

These rules are designed to safeguard those who collect, transport and receive biological specimens and to ensure specimen integrity as well as meeting regulatory requirements.

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## Containers and packaging – general rules

Category B Biological Substances are assigned to UN3373 and must be packaged according to the Dangerous Goods IATA (air) or ADR (road) Packing Instruction 650 for transport.

### **SPECIMEN CONTAINERS**

Ensure that the container is appropriate for the purpose, is properly closed, and is not contaminated on the outside.

Specimen containers need to be sufficiently strong and not leak in normal use.

Containers which comply with recognised standards fulfil this requirement.

### **TRANSPORT OTHER THAN BY POST, E.G. BY COURIER**

Specimens sent from GP surgeries and other external sources should be packaged by the sender, in appropriate containers and transport bags, and be properly labelled. Specimens should be transported in leak-proof, secure transport boxes with lids that can be fastened. Warning labels on the box should state that it should not be opened or tampered with, and give a contact telephone number in case it is found unattended.

### **PACKAGING**

Infectious substances must be packaged according to the UN Packing Instruction 650 as follows:

All specimens must be placed in individual plastic bags in sealed containers.

# Packaging and transporting biological substances



The plastic bags should be put into a second large transparent, sealable, leak-proof, plastic bag containing absorbent material sufficient to absorb the entire quantity of the liquid present in all the specimen containers (e.g. sufficient paper towels to absorb any leakage).

The large bag should be put into a rigid transport container that is correctly marked and labelled.

The request form should not be placed in the bag with the specimen, nor stapled to the bag. A separate pocket for the request form in the transport bag is suitable for most specimens, but for larger containers the request form can be securely taped or tied to the neck of the sack.

## Warning labels

“High risk’ or ‘danger of infection’ stickers must be attached to specimens and request forms from patients that pose a known high risk of exposure to agents such as HIV, HBV, HCV, TB, Typhoid, Brucella, CJD. Care must be taken to protect the confidentiality of the patient when these stickers are used.

## Specimens sent via Royal Mail

The primary specimen container must be leak-proof and wrapped in sufficient absorbent material to absorb any spillage. The primary container and absorbent material must be placed into a single bag with the request form in the pouch.

The specimen bag should be placed into a suitable rigid container that is correctly marked and labelled. This product must be fully compliant with both Packing Instruction 650 and UN3373 requirements.

Specimens containing hazard group 4 agents must not be sent by post.

## **LABELLING POSTAL PACKAGES**

Packages containing infectious substances sent by post must be marked with:

1. The sender’s name and address.

2. The telephone number of a responsible person who has knowledge of the shipment.
3. The recipient's name and address.
4. The appropriate warning label for infectious substances should be used. For example, "Biological Substance, Category B". The label must be at least 6mm high.
5. The outer packaging must always be suitably marked and labelled with "UN3373" contained within a diamond shape with minimum dimensions of 50 mm by 50 mm; the width of the line shall be at least 2 mm and the letters and numbers at least 6 mm high.

### [Specimens in formalin - safety](#)

Before formalin is used in the workplace, COSHH risk assessments must be carried out.

Formalin spillage granules must be available wherever formalin is used or stored and staff trained in their use.

Advice on the safe use of formalin may be obtained from the histopathology team on ext. 7045.

### [Transport of histology and cytology specimens](#)

Ensure the cap of the primary container is securely fastened.

Wrap the primary container in absorbent material and place into a plastic specimen bag.

Place the specimen bag into a large plastic bag or cardboard box and place into the transport box. Ensure the specimen pots remains upright in the transport box.

Keep a log of all specimens sent to the laboratory. The patient's name, specimen type and the date and time sent to the laboratory must be recorded, as well as the signature of the person who packaged and sent it.

These specimen are not suitable to be sent via the postal system.

## Specimens sent on dry ice

When dry ice (solid carbon dioxide) is used as a coolant, the requirements below must be met.

Where dry ice is used, it should be placed around the secondary packaging, and the outer packaging should permit the release of carbon dioxide. The dry ice should not be placed inside the sealed primary container. This can lead to pressurisation of the primary container with the likelihood of it exploding.

Interior supports must be provided to secure the secondary packaging in the original position after the ice or dry ice has dissipated.

Packages containing dry ice for cooling shall be marked with the following wording on the outside of the package, in addition to the P650 requirements: **CARBON DIOXIDE, SOLID, AS COOLANT**. The markings shall be durable, legible and placed in such a location and of such a size relative to the package as to be readily visible.