

TITLE: Packaging Specimens for Shipping

Principle: To correctly prepare and package specimens to be sent via a shipping service, such as FedEx or UPS, to the correct reference laboratory for testing and properly follow federal shipping rules and regulations.

Personnel: All Laboratory Staff

Additional Information: Frozen specimens are to be shipped with dry ice.
Dry Ice is obtained from Versiti Blood Center and must be ordered routine by blood bank.

Stepwise Procedure:

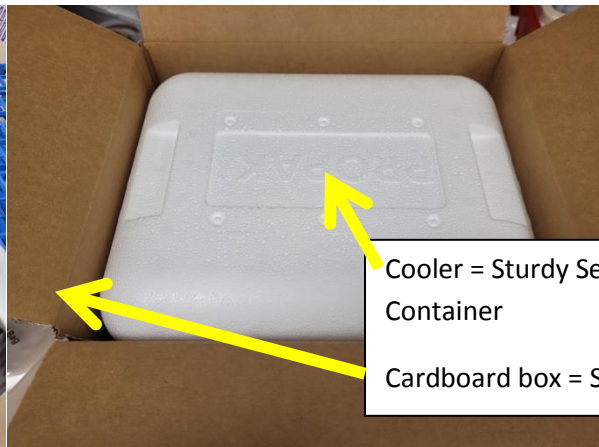
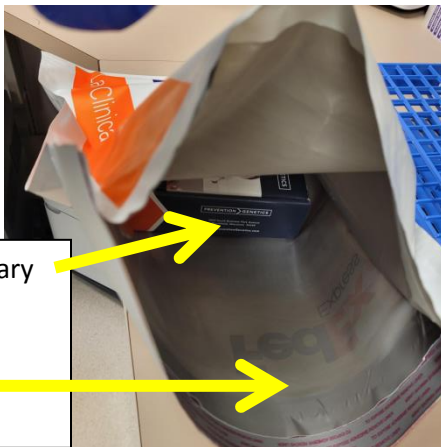
1. Specimens that will be shipped via a shipping service are required to be packaged and labeled according to IATA and DOT regulations. Rush Copley ships only Exempt Human Specimens and Category B specimens.
 - a. Exempt Human Specimens are specimens for which there is a low probability that the sample is infectious. Examples of exempt specimens are meconium and umbilical cord segment specimens.
 - b. Category B specimens are human or animal materials that are being transported only for the purpose of diagnosis or investigation. This includes blood, body fluid, and tissue specimens sent to reference labs for testing.
2. The specimen(s) being shipped must in a leak-proof primary container that does not exceed 500ml, such as an aliquot tube, specimen tube, sterile container, etc.
 - a. Place Parafilm around the primary container lid to prevent leaking.
 - i. Exception: Chain-of-Custody sealed specimens, such as meconium or umbilical cord segment specimens, are not to be sealed with Parafilm as this may damage the tamper-evident seal, causing test rejection.
 - b. Examples of primary specimen containers:



