

6. Evidence Integrity

Recommendations at a glance to maintain evidence integrity:

- Follow jurisdictional policies for drying, packaging, labeling, and sealing evidence.
- Make sure transfer policies maximize evidence preservation.
- Make sure storage policies maximize evidence preservation.
- Document the handling, transfer, and storage of evidence.

Follow jurisdictional policies for drying,¹⁵⁵ packaging, labeling, and sealing evidence. Examiners should be educated regarding these policies. It is critical to air-dry wet evidence at room temperature in a clean, sterile environment and quick manner that prevents contamination.¹⁵⁶ A drying box or other device may be used to facilitate the drying process. Jurisdictions should have policies for handling evidence that cannot be dried thoroughly at the exam site (e.g., wet clothing, tampons, sanitary napkins, tissues, diaphragms, and condoms), as well as for liquid evidence such as urine and drawn blood samples. When packaging dry evidence, use paper containers rather than plastic, because plastic containers retain moisture and promote degradation of biological evidence. Following proper drying and packaging procedures is vital to prevent the growth of mold and bacteria that can destroy an evidentiary sample.

Keep in mind that evidentiary materials include exam documentation. Follow jurisdictional policies for documenting exam findings and the medical forensic history and for packaging, labeling, and sealing such documentation. Properly recording and preserving this information is critical for its admissibility during a trial.

Make sure transfer policies maximize evidence preservation. Minimize transit time between collection of evidence and storage of kits. To avoid potential degradation of evidence, it is important to transport kits containing liquid samples and other wet evidence in a timely fashion. Only a law enforcement official or duly authorized agent should transfer evidence from the exam site to the appropriate crime laboratory or other designated storage site (e.g., a law enforcement property facility). Jurisdictional procedures for evidence management and distribution must be in place and followed. Those involved in evidence management and distribution should be educated on the specifics of these procedures and their responsibilities.

Make sure storage policies maximize evidence preservation. Secure storage sites should be designated and storage requirements should be consistent across a jurisdiction. Storage requirements depend on what types of specimens are being collected and on jurisdictional policy. For example, kits without drawn blood or other wet evidence generally do not need to be refrigerated. Follow jurisdictional policy for refrigeration of drawn blood samples and other wet evidence. The use of dried blood samples on blood collection cards is encouraged because they do not require refrigerated storage.¹⁵⁷ Urine should be refrigerated or frozen when stored.¹⁵⁸ Those involved in storing biological evidence should be knowledgeable regarding optimal storage conditions as well as the hazards for handling and storing evidence such as blood and urine. Evidence should be retained for as long as possible, as storage space permits. Some jurisdictions require storage of evidence for the full statute of limitations of the offense.

Make sure jurisdictional policies are in place to address evidence storage in cases where patients are undecided about reporting. Finding adequate storage space for these kits is a challenge for many facilities and agencies (e.g., community-based or hospital examiner programs may lack the capacity for secure long-term storage of kits at their facilities). Local responders, particularly examiners, law enforcement representatives, and crime lab staff, should discuss and address these and related challenges and develop

¹⁵⁵ Dry evidence unless indicated otherwise (e.g., freezing).

¹⁵⁶ With the ever-increasing sensitivity of DNA analysis, there is a greater chance that accidental contamination and dilution by foreign DNA can be detected. Every precaution should be taken to reduce outside contamination and dilution of evidence.

¹⁵⁷ The National Institute of Standards and Technology is conducting a 10-year project on DNA storage. Thus far, it confirms that refrigeration of dried DNA is generally unnecessary.

¹⁵⁸ Liquid blood and urine are generally required for toxicology purposes. These samples require refrigeration, preferably in a locked refrigerator. If a locked refrigerator is not immediately available, these samples can be kept at room temperature for no longer than 24 hours.

procedures that allow for the secure storage of these kits without revealing patients' identity. Storing the evidence as long as necessary is the ideal (e.g., until the patient decides whether to report or until the jurisdiction's statute of limitations for retaining evidence expires). However, due to lack of storage space, kits in some jurisdictions are stored for a limited period of time (e.g., 1, 5, or 10 years) and then destroyed if no report is made. Many jurisdictions have elected to store kits for the duration of the statute of limitations for the offense. If a limited-time policy is implemented, it is important that patients are informed regarding the amount of time they have to decide to report and procedures for reporting. It is also critical that the period of time given to patients to decide allows them the chance to consider their decision thoroughly; a short time such as a week or a month may not be sufficient to make such a decision.

Document the handling, transfer, and storage of evidence. Examiners must maintain control of evidence during the exam, while evidence is being dried, and until it is in the kit container and sealed (and then follow jurisdictional procedures for storing evidence securely or handing it over to a duly authorized agent for transfer to a storage site). Documentation should continue with each transfer of the evidence to law enforcement, the crime laboratory, and others involved in the investigative process.¹⁵⁹ Patients, advocates, family members, and other support persons should not handle the evidence. Documentation of the chain-of-custody information is vital to ensuring that there has been no loss or alteration of evidence prior to trial. Educate all those involved in handling, transferring, and storing evidence regarding the specifics of maintaining the chain of custody. If the patient is transferred between facilities, staff at both facilities should be careful to complete this documentation.

¹⁵⁹ Adapted from the *California Medical Protocol for Examination of Sexual Assault and Child Sexual Abuse Victims*, 2001, p. 34.