know your numbers
Contents

• Impact of alcohol on health and the NHS.
• Department of Health guidance and associated risk of drinking above these levels.
• How to calculate units of alcohol.
• Direct health implications to the patient – topics of discussion.
• Screening and brief intervention model FRAMES
• Increased knowledge of the signs of withdrawal and appropriate treatment pathways.
• Information, advice and help on alcohol for patients in the hospital and the community.
Facts about alcohol and how it impacts on health. All data relative to guidance prior to Jan 2016

- Over 90% of adults drink alcohol in England.

- Approximately 8 million adults (approx. 1 in 4) consume above the Governments sensible drinking guidelines.

- Alcohol now the third leading cause of ill health in country after tobacco and blood pressure.

- Alcohol is the leading cause of death among 15 to 49 year olds (PHE alcohol evidence review)

- Excessive drinking causes over 60 medical conditions including strokes, cancers, heart disease, mental health problems and injuries requiring treatment.

- In Accident and Emergency department between midnight and 5am up to 70% attendances are alcohol-related.

- (SIPS Research Project, Kings College London 2015)
In 2013/14, there were an estimated 1,059,210 admissions related to alcohol consumption where an alcohol-related disease, injury or condition was the primary reason for hospital admission or a secondary diagnosis.

Of these the highest number of admissions, 511,260 (48 per cent of all admissions), were due to cardiovascular disease in 2013/14.

In England, in 2013 there were 6,592 alcohol-related deaths, a 1% increase from 2012 (6,495) and a 10% increase from 2003 (5,984).

For 16-24-year olds, 26% of deaths in males and 23% of deaths in females have been attributed to alcohol consumption.

Source: From Health and Social Care Information Centre June 2015
Alcohol, health and the NHS

England 2013:

• 15% of men and 20% of women did not drink any alcohol in the last year.

• Of those who do drink; 18% of men and 13% of women drank at an increased risk of harm (more than 4 units for men, or 3 units for women, but less than double).

• 5% of men and 3% of women drank at higher risk levels (more than 8 units for men or 6 units for women a day or 50 or 35 units a week).

• Although drinking trends are going down, the impact of people’s long term drinking and binge drinking (double the lower limit 6) over time is placing more demands on our National Health Service.
The estimated cost of alcohol harm

- To society is £21 billion per year.
- To NHS is £3.5 billion per year
- This is equal to £120 for every taxpayer.

House of Commons Health Select Committee on the Government’s Alcohol Strategy – Third Report of Session 2012-2013
National guidance on alcohol consumption

- The Chief Medical Officer has guidance on alcohol consumption to reduce health harms.

- This is described in term the number of ‘units’.

- In addition the Royal College of Psychiatrists has given guidance (based on old guidelines) for older adults.
Chief Medical Officers’ guideline 2016

• **Men and Women:**
  • You are safest not to drink regularly more than **14 units per week**, to keep health risks from drinking alcohol to a low level
  • If you do drink as much as 14 units per week, it is best to **spread this over 3 days or more**. If you have one or two heavy drinking sessions, you increase your risks of death from long term illnesses and from accidents and injuries.
  • The risk of developing a range of illnesses (including, for example, cancers of the mouth, throat and breast) increases with any amount you drink on a regular basis.
  • If you wish to cut down the amount you’re drinking, a good way to help achieve this is to have several drink-free days each week.
### Unit consumption answers

**What do you think the recommended daily unit consumption is?**

<table>
<thead>
<tr>
<th>Adult Male and Female</th>
<th>14 units per week spread over several days, with benefit of 2 or more alcohol free days</th>
</tr>
</thead>
<tbody>
<tr>
<td>A young person 15-17 years</td>
<td>Parents and young people should be aware that drinking, even at age 15 or older, can be hazardous to health and that not drinking is the healthiest option for young people. If 15 to 17 year olds do consume alcohol they should do so infrequently and certainly on no more than one day a week. Young people aged 15 to 17 years should never exceed recommended adult limits and on days when they drink, consumption should usually be below such levels.</td>
</tr>
<tr>
<td>Child under 15</td>
<td>None Children and their parents and carers are advised that an alcohol-free childhood is the healthiest and best option, However, if children drink alcohol, it should not be until at least the age of 15 years</td>
</tr>
<tr>
<td>Older adult 65+</td>
<td>Half the adult consumption</td>
</tr>
</tbody>
</table>
What does that mean?

