



FERSI
Road Safety Research

Eliminating Drink Driving

The Hague, 25th May 2016

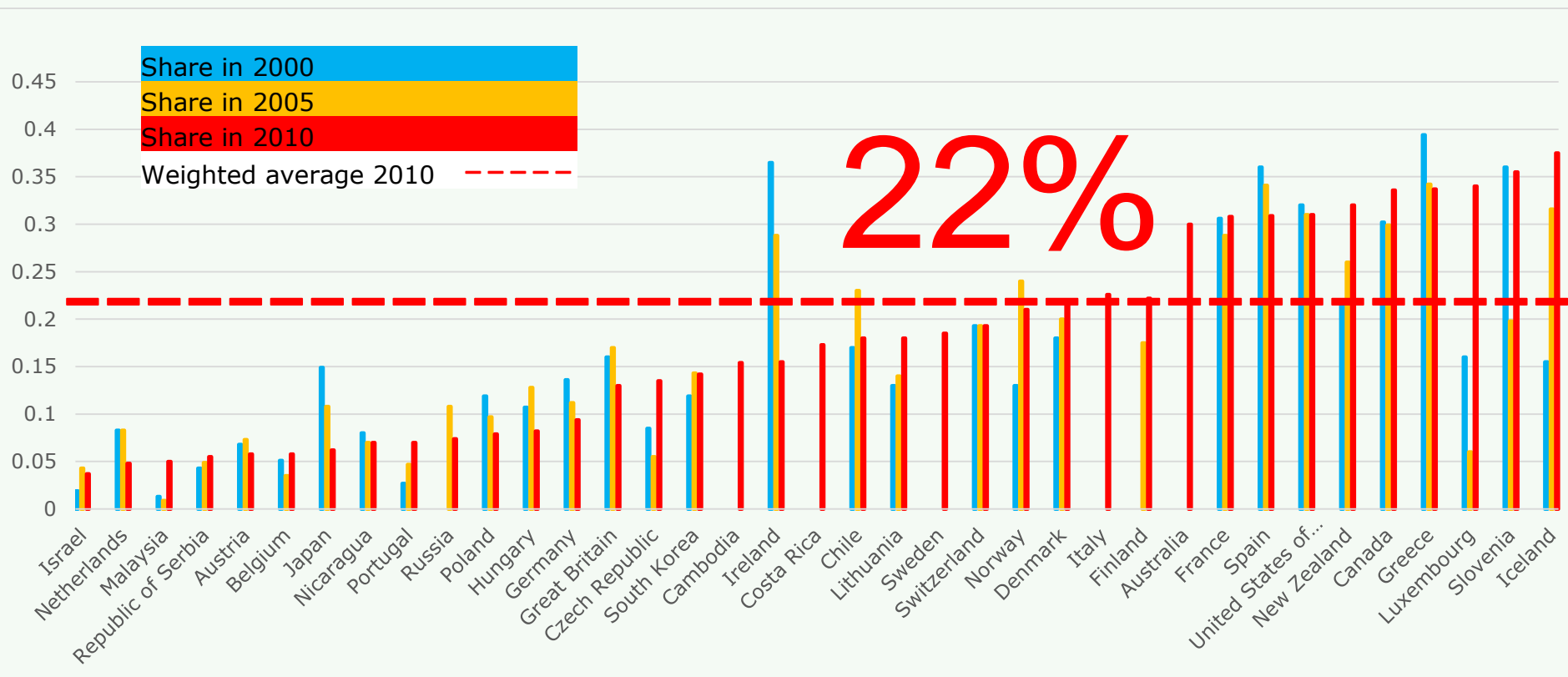
Dr. Horst Schulze

German Federal Highway Research Institute

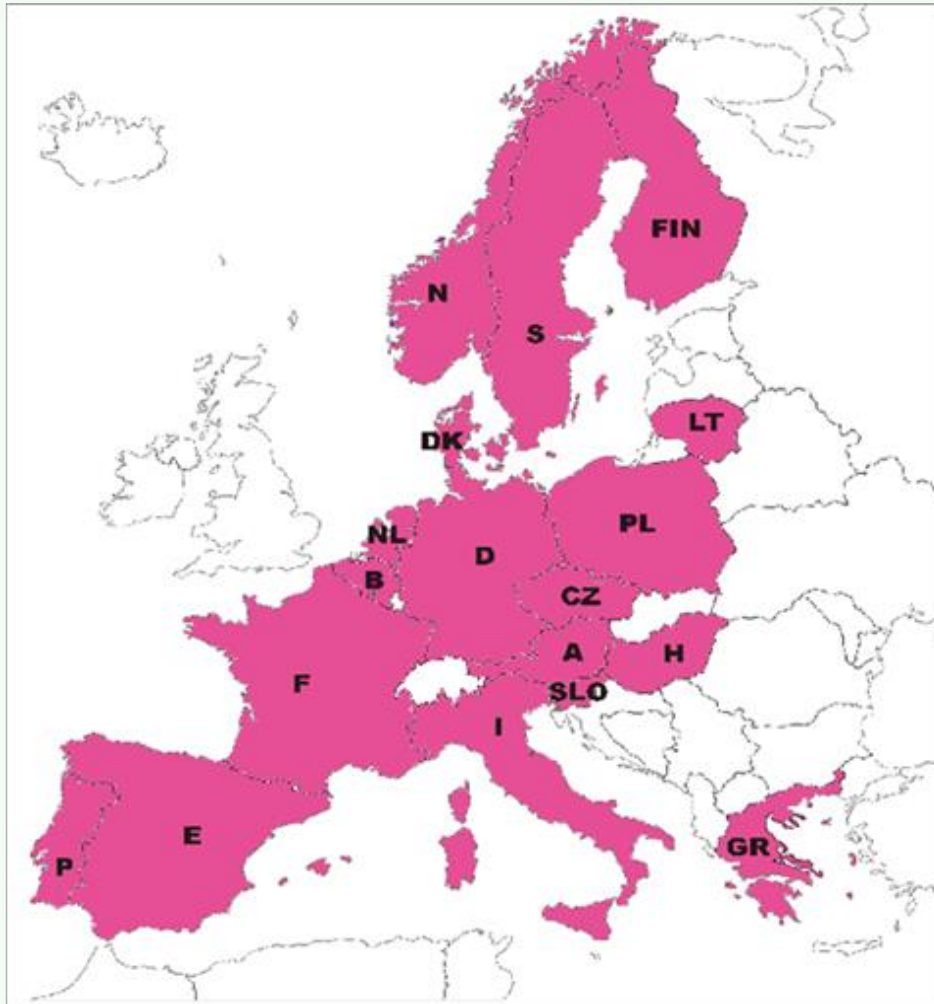
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Alcohol-related road fatalities

