



# Photography Basics for Medicolegal Death Investigation

Presented by members of the Ada County Coroner's Office:

Carolina Ramos, Senior Forensic Autopsy Technician

Lorraine Barton, Forensic Autopsy Technician II

Amethyst Crowe, Forensic Autopsy Technician II

# Introduction

- ◆ Photography is the best way to preserve the scene – You are the eyes and ears for the forensic pathologist and others who cannot attend the scene but will be involved further down the line.



# Why does it matter?

- ◆ Things can happen in transport that cause further distortion of the body, create artefact defects, etc.
- ◆ Details can be picked up with the camera that may have been missed with the naked eye upon initial investigation.



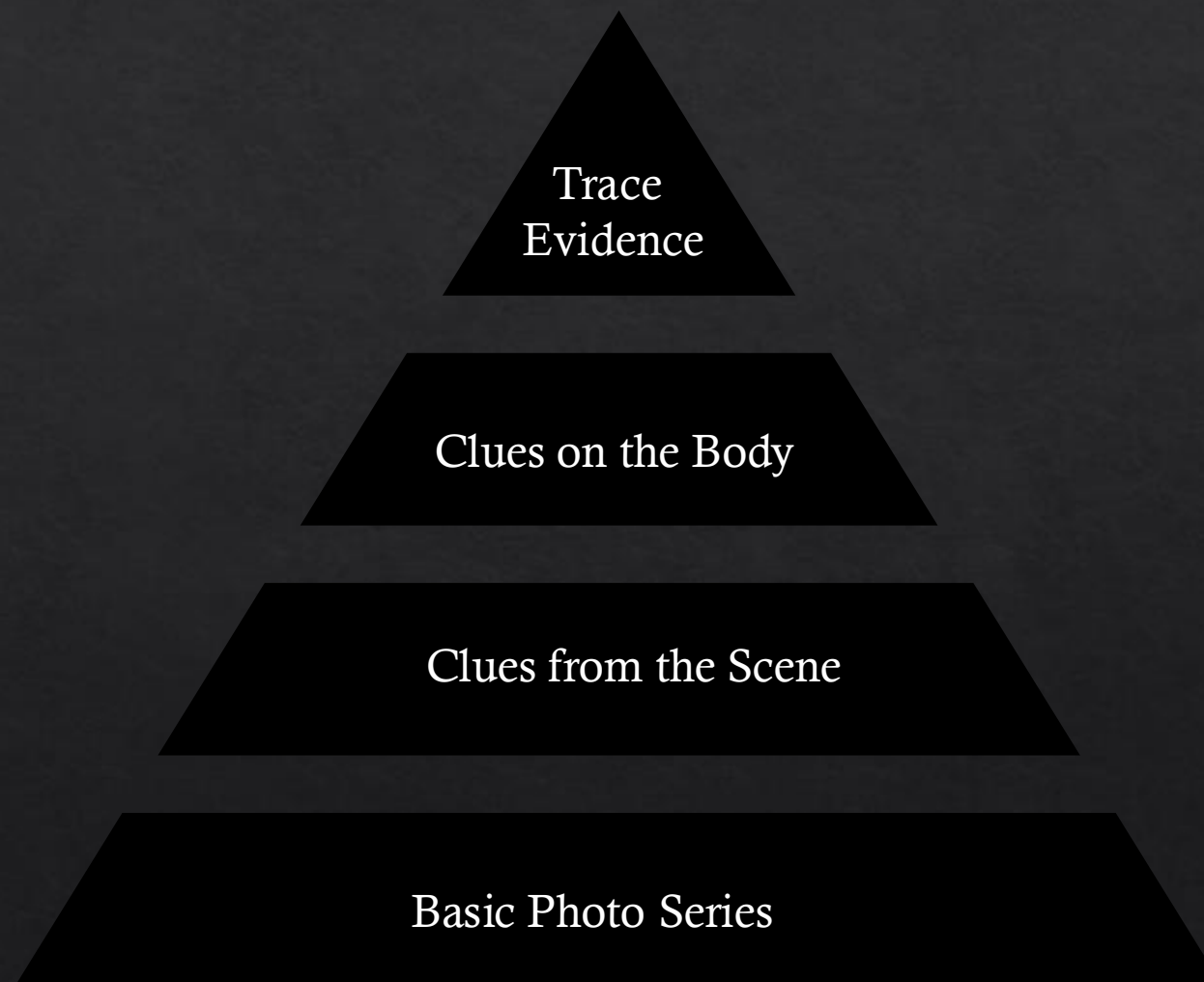
# Consider Future Audiences

- ◇ Forensic pathologists
- ◇ Forensic autopsy technicians
- ◇ Law enforcement agencies
- ◇ Attorneys
- ◇ Juries
- ◇ Judges
- ◇ Fatality review boards
- ◇ Future you
- ◇ And more!



# Photography Basics

- ◆ Regardless of whether you are bringing a case for autopsy, you should have a basic photo series established.
- ◆ Photography improves with consistent practice, and practice makes permanent.
- ◆ Practice the same base set of photos on EVERY case, and add as necessary.
  - ◆ Refer to *Basic Standard Exam Photo Series* and *Case Specific Photo Checklist Handout*.



# Scene Photography Introduction

- ❖ Law enforcement photos are taken in different context and for a different purpose than MDI photos. You, the death investigation professional, need to take your own photos in addition to obtaining any photographs taken by LE/CSI for this reason.





What are your current protocols or routines for photos on scene? What are you looking for?