- Men and Women
- **14 units per week** spread over several days

6 pints of 4% ABV beer/lager/Ale
*Beck’s Vier, Boddingtons, Carling, Carlsberg, Fosters, Guinness, John Smith’s, Stella (low strength)*

6 MEDIUM 175ml glasses of 12 % ABV wine.
(most wine is between 12-15%)
What does that mean?

5.5 Pints (568mls) 4.5% ABV Cider.
Bulmers, Gaymer, Magners,
Stella Cidre, Strongbow.

3.5 Pints (568mls) >7% ABV Cider.
Old Rosie Scrumpy, Frosty Jacks
and Diamond White.

14 Single measures (25ml) 40% ABV
Vodka, Whisky
Guidance on pregnancy

• If you are pregnant or planning a pregnancy, the safest approach is **not to drink alcohol at all**, to keep risks to your baby to a minimum.

• Drinking in pregnancy can lead to long-term harm to the baby, with the more you drink the greater the risk.

• Most women either do not drink alcohol (19%) or stop drinking during pregnancy (40%).

• The risk of harm to the baby is likely to be low if a woman has drunk only small amounts of alcohol before she knew she was pregnant or during pregnancy.

• Women who find out they are pregnant after already having drunk during early pregnancy, should avoid further drinking, but should be aware that it is unlikely in most cases that their baby has been affected. If you are worried about how much you have been drinking when pregnant, talk to your doctor or midwife.
Your turn!

What do you think the recommended daily unit consumption is?

- Adult female
- Adult male
- A young person 15-17 years
- Child under 15
- Older adult 65+
What is a unit and how do I calculate it?

- 1 unit = 8g/10ml of pure alcohol.
- To work out the units of different drinks use the following formula.

\[
\text{Unit(s)} = \frac{\%ABV \times \text{volume (ml)}}{1000}
\]

Here’s an example

A pint of lager (ABV) 5.3% x (volume) 568 mls \(\div\) 1000 = 3 units
Your turn!

- Using the formula \( \%ABV \times \text{Volume} \div 1000 = \text{UNITS} \) calculate the following.

<table>
<thead>
<tr>
<th>Volume</th>
<th>ABV</th>
</tr>
</thead>
<tbody>
<tr>
<td>275mls</td>
<td>4.5%</td>
</tr>
<tr>
<td>125mls</td>
<td>12%</td>
</tr>
<tr>
<td>568mls</td>
<td>6.1%</td>
</tr>
<tr>
<td>25mls</td>
<td>40%</td>
</tr>
<tr>
<td>568mls</td>
<td>4.5%</td>
</tr>
<tr>
<td>175mls</td>
<td>14%</td>
</tr>
</tbody>
</table>

May 2016  KYN Long Training
Unit answers

- Using the formula %ABV x Volume ÷ 1000 = UNITS calculate the following.

<table>
<thead>
<tr>
<th>Volume (mls)</th>
<th>ABV (%)</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>275</td>
<td>4.5</td>
<td>1.2</td>
</tr>
<tr>
<td>125</td>
<td>12</td>
<td>1.5</td>
</tr>
<tr>
<td>568</td>
<td>6.1</td>
<td>3.5</td>
</tr>
<tr>
<td>25</td>
<td>40</td>
<td>1</td>
</tr>
<tr>
<td>568</td>
<td>4.5</td>
<td>2.5</td>
</tr>
<tr>
<td>175</td>
<td>14</td>
<td>2.3</td>
</tr>
</tbody>
</table>

May 2016
KYN Long Training
Alcohol consumption and health

The diagram gives an overview of the damage alcohol can do to someone’s health.
Alcohol increases the risk of many medical conditions including heart attack, stroke, pancreatitis and high blood pressure.

- **Cancer** - Alcohol increases the risk of 7 types of cancer (liver, bowel, breast, mouth, pharyngeal, oesophageal and laryngeal cancer).

- **Liver Disease** – Alcohol can cause inflammation in the liver, whether the heavy drinking is every day or just a few days a week. Over time scarring and cirrhosis can occur.

Healthy liver, Fatty Liver, Cirrhotic Liver
Alcohol consumption and health continued

• **Medical Information** When you reduce your drinking short term effects of alcohol can improve; sleeplessness, stress, memory loss, sweating, shaking, loss of appetite, stomach problems, anxiety, diarrhoea, sickness, bad skin and weight gain.

• **Weight gain** - Alcohol contains lots of calories, almost as many as pure fat! [nhs.uk/Livewell/alcohol/Pages/calories-in-alcohol.aspx](nhs.uk/Livewell/alcohol/Pages/calories-in-alcohol.aspx)
### Risk of illnesses from alcohol consumption

