At-a-Glance

- Proposal to Require Use of a Standardized, Internal Label that is Distributed by the OPTN and that Transplant Centers Notify the Recovering OPO when they Repackage an Organ
- Affected/Proposed Policy: Policy 5.0 Standardized Packaging, Labeling and Transporting of Organs, Vessels and Tissue Typing Materials
- Organ Procurement Organization (OPO) Committee

Current OPTN policy only requires that the external label distributed by the OPTN contractor be used for transporting organs and vessels. This proposed policy change would require OPOs and transplant centers to also use standardized, internal labels that are distributed by the OPTN contractor for organ and vessel transport and for vessel storage. This change will make both internal and external labeling consistent throughout the U.S. The proposal also:

- requires transplant centers to notify the recovering OPO when they repackage an organ;
- makes the language consistent by changing the term "provided" by the OPTN contractor to the term "distributed" by the OPTN contractor;
- moves Policy 2.5.6.1 which lists the required documentation that accompanies an organ or vessel to policy 5.5.1.
- clarifies labeling requirements for vessel storage

The goal of this proposed change is to improve patient safety and reduce the number of wasted organs by reducing the number of labeling errors.

• Affected Groups

OPO Executive Directors OPO Medical Directors Directors of Procurement OPO Coordinators Lab Directors/Supervisors Transplant Administrators Transplant Physicians and Surgeons PR/Public Education Staff Transplant Program Directors

• Specific Requests for Comment

The Committee recognizes that each OPO has its own process regarding internal labels and that this modification will replace that process. Through public comment, the OPO Committee seeks community and public input to identify specific OPO needs that may arise when developing new processes and practices.

Proposal to Require Use of a Standardized, Internal Label that is Distributed by the OPTN and that Transplant Centers Notify the Recovering OPO when they Repackage an Organ

Affected/Proposed Policy

Policy 5.0 (Standardized Packaging, Labeling and Transporting of Organs, Vessels and Tissue Typing Materials)

Organ Procurement Organization (OPO) Committee

Summary and Goals of the Proposal

Current OPTN policy only requires that the external label distributed by the OPTN contractor be used for transporting organs and vessels. This proposed policy change would require OPOs and transplant centers to use standardized, internal labels that are distributed by the OPTN contractor for organ and vessel transport and for vessel storage. This change will make both internal and external labeling consistent throughout the US. The proposal also:

- requires transplant centers to notify the recovering OPO when they repackage an organ;
- makes the language consistent by changing the term "provided" (by the OPTN contractor) to the term "distributed" (by the OPTN contractor);
- moves the required documentation that accompanies an organ or vessel from policy 2.5.6.1 to policy 5.5.1
- clarifies labeling requirements for vessel storage

The goal of this proposed change is to improve patient safety and reduce the number of wasted organs by reducing the number of labeling errors.

Background and Significance of the Proposal:

OPTN policy states that OPOs are required to use the standardized <u>external</u> shipping label distributed by the OPTN contractor; however, current policy does not require OPOs to use a standardized <u>internal</u> label distributed by the OPTN contractor. Currently, each individual OPO develops their own internal label and these labels vary from OPO to OPO. As a result, internal labeling is not consistent throughout the United States. Additionally, OPTN policy requires that specific information appear on the internal label. The OPO Committee agreed that this lack of consistency created by non-standardized labels increased the probability of errors.

The OPTN Membership and Professional Standards Committee (MPSC) reviewed labeling and packaging errors that occurred following the implementation of a new labeling system in January 2008 and asked the OPO Committee to address the issue. The Department of Evaluation and Quality (DEQ) provided a report of past labeling errors.

Organ Issue	
Kidney/Liver	Incorrect UNOS ID # was put on organ labels.
Kidney Self reported that they sent blood with the wrong UNOS ID #.	
Liver	Self reported that it used a shipping box that did not meet the requirements of

Table 1. Report of Labeling Errors that Occurred from March 09 – August 09.

