

SNAPSHOT: Alcohol-related Harm 2015

AUCKLAND

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Wholly Alcohol-Attributable Hospitalisations

Figure 1 presents the rates of hospitalisations in 2015 that were wholly attributable to alcohol, i.e. where the development of a health condition results directly from the consumption of alcohol.

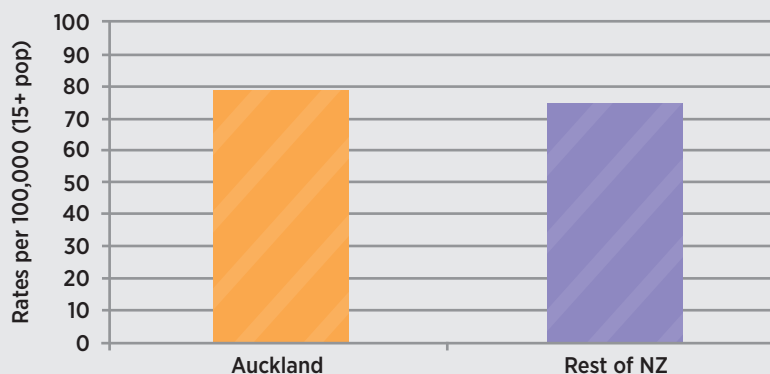
The rate of wholly alcohol-attributable hospitalisations in the Auckland population aged 15+ years was **7%** higher than the rate for the rest of the country (79 per 100,000 people aged 15+ years in Auckland, as compared to the rate in the rest of the country of 74 per 100,000 people aged 15+ years) (Figure 1).

When data were analysed by age group, the 45-49 and the 60-64 year olds in the Auckland Region were observed to have the highest rates:

- The 45-49 year age group in the Auckland Region had a rate that was **33%** higher than the rate in the rest of New Zealand (139 hospitalisations per 100,000 people as compared

Figure 1:

Rates of wholly alcohol - attributable hospitalisations aged 15+ years in 2015



to 105 per 100,000 in the same age group in the rest of New Zealand).

- The 60-64 year age group in the Auckland Region had a rate that was **107%** higher than the rate in the rest of the country (of 143 hospitalisations per 100,000 people as compared to 69 per 100,000 in the same age group in the rest of the country).

Types of wholly alcohol-attributable hospitalisations

In 2015, of the hospitalisations that were caused by alcohol most (77%) were due to mental and behavioural disorders due to use of alcohol (including acute intoxication, harmful use, dependence, withdrawal state and psychosis). Among the younger age groups - 15-19 and

1. The Alcohol-Related Harm Snap Shot 2015 is not directly comparable with the Alcohol-Related Harm Snap Shot 2013. The analysis has been conducted differently and the indicators presented differ in some cases due to data availability.

20-24 year olds, over 80% of hospitalisations were due to mental and behavioural disorders due to use of alcohol (including acute intoxication, harmful use, dependence, withdrawal state and psychosis). Among those aged 35 years and above, mental and behavioural disorders due to use of alcohol also comprised the majority of hospitalisations, however, hospitalisations with a diagnosis of alcoholic liver disease were more common.

Late night assaults

Figure 2 shows rates of Police calls for service for late night assaults in 2015. At least 75% of assaults between 9:00pm and 6:00am are estimated to be alcohol-related by the New Zealand Police (New Zealand Police 2013)².

The rate of calls for service to Police for assaults between midnight and 3.59am in the Auckland region was **21%** higher than the rate in the rest of the country (164 per 100,000 compared to 135 per 100,000 people aged 15+ years). Between 4am and 6.59am the rate in Auckland was **49%** higher than the rate in the rest of the country (73 per 100,000 in Auckland versus 49 per 100,000 people aged 15+ years in the rest of New Zealand).

Alcohol-involved crashes

The following figure presents the rates of drivers in alcohol-involved crashes resulting in an injury or fatality in 2015 (in the Auckland Region and the rest of New Zealand).

In 2015 the rate of drivers in an alcohol-involved crash in the Auckland Region, resulting in an injury or fatality, was **2%** lower than

Figure 2:

