Regulations of the country of origin, as the case may be, and are marked accordingly.

UN Standardized Intermediate Bulk Containers (IBC)
- The UN standardized IBCs must be for Packing Group I or II and for liquids or solids listed in Table 4 – Selected Packaging Codes for UN Standardized IBCs, of the CAN/CGSB-43.125 Standard. The type of IBCs associated to the UN IBC code listed in Table 4 shall be UN standardized IBCs that meet the requirements applicable to this type of container as set out in CAN/CGSB-43.146 (Design, manufacture and use of intermediate bulk containers for the transportation of dangerous goods, classes 3, 4, 5, 6.1, 8 and 9) Standard or the UN Recommendations and the Regulations of the country of origin, as the case may be, and are marked accordingly.

UN Standardized Large Packagings
- UN standardized rigid and leak-proof large packagings must be for Packing Group II, for liquids or solids meeting the requirements of Chapter 6.6 in the UN Recommendations and the Regulations of the country of origin, and marked accordingly.

Non-Standardized Combination Packaging
- A non-standardized combination packaging consisting of a securely-closed plastic bag must meet the requirements of Table 5 – Plastic Bag, of the CAN/CGSB-43.125 Standard, with Elmendorf tear and Dart impact strengths and is contained in a securely-closed outer packaging that is
  - Rigid, leak-proof and designed for repeated use; or
  - A single or double walled fibreboard box that meets the requirements of Columns 1, 2 or 3 or Columns 1, 2 and 4 of Table 6 – Fibreboard Box, as specified in the CAN/CGSB-43.125 Standard.

A Type P620 Packaging
- Category A infectious substances intended for disposal and meeting the requirements of Subsection 2.36(3) (specific infectious substances included
in Category A as per Subsection 2.36(3), and any substance that exhibits characteristics similar to these substances, which must always be handled, offered for transport or transported as Category A Infectious Substances) shall always be handled, offered for transport or transported in a type P620 packaging.

- **Packaging for Sharp Objects (i.e., Sharps Container)**
  - Packaging intended to contain sharp objects such as broken glass and needles must:
    - Meet the requirements of the CAN/CSA Z316.6 (Sharps injury protection – Requirements and test methods – Sharps containers) Standard; or
    - Be rigid, leak-proof, puncture resistant and designed for repeated use.

There is no unique compliance marking specifically prescribed for non-standardized packaging permitted in Part III of the CAN/CGSB-43.125 Standard to transport infectious substances intended for disposal or clinical, (bio) medical or regulated medical waste. If the packaging is a non-standardized packaging, it will not have a UN marking displayed. However, a UN standardized small container such a drum will have a marking displayed as follows:

```
1A1 / Y200 / S / 17
CAN / ABC 8-9999
```

For more information about infectious substance packaging, including Type P620, Type P650, and packagings permitted in Part III of the CAN/CGSB-43.125 Standard for the transportation of infectious substances for disposal or clinical, (bio) medical or regulated waste, please refer to the CAN/CGSB-43.125 Standard.

Biomedical waste designated as non-infectious by a medical professional is not subject to the requirements of packaging standard CAN/CGSB-43.125. The same is true of biomedical (medical or clinical) waste that previously contained infectious substances and is decontaminated using a process that is deemed acceptable by a medical professional.
Below is a table that summarizes when to use a given type of packaging:

### Selection and Use of Packaging for Infectious Substances

<table>
<thead>
<tr>
<th>Category</th>
<th>Type of Packaging</th>
</tr>
</thead>
</table>
| Category A – UN2814, UN2900  
Category B – UN3373  
Waste – UN3291 | Type P620 |
| Category B – UN3373 (including “non-culture” Category A infectious substances that can be shipped as Category B, except for Infectious Substances listed in Subsection 2.63(3) of the TDG Regulations)  
Waste – UN3291 | Type P650 |
| Category A Infectious Substances intended for disposal (except for Infectious Substances listed in Subsection 2.63(3) of the TDG Regulations) – UN2814, UN2900  
Waste – UN3291 | Standardized and non-standardized packagings permitted in Part III of the CAN/CGSB-43.125 Standard |
DANGEROUS GOODS SAFETY MARKS (PART 4)

Class 6.2, Infectious Substances Label (Category A)

In addition to the appropriate markings required by the CAN/CGSB-43.125 Standard, the outer package containing Category A Infectious Substances must have affixed to it a Class 6.2, Infectious Substances label illustrated in the Appendix to Part 4 (Dangerous Goods Safety Marks) of the TDG Regulations. Additional markings required are the UN number and shipping name that must be printed on the outside of the package near the label, as follows:

- UN2814, INFECTIOUS SUBSTANCE, AFFECTING HUMANS or
- UN2900, INFECTIOUS SUBSTANCE, AFFECTING ANIMALS only.

