TDG BULLETIN

Shipping Infectious Substances

Transport Canada Transports Canada

Canada

Contents

Shipping infectious substances

This bulletin explains the requirements related to the transportation of infectious substances. It does not change, create, amend or suggest deviations to the Transportation of Dangerous Goods (TDG) Regulations. For specific details, consult the TDG Regulations.

Infectious substances

An infectious substance, as defined under Section 1.4 of the TDG Regulations, is a substance known or reasonably believed to contain viable micro-organisms, such as viruses, bacteria, parasites, fungi, and other agents, that are known or reasonably believed to cause disease in humans or animals. Substances classified as infectious substances may include blood, tissue, organs, body fluids, or cultures that contain pathogenic microorganisms.

A list of infectious substances, such as Ebola virus or Herpes B virus, can be found in Part 2 of the TDG Regulations under Appendix 3.

Note: The table under Appendix 3 is **NOT** a complete list. If a substance is not listed in the table, it is still considered an infectious substance when it meets the definition above and exhibits characteristics similar to an infectious substance on the list, such as:

- Severe Acute Respiratory Syndrome Associated Coronavirus (SARS-CoV),
- *Salmonella Enterica* SPP,
- Hepatitis C virus, etc.

In addition to the TDG Regulations, other government departments regulate infectious substances. The Public Health Agency of Canada (PHAC) administers regulations that apply to human pathogens in Canada, while the Canadian Food Inspection Agency (CFIA) regulates animal pathogens**.** In addition, provincial governments may have additional regulations that pertain to infectious substances.

As a consignor, you must comply with the requirements related to:

- Classification (Part 2 – TDG Regulations)
- Documentation (Part 3 – TDG Regulations)
- Labelling, and if applicable, placarding (Part 4 – TDG Regulations)
- Packaging (Part 5 – TDG Regulations)
- Training (Part 6 – TDG Regulations)
- Emergency Response Assistance Plans (ERAP) (Part 7 – TDG Regulations)
- Reporting Requirements (Part 8 – TDG Regulations)

Note 1: Placarding applies to the person transporting the infectious substance or to the person loading the vehicle or large means of containment.

Note 2: 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).

Note 3: Placards and UN number are required when the shipment is transported in a large means of containment, and it requires an ERAP in accordance with Part 7 of the TDG Regulations.

Training

Always assume training is required. The only time training is not required is when you are using an exemption (i.e., special case) which exempts you from Part 6 of the TDG Regulations. You will find most exemptions in Part 1 of the TDG Regulations, from Sections 1.15 to 1.50.

Employers are responsible for issuing a training certificate once their employee has received adequate training. The certificate must contain all of the information required by Section 6.3 of the TDG Regulations. Even though there is no standard format, the TDG Directorate has a sample in the TDG Bulletin – TDG Training.

Classification

Infectious substances are classified as Class 6.2, Infectious Substances, and are assigned to a category (Category A or Category B) instead of a packing group.

Category A

Infectious substances included in Category A are infectious substances that are 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. The proper shipping name of a Category A infectious substance is, as appropriate:

- UN2814 – INFECTIOUS SUBSTANCE, AFFECTING HUMANS
- UN2900 – INFECTIOUS SUBSTANCE, AFFECTING ANIMALS only

Category B

Infectious substances included in Category B are infectious substances for which the likely consequences of an exposure during transport will not cause permanent disability and will not lead to fatality. The proper shipping name of a Category B infectious substance is:

- UN3373 – BIOLOGICAL SUBSTANCE, CATEGORY B

Classification of patient specimens

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

Table 1 - Classification of human or animal specimens

Patient Specimen Condition	There is **no reason to believe** the sample contains infectious substances (including routine tests)	For the diagnosis of an infectious substances **when there is suspicion** of an infectious disease	**Category A** infectious substance	**Category B** infectious substance
Classification	Human or animal specimens believed not to contain infectious substances exemption (Section 1.42 of the TDG Regulations)	Regulated, as appropriate	Fully regulated	Class 6.2, Infectious Substances, UN3373, BIOLOGICAL SUBSTANCE, CATEGORY B exemption (Section 1.39 of the TDG Regulations)

No reason to believe

The term “no reason to believe” means that sufficient information is available and none of it suggests that the specimens could contain infectious substances included in Category A or B.

Professional judgment is required to determine whether there is no reason to believe a specimen contains an infectious substance. Factors such as the known medical history, symptoms and individual circumstances of the source, human or animal, and endemic local conditions should be considered.

For more details regarding the classification of infectious substances contained in patient specimens, please consult the document on classification of patient specimens.

Substances subject to the TDG Regulations

Any substance known or believed to contain infectious substances which meet the criteria of Category A or Category B is regulated under the TDG Regulations and must be assigned to UN2814, UN2900, UN3373, UN3291, or UN3549 as appropriate.

A list of regulated infectious substances can be found in Appendix 3 of Part 2 of the TDG Regulations. Note that this list is not exhaustive, but it serves as a guide to classify pathogens.

