METADATA

Information topic	Details
Indicator name	**Hospitalisations wholly attributable to alcohol**
Domain and topic	Alcohol-related harm: Harms to drinkers
Indicator definition and units	Number and rate of public hospital discharges for conditions wholly attributable to alcohol use, in persons aged 15 years or over. Crude and age-standardised rates, per 100,000 population. Primary diagnosis of a condition considered wholly attributable to alcohol as per Jones and Bellis (2014). ICD-10 AM codes: E24.4, F10, G31.2, G62.1, G72.1, I42.6, K29.2, K70, K85.2, K86.0, T51.0, T51.1, T51.9, Q86.0, R78.0, X45, X65, Y15, Y90, Y91.
Data source	National Minimum Dataset (NMDS), Ministry of Health. Statistics New Zealand for population denominator data NZDep2013 population denominators from Otago University Wellington
Numerator	Number of publicly-funded hospital discharges for conditions with a primary diagnosis considered wholly attributable to alcohol. Multiple episodes are included for the same person. Excludes: • non-residents (domicile code = 9999) • transfers • emergency department short stays where the health speciality code on discharge is that of Emergency Medicine (M05, M06, M07, and M08), length of stay = 0 or 1 and discharged alive (Ministry of Health 2015).
Denominator(s)	Mid-year DHB population estimates (2013 and prior) and projections of usually resident population, aged 15 years and over. This includes the denominator used for calculating rates for all of New Zealand. NZDep2013 usually resident population from Census 2013 TA population estimates: at 30 June 2018 (provisional) from Stats NZ. The estimated resident population at 30 June 2013–18 is based on the 2013 Census usually resident population count.

Time period and time scale	Calendar year from 2001 onwards to most recent year of available data, based on the date of discharge from hospital.
Population coverage	New Zealand usually resident population 15 years and over
Spatial coverage	District Health Board, Territorial Authority including Auckland Local Boards, and Area Unit
Measures of frequency	By age group, sex, prioritised ethnicity (Māori, Pacific, Asian, European/Other) and Māori/non-Māori, NZDep2013 quintile, pattern of alcohol use (acute/chronic) and urban/rural classification.
Methodological notes	Conditions categorised as chronic are those related to a pattern of repeated harmful alcohol use, whereas conditions categorised as acute are those that can be associated with a single episode of harmful alcohol use. Conditions due to chronic alcohol use: E24.4, F10.1, F10.2, F10.3, F10.4, F10.5, F10.6, F10.7, G31.2, G62.1, G72.1, I42.6, K29.2, K70, K85.2, K86.0, Q86.0 Conditions due to acute alcohol use: F10.0, R78.0, T51.0. T51.1, T51.9 (X45, X65, Y15, Y90, Y91) Age-standardised to the WHO world standard population (Ahmad et al 2001), to account for different age structures of populations. Data for multiple years is aggregated when producing geographical and population group breakdowns, due to low numbers of deaths. Hospitalisations are allocated to geographical areas based on the residential address of the person. X45, X65, Y15, Y90, and Y91 are used for external cause codes and not the primary diagnosis code. The second clinical code was examined for use of these external cause codes on the assumption that its use for the second clinical code would be strongly related to the primary diagnosis and reason for hospitalisation. Less than 10 hospitalisations were found where the primary diagnosis was not in the alcohol wholly attributable list of diagnoses anyway.
Confidence interval methodology	95% confidence intervals for crude and age-standardised rates as recommended by the UK Association of Public Health Observatories, using Byar's approximation and exact probabilities for small counts (Eayers 2008).
Limitations of indicator	Health conditions considered to be wholly (100%) attributable to alcohol use represent only part of the burden of disease and injury to which alcohol contributes. This indicator does not capture deaths for the much wider set of conditions that are partially attributable to alcohol such as various cancers, cardiovascular diseases, and injury.

	This indicator also does not include visits to the hospital emergency department requiring less than three hours of care. Emergency departments see a high volume of conditions and injuries both wholly and partially attributable to alcohol. The number of deaths becomes small when examined by sub-national geography, and population groups such as age and ethnicity. This means results are too unreliable to be reported or are only available for large groupings of years, limiting the time series.
Limitations of data source	The accuracy of indicators based on codes found in hospital discharge data is limited by the completeness and quality of coding.
Created by	Environmental Health Indicators Programme, Massey University
Related indicators	Alcohol-related motor vehicle crashes Injury outcomes from alcohol-related crashes Prevalence of hazardous drinking Alcohol outlet licence density
For more information	https://www.researchgate.net/publication/235428834_Alcohol-Attributable_Fractions_for_England_Alcohol-Attributable_Mortality_and_Hospital_Admissions http://www.health.govt.nz/nz-health-statistics/national-collections-and-surveys/collections/national-minimum-dataset-hospital-events
References	Ahmad OB, Boschi-Pinto C, Lopez AD, et al. 2001. *Age Standardization of Rates: A New WHO Standard (Technical Report).* GPE Discussion Paper Series: No. 31. Geneva: World Health Organization. Eayres D. 2008. *Technical Briefing 3: Commonly used public health statistics and their confidence intervals.* York: Association of Public Health Observatories. Jones L, Bellis MA. 2014. Updating England-Specific Alcohol-Attributable Fractions. Liverpool: Centre for Public Health, Liverpool John Moores University. Ministry of Health. 2015. *Factsheet: Short stay emergency department events*. Wellington: Ministry of Health.