

Quick Reference Guide for Laboratory Examinations

[The Directory of Services](#) is a document listing evidence types with corresponding Unit phone numbers for answers to your questions.

[The Handbook of Forensic Services](#) is an extensive document listing evidence types by index, and includes examinations the Laboratory conducts, how to submit evidence, as well as information on crime scene searches and safety.

When you submit evidence to the Laboratory, a Request Coordinator (RC) from the [Evidence Control Unit](#) is assigned to your case. The RC ensures that the evidence is properly routed through the Units of the Laboratory and ensures that all appropriate examinations are considered and conducted in a timely manner. The RC will be the primary point of contact in the Laboratory from the time the case arrives until its final disposition. You will be contacted by the RC when the evidence arrives at the Laboratory. Should trial dates, deadlines, case discontinuations, or other circumstances arise, please contact the RC so that the proper arrangements can be made. The telephone number for the [Evidence Control Unit](#) is **703-632-8360**.

Whenever possible, agents should submit known samples for comparison purposes. This includes, but is not limited to: blood or buccal samples for DNA examination; a roll of tape for an end-match comparison; writing exemplars for handwriting analysis; fingerprints for a latent print examination; and pulled hairs for trace evidence analysis. Known samples should also be obtained for elimination purposes from individuals or objects with a legitimate purpose at the scene.

The following table describes general types of evidence you may want to submit, what Unit can examine your evidence, and the types of examinations that may be conducted. Evidence items are listed alphabetically; Units are listed in the order the items are examined in the Laboratory.

<i>Automobiles, motorcycles, construction equipment</i>	Trace Evidence Unit	Examination and comparison of glass, hair, and/or fiber
	Latent Print Operations Unit	Examination, development, comparison, and preservation of friction ridge prints
	Chemistry Unit	Paint analysis for make/model comparison and/or determination; headlamp failure analysis
	Questioned Documents Unit	Examination and comparison of impressions (shoe/tire); tire database search for brand/manufacturer
	Firearms-Toolmarks Unit	Vehicle identification number recovery, examination, and verification; firearms trajectory reconstruction
<i>Blood, bloodstains (see clothing)</i>	DNAUI	Analysis of a reference sample for nuclear DNA. If the sample is from an unidentified individual or a close relative (parent, sibling) of a missing person, the profile can be entered into the Missing Person Database. For bloodstains on evidence, blood examinations followed by nuclear DNA examinations; bloodstain pattern analysis
	DNAUII	Examination to determine the mitochondrial DNA (mtDNA) sequence to use as a known casework sample. If the sample is from an unidentified individual or the maternal relative of a missing person, the mtDNA sequence can be entered into the Missing Person Database or the sequences can be compared to one another.

	Chemistry Unit	Analysis for drugs of abuse, poisons, and drugs used to facilitate sexual assault
<i>Bombs, explosives, or other improvised explosive devices (IEDs), incendiary devices (arson)</i>	Explosives Unit	Safety check on unexploded devices, examination for bulk explosives or explosive residues; Call for shipping instructions and appropriate packaging materials.
	Trace Evidence Unit	Examination and comparison of hairs, fibers, soil, glass, fabric damage, and other trace evidence
	Latent Print Operations Unit	Examination, development, comparison, and preservation of friction ridge prints
	DNAUI	Examination of nuclear DNA
	DNAUII	Examination of mtDNA on hairs found
	Chemistry Unit	Analysis of nonexplosive components, such as metal, tape, and other components
	Firearms-Toolmarks Unit	Examination and comparison of toolmarks
<i>Bones</i>	Trace Evidence Unit	Examination to determine source, age, sex, ancestry, stature estimation; trauma analysis; personal identification (comparison with medical records); facial reproduction
	DNAUI	Examination of nuclear DNA, which includes nuclear DNA analysis of remains of an unidentified individual to enter into the Missing Person Database. The DNA profile can be compared to a reference sample or relatives to help identify the missing person.
	DNAUII	Examination to determine the mtDNA from the remains of a missing/unidentified individual to enter into the Missing Person Database. This sequence can also be compared to the mtDNA sequence of a possible maternally related individual. The mtDNA sequence from multiple samples can determine if they could be from the same individual.
	Firearms-Toolmarks Unit	Examination of toolmarks
<i>Bottles, cans</i>	Latent Print Operations Unit	Examination, development, comparison, and preservation of friction ridge prints
	DNAUI	Analysis of sample from rim and backwash for nuclear DNA
<i>Building materials</i>	Trace Evidence Unit	Class determination (insulation, cement, brick, etc.); comparison to knowns for possible common origin
	Latent Print Operations Unit	Examination, development, comparison, and preservation of friction ridge prints