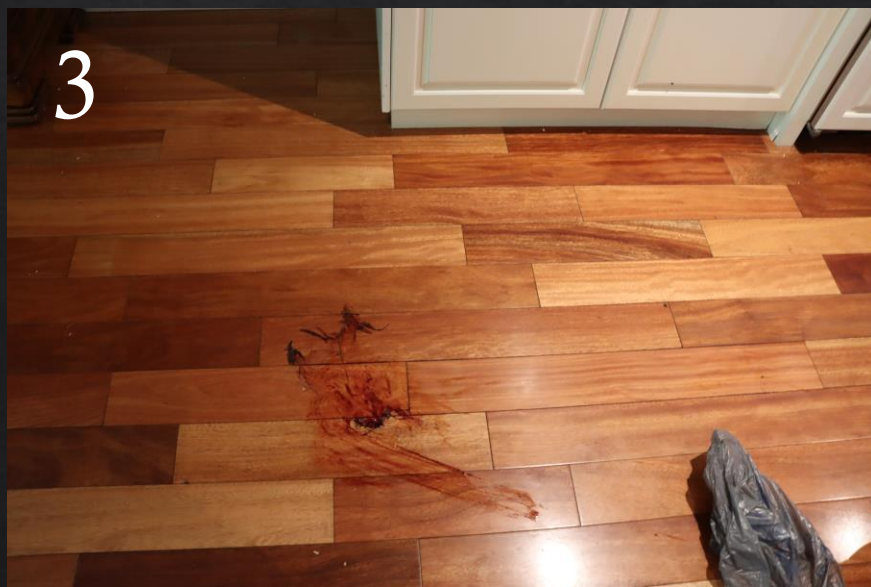


# Scene Investigation Introduction

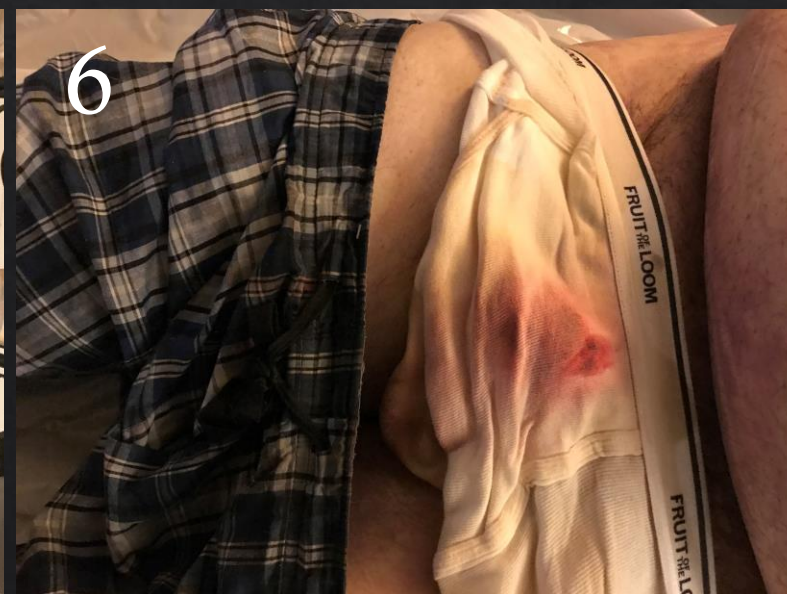
- ◇ Arrive on scene.
- ◇ If LE is present, talk with them about their findings. Talk with any present witnesses to assess additional points of interest.
- ◇ Walk through the scene.
- ◇ Make mental notes while investigating.
- ◇ Don't touch anything while doing initial walk through.
- ◇ Make a game plan of key points of interest to photograph.
- ◇ THEN complete photos.



# Do a walk-through and make mental notes.

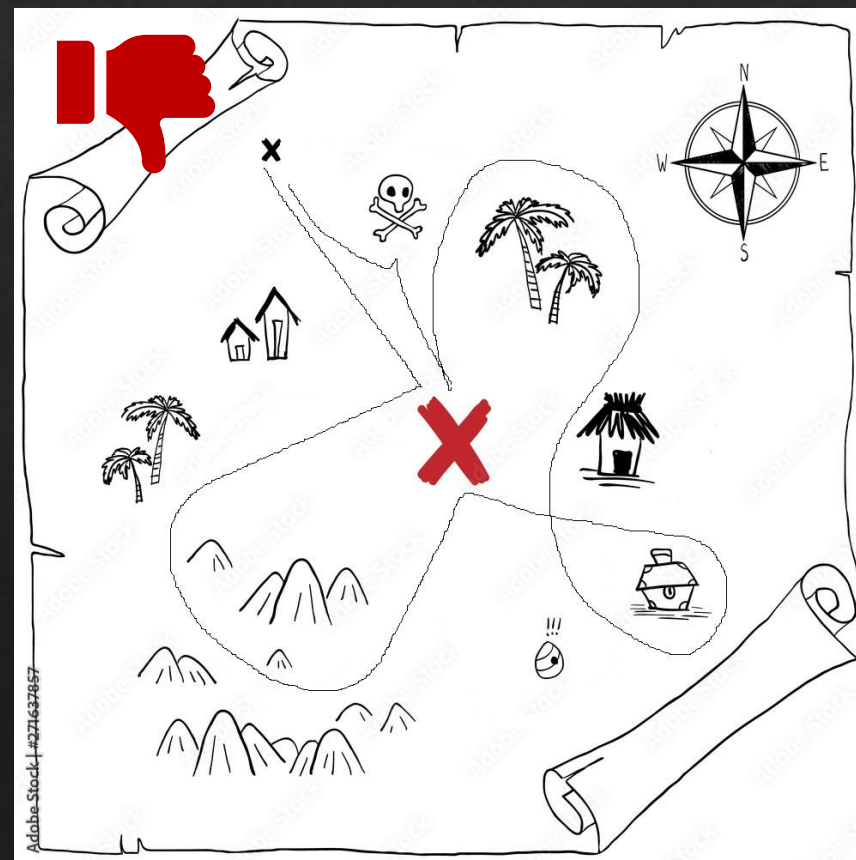
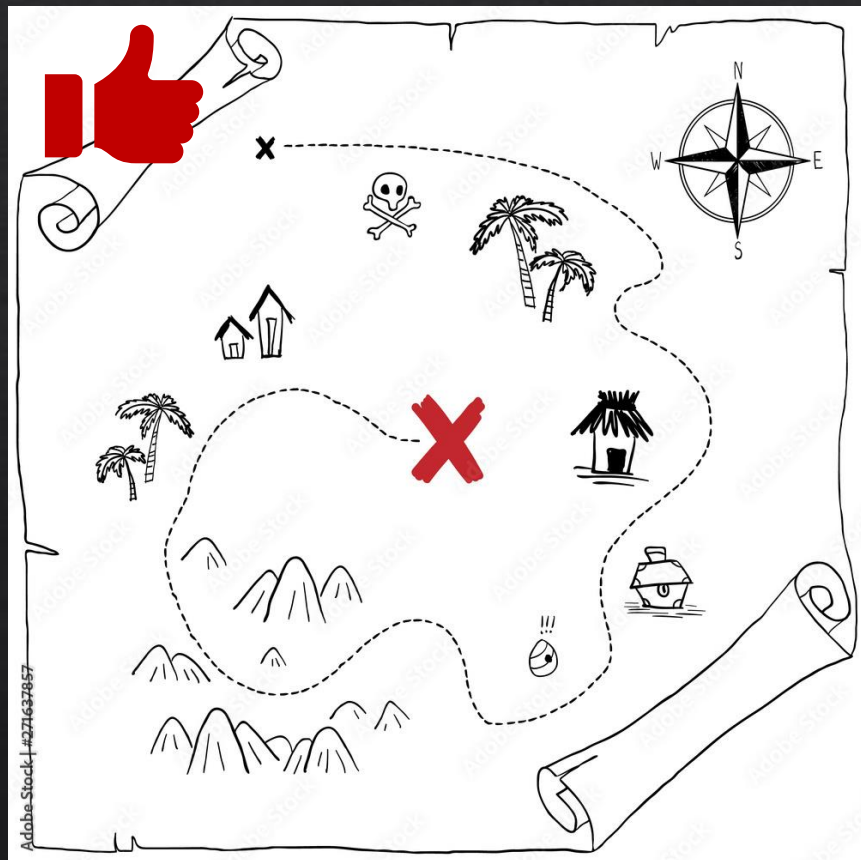


