

Fit to Drive

4th International Traffic Expert Congress
Tallinn from June 4th - 5th 2009



Welcome

Preparing adolescents to understand the dangers of alcohol and driving (the “Clear Picture ...!?” program)

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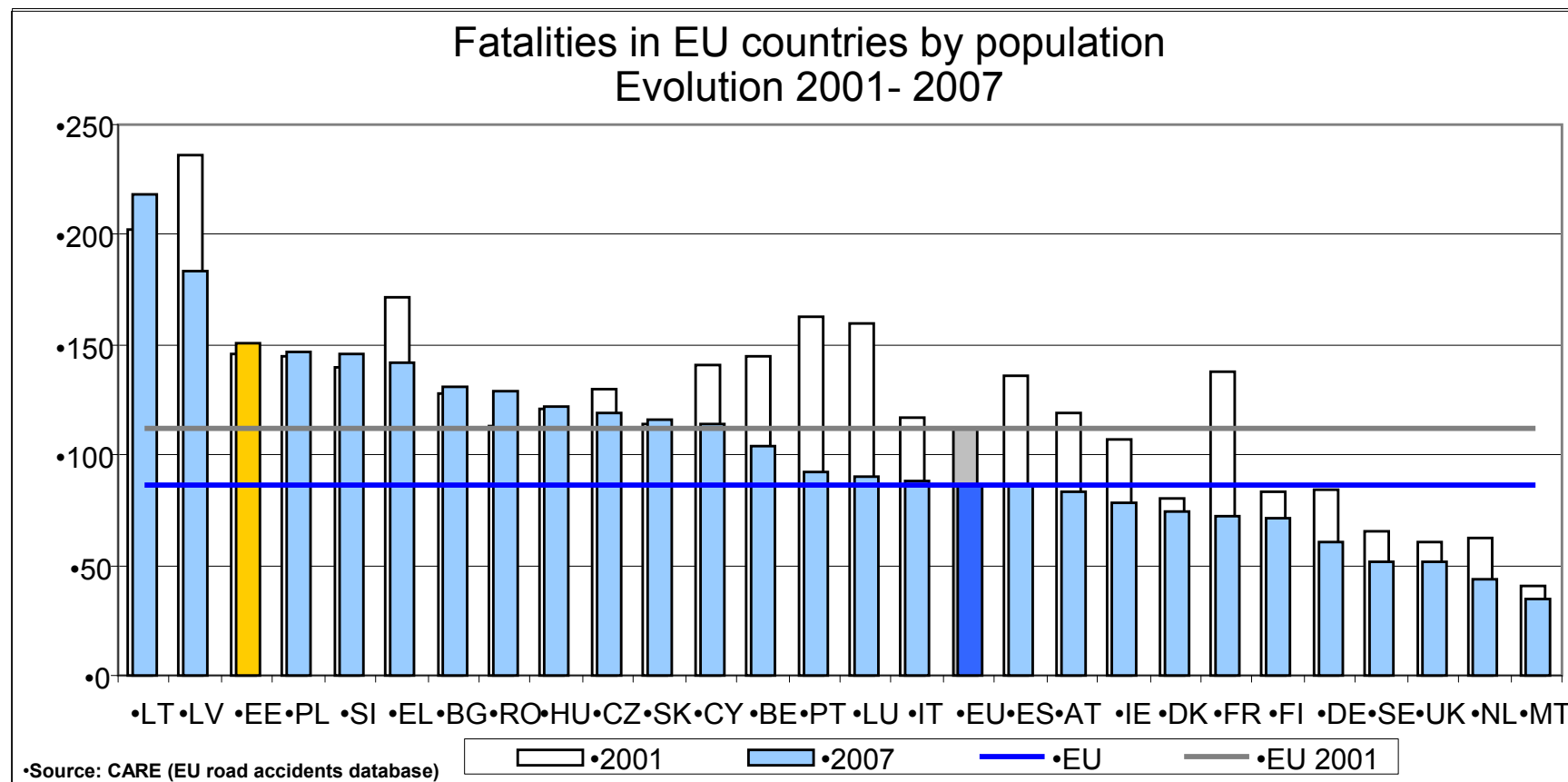
MTÜ Turvakonsultantide Ühendus
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- The present study, undertaken in Estonia, describes
 1. The background of most urgent road traffic problems:
 - many accidents, a lot of people injured and a lot of fatalities
 - many accidents caused by alcohol-intoxicated drivers
 - high proportion of young drivers involved in accidents
 2. A proactive approach to change the attitudes of young potential and actual drivers towards driving under alcohol intoxication:
 - the intervention program to change the attitudes towards driving under alcohol intoxication
 - the methods involved in the attitude change program
 - the preliminary results of immediate feedback from the training program

