DNA / Serology FAQs

Why do I need a DNA acceptance code?
Acceptance codes allow investigators to ask questions about DNA testing and to understand the scope of our testing capabilities. The purpose of discussing the specifics of a case with a DNA analyst is to limit the submitted items to the most probative pieces of evidence – this helps minimize backlog DNA cases and helps to decrease your case’s turnaround time. If during the first round of testing nothing of value is generated, you can submit more items of evidence for additional testing later.

What kind of items will not be accepted for testing?
Liquid biological fluids, syringes containing needles, and bullets/casings will not be accepted for DNA testing. Bullets and casings are still accepted for latent print and firearm testing. Touch DNA swabs (i.e. steering wheel swabs, door knob swabs, etc.) will not be accepted without an elimination standard from the home/car owner. Felon in possession cases will not be accepted without a suspect DNA standard.

How should biological evidence be packaged?
Biological evidence should be completely dry before packaging. The evidence should be packaged in paper only, NEVER plastic. Biological evidence should be stored in a cool place (room temperature) and should never be left in a hot car.

How many items can I submit in a property crime?
You can submit a maximum of two items of evidence. Any DNA standards collected do not count against this number. If you are submitting swabs from a person’s home/car, then you are required to submit an elimination standard from the owner (s). We will not accept property crime touch DNA swabs without a standard.

Are there any limitations/restrictions for submitting evidence in a felon in possession of a firearm case?
Yes. We will not accept felon in possession of a firearm cases without a suspect standard.

If my suspect is in the “system” (CODIS), do I still have to collect a standard from him/her?
Yes. DNA analysts cannot search the CODIS database for DNA profiles. DNA standards from arrestees/convicted offenders do not maintain a chain of custody and can therefore not be used as evidence or as a comparison tool. A separate DNA standard from the suspect in most cases will be required. A suspect standard that is submitted upon the initial submission of the evidence will make the entire process more efficient and will even facilitate things down the line if a CODIS “hit” occurs at a later time.

What do I do once I get notification of a CODIS hit?
You will need to collect a DNA standard from the person identified through the CODIS hit and submit that to the laboratory for direct comparison to the evidentiary profile. Per New Mexico legal statutes, offender and arrestee samples in CODIS are for data basing purposes only and are not to be used as standards for comparison. A CODIS “hit” is strictly an investigative lead and is not appropriate for use in court.
Can all DNA profiles be entered/searched in CODIS?

No. The FBI has several rules that govern the entry of DNA profiles into CODIS. Victim DNA profiles cannot be entered into CODIS. Only evidentiary DNA profiles generated during commission of a crime can be entered into CODIS. DNA profiles generated from items collected from a suspect’s person/property cannot be entered into CODIS (which is why a standard must be submitted for a felon in possession of a firearm case). For more information, visit the NDIS procedures at [http://www.fbi.gov/about-us/lab/biometric-analysis/codis/codis-and-ndis-fact-sheet](http://www.fbi.gov/about-us/lab/biometric-analysis/codis/codis-and-ndis-fact-sheet)

When should I collect DNA standard(s) from the person(s) of interest in a case?

If possible, standards should be collected every time. It is easier to collect a standard during investigation of a case than at a later date. In cases where a search warrant is required, or there is no suspect, then those cases can be submitted as is.

Why do I have to submit elimination standards?

DNA results can be very difficult to interpret without a standard for comparison. If an item is collected from a person’s home/car, it is expected to find their DNA on those items. Analysts are not allowed to enter victim DNA profiles into CODIS, so the owner(s) must be eliminated from the evidence before the evidentiary profile can be entered into CODIS.

Does your laboratory do any specialized testing?

Yes. We perform male Y-STR DNA testing, criminal paternity testing, and reverse parentage testing. For male Y-STR testing, a male DNA standard is required. For criminal paternity testing, standards from the alleged father, the biological mother, and the child/product of conception are required. For reverse parentage testing, standards from the biological mother, biological father, and alleged child are required.

What is male Y-STR DNA testing?

Male Y-STR DNA testing uses the same technology as conventional DNA testing, however, it only tests the Y chromosome. The Y chromosome is passed unchanged from father to son, so an entire paternal male lineage will have the same male Y-STR DNA profile. Since this type of testing targets only the male DNA present in a sample, it can be useful in cases where there is too much female DNA present, as in sexual assault cases.

What is a DNA mixture?

A DNA mixture is when more than one person contributes their DNA to an item of evidence. An analyst can sometimes separate out the components of a mixture, as in who deposited the most amount of DNA (major DNA profile) and who deposited the least amount of DNA to a sample (minor DNA profile). If the components of a mixture cannot be separated out, it is simply reported as a mixture.

What is a “foreign” DNA profile?

When swabs are collected from a person’s body, it is expected to find their DNA profile from those swabs. When there is DNA present on those body swabs that does not belong to that person, it is called “foreign” DNA.