Packaging Requirements for the Transport of Biological Samples

Packing Instructions

- Samples must be labelled according to the protocol, or if not specified in protocol with patient trial number, participating site identifier (if applicable), and date of collection as a minimum.
- Patient’s anonymity must be maintained (i.e. no hospital stickers, no name of patient, no patient address or patient hospital number).
- The primary container(s)/receptacle must be leak proof and robust.
- Absorbent material is placed between the sample primary container(s)/receptacles(s).
- Multiple samples should be individually wrapped before being packed.
- There must be sufficient absorbent material to absorb the entire contents of the samples within the primary container(s)/receptacle(s) to ensure that any release of liquid substance will not compromise the integrity of the outer packaging.
- The outer packaging should be of a type tested and approved by the Department of Transport and marked accordingly.
- An itemised list of contents must be enclosed in the package.
- Traceability paperwork must be completed for a complete audit trail.
- Transport documentation must be filled in.

Frozen Samples

- Dry ice is placed in the outer packaging normally a polystyrene box and must be of sufficient quantity to last for the duration of the shipping.
- The primary receptacle is covered in the dry ice.
- Dry ice will sublime and release carbon dioxide gas.
- Do not tape down the lid (prevents build-up of gas) of polystyrene box.
- Place the polystyrene box inside a cardboard box.
- Secure the box in such a way that there can be release of carbon dioxide gas (this prevents a build-up of pressure that could rupture the packaging).
- Instructions for filling and closing such packages are normally provided by the packaging manufacturer.

Samples Transported at Ambient Temperature

- A fridge pack or gel pack may be packed between the sample and the absorbent material, or if specified according to protocol.
- Sample absorbent material and gel pack are placed inside a leak proof primary receptacle.
- Pack in a suitable outer container, sturdy cardboard, jiffy bag, polystyrene box.

Labelling all Packages

- All packages must be marked with a square each side being 50mm or 2inches set at 45°. Within the square is UN3373. Written next to the symbol in letters at least 6mm high is “Biological Substance Category B”.
- Address should be clear.
- The name of the sender should be accessible.
Labelling Packages containing Dry Ice

- Packages containing dry ice must use a UN1845 label also have the following additional label filled in by the sender.

Packages that are Time and Temperature Sensitive

- Only to be used when there is a specific agreement in place with the stakeholders (shipper, forwarder, carrier, etc).
- Only to be completed as indicated in that agreement (i.e. in the SLA, QMS, SOP, etc).
- The temperature indicated on the label is the only one that will be followed during transport (other package markings will be disregarded).
- Informs the handler on the external handling temperatures.
- The label will be a 3 colour label.