



B12 Identification of the Missing From Srebrenica

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This presentation will discuss the difficulty of identifying remains recovered from the Srebrenica area that led to the development of a large-scale DNA testing effort and the results of this effort.

During July of 1995, an estimated 7,500–10,000 people went missing in the Podrinje region of eastern Bosnia and Herzegovina. This marks the single greatest loss of life event to occur in Europe since the end of World War II and the name of the largest city in this region, Srebrenica, is now associated with the deaths of thousands of individuals. The recovery and identification of these mortal remains is complicated due to the sheer number of missing as well as the conditions of the remains. As the front lines shifted during the later months of the war, the majority of primary mass graves were disturbed and the remains they contained moved and buried in secondary or, occasionally, in tertiary mass graves. This has resulted in a severe commingling situation in which the majority of bodies has been disarticulated and are frequently scattered over a geographic region. In addition, a significant number of bodies were never buried and were left exposed on the surface.

To date, the exhumation process of the missing from the Podrinje region that began in late 1996 has resulted in approximately 6,500 body bags of human remains. Of these, roughly 1,800 contain whole, intact bodies; another 1,950 contain partial bodies of one individual, with the rest comprised of commingled remains. While difficult to precisely state the number of missing, it is estimated that approximately 4,500–5,500 individuals are represented among these 6,500 body bags.

From the years 1996–2000, a total of 73 individuals who went missing from the Podrinje region were identified. Of these, 40 were identified without DNA testing while the remaining 33 required DNA testing for confirmation. This was a painfully slow process for the families of the missing and did not give hope that the majority of the missing would be identified. It was because of this failure of other forensic identification techniques that the ICMP (International Commission of Missing Persons) developed a large-scale testing strategy that would transform the emphasis of the identification effort into a DNA led process.

Beginning in early 2000, five blood collection centers were established throughout Bosnia and Herzegovina. These centers work with local authorities and family organizations to collect blood samples from the families of the missing. The first blood samples were collected in July of 2000 and, to date, more than 30,000 blood samples have been collected from throughout the region by ICMP teams. In addition, three DNA laboratories have also been established in Bosnia and Herzegovina with the first Bosnia DNA laboratory becoming operational in May of 2001. All DNA profiles obtained by these DNA laboratories are entered into the central DNA computer housed in Tuzla where the DNA matching program is housed. The first in-country DNA match occurred on November 16, 2001 and was of a 15-year-old boy who disappeared from Srebrenica in July of 1995. By the summer of 2002, approximately 100–150 DNA assisted identifications of the missing from Srebrenica occur each month. The vast majority of these are 'blind' hits, those that had no presumptive leads. Another benefit of using DNA testing on a large-scale is the ability to reassociate remains. While the current technology is not sufficient to fully reassociate bodies that have been completely disarticulated and commingled, there are multiple cases in which the upper and lower halves of bodies have been able to be rejoined, based on DNA profiles.

As this DNA led identification process proceeds, it also serves as a gauge as to the accuracy of other techniques as they were employed for Srebrenica. For example, initial family recognition of photographs of clothing and personal effects found on the bodies of the missing from Srebrenica were found to be incorrect more than 77% of the time. Indeed, even finding personal identification cards in the pockets of recovered remains was shown not to be correctly associated with the missing person in multiple cases. Ante/post mortem comparisons on such a large number of missing produced very few leads, and even fewer closed cases. Instead, it has been the successful development and operation of a large-scale DNA testing program that has led to increasing numbers of identifications of the missing from Srebrenica.

Human Identification, Srebrenica, DNA