

Safe Transport of Infectious Substances

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Objective:

Overview of the transport requirements for Biological materials that have the potential to be infectious. Specific information for Transport sets out the legal requirements to comply with national and International regulations and provides specific detailed guidance on the classification, packaging, labeling and transport of infectious substances.

Transport of infectious material.

There are 4 steps involved in the safe transport of infectious material. These are:

- Classification.
- Packaging.
- Marking & Labeling
- Transport Documentation.

Classification

The transportation of infectious substances is divided into the following categories:

• Category A:

An infectious substance which is carried in a form that, when exposure to it occurs, is capable of a using permanent disability, life threatening or fatal disease in otherwise healthy humans or animals. This definition is supplemented by an indicative list of pathogens, these are assigned to:

UN2814 = Infectious substance, affecting humans

UN2900 = Infectious substance, affecting animals

Examples of Category A Substances.

Bacillus anthracis (cultures only)

Hepatitis B virus (cultures only)

Shigella dysenteriae type 1 (cultures only)

•Category B:

any infectious substance that does not meet the criteria for inclusion in Category A. This would include specimens from Patients with known or suspected HIV, HBV or HCV infections,

These are assigned to UN3373 = Biological substance, Category B

Examples of Category B Substances

Streptococcus pyogenes

Hepatitis B virus

Staphylococcus aureus

Escherichia coli, verotoxigenic

Packaging

Transport of infectious substances requires a basic **triple packaging system**. It consists of three layers as follows:

•Primary receptacle.

A primary watertight leak-proof receptacle containing the specimen. The receptacle is packaged with enough absorbent material to absorb all fluid in case of breakage.

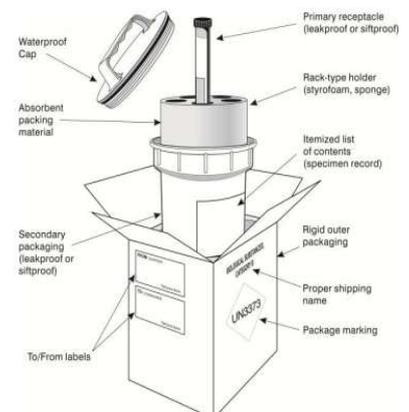
•Secondary packaging.

A second durable, watertight, leak-proof packaging to enclose and protect the primary receptacle(s). Several cushioned primary receptacles may be placed in one secondary packaging, but sufficient additional absorbent material shall be used to absorb all fluid in case of breakage.

•Outer packaging.

Secondary packaging are placed in outer shipping packaging with suitable cushioning material Outer packaging protect their

Contents from outside influences, such as physical damage, while in transit



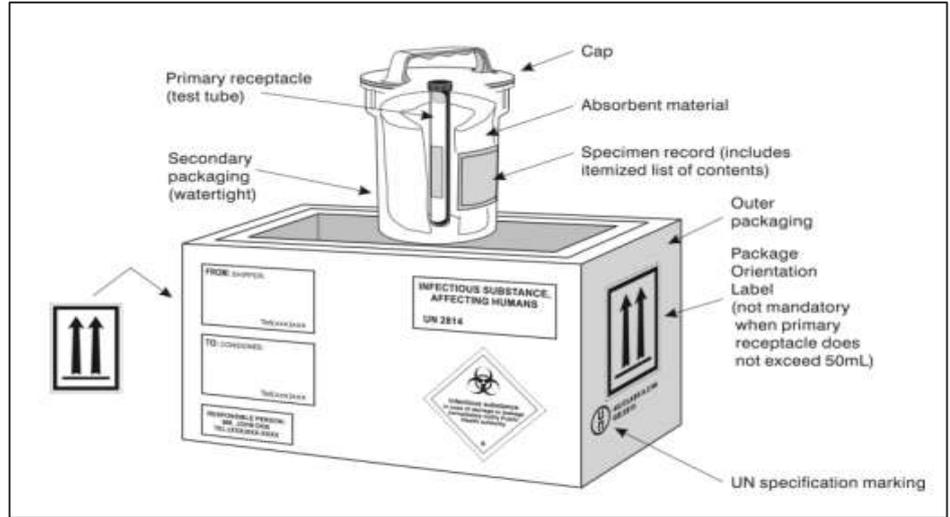
Marking & Labeling

Packages containing infectious substances should be marked with:

•The proper shipping name, e.g. ‘Infectious substance, affecting human ‘with the appropriate UN number (e.g. for ‘Infectious substances, affect in humans’ this would be UN 2814); and the appropriate warning label.

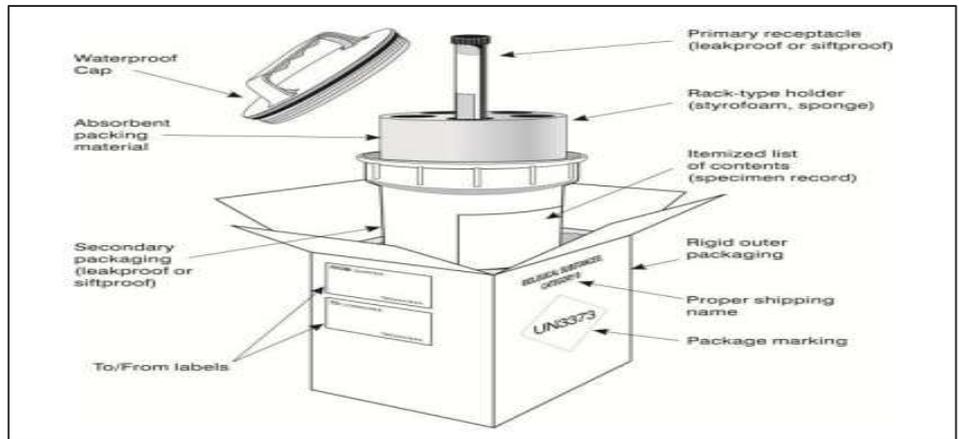
Category A

- The proper shipping name
- UN number
- UN specification mark
- warning label
- (biohazard label)
- Shipper information
- Consignee Information
- Name and telephone number of responsible person
- handling labels
- (arrow orientation)



Category B

- The proper shipping name
- UN number
- Shipper information
- Consignee Information



Transport Documentation

Shipper’s Declaration of Dangerous Goods

- Ensure information is accurate, easy to ID, legible and durable
- Must be an original document with red and white markings on sides
- Must be legible and perfect
- Carriers will wonder if sloppy paperwork indicates sloppy packaging
- Must be in English
- Person signing form is responsible and must be trained
- Must be completed by shipper, except 3 fields
- Air Waybill number, Airport of Departure, Airport of Destination , these can be completed by carrier
- No abbreviations except those listed in the Dangerous Goods Regulations

Shipper’s Declaration of Dangerous Goods

Air Waybill