Share of alcohol-related road fatalities in 2000, 2005 and 2010 from official statistics



Source: IRTAD report on alcohol related crashes (not published yet)



- **DRUID**
Driving under the influence of drugs, alcohol and medicines
- 6th EU Framework Program project
- 2006-2011

Controls: Roadside surveys

Drivers of personal vehicles

Stratified sample

Checked at random

N = 50 000

Cases I: Seriously injured drivers

Drivers of personal vehicles

Seriously injured (MAIS \geq 2)

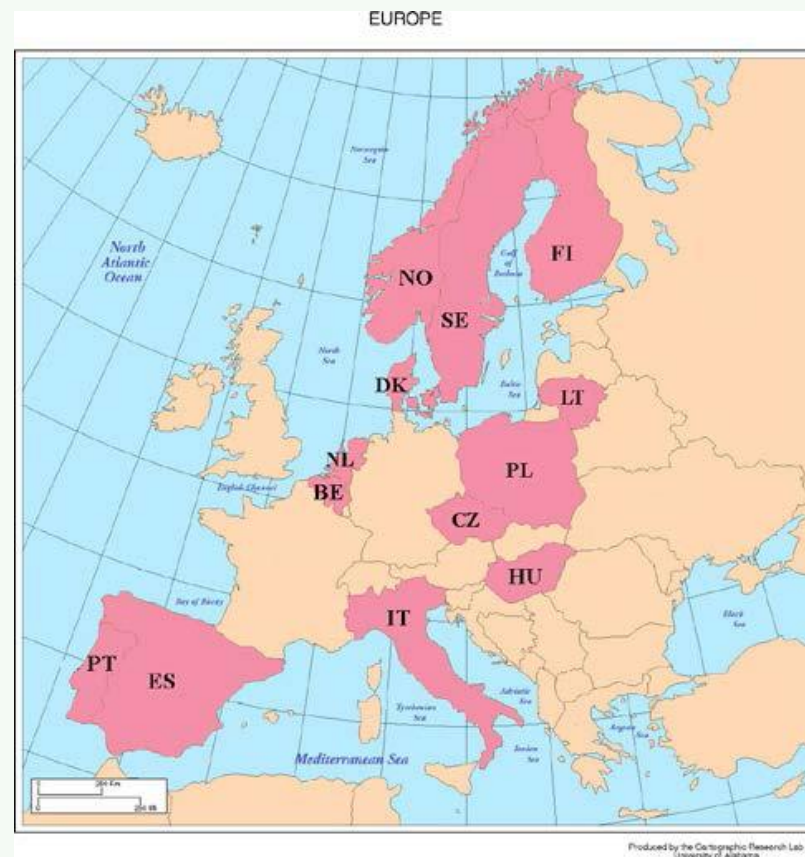
N = 2 600

Cases II: Killed drivers

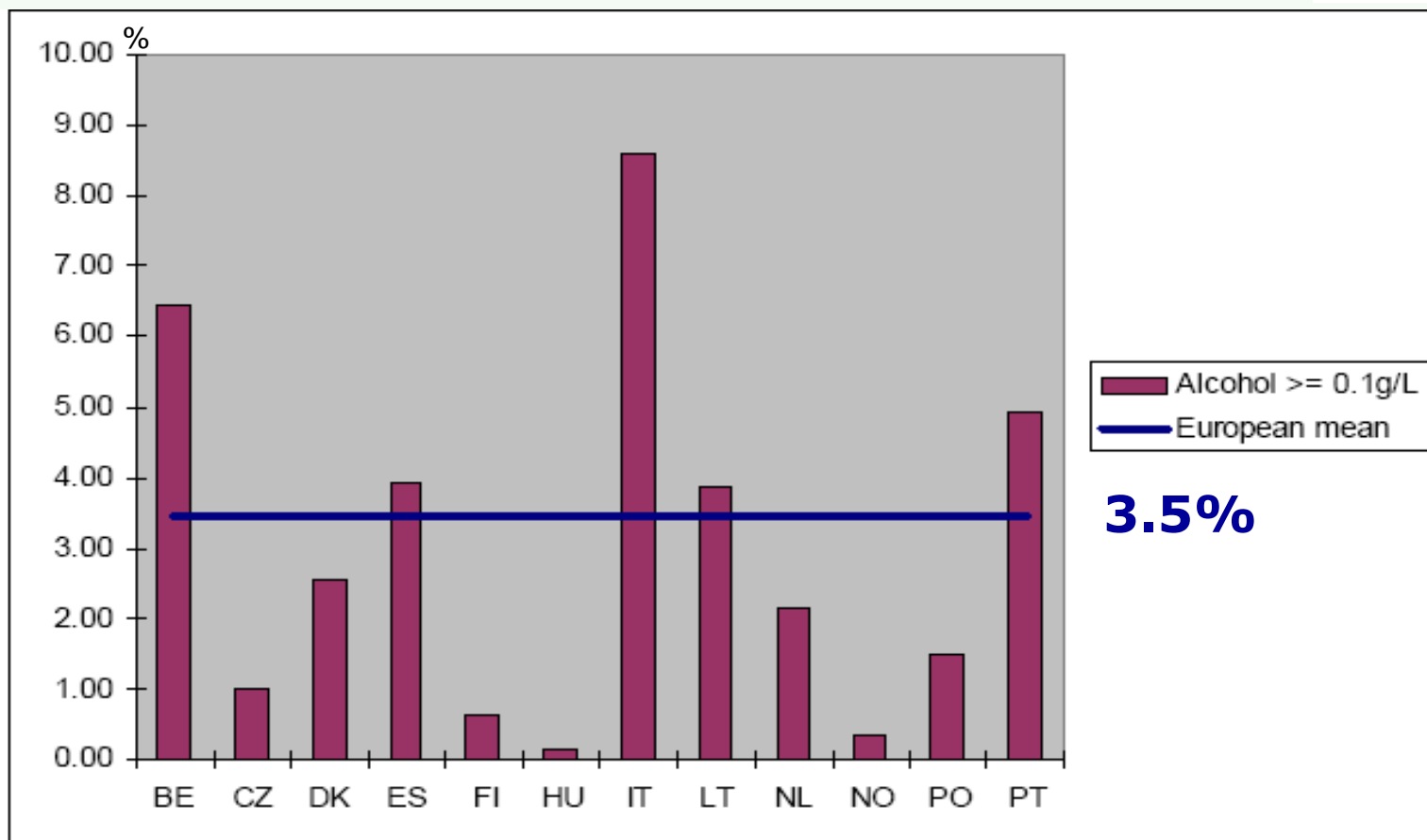
Drivers of personal vehicles

Killed in traffic

N = 1 000

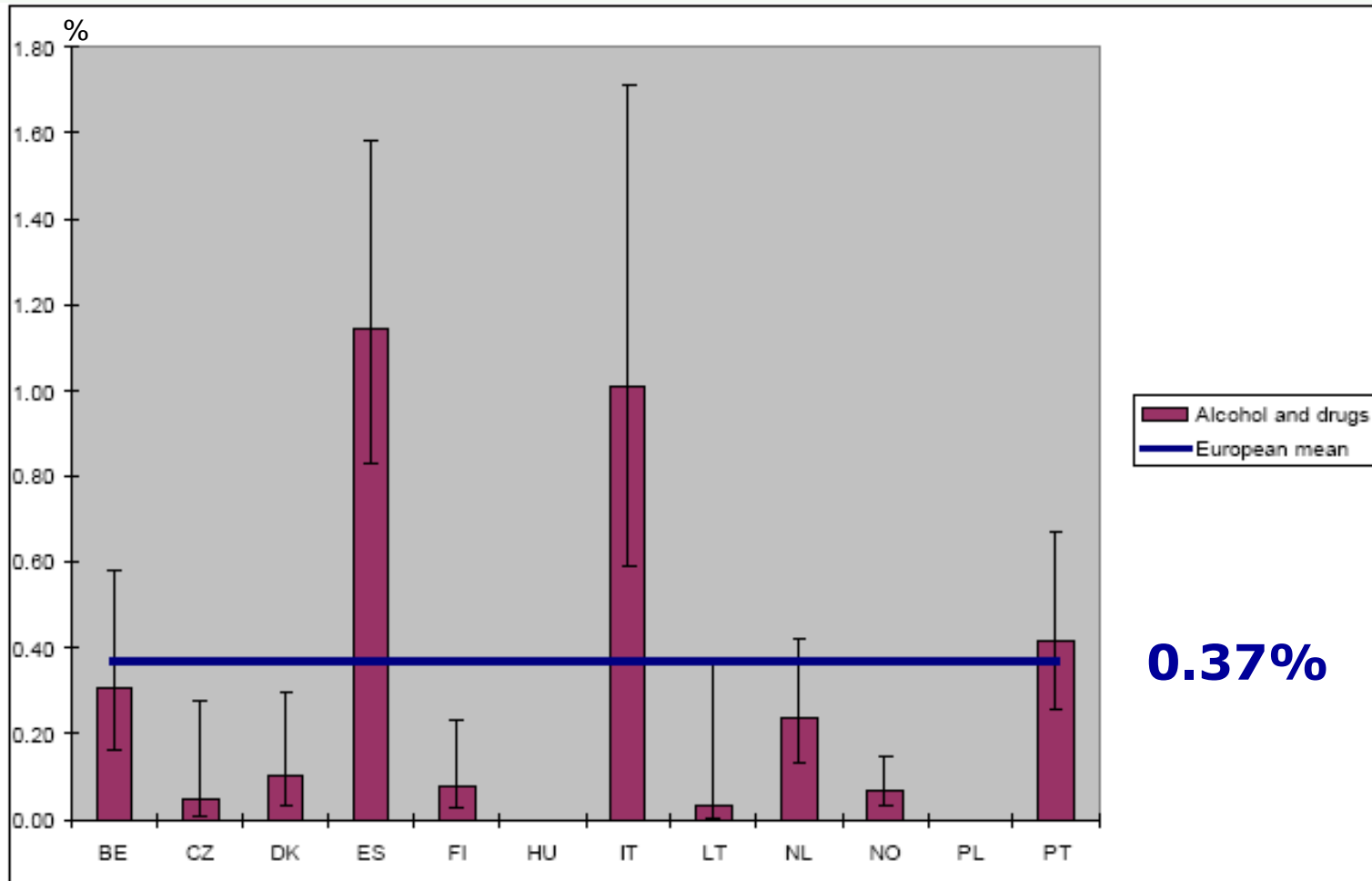


