

How can we reduce the burden?

Michael Marmot
Director International Institute for Society and
Health
UCL

RCP
13th November 2007

Increased mortality from alcohol related diseases UK

- Alcohol related deaths almost doubled between 1991 and 2004 (from 4144 to 8221)
- Alcohol related deaths increased by 18% from 2002 to 2005 in UK

ONS 2007

National Statistics definition of alcohol-related deaths

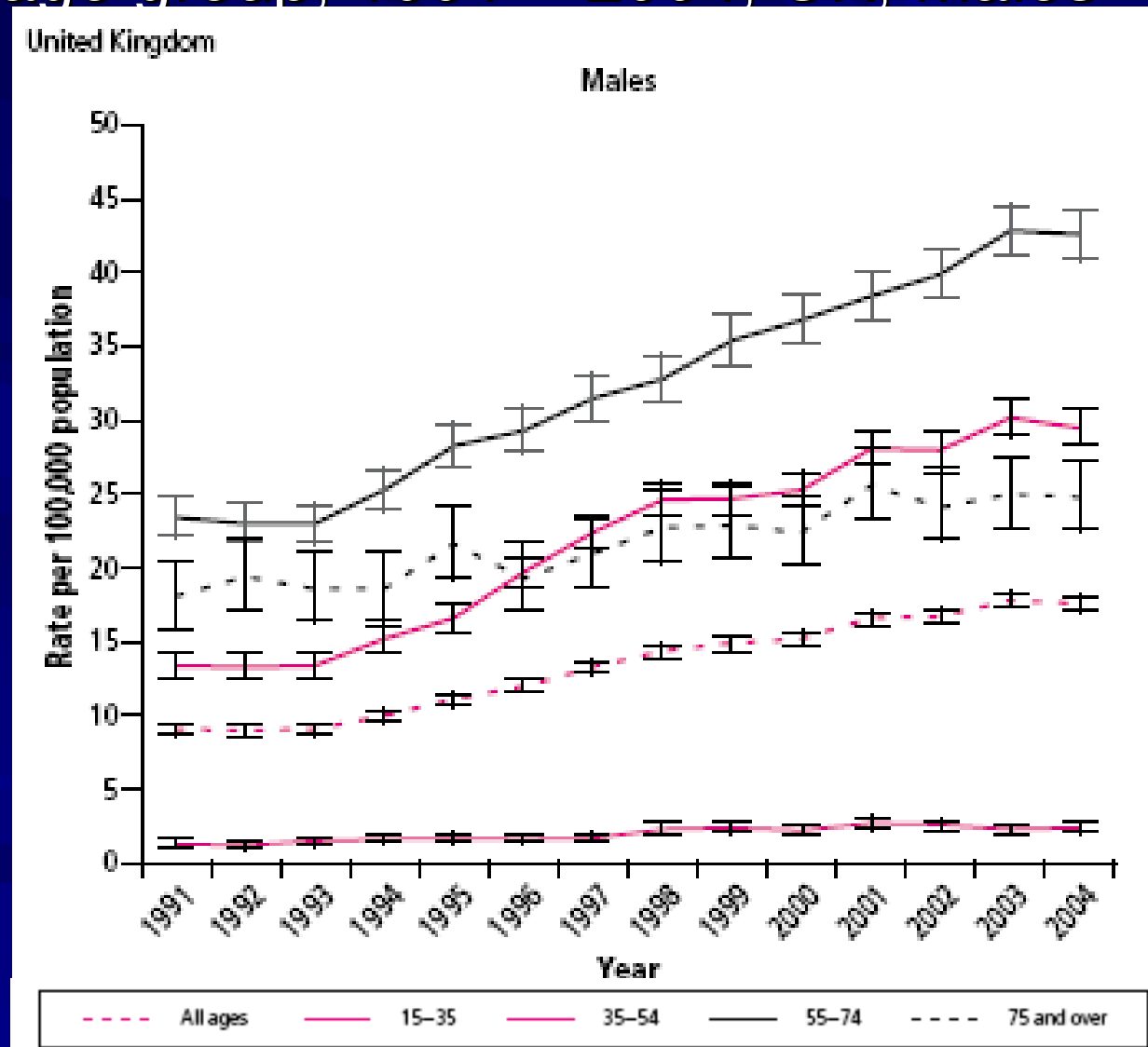
International Classification of Diseases, Ninth Revision

291	Alcoholic psychoses
303	Alcohol dependence syndrome
305.0	Non-dependent abuse of alcohol
425.5	Alcoholic cardiomyopathy
571	Chronic liver disease and cirrhosis (Excluding 571.6 – Biliary cirrhosis)
E860	Accidental poisoning by alcohol