<table>
<thead>
<tr>
<th></th>
<th>Regularly consuming 25g (3 units) daily</th>
<th>Regularly consuming 50g (6 units) daily</th>
<th>Regularly consuming 100g (12 units) daily</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cancers</strong></td>
<td>Increase over standard risk</td>
<td>Increase over standard risk</td>
<td>Increase over standard risk</td>
</tr>
<tr>
<td>Mouth and throat</td>
<td>96%</td>
<td>211%</td>
<td>545%</td>
</tr>
<tr>
<td>Colon</td>
<td>5%</td>
<td>10%</td>
<td>21%</td>
</tr>
<tr>
<td>Oesophagus</td>
<td>39%</td>
<td>93%</td>
<td>259%</td>
</tr>
<tr>
<td>Rectum</td>
<td>9%</td>
<td>19%</td>
<td>21%</td>
</tr>
<tr>
<td>Liver</td>
<td>19%</td>
<td>40%</td>
<td>81%</td>
</tr>
<tr>
<td>Larynx</td>
<td>43%</td>
<td>102%</td>
<td>286%</td>
</tr>
<tr>
<td>Breast</td>
<td>25% (f)</td>
<td>55% (f)</td>
<td>141% (f)</td>
</tr>
<tr>
<td><strong>Cardiovascular</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hypertension</td>
<td>43%</td>
<td>104%</td>
<td>315%</td>
</tr>
<tr>
<td>Ischaemic stroke</td>
<td>-10%</td>
<td>17%</td>
<td>337%</td>
</tr>
<tr>
<td>Haemorrhagic stroke</td>
<td>19%</td>
<td>82%</td>
<td>370%</td>
</tr>
<tr>
<td>Cardiac arrhythmias</td>
<td>51%</td>
<td>123%</td>
<td>123%</td>
</tr>
<tr>
<td>Oesophageal varices</td>
<td>26%</td>
<td>854%</td>
<td>854%</td>
</tr>
<tr>
<td>Unspecified liver disease</td>
<td>26%</td>
<td>854%</td>
<td>854%</td>
</tr>
<tr>
<td>Acute and chronic pancreatitis</td>
<td>34%</td>
<td>74%</td>
<td>219%</td>
</tr>
</tbody>
</table>
## Alcohol health harm

For female **Breast Cancer**, relative risks of both illness and death from the disease increase:
- by 16% if drinking regularly at 2 units (16 grams) per day (equivalent to the proposed guideline level)
- by 40% if drinking regularly at 5 units (40 grams) per day (more than double the proposed guideline level)
- An estimated 6 per cent of female breast cancers in the UK are linked to alcohol, that effects more than 3,000 women each year

For **Cirrhosis of the Liver**, for men, relative risks of death from the disease increase:
- by 57% if drinking regularly at 2 units (16 grams) per day (equivalent to the proposed guideline level)
- by 207% if drinking regularly at 5 units (40 grams) per day (more than double the proposed guideline level)
For **Ischaemic Stroke**, for men, relative risks of death from the disease:
- decrease by 11% if drinking regularly at 2 units (16 grams) per day (equivalent to the proposed guideline level)
- increase by 3% if drinking regularly at 5 units (40 grams) per day (more than double the proposed guideline level)

For **Cardiac Arrhythmias**, for men, relative risks of illness and death from the disease increase:
- by 13% if drinking regularly at 2 units (16 grams) per day (equivalent to the proposed guideline level)
- increase by 34% if drinking regularly at 5 units (40 grams) per day (more than double the proposed guideline level)
# Alcohol risk levels

<table>
<thead>
<tr>
<th></th>
<th>MEN</th>
<th>WOMEN</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lower Risk</strong></td>
<td>Less than 14 units a week spread evenly across 3 or more days.</td>
<td>Less than 14 units a week spread evenly across 3 or more days.</td>
</tr>
<tr>
<td><strong>Increasing Risk</strong></td>
<td>15-49 units per week.</td>
<td>15-34 units per week.</td>
</tr>
<tr>
<td><strong>Higher Risk</strong></td>
<td>More than 50 units per week (or more than 8 units per day on a regular basis)</td>
<td>More than 35 units per week (or more than 6 units per day) on a regular basis</td>
</tr>
<tr>
<td><strong>Binge Drinking</strong></td>
<td>Consuming more than twice the lower risk levels in one day (&gt; 8 units)</td>
<td>Consuming more than twice the lower risk levels in one day (&gt;6 units)</td>
</tr>
<tr>
<td><strong>Alcohol Dependence</strong></td>
<td>Drinking behaviour characterised by an inner drive to consume alcohol, continued drinking despite harm and commonly withdrawal symptoms on stopping drinking</td>
<td></td>
</tr>
</tbody>
</table>
Benefits of reducing alcohol

- Reduced risk of liver disease
- Reduced risk of cancer
- Better physical shape
- Reduced risk of injury
- Save money
- Reduced risk of drink driving
- Improved memory
- No hangovers
- More energy
- Lose weight
- Better sleep
- Improved mood
- Improved relationships
- Depression / Anxiety
When can you drive after drinking?

- Calculate your units
- From the moment you stop drinking the first hour does not count and then it takes an hour for every unit drunk to be metabolised.
- Example

5 pints at 4% = 11.3 units. Stop drinking at 11pm therefore can get behind a wheel of a car until **11.30 am.**
What does this tell us?

