

Alcohol Problems in A&E

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Addiction
Centre**

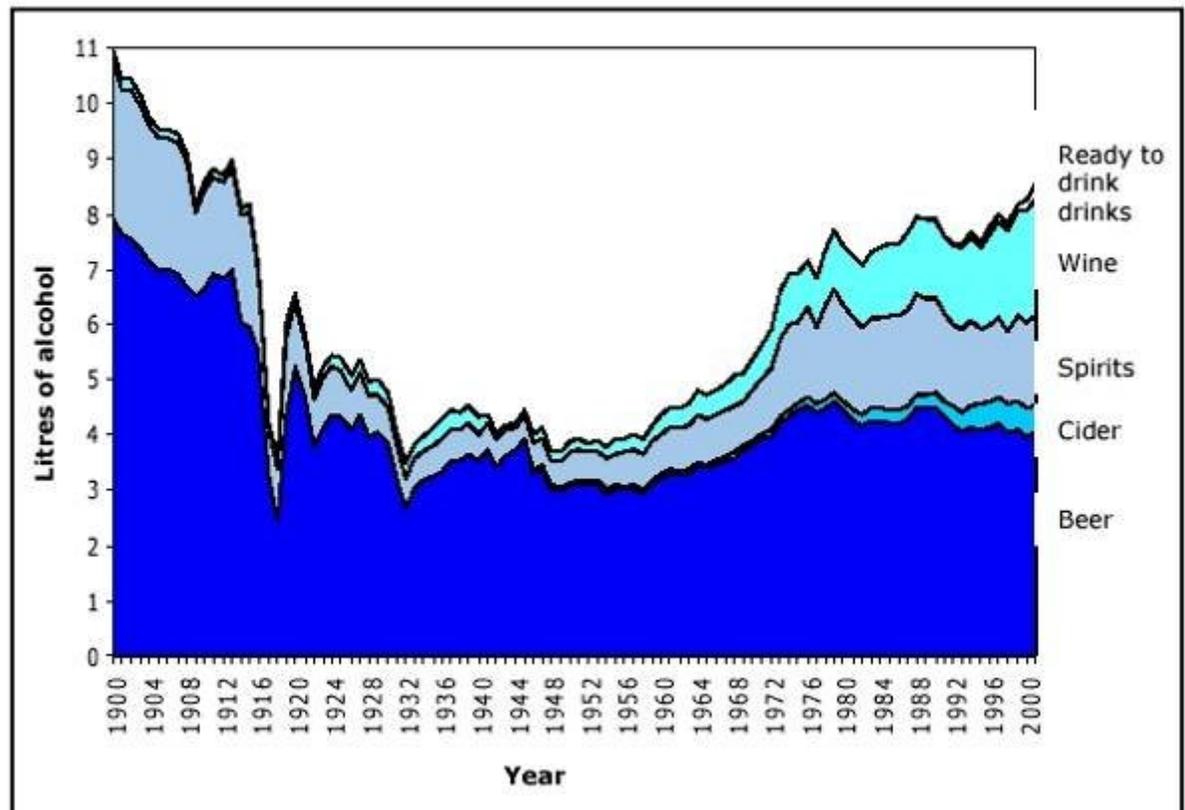
The Nation's favourite drug



Alcohol consumption in the UK

Alcohol consumption has increased by over 120% since the 1950's

ALCOHOL CONSUMPTION IN THE UK: 1900-2000
PER CAPITA CONSUMPTION OF 100 PER CENT ALCOHOL



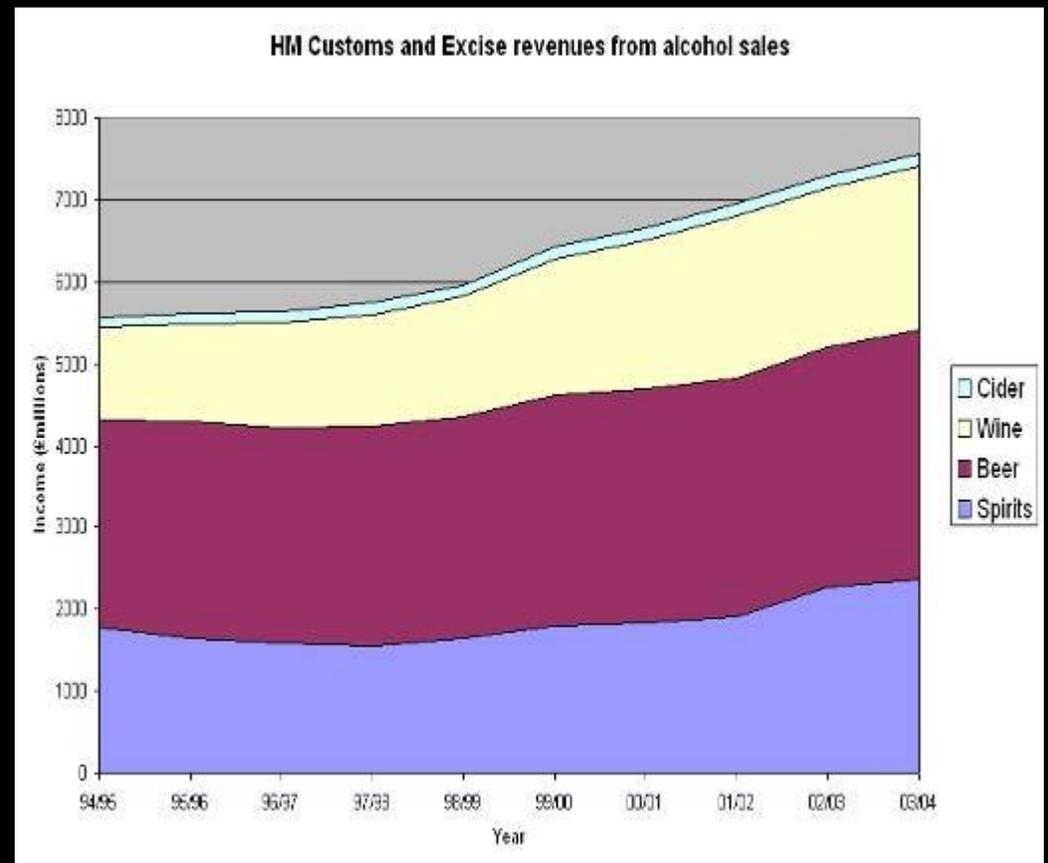
Source: BBPA Statistical Handbook (2001)

Alcohol revenue (Tax)

The UK government raises over £7.5 Billion per year from duty paid on alcohol sales. About the same amount is raised from VAT on sales

Almost 1,000,000 people rely on the alcohol industry for employment – 3.5% of all UK employees. This will raise at least a further £5 Billion in income tax.

