March 2012

LABORATORY BRIEFINGS

New DNA Reporting

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If you haven't already noticed, you may soon be seeing some changes to the reports issued by the DNA section. These changes have been made to make our receive an initial report notifying you reports easier for you to read.

There has also been a change in the way in which DNA profiles are searched and reported. You will now receive an initial report notifying you if a profile will be entered into the

Our nuclear DNA reports will be written in a table format with the results bulleted. Our intent is that cases with numerous items will be easier to follow and more organized.

DNA database (CODIS). If the profile subsequently "hits", you will receive a follow-up report containing the hit information. Searches of the database will be performed twice

The information contained in these weekly. As the report states, we <u>will</u> reports will be the same, but will be notify you if any hits in the presented in a different format.

database occur.

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Example:



ASCLD/LAB-International accredited since December 10, 2009

Item 1

- Male DNA profile
- Matches John Doe
- Does not match Jane Smith
- Would not be expected to occur more than once among unrelated individuals in the world population



https://dps.mn.gov/divisions/bca/bca-divisions/forensic-science

Cold Case Grant



In August of 2011, the BCA received a grant from the National Institute of Justice to re-examine cold cases. Of the first batch of 214 cases reviewed under this grant, 34 contain biological evidence for testing. The investigations unit, along with the forensic science laboratory, will be reexamining evidence from these cases. If your agency has a case you believe deserves a second look. please contact Special Agent Drew Evans (651-793-2900).

Please take a minute to respond to the swab survey!

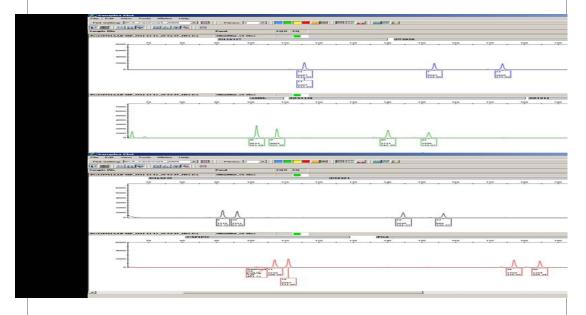
Swab Survey

Recently, the Hennepin County Sheriff's Crime Laboratory identified a brand of swab that interfered with their DNA testing process. While the BCA laboratory has not seen any difficulty with any particular swabs, we are curious as to what brand your agency is currently using. If you could take a minute and email rachel.klick@state.mn.us with the brand of swabs you are using for evidence collection, it will assist us greatly!



Minifiler™

The Nuclear DNA section is pleased to announce the arrival of our latest technology, the Minifiler Amplification Kit. After years of validation studies, the BCA has gone online with this new technology, which may help us obtain DNA results from compromised samples that previously would have yielded limited or no genetic data. Results may appear similar as with our Identifiler Amplification Kit because it uses the same areas, but is more sensitive and can produce a profile from much lower amounts of DNA. The Nuclear DNA section is re-evaluating some cold cases for analysis using Minifiler. This also means that new challenging samples coming into the laboratory have a better chance of providing useful DNA results.



A Minifiler Profile

Upcoming Training Opportunity for Legal Professionals

On May 2nd, the BCA Laboratory in St. Paul will be hosting an informational DNA course for prosecutors, defense attorneys, and judges. DNA is becoming more prevalent in the court system and the goal of this class is to give the legal community a greater understanding of the work we perform. Topics to be covered include: chain of custody, the laboratory testing process, reports, and expert witness

If you know of an attorney who may be interested in this class, information can be found on the BCA CJTE homepage. The title of the class is "Forensic DNA and the Courts".

The class on May 2nd is currently full, but additional classes may be offered in the future and at the Bemidji Laboratory. If you are interested in this class or have any questions, please contact Tina Jones at tina.jones@state.mn.us.



The informational training session for attorneys will be held on **May 2nd** at the BCA in St. Paul

Touch/Wearer DNA

As the sensitivity of the DNA testing process has improved over the years, we have been able to obtain DNA profiles from lesser amounts of biological material such as skin cells. "Touch DNA" refers to the testing of shed skin cells on objects that may have been handled by an individual. "Wearer DNA" refers to the testing of cells from an item of clothing that may have been worn by an individual. There are a number of variables involved in whether or not a DNA profile may be obtained for touch DNA. These include, but are not limited to: how good of a shedder someone is, if the person was sweating when they touched the object, if the surface of the object is textured, how long the item was handled, and if the item has been washed or cleaned.







Gun Swab Cases

Swabbings from guns are often encountered in cases such as felon in possession. controlled substance, and assault. If swabbing the gun for DNA at your agency, remember to use two swabs per area. sterile water, and swab vigorously. Areas that are good for recovering DNA are: textured grips, trigger, and slide.

If submitting a case in which a weapon is involved please submit a known DNA sample from the listed suspect at the time of evidence submission. The DNA profiles that are obtained from gun swabs are often too complex to search through the DNA database. However, if a known sample is provided up front, then a comparison

can be made immediately. Your suspect may be a convicted offender and have his DNA in the database, but we cannot go in and pull that sample for comparison purposes. The turn around time for your case will be greatly improved if a known sample from your suspect is provided with the other evidence.

Please remember to submit a known DNA sample from your suspect when submitting gun swab cases!





BUREAU OF CRIMINAL APPREHENSION

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Phone: 651-793-2900

37 N. Norris Court NW Bemidji, MN 56601

Phone: 218-755-6600

Future Topics

Is there a DNA topic you would like to see covered in a future issue? Or is there a topic pertaining to another section of the laboratory you would like addressed? Please email your requests to rachel.klick@state.mn.us and look for articles in upcoming issues!



EVIDENCE INTAKE HOURS

Please note - operating hours for evidence intake are:

St Paul: Monday through Friday 8:00AM to 3:00PM Bemidji: Monday through Friday 8:00AM to 4:30PM

