Breakdown of Māori Statistics from the:

New Plymouth District Community Injury Prevention Needs Assessment 2011

Prepared for



by

Caroline Maskill

lan Hodges

Velma McClellan

March 2012

Health*Search* Ltd

Injury deaths among Māori and non-Māori

In 2004–2008, Māori had 2.4 times the average annual age-standardised injury death rates of non-Māori (74 per 100,000 population compared with 31 per 100,000) (appendix table 3.7). Of the 31 Māori people fatally injured in 2004–2008, 9 died as a result of transport accidents and 7 by intentional self-harm (table 3.8). Altogether, nearly one-third of Māori injury deaths (10 of 31) were from intentional injury (either self-harm or assault).

Table 3.8

Causes of Injury Deaths (ranked)

New Plymouth District, by ethnic group and ICD-10 E-Code Five years 2004–2008 combined

| Māori | | non-Māori | | |
|--|-----|--|-----|--|
| Injury description | No. | Injury description | No. | |
| V00-V99 Transport accidents | 9 | X60-X84 Intentional self-harm | 37 | |
| X60-X84 Intentional self-harm | 7 | W00-W19 Falls | | |
| W00-W19 Falls | 4 | V00-V99 Transport accidents | | |
| X85-Y09 Assault | 3 | X40-X49 Accidental poisoning by and exposure to noxious substances | 5 | |
| W65-W74 Accidental drowning and submersion | 2 | W65-W74 Accidental drowning and submersion | | |
| X40-X49 Accidental poisoning by and exposure to noxious substances | 2 | X85-Y09 Assault | 4 | |
| W20-W49 Exposure to inanimate mechanical forces | 1 | W75-W84 Other accidental threats to breathing | 2 | |
| W75-W84 Other accidental threats to breathing | 1 | W85-W99 Exposure to electric current, radiation, & extreme ambient air pressure | 2 | |
| X30-X39 Exposure to forces of nature | 1 | W20-W49 Exposure to inanimate mechanical forces | | |
| Y85-Y87 Sequelae of transport, other accidents, intentional self-harm, assault and events of undetermined intent | 1 | W50-W64 Exposure to animate mechanical forces | | |
| Total injury deaths 2004–2008 | 31 | X50-X57 Over-exertion, travel and privation | 1 | |
| | | X58-X59 Accidental exposure to other and unspecified factors | 1 | |
| | | Y10-Y34 Event of undetermined intent | 1 | |
| | | Y85-Y87 Sequelae of transport, other accidents, intentional self-harm, assault and events of undetermined intent | 1 | |
| | | Total injury deaths 2004–2008 | 123 | |

Source: Data supplied by Ministry of Health.

Note: Years are calendar years 1 January to 31 December.

Data for 2008 is provisional.

The leading non-Māori injury death cause was intentional self-harm, followed closely by falls and transport accidents. Similar to Māori, 33% of non-Māori injury deaths (41 of 123) were from intentional injury (either self-harm or assault). However, reflecting the older age profile of New Plymouth District's non-Māori population, falls caused 26% of non-Māori injury deaths but just 13% of Māori injury deaths.

Injury hospitalisations for Māori and non-Māori

From 2006–2010, 1,034 New Plymouth District Māori and 7,115 New Plymouth District non-Māori were hospitalised for injury. During this period, Māori had slightly higher age-standardised average annual rates of injury hospitalisation (2,287 per 100,000 population) than non-Māori (2,024 per 100,000 population) (appendix table 4.6).

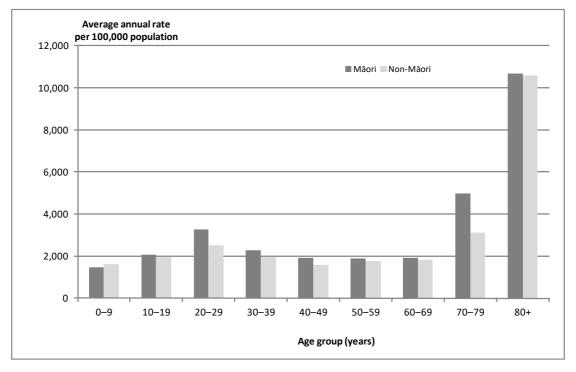
A comparison of age-specific rates of injury hospitalisation for local Māori and non-Māori residents shows which groups were more likely to be hospitalised because of injury.

In all age groups except 0–9, Māori had higher or slightly higher injury hospitalisation rates than non-Māori (figure 4.3). The biggest rate differences between Māori and non-Māori were in the 20–29 and 70–79 age groups.

