

# DoD Global, Laboratory-based, Influenza Surveillance Program

## Summary of Specimen Collection, Storage, and Shipping Guidelines

United States Air Force School of Aerospace Medicine (USAFSAM)  
Department of Public Health & Preventive Medicine

### PURPOSE

The purpose of this document is to highlight guidance for physicians, medical staff, and Public Health on collection, storage, and shipping of respiratory specimens related to the DoD Global, Laboratory-based, Influenza Surveillance Program. It is not intended to replace the Wright-Patterson Epidemiology Laboratory Guide. For the most up to date laboratory guidance visit: <https://kx.afms.mil/epi>.

### SPECIMEN TYPES

USAFSAM prefers to receive nasal wash specimens. However, nasopharyngeal swabs can be accepted and tested if received in viral transport medium (VTM).

Nasal Wash Collection (using the collection kit provided by USAFSAM)

1. Have patient blow their nose into a tissue to clear excess mucus.
2. Tuck bib into patients' shirt collar.
3. Uncap pre-filled saline syringe and specimen collection container. Break the seal on the syringe by gently expressing a small amount of saline into the tip of the hub.
4. Have patient tilt their head back so they are able to look directly at the ceiling while they hold the specimen collection container up to their chin area.
5. Encourage patient not to swallow saline by saying "Ka Ka Ka" or by making a constant "choking sound" while saline is expressed into their nostrils.
6. Gently express 2-4 mL of sterile saline into right nostril of patient. Saline will drain back into the back of the nasopharynx.
7. After a few seconds, have patient lean their head far enough forward so the saline will drain into the specimen collection container. **Repeat for second nostril.**
8. Offer patient a facial tissue or have them use the bib to wipe away excess saline from their face.
9. Transfer the contents to the M4RT viral transport medium (VTM) vial. Squeezing the rim of the cup will help in pouring the contents into the VTM tube. Freeze at -70°C or colder.
10. Package each specimen *individually* in the biohazard bag included in the collection kit and transport specimen immediately to the laboratory's shipping department (See "Shipping" section below for more information).
11. Place specimen in a secondary receptacle with the surveillance questionnaire.

An instructional nasal wash collection video is located on our website:  
<https://gumbo2.wpafb.af.mil/epi-consult/influenza/specimens.cfm>.

### SHIPPING

When shipping specimens, it is essential that each specimen be packaged and shipped properly. To control or eliminate health and financial liabilities (criminal and civil) it is essential MTFs adhere to the regulations set forth by the U.S. Department of Transportation (DOT) and the International Air Transport Association (IATA). These are recommendations only. Each laboratory is responsible for implementing the procedures that comply with Federal Regulations.

IATA requires that the person who packs/ships materials be a trained person. The following web sites, as well as others not listed, can provide information on training.

- Office of Hazardous Materials Safety, DOT: <http://phmsa.dot.gov/hazmat>
- SAFTPACK, Inc.: [www.saftpak.com](http://www.saftpak.com)

Each packer/shipper must have a training record on file. Certification is valid for 2 years. Each person must be re-trained and re-certified at the end of two year period. USAFSAM must maintain a copy of current IATA training for OCONUS personnel who pack specimen shipments. A yearly audit is performed to ensure compliance.

USAFSAM provides IATA training disks to OCONUS sites. Once training is completed, print your certificate and scan to [usafsam.phecussv@us.af.mil](mailto:usafsam.phecussv@us.af.mil). Once your certificate is received, you will be sent the laboratory import permit that is required with each shipment.

### **SHIPMENT TEMPERATURE AND PACKAGING**

If shipments are received out of temperature the specimens will be rejected.

#### Best: Frozen Box

Specimens frozen immediately at -70°C and shipped to USAFSAM on dry ice is the preferred method. These specimens should be shipped in the following manner:

1. Place individually packed biohazard bags of specimens in box.
2. Place a barrier device (i.e., chuck) between the specimens and the dry ice.
3. Add pellets or block dry ice making sure to fill any “dead” space with packing material, such as newspaper. Do not leave dead air space which leads to faster evaporation of the dry ice.
4. Ensure enough block dry ice is added to keep the specimens frozen for any unexpected delay.
5. Each standard shipping box should contain a minimum of:
  - a. 5 lbs of dry ice for CONUS
  - b. 15 lbs of dry ice for OCONUS
6. Do not use flaked dry ice as it evaporates much faster.