TOTAL: £20 Billion



How big is the problem?

8 million people drink up to twice the weekly recommended limits; a further 2 million knock back over twice the recommended weekly limits; and 1.4m people consume more than twice the recommended daily limit in a single session.

Impacts on NHS, Criminal Justice System and UK industry.

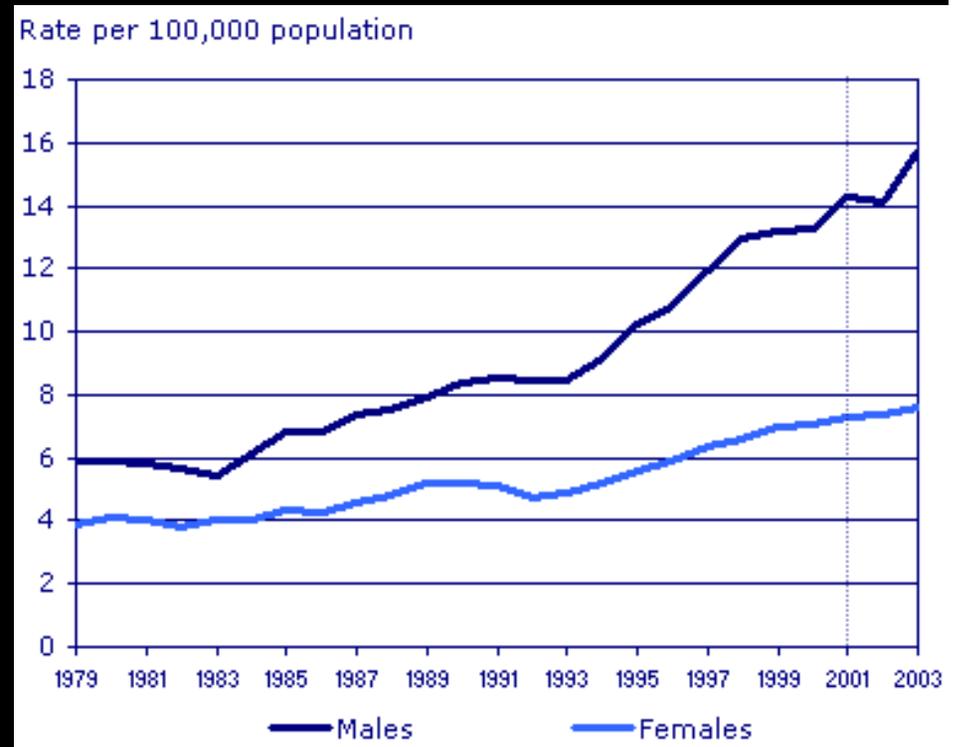


Take a closer look... Alcohol is involved in:

- **25% of hospital admissions**
- **65% of suicide attempts**
- **32,000 deaths**
- **14 million work days lost**
- **1.2 million crimes alcohol related**
- **7% of all RTAs and 50% of fatalities**

Alcohol related deaths

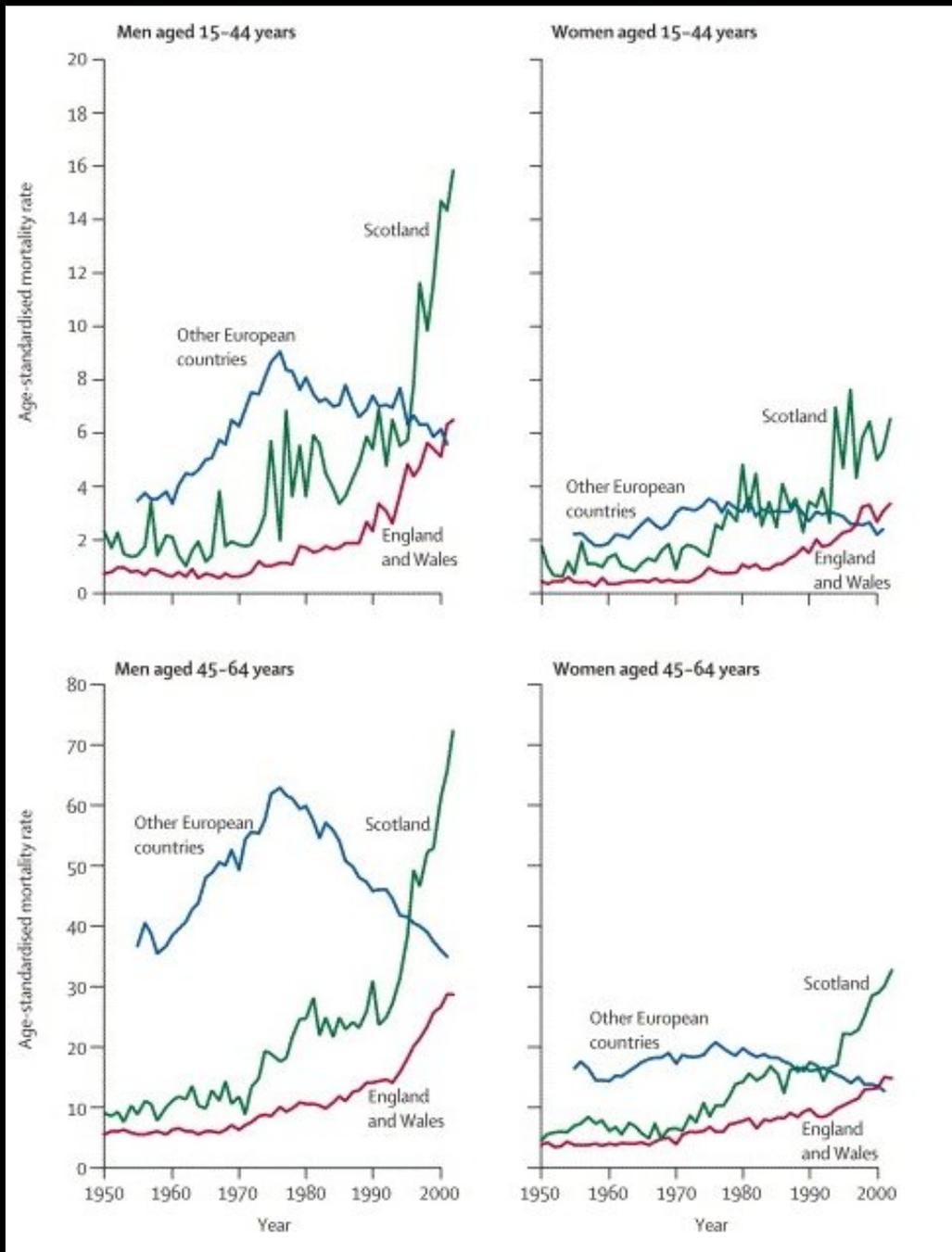
The number of alcohol-related deaths in England and Wales, which rose throughout the 1980s and 1990s, has continued to rise in more recent years. Numbers increased from 5,970 in 2001 to 6,580 in 2003. Death rates per 100,000 population also increased, from 10.7 in 2001 to 11.6 in 2003.



