

SECTION 6 - INVESTIGATIONS - SCENE OF DEATH PROTOCOL**I. DEATH SCENE PROTOCOL**

This section outlines the basic processing of virtually any death scene. No two scenes are exactly the same and specific scene types require specific guidelines. These guidelines should be followed to investigate the basics of any scene. Further sections describe more detailed guidelines. All investigations shall be in accordance with NISTY OSAC approved standards.

II. EMERGENCY RESPONDERS

An emergency medical team summoned to any scene for purposes of rendering medical attention to a human being has sole authority in determining when or when not to initiate resuscitative measures. In cases where rigor mortis, livor mortis or decomposition is obvious, or where mutilation is so severe as to preclude life, the first responder may elect to assume that death has occurred.

III. LAW ENFORCEMENT AGENCY AUTHORITY AND JURISDICTION

The law enforcement agency of jurisdiction and the Deputy Coroner must work together in the investigation of reportable deaths. Standard response guidelines call for the first law enforcement responder to:

1. Tend the injured
2. Arrest the perpetrator
3. Hold the scene
4. Make initial determination of criminality vs. no criminality
5. Immediately notify the Shelby County Coroner through established procedures
6. May notify their department criminal investigation unit (CSI)

Under no circumstance (except where there is danger to the body or to others at the scene) is the body to be moved or tampered with in any way until the C/DC arrives at the scene. *(Due to potential scene hazards, the body may have to be removed before scene investigation can be continued; e.g., crowd control, collapsing structures, poisonous gases, traffic, etc.).* Any actions involving the decedent by any responders or witnesses will be documented by the law enforcement case agent designated and relayed to the Deputy Coroner on his/her arrival; e.g., CPR administered by passersby, body turned over by EMS, articles removed initially by witnesses or first responders, etc.

IV. CORONER RESPONSE

The management of all scenes is the responsibility of the law enforcement agency of jurisdiction. The management of the body and materials that played a part in the mechanism of the death is the responsibility of the Coroner's Office. Scene response is the primary responsibility the C/DC. A scene investigation will be conducted in all accident, suicide, homicide, undetermined and reportable deaths unless otherwise specified.

If the decedent is 60+ with a significant medical history with no signs of drug or EOTH use, the Coroner has the option to release directly to the FH or transport to the morgue.

Other cases where the decedent is younger than 60 with a significant medical history are taken on a case by case basis.

V. ARRIVING AT THE SCENE

INTRODUCE AND IDENTIFY SELF AND ROLE: Upon arrival at a scene, the C/DC will introduce him/herself to those individuals who are responsible for conducting the police investigation. All C/DCs are provided with a photo identification card that can be used for this purpose. Introductions at the scene allow the C/DC to establish formal contact with other official agency representatives. The C/DC must identify the first responder to ascertain if any artifacts or contamination may have been introduced to the death scene. The C/DC must work with all key people to ensure scene safety prior to his/her entrance into the scene.

Upon arrival at the scene, and prior to entering the scene, the C/DC should:

1. Secure vehicle and park as safely as possible
2. Assess and/or establish physical boundaries
3. Identify incident command and identify the lead investigator at the scene and present identification
4. Identify other essential officials at the scene (law enforcement, fire, EMS, social/child protective services, etc.) and explain the Deputy Coroner's role in the investigation
5. Identify and document the identity of the first essential official(s) to the scene (first "professional" arrival at the scene for investigative follow-up) to ascertain if any artifacts or contamination may have been introduced to the death scene
6. Obtain clearance/authorization to enter scene from the individual responsible for scene safety
7. Determine scene safety (prior to entry)
8. Use personal protective safety equipment
9. While exercising scene safety, protect the integrity of the scene and evidence to the extent possible from contamination or loss by people, animals and elements

EXERCISE SCENE SAFETY: Determining scene safety for all investigative personnel is essential to the investigative process. The risk of environmental and physical injury must be removed prior to initiating a scene investigation. Risks can include hostile crowds, collapsing structures, traffic, environmental and chemical threats. The Deputy Coroner will attempt to establish scene safety prior to entering the scene to prevent injury or loss of life, including contacting appropriate agencies for assistance with other scene safety issues.

The following are examples of various scenes and safety measures that the C/DC should be aware:

Fire & Explosives: When the C/DC is summoned to a scene where a fire or explosion has or may continue to occur, the C/DC is not to proceed until the individual in command has issued an "all clear". Rescue personnel are responsible for determining whether live individuals are present. Once the determination has been made by rescue personnel that no life signs exist within the configuration, the retrieval of those assumed dead will proceed at a time when all jeopardy to the living has passed. The determination to enter such a situation is made by the individual C/DC cannot be ordered into any such situation until clearance of hazard is assured.

Presence of Criminality or a Dangerous Scene: Scenes to which a C/DC has been summoned where armed and dangerous individuals are still at large, or where unruly onlookers or family members are present and an actual threat of bodily harm is present are to be rendered safe by the law enforcement agency of jurisdiction. When weighing threat to oneself over potential harm to the evidence contained on or in a body, the C/DC must decide for one's personal safety.

Handling dangerous weapons or devices: Rules of crime/death scene processing state that any device in or on the body, or any device that is or was a factor in the death is considered within the scope of the Coroner's Office investigation. This requirement must be tempered by the degree of danger presented by the acquisition of the device. Syringes must be wrapped or packaged in such a way as to prevent the needle from penetrating. If they are on the body, they are to be submitted by law enforcement or properly disposed of after conferring with law enforcement.

Firearms of any sort are the responsibility of the law enforcement personnel at the scene. Regardless of where the firearm is located (under a body or in an adjoining room) it is to be managed by the police agency and will be rendered safe by those individuals. Firearms are not to be transported with a body to the Coroner's Office.

In cases where the pathologist requests the weapon be produced, it will be through or with specific instructions to the police agency. Firearms at scenes must never be moved prior to all parties completing their investigation under the guidelines of the Crime Scene Protocol found in this section.

Dangerous Terrain: The Coroner's Office must proceed to view the body, and make all proper inquiry respecting the cause and manner of death of a body in cases where death is sudden, unexpected or unexplained. This requires accessing locations in ravines, mountains, wells, excavations and bodies of water. The C / D C shall, in cooperation with other search, rescue and response personnel, assess the technical nature of accessing a decedent. The C/DC shall use his/her discretion in cases of extreme hardship and hazard. The C/DC may authorize support personnel to remove a body to a safe environment, take scene photographs or other duties as assigned.

Potential for Radioactivity or Hazardous Waste: Shelby County Fire Departments are responsible for managing all scenes where suspected hazardous wastes or radioactive materials may exist. Scenes involving property of the United States Government would be managed by an appropriate Federal agency. No individual other than the specifically trained personnel can advise on the suitability of scene/body access. The specifically trained personnel on scene can be contacted for specific information regarding the handling of radioactive cadavers.

