



Child injuries due to lack of
child restraint during crash

Introduction to ChildSafe



Why is child injury important?

Major public health problem - requires urgent attention.

Injury and violence is a major killer of children throughout the world, responsible for about 950 000 deaths in children and young people under the age of 18 years each year (WHO Global Burden of Disease: 2004 update).

Unintentional injuries account for almost 90% of these cases - leading cause of death for children aged 10–19 years.

Intentional vs Unintentional Injury

Intentional

Injuries resulting from purposeful human action, whether directed at oneself or others.

Injuries include self-inflicted and interpersonal acts of violence intended to cause harm.

Unintentional

Injuries that were unplanned.

The **injury** occurs in a short period of time - seconds or minutes,

The harmful outcome was not sought, or expected - “accidental”?

Unintentional Injuries

- Transport injuries
- Drowning
- Falls
- Burns
- Poisoning
- Suffocation and choking
- Animal bites
- Firearms

More children die of these injuries

Most children non fatality injured

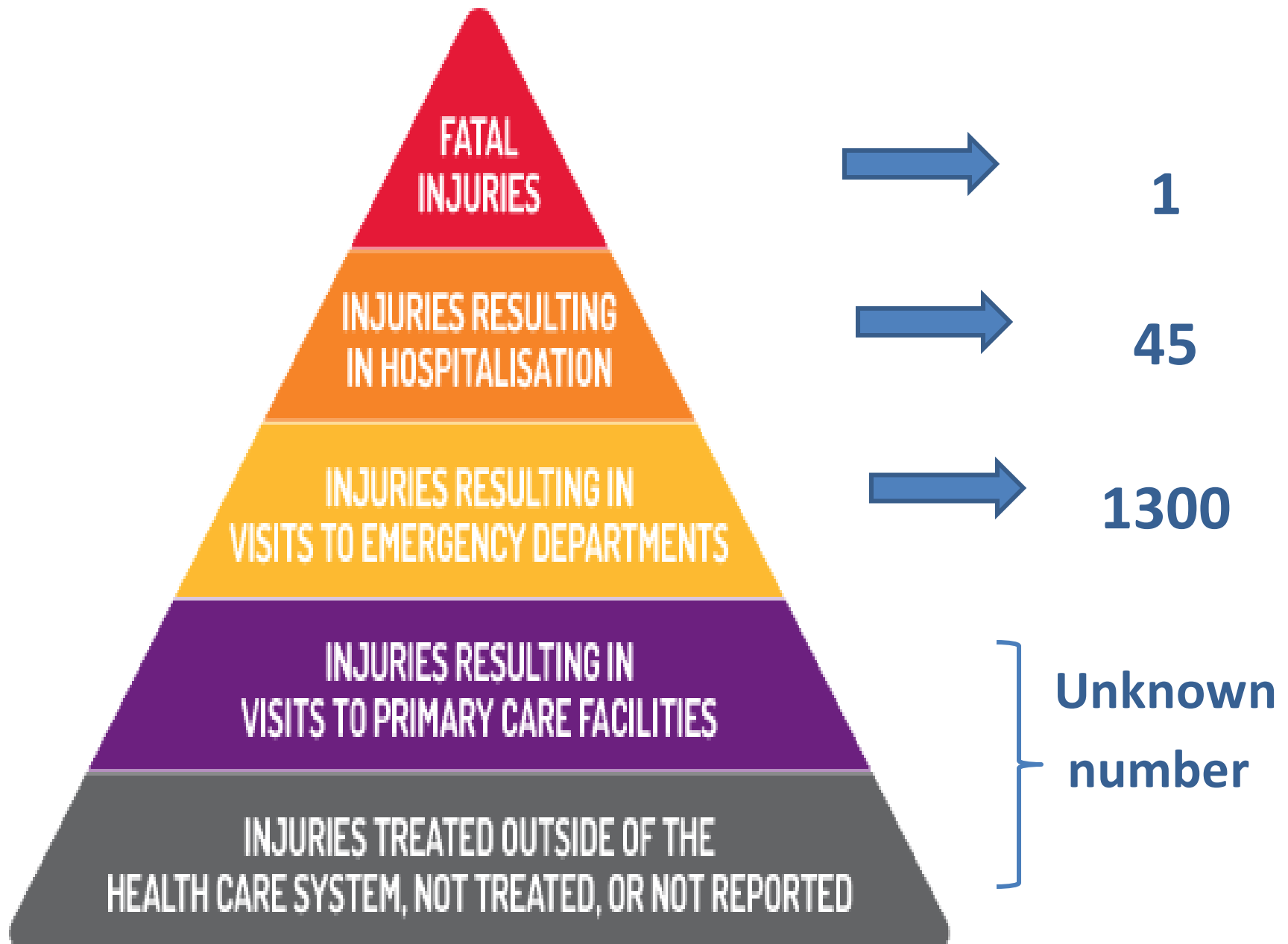
Red Cross Children's Hospital



2019 Trauma Unit saw 7 128 children

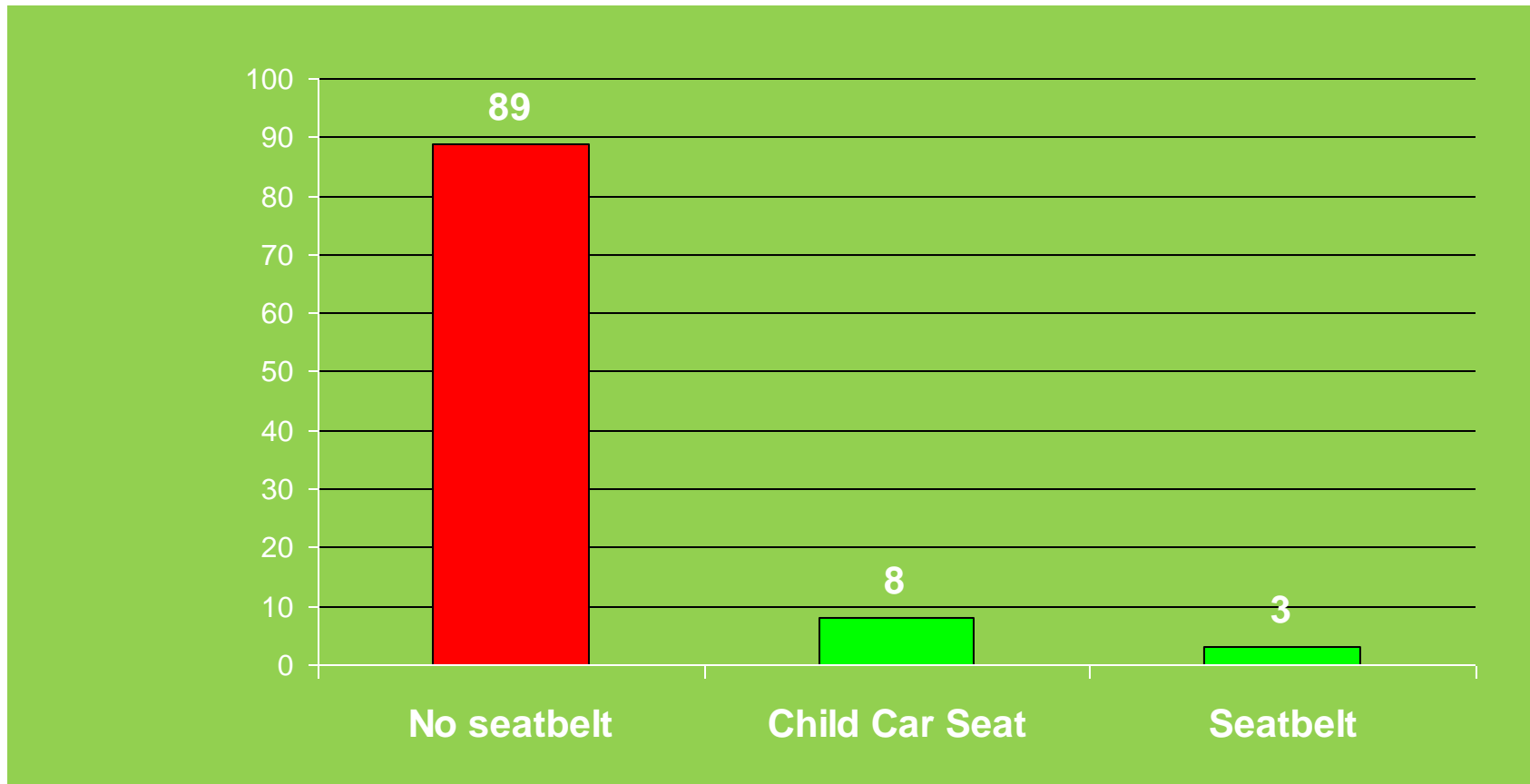
Falls	2750
Burns	1117
Transport	1097 over all injuries 13% of child passenger were restraint

In Western Cape 436 children died as passengers in 2018.