OPTN Policy 5.5.1 – shipped a liver in a box that was not wax coated.
Arteries from liver and pancreas were packaged together and veins from liver and
pancreas were packaged together.
Packaged donor record and documentation outside of the box in a clear Ziploc bag
Right and left kidneys sent to wrong transplant centers (R \leftrightarrow L)
Tube of blood only contained donor name, no other identifiers.
Left segment of liver was labeled right.
Spleen and lymph nodes were mislabeled.
Blood sent with outer box labeled but not the individual tubes of blood.
Packaged right kidney in the left kidney jar and vice versa (R \leftrightarrow L)
Lymph nodes were not in the box containing kidney or pancreas, the label outside
the box indicated that lymph nodes were included.
Right and left kidneys sent to the wrong transplant center (R \leftrightarrow L)

Nine of the 13 reported errors (highlighted in blue) resulted from an organ that was mislabeled as something other than what it was (i.e. right vs. left kidney) or not labeled at all. The other 4 errors resulted from incorrect information found on the label or incorrect packaging. Based on the OPO community's input, the Committee concluded that the labeling system was cumbersome and confusing. In response, the Committee developed a new organ-specific, color-coded system. Under the new system, a standardized internal label is color coded to match its corresponding color coded external label and each organ-specific label has its own unique color. **(Exhibit A)** These safeguards were put in place to eliminate the possibility of placing a right kidney in a left kidney box as it would be very apparent that the color of the internal label does not match the external label. Additionally, the Committee developed a standard internal vessel label. All labels contain the information required by policy.

In order to evaluate the effectiveness of the new labeling system, a pilot study involving five volunteer OPOs was conducted in January and February, 2010. The OPOs varied in size and represented different geographic regions. These pilot sites used the new system (external and internal labels for organs and internal labels for vessels) on all of their donors during the test period. They found it to be extremely effective in eliminating errors and easy to use. Based on their feedback, the Committee agreed that this new labeling system should be used as the standard for all OPOs and transplant centers.

The Committee was also informed of a recent event where the transplant center repackaged an organ and allowed the OPO to reallocate it without informing the OPO that the organ had been repackaged. The OPO Committee agreed that this practice threatens patient safety. To avoid contamination, an organ is packaged in a sterile environment and handled with particular care and opening an organ package poses significant risk for contamination. As such, transplant centers should inform the OPO if an organ package has been opened, if any procedures are performed, including an examination of the organ, and if the organ was repackaged.

Finally, the OPO Committee and the Disease Transmission Advisory Committee (DTAC) Joint Work Group agreed that the policy stipulating that the required documentation that accompanies an organ or vessel (Policy 2.5.6.1) should be removed from Policy 2.0 and moved to Policy 5.5.1. This move seems appropriate since Policy 5.0 contains all packaging, labeling and documentation requirements. The only change in language for this portion is the change from "serology" to "infectious disease testing results" since serology does not define this requirement as well.

Collaboration:

The OPO Committee collaborated with the Operations and Safety Committee to develop the new labeling system. Additionally, the OPOs that participated in the pilot study were:

- California Transplant Donor Network California
- Midwest Transplant Network Kansas
- Finger Lakes Donor Recovery Network New York
- Gift of Life Pennsylvania
- Washington Regional Transplant Consortium Washington DC

Additionally, the Committee worked with the Disease Transmission Advisory Committee and agreed to move policy language from Policy 2.5.6.1 to Policy 5.0.

Alternatives Considered:

The Committee considered developing a color-coded internal label to match the external label but making its use optional and not required. After much discussion and with the consideration of the comments from the pilot sites, the Committee agreed that making it mandatory to use a specific label would eliminate differences in information on the labels and standardize the internal labeling process throughout the US.

Strengths and Weaknesses: These changes will:

- standardize internal labeling throughout the U.S. which is consistent with the external labeling policy that requires using labels distributed by the OPTN contractor;
- reduce human errors by eliminating confusion;
- enhance patient safety and decrease organ wastage due to labeling errors.

OPOs will need to alter their internal practices and processes to accommodate the use of this mandatory internal label. Sufficient time will be needed to ensure that training of all staff is provided the opportunity to learn how to use the labels.

Description of intended and unintended consequences

Aim: The aim of this proposed policy change is to reduce the number of labeling errors to enhance patient safety and decrease the number of organs wasted by standardizing internal labeling practices throughout the U.S.

Impact: OPOs and transplant centers will need to train all staff that participates in the packaging and labeling of organs. This policy change should not impose any additional financial burden on the OPOs and transplant centers.

Unintended consequence: OPOs and transplant centers will have to restructure their internal processes for completing the internal labels and for verifying the packaging and labeling as required by policy. The Committee could not identify an unintended consequence in requiring the use of the internal label distributed by the OPTN contractor.

