

Sweden and prevention of DUI

Hans Berg

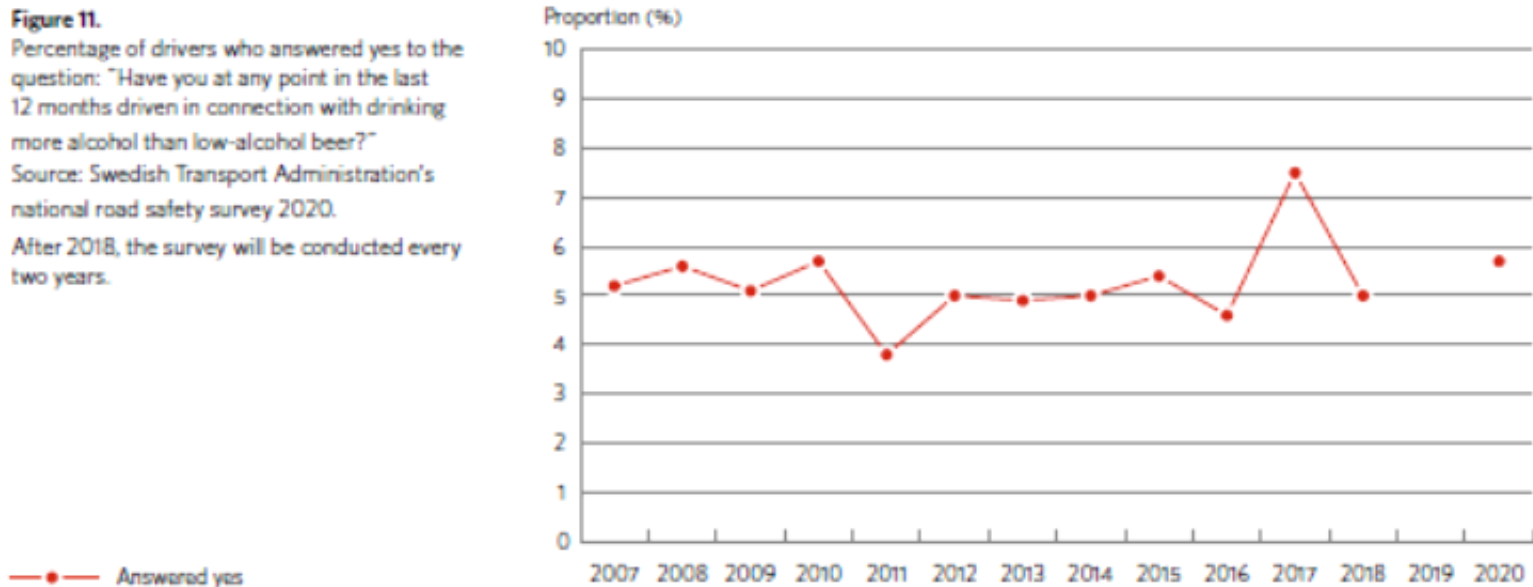
Drinking and driving in Sweden

Figure 11.

Percentage of drivers who answered yes to the question: "Have you at any point in the last 12 months driven in connection with drinking more alcohol than low-alcohol beer?"

Source: Swedish Transport Administration's national road safety survey 2020.

After 2018, the survey will be conducted every two years.



The Swedish alcohol policy since the end of the 1900 century - limit the total consumption

