



PIN Talk

Tackling drink driving: what can European countries learn from one another?

Analysis of the implementation of the „Zero Tolerance“ approach for young and novice drivers in Germany

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1) Justification

2) Implementation

3) Evaluation

4) Conclusions and recommendations



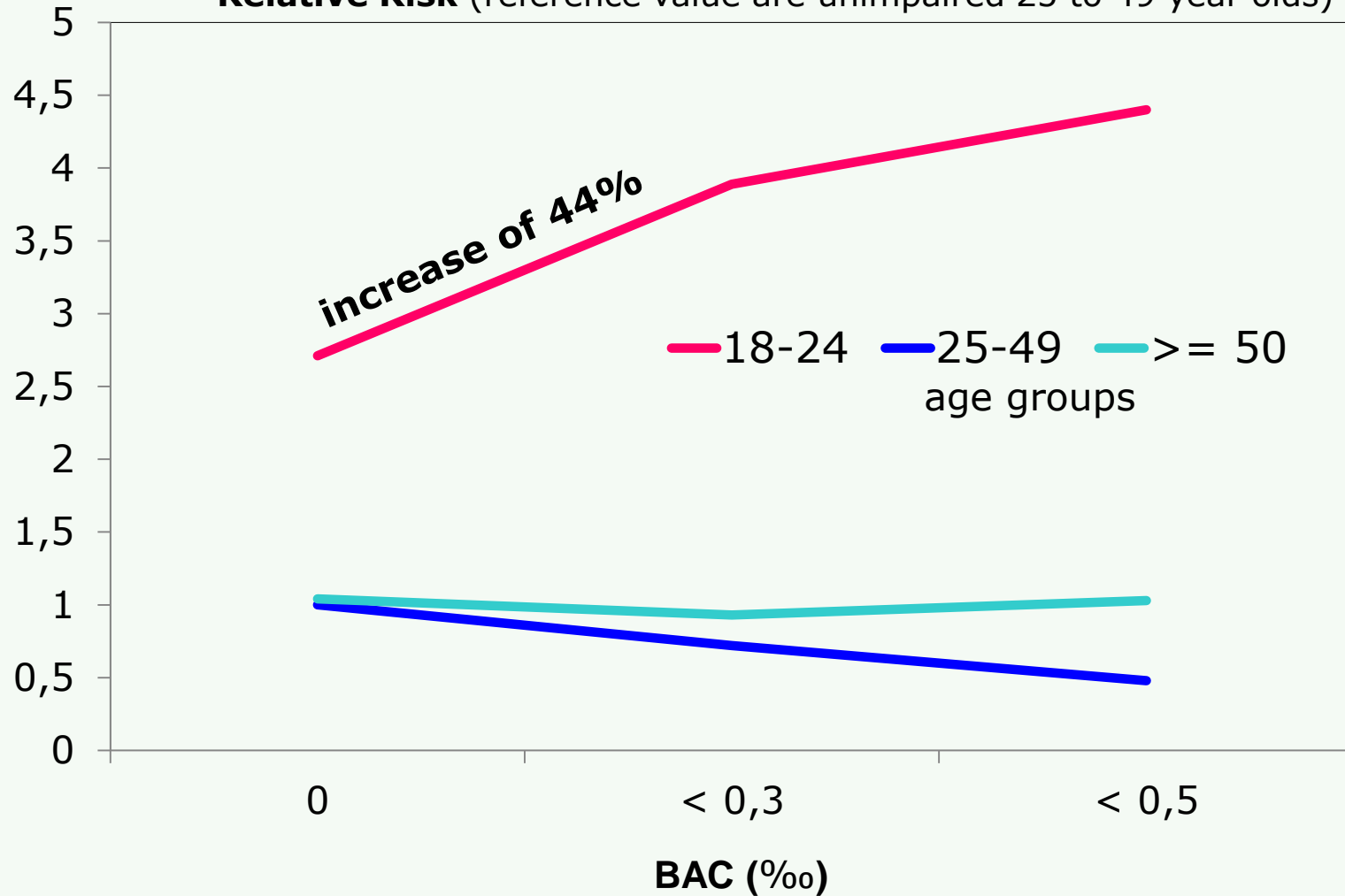
- In 1998, the legal BAC limit was lowered from 0.8 mg/ml to 0.5 mg/ml in Germany
- EC-Recommendation (2001): *„(...) AL of 0.2 mg/ml is recommended for certain types of driver and vehicle, namely: inexperienced drivers (...), learner drivers accompanied by driving or trainee (...) novice drivers having held a driving licence for less than two years; (...)”*
- Discussion in Germany about lowering the BAC limit for all drivers: No scientific evidence of relevant risk for experienced drivers (most severe accidents occur under very high BAC)
- But: Well-grounded scientific findings concerning higher risk for young and novice drivers
- Data from other countries showed benefit for traffic safety and positive cost-benefit ratio (e.g. EU-Project PROMISING)
- High acceptance in all age groups (EU-Project SARTRE 2004)



