

A woman is shown from the chest up, leaning over a child who is seated in a car seat. The woman is smiling and looking down at the child. The child is also smiling and looking towards the camera. The background is a soft, out-of-focus indoor setting. The entire image has a warm, golden-yellow color cast.

BE QUICK TO 
CLICK
PROTECT YOUR HEAD

**There is a threat to our children's lives
that is of epidemic proportions.**

And it is preventable... with the click of a seatbelt.

Injury causes
40%

MORE DEATHS

**than HIV/Aids,
TB & Malaria
combined.**

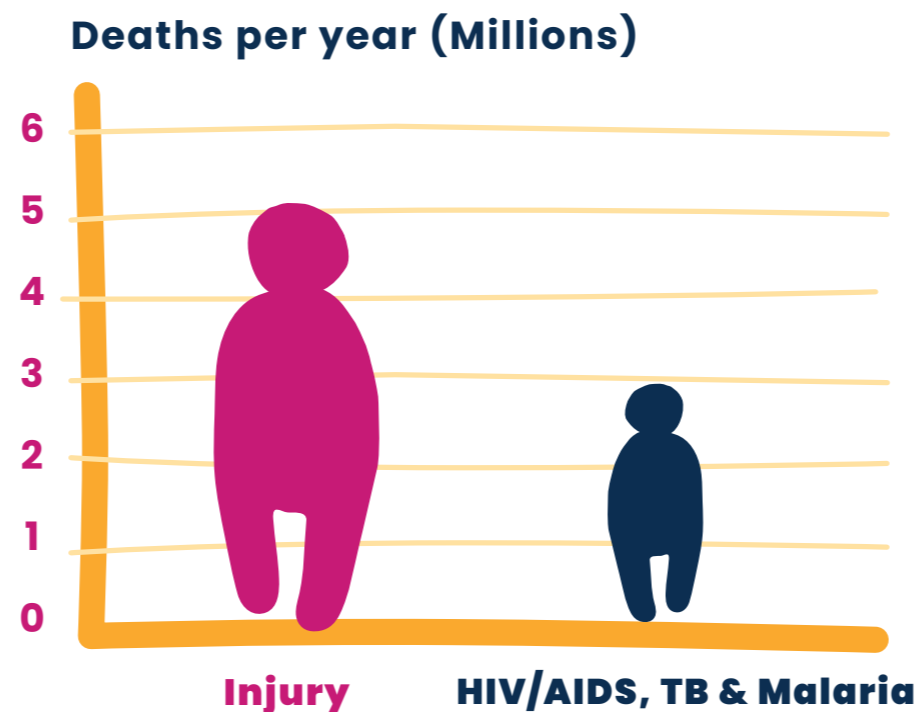
It is responsible for

60%

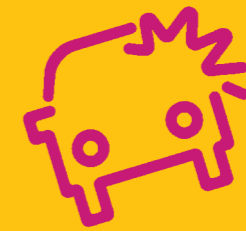
of childhood deaths in the
US, topping cancer as the
number one killer of children.

Cunningham, R. M. et al. (2018) The Major Causes
of Death in Children and Adolescents in the United
States. *The New England journal of medicine.*

Of all trauma-related injuries,
Traumatic Brain Injury (TBI)
is the greatest killer.



Source: WHO Global Health Estimates, 2014



And the single biggest
cause of TBI in children is
**motor vehicle
accidents.**

IT IS BOTH PREVENTABLE
AND ONE OF THE MOST
UNDER-RESOURCED,
UNDER-FUNDED AND
OVERLOOKED PUBLIC
HEALTH BURDENS.

A SILENT KILLER.

“ We have seen the human cost of motor vehicle accidents and TBI
in children we have not been able to save. We have also seen those
we have been able to save, but whose lives have been permanently
impacted by injury that is readily preventable with the click of a buckle.
There is an African saying that; ‘It takes a village to raise a child’.
It also takes one to protect it. We need to rally personal responsibility
around seatbelt usage – together as society. ”

Professor Anthony Figaji

**We hope to
change
that.
Join us.**

Children are the most vulnerable cohort

FACTS TO GET YOUR HEAD AROUND:



The **Red Cross War Memorial Children's Hospital** sees some

2 000 CHILDREN

(aged newborn to 12) with head injuries annually



Road accidents are responsible for almost

80%

of severe head injuries in children at the hospital (in a coma or on life support).