• Not many drinks are a single unit!
• Pouring drinks without a measure makes it difficult to keep track of units
• If a person drinks alcohol s/he needs to be able to calculate his/her units (go to the Know Your Numbers campaign [http://wessexahsn.org.uk/projects/32/know-your-numbers](http://wessexahsn.org.uk/projects/32/know-your-numbers)) and how this relates to national consumption guidance (DoH)
• As a member of staff you can educate patients about units.

Why is this important?
Why we need to ask about alcohol:

• An opportunity to raise awareness
• Alcohol related physical harm is entirely preventable
• Preventing the complications of withdrawal
• Impact on NHS
• As health care professionals we have multiple opportunities to screen and provide advice.
Who says so?

• Chief Medical Officer, DoH:

“It is vital that nurses have up-to-date advice on alcohol guidelines and the skills to have conversations about alcohol consumption...all nurses play a significant role in stopping the rising tide”

• NICE Clinical Guidance CG115:

Staff working in services provided and funded by the NHS who care for people who potentially misuse alcohol should be competent to identify harmful drinking and alcohol dependence. They should be competent to initially assess the need for an intervention or, if they are not competent, they should refer people who misuse alcohol to a service that can provide an assessment of need
## AUDIT C Alcohol screening

<table>
<thead>
<tr>
<th>Questions</th>
<th>Scoring system</th>
<th>Your score</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>How often do you have a drink containing alcohol?</strong></td>
<td>Never</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Monthly or less</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2 - 4 times per month</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2 - 3 times per week</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4+ times per week</td>
<td></td>
</tr>
<tr>
<td><strong>How many units of alcohol do you drink on a typical day when you are drinking?</strong></td>
<td>1 -2</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>3 - 4</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>5 - 6</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>7 - 9</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>10+</td>
<td></td>
</tr>
<tr>
<td><strong>How often have you had 6 or more units if female, or 8 or more if male, on a single occasion in the last year?</strong></td>
<td>Never</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Less than monthly</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Monthly</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Weekly</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Daily or almost daily</td>
<td></td>
</tr>
</tbody>
</table>

**Scoring:**
A total of 5+ indicates increasing or higher risk drinking. An overall total score of 5 or above is AUDIT-C positive.
Audit scores – what next?

• **Scores 0 - 4**
  Indicates a low risk drinker who is less likely to develop alcohol related problems. Congratulate!

• **Audit C positive scores 5 – 12**
  Indicates increasing or higher risk drinking, which could put ones health at risk in the future. Deliver brief intervention.

• Patients who **score 8** or above should be referred to the Alcohol Specialist Nurse Team.

• Following AUDIT score many patients will require brief intervention.
Brief intervention

• An Alcohol Brief Intervention (ABI) is:

• The giving of information, advice and encouragement to the patient to consider the positives and negatives of their drinking behaviour.

• In addition offer support and help to the patient if they do decide they want to cut down on their drinking or sign post to alcohol support services.

• (Alcohol Harm Reduction Strategy for England pg. 37)

• For every eight people who receive simple alcohol advice, one will reduce their drinking to within lower-risk levels.

• 56 controlled trials have shown the value of brief intervention

• (Moyer et al, 2002)
FRAMES approach

- Feedback - risk
- Responsibility - individual
- Advice - reduction
- Menu of options to change
- Empathy
- Self efficacy - be self aware of changes.

- SIPS (Screening and Intervention Programme for Sensible Drinking)
  www.sips.iop.kcl.ac.uk/
- Alcohol Learning Centre
  www.alcohollearningcentre.org.uk/eLearning/IBA
What is withdrawal

• Alcohol withdrawal is the set of symptoms seen when an individual reduces or stops alcohol consumption after prolonged periods of excessive alcohol intake.

• The withdrawal is largely due to the central nervous system being in a hyper-excitable state.

• Withdrawal symptoms can be classified into three categories:
  * mild
  * moderate
  * Severe

• Mild alcohol withdrawal can cause pain and suffering and severe alcohol withdrawal can be life-threatening.

• Even mild or moderate withdrawal can be dangerous for those people with hypertension or heart conditions as withdrawal can raise blood pressure further.
Visual signs of withdrawal

- Vomiting
- Tremor
- Sweating
- Anxiety
- Agitation (fidgety and restless)
- Tachycardia
- Seizures
Reported signs of withdrawal

- Nausea
- Headaches
- Disorientation/confusion
- Tactile disturbance (itchy, pins and needles, numbness or crawling under the skin)
- Auditory disturbance (more aware of noises, sounds are harsh or frightening, hearing things that are not there)
- Visual disturbances (lights brighter, colour different, seeing things that are not there)
Wessex AHSN Brief Treatment Pathway

www.wessexahsn.org.uk/img/projects/Umbrella%20BTP%20v0.8.pdf