Class 6.2, Infectious Substances Label and Package Marks

The label for Class 6.2 is a white background with black lettering.

The consignor must display or ensure the display of the required dangerous goods safety marks on each small means of containment that contains dangerous goods [Subsection 4.4(1)(a)]. One label must be displayed on a small means of containment for the primary class and one for each subsidiary class for each of the dangerous goods in transport in the small means of containment [Subsection 4.10(a)]. When a label is required to be
displayed, it must be displayed on any side of the outer surface of a small means of containment other than the side on which it is intended to rest or be stacked during transport [Subsection 4.10(3)(a)].

A UN number that is required by Part 4 (Dangerous Goods Safety Marks) of the TDG Regulations to be displayed on a small means of containment must be displayed in one of the two following ways:

- Next to the primary class label for the dangerous goods; or
- Within a white rectangle located on the primary class label for the dangerous goods, without the prefix “UN” [Subsection 4.8(1)].

Regardless of Special Provision 16, which applies to both UN2814 and UN2900, the technical name is not required to be shown on a small means of containment for these dangerous goods.

**Category B Mark (Category B)**

When shipping Category B Infectious Substances, in addition to the appropriate markings required by the CAN/CGSB-43.125 Standard, the **Category B Mark** illustrated in the Appendix to Part 4 (Dangerous Goods Safety Marks) of the TDG Regulations must be displayed, instead of a Class 6.2, Infectious Substances label, on the small means of containment containing infectious substances included in **UN3373, BIOLOGICAL SUBSTANCE, CATEGORY B, Class 6.2, Category B**. The Category B Mark has the UN number UN3373 inside of it. Additional markings required are:

- The shipping name “BIOLOGICAL SUBSTANCE, Category B” displayed next to the Category B mark on the means of containment; and
- The **24-hour telephone number** displayed next to the shipping name on the means of containment [Sections 1.39 and 4.22.1].

<table>
<thead>
<tr>
<th>Category B Mark and Package Marks</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Category B Mark" /></td>
</tr>
<tr>
<td><strong>UN3373</strong></td>
</tr>
<tr>
<td><strong>BIOLOGICAL SUBSTANCE, Category B</strong></td>
</tr>
<tr>
<td>24-Hour Number: XXX-XXX-XXXX</td>
</tr>
</tbody>
</table>

Letters and numbers are in black and at least 6 mm high. The black line of the square on a point is at least 2 mm wide. The background is white except that the background may be the colour of the means of containment if it contrasts with the letters, numbers and line. The size of the label must be at least 50 mm in length on each side.
Class 6.2, Infectious Substances Placard

When Class 6.2, Infectious Substances are transported in a large means of containment (capacity greater than 450 L), a Class 6.2 placard (primary class placard) must be displayed on each side and on each end of the large means of containment [Subsection 4.15(1)]. Placards are also required for Class 6.2 shipments of more than 500 kg, such as biomedical waste from the hospital [Section 4.16.1]. However, a person must not handle, offer for transport or transport UN2814, UN2900, or UN3373 in a large means of containment if they are in direct contact with the large means of containment [Special Provision 38].

The UN number is only required to be displayed on a large means of containment if the Class 6.2, Infectious Substances are:

- In a quantity/concentration for which an ERAP (Emergency Response Assistance Plan) is required; or
- A liquid or gas in direct contact with the large means of containment [Section 4.15.2].

As per Special Provision 84 in Column 5 of Schedule 1 for UN2814, INFECTIOUS SUBSTANCE, AFFECTING HUMANS, Class 6.2, Category A, transporting any quantity of dangerous goods that are Risk Group 4 human pathogens within the meaning of the Human Pathogens and Toxins Act, requires an approved ERAP (Emergency Response Assistance Plan) [Subsection 7.2(1)(g)]. In this case, Class 6.2 placards and the UN number (i.e., UN2814) must be displayed on all four sides of the large means of containment (i.e., delivery truck) containing packagings (i.e., Type P620 packagings) with any quantity of UN2814 that are Risk Group 4 human pathogens.

### Class 6.2, Infectious Substances Placard and UN Number on a Large Means of Containment

In this case, the product is

UN2814, INFECTIOUS SUBSTANCE, AFFECTING HUMANS, Class 6.2, Category A

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>6</td>
</tr>
</tbody>
</table>

The UN number of the dangerous goods being transported must be displayed in black numerals not less than 65 mm high within a white rectangle located on the primary class placard or on an orange panel next to the primary class placard. The letters “UN” are always omitted [Subsection 4.8(2)].
The primary class placard and the UN number are required when the shipment is transported in a large means of containment and requires an ERAP in accordance with Part 7 (Emergency Response Assistance Plan) of the TDG Regulations.

