

AfroSAFE Academy traffic safety course | Lusaka, Zambia, 8–9 June 2026

Safe System in road traffic

ALIAKSEI LAURESHYN | LUND UNIVERSITY, SWEDEN



in 2021:

10.3 million population

6.5 million vehicles

204 traffic fatalities

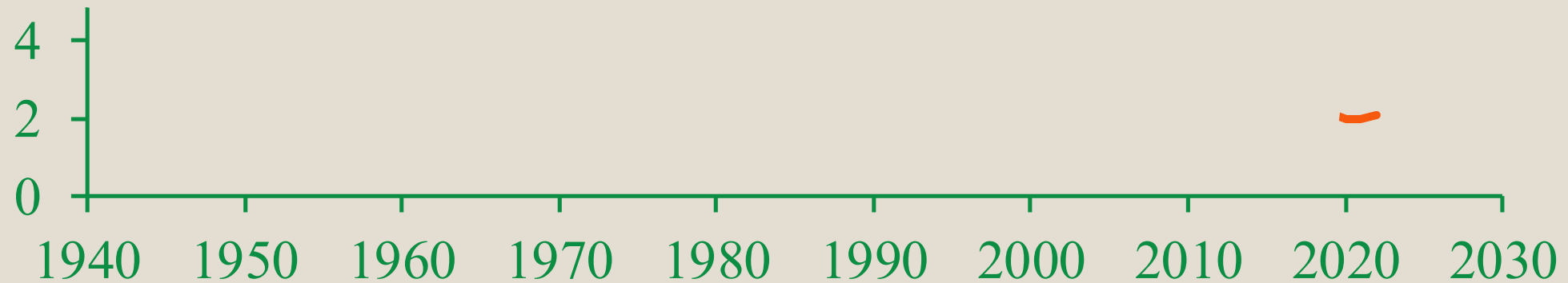
2.0 fatalities per 100 000 pop.

(17 in Zambia, WHO estimate)



