

# Early identification of Alcohol Harm and how can we reduce this in the primary care setting?

Dr Martyn Hull  
Clinical Director  
Turning Point

# Harms from alcohol

- Emerging evidence related to harm from alcohol use led to alteration in CMO guidelines
- Associated shift in focus in primary care: screening and advice
  - Adherence to guidelines?
  - Realistic? Pragmatic?
  - Effect: on population/ on health care professionals?
- Harms
  - Intoxication
  - Chronic tissue damage
  - Withdrawal syndromes
  - Dependence

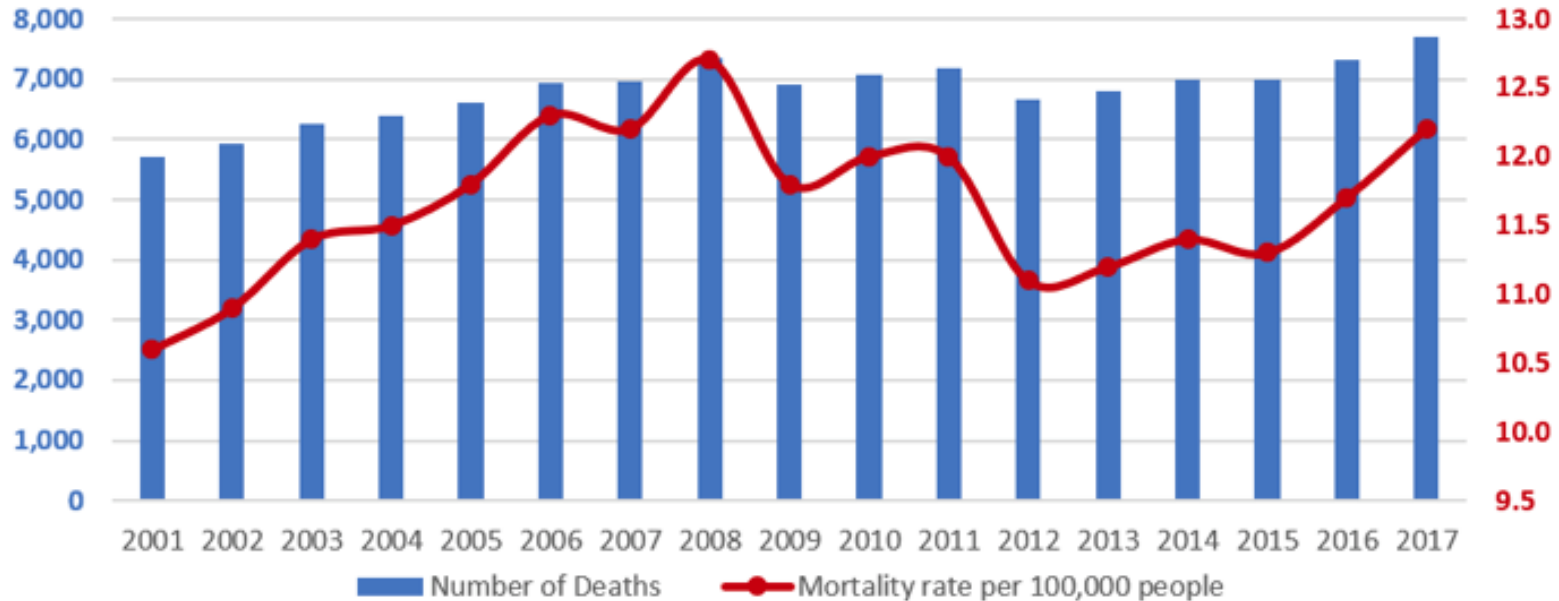


**UK Chief Medical Officers'  
Low Risk Drinking  
Guidelines**

# Upward trend in alcohol-related deaths

**Figure 1: Alcohol-specific deaths in the UK, 2001-2017**

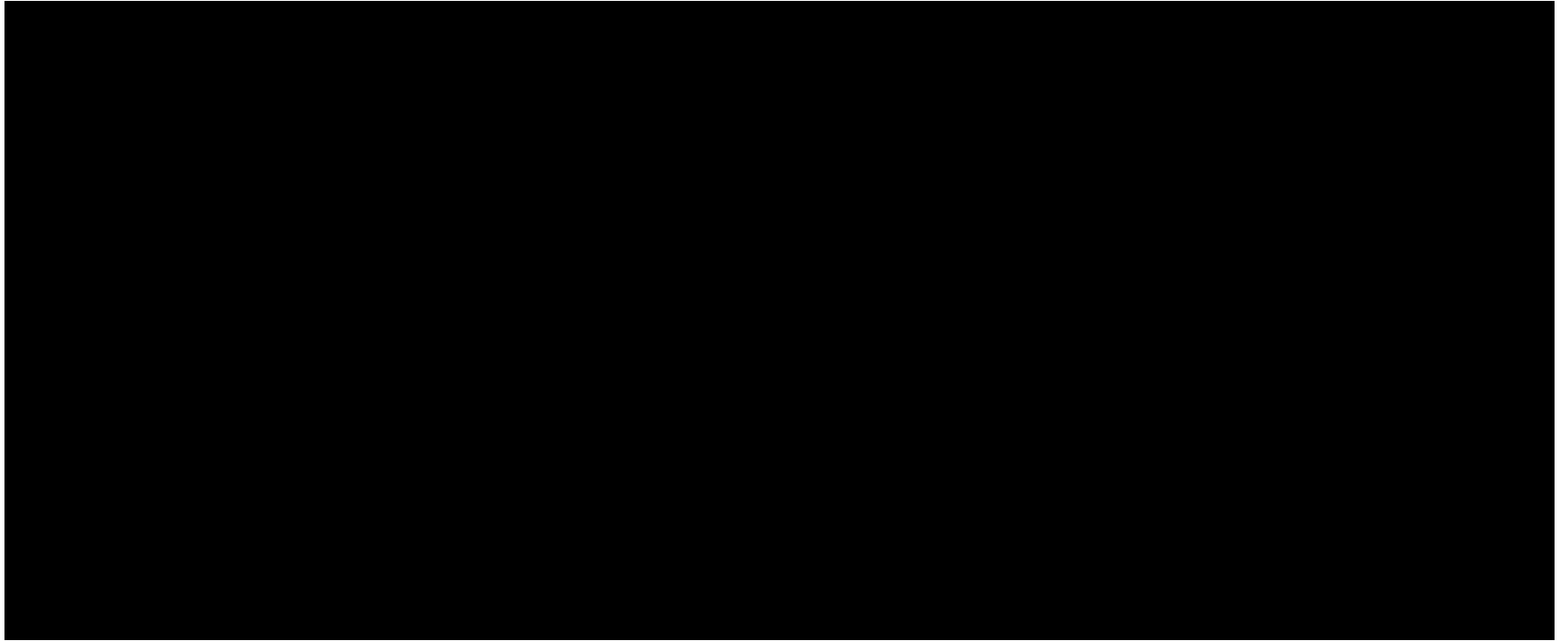
Source: ONS (2018) *Alcohol-specific deaths in the United Kingdom* [Dataset]



# Physical sequelae

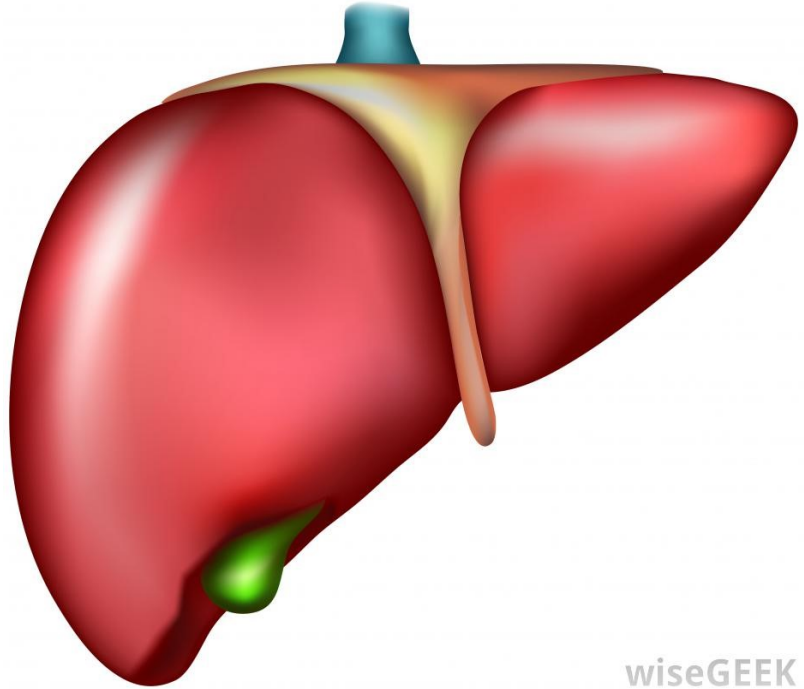
- **Liver**
- Cardiovascular
- Cancer
- Immune system
- Pancreas
- Brain
- Pregnancy