	Chemistry Unit	Comparison of painted surfaces
<i>Bullets</i>	Trace Evidence Unit	Examination for trace evidence such as fibers, glass, or other material adhered to the bullet
	Latent Print Operations Unit	Examination, development, comparison, and preservation of friction ridge prints
	Firearms-Toolmarks Unit	Examination and comparison; comparison with National Integrated Ballistics Information Network (NIBIN)
<i>Cartridges, cartridge cases</i>	Latent Print Operations Unit	Examination, development, comparison, and preservation of friction ridge prints
	Firearms-Toolmarks Unit	Examination and comparison; comparison with NIBIN
<i>Chemicals</i>	Chemistry Unit	Analysis of any residue, stain, liquid, or powder, to include pepper sprays, lubricants, foams, inks, sealants, caulks, drugs, poisons, or bank dye
	Explosives Unit	Bulk analysis and screening of hazardous material
<i>Cigarettes</i>	DNAUI	Analysis from the filter end for nuclear DNA
	Latent Print Operations Unit	Examination, development, comparison, and preservation of friction ridge prints
<i>Clothing</i>	Explosives Unit	Examination for residues of explosives or weapons of mass destruction
	Trace Evidence Unit	Examination for and comparison of hairs, fibers, soil, glass, fabric damage, and other trace evidence
	DNAUI	Examination of blood and/or semen or wearer samples (collar, hat band, gloves, ski mask), all followed by nuclear DNA analysis; bloodstain pattern analysis on larger items of evidence
	Latent Print Operations Unit	Examination, development, comparison, and preservation of friction ridge prints
	Questioned Documents Unit	Examination and comparison of impressions (shoe/tire)
	Chemistry Unit	Examination of stains for bank dye, drug residue, metal filings/debris, paint, unknown powders, pepper spray
	Firearms-Toolmarks Unit	Determination of victim muzzle-to-target distance
<i>Cordage</i>	Trace Evidence Unit	Examination for physical matching; comparison to knowns for possible common origin

<i>Cryptanalysis—encrypted documents</i>	Cryptanalysis and Racketeering Records Unit	Analysis of encoded and enciphered documents used by terrorists, foreign intelligence agents, violent criminals, street and prison gangs, and organized crime groups; encrypted documents may be faxed or emailed for immediate decryption.
<i>Documents, including gambling, drugs, prostitution, and racketeering record; photographs; checks; threats; contracts</i>	Questioned Documents Unit	Examination and comparison, including shredded, charred, or water-soaked documents; rubberstamps; seals; indented writing; watermarks; alterations and obliterations; and inks, analysis of handwriting, handprinting and typewriting
	Cryptanalysis and Racketeering Records Unit	Analysis for business, distribution, or other organizational records
	Latent Print Operations Unit	Examination, development, comparison, and preservation of friction ridge prints
<i>Envelopes</i>	Trace Evidence Unit	Examination for hairs/fibers on adhesives
	Chemistry Unit	Analysis for residue, such as white powders in threat letters
	Questioned Documents Unit	Examination and comparison, including handwriting, handprinting, and typewriting analysis; printing/graphics, etc.
	Latent Print Operations Unit	Examination, development, comparison, and preservation of friction ridge prints
	DNAUI	Analysis of the flap and stamp for nuclear DNA
<i>Feathers</i>	Trace Evidence Unit	Determination of species; comparison to knowns for possible common origin
<i>Fibers</i>	Trace Evidence Unit	Examination for fiber type (natural, synthetic); comparison to knowns for possible common origin
<i>Glass</i>	Trace Evidence Unit	Fracture analysis (direction and type of force, sequence of force events); comparison to knowns for possible common origin
	Questioned Documents Unit	Examination of larger pieces for shoe print
	Latent Print Operations Unit	Examination, development, comparison, and preservation of friction ridge prints
<i>Hairs</i>	Trace Evidence Unit	Examination to determine source, race, body area, damage, alteration, method of removal; comparison to knowns for possible common origin
	DNAUI	Examination of nuclear DNA from tissue adhering to the hair when determined by the Trace Evidence Unit to be suitable