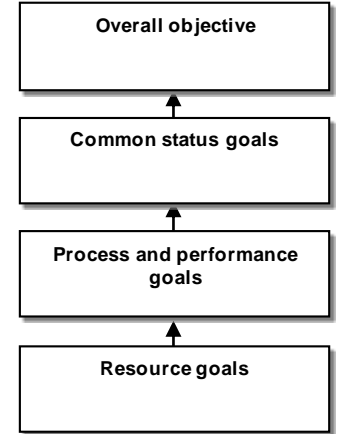
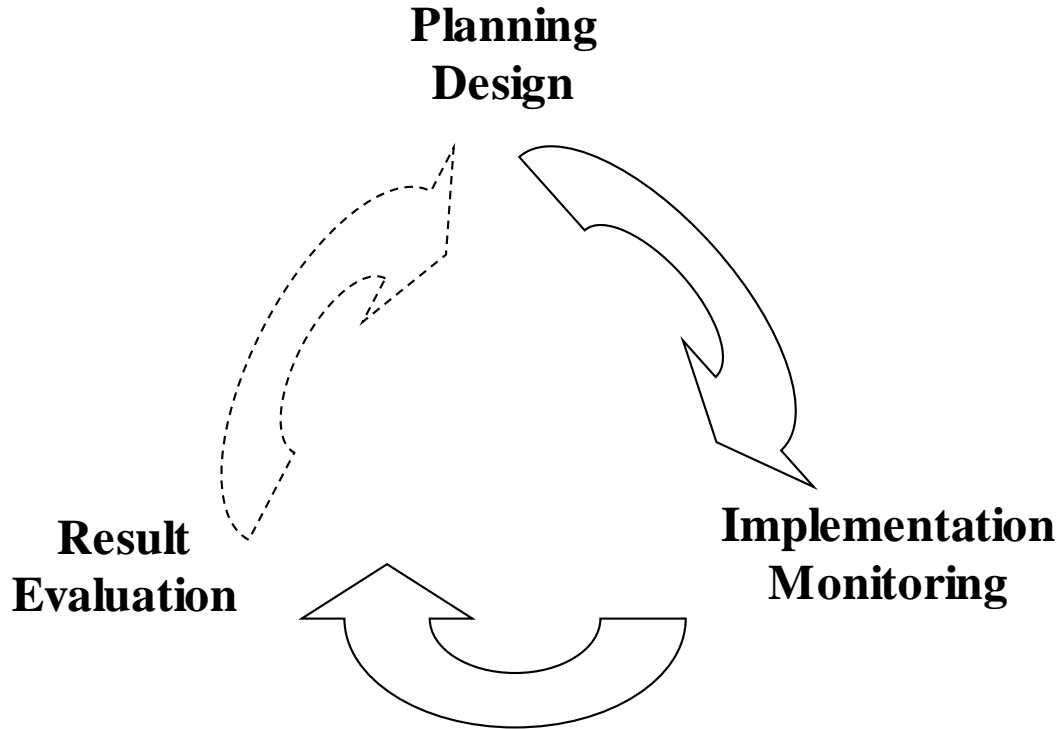
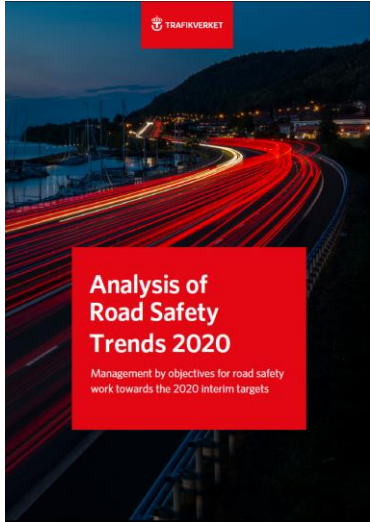
- During the 1800 century, alcohol was used to produce gun powder and to clean guns and canons but....!
- At the end of 1800's recognized as a public health problem
- Introducing heavy restrictions on alcohol serving and 1917 a ration book to control over the (legal) purchase of spirits and wine.
- Referendum on alcohol bans in 1922 led to a compromise where the ration book and the restaurants' restrictions were made permanent.
- 1955 the ration book was abolished and the national company "Systembolaget" was introduced. Increased tax on alcohol.
- 1977 not allowed to sell beer in grocery stores
- Alcohol advertising was banned 1979 and 1981 "Systembolaget" closed on Saturdays (since 2001 open on Saturdays)

Development of legal blood alcohol content in Sweden (breath in brackets)