# Relative risk – harmful / higher risk drinking

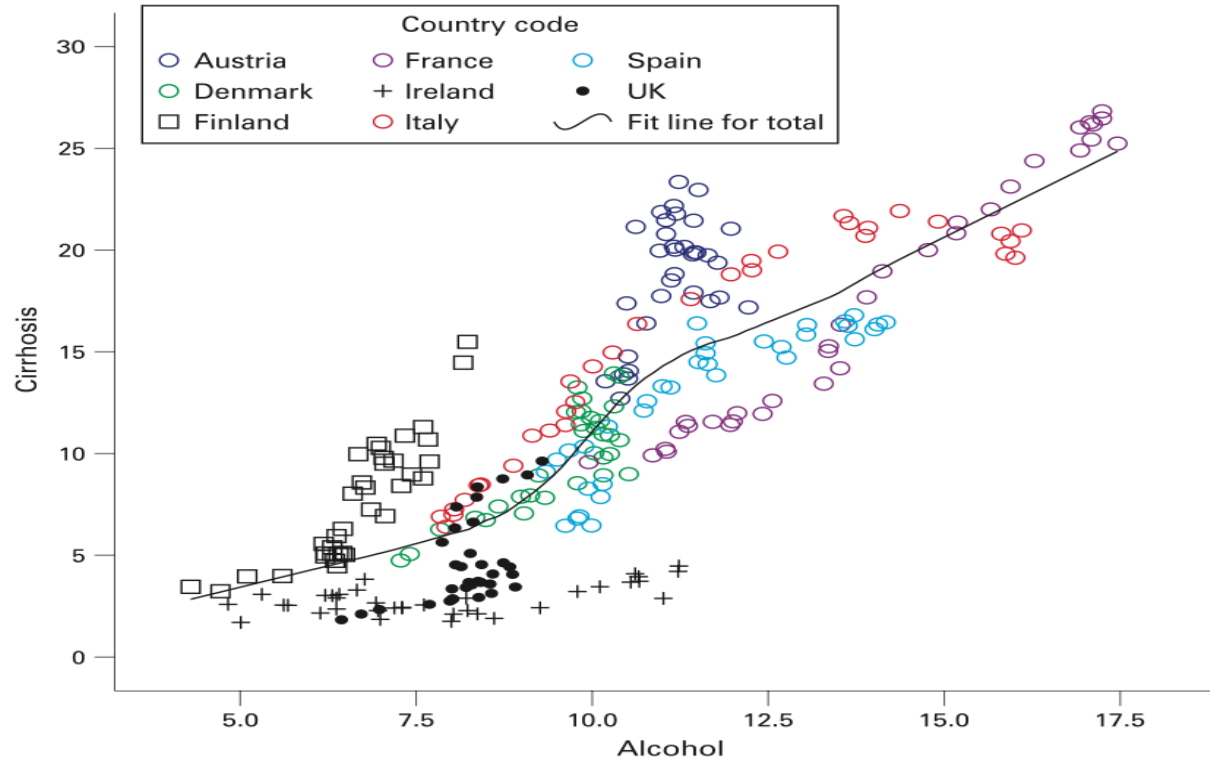


# Liver

- Fatty liver
- Alcoholic hepatitis
- Fibrosis
- Cirrhosis



# Alcohol consumption and liver mortality



# Liver

- Linear relationship between liver mortality and overall alcohol consumption in most countries
- Clinical-histologic spectrum encompassing fatty liver, alcoholic hepatitis & cirrhosis (plus its complications)
- Most are diagnosed at advanced stages
- Alcohol accounts for c 50% of cirrhosis related deaths
- Alcohol is a frequent co-factor with other liver disease, e.g. Hepatitis C (accelerates fibrosis)



# Alcoholic fatty liver disease

- Fatty liver (steatosis) initial / most common consequence of excessive alcohol
- Diagnose: Patient with AUD with steatosis on USS and/or abnormal LFTs in absence of other causes of liver disease
- Liver usually large and smooth but not tender
- Develops in 90% of heavy drinkers
- Can develop within 2 weeks of heavy drinking
- Potentially reversible: simple steatosis resolves quickly with abstinence
- Most are asymptomatic, but can c/o nausea, anorexia
- With continued excess ingestion, risk of inflammation – alcoholic steatohepatitis
- 20-40% of those with steatohepatitis develop fibrosis; 8-20% develop cirrhosis
- Spectrum of escalating harm: early identification and action is key