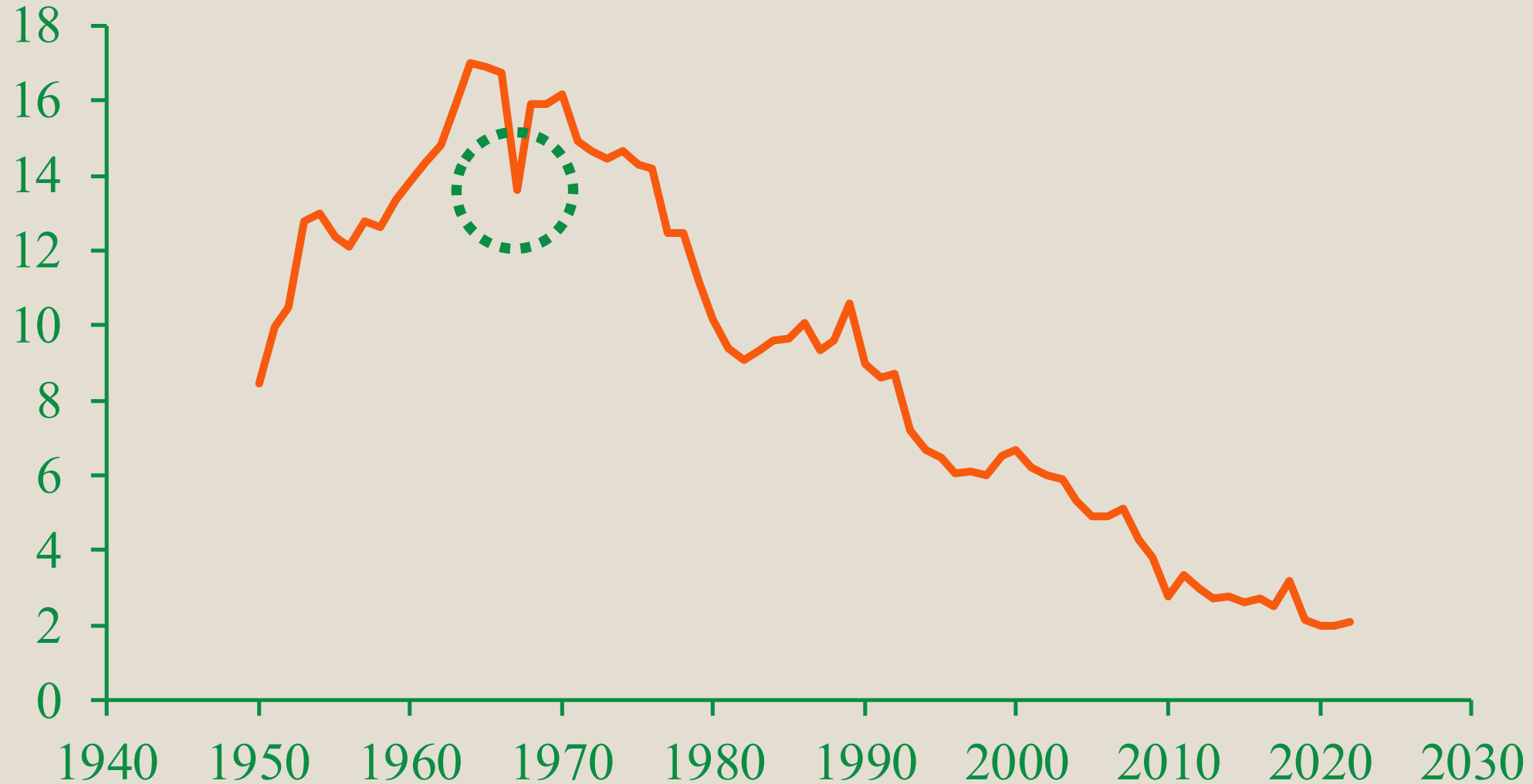
Longer perspective: Sweden

Traffic fatalities per 100 000 population



Longer perspective: Sweden

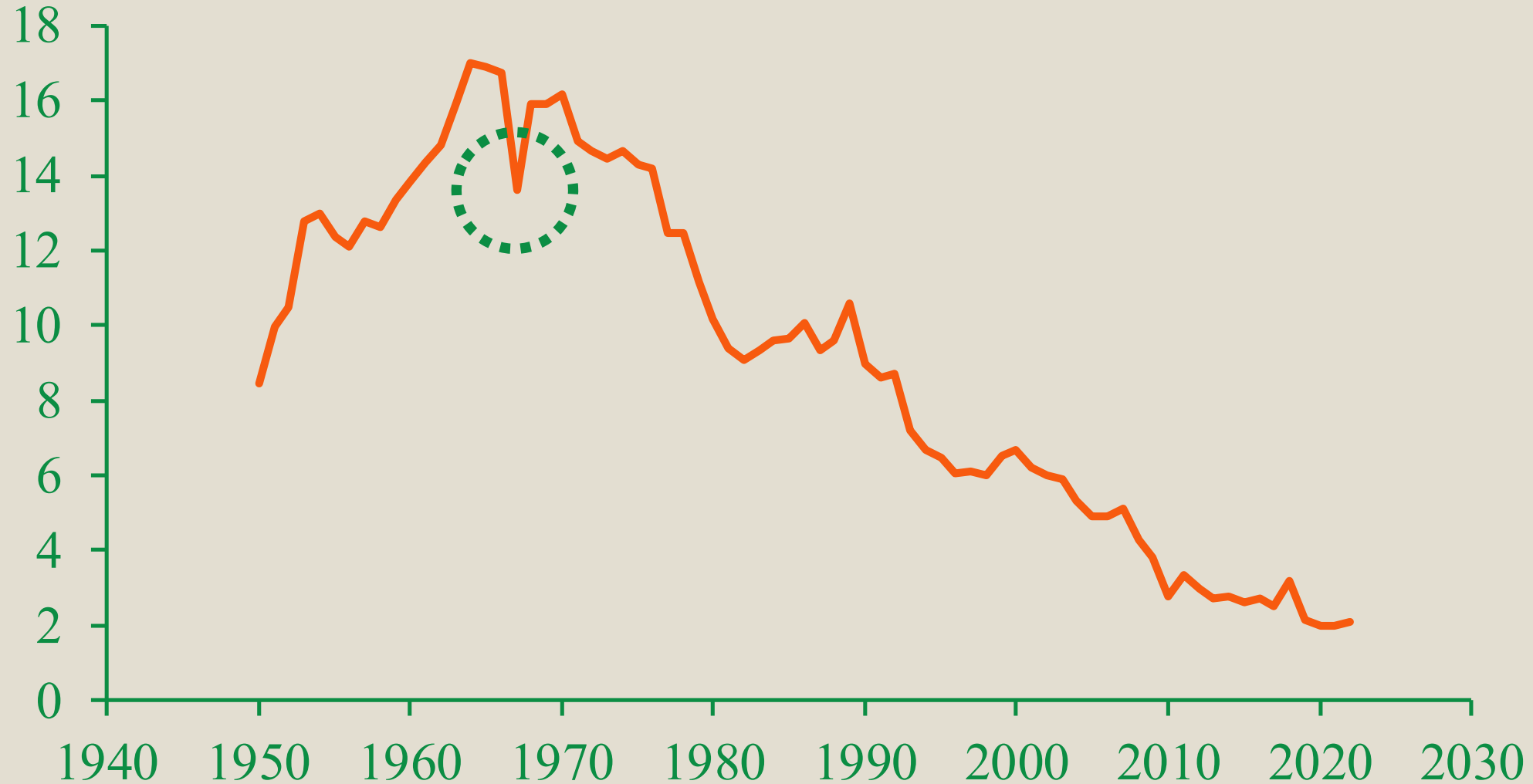
Traffic fatalities per 100 000 population

