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Effectiveness of Brief Alcohol Intervention strategies

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Introduction

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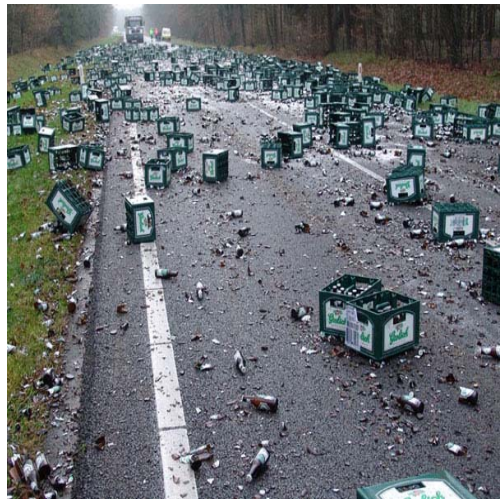
- Scope of alcohol harm
- Preventive paradox
- Response strategies
- Evidence of effectiveness
- Implementation issues
- Wider application



WHO Global Burden of Disease 2013

	Risk factor	DALYS (Millions)	1990 rank
	World		
1	High blood pressure	173	4
2	Tobacco smoking	156	3
3	Household air pollution	108	2
4	Diet low in fruit	104	7
5	**Alcohol use**	**97**	**8**
6	High body mass index	93	10
7	High fasting plasma glucose level	89	9
8	Childhood underweight	77	1
9	Exposure ambient particulate matter pollution	76	6
10	Physical inactivity	69	--

Murray et al. Measuring the Global Burden of Disease. NEJM 2013;369:448-57

Adult Alcohol consumption 2012

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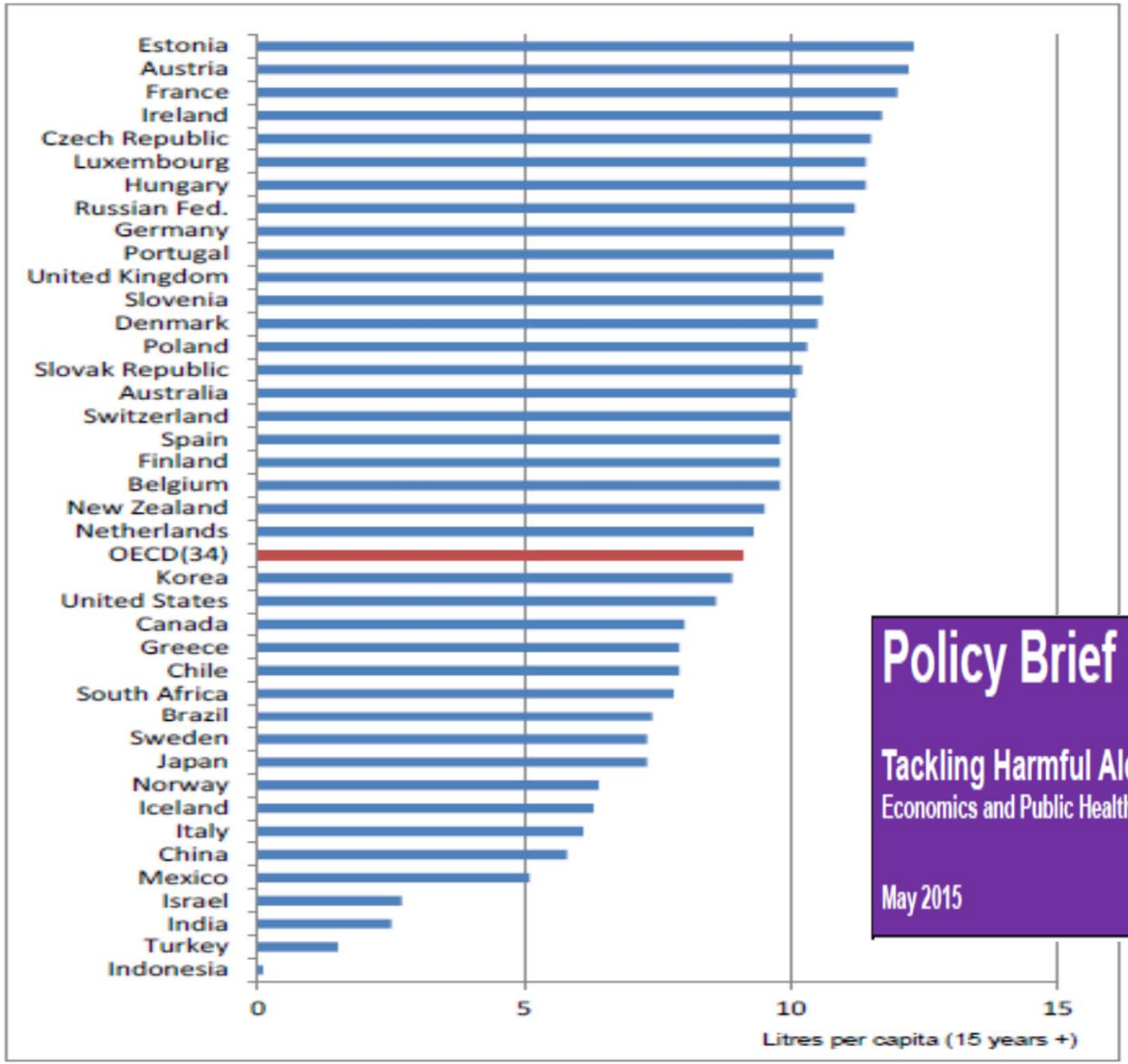

Policy Brief

Tackling Harmful Alcohol Use

Economics and Public Health Policy

May 2015

OECD

Directorate for Employment, Labour and Social Affairs

Share of alcohol consumed by the 20% of the population who drink the most (OECD 2015)

