Alcohol harm, demand and supply reduction: What is the strongest cocktail?

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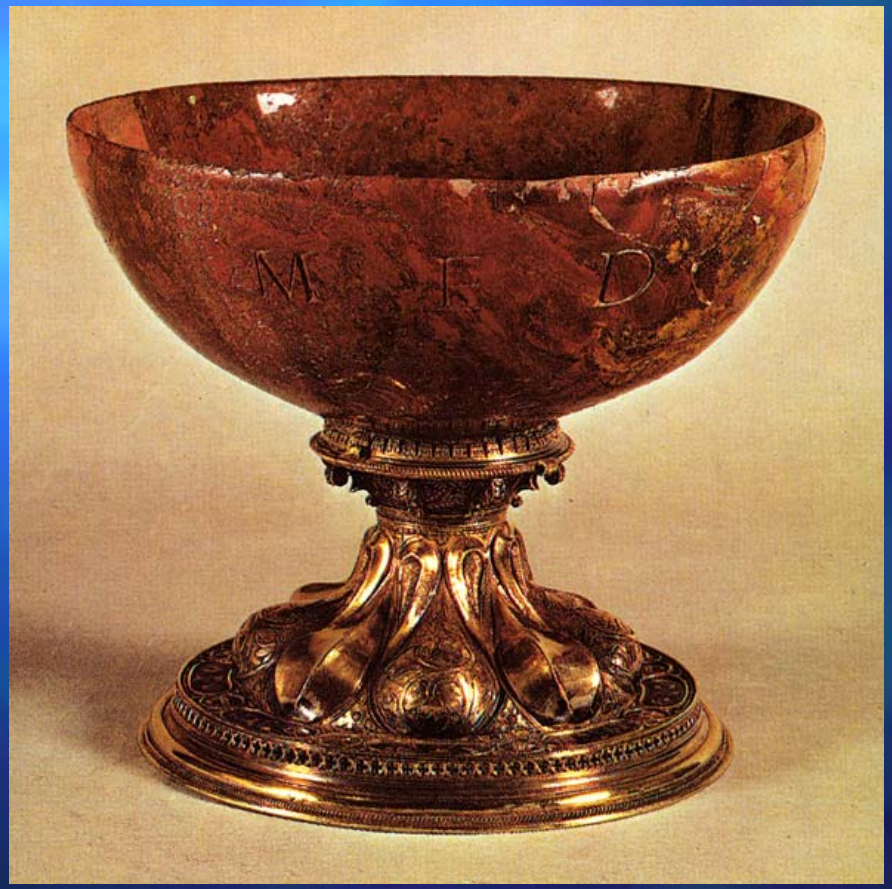
Hope, Hype or Hard Evidence? Alcohol and Other Drugs Practice in the New Millennium, Fremantle, WA, 31 August 2010