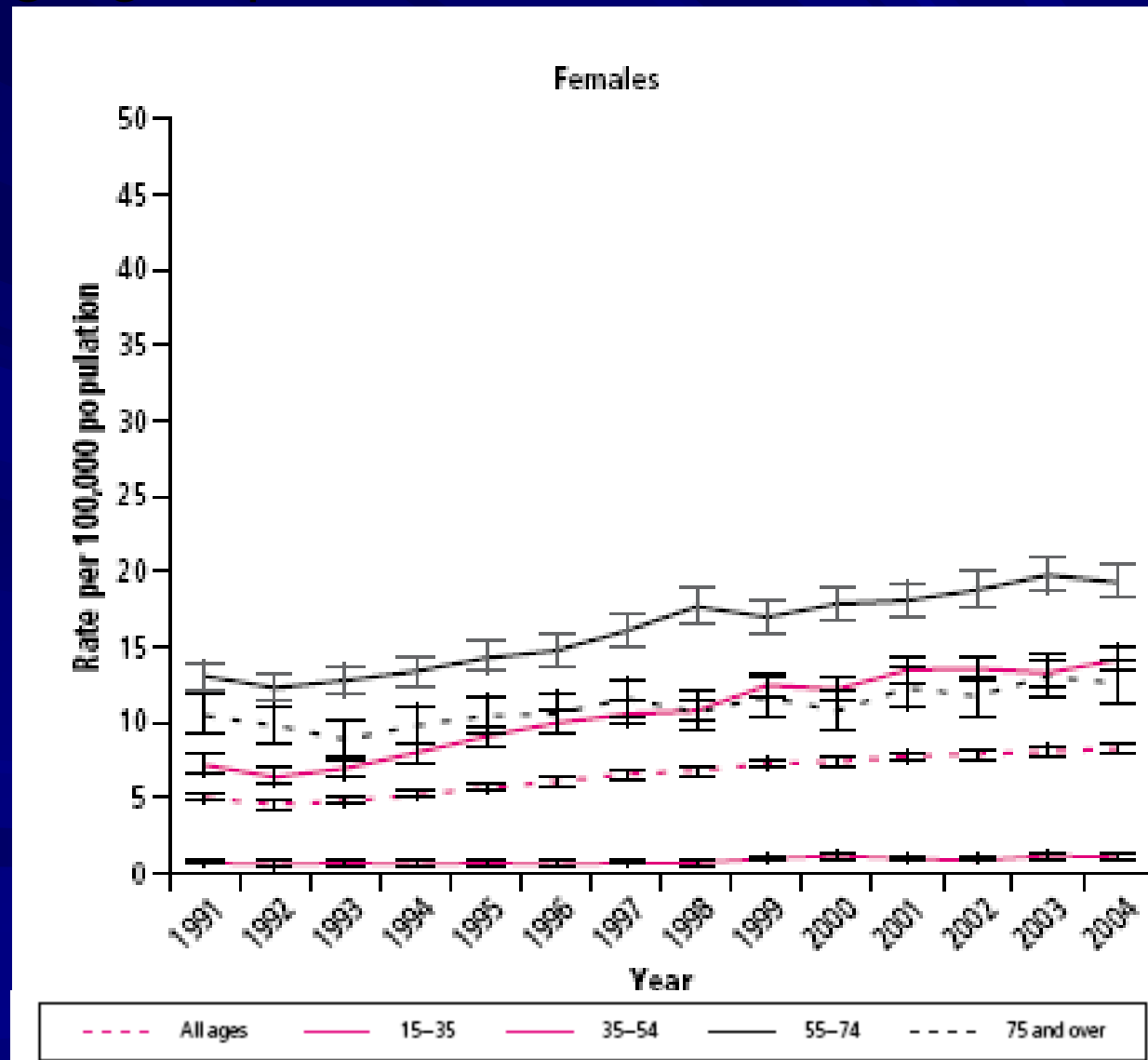
International Classification of Diseases, Tenth Revision

F10	Mental and behavioural disorders due to use of alcohol
G31.2	Degeneration of nervous system due to alcohol
G62.1	Alcoholic polyneuropathy
I42.6	Alcoholic cardiomyopathy
K29.2	Alcoholic gastritis
K70	Alcoholic liver disease
K73	Chronic hepatitis, not elsewhere classified
K74	Fibrosis and cirrhosis of liver (Excluding K74.3–K74.5 – Biliary cirrhosis)
K86.0	Alcohol induced chronic pancreatitis
X45	Accidental poisoning by and exposure to alcohol
X65	Intentional self-poisoning by and exposure to alcohol
Y15	Unintentional poisoning by and exposure to alcohol, undetermined intent

Age-standardised alcohol-related death rates by sex and age group, 1991 – 2004, UK, males