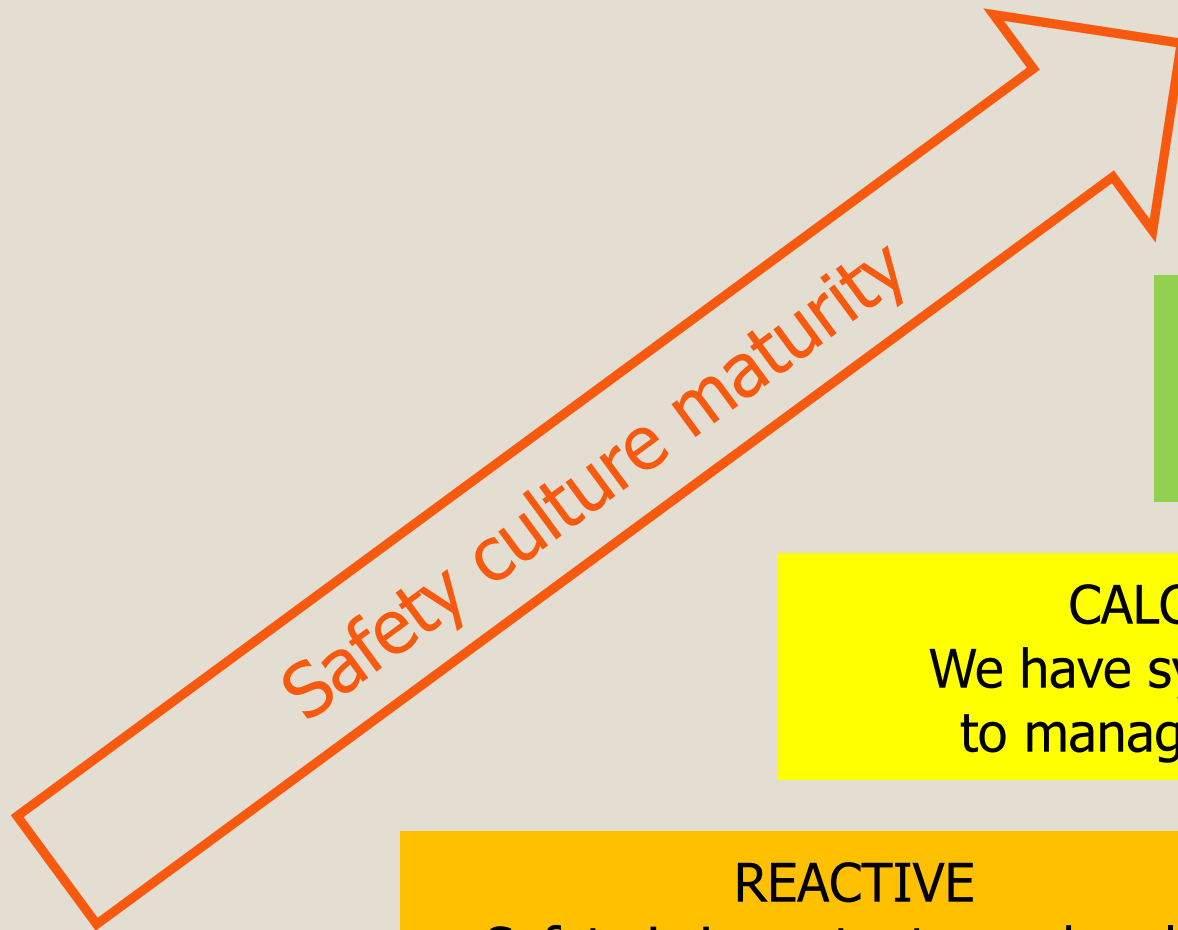




Longer perspective: Sweden

Traffic fatalities per 100 000 population





GENERATIVE
'Safety' is how we naturally
do things here

PROACTIVE
Safety leadership and values
drive continuous improvement

CALCULATIVE
We have systems in place
to manage the hazards

REACTIVE
Safety is important, we do a lot
every time there is an accident

PATHOLOGICAL
Who cares as long as
we are not caught?



