



# WHAT YOU NEED TO KNOW ABOUT DRINKING AND DRIVING

From their late teens, young people might think of taking to the roads, on a moped or later driving. As alcohol affects reaction times, vision and coordination, there is a legal drink drive limit, which is based on a driver's BLOOD ALCOHOL CONCENTRATION (BAC).

## What is BAC?

Blood Alcohol Concentration is a measurement of alcohol that's in the bloodstream after drinking. BAC varies depending on how much alcohol someone consumes; the more a person drinks, the higher their BAC. However, many other factors also affect BAC such as someone's size and weight.

## How is BAC measured?

BAC can be measured with a breathalyser or by analysing a sample of blood. BAC is the amount of alcohol present in 100 milliliters (ml) of blood, measured in grams. For example, a BAC of .08, the UK legal limit for driving, means someone has .08 grams of alcohol in every 100ml of their blood. The BAC limit for driving in Scotland is .05.

## Drinking and eating

Having food in the stomach does not stop someone from getting drunk, but it does slow down the rate at which alcohol passes into the bloodstream.

Lots of different factors can affect a person's BAC including:

- whether someone is male or female
- if they are drinking on an empty stomach
- if they are drinking quickly
- individual differences (size, weight, metabolism)
- the percentage of alcohol in the drink
- the type of alcohol they are drinking (fizzy drinks are absorbed more quickly)
- the container size (someone may think they're having one drink, but how many units are they actually having?)
- the amount of time since their last drink (the body can only break down about one unit an hour, their BAC can still be rising because alcohol takes time to be absorbed).

## More about individual differences

One person might have a higher or lower BAC than someone else who has drunk the same amount. This can be due to variables such as:

- whether they are of smaller or larger build
- whether they are female or male
- their proportion of body fat (body fat does not absorb alcohol)
- their metabolic rate (affected by diet, digestion, fitness, emotional state, hormonal cycle, time of day, year etc).

The use of other drugs won't affect BAC, but may 'mask' the effect of alcohol, making someone feel more sober than they really are.

A number of factors can lead to a woman having a higher BAC than a man, even if she has had the same number of drinks; women's bodies have less water and more fatty tissue than men's, so the alcohol in the water in their system is more concentrated. Men also make more of a protective enzyme that breaks down alcohol.

## Thinking distance

Alcohol's effect on the brain slows down a person's reaction times - they take longer to respond to hazards. So, if a cat ran in front of a car or motorbike, the delay between a driver seeing it and putting their foot on the brake is greater after drinking. The extra distance travelled in that time is called the 'thinking distance'. Each drink can increase the 'thinking distance' by 20%.

## Driving

The risk of someone being in an accident increases by:

- 2 times for drivers with a BAC of .05
- 4 times for drivers with a BAC of .08
- 20 times for drivers with a BAC of .15.

Drivers who have been drinking underestimate the distance and speed of other vehicles on the road. Their vision is affected, slowing reaction times further. Drivers who've been drinking overestimate their ability.

## Don't be tempted

If a driver exceeds the legal limit, they face an unlimited fine, six months in prison and having their licence taken away for a year. The offence of causing death by careless driving whilst under the influence of drink or drugs carries the highest possible penalty - life imprisonment !

Did you know, that if someone has a criminal record, they can't go to the US? Never mind the law, nobody would forgive themselves if they injured another person seriously – and it's much more difficult to get car insurance or a good job with a driving conviction.

There is a very good website that explains that many drivers are unaware of how they can still be over the drink drive limit



the morning after a night out. If 10 units of alcohol have been drunk (5 double vodkas, or four cocktails) it will take 10 hours for all the alcohol to leave the bloodstream – one unit an hour. [morning-after.org.uk](http://morning-after.org.uk)

Finally... don't ever accept a lift from someone who is over the drink drive limit and do everything possible to persuade that person not to drive – it could be save their life or someone else's.