

CDC Specimen-Collection Protocol for a Chemical-Exposure Incident

See "Chemical Agents: Shipping Instructions for Specimens Collected from People who May Have Been Exposed to Chemical Agents" http://emergency.cdc.gov/labissues/specimens_shipping_instructions.asp

Collect blood and urine samples for each person involved in the chemical-exposure incident.

Note: For children, collect only urine samples unless otherwise directed by CDC.

Blood-Sample Collection

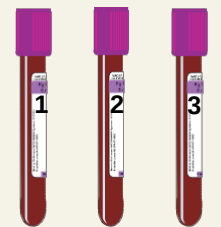
For each person, collect blood in glass or plastic tubes in the following order: 1st: collect specimens in three (3) EDTA (purple-top) 4 mL or larger plastic or glass tubes; 2nd: collect another specimen in one (1) gray- or green-top tube. Collect the specimens by following the steps below:

- 1** Collect a minimum of 12 mL of blood in three (3) 4 mL or larger glass or plastic tubes. If using 3 mL tubes, use four tubes.



Do not use gel separators.

- 2** Mix contents of tubes by inverting them 5 or 6 times.



Tube #1 Tube #2 Tube #3

Label tubes in order of collection. #1, #2, #3

- 3** Place bar-coded labels on each tube, so that when the tubes are upright, the barcode looks like a ladder.



Tube #1 Tube #2 Tube #3

Store samples at 1°C to 10°C.
Do not freeze.

- 4** After collecting samples in the purple-top tubes, collect one (1) sample in a gray- or green-top tube (gray-top tube shown). Allow the tube to fill to its stated capacity.



Do not use gel separators.

- 5** Mix contents of the tube by inverting it 5 or 6 times.



- 6** Place bar-coded labels on the tube, so that when the tube is upright, the barcode looks like a ladder.



Store samples at 1°C to 10°C.
Do not freeze.

Urine-Sample Collection

For each person, collect 40 mL- 60 mL of urine in a screw-cap urine cup.



Label the urine cup with the appropriate bar-coded label as shown. Indicate on the cup how the sample was collected if the method was other than "clean catch" (i.e., catheterization).

Freeze samples (optimally at -70°C).



Place bar-coded labels on all cups so that when the cup is upright, the barcode looks like a ladder.

Radiological Agents: Instructions for Shipping Urine Specimens to CDC after a Radiological Incident

This guidance is in accordance with the International Air Transport Authority (IATA) Packing Instruction 650 for Biological Substance, Category B. See "Radiological Agents: Shipping Instructions for Specimens Collected from People with Potential Contamination to Radiological Materials" for detailed information: <http://emergency.cdc.gov/radiation/labinfo.asp>



To separate urine cups, use a grid and/or individually wrap the urine cups. Place absorbent material in the bottom of the box and insert the cups.



Use one continuous piece of evidence tape to seal the box containing the urine cup(s). Write initials half on the evidence tape and half on the box or bag



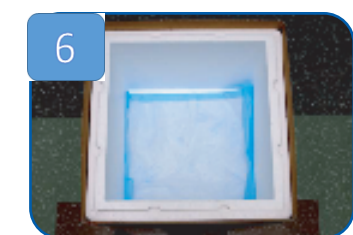
Wrap the box with absorbent material and secure with tape. Seal the box inside a Saf-T-Pak inner leak-proof polybag (or equivalent).



Place the sealed Saf-T-Pak inner leak-proof polybag (or equivalent) inside a white Tyvek® outer envelope (or equivalent).
Note: Or equivalent packaging must meet USDOT Regulations (49 CFR 173.199) and IATA Packing Instruction 650 for transporting Biological Substance, Category B Specimens.



Seal the opening of this outer envelope with a continuous piece of evidence tape. Write initials half on the evidence tape and half on the envelope.



Use a polystyrene foam-insulated, corrugated fiberboard shipper to ship boxes to CDC. Place an absorbent pad in the bottom of the shipper.



Place a layer of dry ice in the bottom of the shipper on top of the absorbent material.
DO NOT use large chunks or flakes of dry ice.



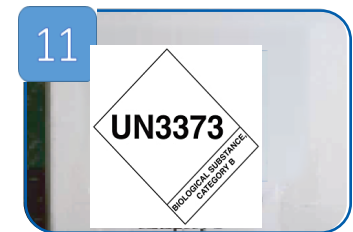
Place the packaged urine cups in the shipper. Use absorbent material or cushioning material to minimize shifting while box is in transit. Place additional dry ice on top of samples.



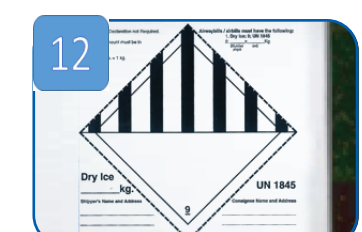
Place the urine shipping manifest in a sealable plastic bag and put on top of the styrofoam lid of the shipper. Keep your chain-of-custody documents for your files.



Secure the outer container lid with filamentous shipping tape. Place your return address in the upper left-hand corner of the shipper top and put the CDC receiving address in the center (see Instruction box # 13 below for address).



Add the UN 3373 label and the words "Biological Substance, Category B" on the front of the shipper. UN 3373 is the code identifying the shipper's contents as "Biological Substance, Category B."



Place a Class 9/UN 1845 label on the front of the shipper. This label is to indicate the use of dry ice (in kg) in the shipper and the proper name (either dry ice or carbon dioxide, solid)



Send shipment to:
CDC Warehouse
3719 North Peachtree Road
Chamblee, Georgia 30341
Phone: 770-488-7227
NCEHsamplelogistics@cdc.gov

Questions concerning this process should be directed to:
CDC Sample Logistics Laboratory
Inorganic and Radiation Analytical Toxicology Branch
Division of Laboratory Sciences, National Center for Environmental Health
Phone: 770-488-7227
NCEHsamplelogistics@cdc.gov

