**POLICY: PERFORMING FORENSIC EXAMINATIONS**

**Policy:** The pathologist is physically present for the internal examination and performs all autopsies and directly supervises all assistance rendered during postmortem examinations. The circumstances determining when complete or partial autopsies are performed and when external postmortem examinations are appropriate are listed here.

Complete autopsies (including examination of brain and neck) are performed in all deaths:

* suspected as the result of homicide, or apparent criminal violence
* all cases of suspected drug overdose, unless a significant interval has passed, and the medical findings and absence of trauma are well documented
* resulting from motor vehicle-related trauma; unless a significant interval has passed and the medical findings and traumatic injuries are well documented in the medical record.
* resulting from trauma in the workplace (with a preference for a complete autopsy of any natural death of law enforcement personnel, emergency responders and firefighters);
* unexpected natural deaths in an age not usually associated with cardiovascular death;
* non-natural deaths while in police custody (and a preference for performing a complete autopsy of any natural death occurring while in police custody);
* non-natural deaths while in custody of the Department of Corrections;
* when Public Health Officials need such information to assess threats to public health;
* when, after reviewing the death of a Department of Developmental Disabilities (DDS) client, an autopsy is requested by the Department or when otherwise necessary;
* upon request of the State's Attorney as described in C.G.S. 19a-413 (exhumation);
* when the office is responsible for signing the death certificate for whatever reason, and when a family requests an autopsy even in cases when one would not usually be done.
* The death is unexpected and unexplained in an infant or child.
* The body is unidentified and an autopsy may aid in identification.
* The body is charred.
* The forensic pathologist deems a forensic autopsy is necessary to determine cause and manner of death.

Partial autopsies are limited to cases where:

* a gunshot wound is obviously suicidal in nature, and the excision is to retrieve a bullet;
* the next of kin objects to a complete autopsy, but only after the pathologist is sure the objecting party understands the potential harm due to the lack of a complete autopsy.

External postmortem examinations are appropriate in deaths:

* by hanging or other forms of neck compression which are obviously suicidal and did not occur inside a psychiatric facility or while in criminal custody;
* of prolonged survival after traumatic injury and no criminal prosecution is anticipated;
* due to accidental trauma not inflicted by another person (i.e. falls) in elderly or compromised people;
* when the Office takes jurisdiction solely because a private physician is unavailable or refuses to sign the death certificate, or any natural death reasonably expected as due to known medical history or risk factors (including age).

**General Procedures:** The pathologist will:

1. Consider objection to complete autopsy based on religious beliefs after consulting with clergy, see also Objection to examination policy.
2. Review deaths involving DDS clients and persons in custody of Corrections (DOC) regardless of the nature of death.
3. Perform all dissections of removed organs. NOTE: Such dissection may be performed by a medical student or resident assigned to the Office, in accordance with C.G.S. Sec. 19a-404 (duties of CME) and within generally accepted practices of medical education, provided the physician judges the student/resident competent and provides constant, appropriate supervision. The dissection is directly observed by the pathologist of record.
4. Determine the need for special dissections or additional testing.
5. Review and interpret all laboratory results requested.
6. Review all ancillary and consultative reports requested.
7. Determine the manner and cause of death.
8. Create appropriate diagrams, notes and document findings in a comprehensive autopsy report.
9. Make noted records of correspondence in CaseManager system.

**Specific Procedures: EXTERNAL EXAMINATIONS**

1. For all autopsies, the pathologist documents evidence, the initial external appearance of the body, and its clothing and property items, and correlates alterations in these items with injury patterns on the body.
2. Preliminary procedures by the pathologist, (assisted by forensic technicians) include:

* Reviewing the circumstances of death prior to forensic autopsy.
* Measuring and recording body length and body weight.
* Examining the external aspects of the body before internal examination.
* Directing the taking of photographs (done by the photographer)
* Correlating clothing findings with injuries of the body
* Identifying and collecting trace evidence on clothing where appropriate.
* Removing clothing, and listing clothing and personal effects.
* Transferring personal property to the Processing Technician assigned to the case.

1. Describing the body's physical characteristics, to document identifying features or signs of disease and trauma or signs of death, includes:

* Documenting apparent age and establishing sex.
* Describing apparent race or racial characteristics
* Describing hair, eyes, and body habitus
* Documenting prominent scars, tattoos, skin lesions, and amputations
* Documenting dentition
* Inspecting and describing head, neck, thorax, abdomen, extremities, and hands.
* Inspecting and describing posterior body surface and genitals.
* Documenting evidence of medical or surgical intervention. c) Describing the postmortem changes includes:
* Describing Algor, livor, and rigor mortis.
* Describing evidence of embalming.
* Describing decomposition changes.