Supporting Evidence and/or Modeling:

The Committee reviewed labeling errors that occurred from March 2009 to August 2009 and found that 8 out of the 13 reported errors occurred because an organ was mislabeled as something other than it

was (i.e. right kidney vs. left, internal labeling did not match external labeling). Upon further investigation, OPOs reported that the current labeling system was cumbersome and confusing. Internal labels contained information required by policy but in different formats. Consequently, the Committee developed a new organ-specific, color-coded labeling system that demonstrated its ease of use during pilot testing. Internal and external labels were prepared in the same color to eliminate placing a right kidney in a left kidney box as it would be immediately apparent that the colors do not match.

Expected Impact on Program Goals, Strategic Plan, and Adherence to OPTN Final Rule:

The HHS Program Goals affected by the proposal include:

- Patient Safety through accurate labeling of organs, information transferred on the labels will have a consistent format.
- Maximum Capacity fewer labeling errors mean fewer discarded organs.
- Operational Effectiveness by standardizing the internal label, the process for organ labeling will make improvements that best support critical network functions, and work to disseminate them to all members who could benefit

Plan for Evaluating the Proposal:

Once the policy is implemented, every six months the Committee will review a list of all labeling and packaging errors and determine if the labels have contributed to the problem. The OPO Committee will also determine if there is a reduction in the number of labeling errors. They will ask the questions:

- Has there been a decrease in the number of labeling and packaging errors since the internal label has been required?
- Are the errors that have occurred attributed to the new labeling requirements?

OPOs and transplant centers will be expected to comply with this policy. The DEQ will evaluate member compliance with this policy.

Additional Data Collection:

No additional data collection will be required for this proposed policy change.

Expected Implementation Plan:

OPOs and transplant centers will need to ensure that their staff members are educated in the use of the labeling system, both internal and external. UNOS will provide written guidelines as well as educational teleconferences to explain the system and respond to questions and provide written guidelines. OPOs will need to order their labels from UNOS and apply them to all internal and external containers when transporting an organ or vessel.

This proposal will not require programming in UNetsm.

Communication and Education Plan:

Communication Activities			
Type of Communication	Audience(s)	Deliver Method(s)	Timeframe
Policy Notice	Appropriate OPO, TX center staff and OPTN member laboratories.	Article in the member e-newsletter	Policy notice will be posted to the member archive 30 days after the board meeting and the e- newsletter will be sent out the third Monday of each month.
Sidebar in the UNOS monthly Update in the Policy section.	Update readers	Mailing of print copy of magazine.	Earliest appropriate issue after the policy has been approved.
A system notice won't be necessary because this change won't involve changes to UNet.			
Teleconference	All OPTN members that participate in packaging and labeling of organs; and those who store vessels.	Teleconference	Within 30 days of approval

Implementation: Implementation of this proposed change would require the OPO or transplant center to have the labels (internal and external) that are distributed by the OPTN contractor.

Monitoring and Evaluation:

OPOs and transplant centers will be expected to comply with this policy. The Department of Evaluation and Quality Staff will evaluate member compliance with this policy.

Transplant centers and OPOs are expected to:

- Follow policy requirements regarding external and internal packaging.
- Follow policy requirements regarding external and internal labeling.
- Follow policy requirements for documentation accompanying the organ or vessel.
- Establish and implement procedures for verifying labeling and documentation included with the organ.
- Establish and implement procedures for verifying certain information upon receipt of an organ.
- Establish and implement policies and procedures addressing tissue typing specimen, medium, and shipping requirements and have an agreement with an OPTN member laboratory.

- Establish and implement policies and procedures addressing living or deceased donor organs that remain in the same operating room suite as the intended candidate(s).
- Establish and implement policies and procedures addressing vessel recovery and transplant and vessel storage requirements.

The Department of Evaluation and Quality staff may detect potential violations of this proposed policy by:

- Conducting site surveys.
- Researching confidential reports of complaints received through the OPTN Member Reporting Line or Patient Services Line.
- Reviewing OPTN data.
- Receiving referrals from OPTN/UNOS Committees, OPTN/UNOS staff, or OPTN/UNOS Members.

During site surveys, UNOS staff may do any or all of the following:

- Request and review copies of Member policies and procedures addressing Policy 5.0 requirements.
- Request a demonstration of internal and external packaging and labeling procedures.
- Review records to verify appropriate internal and external labeling.
- Interview staff to verify knowledge of procedures and that staff follow procedures.
- Review vessel storage records.
- Verify the implanting transplant program notified the OPTN of final disposition of the vessels.
- Review any other available documentation and records to verify compliance with Policy 5.0.