#### Acceptable: Refrigerated Box

A specimen may be shipped on frozen gel packs at refrigerated (2-8°C) temperature, *only if received at the USAFSAM lab within 48 hours of collection from patient.* Specimens received over 8°C or over 48 hours from collection cannot be accepted.

1. Place individually packed biohazard bags of specimens in box.
2. Add enough coolant packs to keep specimens cool until arrival. A minimum of six are recommended. Be sure to place gel packs under and on top of specimen.
3. Fill any “dead” space with packing material, such as newspaper.

### **ADDITIONAL INFORMATION**

- Specimens frozen at -20°C are not acceptable. This results in rapid loss of virus which will yield false negative results.
- Please contact USAFSAM if dry ice is not available.
- Viral transport medium (VTM) tube should have at least two identifiers on the label, i.e. SSN/FMP, DOB, or Name.
- Universal transport medium (UTM) is not accepted at USAFSAM and will not be tested.
- Package each specimen *individually* in biohazard bags.

## PREPARING BOX FOR SHIPMENT

1. Place paperwork in box pertaining to that shipment ensuring that only the paperwork for that particular individual box is included.
2. Seal the box and properly identify box with labels, according to IATA/DOT shipping guidelines.
3. Do not ship boxes on a day that will have the shipment arrive on a holiday.
4. Affix courier waybill to the outside of the box, using the following address:

Epidemiology Laboratory Service  
USAFSAM/PHE  
Bldg 20840  
2510 Fifth Street  
Wright Patterson AFB, OH 45433-7951

## FEDERAL EXPRESS (FEDEX) SHIPPING

1. Use the FedEx number 425177729.
2. Ship specimens **“Priority Overnight”** to arrive Tuesday through Friday. FedEx does not make Sunday deliveries.
3. Specimens sent for Saturday arrival require special handling.
  - a. Notify the USAFSAM/PHE Customer Service Team at 937-938-4140 (DSN: 798-4140) that you are sending a Saturday shipment.
  - b. Mark the shipment for both **“Priority Overnight”** and **“Saturday Delivery”**. If these are not checked, then your package will not be delivered until Monday. Saturday shipments not delivered to the laboratory until Monday are usually rejected because they are out of temp.
  - c. Use the FedEx online management tool, “InSight.” FedEx Insight allows you to monitor the status of your shipment in real time. Also, InSight automatically alerts you of critical shipping events.
4. Check the box for dry ice and include the estimated weight of the dry ice.
5. When you print the shipment paperwork out, you will see the dry ice amount listed in the upper right-hand corner of the waybill. The amount on that must be written on the dry ice sticker.
6. If there is not already a pickup scheduled, you can create that under Pickup/Drop Off on the FedEx website.
7. Print 3 copies for the driver.
8. For OCONUS shipments please email the FedEx tracking number to [usafsam.phecussv@us.af.mil](mailto:usafsam.phecussv@us.af.mil).
9. Track your shipments. Tracking your own shipments is critical in preventing shipping problems. When you program your shipment you can select “email notifications” to alert you to delivery status or delays.

## CONTACT INFORMATION

For general information about surveillance program guidelines, ordering collection kits, IATA training, or submission of specimens please call: (937) 938-3196, DSN 798-3196 or email [usafsam.phrflu@us.af.mil](mailto:usafsam.phrflu@us.af.mil).

If you have laboratory or shipping questions, request your laboratory staff call USAFSAM/PHE customer service at: (937) 938-4140, DSN 798-4140 or email [usafsam.phe.cst@wpafb.af.mil](mailto:usafsam.phe.cst@wpafb.af.mil). The USAFSAM Epidemiology Laboratory Service Guide can be obtained here: <https://kx.afms.mil/epi> or <https://gumbo2.wpafb.af.mil/epi-lab/labguide/>.