

Miami Valley Regional Crime Laboratory

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June 2009

Ohio Identification Officers' Association Fall Training

The Miami Valley Regional Crime Laboratory will be hosting the **Fall Training Conference of the “Ohio Identification Officers’ Association” (OIOA)**.

The Ohio Identification Officers’ Association mission is to be a professional association for those engaged in investigation, forensic identification and scientific examination of physical evidence.

The OIOA is the Ohio Division of the International Association for Identification.

This year’s conference will be held at the Holiday Inn, Dayton Mall on October 14-16, 2009. The conference is structured to include several guest speakers and break out sessions dealing with various training topics.

The conference fee is \$125.00 for OIO members / \$135.00 non members.

The price includes a dinner banquet on October 15th. Investigator Bob Hunkeler of the Montgomery County Coroner’s staff will be the dinner speaker for the evening. Local entertainment will also be provided.

Please take a look at the OIOA web site <http://www.oioa.org/> for the conference agenda. There is also a link for registration. A conference brochure will be available at the front counter with more information.

This is a great local training opportunity for agencies and officers in the Miami Valley area and a great opportunity to meet other professionals in the Ohio area.

If you have any questions, feel free to contact me at the laboratory.

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Evidence Technician School

Applications for the 2010 Evidence Technician School will be available in the October Newsletter. If an officer has applied for the 2009 school and was not accepted, the officer will need to re-apply for 2010.

Departmental Training?

Is your department sponsoring training in 2010? If you would like it to be included in the October newsletter contact Tim Duerr at 937-225-4990 or duerrt@mcohoio.org.

Field Questions

Note from the Fingerprint Section

We appreciate your agency putting latent print cards into envelopes for submission to the lab. It is not, however, necessary to put each latent print card in a separate envelope. You may put the entire cases' latent print cards in one envelope. And, if at all possible, especially from agencies which store their latent print cards at the lab, cards should be placed in a 9 X 12 envelope, with your case information clearly written on the outside. We thank you for your cooperation.

Ammunition

The Firearm Section of the Laboratory is requesting that instead of destroying ammunition from resolved cases or ammunition turned in by citizens, please release it to the section. Ammunition must be in good condition and original boxes. Please no loose cartridges.



Laboratory Ammunition File

“One-Pot” Methamphetamine Manufacturing and Sampling

By: Brooke Ehlers

At the Miami Valley Regional Crime Laboratory, we are almost exclusively seeing “One-Pot” Methamphetamine manufacturing. This method combines the simultaneous production of ammonia from fertilizer or cold packs and the reduction of pseudoephedrine (or ephedrine) to methamphetamine in one container. Once the reaction is complete, it will need to be “salted out” with a gas generator. It is an efficient and fast method to manufacture methamphetamine in small batches.

Hazards to consider with “One-Pot” manufacturing include the ignition of ether, the addition of lithium or sodium and water often resulting in sparking, the production of ammonia gas and the combination of incompatible chemicals into a sealed container. Law enforcement should be extremely cautious when investigating these types of clandestine labs. **Only certified clandestine laboratory personnel should be on site and collecting evidence.**

Often 2-liter plastic bottles are used as the reaction vessel. A soda bottle is not built to withstand the heat or pressure that can occur during this reaction. There have also been reports of glass canning jars being used which could result in shrapnel. A closed container may explode.

Do not sample active or bubbling “One-Pot” bottles. We will not accept this evidence at the laboratory. Certified clandestine laboratory personnel will need to take photos on site, use a Drager pump for gas sampling and document the findings. Collect any other evidence found at the scene such as pseudoephedrine and lithium battery packaging, empty bottles, and paraphernalia, tubing, grinders and utensils containing residues. The vessel should then be sent for destruction with the clean-up company. **It is not safe to transport a reaction vessel.**

Exposure to vapors or liquids from a “One-Pot” cook could cause suffocation, dizziness, blindness, caustic burns, coughing or choking, irritation to the mucous membranes, coma or death. **If you have any questions, please contact Brooke Ehlers.**



Swabbing Guns for “Touch” DNA

By: Annette Davis and Steve Wiechman – DNA Analysts



Why swab a gun for DNA? There are many reasons to swab a gun for DNA. One may be to see if you can pick up DNA from an individual who may have handled it or fired it. Another may be to identify blood from a victim who may have been shot with the gun.

