Factors that affect a person’s BAC

- Whether the person is male or female – 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. BAC is also likely to be higher just before a woman’s menstruation than any other time. Men make more of the protective enzyme that breaks down alcohol before it enters the blood.

- Metabolic rate – which is affected by diet, digestion, fitness, emotional state, hormonal cycle.

- Type of build – small framed people may have a higher BAC than large framed people who have drunk the same amount.

- Amount of body fat – body fat does not absorb alcohol so alcohol is more concentrated in people with a high proportion of body fat.

- Drinking on an empty stomach – having food in the stomach slows down the rate at which alcohol passes into the bloodstream.

- Drinking quickly – the body can only metabolise one standard drink per hour.

- Percentage of alcohol in a drink – the higher the percentage the higher the BAC.

- The type of alcohol – fizzy drinks are absorbed more quickly.

- The container size – it is the number of standard drinks not the number of glasses that determines BAC. One glass may contain several standard drinks.

- The time since last drink – the body can only break down one standard drink per hour so the BAC may still be rising several hours after drinking has stopped because the alcohol takes time to be absorbed.

- The use of other drugs – this won’t affect BAC but may ‘mask’ the effect of alcohol. Stimulants such as speed and ecstasy may make a person feel more sober than they really are and cause severe dehydration. Cannabis or other depressants such as analgesics and cold and flu tablets, combined with alcohol, decrease alertness and motor skills more than just consuming alcohol alone. Alcohol combined with some antibiotics may cause headaches, nausea and flushing and reduce the effectiveness of the antibiotics.

Summary of national guidelines to reduce harm from alcohol use

The following national guidelines are based on evidence about reducing risks to the developing brain, and reducing the risk of alcohol-related death, injury and chronic disease including but not limited to self-harm, violence, anti-social behaviour, road crashes, cancer, liver cirrhosis and foetal alcohol spectrum disorders.

Children and young people:
The safest option for children and young people is not to drink alcohol at all. This is especially important for children under 15 years of age. For 15 to 17 year olds the safest option is not to drink and to delay the initiation of drinking for as long as possible. If drinking does occur it should be at a low-risk level and in a safe environment, supervised by adults.

Adults:
Adult drinkers should have at least 2 alcohol-free days a week and healthy men and women should consume no more than two standard drinks on any day. These guidelines are for adults only.

Source: National Health and Medical Research Council (2009), Australian Guidelines to Reduce Health Risks from Drinking Alcohol (pages 39 and 57, 67, 85, 94)