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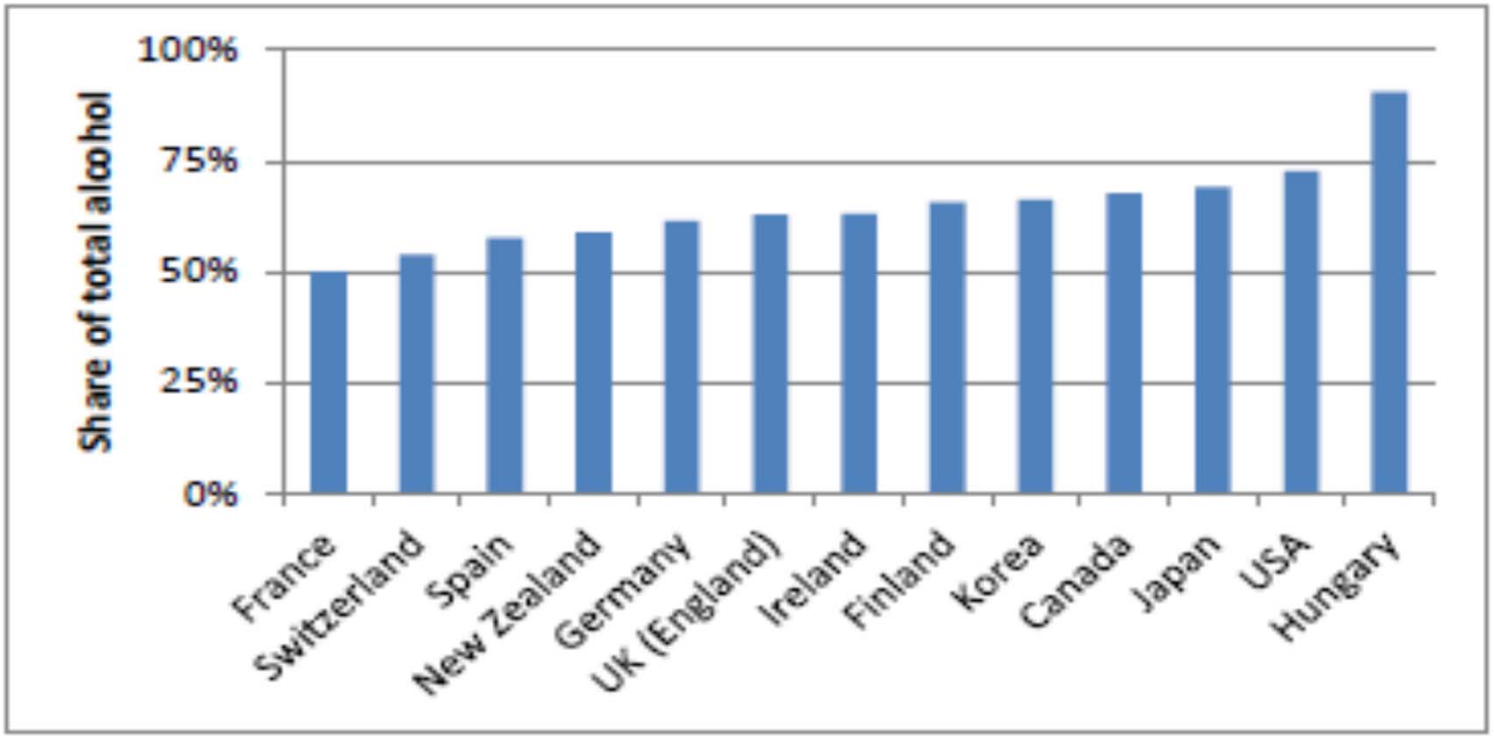

Alcohol can adversely affect all organs

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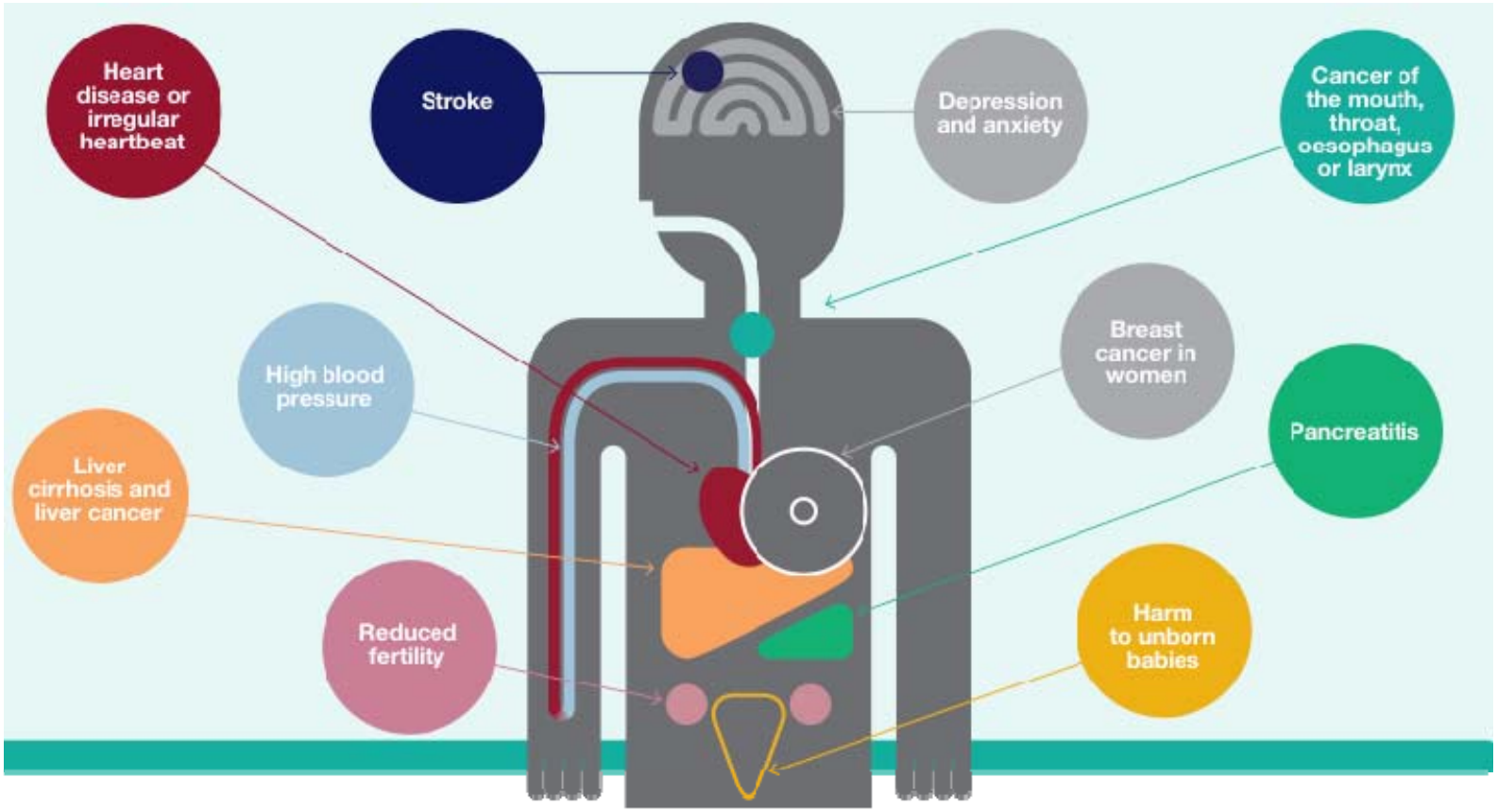

