

**Submission  
No 549**

## **MOBILE SPEED CAMERA ENFORCEMENT PROGRAMS IN NSW**

**Organisation:** Royal Prince Alfred Hospital

**Date Received:** 8 July 2021

## **The Joint Standing Committee on Road Safety (Staysafe) is conducting an inquiry into mobile speed camera enforcement programs in NSW**

Royal Prince Alfred Hospital is supportive of the mobile speed camera enforcement programs in NSW as evidence outlined in the Centre for Road Safety's Speed Camera Programs 2019 Annual Review demonstrates that they contribute to a reduction in the number of patients presenting to hospital with road trauma-related injuries.

### **Road Trauma at Royal Prince Alfred Hospital**

#### **Background**

RPA has the only designated trauma service in the Sydney Local Health District. It is a Level 1 Adult Major Trauma Service under the current NSW Trauma Plan, providing clinical care, continuity, and coordination for severely injured patients across the district and critical care referrals across much of western NSW. The trauma service admits over 1000 trauma patients each year (approximately 70% of trauma calls) of which around 360 are in the most severely injured category (injury severity score [ISS]>12) and over half use the ICU. The most frequent types of injuries are road trauma and falls. Care is coordinated across multiple different surgical service admissions, including General Surgery (43%), Orthopaedics (26%), Neurosurgery (17%), Cardiothoracic Surgery (7%) and Plastics and Reconstructive Surgery (5%). Supported by critical care, operating theatre and medical infrastructure, outcomes for these patients are amongst the best in Australia based on national benchmarking reports.

#### **Road Trauma 2011-2021**

In an analysis of the institutional trauma registry from January 1<sup>st</sup> 2011 to 31<sup>st</sup> Dec 2020 there were a total of 5768 trauma patients admitted with road trauma-related injuries. Of these patients, 68.1% were male, the mean age was 40.5yrs with the highest proportion of patients between 21-40yrs old (Figure 1), and the average ISS was 6 with 14% (n = 802) suffering major injury (ISS>12).

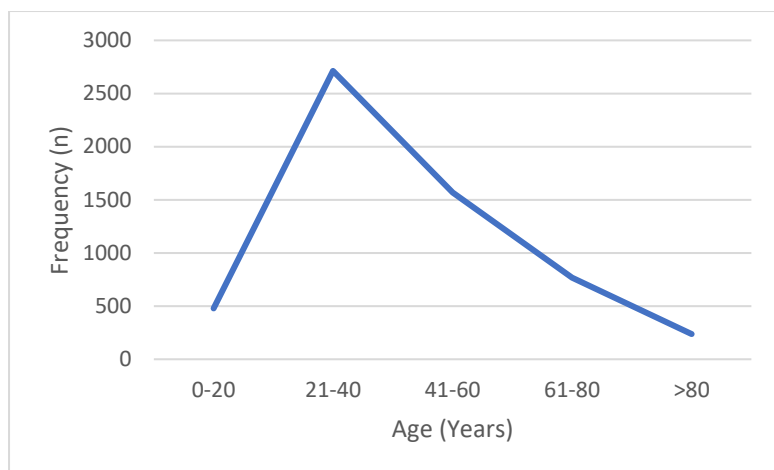


Figure 1 – Frequency of road trauma patients by age groups

The mechanism of the road trauma was 35% (n=2020) motor vehicle collisions (MVC), 22% (n=1284) were cyclist-related trauma, 23% (n=1317) were pedestrians-related trauma and 20% (n=1146) were motorbike-related trauma.

There was a gradual decline in the frequency of road trauma over the time period (2011-2020) (Figure 2).

