

GOT EVIDENCE?

Now What?

What Do You Do First?

by

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Now what? What do you do first?

At least once a month I get a phone call from a detective or an investigator either asking my advice on how to best process an item of evidence or asking me if a special, non-routine examination can be done on an item of evidence.

Unfortunately during the course of the conversation, I find out the local agency has “jumped the gun” and processed the item for latent prints first. While I am appreciative of their enthusiasm to try to collect as much information and evidence as quickly as possible, it has the unfortunate side effect of negating any future examinations from another discipline.

The other conversation I seem to routinely have is an agency or state attorney calls in asking for latent print examination on an item of evidence after it has already been handled and examined by the Firearms Section. So, in light of these recent conversations, I wanted to provide a little write-up to help local agencies in their decision making process when it comes to what process to do and when.

BIOLOGICAL EXAMINATIONS

Let's begin with DNA because that is often one of the most widely known and recognized examinations on evidence.

If you have an item and you think you're going to want or need biological examination on it, or whether you suspect the district attorney will want biological examination on it, in addition to latent print examination, then your best course of action is to focus on the DNA first.

Package the item accordingly and be sure to label the exterior of the packaging with all the crucial information such as agency name, case number, date of offense, offense type, location of recovery. These are just a few of the best pieces of information to provide, but remember it can never hurt to provide extra information but can be problematic if critical information is missing.

Next is understanding the proper examination sequence. In this particular case the item of evidence will need to undergo biological examination first. If the agency attempts to process this item for latent prints prior to biological examination it could have a detrimental effect on DNA recovery and the item has now likely been handled in a non-sterile environment, which could end up creating DNA mixtures or contamination from your agency personnel.

So the best course of action here is 1) DNA first and 2) Latent Prints second.

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FIREARMS EXAMINATIONS

Next, let's look at Firearms examination as that is perhaps the second most commonly requested examination process that is often associated with latent print examination.

Because latent print residue is approximately 98.5% water, it is extremely fragile and can easily be wiped or rubbed off. When handling a firearm or firearms components, it is important to remember this fact.

If you have an item on which you think you or the state attorney are going to want both latent print and firearms examinations, then you'll want to get the latent print examination done first. Package the item accordingly.

Here I cannot stress enough using gun boxes for firearms. I have had instances where a firearm is submitted in a plastic bag. Unfortunately, plastic bags come in contact with the firearms surface and can rub off any latent prints that may be on the item. So be sure to use a gun box and if need be, zip-tie the item in place inside the box so it doesn't slide around. Package any ammunition either in a separate container within the box, or in a separate container outside of the box. It's not out of the realm of possibilities for loose ammunition to slide into the chamber of a firearm while in a container. So, remember: **Safety First!**

If your item of evidence goes to the Firearms Section for examination, chances are it could be handled by the examiner without wearing gloves, and it is handled excessively during the examination process. This is also detrimental to the recovery of latent prints from that firearm evidence. Or it could end up being a situation where latent prints are recovered that do not belong to the defendant

and cause the latent print examiner to spend valuable time comparing them with the firearms examiner, thus providing no probative value to the investigation.

So the best course of action here is 1) Latent Print examinations first and 2) Firearms second.

OTHER EXAMINATIONS

Now let's talk about some of the more unique, special, and non-routine examinations you could need during the course of your investigation. These are examinations you don't always need, but when you do it's important to understand what comes first with regards to these examinations and latent print examinations. Examples of these examinations are fracture matching of duct tape, documents and hand writing analysis of a threatening note, digital evidence examinations on cellular phones, tablets, etc.

When it comes to fracture matching for items of evidence such as glass or duct tape, you're going to want to hold off on any latent print examinations and get the fracture match examination done first. Latent print examinations have the possibility of affecting the fractured edges so we don't want to do anything that could be detrimental to that fracture match exam.

So in this case we want to do 1) Fracture Match examination first and 2) Latent Print examinations second.

When it comes to documents and hand-writing examinations, it's important to note that document examiners have to work from originals. They cannot

work from copies. And often times the chemical reagents used to process items of evidence for latent prints can have an adverse effect on the inks used or pencil used to write a note or letter. You're going to want to hold off doing any latent print examinations until after the documents examination is complete.