Alcohol is causally linked to over 60 disease conditions

Alcohol also affects all life stages

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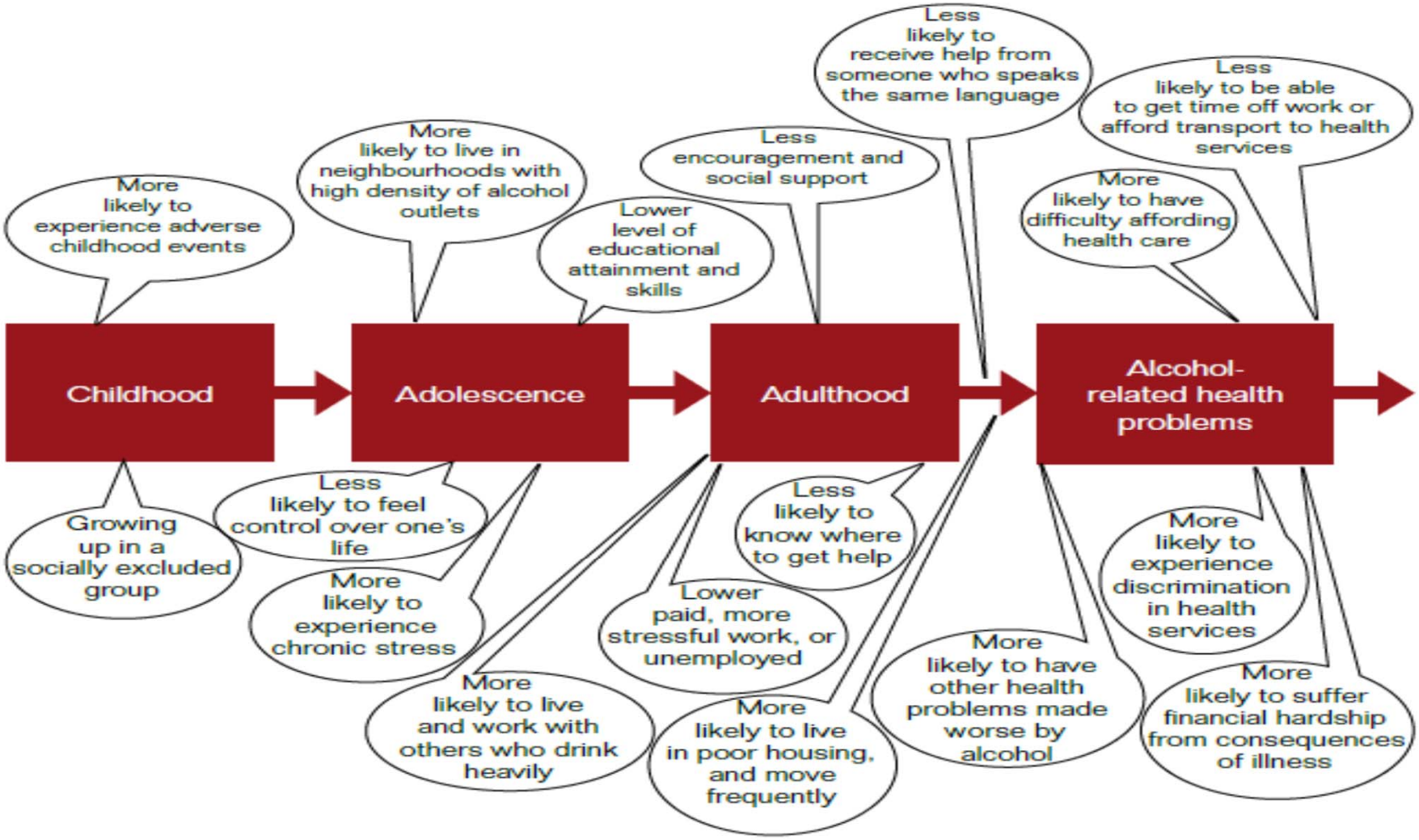
WHO Alcohol & Inequities report 2014



Impact on UK public services

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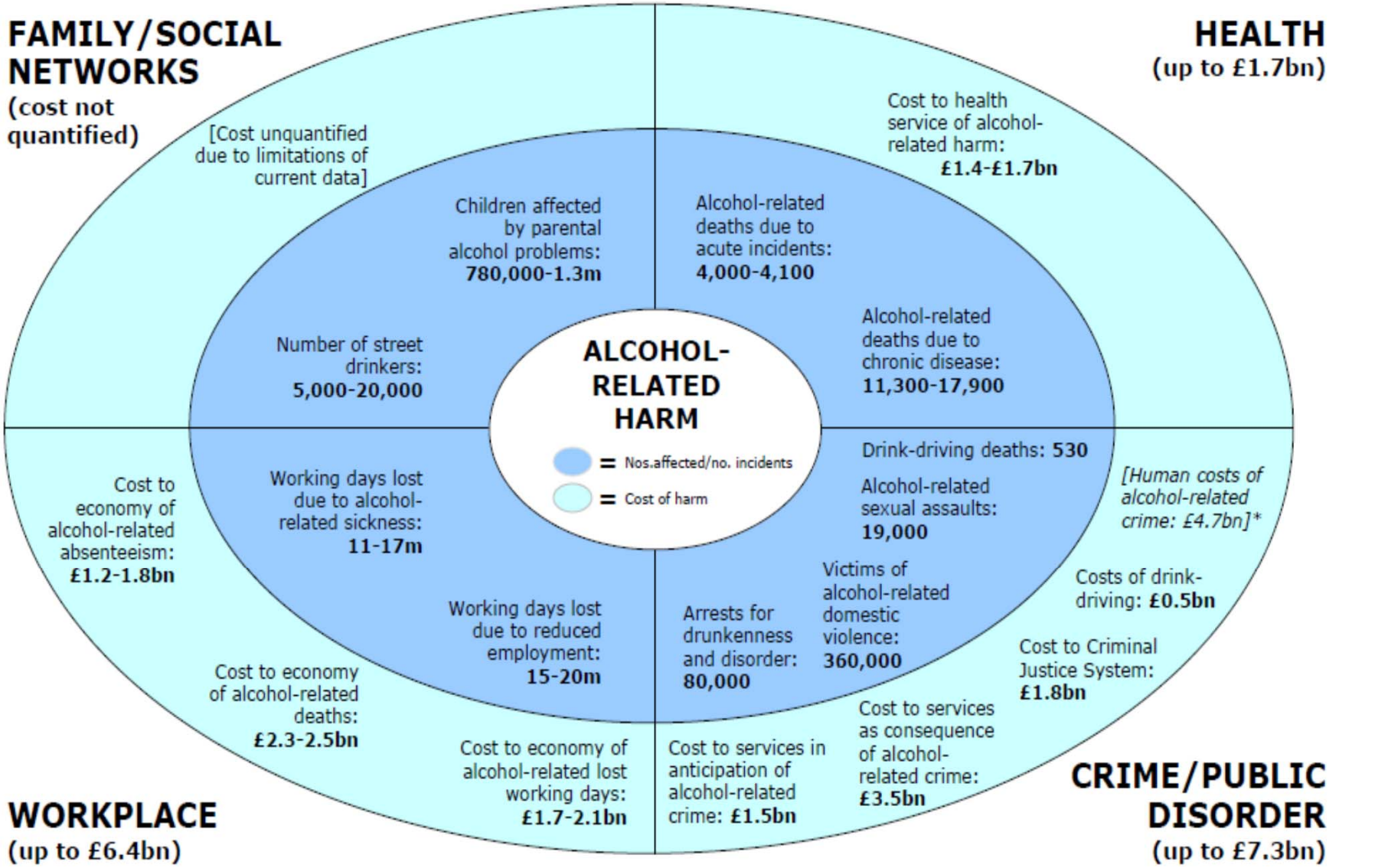
- 20% of PHC patients
- 70% of A&E visits - midnight to 5am
- 7-40% hospital admissions (non A&E)*
  - 7% planned
  - 25-40% acute/unplanned
- 37% AUD have mental health problems
- 63% of criminal justice cases
- 36-52% community pharmacy visitors**

