

National Institutes of Health

National Institute of Neurological Disorders and Stroke  
National Institute on Aging

# MarkVCID2 Shipping Human Biospecimens Guideline

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MarkVCID Consortium  
[www.markvcid.org](http://www.markvcid.org)

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# MarkVCID Shipping Human Biospecimens Guideline

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## 1. Purpose

The purpose of this document is to provide guidelines for the shipping of MarkVCID biological specimens.

## 2. Scope

The policies and procedures described in this document pertain to all MarkVCID Consortium members who will be responsible for shipping biological specimens.

## 3. Procedures

### 3.1. Trainings

All staff who ship biosamples must maintain current training and certification in the shipping and handling of biological specimens as mandated by their institution.

All site staff who receive and process samples, print labels, scan and input information into the MarkVCID virtual repository must complete the virtual biorepository training.

(<https://markvcid.partners.org/4-virtual-biorepository-training>)

### 3.2. Shipping Requirements

Human samples fall under Category B “Infectious Substances.”

Please follow the instructions for Processing Shipped Samples in the Biorepository Training Manual.

### 3.3. Shipping and Handling Overview

1. Remove samples from -80C and place on dry ice
2. Wrap each tube with parafilm
3. Place samples in tube boxes and keep on dry ice
4. Label boxes accordingly
5. Place boxes in a leak proof biohazard sample bag
6. Fill the cooler with dry ice completely
7. Attach a printed, itemized list of the included samples to the top of the cooler with 24-hour contact name and number
8. Place cooler in corrugated outer box. Do NOT air-seal the outer box. CO2 must be allowed to vent.
9. Place a shipment request with FedEx following guidelines below
10. Place shipping label on the top of the box with both the UN3373 Biological Substance, Category B and UN 1845 Dry ice and weight labels

### 3.4. Shipping and Handling Details

#### 3.4.1. Packaging Specimens

1. Put specimen in leak-proof primary container (cryovials for plasma/serum/CSF: [DWK W985874](#)) and wrap individually (screw cap lid with parafilm around seal)
2. Use absorbent material sufficient to absorb entire contents of primary container ([SAF-T-PAK STP-152 SKU:34834](#))
3. Use a leak proof secondary container – Leak proof Biohazard sample bag ([VWR 11215-682](#))
4. Use a corrugated box around Styrofoam cooler
5. Include a manifest of items using the template under Section 4.2.
  1. *Print, place in a plastic sheet protector, and place the manifest between the secondary and outer container.*
  2. *Email a digital copy of the manifest to the recipient and coordinating center.*
  3. *Store a local copy electronically for your site's records.*
  4. *Make sure to include a 24hr contact name and number.*

**3.4.2. Labeling Outer Container**

1. Include two labels in each package. The site packaging supplier will provide the following:
  - UN3373 label with adjacent statement “Biological Substance, Category B”
  - Completed Dry Ice UN 1845 label



**Biological  
Substances,  
Category B**

A rectangular shipping label form for Dry Ice UN 1845. The top half features a triangular hazard symbol with vertical black and white stripes. Text on the left includes "Dry Ice UN 1845" and instructions for airbill completion. The right side has fields for weight in kg and lb. The bottom section contains fields for "Shipper:" and "Recipient:" and a central hazard class number "9".

**Dry Ice  
UN 1845**

Airbills must have the following:

1. Dry Ice; UN 1845
2. \_\_\_\_\_ x \_\_\_\_\_ kg.  
(Number (wt)  
pkgs)

\_\_\_\_\_ kg  
2 lb = 1 kg

Shipper: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

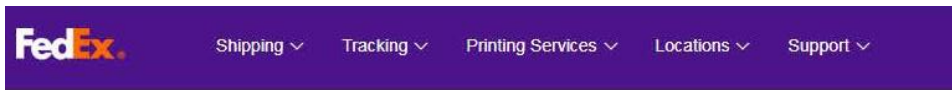
Recipient: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**9**

106426 9/11 RRD

### 3.4.3. Shipping Label

1. Login to [FedEx](#). Request the login and password from the coordinating center. Note you must be the designated MarkVCID site representative to use this account.
2. Click on Shipping > Create a Shipment > Edit highlighted fields in EXAMPLE:



FedEx Ship Manager®

My Profile Logout Help

Sender and Recipient MUST be registered with the Coordinating Center before any shipments are sent or received.

Click on "From" and use the "Saved Senders" dropdown menu.

Click on "To" and select the "Contact name" dropdown menu.

Please always doublecheck your recipient's address with the point of contact via email.

**Create a Shipment**

1 Enter shipping information 2 Print label(s)

**1. From** Help Hide

Saved senders Select

**2. To** Help Hide

\* Country/Territory: United States  
 Company: University of Kentucky  
 \* Contact name: Tiffany Lee  
 \* Address 1: 800 S LIMESTONE ST  
 Address 2: Sanders-Brown 233  
 \* ZIP: 40536001  
 \* City: LEXINGTON  
 \* State: Kentucky  
 \* Phone no.: 859-218-2389 ext.