1. Specific procedures for cases of suspected sexual assault are necessary to determine if sexual assault occurred, to link multiple, apparently unrelated deaths, or to link the death to an assailant. Sample collection is performed according to the requirements of the State of Connecticut Crime Laboratory procedures. Procedures include:
2. Collecting swabs of oral, vaginal, and rectal cavities;
3. Collecting pubic hair combings or tape lifts and pubic and scalp hair exemplars;
4. Collecting fingernail scrapings or clippings;
5. Identifying and preserving foreign hairs, fibers, and biological evidence.
6. Specific procedures for documenting injuries are done to facilitate analysis of the nature of the object used to inflict the wounds, how the injuries were incurred, and whether the injuries were a result of an accident, homicide, or suicide. Procedures include:
7. Describing injury or injuries by type, locations, size, shape and pattern;
8. Photographing injuries unobstructed by blood, foreign matter, or clothing;
9. Photographing major injuries with a scale.
10. Specific procedures for cases of gunshot injuries require documentation of firearm wounds.
11. Describing injuries and measuring wound size.
12. Locating cutaneous wounds of the head, neck, or torso by measuring from either the top of head or sole of foot.
13. Locating cutaneous wounds of the head, neck, torso, or lower extremities by measuring from either the anterior or posterior midline.
14. Locate cutaneous wounds of the upper and lower extremities by measuring from anatomic landmarks.
15. Descriptively locating cutaneous wounds in an anatomic region.
16. Describing presence or absence of soot and stippling.
17. Describing presence of abrasion ring, searing, muzzle imprint, lacerations.
18. Procedures for cases of sharp force injuries require documentation to:
19. Describe wounds;
20. Measure each wound size;
21. Locate each wound in an anatomic region (if many wounds are present);
22. Locate wounds as described in cases for gunshot wounds (if few wounds are present).
23. Procedures for documenting burn injuries as listed below include describing the appearance and distribution of each burn.
24. Obtain samples for cultures (bacterial and viral), as appropriate for the case.
25. Procedures for documenting patterned injuries include:
26. Measuring injury size;
27. Describing the location of injuries;
28. Describing the injury pattern;
29. Swabbing recent or fresh bite marks to obtain samples for subsequent testing;
30. Obtaining necessary consultation where appropriate (e.g., forensic odonatologist for bite mark evaluation).

**Specific Procedures: INTERNAL EXAMINATIONS**

1. During the in-situ examination, the pathologist will examine the thoracic and abdominal cavities before and after the removal of organs so as to identify signs of disease, injury, and therapy. Procedures include:
2. Examining internal organs in situ.
3. Describing adhesions and abnormal fluids.
4. Documenting abnormal position of medical devices.
5. Describing evidence of surgery.
6. The major internal organs and viscera are examined after their removal.
7. The pathologist, or forensic technician under direct pathologist supervision and observation, or a student in a formal training program under direct pathologist supervision and observation, removes organs from cranial, thoracic, abdominal, and pelvic cavities.
8. The pathologist records measured weights of brain, heart, lungs, liver, spleen, and kidneys.
9. The pathologist dissects and describes organs.
10. The scalp and cranial contents are examined before and after the removal of the brain.
11. The pathologist inspects and describes the scalp, skull, and meninges.
12. The pathologist documents any epidural, subdural, or subarachnoid hemorrhage.
13. The pathologist inspects the brain *in situ* prior to removal and sectioning.
14. The pathologist shall document purulent material and abnormal fluids.
15. The pathologist, or forensic technician under direction and direct supervision of the pathologist, removes the dura mater and the forensic pathologist inspects the skull.
16. The muscles, soft tissues, airways, and vascular structures of the anterior neck are examined for evaluation of trauma to the anterior neck. A dissection of the posterior neck is necessary when occult neck injury is suspected. The pathologist or forensic technician under direct supervision of the pathologist:
17. Examines *in situ* muscles and soft tissues of the anterior neck;
18. Removes and examines neck organs and airways;
19. Dissects the posterior neck in cases of suspected occult neck injuries;
20. Performs anterior neck dissection in neck trauma cases.
21. Photographs the examination
22. To document any penetrating injuries, including gunshot and sharp force injuries, and to recover foreign bodies, the pathologist will:
23. correlate internal injury to external injury;
24. describe and document the track and direction of wound;
25. recover foreign bodies of evidentiary value
26. describe, document and secure/transfer the recovered foreign body
27. review relevant radiographs
28. To document any blunt impact injuries, the pathologist will:
29. Describe internal and external injuries with appropriate correlations.
30. Describe and document injuries to skeletal system.
31. Describe and document injuries to internal organs, structures, and soft tissue.