

Information topic	Details																																								
Indicator name	<b>Hospitalisations wholly attributable to alcohol</b>																																								
Domain and topic	Alcohol																																								
Indicator definition and units	The number and rate of hospitalisations in the 15+ year old population where the diagnosis is a condition wholly attributable to alcohol. Crude and age-standardised rates per 100,000 persons																																								
Data sources	National Minimum Dataset (Health New Zealand – Te Whatu Ora) Populations web tool (Health New Zealand – Te Whatu Ora)																																								
Numerator	<p>Number of publicly funded hospital discharges for conditions with a primary diagnosis considered wholly attributable to alcohol.</p> <p>The ICD-10 codes used are</p> <table border="1" data-bbox="384 909 1414 1921"> <tbody> <tr><td>E24.4</td><td>Alcohol-induced pseudo-Cushing’s syndrome</td></tr> <tr><td>F10</td><td>Mental and behavioural disorders due to use of alcohol</td></tr> <tr><td>G31.2</td><td>Degeneration of nervous system due to alcohol</td></tr> <tr><td>G62.1</td><td>Alcoholic polyneuropathy</td></tr> <tr><td>G72.1</td><td>Alcoholic myopathy</td></tr> <tr><td>I42.6</td><td>Alcoholic cardiomyopathy</td></tr> <tr><td>K29.2</td><td>Alcoholic gastritis</td></tr> <tr><td>K70</td><td>Alcoholic liver disease</td></tr> <tr><td>K86.0</td><td>Alcohol-induced chronic pancreatitis</td></tr> <tr><td>T51.0</td><td>Ethanol poisoning</td></tr> <tr><td>T51.1</td><td>Methanol poisoning</td></tr> <tr><td>T51.9</td><td>Toxic effect of alcohol, unspecified</td></tr> <tr><td>X45</td><td>Accidental poisoning by and exposure to alcohol</td></tr> <tr><td>X65</td><td>Intentional self-poisoning by and exposure to alcohol</td></tr> <tr><td>Y15</td><td>Poisoning by and exposure to alcohol, undetermined intent</td></tr> <tr><td>K85.2</td><td>Alcohol-induced acute pancreatitis</td></tr> <tr><td>Q86.0</td><td>Foetal alcohol syndrome (dysmorphic)</td></tr> <tr><td>R78.0</td><td>Excess alcohol blood levels</td></tr> <tr><td>Y90</td><td>Evidence of alcohol involvement determined by blood alcohol level</td></tr> <tr><td>Y91</td><td>Evidence of alcohol involvement determined by level of intoxication</td></tr> </tbody> </table> <p>Multiple episodes are included for the same person. Excludes:</p>	E24.4	Alcohol-induced pseudo-Cushing’s syndrome	F10	Mental and behavioural disorders due to use of alcohol	G31.2	Degeneration of nervous system due to alcohol	G62.1	Alcoholic polyneuropathy	G72.1	Alcoholic myopathy	I42.6	Alcoholic cardiomyopathy	K29.2	Alcoholic gastritis	K70	Alcoholic liver disease	K86.0	Alcohol-induced chronic pancreatitis	T51.0	Ethanol poisoning	T51.1	Methanol poisoning	T51.9	Toxic effect of alcohol, unspecified	X45	Accidental poisoning by and exposure to alcohol	X65	Intentional self-poisoning by and exposure to alcohol	Y15	Poisoning by and exposure to alcohol, undetermined intent	K85.2	Alcohol-induced acute pancreatitis	Q86.0	Foetal alcohol syndrome (dysmorphic)	R78.0	Excess alcohol blood levels	Y90	Evidence of alcohol involvement determined by blood alcohol level	Y91	Evidence of alcohol involvement determined by level of intoxication
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## Metadata