Medical or Clinical Waste

Medical or clinical wastes include sharps, soiled linen, etc. They are derived from the medical treatment of humans, the veterinary treatment of animals or from bio-research. They can be assigned to:

- UN2814 – INFECTIOUS SUBSTANCE, AFFECTING HUMANS, if they contain Category A infectious substances
- UN2900 – INFECTIOUS SUBSTANCE, AFFECTING ANIMALS only, if they contain Category A infectious substances
- UN3291– CLINICAL WASTE, UNSPECIFIED, N.O.S., (BIO) MEDICAL WASTE, N.O.S. or REGULATED MEDICAL WASTE, N.O.S., if:
    - The medical or clinical wastes contain Category B infectious substances; or
    - The medical or clinical waste are reasonably believed to have a low probability of containing infectious substances.
- UN3549 - MEDICAL WASTE, CATEGORY A, AFFECTING HUMANS, solid or MEDICAL WASTE, CATEGORY A, AFFECTING ANIMALS only, solid

Note: UN3549 is a new classification. This classification is for solid medical waste containing Category A infectious substances generated from the medical treatment of humans or veterinary treatment of animals; it shall not be used for waste from bio-research or liquid waste.

See Appendix for more information on transporting Ebola contaminated waste.

Biological Products

Biological products are derived from living organisms and are used to prevent, treat or diagnose disease in humans or animals. They are also used for development, experiment or investigation purposes and includes finished or unfinished products, live vaccines or attenuated live vaccines.

A biological product known or reasonably believed to contain a pathogen that meets the definition of a Category A or B infectious substance must be assigned to UN2814, UN2900, or UN3373, as appropriate.

Genetically Modified Microorganism and Organisms (GMMO and GMO)

GMMOs and GMOs which do not meet the definition of infectious substances are not subject to the TDG Regulations, unless they meet the criteria for inclusion in another class.

Patient Specimens

Patient specimens are those collected directly from humans or animals and include, for example, excreta, blood and its components, tissue and tissue fluids swabs, and body parts being transported for purposes such as research, diagnosis, investigational activities, disease treatment and prevention.

Cultures versus patient specimens

Infectious substances can be transported as cultures or contained in patient specimens. The risk of infection is higher in cultures, due to the high concentration of pathogens as opposed to patient specimens. Under certain conditions, infectious substances, classified as Category A, contained in patient specimens may be shipped as Category B.

However, some infectious substances **MUST** always be shipped as Category A regardless of their form, due to their pathogenicity. Table 1 provides a list of 19 infectious substances that **MUST** always be shipped as Category A. See Subsection 2.36 (3).

Table 2 - Infectious substances that are always shipped as Category A

Name of Infectious Substance	UN Number
(a) Crimean-Congo Hemorrhagic fever virus; (b) Ebola virus; (c) Flexal virus; (d) Guanarito virus; (e) Hantaviruses causing hemorrhagic fever with renal syndrome; (f) Hantaviruses causing pulmonary syndrome; (g) Hendra virus; (h) Herpes B virus (Cercopithecine Herpesvirus-1); (i) Junin virus; (j) Kyasanur Forest virus; (k) Lassa virus; (l) Machupo virus; (m) Marburg virus; (n) Monkeypox virus;	UN2814

(o)	Nipah virus;	
(p)	Omsk hemorrhagic fever virus;	
(q)	Russian Spring – Summer encephalitis virus;	
(r)	Sabia virus; and	
(s)	Variola (smallpox virus).	

Human or animal specimens are exempted from certain parts of the TDG Regulations if there is no reason to believe that the specimen contains an infectious substance. You can ship such specimens using the exemption under Section 1.42 of the TDG Regulations.

If the specimens are part of routine screening tests, then they may be shipped as per Section 1.42 of the TDG Regulations if a professional judgment concludes there is no reason to believe the patient could be contaminated with an infectious substance. This is also true for samples collected for the purpose of testing for a known infectious substance. For example, an employer may wish to screen all new employees for infectious diseases. In this case, you may ship the sample as "*Exempt Human Specimen*" if the medical professional concludes there is no reason to believe that the person has been in contact with an infectious substance.

Examples of specimens that may be transported under this section include:

- blood or urine specimens to monitor cholesterol levels, blood sugar levels or hormone levels;
- specimens to determine the presence of drugs or alcohol for insurance or employment purposes;
- pregnancy test; or
- biopsies to detect cancer.

Doctor-patient confidentiality

There are no exemptions that apply to shipping samples that are known or suspected to contain infectious substances. However, the TDG Regulations do not require you to include a patient's name or any personal reference when shipping infectious substances.

Shipping known or suspected infectious substances without complying with the TDG Regulations is an offence for which enforcement action is applicable.

Assistance to classify infectious substances

TDG Directorate is the authority with regards to the classification of infectious substances for transportation. However, you could contact the **Public Health Agency of Canada (PHAC)** or the **Canadian Food Inspection Agency of Canada** for assistance in the classification of infectious substances.