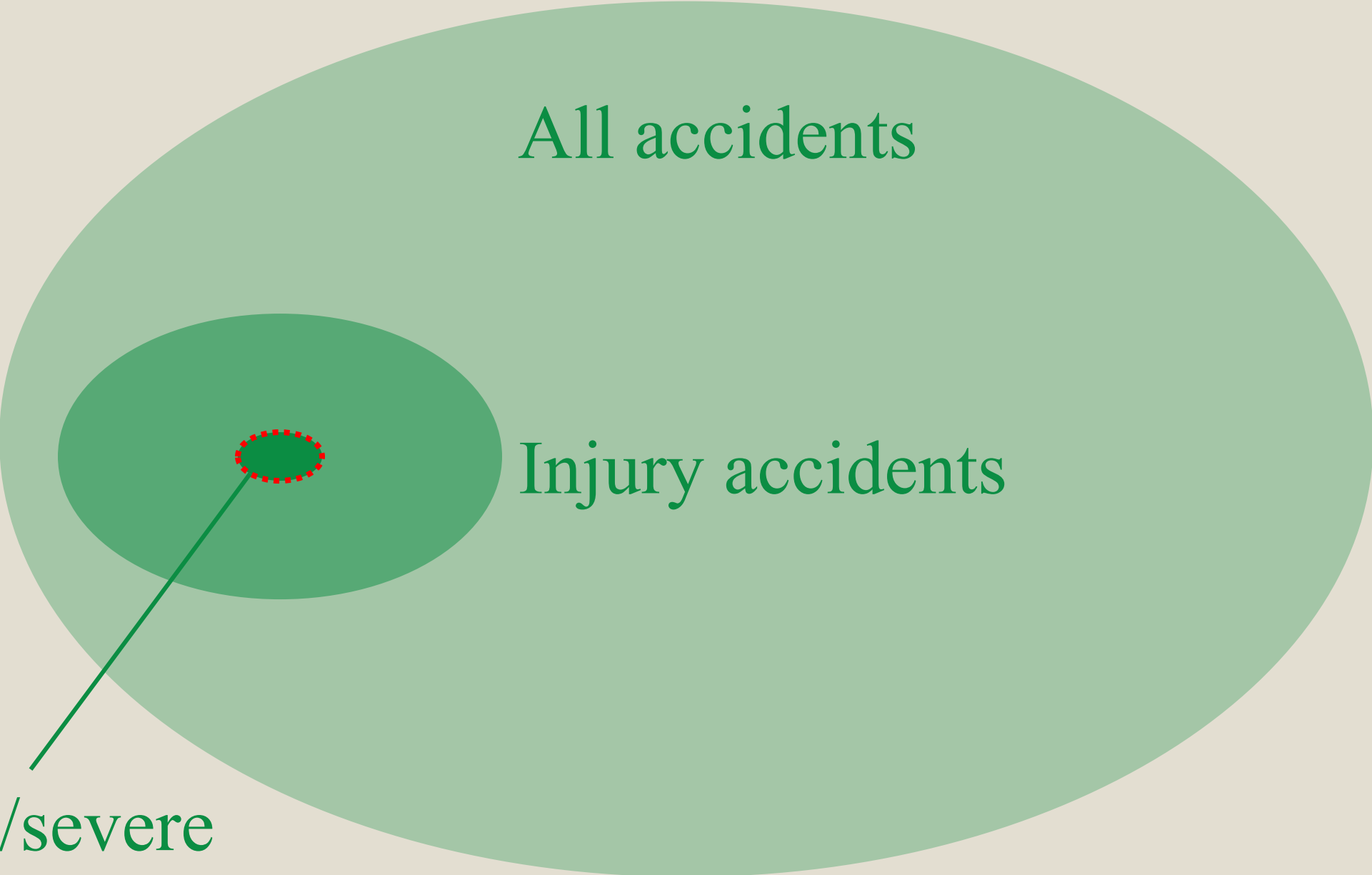
Safe System: a paradigm shift



Safe System: a paradigm shift

Severe accidents in focus





All accidents

Injury accidents

Fatal/severe
injury accidents

Strong emotional and ethical standing

Property damage

'money loss problem'

Death & injuries

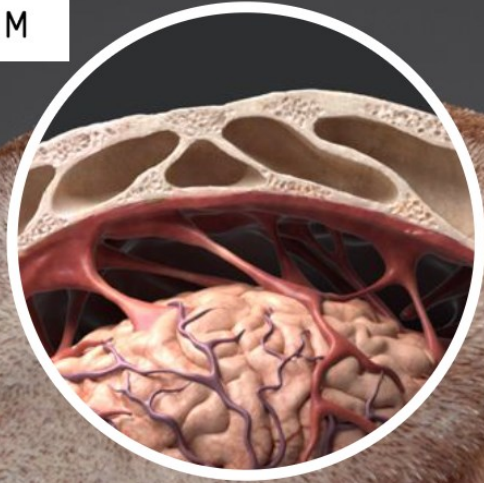
'public health problem'

Vision Zero

Hard to argue for any other number than zero:
who are the people to sacrifice?