A placard, or a placard and UN number, must be displayed on each side and each end of a large means of containment. A placard, or a placard and UN number, may be displayed on the frame permanently connected to the large means of containment, such as a truck frame or a supporting frame for the means of containment [Subsection 4.15.3(a)]. A placard, or a placard and UN number, may also be placed on the front of a truck instead of the front of a cargo unit attached to the truck [Subsection 4.15.3(b)].

Transporting a gross mass (i.e., the mass of the means of containment and its contents, or the mass of all minimum required means of containment used to contain the dangerous goods) of less than 500 kg of Class 6.2, Infectious Substances does not require the display of placards on the outside of the transportation vehicle. The 500 kg Gross Mass Placarding Exemption does not apply to UN2814 if an ERAP is required [Section 4.16.1]. Therefore, the primary class placard must be displayed when infectious substances are transported unless the placarding exemption is used and no ERAP is required [Section 4.16.1].

The person who loads the means of transport or large means of containment is responsible for displaying the placards. This person could be the consignor (i.e., shipper) or the carrier [Sections 4.3, 4.4 and 4.5]. Once the means of transport or large means of containment leaves the site, the carrier is responsible for ensuring the display of the required placards [Section 4.5].
REPORTING REQUIREMENTS (PART 8)

Any person who has the charge, management or control of a means of containment containing dangerous goods must verbally report a release or anticipated release of the dangerous goods that are being offered for transport, handled or transported by road vehicle, railway vehicle or vessel as soon as possible, after a release or anticipated release. The verbal report has to be made to any local authority that is responsible for responding to emergencies at the geographical location of the release or anticipated release. The report must be made if the dangerous goods are, or could be, in excess of the quantity set out in the following table AND if the release endangers or could endanger Public Safety [Subsection 18(1) in TDG Act and Section 8.2 in TDG Regulations]. Public Safety means the safety of human life and health and of property and the environment [Section 2 in TDG Act].

Where a release of dangerous goods in excess of a prescribed quantity occurs or is anticipated from a means of containment being used to handle or transport dangerous goods, Subsection 13(1) of the provincial Dangerous Goods Transportation and Handling Act also requires any person who, at the time of the release or anticipated release, has the charge, management, or control of the means of containment to make a verbal report of the release or anticipated release. The verbal report shall be made in the prescribed manner and containing the prescribed information to a prescribed person, as soon as possible in the circumstances.

<table>
<thead>
<tr>
<th>Class</th>
<th>Packing Group or Category</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>II</td>
<td>Any quantity</td>
</tr>
<tr>
<td>2</td>
<td>Not applicable</td>
<td>Any quantity</td>
</tr>
<tr>
<td>3, 4, 5, 6.1 or 8</td>
<td>I or II</td>
<td>Any quantity</td>
</tr>
<tr>
<td>3, 4, 5, 6.1 or 8</td>
<td>III, or without packing group</td>
<td>30 L or 30 kg</td>
</tr>
<tr>
<td>6.2</td>
<td>A or B</td>
<td>Any quantity</td>
</tr>
<tr>
<td>7</td>
<td>Not applicable</td>
<td>A level of ionizing radiation greater than the level established in section 39 of the “Packaging and Transport of Nuclear Substance Regulations, 2015”</td>
</tr>
<tr>
<td>9</td>
<td>II or III, or without packing group</td>
<td>30 L of 30 kg</td>
</tr>
</tbody>
</table>

Local authority (Section 8.2 of the federal TDG Regulations) or the prescribed person (Subsection 13(1) of the provincial Dangerous Goods Transportation and Handling Act) who receives the verbal dangerous goods occurrence/release report include Alberta Transportation, Dangerous Goods (1-800-272-9600) and the local police (911), as per Section 5.1 of the provincial Dangerous Goods Transportation and Handling Regulation, AR 157/97.

The Emergency Report provided to the local authority must include the following information:

- The name and contact information of the person making the report;
The date, time and geographic location of the release of dangerous goods;
- The date, time and geographic location of the incident that led to the anticipated release;
- The mode of transport used;
- The shipping name or UN number of the dangerous goods;
- The quantity of dangerous goods that was in the means of containment before the release or anticipated release;
- The quantity of dangerous goods estimated to have been released; and
- If applicable, the type of incident leading to the release, including a collision, rollover, derailment, overfill, fire, explosion or load-shift [Section 8.3].

The **Release or Anticipated Release Report** is required in the following situations:
- The death of a person;
- A person sustaining injuries that required immediate medical treatment by a health care provider;
- An evacuation of people or their shelter in place;
- The closure of a facility used in the loading and unloading of dangerous goods, or a road, a main railway line or a main waterway;
- A means of containment has been damaged to the extent that its integrity is compromised; or
- The centre sill or stub sill of a tank car is broken or there is a crack in the metal equal to or greater than 15 cm (6 in.) [Subsections 8.4(2) and 8.4(3)].

