

Reduction of Alcohol Impaired Driving

Policies in the Netherlands

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Legal provisions against drink driving in the Netherlands

- 1974: Introduction of statutory BAC limit of 0.5 g/l and:
 - Chemical breath test tubes for screening by police
 - Evidential blood test
 - Prosecution limit of 0.54 g/l BAC
- 1984: Introduction of electrochemical screeners
- 1987: Introduction of evidential breath test and:
 - Statutory BrAC limit of 0.22 mg/l (after correction for measurement errors; approx. 15% deduction from measured value)
 - Prosecution limit of 0.235 mg/l BrAC (= 0.54 g/l BAC)
 - Screening limit of 0.30 mg/l BrAC (= 0.7 g/l BAC)
- 1996: administrative measures of rehabilitation and assessment of fitness-to-drive
- 2006: introduction 0.2 g/l for novice drivers

Alcohol in traffic in the Netherlands: facts and figures

- Rate of drink drivers in weekend nights: about 3%
(mid '70 15%, mid '90 5%)
- Of all kilometres travelled: less than 1% above legal limit
- **Registered** alcohol-related fatalities: 7.5%
- **Estimated** alcohol-related fatalities: 14-20%
- **Estimated** alcohol and drugs fatalities: 10-15%
- Social costs of drink-driving: € 2 billion a year

Profile of drink-driving problem

Offenders

- 85% males
- BAC-distribution: 50% 0.5-0.8 promille, 30% 0.8-1.3 promille, 20% 1.3 promille or more
- 3/4 of severe alcohol crashes are caused by drivers with 1.3 promille BAC or more
- Origin: 50% pub/restaurant, 35% home/private party

Victims

- 80% males (18-24 years 23%)
- 65% car occupants (non-alcohol: 45%)
- 2/3 in weekend evenings and nights

Policies against drink-driving

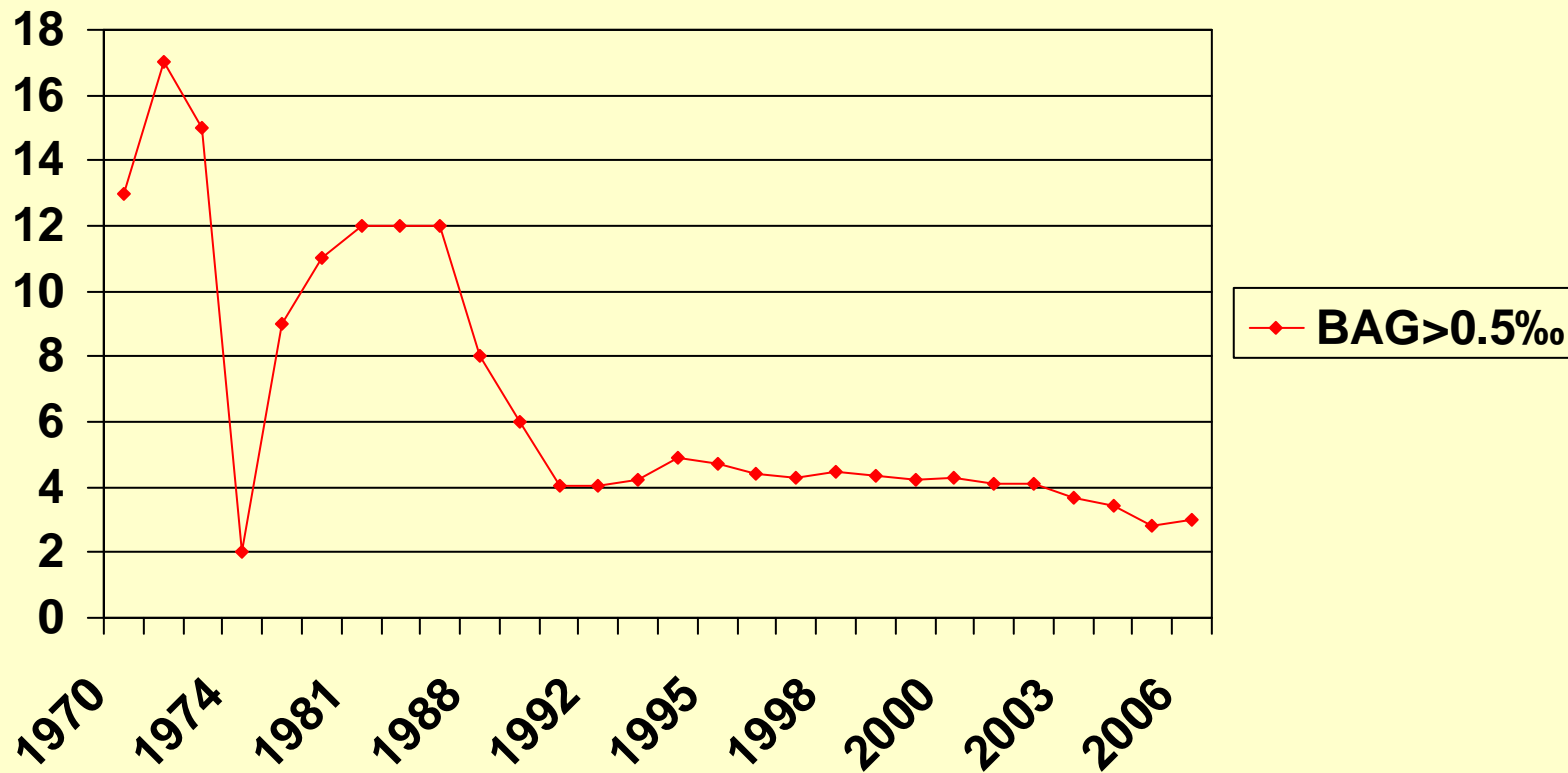
Combination of prevention and repression