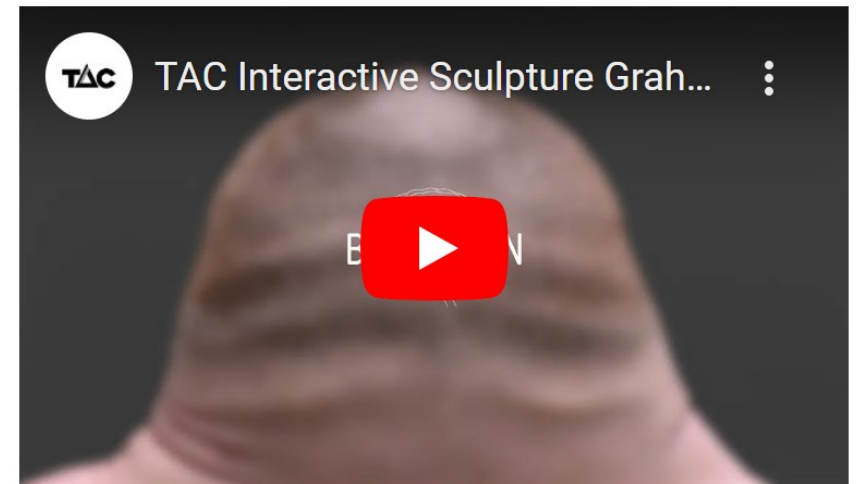
Biomechanical tolerance



BRAIN



The brain is one of the most vulnerable parts of our body. It sits delicately surrounded by cerebrospinal fluid, which acts as an inbuilt safety mechanism to protect the brain from day-to-day knocks and jolts. The brain itself has very little internal structural that helps to cushion it.



In a car crash, we are dealing with forces much greater than the physical knocks our brains are designed to take. Impact forces cause the brain to hit the walls of the skull.