So in this case we want to do 1) Documents examinations first and 2) Latent Print examinations second.

When it comes to digital evidence examinations, it's important to remember that the chemical reagents used for latent print recovery are pervasive and can penetrate into the tiniest of cracks and seals of cellular phones, tablets, external hard drives, etc. Also it's important to note that fingerprint powders can be very destructive to these devices as well. Again, in this instance you're going to want to hold off performing any latent print examinations until after the digital media examinations have been performed.

So in this case we want to do 1) Digital Evidence examinations first and 2) Latent Print examinations second.

MULTIPLE EXAMINATIONS

Lastly let's look at multiple combinations of examinations and look at the proper sequence to best optimize our chances of recovering the evidence you may need.

In the event you need the three most common examinations (DNA, Latent Prints, and Firearms) then the proper sequence is: 1) DNA first, 2) Latent Prints second, 3) Firearms third. Because, remember, we want to have that item opened and handled in a sterile environment first for DNA, then

examined for fragile latent prints secondly before being handled excessively for firearms examinations last.

If by some chance you need Trace Evidence or Fracture Match examinations along with DNA, Latent Prints, or Firearms on an item of evidence, then you'll want to perform the Trace/Fracture Match examinations first, DNA second, then Latent Prints, then Firearms lastly.

If by chance you need Digital Evidence, Drug Chemistry, Documents Examinations, and Latent Print examinations on an item of evidence, then you'll want to perform Digital Evidence first, Drug Chemistry second, Documents examinations third, and then Latent Prints last.

So, as you can see, there is a method to the madness. Often times if an agency processes an item for latent prints prior to any other examinations, excluding firearms, it can have a serious effect on the success of the other examinations.

It is important to remember these rules in the heat of the moment so that you and your state attorney have the best chance to recover the necessary evidence for trial. There's nothing more disappointing than at the end of my conversation to hear a detective or investigator saying, "Well, we'll remember that for next time." Because missing a chance at recovering evidence that could be crucial for prosecution of a crime is a tough sell to the victim.

Good luck, be safe, and remember: if in doubt, contact your local full service laboratory for clarification *prior* to performing any examinations!

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About the Author

MORGAN HAYS

Morgan Hays is currently supervisor of the Florida Department of Law Enforcement (FDLE) Latent Print and Impression Evidence section at the Jacksonville Regional Operations Center. He began his forensics career with FDLE in August of 2002, as a crime lab technician in the DNA Database section. He was promoted to forensic technologist in the Chemistry/Toxicology section in August 2003 and then promoted to crime laboratory analyst in the Latent Print section in August of 2004. In August of 2009, he was promoted to supervisor of Latent Print and Impression Evidence section. Today, he mentors and supervises twelve employees, as well as continues to complete casework in the discipline. In 2009, he was awarded the Missing Children's Day Law Enforcement Task Force/Team of the Year by the State of Florida.

Morgan is a certified latent print examiner by the International Association for Identification (IAI). He is an active member of both the IAI and the Florida Division of the International Association for Identification (FDIAI), serving as President of the FDIAI for 2015. He serves as chairman of the Latent Print Committee for FDIAI, is a former member of the Anthropology/Entomology Committee, and has worked his way through the ranks from Region 2 director to first vice president of the association, assisting the secretary/treasurer to maintain association business. In addition to filling positions of leadership, he has taught numerous colloquia and given lectures at FDIAI conferences, including "Biological Aspects of Friction Ridge Skin" and "Conflict Resolution and Verification." Morgan is also an ASCLD/LAB – International Certified Assessor for the American Society of Crime Laboratory Directors/Laboratory Accreditation Board. He has participated as a technical assessor of latent prints for ISO 17025 laboratory accreditation assessments from the municipal to the federal level.

Morgan earned Bachelor's and Master's Degrees in Anthropology from Florida State University. His thesis was titled "Florida's Clandestine Graves: An Anthropological Perspective of the Dead" and was a study of the deposition of human remains in an attempt to predict where they may be buried or concealed.

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