The DEQ staff will explore all potential policy violations and forward any results to the MPSC for confidential medical peer review.

Policy or Bylaw Proposal:

5.0 STANDARDIZED PACKAGING, LABELING AND TRANSPORTING OF ORGANS, VESSELS, AND TISSUE TYPING MATERIALS

The purpose of Policy 5.0 and its subsections is to:

- state requirements for packaging and labeling organs, tissue typing specimens, and vessels to prevent wastage (and/or to promote safe and efficient use);
- define terms and responsibilities related to packaging, labeling, and transporting organs, tissue typing specimens, and vessels; and
- state requirements for recovering, storing, and using vessels in solid organ recipients.

The responsibility for packaging and labeling deceased donor organs is assigned to the Host OPO. Transplant Center staff may not leave the operating room without allowing the OPO to package and label the organ in accordance with OPTN Policy. The OPO must submit a report through the Patient Safety System when a Transplant Center fails to comply with this policy. The OPO will make all reasonable efforts to package and label the organ in a timely fashion. If an organ is repackaged by a transplant center for transport, the Transplant Center will package, label and ship the organ in accordance with this policy <u>and immediately notify the recovering OPO of the repackaging.</u>

5.1 EXTERNAL PACKAGING SPECIFICATIONS

An external transport container is defined as a: disposable shipping box, cooler or mechanical preservation machine. The transplant center or OPO must use both internal and external transport containers to package a deceased donor organ that travels outside the recovery facility.

5.1.1 Disposable Shipping Box [5.1.1 No Changes]

5.1.2 Cooler

- Coolers are permitted for non-commercial transporting of organs when the organ recovery team is transporting the donor organ with them from the donor hospital to the candidate transplant center.
- Coolers must be labeled with the standardized label <u>distributed</u> provided by the OPTN contractor.
- Coolers may be reused if properly cleaned and sanitized.
- Before re-using a cooler, all labels from the previous donor organ must be removed.

5.1.3 Mechanical preservation machine

- Mechanical preservation machines are permitted for transporting an organ.
- The cassette containing the organ must be labeled with the organ type (i.e. left kidney, right kidney), ABO, and UNOS ID.
- The external surface of a mechanical preservation machine must be labeled with:
 - the standardized <u>external</u> label <u>distributed</u> provided by the OPTN contractor, or
 - an alternate label that contains all information included on the OPTN contractor standardized label.
- Before re-using a mechanical preservation machine that was used to transport an organ, all labels from the previous donor organ must be removed.

5.2 INTERNAL PACKAGING SPECIFICATIONS [No Changes]

5.3 EXTERNAL LABELING REQUIREMENTS

When a disposable shipping box or cooler is used to transport a deceased donor organ, the Host OPO must use the standardized external label distributed by the OPTN contractor. When a mechanical preservation machine is used, the OPO or Transplant Center, as applicable, may use an alternative label if the label contains all of the required information.

The external transport container must be labeled with the: UNOS Donor I.D. Donor ABO type, a description of the specific contents of the box, the sender's name and telephone number, and the Organ Center telephone number. The label must be securely affixed to the external transport container. The OPTN contractor distributes a standardized external label that includes this information and must be utilized.

5.4 INTERNAL LABELING REQUIREMENTS

5.4.1 Solid organ

The Host OPO is responsible for ensuring that the <u>a secure label identifying the</u> <u>specific contents (e.g., liver, right kidney, heart) is attached to the outer bag or rigid</u>

container housing the donor organ. The OPTN contractor distributes a standardized internal label that must be utilized for this purpose. In addition to the contents of the package, the label information must include the UNOS Donor I.D and donor ABO type.; and a secure label identifying the specific contents (e.g., liver, right kidney, heart) are attached to the outer bag or rigid container housing the donor organ.

5.4.2 Tissue typing materials

Each separate specimen container of tissue typing material must have a secure label with two unique identifiers, one being UNOS Donor I.D., and one of the following three: donor date of birth, donor initials or locally assigned unique ID, (donor ABO is not considered a unique identifier). Additionally each specimen should be labeled with Donor ABO, date and time the sample was procured and the type of tissue. In the preliminary evaluation of a donor, if the UNOS ID <u>or ABO</u> is not available, it is permissible to use a locally assigned unique ID and one other identifier for the transportation of initial screening specimens.