# Make a game plan.



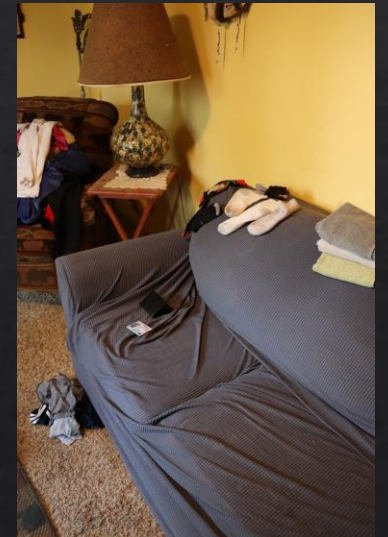
# Photograph a “Virtual Tour”

To start, take a photo with an identifying landmark noting scene location (house with house number, assisted living title placard, etc.).



# Photography of the Scene

- ◆ Try to complete ALL scene photos before moving on to the body.
- ◆ Even though we are in the room with the decedent, the decedent is not the main focus of these photos.



# Clues on the Scene

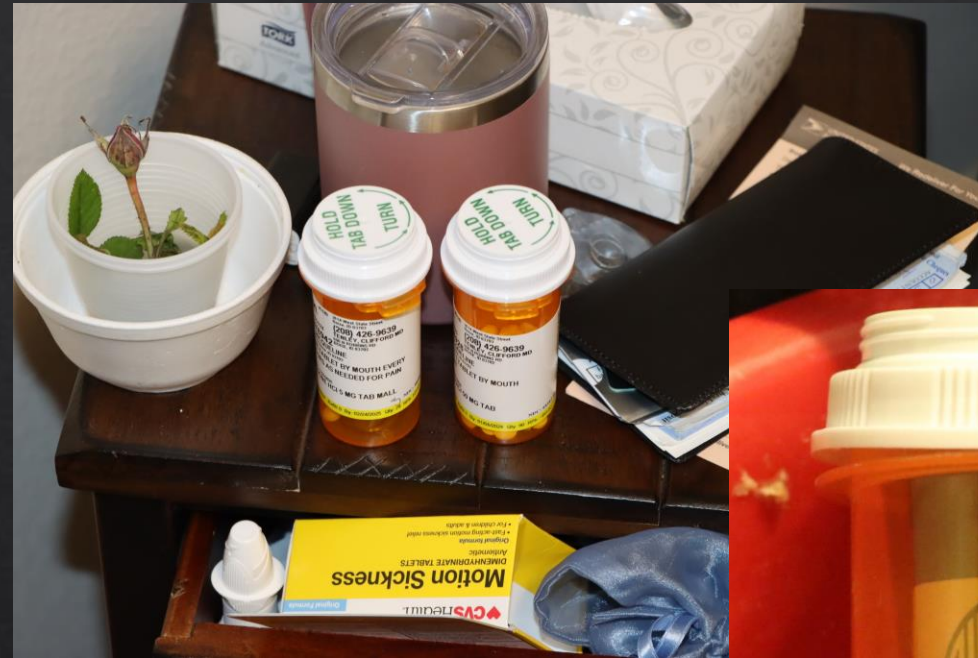
- ◆ Include thermostat and anything else that may affect scene temperature or decedent condition.
- ◆ Medications on scene.
- ◆ Anything on scene that may be pertinent to COD/MOD.



# Clues on the Scene – Medications

What to look for:

- ✓ Who is it prescribed to?
- ✓ Which doctor prescribed it?
- ✓ What is it?
- ✓ When was it prescribed?
- ✓ How many were provided?
- ✓ How many should be taken per day?
- ✓ What is the description of the pill?
- ✓ What is actually inside?



# Variables to Consider

## ◆ Weather

- ◆ Imprints in the snow - hurry before it melts or snows more.
- ◆ Rainy - look for marks where there are dry spots.
- ◆ Do you need to cover the decedent to give yourself more time for scene investigation?