	Chemistry Unit	Analysis for drugs or poisons
	DNAUII	Examination to determine the mtDNA sequence; must have a known sample for mtDNA comparison from the victim, subject, or a maternal relative of the victim or subject for examination to be done on the hair(s)
<i>Impressions—photographs of, casts of, or gels of</i>	Trace Evidence Unit	Examination and comparison of fabric impressions
	Questioned Documents Unit	Examinations and comparisons (shoe/tire)
	Firearms-Toolmarks Unit	Examination and comparison of toolmarks
<i>Lifts—shoes</i>	Questioned Documents Unit	Examination and comparison
<i>Lock—keys</i>	Latent Print Operations Unit	Examination, development, comparison, and preservation of friction ridge prints
	Firearms-Toolmarks Unit	Examination and comparison of toolmarks; examination for bypass; decoding
<i>Metals</i>	Latent Print Operations Unit	Examination, development, comparison, and preservation of friction ridge prints
	Chemistry Unit	Analysis for fractures/failure; analysis for forgery of metals used in currency, IEDs, timers, watches, and light bulbs; compositional comparison of metal specification to determine fraud
	Firearms-Toolmarks Unit	Examination and comparison of toolmarks
<i>Office machines (fax, copier, etc.), including machine ribbon (typewriters)</i>	Latent Print Operations Unit	Examination, development, comparison, and preservation of friction ridge prints
	Questioned Documents Unit	Examination, comparison, and classification
<i>Paint</i>	Chemistry Unit	Analysis and comparison of paint on tools, automobiles, marine vessels, and architectural paint; can also perform make/model/year searches for automobiles in hit-and-runs
<i>Photographs, surveillance video</i>	Firearms-Toolmarks Unit	Analysis of images for possible determination of firearm make and model
<i>Plastic (polyethylene) bags</i>	Latent Print Operations Unit	Examination, development, comparison, and preservation of friction ridge prints
	Questioned Documents Unit	Examination and comparison

<i>Racketeering records</i>	Cryptanalysis and Racketeering Records Unit	Analysis of records from illegal businesses, including drug records, sports and horse bookmaking, internet gambling, numbers or lottery, loan-sharking, and prostitution
<i>Semen stains—see clothing</i>		
<i>Sexual assault kits</i>	Trace Evidence Unit	Examination of fingernail scrapings and combings for hairs and fibers
	DNAUI	Examination for semen, then nuclear DNA; examination of fingernail scrapings for nuclear DNA
	Chemistry Unit	Analysis of urine and/or blood by toxicology screenings for drugs used to facilitate sexual assaults
<i>Shoes</i>	Trace Evidence Unit	Examination for trace evidence such as fibers, glass, soil, or other material
	Questioned Documents Unit	Examination and comparison; shoe database search for brand/manufacturer
<i>Silencer/suppressor</i>	Latent Print Operations Unit	Examination, development, comparison, and preservation of friction ridge prints
	Firearms-Toolmarks Unit	Examination and sound-meter testing
<i>Shredded paper</i>	Latent Print Operations Unit	Examination, development, comparison, and preservation of friction ridge prints
	Questioned Documents Unit	Reconstruction, examination and comparison
<i>Soil</i>	Trace Evidence Unit	Determination of provenance (soil source); comparison to knowns for possible common origin
<i>Tape/adhesives</i>	Trace Evidence Unit	Examination of hairs and fibers
	Questioned Documents Unit	Matching of end fractures of paper and film tapes
	Latent Print Operations Unit	Examination, development, comparison, and preservation of friction ridge prints
	Chemistry Unit	Analysis and comparison of duct, electrical, or packaging tapes used on threat letters, IEDs, or in kidnappings
<i>Teeth</i>	Trace Evidence Unit	Examination to determine source (human vs. non-human), age, ancestry; trauma analysis; personal identification and comparison with dental records

