

National Institute of Standards (NIST)

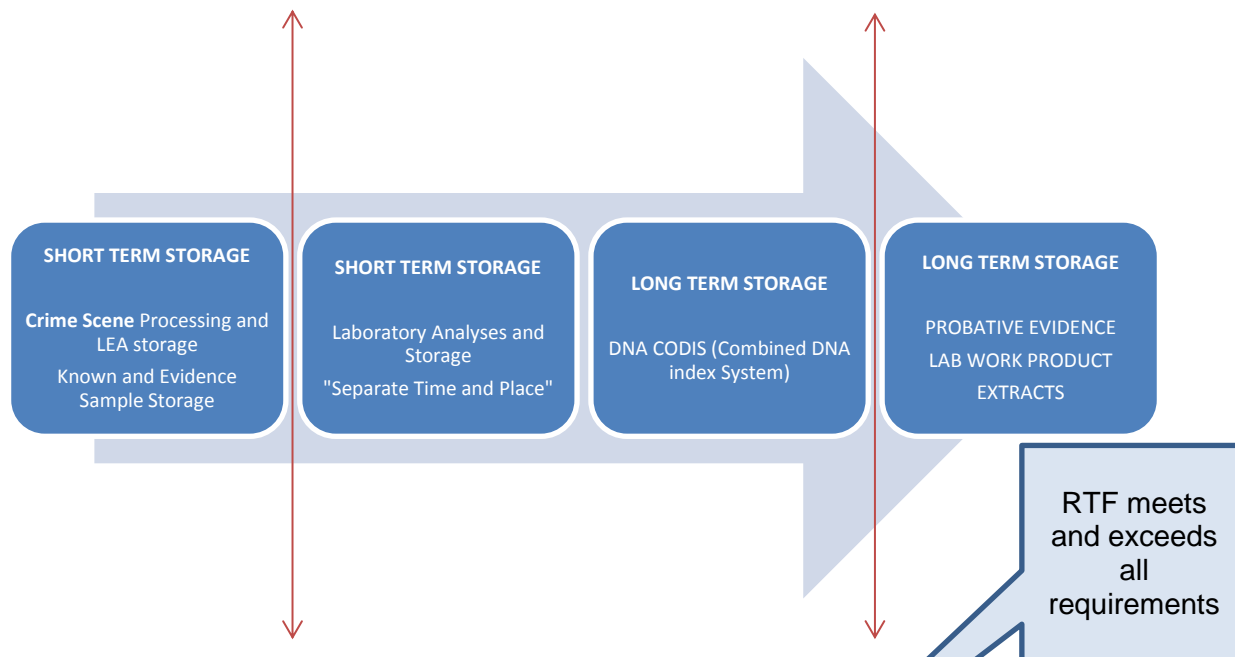
Biological Evidence Handbook

Refrigerated Forensic Evidence Systems Built For:

- Crime Scene Processing
- Short Term Storage
- Long Term Storage
- Security
- Temperature Monitoring
- Forced Air Circulation
- Stainless Steel Construction
- Environmentally Friendliness



RTF Evidence Storage Systems meet and exceed National Institute of Standards (NIST) Biological Evidence Preservation Handbook for the total evidence process: Crime Scene short term evidence storage (Pre Laboratory Analyses (short term) to Post Laboratory Analyses (Long Term) Freeze Dry



Excerpts from National Institute of Standards Biological Evidence Preservation Handbook
Short Term Storage

Type of Evidence ²	Frozen	Refrigerated	Temperature Controlled	Room Temperature
Liquid Blood ³	Never	Best	Less than 24 hours	
Urine	Best	Less than 24 hours		
Dry Biological Stained Item ⁴			Best	Acceptable
Wet Bloody Items (if cannot be dried)	Best	Acceptable	Less than 24 hours	
Bones	Acceptable		Acceptable	Acceptable
Hair			Best	Acceptable
Swabs with Biological Material		Best (wet)	Best (dried)	
Vaginal Smears			Best	
Feces	Best			
Buccal Swabs			Best	Less than 24 hours

RTF meets and exceeds all requirements

Long Term Storage

Type of Evidence ²	Frozen	Refrigerated	Temperature Controlled	Room Temperature
Liquid Blood	Never	Best		
Urine	Best			
Dry Biological Stained Items			Best	
Bones			Best	
Hair			Best	Acceptable
Swabs with Biological Material			Best (dried)	
Vaginal Smears			Best	
Feces	Best			
Buccal Swabs			Best	
DNA Extracts	Best (liquid)	Acceptable (liquid)	Acceptable (dried)	

Recommendation I-4:

Biological evidence that is collected in the course of an open investigation should be retained indefinitely for homicides and, at a minimum, for the length of the statute of limitations for all other offenses.

RTF meets and exceeds all requirements

Recommendation I-6:

Biological evidence should be preserved through, at a minimum, the period of incarceration in the following crime categories, as defined in NIBRS, regardless of whether or not a plea was obtained: homicides, sexual assault offenses, assaults, kidnapping/abductions, and robberies.

For all other Group

A and B offenses, biological evidence may be disposed of upon receipt of authorizations.

Recommendation III-1:

In tandem with state or local legislatures, managers in law enforcement and relevant stakeholders should advocate for additional resources and funding to ensure the integrity of biological evidence through prioritizing the packaging, storage, maintenance, and security of the evidence in their jurisdictions.

Recommendation III-3:

Each law enforcement agency should develop a protocol for standardizing evidence packaging materials and customizing shelving to allow for more efficient retrieval of evidence stored in property rooms.

Recommendation III-4:

For the safety of employees, agencies should always attempt to segregate types of biohazardous evidence, such as liquid evidence, tissue samples, and extracted DNA, in one centralized location for easy identification and safe storage.

RTF meets
and exceeds
all
requirements

Biological evidence should be stored in one of the following conditions, depending on the type of evidence, and if known, the type of analysis that will be conducted:

Frozen: temperature is maintained thermostatically at or below $-10\text{ }^{\circ}\text{C}$ ($14\text{ }^{\circ}\text{F}$)

Refrigerated: temperature is maintained thermostatically between $2\text{ }^{\circ}\text{C}$ and $8\text{ }^{\circ}\text{C}$ ($36\text{ }^{\circ}\text{F}$ and $46\text{ }^{\circ}\text{F}$) with less than 25 % humidity.

Temperature controlled: temperature is maintained thermostatically between $15.5\text{ }^{\circ}\text{C}$ and $24\text{ }^{\circ}\text{C}$ ($60\text{ }^{\circ}\text{F}$ to $75\text{ }^{\circ}\text{F}$) with less than 60 % humidity room temperature: temperature is equal to the ambient temperature of its surroundings; storage area may lack temperature and humidity control methods.