Hospital Separations due to Road Traffic Vehicle Crashes, Queensland, 2010 to 2015

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Admitted patient hospital separations for ‘road traffic vehicle crashes’ are able to be identified using ICD-10-AM coded morbidity data. The ICD-10-AM external cause codes relating to land transport accidents (V00-V89) were used to describe the patient’s mode of transport or the type of vehicle in which the injured person was an occupant.

Hospital separations from 2010 to 2015 relating to road traffic vehicle accidents were selected from the Queensland Hospital Admitted Patient Data Collection (QHAPDC), for all public and private hospitals in Queensland.

Figure 1 shows an increase in separations due to road traffic vehicle crashes from 2010 to 2015 particularly where the patient was a car occupant, motor cyclist, pedal cyclist or pedestrian.

Figure 1. Separations for first external cause of ‘road traffic vehicle crashes’ by patient’s mode of transport, public and private hospitals, Queensland, 2010 to 2015(p).

Source: Queensland Hospital Admitted Patient Data Collection (QHAPDC).
Excludes separations for unqualified newborns, posthumous organ procurement and boarders.
2015 data are preliminary and subject to change.
What type of road traffic vehicle crash resulted in the highest numbers of hospital admissions in Queensland in 2015?

**Car drivers**

31.7% of Qld hospital separations for road traffic vehicle crashes in 2015

**Motorcyclists**

26.1% of Qld hospital separations for road traffic vehicle crashes in 2015

**Pedal cyclists**

16.1% of Qld hospital separations for road traffic vehicle crashes in 2015

Source: Queensland Hospital Admitted Patient Data Collection (QHAPDC)
Excludes separations for unqualified newborns, posthumous organ procurement and boarders.
2015 data are preliminary and subject to change.
Table 1: Separations with first external cause of ‘road traffic vehicle crashes’ by vehicle type by average length of stay (ALOS), public and private hospitals, Queensland, 2014 and 2015(p)

<table>
<thead>
<tr>
<th>Type of vehicle</th>
<th>Year of hospital separation</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2014</td>
<td>2015</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Separations</td>
<td>ALOS (days)</td>
<td>Separations</td>
</tr>
<tr>
<td>Bus occupant</td>
<td>51</td>
<td>4.8</td>
<td>43</td>
</tr>
<tr>
<td>Car occupant (Total)</td>
<td>3,991</td>
<td>3.6</td>
<td>4,575</td>
</tr>
<tr>
<td>Car driver</td>
<td>2,699</td>
<td>3.4</td>
<td>3,047</td>
</tr>
<tr>
<td>Car passenger</td>
<td>1,078</td>
<td>4.0</td>
<td>1,240</td>
</tr>
<tr>
<td>Other car occupant</td>
<td>214</td>
<td>3.8</td>
<td>288</td>
</tr>
<tr>
<td>Heavy transport</td>
<td>173</td>
<td>5.9</td>
<td>163</td>
</tr>
<tr>
<td>Motorcyclist</td>
<td>2,253</td>
<td>3.9</td>
<td>2,511</td>
</tr>
<tr>
<td>Pedalcyclist</td>
<td>1,427</td>
<td>2.5</td>
<td>1,548</td>
</tr>
<tr>
<td>Pedestrian</td>
<td>432</td>
<td>6.1</td>
<td>581</td>
</tr>
<tr>
<td>Pick-up truck or van occupant</td>
<td>49</td>
<td>3.8</td>
<td>57</td>
</tr>
<tr>
<td>Other or unknown</td>
<td>147</td>
<td>3.0</td>
<td>142</td>
</tr>
<tr>
<td>Total</td>
<td>8,523</td>
<td>3.7</td>
<td>9,620</td>
</tr>
</tbody>
</table>

Source: Queensland Hospital Admitted Patient Data Collection (QHAPDC).
Excludes separations for unqualified newborns, posthumous organ procedurement and boarders.
2015 data are preliminary and subject to change.

Further analysis shows that:

- In 2015, the average length of stay in hospital was highest for ‘pick-up truck or van occupant’ (6.8 days), ‘heavy transport’ (5.6 days) and ‘pedestrians’ (5.5 days).
- 31.7% of hospital separations due to traffic vehicle crashes in 2015 involved ‘Car drivers’ and 26.1% involved ‘Motorcyclists’.
- In 2015, the age group separated most frequently from hospital due to road traffic vehicle crashes was ’20-29’ years (22.2%) for both males and females.
- Of the motorcyclists separated from hospital due to road traffic vehicle crashes in 2015, 89.7% were male.
- The average annual growth rate for Queensland hospital separations for road traffic vehicle crashes (all vehicle types) from 2010 to 2015 was 7.0%.

This Statbite has presented a very brief summary of hospitalisations in Queensland acute hospitals due to traffic vehicle crashes. Further detail on this topic will be presented in subsequent Statbites and data published by the Statistical Services Branch.
Notes:

1. Excludes unqualified newborns, boarders, posthumous organ procurement.
2. Excludes 'previously declared hospitals'. From 1 July 2014, a number of small hospitals were reclassified as 'Primary Health Centres', and are no longer in scope of Standard Reporting.
3. p. data for July -December 2015 is preliminary and subject to change.
4. The first external cause code was used to identify the road traffic vehicle crash, as follows (ICD-10-AM):
   - **Bus occupant:** V70-V78.[5,6,7,9], V79.[4,5,6,9]
   - **Driver (of car):** V40–V48.[5], V49.[4].
   - **Passenger (of car):** V40–V48.[6], V49.[5].
   - **Other Occupant (of car), and not driver or passenger:** V40–V48.[5,6,7,9], V49.[4,5,6,9].
   - **Heavy transport:** V60-V68 [5,6,7,9], V69.[4,5,6,9]
   - **Motorcycle rider:** V20–V28.[4,5,9], V29.[4,5,6,9].
   - **Pedal cycle rider:** V10–V18.[4,5,9], V19.[4,5,6,9].
   - **Pedestrian:** V00–V06.[1], V09.[2,3]
   - **Pick-up truck or van:** V50-V58. [5,6,7,9], V59.[4,5,6,9]
   - **Other or unknown:** V83-V86 [0,1,2,3], V87, V811, V821, V829, V892, V893

A hospital separation is defined as an episode of care for an admitted patient, which can be a total hospital stay (from admission to discharge, transfer or death) or a portion of a hospital stay beginning or ending in a change of type of care (for example, from acute care to rehabilitation). (Source: Australian Institute of Health and Welfare, Admitted patient care 2014-15)

Please note that data presented in this Statbite differs from the AIHW publication ‘Trends in serious injury due to road vehicle traffic crashes, Australia 2001 to 2010’. The data in this Statbite includes:

- All patients separated from a Queensland hospital regardless of their State of usual residence
- Patient transfers
- Patients who died in hospital (discharge status of ‘05’).