Fatality risk

100 %

80

60

40

20

0

0

20

40

60

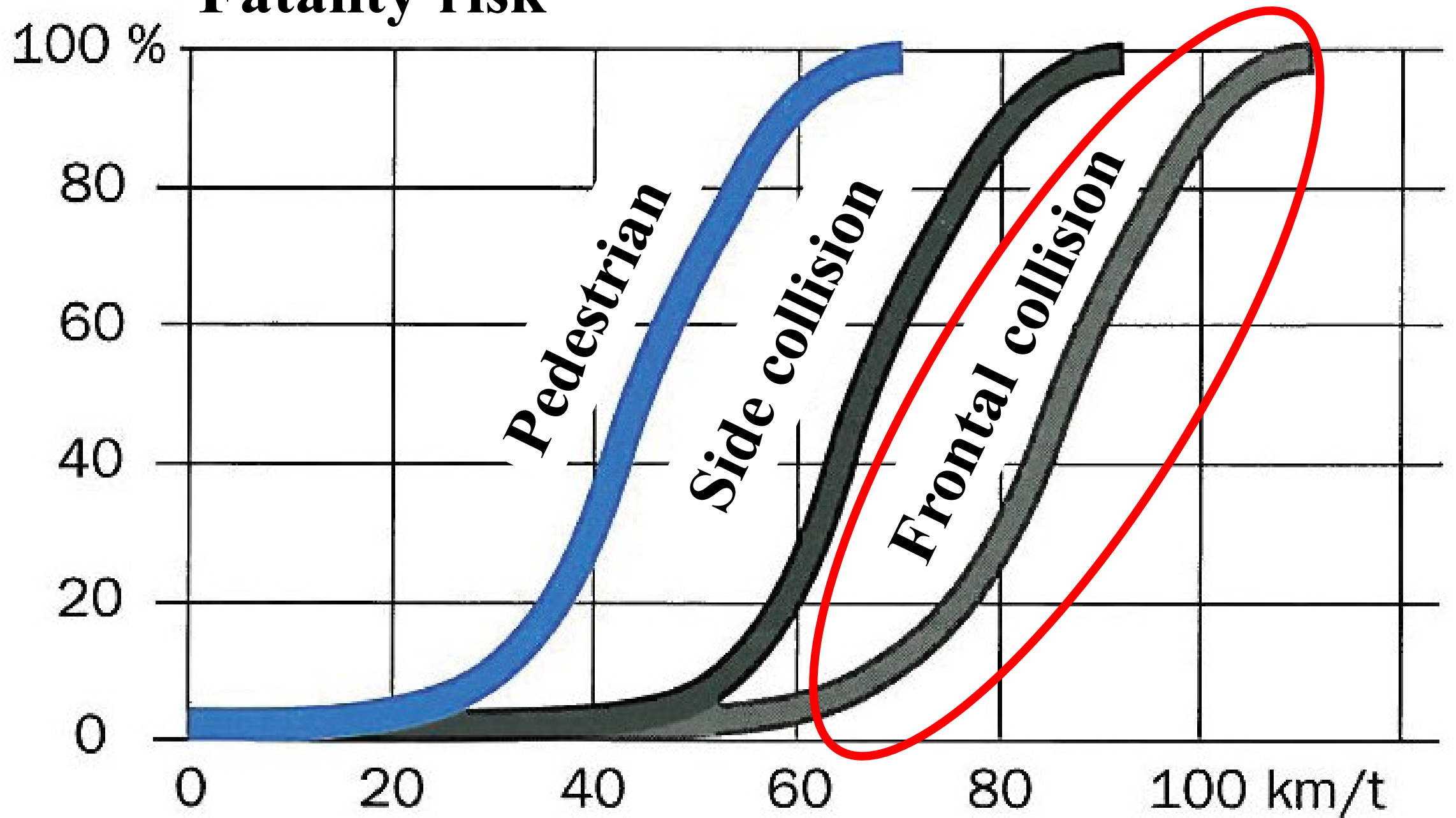
80

100 km/t

Pedestrian

Side collision

Frontal collision





50 km/h



70 km/h



90 km/h

23 34
VÄXJÖ 174
VIMMERBY 49
KISA 9



Fatality risk

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0

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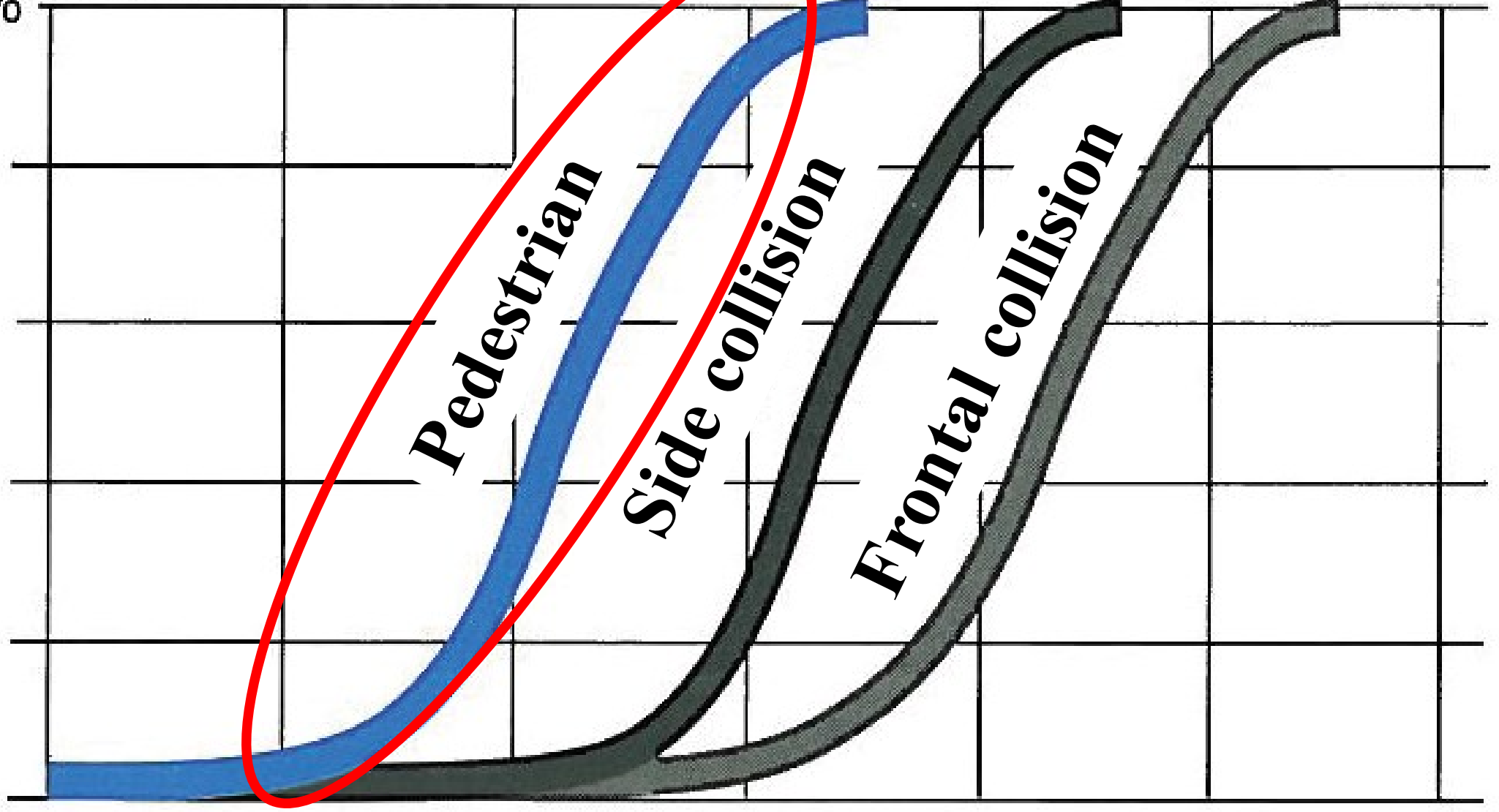
80

100 km/t

Pedestrian

Side collision

Frontal collision



23 34
VÄXJÖ 174
VIMMERBY 49
KISA 9





Takoradi
Cape Coast
Winneba

LATEX FOAM
...Your Partner for
Tel: 0208-155538

MEMORANDUM

HR123





Humans fail...



