

---

## E15 Johannesburg Identification Unit: Identifying the Unidentified Deceased at a South African Medicolegal Mortuary

*Craig A. Keyes, MS\*, University of the Witwatersrand, Johannesburg, Gauteng 2193, SOUTH AFRICA; Trisha-Jean Mahon, MSc, International Committee of the Red Cross, Geneva 1202, SWITZERLAND; Allison Gilbert, MSc, University of the Witwatersrand, Johannesburg 2000, SOUTH AFRICA*

---

**Learning Overview:** The goal of this presentation is to introduce attendees to the work being performed by the Johannesburg Forensic Pathology Service, which is legally mandated to perform postmortem examinations on all cases of unnatural deaths in the greater Johannesburg metropolitan area in South Africa.

**Impact on the Forensic Science Community:** This presentation will impact the forensic science community by reporting the results of the Johannesburg Identification Unit over the period of January 2018–July 2020. The following data is presented: the total number of unidentified decedents, their demographics, the frequency of successful primary identifier collection, the number of subsequent positive identifications, and the nationality of positively identified decedents.

Unidentified decedents can comprise up to 10.0% of the total number of annual admissions at this medicolegal mortuary. These decedents are given a state-sponsored burial (“pauper burial”) without an identity, which has serious legal, humanitarian, and financial implications. To address these multiple aspects, the Johannesburg Identification Unit was pioneered in 2016 through a collaborative effort between the International Committee of the Red Cross, the Gauteng Southern Cluster Forensic Pathology Services, the University of the Witwatersrand, and the Victim Identification Center of the South African Police Services. The Unit’s role is to perform secondary examinations for identification purposes. This examination involves collecting various secondary identifiers, DNA samples, taking photographic and radiographic images and fingerprints; and using the expertise of various specialists.

Over a period of 31 months, a total of 8,560 medicolegal autopsies were performed at the Johannesburg Forensic Pathology Service. Unidentified decedents comprised 8.1% ( $n=693$ ) of all cases, which is an average of 22.4 unidentified decedents admitted to this medicolegal mortuary per month (excluding skeletonized remains, neonates, and non-viable fetuses). The Johannesburg Identification Unit documented postmortem data from 385 (55.6%) unidentified individuals during this period, of which the demographics comprised mostly of adult (100%), Black (94.5%) males (91.7%). Samples for DNA analysis were successfully collected from most cases in the form of hair (96.4%;  $n=371$ ), blood (92.2%;  $n=355$ ), and nails (90.1%;  $n=347$ ). Through the multidisciplinary approach toward identification and the efforts of the Johannesburg Identification Unit, 87 persons (22.6%) were subsequently positively identified. Fingerprinting was the most successful method of identification (98.9% of cases;  $n=86$ ) that was collected, either completely or partially, from 65.5% of the unidentified cases ( $n=252$ ). A single positive identification was facilitated through DNA analysis. The nationality of over half of the positively identified decedents was confirmed to be South African (52.9%;  $n=46$ ) and, in 36.8%, the nationality was not known. Of the remaining positively identified individuals, their nationalities were confirmed to be from other African countries, namely: Zimbabwe (5.7%), Uganda (1.1%), Mozambique (1.1%), Malawi (1.1%), and Sudan (1.1%). Collecting as much postmortem data to aid in an eventual identification ensures that unidentified decedents are treated with dignity and respect. Through the collaborative efforts of all the agencies involved, the impact of the work of this Unit is vast—not only for South African authorities but, most importantly, for families.

The Johannesburg Identification Unit is also providing training and workshops to other forensic pathology facilities in South Africa, which adopt and adapt the program to their individual facility’s identification challenges and resources. It is hoped that such a program can be expanded to other countries within Africa.

---

### Unidentified, Migrants, South Africa