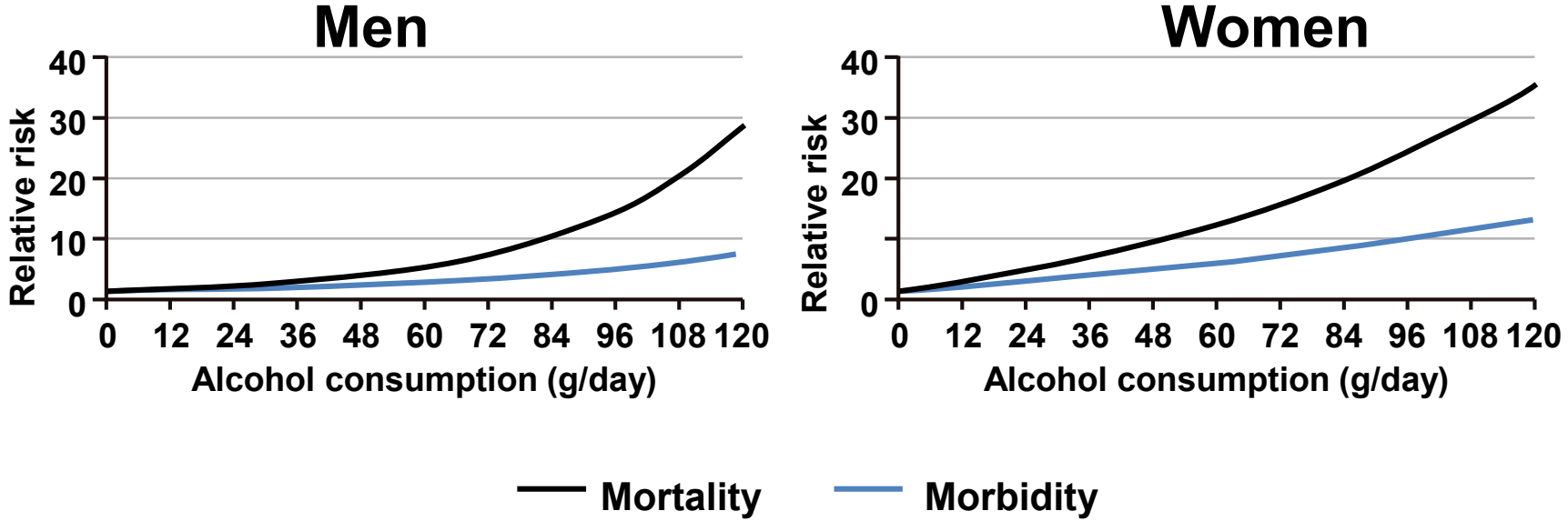
# Alcoholic hepatitis (ASH)

- Combination of fatty liver, diffuse liver inflammation and liver necrosis (often focal)
- Ranges from mild & reversible to life threatening
- Moderate disease – present as undernourished; fatigue, fever, jaundice, RUQ pain; tender hepatomegaly
- Can deteriorate rapidly: ascites, encephalopathy, variceal bleeding, liver failure
- Diagnose: Rapid development or worsening of jaundice & liver-related complications; abnormal LFTs (Bilirubin, AST/ALT – ratio  $>1.5$ , GGT); persistent heavy alcohol use; absence of other liver diseases
- Liver biopsy? (debate)

# Cirrhosis

- Advanced liver disease characterised by extensive fibrosis
- Alcoholic hepatitis may coexist
- Attempted hepatic regeneration leads to fibrosis & nodule formation; liver shrinks
- Compensated cirrhosis may be asymptomatic
- Symptoms range from those of ASH to complications of end-stage liver disease (varices, upper GI bleed, splenomegaly, ascites, encephalopathy, renal failure)
- Hepatocellular carcinoma in 15%
- Fibroscan – liver biopsy
  
- Features of fatty liver – ASH – cirrhosis overlap – diagnosing to specific category not necessarily that useful (though prognostic guide)
- Fibrosis / cirrhosis usually irreversible

# Liver cirrhosis associated with alcohol consumption



- Once cirrhosis and complications develop (e.g. ascites, bleeding), 5 year survival 50%
- Survival higher if abstinent
- Treatment
  - Abstinence (PSI, pharmacological)
  - Supportive care
  - Steroids & enteral nutrition for severe hepatitis
  - Sometimes transplantation

# Physical sequelae

- Liver
- **Cardiovascular**
- **Cancer**
- **Immune system**
- **Pancreas**
- **Brain**
- **Pregnancy**