The use and misuse of alcohol has been recorded down the ages

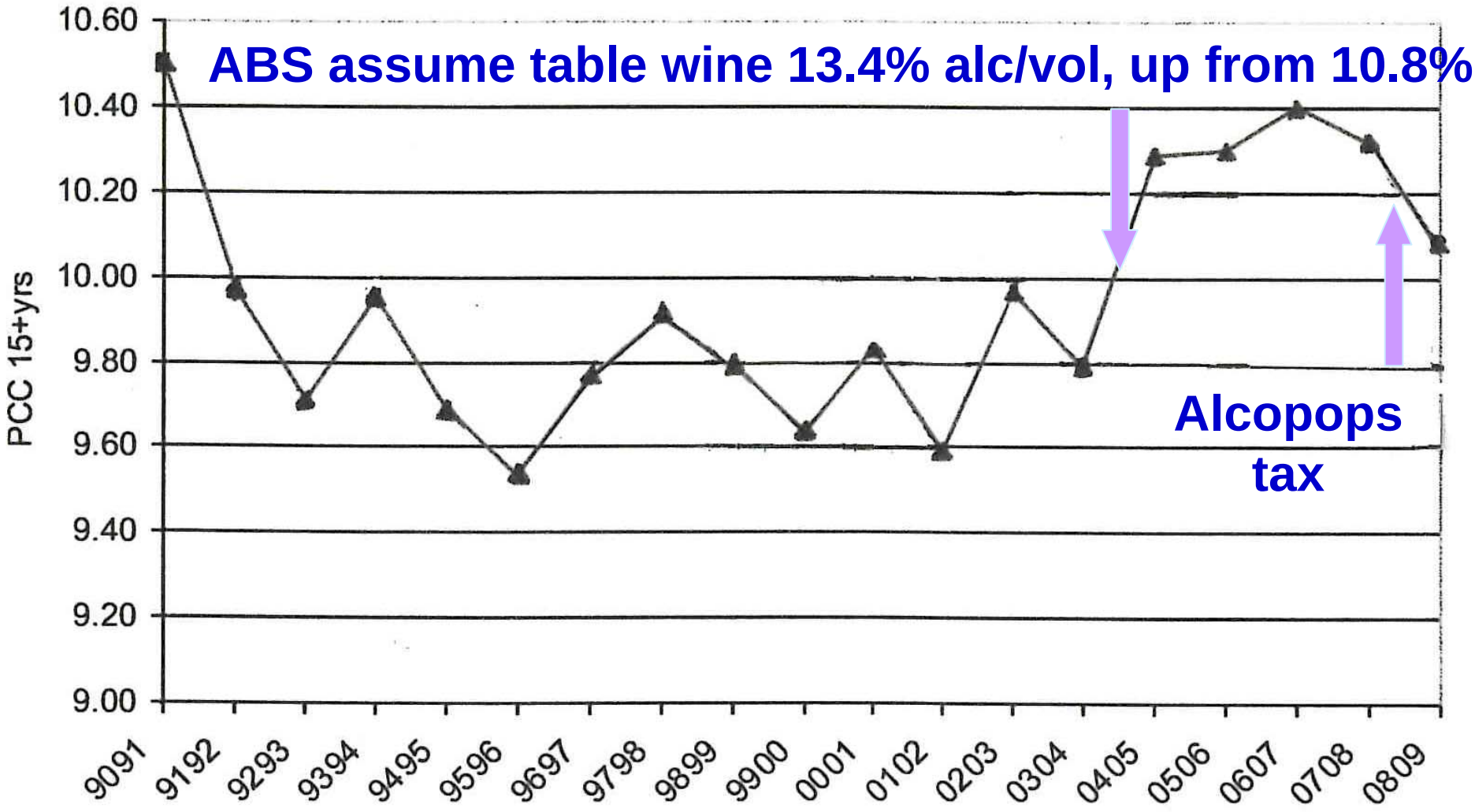


Why should we be concerned?

Alcohol is a major and growing contributor to the burden of disease globally and in Australia

- and deserves the growing attention it is receiving globally from a public health perspective

New per capita alcohol consumption data for Australia, 1990/91 to 2008/9 from ABS



Dose-response relationships between alcohol consumption and harms

- At the individual and population levels
- For harms caused by both short and long-term effects of alcohol

Daily alcohol use and % disease risk

Disease	Abs. Risk	1 drink	2 drinks	3-4 drinks	5-6 drinks	7+ drinks
Tuberculosis	1 in 2,500	0	0	+194	+194	+194
Oral Cavity & Pharynx Cancer	I in 200	+42	+96	+197	+368	+697
Oral Oesophagus Cancer	I in 150	+20	+43	+87	+164	+367
Colon Cancer	1 in 40	+3	+5	+9	+15	+26
Rectum Cancer	1 in 200	+5	+10	+18	+30	+53
Liver Cancer	1 in 200	+10	+21	+38	+60	+99
Larynx Cancer	1 in 500	+21	+47	+95	+181	+399
Ischemic Heart Disease	1 in 13	-19	-19	-14	0	+31
Epilepsy	1 in 1,000	+19	+41	+81	+152	+353
Dysrythmias	1 in 250	+8	+17	+32	+54	+102
Pancreatitis	1 in 750	+3	+12	+41	+133	+851
Low birth weight	1 in 1000	0	+29	+84	+207	+685

International reviews of "what works"

- Babor, T. et al (2010) "*Alcohol: No ordinary commodity*". WHO and Oxford University Press.
- Anderson, P.(2009) Effectiveness and cost-effectiveness of policies and programmes to reduce the harm caused by alcohol. *The Lancet*, 373: 2234–46.
- Stockwell, Toumbourou, Gruenewald and Loxley (2005) "*Preventing harmful substance use: the evidence base for policy and practice*". John Wiley & Sons, UK.

