

## SCREENING PEDIATRIC AUTOPSY CASES AT THE 'FRONT-END'

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### OBJECTIVE

To determine if information in the Coroner's Warrant and police information can be used to effectively screen pediatric cases prior to autopsy.

### METHOD

The central Coroner's files for 45 consecutive pediatric autopsies from 2005 were reviewed. The Coroner's Warrant and police information was used to *pre-classify* the cases into four classes: undifferentiated, natural death; accidental death; and homicide. The classification established using gestalt assessment, rather than specific parameters or criteria. After the classification, the autopsy report, determinations of the Death Under 5 Committee, and supplementary investigative documents were used to ascertain the final certification.

The control group was 58 consecutive adult autopsies from Toronto from 2005. The approach was the same, but the accidental death group was expanded to accidental/suicidal death.

### RESULTS

One case in the pediatric group was pre-classified as homicide and was certified as homicide. One case was pre-classified as an accidental death and was certified as accident. Twenty cases were pre-classified as natural deaths and were confirmed as natural deaths.

A total of 25 cases were pre-classified as undifferentiated deaths. Of these cases, 17 cases were classified as undetermined deaths, with 6 cases certified as natural, and 2 cases certified as accident. In the group of 17 cases that were pre-classified as undifferentiated, four cases had significant forensic findings at autopsy (maternal transfer of cocaine in a neonate, unresolved issues surrounding livebirth in a neonate found dead in a box, unexplained malnutrition, and unexplained injuries).

The adult control group consisted of 58 cases. Of these cases, all the cases that were pre-classified as a homicide, accident/suicide or natural death were certified as such ( $n = 38$ , 66%). A total of 20 cases were pre-classified as undifferentiated. These cases were certified as natural or undetermined deaths (six cases, each) and eight accident/suicide deaths.

### CONCLUSION<sup>1</sup>

In pediatric cases, 56% of the cases were pre-classified as undifferentiated and 38% of cases remained undetermined deaths, despite autopsy and death investigation. In the adults, 34% of the cases were pre-classified as undifferentiated, but only 10% of the cases remained undetermined deaths after autopsy.

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<sup>1</sup> Clearly, the sample size in the pediatric group was not large enough to capture undifferentiated cases that would ultimately be classified as homicide.