* RCP 2001 Alcohol – can the NHS afford it? / ** Dhital 2007

Economic cost - £20B



Preventive Paradox

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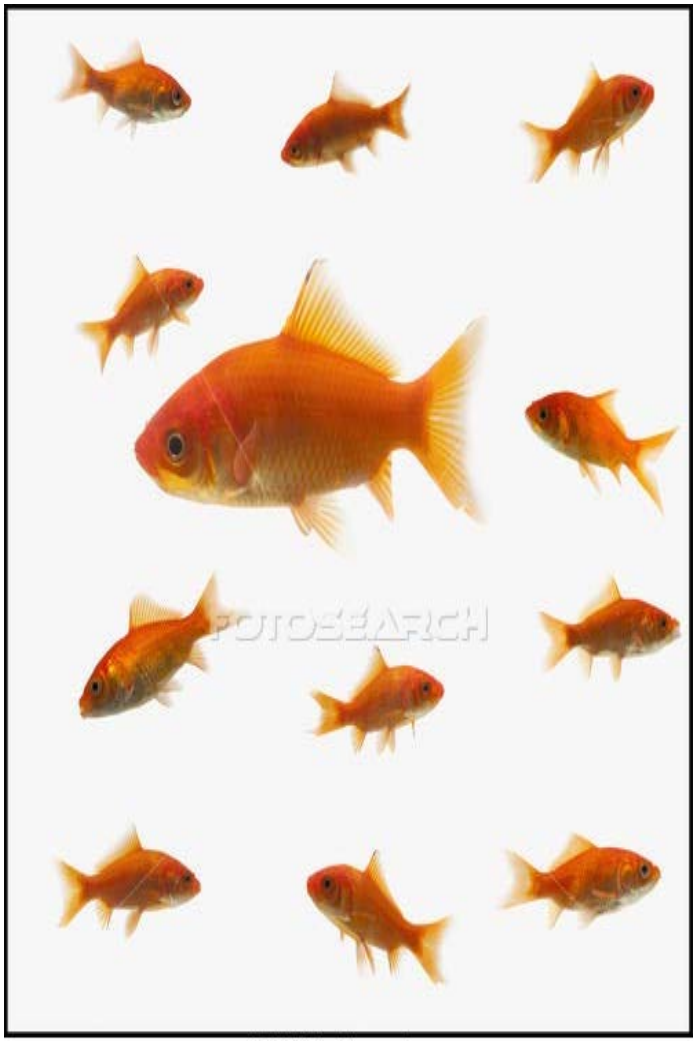

- Dependent 'alcoholic' drinkers are small in number (5%) but have intensive needs
- Heavy drinkers (20%) each have fewer problems but contribute most impact on a societal level - **maximum public health impact here**
- Moderate 'sensible' drinkers are the majority (60%) mainly use alcohol without problems but occasional binges can cause problems
- Non-drinkers (15%) include lifetime abstainers and ex-alcoholics

Prevention strategies

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- Primary prevention – strategies that aim to deter people from drinking heavily and delay young people from beginning to drink (whole population approaches, media campaigns, labelling)

- Secondary prevention – early identification of clinical risk or harm and intervention to modify behaviour

- Tertiary prevention – intervention that aims to slow or stop disease from progressing to a more advanced or irreparable stage

