

FORENSIC EVIDENCE HANDLING GUIDELINES

The following guidelines have been prepared to assist you in the collection, packaging, storage and shipment of evidentiary and reference samples. These are guidelines only. We therefore encourage you to contact us with any questions or specific exceptional circumstances.

General Instructions

Collection and Labeling of Samples

1. Use clean latex gloves for collecting each item of evidence. It is recommended the gloves be changed between the collection of each item of evidence.
2. It is preferred that each item of evidence be sealed in separate packages. However, if the evidence is already packaged together, please ship to us in that condition.
3. For proper chain of custody, each individual item should be marked with the agency case number, and item number, as well as the date it was sealed.
4. If possible, the person responsible for packaging each item should initial the seal on the package.

Shipping

1. Samples which are being hand-delivered should be delivered on a business day between 8:00 AM and 5:00 PM.
2. If possible, samples which are being shipped should be sent by overnight courier service for delivery on a business day and should not be shipped over a weekend.
3. If possible, samples should be shipped in secondary packaging (i.e. the primary evidence bag box or envelope should be placed in a secondary container for shipping).
4. If possible, reference samples should not be shipped in the same primary packaging as evidence (although they may be shipped in the same secondary container).
5. All shipments should be accompanied by a case submission form sealed in an envelope attached to the outside of the package.
6. All shipments should be addressed to the attention of the Evidence Technician.

Stains

Collection

1. When possible, evidence with dried stains should be collected with the stains left in place.
2. Dried stains should be packaged individually in paper packaging, such as envelopes, to prevent DNA degradation due to moisture.
3. When possible, evidence with wet stains should be allowed to air-dry prior to packaging.
4. If stains must be collected from an immovable surface (such as a window or sidewalk), sterile cotton swabs moistened with distilled water may be used.
5. To collect a stain from an immovable surface, rub the stained area with the moistened swab until all of the stain is transferred to the swab. If one swab is insufficient to collect the entire stain, use additional moist swabs.
6. Swabs should be allowed to air-dry when possible, and should be packaged in pre-labeled paper envelopes as indicated above.
7. Store dry stains or swabs at room temperature until the samples are shipped.

Shipping

1. Ship in a sealed box or sealed envelope at room temperature.
2. If you require only a certain portion of a sample to be tested, ship only the stained portion.
3. If you require Orchid Cellmark to screen the evidence, please ship the entire item.
4. If the item is more than 50 lbs or larger than 2'X4', please advise Orchid Cellmark in advance.

Biological, Wet Samples

Collection

1. Evidence that cannot be dried, such as pieces of tissue, bone, fetal material¹, or other wet biological material, should be collected and packaged separately in an air-tight, sealed and labeled container and immediately frozen at -20°C.
2. If possible, do not select formalin or formaldehyde preserved tissue samples because these chemicals can degrade DNA.
3. Store frozen until samples are shipped.

Shipping

1. Ship all biological, wet samples in a hard, frozen state.
2. To avoid DNA degradation during shipping, ship on dry ice in a sealed insulated container.
3. If dry ice is not available, ship in a sealed, insulated container with standard frozen ice packs.

Reference Samples

Please collect one of the following reference samples. The samples, in order of preference, are cheek swabs, blood samples and then pulled head hair samples.

Collection

1. Cheek swabs (a minimum of 2) should be collected on cotton-tipped applicators, air-dried, packaged in a paper envelope, and stored at room temperature. Upon request, we will provide a complimentary Orchid Cellmark Buccal Swab Collection Kit and instructions for the collection of cheek swabs.
2. Dried bloodstain cards should be packaged in a paper envelope and stored at room temperature.
3. If possible, liquid blood samples should be collected in EDTA purple top tubes and stored refrigerated. To prevent breakage, do not freeze.
4. Liquid blood samples previously collected by a pathologist or coroner in a blood tube with a different preservative can be tested and should be stored refrigerated. To prevent breakage, do not freeze.
5. Pulled head hair (a minimum of 10 with roots) should be packaged in a paper envelope, and stored at room temperature.

Shipping

1. Dried reference samples (cheek swabs, dried bloodstain cards, hair) should be shipped at room temperature.
2. Package blood tube(s) into standard Styrofoam blood tube packages or wrap individually in bubble wrap and secure with tape. The individually wrapped tubes of blood should be placed into a larger, sturdy cardboard box surrounded by packing material for protection from breakage. Ideally, liquid blood tubes should be shipped in a sealed, insulated container with standard frozen ice packs. However, if the blood tubes have previously been stored at room temperature, shipping them at room temperature is acceptable. **Do not freeze liquid blood tubes.**

¹ For more information, please request the Orchid Cellmark Procedure for the Collection and Shipment of a Product of Conception.

Infectious Blood Samples

1. Blood standards from persons diagnosed with HIV or hepatitis should be shipped using a Class 6.2/95 CAN/8-2SAF-T-PAK container with the proper Federal Express shipping tag for dangerous goods.
2. Suppliers of infectious shipping supplies include:

Source Packaging	888.665.9768
Federal Industries	800-356-4206
Labelmaster	800-621-5808
All Pak	800-245-2283

DNA Extracts

1. We recommend storing and shipping DNA extracts in a frozen condition.
2. Preferably, DNA extracts should be surrounded by packing materials and shipped in a hard-sided container to minimize the possibility of the tubes being crushed or otherwise damaged. Ideally, DNA extracts should be shipped in a sealed, insulated container with standard frozen ice packs.
3. Along with DNA extracts, please submit the corresponding reagent blank controls. If reagent blanks are not available, Orchid Cellmark may still process the samples, but a disclaimer will appear on the report indicating that no reagent blank control was available for testing in our laboratory.