## ◆ Public deaths

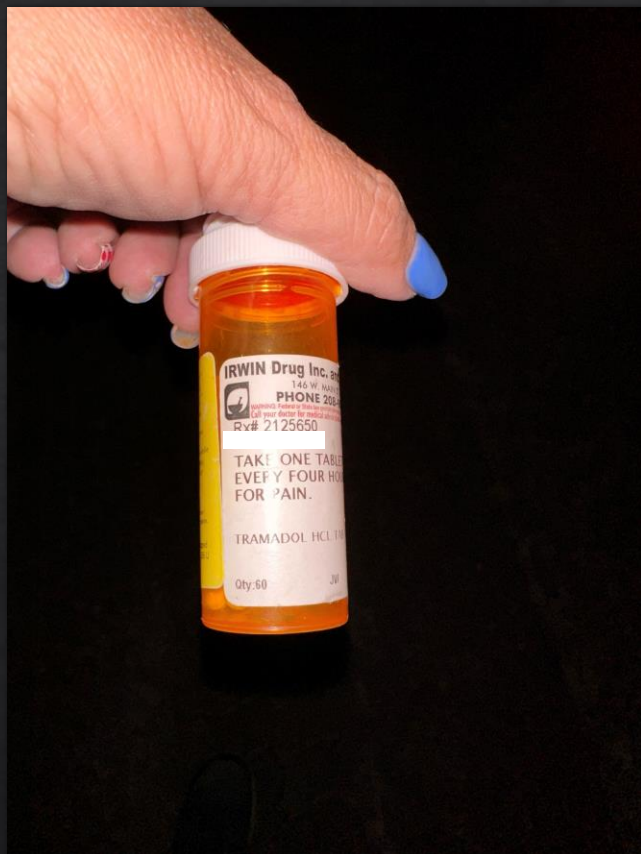
- ◆ Need to process the scene quickly.
- ◆ Relying on your photography “muscle memory” makes this easier.





# WEAR GLOVES

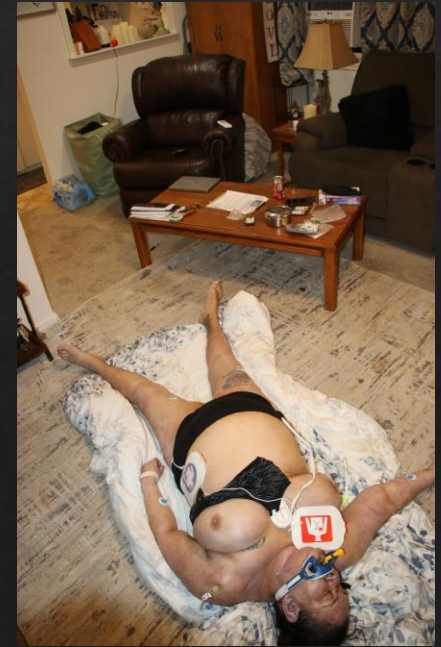
when touching anything on scene, especially something that is being photographed.





# Photography of the Body on Scene

- ◆ Show decedent as found on scene. Provide overall view as is, as well as perspectives from the 4 corners of the area. Then add closer-up shots to show head, limbs, and trunk with no alterations.
- ◆ Document injuries, defects, tattoos, scars, lividity/blanching, other notable patterns, or marks. Remember to include an orientation shot, then a close-up.



# Photography of the Body on Scene

- ◆ It is important to get an “ID shot” that is taken at 90 degrees from the anterior view of the face. Ensure this photo is not distorted for possible comparison needs.



# Photography of the Body on Scene

- ◆ If the decedent is clothed, pull up clothing to expose the covered area and photograph.
- ◆ Roll the decedent and repeat the process on the other side of the body.



# Photography of the Body on Scene

- ◆ Documenting the negative (what is not there) is just as important as the positive.



# Photography of the Body on Scene

- ◆ Bag hands (when required), attach and photograph ID band/tag, and place decedent in the body bag. If the decedent is unidentified or presumed, it is recommended to include the case number on the ID band. Seal the bag if necessary per policy, and photograph the seal.



# Photography of the Body on Scene

- ◆ Photograph the area that the decedent was removed from ('void' photo).
- ◆ Always place the decedent in the body bag in the face-up position, regardless of how they were found.



# Photography of the Body

- ◆ The external exam can be performed on-scene if time allows, or can be performed off-site.
- ◆ Any time a body bag is sealed/locked, the lock needs to be photographed in place before removal, then off after removal.
- ◆ There are different procedures for cases being brought for autopsy vs not.



# External Exam For Cases Not Brought to Autopsy

- ◆ Follow the same steps as if you are bringing the case to autopsy – document everything as-is, before removing or cleaning.
- ◆ Then, follow the steps outlined in the *Basic Standard Exam Photo Series Handout*.





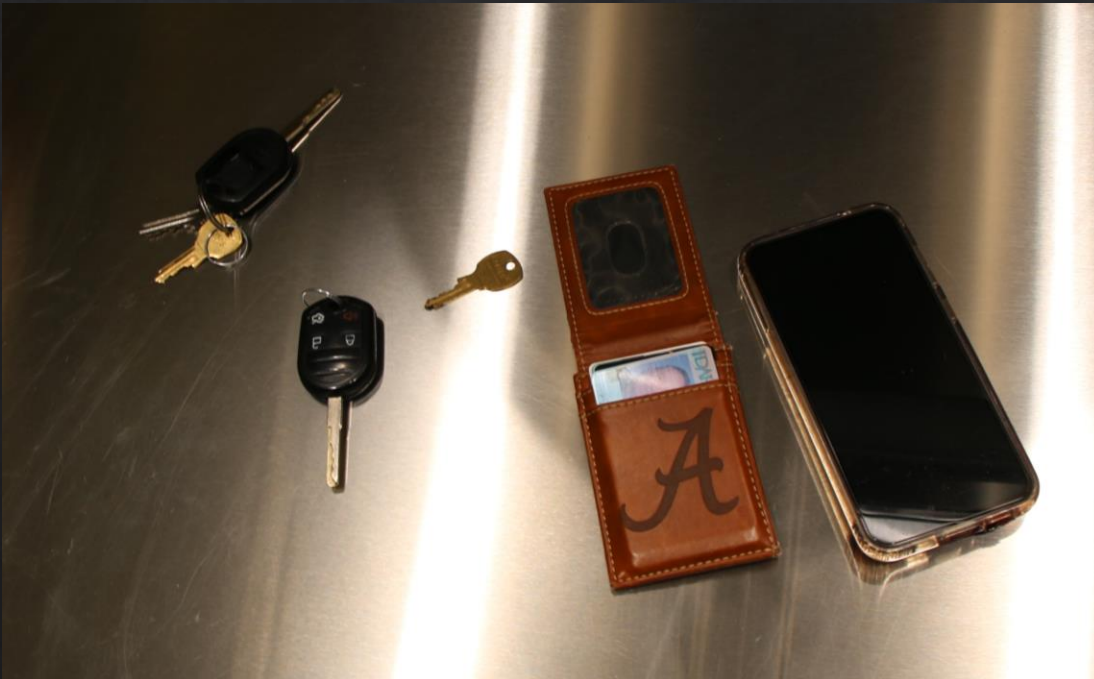
# External Exam For Cases Brought to Autopsy

