

## Alcoholism

### Alcoholism is a disease

Alcoholism is a chronic, often progressive, disease that's characterised by a physical and psychological dependence on alcohol. It's sometimes also known as alcohol dependence.

Alcohol dependency may result from a genetic predisposition, mental illness, sustained heavy and abusive drinking or a combination of these factors. Recent research in genetics and neuroscience has identified certain genetic characteristics that are believed to be related to alcohol dependence. Scientists are continuing to research the relationship between genetics and alcoholism. There's no known cure for alcoholism, though many people can stay sober for the long term with commitment and effort. However, before people with alcoholism can start recovery, they have to admit that they have a drinking problem.

Alcoholism is characterised by a physical and psychological dependence on alcohol

Some people have very serious problems with alcohol without having all the signs and symptoms of alcoholism.

#### Warning signs

Here are some of the signs that someone might have a drinking problem (it's not a complete list by any means).

- Feeling a compulsion to drink
- Being unable to limit how much they are drinking at any particular time
- Needing to drink greater amounts of alcohol to feel the desired effect
- Experiencing physical withdrawal symptoms (nausea, sweating, shallow breathing and shaking) if they don't drink alcohol
- Needing to drink to feel good or normal
- Losing interest in activities, hobbies or relationships
- Experiencing blackouts – forgetting what happened when they were drunk
- Drinking alone or hiding their drinking from others

The World Health Organisation has developed the Alcohol Use Disorders Identification Test (AUDIT) instrument which is a helpful assessment tool for physicians to assess the likelihood of a patient's alcohol dependence. The AUDIT questionnaire can be used to determine the degree of risk associated with drinking.

#### **take action**

If you do experience any of these signs or symptoms – or know someone else who does – please contact a doctor, healthcare professional or alcohol treatment organisation for help. Such professionals and organizations may assist with counselling, prescription medications and other support.

#### talkingalcohol.com

is a site dedicated to helping people make informed choices about alcohol

#### other websites

These sites contain further information that you may find useful. However, SABMiller is not responsible for the content of these sites.

- Adult Children of Alcoholics World Service Organization, Inc.  
[www.adultchildren.org/](http://www.adultchildren.org/)
- Alcoholics Anonymous Worldwide  
[www.aa.org/](http://www.aa.org/)
- Narconon, Johannesburg, South Africa  
[www.stopaddiction.co.za/P20050305144452740.htm](http://www.stopaddiction.co.za/P20050305144452740.htm)

- New South Wales Government Alcoholinfo, Dependence, Disease and Treatment  
[www.alcoholinfo.nsw.gov.au/dependence\\_\\_disease\\_\\_and\\_treatment](http://www.alcoholinfo.nsw.gov.au/dependence__disease__and_treatment)
- NHS Choices (UK), Caring for an Alcoholic  
[www.nhs.uk/Livewell/alcohol/Pages/Caringforanalcoholic.aspx](http://www.nhs.uk/Livewell/alcohol/Pages/Caringforanalcoholic.aspx)
- NIAAA, Collaborative Studies on Genetics of Alcoholism (COGA)  
[www.niaaa.nih.gov/ResearchInformation/ExtramuralResearch/SharedResources/projcoega.htm](http://www.niaaa.nih.gov/ResearchInformation/ExtramuralResearch/SharedResources/projcoega.htm)



## Alcohol poisoning

### Someone with alcohol poisoning needs urgent medical attention

Alcohol poisoning is the result of drinking dangerous amounts of alcohol. It can be deadly; those who survive can be left with irreversible brain damage.

When someone consumes excessive amounts of alcohol, their breathing slows and the brain is deprived of oxygen. The struggle to deal with an overdose of alcohol and lack of oxygen will eventually cause the brain to shut down the body functions that regulate breathing and heart rate. When that happens, the drinker can die.

Rapid, excessive drinking is especially dangerous because people can consume a fatal amount of alcohol before they lose consciousness. It's best to always drink in moderation and to avoid taking part in drinking games that involve drinking excessive amounts or drinking rapidly.

Underage and inexperienced drinkers are particularly vulnerable to alcohol poisoning.

Alcohol poisoning is most commonly associated with drinking excessive amounts of alcohol in a short period of time.

#### What Can Happen?

People should never be left to 'sleep it off' – this could be a fatal mistake. A person's

Blood Alcohol Concentration may continue to rise even after they have passed out. If alcohol poisoning goes untreated, the following can happen:

- The victim can choke on his or her own vomit
- Breathing slows, becomes irregular and can stop
- The heart beats irregularly and can stop
- Body temperature decreases (i.e., hypothermia)
- Blood sugar can decrease (i.e., hypoglycaemia) which can cause seizures
- Permanent brain damage
- Death



#### take action

A person with alcohol poisoning needs urgent medical attention. Here's what you should do:

- Don't panic
- Get medical help immediately – call the emergency services
- Turn them on their side (to prevent them inhaling or choking on vomit)
- Keep them warm

- Stay with them until medical help arrives

Don't try and sober the person up with black coffee or cold showers – these things don't work – and don't leave them to 'sleep it off'. They may never wake up.

