What’s the theme?
Alcohol: Know the risks

The aim of Alcohol Awareness Week is to get people thinking about alcohol - how it affects us as individuals, families, communities and society as a whole.

Who can take part?
Anyone! The week is a fantastic opportunity for many different organisations to take part:

- Local authorities
- NHS organisations
- Emergency services
- Treatment services
- Schools, colleges, universities
- Workplaces

What’s happening?
It is up to individual organisations to decide what activity suits them best. Whether it’s social media activity, or an awareness stand – or both – people choose different ways to help spread the awareness around alcohol harm.
In January 2016, the guidance around recommended limits of alcohol was updated by the CMO. The new guidance states that the limits for both men and women are the same – which is to not drink more than 14 units a week, and spreading these units evenly over 3 or more days.

The guidance also highlighted how there is no safe level of alcohol.

The theme of Alcohol Awareness Week 2016 will look focus on alcohol and health, and knowing the risks associated with alcohol, by focusing on the relationship between particular health conditions and alcohol.

**Monday 14th November** – Alcohol and cancer  
**Tuesday 15th November** – Alcohol and depression  
**Wednesday 16th November** – Alcohol and dementia  
**Thursday 17th November** – Alcohol and breast cancer  
**Friday 18th November** – Alcohol and diabetes  
**Saturday 19th November** – Alcohol and hypertension  
**Sunday 20th November** – Alcohol and brain damage
Alcohol Statistics

Statistics
• Alcohol is a causal factor in more than 60 medical conditions, including: mouth, throat, stomach, liver and breast cancers; high blood pressure, cirrhosis of the liver; and depression

• Alcohol is one of the three biggest lifestyle risk factors for disease and death in the UK, after smoking and obesity

• Alcohol related harm costs England around £21bn per year, with £3.5bn to the NHS, £11bn tackling alcohol-related crime and £7.3bn from lost work days and productivity costs

• In the UK, in 2014 there were 8,697 alcohol-related deaths

• For every £1 invested in specialist alcohol treatment, £5 is saved on health, welfare and crime costs

Local statistics
• To give you some local statistics on alcohol harm in your areas, you can use our Alcohol Harm Map.
Social media

The hashtag

Please keep us posted with what you’re getting up to by using #AAW2016. We’ll also be focusing on alcohol and different health conditions throughout the week using the hashtag #knowtherisks.

Our channels

• @AlcoholConcern
• @DryJanuary
• Alcohol Concern Facebook
• Dry January Facebook
General tweets

• It’s @AlcoholConcern’s Alcohol Awareness Week. We’re talking about knowing the risks around alcohol. Keep posted via #AAW2016 #knowtherisks
• Alcohol is a causal factor in more than 60 medical conditions, cancers; high blood pressure, and depression #knowtherisks #AAW2016
• Did you know alcohol continues to be the leading risk factor for deaths among both men and women aged 15 – 49? #knowtherisks #AAW2016
• Alcohol related harm costs England around £21bn per year, with £3.5bn to the NHS, £11bn tackling crime & £7.3bn from lost work days #AAW2016
• Every hour a family loses a loved one to alcohol #AAW2016
• In the UK, in 2014 there were 8,697 alcohol-related deaths #AAW2016
• For every £1 invested in specialist alcohol treatment, £5 is saved on health, welfare and crime costs #AAW2016

Daily tweets

Monday 14th November – Alcohol and cancer
• Around 4% of cancers in the UK are directly attributable to alcohol - around 12,800 individual cases every year #AAW2016 #Knowtherisks
• Alcohol one of the most preventable cause of cancer after smoking. #AAW2016 #Knowtherisks
• Alcohol can cause 7 types of cancer including, breast, bowel, and mouth cancers. There is no safe level of alcohol #AAW2016 #Knowtherisks

Tuesday 15th November – Alcohol and depression
• Depression shares a equally reinforcing relationship with alcohol - having one condition make it more likely the other will develop
• Did you know reducing alcohol consumption reduces depressive symptoms? #AAW2016 #Knowtherisks
Daily tweets cont.

Wednesday 16th November – Alcohol and dementia
• Did you know prolonged heavy alcohol use can result in the development of 'alcohol related dementia'? #AAW2016 #Knowtherisks
• The brains of men who drank more than 4 units of alcohol a day over 10 yrs age at a much higher rate than non/light drinkers #AAW2016

Thursday 17th November – Alcohol and breast cancer
• In 2011 alcohol was responsible for at least 6% of the diagnoses of breast cancer #AAW2016 #Knowtherisks
• Alcohol has been linked with increased levels of oestrogen in the blood. Breast cells are particularly sensitive to oestrogen. #AAW2016 #Knowtherisks

Friday 18th November – Alcohol and diabetes
• Heavy alcohol consumption is known to contribute to an increased risk of developing some forms of diabetes #AAW2016 #Knowtherisks
• Consuming five or six alcoholic drinks a day raises the risk by between 15% - 75% #AAW2016 #Knowtherisks

Saturday 19th November - Alcohol and hypertension
• Did you know alcohol is a major contributory factor in the development of hypertension? #AAW2016 #Knowtherisks
• Hypertension can often be prevented. Drinking less alcohol reduces blood pressure #AAW2016 #Knowtherisks

Sunday 20th November – Alcohol and brain damage
• Over time, drinking too much alcohol can change the way the brain works and its physical shape and structure #AAW2016 #Knowtherisks
• Alcohol-related brain damage is an umbrella term for the damage that happens as a result of long-term heavy drinking #AAW2016
We have a number of resources for you to print off yourselves to display at your awareness stands, or to link to from your website.

For the online versions, please click [here](#).

The following resources will be available to print on the next page.

- Alcohol and breast cancer factsheet
- Alcohol and cancer factsheet
- Alcohol and dementia factsheet
- Alcohol and depression factsheet
- Alcohol and diabetes factsheet
- Alcohol and hypertension factsheet
- Alcohol and brain damage factsheet
- Unit information
Introduction

Breast cancer is by far the most prevalent and one of the most lethal cancers for women in the UK. It affects around 1 in 8 women in the UK during their lifetime, and was diagnosed in nearly 50,000 women in 2011 and caused the death of over 11,000 in 2012.

Why does drinking alcohol increase breast cancer risk?