- ◆ Photograph clothing, medical intervention, etc. **WITHOUT REMOVING**.
- ◆ Photograph injuries **WITHOUT** cleaning/wiping/disturbing original condition. Remember to include perspective shots!
- ◆ If hands are bagged, document this photographically.



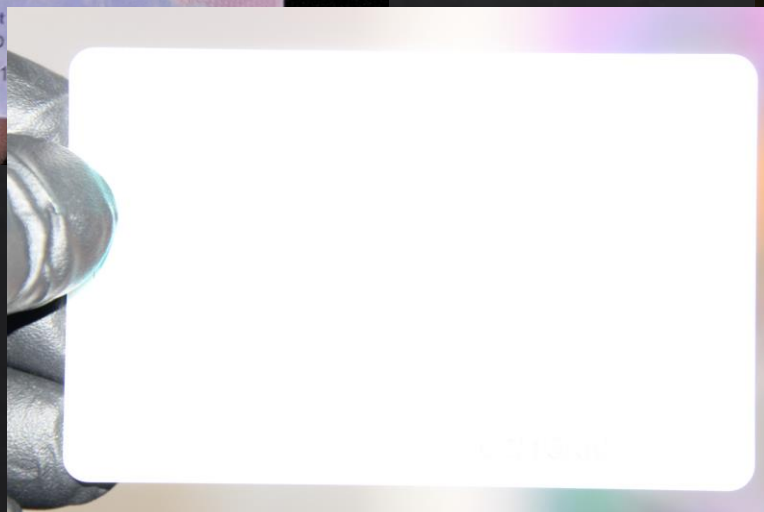
# Photography of Property

- ◆ Property being retained from the scene, whether it was found on the decedent or otherwise, needs to be documented for chain of custody purposes. Take clear photos of everything and note disposition of items in your report. Following this procedure ensures proper chain of custody for liability purposes.



# Photography of Property

- ❖ Of note, driver's licenses are reflective, so take this photo from an oblique angle to avoid glare. You do not need a flash, in most circumstances.



# Putting Skills Into Practice

- ❖ You must understand your gear and familiarize yourself with your equipment so you can use it intuitively in varying conditions. Your camera should be an extension of yourself. Study photos from others to learn how to critique your own and in turn begin to emulate the styles of effective photography.
- ❖ Your photo series tells a story. The order of photos matters to have a reviewable record of scene investigation. Try to review your own photos and see if you can decipher the circumstances with no other context.



# Equipment

- ◇ DSLR – digital camera
  - ◇ DSLR allows for larger range of photo file types to be created, however this camera type may not be as accessible for some jurisdictions.
- ◇ Smartphone or other mobile devices
  - ◇ Smartphone cameras on more recent models of phones do have impressive capabilities to easily capture the intended subject. However, they are sometimes less ideal for ease of file transfer.



Use of your personal phone for case photography is NOT recommended as anything in that phone can be subpoenaed.



# Know Your Camera Settings

- ◆ File sizes (raw, large, medium format, etc) vs file types (jpg., .tif,)
- ◆ Shutter speed
- ◆ Subject and frame focus
- ◆ Brightness adjustment/night mode
- ◆ “Live” photo – iPhone specific



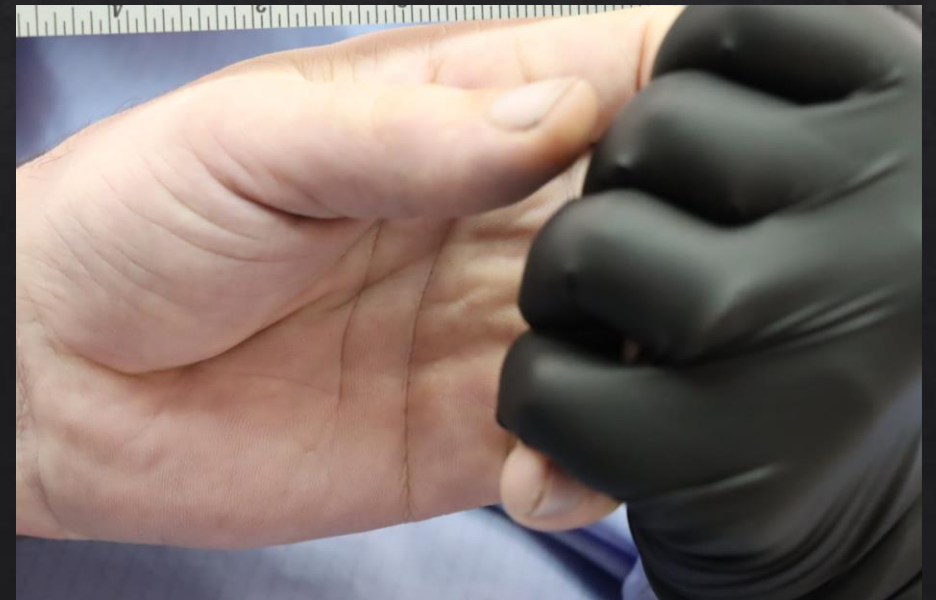


# *Before Taking Your Photos*

- ◆ Ensure your SD card does not contain photos from another case.
  - ◆ Switch SD cards between cases if using a digital camera.
- ◆ Utilize a case number or other identifier written on a placard: take a photo of the placard to signify that the following photos are for a new case (i.e., start your photo series with the address of the house or perhaps a photo of an ID card of the decedent).
  - ◆ Use this method if you can't switch SD cards or if you are using a mobile device.
- ◆ If you use an iPhone for case photos regularly, consider changing your phone's settings to capture images in JPEG rather than HEIC (iPhone's default format). This is a more universally transferrable photo format. Samsung phones are defaulted to storing as JPEGs.
- ◆ Check your camera settings –JPEG is the easiest file format to use without compromising image quality. Formats like RAW or CR2 are not easily transferred, and the file size is often too large to upload to online case management systems.