# Cardiovascular

- Unlikely there is a significant beneficial effect from low level alcohol consumption (possibly women over 55; less than 5u / week)
- Alcohol – increases BP & HDL cholesterol – and thereafter to increased risk MI, stroke
  - Hypertension
  - Linear increase in risk of stroke with increasing alcohol
  - Risk of MI increases above 35g alcohol / week, then constant
- Cardiomyopathy
- Arrhythmia

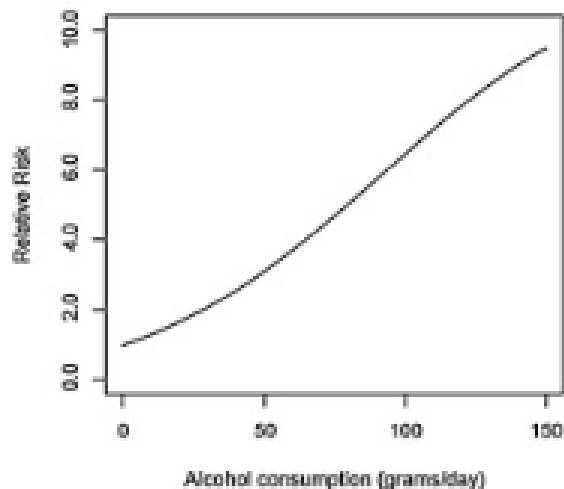
# Cancer

- Alcohol is a potent carcinogen
  - Head & neck
  - Oesophagus
  - Liver, pancreas
  - Breast
  - Colorectal
- 6% of all new cancers in UK attributable to alcohol
- Mouth/ throat, oesophagus, breast – risk increases from <11 units per week (rationale for CMO guidance)
- Larynx, colorectal – increase risk from 11 units per week
- Liver, pancreas – increase risk from 42 units per week
  
- Linear increase in risk of all
- Gradual reduction in risk after stopping drinking

