Module 8
Frequently Asked Questions and Tools
Frequently asked questions
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1. Where do you purchase shipping packages?
2. Can you ship multiple samples assigned to different categories in the same package?
3. Can you prepare a package without gloves?
4. What are the limitations for shipping infectious substances?
5. Can someone send infectious substances through the mail?
6. How would someone reuse a package?
7. How does someone send an empty package?
8. How much absorbent material is needed in the secondary container?
9. Are there any variations to the regulations?
1. Purchasing shipping packages

Packages can be purchased from courier service providers or from other commercial providers.

An internet search using a suitable national or international search engine usually provides appropriate information. Search phrases such as “UN Packaging” and “UN Infectious Substance Packaging” produce extensive results.

Carriers and forwarding agents should also be able to provide details of local suppliers or companies which can provide such information and packaging supplies.
2. Multiple samples: different categories

Category A samples can be shipped in the same package as Category B or Exempt samples as long the packaging meets the most stringent (among the samples present) shipping requirements.

Other dangerous goods must not be packed in the same packaging as Division 6.2 Infectious Substances unless they are necessary for maintaining the viability, stabilizing or preventing the degradation of infectious substances.

A quantity of 30 ml or less of dangerous goods included in Classes 3, 8, or 9 may be packed in each primary container with infectious substances. When these small quantities of dangerous goods are packed with infectious substances, no other requirements for substances of these classes need to be met.
3. Preparing packages – no gloves

- It is recommended to handle samples with gloves
- It is recommended to develop and monitor medical surveillance programmes among individuals handling samples
- If gloves are not available, individuals should consider the following recommendations:
  - Disinfect primary container surface
  - Develop and ensure a hand washing standard operating procedure (SOP) for individuals handling primary containers with no gloves
  - Provide tongs for individuals to handle primary containers
  - Train staff on processes which minimize risk of exposure
4. Shipping infectious substances - Limitations

- Every infectious substance can be shipped
- All human and animal specimens should be considered potentially infectious unless otherwise specified by a medical professional
- Unless an infectious substance cannot be consigned by any other means, live animals must not be transported
- Infectious substances must not be hand carried or carried in checked-in baggage during air travel
- Infectious substances must not be placed in diplomatic pouches
5. Shipping infectious substances by mail

⚠️ Not all countries allow shipments of infectious substances by mail

⚠️ Generally, postal services do not accept Category A shipments by mail

⚠️ Contact local postal authorities to determine if the countries you are shipping from, through, and to, allow infectious substances to be shipped by mail

⚠️ Shippers must follow postal requirements when shipping infectious substances by mail
6. Reusing packages

⚠️ Shipping packages can be reused

⚠️ If the shipper plans on reusing the package – it must be appropriately disinfected

⚠️ Before reusing the package, the shipper must make sure all markings and labels reflect the substance actually being shipped

⚠️ If the shipper plans on shipping an empty package, all non applicable markings and labels must be removed or covered
7. Shipping empty packages

⚠️ Empty packages can be shipped

⚠️ If the shipper plans on shipping an empty package, all non-applicable markings and labels must be removed or covered
8. Absorbent material

⚠ Absorbent material should always be placed inside the secondary container (between the primary and secondary containers)

⚠ There must be enough absorbent material to absorb the entire contents of the primary container

⚠ Absorbent material must protect the cushioning material and outer packaging if there is a leak from the primary container

⚠ Liquids from primary containers should never leak through the secondary or outer container
9. State and operator variations

States (countries) and operators (e.g. airlines) may have specified variations to existing regulations.

These variations may restrict or impose additional requirements for the transport of infectious substances and other dangerous goods.

Shippers are advised to contact their carrier prior to shipment to ensure all State and operator requirements are met prior to shipping.
10. Relevant special provisions (I)

A81 Quantity limits do not apply to body parts, organs or whole bodies. Transport in accordance with this Special Provision must be noted on the DGD.