# DSLR Cameras

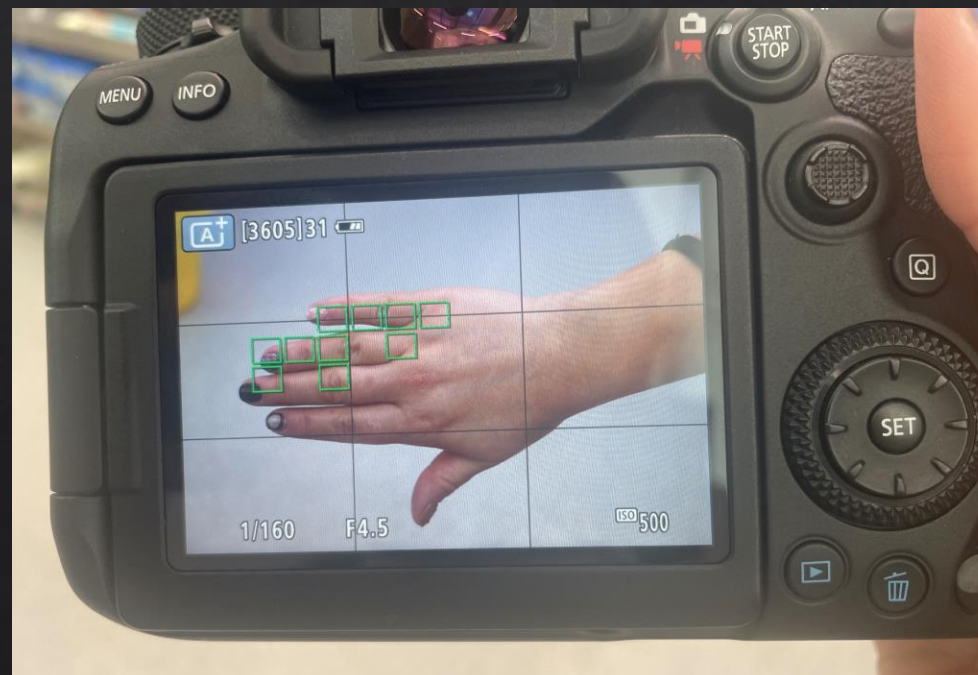
- ◆ As a general DSLR rule, leave your camera settings on auto. The camera will largely adjust to the existing lighting.
- ◆ Check for a more precise focusing option on your device if you need to be more focused on a specific area.
  - ◆ "P" setting on Canon DSLR – used to focus on an object that is not in the foreground
    - ◆ Intraoral injuries, palm of hand, GSW
    - ◆ Works best using eye piece of camera, rather than screen





# DSLR Cameras

- ◆ Most DSLR cameras have options for an auto-focus feature. For example, depressing the shutter button halfway will allow the camera to demonstrate where it wants to focus before capturing the image. You can adjust your positioning, lighting, or zoom as necessary to get the camera to focus on the intended subject, then fully depress the button to take the picture.