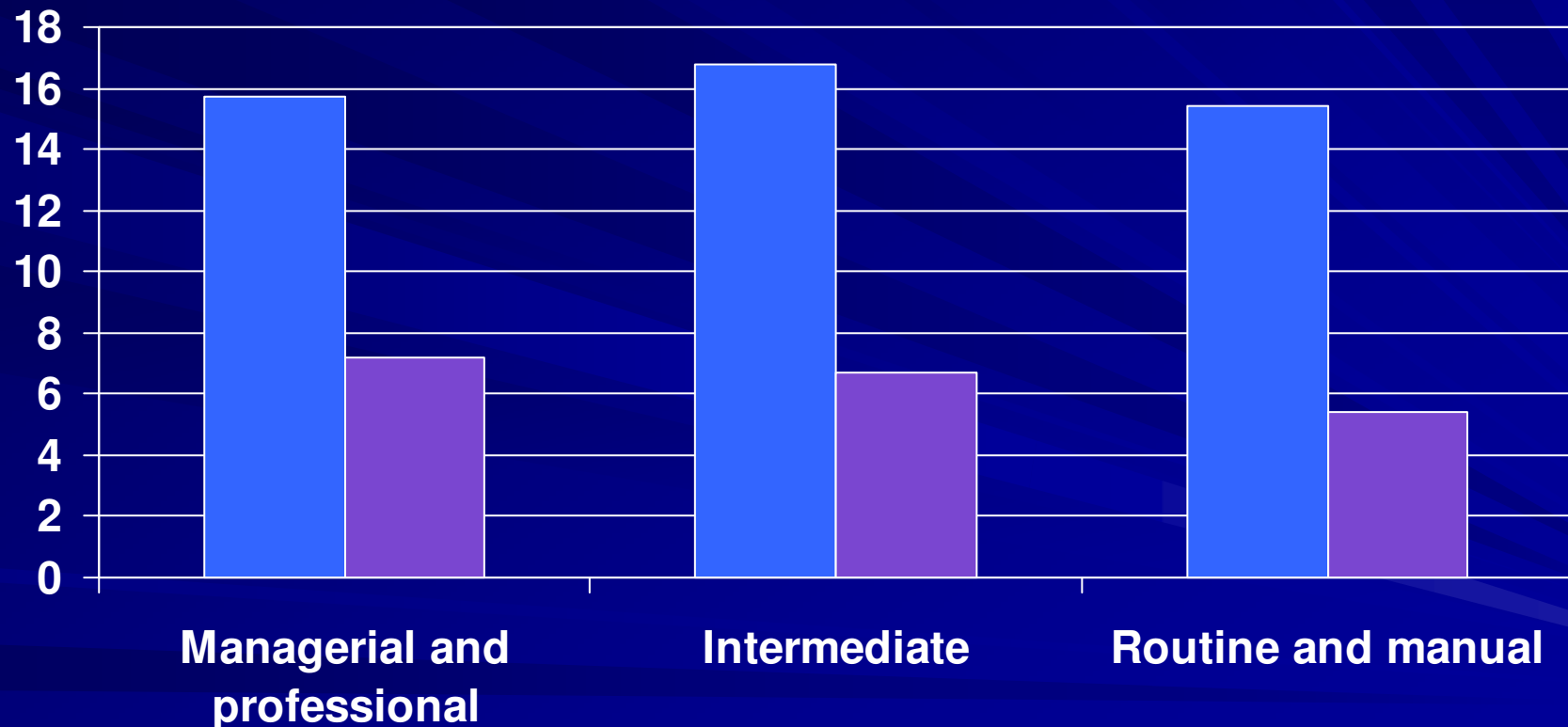
Age-standardised alcohol-related death rates by sex and age group, 1991 – 2004, UK, females



Average weekly alcohol consumption by sex and socioeconomic class

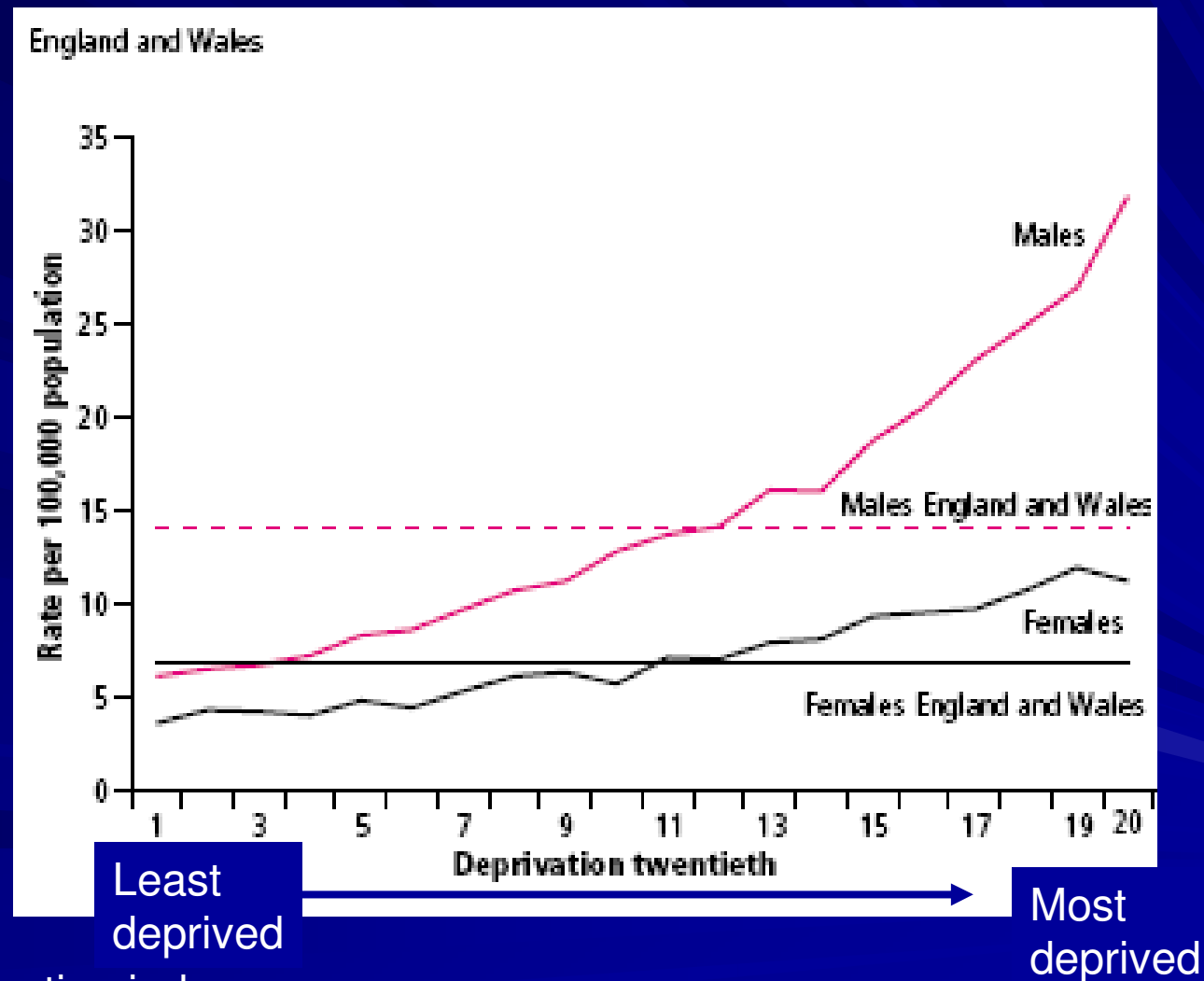
Mean number of units a week

men women



ONS General Household Survey 2005

Age-standardised alcohol-related death rates by deprivation* twentieth and sex, England and Wales 1999-2003