- To 1949 1.5 ‰ (0.75 ‰)
- 1949 to 0.8 ‰ (0.4 ‰)
- 1957 to 0.5 ‰ (0.25 ‰)
- 1990 to 0.2 ‰ (0.1 ‰)

A discussion has been about lower the legal limit to 0 ‰

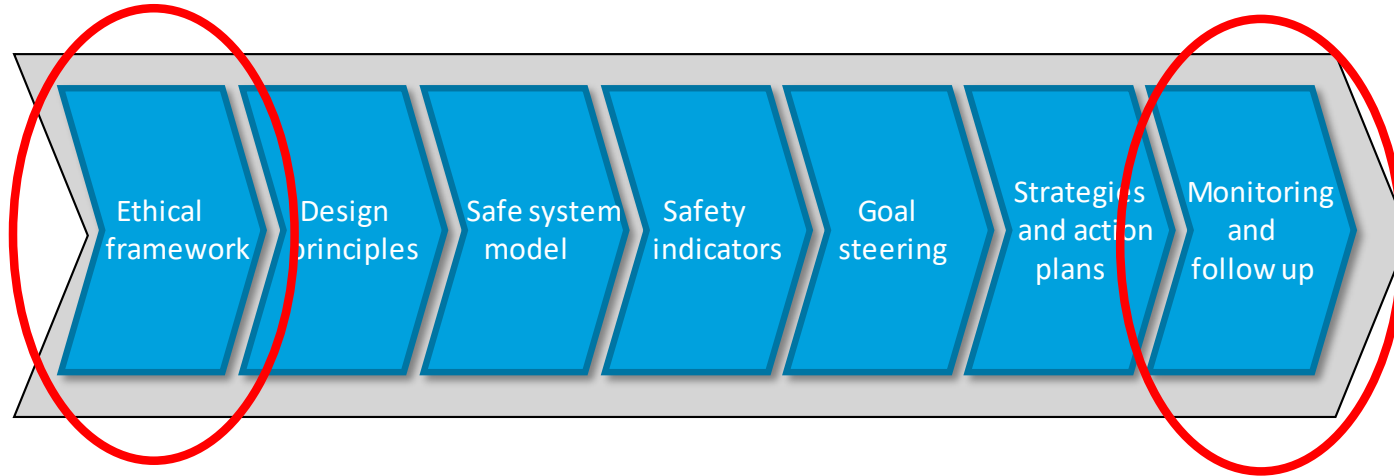
Monitoring is the heart of prevention!



Systematic approach in road safety work

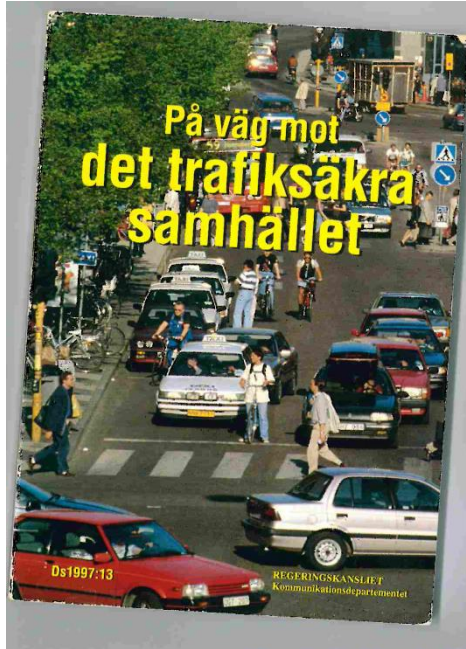
1. Define the burden and nature of road casualties/injuries
2. Get commitment and support from decision makers
3. Establish Road Safety Policy
4. Define Institutional roles and responsibilities
5. Identify road safety problems
6. Set Road Safety Targets
7. Formulate strategy, action plan
8. Allocate responsibility for measures
9. Ensure funding
10. Apply measures with known effectiveness
11. Monitor performance