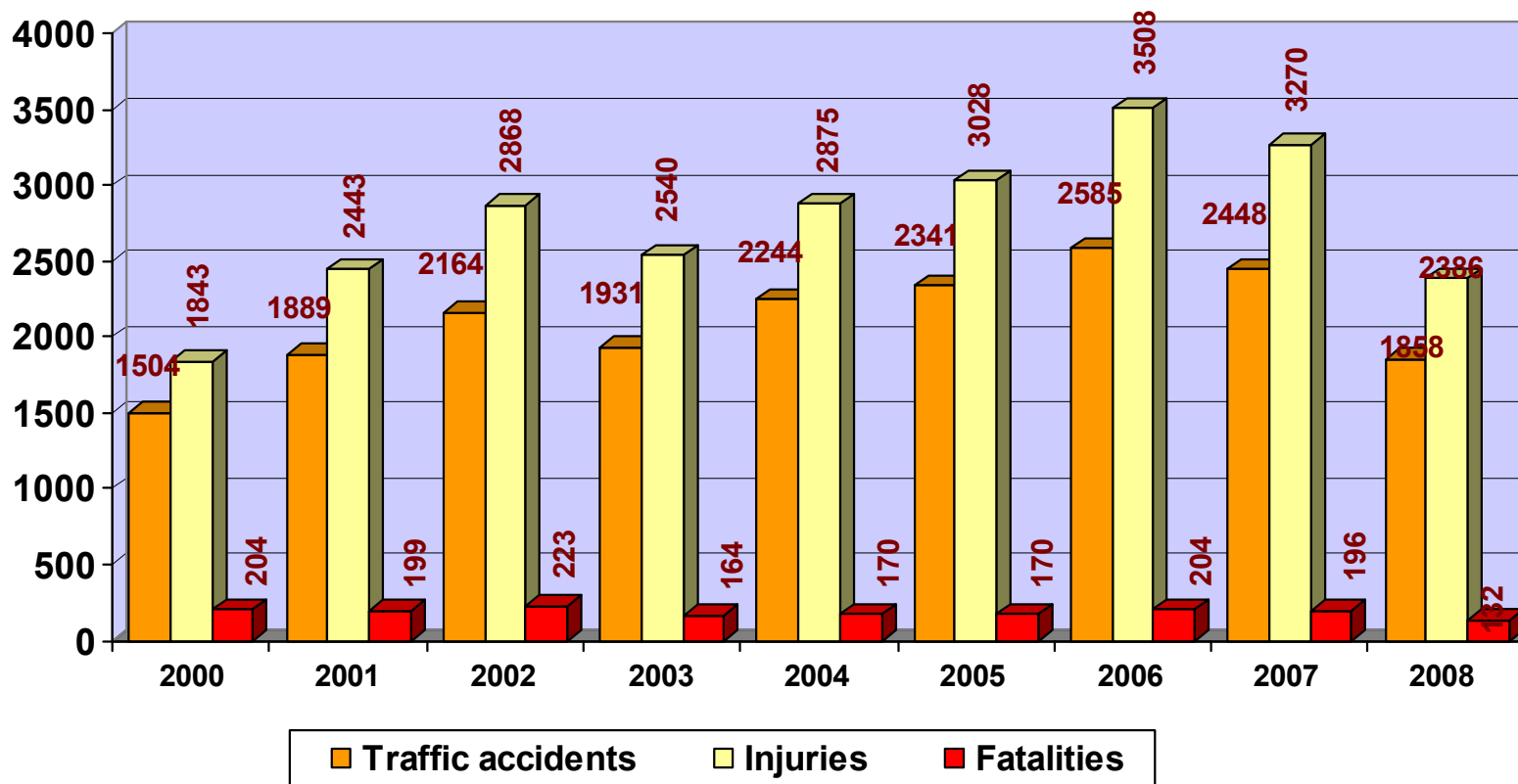


Together with two other Baltic states Estonia belongs to the three EU countries with the highest road traffic accident risks