	DNAUI	Examination of nuclear DNA, which includes nuclear DNA analysis of teeth from a missing person or an unidentified individual to enter into the Missing Person Database. The DNA profile can be compared to a reference sample or relatives to help identify the missing person.
	DNAUII	Examination to determine the mtDNA from the remains of a missing/unidentified individual to enter into the Missing Person Database. This sequence can also be compared to the mtDNA sequence of a possible maternally related individual. The mtDNA sequence from multiple samples can determine if they could be from the same individual.
<i>Tires</i>	Questioned Documents Unit	Examination and comparison of impression; tire database search for brand/manufacturer
<i>Tissue, human</i>	DNAUI	Examination of nuclear DNA, which includes nuclear DNA analysis of tissue of an unidentified individual to enter into the Missing Person Database. The DNA profile can be compared to a reference sample or relatives to help identify the missing person.
	DNAUII	Examination to determine the mtDNA sequence to use as a known casework sample. If the sample is from an unidentified individual or the maternal relative of a missing person, the mtDNA sequence can be entered into the Missing Person Database or the sequences can be compared to one another.
	Chemistry Unit	Analysis for drugs or poisons
<i>Tools (hand or power), toolmark casts</i>	Latent Print Operations Unit	Examination, development, comparison, and preservation of friction ridge prints
	Chemistry Unit	Comparison of painted surfaces or transferred paint
	Firearms-Toolmarks Unit	Examination and comparison
<i>Urine</i>	Chemistry Unit	Analysis for drugs of abuse, poisons, and drugs used to facilitate sexual assault
<i>Weapons (firearms, knives, melee type, etc.)</i>	Trace Evidence Unit	Examination for trace evidence such as fibers, glass, soil, or other material; examination for blowback material on firearms
	Chemistry Unit	Examination to look for drug residue; comparison of broken fragment to blades (trace metal analysis)
	Latent Print Operations Unit	Examination, development, comparison, and preservation of friction ridge prints
	DNAUI	Examination of blood, followed by nuclear DNA analysis

	Firearms- Toolmarks Unit	Examination and comparison of firearms, ammunition, ammunition components (bullets, cartridge cases); examination of toolmarks; fracture matching; serial number restoration; gunshot residue distance determination; NIBIN entry and comparison
<i>Wood</i>	Trace Evidence Unit	Examination for fracture matching, identification of species; comparison to knowns for possible common origin
	Latent Print Operations Unit	Examination, development, comparison, and preservation of friction ridge prints
	Firearms- Toolmarks Unit	Examination and comparison of toolmarks

This list should not be considered all-inclusive. For answers to specific questions regarding any other potential items of evidence, please contact the [Evidence Control Unit](#) (703-632-8360) or the appropriate Laboratory Unit directly at the numbers listed below:

Forensic Analysis Section

[Cryptanalysis and Racketeering Records Unit](#)
703-632-7334
[Firearms-Toolmarks Unit](#)
703-632-8442
[Latent Print Operations Unit](#)
703-632-8443
[Latent Print Support Unit](#)
703-632-7107
[Questioned Documents Unit](#)
703-632-8444

Scientific Analysis Section

[Chemistry Unit](#)
703-632-8441
[DNA Analysis Unit I \(Nuclear\)](#)
703-632-8446
[DNA Analysis Unit II \(Mitochondrial\)](#)
703-632-7572
[CODIS Unit](#)
703-632-8315
[Trace Evidence Unit](#)
703-632-8449

Operational Response Section

[Chemical Biological Sciences Unit](#)
703-632-7770
[Evidence Response Team Unit](#)
703-632-7884
[Explosives Unit](#)
703-632-7634
[Hazardous Materials Response Unit](#)
703-632-7911
[Photographic Operations & Imaging Services Unit](#)
703-632-8084

Forensic Science Support Section

[Special Projects Unit](#)
703-632-8194

Forensic Analysis Branch

[Evidence Control Unit](#)
703-632-8360
[Terrorist Explosive Device Analytical Center \(TEDAC\)](#)
703-632-7400