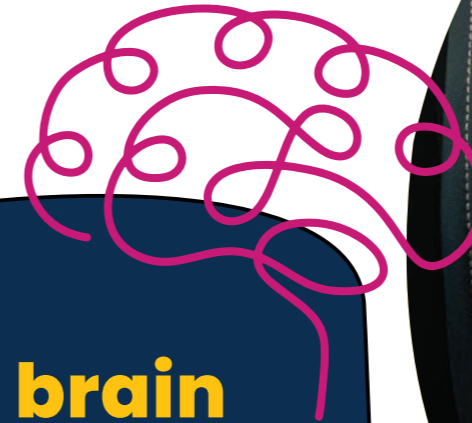
Injury is not only the greatest killer of young people, it also doubles the percentage of disability-impacted life years in 10-24 year olds compared to HIV, TB and Malaria.

(The Global Burden of Disease and Injuries 2020)

Of children admitted to the hospital after severe TBI sustained as a passenger in motor vehicle accidents,

96%

were not wearing a seatbelt.



The brain

is the only organ entirely protected by bone, however it remains extremely vulnerable to sudden movement and high impact.

30-60 MILLION

new cases of Traumatic Brain Injury (TBI) occur globally a year.

(Maas et al; Lancet Neurology 2022/James, GBD TBI; Lancet Neurology 2019)

55 million

PEOPLE LIVE WITH TBI-DISABILITY GLOBALLY.