5.4.3 Vessels

If packaged separately from the organ, the vessels must be protected by a triple sterile barrier, one of which must be a rigid container; The vessels must be labeled with the standardized internal label distributed by the OPTN contractor. The labeled with information must contain the: recovery date, ABO, all serology results, container contents, and the UNOS Donor ID. If the donor is in a "high risk"¹ group as defined by the Centers for Disease Control and Prevention (CDC), the label must indicate that the vessels are from a donor who meets the CDC criteria for high risk. The appropriate packaging of vessels should be completed in the donor operating room. The label should clearly state "for use in organ transplantation only." If packaged separately from the organ, the vessels must be protected by a triple sterile barrier, one of which must be a rigid container and the standardized internal label must be affixed to the outermost barrier.

5.5 DOCUMENTATION ACCOMPANYING THE ORGAN OR VESSEL

5.5.1 Documentation accompanying the organ

- Complete donor documentation, as described in Policy 2.5.6.1, must be sent in the container with all each transported organs. This documentation must include:
 - <u>ABO typing source documentation;</u>
 - <u>Serology Infectious disease testing results;</u>
 - <u>Medical/Behavioral History form;</u>
 - o <u>Donor Evaluation;</u>
 - <u>Complete record of the donor;</u>
 - <u>Consent form; and</u>
 - Organ quality information as noted in Policy 2.5.

¹ Rogers MF, Simonds RJ, Lawton KE, et al. Guidelines for Preventing Transmission of Human Immunodeficiency Virus Through Transplantation of Human Tissue and Organs. CDC MMWR Recommendations and Reports. 1994;May 20/ 43(RR-8):1-17. <u>http://www.cdc.gov/mmwr/preview/mmwrhtml/00031670.htm</u>

- Donor documentation must be placed in a watertight container.
- Donor documentation may be placed in either:
 - a location specifically designed for documentation, or
 - between the outer and inner containers.
- Whenever a deceased donor organ is transported, the Host OPO or the Transplant Center, as applicable, must include in the donor documentation the source documentation.

5.5.2 – 5.5.3 [No Changes]

5.5.4 Documentation accompanying the vessel

If the vessels are not shipped in the same package as the organ, the same <u>complete</u> <u>donor</u> documentation, <u>as described in Policy 2.5.6.1</u>, must be included with the vessels<u>as is included with the organ</u>.

5.6 – 5.9.1 [No Change]

5.10 VESSEL RECOVERY, TRANSPLANT, AND STORAGE

The intent of this policy is to permit:

- vessel recovery and immediate use in a solid organ transplant (for example either a current liver or pancreas transplant); and
- vessel recovery and storage for use in a subsequent solid organ transplant from a donor with a different UNOS Donor ID (for example, when the vessel(s) and the liver or pancreas allograft are being transplanted from different donors with different numbers).

5.10.1 [No Changes]

5.10.2 Vessel storage

The Transplant Center must designate a person to monitor and maintain records, destroy, and notify the OPTN of outcome and/or use of vessels. This designated person must maintain information on all donor vessels including monitoring and maintaining all records relating to the use and management of donor vessels (e.g. subsequent positive serology testing, monitor inventory of stored vascular conduits). This person must monitor the refrigerator, ensure records are up to date and available with the conduits, destroy the vessels when expired, and notify the OPTN of its use or disposal.

- The vessels must be stored in a Food and Drug Administration (FDA) approved preservation solution (ex. UW, Custodial HTK).
- The vessels must be stored in a rigid, sterile sealed container labeled with the recovery date, ABO, serology, container contents, and the UNOS Donor ID for tracking. The internal standardized label distributed by the OPTN contractor must be attached to the outer sterile barrier bag and information on the label must include all of the above information and all serology testing results. The appropriate packaging of vessels should be completed in the donor operating room. Label should clearly state for use in organ transplantation only.
- The vessel(s) must be stored in a secured refrigerator with a temperature monitor and maintained within a range of 2 8 degrees Celsius.
- There must be daily monitoring of the vessel(s) with documented security and temperature checks by the transplant center.

- The vessel(s) can be stored up to a maximum of 14 days from the original recovery date.
- The transplant center must maintain a log of stored vessels.
- The transplant surgeon must have around the clock access to the donor information prior to using the donor vessel(s) in a recipient other than the intended recipient.