The **Release or Anticipated Release Report** must be made to Alberta Transportation, Dangerous Goods (1-800-272-9600), local police (911), and to:
- CANUTEC at 1-888-CANUTEC (1-888-226-8832) or 613-996-6666;
- The consignor;
- In the case of dangerous goods included in Class 7, Radioactive Materials, the Canadian Nuclear Safety Commission; and
- In the case of a vessel, a Vessel Traffic Services Centre or a Canadian Coast Guard radio station [Subsection 8.4(4)].

A **Release or Anticipated Release Report** must include the following information:
- The name and contact information of the person making the report;
- The date, time and geographic location of the release;
- The date, time and geographic location of the incident that led to the anticipated release;
- The mode of transport used;
- The shipping name or UN number of the dangerous goods;
- The quantity of dangerous goods that was in the means of containment before the release or anticipated release;
- In the case of a release of dangerous goods, the quantity of dangerous goods estimated to have been released;
- If applicable, the type of incident leading to the release or anticipated release, including a collision, rollover, derailment, overfill, fire, explosion or load-shift;
- If applicable, the name and geographic location of any road, main railway line or main waterway that was closed;
- A description of the means of containment containing the dangerous goods;
• If applicable, an estimate of the number of people evacuated or sheltered in place; and
• If applicable, the number of deaths and the number of persons who sustained injuries that required immediate medical treatment by a health care provider [Section 8.5].

After verbally making the Release or Anticipated Release Report, the person making the report or the person's employer, must make a **30-Day Follow-Up Report** in writing to the Minister within 30 days after the day on which the verbal report was made [Section 8.6]. The 30-Day Report must include the following information:

• The name and contact information of the person making the report;
• The names and contact information of the consignor, consignee and carrier;
• In the case of a release of dangerous goods, the date, time and geographic location of the release;
• In the case of an anticipated release of dangerous goods, the date, time and geographic location of the incident that led to the anticipated release;
• The mode of transport used;
• The classification of the dangerous goods;
• The quantity of dangerous goods that was in the means of containment before the release or anticipated release;
• In the case of a release of dangerous goods, the quantity of dangerous goods estimated to have been released;
• A description of the means of containment containing the dangerous goods;
• If applicable, a description of any failure of or damage to the means of containment;
• Information about the events leading to the release or anticipated release of dangerous goods;
• Information as to whether there was an explosion or fire;
• The name and geographic location of any facility used in the loading or unloading of the dangerous goods that was closed, and the duration of the closure;
• The name and geographic location of any road, main railway line or main waterway that was closed, and the duration of the closure;
• If applicable, an estimate of the number of people evacuated or sheltered in place and the duration of the evacuation or shelter in place;
• If applicable, the number of deaths and the number of persons who sustained injuries that required immediate medical treatment by a health care provider;
• If applicable, the ERAP reference number, the name of the person who was required to have the ERAP, and the date and time that the ERAP incident report was made;
• The date on which the report referred to in section 8.4 was made; and
• An estimate of any financial loss incurred as a result of the release or anticipated release, and any emergency response cost or remediation costs related to it [Section 8.7].

For detailed information on reporting requirements, please consult Part 8 (Reporting Requirements) of the TDG Regulations.
EMERGENCY RESPONSE ASSISTANCE PLAN (PART 7)

An emergency response assistance plan (ERAP) describes what to do in the event of a release or anticipated release of certain higher-risk dangerous goods while they are in transport. Each plan is specific to certain dangerous goods, modes of transport (road, rail, air, or marine), means of containment (containers or packaging) used to hold dangerous goods and geographical area in which the dangerous goods are transported.

As per Special Provision 84 in Column 5 of Schedule 1 for UN2814, INFECTIOUS SUBSTANCE, AFFECTING HUMANS, Class 6.2, Category A, transporting any quantity of dangerous goods that are Risk Group 4 human pathogens within the meaning of the Human Pathogens and Toxins Act, requires an approved ERAP [Subsection 7.2(1)(g)]. Risk Group 4 human pathogens include:

- Alkhumra virus
- Crimean-Congo hemorrhagic fever orthonairovirus
- Ebolavirus
- Guanarito mammarenavirus
- Hendra virus
- Junin mammarenavirus
- Kyasanur Forest disease virus
- Lassa mammarenavirus
- Macacine alphaherpesvirus 1
- Machupo mammarenavirus
- Marburgvirus
- Nipah virus
- Omsk hemorrhagic fever virus
- Sabia mammarenavirus
- Tick-borne encephalitis virus [Schedule 4, Human Pathogens and Toxins Act].

No person shall import, offer for transport, handle or transport dangerous goods in a quantity or concentration that is specified by regulation – or that is within a range of quantities or concentrations that is specified by regulation – unless the person has an ERAP that is approved before:

- Importing the dangerous goods;
- Offering the dangerous goods for transport; or
- Handling or transporting the dangerous goods, in the case where no other person is required to have an ERAP in respect of that handling or transporting [Section 7(1) of the TDG Act].

