

A Guide for Shipping Temperature Sensitive Samples to the Center for Human Identification (CHI):

Ensuring Sample Integrity

This guide details proper procedures for shipping samples requiring **refrigeration or freezer** storage to CHI. Following these steps ensures sample integrity and minimizes the risk of damage or loss.

Contact Information

- Questions? Call the Evidence Unit at 1-800-763-3147.
- Forensic Anthropological Analysis with Wet/Decomposition Odor Cases: Contact the Forensic Anthropology Unit at 817-735-2190 or ForensicAnthropology@unthsc.edu. For these cases, decomposing tissue removal and disarticulation for a suitable container are required.

Samples Requiring Refrigeration or Freezer Storage

Refrigerated Samples (Examples):

- Liquid blood in glass vials
- Condoms containing potential semen
- Liquids (urine, blood, oral washes)

Frozen Samples (Examples):

- Fetal material
- DNA extracts
 - Unless informed otherwise, DNA extracts for forensic genetic genealogy testing are considered liquid and require storage at or below -10°C.
- Non-dried tissue
- Resected bone samples

Shipping Requirements

- Overnight shipping with ice packs or dry ice (no wet ice).
- **Packing Materials:**
 - Coolant (ice packs/dry ice)
 - Absorbent materials

- Packing materials
- Insulated container
- Outer corrugated box
- Plastic liners/bags (optional - for multiple samples/cases to prevent leakage/thawing)

Packing Instructions

1. **Freeze Coolants:** Follow manufacturer's instructions. Pre-cool the insulated container (if possible).
2. **Line the Container:** Use enough absorbent materials to capture any liquid or condensation.
3. **Secure Liquid Samples:** Use leak-proof containers with secure closures (screw-on, snap-on, push-on lids). Seal with tamper-proof tape.
 - Alternatively, double-bag non-dried samples using leak-proof plastic bags and seal them before placing them in the insulated container.
4. **Coolant Placement:** Avoid direct contact between coolants and samples/cardboard packaging by placing evidence packaging inside closed plastic bags. Place coolants on the side or bottom of the container and create a barrier, such as absorbent pads/paper, to prevent condensation/melting water transfer.
5. **Fill Empty Space:** Use packing materials to prevent items from shifting and ensure protection.
6. **Seal the Package:** Place the insulated container with its lid inside the corrugated box and seal the edges with tape.

Completed Package Requirements

- The completed package must be strong enough to withstand shipment without content loss due to vibration, temperature changes, humidity, or pressure.

Recommended Shipping Carriers

- FedEx Priority Overnight or UPS Next Day Air services.
- Avoid weekend delivery and First Overnight/Next Day Air Early due to limited business hours. Mail is only accepted during regular business hours of 8:00AM CST- 5:00PM CST Monday through Friday.

Additional Considerations

- Consult the shipping company for specific packing, marking, and labeling requirements for different sample types.

Suggested Shipping Material Resources

Uline heavy-duty boxes

https://www.uline.com/BL_417/275-Lb-Test-Single-Wall-Boxes

Example size

<https://www.uline.com/Product/Detail/S-4772/Heavy-Duty-Boxes/24-x-12-x-12-275-lb-Heavy-Duty-Corrugated-Boxes>

Insulated shipper kits

https://www.uline.com/BL_2157/Insulated-Shipping-Kits

Example size

<https://www.uline.com/Product/Detail/S-20422/Insulated-Shippers-and-Supplies/Insulated-Foam-Shipping-Kit-25-x-16-1-2-x-12>