Infectious Disease Cases: C/DCs often must touch, examine or remove a body or handle contaminated evidence and specimens. The health and safety of all personnel is of utmost importance. A detailed protocol to be used by C/DCs at the scene and during examination of the body may be found in later in this segment.

Response Policy When Hazards Exist: When hazards exist in doing a scene investigation that exceed the ability of the C/DC to handle in a safe manner, without risk to life or limb to the C/DCr or others on the team, this information is to be relayed to the on-call Alabama Department of Forensic Science Investigators/ Pathologist and a decision will be made on how the scene investigation is to proceed.

CONFIRM OR PRONOUNCE DEATH: Upon arrival at a secured scene and after the appropriate introductions have been made, the C/DC be taken to the decedent for pronouncement of death making and documenting the following observations:

1. Locate and view the body
2. The presence/extent of rigor mortis, livor mortis, decomposition or severe mutilation
3. Absence of a heart beat on palpation
4. The absence of respiration by examination of the exposed chest and abdomen
5. Bilateral dilation and fixation of the pupils
6. Absence of reflexes
7. Identify and document other individual who made the official pronouncement of death, including the date and time of determination
8. Ensure death is pronounced as required
9. The time and date of pronouncement are provided to the case agent
10. When summoned to a scene where multiple deaths have occurred, the time and date of pronouncement for all bodies at the scene will be the same

PARTICIPATE IN SCENE BRIEFING WITH ATTENDING AGENCY REPRESENTATIVES: The C/DC must recognize the varying jurisdictional and statutory responsibilities that apply to individual agency representative (e.g., law enforcement, fire, EMT, judicial/legal). Determining each agency's investigative responsibility at the scene is essential in planning the scope and depth of each scene investigation and the release of information to the public.

The C / D C will identify specific responsibilities, share appropriate preliminary information and understand investigative goals of each agency present at the scene. Discussions with the case agent, CSI and/or crime laboratory personnel and the C/DC will outline the requirements of each agency for processing the scene. The police case agent and CSI personnel will determine how access will be managed. A discussion may take place at this time to determine if other expertise or consultation with other agencies is required.

When participating in the scene briefing, the C/DC should:

1. Locate the staging area (entry point to scene, command post, etc.)
2. Document the scene location (address, mile marker, building name) consistent with other agencies
3. Determine the nature and scope of investigation by obtaining preliminary investigative details (e.g., suspicious versus non-suspicious death)
4. Ensure that initial accounts of incident are obtained from the first witness or witnesses
5. The law enforcement case agent shall apprise the C/DC of the facts surrounding the death and information pertaining to a suspected cause and manner of death.
6. If criminality is suspected and a crime scene investigation is required, the case agent and the C/DC will wait for the arrival of the CSI unit prior to entering the scene

CONDUCT SCENE "WALKTHROUGH": Conducting a scene walkthrough provides the C/D C with an overview of the entire scene. The walkthrough provides the C/DC with the first opportunity to locate and view the body, identify valuable and/or fragile evidence and determine initial investigative procedures providing for a systematic examination and documentation of the scene and body. Personnel will be guided through the scene by the case agent for purposes of observation and report requirements. If pronouncement of death has not occurred, it will be done at this time.

Prior to or during the scene walkthrough, the following may be required:

1. Assessment of the scene boundaries - adjust as appropriate (usually the responsibility of law enforcement)
2. Establishing paths of entry and exit (usually the responsibility of law enforcement)
3. Identifying visible physical and fragile evidence
4. Documenting and photographing fragile evidence immediately
5. Locating and viewing the decedent

Photography during scene walkthrough: CSI personnel will usually proceed to photograph and otherwise document the crime scene. The C/DC may take preliminary photographs at this point along with CSI if approved. When the C/DC has completed preliminary photography he/she will leave the scene while CSI personnel complete their duties. The C/DC should remain available, either in person or by electronic communication, to assist CSI personnel if so requested.

ESTABLISH CHAIN OF CUSTODY: Ensuring the integrity of the evidence by establishing and maintaining a chain of custody is vital to an investigation. This will safeguard against subsequent allegations of tampering, theft, planting and contamination of evidence. Prior to the removal of any evidence, the custodian(s) of evidence shall be designated and shall generate and maintain a chain of custody for all evidence collected. Throughout the investigation, those responsible for preserving the chain of custody should:

1. Document location of the scene and time of arrival of the C/DC at the scene
2. Determine custodian(s) of evidence, determine which agency is responsible for collection of specific types of evidence and determine evidence collection priority for fragile/fleeting evidence
3. Identify, secure and preserve evidence with proper containers, labels and preservatives.
4. Document the collection of evidence by recording its location at the scene, time of collection and time and location of disposition

FOLLOW LAWS (RELATED TO THE COLLECTION OF EVIDENCE):C/DCs must follow local, State, and Federal laws for the collection of evidence to ensure its admissibility. The C/DC must work with law enforcement and other legal authorities to determine laws regarding collection of evidence.

The C/DC working with other agencies must identify and work under appropriate legal authority. Modification of informal procedures may be necessary but laws must always be followed.

Prior to or upon arrival at the death scene, the C/DC should work with other agencies to:

1. Determine the need for a search warrant (discuss with appropriate agencies)
2. Identify local, State, Federal, and International laws that might apply
3. Identify statutes and/or standard operating guidelines

VI. DOCUMENTING AND EVALUATING THE SCENE

PHOTOGRAPH THE SCENE: Photography allows for the best permanent documentation of the death scene. It is essential that accurate scene photographs are available for other investigators, agencies and authorities to recreate the scene. Photographs are a permanent record of the terminal event and retain evidentiary value and authenticity. It is essential that the C/DC obtain accurate photographs before release of the scene. If evidence has been moved prior to photography, it should be noted in the report, but the body or other evidence should not be reintroduced into the scene in order to take photographs. When appropriate and prior to moving the body or evidence, the C/DC should:

1. Remove all nonessential personnel from the scene
2. Obtain an overall (wide-angle) view of the scene to spatially locate the specific scene to the surrounding area
3. Photograph specific areas of the scene to provide more detailed views of specific areas within the larger scene- Close-up photos.
4. Photograph the scene from different angles to provide various perspectives that may uncover additional evidence - Intermediate and Distant photos
5. Crime scene personnel will identify all physical evidence that is available and upon completion of this identification, photographs will be taken by that unit. The C/DC may photograph all evidence that is necessary for their investigation but only under the guidance and jurisdiction of the CSI team.
6. Obtain some photographs with markers to document specific evidence
7. Obtain photographs even if the body or other evidence has been moved
8. Photographs should be taken with and without a forensic scale.

