

Transportation of Dangerous Goods (TDG 6.2) - Infectious Substances

Transport Canada's bulletin on *Shipping Infectious Substances* (March 2018) explains the different forms of infectious substances (starting on page 5):

- cultures carry the highest risk
- patient specimens (that we have reason to believe carry an infectious substance) have a lower risk for transporting (refer to page 8).

Transport Canada's bulletin can be obtained at its website: <https://tc.canada.ca/en> – then search for *shipping infectious substances*.

A prime example of infectious substances is HIV. HIV shipped as a viral culture (which would only be done by a public health laboratory or research laboratory) would be shipped as a Category A according to Appendix 3 Guide to Classification of Category A and Category B of the TDG Regulations. It would be classified and shipped as a Category B in the case of a viral load from an infected patient.

It is important to pay attention to the information on the requisition form. It is the responsibility of the consignor (shipper) to classify the patient specimen appropriately; making the decision based on whether they have “reason to believe” that the specimen contains an infectious disease.

For example, the Roy Romanow Provincial Lab (RRPL) requisition that includes the testing HIV Viral Load and HCV Genotype, would need to be classified and shipped as a dangerous good.

- The viral serology heading on the RRPL requisition; these tests are looking for antibodies associated with an infectious process and the patient may or may not (or may have previously) have an infection and the shipper would need to use their professional judgment using “reason to believe”.
- Immune status indicates that the health provider is looking for immune status such as in the case to see if there is an appropriate response to a recent vaccination.

The following is a list of some (not all) infectious disease tests that are always classified as dangerous goods:

- | | |
|--------------------------|--------------------------|
| ▪ HIV viral load | ▪ Hepatitis C viral load |
| ▪ HIV genotyping | ▪ Hepatitis C genotyping |
| ▪ Hepatitis B viral load | ▪ Hepatitis C PCR |
| ▪ Hepatitis B genotyping | ▪ Hepatitis C antigen |
| ▪ Hepatitis B DNA | |

Shipments between facilities

TDG regulations apply when samples are being transported between facilities:

- the sending lab/site acts as the consignor
- the courier between sites acts as the carrier for ground transport
- the receiving lab is the consignee

TDG regulations do not apply within the same facility.

For example: if I collect a patient specimen in the ER department at a hospital and need to take it to the lab at that same hospital, I don't need to package the sample for transport.

These samples are not being transported by road but are just being carried down the hallway.

Home visits by lab workers

Lab workers attending to patient homes must also follow TDG regulations:

- the person collecting the blood is the consignor and carrier all wrapped up into one since these specimens are being transported by road (e.g., in the lab worker's vehicle)
- the tote system must be applicable for the specimens being transported (exempt human specimens OR infectious substances)
- if the lab worker had reason to believe that the patient had an infectious disease, they would need to use appropriate TDG packaging

Exempt Human Specimen

Transport Canada Regulations 1.42 (2) states the exempt human specimens must be 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 specimen.

This safety talk was developed in collaboration with the Roy Romanow Provincial Laboratory.

Safety Talk Discussion

Be Accountable: Choose safety - work safe - and go home injury free!