Germany 1994 (Krueger, 1995)

(N=4087 accident causers)

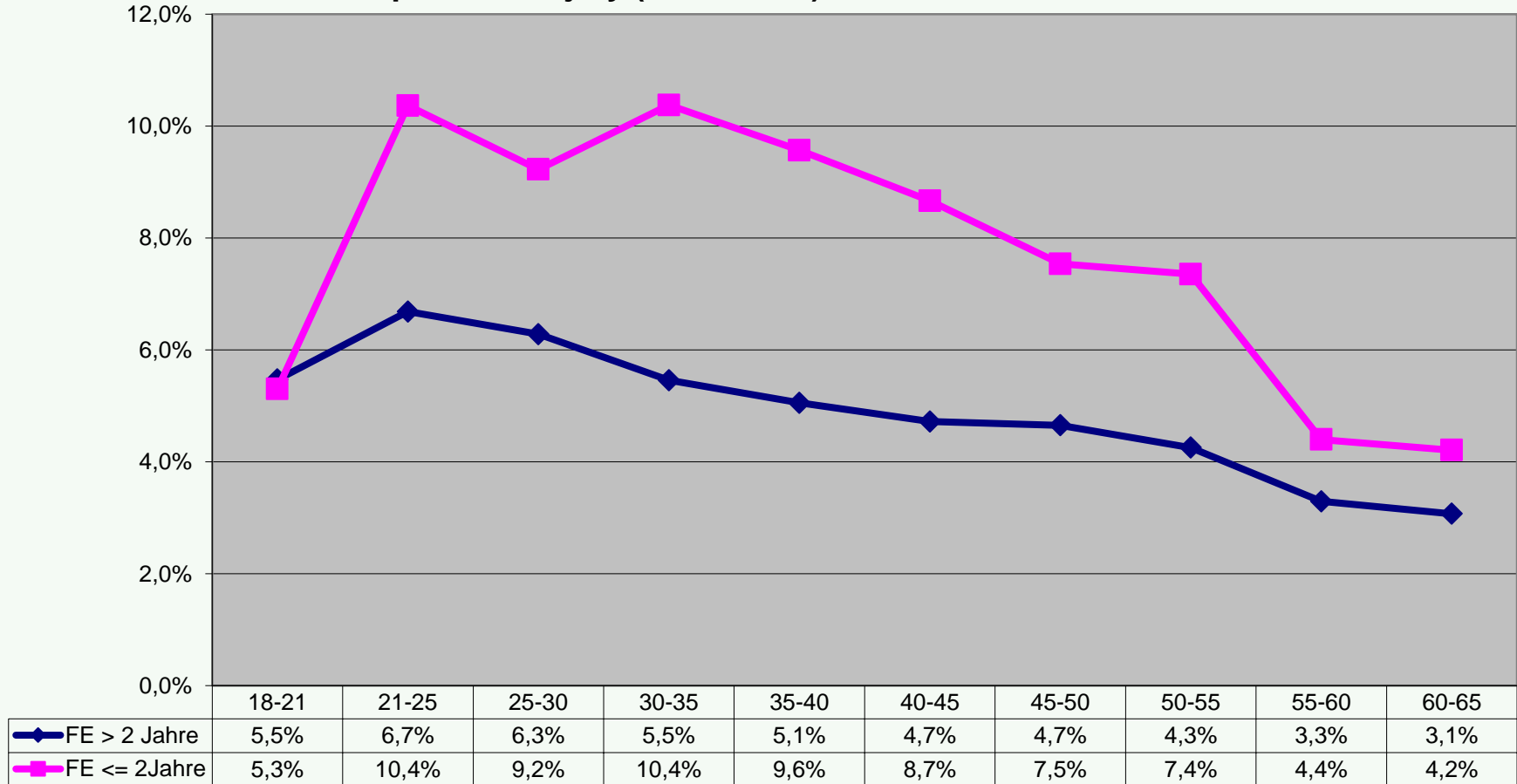
Relative Risk (reference value are unimpaired 25 to 49 year olds)





Why not only *young* drivers, but also older novice drivers?