1. Effective harm reduction

"Making the world safer for drunks"? (Robin Room)

- and for the wider community

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Prevention needs to be about harm reduction as well as demand and supply reduction…

Evidence for Harm Reduction

★★★

Random Breath Testing

★ ★

Ignition interlocks

Thiamine supplementation

‘Safer Bars’ – violence prevention

Harm reduction education in schools

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Plastic/shatterproof glasses

Food service with alcohol

“Wet shelters”

Glass-related injuries*

Interviews with young violent offenders in Scotland:

"If I'm going to go out with ma [my] pals and I've got a bottle then if someone starts anything you can hit them with a bottle." ('Gordon', 18 years-old, Serious Assault)

"We don't carry knives down my way, just bottles." ('Adam', 17 years-old, Racially-aggravated Assault)

54% of all discarded glassware in a Scottish town comprised one type of beverage: Buckfast

** Source: in press, Crime Prevention and Community Safety*

Glass-related injuries

Survey and recorded interviews with incarcerated perpetrators

81% drinking at time of offence (nearly all off-premises)

44% had been drinking *Buckfast*

When a weapon was involved, half involved use of a bottle in the attack

Recommended plastic Buckfast bottles

Buckfast – a 17% strength caffeinated tonic wine, made by Benedictine monks in Devon, England; favourite drink for violent offenders in Scottish towns

Alcohol and caffeine: a dangerous cocktail

Growing body of research indicating:

- *Marked increase in prevalence in many countries – especially by young people*
- *Associated with more risk-taking behaviours and related harms*
- *Likely mechanisms: (i) reduced fear + increased energy (ii) more consumption (iii) false sense of sobriety*

2. Effective demand reduction = Regulating economic availability and how alcohol is promoted

Evidence for Demand Reduction

★★★

Brief interventions

Treatment Programs

Tax and price strategies

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Labelling of alcohol containers to support drinking guidelines

Social marketing for alcohol – providing supports other effective strategies

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Is it really necessary to regulate the price and availability of alcohol?

What would happen if we just let the market regulate itself?

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Alcohol price promotion in Perth, Australia: All you can eat and drink for $20 entry fee