Figure 4.3

Rate of Injury Hospitalisation

New Plymouth District, by age and ethnic group Five years 2006–2010 combined



Source: Data supplied by Ministry of Health. Data in appendix table 4.6.

Note: Years are calendar years 1 January to 31 December.

Rates calculated using Statistics NZ 2006 Census data for New Plymouth District.

For both Māori and non-Māori, falls, exposure to inanimate mechanical forces and transport accidents were the three commonest causes of injury hospitalisations (table 4.16). Falls made up a bigger share of non-Māori injury hospitalisations at least in part because this population group is comparatively older than the Māori group (see previous demographic section).

Table 4.16

Causes of Injury Hospitalisation, Māori and Non-Māori (ranked)

New Plymouth District, by ICD-10 E-Code Five years 2006–2010 combined

| Māori | | | Non-Māori | Non-Māori | | | |
|--|-----------|-------------|---|-----------|-------------|--|--|
| Injury description | No. | Perc ent | Injury description | No. | Perc ent | | |
| W00-W19 Falls | 316 | 30.6 | W00-W19 Falls | 3,07 1 | 43.2 | | |
| W20-W49 Exposure to inanimate mechanical forces | 172 | 16.6 | W20-W49 Exposure to inanimate mechanical forces | 1019 | 14.3 | | |
| V00-V99 Transport accidents | 121 | 11.7 | V00-V99 Transport accidents | 992 | 13.9 | | |
| X85-Y09 Assault | 84 | 8.1 | X60-X84 Intentional self-harm | 432 | 6.1 | | |
| X60-X84 Intentional self-harm | 83 | 8.0 | X50-X57 Over-exertion, travel and privation | 304 | 4.3 | | |
| W50-W64 Exposure to animate mechanical forces | 61 | 5.9 | Y85-Y87 Sequelae of transport, other accidents, intentional self-harm, assault and events of undetermined | 290 | 4.1 | | |
| Y85-Y87 Sequelae of transport, other accidents, intentional self-harm, assault and events of | 45 | 4.4 | W50-W64 Exposure to animate mechanical forces | 250 | 3.5 | | |
| X40-X49 Accidental poisoning by and exposure to noxious | 37 | 3.6 | X58-X59 Accidental exposure to other and unspecified factors | 200 | 2.8 | | |
| X50-X57 Over-exertion, travel and privation | 33 | 3.2 | X85-Y09 Assault | 166 | 2.3 | | |
| X58-X59 Accidental exposure to other and unspecified factors | 32 | 3.1 | X40-X49 Accidental poisoning by and exposure to noxious substances | 128 | 1.8 | | |
| Y10-Y34 Event of undetermined intent | 19 | 1.8 | Y10-Y34 Event of undetermined intent | 85 | 1.2 | | |
| X10-X19 Contact with heat and hot substances | 13 | 1.3 | X00-X09 Exposure to smoke, fire and flames | 52 | 0.7 | | |
| W75-W84 Other accidental threats to breathing | 7 | 0.7 | X10-X19 Contact with heat and hot substances | 50 | 0.7 | | |
| X00-X09 Exposure to smoke, fire and flames | 4 | 0.4 | W75-W84 Other accidental threats to breathing | 44 | 0.6 | | |
| W65-W74 Accidental drowning and submersion | 2 | 0.2 | X20-X29 Contact with venomous animals or plants | 16 | 0.2 | | |
| X20-X29 Contact with venomous animals or plants | 2 | 0.2 | W65-W74 Accidental drowning and submersion | 7 | 0.1 | | |
| X30-X39 Exposure to forces of nature | 2 | 0.2 | W85-W99 Exposure to electric current, radiation, & extreme ambient | | 0.1 | | |
| W85-W99 Exposure to electric current, radiation, & extreme | 1 | 0.1 | X30-X39 Exposure to forces of nature | | 0.1 | | |
| Y35-Y36 Legal intervention and operations of war | 0 | 0.0 | Y35-Y36 Legal intervention and operations of war | | 0.0 | | |
| Total injury hospitalisations 2006–2010 | 1,03 4 | 100.0 | Total injury hospitalisations 2006– 2010 | 7,11 5 | 100.0 | | |

Source: Data supplied by Ministry of Health. Data in appendix tables 4.5 and 4.6.

Note: Years are calendar years 1 January to 31 December.

For New Plymouth District Māori, the proportion of injury hospitalisations caused by falls was slightly higher in 2006–2010 compared to 2001–2005 (31% versus 28%) (McClellan et al 2006).