* Carstairs deprivation index

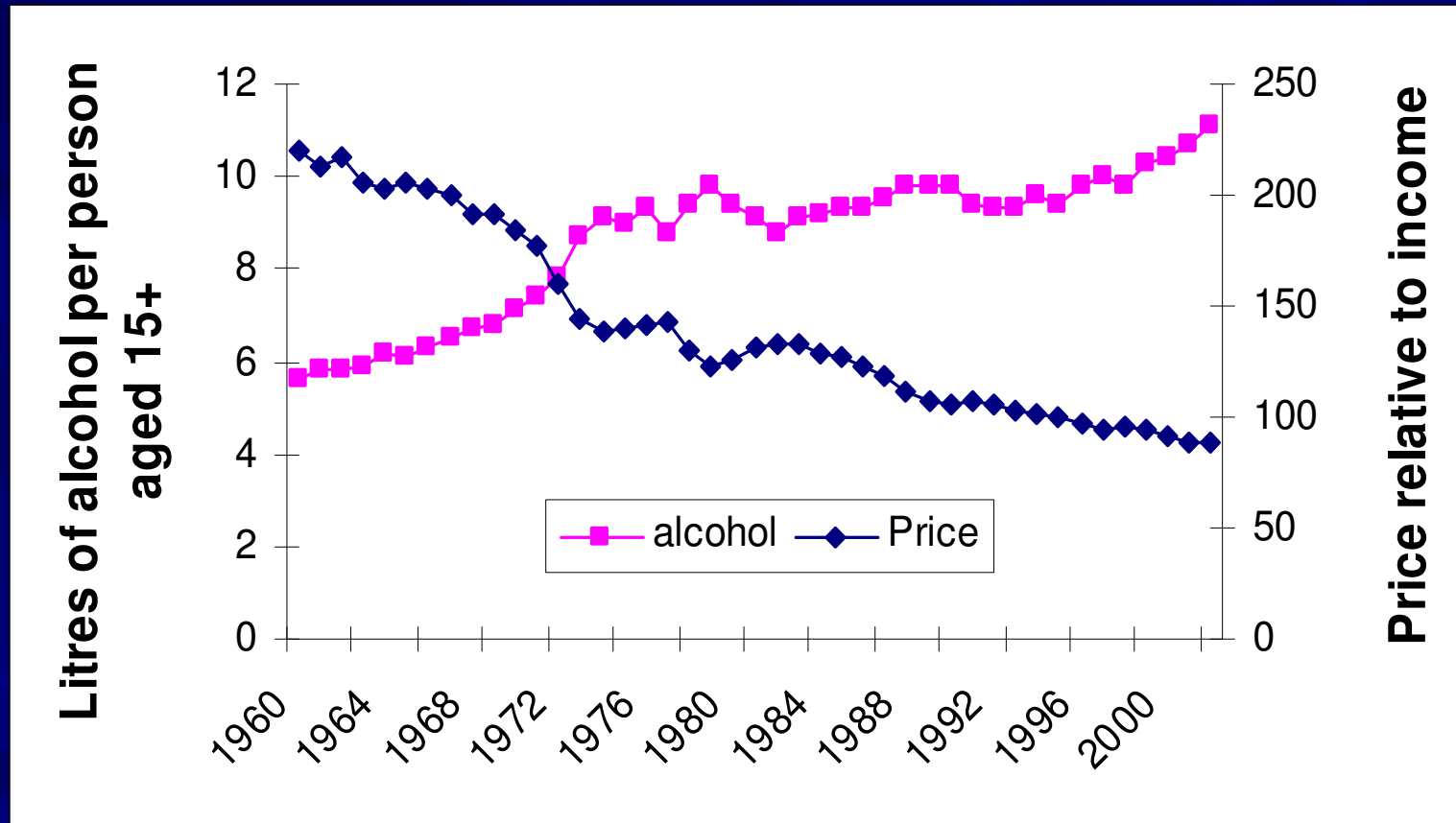
Source: ONS 2007

- Alcohol consumption is not graded across socioeconomic groups
- But alcohol harm is greater among deprived groups
- Social factors contribute to the burden

Why has health burden increased in UK?