Public Health Agency of Canada
Phone: 613-957-1779
E-mail: PHAC.pathogens.pathogenes.ASPC@canada.ca

Canadian Food Inspection Agency
Phone: (613) 773-5327
E-mail: biocon@inspection.gc.ca

Packaging

The following types of packaging can be used to ship infectious substances:

- Type P620;
- Type P650; or
- Standardized and non-standardized packagings permitted in Part III of the CAN/CGSB 43.125 standard for the transport of infectious substances intended for disposal or clinical, (bio) medical or regulated waste.

A copy of the CAN/CGSB-43.125 Standard can be obtained from Public Service and Procurement Canada.

Table 3 – Summary of the types of packaging

Type of Packaging	UN Number - Category
Type P620	Intended for transport of: • UN2814 – Category A and UN2900 – Category A May also be used for transport of: • UN3373 – Category B • UN3291 – Waste
Type P650	Intended for transport of: • UN3373 – Category B May also be used for transport of: • UN3291 – Waste
Standardized and non-standardized packagings permitted in Part III of the CAN/CGSB-43.125 standard	Intended for transport of: • UN3291 – Waste • UN2814, UN2900 containing Category A waste • UN3549 - Solid medical waste containing Category A Note: Permitted packaging is dependent on classification of waste

Type P620 packaging

It is defined as a packaging that is in compliance with the requirements of the CAN/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.

This 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) of the TDG Regulations. However, as it is the highest integrity packaging, this packaging can also be used to transport Category B infectious substances and clinical, (bio) medical or regulated waste.

You will find the requirements for the design, testing and marking of Type P620 packaging in Part I of the CAN/CGSB-43.125 standard. Facilities that manufacture type P620 packaging in Canada must be registered with Transport Canada and must have their packaging design registered with Transport Canada. The CAN/CGSB-43.125 standard now requires the periodic retest of a Type P620 packaging design every five years.

Identify a Type P620 packaging

A Type P620 packaging will have a UN marking on the outer packaging as set out in Section 5.1 of the CAN/CGSB-43.125 standard. For example:

4G/CLASS 6.2/21
CAN/ABC 8-9999

Table 4 – Description of the UN packaging code and symbol

Code or symbol	Description
	United Nations packaging symbol.
4G **or** **4GU** **or** **4GW**	Packaging code (in this example, 4G represents a fibreboard box). The “U” indicates the packaging is a special packaging which meets more stringent requirements. The “W” indicates the packaging 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.
CLASS 6.2	The text “CLASS 6.2” means that this type of container is suitable for Class 6.2 infectious substances.
21	The last two digits of the year of manufacture.
CAN	The country authorizing the allocation of the marking.
ABC 8-9999	The name or symbol of the manufacturer and other identification of the

	container as specified by the country authorizing the allocation of the mark (e.g., design registration number).

A Type P620 packaging shall consist of:

a) Inner packagings comprising:

1) Leakproof primary receptacle(s);

2) Leakproof secondary inner packaging(s);

b) A rigid 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 of the CAN/CGSB-43.125 standard.

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 content of the primary receptacle(s).

The primary receptacle(s) of a type P620 packaging cannot be reused. The secondary inner packaging or outer packaging of a type P620 packaging may be reused if there is no visible contamination, damage or defects that may render the packaging unsafe for transport.

Example of a Type P620 packaging

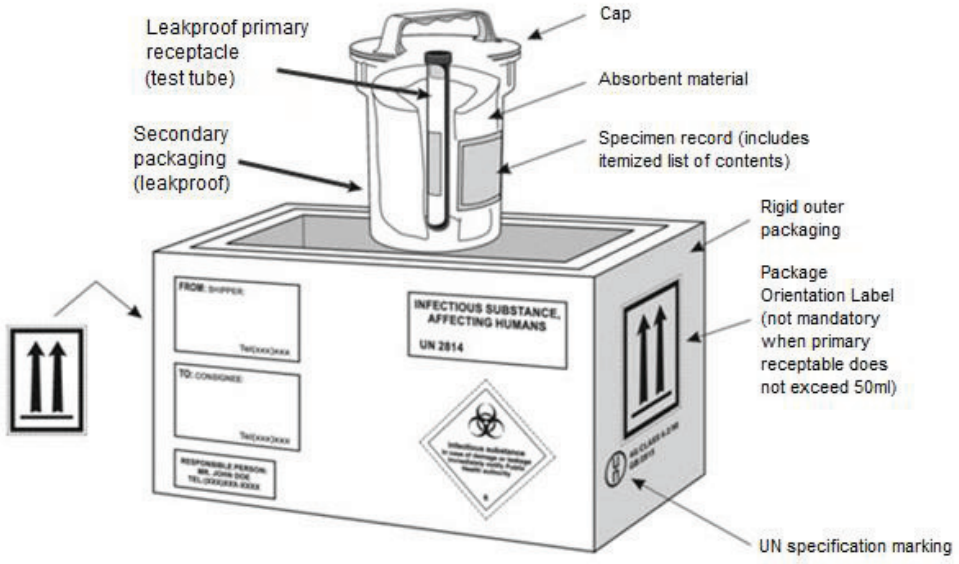


Figure 1: *Figure provided by IATA, Montreal, Canada (modified by the TDG Directorate)*

Type P650 packaging

A Type P650 packaging is defined as a packaging that is in compliance with the requirements of the CAN/CGSB-43.125 standard 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.