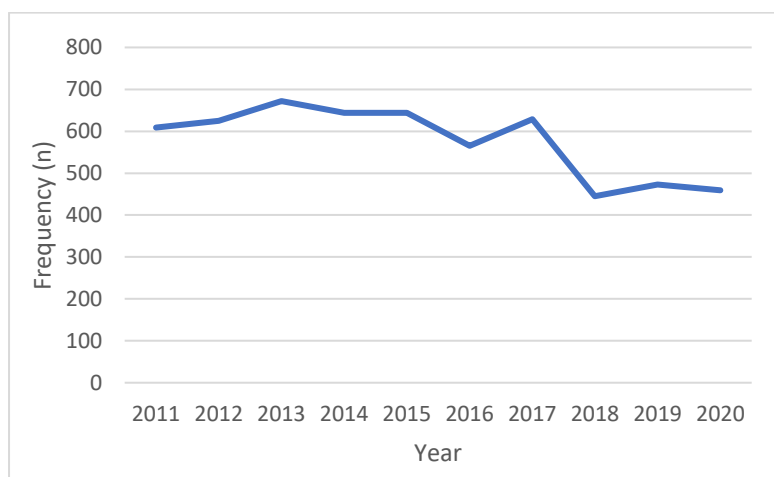


Figure 2- Trend in frequency of road trauma patients from 2011 – 2020

The main injury sustained from road trauma was upper limb trauma (41.1% n =2372) (Table 1), with 51.4% of patients (n=2967) suffering injury to one or more body region.

Body region injured	Frequency (%)
Head	1765 (30.6)
Face	958 (16.6)
Neck	70 (1.2)
Chest	1182 (20.5)
Abdomen	530 (9.2)
Spine	1249 (21.7)
Upper limbs	2372 (41.1)
Lower limbs	2230 (38.7)

External	317 (5.5)
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Table 1- Body regions injured from road trauma

During the study period there was an increase in elderly patients suffering road trauma (Figure 3) with the average length of stay highest in the elderly group (Table 2).

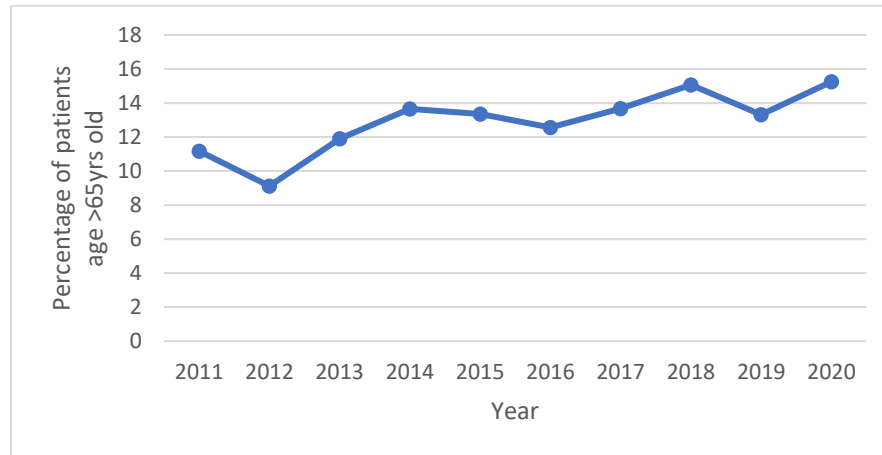


Figure 3- Percentage of road trauma patients age&gt;65yrs by year

Age group (years)	Average length of stay (Days)
0-20	2.2
21-40	3.6
41-60	4.3
61-80	6.8
>80	9.2

Table 2- Average length of hospital stay by age group for road trauma patients

For all road trauma patients during the period 2011-2020 the average length of hospital stay was 4.3 days, 7% of patients (n = 405) required ICU and 1% (n= 56) pf patients died.

### **Conclusions**

Road trauma often affects young patients, although over the 10-year period there was an increasing trend in older (age>65yrs) road trauma victims. Reassuringly there was a general decline in the frequency of road trauma patients admitted to RPA hospital. The elderly patients are those most vulnerable and account for significant hospital lengths of stay. Resources and models of care should be developed to help manage this increasing workload of geriatric trauma.