- Legislation: is generally well-formed (exemplary in the EU)
- Education: licensing and secondary schools
- Mass media and face-to-face communication
- Enforcement: selective and random controls, sanctions under criminal law
- Rehabilitation program for first offenders 1.3-1.8 promille BAC and recidivists: obligatory 3-day course
- Medical examination for offenders above 1.8 promille (possibility of license revocation)
- Near future??: introduction of alcolock program for heavy drinkers 1.5-2.1 promille BAC

Evaluation of drink-driving policies

- Periodic nationwide roadside surveys 1970-2006
- Evaluation of annual publicity campaigns
- Evaluation of police controls
- Evaluation of the administrative rehabilitation measure (2000)

Development of drink-driving (1970 – 2006)



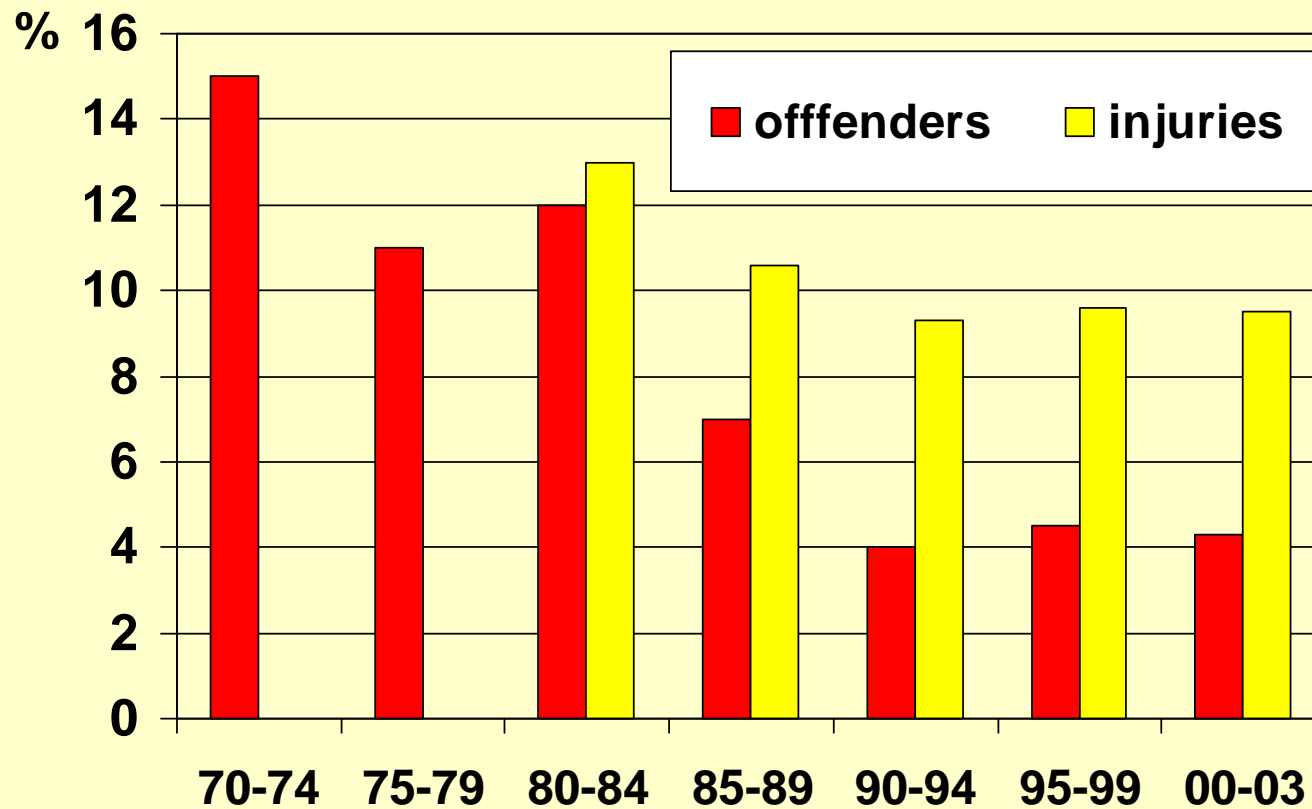
Percentage of drivers with a BAC > 0.5‰ at weekend nights.