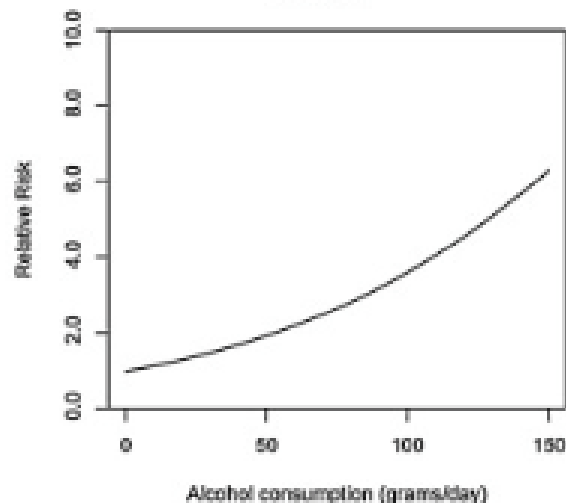


## Neoplasms of the upper digestive tract

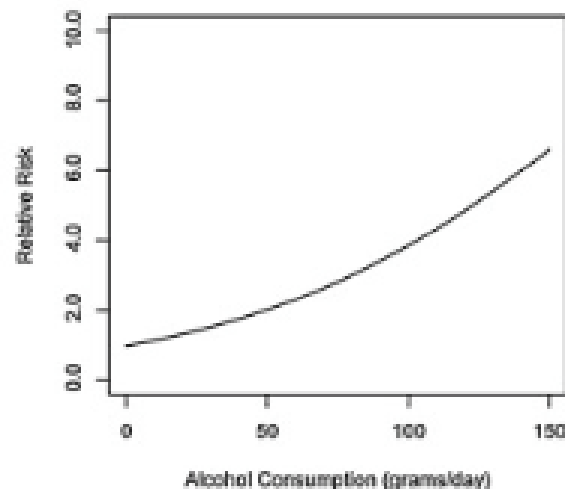
### Cancers of the mouth and oropharynx



### Oesophageal cancer

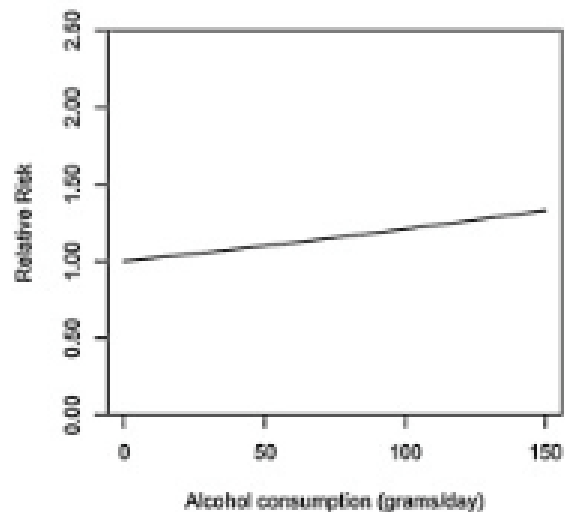


### Laryngeal cancer

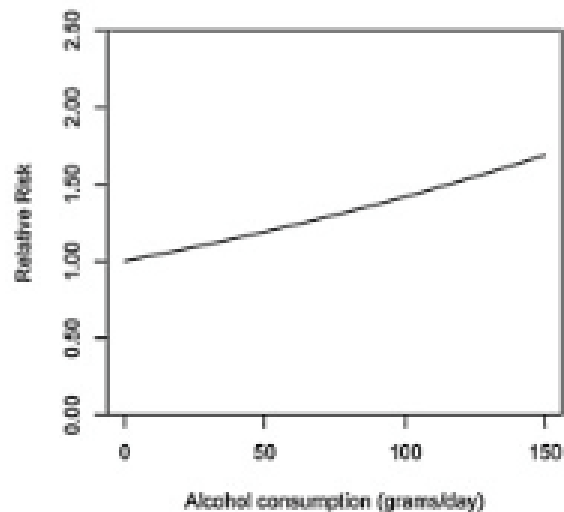


## Neoplasms of the lower digestive tract

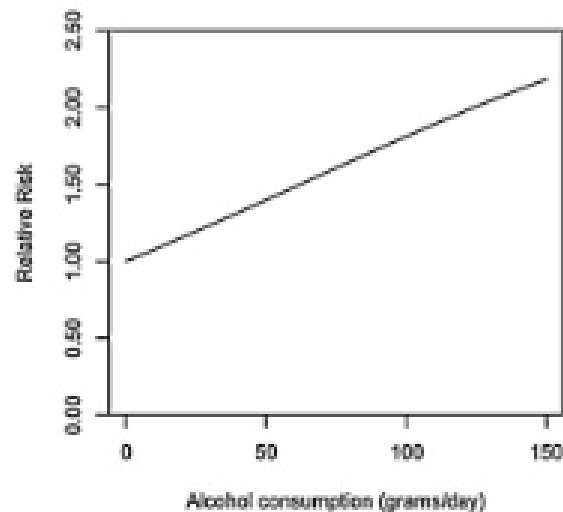
### Colon cancer



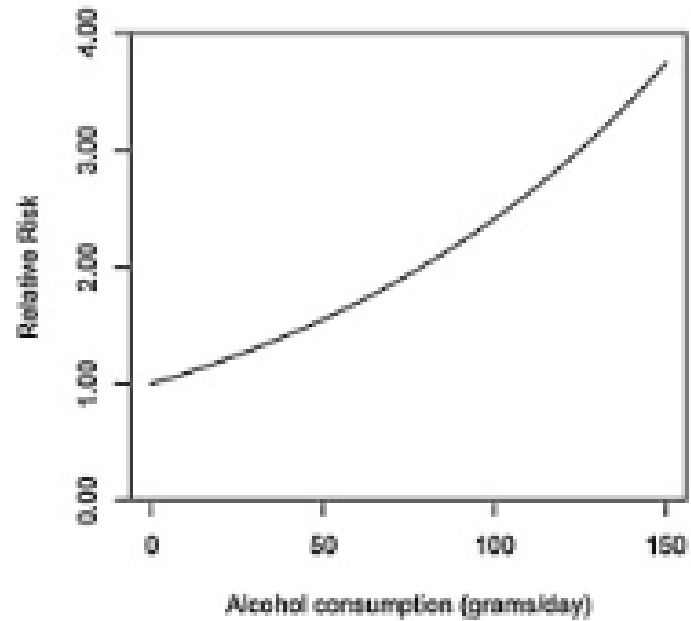
### Rectal cancer



### Liver cancer



## Cancer of the female breast



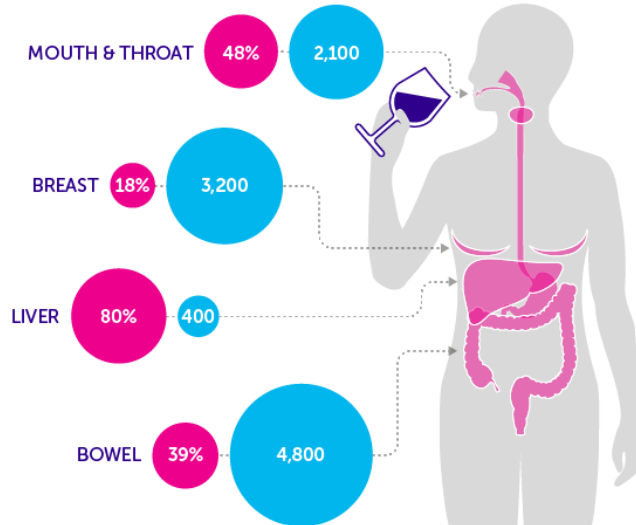
# ALCOHOL AND CANCER AWARENESS

UK survey result for the following question...