#### Warning signs

Signs that someone might have alcohol poisoning include:

- Mental confusion
- Difficult to awaken
- Stupor, unconsciousness, coma
- Vomiting
- Seizures
- Slow or irregular breathing
- Blue-tinged skin, pale skin and/or cold clammy skin
- Low blood temperature

People can be suffering from alcohol poisoning without having all the sign and symptoms. If you suspect that someone has alcohol poisoning, get emergency medical help immediately.

#### talkingalcohol.com

is a site dedicated to helping people make informed choices about alcohol

#### other websites

These sites contain further information that you may find useful. However, SABMiller is not responsible for the content of these sites.

- Mayo Clinic – signs and symptoms of alcohol poisoning  
[www.mayoclinic.com/health/alcohol-poisoning/DS00861](http://www.mayoclinic.com/health/alcohol-poisoning/DS00861)

- NIAAA, Facts About Alcohol Poisoning  
[www.collegedrinkprevention.gov/OtherAlcoholInformation/factsAboutAlcoholPoisoning.aspx](http://www.collegedrinkprevention.gov/OtherAlcoholInformation/factsAboutAlcoholPoisoning.aspx)
- Student Emergency Medical Services Foundation (SEMFS)  
[www.semsfoundation.org/index.php?s=7978](http://www.semsfoundation.org/index.php?s=7978)



## Binge drinking

‘Binge’ or ‘extreme drinking’  
is irresponsible and dangerous

Whether labelled ‘binge drinking’, ‘extreme drinking’ or ‘heavy episodic drinking’, any pattern of drinking that involves rapid intoxication or intoxication for an extended period of time carries the potential for considerable social, psychological and physical harm, and should be avoided.

While there is no universal scientific or medical definition of what constitutes ‘binge’ or ‘extreme’ drinking, it usually means drinking excessive amounts of alcohol in a short period of time. Whatever the definition, the important thing is what can be done to prevent it.

Binge drinking carries the potential for considerable social, psychological and physical harm

Binge drinking can take a toll on the body and be dangerous. It can cause or contribute to:

- Alcohol poisoning
- Accidents, including car accidents
- Brain or neurological damage
- Gastrointestinal tract damage
- Risky behaviour (such as unprotected sex)
- Alcohol dependence
- Stroke or cardiovascular problems
- Poor academic performance.
- Absenteeism

Binge drinking not only affects the person who is drinking but it can affect others who are exposed to, and who may rely on, them. If a binge drinker fails to make responsible choices, those who either are not drinking or who drink responsibly can be subjected to problems ranging from rude or loud behaviour to accidents caused by drunk driving.



### take action

Binge or extreme drinking can happen at any stage of your life; it's not just a problem for underage drinkers.

No matter how old you are, it's irresponsible and dangerous. You shouldn't binge drink.

### talkingalcohol.com

is a site dedicated to helping people make informed choices about alcohol



### other websites

These sites contain further information that you may find useful. However, SABMiller is not responsible for the content of these sites.

- Centers for Disease Control and Prevention (US), Quick Stats: Binge Drinking  
[www.cdc.gov/alcohol/fact-sheets/binge-drinking.htm](http://www.cdc.gov/alcohol/fact-sheets/binge-drinking.htm)
- College Binge Drinking  
[www.collegebingedrinking.net/about-us.html](http://www.collegebingedrinking.net/about-us.html)
- International Center for Alcohol Policies, Extreme Drinking  
[www.icap.org/PolicyIssues/ExtremeDrinking/](http://www.icap.org/PolicyIssues/ExtremeDrinking/)

- Narconon, Johannesburg, South Africa, Alcohol and Binge Drinking  
[www.stopaddiction.co.za/P20050319093711354.htm](http://www.stopaddiction.co.za/P20050319093711354.htm)
- NIAAA (US), College Drinking: Changing the Culture  
[www.collegedrinkingprevention.gov/](http://www.collegedrinkingprevention.gov/)
- NSW Office of Drug & Alcohol Policy, Australia – Binge Drinking  
[www.alcoholinfo.nsw.gov.au/preventing\\_abuse\\_and\\_harm/binge\\_drinking](http://www.alcoholinfo.nsw.gov.au/preventing_abuse_and_harm/binge_drinking)

## Cancer

### Alcohol may be a cause of some types of cancer

Cancer is caused by a complex interplay of factors, including our genetic make-up, what we eat and drink, the lifestyle choices we make, hormones, radiation, stress, lack of social support, the environment in which we live and work, and some factors that are not yet known.

Alcohol consumption has been studied as a possible cause of cancer, especially in recent years, and some organisations have concluded that alcohol consumption can cause certain types of cancer. For example, the International Agency for Research on Cancer (IARC), a part of the World Health Organisation, has concluded that cancers of the oral cavity, pharynx, larynx, oesophagus, liver, colorectum, and breast are caused by alcohol consumption and that the risk increases with the amount of alcohol consumed. Alcohol may also be linked to other forms of cancer including lung, stomach, pancreatic and endometrial cancer. The United States National Toxicology Program (NTP) found that studies indicate that the risk of cancer related to alcohol consumption is most pronounced among smokers and at the highest levels of consumption.

