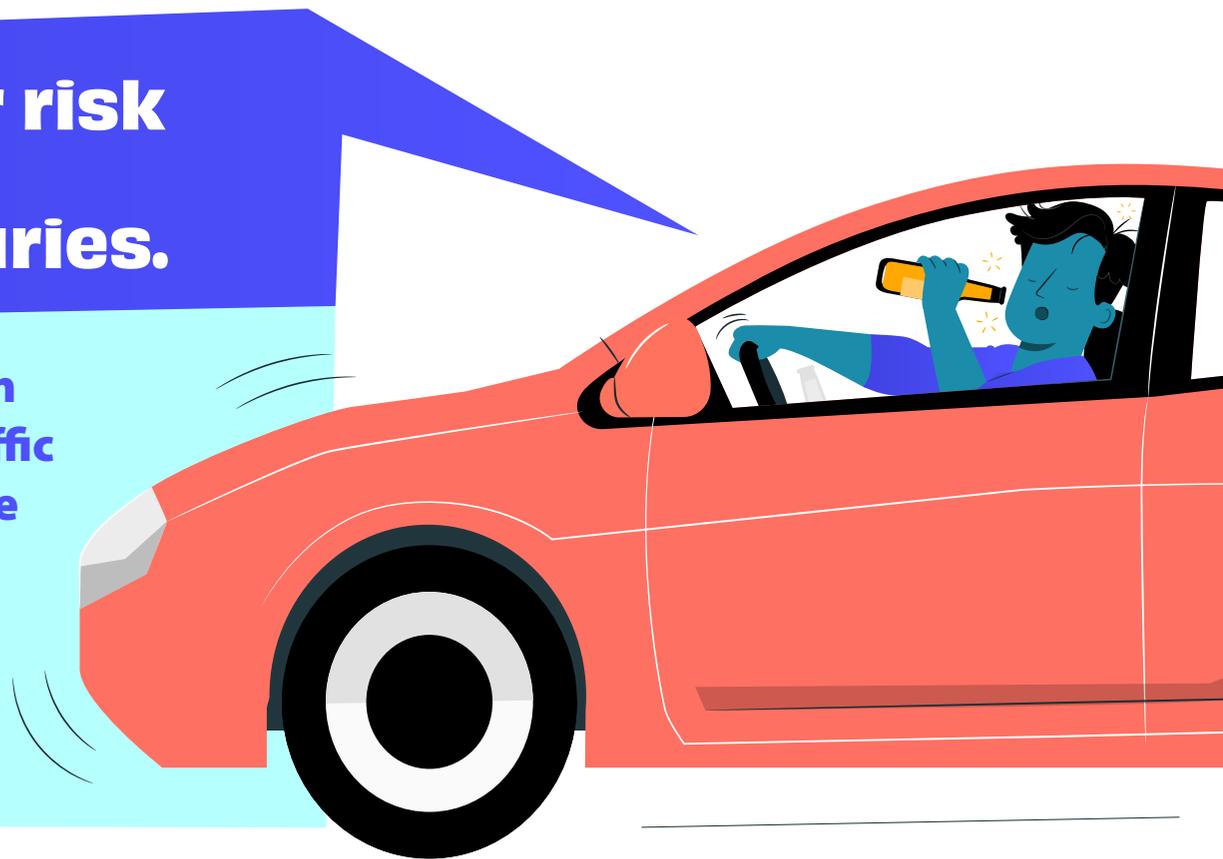


# DRINK DRIVING COUNTERMEASURES: WHY DO THEY MATTER?

**Alcohol is a major risk factor for traffic fatalities and injuries.**

In 2016, as many as **1.35 million people died globally from traffic crashes, and 27% of them were attributable to alcohol use, translating to around 370 000 alcohol-attributable deaths due to road injuries worldwide.**



## What is blood alcohol concentration (BAC)?

**Blood alcohol concentration (BAC) refers to the amount of alcohol present in the blood of a drinker. It can be measured using a breathalyser or blood test. Because people react differently to the effects of alcohol, it is very difficult for a person to judge their own BAC. A person may not feel “drunk” but may still be legally impaired.**

### THE LINK BETWEEN BAC AND DRIVING

Overall, the crash risk increases exponentially with BAC. In general, the lower the BAC legal limit in a country, the fewer alcohol-attributable deaths due to road injuries. Alcohol blunts alertness, reduces motor coordination, alters depth perception and judgement, and can cause blurred vision. Driving skills are increasingly impaired in accordance with the number of drinks consumed before driving, with decrements in performance starting with the second drink. Even with a BAC of just 0.05%, judgement and reaction times are impaired as well as driving performance.

## What policies are effective in reducing drink driving injuries and deaths?

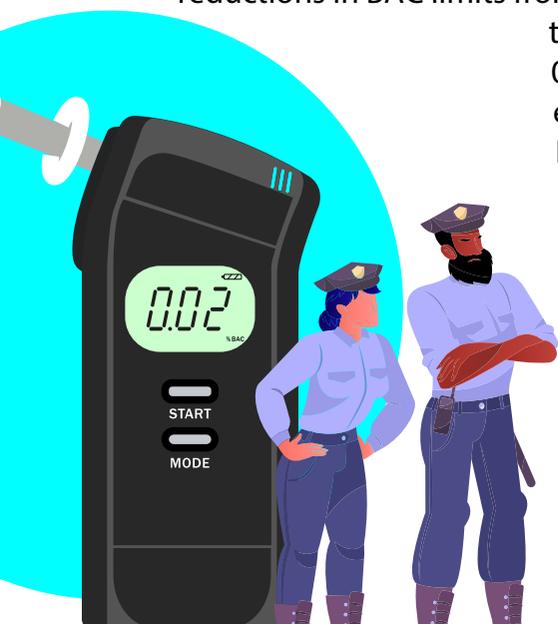
**1 Lower BAC Levels:** There is strong evidence that lowering the BAC limit is an effective intervention for reducing traffic crashes. There is also strong evidence that a lowered BAC limit is effective at a range of levels, i.e., reductions in BAC limits from 0.10% to 0.08%, from 0.08%

to 0.05%, and from 0.05% to 0.03% or 0.02%, are all effective and lowering the BAC limit for young people to any measurable amount of alcohol is effective. A zero-tolerance BAC level for all drivers is already in place in 15 countries (including Uruguay and Brazil), and 27 countries have low BAC limits (<0.03%).