**Q** Do you think your risk of developing the following types of cancer is **increased** by drinking alcohol?

**% who correctly thought drinking alcohol increased the risk of the following cancers**

**Number of cancer cases caused by alcohol in the UK each year**



Sample size for awareness survey: 2,100 UK adults

Sources: An investigation of public knowledge of the link between alcohol and cancer. (2015) University of Sheffield and Cancer Research UK; Numbers of cases calculated by CRUK, by applying the estimated population attributable fraction for alcohol drinking (Parkin BJC 2011) to cancer cases in the UK in 2011.

LET'S BEAT CANCER SOONER.  
cruk.org



# Immune system

- Long recognised increased illness and death from infectious diseases
- Regarded as immunodeficiency caused by alcohol
- Also suspect organ damage – such as ALD – partly caused by alcohol-triggered autoimmunity
  - Pneumonia
  - TB
  - HIV
  - Viral hepatitis
  - Sepsis

# Pancreas

- Acute pancreatitis
  - Acute inflammation of pancreas
  - Multiple causes – 25% caused by alcohol
  - 25% of cases are severe
  - 5% mortality
- Chronic pancreatitis
  - Prolonged inflammatory process
  - Loss of pancreas function
  - Alcohol is commonest cause (80%)
  - Complications, including increased risk Ca. Pancreas

# Brain

- Neurotoxic effects of alcohol intoxication & withdrawal
- Cerebral atrophy (scan)
- Increased risk dementia, mood disorders, cognitive abilities
- Alcohol-related brain damage
- WKS

# Pregnancy

- Reduced fertility
- Increased risk with increased consumption – binge drinking potentially worse
- No safe amount of alcohol in pregnancy
  
- Growth retardation
- Fetal alcohol syndrome
- Increased risk spontaneous abortion