A117 Wastes transported under UN 3291 are wastes derived from the medical treatment of humans or animals or from bio-research, where there is a relatively low probability that infectious substances are present. Waste infectious substances which can be specified must be assigned to UN 2814 or UN 2900. Decontaminated wastes which previously contained infectious substances may be considered as not subject to Dangerous Goods Regulations unless the criteria of another class or division are met.

A140 For the purposes of documentation, the proper shipping name must be supplemented with the technical name. Technical names need not be shown on the package. When the infectious substances to be transported are unknown, but suspected of meeting the criteria for inclusion in category A and assignment to UN 2814 or UN 2900, the words “suspected category A infectious substance” must be shown, in parenthesis, following the proper shipping name on the transport document, but not on the outer packagings.
10. Relevant special provisions (II)

A152 Insulated packagings conforming to the requirements of Packing Instruction 202 containing refrigerated liquid nitrogen fully absorbed in a porous material are not subject to Dangerous Goods Regulations provided the design of the insulated packaging would not allow the build-up of pressure within the container and would not permit the release of any refrigerated liquid nitrogen irrespective of the orientation of the insulated packaging and any outer packaging or overpack used is closed in a way that will not allow the build-up of pressure within that packaging or overpack. When used to contain substances not subject to Dangerous Goods Regulations, the words “not restricted” and the special provision number A152 must be provided on the air waybill when an air waybill is issued.
Tools
Tools

- Classification Flowchart
- Differences in Packaging Requirements (P620, P650, Exempt)
Is it known not to contain infectious substances?
Have any pathogens present been neutralized or inactivated, so that they no longer pose a health risk?
May it contain microorganisms that are non-pathogenic to humans or animals?
Is it in a form in which any pathogens present have been neutralized or inactivated such that they no longer pose a health risk?
Is it an environmental sample (including food and water sample) that is not considered to pose a significant risk of infection?
Is it a dried blood spot?
Is it a faecal occult blood screening sample?
Is it decontaminated medical or clinical waste?
Is it for transfusion or transplantation?

Yes

No or Unknown

Does it meet the definition of a Category A substance?

No

Yes or Unknown

Has an informed professional judgement based on the known medical history, symptoms and individual circumstances of the source, human or animal, and endemic conditions determined that there is only minimal likelihood that pathogens are present?

Yes

No or Unknown

Not subject to the transport requirements for dangerous goods unless meeting the criteria for another division or class

Subject to 'Exempt human specimen' or 'Exempt animal specimen' provisions

UN 3373 Biological substance, Category B

UN 2814 Infectious substance, affecting humans, or UN 2900 Infectious substance, affecting animals only
## Differences in packaging requirements

<table>
<thead>
<tr>
<th>Category A (P620)</th>
<th>Category B (P650)</th>
<th>Exempt Human/Animal Specimen</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN 2814 – Infectious Substance affecting Humans</td>
<td>UN 3373 – Biological Substance, Category B</td>
<td>Exempt Human Specimen</td>
</tr>
<tr>
<td>UN 2900 – Infectious Substance affecting Animals Only</td>
<td></td>
<td>Exempt Animal Specimen</td>
</tr>
<tr>
<td>Primary container is leakproof</td>
<td>Primary container is leakproof</td>
<td>Primary container is leakproof</td>
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<tr>
<td>Secondary container is leakproof</td>
<td>Secondary container is leakproof</td>
<td>Secondary container is leakproof</td>
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<tr>
<td>Outer container is rigid</td>
<td>Either secondary or outer container must be rigid*</td>
<td>Outer packaging must be of adequate strength</td>
</tr>
<tr>
<td>Pressure tested at 95 kPa</td>
<td>Pressure tested at 95 kPa</td>
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</tr>
<tr>
<td>Drop tested from 9 m</td>
<td>Drop tested from 1.2 m</td>
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<tr>
<td>Stack tested</td>
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<td>--------------</td>
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<tr>
<td>Puncture tested at 7 kg</td>
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<tr>
<td>UN Specification marking</td>
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<tr>
<td>Shipper must be trained</td>
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* If shipment is transported by air, the outer container must be rigid.
Questions and comments