



December 2021

Rapid DNA Pilot Program Plan

In accordance to ESSB 5092 (Section 402(14))

BACKGROUND

In 2021, the legislature provided \$1,320,000 of the general fund—state appropriation for fiscal year 2023 to the Washington State Patrol to implement an enhanced forensic capabilities pilot program. The goal of the proposed pilot program is to provide expedited DNA technology and forensic services to assist in the processing of mass disaster scenes, as well as crime scene evidence and reference samples pertaining to crimes that are typically given lower priority, in as little time as 90 minutes. This expedited DNA technology, referred to as “Rapid DNA,” involves specialized DNA instruments that would be placed in select WSP crime laboratories for external law enforcement access/use. The proposal advocated that law enforcement officers would test DNA samples from evidence items taken from these lower priority crime scenes to query against a mirror copy of the State DNA Index System (SDIS) containing Washington convicted offender DNA profiles. If the submitted crime scene sample “matches” to a profile in a mirror copy of SDIS, the officer could use the match information as an investigative lead to seek a search warrant for the suspect’s reference sample, or take other investigative steps.

This proposed design for a Rapid DNA pilot project was considered by the WSP and portions of the design have been determined to not be feasible as written, in order for WSP to remain in compliance with federal and state regulations.

The advent of Rapid DNA technology is an exciting recent and ongoing development in the field of forensic DNA testing, with many promising applications. The WSP is appreciative of the opportunity to implement the technology into its system to provide expedited DNA services to its law enforcement stakeholders. Prior to using the proviso funding to purchase this technology and provide this forensic service, WSP is to provide a plan to the legislature to respond to various operational questions. Below is a summary of how WSP can adopt the technology into its current operations, while maintaining a robust quality system that complies with federal and state regulations.

WSP’s DNA Program Overview and the Analysis of the Rapid DNA Pilot Proposal

The DNA Program of the WSP Crime Laboratory Division is the only accredited forensic program operating in Washington State, providing DNA testing of evidence and operation of the DNA database under the legal authority of RCW 43.43.752, WAC 466-75-040 and WAC 466-75-050. To maintain access as a participating member of the FBI’s National DNA Index System (NDIS), WSP has strict quality standards it must adhere to on an ongoing basis. The WSP DNA program undergoes regular audits to demonstrate compliance with its Memorandum of Understanding (MOU) with the FBI, accreditation criteria, the FBI’s Quality Assurance Standards, and NDIS Procedures. Furthermore, WSP is required to utilize only forensic DNA technology/methods that are approved by NDIS, and must control and protect the release of all DNA data and any personally identifiable information (PII) as outlined in the federal DNA Identification Act and the NDIS Privacy Act Notice.

Recent consultation between the WA State CODIS Administrator and the FBI’s NDIS Custodian provided direction for WSP to address the proposed pilot program’s privacy and operational issues so that WSP does not jeopardize its ability to be an NDIS-approved participating program, yet still implement a Rapid DNA pilot program for its law enforcement customers.

Protocols on the operation and use of the program:

- The pilot program will be implemented in a phased approach due to WSP DNA resources, as well as the growth and ongoing development of Rapid DNA technology. Currently, Rapid DNA is validated and FBI-approved for known reference samples only. Further research and development for the use of Rapid DNA on crime scene samples are ongoing by the manufacturers and the FBI in association with national working groups. The phased approach of this pilot project will allow time for the advancement of the technology while incorporating it into laboratory operations with its approved and robust applications.
- Phase I of the pilot project will be limited to those sample types currently validated and approved by the FBI. The sample types appropriate for the Phase I are reference samples (oral swabs, blood), such as those from a convicted offender, suspect, or a relative searching for a missing person, as well as other single-source samples such as unidentified human remains (bone, teeth, tissue).
- Phase II of the pilot project will incorporate the testing of crime scene samples with the use of a mirrored copy of the state CODIS database containing offender samples.
- Selection of and the procurement of the Rapid DNA instrumentation, software, and supplies will follow WA State procurement laws.
- The Rapid DNA technology, instrumentation, and methods will be fully validated/ performance checked by WSP prior to implementation, following the applicable FBI Quality Assurance Standards.
- The Rapid DNA instrumentation will reside within WSP property, and the use of the instrumentation and supplies will be restricted to approved WSP personnel only. WSP is prohibited from providing access to and/or releasing DNA records and PII to any non-NDIS approved entities, so WSP must maintain the control of this system and any resulting DNA data to remain in compliance.
- Operation of the instrumentation and the evaluation of any resulting DNA profiles will be conducted by trained and fully-qualified WSP forensic DNA scientists.
- To remain in good standing with NDIS, WSP is required to be the only entity who has access to the CODIS database and any mirror copies of that database. Therefore, WSP will continue to retain complete control of the DNA data contained within CODIS, safeguarding the confidentiality and integrity of DNA records.