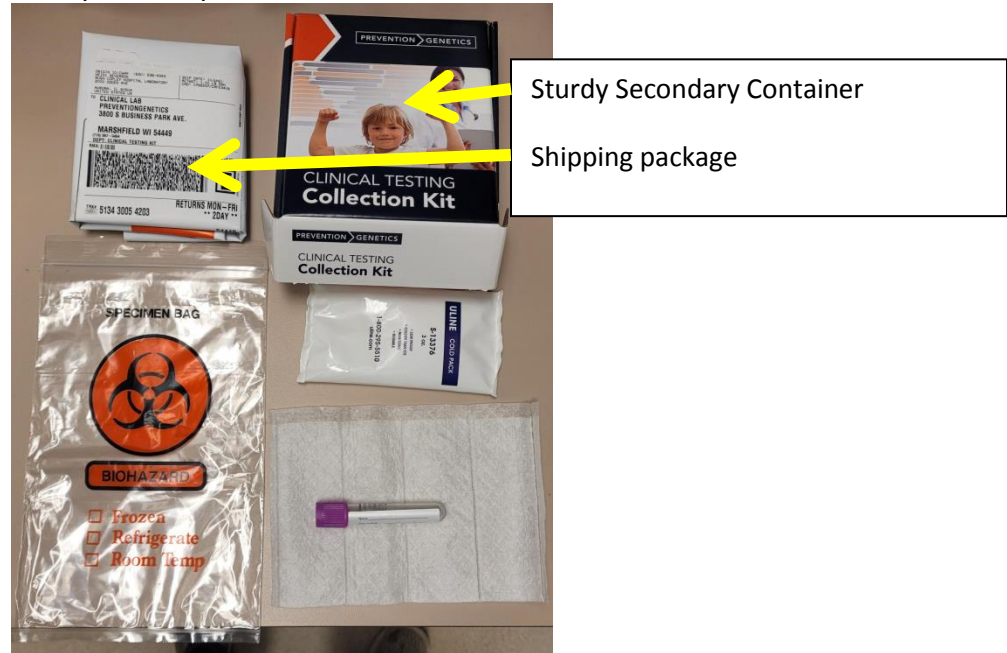
3. The leak-proof primary container is then to be packaged and sealed in a biohazard specimen bag that also contains an absorbent material.
 - a. There should be enough absorbent material to absorb all of the liquid in the primary container if the specimen is broken or leaks.



4. The sealed specimen bag is to then be placed in a sturdy secondary container, such as a cardboard box or Styrofoam cooler.
5. The study secondary container is then placed into an outer shipping container, such as a FedEx Clinical bag or shipping box.



- a. Specimen kits will often supply all shipping materials within the kit, including the sturdy secondary container and a pre-labeled outer shipping bag.
 - i. Example of a Specimen kit:



- b. Rush Copley Laboratory stocks shipping boxes that contain Styrofoam coolers, which meet the requirements for both the sturdy secondary container and shipping container.
- c. Reference labs, such as Mayo Medical Laboratories and ARUP Laboratories, offer approved shipping containers that contain a cooler and shipping box that can be ordered from them.

6. The external shipping box/bag must be appropriately labeled with a UN3373 label for Category B specimens or be marked “Exempt Human Specimens”.



7. **Shipping Ambient (Room Temperature) Specimens:**
- Package the labeled primary specimen container in a biohazard specimen bag with absorbent material.
 - Place the sealed specimen bag in a sturdy secondary container (box included in kit, other sturdy box, or Styrofoam cooler box).
 - If shipping an ambient specimen during the hot summer months or cold winter months, it is recommended to use a cooler box and include room

temperature gel packs to help keep the specimen from getting too hot or freezing.

- c. If not using a cooler box, place the sturdy secondary container in a shipping container, such as a FedEx clinical bag or other shipping box.
 - d. Seal the shipping container.
 - e. Label the shipping container, if not already done, with a UN3373 label or mark “Exempt Human Specimen” on the container.
 - f. Complete a shipping air bill for the shipping company that will be used if a pre-printed air bill is not available.
 - g. Place the shipping company’s air bill on the shipping package.
- 8. Shipping Refrigerated Specimens:**
- a. Package the labeled specimen in a biohazard specimen bag with absorbent material. Include the specimen requisition.
 - b. Place the sealed specimen bag including requisition in a shipping box with a cooler.



- c. Place paper towels or packing paper on top of the specimen to protect it from freezing.



- d. Place one or two frozen gel packs on top of the covered specimen.