The Swedish Road Safety Process



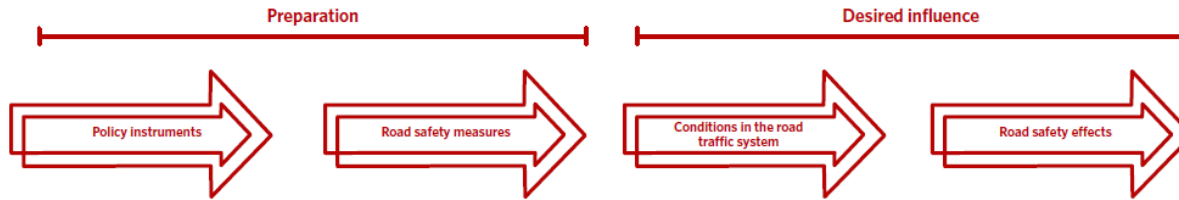
3. Establish Road Safety Policy

In October 1997 the Parliament passed a new bill on Road Traffic Safety, "*Vision Zero*".



“Vision Zero means that (eventually) no one will be killed or seriously injured within the road transport System”

The use of "Safety performance indicators"

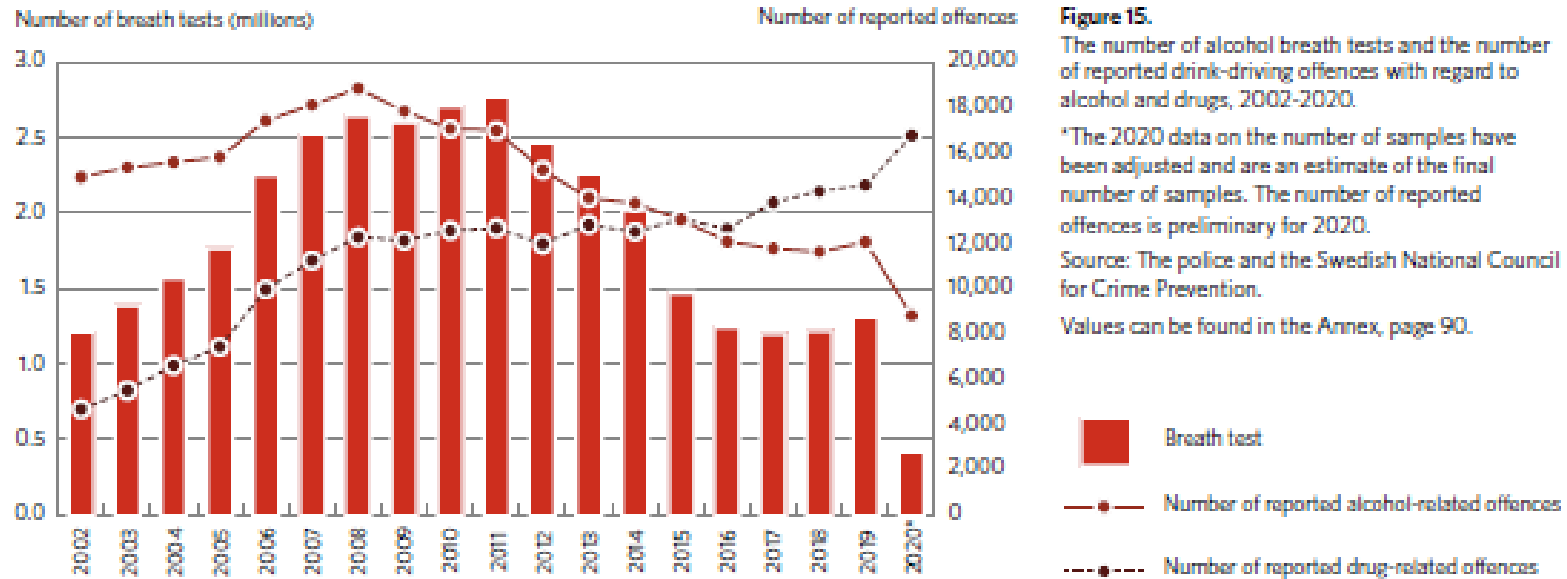


Safety performance indicator	Starting position	2020	Target year 2020	Target achieved
Traffic volume within speed limits, state road network	43%	49.4%	80%	No
Traffic volume within speed limits, municipal road network (start year 2012)	64%	67%	80%	No
Average travel speed, state road network	82 km/h	76.8 km/h	77 km/h	Yes
Average travel speed, municipal road network	49 km/h	46 km/h	46 km/h	Yes
Traffic volume with sober drivers	99.71%	99.75% (2019)	99.90%	No
Seat belt use in front seat of passenger cars	96%	97.9%	99%	No
Helmet use among cyclists	27%	47%	70%	No
Moped riders with correctly used helmet	96%	98%	99%	No
