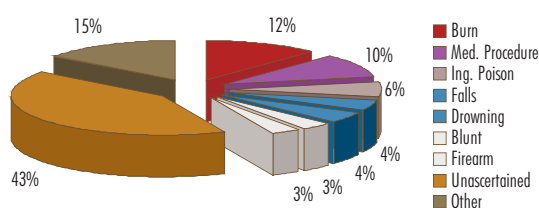


CHAPTER 9. UNDETERMINED MANNER OF DEATH

Compiled by Christine Harris

The external causes of death for the 2263 cases where the manner of death was classified as undetermined (Figure 39) accounted for 8.9% of all deaths recorded in the NIMSS database. The main external causes of death in the undetermined category were burns, medical procedure, ingested poison, falls, drowning, blunt object injuries, firearm injuries and cases where the cause of death could not be ascertained at all.

Figure 39. External causes, undetermined manner of death, 2001 (N = 2263).



Internationally, undetermined deaths account for between 5% and 10% of all non-natural deaths. Although the autopsy is the gold standard in assessing the cause of death, it is by no means infallible. There is a small group of cases (so-called 'negative autopsies') in which no obvious cause of death is apparent after detailed initial external and internal examination.

The incidence of negative autopsies is approximately 5-10%. This figure improves to about 5% when special tests such as postmortem chemistry and microbiology are carried out. According to Knight,⁹ a higher rate of negative autopsies originate from more experienced pathologists than from juniors. When no anatomical lesion or biochemical toxicological/microbiological abnormality can be demonstrated, the cause of death must be worded to emphasise this uncertainty. We favour the terms 'no specific anatomical cause of death found at autopsy' or 'unascertained'.

9.1 UNDETERMINED MANNER OF DEATH BY SEX

Higher percentages of male deaths from firearms, blunt injuries, ingested poison and drowning were undetermined, whereas in females higher percentages of deaths from medical procedures, burns and falls was undetermined. The external causes of death with the highest percentage of cases that were recorded as undetermined were deaths due to medical procedures (88%), poisoning by ingestion

(23%), and burns (22%). Table XVII shows the percentage of deaths that were undetermined for different external causes of death, by sex.

Table XVII. External cause of undetermined manner of death, by sex, 2001.

	No. of cases			% of total external causes that were undetermined		
	Male	Female	Total	Male	Female	Total
Burn	156	111	270*	22%	22%	22%
Medical procedure	114	107	221	87%	90%	88%
Ingested poison	81	51	134*	24%	21%	23%
Falls	70	26	98*	19%	19%	19%
Drowning	79	15	94	18%	13%	17%
Blunt	68	10	78	5%	3%	5%
Firearm	64	5	70*	1%	1%	1%
Other	790	392	1300	4%	8%	5%

*The total number of deaths is greater than the sum of male and female deaths, since the sex of the deceased could not always be determined during the postmortem examination.

9.2 UNDETERMINED MANNER OF DEATH BY AGE

The most noticeable feature of the age distribution for undetermined non-natural deaths is the large number of deaths in the very young and very old age categories (see Figure 2e in Chapter 3).

In order to reduce the percentage of undetermined deaths in the NIMSS database it will be important to reach consensus with forensic pathologists and medical examiners as to how the deaths are coded. Data recorded in the NIMSS do not have any medico-legal implications and as such, forensic pathologists and medical examiners should be free to interpret the evidence and define the death as an unintentional death or due to homicide or suicide. Deaths due to medical procedures are an obvious example, since the medico-legal interpretation is that if malpractice is suspected the doctor could be subject to a culpable homicide investigation. However, it is unlikely that the doctors' intention was to cause injury or death, and for prevention purposes the death could more accurately be described as an 'accident' or 'unintentional injury' death. Similarly, with the external cause or circumstance of injury, the forensic pathologists must be encouraged to use the NIMSS definitions, as these are geared towards prevention. For example, since there are no pathognomonic signs of drowning at autopsy, the forensic pathologist would not write down the cause of death as 'drowning' but rather as 'Consistent with history of drowning' or some variation of this formula. While this is technically correct, grouping these deaths together as drowning is more useful for prevention agencies.

⁹ Knight B. 1990. Forensic Pathology. London: Edward Arnold, pp. 44-46