Mortality rates for liver cirrhosis

1950 – 2003

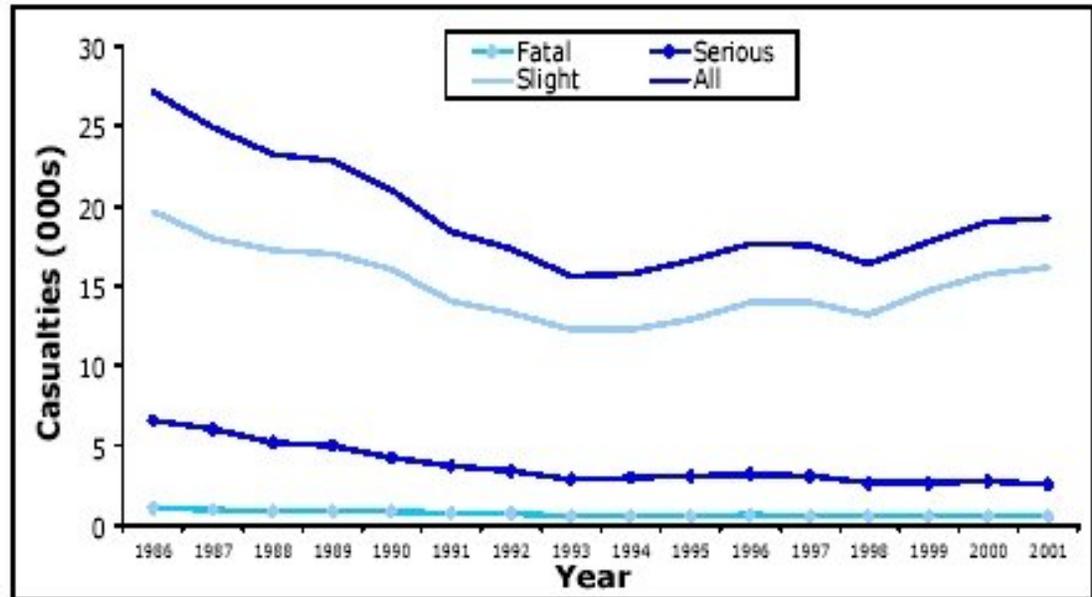
Leon & McCambridge (2006)



Alcohol and road accidents

Between 1993 and 2001 the total number of RTAs involving alcohol has risen by 1/5

CASUALTIES FROM ROAD ACCIDENTS INVOLVING ILLEGAL ALCOHOL LEVELS, 1986-2001



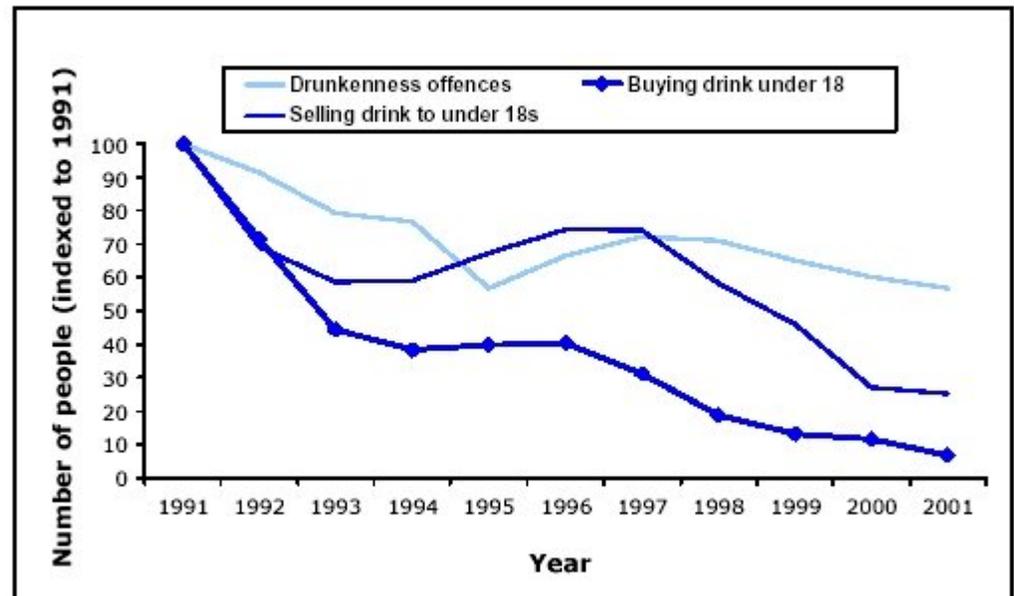
Source: Department of Transport (2001)

Alcohol and crime

Up to 30% of all arrests are alcohol related.

However, the rate of alcohol specific offences is reducing.

PERSONS FOUND GUILTY OR CAUTIONED FOR ALCOHOL-SPECIFIC OFFENCES



Source: Home Office Criminal Statistics (2001)

And the cost?

Impacts on NHS: costs £3 billion

Criminal Justice System: costs £10.0 billion

UK industry: costs £7.0 billion

Total cost: £20 billion

Sensible drinking – how much?

1992 “Health of the Nation” 21/14 weekly

1995 RCP / RCGP review and retain limits

1995 DoH “Sensible drinking” daily benchmarks, widely interpreted as an increase. Men 3/4, women 2/3

2005 ??? DoH set to re-assess the current message

Definitions of Hazardous Drinking:

General

A pattern of consumption that *may* have a negative impact on either physical or mental well-being.

