

In Vehicle Breathe Alcohol Testing

IMPAIRED
DRIVING

In-vehicle breath alcohol systems prevent engine start if a driver's BAC exceeds a set limit, typically mandated for DUI offenders.

Implementation Strategy

How and Where to Apply

- Ignition interlocks are mandated under state DUI laws, requiring installation through certified providers for license reinstatement.
- Applications go through DMV or courts, with monitoring for compliance. Voluntary use is also common among fleets and parents of teens.
- The **FHWA** states that this marking can be used "Ignition interlocks are the only technology currently available that protect the public by physically preventing a person from driving a vehicle if they have been drinking."

Use in a Safe System Approach

This supports the Safe System by preventing impaired driving at the source (preventive control principle). By detecting alcohol before driving, it protects all road users from high-risk behavior and compensates for human error with a built-in safeguard.

Key Stakeholders

State departments of motor vehicles, judicial and law enforcement agencies.

Proactive Implementation

Require certified ignition interlocks for all DUI offenders as a condition of license reinstatement. Ensure devices are regularly calibrated and equipped with data logging for compliance monitoring. Integrate interlock data into DMV or court systems, offer financial assistance for low-income users, and promote early installation to increase compliance, improve enforcement, and reduce alcohol-impaired driving incidents.

Countermeasure Overview

Objective: Enforce DWI Laws

Strategy: Enhance DWI Detection Through Special DWI Patrols and Related Traffic Enforcement

Selected Related Countermeasures

- CM1** Alcohol Screening and Brief Intervention (SBI)
- CM2** Administrative License Revocation (ALR)
- CM3** High-Visibility Enforcement (HVE) Campaign

Cost: \$ (Low)

Service Life: > 5 years

Targeted Solution



CONTRIBUTING FACTORS

- Misjudgment
- Visibility
- Slower response



TARGET CRASH TYPE

- Speeding
- Aggressive



ROAD FACILITY TYPE

- All



AREA TYPE

- All

Safety Linkage



NCHRP 500 Series

Alcohol-Related Collisions

SAFE SYSTEM APPROACH

Safe Road Users

SAFE SYSTEM ROADWAY DESIGN



AASHTO'S TOWARD ZERO DEATHS

Safer Drivers and Passengers

TIER 1
TIER 2
TIER 3
TIER 4

N/A

Breathe Alcohol Testing . Source: [Alcolock](#)

Safety Benefits

70%

Reduce the chance of repeat DUI offenses¹

¹ [CDC, 2024](#)

Resources

- [NHTSA: Countermeasures That Work: A Highway Safety Countermeasure Guide](#)
- [CDC. Effectiveness of Ignition Interlocks for Preventing Alcohol-Impaired Driving.](#)

