Vision Zero - what is it about?

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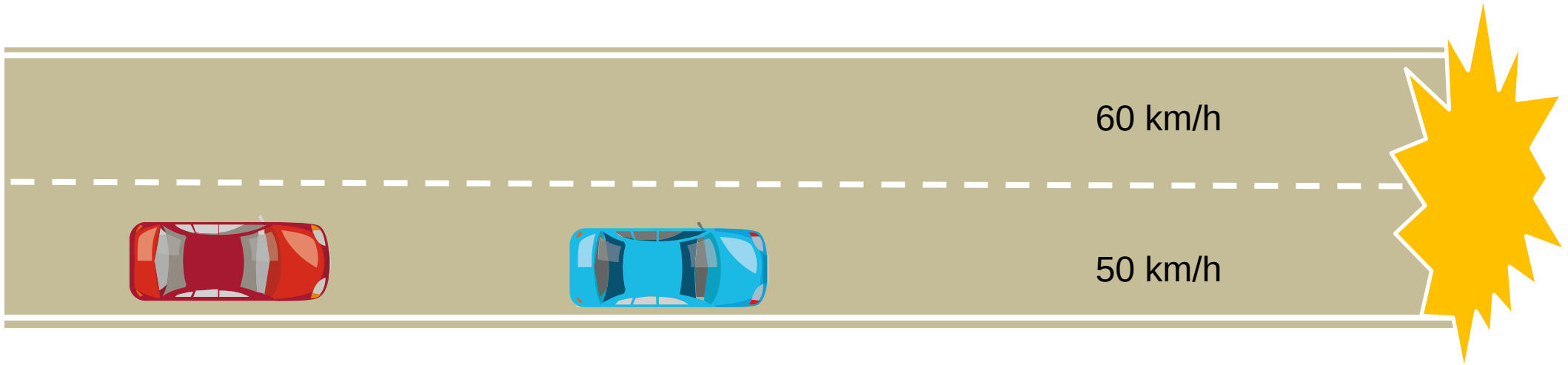
What speed would the red car be at when the blue car has stopped?



Basic physics

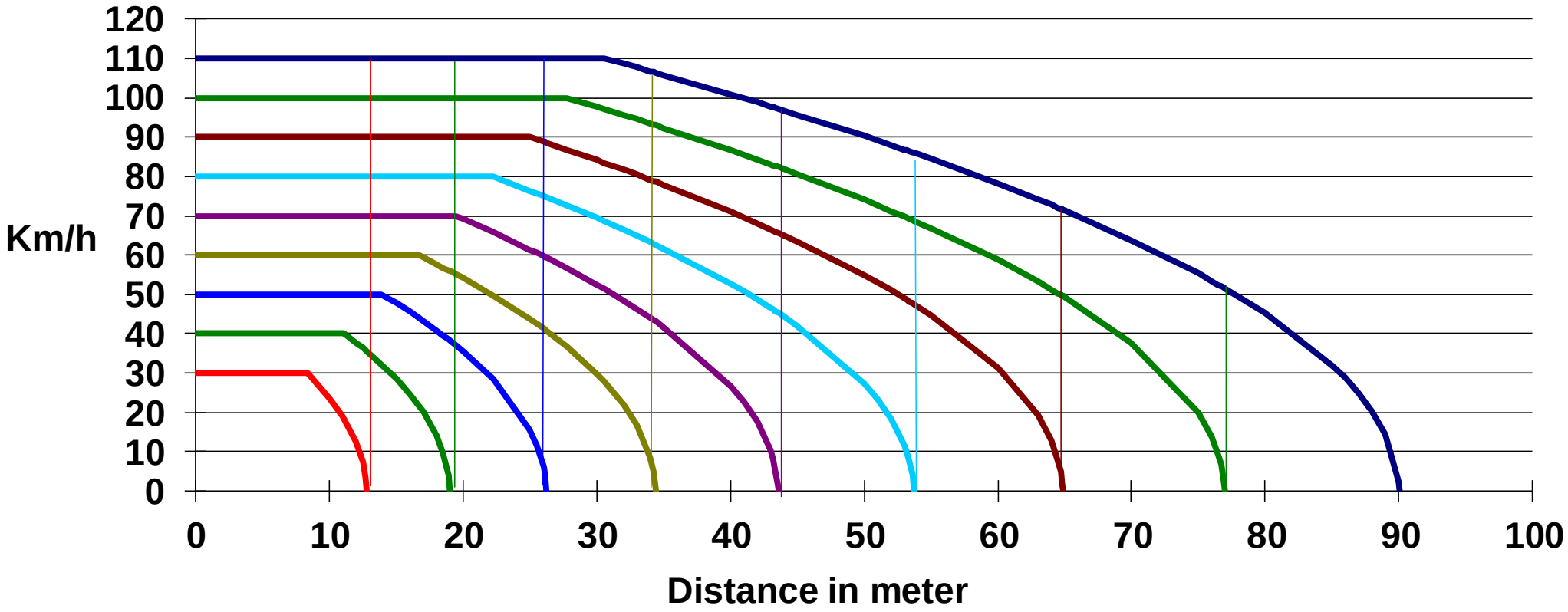
$$\text{Kinetic energy} = \frac{m * v^2}{2}$$