For non-Māori, the proportion of injury hospitalisations caused by falls in 2006–2010 and 2001–2005 was the same – 43%.

Similarly, over the two time periods there was very little change in the proportion of injury hospitalisations caused by transport accidents, either for Māori or non-Māori.

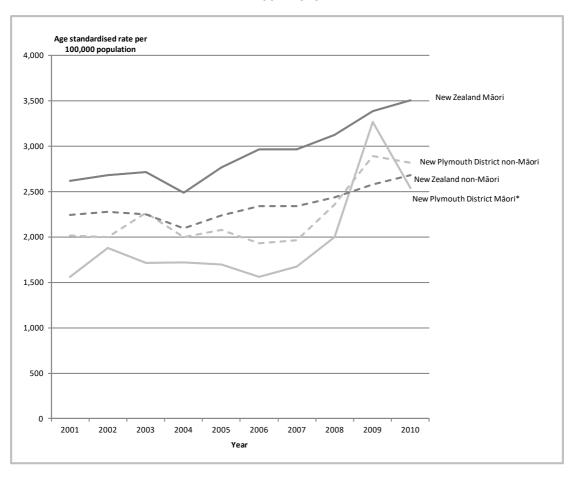
Trends in injury hospitalisations for Māori and non-Māori

Looking at annual trends in injury hospitalisations for Māori and non-Māori over the period 2001–2010, there was an overall increase in age-standardised rates for both New Plymouth District and New Zealand as a whole (figure 4.25).

Figure 4.25
Injury Hospitalisation for Māori and non-Māori – age-standardised rates

New Plymouth District and New Zealand

2001–2010



Source: Data supplied by Ministry of Health. Data in appendix table 4.13.

Note: Years are calendar years 1 January to 31 December.

*Caution: some age-specific rates for this group are based on relatively small numbers.

Until 2008, injury hospitalisation rates for New Plymouth District Māori were less than for local non- Māori.

In addition, compared with New Zealand Māori, New Plymouth District Māori had considerably lower rates of hospitalisation for injury until 2009 when their rates increased steeply and almost reached the national average. In 2010 the injury hospitalisation rate for local Māori decreased to become again considerably lower than the rate for all Māori in New Zealand.

From 2001–2007, age-standardised rates for injury hospitalisations among New Plymouth District non-Māori were somewhat lower than the national average for non-Māori, although the gap in rates was not as wide as it was for Māori.

In 2008, the rates for New Plymouth District non-Māori increased to reach almost national levels and in 2009 peaked at above the rate for New Zealand. In 2010 there was a slight decline in the rate for local non-Māori, but it was still slightly above the national average.

Emergency Department Visits

Māori and non-Māori

Māori living in New Plymouth District made 1,276 emergency department visits for injury in 2010. This was 17% of all emergency department visits for injury. Non-Māori made 6,264 ED visits for injury (appendix table 5.4).1

Almost two-thirds (65%) of injury visits by Māori were by males. This was a total of 832 visits by Māori males. Māori females made 444 injury visits.

For non- Māori, 57% of ED injury visits were for males and 43% were for females.

Fifty-nine percent of all emergency department visits for injury by New Plymouth District Māori were children and young people aged 0–24 years, a total of 750 visits.

Looking at population rates (figure 5.3 overleaf), Māori males aged 20–24 were the most likely to visit EDs for injury (31,594 visits per 100,000 population), followed by Māori males aged 80 or more (25,000 visits per 100,000 population).

Among Māori females, those aged 80 or more were the most likely to visit an emergency department for injury (19,444 visits per 100,000 population), followed by 20–24 year olds (16,817 visits per 100,000 population) and 25–29 year olds (13,084 visits per 100,000 population).

Overall, Māori males were more likely than Māori females to make an ED visit for injury in all age groups except 70–79.

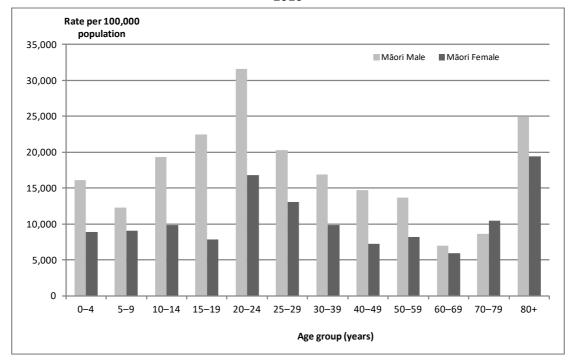
Māori had higher age-standardised rates of ED visits for injury (13,442 per 100,000 population) than non- Māori (11,946 per 100,000).