All photographs taken by the Coroner's Office or designated representative (including Deputy Coroner's) are the property of the Coroner's Office and are considered legal evidence. Photographs are stored as images on designated computer hard drives under the appropriate case file number. Photographs may be shared with law enforcement agencies if requested.

There are generally two groups taking photographs, the C/DC and law enforcement. In the field, the C/DC is the only one taking photos on behalf of the Coroner's Office.

DEVELOP DESCRIPTIVE DOCUMENTATION OF THE SCENE: Written documentation of the scene provides a permanent record that may be used to correlate with and enhance photographic documentation, refresh recollections, and record observations.

After photographic documentation of the scene and prior to removal of the body or other evidence, the C/DC should:

1. Diagram (not to scale)/describe in writing items of evidence and their relationship to the body with necessary markers
2. Describe scene environment including odors, lighting, temperature and other fragile evidence
3. If evidence has been moved prior to written documentation, it should be noted in the report

ESTABLISH PROBABLE LOCATION OF INJURY OR ILLNESS: The location where the decedent is found may not be the actual location where the injury/illness that contributed to the death occurred. The C/DC must attempt to determine the locations of any and all injuries/illnesses that may have contributed to the death. Physical evidence at any and all locations may be pertinent in establishing the cause, manner and circumstances of death. In those cases where the decedent is pronounced in a hospital but the injury/illness occurred at another location, the C / D C must, to the extent deemed practical, conduct a scene investigation at the site where the injury/illness occurred.

The C/DC should:

1. Document location where death was confirmed (i.e. in cases where the decedent is pronounced in a hospital but the injury occurred at another location, the C/DC must conduct, to the extent deemed practical, a scene investigation at the injury site as well)
2. Determine location from which decedent was transported and how body was transported from the scene
3. Identify and record rigor mortis, livor mortis and body temperature as appropriate.

4. Check body, clothing, and scene for consistency/inconsistency of trace evidence and indicate location where artifacts are found
5. Check for drag marks (on body and ground)
6. Establish post-injury/illness activity
7. Obtain (police and/or ambulance) records as appropriate
8. Interview family members and associates as appropriate
9. Whenever possible, with the law enforcement agency of jurisdiction, go to the actual location where injury or illness occurred and conduct a thorough investigation. The hospital is not the primary scene.

COLLECT, INVENTORY, AND SAFEGUARD PROPERTY AND EVIDENCE: The CSI personnel shall collect and preserve all evidence not found on the body. If an item of evidence not on the body is deemed important by the C/DC to accompany the body, that evidence shall be collected by the CSI personnel and receipted to the C/DC for transport with the body. The decedent's valuables/property must be safeguarded to ensure proper processing and eventual return to next of kin. Evidence on or near the body must be safeguarded to ensure its availability for further evaluation. All evidence receipted to the Coroner's Office or collected by the Coroner's Office, will be receipted back to the investigating law enforcement agency or NOK at the completion of the examination. Any special requests for evidence collection from the body at the scene must be discussed by both agencies and referred to the on-duty pathologist where questions exist. No evidence may be collected from the body if either party feels the evidence could be jeopardized.

After personal property and evidence have been identified at the scene, the C/DC should consider the following:

Alcohol in a death scene: It will be the responsibility of the C/DC to report the presence of alcohol at the scene. Record the condition of a driver as determined by the police agency when the driver survives but the passenger(s) do not. Record any evidence of drinking within the scene or indications that a perpetrator had been drinking. Record any indication at a scene of current consumption of alcohol. Record any indication of chronic alcohol abuse on the part of the decedent.

Drugs - licit and illicit: In cases where medications (prescription or over the counter) are present at a death scene and relate to the death, the C/DC will collect and reconcile all prescription medications using the approved form. All non-prescription medications should be generally noted but not retained by the C/DC. Medications collected shall be maintained and disposed per policy of the Coroner's Office.

Illicit drugs and any paraphernalia associated with these are to be collected by the law enforcement agency in charge. These materials are not to be inventoried on the Medication Log but must be recorded on the Report of Death.

Money, valuables, personal property: If it falls under the jurisdiction of the C/DC he/she will inventory, collect and safeguard money, valuables and personal property at the scene and when the body is examined in the field or at the morgue.

INTERVIEWING WITNESSES AT THE SCENE-Documented comments of witnesses at the scene allow the C/DC to obtain primary source data regarding discovery of body, witness corroboration and terminal history. The documented interview provides essential information for the investigative process. Under no circumstance should the C/DC question a witness at the scene of a death without the prior approval and participation of the law enforcement agency of jurisdiction.

The C/DCs report will include the source of information, including specific statements and information provided by the witness. The C/DC should:

1. Collect all available identifying data on witnesses (e.g., full name, address, work and home telephone numbers, etc.)
2. Establish witness' relationship/association to the deceased
3. Establish the basis of witness' knowledge (how does witness have knowledge of the death?)
4. Obtain information from each witness
5. The discrepancies from the scene briefing (verify statements)

Documenting and Evaluating the Body

PHOTOGRAPH THE BODY: The photographic documentation of the body at the scene creates a permanent record that preserves essential details of the body position, appearance, identity and final movement. Photographs allow sharing of information with other agencies investigating the death. Prior to moving the body or evidence, the C/DC should:

1. Photograph the body and immediate scene (including the decedent as initially found)
2. Photograph the decedent's face
3. Take additional photographs after removal of objects/items that interfere with photographic documentation of the decedent (e.g., body removed from car)
4. Photograph the decedent with and without scale (as appropriate)
5. Photograph the surface beneath the body (after the body has been removed, as appropriate)
6. Never clean the face; do not change condition of the body.
7. Take multiple images when appropriate

CONDUCT EXTERNAL BODY EXAMINATION (SUPERFICIAL): Conducting the examination provides the C/DC with objective data regarding the single most important piece of evidence at the scene, the body. This documentation provides detailed information regarding the decedent's physical attributes, his/her relationship to the scene, and possible cause, manner and circumstances of death.

The C/DC will be tasked with determining whether or not an autopsy is ordered for a case. At the scene or location of death prior to that determination, an external examination of the body may be performed. A visual external examination is not an autopsy.

The extent of the external examination performed on scene should be dependent on whether or not an autopsy will be performed. Bodies with associated evidence and clothing sent for autopsy should remain intact as when found, with minimal manipulation, to enable the forensic pathologist to make accurate and appropriate conclusions. The C/DC should allow evidence associated with the body to remain intact unless the fragile nature of the evidence requires special handling or the C/DC is petitioned by law enforcement for on-scene collection. Any exception should be addressed on a case-by-case basis and may require the C/DC to consultation. Any manipulation, changes, additions, subtractions, or instrumentations made to the body, clothing, or associated evidence should be well documented in the ROD submitted at the time of autopsy.