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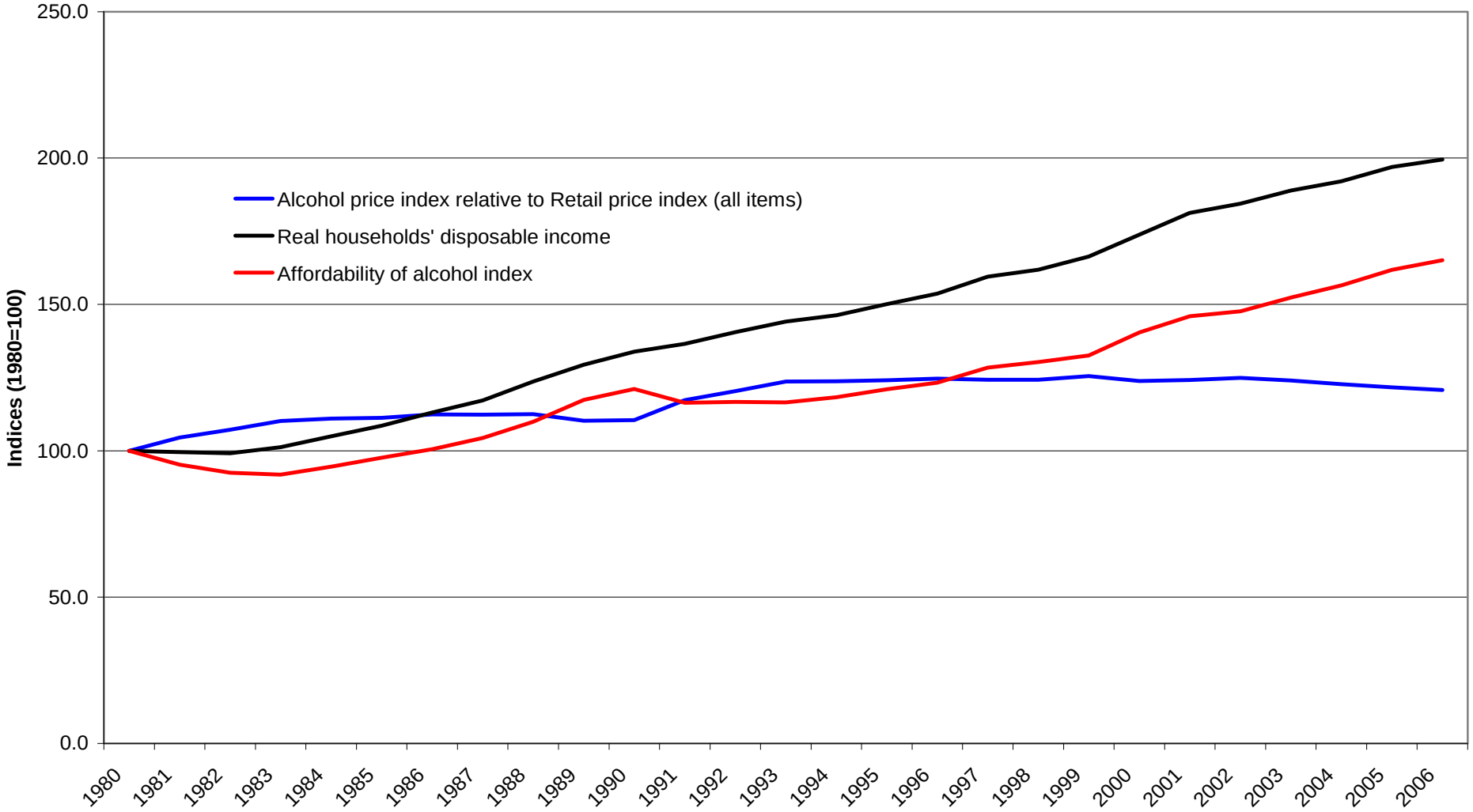
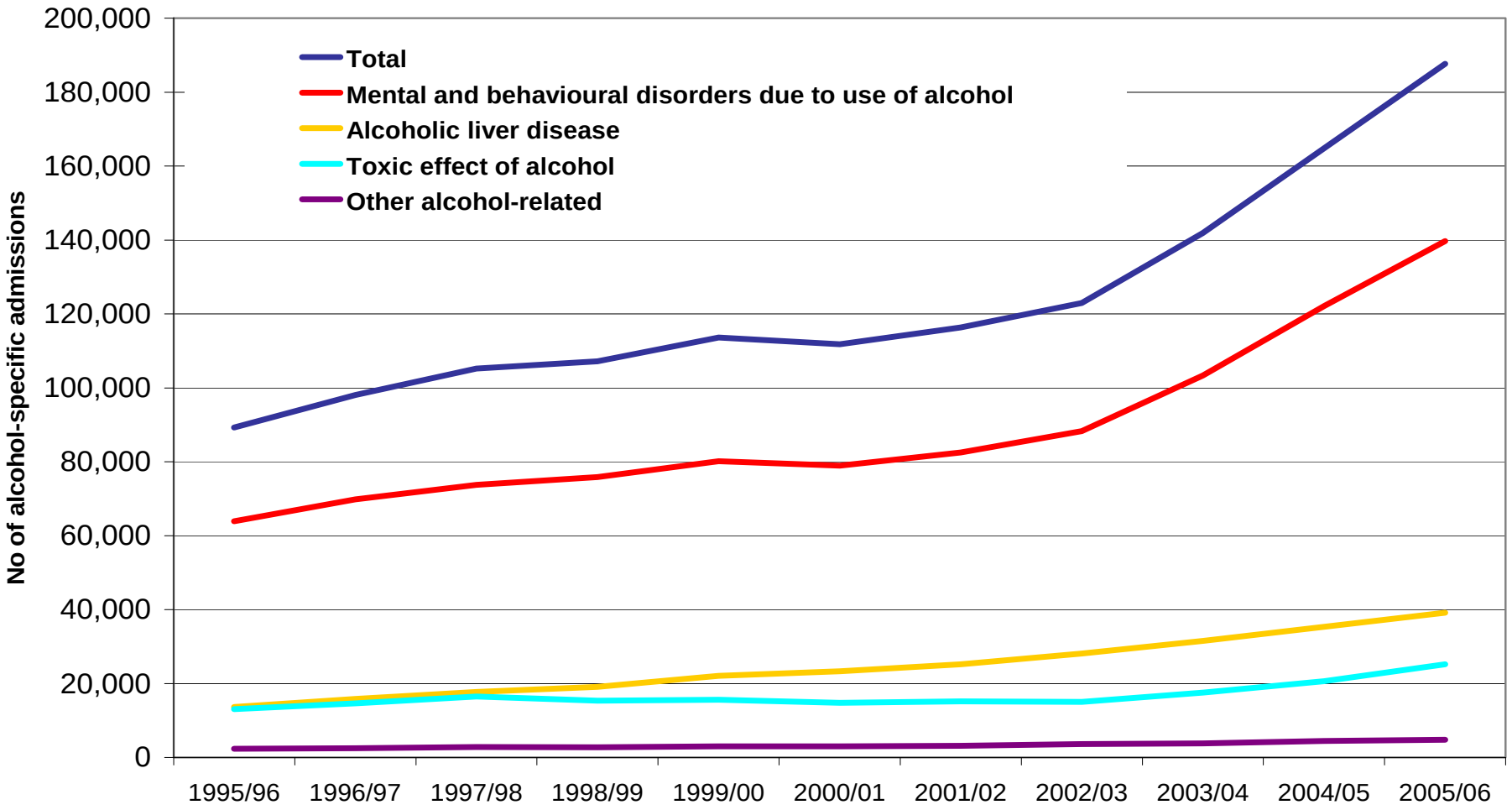
Trends in Affordability of Alcohol in UK, 1980-2006



