



Trafi

Finnish Transport Safety Agency

Implementation and evaluation of the alcohol interlock programme in Finland

19 May 2015, Luxembourg

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*Responsible traffic.
A joint effort.*

1. Finland: facts and number of DUI* cases

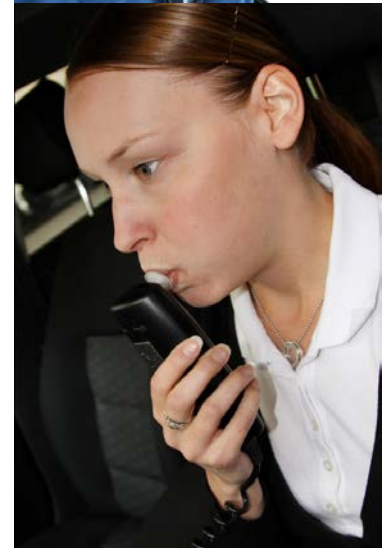
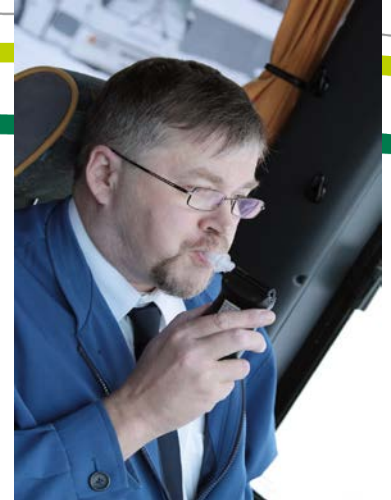
2. Rehabilitation programme for DUI offenders

- The facts
- The steps
- The costs
- The evaluation study
- Challenges encountered at the implementation

3. Alcohol interlocks mandatory in school and day care transport

4. Alcohol interlocks in other commercial vehicles

* Driving Under the Influence (of alcohol)



Finland: facts

Area 338 432 m2 (10 % lakes)

5,5 million inhabitants

3,7 million driving licences

5,0 million vehicles

BAC-limit: **0,5 %**

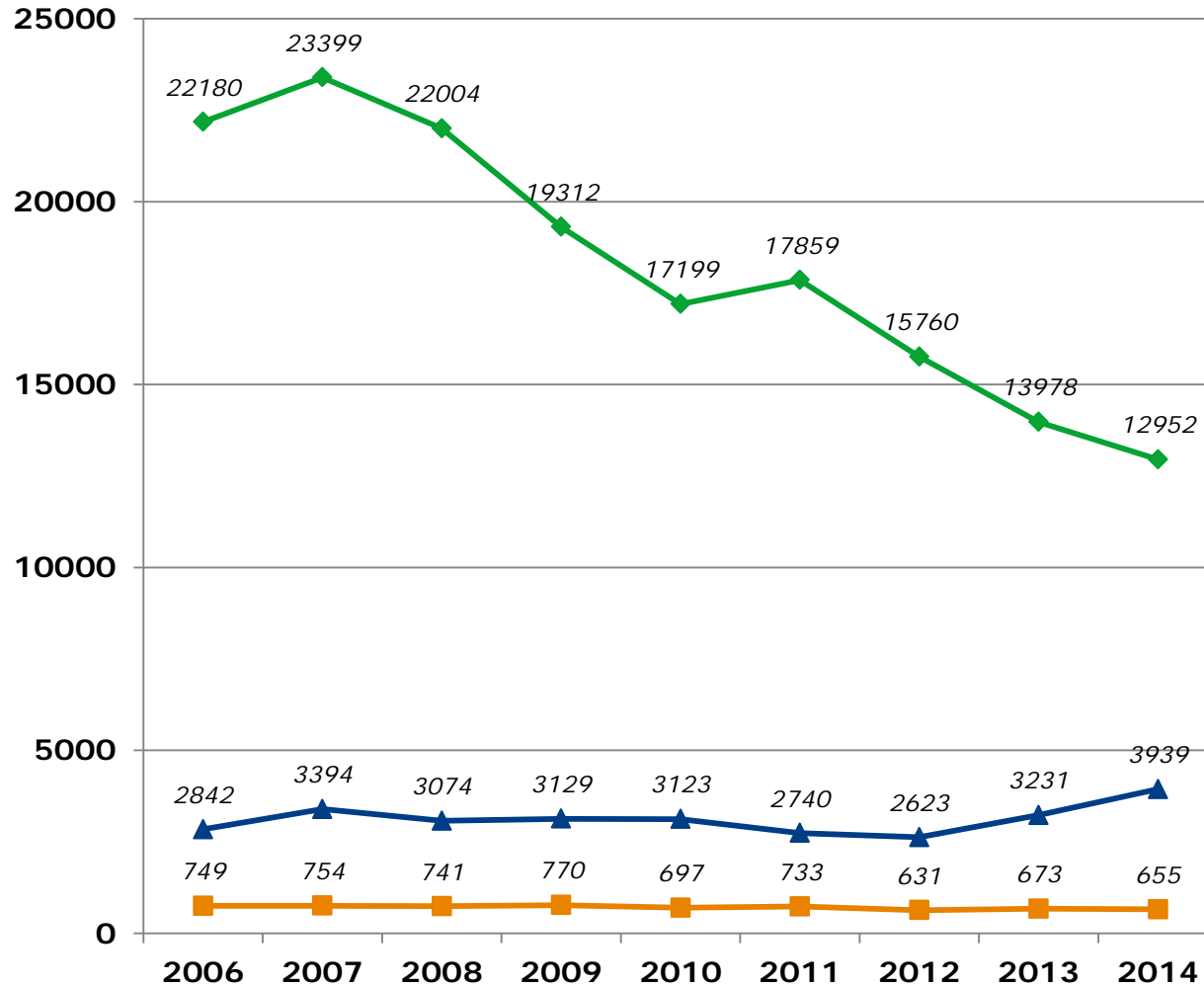
Road traffic accidents:

~ **20 %** of deaths and

~ **10 %** of injuries related to DUI



Finland: number of DUI cases (caught by the police)



Rehabilitation program with alcohol interlocks – the facts

- A trial July 2005–June 2008 → Permanent **since July 2008**
- **Voluntary** for DUI offenders (the offender may apply for the alcohol-interlock-controlled driving licence, instead of being banned from driving)
- Approximately 500 new participants each year
- Program **duration** 1–3 years (court decides)
- The installation and calibration of alcohol interlocks is performed by authorized service providers that are trained by interlock manufacturers/importers (calibration interval most often 1 year)
- The police monitors the participants (based on data read-out)
If there are violations (e.g. manipulation attempts or the interlock removed too early), the programme may/shall be terminated
- Brochure in English:
http://www.poliisi.fi/instancedata/prime_product_julkaisu/intermin/embeds/poliisiwwwstructure/27627_alkolukkoesite_suomi_muokattu2_EN.pdf?2577f39c4d2ad288

Rehabilitation program with alcohol interlocks – the steps

- DUI offender is caught by the police
 - The police informs the offender about the interlock possibility

The offender

- gets the alcohol interlock installed and the vehicle inspected
- visits a doctor or an another health care professional
- submits the driving licence application to the police
- receives a driving licence with national code 111 (interlock)
- takes the interlock to log-data read-out every 60 days
- after the mandatory period, may get the interlock removed from the vehicle, or instead, may leave the device in the vehicle (with voluntary use settings applied, e.g. no running re-tests, no data read-out)

Rehabilitation program with alcohol interlocks – the costs

The participant pays all the costs (on average less than 5 € per day)

- Alcohol interlock + installation: 1250–1450 €
- Data read-out: 20–60 €
- Calibration (usually once a year): 30–60 €
- Removal of the interlock: 100–170 €

- One visit to a doctor or another health care professional: in public sector ~ 30 €, in private sector up to 160 €
- Inspection of the vehicle after the installation of the interlock: ~ 40–60 €
- New driving licence from the police: 52 €

The evaluation study published in February 2013

- Trafi Publications 6/2013 (in English): “Effectiveness and impact of alcohol interlock-controlled driving rights”
- http://www.trafi.fi/palvelut/julkaisut/2013_julkaisut/effectiveness_and_impact_of_alcohol_interlock-controlled_driving_rights

The study included

- A survey (**questionnaire**) to all the drivers in the interlock program since July 2008 (N=1569; response rate 45 %)
- An analysis of the drink-driving **offences** before, during and after the interlock period
- An analysis of the interlock **log data**
- **Interviews** with the relevant authorities within the process

