Road Safety Among Indigenous Australians: A Statistical Profile

3rd Indigenous Road Safety Forum
Broome, Western Australia
23–25 October 2006
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BROOME, 23 – 25 OCTOBER 2006
This broad profile of road safety among Indigenous Australians was prepared as a discussion paper for the 3rd Indigenous Road Safety Forum and Working Group held in Broome, 23 – 25 October 2006. It comprises two sections:

2. A comparative profile of crash types for Indigenous and non-Indigenous road fatalities in the Northern Territory, based on coronial data held in the Australian Transport Safety Bureau (ATSB) Fatal Road Crash Database.

1. DEMOGRAPHIC PROFILE OF INDIGENOUS ROAD FATALITIES

This section presents a demographic profile of road crash deaths among Indigenous Australians over the four calendar year period 1999 – 2002. The analysis is based on fatality counts obtained from Australian Bureau of Statistics (ABS) mortality data.

The ABS data are based on information recorded on death certificates. A uniform question is now used Australia-wide for recording Indigenous status on death certificates: “Was the deceased of Aboriginal or Torres Strait Islander Origin?”

The ABS counts are known to understate Indigenous deaths\(^1\). The person completing the certificate (usually a doctor or funeral director) may not know if the deceased was of Indigenous status, and may be reluctant or unable to ask the relatives. ABS estimates of Indigenous deaths based on census data and life tables indicate that mortality statistics have probably identified only 55 to 60 per cent of Indigenous deaths nationwide from all causes over the period covered here (about 85-90 per cent in the Northern Territory, about 70 per cent in Western Australia and about 55 per cent in Queensland). The ABS counts may also contain inaccuracies due to differing definitions of a ‘road crash’ and from inclusion of deaths outside the standard requirement of death within 30 days of the crash.

1.1 ABS registered fatality counts

Figure 1 shows Indigenous road deaths registered Australia-wide between 1999 and 2002.

![Figure 1: Indigenous road fatalities by year, Australia, 1999-2002](source: ABS)

\(^1\) ABS Deaths 3302.0
Figure 2 aggregates data for four years to show counts of Indigenous road deaths registered in each state and territory.

![Figure 2: Indigenous road fatalities by state/territory, Australia, 1999-2002](image)

Source: ABS

In the Northern Territory and Queensland alternative Indigenous road fatality counts are available from information recorded on police crash reports, and the ATSB has been provided with these counts for recent years by the Northern Territory Department of Planning and Infrastructure and by Queensland Transport.

In Table 1 these counts are compared with the corresponding ABS counts.

### Table 1: Comparison between Indigenous road fatality counts obtained from police crash reports and ABS mortality statistics - NT and Queensland

<table>
<thead>
<tr>
<th>Source</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northern Territory</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Police count</td>
<td>17</td>
<td>18</td>
<td>25</td>
<td>28</td>
<td>25</td>
<td>17</td>
<td>24</td>
</tr>
<tr>
<td>ABS</td>
<td>10</td>
<td>17</td>
<td>22</td>
<td>25</td>
<td>na</td>
<td>na</td>
<td>na</td>
</tr>
<tr>
<td>Queensland</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Police count</td>
<td>0</td>
<td>4</td>
<td>4</td>
<td>17</td>
<td>9</td>
<td>15</td>
<td>14</td>
</tr>
<tr>
<td>ABS</td>
<td>7</td>
<td>16</td>
<td>10</td>
<td>13</td>
<td>na</td>
<td>na</td>
<td>na</td>
</tr>
</tbody>
</table>

* ABS data record the year of registration, whereas Police crash data show the year of the crash.
1.2 Fatality rates

Figure 3 shows the average annual road fatality rates for the Indigenous and non-Indigenous populations in each state and territory over the four calendar year period 1999 – 2002.

The rates are based on (i) ABS mortality statistics\(^2\) (ii) the ATSB monthly road crash database\(^3\) and (iii) the estimated Australian population and ‘experimental’ estimates of the Indigenous population during 1999 – 2002 obtained from ABS demographic statistics\(^4\).

![Figure 3: Average annual road fatality rate per 100 000 population 1999-2002](image)

In may be seen from Figure 3 that:

- Australia-wide, between 1999 and 2002, there was an annual average of 16.0 deaths per 100,000 Indigenous population. This compares with an average of 8.9 deaths per 100,000 non-Indigenous population.
- The national Indigenous per-capita road fatality rate is 1.80 times that of the non-Indigenous population.
- Based on the level of under-identification estimated to exist nationally in ABS Indigenous mortality statistics for all causes of death, the national Indigenous road fatality rate may be closer to three times the national rate for the non-Indigenous population.
- Substantial discrepancies are apparent among jurisdictions in the extent to which the Indigenous rate exceeds the non-Indigenous rate.

\(^2\) Obtained by request from ABS
\(^4\) ABS Australian Demographic Statistics 3101.0
Figure 4 shows average annual rates for total transport accident deaths for Indigenous and non-Indigenous populations over the period 2001 – 2004.

Although this figure includes non-road transport deaths, it utilises more recent data than Figure 3.