Source: SWOV (until 1998)/AVV Transport Research Centre (from 1999).

Results from evaluation studies

- The level of police enforcement was the most important factor of influence regarding drink-driving. Each increase of police enforcement was followed by a reduction of DWI-offenders
- In the period 1970-2005, the number of screening tests increased from 50,000 to 1.5 million per annum
- In the same period, the proportion of drivers with a BAC >0.5 g/l decreased from 16 to 3%
- No significant behavioral effects of publicity campaigns, rehabilitation and license revocation could be assessed

Development of drink driving offenders and of alcohol-related serious injuries



Reasons for the relatively small decrease of alcohol-related injuries

Between 1980 and 2003, the proportion of drivers with BAC above 0.5 g/l dropped by 70%, but the proportion of alcohol-related injuries dropped by only 27%.

Reasons:

- Growing number of drinking drivers who concomitantly use illegal drugs
- Growing proportion of illegal BACs among young/novice male drivers
- Relatively slow decrease of high-BAC offenders, especially in recent years

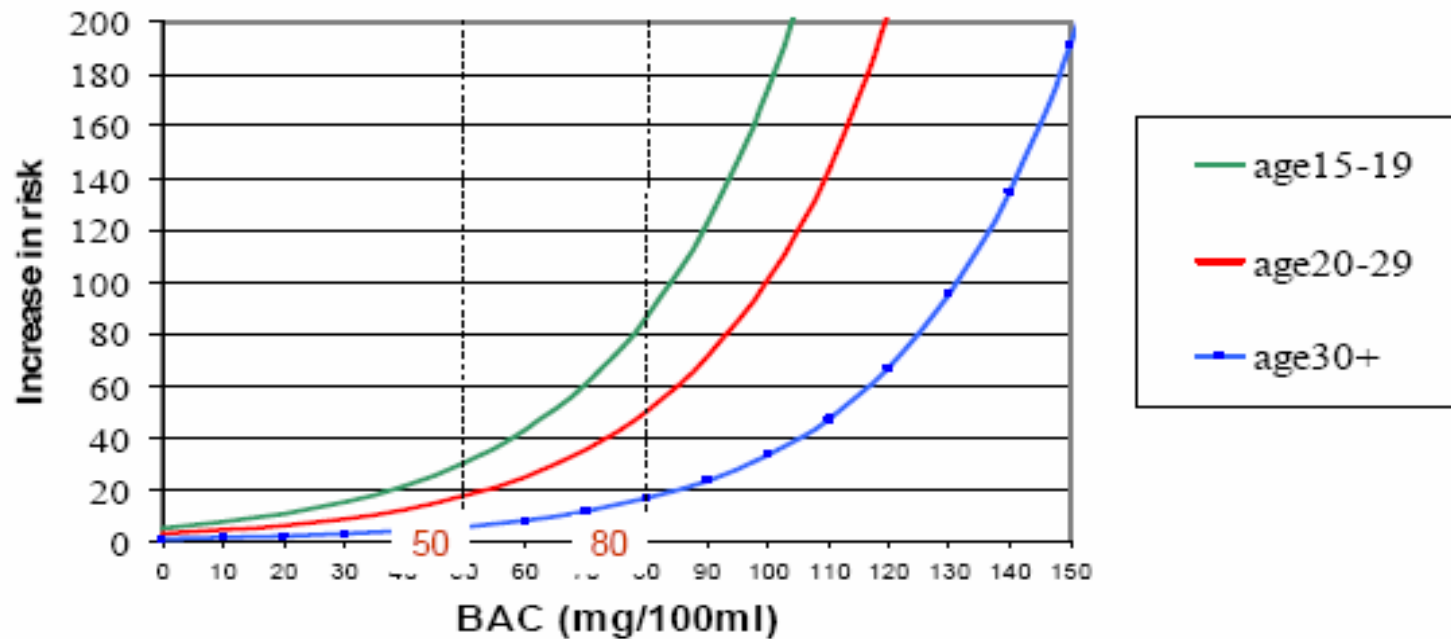
Development and consequences of combined drink and drug driving

