

## **Unknowned Deceased**

### **Name of Procedure:**

Processing Hands/Feet of Unknown Deceased

### **Suggested Uses:**

This procedure is used to accomplish the proper handling, processing and examination of severed hands and/or feet of an unknown deceased individual.

### **Equipment Needed to Perform Procedures:**

A - Appropriate protective gloves (Numerous pairs)

B - Surgical mask

C - One (1) or more scalpel handles

D - Numerous scalpel blades (Various sizes)

E - Duplicast and catalyst

F - One (1) tube of printer's ink (Fingerprint ink)

G - Inking slab

H - Postmortem printing spoon and cards

I - Scale (or ruler) for use in photographs

### **Chemicals Needed For Preparation of Chemical Solution(s):**

A - Tissue builder and syringe(s)

B - Isopropyl

### **Formula/Directions for Preparation of Chemical Solution(s):**

Not Applicable

### **Processing Procedures for Application to Item(s) of Evidence:**

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**NOTE:** Although the terms hand(s), finger(s), and palm(s) are used throughout this procedure, the terms foot (feet), toe(s), or sole(s) may be interjected when appropriate.

1. Prepare the processing and examination area by placing clean paper in the biohood and on the counter space.
2. Set out all apparatus and supplies (See list above).
3. Wearing two (2) pair of protective gloves, a protective clothing, and a surgical mask, remove the container of hands from the refrigerator and place in sink.
4. Remove the hands from the container (leaving lid, container, and liquid in the sink), and rinse thoroughly with tap water.
5. Place the hands in the fume hood and allow them to air dry (After dry - continue to Step 6).
6. Examine each finger closely for significant ridge detail (Include palm area).
7. If significant ridge detail is present (See Step #17), record using printer's ink and postmortem spoon. Several copies of each finger are preferred at this point. Make certain to properly label each card.
8. If significant ridge detail is present on the palm area, record using printer's ink by applying ink to the palm of the hand and pressing onto plain bond paper.

**Note:** If clear prints are obtained, choose the best copy of each finger and palm and construct a 10 - print card. If not, continue:

9. If fingers and/or palms are shriveled, but ridge detail is present, inject tissue builder into the finger or palm with syringe. Injections should be made at the tip of the finger or side of the palm so as not to destroy any ridge detail. Inject only enough tissue builder to add pliability and restore finger or palm to approximate original state.
10. If Step #9 is successful, repeat Steps #7 and #8.
11. If injecting tissue builder is unsuccessful, proceed to STEP #12.
12. Remove as much ink as possible using alcohol and a soft bristle brush.
13. Rinse hands with tap water, place them in a fume hood and allow them to air dry. After dry - Continue to Step #14.
14. Using a scalpel handle and blade(s), remove layer(s) of skin from each finger and palm. Proceed slowly and carefully. Attempt to remove the friction ridge skin on the finger(s) and

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palm(s) in solid sheets or large pieces.

**Note:** Place each piece of skin in separate plastic bag (labeled) after gently “patting” dry with cloth.

15. Place each piece of skin on POS-1 using back-lighting and expose onto negative paper or film. LABEL each finished exposure.

**Note :** If clear prints are obtained, choose the best copy of each finger and palm and construct a 10-print card. If not, continue:

16. Using your gloved index finger or thumb place each piece of skin on your finger and apply printer’s ink, then attempt to roll legible impressions (Palms may also be printed in this manner).

**Note:** If clear prints are obtained, choose the best copy of each finger and palm and construct a 10-print card.

17. Using DUPLICAST to mold impressions of fingers and palms is successful only when significant ridge detail is present.

- a. Skin must be dry.
- b. Prepare DUPLICAST (According to manufacturers instructions - SEE PACKAGE) in sufficient amounts to mold only one or two finger impressions or one palm impression at a time. Impressions should be thin enough to be pliable, but thick enough not to tear when removing from the hands.

- c. If molding is successful, use Step #15 or Steps #7 and #8.

18. Return the hands to the container and seal. Attach plastic bags (containing skin) to container. Place the container and bags into the refrigerator.

### **Steps to Preserve Developed Impressions:**

The inked impressions or other methods which have been discussed are proper ways of preserving the impressions. The inked impressions may also be obtained and recorded through photography with the appropriate techniques utilized (See Photographic Equipment/Procedures) or electronic recording (See Image Processing).

### **Safety Concerns:**

Wear protective gloves, surgical mask and protective clothing at all times.

Hands from deceased individuals present the most severe biological hazard of any evidence processed in this section.

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All work on hands must be performed in the biohood.

Extreme caution should be exercised to protect yourself and others from infection. Any accidents (ESPECIALLY WITH SCALPEL BLADES) while performing this or any procedure should be reported to the Supervisor immediately.

Properly discard all materials used in the red biohazard bags and clean all work surfaces (including POS-1) with a 10% bleach solution.

DO NOT eat, drink, or smoke while performing this procedure.

### **Storage and Location of Chemicals and Solutions:**

Store all hands and fingers in a refrigerator in a sealed container until needed.

### **Shelf Life:**

Not Applicable

### **Other Information:**

Not Applicable