

## B38 Presumptive Casework and the Usefulness of a Prior Knowledge From Antemortem Data

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Participants will be given an overview of the use of ante mortem and post mortem data in the identification of mortal remains recovered from the former Yugoslavia. The use of DNA data will also be compared and contrasted and a discussion of causes of discrepancies between the two types of data will be conducted.

The mortal remains recovered from within the former Yugoslavia as a result of conflicts in the 1990s can be categorized as presumptive or non-presumptive cases. Presumptive remains are those in which circumstantial evidence or a priori knowledge of the conditions associated with the loss develops into a presumption of the identity of the individual. A lack or relative paucity of such information defines non-presumptive cases.

Presumptive cases primarily occur in two instances. The first is when documents or other personal possessions are discovered on recovered remains and can be used to make a preliminary identification. Related to this is visual recognition from family members of clothing, jewelry or other personal items. For these cases a bone sample is taken and DNA testing performed to ensure that the presumptive identification is correct. The second instance of presumptive identification occurs when local governmental authorities exhume an individual who had been buried by a relative, or in which there is eyewitness testimony as to the identity of the missing individual.

DNA testing has become increasingly common in aiding in the identification of recovered remains. The use of DNA testing in the identification process is expected to increase as the successes obtained by the International Commission on Missing Persons (ICMP) are reported throughout the region. The expectation is that a majority of recovered remains will be non-presumptive and therefore DNA testing will play a key role in many of these cases. In previous mass disasters such as plane and train crashes, ante mortem data has proven useful in the identification of victims. However, the situation in the former Yugoslavia is compounded due to the magnitude of the incidents, the nature of the

losses, and the time since the incidents occurred. However, the use of ante mortem/post mortem data comparisons as the primary basis for identification has been disappointing so say the least.

The ICMP performed DNA testing on several hundred cases in which a presumption of identity was established using the abovementioned criteria. The results of this DNA testing indicated that the presumption of identity was correct in approximately 55% of the cases, while incorrect in approximately 45% of the cases. These rather startling results warranted a review of the methods that led to the presumption of identity as well as an increased reliance on DNA testing. Since the ICMP had already developed a large-scale DNA capacity within the former Yugoslavia designed to test thousands of cases per year, the addition of such presumptive cases into the system does not place excessive strain on the DNA testing system, nor does it result in a significant delay in obtaining results. However, it does offer compelling proof or refutation of the identity of the individual. Nevertheless the a priori knowledge of ante and post mortem data from presumptive cases did often provide a strong lead in the identification process. For this reason, ante and post mortem data should not be dismissed as assuming key roles in any identification system, but the context and conditions in which they are used will directly influence their accuracy and reliability.

## DNA, Antemortem - Postmortem, Identification