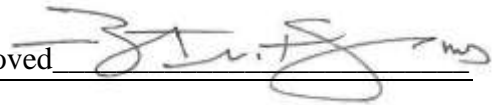


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TITLE: DNA IDENTIFICATION

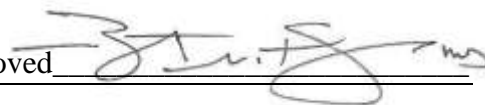
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- Policy:** The Office of the Chief Medical Examiner (OCME) is responsible for the positive identification of all decedents whose deaths are investigated pursuant to DC Code § 5-1403 and 1409.
- Purpose:** To ensure efficient and timely identification of decedents under the jurisdiction of OCME.
- Scope:** The following procedure is to assist the ID Unit and any OCME staff member involved in the identifications of a decedent.

## 1. DNA Identification

- 1.1. Antemortem DNA collections - A Family Reference Sample (FRS) is collected for identification purposes when finger prints, skeletal radiographs and dental radiographs are unavailable or fail to render a positive identification.
- 1.1.1.1. The FRS source is contacted to schedule an appointment to submit DNA.
  - 1.1.1.2. While speaking with the family, the best source of the FRS based on kinship is identified and that individual is asked to submit a DNA sample.
  - 1.1.1.3. The FRS donor is asked to bring a state or government issued photo identification.
  - 1.1.1.4. The ID Unit staff initiates the sample collection by copying the family members ID and having them complete the Decedent Survivor Form (see Section 2 above).
  - 1.1.1.5. The family completes the DNA Evidence Collection Consent Form (P:\MLI Investigations).
  - 1.1.1.6. A sampling kit (four sterile swabs and a swab box) is used to collect the buccal swabs.
  - 1.1.1.7. The FRS rubs each swab along the inside cheek of his/her mouth.
  - 1.1.1.8. The swabs are placed in the swab box. The swab box is labeled with the case number and sealed in an envelope labeled with a case number.
- 1.2. Postmortem DNA collection – A postmortem DNA sample is collected from the decedent.
- 1.2.1. When a decedent is received in a fresh state, a blood sample is collected.

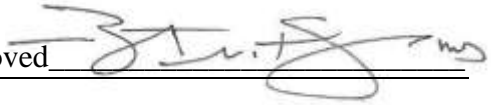
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- 1.2.1.1. The DNA stain card is retrieved from the Toxicology Laboratory. The Toxicology Laboratory chain of custody form is completed and a copy of the form and the stain card are received.
  - 1.2.1.2. If the decedent received a blood transfusion during a perimortem hospitalization, a buccal swab is collected.
  - 1.2.2. When the individual is in a moderate state of decomposition (articulated with non-desiccated flesh) skeletal muscle from an extremity and a metacarpal are collected.
  - 1.2.3. When the decedent is in an advanced state of decomposition (skeletal with or without desiccated flesh), the following items are sampled, when available.
    - 1.2.3.1.1. Two virgin molars (i.e., molars with no restorations). If virgin molars are unavailable alternate virgin teeth are collected.
    - 1.2.3.1.2. Two metacarpals or metatarsals.
    - 1.2.3.1.3. A rib (not a rib used for age estimation, if possible).
    - 1.2.3.1.4. A segment of a femoral shaft (preferably, mid-shaft). If unavailable, then a humeral shaft segment, followed by a smaller long bone.
    - 1.2.3.1.5. In absence of the above items or when only a few bones are recovered, at least two bone segments containing cortical bone are sampled.
  - 1.3. Submission of the DNA specimens – the FRS and DNA specimen are submitted to DFS Central Evidence Unit (CEU).
    - 1.3.1. The DFS Evidence Submission Form is completed and submitted with the specimen. A copy of the chain of custody form initiated by CFU is received and placed in the case file.
    - 1.3.2. In the absence of a FRS, the DNA specimen is submitted to the University of North Texas Center for Human Identification (UNT).
    - 1.3.3. The electronic UNT Unidentified Human Remains Submission Form is completed. Two hard copies of the form are made.
    - 1.3.4. The specimen is sent via FedEx to UNT with the submission form and the additional submission form copy is placed in the case chart.
    - 1.3.5. When DNA results are received, the Anthropologist:
      - 1.3.5.1. Reviews the results using the following Kinship Index categories
        - 1.3.5.1.1.1. ~1 – Uninformative
        - 1.3.5.1.1.2. 10-20 – Useful support
        - 1.3.5.1.1.3. 40-50 – Strong supportive evidence
        - 1.3.5.1.1.4. 1000 – Very powerful evidence
      - 1.3.5.2. For a Kinship Index of  $\geq 1000$ , updates the Identification page within FACTS and notifies the family of the identification.
        - 1.3.5.2.1. Method – (ID by DNA);

Section 11: Decedent Identification  
E: DNA Identification

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A handwritten signature in black ink, appearing to be "J. J. [unclear]", is written over a horizontal line.

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- 1.3.5.2.2. By Whom – (Laboratory name);
  - 1.3.5.2.3. Date & Time – (MM/DD/YYYY 00:00);
  - 1.3.5.2.4. NOK Form Signed? – (Not Applicable); and
  - 1.3.5.2.5. Grief Counseling Provided? – (No).
  - 1.3.5.2.6. Comment section:
    - 1.3.5.2.6.1. Staff's initials;
    - 1.3.5.2.6.2. Date and time of the family notification;
    - 1.3.5.2.6.3. To whom the ID Unit staff spoke.
  
  - 1.3.5.3. For Kinship Index  $\leq 999$ , notifies the case medical examiner to review the case.