National Guidance

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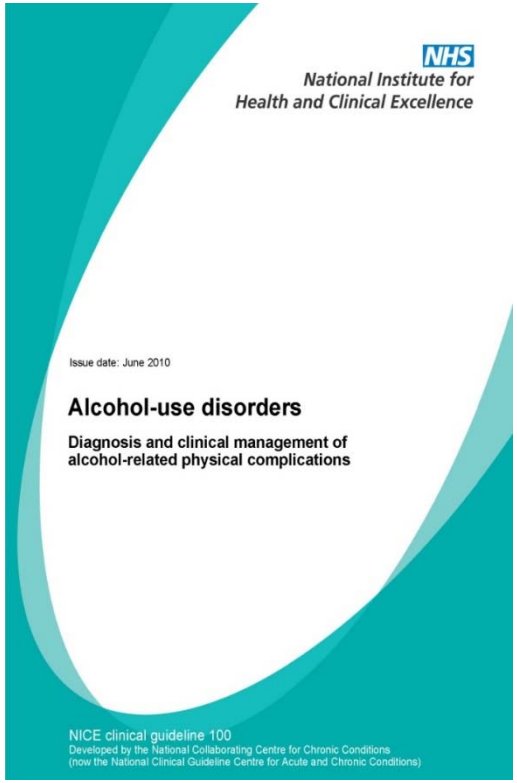
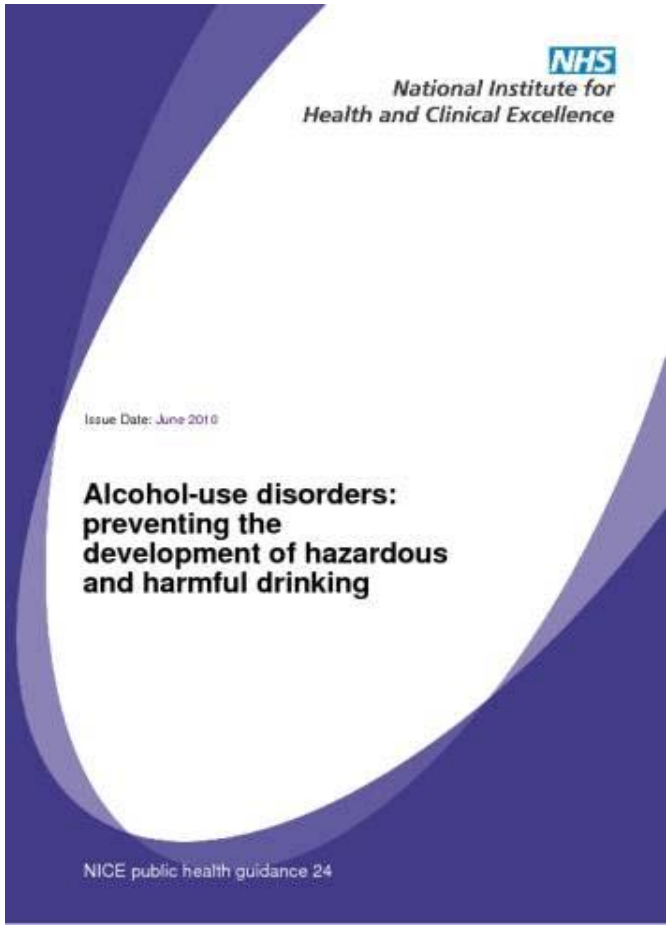
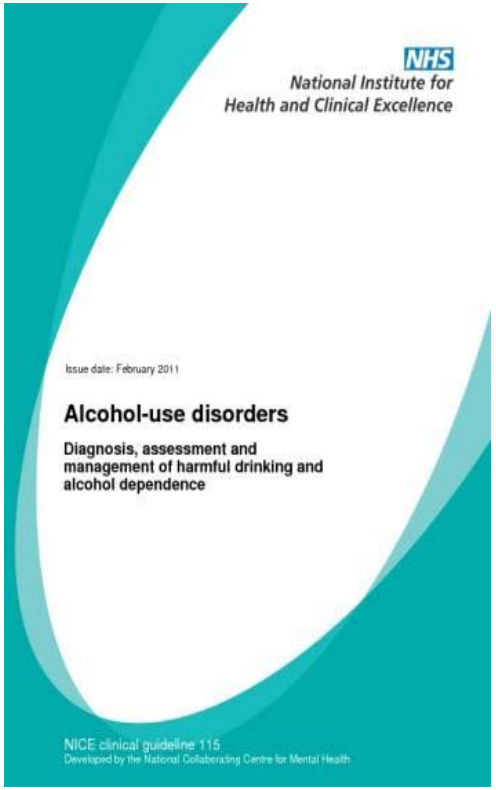
www.nice.org.uk/guidance/PH24







Recommendations on screening and brief alcohol intervention

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- Resources/training to enable brief intervention
- Screening to identify risk/harm (heavy drinking)
- Delivery of simple brief alcohol (advice) interventions
- Extended intervention (brief counselling) if appropriate
- Referral following specific assessment for dependence

What is the evidence base?

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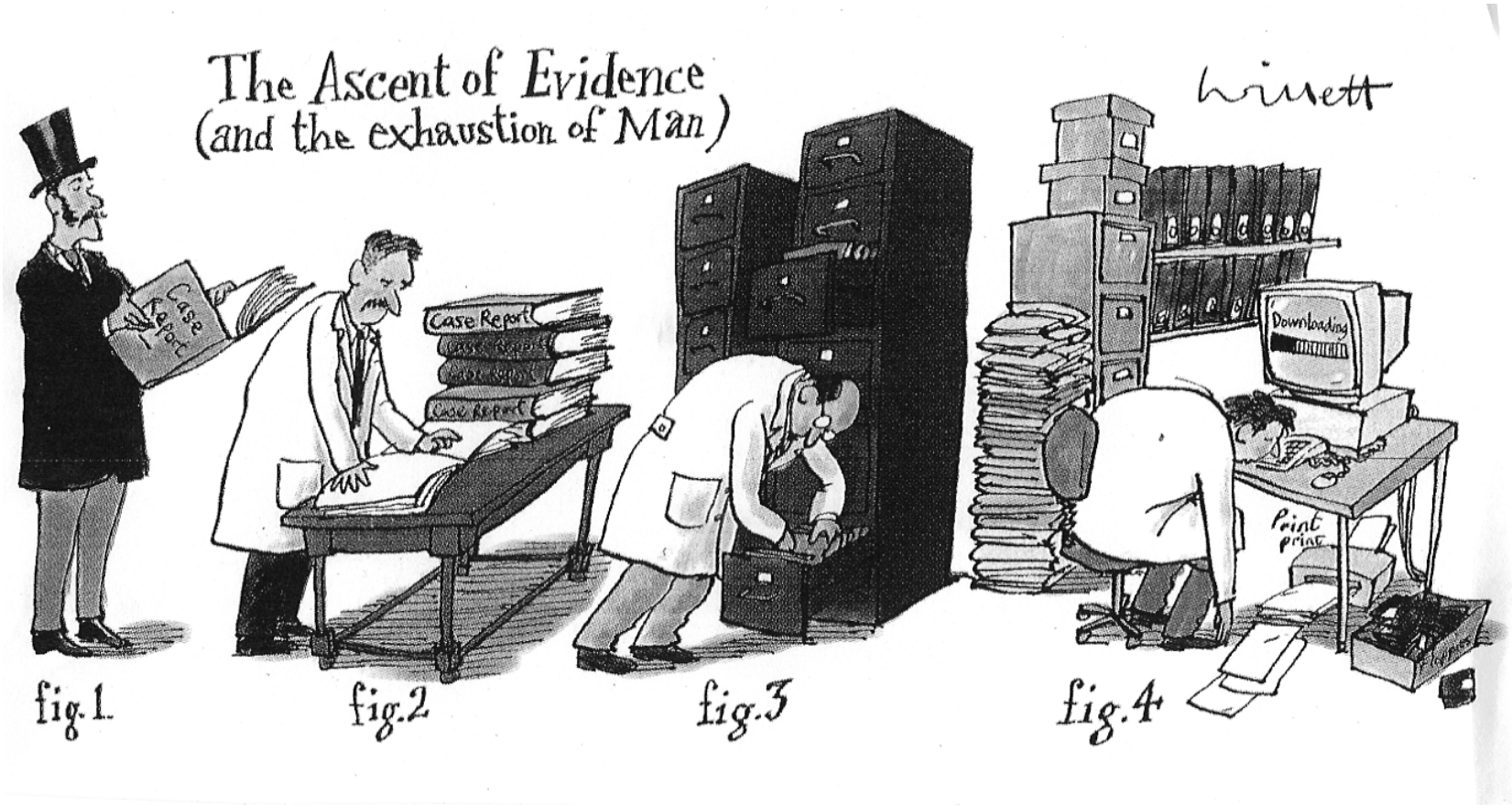