- Fall in the relative price of alcohol
- Increasing availability
 - New retail outlets
 - Removal of restrictions on alcohol sales
- Increased promotion by the alcohol industry

UK ALCOHOL CONSUMPTION RELATIVE TO ITS PRICE



Source: Tighe, 2003

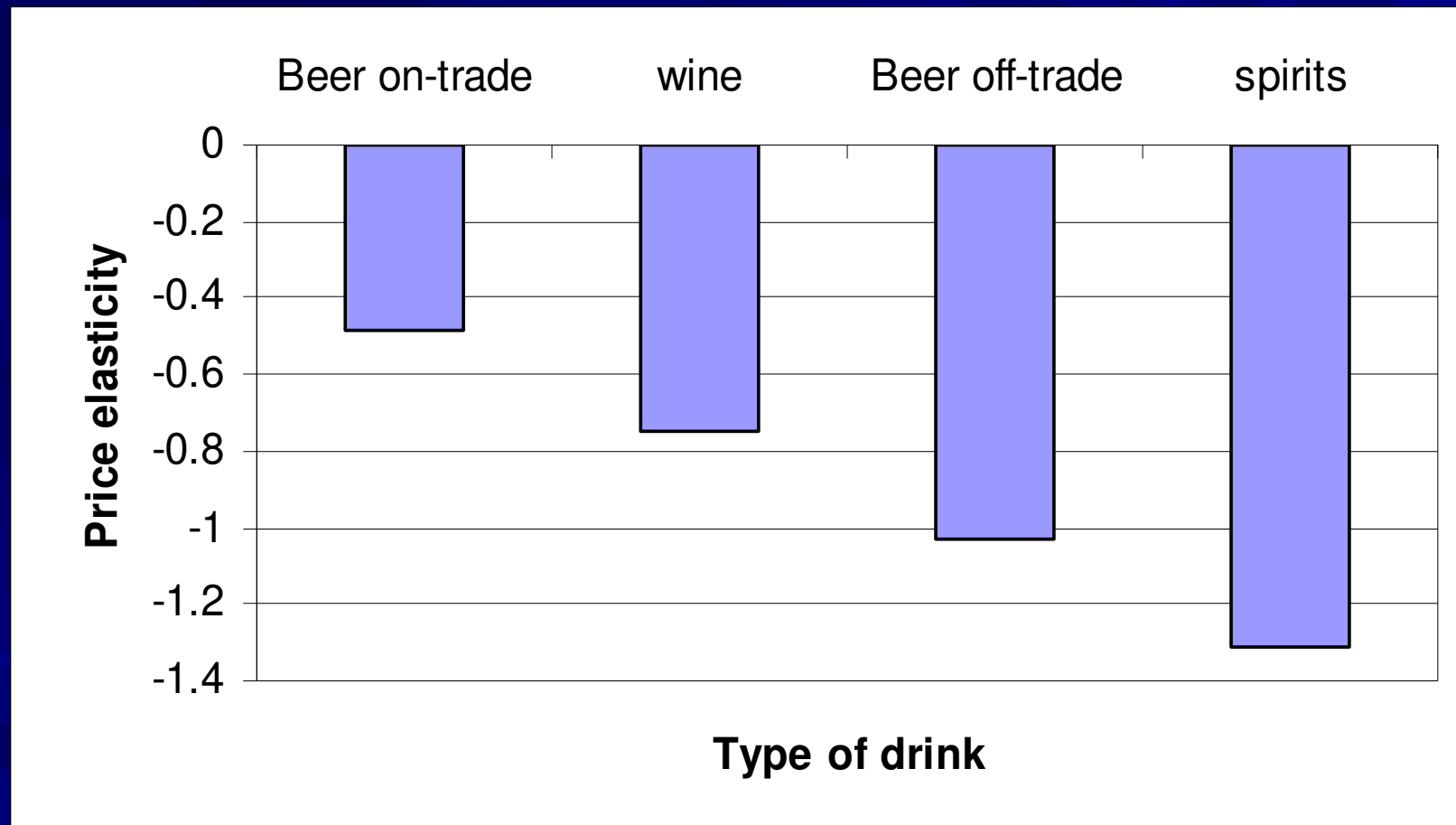
EFFECT OF CHANGING PRICE

A 10% rise in UK alcohol prices would produce:

- **7% male and 8.3% female decrease in cirrhosis mortality**
- **29% male and 27% female decrease in deaths explicitly from alcohol-involved causes**

Source: Nörstrom *et al*, 2002

ESTIMATED PRICE ELASTICITIES IN THE UK



Source: Customs and Excise Study, Huang 2003

Learning from experience

- 1 March 2004: Finnish government reduced alcohol excise duty by an average 33% in order to reduce cheap imports from abroad;
- The result was an immediate 17% increase in sudden deaths involving alcohol (equivalent to 8 additional alcohol related deaths per week)

Why has health burden increased in UK?

- Fall in the relative price of alcohol
- **Increasing availability**
 - New retail outlets
 - Removal of restrictions on alcohol sales
- Increased promotion by the alcohol industry