The exact causal mechanism between alcohol and breast cancer is not fully known – but it is likely due to the way alcohol breaks down into toxic chemicals in our body and increases the production of the female hormone oestrogen.

Drinking moderate amounts of alcohol has been linked with increased levels of oestrogen in the blood.

Alcohol has been linked with increased levels of oestrogen in the blood. Drinking moderate amounts of alcohol has been linked with increased levels of oestrogen in the blood. Breast cells are particularly sensitive to oestrogen, and when exposed to higher-than-normal amounts may become cancerous.

Alcohol also breaks down into the carcinogenic compound ‘acetaldehyde’ inside the body. This substance causes genetic mutations and permanently damages DNA, which can trigger a response in the body leading to the development of cancerous cells.

Alcohol consumption increases risk of developing breast cancer

Alcohol has long been known to have carcinogenic (cancer-causing) properties, and more than 50 studies have confirmed alcohol is a particular risk factor in the development of breast cancer. 6% of female breast cancer cases in the UK in 2010 were attributable to alcohol consumption.

Consuming large amounts of alcohol or drinking on a daily basis increases the risk. Each drink per day increases the risk in women of developing breast cancer by between 7% - 12%.

Choice of Drink

The risk is not affected by the choice of drink. The crucial factor is the strength of the alcohol and the number of drinks consumed. Drinking a higher quantity or stronger alcohol directly impacts on the risk of developing breast cancer.
How can I reduce this risk?

There is no definite evidence that women who stop drinking altogether reduce their risk of developing breast cancer. However limiting alcohol intake may reduce the risk – given that drinking more alcohol does increase it.

While the NHS recommends women should not regularly drink more than 2-3 units of alcohol a day, it is important to remember there is no ‘safe’ level of alcohol consumption. Drinking just two drinks a day still increases the risk of developing breast cancer by roughly 18%.

If alcohol consumption was reduced to a very low level – less than one unit a week – an estimated 6% of breast cancer cases could be prevented. Sticking to government guidelines of alcohol consumption is a reliable way of minimising alcohol-related health risks.

References


8 N E Allen et al, “Moderate alcohol intake and cancer incidence in women”, Journal of the National Cancer Institute, (March 2009), Vol 101 No 5, pp. 296 - 305


Funded by a grant from the Pink Ribbon Foundation
Introduction

Around 4% of cancers in the UK are directly attributable to alcohol – around 12,800 individual cases every year. This makes alcohol one of the most preventable causes of cancer after smoking. Worldwide, one in five of alcohol-related deaths are caused by cancer. Just one alcoholic drink a day can increase the risk of developing cancer – and the risk increases with every drink.

However, public awareness of the cancer risks associated with drinking is low. More than nine in ten of the British public are aware excessive alcohol is bad for health, yet less than half are aware of the link between alcohol and cancer and only a third are aware of the specific relationship between alcohol and breast cancer, for example. This lack of knowledge constitutes a significant public health risk.

Alcohol consumption increases the risk of developing cancer

Over one hundred and fifty studies worldwide confirm that alcohol is a carcinogen – meaning it is a particular risk factor in the development of cancer. Seven different types of cancer are directly attributable to alcohol.

<table>
<thead>
<tr>
<th>Type of Cancer</th>
<th>Percentage of diagnosed cancer cases in the UK in 2010 attributable to alcohol</th>
<th>Number of diagnosed cancer cases in the UK in 2010 attributable to alcohol</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mouth and throat</td>
<td>30.4%</td>
<td>2,106</td>
</tr>
<tr>
<td>Voice Box</td>
<td>24.6%</td>
<td>539</td>
</tr>
<tr>
<td>Oesophagus</td>
<td>20.6%</td>
<td>1,761</td>
</tr>
<tr>
<td>Liver</td>
<td>9.1%</td>
<td>324</td>
</tr>
<tr>
<td>Colorectal</td>
<td>11.6%</td>
<td>4,649</td>
</tr>
<tr>
<td>Breast</td>
<td>6.4%</td>
<td>3,080</td>
</tr>
</tbody>
</table>


No Safe Level of Alcohol

There is no ‘safe’ level of alcohol consumption when seeking to reduce the risks of alcohol-related cancers. The more alcohol consumed the greater the risk. Light daily alcohol consumption can increase the cancer risk for parts of the body which come into direct contact with alcohol – the mouth, throat, larynx and oesophagus - and breast cancer. Heavy consumption increases the risk of all seven types of alcohol-related cancer. Consuming three units of alcohol a day increases the risk of developing liver cancer by nearly 20%; six units a day increases the risk by 40%; and 12 units per day increases risk by 80%.
Does the type of alcohol matter?
The type of alcohol consumed has no effect on the risk of developing cancer.¹ ² What is important is the amount consumed. The greater the strength and number of drinks consumed, the greater the risk of developing cancer.

How does alcohol cause cancer?
The exact causal mechanism between alcohol and cancer is not fully known and it is likely that it varies between the different types of cancer. However, one common mechanism that is likely shared is how alcohol breaks down into the carcinogenic compound ‘acetaldehyde’ inside the body. This substance causes genetic mutations and permanently damages DNA, which can lead to the development of cancerous cells.¹ ²

Conclusion
Alcohol is one of the most preventable causes of cancer. Yet, public knowledge levels about the relationship between alcohol and cancer is relatively low. The risk increases with each drink so there is no ‘safe’ level of alcohol consumption when seeking to reduce the risks of certain cancers.

References
Introduction

Dementia is a broad term used to describe a set of brain disorder symptoms that may include memory loss and difficulties with thinking, problem-solving or language. There are many different types and causes of dementia which collectively, annually, costs the UK economy £26.3 billion.

Many researchers believe regular excessive drinking increases the risk of the most common forms of dementia such as Alzheimer’s and vascular dementia, but the evidence base is still emerging.

Prolonged heavy alcohol misuse can result in the development of ‘alcohol-related dementia’ and Wernicke-Korsakoff’s syndrome, an alcohol-related brain disorder that may not strictly speaking be a dementia, but has similar symptoms.

Partial recovery from both conditions is possible with abstention from alcohol, a healthy diet and large doses of thiamine (vitamin B1) making these conditions different from other dementias which usually get progressively worse.

What is the relationship between alcohol and dementia?