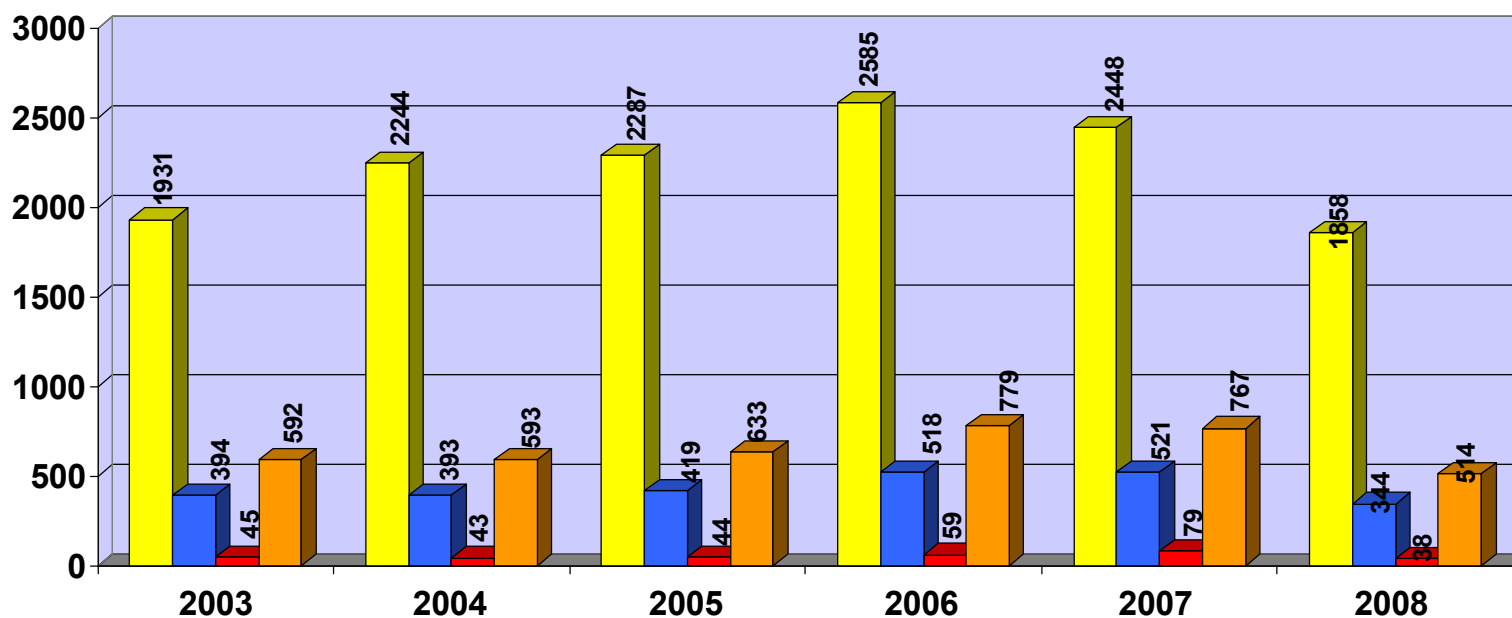
Statistics of traffic accidents, injuries and fatalities 2000 – 2008