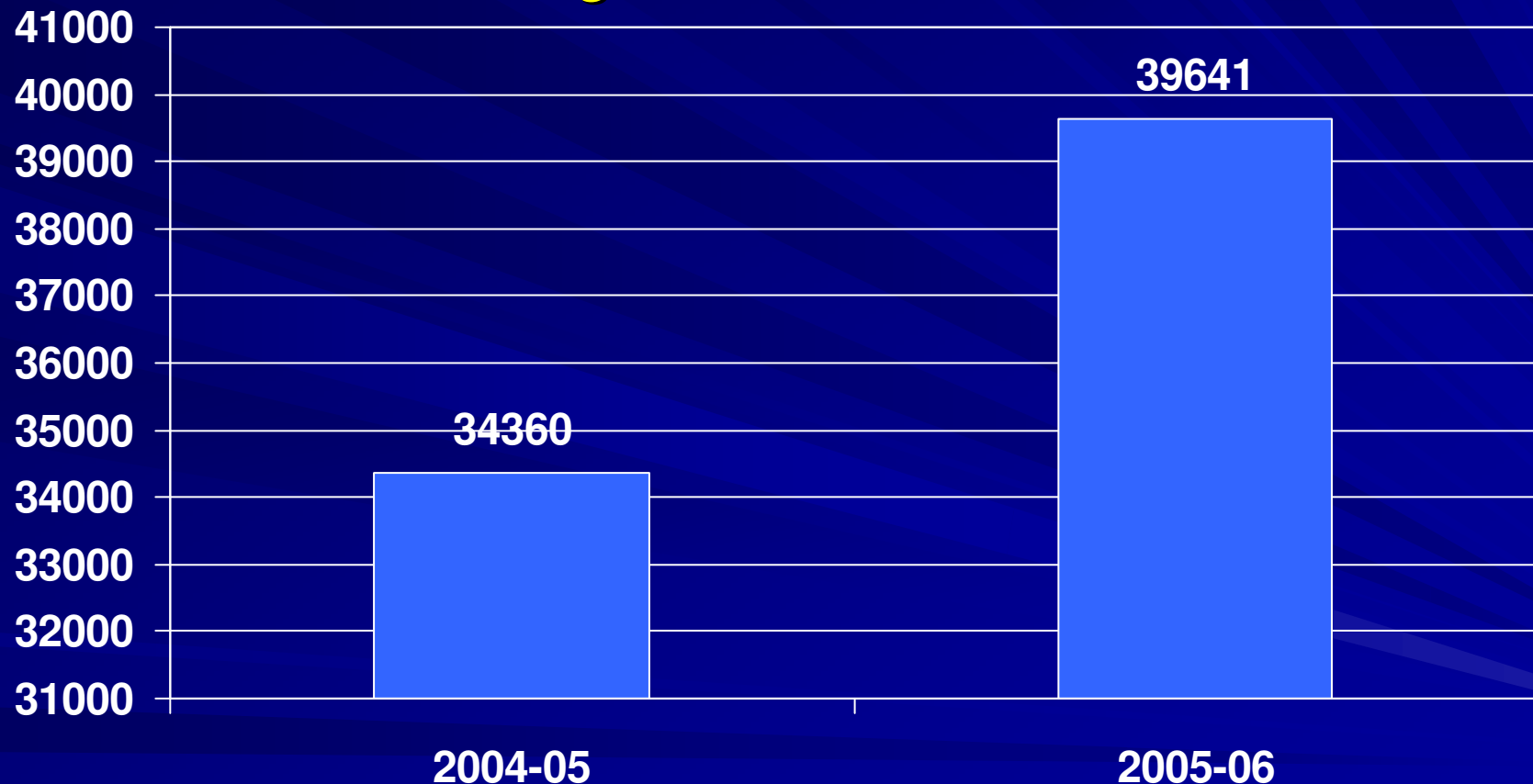
AVAILABILITY OF ALCOHOL: UK

- **On-licensed premises: 61,000 in 1953 (Williams & Brake 1980) increased to 78,500 (PMSU, 2003)**
- **Off-licensed premises: 24,000 in 1953 (Williams & Brake 1980) increased to 'more than 40,000' (PMSU, 2003)**



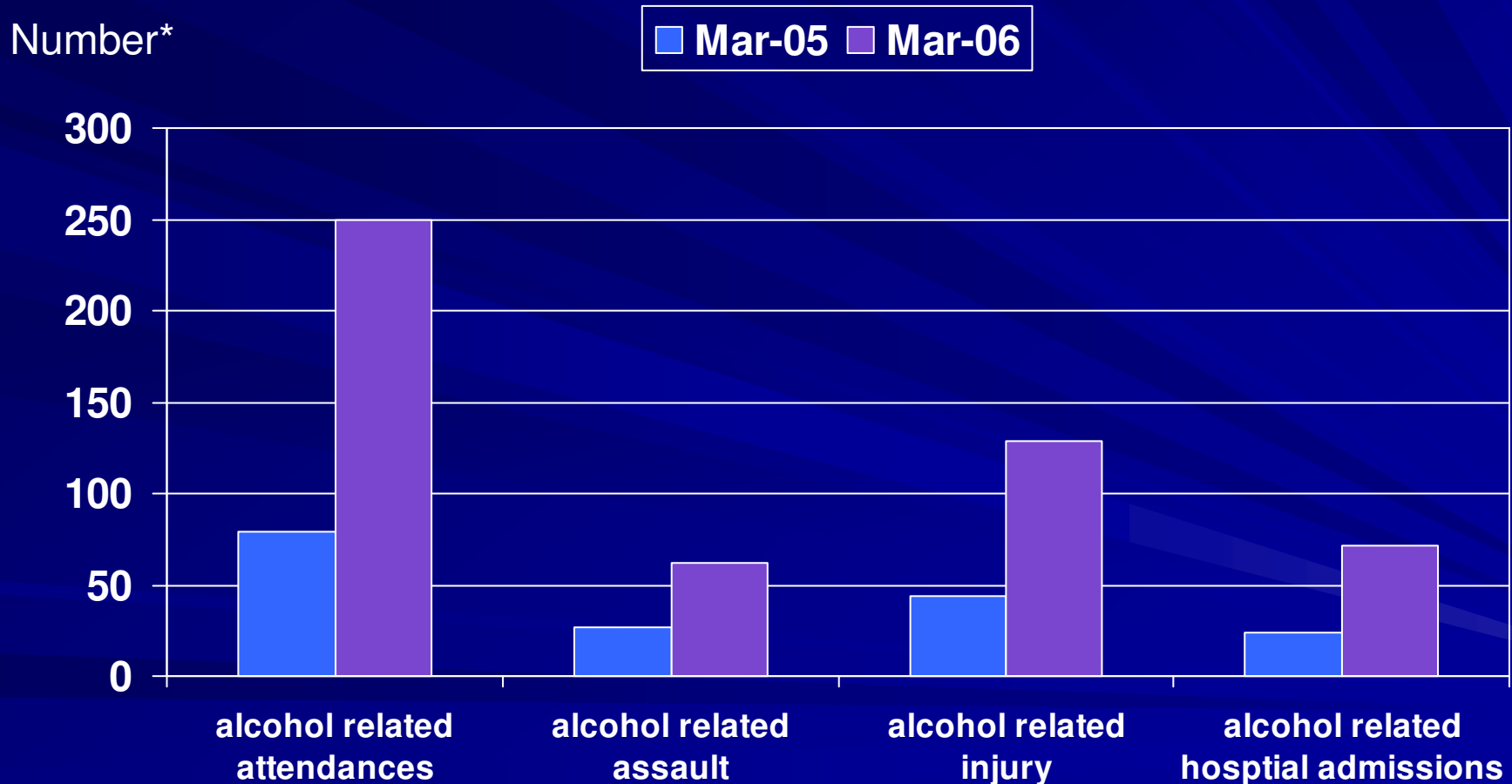
Alcohol related admissions to A & E, NHS Hospitals, England, 2004-5 and 2005-6