The exact relationship between alcohol and dementia is debated. Alcohol, a neurotoxin, can cause damage to nerve cells and blood vessels, leading to brain shrinkage. People who heavily misuse alcohol also often suffer injuries to the head – from falls or fights – and have a poor diet, all of which can contribute to alcohol related dementia.

Drinking alcohol earlier in life may substantially increase the risks of developing early-onset dementia (before the age of 65). Frequent drinking in young adults is the biggest risk factor for men who develop early-onset dementia outweighing a family history of dementia, use of other types of drug or suffering from any other health condition.

What is clear is that long term alcohol use can damage the brain and lead to cognitive impairment.

The brains of men who drank more than four units of alcohol a day over ten years – approximately two or three drinks a day – aged at a much higher rate than non-and light-alcohol drinkers. Brain capacity naturally declines with age but the brains of men who regularly drink alcohol appear between 1.5 to 5.7 years older than their healthier counterparts.

Many alcoholics who give up drinking continue to exhibit poorer memory, lower attention span and problem solving skills for up to a year after they quit. Although normal cognitive function appears to return after a year.
Alcohol and Dementia

Alcohol-related brain damage

Long term heavy alcohol consumption is linked with the development of ‘alcohol-related dementia’; a broad set of dementia-like symptoms which can include problems with memory, attention, learning new tasks and reasoning.

Long term heavy alcohol use can also result in the development of Wernicke-Korsakoff’s syndrome. Korsakoff syndrome is a chronic memory disorder caused by severe deficiency of thiamine (vitamin B-1) which is often, but not always preceded by an episode of Wernicke encephalopathy. Wernicke’s is an acute brain reaction to severe lack of thiamine. Prolonged excessive drinking often contributes to poor eating habits – often alcohol replaces food - and it disrupts the stomach’s ability to absorb crucial vitamins and nutrients including thiamine.1

Wernicke’s usually has four main symptoms – being very underweight, having involuntary eye movements or paralysis of the eyes, poor balance or disorientation and mild memory loss. If Wernicke's is diagnosed and treated, it is usually reversible. If not, and drinking is continued 85% will go on to develop Korsakoff’s syndrome.10 Korsakoff’s syndrome is characterised by severe short term memory loss, personality changes and the development of memory confabulation.11

To Conclude

Alcohol misuse can damage the brain causing cognitive impairment and may contribute to common forms of dementia such as Alzheimer’s, although the evidence is still emerging. Prolonged alcohol misuse can cause alcohol-related dementia and Wernicke-Korsakoff syndrome, dementia-like conditions which are increasingly termed as ‘alcohol-related brain damage’.

References

4 Ibid
8 C Whiteley et al, “Autobiographical memory in detoxified dependent drinkers”, Alcohol and Alcoholism, (March 2009), Vol 44 No 4, pp. 429 - 430
9 K Stavro et al, “Widespread and sustained cognitive deficits in alcoholism: a meta-analysis”, Addiction Biology,

Lundbeck has provided funding support for the development and printing of this factsheet. Lundbeck has had no editorial control over the content which has been reviewed for factual accuracy only.

www.alcoholconcern.org.uk
Registered Charity No.291705

Alcohol Concern
Promoting health; improving lives
Introduction

Depression is one of the most common mental health problems in the UK—experienced by as many as one in ten people in any year; and it shares a complex, mutually reinforcing relationship with excessive alcohol consumption.

This means regardless of whether heavy alcohol consumption or depression came first, having one condition makes it significantly more likely the other will develop. In both cases however, the risk increases with greater consumption of alcohol: excessive drinking increases the chance of developing depression, and drinking while depressed both exacerbates depressive symptoms and makes recovery more difficult.

Biological Effects

The full effects of alcohol on the brain are not yet fully understood. A number of clinical research studies have found that regularly drinking alcohol disrupts the brain’s chemistry, altering the way it operates. Lowering the level of serotonin in the brain—the chemical responsible for regulating people’s mood—and disrupting other chemicals, may lead to the development of depressive-like symptoms.

Alcohol and Depression, Depression and Alcohol – What’s the link?

There is no definitive causal link between alcohol and depression. Depression is found in heavy drinkers at a significantly higher rate than in the general population, and suffering from depression increases the likelihood of excessive alcohol consumption and dependence in the future. Alcohol dependence is roughly three times more likely amongst those experiencing depression, compared with non-depressive populations. A complex & mutually reinforcing relationship exists between the two. Alcohol’s effect on the human body (especially excessive alcohol consumption over a long period of time) has been shown to cause depressive symptoms.

‘Self-medicating’

Many people suffering from depression and experiencing acute feelings of sadness and anxiety may drink alcohol in an attempt to relieve those symptoms, this is known as ‘self-medicating’.

What is Depression?

Sufferers of depression experience persistent feelings of sadness for prolonged periods of time. This can include experiencing no happiness or pleasure from any activity, finding it hard to sleep or get up, loss of appetite, fatigue, poor concentration, feelings of worthlessness, hopelessness and even suicidal thoughts.

As well as having a devastating impact on individuals, depression also substantially impacts on public finances. It is estimated in England alone the cost of depression was nearly £11bn in 2010 - both in direct medical care and lost revenue from time taken off work.

£11bn

Alcohol and Depression

Promoting health; improving lives
Alcohol and Depression

Temporarily, the effect alcohol has on the body may relieve some of them – by depressing the central nervous system, alcohol helps ‘numb’ emotions to avoid dealing with difficult issues. However, ‘self-medicating’ has been shown to be one of the least effective methods of dealing with depression. Suffering from depression is often experienced before the development of problematic drinking, particularly in women, which suggests that people attempting to self-medicate accounts for a substantial amount of the number of concurrent alcohol problems in depressed people. Ultimately, self-medicating with alcohol not only fails to reduce depressive symptoms, but can exacerbate them and contribute to the development of problematic drinking it its own right.

Alcohol Exacerbates Symptoms and Increases Risk
Consuming greater amounts of alcohol may contribute to harsher, more acute depressive symptoms. Sufferers of depression who have a harmful relationship with alcohol have a higher risk of committing suicide, having marital problems and being divorced, spending more time in hospital and overall a lower chance of recovering from depression in the future.