At the scene and prior to moving the decedent, the C/DC should, without removing the decedent's clothing:

1. Document/Photograph the decedent's position
2. Document/Photograph the decedent's physical characteristics; hair color; presence of facial hair; eye color; circumcision (male); height/weight
3. Document/Photograph the presence or absence of clothing and personal effects
4. Document/Photograph the presence or absence of any items/objects that may be relevant
5. Document/Photograph the presence or absence of marks, scars, and tattoos
6. Document/Photograph the presence or absence of injury/trauma, petechiae, etc; should include inspection of the surface of the eye orb, inner aspect of the upper and lower eyelids, inner aspect of the lips, and inside the mouth when possible.
7. Document/Photograph the presence of treatment or resuscitative efforts
8. Based on the findings, determine the need for further evaluation/assistance of forensic specialists

Establishing Time of Death

There are currently seven major methods of determining TIME OF DEATH:

- Postmortem Lividity
- Rigor Mortis
- Putrefaction
- Body Temperature -- NOT PERFORMED IN ALABAMA CASES
- Soil Analysis-- NOT TYPICALLY PERFORMED IN ALABAMA CASES
- Forensic Entomology -- NOTE INSECT ACTIVITY ONLY
- Food Digestion

All methods of determining time of death are estimates and they are never exact. Combining two or more methods of estimating time of death should generally result in a more reliable date and time.

Postmortem Lividity (Livor Mortis)

Livor Mortis is the discoloration (red/blue spectrum) of the body due to the settling of blood with the force of gravity after death. The presentation and development of livor mortis can be extremely variable and may be hard to appreciate in dark-skinned individuals. In general, in the immediate postmortem period, livor mortis is not fixed, meaning that if the body is repositioned, the distribution of lividity will change. Livor mortis will eventually become fixed and will not redistribute if the body is moved. To evaluate livor mortis, apply digital pressure to the area of lividity. If the livor blanches, then it is not fixed. As the postmortem interval increases, Tardieu spots, pinpoint focal areas of livor similar in appearance to petechiae or small purpura within areas of lividity may occur.

Colors May Indicate Cause of Death:

Purplish-Red to Cherry Red:

- Carbon Monoxide Poison
- Freezing
- Cyanide Poisoning

Purplish Blue

- Asphyxial Deaths

Dark Blue

- Normal Death

As livor progresses it will deepen in color and take on a marbled appearance, usually initially in the torso and upper extremities.

Time Factors:

- Becomes visible in ½ to 3 hours after death.
- Irreversible or fixed after 6 to 18 hours.
- Maximum lividity occurs from 8 to 12 hours after death.

Lividity can be distinguished from a bruise in two ways:

1. When a bruised area is cut it will not drain--PL will if not fixed.
2. Prior to becoming fixed PL will "blanch" when pressure is applied--a bruise will not.

Rigor Mortis (RM)

Rigor Mortis can be used as an indicator of time since death and can be estimated without undue manipulation of the decedent. Rigor is the stiffening (without actual contraction) of muscles after death and is due to a chemical process by which the actin and myosin fibers of the muscles are chemically cross-linked after death.

When rigor is present, it may be “broken” by forcibly flexing or contracting the muscle, after which it will move freely.

Rigor Mortis Characteristics

- Rigor Mortis affects both the voluntary and involuntary muscles. It also affects the body's bone joints.
- Rigor Mortis is detectable in the smaller muscles first, such as the face, hands, feet and neck, and later in the larger muscle groups.
- Rigor Mortis leaves the body in the same manner; it begins in the small muscles and then progresses to the larger muscle groups.

Time Factors in Rigor Mortis

- RM will generally begin within two to seven hours after death.
- RM will begin in the smaller muscle groups.
- RM is fully achieved between 11 and 13 hours.
- RM begins to leave the body (that is, the muscles will begin to relax) between the next 12 to 24 hours.

Variables Affecting Rigor Mortis

- Heat hastens the onset and relaxation of RM.
- Cold delays the onset and relaxation of RM.
- Duration (time) of RM is reduced in infants, diseased, or poorly nourished adults.
- Violent Deaths or deaths involving extreme exertion may speed up the onset of RM, for example, deaths by electrocution or resulting from fights.
- Clothing or lack of clothing may effect the onset of RM.
- Cadaveric Spasm, the instantaneous tightening of a small muscle group, may confuse the timing of RM.
- Drug use

Putrefaction

The decomposition of the body after death by bacterial action, characterized by the production of malodorous products, bloating, and discoloration of the body.

Characteristics of Putrefaction

- The onset of putrefaction is noted by a greenish color of the tissue around the abdominal wall.
- There is a buildup of gases in the body cavities and tissues.
- Gases generally begin to build up in the abdomen first.
- The skin of Caucasians turns progressively darker.
- Blisters filled with gases or fluids may form on the skin.

Time of Putrefaction

- Putrefaction is generally noticeable with 24 to 72 hours after death.

Variables Affecting Putrefaction

- A body that is under water or buried in the soil will putrefy at a slower rate. [Generally one week in the air is the equivalent of two weeks in the water or eight weeks under the ground.]
- Environmental temperature:
 - Decay may be present within 3 hours in hot, humid weather.
 - Decay may be delayed a day or more in cold weather.
 - Animals and birds may hasten the decay process.
 - Clothing, or lack of it, may also affect the rate of decomposition.
- Other factors delaying putrefaction:
 - Chemicals in the tissue, e.g., arsenic.
 - Skin soaked in a petroleum-based product, e.g., kerosene.

Note: Drowning Deaths Normally, the gases produced during putrefaction will cause a drowning victim's body to float to the service.

Exceptions: If the body has become entangled with some underwater hazard; e.g.; a tree root; or if it has been purposely weighted down, it may not float as a result of putrefaction.

Note: Formation of Adipocere Adipocere is the waxy, yellowish-white substance that is created from decomposed body fat just below the skin. Adipocere results from the decomposition of the body in water or wet soil. It will take an expert to determine how long the body has been in the water or wet soil.

Note: Mummification Mummification generally occurs in warm, dry climates where there is a sufficient flow of dry air that creates water loss (evaporation). The presence of large quantities of insects and bacteria in the air and soil serve to reduce the effects of mummification.

Body Temperature

Algor Mortis is the cooling of the body after death until ambient temperature is reached. In general, the body temperature will decline at a steady rate, and there are formulas for calculating the postmortem interval based on the body temperature. However, both external factors and variables intrinsic to the body can have a significant effect on the rate of cooling introducing a large and incalculable margin of error. In most cases tactile perception of whether the body is hot, warm, cool, or cold is all that is required.

Estimating time of death from body temperature is inexact at best.