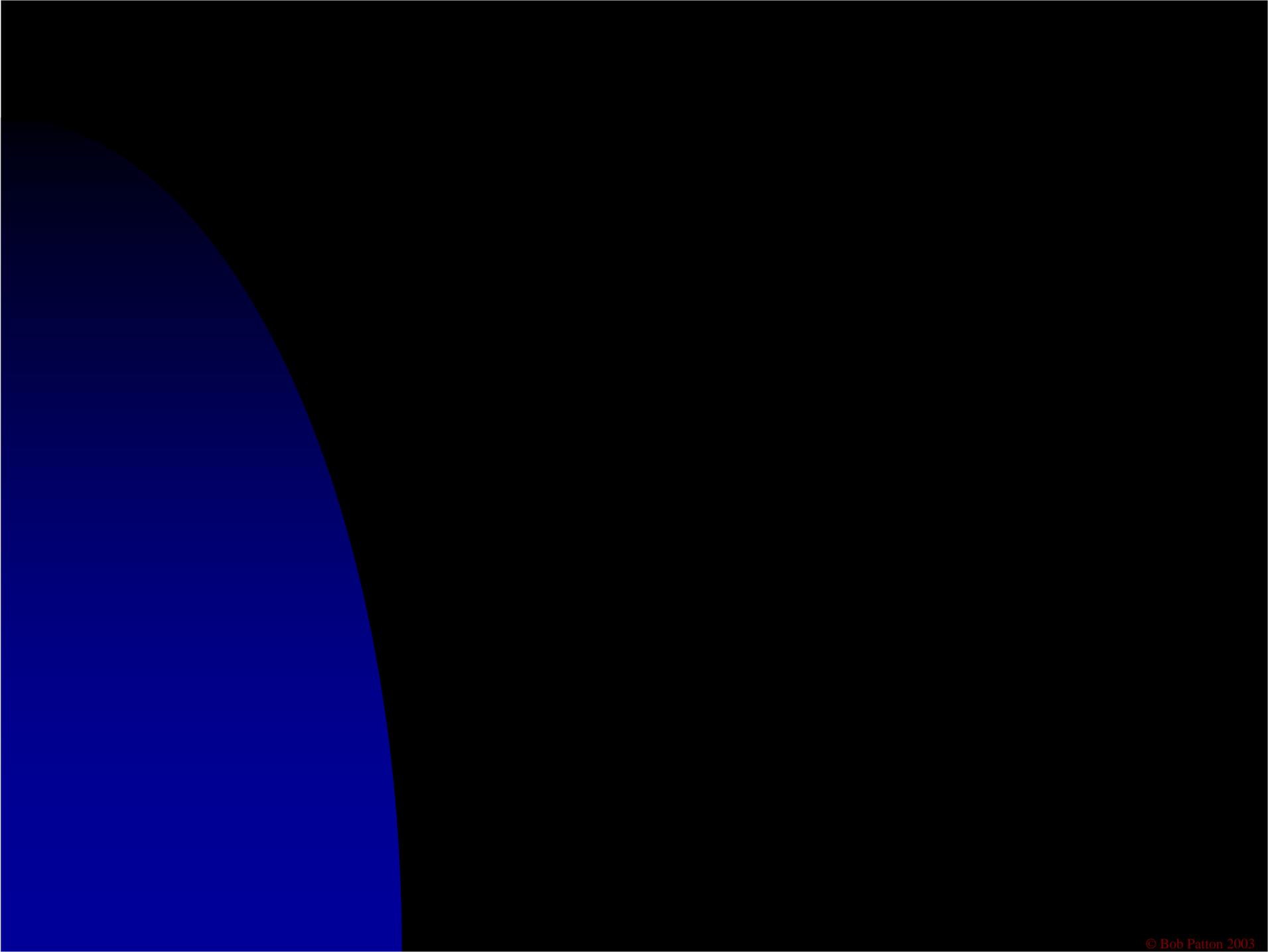
& Contextual

Men consuming 8 or more units, and women who consume 6 or more units, on at least one occasion per week. Additionally, any person who states that their accident or injury is related to their alcohol consumption.

Brief interventions

- Delivers short information and advice session where patient is given motivational interviewing / counselling and may be referred on to specialist agencies
- Assessment of alcohol consumption
- Provision of guidance / advice
- Single session





Enhancing Motivation for Change: FRAMES

- F** eedback (personalized, non-judgmental)
- R** esponsibility (respect for autonomy)
- A** dvice (clear and timely)
- M** enu of options (what works for you?)
- E** mpathy (reflective listening)
- S** elf-efficacy (offer optimism and hope)

Brief Interventions – the evidence

Wallace et al (1988)

RCT in general practice involving 909 patients. Hazardous drinking detected using CAGE. 61% of patients invited to interview attended. Given overview of their problems and specific advice. One year later 21% had reduced their level of consumption compared to those who did not receive advice . Data supported by biomarkers.

WHO trial of brief interventions in primary care (1992)

Multi-centre RCT involving 1490 patients identified as hazardous drinker using a quantity / frequency measure. Randomised to assessment only (control), advice / booklet or advice + 4 counselling sessions. Found reductions in ALL conditions, but significantly greater in treatment groups (no difference between groups) with 25% males and 10% females reducing levels of consumption

Motivational Interviewing

Hazardous drinkers detected using screening tools may not regard their level of alcohol consumption as problematic. Miller & Sanchez (1993) devised the FRAMES model of motivational interviewing. This style of approach can help persuade patients to review their alcohol consumption.

F - Feedback

assessment of drinking

R - Responsibility

it's their choice

A - Advice

on changing behaviour

M - Menu of Options

alternative goals/strategies

E - Empathy

counselling style

S - Self-Efficacy

they can do it

The direction of the interview is determined by how ready a patient is to make any changes