The rates in Figure 4 are based on (i) Indigenous and non-Indigenous transport accident deaths during 2001 – 2004\(^5\) and (ii) the Australian population and ‘experimental’ projections (high series) of the Indigenous population from ABS demographic statistics.

As can be seen in Figure 4, for jurisdictions with available published data, the rate of transport deaths for Indigenous people is significantly higher than for non-Indigenous people.

\(^5\) ABS Causes of Death 3303.0
1.3 Road user profile

Figure 5 compares the road user profile of Indigenous fatalities between 1999 and 2002 with that of non-Indigenous fatalities. It is apparent that:

- pedestrians comprised a much larger proportion of Indigenous road deaths than of non-Indigenous deaths

- Indigenous road deaths featured a correspondingly-lower representation of drivers but not a lower representation of passengers (which perhaps reflects higher vehicle occupancy levels in the Indigenous population).

Source: ABS
1.4 Gender profile

Figure 6 presents the average annual road fatality rates for Indigenous and non-Indigenous males and females over the four calendar year period 1999 – 2002. It shows elevated rates for both Indigenous males and Indigenous females.

![Figure 6: Average annual road fatalities per 100,000 population, by ethnicity and gender, Australia, 1999-2002](source: ABS)

Figure 7 presents the average gender profile over the four calendar year period 1999 – 2002 for each major road user group of Indigenous fatalities.

This gender profile is very similar to that observed for all Australian road fatalities, with females featuring more prominently among passenger fatalities than among driver and pedestrian fatalities.

![Figure 7: Gender profile of Indigenous road fatalities, by road user group, Australia, 1999-2002](source: ABS)
2. CRASH TYPES AND RISK FACTORS IN INDIGENOUS ROAD FATALITIES IN THE NORTHERN TERRITORY

This section presents a profile of crash types and risk factors for Indigenous road deaths in the Northern Territory over the four calendar year period 1998 – 2001.

This material derives from the latest available years of the ATSB’s Fatal Road Crash Database, compiled from coronial documents sourced Australia-wide each year.

The identification of the Indigenous status of road deaths included in the database is reliant on the extent to which Indigenous status is mentioned in the coronial documents. The present analysis has been restricted to the Northern Territory as it is only in that jurisdiction that coronial documentation for the years concerned provided reliable identification of Indigenous status. This section is based on a small number of database records (see Table 2). The percentages in the following graphs are indicative of possible relationships, rather than being definitive.

2.1 Crash types

As shown in Table 2, two crash types predominate in Indigenous road deaths in the Northern Territory - collisions with pedestrians and single-vehicle crashes.

Table 2: Indigenous Fatalities, by Crash Type, Northern Territory, 1998-2001

<table>
<thead>
<tr>
<th>Crash Type</th>
<th>Frequency</th>
<th>per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single-Vehicle</td>
<td>44</td>
<td>51%</td>
</tr>
<tr>
<td>Multiple-Vehicle</td>
<td>4</td>
<td>5%</td>
</tr>
<tr>
<td>Pedestrian</td>
<td>38</td>
<td>44%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>86</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Source: ATSB

Figure 8 below shows the collision type resulting in Indigenous pedestrian deaths in the Northern Territory. It can be seen that a large percentage of the fatalities involved people who had been standing or lying on the carriageway.

Figure 8: Indigenous pedestrian fatalities, by collision type, Northern Territory, 1998-2001

Source: ATSB
Table 3 shows that the majority of fatal collisions with Indigenous pedestrians in the Northern Territory between 1998 and 2001 occurred in urban locations.

Table 3: Location of Fatal Collisions with Indigenous Pedestrians, Northern Territory, 1998-2001

<table>
<thead>
<tr>
<th>Location</th>
<th>Frequency</th>
<th>per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>25</td>
<td>66%</td>
</tr>
<tr>
<td>Rural</td>
<td>12</td>
<td>31%</td>
</tr>
<tr>
<td>Unknown</td>
<td>1</td>
<td>3%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>38</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

*Source: ATSB*

Figure 9 compares Indigenous pedestrian deaths, by age, for the Northern Territory between 1998 and 2001. It can be seen that Indigenous pedestrian fatalities in the Northern Territory mainly involved people aged 20 to 29 years and 30 to 39 years.

*Figure 9: Indigenous pedestrian fatalities, by age, Northern Territory, 1998-2001*

*Source: ATSB*
2.2 Behavioural risk factors

Alcohol intoxication is a dominant factor in road deaths among both the Indigenous and non-Indigenous populations of the Northern Territory.

Figure 10 compares alcohol intoxication among fatally-injured Indigenous and non-Indigenous drivers and motorcycle riders in the Northern Territory. Figure 11 compares alcohol intoxication among fatally-injured Indigenous and non-Indigenous pedestrian fatalities. These Figures indicate that:

- alcohol intoxication was higher among Indigenous drivers, riders and pedestrians than among their non-Indigenous counterparts

Source: ATSB
Figure 13 compares seatbelt use among fatally-injured Indigenous and non-Indigenous vehicle occupants in the Northern Territory. It is evident that a larger proportion of indigenous fatalities were not wearing seat belts.

Source: ATSB