A Type P650 packaging is intended for the transport of UN3373 - Category B infectious substances. However, this packaging can also be used to transport clinical, (bio) medical or regulated waste UN3291.

You will find the requirements for the design, testing and marking of Type P650 packaging in the CAN/CGSB-43.125 standard.

Facilities that manufacture type P650 packaging in Canada are not required to be registered with Transport Canada, however, a Type P650 packaging design report must be prepared and retained by the manufacturer in accordance with Annex A of the Standard to demonstrate compliance with the Standard.

Identify a Type P650 packaging

The marking required on the outer packaging of a Type P650 packaging is specified in Section 5.2 of the CAN/CGSB-43.125 standard.

The Category B mark, as per Section 4.22.1, must be displayed on the outside of a Type P650 packaging to demonstrate compliance with the CAN/CGSB-43.125 Standard.

The marking shall be in the form of a square on 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.

Note*:* The marking required on a Type P650 packaging is a hybrid marking as it is used as the packaging compliance mark and the dangerous goods safety mark, (Category B Mark) found in the Appendix of Part 4 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 use of this mark even if the packaging is empty.

A Type P650 packaging shall consist of:

a) Inner packagings comprising:

1) primary receptacle(s) (leakproof or siftproof);

2) secondary packaging(s) (leakproof or siftproof);

b) An outer packaging of which the smallest external dimension is at least 100 mm.

Note: Either the secondary packaging(s) or the outer packaging shall be rigid.

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

The primary receptacle(s) of a type P650 packaging cannot be reused. The secondary inner packaging or outer packaging of a type P650 packaging may be reused if there is no visible contamination, damage or defects that may render the packaging unsafe for transport.

Examples of a Type P650 packaging

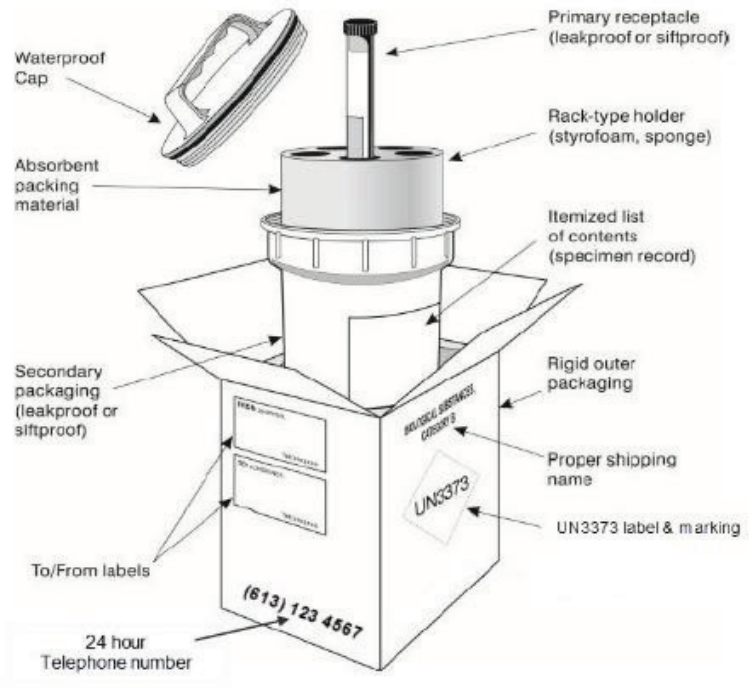
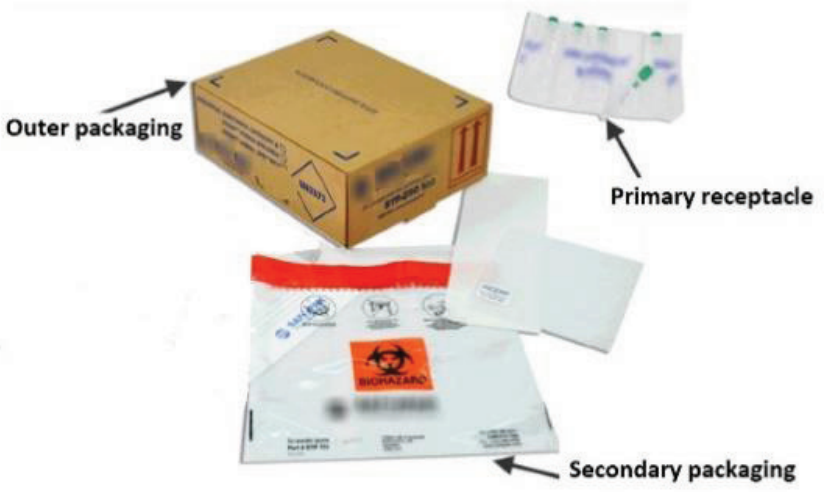