Conducted in 13 countries
according to a standardized
procedure



- Most prevalent periods: weekend nights, week nights (22:00-04:00)
- Alcohol 2-4 times more prevalent in male than in female drivers
- Alcohol most prevalent among male drivers 50+

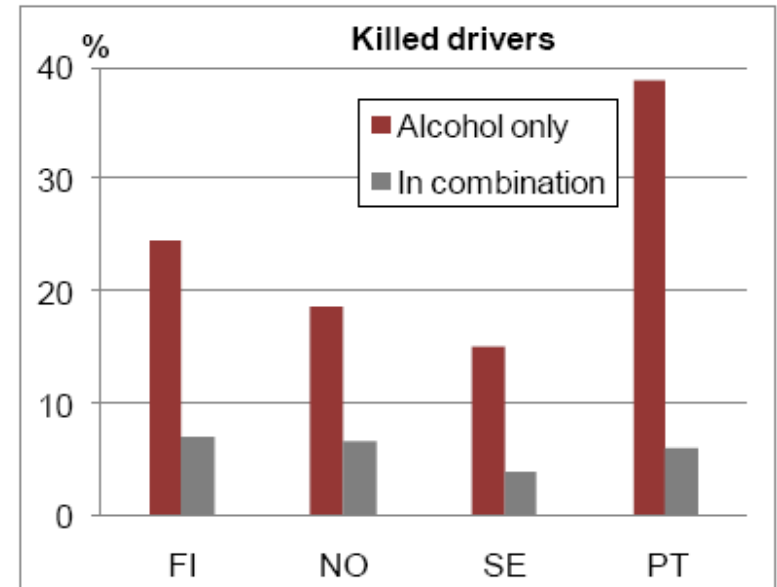
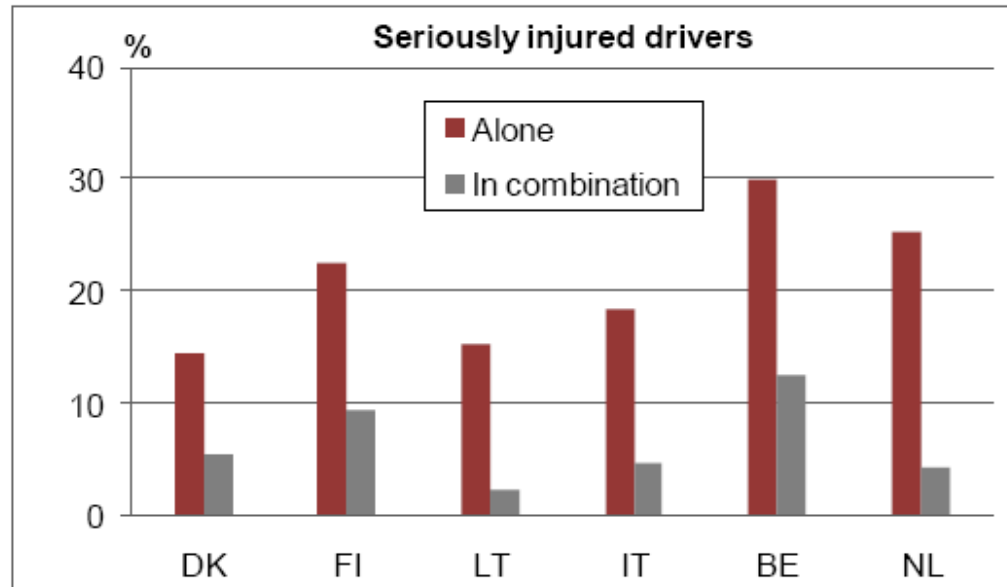
(D 2.2.3)