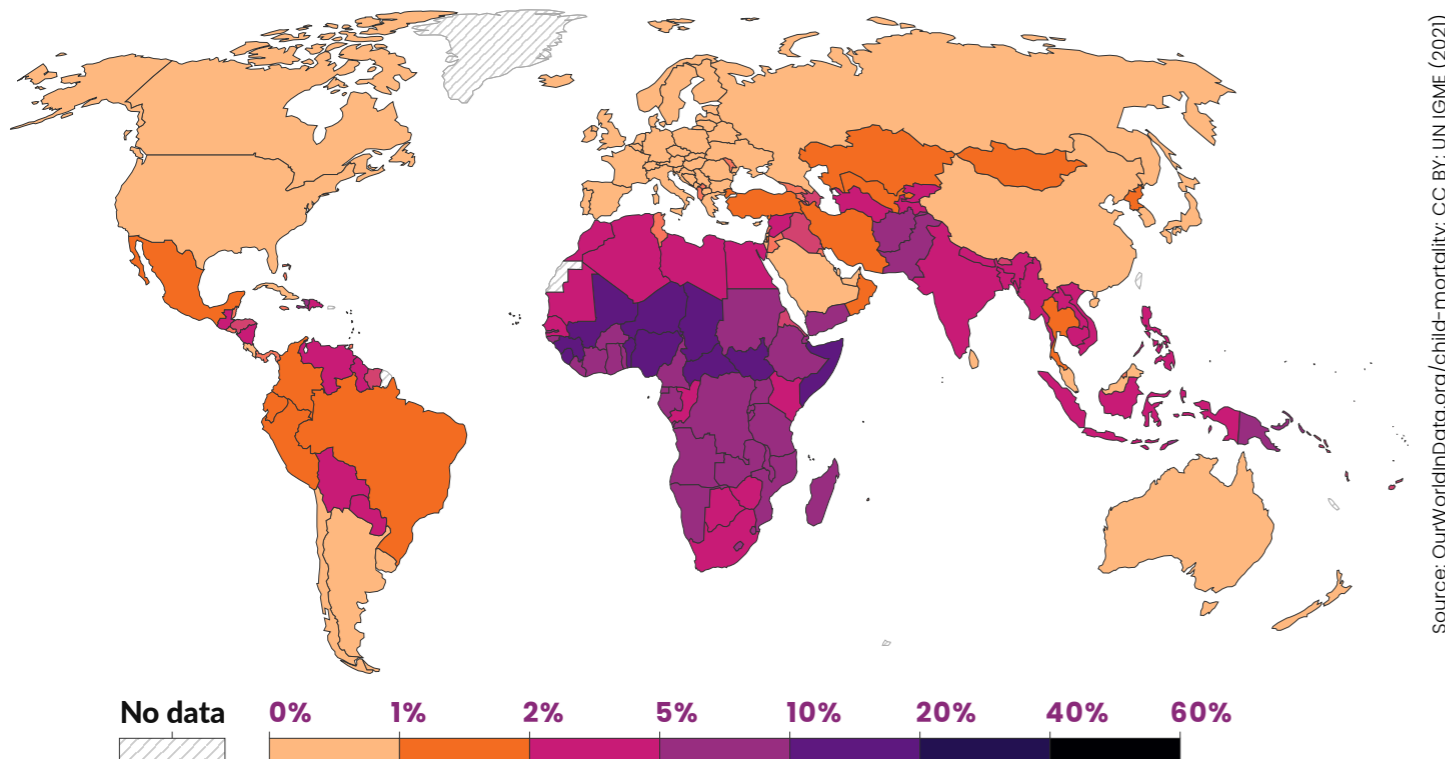


Children are particularly vulnerable to long-term brain damage:

- A brain that is still developing is more at risk of long-term damage.
- In children under the age of three, the capacity of the brain to protect itself is not fully developed.
- Many survivors have long-term disability, including physical, cognitive, behavioural and emotional disorders.
- The younger the onset of disability, the longer the consequences to be suffered over a lifetime.
- Emerging research shows that a single TBI may cause long term inflammation that can damage the neurons for years after the injury. This means that a child with a TBI today may suffer further degeneration of their brain 20 or 30 years later.

MOST CHILDREN IMPACTED ARE FROM LOWER-INCOME HOUSEHOLDS, AND TBI-RELATED DISABILITIES ONLY INCREASE THEIR DISADVANTAGES IN LIFE.

Youth mortality rate, 2020



The global share of children who die before reaching 15.

Children in South Africa are 8x MORE AT RISK OF DYING than those in the UK & 10x MORE AT RISK than in Switzerland.

It is estimated that more than

90%

of road traffic deaths occur in low and middle income countries

(WHO Road Traffic Injury Fact Sheet 2022)

TBI can result in severe disability which has a devastating impact on the life of a child, their family and community.

Most survivors of serious TBI are left with some form of physical disability, emotional or cognitive difficulty, behavioural disorder, and/or learning deficit.

In South Africa, we have one of the highest, age-standardized, disability-adjusted life year rates in the world due to injury.

A child with mild disability may have difficulty concentrating at school, struggle with attention deficits and high activity, which leads to them falling behind, or they may be slightly less coordinated and have difficulty playing sport.

From there the severity of disability climbs, so that the child:

- May need a **special school**
- Be **unable to go to school** at all
- Need **additive therapies** – speech, occupational, physical
- Suffer a **loss of productivity**, they may never be able to join a permanent workforce
- **Struggle to interact socially**
- May need **life-long care and social grants**

The child could also be physically impacted – wheelchair or bed-bound in a vegetative state, unresponsive, with no meaningful interaction with the environment, or those around them, and unable to fulfil daily activities such as eating or washing.

Consider too, the financial and day-to-day impact on primary caregivers, who may no longer be able to work and earn.

And then imagine the impact on a low-income household, which may already have been under considerable pressure.





In the event of an accident, an unrestrained child becomes a projectile.

Flung forward, the child will collide with a seat, windscreen or the road, as their smaller size means they are often catapulted from the vehicle, particularly if it rolls, considerably increasing the risk of injury or death.

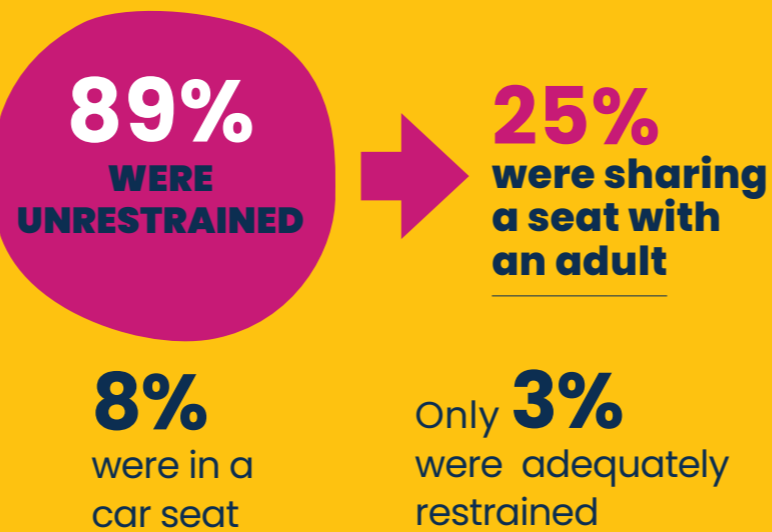
Crash force is calculated as the speed at which one was travelling multiplied by weight, so a 10 kilogram infant travelling at 60 kilometres an hour, will have a crash force of 600 kilograms if brought to a sudden halt.