A person who is required to have an approved ERAP must apply to the Minister of Transport Canada in writing for the approval of an ERAP [Subsection 7.3(1)]. To obtain an application to register an ERAP, please contact CANUTEC at (613) 992-4624 (call collect) or use Transport Canada’s ERAP online services (EOS) to create, view or edit an ERAP application ([https://gart.tc.gc.ca/secure/ROOT-OLOR](https://gart.tc.gc.ca/secure/ROOT-OLOR)).

Often, the person who has the ERAP is contacted at the ERAP telephone number required to be listed on the shipping document [Subsection 3.6(1)(b)]. Anyone can call the ERAP telephone number for assistance to receive technical or emergency response advice,
without automatically triggering implementation of the ERAP. The person identified in the plan must be reached at the ERAP telephone number at any time while the dangerous goods that require an ERAP are in transport.

An ERAP is implemented to respond to a release or anticipated release of dangerous goods that are part of that plan and the release or anticipated release endangers or could endanger public safety. By calling the ERAP telephone number, you will be connected with someone who can implement the plan.

As per Section 8.20, ERAP Incident Report, in the TDG Regulations, during a release or anticipated release of dangerous goods that require an ERAP, any person who has the charge, management, or control of the means of containment containing the dangerous goods that require an ERAP, must as soon as possible after the release or anticipated release of the dangerous goods, make an ERAP incident report by telephone to the person with the approved ERAP at the ERAP telephone number required to be included on the shipping document, if the dangerous goods are, or could be, in excess of the quantity set out in the following table:

<table>
<thead>
<tr>
<th>Class</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1, 2, 3, 5, 6, or 8</td>
<td>Any quantity</td>
</tr>
<tr>
<td>7</td>
<td>A level of ionizing radiation greater than the level established in section 39 of the “Packaging and Transport of Nuclear Substances Regulations, 2015”</td>
</tr>
</tbody>
</table>

An ERAP incident report, which is a mandatory notification, must include the following information:

- The name and contact information of the person making the report;
- The ERAP reference number;
- In the case of a release of dangerous goods, the date, time and geographic location of the release;
- In the case of an anticipated release of dangerous goods, the date, time and geographic location of the incident that led to the anticipated release;
- The mode of transport used;
- The shipping name or UN number of the dangerous goods;
- The quantity of dangerous goods that was in the means of containment before the release or anticipated release;
- In the case of a release, the quantity of dangerous goods estimated to have been released;
- A description of the means of containment containing the dangerous goods;
- An indication of whether a means of containment has been damaged to the extent that its integrity could be compromised;
- An indication of whether a transfer of the dangerous goods to another means of containment is anticipated or required; and
- If applicable, the type of incident leading to the release or anticipated release, including a collision, rollover, derailment, overfill, fire, explosion or load-shift [Section 8.21].
The person with an approved ERAP is responsible for implementing the plan, as they are most familiar with the resources in the plan. Once reached, the person with an approved ERAP determines the actions to take to respond to the release or anticipated release of the dangerous goods that requires an ERAP. A person with an approved ERAP must implement it to tier 1 or tier 2 in response to a release or anticipated release of dangerous goods [Subsection 7.8(1)].

A person who implements an approved ERAP to tier 1 must
- Provide technical or emergency response advice as soon as possible after a request for the advice; and
- Remotely monitor the response to the release or anticipated release [Subsection 7.8(2)].

A person who implements an approved ERAP to tier 2 must
- Provide technical or emergency response advice as soon as possible after a request for the advice;
- Monitor the response to the release or anticipated release; and
- Send ERAP emergency response resources to the location of the release or anticipated release [Subsection 7.8(3)].

Each time a person implements an approved ERAP to tier 1 or tier 2, the person with an approved ERAP must, as soon as possible, make an ERAP implementation report to CANUTEC, at 1-888-CANUTEC (226-8832) or 613-996-6666 [Section 8.22]. The reporting will allow Transport Canada to monitor the response, provide technical advice, if needed, and collect meaningful data to improve the ERAP program.

An ERAP implementation report must include the following information:
- The name and contact information of the person making the report;
- The ERAP reference number;
- If applicable, the person authorized under subsection 7.7(1) to use the ERAP;
- Whether the ERAP was implemented to tier 1 or 2;
- The date and time that the ERAP was implemented to tier 1 or 2;
- The shipping name or UN number of the dangerous goods in relation to which the ERAP was implemented; and
- The measures taken to respond to the release or anticipated release [Section 8.23].
EXEMPTIONS

Class 6.2, Infectious Substances, UN3373, BIOLOGICAL SUBSTANCE, CATEGORY B Exemption (Section 1.39)

Part 3 (Documentation) and Part 4 (Dangerous Goods Safety Marks), except Section 4.22.1, Category B Mark, do not apply to the handling, offering for transport or transporting of infectious substances that are included in Category B if

- One external surface of the means of containment for the substances is flat and measures at least 100 mm × 100 mm;
- The means of containment is in compliance with Part 5 (Means of Containment) and has displayed on the external surface
  - The mark illustrated in Part 4 (Dangerous Goods Safety Marks) for infectious substances included in Category B, and
  - The shipping name, on a contrasting background, next to the mark in letters at least 6 mm high; and
- The 24-hour telephone number is displayed next to the shipping name on the means of containment.