Population

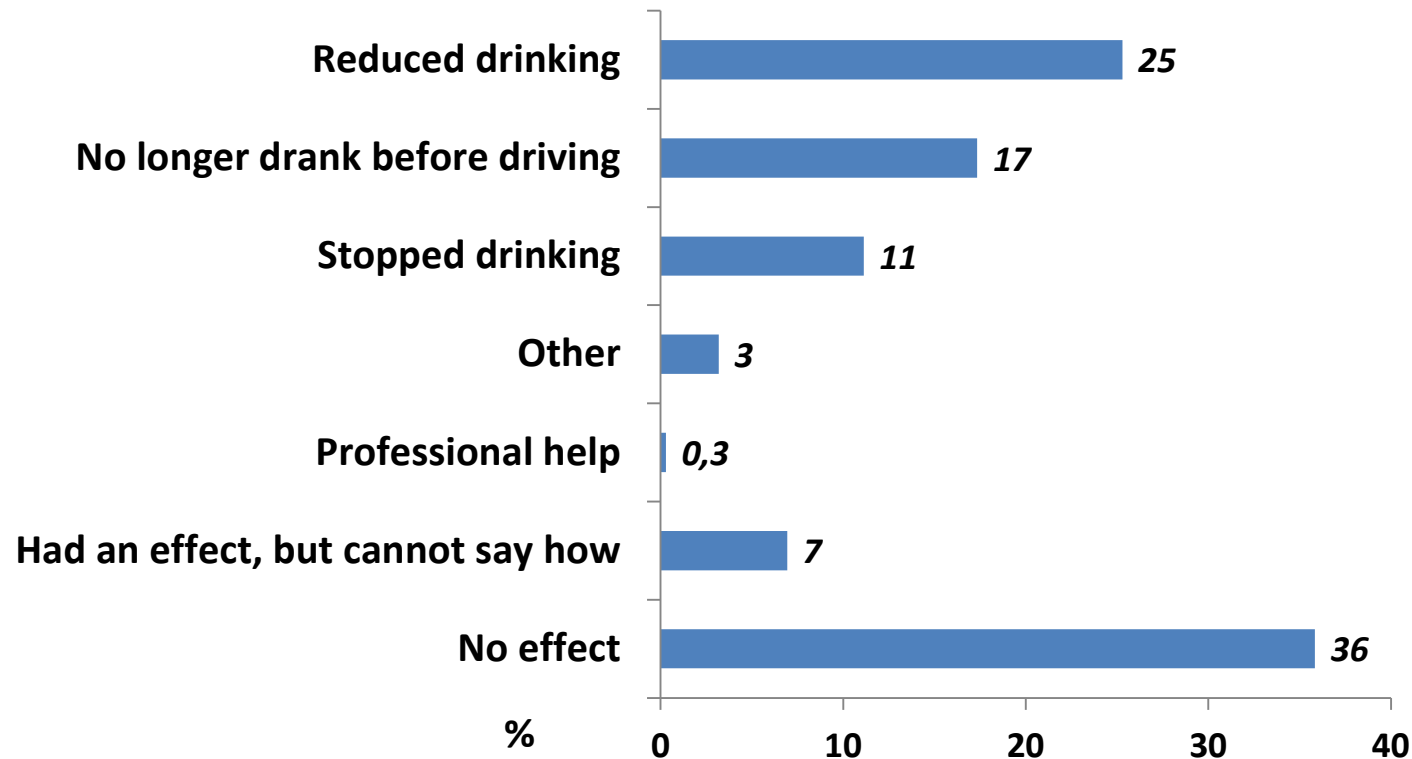
- The **average age** of the participants in the alcohol interlock program was **51 years**. The youngest was 20 years old, the oldest 82.
- 84 % of the drivers were male.
- 1.4 % of the participants had died before the end of the interlock program. In 37.5 % of the cases the cause of death was related to alcohol.
 - In general population the mortality rate is around 1 %. Alcohol related causes of death account for about 6 % for men and 2 % for women.

After the mandatory period

- At least **one third** of the drivers leave **voluntarily** the alcohol interlock device fitted in their vehicle after the mandatory period of 1–3 years!