DNA from an individual who may have handled or fired the gun is considered a “touch” DNA sample. Please keep in mind, just because DNA from an individual is found on the gun, does NOT mean that they fired the gun. It simply means they may have handled it, or have been in contact with it. They may not have even been the last person to handle the gun. Numerous factors such as friction, contact, surface texture, oils, etc. may influence how much, if any, DNA may be found on a gun.

Swabbing Guns for “Touch” DNA –Continued

GUN SWABBING (“touch” DNA)

Procedure: *Put on gloves. Ensure that the gun is safe. Consider if the gun is to be processed for latent prints. Open a packet containing two sterile swabs. Using both swabs together, add a few drops of sterile distilled water to the swabs.*

Swab the following areas: textured grips, slide, trigger, trigger guard, hammer, and barrel, concentrating on areas with texture. Use the same two swabs to cover all of these areas. Avoid any smooth surfaces (such as the magazine and slide) as these areas have potential for latent print processing.

Place the swabs in a labeled envelope or slide box. Labeling should include the gun model, serial number, location of recovery, initials and date. Allow the swabs to dry at room temperature.



There are commercial kits available; however, the method above serves the same purpose.



CODIS rules prohibit certain DNA profiles from being entered into the database. In order for the profiles to be eligible for upload into CODIS, they have to meet certain criteria, including being related to a crime, not belonging to the victim, and not recovered from the suspect. Here are some examples.

CODIS Eligible – Gun recovered from scene of crime. A DNA profile is obtained from the touch DNA swabbing from the gun.

Not CODIS Eligible – Gun found in vehicle or residence via search warrant to establish possession. A DNA profile is obtained from the touch DNA swabbing from the gun.

Regardless of CODIS eligibility, The Miami Valley Regional Crime Laboratory may run these samples in cases of violent crimes, but **only if DNA standards are submitted**. A DNA standard consists of a buccal swabbing or a blood standard.

BUCCAL SWABBING (preferred method)

Procedure: *Collect by having the individual who the sample is to be taken from open the packet containing two sterile swabs. Rub the swabs together on the inside of the cheeks using the same pressure you would use to brush your teeth for about 10 seconds. This collects the buccal cells from the inside of the cheek. Both swabs should then be put into an envelope or slide box and labeled with the name of the individual and any other appropriate identifiers.*

BLOOD STANDARD (option)

Procedure: *Draw one lavender top Vacutainer (EDTA) of blood. Label with the name of the individual and any other appropriate identifiers.*

Status/Results of a Case

When calling for results or status of a case, please ask the front office. Many times analysts are actively working on cases and unable to take phone calls. Also, front office personnel are the only ones that can provide you with the copies of reports whether faxed or mailed.

Laboratory Holidays (Laboratory Closed)

Friday	July 3rd	Independence Day (Observed)
Monday	Sept. 7th	Labor Day
Monday	Oct. 12th	Columbus Day
Wednesday	Nov. 11th	Veteran's Day
Thursday	Nov. 26th	Thanksgiving
Friday	Nov. 27th	Day after Thanksgiving
Friday	Dec. 25th	Christmas

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Fingerprinting Services

The Miami Valley Regional Crime Lab provides two types of fingerprinting services: Web Check and Live Scan (fingerprint cards). The laboratory cannot fingerprint for Florida gun permits or any other requests that require a police officer's signature.

Fingerprinting Hours are Monday through Friday from 9:00 AM to 3:00 PM.

The fees are as follows:
\$10.00 for each fingerprint card
\$40.00 for the state Web Check
\$40.00 for the FBI Web Check
\$70.00 for both the state and the FBI Web Check

Payments must be made by cash, money order or business check. The person being fingerprinted must provide a valid photo ID and the name and address of

where they need the results to be mailed.

Minors must be accompanied by a parent or legal guardian.

If you have any questions, you may contact Sue Hay at 225-4990.

Crime Laboratory Web Site

www.mcoho.org/government/mvrcl

Montgomery County Coroner's Web Site

www.mcoho.org/government/coroner

Feed back on the newsletter can be sent to duerrt@mcoho.org