

This document is written to provide NORS teams, transplant and research centres with information on use of the small organ transport box.

The document also provides guidance and information on the system of colour coding to prevent any errors in packaging and transportation of organs.

Information on cleaning and maintaining the boxes is provided, as well as contact details for ordering consumables, such as labels and sterile ties.

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## INTRODUCTION

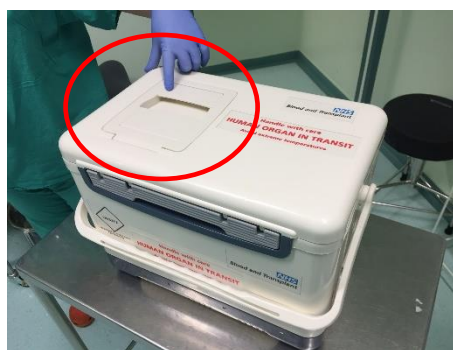
The small organ transport boxes are used to transport the kidney, pancreas, blood vessels, hearts retrieved for valves and research tissue.

The boxes have been validated with wet ice only. Do not use with dry ice. Using dry ice in a sealed container causes it to sublimate into carbon dioxide - this causes a build-up of pressure which very quickly causes the box to expand and even explode.

DO NOT attempt to open the service hatch in the lid. This is sealed shut and attempting to open it could damage the box.

DO NOT apply any additional sticky labels to the exterior of the box.

**Figure One – Service Hatch:**



## AT THE NORS CENTRE

Ensure your ice machine has sufficient capacity to fill four boxes with crushed, melting water ice. These boxes will require approximately 6 kg of ice to ensure the organ is fully covered (You do not need to completely fill the box with ice when the organ is packed (see Figure Two below), but it is important you have enough to surround and protect the organ in transit.

**Figure Two – Box Packed with Ice:**



Before use, wipe the inside of the box, underside of the lid and with a Clinell or Tristell wipe (or equivalent). Ensure you wipe the seal area and check the seal for damage.

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Check the inside of the box ensuring it is free from any stains. If you notice any staining, this **MUST** be removed with a mild detergent and warm water. Follow by thoroughly wiping the inside and the sealing surfaces with a solution of warm water and 5.25% sodium hypochlorite (bleach). Air dry the box before use or closing the lid.

DO NOT use abrasive cleaners of any kind on the inside or outside surfaces of the box.

CHECK that the drainage valve on the side of the box is closed before filling the box with ice.

Fill the small organ transport boxes with crushed or flaked melting water ice and close the lid. NOTE: the ice must not be at a temperature lower than 0°C

Close the lid one side at a time by pressing down firmly on the lid with both palms, while using the fingers to close both ends of the catch evenly.

Do not force the lid closed or attempt to close the catch unevenly as damage may result. Light to firm, even pressure is all that is needed.

NOTE: The lid catches are designed to operate as hinges, should opening the lid from one side be required. It is important to remember this when sealing the box.

Ensure you have sufficient labels, colour coded sterile ties, and plastic bags to transport samples and paperwork.

It is important you maintain the hygiene of the ice machine by emptying it weekly and disinfecting the ice storage area, or in line with the manufacturer's instructions.

## **AT THE DONOR HOSPITAL**

The box lid should be prepared by securing **one side** of the lid (if not already secured) with the supplied cable ties in the manner shown in **Figures Three, Four and Five**. This will be done by either the Organ Preservation Practitioner (OPP) or the Specialist Nurse in Organ Donation (SNOD), but it should be agreed at the beginning of the retrieval whose responsibility this is.

Figure Three – Thread secure tie through cleat



Figure Four – Close latch hole in latch and secure the tie (place finger behind tie to ensure you do not over-tighten)



**NOTE:** The cable ties are to ensure that the box contents are not tampered with and are **not** designed to secure the box closed.

You do not need to line the box with clear bags. The volume of melting water ice in the box should be sufficient to ensure the packaged organ will not be in contact with the box structure. Further melting water ice will be added later once the packaged organ is in place.

The colour coded label must be attached to the handle of the box prior to the organ being accepted by the Organ Preservation Practitioner (OPP) for packaging.