Figure 2: Figure provided by IATA, Montreal, Canada (modified by the TDG Directorate)



Types of standardized and non-standardized packagings to transport clinical, (bio) medical or regulated medical waste

There are various options of standardized and non-standardized packagings permitted in Part III of the CAN/CGSB-43.125 standard for the transport of clinical, (bio) medical or regulated medical waste. The packaging options are dependent on the classification of the waste. The packaging options are summarized in the table below with a more comprehensive description following the summary table.

Table 5 – Permitted packaging options for clinical, (bio) medical or regulated medical waste

Classification of clinical, (bio) medical or regulated medical waste	Permitted packaging
UN2814 **UN2900**	• Type P620 packaging
UN3291	• UN Standardized Small Container • UN Standardized IBC certified • UN standardized Large Packaging • Non-Standardized Combination Packaging • Type P620 packaging • Type P650 packaging • Sharps containers
UN3549	• Triple-layer packaging consisting of: a) metal or plastic inner packaging; b) metal or plastic intermediate packaging; and c) a UN standardized small packaging or large packaging

Packagings permitted for clinical, (bio) medical or regulated medical waste assigned to UN2814 or UN2900

A Type P620 packaging is permitted**.** Consult the Type P620 packaging section to learn more.

Packagings permitted for clinical, (bio) medical or regulated medical waste assigned to UN3291

1. UN Standardized Small Container

The UN standardized small container must be a drum, jerrican, box, or composite packaging listed in Table 3 of the CAN/CGSB-43.125 standard and must meet a Packing Group I or II performance level. The packaging will bear a UN compliance marking.

The packaging must be leakproof or be made leakproof by inserting a plastic bag in the packaging. The plastic bag must pass the Elmendorf tear strength and the Dart impact strength tests as specified in Table 6 of the CAN/CGSB-43.125 standard.

2. UN Standardized Intermediate Bulk Container (IBC)

The UN standardized IBC must be listed in Table 4 of the CAN/CGSB-43.125 standard and must meet a Packing Group I or II performance level. The packaging will bear a UN compliance marking.

3. UN Standardized Large Packaging

The UN standardized large packaging must be listed in Table 5 of the CAN/CGSB-43.125 standard and must meet a Packing Group II performance level. The packaging will bear a UN compliance marking.

4. Non-Standardized Combination Packaging

This type of package consists of a securely closed plastic film bag placed inside either a:

- Packaging that is rigid, leak-proof and designed for repeated use; or
- Inside a fibreboard box that meets the capacity and performance requirements listed in Table 7 of the CAN/CGSB-43.125 standard.

There is no packaging compliance mark required on this packaging.

Note: The plastic bag must pass the Elmendorf tear strength and the Dart impact strength tests as specified in Table 6 of the CAN/CGSB-43.125 standard.

5. A Type P620 Packaging

Consult the Type P620 packaging section to learn more.

6. A Type P650 Packaging

Consult the Type P650 packaging section to learn more

7. Packaging for Sharp Objects (i.e., sharps container)

A packaging intended to contain sharp objects (for example, broken glass and needles) must meet the requirements of the CAN/CSA-Z316.6 standard or be rigid, leakproof, puncture resistant and designed for repeated use. Below is an image of a sharps container.

Packagings permitted for solid medical waste assigned to UN3549

The packaging is a triple layer packaging consisting of:

a) metal or plastic inner packaging;

b) metal or plastic intermediate packaging; and

c) a UN standardized packaging of code 1A2, 1B2, 1D, 1G, 1H2, 1N2, 3A2, 3B2, 3H2, 4A, 4B, 4D, 4G, 4H2 or 4N or a code 50A, 50B, 50N, 50D, 50G, 50H meeting the packaging group II performance level for solids, at minimum.

A fiberboard box meeting certain specifications may be used as an outer packaging in place of the UN packaging codes listed.

The packaging requirements for transport of UN3549 were introduced into the 2021 edition of the CAN/CGSB-43.125 standard. A person transporting this waste must follow the packaging requirements prescribed within the Standard.

To buy appropriate packagings for the transportation of infectious substances intended for disposal or waste

The Transport Canada website has a list of vendors for Type P620 and P650 packaging.

Transport Canada does not have a list of vendors for packagings permitted in Part III of the CAN/CGSB-43.125 standard because many different types of standardized and non-standardized packagings are permitted. You must ensure that your shipment meets the requirements listed in the standard for these types of packaging.

