



F33 Blame Canada: Making Sense of Cross-Border Missing Persons/Found Human Remains Comparison Algorithms and Data Entry Forms

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After attending this presentation, attendees will become aware of the problems and the proposed solutions when using antemortem and postmortem dental data coded on Canadian forms as well as efforts to create a system where the U.S. missing person's forms and the Canadian missing person's forms and their corresponding postmortem forms can effectively communicate with one another.

This presentation will impact the forensic community by making people in North America aware of the profound differences in methods used to code, input data, and make comparisons in National coding databases. Further it will emphasize the importance of completing postmortem and antemortem forms and images in a fashion that can be coded with CJIS and the dental image repository respectively.

There are thousands of unidentified bodies in North America and many more reported missing persons. There have been several organizational attempts to match dental records of the missing persons to those of found human remains. The problem is compounded by the relatively porous border between the United States and Mexico and the free movement across the Canadian / U.S. border.

All dental search programs depend on search algorithms that in turn depend on reasonably accurate entry of antemortem dental information from the charts of missing persons onto standardized data collection forms and similar information coded onto postmortem data collection forms. Accuracy is lost when information is coded by dentists that are not trained to do so.

Currently, both antemortem and postmortem dental coding in Canada are not uniform. Some geographic locales use a form that codes only tooth present, tooth absent, tooth restored. Other geographic locales use a form similar in part to the present U.S. NCIC dental coding forms. In the latter, tooth surfaces restored are coded – in the former tooth surfaces are not coded. Even within Canada there are areas where antemortem coding uses surfaces of teeth as primary data points and postmortem coding where tooth surface information is not used – and vice versa. The problem is compounded by the use of the universal tooth-numbering system in the United States and the federation dentaire internationale F.D.I. in Canada and elsewhere. A solution is proposed wherein one antemortem dental coding form and another postmortem dental coding form that account for differences in dental nomenclature may be used in Canada. This form is optically and informationally similar to the existing NCIC forms and can be placed without modification on the U.S. dental database. It also gathers all data required by both jurisdictions. Examples of the forms will be provided and sample data from the Province of Ontario's existing found human remains database will be presented. This last item could easily mesh with the NCIC dental image repository.

Forensic Odontology, Unidentified Remains, Missing Persons