

Submission
No 161

INQUIRY INTO USE OF E-SCOOTERS, E-BIKES AND RELATED MOBILITY OPTIONS

Organisation: Centre for Trauma Care, Prevention, Education and Research at
Westmead Children's Hospital

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Centre for Trauma Care, Prevention, Education, and Research (CTCPER) at Westmead Children's Hospital: Position on Personal Micro-mobility Devices

Introduction

The Centre for Trauma Care, Prevention, Education, and Research (CTCPER) at the Children's Hospital at Westmead is the largest Major Paediatric Trauma Service in Great Western NSW. As the principal referral hospital for multiple Local Health Districts across the catchment area, CTCPER provides definitive care for most moderate to severe paediatric trauma patients.

Background

Since 2018, personal micro-mobility devices (PMDs) such as e-scooters and e-bikes have gained significant popularity among the paediatric population in Australia. While these devices offer novel transportation and recreational opportunities, their rapid adoption has raised concerns among healthcare professionals at CTCPER.

Preliminary Data Analysis

Since 2020, CTCPER has observed a steady increase in PMD-related trauma admissions (Figure 1):

- The age range of patients admitted for PMD injuries was 5 to 15 years old.
- Children aged 13 and above account for approximately 64% of PMD injuries.
- E-scooters were responsible for 70% of PMD injuries.
- More than 70% of the recorded cases involved children who did not wear any protective equipment.

- Hospital stays range from 1 to 6 days, with an average of 2.5 days. While no fatalities have been recorded, CTCPER has documented two cases of moderate to severe injuries.

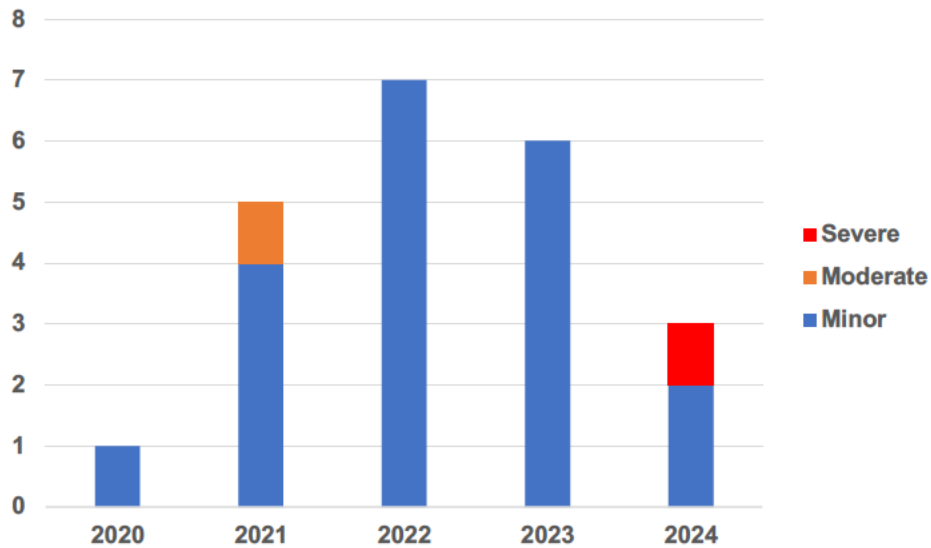


Figure 1. PDM related injuries at CTCPER from 2020 stratified by Injury Severity

Injury Patterns

PMD-related injuries vary but typically fall into two categories (Figure 2):

1. **Minor injuries:** Skin abrasions, muscle contusions, and hematomas in subcutaneous tissues.
2. **Complex injuries:** Severe injuries in multiple body areas, including head injuries and long bone fractures. Those injuries often necessitate:
 - Extended hospital stays
 - Treatment from multiple surgical teams and medical specialties
 - Prolonged rehabilitation