23 34
VÄXJÖ 174
VIMMERBY 49
KISA 9





**No Seat Belt
No Excuse**



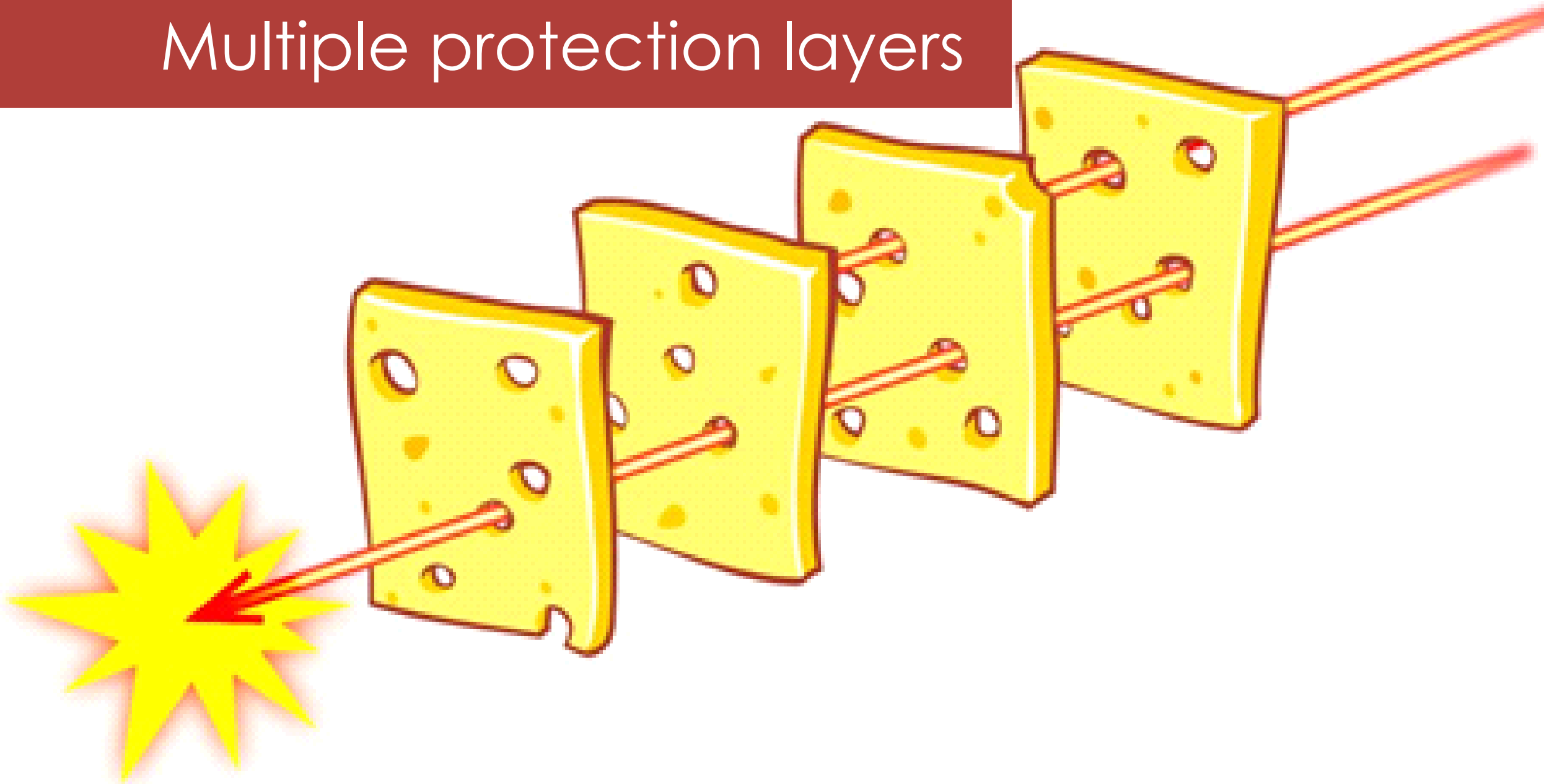
**No Seat Belt
No Excuse**



SU



Multiple protection layers



Safe vehicles



Post-crash response



Road safety management



Safe infrastructure



Safe road users



Safe speeds





Shared responsibility

Traditional approach

'Blame the driver' (93% are caused by ...)