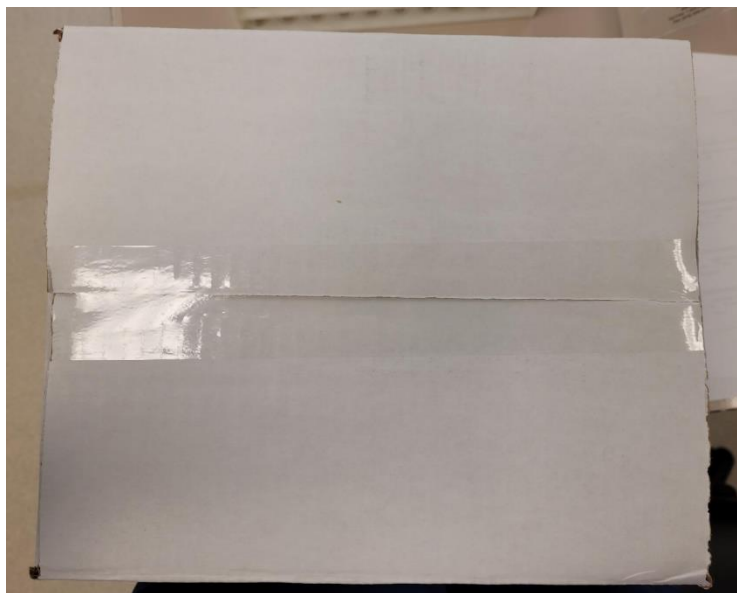
- i. If there is still a large amount of space in the container, fill the void using packing materials such as bubble wrap or packing paper.



- e. Replace the lid on the cooler in the cooler box.



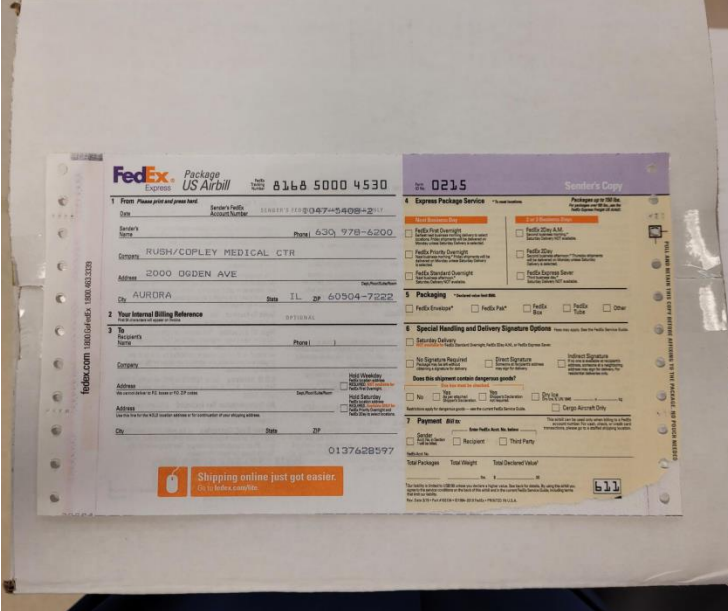
- f. Seal the shipping container by taping the box shut with packing tape.



- g. Label the shipping container, if not already done, with a UN3373 label.



- h. Complete a shipping air bill for the shipping company that will be used if a pre-printed air bill is not available.
- i. Place the shipping company's air bill on the shipping package.



9. Shipping Frozen Specimens:

- a. Check to see if there is a full gallon bag of dry ice in the -70[®] C freezer in Micro. If not, have Blood Bank order some from Versiti Blood Centers.
 - i. Keep the specimen in the freezer until the dry ice has been obtained.

- b. Once the dry ice is obtained, prepare a shipping box with a cooler by placing the packaged specimens at the bottom of the cooler.