On the other hand, some studies have suggested that moderate alcohol consumption can be linked to a lower risk of bladder, kidney, ovarian and prostate cancer, as well as non-Hodgkin lymphoma. Still, we do not encourage people to drink alcohol beverages for any health benefits they may provide.



#### take action

Everyone's health circumstances are different. You should talk to your doctor if you have any questions about the health risks and benefits of alcohol consumption.

You shouldn't drink alcohol for its health benefits – for good health, you should look to diet, exercise and other lifestyle factors.

#### talkingalcohol.com

is a site dedicated to helping people make informed choices about alcohol



#### other websites

These sites contain further information that you may find useful. However, SABMiller is not responsible for the content of these sites.

- American Cancer Society, Alcohol Use & Cancer  
[www.cancer.org/Cancer/CancerCauses/DietandPhysicalActivity/alcohol-use-and-cancer](http://www.cancer.org/Cancer/CancerCauses/DietandPhysicalActivity/alcohol-use-and-cancer)
- Cancer Research UK, Alcohol and Cancer: The Evidence  
[www.info.cancerresearchuk.org/healthyliving/alcohol/howdoweknow/](http://www.info.cancerresearchuk.org/healthyliving/alcohol/howdoweknow/)
- Cancer Council NSW, Alcohol and Cancer  
[www.cancercouncil.com.au/editorial.asp?pageid=1775](http://www.cancercouncil.com.au/editorial.asp?pageid=1775)

- International Agency for Research on Cancer (IARC)  
[www.iarc.fr/](http://www.iarc.fr/)
- IARC, Consumption of Alcoholic Beverages and Ethyl Carbamate, Monograph No. 96  
[www.apps.who.int/bookorders/anglais/detart1.jsp?sesslan=1&codlan=1&codcol=72&codcch=96](http://www.apps.who.int/bookorders/anglais/detart1.jsp?sesslan=1&codlan=1&codcol=72&codcch=96)

## Diabetes

### Diabetics should be careful with alcohol

People with diabetes must be extremely careful with alcohol. Alcohol consumption can cause blood sugar to rise or fall depending on how much you drink and other factors. For some diabetics, excessive consumption can cause blood sugar to drop dangerously low.

The American Diabetes Association suggests that light-to-moderate alcohol consumption (not more than two drinks per day for men and not more than one drink per day for women) is acceptable for some diabetics – providing their doctor agrees. The American Diabetes Association recommends that diabetics practice caution by checking their blood glucose before drinking an alcohol beverage and eating, preferably carbohydrates, prior to having a drink.

Some diabetics should not drink at all because alcohol can make their condition worse. For example, diabetics with high levels of triglycerides (a certain type of fat in the blood) shouldn't drink alcohol because it can affect the liver's ability to metabolise glucose, which in turn may increase blood triglyceride levels. Mixing alcohol with diabetics medication can prevent it from working properly and may contribute to dangerous instability in blood sugar levels.

### Drinking alcohol may prevent diabetes medication from working properly

#### Alcohol and the onset of diabetes

Some studies have reported that light-to-moderate alcohol consumption can have a mild protective effect against the development of type 2 diabetes for both men and women. On the other hand, other studies suggest that, for some people with type 2 diabetes, even moderate alcohol intake may induce low blood sugar levels.

#### Pancreatitis

Pancreatitis is a health condition that's connected with diabetes. Prolonged, heavy alcohol use can contribute to pancreatitis which, in turn, can lead to diabetes.



#### take action

If you are a diabetic, you should talk to your doctor to decide what – if any – level of alcohol consumption is safe for you.

#### talkingalcohol.com

is a site dedicated to helping people make informed choices about alcohol



#### other websites

These sites contain further information that you may find useful. However, SABMiller is not responsible for the content of these sites.

- American Diabetes Association, Alcohol [www.diabetes.org/food-and-fitness/food/what-can-i-eat/alcohol.html](http://www.diabetes.org/food-and-fitness/food/what-can-i-eat/alcohol.html)
- Baker IDI Heart & Diabetes Institute, Healthy Eating and Type 2 Diabetes [www.bakeridi.edu.au/health\\_services/health\\_fact\\_sheets/healthy\\_eating\\_type\\_2\\_diabetes/](http://www.bakeridi.edu.au/health_services/health_fact_sheets/healthy_eating_type_2_diabetes/)
- BattleDiabetes.com, How Does Drinking Alcohol Effect Diabetes and Raising Blood Sugars? [www.battlediabetes.com/drinking-alcohol-and-diabetes](http://www.battlediabetes.com/drinking-alcohol-and-diabetes)

- Canadian Diabetes Association, Alcohol + Diabetes [www.diabetes.ca/for-professionals/resources/nutrition/alcohol/](http://www.diabetes.ca/for-professionals/resources/nutrition/alcohol/)
- Diabetes Australia, Alcohol and Diabetes [www.diabetesaustralia.com.au/en/Living-with-Diabetes/Eating-Well/Alcohol/](http://www.diabetesaustralia.com.au/en/Living-with-Diabetes/Eating-Well/Alcohol/)
- Diabetes UK, Alcohol and Diabetes [www.diabetes.org.uk/Guide-to-diabetes/Healthy\\_lifestyle/Alcohol\\_and\\_diabetes/](http://www.diabetes.org.uk/Guide-to-diabetes/Healthy_lifestyle/Alcohol_and_diabetes/)

## Hangover

If you drink to the point of intoxication, you may get a hangover

While the vast majority of people drink responsibly, some do occasionally drink too much. When this happens, the body may react with physical symptoms often referred to as a hangover (also known as *veisalgia* or 'alcohol hangover').