Observational study RCWMCH Gate on use of restraints in cars entering premises

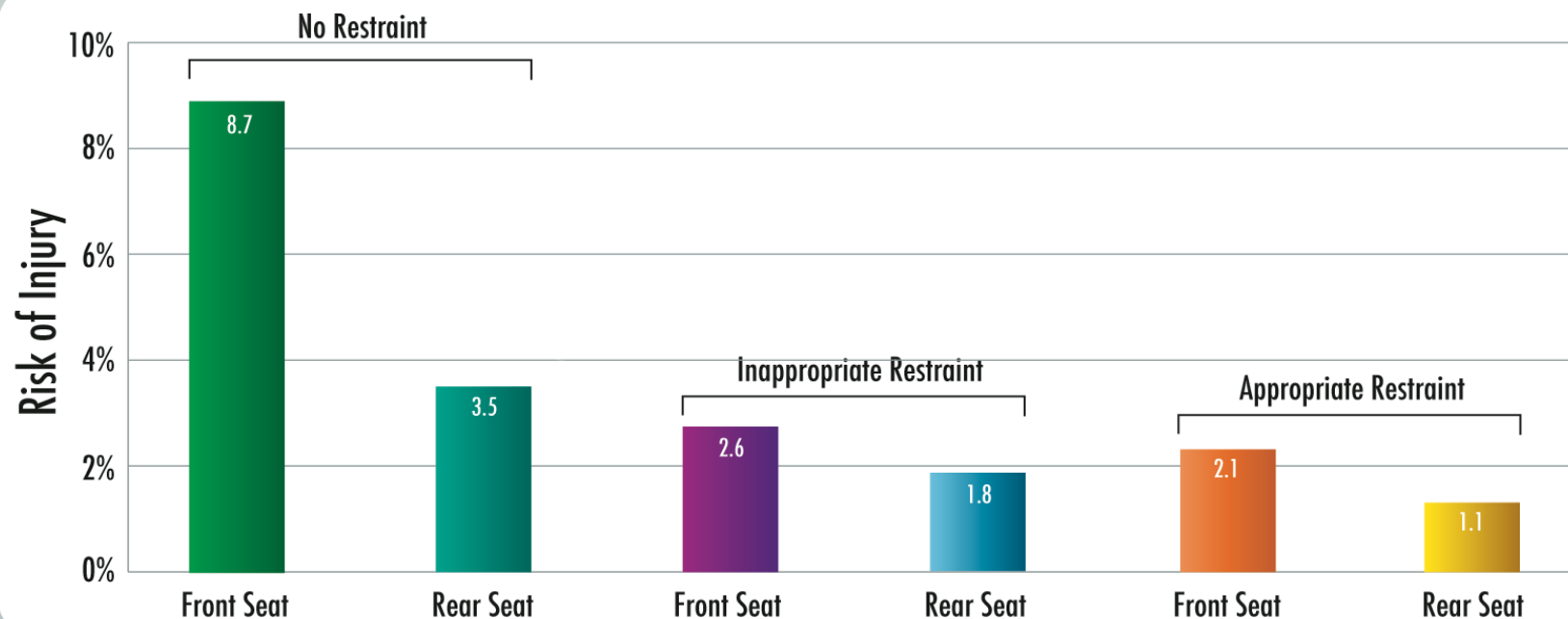
Children (n= 313), only 11% wearing safety belt



Restraint & In the back

Risk of Child Injury by Seat Row and Restraint Type, 1998-2002

Age 0 - 12 Years





Mechanics of a car crash involving a child

- Unrestraint child, 10 kg
- Car traveling at 100km/h
- Car crashes, stops with sudden force – crashes
- Anything not strapped down will continue to move forward
- With the momentum, the 10kg moves at speed of 100km/h
- 100kg flung forward, towards windscreen / dashboard

Nature and severity of injuries

Severity of injuries vary, depending on age (size) and whether a protective device was used

Children's head, chest, limbs, abdomen are in a state of growth

Relative softness of body makes it vulnerable to physical impact

Nature and severity of injuries

Head and limbs are the most common parts of the body injured in children

Chest and abdominal injuries can be very serious too due to the organs involved

Head and neck (traumatic brain injury, whiplash, concussion, skull base fracture)

Bone fractures

Glass injuries

Dental injuries

Nature and severity of injuries



Consequences of crash injuries in children?

1. Death

2. Disability – temporary or permanent

- Traumatic brain injury;
- Disability can stop progress in children in early years
 - depriving them of education and social development
- Excessive strain on the family, emotionally and financially

3. Temporary injury

Fractured bones

Psycho Social Consequences

Mental health conditions observed in children following a crash

- phobias, post traumatic stress disorder, anxiety

Injured children can experience high levels of psycho-social distress

In instances a year after crash, children experience flashbacks, fear of being injured again, mood changes and sleep disturbances

4 Million children are driven to school every day – most unrestrained



Thank you