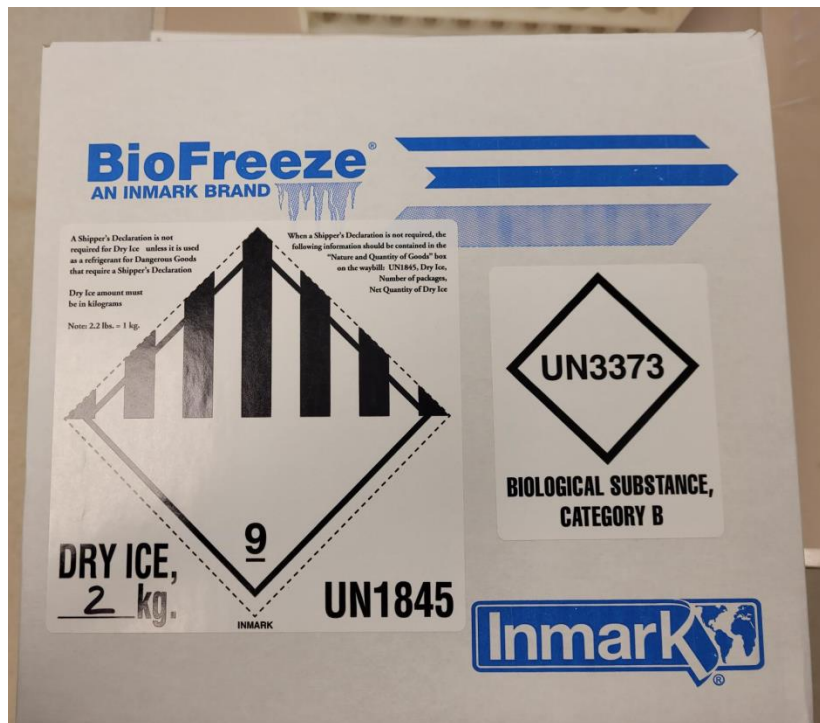
- c. Place a full gallon bag of dry ice on top of the specimen(s).



- d. Replace the lid on the cooler and tape the shipping box shut.

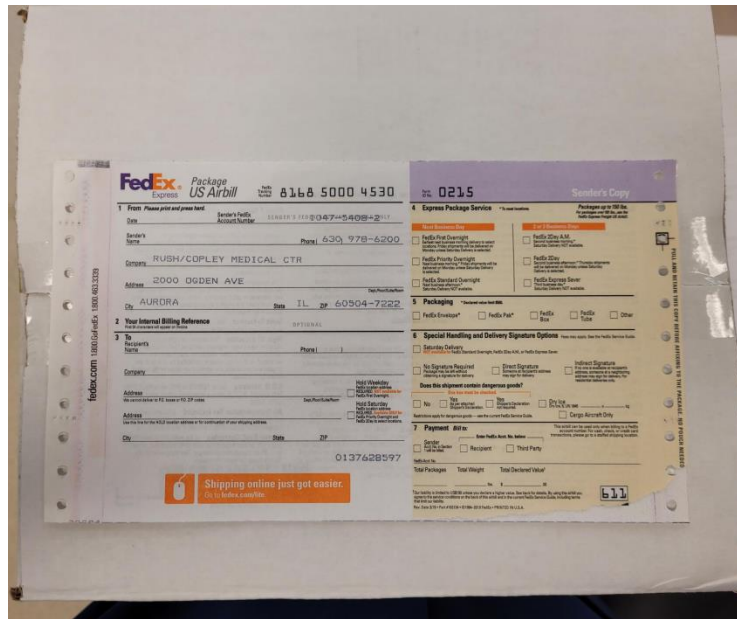


- e. Attach a “UN1845 Dry Ice” label to the box and write the amount of dry ice in kilograms on the line. (2.2 lbs. = 1 kg, a full gallon bag of dry ice is approx. 5 lbs. or 2kg)
- f. Attach a UN3373 label to the box also.



- g. Complete the shipping company’s Air Bill if a pre-printed air bill is not available.

- h. Place shipping company's Air Bill on the box.



- 10. Take the properly packaged and labeled shipping container to the appropriate pick-up location.
 - a. The FedEx Express pick up location is behind the customer service desk between Physician Office Building (POB) I and POB II.
 - b. The UPS pickup location is on the dock.