Dual Diagnosis
In clinical contexts experiencing a mental health and substance misuse problem at the same time is known as ‘dual diagnosis.’ Between a third and a half of people who have a mental health problem also use drugs or drink to excess. The complex nature of dual diagnosis conditions has often led to inadequate treatment. Professionals may incorrectly diagnose one condition as being entirely symptomatic of the other – opting only to treat one element, and ignoring the complexity of the relationship. It is important treatment is coordinated and tackles both diagnoses.

Those experiencing depression while seeking treatment for alcohol dependence are both more likely to relapse and to relapse earlier. Studies have shown that alcohol treatment often only has an impact on alcohol related-depressive symptoms. Whilst, treatment for alcohol dependence in those who develop an alcohol problem after the onset of depression is much less effective.

Suffering from depression can make reducing alcohol consumption more difficult, and vice versa – it is harder to treat depression while drinking large amounts of alcohol. It is important that the NHS and treatment services are equipped to deal with people who have a dual diagnosis, and ensure dual diagnosis patients receive comprehensive care.

Reducing alcohol reduces depressive symptoms
Fortunately, reducing ones drinking can result in fewer, and less intense, depressive symptoms. In people who suffer from a dual diagnosis, cutting out alcohol for five weeks resulted in a substantial reduction in depressive symptoms.

Final Word
There is a complex, powerful and mutually reinforcing relationship between alcohol and depression. Consuming heavy amounts of alcohol increases the chance of developing depression, results in harsher depressive symptoms and can make it harder to recover. Many sufferers of depression use alcohol to ‘self-medicate’ and the treatment system does not always satisfactorily support those who experience a dual diagnosis. Reducing alcohol consumption can help to reduce depressive symptoms and cutting out alcohol altogether may be an important lifestyle change necessary for those suffering from depression.

Reducing alcohol consumption can help to reduce depressive symptoms and cutting out alcohol altogether may be an important lifestyle change necessary for those suffering from depression.
Alcohol and Depression

References

18. Ibid.

Lundbeck has provided funding support for the development and printing of this factsheet. Lundbeck has had no editorial control over the content which has been reviewed for factual accuracy only.

www.alcoholconcern.org.uk
Registered Charity No.291705

Alcohol Concern
Promoting health; improving lives
In 2010 as many as three million people were estimated to have diabetes in England.¹ The condition can lead to a number of serious health conditions. It has been estimated that Type 2 diabetes, the most common form of the condition, costs the UK economy nearly £9 billion every year – a figure which is set to sharply increase in the future.²

Heavy alcohol consumption is known to contribute to an increased risk of developing some forms of diabetes.³⁴ There is also some evidence that light alcohol consumption may lower that risk, although the precise causal relationship is unclear.³⁴ In people who already have diabetes and who are using insulin or tablets to manage it, alcohol can be potentially dangerous in that it can lead to dangerously low blood sugar levels, known as hypoglycaemia.⁷

What is diabetes?
Diabetes is a condition that causes people’s blood sugar level to become too high, either because their body can’t produce enough insulin or because it has become resistant to insulin.¹ Insulin is a natural chemical produced in the body which lowers sugar levels in the blood. If insufficient insulin is available, or it is unable to work properly, sugar will accumulate in the bloodstream, leading to a range of health problems.

The two most common forms of diabetes are:

- **Type 1 diabetes**, which affects around 10% of the total number of people with diabetes, generally occurs during childhood, and is caused by the body attacking its own insulin-producing cells.⁷

- **Type 2 diabetes** which affects around 90% of the total number of people with diabetes generally occurs later in life and is often linked to weight gain, although age, a family history of the condition, and ethnic background are also major factors. It occurs when the pancreas cannot produce enough insulin or the body becomes resistant to its effects.³³

The symptoms of both of these forms of diabetes include frequent urination, feelings of thirst and tiredness, unexplained weight loss and blurred vision. In the long term, diabetes can lead to a number of serious health problems including an increased risk of heart disease and stroke, nerve damage, kidney disease, poor vision and sexual dysfunction. People with diabetes are also prone to slow wound healing.⁷

Alcohol and diabetes
Heavy alcohol consumption significantly increases the risk of developing Type 2 diabetes, whereas lower alcohol consumption appears to be linked with a small reduction although the causal relationship is unclear. Consuming five or six alcoholic drinks a day raises the risk by between 15% and 75%,³⁴ – and the risk may be particularly acute in women who can double their chances of developing diabetes by consuming that much alcohol daily.

Drinking pattern
Drinking patterns have been shown to have an influence on the risk of diabetes; consumption of large amounts of alcohol in a short period (‘binge drinking’) increases the risk.¹² Consuming 26 units of alcohol – roughly thirteen standard drinks – over three days has been found to increase the risk of developing diabetes five-fold.¹²

How does alcohol increase the risk of diabetes?
How alcohol impacts on the development of diabetes is not fully understood. Long-term heavy drinking is linked with chronic pancreatitis – where the pancreas becomes permanently damaged from inflammation and is no longer able to produce insulin.¹² Chronic pancreatitis is a major risk factor for diabetes, which develops in about a third of people with the condition.¹²
Heavy alcohol consumption can also lead to weight gain over time due to the calorific content of alcoholic drinks and the role of alcohol as a stimulant to appetite. Weight gain, particularly in the middle body area, brings an increased risk of developing Type 2 diabetes, since excess body fat increases insulin resistance.12

The terms “blood sugar” and “blood glucose” are often used interchangeably – glucose being the specific type of sugar found in the bloodstream. We generally consume sugar as the more complex carbohydrate. People with diabetes who use insulin or tablets to treat their condition and who drink alcohol may be at risk of hypoglycaemia – dangerously low levels of glucose in the blood.2 Alcohol can inhibit the liver’s ability to produce glucose, which means that during drinking the body has less ability to counteract the blood sugar-lowering effect of insulin.

Alcohol-related hypoglycaemia is particularly dangerous because the symptoms can easily be confused for drunken behaviour, and so people nearby may not recognise the need to intervene and assist. The symptoms include blurred vision, dizziness, sweating and irrational behaviour, and are usually a sign that urgent medical help is needed.13

The risk of hypoglycaemia can be reduced by never drinking on an empty stomach, and by consuming carbohydrates throughout the evening and before going to sleep. Carbohydrates both raise blood sugar and stop alcohol being absorbed as quickly into the blood stream.14

Generally, people with diabetes who take tablets or insulin for the condition can minimise their risk of hypoglycaemia by regularly checking their blood glucose levels and sticking within the recommended government alcohol guidelines.