UK Trends in Alcohol-related Hospitalisations, '95/96->'05/06



Source: ONS, 2008

Principle of using price to control alcohol use is well-established

Meta-analysis by Gallet (2007):

Identified 132 studies, 1945-2003 and concludes:

- ***A 10% increase in price leads to an average of a 5% decrease in consumption***

Meta-analysis by Wagenaar et al (2009):

Identified 112 studies worldwide (1823-2007) with 1007 estimates and concludes:

- ***A 10% increase in price leads to a 4.4% decrease in consumption and 2.8% for heavy drinkers***

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Alcohol is not a single product – most markets include 1000s of different examples. How to tax to best protect public health and safety?

Specific Recommendations from BC's Provincial Health Officer

- Tax alcoholic drinks by volume of ethanol PLUS % alcohol content ie a tiered volumetric model
- Link the level of taxation to cost of living
- Ensure minimum prices are regularly updated [CARBC: $1.50 in stores and $3.00 in bars per standard drink]
- Additional small taxes on high strength drinks to pay for more alcohol treatment and prevention

NB In Australia mostly covered – <u>except for wine</u>

CARBC Briefing Paper, Dec 2009

Alcohol Pricing, Public Health and the HST: Proposed Incentives for BC Drinkers to Make Healthy Choices

Download from www.carbc.ca

Importance of minimum liquor prices

The top 10% of drinkers (ie highest risk) pay 80c, lowest 50% pay $4.75 per standard drink (Kerr & Greenfield, 2007)

Young people and high risk drinkers especially responsive to minimum prices (Meier et al, 2009)

Wine Prices: Achilles Heel of Australian alcohol policy

A 4 litre wine cask can retail for $12 or 32 cents per standard drink (AU$1.07 lowest price in BC, Canada)

A 2 litre bottle of fortified wine can retail for $13 or 36c per standard drink (AU46c in BC)

Will the Henry Report on Australian Taxation be implemented?

***Herald Sun*, March 23, 2010**

"The price of popular wine casks will skyrocket from $12-$15 to more than $37 if Treasury recommendations to change the taxation of alcohol are taken up in its May Budget"

[NB this would still be only about $1 per standard drink – and still cheaper than in Canada]

Incentives for lower alcohol drinks

There are 38 varieties of beer in Australia containing between 2.5% and 3.9% alcohol. We have found 2 in BC – 0.2% market. BUT since 2005, 37% market share in Saskatchewan.

Low Alcohol Alternatives: People cannot tell the difference

Segal, D., & Stockwell, T. (2008). Low Alcohol Alternatives: A Promising Strategy for Reducing Alcohol Related Harm. *International Journal of Drug Policy.*

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Volunteers were easy to find!

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Low alcohol content beer: Testing an Australian idea in BC

The Experiment:

34 male students were given unmarked low alcohol beer (3.8 per cent) and regular strength beer (5.3 per cent) on two occasions, while participating in a pub style game. They could not reliably tell which had the most alcohol.