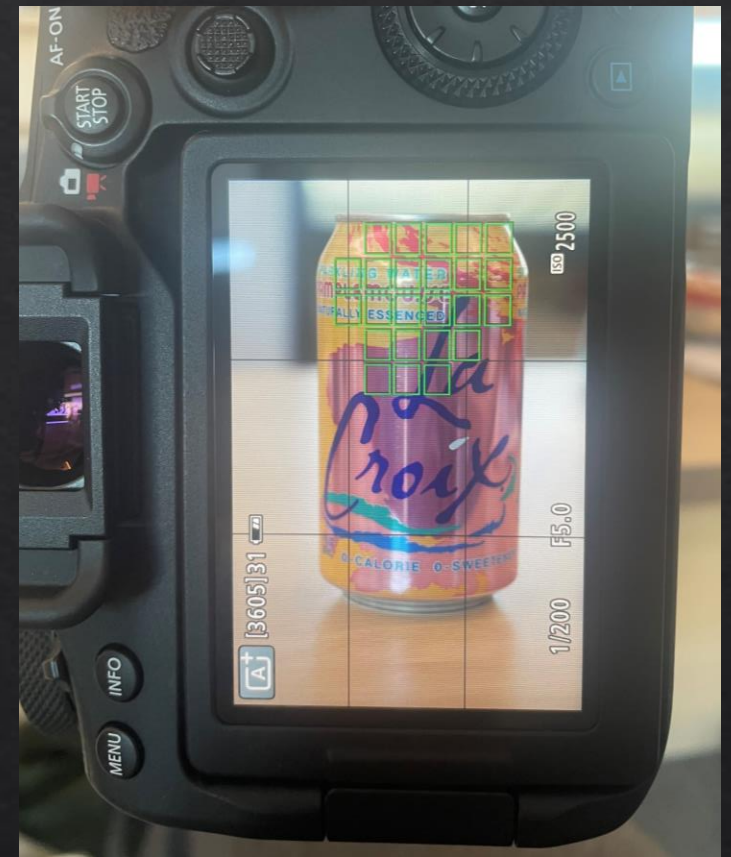
# DSLR Auto-focus Feature



× Too close to subject



× Focused on background, not subject



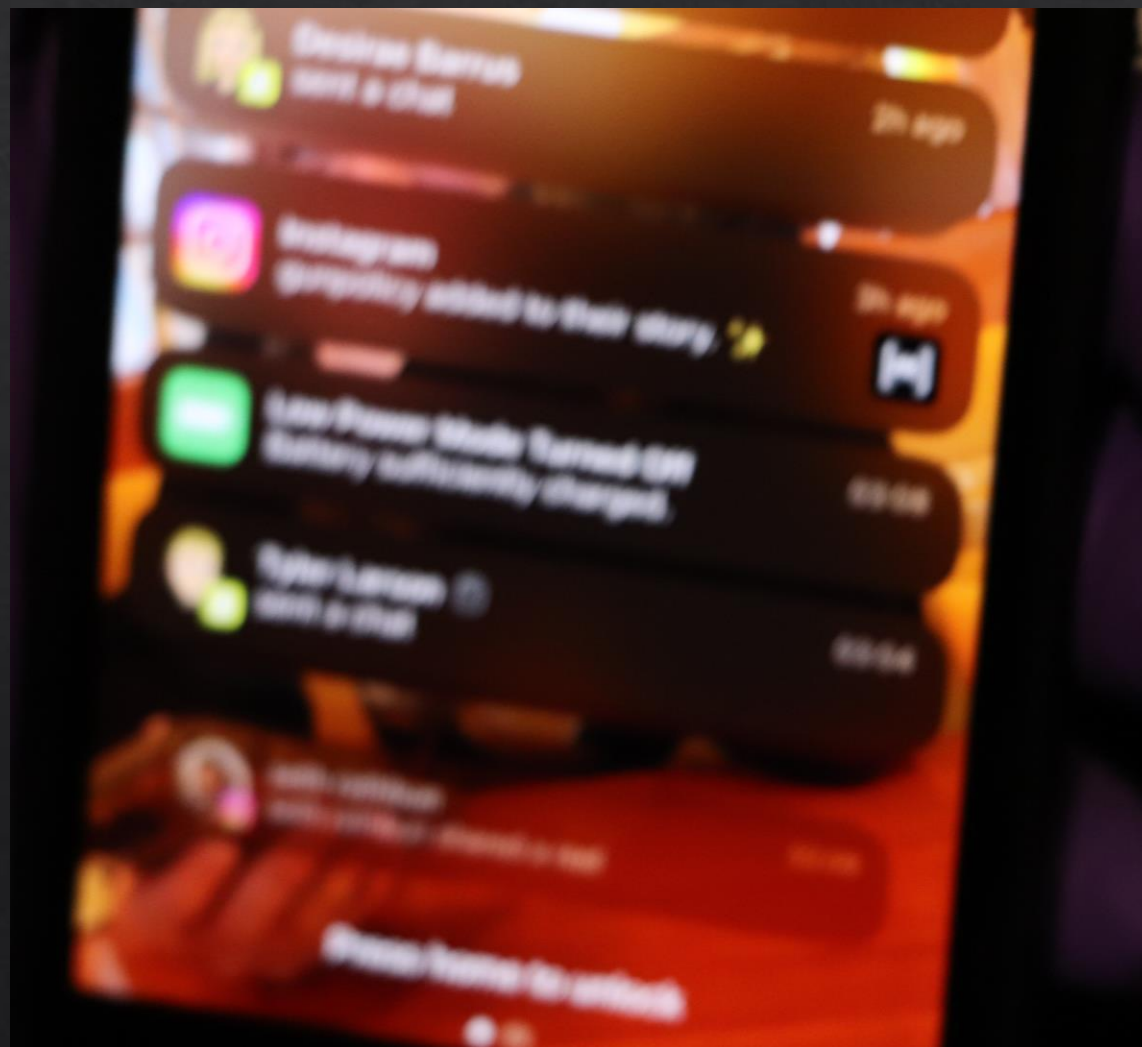
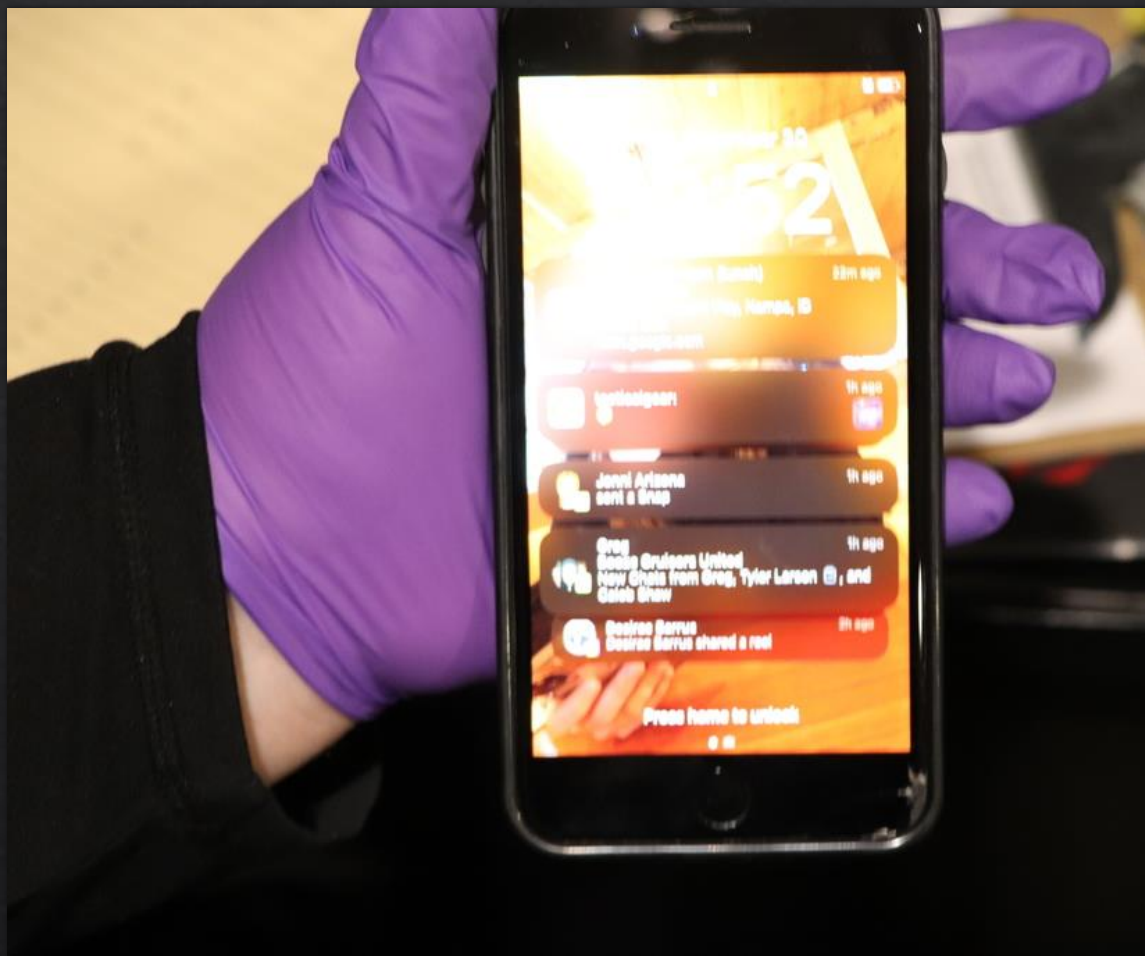
✓ Focused on subject  
✓ Framed well