A hangover typically begins within several hours of someone stopping drinking, peaking when their blood alcohol concentration (BAC) falls to zero and continuing for up to 24 hours.

Hangovers have been with us for centuries but the precise biological factors that cause them are not fully understood. We do, however, know what leads to them – drinking too much – and how to avoid them – responsible consumption.

### What's happening when you have a hangover?

Since alcohol is absorbed directly through the stomach, drinking excessive amounts of alcohol can irritate the stomach lining and cause nausea.

If consumed in excess, alcohol can promote the secretion of hydrochloric acid in the

stomach. Your body may react by vomiting if too much hydrochloric acid builds up in the stomach. Common symptoms of a hangover include headache, fatigue, nausea, anxiety, lack of appetite, thirst and sensitivity to light and noise.

As alcohol is a diuretic, excessive consumption can cause the body to increase the amount of urine it produces. Alcohol also inhibits the production of anti-diuretic hormone, a hormone that keeps the urine concentrated. If you drink too much alcohol, your kidneys may expel water in your urine instead of reabsorbing it into the body, you may urinate more and your body could become dehydrated. Symptoms of mild to moderate dehydration include thirst, weakness, dizziness, headache and lightheadedness – much like those of a hangover. Excess urination also removes necessary salts and potassium from the body. This can result in fatigue and nausea.

Glycogen is the body's main source of stored energy. Alcohol breaks down glycogen in the liver and expels it from the body in the urine. The resulting lower levels of glycogen can make you feel tired and weak until the body restores its supply.

When the liver breaks down alcohol, it produces a toxic substance called acetaldehyde. In turn, acetaldehyde is broken down by an enzyme called glutathione. When too much alcohol is consumed for the liver to keep up, acetaldehyde can build up in the body until the liver is able to metabolise it. This may leave you with a headache and feeling nauseous.

Excess alcohol can inhibit the production of glutamine, a naturally occurring stimulant in the body. When you stop drinking, the body may react by overproducing glutamine. The increased production of glutamine can stimulate the brain, making for a restless night and contributing to feelings of fatigue and anxiety.

Although some old wives' tales claim to have a cure for the hangover, it's drinking water and giving the body plenty of time to heal that will help you feel better. Also, be cautious about reaching for quick relief from aspirin, ibuprofen or acetaminophen. Each has side effects (e.g., stomach bleeding and possible kidney and liver damage) that can be exacerbated when alcohol is in your system.

### talkingalcohol.com

is a site dedicated to helping people make informed choices about alcohol

### other websites

These sites contain further information that you may find useful. However, SABMiller is not responsible for the content of these sites.

- Alcohol Hangover Research Group  
[www.alcoholhangover.com/](http://www.alcoholhangover.com/)
- DrinkFocus.com, Preventing Hangovers  
[www.tree.com/food-dining/hangover-prevention.aspx](http://www.tree.com/food-dining/hangover-prevention.aspx)

- NHS choices, Hangover Cures  
[www.nhs.uk/Livewell/alcohol/Pages/Hangovers.aspx](http://www.nhs.uk/Livewell/alcohol/Pages/Hangovers.aspx)
- Nightlife Tips: Avoiding a Hangover  
[www.10best.com/interests/nightlife-tips-avoiding-a-hangover/](http://www.10best.com/interests/nightlife-tips-avoiding-a-hangover/)
- Phoenix House, Hangover Clues the Day After  
[www.factsontap.org/factsontap/naked\\_truth/hangover\\_clues.htm](http://www.factsontap.org/factsontap/naked_truth/hangover_clues.htm)



# Heart and cardiovascular

## Moderate alcohol consumption can benefit the heart and cardiovascular system

For some people, particularly middle-aged and older men and post-menopausal women, moderate alcohol consumption provides some protection against heart attack, coronary vascular disease, ischaemic stroke and death from cardiovascular causes.

For some people, moderate alcohol consumption provides some protection against heart attack

Medical research has reported that moderate alcohol consumption may benefit the heart and blood vessels, in part, because it elevates high-density lipoproteins (also known as 'HDL' or 'good cholesterol') in the blood and has other positive effects on the blood and blood vessels.

Robust scientific evidence on the beneficial effects of moderate alcohol consumption on cardiovascular health has accumulated over the past 30 years and has been repeated in studies conducted in at least 25 countries. These studies report that, for some individuals, moderate drinking may be a protective factor against coronary heart disease. The evidence also suggests that the strongest association is seen where drinking is moderate and regular, whether daily or on most days of the week.