24 hr drinking introduced in Nov 2005



Emergency hospital attendances* at St Thomas' Hospital, London

(24 hr drinking introduced in Nov 2005)

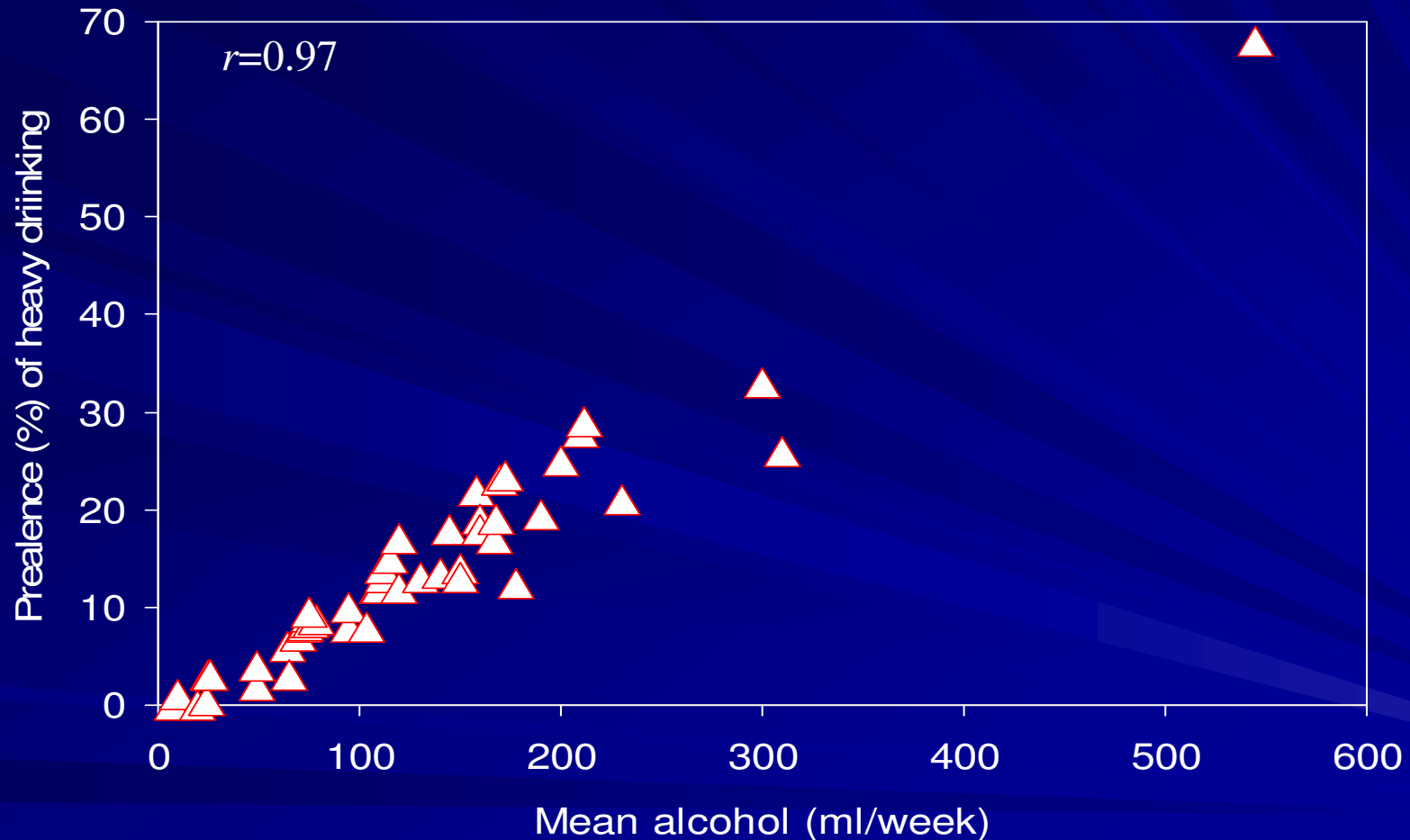


(Source: Newton et al. Emerg. Med.J. 2007;24: 532-534)