Physics has shown it is impossible to hold onto a child if a vehicle is brought to a sudden stop, there is less than half a second to react and instinct is to throw your arms forward.

And never share your seatbelt with a child, as your weight would crush a child on impact.

In 2008, Childsafe South Africa conducted a five-day observational study at the main gate of Red Cross War Memorial Children's Hospital, observing the use of restraints in adult drivers, passengers and children.

OF THE 313 children OBSERVED:



South Africa's traffic fatality rate is double the global average according to the WHO Global status report on road safety (2009).

The very least we could do is wear a seatbelt.

TBI and Criminal Offence

The high representation of TBI survivors in prison

TBI can impact behaviour such as impulsivity and aggression, which puts children at higher risk of making poor decisions as teenagers. A survey of incarcerated adult male offenders found over 60% reported 'Head Injuries', 65% reported injury consistent with TBI, and adults with TBI were younger to enter custodial systems and reported higher incidence of repeat offending.

(W Huw Williams I, Avril J Mewse, James Tonks, Sarah Mills, Crispin N W Burgess, Giray Cordan)

“The impact is astounding. Take a single human story, and multiply that by the number of kids injured annually on our roads.”
Professor Anthony Figaji



Motor vehicle accidents are a leading cause of death and disability in children of all ages worldwide, and responsible for 32% of all childhood injury deaths.

Van As AB, Stein DJ. Child safety: a neglected priority. World J Pediatr 2010;6(4):293-295.

The use of a seatbelt
REDUCES THE RISK
OF FATAL INJURY BY

40-50%

for drivers and front-seat occupants,



Child restraints can lead to a
60%
reduction in deaths

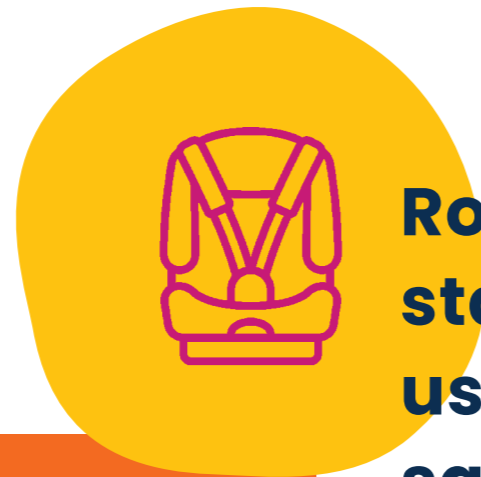
and by up to 25%
for rear-seat occupants.

WHO Road Traffic Accident Fact Sheet, 2022

Prevention is key.

It has been almost three decades since paediatric trauma was identified as a leading killer of our children globally.

Reducing death and disability from TBI due to road traffic accidents and violence must be an important health priority.



Road safety starts with us, and saves lives of our own children and those of others.

Buckling up is the law...

South African regulations state:

- All **adults must use seatbelts** if available.
- The driver must ensure **a child aged three to 14 uses a child restraint, if available, or seatbelt** if available.
- **Infants under three must be strapped into a car seat** where possible.

The law is only as strong as law enforcement.

Death and disability data graphically spell out the hazards of SA roads, and the pressing need for stricter enforcement of the rules of the road.

Simultaneously, a rigorous public awareness campaign is needed, notably in lower income areas, where seatbelt compliance drops, and where children are vulnerable on pavements and playing in streets, to risky driving practices.

- Our primary focus should be on **educating children about road safety, both within vehicles and on the streets,** so children assume a degree of responsibility for their own welfare.
- Drivers need reminding it is their responsibility by law to ensure **children are always seated** in the backseat and **secured with a seatbelt.**
- **Access to safe, cost-effective car seats** must be a focus. Car safety seats (child restraints) **reduce the risk of death in passenger cars by 71% for infants, and 54% for toddlers** (Arrive Alive).