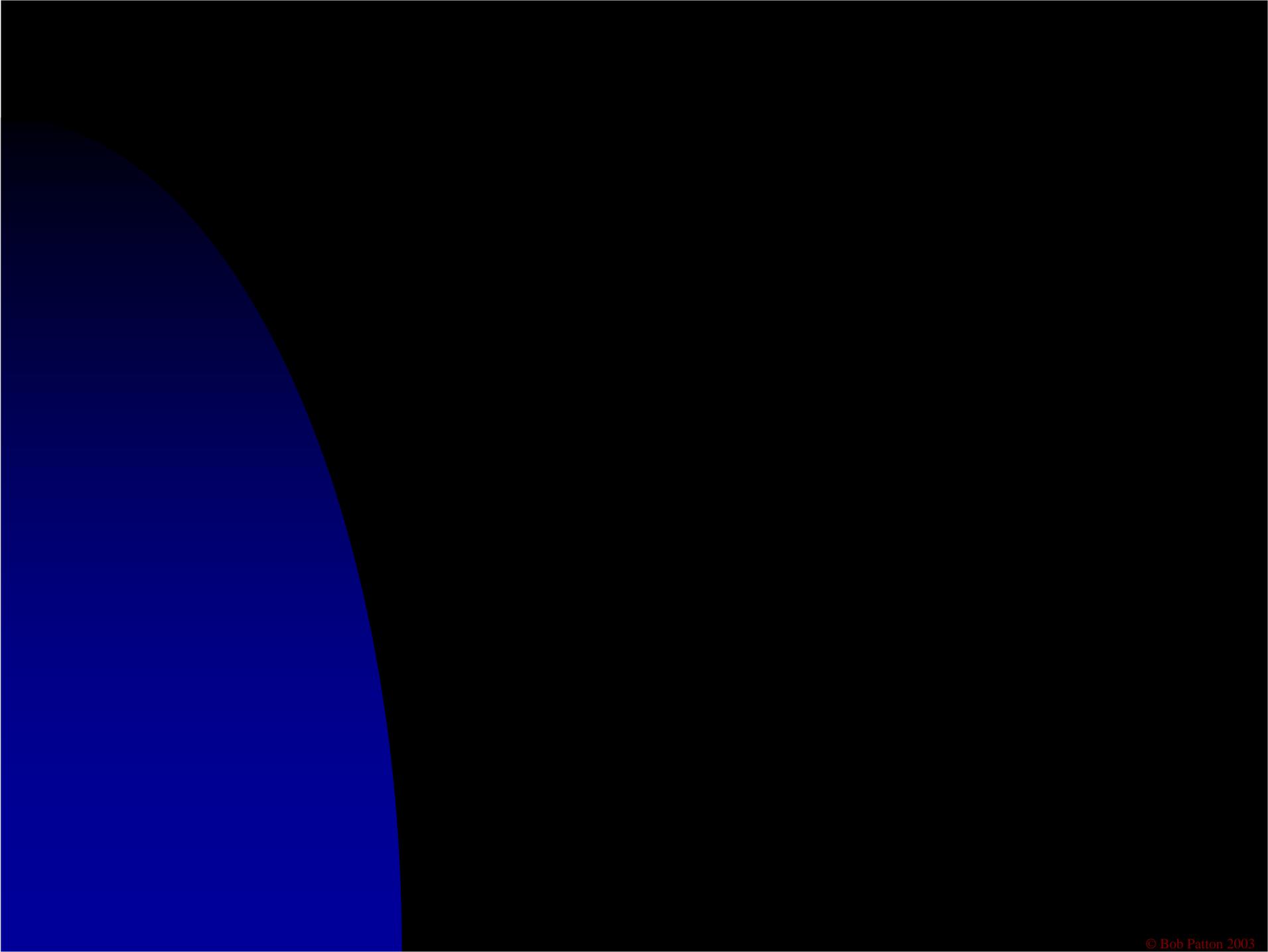
Motivational Interviewing – some evidence

McCambridge & Strang (2004)

Cluster RCT of 200 young people (16-20 years) identified as using illegal drugs. Significant reduction of alcohol consumption at three month follow-up for those receiving MI, and slight increase in consumption for non-intervention controls.

Monti et al (1999)

RCT based in A&E. Found that those in MI condition experienced significantly fewer alcohol related problems at follow-up. Alcohol consumption was reduced in MI and control groups.



St Mary's Hospital, Paddington

Involved in alcohol / A&E research since 1988

One of the few AEDs in the UK to have a specialist alcohol worker

Cited as an example of good practice in "Alcohol – Can the NHS afford it" RCP report (2001), COIN – "Scottish Intercollegiate Guidelines Network" (2003), "Alcohol Harm Reduction Strategy For England" (2004) & "Choosing Health" (2004)



Alcohol and A&E – Why bother?

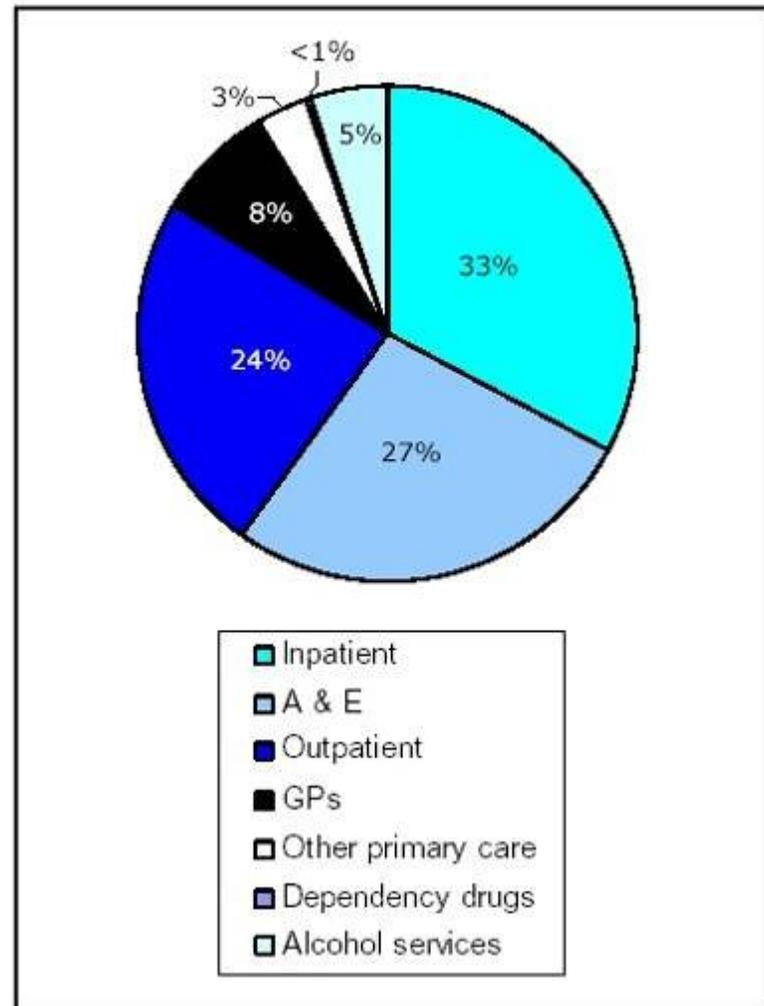
It's busy. Up to 40% presentations related to alcohol consumption, rising to 70% on Saturday nights.

It's a teachable moment – highlighting the relationship between alcohol and attendance.

It's an ideal location to access a wide cross-section of the population.

A&E accounts for 27% of the NHS alcohol bill

COST BREAKDOWN OF ALCOHOL MISUSE



Previous studies

Green (1993). Collaboration between Psychiatry and A&E, identified 104 patients with alcohol problem over two year study period, 46% attended appointment with a consultant to discuss their drinking.