- Combination: any drug + alcohol

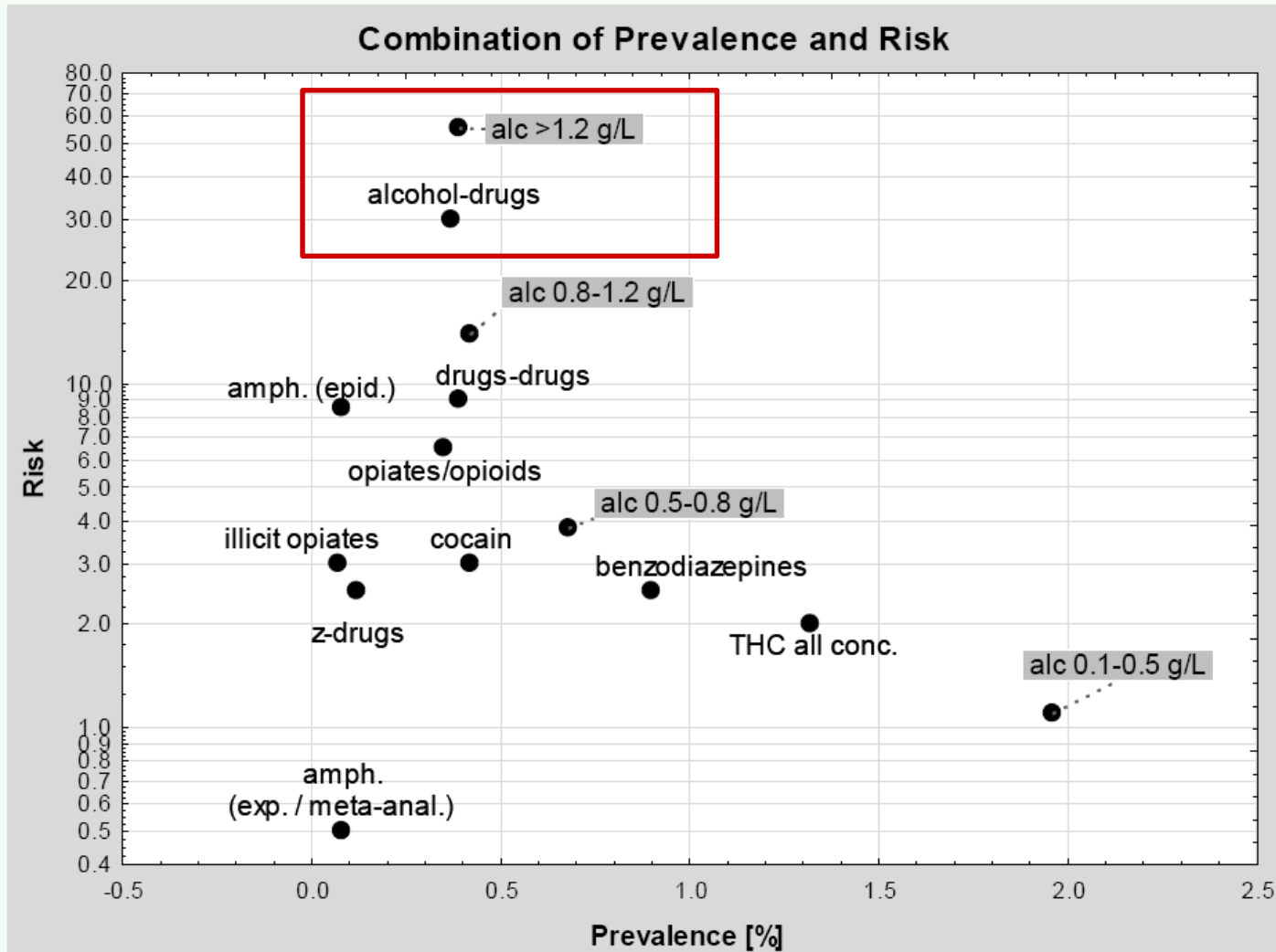
(D 2.2.3)

Seriously injured and killed drivers



- Alcohol was the most prevalent substance in seriously injured and in killed drivers

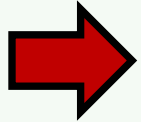
(D2.4.1)



(D1.3.1, p. 116)