Final word

Consuming large amounts of alcohol – particularly through binge drinking – may increase the risk of developing Type 2 diabetes. While people who have developed diabetes do not necessarily need to give up alcohol, those treating it with tablets or insulin should monitor their blood glucose levels whenever they are consuming alcohol.

References

3 AM Hodge et al, “Alcohol intake, consumption pattern and beverage type, and the risk of type 2 diabetes” Diabetic Medicine, (June 2006), Vol 23 No 6, pp. 690 - 697
Alcohol and Hypertension

Factsheet

Introduction

Hypertension, a form of sustained high blood pressure, is a condition experienced by more than one in four adults in England, and alcohol is a major contributory factor in its development. A wealth of clinical research and studies from all over the world have confirmed regularly drinking alcohol raises blood pressure and significantly increases the chance of people developing hypertension in the future.

Hypertension rarely has any obvious symptoms, meaning it is particularly dangerous and often left untreated. Currently over five million people in England are unaware they suffer from it. Without treatment, hypertension significantly increases the risk of stroke, heart disease, vascular dementia (dementia caused by not enough blood being able to get to the brain) and chronic kidney disease, and despite being largely preventable, high blood pressure costs the NHS over £2 billion each year. Alcohol-attributable hypertension accounted for over 300,000 hospital admissions in 2010/11, making it the most prevalent alcohol-related health condition, and is particularly common in those over thirty five years old.

Regularly drinking alcohol increases the risk of developing hypertension. People are more likely to develop hypertension after having just one drink a day, and drinking two or three increases the risk substantially. More than three alcoholic drinks a day can increase the chance of developing hypertension in later life by up to 75%.

In 2013, one in ten people drank five days a week. This puts them at serious risk of developing hypertension and damaging their health. Importantly however, the evidence also clearly shows reducing alcohol consumption lowers blood pressure and reduces the chance of developing hypertension. This means alcohol is one of the most important, and preventable, risk factors related to hypertension, and reducing alcohol consumption is a reliable way of improving health.

What is Hypertension?

Hypertension is the medical term for having persistently high blood pressure, when your heart has to work harder to push blood around your body. It is normally written as two numbers, e.g. 120/80mmHg. The first number is systolic pressure, and measures the force of the blood against your arteries as it is pumped around your body. The second number is diastolic pressure, which measures the force against artery walls between heartbeats. While blood pressure often changes throughout the day, hypertension is classed as blood pressure which is consistently higher than 140/90mmHg.
Alcohol and Hypertension

Link between Alcohol and Hypertension: a simple, dangerous relationship
The risk between alcohol consumption and hypertension is clear. There is a well documented relationship which shows people have a higher risk of developing hypertension the more alcohol they consume. Having just one drink a day can increase the risk, and the overall risk climbs higher for every drink after that.  The relationship remains significant even when age, weight, gender, ethnicity, diet, exercise and smoking habits are taken into account – meaning it is one of the most controllable and preventable risk factors for hypertension.  

Drinking heavy amounts of alcohol raises blood pressure and significantly increases the chance of developing hypertension.  Men have an increased risk after consuming just one drink a day, and women from one and a half drinks.  The health risks quickly and substantially escalate with higher amounts of alcohol: three drinks a day can increase the chance of developing hypertension by as much as 75%.  

Contested Health Benefits for Women
Some research has previously suggested drinking very small amounts of alcohol – usually less than half of one drink a day – may have a beneficial effect on women’s blood pressure.  However these findings are highly contested, and the methodology of a number of studies which appear to find small health benefits has been called into question for assuming non-drinkers are healthier than they actually are. 

Doctors and health professionals have reiterated that if any health benefits do exist, they are only small and people should never go over the recommended alcohol limit on the mistaken assumption alcohol is good for the heart.  Men should not exceed 3 - 4 units a day and women should not have more than 2 – 3 units.

Drinking Patterns: It’s the amount that counts
The total volume of alcohol consumed is the most important indicator for hypertensive risk.  Although binge drinkers are often found to have slightly higher blood pressure and a higher risk of hypertension than regular drinkers, the effect is only small when compared to the total amount of alcohol consumption.  Regardless of whether people drink every day or weekly, the more alcohol they drink the higher the risk of developing hypertension.

Red wine is good for you: a myth debunked
There is also a common misconception that the type of alcohol consumed affects blood pressure in different ways.  In particular, many people believe red wine can offer potential health benefits because of the ‘French Paradox,’ an idea which attributes the relatively low levels of hypertension and heart disease in France – despite a diet high in saturated fat – to their drinking large amounts of red wine.

The ‘French Paradox’ however has been proved to be a myth.  Studies have found no noticeable difference in the effects of beer, wine or spirits on both blood pressure and the risk of hypertension.  How different drinks are consumed is likely to have a greater impact on hypertensive risk than the type of alcohol.  For instance, spirit drinkers are likely to have a higher chance of developing hypertension than other alcohol drinkers – but this is because spirit drinkers also tend to drink more alcohol.  There is no safe type of alcohol to consume.

The most likely explanation for the ‘French Paradox’ is that consuming alcohol at meal times increases blood pressure less than drinking on its own.  Those who drink outside of meal times have a significantly higher chance of developing hypertension than both non-drinkers and people who regularly drink the same amount, but with a meal or snack.

The research however is unclear in explaining why this is the case – although it is likely due to food’s effect on the
Alcohol and Hypertension

absorption and metabolism of alcohol, leading to a slower increase in blood alcohol levels and a lower peak. 22

Reducing high blood pressure
The good news is that reducing alcohol consumption is also a reliable way of improving blood pressure. Alcohol is one of the most modifiable risk factors of hypertension, which means reducing alcohol consumption is a way of reliably tackling high blood pressure.

If heavy drinkers reduce their alcohol consumption by two thirds, their average systolic blood pressure drops by -3.31mmHG, and diastolic by -2.04mmHG.7 However depending on the amount people regularly drink, the amount they reduce their consumption by and their current blood pressure, the reduction can be even higher. The effect was found in people with both high and normal blood pressure, and in those being treated for hypertension. This means reducing alcohol consumption is a reliable way to reduce the risks of hypertension.