Smith et al (1996). Development of the Paddington Alcohol Test (PAT), introduction of “selective screening” – 26 presenting conditions, 335 patients with alcohol problems identified over a one year period and referred to the AHW

Wright et al (1998). 202 / 335 patients attended an AHW appointment, 35% contacted six-months later, 65% reported reduced alcohol consumption

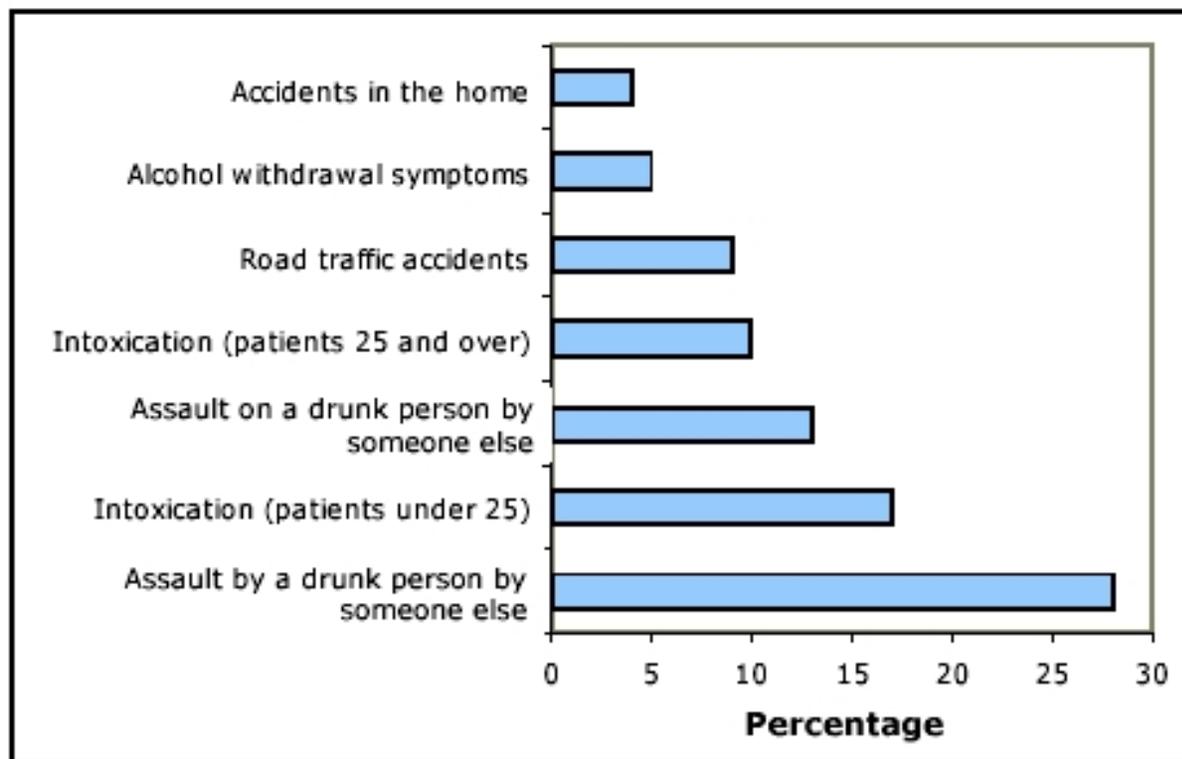
Huntley et al (2001). Audit improves screening rate, up to 80% patients screened, “Top ten” presenting conditions account for 77% of patients identified as hazardous drinkers.

The 'Top 10' A&E presenting conditions associated with alcohol misuse

1. **Fall**
2. **Collapse**
3. **Head Injury**
4. **Assault**
5. **Accident**
6. **Non-Specific G.I.**
7. **“Unwell”**
8. **Psychiatric**
9. **Cardiac**
10. **Repeat Attendee**

Alcohol related presentations

PERCENTAGE OF A&E STAFF IN ENGLAND RANKING VARIOUS REASONS AS AMONG THE TOP 5 CAUSES OF ALCOHOL-RELATED ATTENDANCE



Source: MORI and Health Development Agency (2002)

The Paddington Alcohol Test

A brief instrument that measures quantity / frequency of consumption.

Designed for use in busy A&E settings.

PADDINGTON ALCOHOL TEST (PAT)
2004

PATIENT IDENTIFICATION STICKER:

Circle number(s) - for specific trigger(s); consider for ALL the TOP 10.

1. **FALL** (including trip) 2. **COLLAPSE** (i. fits) 3. **HEAD INJURY** (i. facial) 4. **ASSAULT**
5. **ACCIDENT** (i. Burn, RTA) 6. **UNWELL** (i. Request detox / help, self neglect) 7. **NON-SPECIFIC G.I.**
8. **PSYCHIATRIC** 9. **CARDIAC** (i. Chest pain) 10. **REPEAT ATTENDER** Other (specify) :- _____

After dealing with patient's 'agenda,' i.e. patient's reason for attendance: -

1 "We routinely ask all patients in A&E if they drink alcohol – do you drink?" YES > 2. (No)

2 "Quite a number of people have times when they drink more than usual; what is the most you will drink in any one day?" (Pub measures in brackets; home measures often x3!)

Beer/Lager/cider	__ Pints (2)	__ Cans (1.5)	total Units/day =	<div style="border: 1px solid black; width: 40px; height: 40px;"></div>
Strong Beer/Lager/cider	__ Pints (5)	__ Cans (4)		
Wine	__ Glasses (1.5)	__ Bottles (9)		
Fortified Wine (Sherry, Martini)	__ Glasses (1)	__ Bottles (12)		
Spirits (Gin, Whisky, Vodka)	__ Singles (1)	__ Bottles (30)		

3 If this is more than 8 units/day for a man, or 6 units/day for a woman, "does this happen...."

: Everyday? = PAT +ve Dependent Drinker Y/N (? *Fabrinex*)

: At least once a month? = PAT +ve Hazardous Drinker Y/N

4 "Do you feel your current attendance is related to alcohol?" YES = PAT +ve No = PAT -ve

If PAT +ve "We gently advise you this drinking is harming your health".
"Would you like to see our Health Worker?" YES / NO - give leaflet

The FAST alcohol screening test

For the following questions please circle the answer which best applies.

1 drink = 1/2 pint of beer or 1 glass of wine or 1 single spirits

1 MEN: How often do you have EIGHT or more drinks on one occasion?
WOMEN: How often do you have SIX or more drinks on one occasion?

0	1	2	3	4
Never	Less than monthly	Monthly	Weekly	Daily or almost daily

2 How often during the last year have you been unable to remember what happened the night before because you had been drinking?

0	1	2	3	4
Never	Less than monthly	Monthly	Weekly	Daily or almost daily

3 How often during the last year have you failed to do what was normally expected of you because of drinking?

0	1	2	3	4
Never	Less than monthly	Monthly	Weekly	Daily or almost daily

4 In the last year has a relative or friend, or a doctor or other health worker been concerned about your drinking or suggested you cut down?

0	2	4
No	Yes, on one occasion	Yes, on more than one occasion

AUDIT-C

Please circle the answer that is correct for you.