To learn more about Type P620, Type P650 and packagings permitted for the transportation of clinical, (bio) medical or regulated waste, you can:

- Read the TDG FAQ on Packaging for Infectious Substances
- Email one of TDG engineers at: tdgcontainers-tmdcontenants@tc.gc.ca

Documentation

Shipping document

You must prepare a shipping document if you are shipping a Category A infectious substance (UN2814 or UN2900).

However, you will not need a shipping document if you are shipping a Category B infectious substance (UN3373) in accordance with the exemption set out in Section 1.39 of the TDG Regulations. Don't forget that there are certain Category A infectious substances than can be shipped as a Category B. You need to refer to Subsections 2.36(2) and (3) of the TDG Regulations to verify which Category A infectious substances can be shipped as a Category B.

To learn more, or to view a sample shipping document, consult the TDG Bulletin – Shipping Documents.

Labels and Placards

The dangerous goods safety marks that must be displayed on a small means of containment depend on the type of infectious substance you are shipping.

CATEGORY A

If you are shipping a Category A, you must label the package with an infectious substance label. This label is illustrated in the Appendix to Part 4 of the TDG Regulations.

The text on the label is:

INFECTIOUS
IN CASE OF DAMAGE OR LEAKAGE IMMEDIATELY NOTIFY LOCAL AUTHORITIES AND

INFECTIEUX
EN CAS DE DOMMAGE OU DE FUITE COMMUNIQUER IMMEDIATEMENT AVEC LES AUTORITÉS ET

CANUTEC
613-996-6666

Extra marking requirements:

The shipping name and UN number:

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

(No technical name (SP16))

CATEGORY B

When shipping a Category B infectious substance, Section 1.39 and Section 4.22.1 state that you must label the package with the "Category B mark" illustrated in the appendix to Part 4 of the TDG Regulations.

The text on the mark is:

UN3373

Extra marking requirements:

The shipping name:

- UN3373, BIOLOGICAL SUBSTANCE, CATEGORY B

Text on the package is:

- 24-Hour Number: 999-999-9999

Placards on the vehicule

As per Subsection 4.15(1) of the TDG Regulations, placards are required in the following instances:

The infectious substances are transported in a large means of containment. By definition, a large means of containment is a **means of containment** with a **capacity** greater than 450 L (i.e., a delivery truck). However, Section 4.16.1 provides a placarding exemption for dangerous goods having a gross mass of 500 kg or less.

Paragraph 7.2(1)(g) of the TDG Regulations refers to a list of 16 infectious substances that require an Emergency Response Assistance Plan (ERAP). For those situations, the placards and UN number must be displayed. The placarding exemption found in Section 4.16.1 cannot be used when an ERAP is required.

The person who loads the vehicle or large means of containment is responsible for displaying the placards. This person could be either the consignor (i.e., shipper) or the carrier. Once the vehicle leaves the site, the carrier is responsible for placarding.

Exemptions and Special Provisions

There are two exemptions for shipping infectious substances or potential infectious substances. Like most exemptions, you can find them in Part 1 of the TDG Regulations.

- Section 1.39 – Class 6.2, Infectious Substances, UN3373, BIOLOGICAL SUBSTANCE, CATEGORY B exemption
- Section 1.42.3 – Medical or Clinical Waste

In order to use an exemption, you must comply with all conditions listed in the exemption. If you can't, then you need to ship your infectious substances fully regulated.

Special provisions that only apply to infectious substances

Special Provision 84 states that infectious substances listed in Paragraph 7.2(1)(g) of the TDG Regulations require an emergency response assistance plan.

Special Provision 128 exempts decontaminated medical or clinical waste that from all parts of the TDG Regulations (except Parts 1 and 2) under certain conditions.

Special Provision 164 allows for the transport of other dangerous goods in the same small means of containment with UN2814, UN2900 or UN3373, if they are necessary for maintaining the viability or stability of the dangerous goods, for preventing their degradation or for neutralizing the hazards that they represent.

Special Provision 165 of the TDG Regulations allows the use of the CATEGORY B mark even if the packaging is empty.

Marine Shipments

When shipping by vessel, you must refer to Part 11 of the TDG Regulations.

Air Shipments

When shipping by air, you must refer to Part 12 of the TDG Regulations.

For liquid infectious substances transported by aircraft only, Type P650 packages must undergo the internal pressure test in accordance with Section 7.5 of the CAN/CGSB-43.125 standard.

Domestic Transport

When transporting infectious substances domestically by air, Part 12 of the TDG Regulations requires you to comply with the ICAO Technical Instructions **and** Subsection 12.1(1) of the TDG Regulations.

International Transport

When transporting infectious substances internationally by air (from or to Canada), Part 12 of the TDG Regulations requires you to comply with the ICAO Technical Instructions **and** Subsection 12.1(1) of the TDG Regulations.