AUTHORITIES NEED TO COMMIT TO ENFORCING COMPLIANCE WITH ROAD RULES.

It takes a village

The law is only a part of protecting our children. Everyone needs to commit to road safety, every day, on short trips and long, behind the wheel, in passenger seats and minibuses.



The brain is the keeper of our past, architect of our present and gatekeeper to our future.

Protecting children from head injuries isn't just safeguarding their bodies; it's safeguarding their entire story, their potential and their legacy.



Associate Professor Ursula Rohlwink



The Be Quick to Click Campaign is Generously supported by the **SAMRC** and the **Gabriel Foundation**.



Driving change

Be Quick to Click, Protect Your Head is a spin-off of the African Brain Child Initiative to drive public awareness, both in road users and authorities, of the importance of seatbelt usage and the ready prevention of TBI.

Behind it is the internationally respected, leading research unit in traumatic brain injury in Sub-Saharan African, which spans both research and clinical care through:

- **The Paediatric Neurosurgery Unit at Red Cross War Memorial Children's Hospital**, which provides high-level clinical care.
- And its **African Brain Child** research initiative, which does research into TBIs, and the treatment thereof, to improve outcomes for children with TBI in Africa so that they can maximise their potential.



By combining well-established clinical expertise with translational research in a large population of patients, the Paediatric Neurosurgery Unit has a strong strategic advantage in investigating and managing childhood TBI. Over several years, the unit has invested in developing a world-class infrastructure for clinical and research work in TBI.

The work comprises a multidisciplinary, translational, and clinically relevant research approach that addresses the problem of TBI in South African patients, with an emphasis on children as the most vulnerable population group and road traffic accidents as the most relevant mechanism of injury.

Meet the team

Professor Anthony Figaji

Head of Paediatric Neurosurgery, Division of Neurosurgery and Neuroscience Institute, UCT and Red Cross War Memorial Children's Hospital; Director, African Brain Child; South African National Research Foundation SARChI Chair of Clinical Neurosciences

Tony Figaji is responsible for the neurosurgical management of patients at two internationally renowned teaching hospitals, Groote Schuur and the Red Cross War Memorial Children's Hospital. Over several years Figaji incrementally developed an internationally acclaimed research-based advanced brain monitoring infrastructure for children with acute brain injury, now widely recognized as the most experienced unit of its kind. His group is committed to shedding even more light on brain injury in children, notably due to trauma or tuberculosis meningitis, both of which can lead to long-term disability or death.

Associate Professor Ursula Rohlwink

Associate Professor, Division of Neurosurgery and Neuroscience Institute, UCT and Red Cross War Memorial Children's Hospital; Senior scientist, African Brain Child; Wellcome International Intermediate Fellow

Ursula Rohlwink has focused her research on TBI and TBM, major burdens of disease locally and globally, using clinical tools, such as multimodal brain monitoring, and laboratory tools, such as RNA sequencing, metabolomics and proteomics, to develop high-level patient data.

Ultimately, her research is geared to a greater understanding of brain injury processes and insight into neurocritical care and multimodality neuro-monitoring, with the aim of achieving the best possible outcomes for young patients.

Associate Professor Nico Enslin

Senior Consultant, Division of Neurosurgery and Neuroscience Institute, UCT and Red Cross War Memorial Children's Hospital

Having studied physiotherapy initially, and then medicine, Professor Enslin specialised in paediatric neurosurgery at UCT. Enslin has spearheaded significant innovation in functional neurosurgery (which helps correct chronic neurological disorders that interrupt day-to-day functions such as epilepsy, spasticity or movement disorders) and deep brain stimulation.



Dr Nqobile Thango

Consultant, Division of Neurosurgery and Neuroscience Institute, UCT and Red Cross War Memorial Children's Hospital

A paediatric neurosurgeon at Red Cross War Memorial Children's Hospital, Dr Nqobile Thango has specific research interests in TBI, neurocritical care (notably in multimodal monitoring) and antibiotic pharmacokinetics (how the body reacts to medication) in children with brain infection.

Being quick to click comes down to a single decision that can save a life.

Let us unite as parents, a community and responsible citizens to ensure the safety of our children.

Together, we can make a difference and protect our children's lives and futures.