Likewise, in a controlled study where one group of people switched from normal beer to low-alcohol beer for six weeks — a drink which contains 80% less alcohol than regular beer — their systolic blood pressure fell by between 3.8mmHG and 4.4mmHG, and diastolic blood pressure by between 1.4mmHG and 2.5mmHG. There was no change in the level of physical activity, smoking or diet, and many of those who responded reported significant weight loss. The biggest reduction took place almost immediately, and their blood pressure rose again when they resumed normal drinking habits. ‘This underlines the strength of the link between alcohol and blood pressure.’7 On average, there was a drop of 1.1mmHG in blood pressure per every 100 m/l of reduced alcohol consumption.

Reducing alcohol consumption and blood pressure improves overall health in a number of ways. High blood pressure increases the risk of developing cardiovascular disease, having a stroke or having a heart attack. Drinking less alcohol can therefore substantially reduce the risk of all these health issues.

Final Word

Regularly drinking alcohol drastically increases the chance of developing hypertension. The risk can increase after having just one drink a day, and gets progressively higher the more alcohol consumed. This relationship remains regardless of age, gender, weight, ethnicity, diet, whether people exercise regularly or whether they smoke. Hypertension substantially increases the chance of stroke, heart disease, vascular dementia and chronic kidney disease, which means regularly drinking alcohol can pose significant health risks.

Hypertension can often be prevented.1 Drinking less alcohol reduces blood pressure, and consequently the risk of developing hypertension.

This reduces the chance of developing potentially fatal diseases, and can be achieved regardless of age or any other factor. It is never too late to cut back and receive the health benefits of less alcohol.
Alcohol and Hypertension

References


www.alcoholconcern.org.uk
Registered Charity No.291705

Alcohol Concern
Promoting health; improving lives
What is ARBD?

Alcohol-related brain damage (ARBD), or alcohol-related brain injury (ARBI), is an umbrella term for the damage that can happen to the brain as a result of long-term heavy drinking. Over time, drinking too much alcohol can change the way the brain works and its physical shape and structure. This can bring some very serious consequences, including changes in personality, as well problems with thinking, mood, memory and learning.

The different forms of ARBD

The human brain is a complex organ, and alcohol can affect it in many ways. Because of this there are a number of different types of ARBD and they show themselves in different ways:

- **Alcohol-Related Dementia**: The symptoms of this are similar to Alzheimer’s Disease.
- **Alcohol Amnesic Syndrome**: This involves short-term memory loss, difficulty concentrating, and confabulation (filling gaps in memories with irrelevant or inaccurate information).
- **Wernicke-Korsakoff’s Syndrome (WKS)**: One of the most serious types of ARBD, this is made up of a brain swelling known as Wernicke’s Encephalopathy, and a severe confusion known as Korsakoff’s Psychosis.
- **Damage to the frontal lobe** – the brain’s control centre – leading to problems controlling impulses, making decisions, setting goals, planning, problem-solving, assessing risk and prioritising activities. The frontal lobe also controls our personality and moral conscience.

For more detailed information, download our factsheet ARBD: Signs and Symptoms
Alcohol-Related Brain Damage (ARBD) – What Is It?

How much is too much?
The latest medical guidance is that men and women should not drink more than 14 units of alcohol per week, in order to keep their risk of alcohol-related harm low. That means drinking no more than 1½ bottles of wine or 5½ pints of ordinary strength beer in any week.

‘Heavy drinking’ is defined as regularly drinking more than 28 units a week. That’s just under 3 bottles of wine or 11 pints of ordinary strength beer in a week. This level of drinking is considered ‘high risk’ for alcohol-related harm but does not mean that someone is physically dependent on alcohol (what some people call being an ‘alcoholic’).

What causes ARBD?
ARBD occurs for a number of different reasons:

- **Alcohol itself is toxic in large doses**: Long-term heavy drinking damages brain cells.
- **Alcohol is diuretic** (it makes you pass too much urine): It causes the body to lose too much water, which can cause brain cells to shrink and die.
- **Alcohol makes it hard to absorb some vitamins**: Particularly important is vitamin B1 (thiamine), which is a building block of the brain.
- **Heavy drinkers often don’t eat very well**: They may lose their appetite, and so may not be taking in enough nutrients, including vitamin B1 and other nutrients the brain needs. Alcohol can also cause inflammation of the guts (gastritis) and vomiting, both of which mean that heavy drinkers may not be able to absorb the nutrients from their food.
- **Heavy drinking causes changes to the metabolism** (the chemical reactions inside our bodies), **heart function and blood supply**: This can lead to high blood pressure and high cholesterol levels, increasing the risk of heart attacks and stroke, all of which can also damage the brain.
- **Drunkenness can lead to falls and fights**: Some heavy drinkers suffer injury to the brain in these ways. The effects of alcohol itself can be worsened in those who have frequent falls or other head injuries. The medical term for this is traumatic brain injury, and around 25% of people with ARBD have this kind of injury.
- **Alcohol withdrawal can also damage the brain**: If someone is dependent on alcohol and they suddenly stop drinking without medical supervision, this can cause damage to the brain as the body’s chemistry tries to re-adjust to not having alcohol.
Alcohol-Related Brain Damage (ARBD) – What Is It?

What level of drinking can cause ARBD?

Everyone is different and alcohol affects people in different ways, so there’s no specific amount or length of time of drinking that will determine whether a person does or doesn’t have ARBD. On the other hand, the more someone drinks and the longer the period of time they drink for, the more likely they are to have some form of ARBD.

Research shows that in some cases, men who regularly drink more than 35 units of alcohol a week and women who drink more than 28 units of alcohol a week for a period of five years or more are likely to experience some changes in brain function. In terms of drinks, that equates to around 3½ bottles of wine or 14 pints of lager in a week for a man, and just less than 3 bottles of wine or about 11 pints of lager for a woman. The recommended maximum alcohol use for adults (men or women) in the UK is 14 units per week, ideally spread over three or more days and with at least two alcohol-free days each week.

