

## **Guidelines for sending biological samples by post/courier**

### **Category A – Infectious Substances Capable of Causing Disease in Humans or Animals.**

For the purposes of transport, all cultures of deliberate release organisms and some clinical samples, fall into Category A.

Packages should be marked with the proper shipping name i.e. "Infectious substance affecting humans", the appropriate UN number and the appropriate warning label (i.e. the danger sign for infectious substances).

Category A infectious substances are assigned to UN 2814 or UN2900 and must be packaged in accordance with UN Packaging Instructions. Category A carriage should be individually requested through an approved courier. The service will be a next day tracked door-to-door delivery, which must be signed for at collection and receipt.

\* The sending Laboratory must contact the receiving Laboratory to confirm the specimen is on its way and to give the expected arrival time.

\* The receiving laboratory should call the referring Laboratory to confirm safe receipt.

### **Packaging for Category A substances**

**Packaging should have the following features:**

**Primary receptacle** – A leak-proof receptacle containing the specimen

**Secondary packaging** – A leak-proof secondary container to enclose and protect the primary receptacle. Several primary receptacles may be placed in one secondary receptacle. The secondary container should be externally disinfected after packing.

**Absorbent Material** – Absorbent material must be placed between the primary receptacle and the secondary packaging. The absorbing material must be sufficient to absorb the entire contents of all primary receptacles.

**Outer packaging** - The secondary packaging should be placed in a rigid outer packing which protects it and its contents from external damage during transit. The outer packaging must be UN specification packaging.

**Labelling** – The package should be labelled with the correct hazard signs, proper shipping name and name and telephone number of the person responsible for the contents.

(see labelling guidance)

## **Category B Biological Substances**

If a sample is considered Category B, an overnight delivery using the specified provider will suffice. The sending Laboratory should always contact the receiving Laboratory informing them of specimen dispatch.

Most clinical samples, such as serum, are generally classified as Category B and assigned to UN3373 (Biological Substance, Category B). Clinical samples assigned to UN3373 may be posted.

### **Packaging for Category B substances**

#### **Packaging should have the following features:**

**Primary receptacle** – A leak-proof receptacle containing the specimen. The primary container must not contain more than 1L.

**Secondary packaging** – A leak-proof secondary receptacle to enclose and protect the primary receptacle. Several primary receptacles may be placed in one secondary receptacle. The secondary container should be externally disinfected after packing.

**Absorbent Material** – Absorbent material must be placed between the primary receptacle and the secondary packaging. The absorbing material must be sufficient to absorb the entire contents of all primary receptacles.

**Outer packaging** - The secondary packaging should be placed in a rigid outer packing which protects it and its contents from external damage during transit.

**Labelling** - The package should be labelled with the correct hazard signs.

(see labelling guidance)

## **Genetically Modified Organisms**

GM organisms should be packaged according to the guidelines for Category b samples. GM organisms are assigned to UN3245

## **Samples on ice**


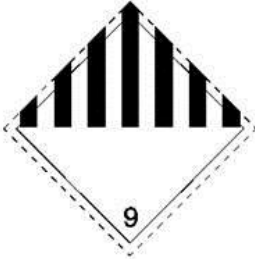


Samples which require packing with ice should be placed in a leak-proof outer container. Ice should be placed outside the primary and secondary container.


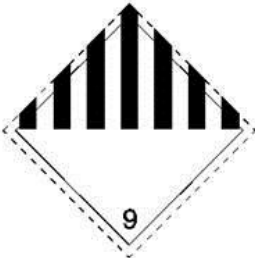
### **Dry Ice**

When using Dry Ice to keep samples cold, it should be contained outside the primary and secondary container, such that carbon dioxide is able to escape through ventilation.

When labelling the exterior of the package, items packed with Dry Ice should be marked with UN1845 and the diamond hazard label shown here:

## Labelling guidance

<p>Consignor Research Group Blizard Institute of Cell and Molecular Science Barts and The London School of Medicine and Dentistry 4 Newark Street London E1 2AT</p>	 
<p>Consignee Research Group Institute Street Address City County Postcode</p>	 <p>Infectious substance, affecting humans – proper name</p>
<p>Emergency Contact: Dr. Responder +44 1234 56789</p>	
<p> 4G/Class 6.2/04/GB/0000</p>	

<p>Consignor Research Group Blizard Institute of Cell and Molecular Science Barts and The London School of Medicine and Dentistry 4 Newark Street London E1 2AT</p>	 
<p>Consignee Research Group Institute Street Address City County Postcode</p>	<p>Biological Substance, Category B UN1845 Dry Ice, 5 kilos</p>

## Understanding US Shipping Codes

Example code: 1H2 / Y1.8 / 100 / 06 / F / OA30900

<b>UN</b>	<b>The United Nations Coding System</b>
<b>1</b>	<b>Type of Container</b> <ol style="list-style-type: none"> <li>1. Drums/Pails</li> <li>2. Barrels</li> <li>3. Jerri cans</li> <li>4. Boxes</li> <li>5. Bags</li> <li>6. Composite Packagings</li> </ol>
<b>H</b>	<b>Material of Construction</b> <ol style="list-style-type: none"> <li>A. Steel</li> <li>B. Aluminium</li> <li>C. Wood</li> <li>D. Fibre</li> <li>E. Plastic</li> </ol>
<b>2</b>	<b>Category Within Type</b> <ol style="list-style-type: none"> <li>1. Closedhead</li> <li>2. Openhead</li> </ol>
<b>Y</b>	<b>Packaging Group for which container was tested</b> <ol style="list-style-type: none"> <li>X. for Packaging Group I, II, III</li> <li>Y. for Packaging Group II and III</li> <li>Z. for Packaging Group III</li> </ol> <p>Packaging Group I: Great Danger - high hazard level            Packaging Group II: Medium Danger - medium hazard level            Packaging Group III: Minor Danger - low hazard level</p>
<b>1.8</b>	<b>Density or specific gravity of material packed</b> OR For packaging intended for Solids (powders, pills, capsules, tablets) or that have inner packaging; this marking will indicate the maximum gross mass (weight) in kilograms.
<b>100</b>	<b>Hydraulic pressure in kilo-pascal (kPa)</b> OR For packaging intended for Solids or that have inner packaging, an "S" in upper case will follow the gross mass.
<b>12</b>	<b>Current year</b>
<b>F</b>	<b>Country where container was manufactured</b>
<b>OA30900</b>	<b>Code for manufacturing plant</b>

### Transport of samples between laboratories

Precautions should include:

- Each specimen must be placed in a leak-proof secondary container with sufficient absorbent material to absorb all the contents should leakage occur.

- Specimens should be transported by hand by a responsible person using the above packaging.