1. How many alcohol related presentations to emergency departments and admissions to hospital were recorded by hospitals in the Kings Cross and Sydney CBD catchment areas in the five years prior to the introduction of the suite of legislation regulating liquor and licensed venues in 2014 and since the laws were introduced? How do these figures compare to alcohol related injuries recorded across the rest of the NSW public health system?

Response:

The numbers of alcohol related late-night presentations are shown in Figure 1 and Table 1 (10.00pm-6.00am). These statistics underestimate the burden of alcohol related harms; however, they can be used to identify trends.

It is not possible to identify alcohol related injuries in data held by NSW Health.

Figure 1. Rate of late-night unplanned alcohol presentations per 1,000 unplanned presentations, St Vincent's Hospital, Sydney Hospital, NSW, 2009 – 2018

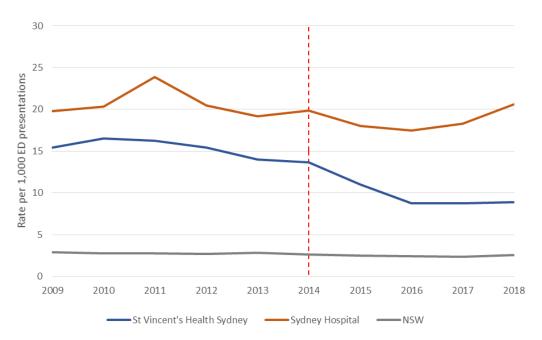


Table 1: Late-night unplanned ED presentations for alcohol problems, count and rate per 1,000 ED presentations, St Vincent's Hospital, Sydney Hospital, NSW, 2009 – 2018

Year	NSW		St Vincent's Hospital		Sydney Hospital	
	Count	Rate	Count	Rate	Count	Rate
2009	5790	2.9	632	15.5	602	19.8
2010	5617	2.8	684	16.5	611	20.3
2011	5655	2.8	678	16.2	743	23.9
2012	5761	2.7	668	15.4	617	20.4
2013	6096	2.8	635	14.0	581	19.2
2014	5772	2.6	631	13.6	577	19.8
2015	5625	2.5	519	11.0	541	18.0
2016	5708	2.4	414	8.7	548	17.5
2017	5778	2.4	418	8.7	587	18.3
2018	6331	2.6	429	8.9	650	20.6

Data source: Data were sourced from Emergency Department Records for Epidemiology (EDRE), Centre for Epidemiology and Evidence, NSW Ministry of Health.

Notes:

- 1. Alcohol-related ED presentations includes presentations related to both chronic (e.g. alcohol withdrawal syndrome) and acute effects of alcohol (e.g. acute intoxication).
- 2. Late-night alcohol-related presentations have been shown to be an effective predictor of acute alcohol intoxication.
- 3. ED attendances increase over time due to increased service usage as well as population growth.
- 4. Rates per 1000 ED presentations adjust for increased ED activity.
- 5. Alcohol-related ED presentations is not a measure of alcohol related burden on EDs because many alcohol-related ED presentations are coded as other problems (such as an injury).

For information about the method used to calculate the number of ED presentations and hospital admissions in response to Question 1, please see **Appendix 1**.

2. What is the average age and gender of victims of alcohol related injury that present to public hospitals for treatment? And what are the most common types of injuries?

Response:

NSW Health does not hold this information.

Information on the age and gender of victims of alcohol related injury can be found in the NSW Treasury report on the Evaluation of the Sydney CBD Entertainment Precinct Plan of Management, which is available at:

https://www.treasury.nsw.gov.au/sites/default/files/2017-

04/Sydney%20CBD%20Entertainment%20Precinct%20Plan%20of%20Management.pdf

- 3. What is the average annual rate of alcohol consumption in NSW by age and gender?
- 5. What trends and changes have been observed in the consumption of alcohol over the past ten years?