Source: Estonian Road Administration



Alcohol- related traffic accidents 2003 - 2008

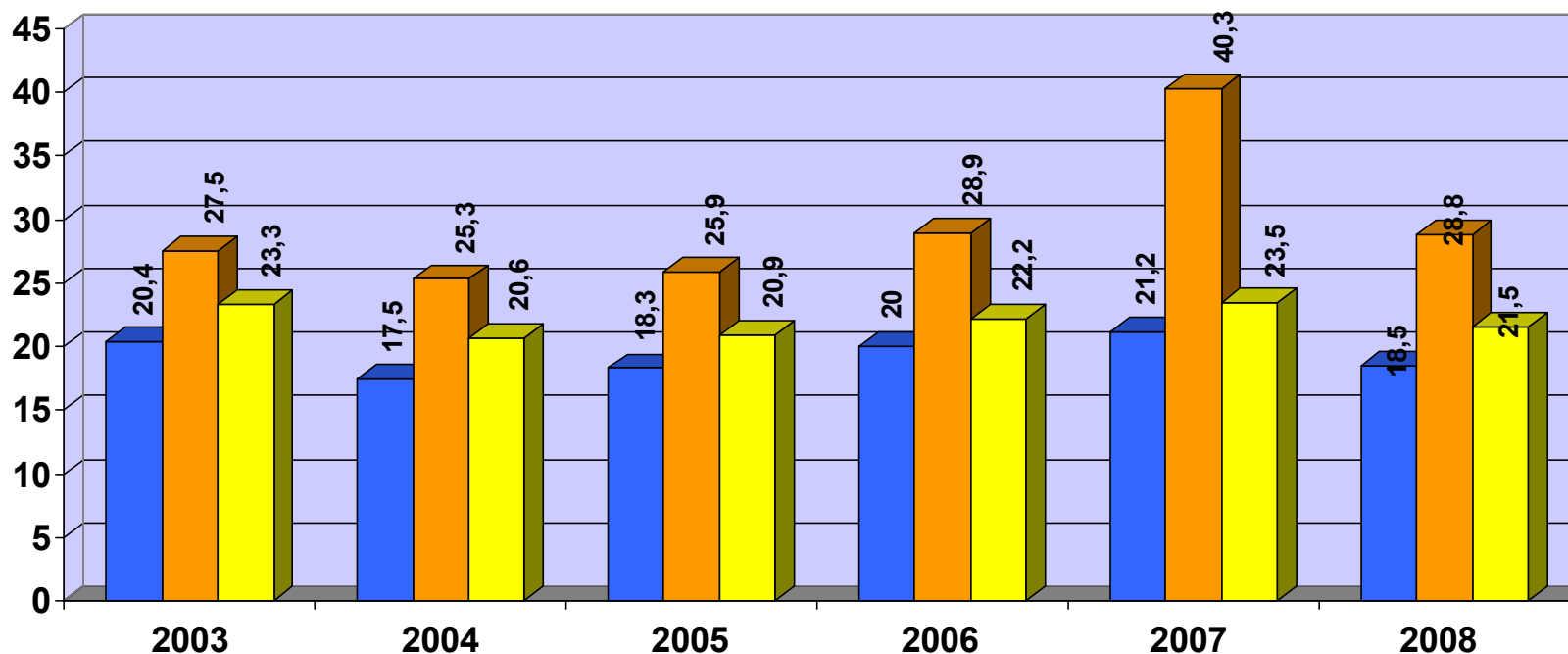


- - total number of accidents
- - number of accidents with drivers under alcohol intoxication involved
- - fatalities in accidents with drivers under alcohol intoxication involved
- - number of injured in accidents with drivers under alcohol intoxication involved

Source: Estonian Road Administration



Ratios of dangerousness of alcohol-intoxicated (1%) drivers



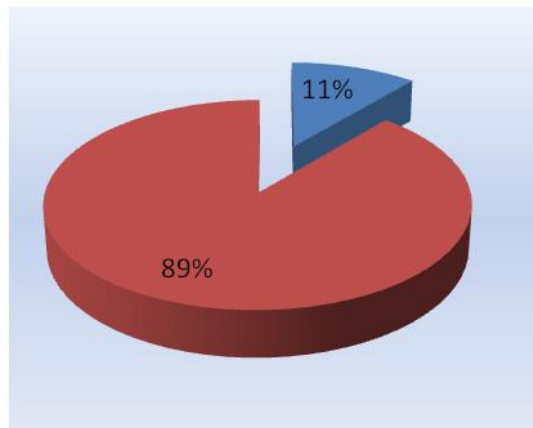
- - ratio of traffic accidents with drivers under alcohol intoxication involved
- - ratio of fatalities in accidents with drivers under alcohol intoxication involved
- - ratio of injured in accidents with drivers under alcohol intoxication involved

Source: Estonian Road Administration



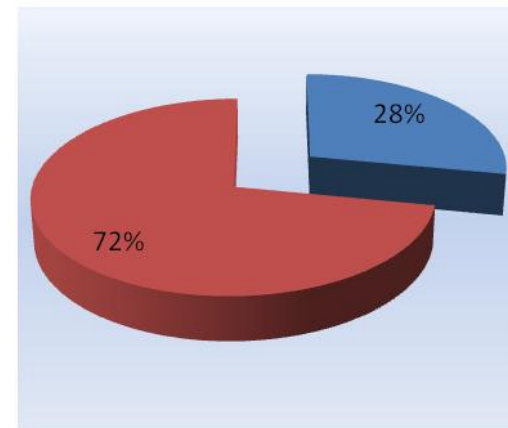
Ratio of young drivers involved in traffic accidents exceeds the ratio of the same age group in Estonian population by 2.5 times

