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TITLE: EVIDENCE COLLECTIN AND HANDLING

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Policy: Every effort should be made to comply with the collection of specific items requested by law enforcement personnel investigating the case

Purpose: To document chain of custody, all evidence collected by the Medical Examiner

Scope: The medical examiner or members of the homicide unit determine evidence collection

**1. Evidence Collection**

1.1. The medical examiner or members of the homicide unit determine evidence collection.

1.2. A photograph should be taken of the deceased as is before collection of specimens.

1.3. The medical examiner collects the evidence, after photographic documentation. Every effort should be made to comply with the collection of specific items requested by law enforcement personnel investigating the case.

1.4. The responsible police investigating unit should be called and advised of the timing of the autopsy. The call should be documented.

1.5. To document chain of custody, all evidence collected by the Medical Examiner is packaged and labeled with a case number, is released, and a form bearing signatures of the Medical Examiner and receiving police officer is generated specifying the date and time of release. This form is called an evidence receipt and is generated in FACTS.

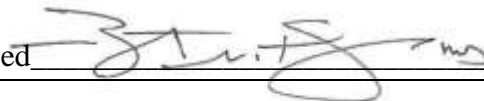
**2. Evidence**

2.1. Trace Evidence

2.1.1. Trace evidence is collected at the discretion of the medical examiner responsible for the case or at the request of law enforcement.

2.1.1.1. Cases for which trace evidence collection (e.g., hair, fingernails, orifices and other swabs) is performed include all cases of suspected sexual assault or other close contact with an assailant. Such evidence may also be collected in pedestrian deaths in which a substance (e.g., paint) may have been transferred from a vehicle or in substance abuse deaths involving inhalation (“huffing”) or body-packing.

2.1.1.2. Fiber, hair or other debris on hands or elsewhere on the body



surface is photographed in situ prior to removal of the body from the body bag to the autopsy table.

- 2.1.1.2.1. Alternate lighting sources may be used to facilitate identification of debris and/or other substances (i.e., semen).
- 2.1.1.3. Debris recovered is packaged and labeled with reference to the site of its recovery. It is advisable to look within the body bag for ballistic and other evidence that may remain in the bag after removal of the body to the autopsy table.
- 2.1.1.4. Bags on the hands are removed by the medical examiner or under his/her supervision prior to undressing or washing the body.
  - 2.1.1.4.1. The hands are photographed and any injury to nails documented prior to collection of fingernail clippings. To prevent cross-contamination, the fingernail clippings are obtained with metal clippers that have been sterilized and dried. The clippers are retained with the clippings of that case.
- 2.1.1.5. Hair samples (e.g., head-combed and pulled hairs, public combings and pulled hairs) and swabs (e.g., orifices, perineum, skin bearing suspected biological stains or overlying suspected bite marks) are obtained by the medical examiner prior to washing the body.
  - 2.1.1.5.1. Blood and in some cases saliva samples are obtained from the decedent as controls. Swabs are dried prior to packaging.

## 2.2. Weapons

- 2.2.1. Weapons are recovered by the investigating police officer or the MPD detectives assigned to the OCME. They are photographed prior to removal.

## 2.3. Ballistics

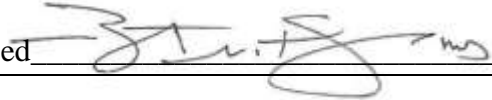
- 2.3.1. Ballistic evidence recovered at autopsy is photographed prior to packaging and labeled with the case number and site of recovery.
- 2.3.2. Plastic instruments are used to retrieve projectiles to avoid any damage.

## 2.4. Drugs

- 2.4.1. Drugs of abuse or paraphernalia found are submitted to MPD's Mobile Crime Unit officer present or are forwarded to the Toxicology laboratory of OCME in the absence of MPD

## 2.5. Medications

- 2.5.1. Medications are submitted to the Toxicology laboratory after documentation.



## 2.6. Clothing

- 2.6.1. Depending on the nature of the case, the clothing may be an item of evidence that is to be immediately surrendered to the Mobile Crime Officer.
- 2.6.2. Chain of custody is followed, evidence receipt or submission form filled. After unclothing the body is surveyed for any item of evidence (e.g., fiber, paint).
- 2.6.3. Clothing requested by the police should be first photographed on a clean sheet, and placed in appropriately labeled bags. It is advised that clothing evidence be dried prior to packaging and release.
- 2.6.4. The Mobile Crime Unit of MPD usually brings such collection bags to the autopsy suite.

