



## E-Scooter Injuries in the ED: An audit two years post e-scooter share scheme implementation

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### Background

Brisbane was the first city in Australia to trial e-Scooters and now has 1500 e-scooters for hire through two companies, Beam and Neuron. E-scooter share schemes now operate in Adelaide, Canberra and Darwin, allowing users to hire an e-scooter for transport or leisure purposes with a tap of their phone.

### Methods

An audit of e-scooter related presentations to The Royal Brisbane & Womens' Hospital identified patients via a key word search on electronic records, who presented between Jan 1st and March 31st, 2021. Inclusion criteria was: e-scooter injury. Exclusion criteria was: non-escooter injuries.

Data was recorded about the patient demographics (age, gender), their helmet and alcohol usage, injuries and discharge destination.

Audit question: What are the demographics, alcohol usage and injuries associated with e-scooters?

### Findings

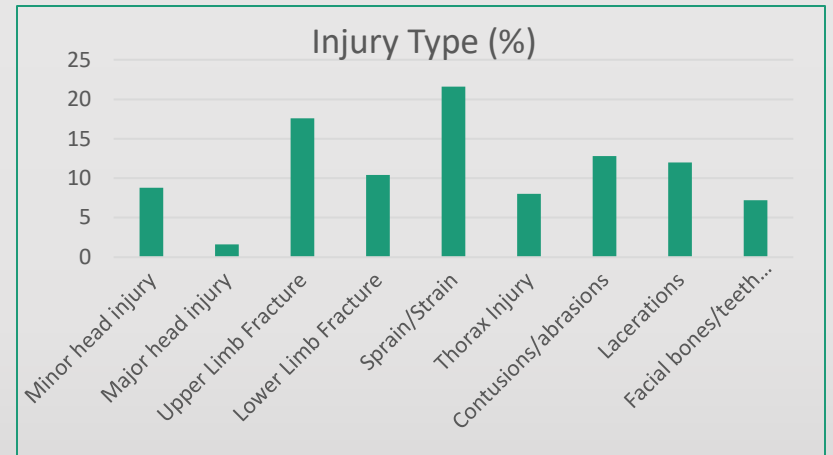
- There were approximately 1.5 presentations per day to the RBWH ETC due to e-scooter injuries during the audit period, with at least 25% involving alcohol and 10% not wearing a helmet.
- 39% of accidents occurred between 9pm and 5am
- Patients who consumed alcohol were more likely to have facial fractures and minor head injuries.

#### Patient Demographics

Gender	Male	71%
	Female	29%
Average Age		33
Wearing Helmet	Yes	25%
	No	10%
Alcohol Involved	Recorded	65%
	Yes	25%
Alcohol Involved	No	18%
	Not Recorded	57%

#### Management

Imaging	CT	26%
	XR	46%
Transported by QAS	Yes	38%
	No	62%
Disposition	Admitted	19%
	Discharged	81%
Length of Stay	< 4 hours	53%
	4 - 24 hours	
	24+ hours	
Surgery Required		6%



### Implications

As the Brisbane Council increases the e-scooter share scheme, ETC presentations due to e-scooter injuries are likely to increase. Auto-locking or slowing the speed of share scheme e-scooters in nightlife districts after a particular time could decrease injuries due to alcohol. Ongoing review of data should continue to monitor the impact of the e-scooter share scheme on the ETC.