Proportion of 18-24 years olds in the Estonian population



- Proportion of 18-24 year olds in the population
- The rest of the population

Proportion of 18-24 years old drivers in traffic accidents



- Proportion of 18-24 years olds drivers in traffic accidents
- The rest of the drivers in traffic accidents

- To introduce a proactive measure against drunk driving for young people in a form of an attitude change program
- To turn the means, typically used in rehabilitation programs of the road traffic offenders, into a proactive attitude change program
- To improve the traffic safety awareness of the graduates of the secondary schools and to suggest using of safe traffic behavior models
- To measure the possible immediate effects of attitude change after the end of the program

- The “Clear Picture ...!?” program is carried out in Estonian secondary schools
- During the reporting period the program was carried out in 14 schools, involving 328 students at the age of 17 – 19 years
- Immediate feedback at the end of the training day was received from 268 students (107 males and 161 females)



- The “Clear Picture ...!?” program consists of three intervention modules:
 1. Targeted discussion with students about traffic behaviour, about the effects of alcohol and about dangers of driving under alcohol intoxication
 2. Behavioural modelling the visual effects of alcohol consumption by wearing special goggles during different activities
 3. Discussing the typical alcohol related traffic accident cases and their causes by a police officer and introducing his own case by the wheelchair-locked victim of the traffic accident, which was caused by himself while driving under alcohol intoxication



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Intervention module 1

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- Module 1:
- Targeted dialogue with the students explains:
 - typical traffic problems with adolescents
 - typical causes of traffic rules violations by adolescents
 - the dangers of alcohol intoxication in the traffic
 - reasonable strategies for avoiding alcohol- related problems in traffic and in public places



- Module 2:
- Performing very simple tasks while wearing the goggles, which simulate the visual effects of 1.3 ‰ alcohol intoxication:
 - walking on the straight line
 - exercising with a ball
 - slalom driving between the cones with the scooter
- After performing these tasks the discussion of the experience acquired follows



- Module 3:
- The police officer explains the typical hazards, which lead adolescents to the traffic accidents:
 - social facilitation of alcohol use and abuse
 - diminished perception of hazards
 - increased readiness for risk taking behaviour
 - improper trends in adolescent group dynamics
- The victim of the traffic accident, caused by himself, explains his experience
 - before the accident
 - during the accident with the analysis of the circumstances which lead to the accident
 - after the accident up to the present moment



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Measuring methods

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- For feedback and research purposes two measurement sessions were arranged:
 1. Measuring the initial knowledge and attitudes of participants about the effects of alcohol and about driving under alcohol intoxication at the beginning of the intervention program with a questionnaire
 2. Measuring the accrued knowledge and changed attitudes immediately after the end of the training with slightly modified questionnaire



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Preliminary results

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- Preliminary results which prove the *external validity* of the program:
 - of 268 respondents **only 3%** have never used alcohol
 - two earliest cases of alcohol consumption were at the age of **3**
 - **45 %** of respondents have been driving under alcohol intoxication
 - **55 %** of respondents have been riding in the car, driven by the driver under alcohol intoxication
 - **53 %** of respondents know personally someone, who has become the injured victim of an alcohol- related traffic accident
 - **24 %** of respondents know personally someone, who was killed in an alcohol- related traffic accident
 - **52 %** of respondents know families divorced on the reason of alcohol abuse



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Preliminary results

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- Preliminary results which prove the *internal validity* of the program:
 - during the program 35 % of respondents acquired new information about alcohol
 - as an average the awareness concerning behavioural pattern, social and traffic context rose by **76.2 %** per respondent
 - under the influence of the program 20 % of respondents consider alcohol in the traffic as a more dangerous agent compared to the pre-program measurement

- The signs of the external and internal validity of the program, acquired through preliminary results of the study, prove the usefulness of the program
- The planned attitude change towards alcohol hazards may develop further over longer time periods
- It may be possible to influence adolescence traffic behaviour through described in the present study means of attitude change

Thank you for listening

- If you have any questions, please contact us:
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