The evidence is weighty

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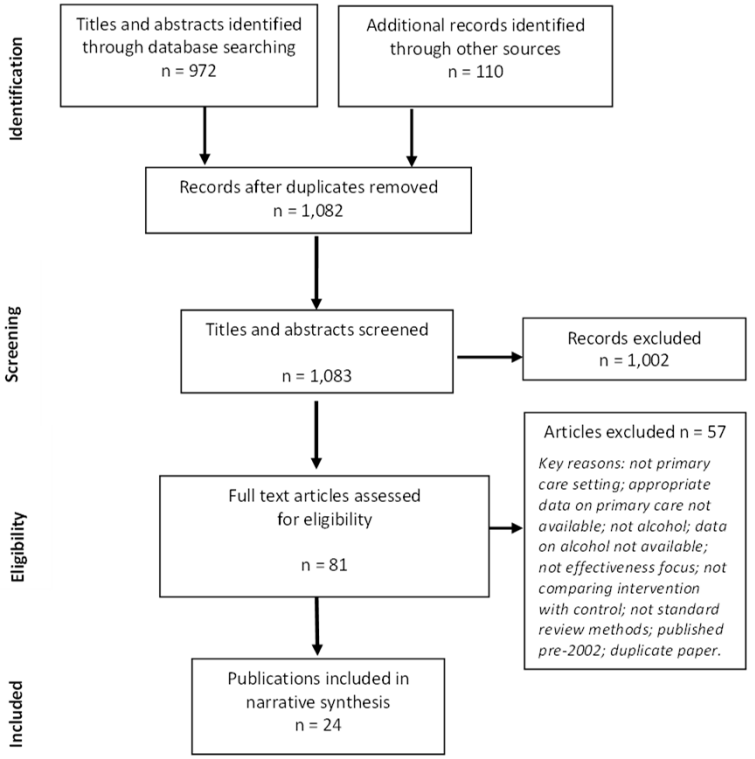
- Over 30 years of research on BI impact
- 24 systematic reviews covering >56 RCTs in primary care – Cochrane review 2007 (being updated)**
- Growing amount of work in other public health settings
- Consistently effective at reducing the quantity, frequency & intensity of drinking
- Longer input has no significant benefit over shorter input

Primary Care

- 24 eligible reviews.
- Results summary:
  - Reduces weekly consumption by 38g
  - 4-5 drinks per week
  - Can be delivered by a range of practitioners
  - Short, simple advice as effective as longer, more intensive counselling.
  - For every 8-12 people receiving advice, one will change (NNT)
- Evidence gaps:
  - Ethnic / geographic bias.
  - Gender, particularly pregnant women.
  - Younger and older drinkers.
  - 'Control' question; active ingredients; longer-term effectiveness.



O`Donnell et al. (2014) The Impact of Brief Alcohol Interventions in Primary Healthcare: A Systematic Review of Reviews. Alcohol & Alcoholism; Vol. 49, No. 1, pp. 66–7

Wider health impacts

- Other positive outcomes include:
  - Reduction in alcohol-related problems;
  - Reduced health-care utilization;
  - Improved mortality outcomes.

- A reduction from 50 to 42 units/week will reduce the relative risk of alcohol-related conditions by 14% and the absolute risk of lifetime alcohol-related death by 20% (Anderson 2008).

Cost-effectiveness

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- Estimated quality-adjusted life-year (QALY) gain associated with BI ranges from 4-19 per 1000 (Anderson 2009)

- BI based on new patient registrations and delivered by a practice nurse provides cost savings to the health care system of £120m over 30 years and health gains over the same period amount to 32,000 QALYs, at £6900 per QALY gained (Purshouse et al 2009).

- Doctor-delivered BI would be more expensive but result in incremental health gains equivalent to 92,000 QALYs, at £1175 per QALY gained (Purshouse et al 2009).

For Philippe - Cochrane update

- 2007 review: 29 included PHC trials
  - (22 in primary meta-analysis)
- 2015 review: 68 trials (old & new)
  - 3 extended input vs BI; 65 BI vs controls
- Of the 65 BI trials in PHC
  - 46 @ 12M follow-up; 6 @ 6M; 13 shorter/pilots
  - 33 are likely to be in primary meta-analysis
    - Focus on consumption g/week (17 old; 16 new trials)
- Results basically confirmed
  - slightly smaller effect sizes
  - robust to extensive sensitivity analyses

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Effectiveness of brief alcohol interventions in primary care populations (Review)

Kaner EFS, Dickinson HO, Beyer F, Pienaar E, Campbell F, Schlesinger C, Heather N, Saunders J, Burnand B

THE COCHRANE COLLABORATION®

This is a reprint of a Cochrane review, prepared and maintained by The Cochrane Collaboration and published in *The Cochrane Library* 2008, Issue 1

http://www.thecochranelibrary.com

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Effectiveness of brief alcohol interventions in primary care populations (Review) 1
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Implementation issues