Traffic volume with highest Euro NCAP safety rating	20%	82%	80%	Yes
Correct use of motorcycles	—	—	—	Not measured
Traffic volume with median barrier on roads with speed limits above 80 km/h, state road network	50%	85%	90%	No
Safe pedestrian, cycling and moped passages	19%	28%	35%	No
Municipalities with good quality maintenance of pedestrian and cycling paths	18%	19% (2019)	70%	No
Systematic road safety management in line with ISO 39001	—	—	—	Not measured
Number of fatalities in road traffic	440	204	220	Yes
Number of seriously injured in road traffic	5,400	3,600	4,100	Yes

Monitoring indicators connected to fatalities (and injuries)

Safety performance indicator	Starting position	2020	Target year 2020	Target achieved
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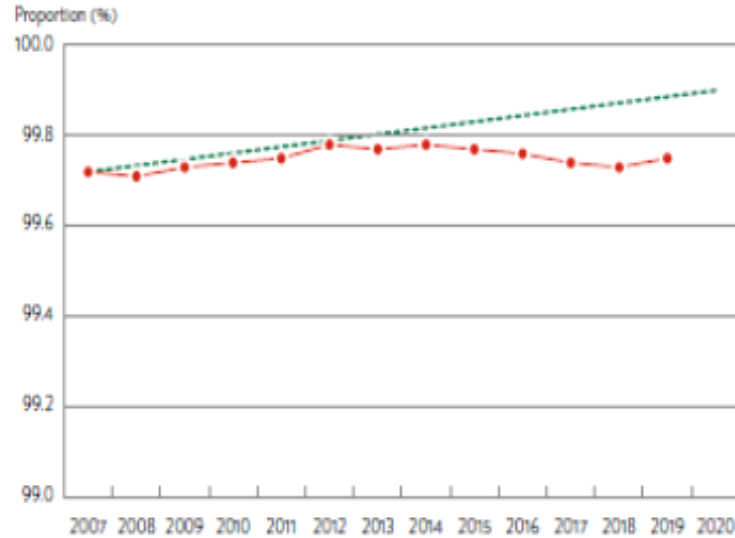
Some facts....



Some facts....

Figure 10.
Percentage of sober traffic, 2007-2019. Measurement series based on data from police checks.
Source: Swedish Police, VTI.

—●— Sober traffic
- - - - - Required development



Some facts.....