Combined response to questions 3 and 5:

The NSW Chief Health Officer released a report in 2016 that examined "Trends in Alcohol Use and Health-Related Harms in NSW". The report is available on the NSW Health website at https://www.health.nsw.gov.au/hsnsw/Publications/chief-health-officers-report-2016.pdf

Key findings of the Chief Health Officer's report include:

- A quarter of all adults drink alcohol at levels that place their long-term¹ health at risk. Although rates have declined over the last 10 years, the overall impact on health is still high.
- Just under one quarter of all adults drank more than 4 standard drinks on a single occasion in the last 4 weeks, which placed them at a higher immediate risk of harm.
- Harmful drinking is highest for people aged 16-24 years and lowest for people over 65 years.
- People living in regional and remote areas are more likely than people in Sydney to drink alcohol at harmful levels.
- Aboriginal people are equally likely to abstain from drinking alcohol as non-Aboriginal people. However, among those Aboriginal people who do drink, a higher proportion drink at levels that place their long-term health at risk.
- Adults across all socioeconomic groups are equally likely to drink at levels that place their long-term health at risk.
- Young people are initiating drinking later and drinking at less hazardous levels than they used to.
- Alcohol-attributable hospitalisations for 15–24 year olds have decreased over the last 9 years.

¹ The Australian Guidelines to Reduce Health Risks from Drinking Alcohol 2009 define hazardous alcohol consumption as follows:

[•] Alcohol consumption at levels posing an immediate risk to health is 'more than 4 standard drinks on a single occasion in the last 4 weeks'.

[•] Alcohol consumption at levels posing a long-term risk to health is 'more than 2 standard drinks on a day when they consume alcohol'.

Additional years of data are available on HealthStatsNSW at: http://www.healthstats.nsw.gov.au/

2018 statistics on the HealthStatsNSW site show that:

- Alcohol consumption at levels posing an immediate risk to health was reported by 34.8% of men, and 17.1% of women.
- The age bands that reported the highest levels of consumption at levels posing an immediate risk to health were 35-44 year old men and 16-24 year old women.
- These levels have stayed relatively stable between 2015 and 2018.
- Alcohol consumption at levels posing long-term risk to health was reported by 40.9% of men, and 22.5% of women.
- The age bands that reported the highest levels of consumption posing long-term risk to health were 25-34 year old men and in 16-24 year old women.
- While there was a reduction in rates of long-term harmful alcohol drinking in NSW from 2002 to 2015, since 2015 rates have returned to levels last seen in 2002, and this is most clearly shown in the 25-34 year old age group from 31.3% (2015) to 40.7% (2018).
- Additional years of data will be required to determine if the recent increases represent a change in the trend or random fluctuation in the long-term trend.

Comprehensive estimates of apparent alcohol consumption, which uses information from multiple sources including excise tariff data from the Australian Tax Office, import clearances from the Australian Government Department of Immigration and Border Protection and domestic sales data from local wine data are only available for Australia overall (ABS Cat. No. 4307.0.55.001 – Apparent Consumption of Alcohol, Australia, 2016-17). This report does not contain state, age group or sex specific estimates of per capita consumption of alcohol; however, it is noted that per capita consumption among Australians 15 years and older has decreased from 10.76L of alcohol products per year in 2007-08 to 9.39L of alcohol products in 2016-17.

4. What impact does the pricing of alcohol have on rates of consumption?

Response:

This issue has been researched extensively. Examples include:

https://www.gov.uk/government/publications/the-public-health-burden-of-alcoholevidence-review

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3828694/

https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(13)62417-4/fulltext?code=lancet-site

6. How successful have public awareness campaigns and harm minimisation policies been in educating the general community about the harmful effects of alcohol and reducing its misuse – what are the features of the most successful campaigns?

Response:

A systematic review of mass media campaigns that aim to reduce alcohol consumption and related harms, conducted in 2018 (Young, Lewis, Katikireddi et al. 2018²) found that mass media campaigns are often recalled by individuals and achieve changes in knowledge, attitudes and beliefs about alcohol.

Carefully planned, targeted, research-based and sustained social marketing and public education campaigns have an important role to play in terms of supporting and enhancing a government's overall efforts in relation to changing alcohol behaviour and reducing alcohol consumption and related harms.