- In the mid-1980s, combined drink and drug driving was virtually non-existent, according to the results of a SWOV study among in-patients
- It emerged probably at the beginning of the 1990s, particularly among high-BAC drivers
- Nowadays, 1 in 4 Dutch drivers with a BAC above 1.3 g/l is positive for one or more illegal drugs, too
- Preliminary results of a Dutch case-control study indicate that concomitant drug use strongly increases the alcohol-related crash risk, probably by a factor 5-10

Development of increased drink driving by young/novice males

- Between the early 1990s and the early 2000s, the proportion of illegal BACs among young/novice male drivers aged 18-24, increased by one third
- At an illegal BAC, the risk of getting involved in a serious-injury crash increases twice as much for young drivers as for older drivers
- While forming less than 5% of the population, young males aged 18-24 constitute nearly 25% of all alcohol-intoxicated drivers involved in serious-injury crashes

Risks for different BAC-levels for three age groups ('Borkenstein-curve' in New Zealand)



relative to drivers aged 30+ at BAC=0

3rd IRTAD Conference

Brno, 26-28 November 2006

Bill Frith
Manager Research and Statistics
Ministry of Transport
NEW ZEALAND

Road toll due to psychoactive substance use in the Netherlands

- An estimated 28% of all serious and fatal road injuries are associated with the use of alcohol:
 - 15% are associated with the use of alcohol-alone
 - 13% are associated with the combined use of alcohol and illegal drugs
- Another 10% are associated with the abuse of illegal drugs (especially combinations of several illegal drugs)
- The road toll due to psychoactive prescription drugs seems to be negligible

Legislative countermeasures to be considered

- Introduction of analytical cutoffs as legal limits for illegal drugs when taken in combination with other psychoactive substances
- Introduction of risk-related thresholds as legal limits for illegal drugs when taken alone (more epidemiological research needed, EU-wide)
- Introduction of therapeutical levels as legal limits for (most) psychoactive medical drugs when taken alone
- Introduction of legal 0.2 or 0.1 g/l BAC limit for novice drivers, preventing drink-and-drug driving

Associated recommendations for enforcement

After the introduction of legal per se limits for drugs other than alcohol:

- Selective enforcement of drug driving: at times and places where drug driving is concentrated
- Introduction of non-invasive on-site screeners for the detection of drug driving, even if these screeners are not perfect yet (panel test for THC, COC, XTC; BZO too?)
- Combined standard screening for alcohol

Recommendations for rehabilitation of drug driving offenders

- Mandatory addiction treatment (for addictive offenders) as a condition for license reinstatement
- Trial of mandatory alcolock program participation to prevent combined drink and drug driving (at present, illegal drug users are generally excluded from alcolock programs)

Campaign on designated driver (BOB)



Campaign umbrella concept

- Recognizable link between all campaign issues
- Brand 'safe behaviour in traffic'
- Pay-off and logo used in national and regional communication

Daar kun je mee  komen.

The way to get  safely

Regional bus advertising 2003



Hot air balloon with BOB-message (province of Friesland)



Access and appreciation (2001-2006)

- Reach and recall: nearly 100%
- Message transfer: more than 90% gives fully correct description of BOB-formula
- Appreciation: 7.5-8 (on 1-10 scale)
- Highest access and likeability scores ever of Dutch Government campaigns

- Leading to a positive attitude (90%) and BOB-deals (self reported) in target group (75%)

- Not possible to measure behavioral effects

Key success factors of the BOB campaign since 2001

- Structural public-private cooperation
- Long term planning and budget (m€ 1.2/year)
- Broad media mix on national and local level
- Presence at moments and places when/where people meet and drink alcohol
- High likeability of concept and materials
- Simple and consistent message
- Easily adoptable behaviour perspective
- Constant refreshment of the concept

Next steps ?

- Lowering legal limits: only if accompanied by an increase of police controls
- More enforcement: RBT + SBT, and only if combined with publicity, and with effective strategies to detect heavier drinkers (how to find them?)
- Higher penalties: less important than being caught
- More exclusion: limited effectiveness
- More campaigns: not in isolation
- Consider drink-driving as a (public) health problem
- Introduce alcohol locks
 - Re-active: effective in preventing recidivism; positive effects but also some doubts are expressed
 - Pro-active: all drivers????????????!!!!!!!!!!!!!!!!!!!!

