# WHAT YOU NEED TO KNOW ABOUT DRINKING AND DRIVING



Some of you may be thinking of taking to the roads soon, on a moped and later driving. As alcohol affects our reaction times, our vision and coordination, there is a legal drink drive limit, which is based on your BLOOD ALCOHOL CONCENTRATION (BAC).

#### What is BAC?

The amount of alcohol in your bloodstream is called your Blood Alcohol Concentration or BAC. Your BAC depends on how much you drink. The more you drink, the higher your BAC. But there are also many other factors that affect your BAC.

#### How is BAC measured?

BAC can be measured with a breathalyser or by analysing a sample of blood. It is measured by the number of grams of alcohol in 100ml of blood. For example, a BAC of .08, the UK legal limit for driving, means you have .08 grams of alcohol in every 100ml of blood. The limit is now .05 in Scotland.

### Drinking and eating

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

Lots of different factors can affect your BAC including:

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



You may have a higher or lower BAC than someone who has drunk the same as you due to variables such as:

- o whether you are of small or larger build
- o whether you are female or male
- o your proportion of body fat (body fat does not absorb alcohol)
- o your 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 you feel more sober than you 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 make more of a protective enzyme that breaks down alcohol than women.

## 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 you seeing it and putting your foot on the brake is greater after drinking. The extra distance travelled in that time is called your 'thinking distance'. Each drink can increase the 'thinking distance' by 20%.

### Driving

The risk of someone being in an accident increases by:

- o two times for drivers with a BAC of .05
- o four times for drivers with a BAC of .08
- o twenty 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 you exceed the legal limit, you face a fine of up to £5,000, six months in prison and having your licence taken away for a year. Causing a serious accident or death through drink drive means up to 14 years in jail and a two year driving ban!

Did you know, that if you've got a criminal record, you can't go to the US?

Never mind the law, you'd never forgive yourself if you injured someone seriously – and try getting car insurance or a good job if you've got a driving conviction – no chance.

**Finally...** don't ever accept a lift from someone you suspect is over the drink drive limit. Do everything you can to persuade them not to drive – you could be saving their life or someone else's.