5.11 TRANSPORTATION RESPONSIBILITY [5.11 – 5.11.3 No Changes]

Exhibit A

UPRIGHT

UNOS ID

ORIGINATING OPO

() -

ORIGINATING OPO TELEPHONE #

DONOR ABO

CROSS CLAMP DATE

CROSS CLAMP TIME (Military Time) Time Zone

CONTENTS OF BOX:

CHECK ONE:

□ SPLEEN □ BLOOD

□ OTHER: _____

HEART

D O N A T E D HUMAN ORGAN/TISSUE for TRANSPLANT

TO (INSTITUTION):	
CITY:	STATE: TEL: () -
If available, PRIMARY FLIGHT #:	If available, CONNECTING FLIGHT #:

In case of delays or problems call UNOS Organ Center at **1-800-292-9537** a 24 hour number.

This shipment is made possible by an exchange of information through United Network for Organ Sharing, a charitable, non-profit organization which has no proprietary interest in this container or its contents.





HANDLE WITH CARE

HEART		
UNOS ID		BLOOD TYPE
BIOH	AZ	ARD 😵

Exhibit A
 INTESTINES KEEP UPRIGHT
 UPRIGHT
DONATED
HUMAN ORGAN/TISSUE
 for TRANSPLANT

DONOR ABO

(

UNOS ID

CROSS CLAMP DATE

ORIGINATING OPO

)

ORIGINATING OPO TELEPHONE #

CROSS CLAMP TIME (Military Time) Time Zone

CONTENTS OF BOX:

CHECK ONE:

 \Box OTHER:

TO (INSTITUTION): TEL: (STATE: CITY: If available. If available. PRIMARY FLIGHT #: **CONNECTING FLIGHT #:**

In case of delays or problems call UNOS Organ Center at 1-800-292-9537 a 24 hour number.

This shipment is made possible by an exchange of information through United Network for Organ Sharing, a charitable, non-profit organization which has no proprietary interest in this container or its contents.





HANDLE WITH CARE

INTESTIN	ES
UNOS ID	BLOOD TYPE
BIOHA	ZARD 😥

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UPRIGHT

UNOS ID

ORIGINATING OPO

_ () -

ORIGINATING OPO TELEPHONE #

DONOR ABO

CROSS CLAMP DATE

CROSS CLAMP TIME (Military Time) Time Zone

CONTENTS OF BOX:

CHECK ONE:

□ OTHER: _____

LEFT KIDNEY

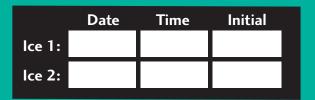
D O N A T E D HUMAN ORGAN/TISSUE for TRANSPLANT

TO (INSTITUTION):		
CITY:	STATE: TEL: () -	
If available, PRIMARY FLIGHT #:	If available, CONNECTING FLIGHT #:	

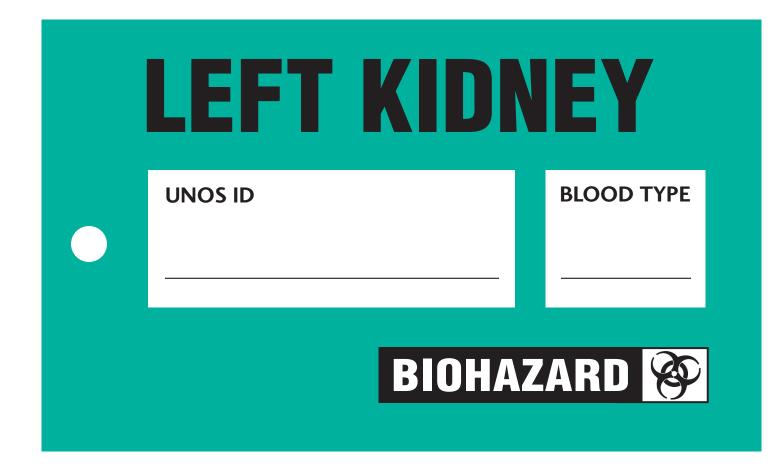
In case of delays or problems call UNOS Organ Center at **1-800-292-9537** a **24** hour number.

This shipment is made possible by an exchange of information through United Network for Organ Sharing, a charitable, non-profit organization which has no proprietary interest in this container or its contents.





