

Humanitarian Forensic Action Using a Holistic Anthropological Approach

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Introduction



Shifts in migration routes have resulted in record-breaking deaths in Maverick County, Texas creating a new epicenter of death. The Texas Criminal Code of Procedure (TCCP) mandates that all unidentified remains be investigated, fingerprinted, sampled for DNA, and tracked for a minimum of ten years. Due to the lack of resources and training, the degree to which Texas border counties are compliant with the TCCP varies, resulting in the burial of hundreds of unidentified persons without identification efforts.¹

Maverick County law enforcement does not take fingerprints or DNA prior to burial due to the overwhelming number of deaths that exceed local storage capacity, creating a mass disaster. To address this major issue, Operation Identification (OpID), a humanitarian initiative within the Forensic Anthropology Center at Texas State (FACTS) sought to fill this gap and help the county facilitate identifications through fingerprints. This presentation addresses the impact of community and capacity-building for the purpose of identification and repatriation so that the unidentified are not lost.

Training and Application of DVI methods

OpID personnel participated in a fingerprint training workshop taught by Bryan Johnson from the Federal Bureau of Investigation's (FBI's) Disaster Victim Identification (DVI) Unit on March 5 and 6, 2024.

The OpID team learned about the different methods of which to obtain fingerprints of decedents in various stages of advanced decomposition.

Following the training, the OpID team traveled to Maverick County's Emergency Operation Center (EOC) on March 7 and 8, 2024 to help collect and process fingerprints with the head of the FBI DVI Unit leading to the identification of **14 individuals** (Figures 1-2). Fingerprints were collected using various methods such as

- An automated fingerprint identification system
- Wearing the degloved epidermis
- Injecting liquids beneath the dermal tissue
- Submerging the hand into near-boiling water and printing the dermal ridges using fingerprint powder and adhesive lifters (Figure 3).^{2,3}

Following the initial trip to the Maverick County EOC, OpID collected fingerprints from 19 unidentified persons resulting in **14** identifications. For those not identified, DNA samples were taken and submitted to the University of North Texas Center for Human Identification (UNTCHI).

On November 12 and 14, 2024, Operation ID (OpID) and collaborators held a mass fatality preparedness and community-building workshop in Eagle Pass, Texas.



Figure 1. Maverick County's EOC.

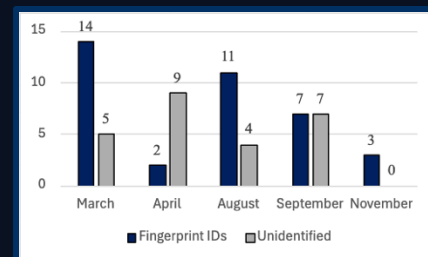


Figure 2. Fingerprint identifications from Maverick County, Texas.



Figure 3. OpID team members fingerprinting with fingerprint powder and adhesive lifters.



Figure 4. Participants of the DVI workshop.



Figure 5. The Director of Vadel Funeral Home and OpID and International Committee of the Red Cross (ICRC) team members working on a repatriation plan for identified decedents.



Figure 6. Participants of the DVI workshop.



Figure 7. OpID team members training Justices of the Peace during the DVI workshop.



Figure 8. Collaborator lecture portion of the DVI workshop.



Figure 9. Dr. Swenson dissecting left metatarsals of an unidentified decedent. These samples will be sent for DNA analysis. DNA results will be uploaded to the Combined DNA Index System (CODIS).