The evaluation study: effect on alcohol use

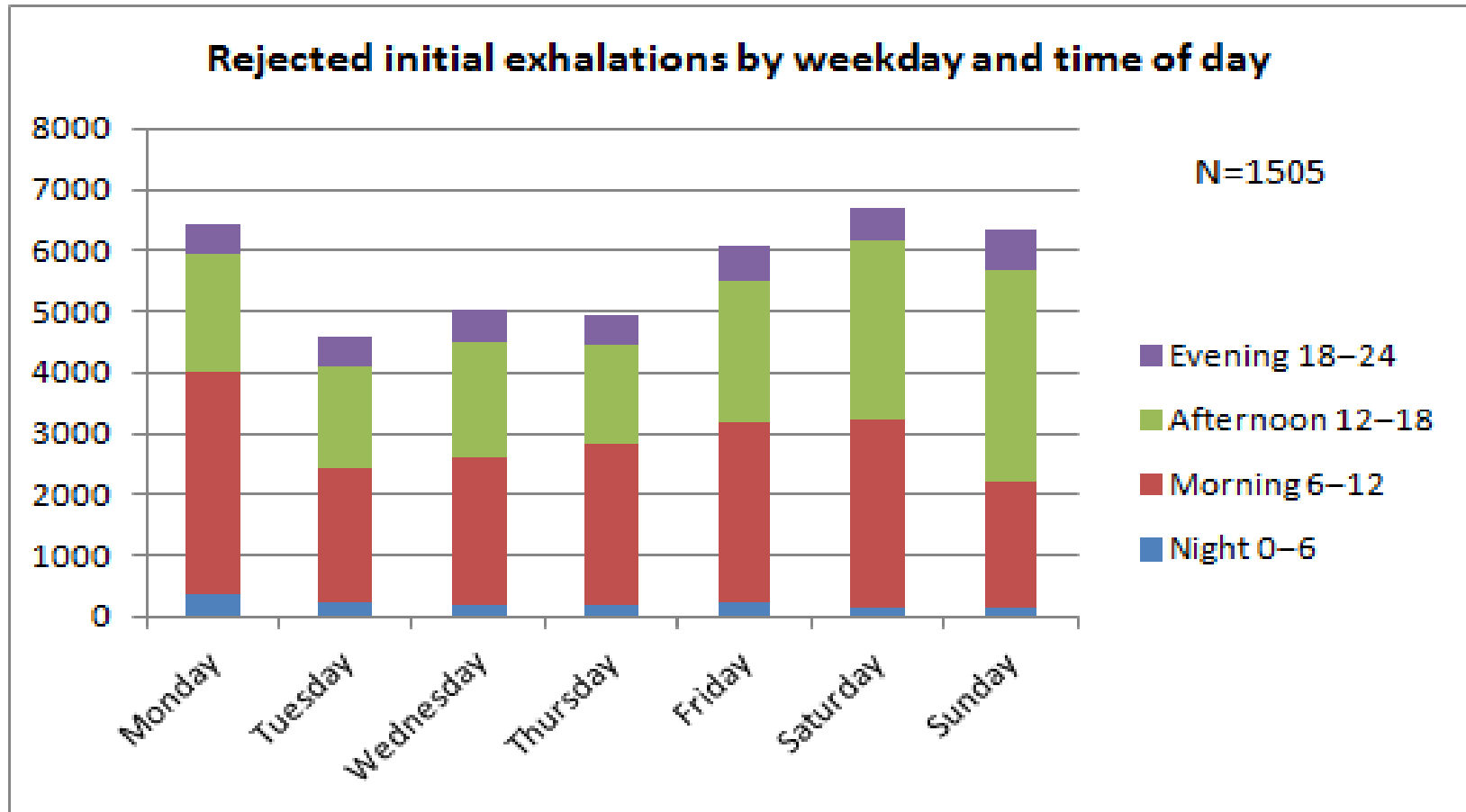
How did/does the alcohol interlock affect the use of alcohol for you?



The evaluation study: prevented DUI cases

- The alcohol interlock log data for about 4 years was analysed out of 1505 interlocks used by the DUI offenders.
- Alcohol interlocks used by the offenders had prevented at least 12 000 instances of driving while under the influence of alcohol (≥ 0.5 ‰; the legal limit) in Finland.
- Overall the alcohol interlocks had prevented over 40 000 times a driver who had “had a few” (≥ 0.2 ‰; the limit set to the interlocks) to start the vehicle for driving.

The evaluation study: rejected breath samples



Best things about using an alcohol interlock

- Keeping one's driving licence was felt to be the largest benefit (95 % of all the respondents).
- More than half (58 %) of the drivers also appreciated the certainty that they would not accidentally set out intoxicated.
- One-third of the drivers kept their jobs thanks to the interlock.
- The emphasis on traffic safety was also valued (28 %).
- Free-form answers listed getting sober as a benefit, as well as the fact that the interlock “teaches one to think” and reminds of “the dangers of the drink”.
- Some drivers viewed the interlock as a friend and travel companion: “I drive a Renault and I've named the alcohol interlock Pierre. Pierre tells me when it's safe to drive. Above all, the interlock is a health instrument and a friend.”