Prolonged heavy drinking, however, has been associated with haemorrhagic stroke, congestive heart failure and atrial fibrillation.



### take action

Everyone's health circumstances are different. If you want to find out more about the risks and benefits of moderate alcohol consumption and how they affect you, you should talk to your doctor or another healthcare professional.

You shouldn't drink alcohol for its health benefits – for good health, you should look to diet, exercise and other lifestyle factors.

### talkingalcohol.com

is a site dedicated to helping people make informed choices about alcohol

### other websites

These sites contain further information that you may find useful. However, SABMiller is not responsible for the content of these sites.

- Australian Government, Alcohol and Heart Disease  
[www.therightmix.gov.au/resources/documents/P01994C\\_Alcohol\\_-\\_Heart\\_Disease.pdf](http://www.therightmix.gov.au/resources/documents/P01994C_Alcohol_-_Heart_Disease.pdf)
- British Heart Foundation, Alcohol  
[www.bhf.org.uk/heart-health/prevention/healthy-eating/alcohol.aspx](http://www.bhf.org.uk/heart-health/prevention/healthy-eating/alcohol.aspx)
- Drinking & You, Alcohol and the Heart  
[www.drinkingandyou.com/site/uk/health/heart.htm](http://www.drinkingandyou.com/site/uk/health/heart.htm)

- Harvard School of Public Health, Alcohol, The Bottom Line  
[www.hsph.harvard.edu/nutritionsource/what-should-you-eat/alcohol/](http://www.hsph.harvard.edu/nutritionsource/what-should-you-eat/alcohol/)
- NIAAA (US), Alcohol Alert, Alcohol and Coronary Heart Disease  
[www.pubs.niaaa.nih.gov/publications/aa45.htm](http://www.pubs.niaaa.nih.gov/publications/aa45.htm)
- World Health Organization Global Status Report on Alcohol (2010)  
[www.who.int/substance\\_abuse/publications/global\\_alcohol\\_report/en/index.html](http://www.who.int/substance_abuse/publications/global_alcohol_report/en/index.html)



## Liver

### Excessive alcohol consumption can damage the liver

The liver breaks down alcohol so that it can be eliminated from the body.

Prolonged, heavy alcohol consumption can damage the liver and this will prevent it from functioning properly.

Liver diseases associated with alcohol include fatty liver (also known as steatosis), alcohol hepatitis and liver cirrhosis.

While some of the symptoms of these diseases are minimal, other consequences can be very serious, including severe jaundice, blood clotting problems and, possibly, death. Prolonged, heavy alcohol consumption is also one of the factors associated with hepatocellular carcinoma, a primary cancer of the liver.

Liver disease that's associated with alcohol consumption is normally seen in alcoholics or those who've had a prolonged history of alcohol abuse. The risk of developing liver disease increases as the duration of alcohol use and the amount of alcohol consumed increases.

#### What is cirrhosis?

Cirrhosis is perhaps the most well-known of the liver diseases associated with alcohol abuse.

It's a condition where scar tissue replaces normal liver tissue due to chronic injury – the word 'cirrhosis' means scarring. As the scarring progresses, it alters the liver's normal structure and interferes with the way it functions.

Cirrhosis of the liver can have very serious health consequences, including death.

### The consequences of some liver diseases can be very serious



#### take action

If you have an existing liver disease, such as hepatitis, or you're at risk of liver disease for other reasons, such as obesity or you are taking certain medications, you should talk to your doctor to see if it's safe for you to drink alcohol at all.

#### talkingalcohol.com

is a site dedicated to helping people make informed choices about alcohol

#### other websites

These sites contain further information that you may find useful. However, SABMiller is not responsible for the content of these sites.

- American Liver Foundation, Alcohol-Related Liver Disease [www.liverfoundation.org/abouttheliver/info/alcohol/](http://www.liverfoundation.org/abouttheliver/info/alcohol/)
- British Liver Trust, What About Alcohol? [www.britishlivertrust.org.uk/home/the-liver/diet--liver-disease/what-about-alcohol.aspx](http://www.britishlivertrust.org.uk/home/the-liver/diet--liver-disease/what-about-alcohol.aspx)
- National Digestive Diseases Information Clearinghouse, Cirrhosis [www.digestive.niddk.nih.gov/ddiseases/pubs/cirrhosis/](http://www.digestive.niddk.nih.gov/ddiseases/pubs/cirrhosis/)
- NIAAA (US), Alcoholic Liver Disease [www.pubs.niaaa.nih.gov/publications/aa64/aa64.htm](http://www.pubs.niaaa.nih.gov/publications/aa64/aa64.htm)
- Patient UK, Alcohol and Liver Disease [www.patient.co.uk/showdoc/23068925](http://www.patient.co.uk/showdoc/23068925)



# Medication and drug interaction

## Mixing alcohol and medications can be dangerous

Mixing alcohol and drugs can be dangerous – whether you're taking prescribed medication or an over-the-counter remedy. Older people need to be particularly careful, as they are more likely to take medications and have an overall weakened health status.