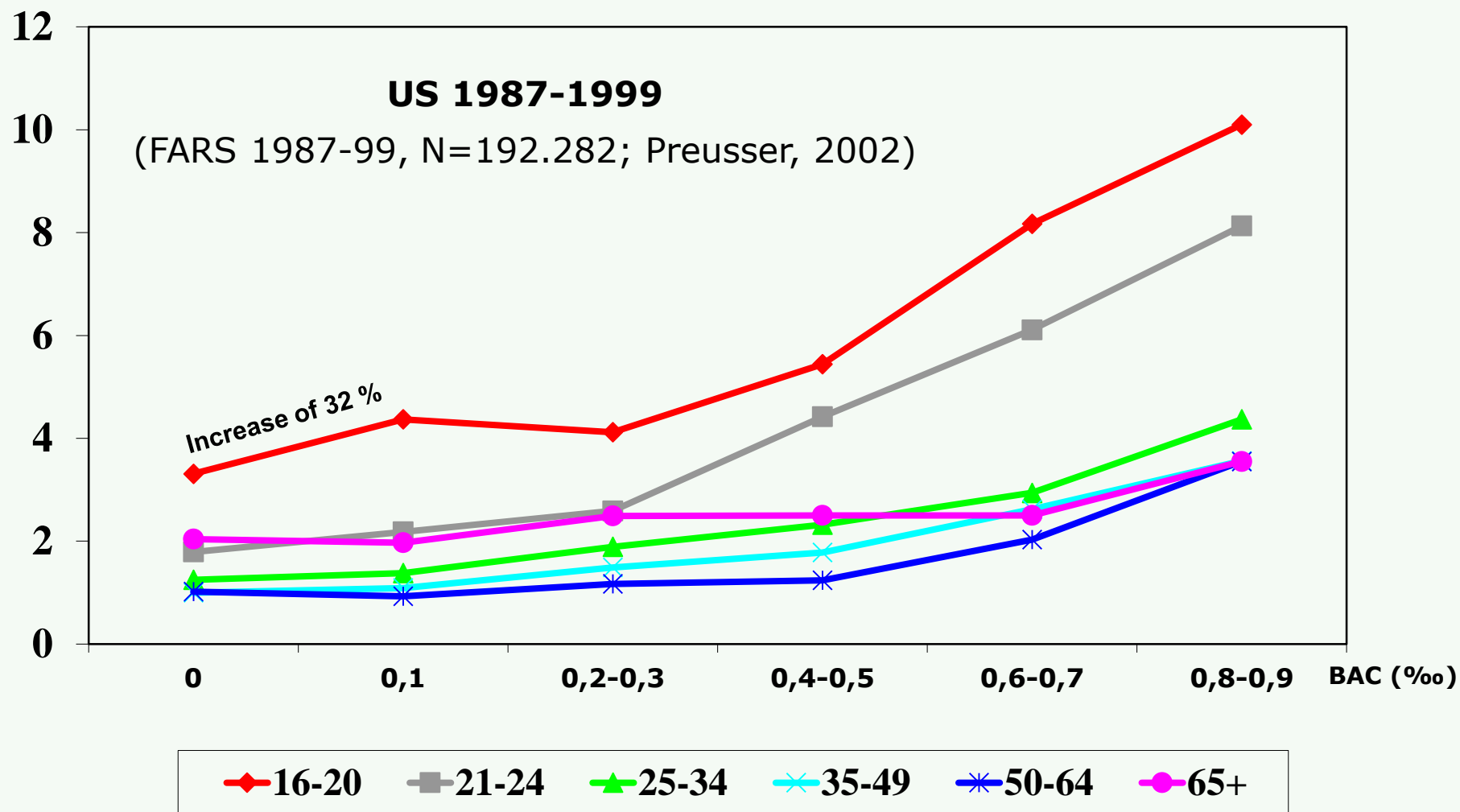
	Alcohol
Target groups	<ul style="list-style-type: none">• ♂ < 35 years• ♂ > 50 years• Addicts
Legal regulations	<ul style="list-style-type: none">• BAC 0.5g/L ☺• BAC < 0.5g/L:<ul style="list-style-type: none">– novice and young drivers– combined consumption
Enforcement	<ul style="list-style-type: none">• Focus on alcohol
Rehabilitation measures	<ul style="list-style-type: none">• EU-wide harmonization
Withdrawal	<ul style="list-style-type: none">• EU-wide harmonization• 3-12 months• Combination of conditional withdrawal and treatment• Zero alcohol limits for young, novice and professional drivers
Future investigations	<ul style="list-style-type: none">• Evaluation of countermeasures• Alternative empirical methods