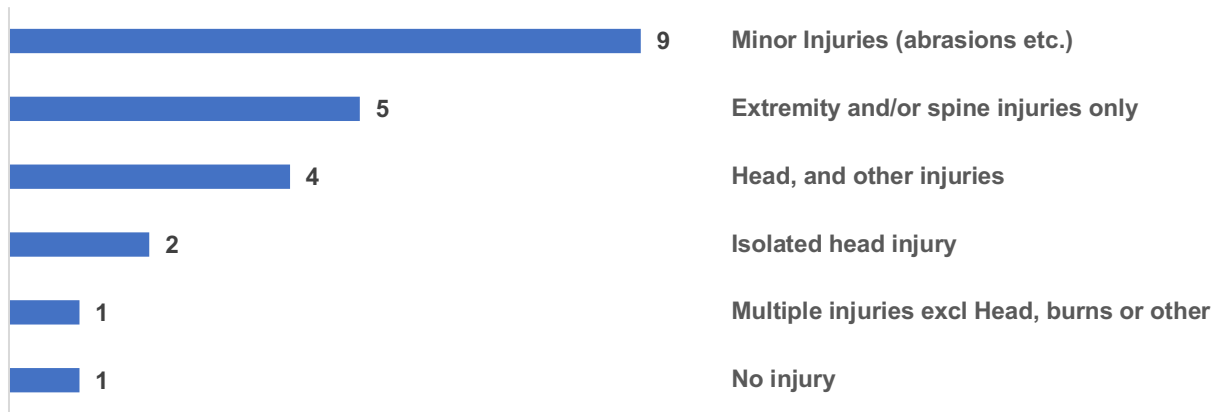


Figure 2. Types of PMD related injuries from 2020 at CTCPER

Due to the lack of standardised coding for capturing PMD-related injuries, the data provided are preliminary and may be subject to change upon formal auditing.

CTCPER's Role in Public Health Advocacy

CTCPER collaborates with the hospital's Public Relations team and government bodies to advocate for children's safety across various public health issues. For instance, in July 2023, the Department of Planning and Environment endorsed CTCPER's recommendations for improving window safety in homes.

Recommendations

Given the increasing prevalence of PMD-related injuries in children, CTCPER proposes the following evidence-based recommendations:

1. Mandatory Protective Equipment: Enforce the use of Australian Standards approved helmets for all PMD riders, with a focus on proper fitting for children. Consider additional protective gear such as wrist guards and knee pads for young riders.

2. Age Restrictions and Single Riders: Implement age limitations for PMD use based on developmental factors. We strongly recommend prohibiting PMD use for children under 12 years old in all circumstances. Strictly enforce the rule of "one person per device" to prevent passenger-related injuries.

3. Speed Limits and Geofencing: Advocate for speed-limited PMDs, particularly for devices marketed to children. Support research to establish safe speed limits for various riding

environments. Encourage the use of geofencing technology in PMD hire schemes to restrict use to designated safe areas.

4. Infrastructure Development: Collaborate with local authorities to create protected and connected infrastructure for PMD use, including non-shared paths that safely separate different transport modes. This is crucial for reducing collisions involving children.

5. Mandatory Safety Features: Ensure all PMDs, both private and public, are equipped with working bells and lights (front and back) to alert pedestrians and enhance visibility.

6. Public Education Programs: Develop comprehensive safety education programs for children and parents, covering proper PMD use, traffic rules, and the importance of protective equipment.

7. Nationally Recognised Data Recording: Advocate for standardised injury surveillance approaches to accurately capture PMD-related traumas in paediatric health systems, facilitating better tracking and analysis of injury patterns. NSW Institute of Trauma and Injury Management has started initiatives to introduce methods for better capturing those injuries in the NSW Trauma Registry.

8. Product Safety Standards: Collaborate with the Australian Competition and Consumer Commission (ACCC) to develop stringent product safety standards for PMDs, particularly focusing on battery safety and overall design suitable for children.

9. Designated Riding and Parking Areas: Work with local councils to establish clear zones for PMD use and parking near schools and recreational areas, ensuring these do not impede pedestrian safety.

10. Funding for Safety Initiatives: Seek government funding to support PMD safety research, education programs, and infrastructure improvements specifically tailored to paediatric users.

Kind regards

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