^{1 126} people did not have their ethnic group recorded.

Figure 5.3

Māori Rate of Emergency Department Attendance for Injury

New Plymouth District, by age and gender 2010



Source: Data supplied by Taranaki District Health Board. Data in appendix table 5.5

Note: Year is calendar year 1 January to 31 December.

Information is for attendances at Taranaki District Health Board emergency departments at Taranaki Base and Hawera hospitals by people living in New Plymouth District. Excludes private accident and emergency clinics.

ACC Entitlement Claims

Ethnicity

In 2010/11, of the 1,930 new entitlement claims for accident injury in New Plymouth District, 1,627 or 84% were for European / Pakeha people. Eleven percent were for Māori people and 4% were for people of other ethnicities (for details see appendix table 6.4).

Comparing age-standardised claim rates per 100,000 population in 2010/11, the rate for New Plymouth District Māori was slightly lower than for non-Māori (2,292 per 100,000 vs. 2,742 per 100,000). Nationally, new claim rates for Māori were also lower than for non-Māori (2,033 per 100,000 vs. 2,352 per 100,000) (appendix table 6.5).

Road Transport Accidents

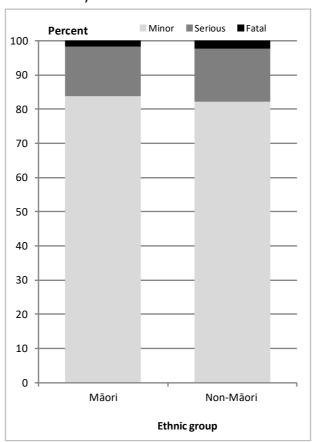
Māori and non-Māori casualties

The proportions of minor, serious and fatal road injuries sustained by Māori were quite similar to non-Māori (figure 7.7). For example, 14% of Māori road crash casualties in New Plymouth District were seriously injured compared to 15% of non-Māori casualties.

Figure 7.7

Māori and non-Māori Injury Road Casualties

New Plymouth District Five years 2006–2010 combined



Sources: New Zealand Transport Agency 2010, unpublished data for 2010 supplied by New Zealand Transport Agency.

Data in appendix table 7.7.

Note: Years are calendar years 1 January to 31 December.

Casualties = number of people injured in crashes (can be more than one per crash). Fatal = death within 30 days of the crash.

Serious = fractures, concussion, internal injuries, crushing, severe cuts / lacerations, severe general shock needing medical treatment, injuries needing hospital treatment.

Minor = non-serious injuries requiring first aid, or that cause discomfort or pain e.g. sprains or bruises.

Chart excludes casualties with unknown ethnic group.

The largest proportion of Māori road injury casualties was aged 20–29 (29%, see figure 7.8). The second largest was aged 10–19 (26%). Thus well over half of all New Plymouth District's Māori road injury casualties were young people.

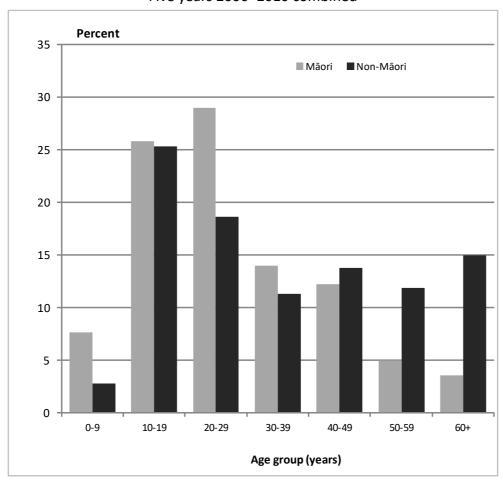
Compared to non-Māori, it was much more common for Māori aged 20–29 to be road injury casualties. It was uncommon for them to be aged 50 or more. In part this is because the district's Māori population has proportionately more young people and fewer older people in it than the non-Māori population (see chapter 2).

Figure 7.8

Māori and non-Māori Injury Road Casualties

New Plymouth District, by age

Five years 2006–2010 combined



Sources: New Zealand Transport Agency 2010, unpublished data for 2010 supplied by New Zealand Transport Agency.

Data in appendix table 7.8.

Note: Years are calendar years 1 January to 31 December.

Casualties = number of people injured in crashes (can be more than one per crash).

Chart excludes casualties with unknown ethnic group and/or unknown age.