Worst things about using an interlock

- **Waiting time** for the device to **warm up** (59 % of all the respondents) and
- rather **high expenses** (57 %) were seen as the worst aspects of using an alcohol interlock.
- Almost half (54 %) of the respondents considered **re-tests** while driving to be unpleasant, and many felt them to be a safety hazard*. The interval of randomly required re-tests was felt to be too frequent**.
- Exhaling in public was felt to be **awkward** by 43 % of the respondents. Many also described the attitude of outsiders as suspicious or negative.

* in re-test the driver has time period of 6 min to give a breath sample

** first re-sample required in 5–10 min, after that every 30–45 min

The evaluation study: Recidivism

- More than half of the drivers had been convicted of DUI several times before applying for the alcohol interlock driving licence.
- 3.3 % of the drivers were caught for DUI during their period of alcohol interlock controlled driving licence (most likely with another vehicle, not fitted with an interlock).
- After the end of the alcohol interlock supervision period, 2.5 % of the drivers were caught for a DUI offence.
- The recidivism rate of alcohol interlock users seems to be significantly smaller than that of all DUI offenders, as generally the recidivism rate in Finland is at least 30 %.

Rehabilitation program: Challenges encountered at the implementation

Before the trial

- How often to ask the offender to download the interlock **log data** and how to use the data by the authorities?
 - E.g. several "red" (over the limit value) breath samples → any consequences for the driver?

In the trial

- There were several mandatory **visits to the health care sector**
 - After the trial they were reduced to only one visit; mainly to keep the overall costs to the participant as low as possible.
- The offender needed to wait for the court hearing before being able to apply for the alcohol interlock driving licence; the **mandatory waiting period** was **not** good for the participation rate.
 - After the trial the process was modified so that the offender may apply for the alcohol interlock driving licence **as soon as** he/she has got the interlock installed in the vehicle and visited a doctor.

Rehabilitation program: Challenges encountered at the implementation

Nowadays

- The **participation rate** is rather low (still), as the driving bans for a DUI offence are fairly short in Finland
→ For many drivers a short driving ban is more appealing choice than investing in an alcohol interlock device.
 - The goal is to get the courts to order the interlock program to **all DUI offenders** (the law will be amended).
 - However, it would still require a consent from the offender (as e.g. they all do not own a vehicle, and they may not afford the program).
- Lack of common register (run by an authority) for the interlock log data.
- Communication between the authorities and other relevant parties (e.g. the interlock importers, the police, the courts, the doctors) could always be improved!

Alcohol interlocks mandatory in school and day care transportation

Background

- The share of professional drivers of all DUI cases (caught by the police) in Finland is estimated to be around 8–9 %.
- In 2006 the Ministry of Transport and Communications gave a recommendation to use alcohol interlocks in all professional school and day care transports.
- In 2008 alcohol interlocks had been taken in use for these transports **in 17 municipalities only** (total number of municipalities more than 400).

Alcohol interlocks mandatory in school and day care transportation

Since August 2011 the Act:

"If the transportation is organised by a municipality, municipal federation, school or institute as charter transport and support from a municipality or state is obtained, a vehicle equipped with an **alcohol interlock** must be used for:

- 1) the transportation of pupils participating in preschool, primary school or voluntary additional basic education teaching;
- 2) the transportation of pupils participating in upper secondary education; and
- 3) day-care transportation".

Alcohol interlocks in other commercial vehicles

There are **no new acts** regarding the use of alcohol interlocks in other commercial vehicles, but nevertheless, nowadays interlocks are rather common in commercial vehicles via **requirements in public tenders**:

- E.g. Helsinki Region Transport in 2012: "Alcohol interlock is a mandatory equipment in all new busses. The transport company gets extra points, if an alcohol interlock is retro-fitted also in busses that are already in use."
- E.g. Road Maintenance contracts since 2012: "All the vehicles that require a valid professional competence (CPC) from the driver, need to be equipped with an alcohol interlock."

The use of alcohol interlocks ensures the **quality and safety** of the transports and promotes the overall **safety culture** of transportation companies

One accident caused by a drink driver may cost several times more to a transportation company than investing in interlocks!

Thank you!

Questions?

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