Spinnakers Doc Ale (3.8%)

Versus:

Kokanee Gold (5.3%)

3. Effective supply reduction = Regulating physical availability

Evidence for Supply Reduction

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Drinking age laws and enforcement

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Responsible Alcohol Service and Accords *[NB <u>with</u> law enforcement]*

Limits on liquor outlet trading hours

Liquor restrictions in isolated communities

Restrict price discounting schemes

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Restrictions on outlet density

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Longer hours for bars, more civilised drinking?

Some Australian examples show this to be a myth

Donnelly et al (2001): Bars in NSW with most violent incidents invariably had long trading hours - and vice versa

Chikritzhs & Stockwell (2002): Bars allowed to trade after midnight doubled rates of violent incidents vs controls

Kypri et al (2009): 37% reduction in assaults following restricted trading hours in Newcastle, NSW compared with control area

Impact of changes to trading hours of bars and restaurants

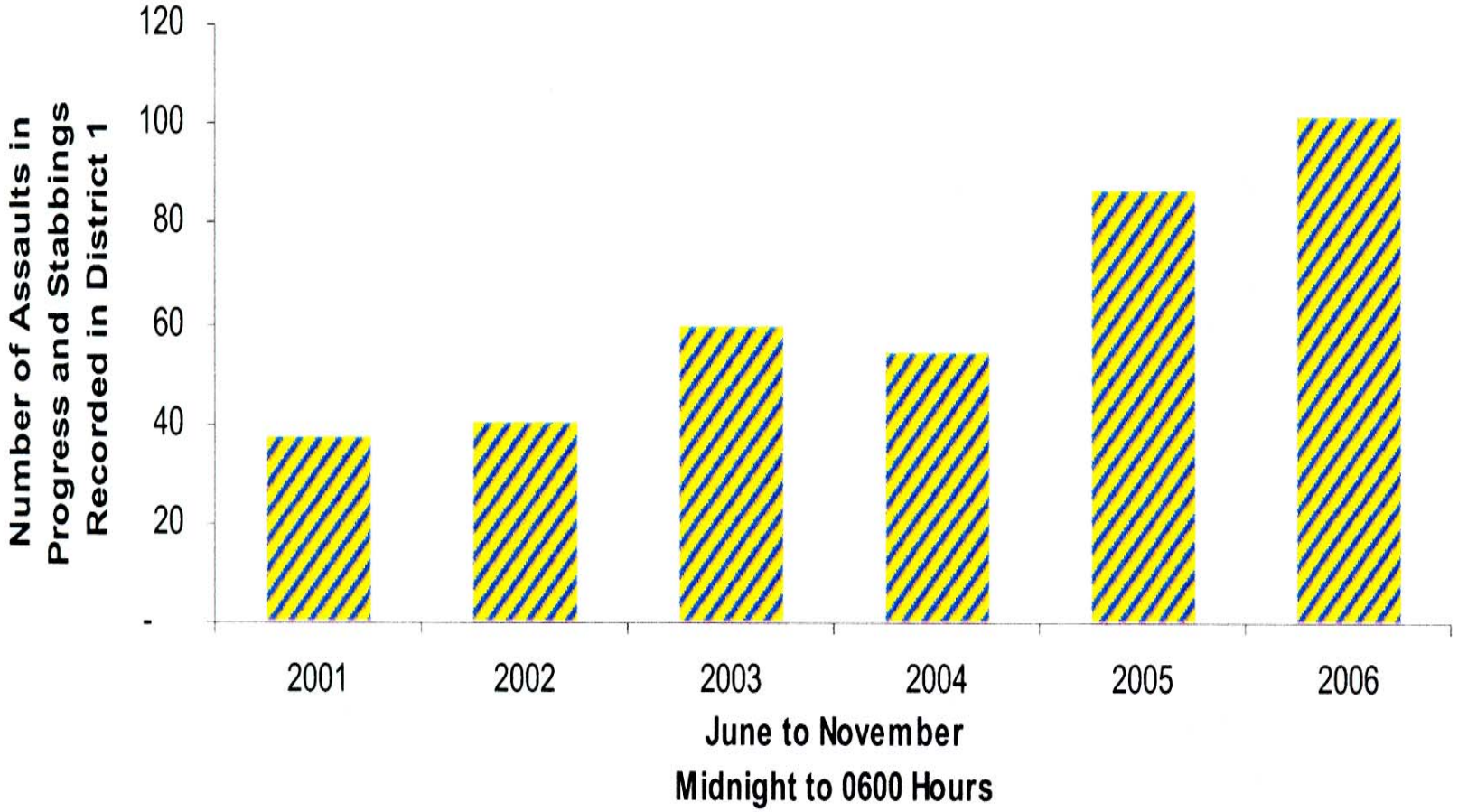
Stockwell and Chikritzhs (2009), Crime Prevention and Community Safety