EFFECT OF CHANGING NUMBER/TYPE OF OUTLETS

- **Consumption rose by 50% the year after beer was made available in grocery shops in Finland (Mäkelä *et al.* 2002)**
- **Wine consumption rose by 16% (total alcohol rose by 5%) in New Zealand when wine was made available in supermarkets (Zhang & Casswell, 1999)**

MEAN ALCOHOL CONSUMPTION AND PREVALENCE OF HEAVY DRINKING*



Source: Adapted from Rose, 1992

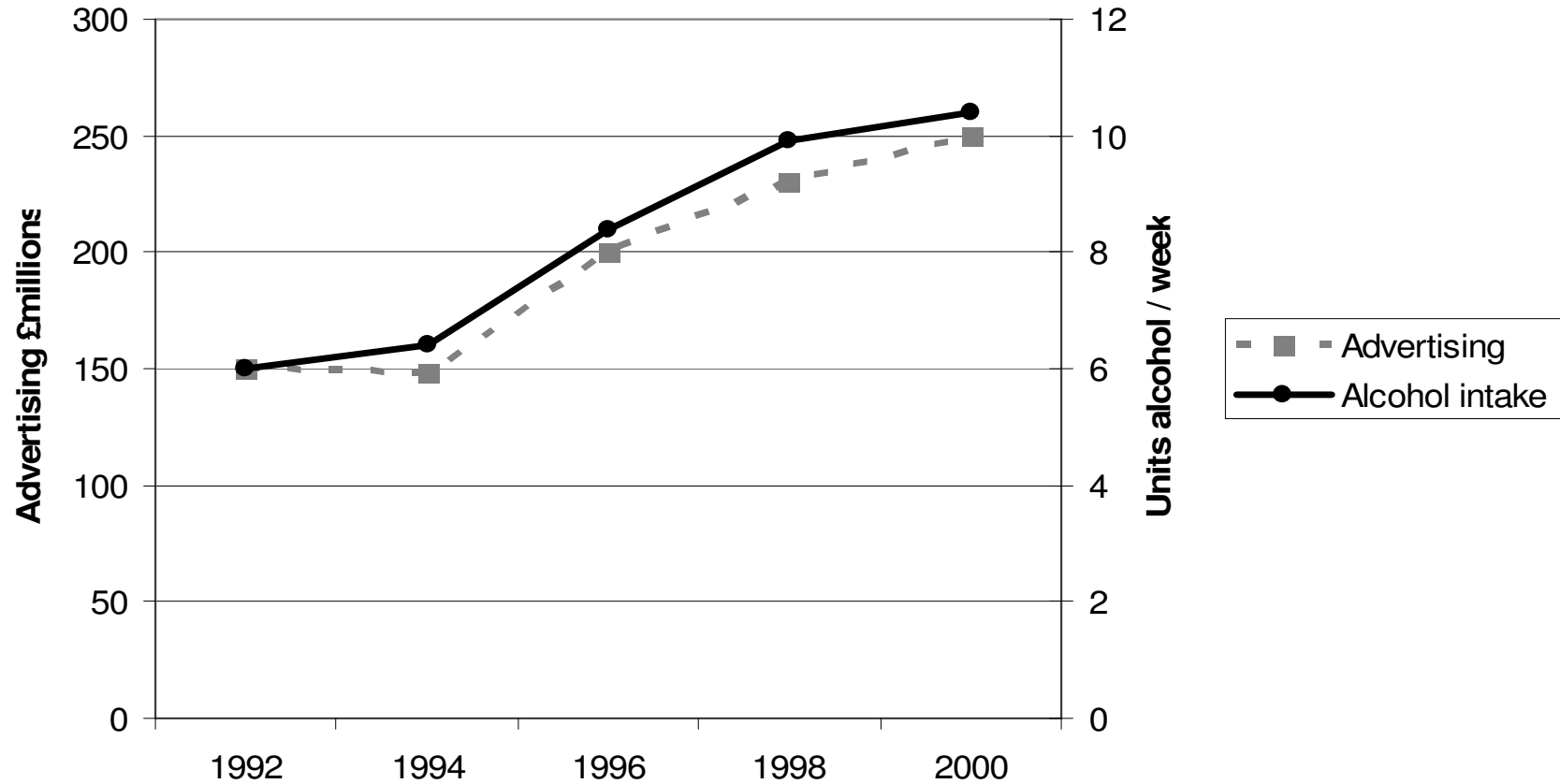
*Across 52 population samples from 32 countries (men and women aged 20-59 years)

Why has health burden increased in UK?

- Fall in the relative price of alcohol
- Increasing availability
 - New retail outlets
 - Removal of restrictions on alcohol sales
- Increased promotion by the alcohol industry

UK advertising expenditure and alcohol consumption: 11-15 year old children

Close relationship between annual expenditure on alcohol advertising and weekly alcohol intake of 11-15 year old children ($R=0.995$)



- Interventions to reduce
 - Availability
 - Accessibility
 - Acceptability

EU strategy 2006 – 5 priority themes

- Protect young people, children and the unborn child
- Reduce injuries and deaths from alcohol-related road traffic accidents
- Prevent alcohol-related harm among adults and reduce the negative impact on the work place
- Prevent alcohol-related harm among adults and reduce the negative impact on the workplace
- Inform, educate and raise awareness on the impact of harmful and hazardous alcohol consumption, and on appropriate consumption patterns

International control of alcohol?

- A parallel to the Framework Convention on Tobacco Control?
 - Licensing
 - Labelling
 - Taxation
 - Availability
 - Advertising
 - Drink driving
 - Treatment
 - Awareness