

Just Leveraging Databases for Human Identification

Introduction [00:00:05] Now this is recording RTI International Center for Forensic Science Presents Just Science.

Voiceover [00:00:18] Welcome to Just Science, a podcast for justice professionals and anyone interested in learning more about forensic science, innovative technology, current research, and actionable strategies to improve the criminal justice system. In episode three of our Applications of Forensic Science for Human Identification season, Just Science sat down with Lori Bruski and Amy Jenkinson, two research public health analysts at RTI International to discuss inter-agency efforts to compile crime, missing persons and decedent information and comprehensive databases. In the digital age, criminal justice information can be uploaded into databases and organized in a searchable, centralized location, making it more accessible than ever. These government databases act as computerized indices of information that law enforcement, medicolegal death investigators, and in some cases, the general public can use, to help identify unknown human remains and resolve missing persons cases. Listen along as Lori and Amy discuss the different databases available, where to access them and how they can be leveraged for forensic science and human identification. This episode is funded by the National Institute of Justice's Forensic Technology Center of Excellence. Here's your host, Jaclynn McKay.

Jaclynn McKay [00:01:28] Hello and welcome to Just Science. I'm your host, Jaclynn McKay, with the Forensic Technology Center of Excellence, a program of the National Institute of Justice. Today, we will be discussing the application of databases to support identification of unknown remains and investigations of missing persons. Here to guide us in our discussion is Lori Bruski and Amy Jenkinson. Welcome to you both and thank you so much for joining us today.

Lori Bruski [00:01:53] Thank you for having us on today.

Amy Jenkinson [00:01:54] Thank you. Happy to be here.

Jaclynn McKay [00:01:56] So far in this season, we have talked about the various ways to get biometrics from individuals to help establish their identity. In this episode, I'd like to switch gears a little bit and discuss the various databases that are available to aid in investigations of a missing or unidentified person. Lori, could you provide our listeners with an overview of some of the databases available for use in these types of cases?

Lori Bruski [00:02:19] There are many national government databases out there that serve different functions. The primary databases in the United States for general missing and unidentified person systems would be National Crime Information Center or NCIC and the National Missing and Unidentified Person System or NamUs. Other large databases include the Violent Criminal Apprehension Program, or ViCAP, which is for those individuals who are believed to be victims of violent crimes, INTERPOL, for individuals missing in a foreign country or unidentified cases recovered that are believed that they could be an individual that had been visiting from a foreign country, and the National Center for Missing and Exploited Children, or NCMEC, which focuses specifically on missing juveniles. For biometrics there's also the Combined DNA System, or CODIS, which is the national database that houses and searches the DNA profiles related to missing and unidentified cases, and Next Generation Identification, or NGI, which houses and searches fingerprint images. You also find many more smaller databases in the United States for regional and local awareness and searching.

Jaclynn McKay [00:03:23] Thank you for that, Lori. Let's dive in a little bit more into NCIC. Can you explain how NCIC operates and how it can be used specifically for missing and unidentified persons?

Lori Bruski [00:03:34] NCIC is a system that was launched in 1967 by the Federal Bureau of Investigations and is managed by the Criminal Justice Information Services Division, or CJIS. The NCIC database is made up of multiple indices, including missing and unidentified persons, fugitives, stolen property and much, much more. The Missing Persons Index started in 1975 and the Unidentified Persons Index in 1983 with a future allowing of cross comparison between the two databases. In 1999, NCIC had a system upgrade that was released to allow for images and additional data fields. Criminal justice professionals can access NCIC 24/7, 365 days a year, and offline requests for historical records or transaction logs, which have been maintained since 1990, can be provided for investigative purposes. NCIC is a voluntary system for agencies, with each index having specific criteria for allowing agency data to be submitted. The only exception falls under Suzanne's Law and the Adam Walsh Act, which state missing persons under the age of 21 must be entered into NCIC within 2 hours of the report.

Jaclynn McKay [00:04:45] Lori, are there any special permissions needed to access NCIC, and is it only accessible by law enforcement?

Lori Bruski [00:04:52] NCIC is only accessible to criminal justice agencies, authorized by CJIS and through the state in which they operate for secure data transmission. This access is primarily restricted to law enforcement; however, medical examiners offices and tribal communities can request access.

Jaclynn McKay [00:05:09] Thank you for that. Switching gears a little bit, Amy, could you speak a little bit more in depth about ViCAP and how that database is used for missing and unidentified persons?

Amy Jenkinson [00:05:19] Sure, ViCAP is ran by the FBI and has been in existence since 1985 and it was established by the Department of Justice. ViCAP does stand for the Violent Crime Apprehension Program and is based out of Quantico, Virginia. ViCAP consists of homicides, attempted homicide, sexual assaults, missing and unidentified persons. There has to be a nexus of a violent crime. ViCAP has analysts that will create timelines, investigative lead matrixes and maps. In addition, they'll disseminate case information with ViCAP alerts to law enforcement. Their database uses an algorithm to identify potential linkages between cases by comparing relevant, similar attributes and generating a list of possible leads. Additionally, ViCAP is undertaking the Highway Serial Killer Initiative, which is also known as HSK to assist investigators with cases involving highway such as missing persons last seen along the highway or a location associated with the highway.

Jaclynn McKay [00:06:16] Do users have to be affiliated with law enforcement, and are there any special permissions that users need to have in order to access ViCAP?