**UNITS OF ALCOHOL IN SOME COMMON DRINKS**

- **2.3 UNITS**
  - Standard glass of wine (175ml 13%)
- **2.3 UNITS**
  - Pint of lager (4%)
- **3.3 UNITS**
  - Large glass of wine (250ml 13%)
- **3.0 UNITS**
  - Pint of strong lager/beer (5.2%)
- **1.0 UNIT**
  - Glass of fortified wine (e.g. sherry) (50ml 20%)
- **10 UNITS**
  - Bottle of wine (13.5%)
- **1.9 UNITS**
  - Can of lager (400ml 3.8%)
- **1.4 UNITS**
  - Alcopop (275ml 5%)
- **1.0 UNIT**
  - Single spirit (25ml 40%)
Alcohol-Related Brain Damage (ARBD) – What Is It?

Who gets ARBD?

Most people with ARBD are in their 50s and 60s, but more and more people in their 30s and 40s are being seen with symptoms. Typically, women develop ARBD at a younger age than men, and women are more vulnerable to ARBD after drinking heavily for a shorter length of time than are men. This is true not only for brain damage, but also for damage to the heart, liver and nerves. People who start drinking at a young age and continue to drink heavily as adults are also at risk.

Here are some of the key factors that put someone at risk of ARBD:

- Heavy alcohol consumption (generally more than 28 units a week) over a period of years is the most obvious risk factor for ARBD, and particularly alcohol dependence – where the body has become so used to alcohol, the drinker feels unwell without it.
- Poor nutrition/low vitamin intake.
- Head injuries.
- Alcohol-related damage to other organs.
- Alcohol withdrawal without medical supervision.

How common is ARBD?

There are various statistics on how common ARBD is in the UK, although it is hard to get a totally clear picture:

- Around 10 million people in the UK regularly drink at above low-risk levels – that is, they drink more than 2 to 3 units a day or 14 units a week.
- Around 0.5% of the UK population have some changes in their brain as a result of their alcohol use.
- Around 35% of the very heaviest drinkers are thought to have some form of ARBD.
- Current research suggests that ARBD accounts for 10-24% of all cases of dementia.
- One of the most extreme forms of ARBD, Wernicke-Korsakoff’s Syndrome, is seen in around 12% of dependent drinkers.
Is there a cure for ARBD?

ARBD is often mistaken for conditions like Alzheimer’s Disease, but one of the key differences is that, with the right treatment, symptoms of ARBD can improve greatly. Unlike Alzheimer’s, ARBD is not progressive – it doesn’t inevitably get worse over time. Recovery is possible and the outcomes for people who stop drinking can be very good, with much of the damage to the brain being reversed. To find out more, download our factsheet ARBD – Diagnosis and Treatment

There are also support services for carers, family members and friends of people with ARBD. To find out more about what’s available in your area, visit our online directory.

Recovery is possible and the outcomes for people who stop drinking can be very good, with much of the damage to the brain being reversed.

Download the other factsheets in this series:
- ARBD – Signs and Symptoms
- ARBD – Diagnosis and Treatment

For advice on living with someone with ARBD, see our Handbook for Carers.

If you’re a professional working with people with ARBD, download our Quick Guide for Clinicians.

For more detailed information on all aspects of ARBD, go to Alcohol Concern’s report All in the mind – Meeting the challenge of alcohol-related brain damage.

Please note: Our publications do not look at the damage to the brain caused in the womb by heavy drinking during pregnancy, known as Foetal Alcohol Spectrum Disorder or Foetal Alcohol Syndrome. More information on these conditions can be found on the website of the National Organisation for Foetal Alcohol Syndrome: www.nofas-uk.org.
WHICH OF THESE WOULD BE YOUR USUAL DRINK?

**Small glass of wine**  (125ml, ABV 12%)
1.5 UNITS
No. of drinks per day: ________

**Standard glass of wine**  (175ml, ABV 12%)
2.1 UNITS
No. of drinks per day: ________

**Large glass of wine**  (250ml, ABV 12%)
3 UNITS
No. of drinks per day: ________

**Pint of lower-strength beer/cider**  (ABV 3.6%)
2 UNITS
No. of drinks per day: ________

**Pint of higher-strength beer/cider**  (ABV 5.2%)
3 UNITS
No. of drinks per day: ________

**Bottle of beer/cider**  (ABV 5%)
1.7 UNITS
No. of drinks per day: ________

**Can of beer/cider**  (440ml, ABV 4.5%)
2 UNITS
No. of drinks per day: ________

**Alcopop**  (275ml, ABV 5.5%)
1.5 UNITS
No. of drinks per day: ________

**Single small shot of spirits**  (25ml, ABV 40%)
1 UNIT
No. of drinks per day: ________

Adapted from NHS website
ABV=alcohol by volume

Alcohol Concern
Promoting health; improving lives
Alcohol Concern is a registered charity No. 291705 www.alcoholconcern.org.uk
Drinking alcohol can increase your risk of several types of cancer, including liver, bowel, breast, mouth, oesophageal cancer (food pipe) and laryngeal cancer (voice box).

**MEN** who regularly drink more than 3 pints of cider a day have a 1.7 times greater risk of developing coronary heart disease.

**WOMEN** have a 1.3 times greater risk of developing coronary heart disease when they regularly drink more than 2 large glasses of wine a day.

Studies have shown that alcohol may reduce sperm count which can affect male fertility.

Studies have shown that even drinking small amounts can reduce a woman’s chance of conceiving.

The risk of breast cancer increases by about 12% for each 10 grams of alcohol you typically drink a day, that’s about a single shot of spirit.

**References:**
Since our first ever Dry January in 2013, we have been changing the conversation around alcohol.

It’s estimated that in January 2016, 1 in 6 Britons attempted a Dry January – that’s 12 million people.

Alcohol Awareness Week is a great opportunity to start the conversation and encourage people to sign up to Alcohol Concern’s campaign.

We offer support throughout the month through emails, social media, with the opportunity to talk to experts throughout the month.

Printable resources for the campaign can be found on the next page.
Give your employees a break from booze

Employer guide to giving Dry January a go

Supported by

Alcohol Concern
Promoting health; improving lives
We’re encouraging people across the UK to sign up for Dry January and start 2017 in a state of booze-free bliss. Because after the heady excess of the holiday season, January is the best time to give your body a little break. And it’s super simple to do – just swap your alcoholic drinks for something softer in January to experience some amazing health (and wealth) benefits.