When the organ has been triple-bagged, the coloured coded tie should be attached to the neck of the outside of the third bag.

When handing over the organ for packaging, the surgeon must clearly state the organ they are handing over, e.g. “right kidney”. The OPP should verbally confirm this, e.g. “right kidney”.

**RED – Right Kidney**  
**YELLOW – Left Kidney**  
**BLUE – Pancreas**  
**WHITE – Heart for Tissue**  
**ORANGE – Research Tissue**

This member of the NORS team must then verbally confirm with the OPP the organ they are handing over.

The Organ Specific form and blood group should be placed in the Document Bag with at least one spare tag, so the box can be resealed after samples have been removed.

The SNOD and OPP will undertake an item check of the box contents prior to sealing the box. The box is then sealed closed with the second cable tie (as described in **Figures Three, Four and Five**, above) and the addresses applied to the labels once known. **Figure Six**. The SNOD will record the box number on Donor Path; the last 5 digits after AAA are the only part of the long number that needs to be recorded. **Figure Seven**.

**Figure Six – address label**



**Figure Seven –numbers to be recorded**



## **HANDLING THE PACKED ORGAN BOX**

The boxes contain melting water ice and there is a risk that spilt water could cause slips, trips and falls. Please be aware of any spillages and ensure these are dealt with rapidly.

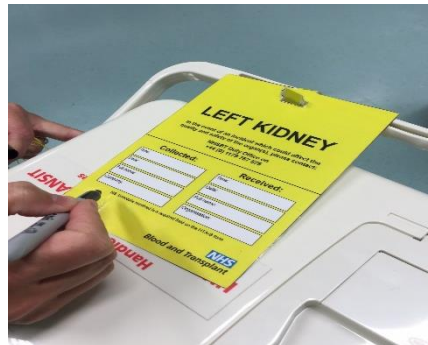
The boxes may weigh around 12.5 kg or less when packed with an organ, so precautions must be taken when lifting the boxes, particularly in restricted spaces, and when carrying the boxes. Avoid the need for any manual handling which might involve a risk of injury, so far as is reasonably practicable, use a wheeled trolley to carry the packed organ.

Where the need for manual handling is unavoidable, please ensure all staff are up to date in their manual handling training.

## **ON RECEIPT OF AN ORGAN**

Whoever takes custody of an organ from the transport driver should complete the date/time received field on the label - this is mandatory information required on the HTA-B form.

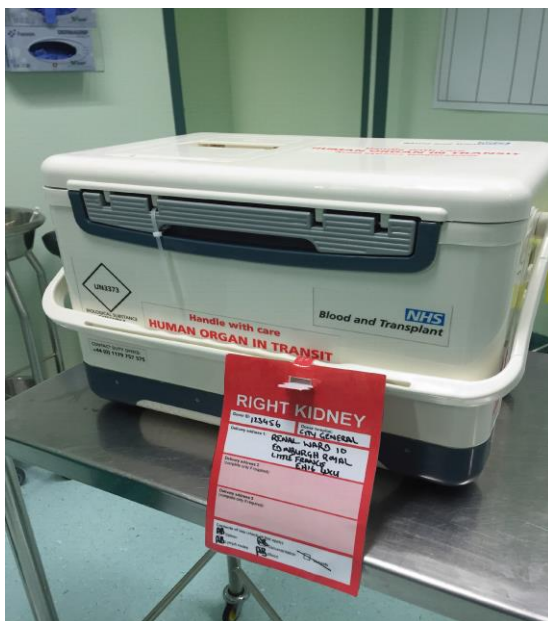
Figure Eight – completing the date/time received field on the label:



The coloured organ label should remain on the organ box until transplantation. It should then be kept with the recipient's medical records or until the date and time of receipt has been successfully and accurately transcribed on to the HTA B form. The coloured label can then be disposed of.

To open the box, cut the cable tie on **one side only** of the silver closing mechanisms with scissors\*:

Figure Nine – cut the cable tie here:



**\*NOTE:** pulling / trying to manually snap the cable tie will cause damage to the organ box.

The 'Contents of the Box' checklist (Figure 10) is for use by the SNOD/OPP at the donor hospital. It is an aide memoir prior to the organ leaving the establishment and does not reflect the contents of the box on arrival at the transplant centre (as samples will have been removed by HLA laboratory personnel).