**2 Enforcement:** Evidence shows that enforcement of the BAC level is an essential component in effectiveness. Enforcement deters drink-driving by increasing drivers' *perceived* risk of arrest. The main policy options for increased enforcement are:

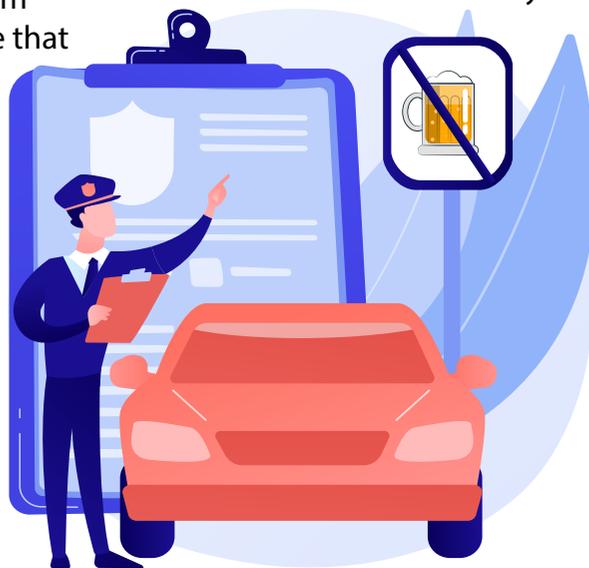
**Random breath testing (RBT):** Any motorist can be stopped at random by police and is required to take a preliminary breath test, even if they are in no way suspected of any offence. RBT is generally conducted so that it is highly visible and widely publicized.

**Sobriety checkpoints:** Law enforcement officials systematically stop every vehicle (or every nth vehicle) passing a predetermined fixed location on a public roadway to ascertain whether drivers might be impaired. The police decide whether they will test based on the driver's demeanor and responses. Drivers must show some signs of alcohol impairment to be tested. To be effective, they need to be done frequently and well publicized.



**3 Severity of punishment:** This has typically been addressed either by changing maximum penalties or by introducing mandatory minimum penalties. There is limited evidence that increased sanctions by themselves reduce drink-driving or alcohol-related crashes.

**4 Swiftmess of punishment:** This refers to the temporal proximity of punishment to the drink-driving event. The swifter the punishment, the lower the likelihood of repeat offenders.



**5 Administrative license revocation (ALR)** Alcohol-related crashes decline with ALR laws, and they are most effective at reducing offending during the license suspension period, presumably reflecting less or more careful driving when without a valid licence.

**6 DUI courts:** Alternative approaches have been developed that target high-risk DUI (Driving Under the Influence) offenders to ensure they receive effective rehabilitation. DUI courts can be effective, but the characteristics of the different interventions used may affect outcomes and effectiveness.

## Measures to protect novice drivers

The evidence shows that **lower BAC limits, delayed access to a full license, and other driving restrictions for young drivers can be effective strategies for reducing drink-driving and related fatalities among young people.**

Lower maximum BAC limits for **novice drivers** are relatively common, with over 90 countries setting BAC limits for novice drivers of between 0% and 0.05%.

**Graduated driver licensing (GDL)** places restrictions on young or novice drivers (e.g., prohibits night-time driving, driving with other young people in the vehicle, driving without an adult in the car) in order to achieve some of the benefits of delayed licensing, leading to a reduction in crashes and fatalities among young people.

**INTERLOCK DEVICES.** Ignition interlock devices prevent a vehicle from being started until the driver passes a breath test using special equipment installed in the automobile. Well-implemented interlock programs may reduce recidivism by 65% or more and can reduce fatal crashes when they are made mandatory.

**INTENSIVE SUPERVISION PROGRAMS.** Intensive supervision, or 24/7 programs, are an alternative sanction to incarceration for DUI offenders and they are effective in reducing recidivism.

**VICTIM IMPACT PANELS.** A systematic review determined there is no evidence of effectiveness for victim impact panels (VIPs). Adding VIPs into standard recidivism programs does not increase effectiveness.

**DESIGNATED DRIVERS AND SAFE RIDE SERVICES.** Designated driver programs were developed to decrease driving after drinking by encouraging groups of drinkers in public or social settings to select a member of the group to serve as the designated sober driver. The evidence of their effectiveness is limited. Designated drivers account for a relatively small percentage of drivers at a given time; therefore, no impact on alcohol-involved accidents or other drink-driving outcomes has been demonstrated.

**EFFECTS OF OTHER ALCOHOL POLICIES ON DRINK-DRIVING.** Alcohol control policies, including measures such as higher alcohol taxes and availability restrictions that affect the overall level of alcohol consumption, reduce traffic-related harm as well.



## Conclusion:

**International evidence suggests that drink-driving countermeasures can consistently produce long-term, population-wide reductions in drink-driving, alcohol-related crashes, and deaths.**

Sources:

1. Babor T, Casswell S, Graham K, Huckle T, Livingston M, Österberg E, et al. Alcohol: no ordinary commodity: research and public policy, 3rd edition. Oxford: Oxford University Press; 2022.

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