Amy Jenkinson [00:06:25] Yes. In order to access ViCAP, they must be law enforcement affiliated. Typically, an agency will have a ViCAP manager that will oversee the cases for the agency and to access ViCAP, the law enforcement user will need to register a LEEP account, which is the Law Enforcement Enterprise Portal, and they can access that through the CJIS website, which is the Criminal Justice Information System. From there,

they can access the ViCAP database where they can collect, enter and analyze their own cases on a local, state and national level.

Jaclynn McKay [00:06:55] That's really interesting. I worked for law enforcement for several years and surprisingly have never heard about the ViCAP database. If law enforcement officers wanted to learn more about it and how to access it, is there any specific places they should look?

Amy Jenkinson [00:07:10] Law enforcement can reach out to the ViCAP analyst for assistance or to NamUs for assistance with accessing the system. If the professional is the medical examiner or a coroner, then the law enforcement agency will need to assist case entry on behalf of the ME's office. The medical examiner's offices cannot access ViCAP because it's only accessible for law enforcement. They can go to the CJIS website, and they can access ViCAP through there, or again, they can reach out to one of us to assist them.

Jaclynn McKay [00:07:38] Switching gears to our last database that we're going to talk about. Lori, could you explain how NamUs operates and what type of information it stores?

Lori Bruski [00:07:48] NamUs system was created and maintained by the National Institute of Justice and is a national repository for missing unidentified and unclaimed persons cases. The system is currently managed by RTI International. The NamUs program consists of a case management system, case comparisons, the advanced searching as well as a public level for information sharing. The NamUs system has three different databases; the unidentified persons database, which launched in 2007 and includes unidentified living as well as unidentified decedent records. The missing persons database, which launched in 2008, and the unclaimed persons database, which launched in 2010 and is comprised of known individuals in which their identity has been confirmed but next of kin has not been located. The NamUs database was redesigned in 2018 to allow more robust searches, enhanced features and additional data collection fields. This case management system includes investigative and physical descriptors of the case, biometric information, images and reports. In addition, the NamUs program provides funding for DNA testing, forensic odontology, fingerprint services and facilitation of forensic genetic genealogy services. NamUs also provides analytical support to the investigating agencies to assist in locating next of kin, possible family members for DNA collection, searching for possible proof of life or death, and much more by utilizing criminal justice and public data sources. Case entry into NamUs is voluntary, except for states that have legislative requirements. The internal requirements for NamUs is that there must be an open missing persons case and the agencies must provide NamUs staff authorization for publication.

Jaclynn McKay [00:09:36] Lori is the NamUs database open to the public and medicolegal death investigators as well as law enforcement?

Lori Bruski [00:09:42] Yes. Anyone worldwide can search the public interface of NamUs us to view the published missing, unidentified and unclaimed person cases. In addition, U.S. individuals can register in the system to enter missing persons cases, track cases of interest and utilize advanced searches. Finally, registered professional users include law enforcement, medical examiners, coroners, medicolegal death investigators, and forensic specialists who can manage and securely upload case information directly.

Jaclynn McKay [00:10:14] If a user wanted more information on NamUs and how to access the database, where should they look?

Lori Bruski [00:10:20] Anyone interested in exploring the NamUs system or registering as a user can go to NamUs.nij.ojp.gov

Jaclynn McKay [00:10:30] Since NamUs is has a public user component, can you describe what the user registration is like?

Amy Jenkinson [00:10:36] Yes. So, anyone can access NamUs, however, for professional access they must be employed with a law enforcement agency, a medical examiner's office, or a coroner's office. The user can go to the NamUs.gov website and click the registration button. From there, they will select the appropriate type of user, such as law enforcement or medical examiner. They will then provide their agency information and a sponsor, which should be someone within their agency, such as a supervisor that can verify and confirm their position within the agency. It's important for the user to know they cannot self-sponsor themselves. They should choose a criminal justice professional within the agency that can verify their position and give permission to have access to NamUs and the case sensitive information.

Jaclynn McKay [00:11:18] So we talked a lot about NCIC, ViCAP and NamUs and how each database is applicable to missing and unidentified persons and the investigations. So when thinking about the future from a database standpoint, are there any changes or advancements that could help better facilitate investigations of unidentified or missing persons? And are there any other types of databases that the field could benefit from?

Lori Bruski [00:11:47] I personally believe in the proverb "It takes a village" and just as multiple individuals are involved in each of these cases working towards a resolution, it also requires those individuals to utilize these databases. For the village to truly assist, I really think we need to ensure that these cases are submitted to all applicable federal databases. I think the more that the information is shared, the more these families will receive some answers they desperately seek.

Jaclynn McKay [00:12:14] Amy, do you have anything to add to that?

Amy Jenkinson [00:12:17] Basically, what Lori said, I think it's imperative that law enforcement establish and maintain a cold case unit and apply these resources that are available to them and ensuring the cases are entered into all applicable systems to to aid the families and to help with case resolution.

Jaclynn McKay [00:12:33] For links to the databases and resources discussed today you can check out the episode's landing page. Lori and Amy, thank you for speaking with us today and for sharing your insight. This discussion has been very informative.

Lori Bruski [00:12:45] You're very welcome, Jaclynn. It was wonderful chatting with you both today.

Jaclynn McKay [00:12:48] If you enjoyed today's episode, be sure to like and follow Just Science on your platform of choice. For more information on today's topic and resources in the forensics field, visit ForensicCOE.org. I'm Jaclyn McKay and this has been another episode of Just Science.

Voiceover [00:13:07] Next week, Just Science sits down with Katharine Pope, Dr. Bruce Anderson and Joe Mullins to discuss forensic art and anthropology. Opinions or points of views expressed in this podcast represent the consensus of the authors and do not necessarily represent the official position or policies of its funding.