Rectal and Liver temperatures should never be attempted per ALDFS standards. It is neither necessary nor desirable to attempt to obtain a core temperature reading by inserting a thermometer into the liver or other organs.

Forensic Entomology

The study of fly and other insect life cycles in order to determine time of death. Flies and other insects go through similar life cycles.

Insect Life Cycles

The life cycles of most flies and insects consist of four specific stages:

- egg
- larva (larvae, plural)
- pupa (pupae, plural)
- adult.

A particular insect species life cycle is stable and generally varies only with the influence of temperature and availability of food sources. Each cycle is relatively consistent with regard to elapsed time. Some researchers consider forensic entomology to be the most reliable of the time of death measures, if more than 72 hours has elapsed since death. Some entomologists claim a precision of 12-24 hours in estimating time of death when environmental temperatures remain high.

Time Factors for the Common Blow Fly

There is no general “rule of thumb” for estimating age of the stages of blow flies. Each species must be evaluated by its specific cycle, habits, and distribution during the seasons. In addition, prevailing temperatures are critical and must be a major consideration in the final analysis of postmortem estimates of time of death when using insects. Thus, it is critical to have the expertise of the forensic entomologist who is knowledgeable with both the species of flies and the energy units required by those species to reach different stages of the life cycle.

Note: Blow fly life cycles can vary among species even when the development temperatures are the same. This variability (at 80 degrees Fahrenheit) can range from:

10-12 days for tropical species of blow flies (southern species)

12-15 days for screw worm, green bottle flies, and the black blow fly (summer species)

18-35 days for the blue bottle flies (spring and fall species)

Collection of Evidence for Entomologists

Samples (adult flies, beetles and beetle larvae) can be preserved in a solution of 75%-80% ethyl alcohol.

- Collect samples of all fly and insect matter on the remains (eggs, larvae, pupae and adults).

Note the location on the body and the condition of the body area. This may be very important as it may indicate trauma or injury that occurred prior to death. Samples should also be preserved in a solution of 75%-80% ethyl alcohol.

Variables Affecting Forensic Entomology

- Temperature. Cool temperatures slow the growth cycle and hot temperatures increase it.
- Weather. Rain and humidity tend to slow the growth cycle. Cold weather will cease insect activity. However, maggots may still remain alive on bodies even in winter. They will be found on the ground/body interface or internally in the remains.
- Location of body. A body that is buried, under water, or otherwise covered may hinder the use of forensic entomology. However, the presence of water does not always rule out the presence of insects.
- Climatic conditions. Fly and insect activities cease, or are greatly diminished, in Indiana during the late

Fall, Winter, and early Spring. Windy days can decrease or suspend flight activity of blow flies.

Entomology should be used as a loose guide for determination of time of death in Alabama.

ALDFS does not recommend collection of samples to send for Entomology examination. This is due to the wide and unpredictable weather patterns in Alabama.

PRESERVE EVIDENCE (BODY): The photographic and written documentation of evidence on the body allows the C/DC to obtain a permanent historical record of that evidence. To maintain chain of custody, evidence must be collected, preserved and transported properly. Physical evidence visible on the body must be photographed. Fragile evidence (that which can be easily contaminated, lost or altered) must also be collected and/or preserved to maintain chain of custody and to assist in determination of cause, manner and circumstances of death. LE CSI may collect, inventory and submit evidence from the body with approval from the C/DC.

Once evidence on the body is recognized, the C/DC should:

1. Photograph the evidence
2. Document blood/body fluid on the body (froth/purge, substances from orifices), location, and pattern before transporting
3. Ensure the decedent's hands and/or feet are placed in unused paper bags (in all homicides and suspicious deaths)
4. Ensure the proper collection of blood and body fluids for subsequent analysis (as appropriate)

COLLECTION OF TOXICOLOGY SPECIMENS

The collection of toxicology specimens is usually performed during the autopsy or external examination. Toxicology specimens may be collected at the scene, especially if the body is to be directly released from the scene to the funeral home/morgue without an autopsy. Toxicology specimens should not be collected if the body is to be sent for autopsy, as that is included in the process by the forensic pathologist, and doing so may introduce artifact to the body and potentially conflicting or confusing test results.

Typical specimens collected by the regional forensic centers at autopsy will include blood, urine and vitreous humor.

1. C/DC must collect specimens for toxicology at the scenes where the body is **not** being sent for autopsy (in cases where legal action may be pending or unclear In House Tox test performed) The appropriate kits for fluid and blood collection is recommended by ADFS.

The kit should not be expired and it should be stored in a secure refrigerator until taken to ALDFS-Hoover.

Vitreous humor is the fluid within the eye and is a good specimen for toxicology (especially confirmation of blood alcohol level) because of its isolation from blood and other body fluids that are more readily affected by postmortem changes, including redistribution. Vitreous humor can also be useful in measuring some of the pre-terminal electrolytes. Again, it is prudent to establish with the laboratory performing the testing the preferred type of tube for electrolyte testing. Vitreous fluid can usually be collected from the eye up to four days post-death and can be collected from embalmed bodies where the eyes have remained intact. Vitreous humor can be obtained by inserting a needle at the lateral margin of the eye and using gentle suction on the syringe to draw the fluid up. A slow, steady suction will allow the collection of the clear, colorless fluid, free of contaminants. One (1) to two (2) milliliters of vitreous should be easily obtainable from each eye.

Urine is the most common sample used for drug testing in the living, but is not always available postmortem. Urine can be obtained by inserting a needle over the top of the pubic symphysis and aspirating (a suprapubic tap), or by catheterizing the patient. If there is urine in the bladder, it should be collected for toxicology. Urine samples can be used to screen for a relatively large number of drugs that could be cost- and sample-prohibitive using blood. Any positive result from urine screening should be confirmed by another method.

Blood is the most frequent source of fluid obtained for toxicology analysis. The preferred site for blood collection is the femoral artery. The femoral artery is located directly over the ball and socket. To located the correct spot. Palpate the inguinal ligament which courses from the anterior superior iliac spine to the pubic symphysis. That places you directly over the ball an socket. Insert needle and aspirate. The second site would be a direct intra-cardiac stick.

SCCO TOXICOLOGY SAMPLES

1. Blood if the Preferred samples
2. Vitreous Humor should be collected as well (use grey tubes)
3. Last, least preferred, is urine.

POSTMORTEM TOXICOLOGY INTERPRETATION

Most drug levels cannot be interpreted in the postmortem state in the same way as in the living. This is due to a number of factors, including the phenomenon of postmortem redistribution, in which drugs diffuse from areas of higher concentration to those of lower concentration after the cessation of blood flow. Drugs may also decompose after death, or may be generated postmortem in the body after death (examples include ethanol and gamma hydroxybutyrate).