Alcohol ban for novice drivers

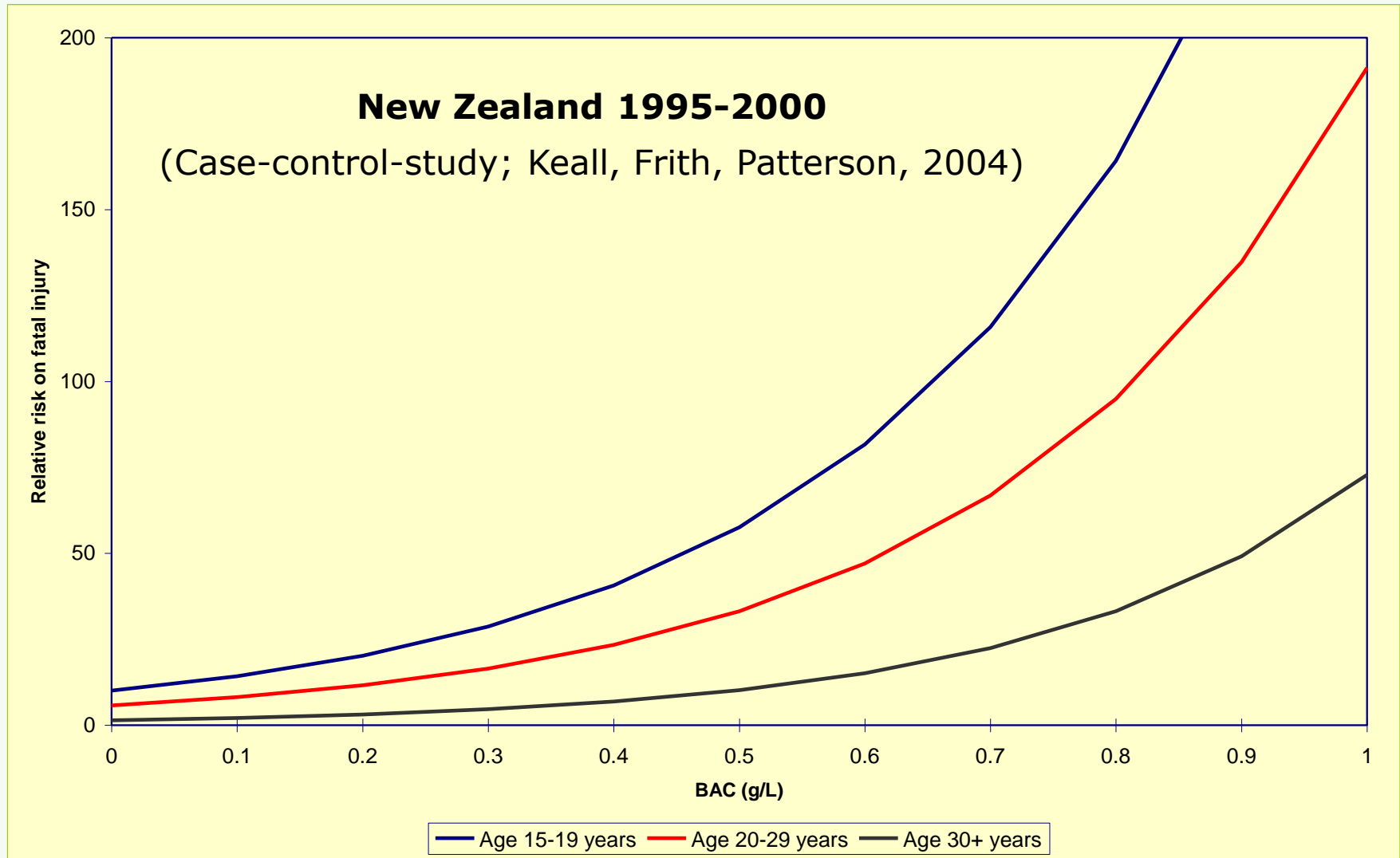


Even a small blood alcohol concentration may impair driving ability of young, inexperienced drivers significantly.

Relative accident risk (reference value are unimpaired 35 to 49 year olds)

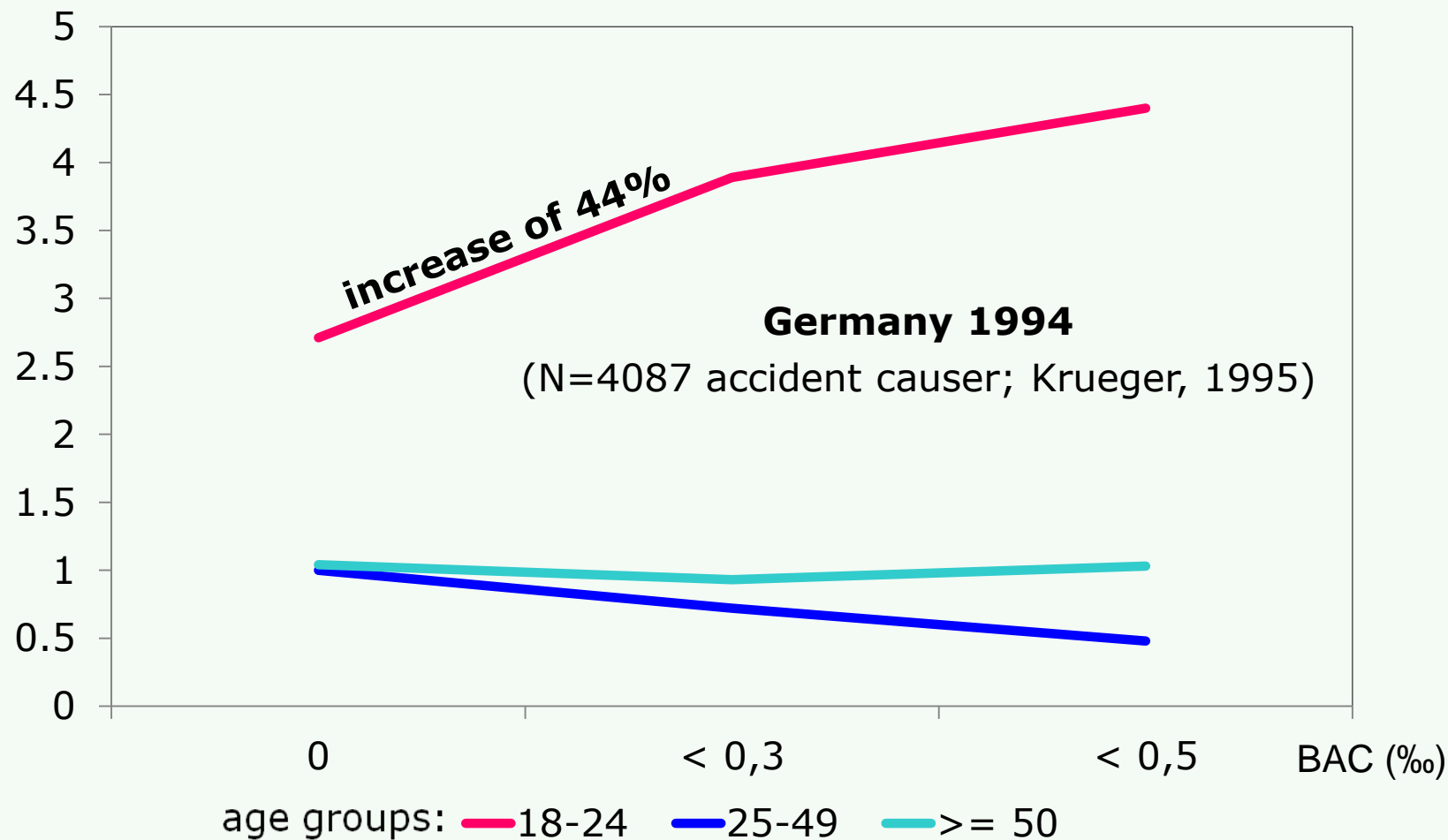


Relative risk on fatal injury and BAC-level per age band



Accident risk – Krueger (1995)

