# Standard Operating Procedure (SOP)

## SOP WP5-003/Version 1.0

### Title:

Shipping of biosamples

### Validity:

valid after: *insert start date*
valid till: *insert end date*

### Replaced versions:

*insert previous version*

### Modification note:

*insert modifications with respect to previous version*

### Distribution list:

Original: quality management / quality assurance representative
Authorized copies (numbered)
1. *insert distribution pathway*
2. *insert distribution pathway*
3. *insert distribution pathway*

### Author:

*insert name*

### Reviewed by:

*insert name*

### Released by:

*insert name*

**Date:**

*insert date*

**Date:**

*insert date*

**Date:**

*insert date*

**Signature**
1. **Aim/field of application/tasks** ........................................................................................................4
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Biosamples to be shipped

Is it monday, tuesday or wednesday?

no → Wait til next week

yes → Pack biosamples into styrofoam box with dry ice

Inform the recipient of the delivery and ask for acknowledgement of receipt

Enclose temperature logger, information concerning sender / recipient and kind of sample

Seal box

Make sure that box features required hazardous material tags

Paste up sender / recipient information

Apply parcel service for picking up and track the shipment

Delay of delivery endangers sample cooling?

no → Continue tracking til recipient confirms acceptance of consignment

yes → Arrange appropriate intervention
1. **Aim/field of application/tasks**

The transport of biosamples has to be performed strictly under standardized conditions to prevent a loss of sample quality. The purpose of this Standard Operating Procedure is to harmonize the shipping conditions of biosamples for all BioSHaRE biobanks.

2. **Terms, definitions, abbreviations**

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADR</td>
<td>Accord européen relatif au transport international des marchandises Dangereuses par Route</td>
</tr>
<tr>
<td>cm</td>
<td>Centimeter</td>
</tr>
<tr>
<td>EC</td>
<td>European Community</td>
</tr>
<tr>
<td>GHS</td>
<td>Globally Harmonized System of Classification and Labeling of Chemicals</td>
</tr>
<tr>
<td>ICAO</td>
<td>International civil aviation organization</td>
</tr>
<tr>
<td>IATA</td>
<td>International Air Transport Association</td>
</tr>
<tr>
<td>SOP</td>
<td>Standard Operating Procedure</td>
</tr>
<tr>
<td>UN</td>
<td>United Nations</td>
</tr>
<tr>
<td>WP</td>
<td>Work Package</td>
</tr>
</tbody>
</table>

3. **Scope of application**

Insert scope of application here.

4. **Relation to other regulations**

Update listed regulations and insert relation to other regulations here.

  http://www.unece.org/trans/danger/publi/unrec/rev17/17files_e.html
- European agreement concerning the international carriage of dangerous goods by road (ADR), applicable as from 1 January 2011  
- International civil aviation organization (ICAO): Technical instructions for the safe transport of dangerous goods by air  
  http://www.icao.int/safety/DangerousGoods/Pages/technical-instructions.aspx
- Globally Harmonized System of Classification and Labelling of Chemicals (GHS), Fourth revised edition, Copyright © United Nations, 2011
5. Responsibilities

Insert responsible person(s) here.

6. Work procedure

6.1. Description of operating procedure

Adapt according to corresponding biobank

Exclusively, shipping of biosample packages is carried out from Monday to Wednesday to ensure the receiving and disposal of the samples at the destination address before the weekend!

<table>
<thead>
<tr>
<th>Description of operating procedure</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. First of all, the recipient of the biosample delivery has to be informed and asked for an acknowledgement of receipt at the point of arrival.</td>
<td>Study coordinator / Project manager</td>
</tr>
<tr>
<td>2. For shipping the biosamples are packed in a styrofoam box (styrofoam, neopor...) with a coating thickness of at least 5 cm for adequate stability. A paperboard coated box is favoured over a non-coated box.</td>
<td></td>
</tr>
<tr>
<td>3. The biosamples should be surrounded from all sides by a dry ice layer with a thickness of at least 5 cm. Vacuity above the dry ice layer should be filled-up with packing material or further dry ice in order to avoid a shift of the insulating bed (dry ice) during the transport. For reasons of dispersal, dry ice pellets (nuggets) are favoured over dry ice blocks.</td>
<td></td>
</tr>
<tr>
<td>4. To record the temperature during transport, a temperature logger should be enclosed in each package.</td>
<td></td>
</tr>
<tr>
<td>5. Due to safety reasons, information concerning sender and recipient of the biosample delivery (address, contact person) are to be enclosed inside the package as well as information concerning sample type and</td>
<td></td>
</tr>
</tbody>
</table>
6. The styrofoam box is to be sealed carefully with adhesive tape. There is no need to seal Paperboard coated styrofoam boxes as far as the paperboard box itself avoids an unintended opening of the styrofoam boxes (tightly enclosing paperboard).

7. The paperboard or styrofoam boxes must be labeled with the required hazardous material tags (UN 1845).

8. Paste up the package with sender and recipient information including contact person and phone number.

9. Apply at parcel service for picking up the package.

10. The sample shipment has to be tracked in regular intervals (at least once a day) to ensure that samples are adequately cooled during the transport.

11. In case of a delay of any reason, arrange an appropriate intervention.

12. The process is not completed till the recipient confirms the acceptance of the consignment.
6.2.

6.3. Flow-chart of shipping procedure *Adapt according to corresponding biobank*
Biosamples to be shipped

- Is it Monday, Tuesday or Wednesday?
  - no: Wait till next week
  - yes: Proceed to next steps

Pack biosamples into styrofoam box with dry ice

- Inform the recipient of the delivery and ask for acknowledgement of receipt

Enclose temperature logger, information concerning sender / recipient and kind of sample

- Seal box

Make sure that box features required hazardous material tags

- Paste up sender / recipient information

Apply parcel service for picking up and track the shipment

- Delay of delivery endangers sample cooling?
  - no: Continue tracking til recipient confirms acceptance of consignment
  - yes: Arrange appropriate intervention