A133 A Multiple Fatality Response to Nine Indigenous Deaths in a Burned House in Pikangikum, Ontario: Disaster Victim Identification (DVI)

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After attending this presentation, attendees will be better informed concerning the approach to DVI in a multiple fatality and will be aware of lessons learned from its application to a specific event from the hosts of the Triennial International Association of Forensic Sciences 2107 meeting, the Ontario Forensic Pathology Service (OFPS).

This presentation will impact the forensic science community by illustrating that a team or committee approach to identification in multiple fatalities utilizing evidence-based methods can be accomplished in a short timeframe. Early communication with all members of the team will ensure that the appropriate antemortem information is collected as soon as possible after the event. Finally, blinding of the postmortem team to existing antemortem information ensures that unbiased information is collected.

Nine family members died in a house fire on the Pikangikum Reserve, a remote Ojibwe community in Northern Ontario. While commingling of the remains at the scene was minimal, and what commingling existed was resolved by the forensic anthropologist at the scene and at postmortems, the remains were extensively thermally damaged and fragmented. Antemortem medical and dental records were only available at the reserve's nursing station on the reserve and had to be collected while the scene was being processed in order to be transported with the remains to Toronto for the purposes of identification.

The OFPS maintains a Multiple Fatality Plan with a section devoted to undertaking DVI. In large multiple fatalities, a clean copy of the Resolve Initiative database will be used. This database is used on a daily basis to compare unidentified remains and missing persons in Ontario and is a shared relational database used by members of the Resolve Initiative team at the OFPS and the Ontario Provincial Police (OPP). In smaller multiple fatalities, it has been practice to utilize Excel® spreadsheets, one each for antemortem and postmortem information. The spreadsheets contain available information and identifications are confirmed by a meeting of an Identification Committee prior to the release of the bodies to the families.

In this multiple fatality case, the anthropologists and pathologists provided information on age, sex, and antemortem medical findings to populate the postmortem spreadsheet. Another team carefully examined all of the medical records for each presumed decedent and populated another spreadsheet with pertinent information for identification. Police investigation in the community prior to removal of the bodies from the scene had confirmed that the decedent group was a closed population, as all other community members were accounted for. Although

there was an attempt to blind the collectors of the postmortem information to the antemortem information, some was shared, which resulted in an interesting case of confirmation bias. This was easily resolved, but it illustrated that it is a good practice to separate the antemortem information team findings from the postmortem team findings until they are formally reconciled by the Identification Committee.

When all of the postmortem and antemortem information had been compiled, the Identification Committee, which consisted of all members of the team, met to determine the final identifications. A combination of dental, medical, group biological, and exclusionary criteria was utilized for the evidence-based final positive identifications. Having a closed population permitted the use of exclusion criteria based on age so the decedents could be returned to the community in a timely manner without having to await DNA identification results.

Multiple Fatality/DVI, Identification Committee, Confirmation Bias