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**INJURY DEATHS: ARE WE MISSING A MATERIAL NUMBER OF CASES?**

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**Background** As in other countries, many of the New Zealand (NZ) national fatal injury indicators are derived from the underlying cause of death (UCoD) as captured in the national Mortality Collection (MC). Recent work in NZ, similar to work in Sweden and Australia, has exposed apparent contradictions between hospital data and the MC: for many of the injury cases that died in hospital, the UCoD recorded on the MC was a medical cause.

**Aim** To investigate the current and alternative methods of identifying injury deaths.

**Methods** NZ hospital discharges, with a principal diagnosis (PDx) of injury, were linked to the MC. Gross mismatches between PDx and the UCoD were described for people injured in the period 2000–2004, by selected variables (eg, age, sex, external cause, intent, PDx). Taking cognisance of (1) WHO coding rules for mortality, (2) definitions of injury death used by injury epidemiologists and (3) identified mismatches, alternative definitions of injury death were proposed.

**Results** Of the 1713 people discharged from hospital with an injury PDx who died within 7 days of their injury, 39% did not have an injury UCoD. Of the 5900 who died within 3 months of their injury, the corresponding figure was 66%. There was variation in the percentage with non-injury UCoD by age, sex, external cause, intent and PDx.

**Conclusion** Alternative theoretical and operational definitions of injury death are clearly needed. Definitions that capture relevant cases for epidemiologists, prevention practitioners and policy makers have been proposed.