Biological Products Exemption (Section 1.41)

Part 3 (Documentation), Part 4 (Dangerous Goods Safety Marks), Part 5 (Means of Containment), Part 6 (Training), Part 7 (Emergency Response Assistance Plan) and Part 8 (Reporting Requirements) do not apply to the handling, offering for transport or transporting of biological products if they

- Are prepared in accordance with the requirements set out under the "Food and Drugs Act";
- Are in a means of containment that is designed, constructed, filled, closed, secured and maintained so that under normal conditions of transport, including handling, there will be no accidental release of the dangerous goods that could endanger public safety; and
- Are in a means of containment that is marked with the words “Biological Product” in black letters at least 6 mm high on a contrasting background.

Human or Animal Specimens Believed Not to Contain Infectious Substances Exemption (Section 1.42)

Part 3 (Documentation), Part 4 (Dangerous Goods Safety Marks), Part 5 (Means of Containment), Part 6 (Training), Part 7 (Emergency Response Assistance Plan) and Part 8 (Reporting Requirements) do not apply to the handling, offering for transport or transporting of human or animal specimens that a person has no reason to believe contain infectious substances.

Professional judgment is required to determine if a specimen is exempt under this section. Factors such as the known medical history, symptoms and individual circumstances of the source, human or animal, and endemic local conditions should be considered. Examples of specimens that may be transported under this section include
• Blood or urine specimens to monitor cholesterol levels, blood glucose levels, hormone levels, prostate-specific antigens (PSA) or organ function;
• Specimens to determine the presence of drugs or alcohol for insurance or employment purposes;
• Pregnancy tests;
• Biopsies to detect cancer; and
• Specimens for antibody detection in humans or animals.

The human or animal specimens referred to above must be in a means of containment that is marked with the words “Exempt Human Specimen” or “Exempt Animal Specimen” and that is designed, constructed, filled, closed, secured and maintained so that under normal conditions of transport, including handling, there will be no release of the specimen.

Tissues or Organs for Transplant Exemption (Section 1.42.1)

The TDG Regulations do not apply to the handling, offering for transport or transporting of tissues or organs for transplant.

Blood or Blood Components Exemption (Section 1.42.2)

Part 3 (Documentation), Part 4 (Dangerous Goods Safety Marks), Part 5 (Means of Containment), Part 6 (Training), Part 7 (Emergency Response Assistance Plan) and Part 8 (Reporting Requirements) do not apply to the handling, offering for transport or transporting of blood or blood components that are intended for transfusion or for the preparation of blood products and are reasonably believed not to contain infectious substances.

The blood or blood components referred to above must be in a means of containment that is designed, constructed, filled, closed, secured and maintained so that under normal conditions of transport, including handling, there will be no release of the blood or blood components.

Medical or Clinical Waste (Section 1.42.3)

This exemption does not apply to medical waste containing infectious substances included in Category A.

Part 3 (Documentation), Sections 4.10 to 4.12 of Part 4 (Dangerous Goods Safety Marks), Part 5 (Means of Containment), Part 6 (Training), Part 7 (Emergency Response Assistance Plan) and Part 8 (Reporting Requirements) do not apply to the handling, offering for transport or transporting of dangerous goods that are medical waste or clinical waste if
• The dangerous goods are UN3291, (BIO) MEDICAL WASTE, N.O.S.;
• The dangerous goods are in a means of containment that is in compliance with CGSB-43.125; and
• The following information is displayed on the means of containment:
  o The biohazard symbol; and
  o The word “BIOHAZARD”.
500 kg Gross Mass Placarding Exemption

Transporting a gross mass (i.e., the mass of the means of containment and its contents, or the mass of all minimum required means of containment used to contain the dangerous goods) of less than 500 kg of dangerous goods does **not** require the display of placards the outside of the transportation vehicle if:

- No ERAP is required;
- There are no subsidiary classes;
- The load does not contain:
  - Class 1, Explosives, except:
    - Class 1.4 (excluding UN0301, AMMUNITION, TEAR-PRODUCING) and are in a quantity that is less than or equal to 1,000 kg NEQ; or
    - Class 1.4S and are in any quantity [Subsection 4.17(1)]; and
    - Class 1.1, 1.2, 1.3, or 1.5 if the explosives have an NEQ of less than 10 kg and are not subject to special provisions 85 or 86, or they are subject to special provision 85 and 86 and there are less than 1,000 articles being transported;
  - Class 2.1, Flammable Gases, if the vehicle is being transported by vessel;
  - Class 2.3, Toxic Gases;
  - Class 4.3, Water-reactive Substances;
  - Class 5.2, Organic Peroxides, Type B, liquid or solid, that require a control or emergency temperature;
  - Class 6.1, Toxic Substances, subject to Special Provision 23; and
  - Class 7, Radioactive Materials, requiring a Category III – Yellow Label [Subsection 4.16.1(2)].
SPECIAL PROVISIONS

Special Provision 38

A person must not handle, offer for transport or transport the following dangerous goods in a large means of containment if they are in direct contact with the large means of containment:

- UN2814;
- UN2900; and
- UN3373.

Special Provision 84

An approved ERAP is required for any quantity of the following dangerous goods that are Risk Group 4 human pathogens within the meaning of the “Human Pathogens and Toxins Act” as referred to in paragraph 7.2(1)(g) of Part 7 (Emergency Response Assistance Plan):

- UN2814.

Special Provision 128

The TDG Regulations, except for Part 1 (Coming into Force, Repeal, Interpretation, General Provision and Special Cases) and Part 2 (Classification), do not apply to the following decontaminated medical or clinical wastes that previously contained infectious substances, unless the decontaminated medical or clinical wastes meet the criteria for inclusion in another class:

- UN3291.

Special Provision 164

Other dangerous goods must not be packed in the same small means of containment as dangerous goods that are Class 6.2, Infectious Substances unless:

- The other dangerous goods are necessary for maintaining the viability or stability of the dangerous goods that are Class 6.2, Infectious Substances, for preventing their degradation or for neutralizing the hazards that they represent;
- The other dangerous goods are included in Class 3, 8 or 9;
- The quantity of the other dangerous goods packed in each primary receptacle does not exceed 30 mL; and
- The other dangerous goods are packed in accordance with the applicable packing instruction set out in CGSB-43.125.

Part 3 (Documentation), Part 4 (Dangerous Goods Safety Marks) and Part 5 (Means of Containment) do not apply to the offering for transport, handling or transporting of the other dangerous goods if the above requirements are met.
Special Provision 165

Despite section 4.2, Misleading Dangerous Goods Safety Marks, of Part 4 (Dangerous Goods Safety Marks) or section 6.1, Prohibition – Dangerous Goods Safety Mark, of the TDG Act, the marking for a Type P650 packaging (i.e., Category B Mark) that is set out in CGSB-43.125 may be displayed on an empty packaging.
OTHER MODES OF TRANSPORTATION

Shipments of infectious substances by the marine mode of transport are regulated by the International Maritime Dangerous Goods (IMDG) Code when the substances are transported between Canada and another country, outside Canada or on a Class I home-trade voyage within Canada. When shipping infectious substances by vessel, refer to Part 11 (Marine) of the TDG Regulations.

Shipments of infectious substances by air mode are more rigidly controlled than by any other mode of transport. Air shipments are regulated by the TDG Regulations and the International Civil Aviation Organization (ICAO). When shipping any dangerous good, including infectious substances by air, a special shipping document called the “Shipper’s Declaration for Dangerous Goods” must be used. In most cases, the air mode will require that the infectious substance be shipped in a high-integrity package (Type P620) even when a routine package (Type P650) will do for ground shipments. For shipments by air only, Type P650 packages must undergo the internal pressure test in accordance with Section 7.5, Internal Pressure Test, of the CAN/CGSB-43.125 Standard. When shipping by air, refer to Part 12 (Air) of the TDG Regulations. When transporting infectious substances domestically or internationally by air (from or to Canada), Part 12 of the TDG Regulations requires compliance with the ICAO Technical Instructions and Subsection 12.1(1), General Requirements, of the TDG Regulations.
Live Infected Animals

The transport of live infected animals is no longer prohibited. Shipments of live or dead infected animals must now comply with all the requirements of the TDG Regulations in addition to requirements under the Health of Animals Act. This means that a shipping document will have to be prepared according to Part 3 of the TDG Regulations instead of the special forms used by Agriculture Canada. This also means that the animals must be contained while in transport so that there can be no emission of infectious material from the compartment.

