




# Idaho State Police

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**To:** Idaho Law Enforcement, Public Defenders, County Prosecutors  
**From:** Matthew Gamette, ISP Forensic Services Laboratory System Director   
**Subject:** Implementation of Y-STR DNA Testing at ISPFS  
**Date:** January 25, 2019

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Idaho State Police Forensic Services (ISPFS) is committed to improving and expanding services to meet the needs of the criminal justice community in Idaho. The ISPFS Biology/DNA section is pleased to announce that Y-STR DNA testing services will be available effective January 25, 2019.

Y-STRs are similar to traditional autosomal STRs; however, they are present only on the Y-chromosome which means they are specific for DNA from males only. Y-STRs can be a valuable forensic tool in cases where autosomal STRs may be limited, particularly sexual assault cases where a very small amount of male DNA may be present on an item of evidence along with an abundance of female DNA. Y-STRs are inherited through the paternal lineage which means all paternal male relatives will have the same Y-STR DNA profile. Therefore, Y-STRs are not able to individualize the source of a DNA sample and the supporting statistical calculations reflect this limitation. In this way, Y-STRs are more limited in their ability to discriminate between individuals than are traditional autosomal STRs. Also, Y-STRs cannot be searched against the CODIS database so they are only useful for direct comparison to known reference samples from a person of interest.

Y-STR DNA testing is well established and accepted in the forensic science community. This technology is being implemented at ISPFS following significant internal validation and training efforts to ensure the method is accurate and reliable, and our scientists are fully trained and qualified experts.

The Y-STR DNA testing service will be provided on a request basis, after consultation with a forensic scientist, to ensure that the technology is appropriate to use in a particular case. If you would like to discuss the possibility of having Y-STR DNA testing performed in a specific case, please contact the ISPFS laboratory in Meridian, ID at (208) 884-7170 and ask to speak with a representative from the biology section.