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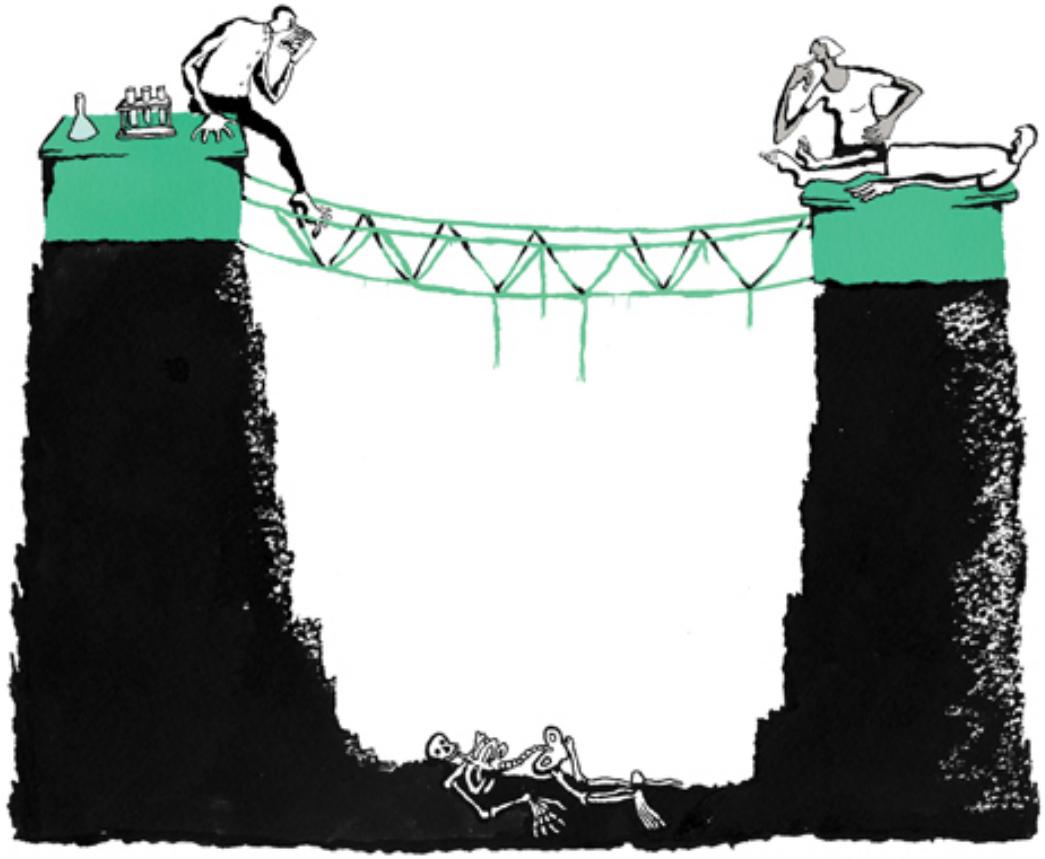

Low levels of routine delivery

- 1 in 20 risky drinkers in primary care are screened or offered brief advice.
- Heavy reliance on recording consumption (Khadjesari et al, 2013)
- Not much follow through
- Even where BI is delivered, quality of content is unclear.

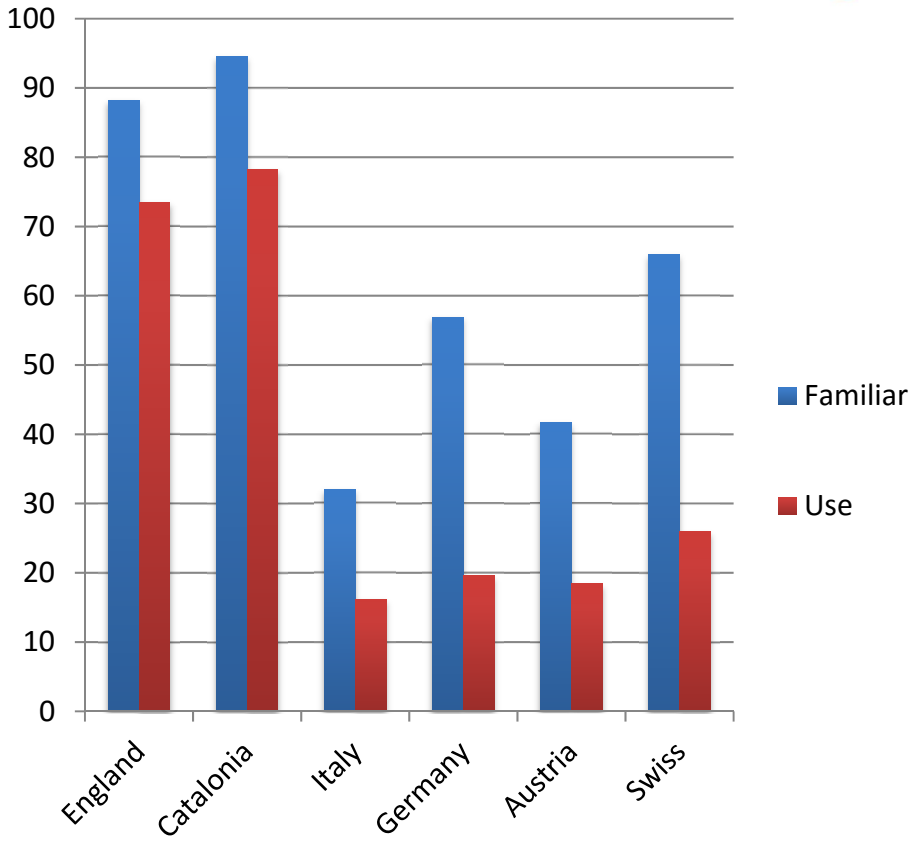

Fig 2: Are GPs familiar with and use standardised alcohol screening tools? (www.amphoraproject.net)

European survey of barriers

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Reason	N of responses	Percent of cases
Time constraints	209	70.6
Risk of upsetting the patient	147	49.7
Lack of financial incentives	87	29.4
Lack of services to refer to	67	22.6
Lack of training	60	20.3

Table 2: Main barriers to alcohol screening in primary care (www.amphoraproject.net)

Beyond primary care

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- Opportunities to tackle risky drinking in A&E, schools, workplace, CJS, social services

- Potential for new modalities (e-Health; m-Health) to support intervention

SIPS junior

www.sipsjunior.net

BISTAIRS

Co-funded by the Health Programme of the European Union

A&E

- 34 primary studies (all RCTs)
  - 12799 patients.
  - 29 face-to-face interventions; 6 computer- or mobile phone-based technology.
- Meta-analysis:
  - Primary outcome - change in consumption (drinks/week or month or day, number of binges, exceeding recommended levels) at 3, 6, 12M
  - Small but significant effects favoured BI in 7 out of 12 comparisons (SMD: 0.09 (0.03-0.15) - 0.16 (0.03-0.29))
  - Highest effects for drinks/day or occasion.
- Conclusions:
  - BI in A&E can be effective in reducing alcohol consumption, particularly high intensity drinking.