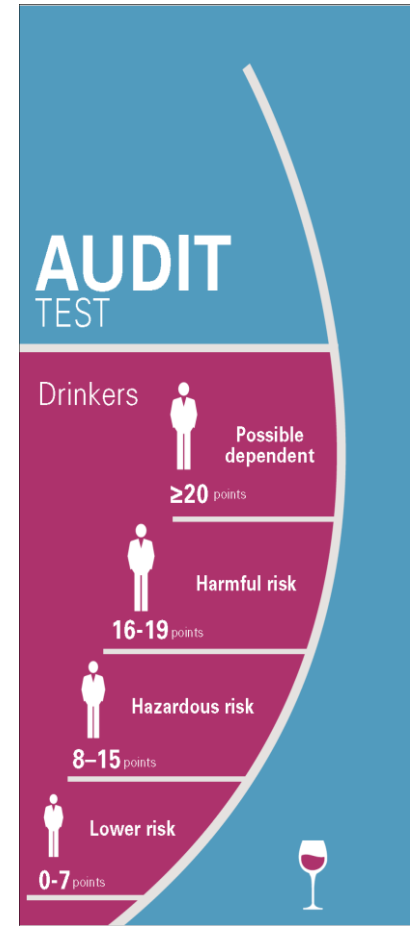
# Screening

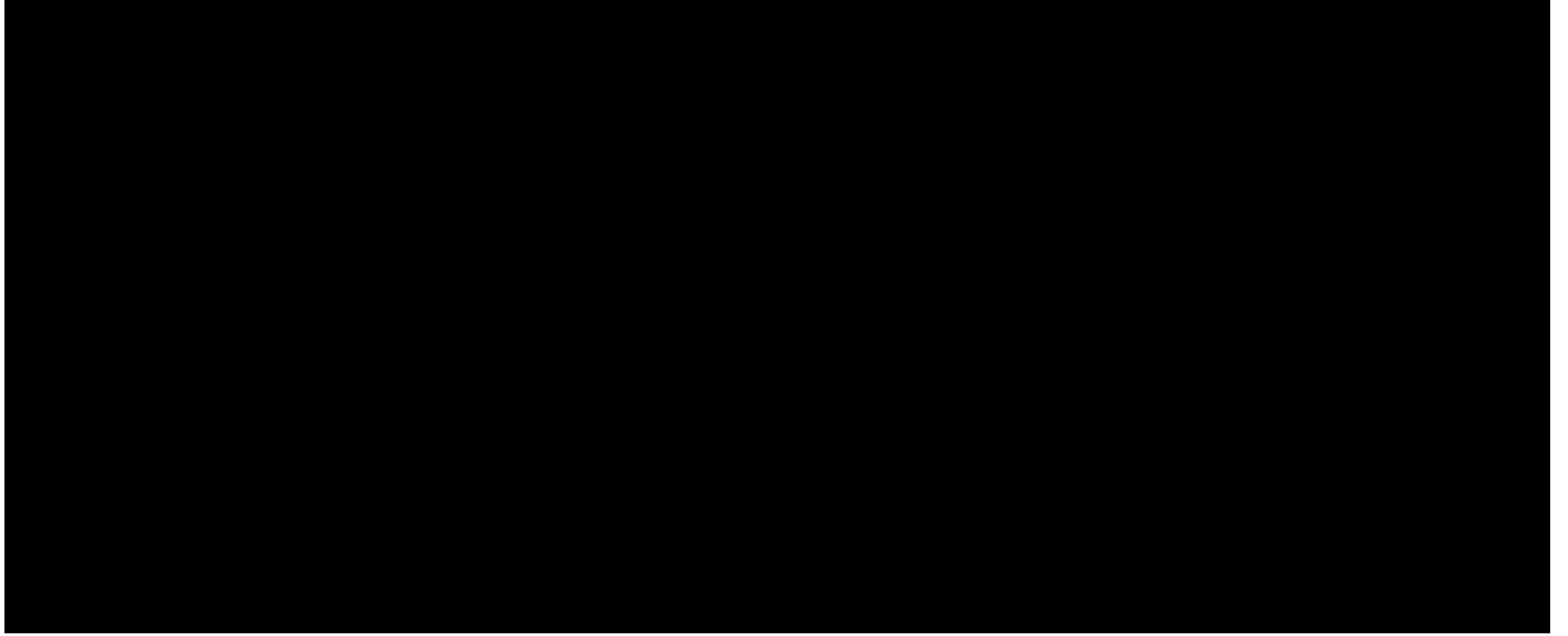
- Early identification of hazardous & harmful drinking imperative
  - 33% males    16% females            - increasing risk (hazardous)
  - 6% males      2% females            - higher risk            (harmful)
- Screening can be opportunistic or targeted

# Targeted screening

- Chronic disease management
  - HT, DM, CVD, COPD
- GI disorder (dyspepsia); cognitive impairment
- After alcohol-related admission or trauma / accident
- Request for emergency contraception
  
- Incentivised (contract / QOF)

- AUDIT gold standard
  - 10 min to complete (10 min consultation)
- AUDIT –PC, AUDIT-C, FAST
- M-SASQ
  
- If positive, then complete full AUDIT
- Identify risk status





# Identified issue: options

- Assess the consequences of drinking on health, on any chronic condition and on any medication being prescribed
- Give written information about excessive drinking and related problems
- Provide Brief Advice or Brief Intervention with aim of reduced drinking
- Suggest attendance at a local self-help group (AA or SMART)
- Provide or arrange more in-depth assessment for dependence, including referral to specialist alcohol services
- Provide or arrange a more in-depth counselling intervention, again with the aim of reducing drinking

# Feedback

- Compare patient's drinking level to friends' / families' / populations' drinking levels and to recommended drinking levels
    - Explain risk (hazardous / harmful) in an understandable way
    - Binge drinking
  - Directly link their drinking to associated health and social problems
  - Explore potential implications for family, relationships, work and leisure
  - Jointly agree a plan of achievable drinking behaviour change in agreed timescale
  - Involve others who are significant in their lives (partner, carer, family) - discuss helplines and sources of help
  - Arrange follow-up dates and times
  - Explore appropriate and accessible treatment options
  - If refer to a specialist service, make it clear
    - why making referral,
    - what is likely to happen,
    - who they will see
- Provide written information about service

# Brief Interventions

- Patient may be resistant to idea that problems linked to alcohol intake
- Key issue for patient to understand *risk*
- Primary care is an excellent setting in which to deliver brief personalised counselling – preventative care
- When done well, brief interventions can:
  - Change drinking behaviour
  - Improve adherence to treatment for alcohol and for related health problems
  - Encourage and improve attendance and effectiveness of treatment outcomes of specialist service
- MI techniques useful
- Specific advice can be useful – e.g. drink-free days