Title of Intervention: The Swedish Ignition Interlock Program

Website: http://www.interlockdevice.com/r5.htm
http://atsb.alberta.ca/506.htm

Intervention Strategies: Environments and Policies

Purpose of the Intervention: To reduce drunk driving

Population: Commercial drivers, individuals who had committed a driving while intoxicated (DWI) offense

Setting: 3 counties in Sweden; community-based

Partners: None mentioned

Intervention Description:

- Environments and Policies: A breath alcohol ignition interlock system, named Alcolock, was installed in commercial vehicles (e.g., buses, trucks, taxis) driven by individuals who had committed a DWI offense. The interlock system required the driver to provide a low or alcohol-free breath sample before the engine of the vehicle could be started.

Theory: Not mentioned

Resources Required:

- Staff/Volunteers: Not mentioned
- Training: Not mentioned
- Technology: Not mentioned
- Space: Not mentioned
- Budget: Not mentioned
- Intervention: Interlock systems, recording devices, access to DWI offenders and willing participants, materials/ personnel to conduct medical checkups and diagnose mental health condition, biological marker exam materials
- Evaluation: Questionnaires, accident and traffic violation data, hospital discharge records, statistical software

Evaluation:

- Design: Randomized Controlled Trial
- Methods and Measures:
    - Medical checkups were conducted every third month. At each checkup participants were interviewed about their alcohol usage and given feedback about the levels of their biological alcohol markers.
    - Questionnaires as well as biological markers and three liver enzyme tests were used to detect any changes in lifestyle and drinking behavior.
    - Three polls evaluated attitudes towards the Alcolock.
    - Log data recorded from the ignition interlock devices installed in the vehicles gave the number of breath tests and the number of tests showing blood alcohol levels greater than 0.1%.
    - Data were collected for 5 years before the DWI offence and onwards (official accident statistics, road accidents involving injury per police reports, number of DWI offenses, hospital discharge registers and sick leave registers).

Outcomes:

- Short Term Impact: The Alcolocks were well accepted by professional drivers, their employers and their passengers. During the program, alcohol consumption generally decreased significantly among those previously convicted of a DWI, as measured through five biological alcohol markers.
- Long Term Impact: The yearly rate of recurrent DWIs fell sharply. There were reduced rates of police reported traffic accidents involving injuries and hospital admissions due to road accidents.

Maintenance: The country of Sweden plans to implement the interlock program country-wide.

Lessons Learned: Successful completion of the program appears to have lasting effects in terms of far lower rates of DWI reoccurrence and possibly lower crash rates.

Citation(s):
Bjerre, B. (2003). "An evaluation of the Swedish ignition interlock program." Traffic Inj Prev 4(2): 98-104.

Bjerre, B. (2005). "Primary and secondary prevention of drink driving by the use of alcolock device and program: Swedish experiences." Accid Anal Prev 37(6): 1145-52.