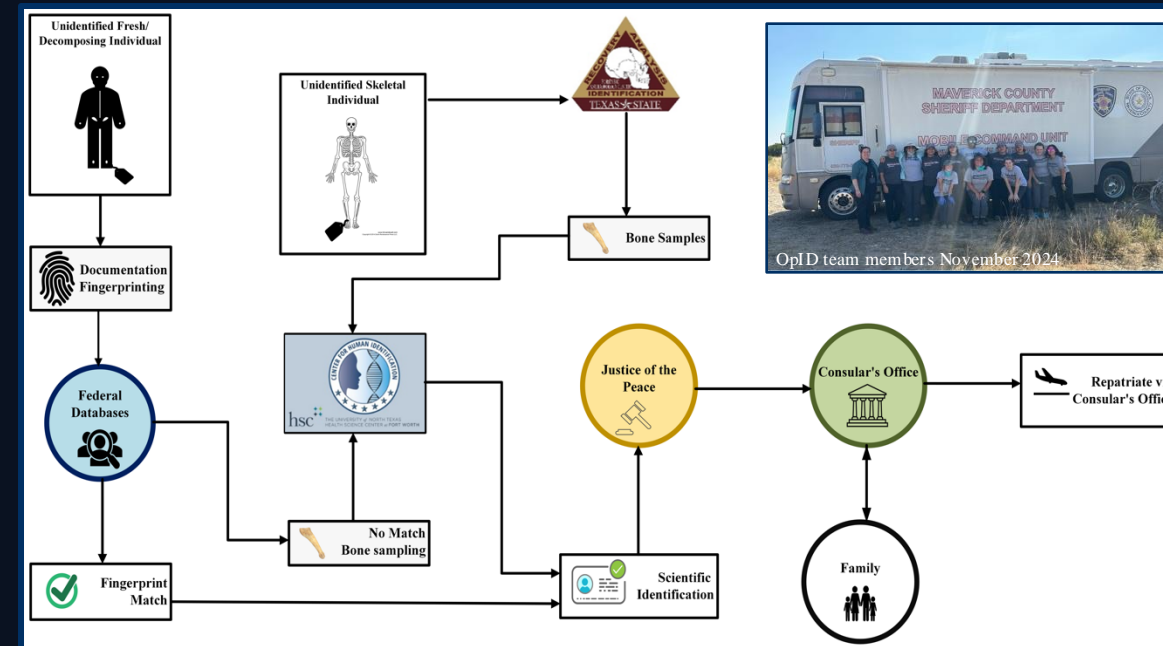


Figure 10. OpID remote case management triage.

Community-Based Solutions

With funding from the HHRRC, OpID personnel, members from the University of Texas, Rio Grande Valley (UTRGV), and the Eagle Pass Border Vigil Group hosted a postmortem fingerprinting workshop to emphasize the need for fingerprinting and DNA collection prior to burial of unidentified human remains during November 12 to 14, 2024 in Maverick County, Texas (Figure 4).

Attendees included Maverick County Justices of the Peace, U.S. Border Patrol Agents from the Missing Migrant Program, Maverick County Sheriff's Office, the South Texas Human Rights Center, International Committee of the Red Cross, Vadel Funeral Home, Mexican Consuls, Guatemalan Consuls, and members of the Texas Nicaraguan Community from Houston (Figures 5-7). This was one of the first times all collaborators involved in death investigation in Maverick County were in the same room discussing challenges and paths forward to better handle future mass disasters.

Scientific education and outreach included training on fingerprinting and triage protocol, lectures from the Argentine Forensic Anthropology Team (EAAF), Harris County Institute of Forensic Sciences, and OpID (Figures 8-10). Attendees of this workshop gained an understanding and significance of:

1. Ensuring identifications are made via scientific means
2. Traceability of case records
3. Fingerprinting techniques following various postmortem changes leading to the identification of **three unidentified decedents**
4. Documenting personal effects to help with the identification process
5. Strengthened relationships among collaborators

Discussion

Forensic anthropologists' roles are expanding beyond the biological profile, trauma analysis, and postmortem interval estimations to include case management especially for unidentified decedents. Implementing Disaster Victim Identification methods and education and outreach in jurisdictions struggling to manage unidentified persons cases has drastically improved death investigation practices in Maverick County.

References

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Acknowledgements

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