Relative risk (reference value are unimpaired 29 to 49 year olds)



Alcohol ban for novice drivers

- US, Canada:
 - Reduction of fatalities between 11% and 33%

- Austria:
 - 0.1 ‰ alcohol limit in combination with the introduction of the probationary driving licence
 - Reduction of the proportion of drunk novice drivers (BAC above 0.8 ‰) that were involved in accidents with serious injuries or fatalities to 16.8%

Survey on alcohol ban for novice drivers (DEKRA, N=1100, 2007)

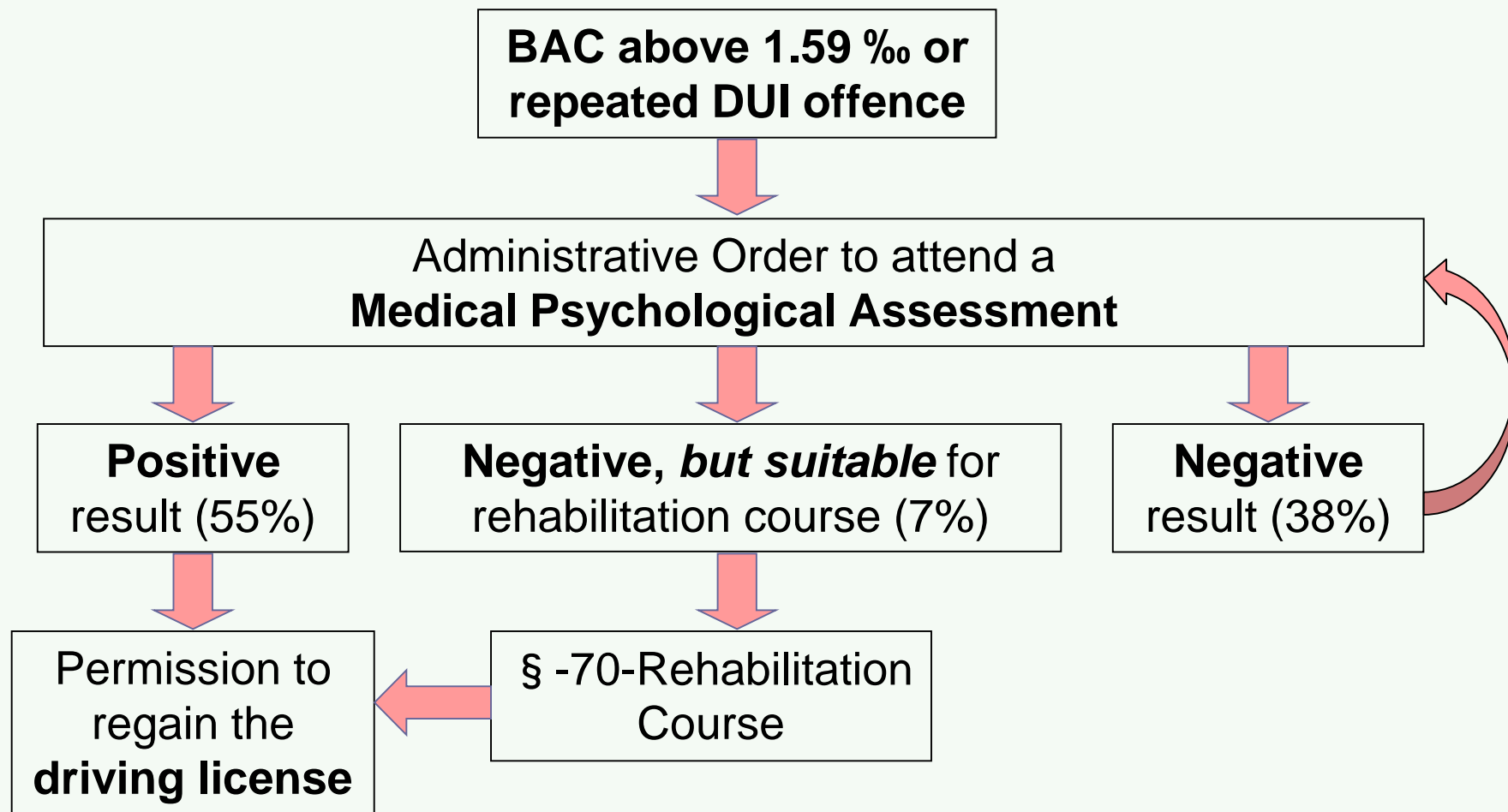
- 86.4% of drivers of all ages welcome the new regulatory
- 83.5% of the 16 to 26 year olds

FORSA-Survey made on behalf of the „Stern“ (18- to 25 year old, N=1001, 2007)

- 92% argue for a total ban on alcohol for novice drivers

Internet-survey DVR (novice drivers, N=14,000, 2006)

- 82% argue for a total ban on alcohol for novice drivers



Drink driving

- High prevalence rates in Europe, but national differences.
- High accident risk (seriously injured road users, fatalities)
- High risk group: novice and young drivers
- Alcohol ban for novice drivers:
 - High reduction rates regarding accidents with serious injuries or fatalities
 - High acceptance