Quick Reference Guide – Road Transport

Item	Category A	Category B	Waste
Classification	**UN2814** INFECTIOUS SUBSTANCE, AFFECTING HUMANS **UN2900** INFECTIOUS SUBSTANCE, AFFECTING ANIMALS only	**UN3373** BIOLOGICAL SUBSTANCE, CATEGORY B	**UN2814 or UN2900** if waste contains Category A **UN3291** if waste contains Category B or if the shipper has reasonable grounds to believe that there is a low probability of containing infectious substances **UN3549** MEDICAL WASTE, CATEGORY A, AFFECTING HUMANS, solid or MEDICAL WASTE, CATEGORY A, AFFECTING ANIMALS only, solid
Packaging Selection	**Type P620**	**Type P620** **Type P650**	**Type P620** **Type P650** **A standardized or non-standardized packaging permitted in Part III of CAN/CGSB-43.125 standard**
Documentation	**Yes**	**Yes**, unless shipped in accordance with Section 1.39 of the TDG Regulations	**Yes**, unless shipped in accordance with Section 1.42.3 of the TDG Regulations
Dangerous Goods Safety Marks	**Yes,** Class 6.2 label Shipping name and UN number (no technical name)	**Yes**, unless shipped in accordance with Section 1.39 of the TDG Regulations	**Yes**, unless shipped in accordance with Section 1.42.3 of the TDG Regulations
Placards	**Yes,** if ERAP is required; see Paragraph 7.2(1)(g) **No,** if total gross mass of shipment is 500 kg or less and no ERAP is required	**Yes**, unless shipped in accordance with Section 1.39 of the TDG Regulations	**Yes**, unless total gross mass of shipment is 500 kg or less
Training	**Yes**	**Yes**	**Yes**, unless shipped in accordance with Section 1.42.3 of the TDG Regulations

Contact Information

If you have any questions about the TDG Regulations, contact a Transport Canada dangerous goods inspector in your region.

Atlantic Region	1-866-814-1477	TDG-TMDAtlantic@tc.gc.ca
Quebec Region	1-514-633-3400	TMD-TDG.Quebec@tc.gc.ca
Ontario Region	1-416-973-1868	TDG-TMDOntario@tc.gc.ca
Prairie & Northern Region	1-888-463-0521	TDG-TMDPNR@tc.gc.ca
Pacific Region	1-604-666-2955	TDGPacific-TMDPacifique@tc.gc.ca

Purchase of Publications

International Civil Aviation Organization (ICAO) – Air

International Maritime Dangerous Goods Code (IMDG Code) – Ship / Vessel

Compliance with the Transportation of Dangerous Goods Act and Regulations

Failure to comply with the TDG Act and TDG Regulations may lead to fines and/or imprisonment. For more information, you can visit the TDG website.

Appendix - Transporting Ebola Contaminated Waste

Transport Canada regulates the Ebola virus as an infectious substance under the TDG Regulations. Following the Ebola Outbreak of 2014-2016, a new UN number for solid infectious substance waste of Category A (UN 3549), as well as two associated packing instructions (P622 and LP622) were introduced into the 21st edition of the UN Model Regulations.

Prior to this, there were no approved packagings suitable for transporting the large volumes of Category A waste that are generated from caring for a patient suspected or known to be contaminated with the Ebola virus. Transport Canada will be introducing the UN3549 classification into the TDG Regulations. The packaging requirements for UN3549 were introduced into the 2021 edition of the CAN/CGSB 43.125 standard.

Anyone handling, offering for transport or transporting this infectious substance by road, rail, marine or air must comply with the TDG Regulations:

- Part 3 requires the consignment to be accompanied by a shipping document
- Part 4 requires the means of containment to display the appropriate safety marks
- Part 5 and the requirements listed in the CAN/CGSB 43.125 standard
- Part 6 requires anyone who handles, offers for transport or transports the infectious substances to be properly trained and hold a training certificate
- Part 7 requires anyone who offers for transport or imports any quantity of the Class 6.2 infectious substances listed in Paragraph 7.2(1)(g) to have an approved emergency response assistance plan (ERAP). The Ebola virus is listed in Schedule 4 of the Human Pathogens and Toxins Act
    - It is the person who offers for transport or imports Ebola contaminated waste who must apply for an ERAP
    - Transport Canada will issue a reference number in writing when it approves the ERAP
    - The ERAP reference number and activation telephone number must appear on the shipping document
    - A person may request written permission to use another person's approved ERAP if it applies to the dangerous goods, the mode of transport, the means of containment and the geographical area. The person who holds the approved ERAP must also agree to respond to an emergency on behalf of the other person

NOTE: The transport of deceased bodies contaminated with the Ebola virus is not regulated under the TDG Regulations.