A description of how expedited DNA technology and forensic services will tie into the current operations of the State Patrol's existing Crime Laboratory Division:

- Currently, WSP does not have a robust DNA testing plan in the unfortunate event of a mass disaster, such as that encountered in the 2014 Oso Mudslide. Additionally, WSP is limited in its abilities to assist law enforcement agencies and medical examiners/coroners to provide DNA services to identify human remains. This Rapid DNA pilot project will help fill

this gap, to assist WSP with the potential ability to respond to these events to conduct rapid DNA testing of unidentified remains and those from relatives looking for their loved one.

- Due to current availability of resources in the WSP CODIS Laboratory, this laboratory section will perform Phase I of the Rapid DNA pilot project. The CODIS Laboratory will evaluate this technology to produce DNA results at a rapid rate for rush offender match confirmations and the quick testing/upload of rush convicted offender sample testing and database upload. This will provide hit confirmations and offender sample processing for rush, high-priority cases within 3-4 hours, compared to the routine weekly to monthly turnaround times.
- DNA profiles produced using Rapid DNA from crime scene evidence samples are currently prohibited from being entered into or searched against the SDIS or NDIS CODIS databases. Therefore, Phase II of the pilot project will require WSP to search a mirror copy of the state CODIS offender database. During this phase, the logistics of a mirror copy of the database will be determined. In order to enter these profiles into CODIS (and for court admissibility), all evidence samples tested with Rapid DNA would have to be resampled and retested using conventional and approved DNA procedures in the crime laboratory.
- The resampling and retesting of crime scene evidence would duplicate laboratory efforts and constrain WSP DNA casework resources that are currently focused on meeting the sexual assault kit testing law (RCW 5.70.050). The timing of Phase II implementation will allow casework operations to be in a better position to incorporate this additional technology.
- The two forensic scientist positions funded by this project will perform the validation and oversee the pilot project, thus reducing the impact on the existing team of DNA staff devoted to high-priority databasing and casework services.
- DNA profiles produced using Rapid DNA that meet FBI CODIS eligibility requirements will be entered into CODIS. Currently, eligible DNA profiles generated from Rapid DNA technology are limited to known reference samples.
- Rapid DNA technology is in its infancy, but is showing to be a promising and effective investigative and public safety tool. The manufacturers of Rapid DNA instruments and the FBI are in the process of evaluating and preparing the technology for crime scene samples over the next few years. The timeframe of this pilot program will serve WSP well to be in a proactive position to expand Rapid DNA technology when the FBI authorizes it for crime scene sample types.
- By taking a phased approach for this pilot project and beginning with only those sample types approved for Rapid DNA technology by NDIS, and to mass disaster remains that do not require the application of CODIS, the WSP will ensure it operates within the constraints of the MOU with the FBI, accreditation, and the federal Quality Assurance Standards. This will allow WSP to first become familiar with the instrumentation and technology while using it in its currently approved capacity before expanding it to Phase II.

Details of how the Washington State Patrol will protect individual privacy and civil liberties in relation to the program:

- The WSP's DNA Quality program operates within federal and state DNA regulations to ensure the protection of individual privacy and civil liberties. WSP has always demonstrated compliance with these regulations. Likewise, the procedures for the Rapid DNA pilot program will abide by federal and state regulations (whichever is more restrictive) in regards to DNA privacy and the release of PII generated as part of DNA testing and DNA databasing.
- WSP IT support will be leveraged to ensure the instrument's software, connection to the WSP network, and any DNA profiles retained in the instrument's closed system follow all security regulations.
- To remain in good standing with NDIS, WSP is required to be the only entity who has access to the CODIS database and any mirror copies of that database. Therefore, WSP will continue to retain complete control of the DNA data contained within CODIS, safeguarding the confidentiality and integrity of DNA records.
- Any matches resulting from DNA profiles generated by Rapid DNA will be confirmed by a currently or previously qualified forensic scientist prior to disclosure.
- DNA samples, such as those from crime scenes, suspects and/or convicted offenders, which are tested by WSP as part of this pilot program, will be legally obtained by law enforcement and/or with explicit consent for testing.

References:

- Washington Administrative Codes (WAC) 466-75-040 and 466-75-050
- Non-CODIS Rapid DNA Best Practices/Outreach and Courtroom Considerations Task Group, *Non-CODIS Rapid DNA Considerations and Best Practices for Law Enforcement Use*; 9-16-2019
- Washington State Patrol Crime Laboratory Division's Memorandum of Understanding with the FBI
- The Federal DNA Identification Act (34 U.S.C. §12591 et seq.; Federal DNA Act)
- FBI Director's Quality Assurance Standards (QAS) for Forensic DNA Testing and Databasing Laboratories
- National DNA Index System (NDIS) Operational Procedures Manual
- NDIS Privacy Act Notice (1996)