Share of *alcohol impaired* causers (car drivers) in all causers of accidents with personal injury (car drivers) in 2005





- Based on expert recommendations (BASt and others) it was decided to implement a special law for the BAC limit for novice and young drivers
- Implementation of the law: **August 2007**.
- The limit applies to novice drivers of all ages during **two years of probation** and to **all drivers under 21**.
- Implementing a „**ban on alcohol**“ (= zero tolerance) for this groups instead of a limit should set a clear **signal to separate drinking and driving**
- § 24c StVG (German Road Traffic Act) prohibits drinking while driving a motorized vehicle or driving under the influence of alcohol (DUI)
 - DUI was defined as **0.2 mg/ml BAC or 0.1 mg/l BrAC** (breath alcohol concentration), following a recommendation of relevant national expert groups
 - The limit was defined in order to exclude measurement uncertainty and endogenous alcohol



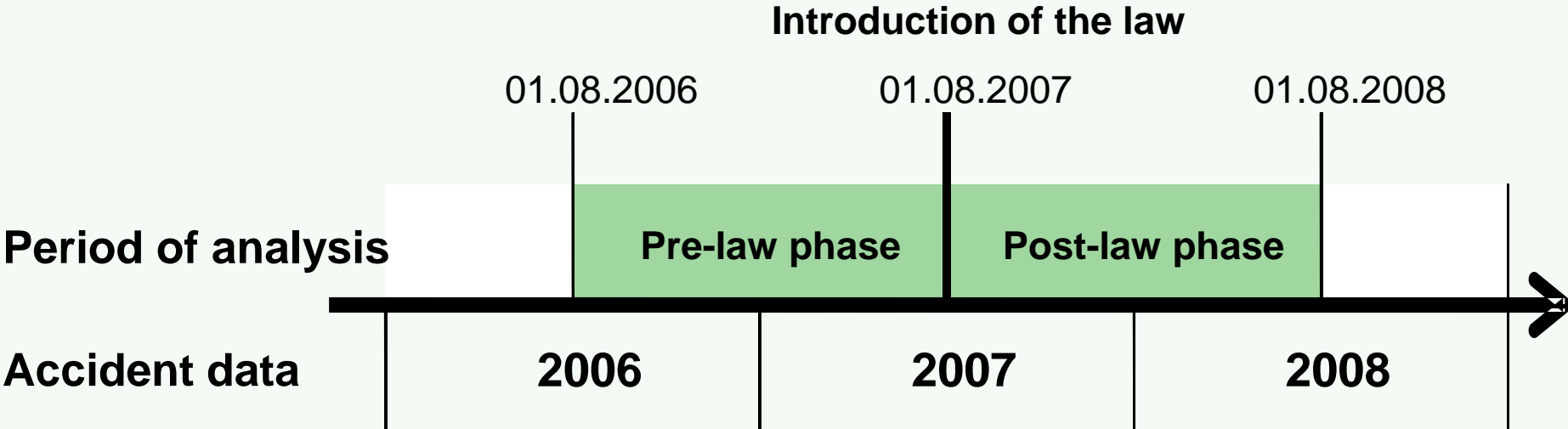
Data basis

- Data of the **official accident statistics**
- Data of the **central traffic register (offences)**
- Information concerning the **application of the new regulations (enforcement)** was used in the analysis and interpretation of the data.
- A **representative survey of novice drivers** was conducted to get information about attitudes and reported or intended behaviour concerning the acceptance of the law.

Research Design

- Comparison of the number of accidents and alcohol related violations of in a **pre-law-phase** with those numbers in a **post-law-phase**
- Accidents: Change in percentage, Odds-Ratios
- Alcohol-related violations: change in percentage

Evaluation





Results (1)

- **Accidents:**

The total number of young novice drivers (passenger car) that were involved in accidents and had a blood alcohol content of at least 0.03 percent dropped by **15%** in the first 12 months after the introduction of the law.

