

E-SCOOTER CRASHES IN SOUTH AUSTRALIA

Researchers from SA Health and Adelaide University have been awarded grant funding from the Lifetime Support Authority to conduct research into e-scooter injury and crash mechanisms commencing in 2025.

Why study e-scooter crashes?

- Worldwide trend of increasing hospital presentations as a result of e-scooter use
- 808,000 hire trips in Adelaide CBD b/w December 2019 and October 2022
- Hire scooters are restricted to footpaths in specific geographic zones that include mandatory helmet-use, single-rider, BAC<0.05, speed-limited
- Influx of e-scooter related injuries at CALHN hospital emergency departments, affecting riders and other road users is evident
- Common factors assumed to be related to non-compliance, illegal use of privately-owned devices, and lack of proper infrastructure
- Injury numbers are expected to increase upon legalisation for the use of privately-owned devices in 2025



Data is needed for evidence-based interventions

- Other cities have found e-scooter related hospital admissions exhibit higher instances of traumatic brain injuries than those from bicycles and motorbikes
- Contributes substantial economic burden to hospital and local health systems
- Detailed crash investigation is required to understand injury factors, severity, role of infrastructure and scooter design to inform policy and harm prevention strategies.

THE RESEARCH COLLABORATION

Centre for Automotive Safety Research (CASR) at Adelaide University

- Crash investigators and road safety researchers

School of Medicine at Adelaide University

- Biomechanics Injury researchers

Royal Adelaide Hospital (RAH), The Queen Elizabeth Hospital (TQEH), SA Health

- Emergency Department Clinicians



Funded by a Lifetime Support Authority Research Grant (R24028)

This study has been approved by the CALHN Human Research Ethics Committee (Approval number 20815).

Please direct any questions to thiru.qovindan@sa.gov.au or ryan.quarrington@adelaide.edu.au.

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STUDY DESIGN