HANDLE WITH CARE



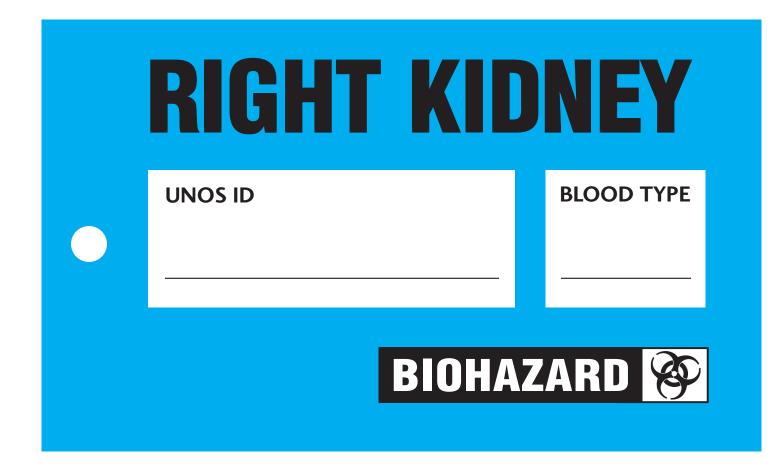
UNOS ID	RIGHT KIDNEY KEEP UPRIGHT
	DONATED
ORIGINATING OPO TELEPHONE #	HUMAN ORGAN/TISSUE
DONOR ABO	for TRANSPLANT
CROSS CLAMP DATE	TO (INSTITUTION):
CROSS CLAMP TIME (Military Time) Time Zone	
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SPLEEN VESSELS	If available, If available, PRIMARY FLICHT #: CONNECTING FLICHT #:
	In case of delays or problems call UNOS Organ Center
□ OTHER:	at 1-800-292-9537 a 24 hour number.
	This shipment is made possible by an exchange of information through United Network for Organ Sharing, a charitable, non-profit organization which has no proprietary interest in this container or its contents.



Exhibit A

Initial Time HANDLE WITH CARE

Date Ice 1: Ice 2:



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UNOS ID	
ORIGINATING OPO	
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DONOR ABO	
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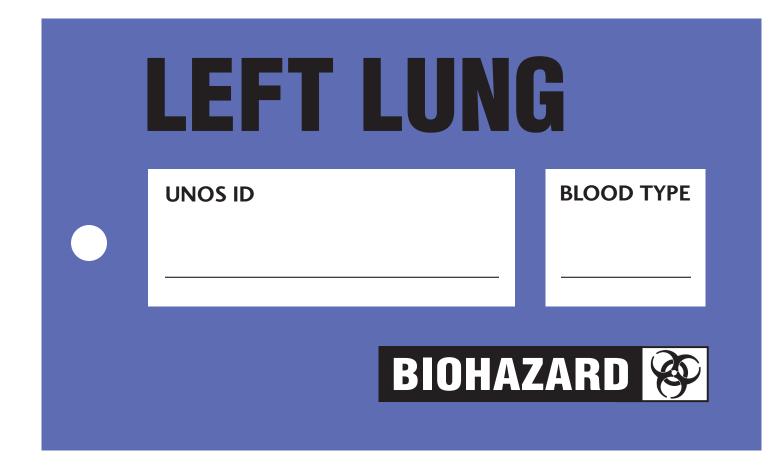
STATE: TEL: () -
If available, CONNECTING FLICHT #:

In case of delays or problems call UNOS Organ Center at **1-800-292-9537** a 24 hour number.

This shipment is made possible by an exchange of information through United Network for Organ Sharing, a charitable, non-profit organization which has no proprietary interest in this container or its contents.



HANDLE WITH CARE



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UNOS ID ORIGINATING OPO ORIGINATING OPO TELEPHONE # for TRANSPLANT DONOR ABO CROSS CLAMP DATE CROSS CLAMP TIME (Military Time) Time Zone **CONTENTS OF BOX:** CHECK ONE: □ OTHER: DOCUMENTATION Initial Date Time Ice 1:

Ice 2:

RIGHT LUNG UPRIGHT DONATED HUMAN ORGAN/TISSUE

TO (INSTITUTION):	
CITY:	STATE: TEL: () -
If available, PRIMARY FLIGHT #:	If available, CONNECTING FLIGHT #:

In case of delays or problems call UNOS Organ Center at 1-800-292-9537 a 24 hour number.

This shipment is made possible by an exchange of information through United Network for Organ Sharing, a charitable, non-profit organization which has no proprietary interest in this container or its contents.