- **49 studies over four decades, mostly from the UK, USA, Australia and Canada**
- **Only 14 included both baseline and control measures, all peer-reviewed**
- **Of these 11 reported significant impacts on at least one outcome in predicted direction**
- **4 of these high-quality studies focused on violence – all found significant impacts**

In Vancouver CBD

- In late 2003 hours of service for bars increased from 2 AM to 4 AM
- Number of liquor “seats” in main entertainment district increased from 1000 to 6700
- Marked increase in calls for assistance, fights, assaults and stabbings reported by police
- Further increases occurred during (and after?) 2010 Winter Olympics

Apparent impact on assaults recorded by VPD



Hours and days of sales: some specifics

- Adding or removing a day of trading usually has a big impact on consumption and harm
- Even an hour or two of extra trading late at night, when people are drinking heavily, can significantly increase consumption and harm
- There can be extra problems on the streets if all bars close at the same time – but “staggered” trading hours don’t have to mean longer hours e.g. 24 hour trading

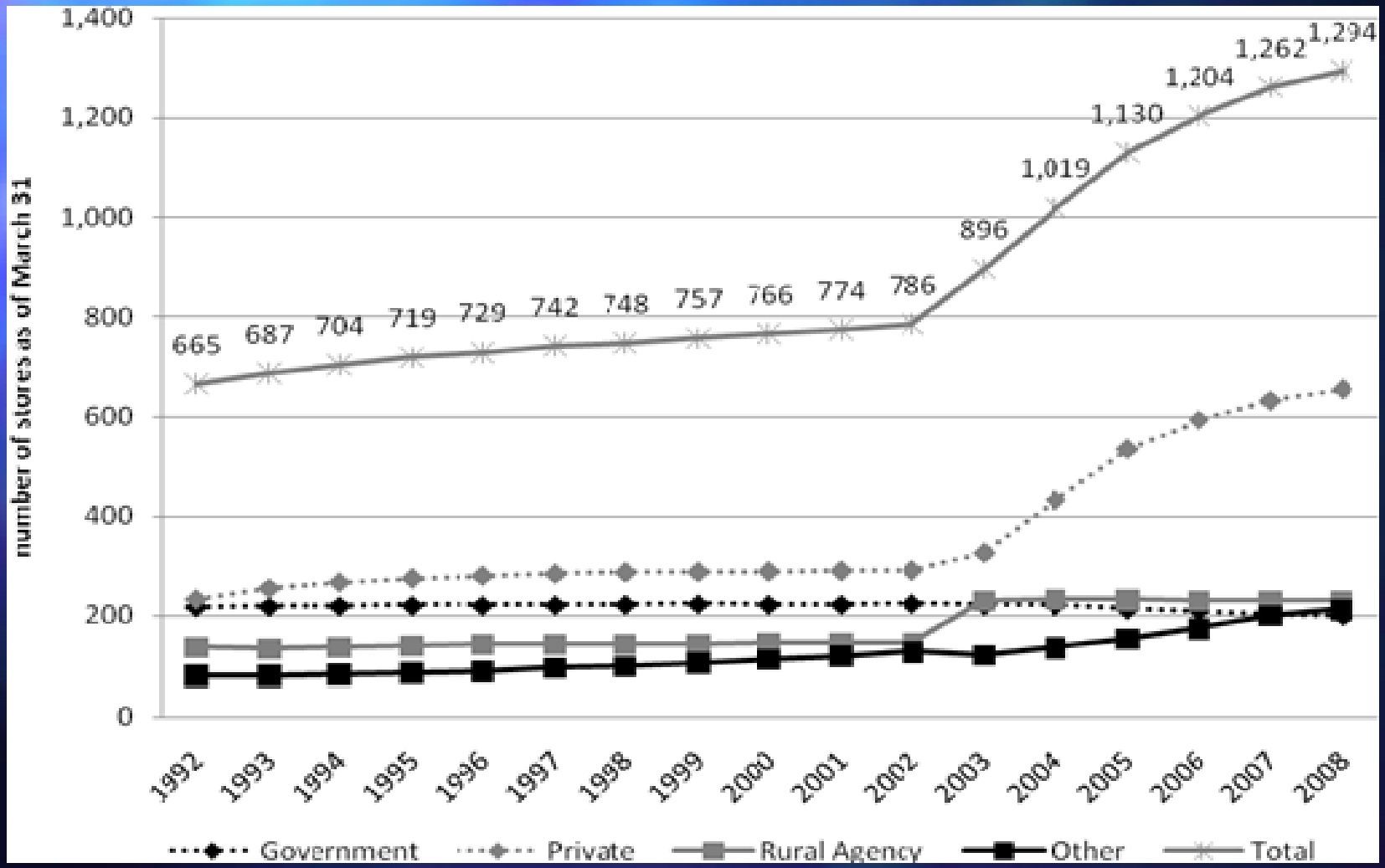
Density of liquor outlets: some specifics

