## 31 ACUTE POISONING FATALITIES AND HOSPITALISATIONS AMONG CHILDREN AND YOUTH IN NEW ZEALAND

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**Background** Globally, poisoning accounts for a significant proportion of deaths among children and young people aged 0–24 years. However, few studies have examined changes in the epidemiologic characteristics across this age group and explored the particular features that could inform targeted intervention strategies.

**Aim** To determine demographic patterns and substances related to acute poisoning fatalities and hospital admissions among children (0–14 years) and youth (15–24 years) in New Zealand.

**Methods** Using the national mortality (1999–2008) and morbidity (2000–2009) databases compiled by the New Zealand Ministry of Health, ICD external cause data corresponding to relevant poisoning events were extracted and analysed.

**Results** During the 10-year period, 286 fatalities and 15 626 primary hospital admissions accounted for mean annual rates of 2.0 and 108.6/100 000 young people aged 0–24 years, respectively. Over half of the deaths and hospitalisations were due to intentional poisoning which occurred mainly among youth aged 15–24 years. Most unintentional poisoning hospitalisations were among children aged less than 5 years. In general, young people of European and Maori ethnicities and those residing in socio-economically deprived neighbourhoods were over-represented among poisoning events. While most deaths were due to carbon monoxide toxicity, most hospitalisations for poisonings were due to pharmacological drugs.

**Significance** The burden of poisoning among young people in New Zealand is substantial with important differences in related demographic and injury characteristics. Age-specific prevention strategies targeting exposure to carbon monoxide and pharmacological drugs and suicide prevention strategies more generally require particular attention.

The leading cause of infant and under 5-years' child burn mortality was contact with hot drinks and foods (31.6%, 45.6%) in 2009. According to the study report of Mongolia, the median age of child death of burn was 3.0. Therefore child burn is the public health priority issues that need comprehensive policies and measures in order to reduce the incidence of child burn in Mongolia. The aim of the study was to determine the incidence of child burn among Ulaanbaatar. The study involved a total number of 793 children of 711 families from the Ulaanbaatar, randomly. The age range was 0–5, of which 50.7% were boys. A total of 51.3% attend in daycare centres. 17.9% of the total surveyed children were injured within the last year, of which 8.1% were resulted from burns. A total of 83.3% of burned children were at home when accidents happened. Only 41.7% of the surveyed family members stated that the children burned themselves. The family members were asked during the survey: 'what to do when your child gets burned'. Out of the total, 38.7% indicated that they would treat it by soap, 49.1% by sugar, 39.6% by blood of dogs, and of which 51% would treat by raw meat. This study identified that almost all of these burn incidents occurred in environment among the children under 5 years old. This study concludes that the family members have inadequate knowledge about child accident prevention programme and the first-aid treatment.