

JAMIESON TRAUMA INSTITUTE

Low Speed Vehicle Run Over: Injury hospitalisations in Queensland from 2015/2016 to 2018/2019

BACKGROUND

Injuries from low speed vehicle runover (LSVRO) events often occur during childhood, however these types of injuries can happen at any age, with the elderly becoming a more prominent age group.

It has been 10 years since an in-depth analysis of these injuries was conducted in Queensland in the 0 – 15 year old age group¹. The following snapshot shows contemporaneous epidemiological trends for the most recent 4 financial years of hospitalization data in Queensland.

KEY FINDINGS

Between 01 July 2015 and 30 June 2019:

- 430 LSVRO injury hospitalisation episodes in Qld public acute hospitals.
- Highest incidence in 0-4 year olds.
- Greatest gender difference for younger as with males having a higher incidence.
- Second peak with increased rates in adults over 60 years of age with females having a higher incidence.
- Increasing incidence in older age group over the time period.
- 53% of events had a length of stay one day or less.
- Injury events peaked in public carparks on a Thursday.
- 46% of injuries resulted in fractures or dislocations.
- 29% of injuries occurred in non-metropolitan areas.

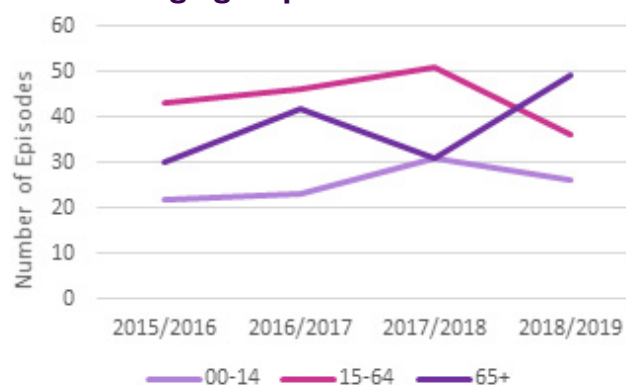
KEY FIGURES

Trends over time

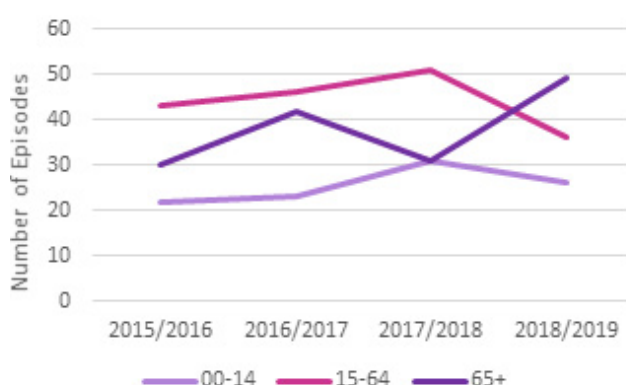
Activity/Outcome	15/16	16/17	17/18	18/19	Total
Episodes of care	95	111	113	111	430
Patient days	421	647	471	411	1,950
Av Length of stay	4.4	5.8	4.1	3.7	4.5
Discharged home	73%	67%	77%	67%	71%

Note: Total number of hospital deaths across the four financial years n=6

Year and age group



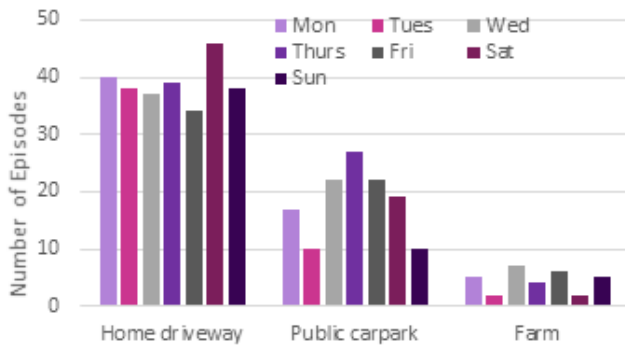
Year and gender breakdown



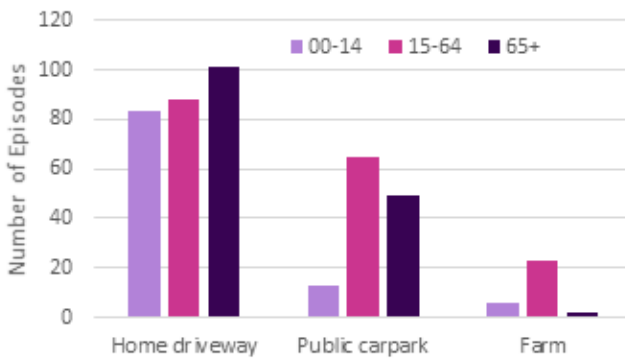
Injury types by gender

	Male	Female	Total
Fracture/Dislocation	103 (46%)	94 (46%)	197
Superficial contusions	37 (16%)	27 (13%)	64
Open wound	18 (8%)	25 (12%)	43
Unspecified injuries	17 (8%)	19 (9%)	36
Internal organ	18 (8%)	17 (8%)	35
Other specified	17 (8%)	11 (5%)	28
Crushing injury	9 (4%)	<5	13
Burns	<5	<5	<10
Blood vessel	<5	<5	<10
Amputation	<5	0	<5
Total	226	204	430