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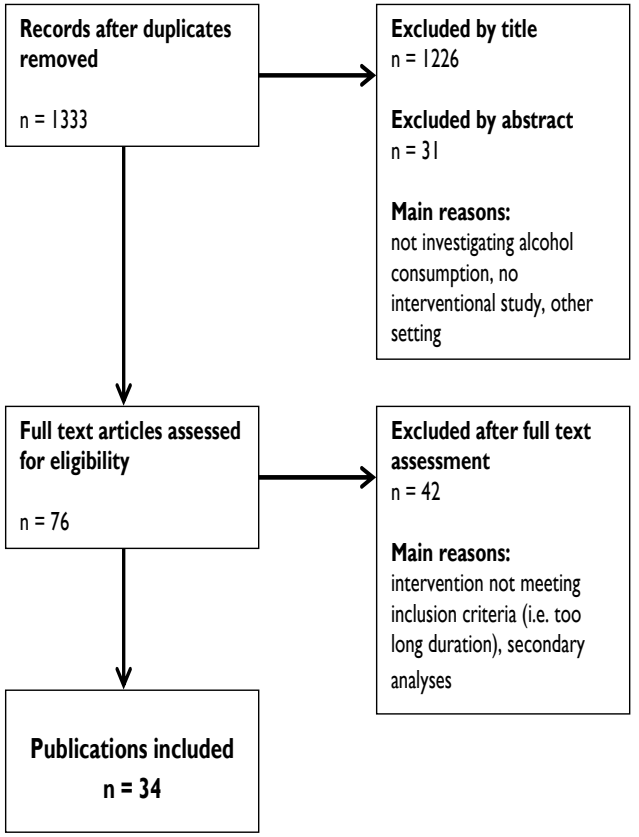
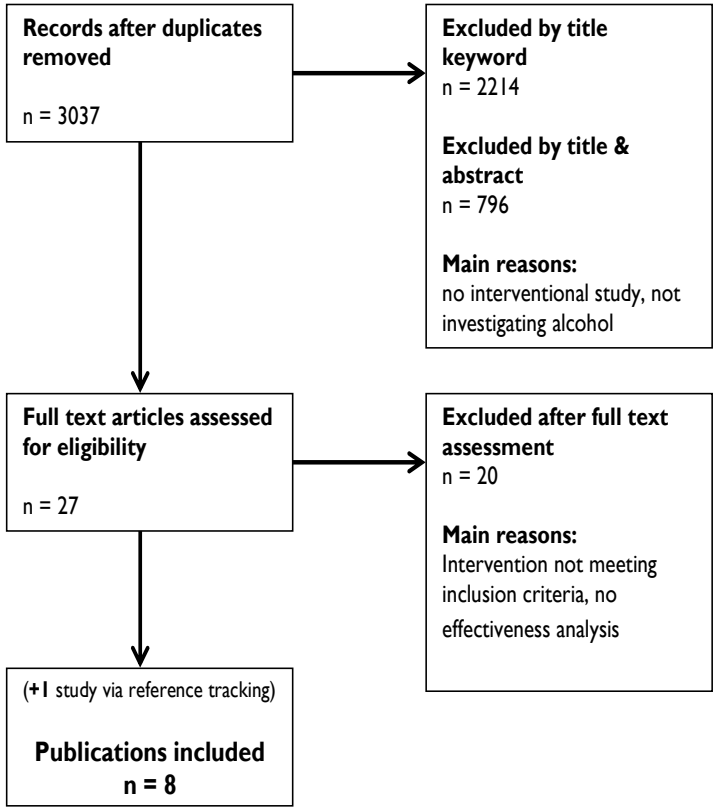


Workplace health

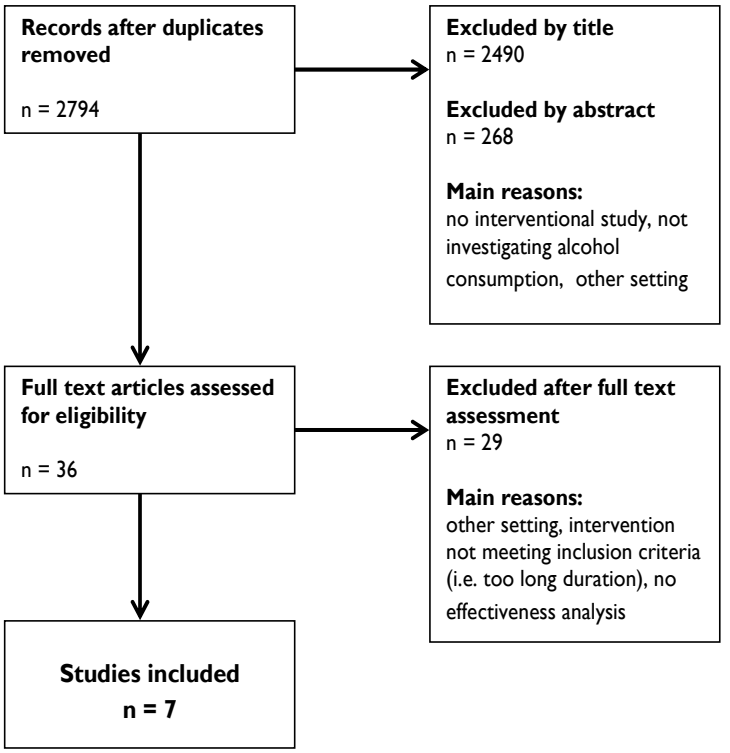
- 8 primary studies (RCTs)
- Majority (7/8) showed significant impact on alcohol consumption.
- However:
  - Much heterogeneity
  - Mainly involved large companies; mainly from USA.
  - Various research barriers, e.g. recruitment, protecting privacy, preventing group contamination.
  - Limited evidence on long-term impact.



Schulte et al. (2014) Alcohol screening and brief intervention in workplace settings and social services: A comparison of literature Front. Psychiatry Frontiers.

Social care

- 7 primary studies (controlled trials)
- Highly heterogeneous evidence base:
  - Target groups (eg homeless people, clients of community-based drug-counselling centres, driving offenders, violent offenders).
  - Outcome criteria (measures).
  - Intervention intensity.
  - Types of settings / definitions of social services.
- Inconclusive evidence:
  - Both control and intervention groups often achieved reduction.



Schmidt et al 2014) Brief Alcohol Interventions in Social Service and Criminal Justice Settings: A Critical Commentary. Br. J. Soc. Work

Conclusions

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- Brief alcohol interventions are effective and cost-effective
- Can be delivered by doctors and nurses in primary care
- Growing evidence in other health/social care settings
- But not often delivered in practice
- Are practitioners working against cultural issues
- Do we need more policy-levers to help?

Any questions?

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