The staff of the ALDFS- Hoover is available for consultation in the interpretation of postmortem toxicology results.

ESTABLISH DECEDENT'S IDENTIFICATION: The establishment or confirmation of the decedent's identity is paramount to the death investigation. Proper identification allows notification of next of kin, settlement of estates, resolution of criminal and civil litigation and the proper completion of the death certificate. To establish identity, the C/DC should document direct visual or photographic identification of the decedent if visually recognizable.

PARTICIPATE IN SCENE DEBRIEFING: The scene debriefing helps investigators from all participating agencies to establish post-scene responsibilities by sharing data regarding particular scene findings. The scene debriefing provides each agency the opportunity for input regarding special requests for assistance, additional information, special examinations, and other requests requiring interagency communication, cooperation and education.

When participating in scene debriefing, the C/DC should:

1. Determine post-scene responsibilities (identification, notification, press relations and evidence transportation)
2. Determine/identify the need for a specialist (e.g., crime laboratory technicians, social services, entomologists, OSHA)
3. Communicate with the on-call Investigator with ADFS regarding the autopsy schedule (as needed)
4. Share investigative data (as required in furtherance of the investigation)
5. Communicate special requests to appropriate agencies, being mindful of the necessity for

ENSURE SECURITY OF REMAINS: Ensuring security of the body requires the C/DC to ensure the labeling, packaging and removal of the remains. An appropriate identification tag is placed on the body to preclude misidentification upon receipt at the examining facility. This function also includes safeguarding all potential physical evidence and/or property and clothing that remain on the body.

Prior to leaving the scene, the C/DC should:

1. Document time and location where the custody of the body was affected
2. Ensure that the body is protected from further trauma or contamination (if not, document)
3. Document and/or secure property, clothing, and personal effects that are on the body

4. Identify property and clothing to be kept as evidence
5. Place identification on the body and body bag
6. Place body into a body bag and seal the bag with numbered seal
7. Know when, where, and why the body bag was opened, by whom and for what purpose
8. Secure transportation for the body as appropriate
9. Supervise the removal of the body from the scene
10. If the body was turned over to another agency (generally a transporter) the name of the transporter and the condition of the body (in a sealed body bag).
11. Note where body is taken
12. Provide all forms as required to the transporter

Maintaining jurisdiction over the body allows the C/DC to protect the chain of custody as the body is transported from the scene for examination or storage. If investigation indicates an autopsy is required, the C/DC will dispatch the appropriate carrier to remove the remains to the location where an autopsy will be performed. The transporter used will either be the funeral home requested by the next of kin or the transport agency summoned by the C/DC. Dispatch of the transporter should be made as soon as the C/DC has an estimated time of completion of scene investigation such that the transporter will arrive as close as possible to that time.

When jurisdiction has been terminated in an investigation, the funeral home selected by the next of kin is to be summoned to pick up the remains. The Coroner's Office assumes no responsibility for transportation costs in these cases. However, the Coroner's Office has a responsibility to assure that the remains are removed.

Infectious Cases: It is incumbent on the C/DC to notify all parties concerned when a case is known to be infectious. This would include the carrier, the funeral home and any other parties who might have contact with the body.

RELEASE JURISDICTION OF THE BODY: Prior to releasing jurisdiction of the body to an authorized receiving agent or funeral director, Receipt of Body must be completed and signed by both parties.

NEXT OF KIN NOTIFICATION: Every reasonable effort should be made to notify the next of kin as soon as possible. Notification of next of kin initiates closure for the family, disposition of remains and facilitates the collection of additional information relative to the case. It is the responsibility of the Coroner's Office to make notification of next of kin.

Establishing and Recording Decedent Profile
Information Document the Discovery History:

1. Establish and record person(s) who discovered the body and when
2. Document the circumstances surrounding the discovery (who, what, where, when, how)

Determine Terminal Episode History:

1. Document when, where, how, and by whom decedent was last known to be alive
2. Document the incidents prior to the death
3. Document complaints/symptoms prior to the death
4. Document and review complete EMS records
5. Obtain relevant medical records (copies)
6. Obtain relevant ante-mortem specimens
7. Document Decedent Medical History:
 - a. Document medical history, including medications, herbal remedies, alternative therapies, alcohol and drugs use, and family medical history from family members and witnesses
 - b. Document information from treating physicians and/or hospitals to confirm history and treatment
8. Document physical characteristics and traits (e.g., left-/right-handedness, missing appendages, tattoos, etc.)

Document Decedent's Mental Health History:

1. Document the decedent's mental health history, including hospitalizations and medications
2. Document the history of suicidal ideations, gestures, and/or attempts
3. Document mental health professionals (e.g., psychiatrists, psychologists, counselors, etc.) who treated the decedent
4. Document family mental health history

Document Social History:

1. Document marital/domestic history
2. Document family history (similar deaths, significant dates)
3. Document sexual history
4. Document employment history
5. Document financial history
6. Document daily routines, habits and activities
7. Document relationships, friends, and associates
8. Document religious, ethnic, or other pertinent information (e.g., religious objection to autopsy)
9. Document educational background
10. Document criminal history

PERFORM EXIT PROCEDURES: Bringing closure to the scene investigation ensures that important evidence has been collected and the scene has been processed. In addition, a systematic review of the scene ensures that artifacts or equipment are not inadvertently left behind (e.g., used disposable gloves, paramedical debris, etc.) and any dangerous materials or conditions have been reported. When performing exit procedures, the C/DC should:

1. Identify, inventory, and remove all evidence collected at the scene
2. Remove all personal equipment and materials from the scene
3. Report and document any dangerous materials or conditions

NEXT OF KIN NOTIFICATION: Every reasonable effort should be made to notify the next of kin as soon as possible. Notification of next of kin initiates closure for the family, disposition of remains and facilitates the collection of additional information relative to the case. It is the responsibility of the Coroner's Office to make notification of next of kin.

FOLLOW-UP INVESTIGATIONS: The C/DC will be responsible for continued investigation on all deaths managed by him/her. Subsequent scene investigation, photography and interviews with families and/or witnesses will be coordinated with the appropriate law enforcement agency of jurisdiction. New findings affecting the nature of the investigation will be reported immediately to the on-call ADFS Investigator/Pathologist.

Informing the primary care provider: The C/DC shall notify the primary care provider of that provider's patient's death within 24 hours of initial notification of death. Exceptions to this directive will be hospital or care-facility deaths. Those facilities usually have a policy that requires primary care provider notification. However, the C/DC shall insure that facility's policy is to make a timely notification. The C/DC may adopt a personal policy to inform the primary care provider and duplicate the efforts of the hospital or other care facility.

Subpoena: It will frequently be necessary for the C/DC to follow-up on cases by collecting information from various sources. Although many individuals and agencies will provide information that is subsequently summarized and documented by the C/DC, a subpoena is sometimes necessary to get documents, records, lab samples and other materials.

