

Letter to the Editor

Revisiting Old Cases of Unidentified Decedents: Problems Encountered, Lessons Learned, and Suggestions for Others

Sir:

In conjunction with various working groups and the National Institute of Justice's newly developed NamUs program directed at improving the management of missing and unidentified deceased persons, we reviewed all of our long-term unidentified decedent cases dating back to 1970 (<http://www.NamUs.gov>, accessed December 15, 2007). In reviewing our 101 cases, we noted a variety of case-related problems that pose obstacles to identifying the remains in some cases. The following list is provided to assist others by giving examples of problems that may be encountered when reviewing old cases, as a list of things to avoid henceforth when managing new cases, and as a chance to offer suggestions for better case management.

We encountered one or more of the following problems in some occasional cases (especially older cases):

1. The method of notating cases of unidentified decedents in the database varied, using terms such as "UID," "Unidentified," "Human Bones," "John Doe," "Skeleton," and other variations. This made it difficult to easily find all cases of unidentified decedents. We now use "No Name Until ID" in all such cases and leave that entry as the person's name until identity is established.
2. In the pre-DNA era, county burials occurred and no bodily samples were retained. This fact, in conjunction with other problems described below, may preclude identification without exhuming the body. Before a body is buried, samples should be taken and undergo DNA profiling to ensure that a DNA profile is available before burial.
3. Skeletal remains were cooked to de-flesh them, degrading DNA and hampering the ability to do DNA profiling. Bones should not be cooked or de-fleshed until adequate samples have been obtained and undergone DNA profiling.
4. Original fingerprint cards, when prepared, were sent to the police department without keeping a copy, and the whereabouts of the prints are now not known and no print cards are in the medical examiner case folder to resubmit. We now prepare multiple fingerprint cards or ensure that we keep a copy of good enough quality that a classification can be made.
5. Autopsy reports contained general descriptions of the teeth but formal dental charting or X-rays were not always performed. Dental X-rays and charting should be performed on all cases before burial.
6. The only biological samples retained were paraffin-embedded tissue blocks on which attempts at DNA profiling have sometimes been unsuccessful, on occasion providing a mixed DNA profile. Appropriate samples for DNA profiling must be obtained prior to disposition of the body.
7. Clay facial reconstructions were done before formal dental charting was completed or verified requiring removal of the clay to do dental charts. Be sure to do the full dental workup before clay reconstructions are made.
8. Case folders were difficult to find because different people had them for different reasons. Keep all UID case folders in one place and remove them only when needed and replace them promptly after use.

9. The whereabouts of some remains were not well documented and some items were difficult to locate. We now store items in a common location and document the location of stored items.
10. Partial remains cases became commingled because multiple cases were stored in paper bags in a common box and the paper bags deteriorated. We now store items individually and in metal containers, when possible.
11. Labels became illegible because of condensation, or adhesive labels fell off of containers. We now label all samples in multiple ways, ensure that labels are placed inside of containers, and that containers are also labeled indelibly on the outside. Case numbers may be written directly on bones when needed.
12. Insects or rodents managed to penetrate containers causing damage to the items. We now use sealed metal containers to the extent possible.
13. Opinions of anthropologists as to decedent demographics varied in scope. This must be kept in mind when estimating the age of skeletal remains.
14. At the original time of case management, samples such as hair or blood were submitted to the crime laboratory which could have been used now for DNA profiling, but samples could not be located. Procedures should be in place to ensure that potentially useful specimens are safeguarded.
15. It was difficult to determine from the case folder if a case had been reported to the National Crime Information Center (NCIC). Once the chances for identification seem slim and traditional methods of identification cannot be employed or are unsuccessful, cases should be reported to NCIC and the Unidentified Decedent Reporting System, the latter of which allows public search capability (<http://identifyus.org>, accessed December 15, 2007).

Of interest, cases with only one or a few bones or fragments have been found in the same creek bed over a period of years. They have been carried as individual cases but DNA profiling has associated at least two of these cases. Even if identity cannot be established, relating two or more cases reduces the total number of unidentified decedents still in need of identification.

In 20 cases (20%), the ability to make an identification is limited or precluded because there was no sample to submit for DNA profiling (or DNA profiling was unsuccessful) and there is lacking fingerprint and dental information in the case file. All such cases occurred in 2004 or before, and all such cases between 1986 and 2004 involved infants or fetuses ($n = 4$), a single bone ($n = 1$), or bone or tooth fragments ($n = 3$) so that fingerprints or dental information could not be obtained or would be of little or no value. Between 1970 and 1986, there were 12 cases in which there were lacking fingerprints, dental information, and sample for DNA profiling. Thus, in most cases (80%), there remains hope that identification can be made using dental comparisons, physical characteristics, DNA testing, and resubmission of fingerprints. In about 20% of cases, especially older ones, identification seems unlikely.

Many death investigation offices will probably face similar dilemmas on old cases and will need to accept existing barriers to identification which resulted from past practices and untoward circumstances. Henceforth, however, it would be prudent to be aggressive, timely, and thorough in regard to the investigation of new cases, using standard procedures and best practices that are offered by professionals in the field.

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