CLASSIFICATION OF PATIENT SPECIMENS

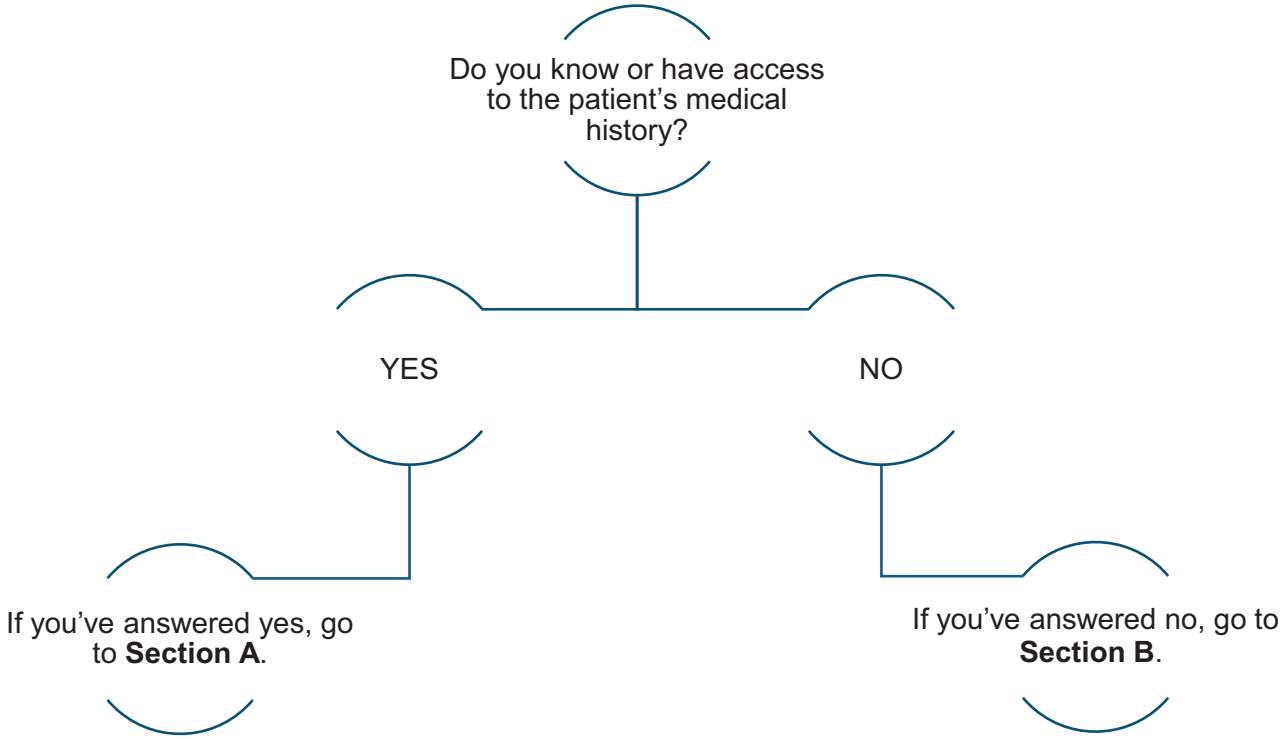
This document does not change, amend or suggest deviations from the *Transportation of Dangerous Goods (TDG) Regulations.*

The purpose of this document is to provide clarity and regulatory guidance on the classification of patient specimens and to assist health care professionals who are responsible for preparing patients specimens for transport. This document is meant to be read with the TDG Bulletin – Shipping Infectious Substances.

Patient specimens

Patient specimens are those, 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.

Patient specimens which may contain a Category A infectious substance listed in Subsection 2.36 (3) of the TDG Regulations must be transported as a UN2814, INFECTIOUS SUBSTANCES, AFFECTING HUMANS or UN2900, INFECTIOUS SUBSTANCES, AFFECTING ANIMALS only, as applicable.



Section A: When the patient's medical history is known

Where a **professional assessment*** concludes that the patient specimen is unlikely to contain an infectious substance, the patient specimen can be classified as "Exempt Human Specimen" and be shipped under the requirements of Section 1.42 of the TDG Regulations.

*Professional assessment must be performed by a knowledgeable individual. Factors such as the known medical history, symptoms and individual circumstances of the patient and **endemic** local conditions must be considered. Individual circumstances of the patient can include occupational or family setting which could lead to a higher probability of the specimen containing an infectious substance.

Endemic local conditions are areas or communities for which the contamination rate of the population is known to be higher than that of the general public on a larger scale.

Section A doesn't apply? Go to **Section B**

Section B: When the patient's medical history is unknown or unavailable

When the patient's medical history is unknown or not available or if the patient specimen may contain a Category B infectious substance, the patient specimen must be classified as UN3373, CATEGORY B INFECTIOUS SUBSTANCES and all applicable requirements of the TDG Regulations must be complied with.

However, note that the exemption of Section 1.39 of the TDG Regulations, for Class 6.2, Infectious Substances, UN3373, BIOLOGICAL SUBSTANCE, CATEGORY B, is applicable in this case.

Contact us

For questions related to the classification of patient specimens, contact the TDG classification team.

For regulatory questions, contact the TDG regional office in your region:

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1-866-814-1477
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Quebec
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