HANDLE WITH CARE

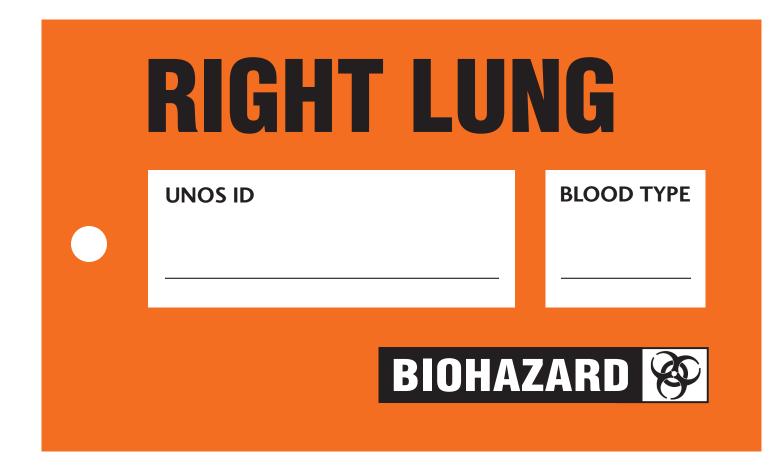


Exhibit A

UNOS ID

ORIGINATING OPO

() -

ORIGINATING OPO TELEPHONE #

DONOR ABO

CROSS CLAMP DATE

CROSS CLAMP TIME (Military Time) Time Zone

CONTENTS OF BOX:

CHECK ONE:

PANCREAS KEEP UPRIGHT

D O N A T E D HUMAN ORGAN/TISSUE for TRANSPLANT

TO (INSTITUTION):	
CITY:	STATE: TEL: () -
If available, PRIMARY FLIGHT #:	If available, CONNECTING FLIGHT #:

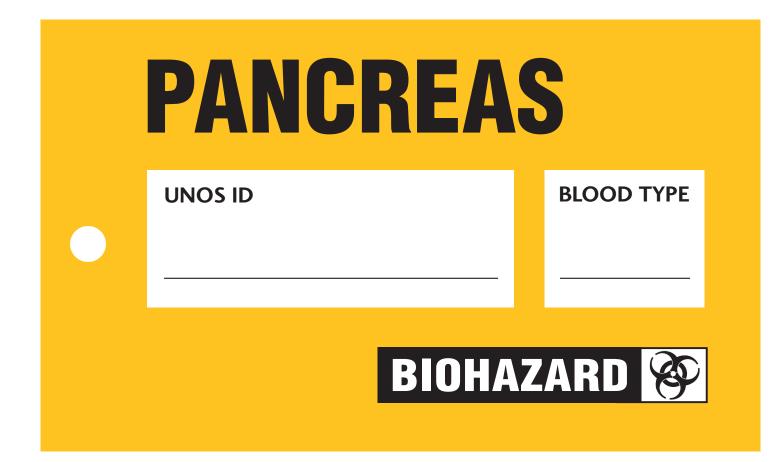
In case of delays or problems call UNOS Organ Center at **1-800-292-9537** a 24 hour number.

This shipment is made possible by an exchange of information through United Network for Organ Sharing, a charitable, non-profit organization which has no proprietary interest in this container or its contents.





HANDLE WITH CARE



UNOS ID

ORIGINATING OPO

_ () -

ORIGINATING OPO TELEPHONE #

DONOR ABO

CROSS CLAMP DATE

CROSS CLAMP TIME (Military Time) Time Zone

CONTENTS OF BOX:

CHECK ONE:

□ OTHER:

LIVER



DONATED HUMAN ORGAN/TISSUE for TRANSPLANT

TO (INSTITUTION):	D (INSTITUTION):		
CITY:	STATE:	TEL: ()	-
If available, PRIMARY FLIGHT #:	If available, CONNECTING	G FLIGHT #:	

In case of delays or problems call UNOS Organ Center at **1-800-292-9537** a 24 hour number.

This shipment is made possible by an exchange of information through United Network for Organ Sharing, a charitable, non-profit organization which has no proprietary interest in this container or its contents.





HANDLE WITH CARE

LIVER	
UNOS ID	BLOOD TYPE
BIOHA	ZARD 🞯

25		VESSELS		25
FC	or orga	N TRANSPI	LANT ONLY	
JNOS ID		_	_	
АВО	F	RECOVERY DA	TE	
ORIGINATIN	G OPO			
	SEROLO	GY TEST R	ESULTS	
	Positive	Negative	Pending	N/A
HIV I/II				
HTLV I/II				
RPR/VDRL				
HBsAg				
HBcAb				
Anti-HCV				
Anti-CMV				
EBV				
lgG				
lgM				
NAT				
HIV				
HBM				
HCV				
Other				