There are many medications that should never be mixed with alcohol. Others should be taken with caution.

There are many medications that should never be mixed with alcohol

### What can happen?

- The effects of the medication can become dangerously strong  
Alcohol can increase the effects of hypnotics, sleeping pills and sedatives. This can lead to increased drowsiness, coma and even death.
- The side effects of the medication can get worse  
For example, mixing alcohol with aspirin increases the risk of getting stomach ulcers
- The medication can become less effective  
For example, mixing alcohol with diabetics medication can prevent it from working properly and may contribute to dangerous instability in blood sugar levels. Alcohol can also interfere with the efficacy of antiretroviral drugs used to treat HIV/AIDS.



### take action

Always read the labels and leaflets that come with your medication. Some medications should never be mixed with alcohol; others must be taken with caution. You should check with your doctor or pharmacist to see whether it's okay to drink alcohol while you're taking the medication.

Don't take anything for granted. Remember that people react differently to medication, to alcohol and combinations of the two.

### talkingalcohol.com

is a site dedicated to helping people make informed choices about alcohol

### other websites

These sites contain further information that you may find useful. However, SABMiller is not responsible for the content of these sites.

- Alcohol Screening.org, Alcohol-Medication Interactions  
[www.alcoholscreening.org/Learn-More.aspx?topicID=8&articleID=37](http://www.alcoholscreening.org/Learn-More.aspx?topicID=8&articleID=37)
- Drugs.com, Drug Interactions Checker  
[www.drugs.com/drug\\_interactions.html](http://www.drugs.com/drug_interactions.html)

- Eldercare Team, When Seniors Combine Drugs and Alcohol  
[www.eldercareteam.com/public/739.cfm](http://www.eldercareteam.com/public/739.cfm)
- University of Rochester Health Service, Alcohol-Drug Interactions  
[www.rochester.edu/uhs/healthtopics/Alcohol/interactions.html](http://www.rochester.edu/uhs/healthtopics/Alcohol/interactions.html)
- NIAAA (US), Harmful Interactions: Mixing Alcohol With Medicines  
[www.pubs.niaaa.nih.gov/publications/Medicine/medicine.htm](http://www.pubs.niaaa.nih.gov/publications/Medicine/medicine.htm)



## Pregnancy

### Alcohol should be avoided during pregnancy – even in small quantities

Pregnant women should either not drink alcohol, or seek medical advice before they do, as there is currently no consensus on how much alcohol is safe for a pregnant woman to consume before causing risk to a foetus.

When a woman drinks alcohol during pregnancy, it is carried through her bloodstream, through the placenta and into the foetal blood.

This can affect the development of the foetus and cause Foetal Alcohol Spectrum Disorder (FASD). FASD refers to a broad range of birth defects, including Foetal Alcohol Syndrome (FAS).

There is currently no consensus on how much alcohol is safe for a pregnant woman to consume

People with FAS may have facial abnormalities, growth retardation and/or brain damage.

Other birth defects associated with drinking during pregnancy include heart and kidney defects, hearing and sight impairment, cleft lip, impaired brain development and central nervous system dysfunction.

There is strong scientific evidence that heavy drinking during pregnancy is associated with substantial risk of life-long physical and psychological harm to a child, including FAS. Heavy drinking is especially risky in the early stages of pregnancy but can present risk even during the second and third trimester.

Some studies have suggested that low levels of drinking during pregnancy may have no adverse effect on the foetus. However, medical science has not established what a safe level of alcohol consumption during pregnancy might be. Drinking alcohol at any stage during pregnancy can affect the brain development of the foetus.

Some studies have found that heavy drinking may be associated with infertility, particularly in women over the age of 30.

Heavy drinking by the father may also contribute to problems in their offspring, including cardiovascular defects, low birth weight and immune system problems.



#### take action

Talk to your doctor or health care professional before drinking during pregnancy.

#### talkingalcohol.com

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#### other websites

These sites contain further information that you may find useful. However, SABMiller is not responsible for the content of these sites.

- National Health Service (UK), Pregnancy and Alcohol  
[www.nhs.uk/change4life/Pages/pregnancy-and-alcohol.aspx](http://www.nhs.uk/change4life/Pages/pregnancy-and-alcohol.aspx)
- NIAAA (US), Drinking and Your Pregnancy  
[www.pubs.niaaa.nih.gov/publications/fas/fas.htm](http://www.pubs.niaaa.nih.gov/publications/fas/fas.htm)
- National Organization on Fetal Alcohol Syndrome (US)  
[www.nofas.org/](http://www.nofas.org/)
- Network Action Team, Girls, Women, Alcohol and Pregnancy (Canada)  
[www.fasdpvention.wordpress.com/about/](http://www.fasdpvention.wordpress.com/about/)
- SANCA Western Cape (Africa), Foetal Alcohol Syndrome  
[www.sancawc.co.za/master/article.php?id=14](http://www.sancawc.co.za/master/article.php?id=14)
- The Center For Adoption Medicine, FASD Links  
[www.adoptmed.org/topics/fetal-alcohol-spectrum-links.html](http://www.adoptmed.org/topics/fetal-alcohol-spectrum-links.html)



## Stroke

### Alcohol consumption can either increase or decrease your risk of having a stroke

Stroke is what happens when the blood supply to the brain is interrupted. This kills cells in the brain, which can result in permanent disability (both physical and mental functioning) and even death.

