



Guidelines for DNA Sample Documentation, Collection, Packaging and Preservation

Iowa Department of Public Safety
Division of Criminal Investigation

Iowa DCI Crime Lab
2240 S. Ankeny Blvd.
Ankeny, IA 50023-9093

Phone: 515-725-1500

The following information is intended to be used as a general guide for submitting agencies when documenting, collecting, packaging and preserving DNA evidence.

Documentation:

In order to accurately identify each item being submitted to the crime laboratory please include the following information on the item's outer packaging; collector's name, date/time of collection, agency case number, agency item identifier, a general description of the item and where it was collected from/ to whom the item belongs.

Collection:

Remember to wear personal protective equipment such as latex gloves when collecting DNA samples to prevent contamination by the collector. The preferred method of collection is simply to collect the entire item (ex. bloodstained knife). Larger items too cumbersome or impossible to submit entirely may be swabbed (ex. bloodstained door) or cut-out (ex. semen stained car seat). Collect a large sample (when possible) with a clean sharp instrument. When collecting DNA samples with a swab use a clean cotton tipped swab (moistened with clean water if the stain is dry) and concentrate as much sample as possible onto the swab. If a large sample is available collect two swabs from the item.

Packaging:

For items that have apparent wet stains it is necessary to allow enough time for drying before packaging. This includes swabs collected from wet stains. Allowing the stains to dry completely prevents contamination with other items, eliminates the creation of additional stain patterns, and helps prevent stain removal by abrasive action during packaging. Always use paper containers (bags, boxes, envelopes) when collecting DNA samples. Paper packaging is breathable and allows the item to dry completely. Do not use plastic or airtight containers for packaging. Packaging wet items in plastic creates conditions favorable for the growth of bacteria and mold and will have deleterious effects on the sample. Remember to package items with sharp edges in boxes and indicate on the packaging that a sharp object is enclosed. Try to package items in such a way that minimal movement will occur within the package while being transported.

Preservation:

Dried body fluids do not require refrigeration and may be stored at ambient room temperature or cooler. Avoid storing DNA samples in direct sunlight (UV radiation) or in temperatures above ambient room temperature for extended periods. Solid human tissue samples (including products of conception) need to be refrigerated and should be submitted to the lab as soon as possible. Items may be submitted directly to the crime lab during normal business hours Monday through Friday (8:00 am to 4:00 pm) or shipped via certified mail.

For questions relating to the documentation, collection, packaging and preservation of DNA samples please contact the DNA unit at (515) 725-1500.