m = mass

v = velocity

Stopping distance and collision speed

Fast reaction time 1 second and hard breaking on dry asphalt (retardation 0,8 g)




90 km / tim
70 km / tim
50 km / tim
30 km / tim

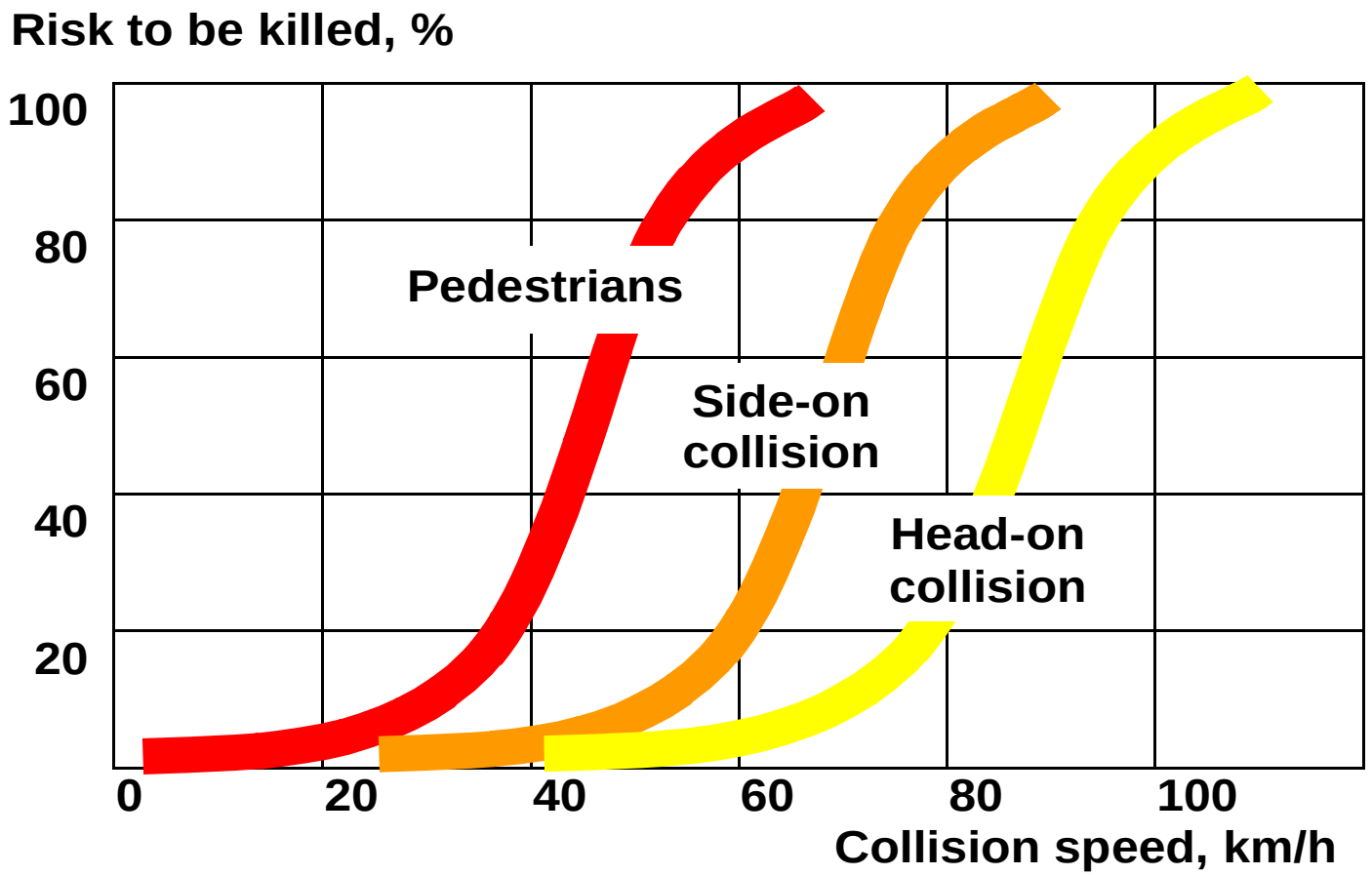
Usain Bolt – the fastest man on earth


Photo: SVT

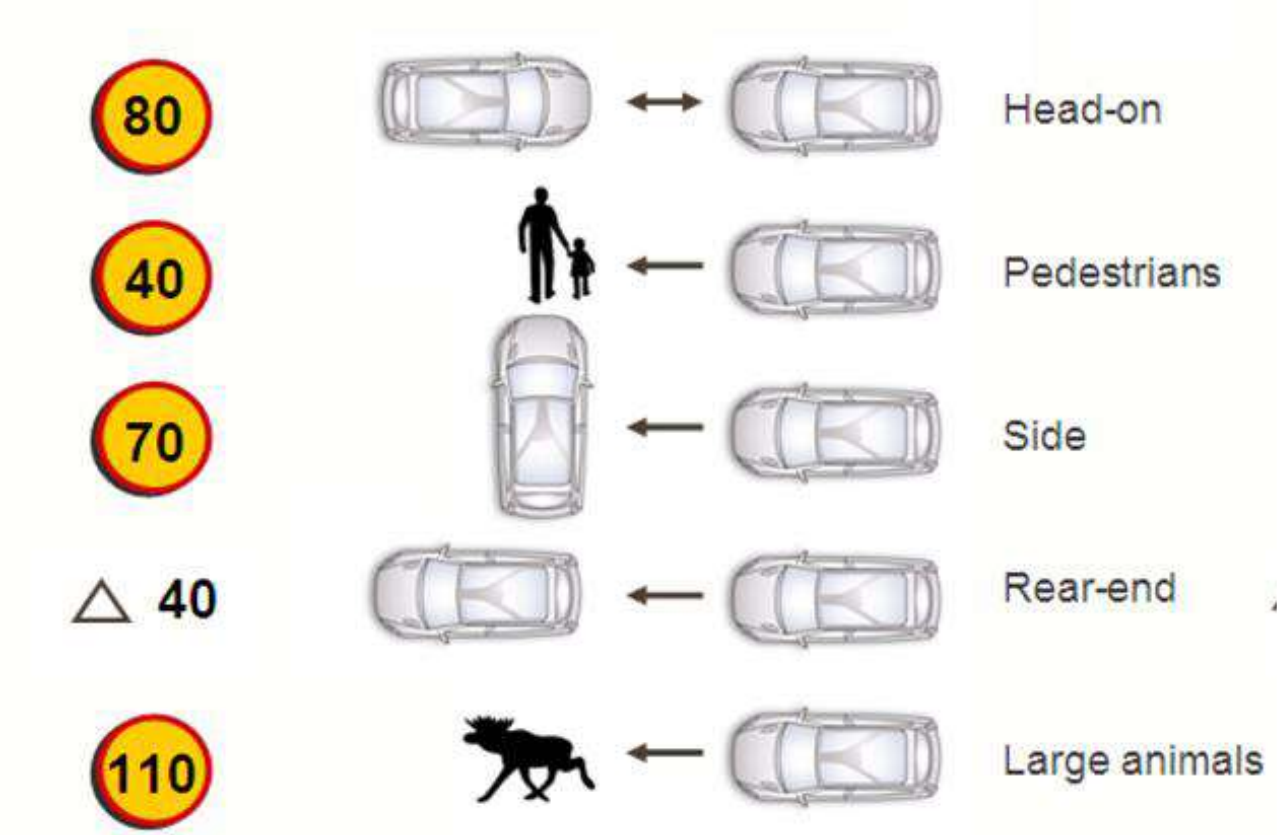
100 m: 9.58 sec

Mean speed: 38 km/h

Risk to be killed at different collision speeds



Design speed for modern cars



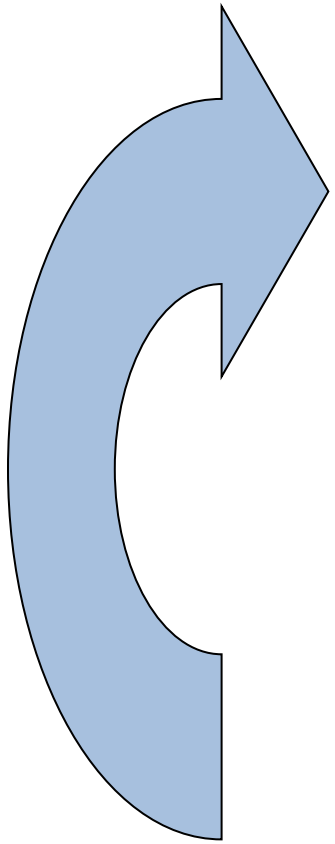
Vision Zero

