

North Carolina State Crime Laboratory Forensic Update



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Dear Criminal Justice Stakeholders,

Season's Greetings and Happy Holidays from the NC State Crime Laboratory. We hope that 2018 will be a great year for you and your agency.

This article is the second edition of **The NC State Crime Laboratory Forensic Update** and is about **Rapid DNA**. There is a lot of buzz about what it can and cannot do. I think you will find the information useful to you as we work together to advance DNA technology and its use in criminal investigations.

In addition to this article, we have provided our contact information, as well as other informative websites for further information on this subject.

"Truth through science so justice is served."

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FORENSIC UPDATE

The Need for Speed...

Rapid DNA Analysis on Crime Scene Samples

Per the FBI's definition, Rapid DNA analysis is a term used to describe the fully automated (hands free) process of developing a DNA profile from a reference sample **buccal (cheek) swab** without human intervention. To date, there are **no** FBI approved Rapid DNA systems for purposes of uploading DNA profiles into the Combined DNA Index System (CODIS) Database.

Crime scene samples vary widely, from the age, exposure and nature of the sample to the amount and quality of DNA it may contain. In addition, crime scene samples often contain mixtures of DNA from more than one individual that requires interpretation by a trained forensic scientist. Most importantly, crime scene samples are often **irreplaceable**.

The North Carolina State Crime Laboratory (SCL) would like to make the following recommendations if your agency plans to use Rapid DNA Analysis on crime scene samples:

- On samples where a possible body fluid is present (i.e. saliva, blood, etc.), collect multiple swabs and package them separately. You may test one swab on the Rapid Instrument and send the **untested** swab to the crime lab. The SCL will **not** test any samples that were previously analyzed on a Rapid DNA instrument.
- Due to the possibility of low amounts of DNA recovered and the high probability of obtaining a DNA mixture, it is highly recommended that "Touch DNA" samples are sent to the crime lab for analysis.
- Since Rapid DNA profiles developed from crime scene samples are **not** eligible for search or entry into the **CODIS** database, it is not advised to process any samples on a Rapid DNA instrument in cases where there is no suspect.
- Discuss the use of Rapid DNA analysis on crime scene samples with your District Attorney's Office
- Call the SCL for a RUSH – Many DNA cases can be turned around in 30 days or less.

Additional resources:

www.fbi.gov

www.swgdam.org

http://ncdoj.gov/getdoc/cc96e6f8-21fb-4a2a-8036-98495ab87180/Rapid-DNA-and-CODIS_08242017-4fold.aspx

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