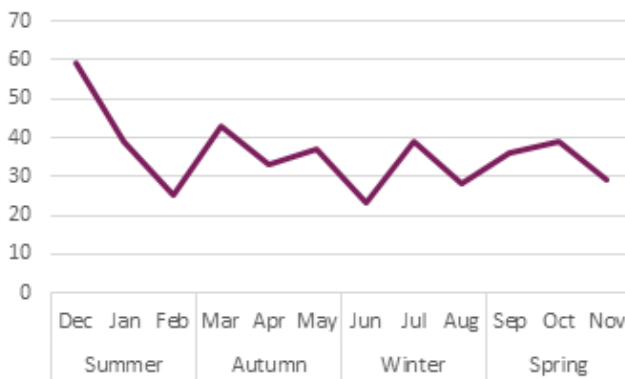
Day of Admission by Place of Injury



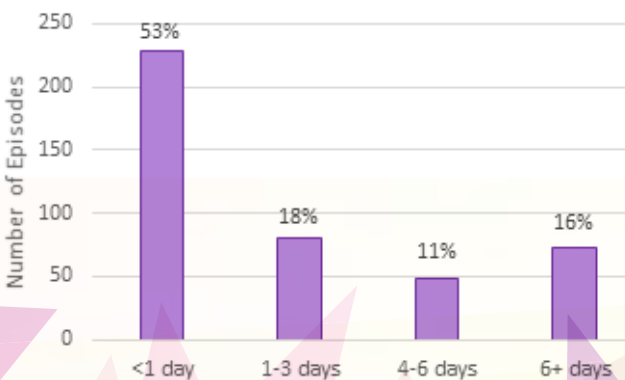
Age Group by Place of Injury



Month of Injury



Length of stay



Demographics by Geographic Region

	North Qld	Central Qld	Western Qld	South East Qld
GENDER				
Male	61%	54%	48%	51%
Female	39%	46%	52%	49%
AGE GROUP				
00-14	20%	26%	22%	24%
15-64	65%	20%	52%	40%
65+	15%	54%	26%	36%
INDIGENOUS				
No	85%	91%	96%	97%
Yes	15%	9%	4%	3%
PLACE OF INJURY				
Driveway	52%	78%	44%	64%
Carpark	20%	17%	22%	34%
Farm	28%	6%	33%	2%
TOTAL	11% (N=46)	13% (N=54)	6% (N=27)	70% (N=303)

About us

The **Jamieson Trauma Institute (JTI)** connects clinicians, researchers, government and industry partners striving to advance trauma prevention, research and clinical management, to deliver the best possible care for people who experience traumatic injury. JTI was established with funding from the Motor Accident Insurance Commission and Metro North Hospital and Health Service.

For further information, contact:
Jamieson_trauma_institute@health.qld.gov.au

DATA SCOPE AND DEFINITIONS

This overview was produced by the Jamieson Trauma Institute, in consultation with the Statistical Services Branch, Queensland Health, using injury hospitalisation data from all public acute hospitals (excluding Mater South Brisbane Hospitals), Queensland from the Queensland Hospital Admitted Patient Data Collection (QHAPDC).

Data Source

Queensland Hospital Admitted Patient Data Collection (QHAPDC) – derived subset of data tables comprising injury related hospital admissions only.

Data Scope

- Admitted patient episodes with separation date between 01 July 2015 & 30 Jun 2019
- Principal diagnosis within the ICD-10-AM code range: S00-T98
- First external cause ICD-10-AM codes related to 'pedestrian' (V00-V09) and Place of injury codes related to 'driveway or garage' (Y9200 or Y9202) or 'farm' (Y927) or 'carpark' (Y9287).
- Care Type = Acute
- This overview presents raw counts and percentages, not age standardised rates, as data relate to episodes of care and not individual patients

Reference:

¹ Griffin BR, Watt K, Wallis BA, Shields LE, Kimble RM. Incidence or paediatric fatal and non-fatal low speed vehicle run over events in Queensland, Australia: eleven-year analysis. BMC Public Health 2014; 14:245