

Paediatric trauma in the Midland Region 2018

1,157 Children

aged 00-14 Years were admitted to Midland DHB hospitals in 2018 due to traumatic injury



1,311 Admissions

= 25 admissions every week

Injury severity

Major* trauma: 28 (2.4%)
Non-Major trauma: 1,129 (97.6%)

*Major trauma = ISS (Injury Severity Score) > 12
Non-Major admitted trauma = ISS < 13

Gender

Female: 467 (40.3%)
Male: 690 (59.7%)

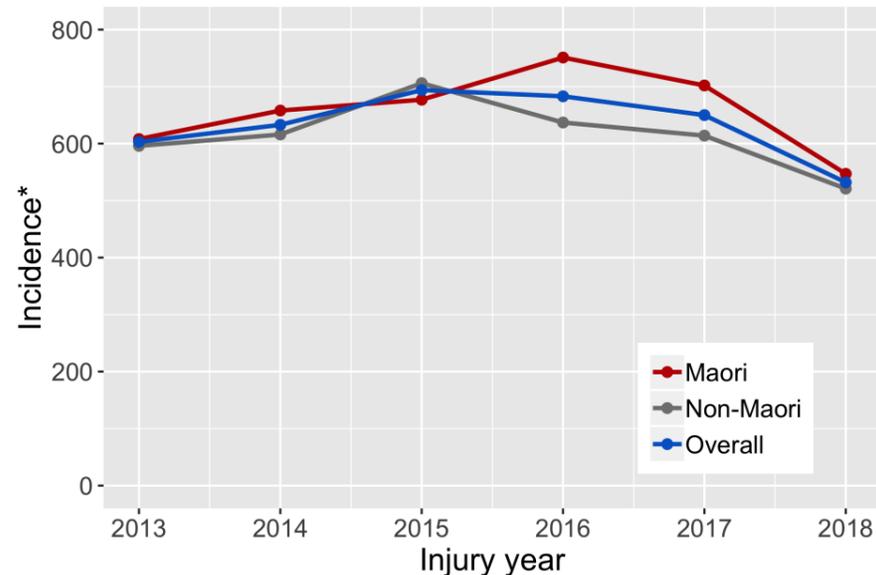
Age groups

0-4 Years: 396 (34.2%)
5-9 Years: 392 (33.8%)
10-14 Years: 369 (32.0%)
Average age: 6.8 Years

Equity

Māori: 470 (40.6%)
NZ European: 529 (45.7%)
Pacific Island: 49 (4.2%)
Other: 108 (9.5%)

Trends



*Incidence = Events/100,000 population per year, all events are Midland domiciled. Population source: MoH projections, age and ethnicity matched.

Causes of injury



Top 6:
Falls, various: 587 (50.7%)
Struck, unintentional: 121 (10.5%)
Crushed*: 71 (6.1%)
Pushbike: 66 (5.7%)
Burns: 61 (5.3%)
Road traffic crash: 41 (3.5%)

*Crush injuries include those due to being caught, crushed, or pinched in or between objects.

Places of injury



Top 6:
Home: 504 (43.6%)
Public admin area/school: 216 (18.7%)
Sports area: 132 (11.4%)
Road: 71 (6.1%)
Farm: 43 (3.7%)
Sidewalk: 27 (2.3%)

Care and outcomes



Ave. time in ED: 243 mins (Median 219 mins)
Major trauma: 278 mins (Median 235 mins)
Non-Major trauma: 242 mins (Median 218 mins)



Total bed days: 2,554
Major trauma: 159 Days (6.2%)
Non-Major trauma: 2,395 Days (93.8%)



Ave. length of stay: 1.95 Days (Median 1 Day)
Major trauma: 4.1 Days (Median 2 Days)
Non-Major trauma: 1.9 Days (Median 1 Day)

12 Patients transferred to Starship Hospital
Survived: 1,155 (99.83%) | Died: 2 (0.17%)
Case Fatality Rate: 0.17%

Key messages

- Over one thousand one hundred children were admitted to Midland DHB hospitals in 2018 as a result of injury. Approximately sixty percent of these were male, 41% were Māori, and the average age of admitted patients was 6.8 years.

- The overall incidence of admitted paediatric trauma, as well as for Māori and Non-Māori, in the Midland Region has declined over the last two years which is encouraging. Further research by MTS will aim to identify the main factors contributing to this decline.

- Falls remain an overwhelming cause of injury related admission among children in all age groups. 50% of these occur in the home and are spread relatively evenly throughout all ages. A large number of unintentional struck injuries are sports related. Injuries in the home are largely 0-4 years old. As observed in previous years, a large proportion of injuries in the 10-14 year age range occur at school or other public admin areas. Injuries incurred in sports areas increase steadily from age 9 years upwards.

- Children with Major trauma (ISS > 12) spend on average 4.6 hours in ED (Emergency Department) before being admitted. Length of stay is variable but does increase with severity. However, 94% of the total 2,554 admitted bed days were from Non-Major trauma cases. Two children died as a result of their injuries.

For further information regarding Registry inclusion criteria please visit: www.midlandtrauma.nz