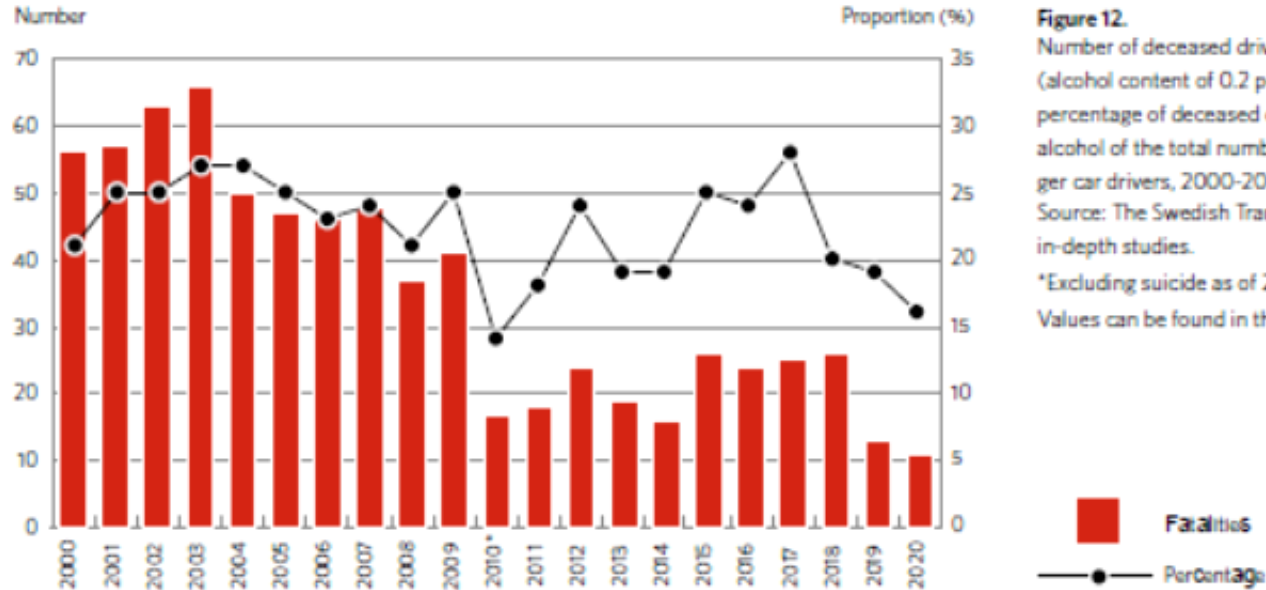


Figure 12.

Number of deceased drivers affected by alcohol (alcohol content of 0.2 per mille or more) and percentage of deceased car drivers affected by alcohol of the total number of deceased passenger car drivers, 2000-2020.

Source: The Swedish Transport Administration's in-depth studies.

*Excluding suicide as of 2010.

Values can be found in the Annex, page 89.

Some facts.....