Any campaign needs to be designed for its target audience(s) in ways that resonate and will best achieve objectives. Market testing is needed to guide whether it will work. The approach is dependent on appetite for change, what else is happening in the environment, culture, and many other interrelated factors.

7. Is there a need for specific education and awareness campaigns that target known high risk groups so they are aware of the risks associated with the misuse of alcohol? Who would be the target audience of such campaigns and how should the campaigns be delivered?

Response:

Priority populations for reducing alcohol related harm are identified using national and New South Wales epidemiological, behavioural, and service level data and evidence. Some priority populations include Aboriginal people, people with lived experience of mental illness, people at risk of domestic and family violence, young people and people in contact with the criminal justice system.

Evidence suggests that targeted approaches which focus on 'at risk' populations, complemented with general population prevention measures are most effective at reducing the misuse of alcohol at the population level.

8. Dealing with the victims of alcohol related violence and families can be stressful and traumatic for health professionals. What support services are available to health professionals to help them deal with the stress of these situations? What improvements have been noted in the physical and mental health of public health professionals working in and around the Sydney CBD and Kings Cross areas since the lockout laws were introduced?

Response:

All NSW Health Staff have access to an Employee Assistance Program (EAP) that provides free and confidential counselling and support from qualified psychologists and counsellors to employees and their immediate families.

² https://academic.oup.com/alcalc/article/53/3/302/4796878

Safety huddles and debriefs provide opportunities for health professionals following incidents and difficult situations.

The submission from the St Vincent's Health Network also addresses the impact upon frontline clinicians.

9. Can you provide an estimated cost of the impact of alcohol misuse on the NSW public health system?

Response:

In 2013, the Audit Office of New South Wales reported that "alcohol misuse" cost the government over \$1 billion a year, or around \$416 from each NSW household. This figure represents the direct cost of alcohol abuse to NSW Government services. The largest cost is to NSW Police, followed by Family and Community Services for out-of-home care and child protection services, and NSW Health for hospitalisations. If social costs are included, the total cost of alcohol abuse in New South Wales is around \$3.87 billion per annum, or about \$1,565 from each household. Social costs include lost productivity in the workplace and home, which accounts for the largest portion of total costs.

https://www.audit.nsw.gov.au/sites/default/files/pdf-downloads/2013 Aug Report Cost of Alcohol Abuse to the NSW Government.pdf

Appendix 1: Method used for response to Question 1

Method

Case selection

Analyses included unplanned ED presentations:

- with arrival date from 1 Jan 2009 to 31 Dec 2018
- to 84 NSW public hospitals
- persons of all ages
- provisional diagnosis was assigned to the Public Health Rapid, Emergency, Disease and Syndromic Surveillance (PHREDSS) system alcohol problems surveillance syndrome³
- provisional diagnosis was assigned to the alcohol problems PHREDSS syndrome
- time of arrival from 10:00 PM to 5:59 AM.

Analysis

- SAS Enterprise Guide 7.15 was used to prepare and summarise the data.
- Data were extracted on 29 July 2019 using EDRE snapshot 184.

Limitations

Emergency department data

- Presentations to the 84 included EDs accounted for 83% to 86% of total NSW public emergency department activity from 2009-10 to 2017-18.
- Participation in PHREDSS is poorer for hospitals in rural and regional NSW compared to metropolitan Sydney areas.
- The diagnosis code is assigned by the treating clinician, not a clinical coder, at the end of the presentation. This leads to variation in coding practices between clinicians.
- ED data are captured at the presentation level (not unique persons).
- ED attendances increase over time due to increased service usage as well as population growth.
- Rates per 1000 ED presentations adjust for increased ED activity.
- Other administrative factors can lead to changes in counts: change between coding systems (ICD10-AM, ICD9, SNOMED), variability in the coding of diagnoses by clinicians, and variation in the completeness of data fields over time.

³ PHREDSS provides daily monitoring of Emergency Department visits presenting with various health problems grouped into surveillance syndromes.