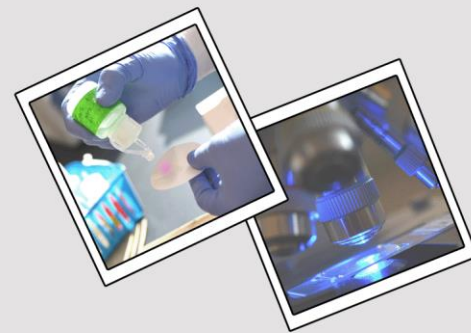


North Carolina State Crime Laboratory Forensic Update



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Dear Criminal Justice Stakeholders,

Happy New Year. I hope this update finds you and yours safe and healthy. Throughout the pandemic the laboratory has remained open, and our scientists have continued to analyze evidence. If you have a case that needs to be expedited, please continue to submit those via FA web to receive the fastest response.

This installment discusses updates to reports in Drug Chemistry and Toxicology that are effective **February 1, 2022**. In addition, Forensic Biology has an update regarding shell casing procedures for DNA testing.

Here at the laboratory, we are continuously evaluating and improving our processes to provide the highest level of service to our customers. We welcome your feedback on these topics, or others, at any time.

As always, if you have questions or need assistance, please reach out to us.

Very Respectfully,



Vanessa Martinucci
Director, North Carolina State Crime Laboratory
vmartinucci@ncdoj.gov
(919) 582-8723

"Truth through science."

Drug Chemistry Reporting Update

The primary function of the Drug Chemistry Section at the North Carolina State Crime Laboratory (NCSCCL) is to identify the presence or absence of controlled substances in items submitted and, if present, record the identity on a laboratory report. As a result of updated accreditation requirements, which would require the lab to provide additional conformity information regarding N.C. GS Chapter 90 for reporting, the Drug Chemistry Section of the NCSCCL will no longer formally make legal interpretations regarding scheduling on laboratory reports. **Effective February 1, 2022**, the Drug Chemistry Section of the NCSCCL will report identified substances without schedules. All schedules for controlled substances, as well as penalties and violations, can be found on the North Carolina General Assembly website ([General Statute Sections - North Carolina General Assembly \(ncleg.gov\)](https://www.ncleg.gov/General-Statute/Sections)). Any questions regarding specific scheduling of controlled substances should be directed to the Forensic Scientist issuing the laboratory report or a Forensic Scientist Manager of the Drug Chemistry Section.

Toxicology Reporting Update and Exam Request Changes

The primary function of the Toxicology section at the North Carolina State Crime Laboratory (NCSCCL) is to analyze the blood of an individual to determine the presence or absence of impairing substances and record the results on the Laboratory's Affidavit and Revocation Report. Over the past 5 years, we have experienced an increase of 1000 Blood Drug requests, which has resulted in an increase in turnaround time for our customers. Effective **February 1, 2022**, the Toxicology Section of the NCSCCL will suspend further testing if a Schedule I substance listed in the North Carolina General Statutes (NCGS) ([NC General Statutes 90-89 \(ncleg.gov\)](#)) or its metabolite(s) is identified in the blood of an individual. The presence of a Schedule I substance or its metabolite(s) satisfies NCGS 20-138.1(a)(3) requirement for the charge of impaired driving ([gs 20-138.1.pdf \(ncleg.gov\)](#)). If additional testing is needed, the prosecuting attorney may submit a request.

Notice for a change in Forensic Advantage for pre-logging DWI kits: In order to streamline analysis of toxicology requests for DWI blood testing, the "DWI-blood Alcohol and Drugs" exam option is being discontinued. When needing both exams, select each exam separately for the item. **Please do not request DWI-blood alcohol if the PBT result was 0.00** or if no alcohol is suspected. This will streamline the testing of the kit for drug analysis and allow the NCSCCL to provide a faster turnaround time for results. In addition, a new exam type has been added called "DWI-Inhalants". Select this option if an inhalant use is suspected. Any additional questions regarding the new testing guidelines should be directed to the Forensic Scientist Manager of the Toxicology Section.

Forensic Biology: Shell Casings DNA Testing Procedure Update

Spent shell casings have historically been a challenging sample type for forensic DNA laboratories. In the past, there has been an extremely low success rate in recovering interpretable levels of DNA from these samples. The historically low success rate in recovering interpretable DNA has guided changes to the North Carolina State Crime Laboratory's (NCSCCL) case acceptance guidelines as it pertains to the acceptance of spent shell casings for DNA testing.

The U.S. Bureau of Alcohol, Tobacco, Firearms and Explosives laboratory (ATF) previously published an improved method for DNA collection from spent shell casings. This improved collection method is designed to increase the effectiveness of DNA collection from spent shell casings by a forensic laboratory. As part of the NCSCCL's commitment to continual process improvement, the NCSCCL evaluated this improved collection method and saw an increase in the effectiveness of the DNA recovery. This increased effectiveness in collecting DNA leads to an increased likelihood of obtaining interpretable DNA profiles from spent shell casings.

If spent shell casings are to be accepted for DNA testing, the DNA collection should be performed by the NCSCCL and **not swabbed by the law enforcement agency prior to submission**. This new collection method for spent shell casings does not allow for the dual testing request of performing DNA and latent processing on the same item. The DNA laboratory processes using this new collection method also do not allow for follow-up DNA testing. Therefore, **effective March 1, 2022**, requests for this type of DNA testing **must have prior approval** from the Manager of the Forensic Biology section and the prosecuting attorney. This new collection method does not have any negative impacts on downstream processing related to firearms/NIBIN examinations.