Stroke can be caused either by a clot obstructing the flow of blood to the brain (ischaemic stroke) or by a blood vessel rupturing and preventing blood flow to the brain (haemorrhagic). The most common type of stroke, ischaemic, accounts for almost 80% of all strokes.

The relationship between alcohol consumption and stroke is complex. Heavy consumption is associated with an increased risk for stroke, while there is a possible decreased risk associated with light-to-moderate consumption.

### The relationship between alcohol consumption and stroke is complex

#### Increased risk

Heavy or excessive alcohol consumption can raise your blood pressure. Research suggests that this can increase the risk for both types of stroke (ischaemic and haemorrhagic).

#### Reduced risk

Some research has suggested that light-to-moderate alcohol consumption may have a protective effect against ischaemic stroke by increasing the levels of high-density lipoprotein cholesterol (also known as 'HDL' or 'good cholesterol') and anti-clotting properties in the blood.



#### take action

If you have any questions about how drinking might affect your risk of stroke, contact your doctor.

However, you shouldn't drink alcohol for its health benefits – for good health, you should look to diet, exercise and other lifestyle factors.

#### talkingalcohol.com

is a site dedicated to helping people make informed choices about alcohol

#### other websites

These sites contain further information that you may find useful. However, SABMiller is not responsible for the content of these sites.

- American Stroke Association (US)  
[www.strokeassociation.org/STROKEORG/](http://www.strokeassociation.org/STROKEORG/)
- Heart and Stroke Foundation (Canada)  
[www.heartandstroke.com/site/c.ikiQLcMWJtE/b.3483933/k.CD67/Stroke.htm?src=home](http://www.heartandstroke.com/site/c.ikiQLcMWJtE/b.3483933/k.CD67/Stroke.htm?src=home)
- National Stroke Foundation (Australia), Risk Factors  
[www.strokefoundation.com.au/stroke-risk-factors-general-information](http://www.strokefoundation.com.au/stroke-risk-factors-general-information)
- The Heart and Stroke Foundation (South Africa)  
[www.heartfoundation.co.za/](http://www.heartfoundation.co.za/)
- The Internet Stroke Center (US)  
[www.strokecenter.org/patients/stroke\\_types.htm](http://www.strokecenter.org/patients/stroke_types.htm)
- The Stroke Association (UK), Alcohol and Stroke  
[www.stroke.org.uk/information/our\\_publications/factsheets/f13\\_alcohol.html](http://www.stroke.org.uk/information/our_publications/factsheets/f13_alcohol.html)



# Foetal Alcohol Syndrome

## Heavy drinking during pregnancy can cause Foetal Alcohol Syndrome (FAS)

During pregnancy, the foetus receives all the nutrients it needs to grow and develop through the placenta. If a woman drinks alcohol during pregnancy, the alcohol in her blood crosses the placenta to the foetus posing risks to foetal development. The level of possible harm is thought to be related to the amount of alcohol consumed and the frequency and timing of the consumption.

Strong scientific evidence demonstrates that heavy drinking during pregnancy can cause congenital abnormalities including Foetal Alcohol Syndrome (FAS). FAS is characterised by a cluster of anomalies that include central nervous system dysfunction, distinctive facial feature abnormalities, and growth deficiencies both during pregnancy and afterwards.

### Some characteristics of FAS include:

- Low birth weight
- Facial abnormalities
- Small head size
- Emotional, social and behavioural problems
- Mental retardation
- Slow growth and poor coordination

While there is conclusive scientific evidence that excessive alcohol consumption can harm the foetus, not all women who abuse alcohol during pregnancy give birth to children with FAS.

Less is known about the effects of light or moderate alcohol consumption on the foetus. Currently there is no conclusive evidence of increased risk of FAS for pregnant women who are light or infrequent drinkers.

There is no known safe level of alcohol consumption during pregnancy. And while heavy drinking is especially risky in the early stages of pregnancy, it also presents risk during the second and third trimesters.

Pregnant women should either not drink alcohol, or seek medical advice before they do. Indeed, governments and medical bodies around the world advise women to abstain from drinking or to drink only small amounts of alcohol during pregnancy.

### In brief

- Excessive drinking during pregnancy can cause FAS
- Heavy drinking is especially risky in early stages of pregnancy, but is risky throughout
- There is no established safe threshold for alcohol consumption during pregnancy
- No conclusive evidence links FAS with light or infrequent alcohol consumption
- Governments and medical bodies recommend women abstain from, or drink very little, alcohol during pregnancy



### take action

Talk to your doctor or health care professional before drinking during pregnancy.

### talkingalcohol.com

is a site dedicated to helping people make informed choices about alcohol

### other websites

These sites contain further information that you may find useful. However, SABMiller is not responsible for the content of these sites.