An ethical standpoint that no-one should be killed or suffer lifelong injury in road traffic.

Road users will always make errors.

The level of violence that the human body can tolerate without being killed or seriously injured shall be the basic parameter in the design of the road transport system.

Shared responsibility

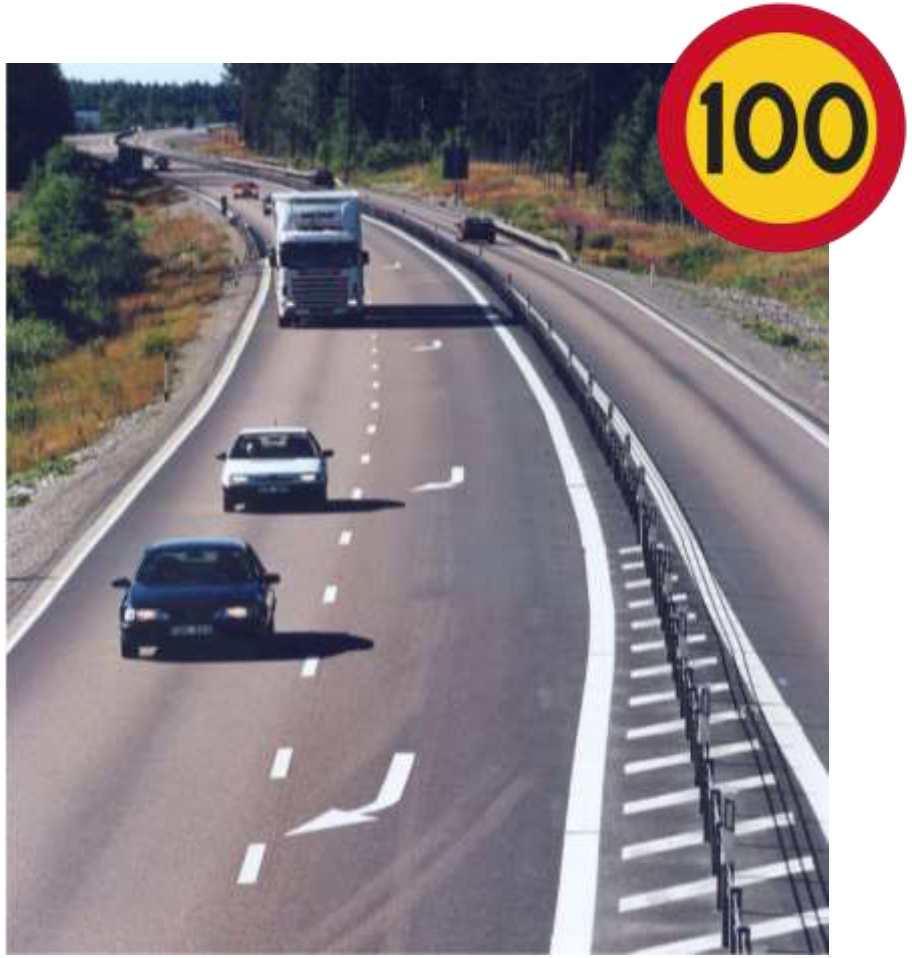


System designers are responsible for the design, operation and the use of the road transport system and are thereby responsible for the level of safety within the entire system.

Road users are responsible for following the rules for using the road transport system set by the system designers.

If the users fail to comply with these rules due to a lack of knowledge, acceptance or ability, the system designers are required to take the necessary further steps to prevent people from being killed or injured.

Controlling on-coming traffic



Intersections to roundabouts

A modern camera system

Example of a safe ”hourglass” bus-stop

Fence and speedbump

Safe bus-stop

Typical speedbump in a residential area