# 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.

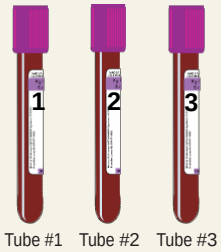
## Blood-Sample Collection

**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.

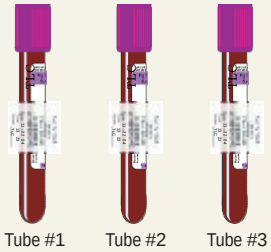
Do not use gel separators.

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




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.




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.



Department of Health and Human Services
Centers for Disease Control and Prevention
CDC

# Chemical Agents:

## Instructions for Shipping Blood Specimens to CDC after a Chemical Exposure Incident

**Guidance in Accordance with Packaging Instructions International Air Transport Authority (IATA) 650 Biological Substance Category B**. 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

1

Place purple- and gray- or green- top tubes by patient number into a gridded box lined with an absorbent pad.

2

Seal gridded box with one continuous piece of evidence tape.
The individual making the seal must initial half on the tape and half on the packaging.

3

Wrap gridded box in absorbent pad and tape to seal.
Seal gridded box inside a Saf-T-Pak clear inner, leak-proof polybag (or equivalent).

4

Place the sealed Saf-T-Pak inner leak-proof polybag (or equivalent) inside a white Tyvek ® outer envelope (or equilvalent).

**Note: If primary receptacles do not meet the internal pressure requirement of 95 kPa, use compliant secondary packaging materials.**

5

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

6

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

7

Place refrigerator packs in a single layer on top of the absorbent material.

8

Place the packaged specimens in the shipper.
Use cushioning material to minimize shifting while box is in transit.
Place additional refrigerator packs on top of samples.

9

Place the blood shipping manifest in a sealable plastic bag and put on top of the sample boxes inside the shipper. **Keep your chain-of-custody documents for your files.**
Place lid on the shipper.

10

Secure the shipper lid with filamentous shipping tape.
Place your return address in the upper left-hand corner of the shipper top and put the CDC Laboratory receiving address in the center.

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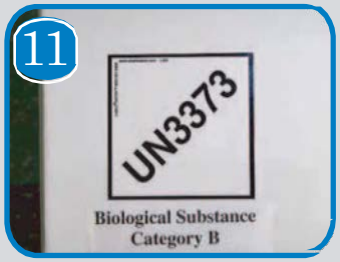


Add the UN 3373 label and the words "Biological Substance Category B" on the front of the shipper. UN 3373 is the code identifying the shipper's contents as "Biological Substance, Category B."

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**Send shipment via FedEx (or equivalent) to:**
**Centers for Disease Control and Prevention**
**CDC Warehouse**
**3719 N. Peachtree Rd.**
**Chamblee, GA 30341**
**ATTN: Chariety Sapp - (770) 488-0343**

**For questions concerning this process, please contact:**

Centers for Disease Control and Prevention
Attn: Chariety Sapp
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U.S. Department of Health and Human Services
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# Chemical Agents:
# Instructions for Shipping Urine Specimens to CDC after a Chemical Exposure Incident

**Guidance in Accordance with Packaging Instructions International Air Transport Authority (IATA) 650 Biological Substance Category B**. 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


Place urine cups in a gridded box lined with absorbent material, or alternatively place each cup inside a leak-proof biohazard polybag (or equivalent) and then place wrapped urine cups into a box.


Use one continuous piece of evidence tape to seal the gridded box or the box containing wrapped urine cups. Write initials half on the evidence tape and half on the box.


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: If primary receptacles do not meet the internal pressure requirement of 95 kPa, use compliant secondary packaging materials.**


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

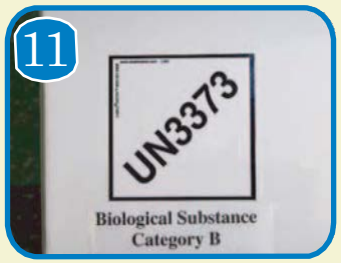

Use polystyrene foam-insulated, corrugated fiberboard shipper to ship boxes to CDC. Place absorbent pad in the bottom of the shipper.


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.

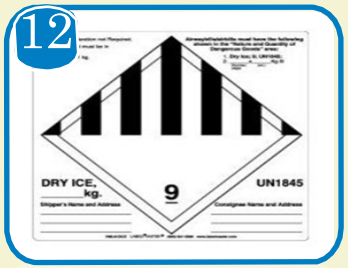

Place the packaged urine cups in the shipper. Use absorbent material or cushioning material to minimize shifting while box is in transit. Place additional dry ice on top of samples.


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


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 Laboratory receiving address in the center.




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 for dry ice MUST indicate the weight of dry ice (in kg) in the shipper and the proper name (either dry ice or carbon dioxide, solid).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