# Real Time Photo Review

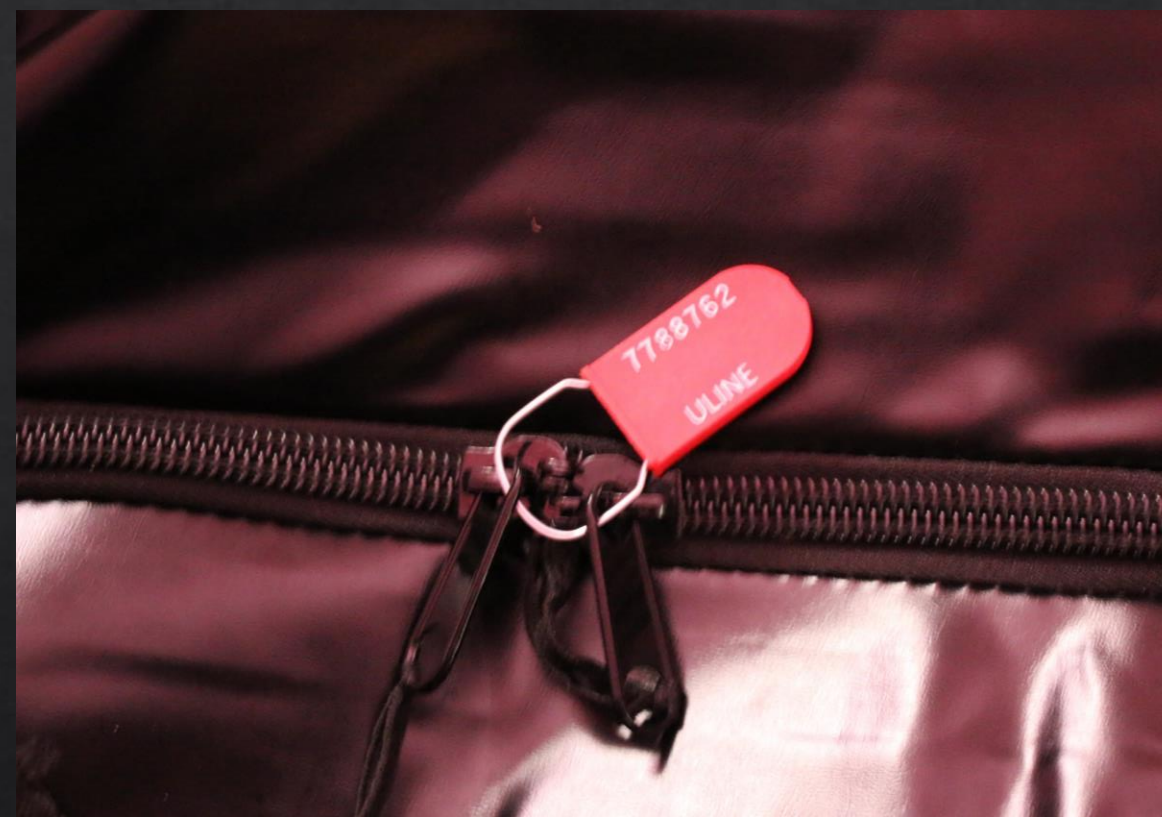
- ❖ Always review your last photo to see if you need to retake it. Your photos should not be blurry, and there is no shame in retaking a photo to make the next one better!
- ❖ Photos **MUST NOT** be deleted or edited for review purposes. The photo file details will indicate any discrepancies in file history.



# Real Time Photo Review



# Real Time Photo Review



# Photo Composition

- ◆ Use elements of the scene (doors, windows, branches) to frame the subject. You want the photo to be easy to review and analyze- if the framing is at obscure angles, it makes review difficult.



# Photo Composition

- ◆ Minimize background noise where it is not needed – cut out people on scene (no faces). Tactfully use negative space to highlight the intended photo subject.



# Photo Composition



- ❖ Action shots are usually unnecessary, except in the case of body recovery where artifact might be created.





# Photo Composition

- ◆ Include overall, mid-range, and close-up perspective shots. Capture wide shots to show the overall context (e.g., the position of the body, surroundings) and mid-range shots for intermediate details. It's vital to document the full body and any potential injuries in relation to the environment.



# Photo Composition



- ◆ Always capture the scene from multiple angles and ensure consistency in the orientation of shots. For example, you might photograph the body from a head-on view, from the side, looking from the feet, and from the left and right sides.

# Rulers or Other Scales

- ◆ For accurate documentation of findings, consider using a ruler or scale during your external examination of the body.
- ◆ Place the scale on the same reference plane as the subject of the photo.
- ◆ Orient the ruler with the top of the numbers pointing towards the top of the body/head.
- ◆ Using a scale on any items of evidentiary value on scene is primarily the responsibility of the LE scene investigator.





# Photo Storage and Distribution

- ◆ Now that your photos are completed, they need to be stored and distributed to necessary stakeholders. There are various recommendations as to how photos should be filed and organized for ease of access.
- ◆ The equipment you are using will largely determine what organization style is best for you and how you process cases after the scene investigation is completed.
- ◆ See *Photo Storage and Distribution Handout* for information on common file types of photos, how to download photos to your computer, how to upload photos to case management system, how to organize files for storage per case, and maintenance of chain of custody.



# Questions?

Thank you!