## 2.7. Blood Samples

- 2.7.1. Blood samples are obtained from all cases.

## 2.8. Sex Assault Evidence Kit (SAEK)

- 2.8.1. SAEKs are collected by the MPD or appropriate Police officials for forensic analysis.

## 3. Tissue and Body Fluid Collection

- 3.1. All containers should be appropriately labeled.
- 3.2. Specimens collected for toxicology are placed in the appropriate plastic or glass tubes, placed in sealed plastic containers with signed requisition form and secured in the refrigerator for pick-up by the toxicology department.
- 3.3. Specimens received with the body from hospital should be labeled in such a way to preserve the identification label of the hospital.
- 3.4. Tissue swabs for culture are placed in the appropriate sterile containers, labeled, with the appropriate signed form.
- 3.5. Specimens for other examination are also collected according to the test desired and placed in the appropriate designated area for collection.
  - 3.5.1. A requisition form should accompany the specimen.
- 3.6. At the Medical Examiner's discretion, serum tubes may be obtained by collecting blood into serum separator tubes (speckled top tubes) and centrifuging for thirty minutes.

3.6.1. The centrifuge is located on the counter in the autopsy room.

3.7. For metabolic screening of infants, blood and bile should be placed on the appropriate spot as indicated in the requisition form.

3.7.1. The form should be filled with the required information as available, signed, placed in the envelope for shipping to the laboratory.

#### 4. Collection of Toxicology Specimens

4.1. Medical examiners should submit biological fluids and tissues to the Toxicology Unit to assist them in determining the cause and manner of death.

4.2. For routine autopsies, the following specimens should be collected at a minimum wherever possible:

4.2.1. 2 x femoral blood (or other peripheral blood) 2 x Heart blood (or other central blood)

4.2.2. 1 x Urine

4.2.3. 1 x Bile

4.2.4. 1 x Vitreous Humor 1 x Liver

4.2.5. 1 x Brain

4.2.6. 1 x Gastric Contents (total gastric volume should be noted)

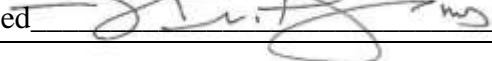
4.3. Other specimens can be collected at the discretion of the medical examiner.

4.3.1. In deaths associated with possible inhalation of toxic gases, airway and lung specimens are collected in containers suitable for headspace analysis.

4.4. Specimens are to be collected in the following containers:

Specimen	Location	Container*	Volume (Max)
Whole Blood	Femoral	VG	10 mL
	Iliac	VG	10 mL
	Subclavian	VG	10 mL
	Heart	VG	10 mL
	Aorta	VG	10 mL
	Central	VG	10 mL
	Peripheral	VG	10 mL
Blood (other)	e.g. chest cavity	VG	10 mL
Blood (other)	e.g. hematoma	VG or BP	10, 50 mL
Serum (spun down)	e.g. femoral	Tiger Top	10 mL
Urine		BP	50 mL
Bile		BP	50 mL
Vitreous Humor		VR	7 mL

Section 9: Evidence Collection and Handling

Approved 

Liver		BP	50 mL
Brain		BP	50 mL
Gastric Contents		BP	50 mL
Lung (and/or airway)		BP	50 mL
Cerebrospinal Fluid		VR	7 mL
Spleen		BP	50 mL
Kidney		BP	50 mL
Other (hair, muscle)		BP	50 mL
Other (bone)		Plastic bag	-

\*VG – Vacutainer Gray top; VR – Vacutainer Red top; BP – Blue Plasti top

- 4.5. Specimens must be individually collected, labeled with the correct decedent information (OCME case number, name of decedent, specimen type, the medical examiner initials, date collected, and the initials of the person collecting the specimen) and the site designation listed for any blood specimens.
- 4.6. Specimens should be placed in a labeled biological specimen bag, sealed, and placed in the small floor refrigerator labeled “Tox Refrigerator”. All specimens must be accompanied by a “Medical Examiner’s Evidence Submission Form”.
- 4.7. In cases of delayed deaths in hospitalized individuals, OCME should attempt to obtain the earliest available hospital specimen when appropriate.
- 4.8. Other evidence (medications, unknown substances, and drug paraphernalia) should only be submitted if it will assist in determining the cause and manner of death