- In Canada the number of bars, restaurants and liquor stores per 10,000 residents each predict local levels of alcohol use
- A US study found increased consumption *follows* increases in the number of outlets
- Concentrations of bars in one area can lead to price competition, lax service and violence
- An Australian study found a “tipping point” for violence at 2 bars per 1000 residents

The Smugglers' Cove Beer, Wine and Spirit Store - a Private Liquor Store in BC

A Government Liquor Store in Victoria, BC

Increased privatisation of liquor stores in BC, Canada: another regulatory failure



CARBC Study on Impact of Partial Privatisation of BC Liquor Market

- Recent alcohol consumption increases and partial privatisation have coincided in BC
- There was much variation across 89 local areas studied

When controlling for economic and demographic differences:

- Density of liquor stores significantly predicted local changes in per capita consumption and rates of alcohol related mortality
- The % of liquor stores in private hands also significantly predicted local consumption

Are government monopolies the ideal regulatory instrument?

Government alcohol monopolies have the power to:

- Set final retail prices – and minimum prices
- Determine density and placement of outlets
- Train staff to systematically check for customers age and state of intoxication
- Control alcohol promotions
- Determine trading hours
- Deliver alcohol awareness programs
- The profits can be used to fund community services – e.g. more prevention and treatment

Liquor control = more revenue and less harm

A formal comparison of per capita alcohol consumption and revenues between US control and non-control states found significantly higher revenue from lower liquor sales in the control states i.e. evidence of greater revenue and less harm.

Alcohol Research Group (2009) *Report for National Alcohol Beverage Control Association*

Holder et al (2010) modelled the effect of privatising the Swedish retail monopoly

It was estimated that this would result in:

- A 14% increase in per capita alcohol consumption
- 700 additional alcohol caused deaths per year
- 7600 additional assaults per year
- an 18% increase in absenteeism

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Do government monopolies on alcohol always realise their potential for improving public health and safety?

Unfortunately, no…

Vex - Hard Pink Lemonade

7% alcohol
$1.59 per bottle
($9.55 for 6 x 341 ml bottles)
19 grams ethanol per bottle
= AU 88c per standard drink

Woody's Pink Lemonade

5.3% alcohol,
$2.38 per bottle
($9.50 for 4 x 330 ml bottles)
14 grams of ethanol per bottle
= AU $1.72 per standard drink

By contrast in WA…….

4 Pack of 4.5% Ruski retails for AU$19.50 or $4.58 per SD

4 pack of 6.5% Ruski retails for $22 or $3.60 per SD

The perfect cocktail of Canadian and Australian alcohol policies?

- Canadian alcohol monopolies (NOT BC style)
- Australian taxes for beer and spirits
- Canadian taxes for cask wine
- Australian thiamine fortification
- Canadian minimum prices (Sask. style)
- Australian RBT, Canadian *'Safer Bars'*
- ADD: licence and trading hours linked to safety record, a harm reduction levy – AND STIR!

Why is effective regulation of alcohol to improve public health so rare?

- Responsibility for regulating alcohol usually lies with Departments of Finance not Health
- Effective regulation is often fiercely opposed by powerful commercial interests
- Scientific evidence for effectiveness tends to support simple general principles not the specifics of implementation
- Departments of Health and Finance rarely talk to each other – at least about alcohol


Thank you!