1. How often do you have a drink containing alcohol?					SCORE
Never (0)	Monthly or less (1)	Two to four times a month (2)	Two to three times per week (3)	Four or more times a week (4)	_____
2. How many drinks containing alcohol do you have on a typical day when you are drinking?					
1 or 2 (0)	3 or 4 (1)	5 or 6 (2)	7 to 9 (3)	10 or more (4)	_____
3. How often do you have six or more drinks on one occasion?					
Never (0)	Less than Monthly (1)	Monthly (2)	Two to three times per week (3)	Four or more times a week (4)	_____
TOTAL SCORE					
Add the number for each question to get your total score.					_____

Maximum score is 12. A score of ≥ 4 identifies 86% of men who report drinking above recommended levels or meets criteria for alcohol use disorders. A score of > 2 identifies 84% of women who report hazardous drinking or alcohol use disorders.

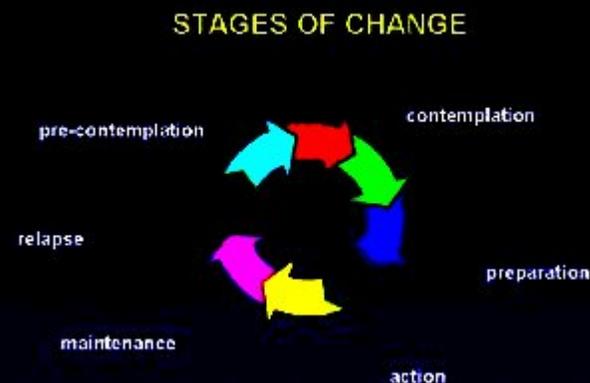
The briefest of brief interventions?

4

"Do you feel your current attendance is related to alcohol?" YES = PAT+ve No = PAT -ve

Drawing the patients attention to the possible relationship between their presentation to the A&E and their alcohol consumption.

This could help move the patient towards the ***Contemplation*** stage of change.



Putting alcohol on the Agenda – The Mary's Model

- 1 hour Education Alcohol Misuse
 - early detection in natural history
 - How to use the PAT, role of AHW
- All “top ten” presentations screened with PAT
- All PAT +ve patients offered an appointment with the AHW



THE PATIENT

Attends A&E

DETECTION
by Dr/Nr

PATIENT
Accepts Problem

Communication
&
Alcohol

REFERRAL
by Dr/Nr
& Information

COUNSELLING
by A.H.W.

PATIENT
Desires Help

A.H.W.
Gives Feedback

Changes
PATIENT ←
Lifestyle

REDUCE project – 2001/2003

- **AIM:** Examine the effect of referral to an AHW on levels of alcohol consumption.
- **DESIGN:** Single blind *pragmatic* RCT
- **METHOD:** Patients screened in the A&E. Hazardous drinkers allocated to experimental or control conditions. Follow-up at six and twelve months.

Experimental & Control treatments

All participants were given a copy of the HEA booklet 'Think about drink'.

Participants in the Experimental Treatment (ET) were made an appointment with the AHW.

Control Treatment (CT) participants did not receive this appointment.

Study Measures

Alcohol consumption

Screening using the PAT occurred at baseline for all participants. At follow-up we employed the Form 90 AQ, Steady Pattern Grid and the PAT.

Psychiatric Morbidity & Quality of Life

An indication of psychiatric caseness was assessed at six months using the GHQ-12. At twelve months we used the EQ-5D to gauge quality of life.

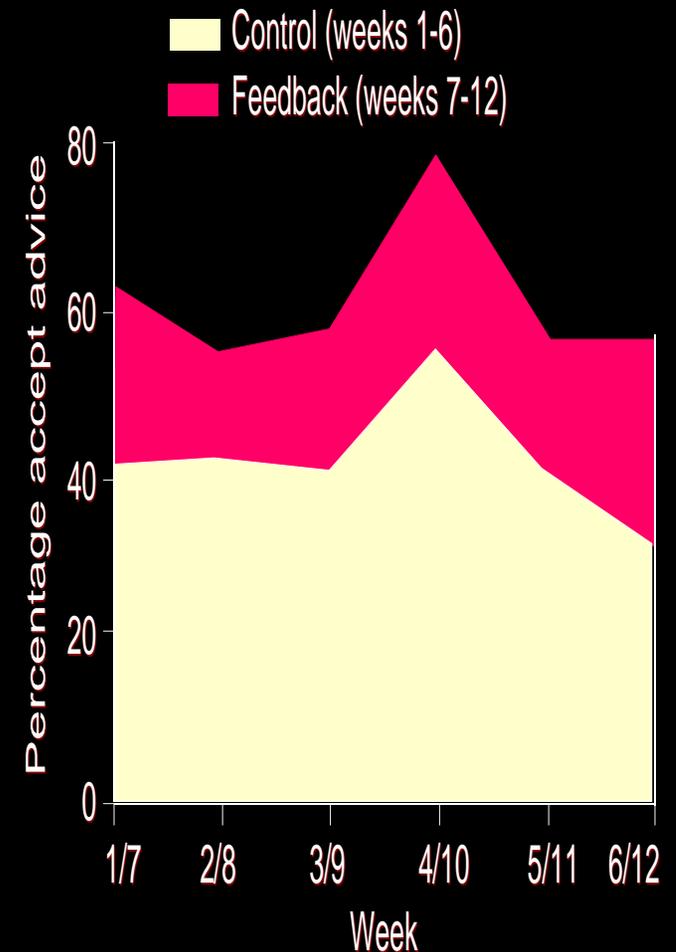
A&E attendance

Data extracted from routine hospital records

Encouraging participation

During the study we noticed that the way in which results of the screening test were presented to patients influenced the proportion that were willing to accept advice

By emphasising a link between the results and potential problems later in life, we increased the uptake of advice by about 15%



Health consequences feedback

If PAT -ve

Simply mark p.3 A&E notes.

If PAT +ve

"We gently advise you this drinking is harming your health". (Witness in A&E!)

(Lives in our area)

"Would you like to see our Health Worker"? YES / NO-give leaflet

This is an example of how research can be integrated into everyday clinical practice.

Brief intervention only works if patients are willing to accept it.