**3. Package & Shipment Details** Help Hide

\* Ship date: 07/24/2018  
 \* No. of packages: 1  
 \* Pricing option: FedEx Standard Rate  
 \* Weight: 3 lbs  
 Declared Value: U.S. Dollars  
 \* Service type: Priority Overnight  
 \* Package type: Your Packaging  
 Dimensions: Select  
 Include a return label

**4. Billing Details** Help Hide

\* Bill transportation to: BUILDINGS & GROUNDS-645  
 \* Bus UACT or BusU-000000-#####: 1200-000000-229371  
 More reference fields

**Special Services (optional)** Help Hide

Dry ice ← Dry ice must be marked  
 \* Total dry ice weight: 2 lbs  
 Dangerous goods  
 Lithium Batteries/Cells

**FedEx® Delivery Signature Options**

Signature type: None specified  
 Hold at FedEx location

**Pickup/Drop-off (optional)** Help Hide

Schedule a pickup ← Use feature as needed  
 Drop off package at a FedEx location  
 Use an already scheduled pickup at my location

**Pickup Address** Edit

Shannon Tuozzo, 175 Cambridge St, 300, Boston, Massachusetts, 02114, United States

**Package Information** Edit

FedEx Express, 07/24/2018, 12:00 p.m. - 6:00 p.m., 1 packages

**Shipment Notifications (optional)** Help Hide

Notify Sender via: Email (HTML) Email (Plain Text)  
 Notification type: Ship, Tendered, Pickup, Exception, Estimated Delivery, Delivery

Sender Email: STUOZZO@MGH.HARV  
 English

Select "Building and Grounds" and enter the account number

Use this feature to notify the site recipient of a shipment

Notify Recipient via:

Email (HTML)  
 Email (Plain Text)  
 Recipient Email: tsudd2@uky.edu  
 English

Ship  
 Tendered  
 Exception  
 Estimated Delivery  
 Delivery

Add additional recipients  
 Add a personal message

**Rates & Transit Times (optional)** Help Edit

View your rates and transit times based on your selections.

**5. Complete your Shipment** Help

Create a Shipment Profile to store recipient, package and all other details of this shipment for future use.  
 Send a Mobile Shipping Label

**Please note:**

- Click the Ship button only once. Expect some delay due to transmission time. Do not click Stop or Reload; it may cause a duplicate shipment transaction to occur.
- By clicking the Ship/Continue button, you agree to the [FedEx Ship Manager at fedex.com Terms of Use](#) and the FedEx terms of shipping in the applicable [FedEx Service Guide](#) and the [Shipper's Terms and Conditions for FedEx Express International Shipments](#).
- By clicking the Ship/Continue button, you agree that this shipment does not contain undeclared Dangerous Goods. If you are uncertain of whether your shipment contains Dangerous Goods, see the [help](#) for more information.
- Results provided by FedEx Address Checker are believed to be reliable, but are not guaranteed.
- FedEx makes no warranties, express or implied, regarding Address Checker information.
- Correct completion of shipping documents is the responsibility of the customer.
- If the delivery address is later identified as residential, you could receive a residential surcharge.

While weighing your package is not required for FedEx One Rate pricing, to qualify, FedEx Envelopes must weigh 10 lbs. or less and FedEx Paks and Boxes must weigh 50 lbs. or less. If your package exceeds these weight limits, it will be rated based on FedEx Standard List Rates or FedEx Retail Rates as applicable. Please refer to the specific packagings for recommended weight

Once fields are complete, click "Ship" to print the label



- Once the form is submitted, the website will create a printable label. See example below:

**FedEx** Shipping Tracking Printing Services Locations Support

**Prepare a shipment**

1 Enter shipping information 2 Print label(s)

Thank you for shipping with FedEx. Your tracking number: 772802409652

Label  
 Receipt | [View](#)

[Print](#) [Create return shipment](#) [Edit shipment](#) [Cancel shipment](#) [Repeat last](#) [Create new](#)  
[Schedule a Pickup](#)

TO  
**TIFFANY LEE**  
**UNIVERSITY OF KENTUCKY**  
**800 S LIMESTONE ST**  
**SANDERS-BROWN 233**  
**LEXINGTON KY 40536**

ORIGIN: WMA (017) 443-4639  
 SHANNON TUZZO  
 MASSACHUSETTS GENERAL HOSPITAL  
 300 CAMBRIDGE ST  
 BOSTON MA 02114

SHIP DATE: JUL 18  
 ACT WT: 2.00 LB  
 CAD: 010655NKT4000  
 DRY ICE: 0.44 KG  
 BILL SENDER

TRK# 7728 0240 9652  
 (0201)

WED - 25 JUL 10:30A  
 PRIORITY OVERNIGHT  
 ICE  
 40536  
 KY-US SDF

**FedEx**  
 712811072100

552.02409652000006

- Verify the information is correct and print the label
- Keep a receipt of your shipment
- Attach the shipping label to the package and ensure the required UN3373 and Dry Ice labels are also attached (see labels in Section 3.4.2.). Add information to the Dry Ice label as appropriate
- Track your shipment as needed through the FedEx online tracker
- If you cannot access the online FedEx label generator, please contact the coordinating center project manager.

## 4. Attachments

### 4.1. Approved Site Addresses

For the recipient's name and contact information, click here:

<https://markvcid.partners.org/7-shipping-biospecimens-approved-addresses>

### 4.2. Template Manifest (use word document or excel sheet for table below)



1. Enter the information below for each item (use word document or excel sheet).
2. Print, place in a plastic sheet protector, and include this document in each shipment.
3. Email a digital copy of the manifest to the **recipient and coordinating center**.
4. Store a local copy electronically for your site's records.

<b>SITE ID#</b>	_____
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*Items included in this shipment:*

Shipment Date	Subject ID	Vial ID	Sample Type	Sample Volume

Shipping site's 24-hour contact: \_\_\_\_\_

Phone #: \_\_\_\_\_