The subpoena issued by the Coroner's Office representative is for materials that relate only to the cause and the manner of the death being investigated. The subpoena cannot be used by Coroner's Office to acquire information or evidence for other agencies. For medical records, a copy of the record is sufficient. In certain cases where the original must be reviewed, the on-call pathologist will give authorization to request the original records and the subpoena must indicate that original records are required.

Failure to comply with a Coroner's Office subpoena: When there is a failure to comply with the conditions of a Coroner's Office subpoena, the Coroner should first attempt to clarify the position and needs of the Coroner's Office with the individual, or the individual's supervisor. All pertinent information must be obtained at this time, which would include the reason(s) the person is failing to comply and specifically what information is being sought or is needed by the Coroner's Office. Continued refusal to comply with the subpoena is to be referred to the Coroner, where the District Attorney or appropriate judge will be contacted for further direction. Strict adherence to the rules governing the use of the Subpoena by Coroner's Office must be observed and maintained.

VII. WORKING WITH FAMILIES

ASSIST THE FAMILY: The C/DC provides the family with a timetable so they can arrange for final disposition and provides information on available community and professional resources that may assist the family.

When the C/DC is assisting the family, it is important to:

1. Inform the family if an autopsy is required
2. Inform the family of available support services
3. Inform the family of appropriate agencies to contact with questions (law enforcement, SIDS groups, etc.)
4. Ensure family is not left alone with the body (if circumstances warrant)
5. Inform the family of approximate timetable for release of the body
6. Inform the family of information release timetable (toxicology, autopsy results, etc., as required)
7. Inform the family of available reports

NOTIFICATION OF NEXT OF KIN: The responsibility for formal notification of next of kin lies with the Often, notification of next of kin has occurred by other individuals. The C/DC must determine that the notification has occurred and document. The following are appropriate next of kin, in descending order:

1. Spouse - Common -law not recognized in Alabama
2. Adult child (18 and over)
3. Parent
4. Sibling (18 and over)
5. Grandparents
6. Aunt/Uncle

In cases where confusion exists (such as in divorces with remarriage) DO NOT release remains until the questions are resolved.

NOTIFICATION BASED ON CORONER'S OFFICE IDENTIFICATION: In cases where the remains have been identified by Coroner's Office, reasonable attempts will be made to contact the legal next of kin who is to be advised of the location of the decedent, the pertinent details of the fatal event, and that an autopsy is/was performed. The C/DC making such notification will note in writing the name of the person advised, their relationship to the deceased, the method of notification and the time and date. If the Coroner's Office representative has made notification, law enforcement should be made aware that notification has been made.

VIEWING OF DECEASED BY NEXT OF KIN: At the scene of death or in the hospital (inpatient) the C/DC must be guided by the nature of the investigation, a concern for physical evidence that might be on the body and the health and safety of those who might handle the remains.

Viewing should only occur when the C/DC and law enforcement in charge of the investigation concur that no harm will come from family viewing and/or touching the body.

AT THE CORONER'S OFFICE/MORGUE: There will be NO viewing of the deceased by the next of kin in the Coroner's Office facility. Exceptions to this policy will be granted in only the rarest of circumstances (religious and cultural beliefs will be taken into account). Clearly distraught, belligerent, under the influence of drugs or alcohol and disrespectful persons will not be allowed to view a body. No more than two persons from the family will be permitted to view the body. When viewing is to take place, the C/DC will make the body and the viewing area as presentable as possible.

In rare instances where identification depends on the recognition by the family, digital images will be taken by C/DC and made available for viewing by the family.

INFORMING FAMILY WHEN AUTOPSY IS OR IS NOT TO BE PERFORMED: The C/DC will make every effort to communicate with the next of kin to keep them apprised of what decisions are being made and where the body is at any given time. The C/DC must also notify next of kin when a decision has been made not to do an autopsy. Notification and communications with the family must be documented in the Report of Death. When a determination has been made that an autopsy will be performed, the C/DC in charge of the case will so advise the legal next of kin. The C/DC is advised to use tact, diplomacy and sensitivity in advising the family of the autopsy requirement. A sensitive approach coupled with factual information will aid the family at this extremely emotional time.

The next of kin notified should be told the following:

1. That an autopsy will be performed
2. Why it is necessary (homicide, work-related, obscure cause and/or manner, to rule out other conditions, etc.)
3. Where the exam will take place
4. How the release is facilitated when the procedure is complete

This communication with next of kin is not for purposes of asking their permission or obtaining their consent. It is advisory, and communicates to them the steps this office will be taking in the investigative process. The contact with the next of kin must be recorded on the ROD.

PROTESTS BY NEXT OF KIN: When family members express opposition to the autopsy that is not allayed by the discussion of the reasons why the autopsy is required, the C/DC is to be made aware of the opposition. When relaying this information to the Coroner, a phone number for the next of kin is to be provided so that further discussion can be implemented.

If the legal next of kin expresses concerns or objections to an autopsy, the C/DC will explain the specific reasons why the Coroner's Office has jurisdiction, why the death requires an autopsy and try to help the next of kin understand Coroner's Office's involvement. Document time, date, person with whom discussions were held and pertinent issues discussed.

If next of kin concur in the decision to autopsy, this will also be documented in the case file. If particular requests or limitations are included, the family should be advised whether these are or are not possible.

Where objections to the autopsy continue, or the Coroner's Office is unable to accommodate the desired limitations, the Coroner's Office may consult with the Office of the District Attorney to obtain an opinion as to whether the autopsy must be performed in order for the District Attorney to carry out legal responsibilities adequately.

If it is not possible, the family will be informed by the Coroner's Office that the body will be held for a reasonable time (24 hours) unless circumstances compel that the interval should be shorter. An extension of time may be granted as long as it does not jeopardize the ends of justice or expose any citizen to a dangerous situation. During this time, the family may pursue legal avenues in order to prevent the autopsy. These may include:

1. Contacting the District Attorney in the judicial district of jurisdiction for relief, or
2. Obtaining a court order to prohibit the autopsy.

(In either of these situations, the family should be strongly advised that it might be to their benefit to obtain legal counsel.)

NEXT OF KIN NOT LOCATED - AUTOPSY REQUIRED: In autopsy cases where the decedent has been identified and the next of kin has not been located, cannot be located or are unknown, information in the ROD must document efforts made by the C/DC in attempting to locate and/or notify next of kin.

UNIDENTIFIED REMAINS - AUTOPSY REQUIRED: In cases where remains are unidentified and an autopsy is necessary, the establishment of a positive identification and search for next of kin will not preclude the autopsy from commencing. Attempts to establish identity will commence as part of the ongoing investigation by the law enforcement agency responsible for the case. The Coroner's Office will aid in this matter by providing any pertinent information that may be derived from the examination of the clothing and/or the body.