- Centers for Disease Control and Prevention (US), Fetal Alcohol Spectrum Disorders (FASDs)  
[www.cdc.gov/ncbddd/fasd/index.html](http://www.cdc.gov/ncbddd/fasd/index.html)
- FAS Aware UK  
[www.fasaware.co.uk/](http://www.fasaware.co.uk/)
- FASfacts (South Africa)  
[www.fasfacts.org.za/](http://www.fasfacts.org.za/)

- National Organization on Fetal Alcohol Syndrome (US)  
[www.nofas.org/](http://www.nofas.org/)
- Public Health Agency of Canada, Fetal Alcohol Spectrum Disorder (FASD)  
[www.phac-aspc.gc.ca/hp-ps/dca-dea/prog-ini/fasd-etcaf/index-eng.php](http://www.phac-aspc.gc.ca/hp-ps/dca-dea/prog-ini/fasd-etcaf/index-eng.php)



## Women & Alcohol

### Women's bodies react to alcohol differently than men's do

The majority of the risks and benefits of alcohol consumption relate to women and men alike. However, on average, most women respond to alcohol faster than men because their bodies react to alcohol differently. Also, excessive drinking may be more risky for women than for men; one example is an increased risk to their personal safety.

#### Body composition

A woman's body is different than a man's. The following factors may contribute to gender-related differences in how much alcohol reaches the bloodstream, known as Blood Alcohol Concentration (BAC).

- The average female body has 10% more fat cells than the average male body. Body fat contains little water and alcohol is absorbed by water in the body's tissues before it reaches the bloodstream
- Women produce less of a certain enzyme that breaks down alcohol in the stomach
- Because of their smaller size, women have less blood to dilute the alcohol once it reaches the bloodstream

It is impossible to predict exactly how any individual will respond to alcohol because every person's situation is unique (e.g., height, weight, amount and timing of food intake, genetics, medications, health status).

However, as a woman, you may be exposed to greater health risks if you drink as much as a man. That is why government guidelines generally recommend lower 'moderate drinking' levels for women than for men. Women should never try to match a man drink for drink.

#### Pregnancy

Pregnant women should either not drink alcohol or seek medical advice before doing so. There is currently no consensus on how much alcohol is safe for a pregnant woman to consume before causing risk to the foetus.

#### Breastfeeding

Women who are breastfeeding should be cautious about drinking alcohol, if they drink alcohol at all. According to the United States Dietary Guidelines (2010), if the infant's breastfeeding behaviour is well established and the child is at least three months of age, a mother may consume a single alcohol beverage if she waits at least four hours before breastfeeding. An alternative is to express breast milk before consuming the drink and feed the expressed milk to the infant later.

#### Breast cancer

There are many risk factors for breast cancer. They include family history, body

mass index, height, age at menarche, age at first pregnancy, breastfeeding, age at menopause, whether or not a woman has taken hormone replacement therapy, smoking and alcohol consumption. Some organisations such as the International Agency for Research on Cancer (IARC) have concluded that alcohol consumption is a cause of breast cancer, with the risk increasing with the amount consumed.

Although alcohol is a well-established risk factor for breast cancer, the mechanism by which alcohol consumption may cause breast cancer is not fully known. The relationship between alcohol consumption and breast cancer is undergoing vigorous research. Recent studies indicate that alcohol consumption may be more strongly linked to a certain less common form of breast cancer (lobular cancer), than it is to the most common type of breast cancer (ductal cancer).

Both alcohol and hormone replacement therapy are risk factors for a certain subtype (lobular) of breast cancer. It has been reported that women who have been on hormone replacement therapy for more than five years and consume alcohol may have an increased risk of breast cancer. If and how these two factors may interact and affect risk is not completely known.

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is a site dedicated to helping people make informed choices about alcohol



#### other websites

These sites contain further information that you may find useful. However, SABMiller is not responsible for the content of these sites.

- Narconon, Johannesburg, South Africa, Alcohol and Women  
[www.stopaddiction.co.za/P20050305162548020.htm](http://www.stopaddiction.co.za/P20050305162548020.htm)
- National Breast and Ovarian Cancer Centre (Australia)  
[www.canceraustralia.nbooc.org.au/](http://www.canceraustralia.nbooc.org.au/)
- NIAAA (US), Alcohol: A Women's Health Issue  
[www.pubs.niaaa.nih.gov/publications/brochurewomen/women.htm](http://www.pubs.niaaa.nih.gov/publications/brochurewomen/women.htm)

- Network Action Team, Girls, Women, Alcohol and Pregnancy (Canada)  
[www.fasdprevention.wordpress.com/about/](http://www.fasdprevention.wordpress.com/about/)
- New South Wales Government, NSW Health, Women  
[www.alcoholinfo.nsw.gov.au/family\\_wellbeing/women#nsw](http://www.alcoholinfo.nsw.gov.au/family_wellbeing/women#nsw)
- Susan G. Komen for the Cure  
[www.komen.org/KomenNewsArticle.aspx?id=6442452439](http://www.komen.org/KomenNewsArticle.aspx?id=6442452439)