# MAJOR TRAUMA AUDIT
## PAEDIATRIC SUMMARY REPORT 2014-2019

The Major Trauma Audit (MTA) was established by the National Office of Clinical Audit (NOCA) in 2013. This audit focuses on the care of the more severely injured patients in our healthcare system, across 26 trauma receiving hospitals.

## WHAT IS MAJOR TRAUMA?
Major trauma is any injury that has the potential to cause prolonged disability or death. There are many causes of major trauma. These injuries can be caused by blunt or penetrating mechanisms such as falls, motor vehicle collisions, stab wounds, and gunshot wounds (World Health Organization, 2014).

## WHAT ARE THE MOST COMMON CAUSES OF MAJOR TRAUMA IN CHILDREN IN IRELAND?
The most common causes of major trauma in children are falls, road traffic collisions and burns. Attention to the following details can help prevent major trauma injuries in children.

### 1. FALLS IN CHILDREN AGED 2 YEARS OR UNDER
- Take care when carrying small children, especially on steps/stairs.
- Watch out for tripping hazards.
- Fasten straps correctly on seats.
- Always keep bouncers on a low surface.
- Supervise young children sitting on couches or chairs, in walkers, and on changing tables.
- Install safety gates at the top and bottom of stairs.
- Use bicycle helmets for children of all ages.

### 2. BURNS
- Keep hot things out of the reach of children, especially hot liquids, cups of tea/coffee, soup, pots on the stove, kettles and teapots.
- Ensure that lids on hot water bottles are fastened correctly.
- Check bath temperatures.

### 3. ROAD TRAFFIC COLLISIONS
- Wear seatbelts.
- Use the correct seat for the child's age and ensure that it is fitted properly.
- Sit children in the back seats of vehicles.

### 4. FARM ACCIDENTS
- Supervise children on farms at all times.
- Know where children are before driving or operating large machinery.
- Lock the doors to sheds and barns.
- Take care when children are around large animals, such as horses and cows.
- Make sure that large objects (i.e., bales of hay, tanks, bags of fertiliser) are not at risk of toppling.
- Ensure that seatbelts are in place in any farm vehicle.
83% of paediatric major trauma patients were discharged directly home from hospital.

1% of paediatric major trauma patients were discharged to rehabilitation.

The median hospital LOS was 5 days for all paediatric major trauma patients, and 6 days for patients with an ISS of >15.

52% of children who required a head CT scan received it within 1 hour.

57% has an Injury Severity Score (ISS) of >15.

54% of injuries occur in the home.

The most common type of surgery performed was limb surgery 54%.

The limbs and head are the most common body regions injured in all paediatric major trauma patients, at 32% each.

Paediatric major trauma presentations are more common in the afternoon and evening between 2.00pm and 9.00pm.

Falls, road traffic collisions and burns account for 71% of paediatric major trauma.

Transfer to another institution for definitive management occurred in 57% of paediatric major trauma cases.

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KEY RECOMMENDATIONS

The MTA continues to highlight the need for implementation of the Trauma System for Ireland strategy and to address the needs of paediatric patients in this system by developing paediatric major trauma pathways of care.

The MTA will engage with national organisations to use the information from this report to inform injury prevention strategies for children.

Each hospital should have a local MTA hospital governance committee who actively use the data for quality improvement.

NOCA will develop a research group and further develop public and patient involvement in the audit.

PATIENT AND PUBLIC INTEREST

“This important report includes audit data regarding major trauma in children for the years 2014–2019. Monitoring and learning from the data can highlight areas for continuous quality improvement and identify how childhood injuries can be prevented.”

Naomi Fitzgibbon, Patient and Public Interest Representative, MTA Governance Committee

REFERENCES