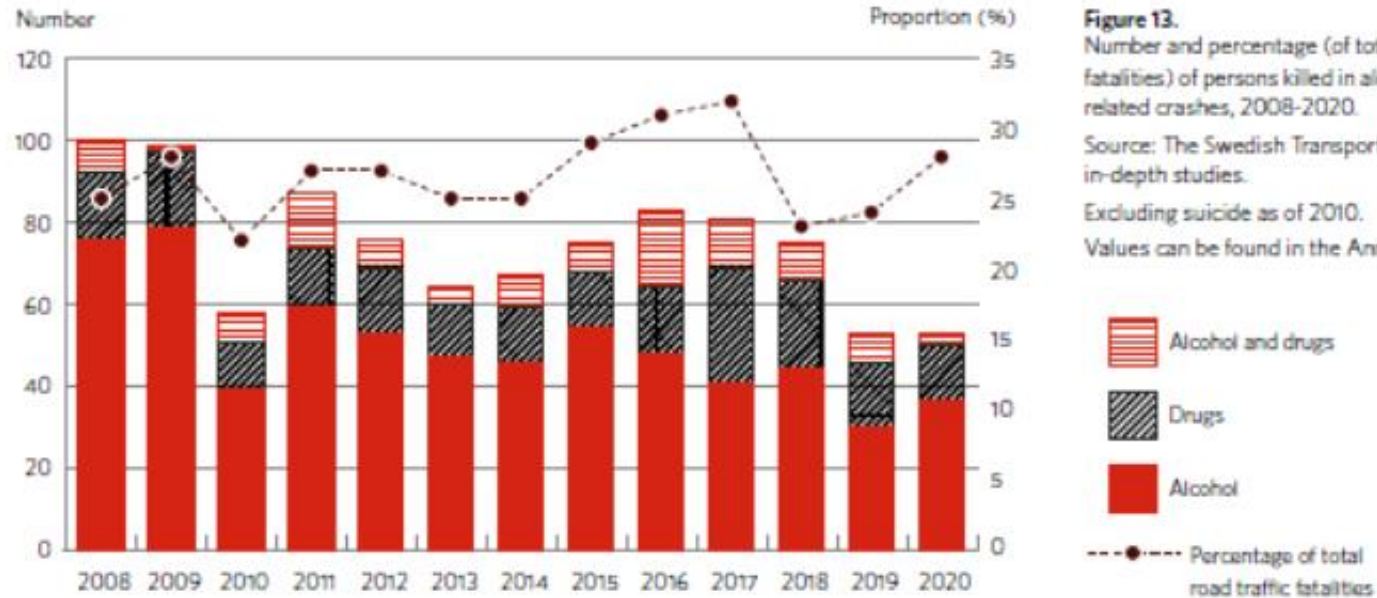


Figure 13. Number and percentage (of total number of fatalities) of persons killed in alcohol and/or drug related crashes, 2008-2020.

Source: The Swedish Transport Administration's in-depth studies.

Excluding suicide as of 2010.

Values can be found in the Annex, page 89.



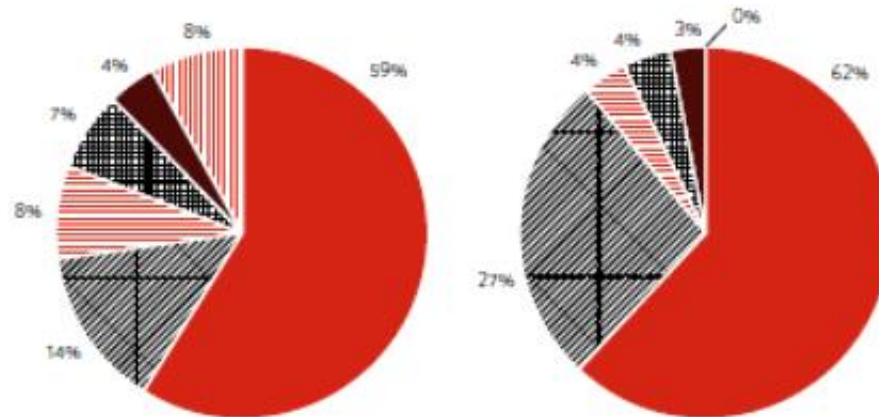
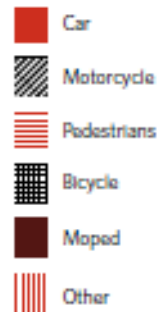
---●--- Percentage of total road traffic fatalities

Some facts....

Figure 14.
Percentage of persons killed in alcohol-related (left chart) and drug-related crashes (right chart) by mode of travel. The crashes that are both alcohol-related and drug-related are included in both charts. The distributions are based on all crashes during the period 2016-2020.

Source: The Swedish Transport Administration's in-depth studies.

Values can be found in the Annex, page 89.



Activities to lower alcohol consumption and protect from alcoholrelated fatalities/injuries