Odds Ratio = **0,869**

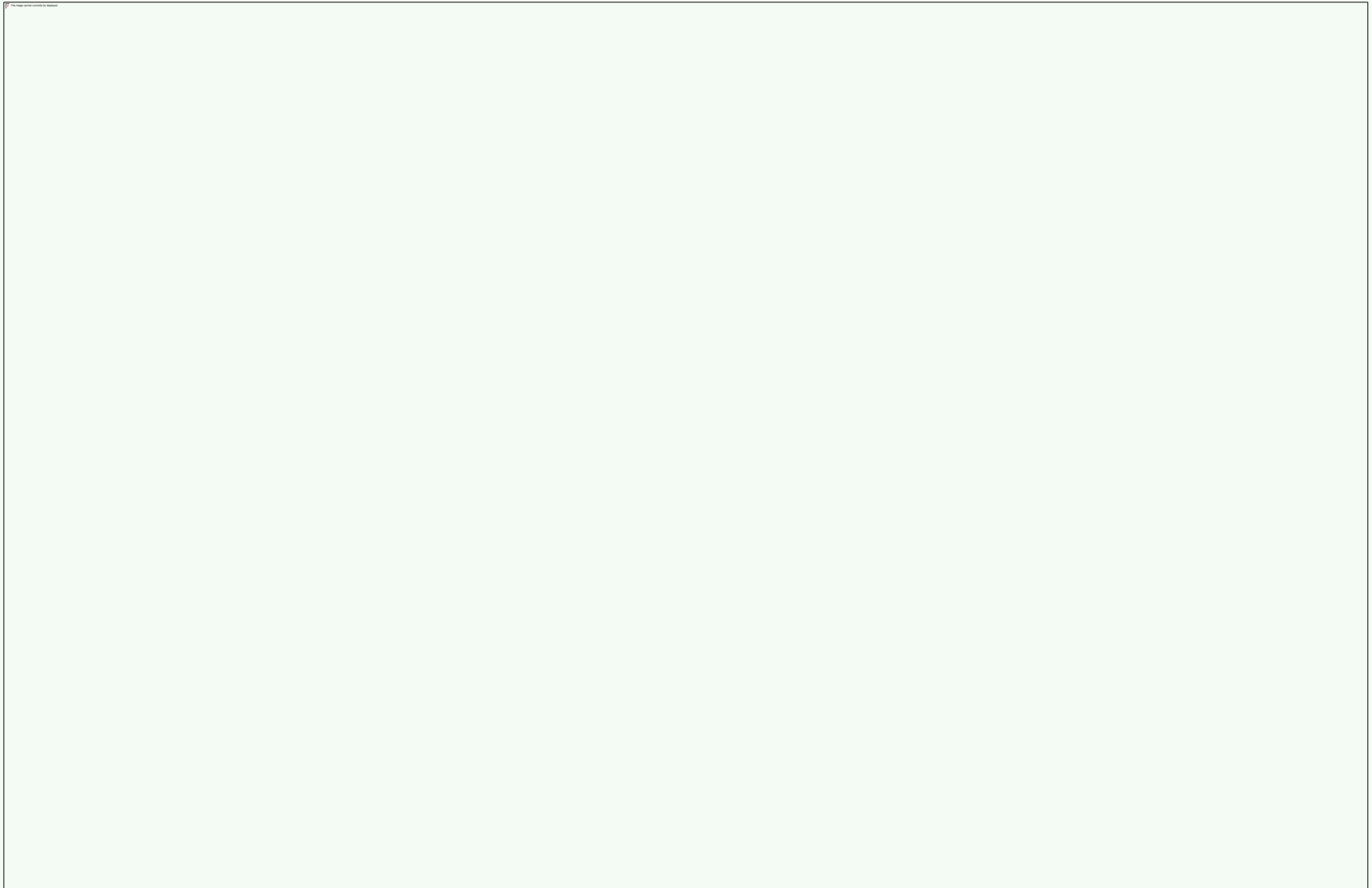
Strongest effect: BAC level of 0.3-0.8

- **Alcohol offenses:**

A reduction of **17%** of all the registered alcohol offenses among young drivers under 21 years of age was found during the period after the introduction of the law. This compares to a reduction of 2.5% for all persons older than 21 years.



Share of alcohol impaired car drivers in all car drivers involved in an accident 2005-2008





Results (2)

Acceptance and behaviour:

- The acceptance of the law among the target group of novice drivers is high (95%),
- 98% of novice drivers know that all novice drivers are not allowed to drink alcohol and drive.
- A clear adaptation of behaviour to the law can be seen:
To have the opportunity to drink of alcohol during evening entertainment,
 - 41% frequently or always use public transport,
 - 21% go by bicycle,
 - 46% join a lift club and
 - 25% walk.Only 7% stay at home (multiple answers).



- The zero tolerance alcohol law for young and novice drivers improved traffic safety (accidents, offences) of this group substantially.
- The acceptance of the law was high in the target group right from the beginning
 - key factor for success
 - When acceptance remains high, a sustainable consolidation or even increase of the effect can be reached
- To stabilise acceptance and compliance:
 - Thematic presence of the danger of DUI driving in public (campaigns etc.) and educational measures
 - Enforcement
- Follow-up (investigation of long-term effects) is still outstanding



Implementation

- Communication should be “zero alcohol” in the law itself and to the public irrespective whether the actual threshold is 0.0 or 0.1 or 0.2 mg/ml BAC.
- Broad and early information of relevant groups (target group, police...), e.g. Driving schools, campaigns, leaflets...

Enforcement

- The subjective expectation of being sanctioned should be high (i.e. drivers must have the feeling that the law is enforced and they can get caught)

Evaluation

- Plan and start an evaluation at an early stage: Easier to gain comparison data from the pre-law phase



**Thank you very much
for your attention!**

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