Information Contacts

For air shipments of infectious substances, contact:
Transport Canada - Air
Edmonton, Alberta
Telephone: (780) 495-3810

For ground shipments of infectious substances contact:
Alberta Transportation
Alberta EDGE (Environmental and Dangerous Goods Emergencies)
Edmonton, Alberta
Telephone: 1-800-272-9600 (in the province of Alberta) or (780) 422-9600 (Edmonton)
### DEFINITIONS (SECTION 1.4)

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biological Product</td>
<td>means a product that is derived from living organisms and that is used to prevent, treat or diagnose disease in humans or animals or for development, experiment or investigation purposes and includes finished or unfinished products, live vaccines or attenuated live vaccines.</td>
</tr>
<tr>
<td>Infectious Substance</td>
<td>means a substance known or reasonably believed to contain viable microorganisms such as bacteria, viruses, rickettsia, parasites, fungi and other agents such as prions that are known or reasonably believed to cause disease in humans or animals and that are listed in Appendix 3 to Part 2 (Classification) or that exhibit characteristics similar to a substance listed in Appendix 3.</td>
</tr>
<tr>
<td>Category A</td>
<td>means an infectious substance that is transported in a form such that, when it is released outside of its means of containment and there is physical contact with humans or animals, it is capable of causing permanent disability or life-threatening or fatal disease to humans or animals.</td>
</tr>
<tr>
<td>Category B</td>
<td>means an infectious substance that does not meet the criteria for inclusion in Category A.</td>
</tr>
<tr>
<td>Culture</td>
<td>means the result of a process by which pathogens in a specimen are intentionally propagated. This definition does not include specimens taken from a human or animal patient and that are intended to be processed in a laboratory.</td>
</tr>
<tr>
<td>Type P620 means of containment</td>
<td>means a means of containment that is in compliance with the requirements of CGSB-43.125 for Type P620 packaging or, if it is manufactured outside Canada, is in compliance with the requirements of Chapter 6.3 and Packing Instruction P620 of the UN Recommendations and the national regulations of the country of manufacture.</td>
</tr>
<tr>
<td>Type P650 means of containment</td>
<td>means a means of containment that is in compliance with the requirements of CGSB-43.125 for Type P650 packaging or, if it is manufactured outside Canada, is in compliance with the requirements of Packing Instruction P650 of the UN Recommendations and the national regulations of the country of manufacture.</td>
</tr>
</tbody>
</table>

*Often, a specimen taken from a human or animal patient in a doctor's office, a clinic, a hospital or a lab is referred to by the health care professional as a "culture". In fact, such a specimen is usually intended to be sent to a laboratory where it will be manipulated or "cultured". It is packaged in such a way that the specimen itself will not deteriorate but any pathogens it contains will not "grow" during transport.*
### SUMMARY TABLE – ROAD TRANSPORT OF CLASS 6.2 INFECTIOUS SUBSTANCES

<table>
<thead>
<tr>
<th>Infectious Substance</th>
<th>Classification</th>
<th>Packaging Selection</th>
<th>Documentation</th>
<th>Dangerous Goods Safety Marks (Labels)</th>
<th>Dangerous Goods Safety Marks (Placards)</th>
<th>TDG Training</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Category A</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• <strong>UN2814</strong>, INFECTIOUS SUBSTANCE, AFFECTING HUMANS, Class 6.2, Category A</td>
<td></td>
<td>Type P620 Type P650 (Only in certain instances. Refer to Section 5.16 and Subsections 2.36(2) and 2.36(3) in the TDG Regulations).</td>
<td>Yes</td>
<td>Yes Class 6.2 label UN Number Shipping Name (no technical name)</td>
<td>• Class 6.2 Placard if ERAP is required (see Subsection 7.2(1)(g))</td>
<td>Yes</td>
</tr>
<tr>
<td>• <strong>UN2900</strong>, INFECTIOUS SUBSTANCE, AFFECTING ANIMALS only, Class 6.2, Category A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Category B</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• <strong>UN3373</strong>, BIOLOGICAL SUBSTANCE, CATEGORY B, Class 6.2, Category B</td>
<td></td>
<td>Type P620 Type P650</td>
<td>Yes</td>
<td>Yes Class 6.2 label UN Number Shipping Name (no technical name)</td>
<td>• Class 6.2 Placard</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Waste</strong></td>
<td>If waste contains Category A (except infectious substances listed in Subsection 2.36(3) of the TDG Regulations):</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• <strong>UN2814</strong>, INFECTIOUS SUBSTANCE, AFFECTING HUMANS, Class 6.2, Category A OR <strong>UN2900</strong>, INFECTIOUS SUBSTANCE, AFFECTING ANIMALS only, Class 6.2, Category A</td>
<td></td>
<td>Type P620 Type P650 A standardized or non-standardized packaging permitted in Part III of CAN/CGSB-43.125 Standard.</td>
<td>Yes</td>
<td>Yes Class 6.2 label UN Number Shipping Name (no technical name)</td>
<td>• Class 6.2 Placard</td>
<td>Yes</td>
</tr>
<tr>
<td>If waste contains Category B or if shipper has reasonable grounds to believe that there is a low probability of containing infectious substances:</td>
<td>• <strong>UN3291</strong>, CLINICAL WASTE, UNSPECIFIED, N.O.S.; (BIO) MEDICAL WASTE, N.O.S.; or REGULATED MEDICAL WASTE, N.O.S, Class 6.2, Packing Group II</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>