Our Sample

5240 patients screened
1167 were hazardous drinkers
763 accepted advice
599 gave consent & were randomised:

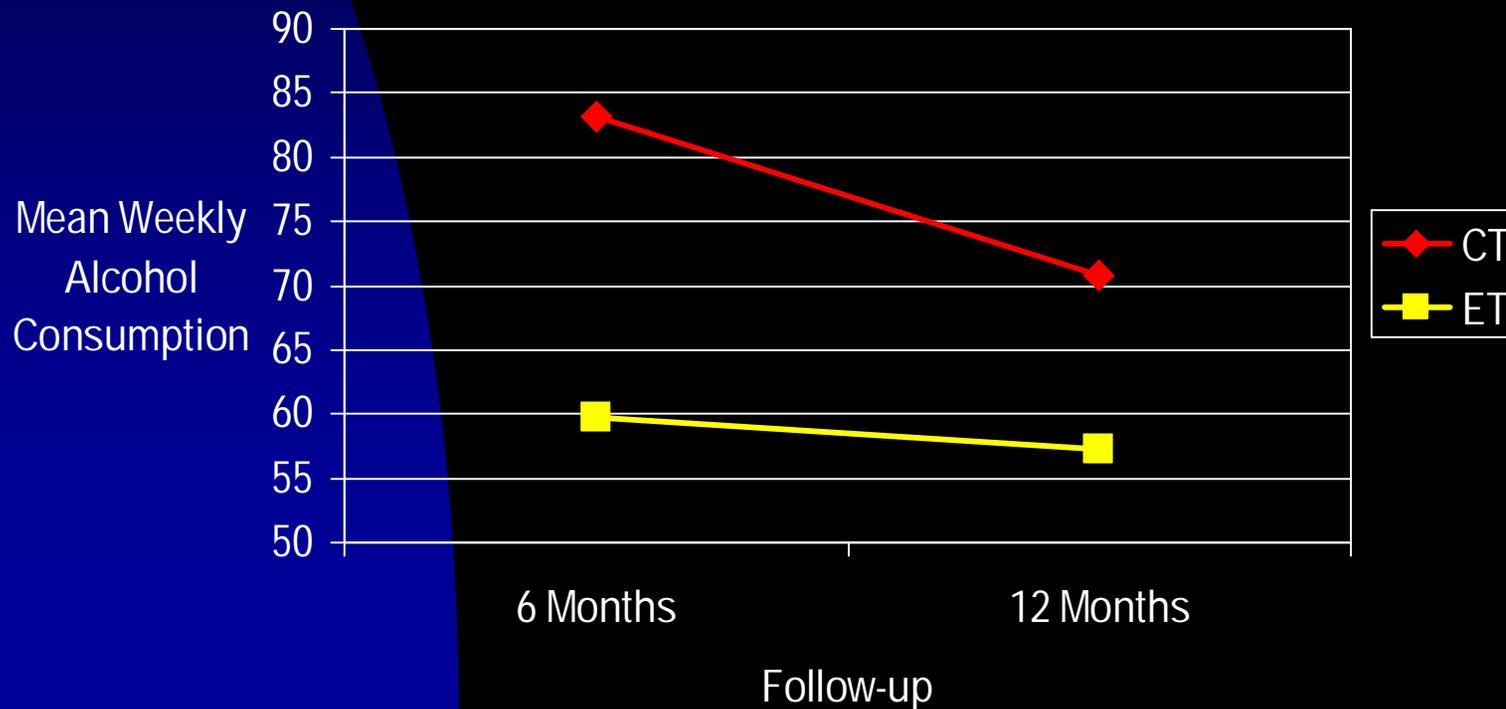
287 Experimental condition

312 Control condition

There was a **26%** loss to follow-up at 12 months

Results – Alcohol Consumption

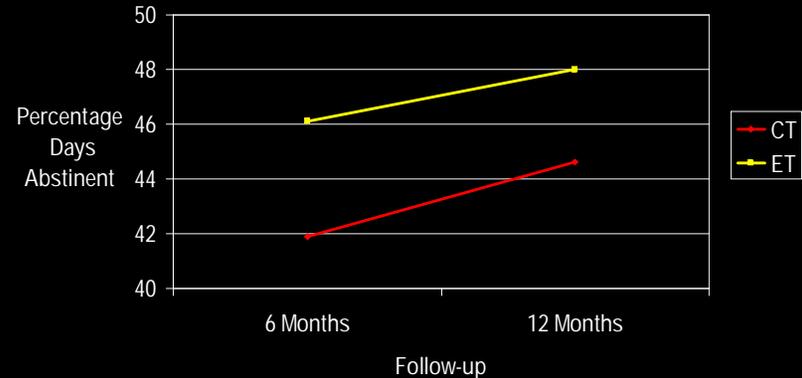
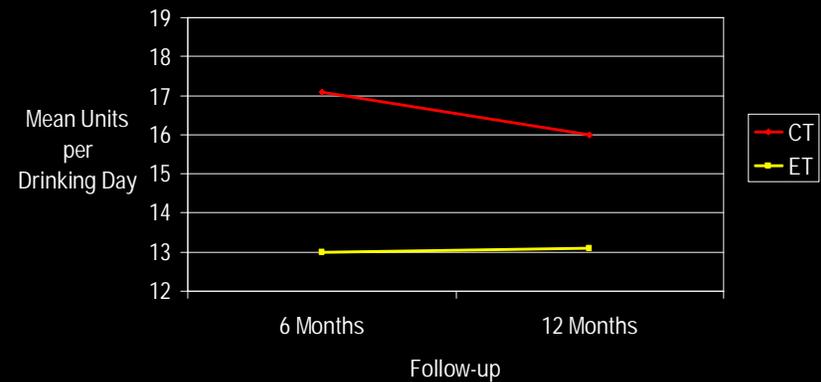
Six months after randomisation participants referred to the AHW had ***significantly lower*** levels of weekly alcohol consumption (59 vs. 83 units / week) than the control group.



Other measures of alcohol consumption

There were significant differences between groups at 6 and 12 months on daily alcohol consumption

No significant differences were observed on the percentage of days abstinent



Results – Other Measures

ET participants were also less likely to re-attend the A&E in the one year following their initial presentation than CT (1.2 visits vs. 1.7, $p < 0.05$, NNT=2)

However we detected no significant differences between the groups on GHQ-12 or EQ-5D.

Cost / Benefit

Screening and referral to the AHW has a cost, but this should be offset against the savings gained by reducing attendance:

For every 1000 patients screened, costs are approximately £2500 (including the cost of the AHW for those referred), and savings of £4000.

Net: £1500 savings

Limitations of the study

This was a pragmatic trial – we were unable to collect comprehensive data at baseline, and so were unable to measure the *change* in our primary and secondary outcome measures

All study participants received as self-help booklet; a “no treatment” control group was considered unethical

Low numbers of our ET group actually attended the AHW session

Conclusions

Screening and referral for brief intervention for alcohol misuse in an A&E is feasible and results in lower levels of alcohol consumption over the following 12 months.

Reduced alcohol consumption is associated with lower levels of reattendance in the department.

Reduced reattendance in the A&E offsets the costs of screening and providing brief intervention.

Discussion

“Choosing Health, 2004”: A health promoting NHS

Piloting approaches to targeted screening and brief intervention in both primary care and hospital settings, including A&E

NHS health professionals being able to identify problems with alcohol and deliver brief interventions in A&E settings