Rates of late night assaults in 2015

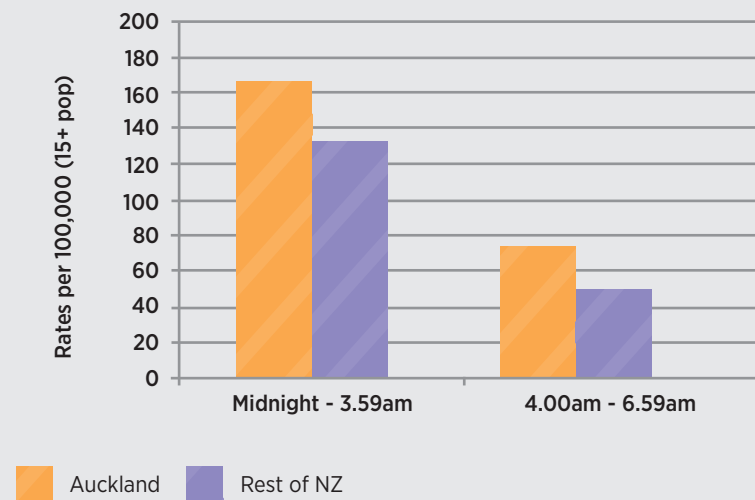
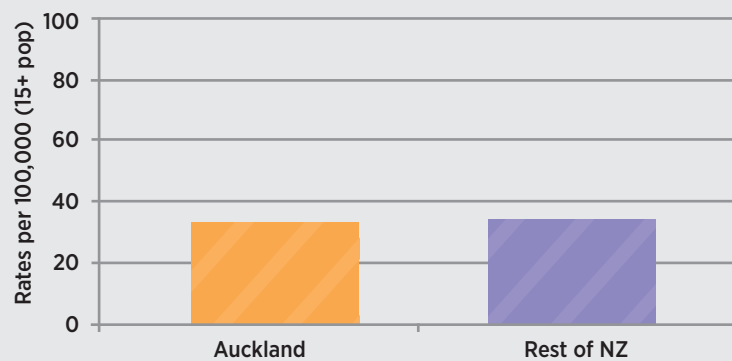


Figure 3:

Rates of drivers in alcohol-involved crashes aged 15+ years in 2015*



*resulting in an injury or fatality

the rate in the rest of the country (33 per 100,000 people aged 15+ years compared to the rest of NZ rate of 34 per 100,000) (Figure 3).

When data were analysed by age, drivers in the age groups 20-24 years were observed to have the highest rate of alcohol-involved crashes, resulting in an injury or fatality, in the Auckland Region in 2015 (and the same was found for the 20-24 year olds in the rest of the country).

- Among 20-24 year olds, the rate was **19%** lower in the Auckland Region as compared to the rate in the rest of the country (76 crashes per 100,000 relative to the rate in the rest of the country of 94 crashes per 100,000).

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Appendix: Methodology

Wholly alcohol-attributable hospitalisations

Hospitalisations that were wholly attributable to alcohol were obtained from the National Minimum Dataset in 2015. The data represent hospitalisations not individual people. Wholly alcohol-attributable conditions are those conditions where alcohol is implicated in all cases of the condition. By definition, the Attributable Fraction = 1 (or 100%), because no cases would be expected to arise in the absence of alcohol.

Hospitalisations for the following conditions were obtained:

- Mental and behavioural disorders due to use of alcohol including: acute intoxication, harmful use, dependence syndrome, withdrawal state (including with delirium), psychotic disorder, amnesic syndrome, residual and late-onset psychotic disorder, other and unspecified mental and behavioural disorders that are all attributable to alcohol,
- Alcoholic liver cirrhosis,
- Alcohol toxicity (poisoning),
- Alcoholic cardiomyopathy (where alcohol weakens the heart muscle),
- Alcoholic gastritis (inflammation of the lining of the stomach caused by excessive alcohol use),
- Alcoholic poly neuropathy (damage to the nerves that results from excessive drinking of alcohol),
- Alcohol induced pancreatitis.

Late night assaults

Police calls for service for assaults were obtained from the Communications and Resource Deployment (CARD) database held by the New Zealand Police in 2015. CARD records all 111 calls and vehicle stops, whether or not they lead to arrests. As CARD events include 111 calls initiated by the public these data are less dependent on factors related to policing practice (compared with Police databases of arrests). The times of calls are recorded. No demographics were available.

Alcohol-involved traffic crashes

Data on drivers in alcohol-involved traffic crashes resulting in injury or fatality over the entire New Zealand population were obtained from the Ministry of Transport in 2015.

Crashes involving injury or death are required by law to be reported to the Police in New Zealand. In non-fatal injury crashes, driver alcohol levels were available from hospital blood tests or police administered breath tests. Drivers were required to be over the legal BAC limit for driving for alcohol-involvement to be coded. The legal BAC limit for driving in New Zealand was 50mg of alcohol per 100ml of blood for adults 20+ years in 2015 and zero milligrams for drivers under 20 years.

In the case of fatal crashes, a blood test was obtained at autopsy for drivers who died. Measured BACs were available for around 80% of fatally injured drivers.

In some cases, Police recorded that alcohol was suspected but did not record an alcohol level. Evidence indicates that this is a reasonably accurate indicator of alcohol-involvement³.

Analysis

Rates of alcohol-related harm indicators were generated for the Auckland Region and the rest of the country separately (and separately for age groups). Rate calculations were undertaken using population estimates from NZ.stat⁴ in the Auckland Region and the rest of New Zealand for: a) the population aged 15+ years, and b) for each age group separately (using the population in each age group as the denominator). Age groups were: 15-19, 20-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50-54, 55-59, 60-64 and 65+. Data were analysed using SAS 9.3.

3. Kypri K. *Minimum Purchase Age as a Strategy to Reduce Alcohol-related Injury*. Centre for Clinical Epidemiology & Biostatistics, School of Medicine and Public Health, University of Newcastle; 2010.

4. <http://nzdotstat.stats.govt.nz/wbos/Index.aspx>