CONSULTATION AUTOPSY CASE: In cases where an autopsy is not warranted, but the family would like to have one performed, the family should be referred to UAB Pathology 205-934-4303. They can request to speak with a Pathologist about their case. There is an upfront fee to autopsies at UAB which is around \$6500.

FUNERAL HOMES DESIGNATED BY FAMILY: The staff of the Coroner's Office is prohibited from recommending the use of one funeral home or mortuary/crematory service over another. . The family member should be allowed to decide which if any services they might require by interviewing mortuary or crematory services directly. The exception to this would be a request by family members to conduct family burials or if they inquire as to what services they might perform themselves.

It is the responsibility of the investigating C/DC to obtain the mortuary preference of the family as soon as possible.

RELEASE OF PERSONAL EFFECTS TO NEXT OF KIN: The C/DC must be attentive to details of the family network and only release personal property after establishing next of kin. Only then will personal property be released to family members when there is no question as to the relationship that exists. If there is ever a question as to the relationship or it appears that to release items such as large amounts of cash would present problems with others present, no release is to be made.

PROTECT THE ESTATE OF THE DECEASED: The Coroner is responsible for releasing personal effects to the next of kin and making sure that property (house, cars, etc.) are secured until family can be found.

VIII. INVESTIGATIONS - SPECIAL CIRCUMSTANCES

DISCOVERY OF SKELETAL REMAINS: Often skeletal remains, complete or partial, are found in all areas of Shelby County. The Coroner shall conduct an on-site inquiry within forty-eight hours of such notification to attempt to determine whether such skeletal remains are human remains and to determine their forensic value. If it is confirmed that the remains are human remains but of no forensic value but are therefore of historic significance, the coroner shall notify the state archaeologist of the discovery. The state archaeologist shall recommend security measures for the site.

"Forensic Value" defined: When skeletal remains are examined and it is determined that the remains are "recent" (a reasonable timeframe which shall be generally defined as 50 years, and) the cause, manner and circumstances of the death fall within the purview of law enforcement and/or Coroner's Office, then the remains shall be determined to be of forensic value.

"Historic Significance" defined: When skeletal remains are examined, and it is determined that the remains have been buried for a period of 50 years or longer and the cause, manner and circumstances of the death do not fall within the purview of law enforcement and/or Coroner's Office, then the remains shall be determined to be of historic significance. A Consult form must still be filed.

DISPOSITION OF REMAINS: Once remains have been determined to be of historic significance, Coroner's Office will release jurisdiction to the state archaeologist.

REPORTING: A Report of Death will be issued by the C/DC documenting the investigation. Subsequent findings will be documented on a Supplemental Report of Investigation. All reports generated by Coroner's Office will be kept on file in the Coroner's Office.

DISINTERMENTS (EXHUMATIONS): Requests for disinterment permits for the purpose of removing remains from one location to another location shall be referred the designated funeral home for removal. Court ordered disinterments shall be handled exclusively by the Coroner's Office. A court order for disinterment may be issued in cases where further Coroner's Office investigation is required or at the request of the district attorney through complaints filed by relatives or friends, prosecuting attorneys, the Coroner, a plaintiff or a defendant, insurance companies or the next of kin in civil cases. A court ordered disinterment is investigated by the Coroner's Office through the presence of an assigned C/DC at the site who will document the proceedings.

Information concerning the nature of the disinterment will be recorded on a Report of Death. A time and date will be set for the actual disinterment. All legal authorizations will be made available to all parties. A funeral home will be designated to proceed with the disinterment. The gravesite will be identified by cemetery officials to official witnesses (C/DC and law enforcement representatives). All means reasonable are to be used to assure that the remains are those of the specified person. A record will be kept (photographs and reports) of the untouched gravesite, and the disinterment procedure.

Samples of soil, wood, metal, fluid or ice (above, below or on the sides of the coffin or vault) will be collected by the C/DC. These samples are to be preserved and identified as evidence and are to accompany the remains to the examination site. A carrier will be designated by the Coroner's Office and the vehicle will be described in the report. All witnesses to the disinterment will be listed on the official report.

RESEARCH STUDIES: With consent of the next of kin, the Coroner's Office may work with qualified hospitals or institutions involved in research programs. A representative of the program will contact Coroner's Office to inform of particulars concerning patients in the study. Those particulars will be documented and distributed to the Deputy Coroners/Investigators. All notifications and pertinent documents will be handled by the program. Families will normally bear expenses involved in body transport, organ removal and other fees as necessary.

REQUESTS FOR CORONER'S OFFICE SERVICES - NON-SHELBY COUNTY DEATH: When individuals suffer injuries in Shelby County but are transported for medical treatment to other counties and subsequently die, the SCCO will have jurisdiction over that decedent. The C/DC should speak with the hospital about the circumstances of the death and complete and ROD. If it is noted that the decedent should have an autopsy, normal procedures apply.

THE BASIC CORONER KIT

A minimum of equipment is necessary to perform a scene investigation. The following items are recommended to be immediately available when a coroner call is received to assist with performing and documenting the scene.

The single most useful piece of equipment to have is a digital camera. Photography provides a permanent visual record that can be used to enhance the written scene description. Scene photographs should be submitted to ALDFS whenever a body is sent for autopsy. When possible, and appropriate, photos should include a scale and/or ruled measure. The C/DC should not use their personal cell phones or tablets to document a scene or body. Personal cell phones or tablets can be hacked or, if not locked, photos or sensitive subject matter may be viewed by lay person(s) or unauthorized personnel.

- Portable laptop/Tablet
- Blank forms:
 - o ROD
 - o Sudden Unexplained Infant Death Investigation(SUIDI)
 - o Sudden Unexplained Child Death Investigation(SUCDIR)
 - o Medication Log
 - o Photo Sheet
 - o Receipt of Body
 - o Inventory Sheet
- Evidence packaging and Collection materials
- Blank Paper (for notes or diagramming)
- Clipboard and Pens, Sharpie markers
- Writable tags for body (ankle or wrist)
- Body bags – clean and unused
- Flashlight or penlight
- ABFO Scale or 6 inch Ruler
- Red Numbered Body Seals

- Metal measuring tape
- Personal Protection Equipment:
 - o Disposable gloves
 - o Mask (N-95 or better)
 - o Face shield
 - o Shoe covers
 - o Apron, disposable gown, or jumpsuit
 - o Hair cover
- Cotton or disposable sheet to wrap body to protect evidence when indicated
- Toxicology Supplies:
 - o 20 cc to 30cc plastic syringe
 - o Large bore needles
 - o Sharps container
 - o Various tubes for fluid and blood collection