**Why encourage your workforce to take part?**

Well every day, around 200,000 people go to work with a hangover. And that’s got to have a pretty big impact on your workplace. Not only that, lost productivity and absenteeism due to alcohol costs the economy 17 million working days and £7bn a year*. So, if your employees sign up for just a month off the sauce, you’re going to notice a positive difference.

*Source: Alcohol Concern

“I feel fresh – wide awake, and way more productive.”

“Even my bank balance is feeling healthier after Dry January”

“I lost weight, felt great and will be drinking far less in the future thanks to Dry January.”
Spread the word

Firstly, we’ve got to make sure everybody knows about it. So...

Display one of the **A4 pledge posters** in a public place to encourage your employees to sign it and show their commitment to Dry January 2017.

Pop these eye-catching **A3 posters** in pride of place to encourage every member of staff to sign up for Dry January.
Dry January in five easy steps

You can help your colleagues stay alcohol free for all 31 days. In this pack, there’s everything you need to make your work environment an encouraging place for people to take part. And it’s as easy as 1,2,3.

1. **Sign up at** dryjanuary.org.uk

2. **Pledge**
   
   The pledge poster. This is best placed where everyone can see it, like the public kitchen or staff room. Everyone who is up for taking part, pledges by autographing the poster.
   
   Make sure you ask your staff to register online too. Simply visit dryjanuary.org.uk and fill in the form to get lots of helpful hints on how to keep motivated (via email or text).
   
   Also, the Dry January website is packed with information about how cutting out alcohol improves their health and wealth.

3. **Personal reminder**
   
   These Dry January wristbands* are for your employees to wear throughout the month to remind them that they’re giving their body a break. Hand them out once they’ve registered and signed the Dry January pledge poster.

* included in packs while stocks last
4. Motivation

Help your Dry January team make it through by placing this countdown poster where everyone can see it. It’s full of tips on how to stay strong, and points out all the benefits of going without booze for a month. Plus, all the successful alcohol-free days can be enthusiastically crossed off.

5. Dry January Champion

Pick a Dry January Champion to help encourage everyone in the team.

Stay social

Facebook, Twitter and Instagram are where people share how they’re getting on during Dry January. From uploading photos of their hangover free Saturday mornings to talking about how they’re finding going booze free.

- See what’s got people talking on the #DryJanuary Twitter feed
- Find plenty of Dry January suggestions on Facebook including mega mocktail recipes

Sign up to take January off (booze)

Register online at dryjanuary.org.uk and get regular texts and emails full of handy hints on how to stay booze free for the whole month.
Lead by example. If the big boss is off the booze too it’s going to be a lot easier for everyone.

Set up a buddy system – encourage Dry January people to pair up and support each other.

Throw a Dry January launch party for everyone involved. It will help remind everyone that they’re all in it together.

Some more ways to keep the momentum going

Instead of Friday drinks, why not head for a team night out at the cinema, a concert or maybe a quick game of ten-pin bowling?

Substitute alcohol at work events throughout the month. This shows your staff that you’re willing to help them complete the challenge.

Link to the Dry January website on your intranet or internal channels so your staff can find loads of hints about how to keep on track with the challenge. Dryjanuary.org.uk

Encourage conversation by sharing their Dry January experiences on our social media channels using the hashtag #dryjanuary.

Download the Dry January app available on iOS and Android to help track progress, and for handy tips and tricks.
Join us and have a break from booze

Sign here to show you're taking part

Start the year by giving your body a break
save money • lose weight • feel energised

SIGN UP AT DRYJANUARY.ORG.UK
Give your body a well-earned break by starting 2017 in a state of booze-free bliss. Like any great holiday, you’ll feel better the longer it lasts so keep going to the end of the month to really feel the benefits.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>That’s New Year done... Booze packed away? Friends and family notified? Got!</td>
<td>You are not alone. Find loads of support on Facebook and Twitter to help you along.</td>
<td>Back in the office today! Get your colleagues signed up at dryjanuary.org.uk</td>
<td>Don’t forget to download the Dry January app!</td>
</tr>
</tbody>
</table>

5. Make it a mocktail tonight and wake up to a wonderful weekend.
6. Rise and shine.
7. You’ve had one week away from booze. Well done!
8. It may be Monday, but after a week without the booze we bet you’re ready to take on the world!
9. Boost, share, ask... get on Twitter and Facebook to tell everyone what Dry January is like for you.

10. Even your bank account should be feeling healthier after all these booze free weekends.
11. Help beat those Monday Blues by meeting up with friends – just remember to make it a booze-free activity.
12. You might not have a tan, but is your skin looking better?
13. You may be sleeping better this week - now what will you do with all that extra energy?
14. Share your Dry January pics on Facebook. We want to know how you’re getting on!
15. You’re doing amazingly!
16. You might not have a tan, but is your skin looking better?
17. Your blood pressure may be dropping by now. A sign your body is feeling the benefit.
18. If you’re feeling tempted at any point go to dryjanuary.org.uk for advice and motivation.

19. Team #Selfea time!
20. Time off alcohol can help improve your mood. Are you chirpier than usual?
21. Remember to check in to our Facebook page for the latest hints, tips and info!
22. Time to show off your holiday body! Cutting out alcohol is a great way to cut calories.
23. Your blood pressure may be dropping by now. A sign your body is feeling the benefit.
24. If you’re feeling tempted at any point go to dryjanuary.org.uk for advice and motivation.
25. Woo hoo! You’ve made it! For tips and ideas on how to reward yourself, go to dryjanuary.org.uk

26. Your favourite Dry experiences so far? Share them on Facebook and Twitter.
27. #Selfea time. To record how amazing you look and feel.
28. Almost there...
29. Woo hoo! You’ve made it! For tips and ideas on how to reward yourself, go to dryjanuary.org.uk
30. You are not alone. Find loads of support on Facebook and Twitter to help you along.
31. Well done!

You should feel as proud as punch. Keeping off the booze for 31 days is no mean feat, and after some well deserved time off, your body must be feeling (and looking) so much better. Treat yourself to more time off sometime soon!

Sign up at dryjanuary.org.uk for even more hints and tips on how to stay booze free.