	<ul style="list-style-type: none"> <li>• non-residents (domicile code = 9999)</li> <li>• transfers</li> <li>• 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.</li> </ul>
Denominator	The population data for DHBs, ethnic groups, gender and for years 2009 to 2025 is from the Te Whatu Ora webtool
Methodology	<p>All inpatient events were counted where the primary diagnosis was in the wholly attributable alcohol group (see above). If the event was the transfer of a patient between healthcare facilities as part of a single inpatient spell this event was excluded.</p> <p>Events were counted by sex, age group, ethnicity, territorial authority Auckland local board area, urban and rural and by NZ deprivation quintile. The deprivation quintiles were based on 2023 census information (Atkinson et al., 2024).</p> <p>‘All age’ rates were standardised to the World Health Organisation world standard population (Ahmad et al., 2001).</p> <p>New Zealand hospitals use the <i>International Statistical Classification of Diseases and Related Health Problems, tenth revision, Australian Modification</i> to classify cases (Independent Health and Aged Care Pricing Authority, 2022). The eighth edition of this classification system was used in this report . This provides a consistent coding system between 2015 and 2024.</p>
Time period and time scale	Rates are calculated from 2015 to the 2024. Results are presented annually and pooled over multi-year periods.
Population coverage	Hospitalisation rates use the New Zealand estimated resident population.
Spatial Coverage	National, with rates also presented by district (formerly District Health Boards) and Territorial Authority.
Measures of frequency	Rates are presented from 2015 to 2024 and by sex, age group, prioritised ethnicity, NZ deprivation quintile (based on 2023 Census), territorial authority, DHB and Auckland local board.

Methodology	<p>95% confidence intervals were calculated based on the methodology outlined in a technical briefing from the Association of Public Health Observatories (Eayres, 2008). Confidence intervals are presented as vertical bars on graphs.</p> <p>Suppression was applied to some rates due to the unreliability of estimates with small numbers. Age-standardised rates were suppressed for counts less than 20 or populations less than 30. Age-specific rates were suppressed for counts less than 5 or populations less than 30.</p> <p>Rate ratios have been used to compare rates. A rate ratio higher than 1 indicates the rate is higher in the group of interest than in the comparison group. We have used 95% confidence intervals to decide if the rate ratio is statistically significantly different from 1 (where 1 indicates no difference because the two rates are the same). If the 95% confidence interval does not include 1, then the rate ratio is statistically significant (at the 5% probability level).</p>
Limitations of indicator	<ul style="list-style-type: none"> <li>• Hospitalisations may occur sometime after and not in the location the alcohol consumption took place.</li> <li>• Conditions where alcohol is a contributory factor rather than wholly causal are not included.</li> <li>• Rates are calculated for adults (15 years or older) only. Hospitalisations where the condition was caused by another person's drinking, are not covered.</li> </ul>
References	<p>Ahmad, O. B., Boschi-Pinto, C., Lopez, A. D., Murray, C. J., Lozano, R., &amp; Inoue, M. (2001). Age standardisation of rates: A new WHO standard. In. Geneva: World Health Organisation.</p> <p>Atkinson, J., Salmond, C., Crampton, P., Viggers, H., &amp; Lacey, K. (2024). <i>NZDep2023 Index of Socioeconomic Deprivation: Research Report</i>. <a href="https://www.otago.ac.nz/_data/assets/pdf_file/0026/593135/NZDep2023-Research-Report-31-October-2024.pdf">https://www.otago.ac.nz/_data/assets/pdf_file/0026/593135/NZDep2023-Research-Report-31-October-2024.pdf</a></p> <p>Eayres, D. (2008). <i>Commonly used public health statistics and their confidence intervals</i>. Association of Public Health Observatories.</p> <p>Independent Health and Aged Care Pricing Authority. (2022). <i>ICD-10-AM/ACHI/ACS eighth Edition</i>. IHACPA. <a href="https://www.ihacpa.gov.au/resources/icd-10-amachiacs-eighth-edition">https://www.ihacpa.gov.au/resources/icd-10-amachiacs-eighth-edition</a></p>