Solutions: campaigns, education, enforcement

Safe System approach

Road users

know & follow rules

System designers

build & operate road system

take further steps if road users fail to comply due to error, lack of knowledge, ability, or acceptance



STOP

Kappa



Stakeholders

Parliament

Ministry of finance

Ministry of infrastructure

Ministry of labour

Ministry of justice

Ministry of health

Transport agency

Police authority

Public health agency

Transport administration

Work environment authority

Insurance companies

Research institutes

Local authorities

Vehicle industry

Transport companies

NGOs

Summary

Safe System

Fatalities/injuries

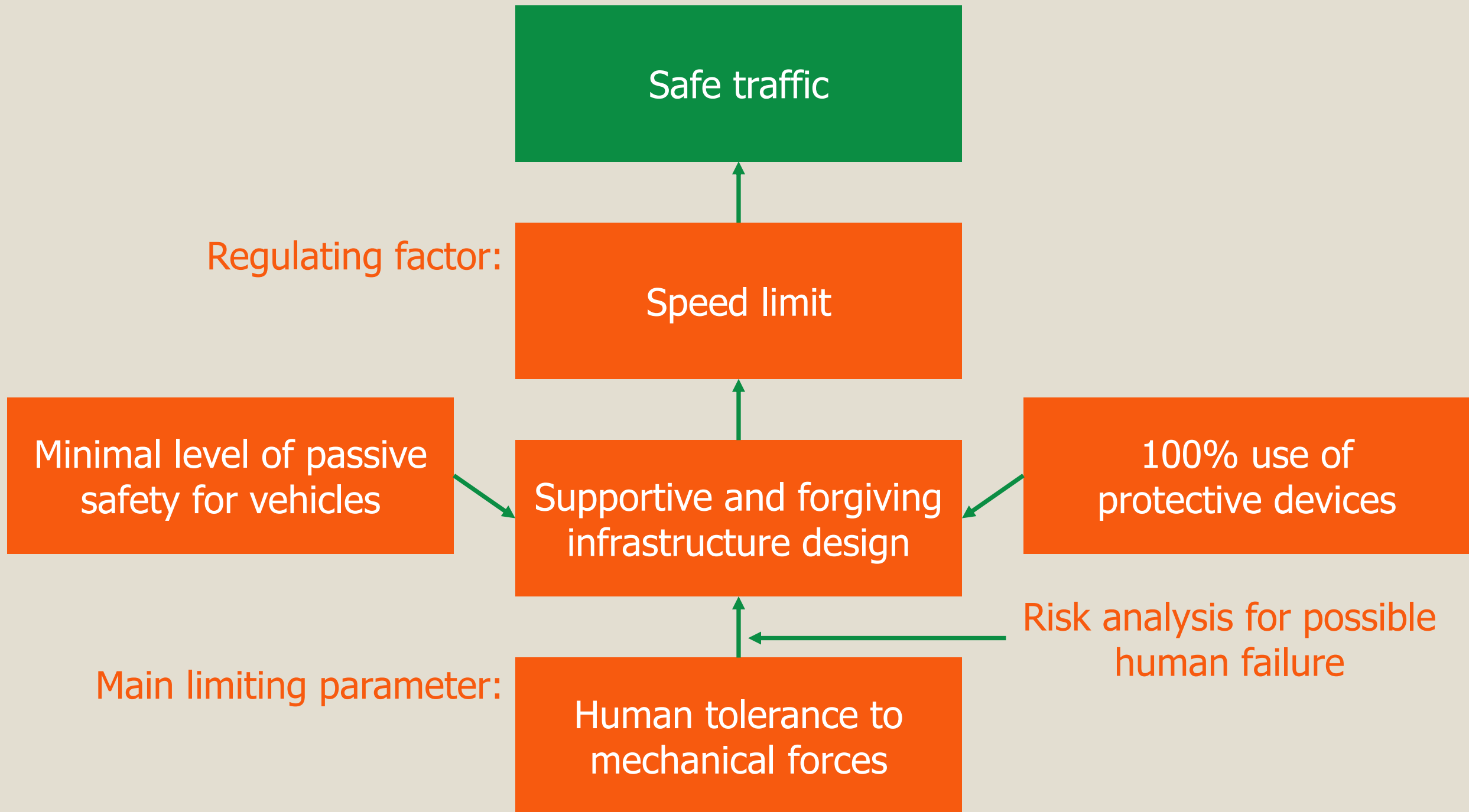
Human body

Shared responsibility

Human mistakes

Multiple protection





No one to be killed in traffic



VISION ZERO

TOGETHER WE
SAVE LIVES

Thank you!

Aliaksei Laureshyn
Lund University, Sweden

aliaksei.Laureshyn@tft.lth.se



www.ictct.net/afrosafe

References

Hudson, P. (2007), 'Implementing a safety culture in a major multi-national', *Safety Science*, 45 (6), 697–722, <https://doi.org/10.1016/j.ssci.2007.04.005>.

Johansson, R. (2009), 'Vision Zero - implementing a policy for traffic safety', *Safety Science*, 47, 826–831, <https://doi.org/10.1016/j.ssci.2008.10.023>.

Lie, A., C. Tingvall (2024), 'Are crash causation studies the best way to understand system failures – Who can we blame?', *Accident Analysis & Prevention*, 196, 107432, <https://doi.org/10.1016/j.aap.2023.107432>.

Project Graham (n/d), 'Meet Graham: The only person designed to survive on our roads' (Towards Zero, Project Graham), <http://www.meetgraham.com.au/>.