The three E's

- Education
- Enforcement
- Engineering

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Enforcement

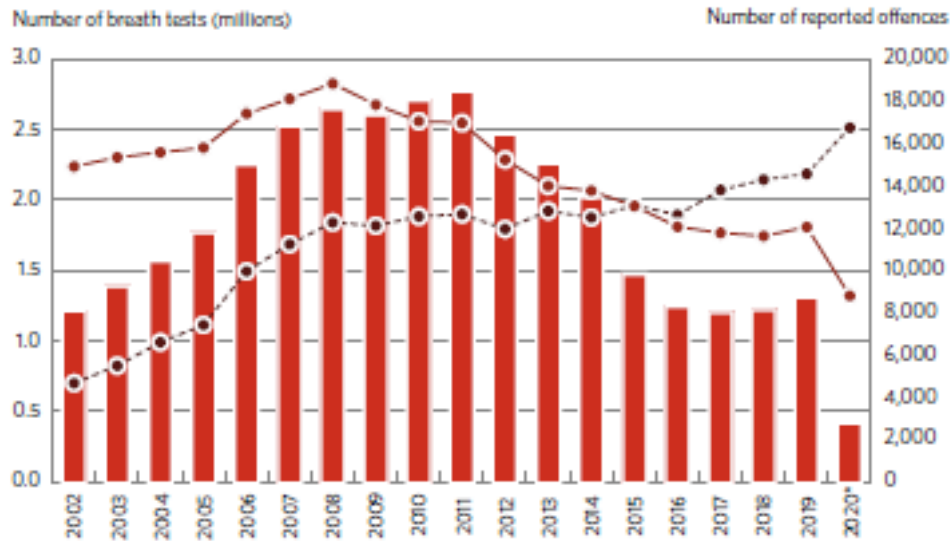


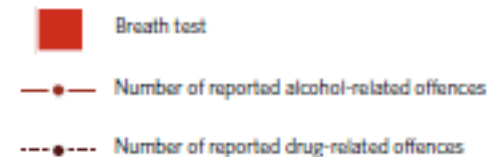
Figure 15.

The number of alcohol breath tests and the number of reported drink-driving offences with regard to alcohol and drugs, 2002-2020.

*The 2020 data on the number of samples have been adjusted and are an estimate of the final number of samples. The number of reported offences is preliminary for 2020.

Source: The police and the Swedish National Council for Crime Prevention.

Values can be found in the Annex, page 90.



Engineering

Speed

Alcohol

Seat belt use

Helmet use - bicyclists

Safer cars

Safer heavy vehicles

Safer roads and streets

Rescue and emergency care

Fatigue

Attitudes



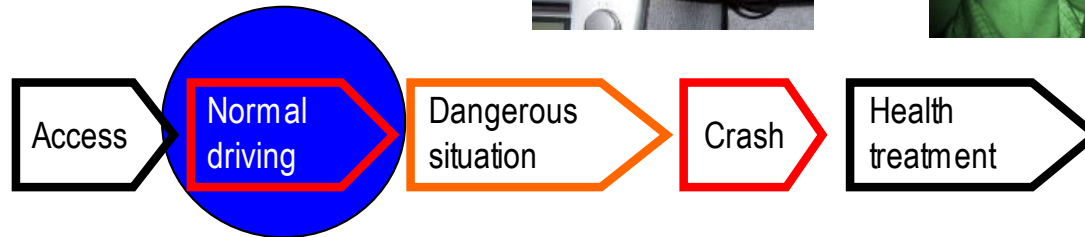
Intersections to roundabouts



Safety systems in motor vehicles

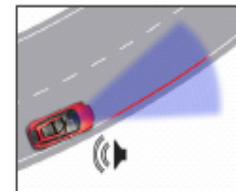
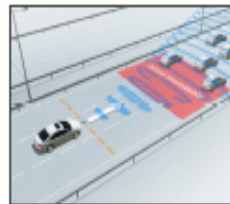
Support systems at normal driving

- Seat belt reminders
- ISA/Speed Alert
- Alco locks
- Impaired driving detection
- Etc.



Support systems at dangerous Situation

- Adaptive Cruise Control
- Lane departure warning
- Electronic stability control (ESC)
- Pre Impact Emergency Braking
- Etc.



Education - Activities to lower alcohol consumption in general but also in traffic

- The road safety problem and alcohol and drugs are included in the school and driving curricula in Sweden
- 1957 "Operation vine"
- 1971 "Spola kröken" (skip the booze...!)
- 1989-1991 "Athena" (Drugs, buying alcohol to younger friends and age limits, Alcohol Policy and Theme Week Against Drugs)
- Don't drink and drive

https://www.youtube.com/watch?v=pa1CSh_gpn0

<https://www.youtube.com/watch?v=L0t13NVmo8w>

Thank you!