**Figure Ten – Contents checklist:**

Contents of box (check all that apply):		
<input type="checkbox"/> Spleen	<input type="checkbox"/> Documentation	<input type="checkbox"/> Vessels
<input type="checkbox"/> Lymph nodes	<input type="checkbox"/> Blood	

If the organ is subsequently sent on to another establishment for transplantation or Scheduled Purposes, the HCP at Centre 1 should complete 'Delivery Address 2 or 3' as required (Figure 11). **The box must then be resealed using a cable tie.**

**Figure Eleven – Delivery address 2:**

Delivery address 2 (complete only if required):
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On receipt of the organ at a second or third delivery address, please ensure the "date/time received" section (Figure Eight) is crossed through and the new date/time received written in.

After unloading the Carrier, thoroughly clean it outside and inside, and check for any damage, particularly seal damage. If damage is noted, please inform [KidneyTransportBoxes@nhsbt.nhs.uk](mailto:KidneyTransportBoxes@nhsbt.nhs.uk)

DO NOT pass the box to another team or allow this to be used for anything other than retrieval of deceased and living donor organs.

## **CLEANING AND MAINTENANCE**

It is extremely important you clean the box after every use, inside and out. If there are no stains, an antibacterial wipe can be used (such as a Clinell, Tristell wipe or equivalent). The box should be left to air dry before the lid is closed. If there are any stains, these **MUST** be removed immediately. Use a mild detergent and warm water to clean the box inside and out. Follow by thoroughly wiping the inside and the sealing surfaces with a solution of warm water and 5.25% sodium hypochlorite (bleach).

DO NOT use abrasive cleaners of any kind on the inside or outside surfaces of the box.

**YOU MUST ENSURE THE INSIDE OF THE BOX IS DRY BEFORE CLOSING AND STORING.**

## **COLLECTION/DELIVERIES**

The administration of small organ boxes is undertaken by NHSBT Information Services

Email: [KidneyTransportBoxes@nhsbt.nhs.uk](mailto:KidneyTransportBoxes@nhsbt.nhs.uk)

Telephone: 0117 975 7436

It is extremely important all box movements are tracked – failure to do this will impact on a team's stock levels. Therefore, please **DO NOT** pass boxes to another team, or allow anyone to borrow/take boxes for any reason other than for the express purpose of transporting a kidney, pancreas, or heart tissue for valves.

## **REPORTING OF ISSUES**

Any issues with the process for collection/delivery of boxes, or with the use of the boxes, please email [KidneyTransportBoxes@nhsbt.nhs.uk](mailto:KidneyTransportBoxes@nhsbt.nhs.uk)

If there is a patient safety/quality and safety issue, follow the process for reporting incidents to NHSBT (SOP3888).

If there is an operational issue, or if you are unsure on the nature of the problem, please notify [KidneyTransportBoxes@nhsbt.nhs.uk](mailto:KidneyTransportBoxes@nhsbt.nhs.uk)

## **ORDERING RETRIEVAL PACKS AND OTHER CONSUMABLES**

Colour coding labels and sterile ties have been in use for all kidney, pancreas and heart valve retrievals since July 2016. The orange research label was added in September 21.

Plain security tags should be used with the small organ boxes (as shown in Figures Two, Three and Four above). These are included in the kidney retrieval packs available from the Brandon Trust.

Kidney retrieval packs, labels, sterile ties, plain security tags can be ordered directly from the Brandon Trust by emailing/contacting:

### **Brandon Trust**

Olympus House, Britannia Road, Patchway, Bristol, BS34 5TA

Tel: 0117 907 7200 Fax: 0117 969 9000

Email: [info@brandontrust.org](mailto:info@brandontrust.org) Website: [Home | Brandon Trust](#)

## **GENERAL ENQUIRIES**

For all other enquiries, please contact:  
[KidneyTransportBoxes@nhsbt.nhs.uk](mailto:KidneyTransportBoxes@nhsbt.nhs.uk)