

ALCOHOL HARM IN NEW ZEALAND

Alcohol-related harm in New Zealand has been recently estimated to cost \$5.3 billion per year. This equates to a cost of \$14.5 million every day.^I

New Zealand's youth, Māori and Pacific populations bear a disproportionate burden of alcohol-related harm.

Drinking patterns

- \bullet Over 80% of the adult population of 2.98 million drinks at least occasionally. $^{\rm II}$
- Forty four percent of all alcohol available for consumption in this country was consumed in "heavier drinking occasions" at the time of the 2004 Alcohol Use in New Zealand survey.
- Nearly one in three drinkers drink on average more than two standard drinks a day, which increases their lifetime risk of alcohol-related disease and injury.^{IV}
- Younger people tend to drink at higher volumes but with less frequency, while older drinkers tend to drink at lower volumes but with greater frequency.
- Approximately 25% of adult drinkers are binge drinkers.^{VI}
- The relative volume consumed on a typical drinking occasion by Māori is 40% more than for non-Māori, and this is so for both sexes and in each age group.^{VII}
- Pacific people are more likely to be non-drinkers, but those who do drink are relatively heavy drinkers, preferring to drink in groups and until they are intoxicated. VIII
- About half of drinkers under 25 years of age drink large quantities when they drink.
- Sixty-one percent of adolescent school students currently drink alcohol and

^I Slack A, Nana G, Webster M, et al. 2009. *Costs of harmful alcohol and other drug use.* Final Report to the Ministry of Health and ACC.

II Ministry of Health. 2007. Alcohol Use in New Zealand Analysis of the 2004 New Zealand Health Behaviours survey – Alcohol Use. Wellington: Ministry of Health.

III SHORE. Comparative analysis of National Alcohol Use Survey data, 1995, 2000, 2005. Unpublished: SHORE.

Ninistry of Health. June 2009. Unpublished Data Analysis of the 2004 New Zealand Health Behaviour Survey – Alcohol Use. Wellington: Ministry of Health.

V Ministry of Health. 2007. Alcohol Use in New Zealand Analysis of the 2004 New Zealand

^V Ministry of Health. 2007. Alcohol Use in New Zealand Analysis of the 2004 New Zealand Health Behaviours survey – Alcohol Use. Wellington: Ministry of Health.

VI Shane, Palmer, Fryer, et al. 2007-08. *ALAC Alcohol Monitor – Adults & Youth: 2007-08 Drinking Behaviours Report.* Wellington: Alcohol Advisory Council of New Zealand.

VII Ministry of Health. 2007. *Alcohol Use in New Zealand Analysis of the 2004 New Zealand Health Behaviours survey – Alcohol Use.* Wellington: Ministry of Health.

VIII Huakau J, Asiasiga L, Ford M, et al. 2005. New Zealand Pacific Peoples' Drinking Style: Too Much or Nothing At All? 118: 1216. *The New Zealand Medical Journal*, 1491-1495.

- 34% have experienced binge drinking. IX
- Women still drink with less frequency than men, with an average 37% of female drinkers drinking less than once a week compared with 24% of male drinkers.^X
- Up to 36% of women consume alcohol during pregnancy, with 10% drinking heavily throughout pregnancy. XI
- Over a third of male drinkers aged 18-24 years drink enough to get drunk at least once a week, as do 17% of male drinkers aged between 25-34 years.

Deaths and injuries

- Every year about 1,000 New Zealanders die from alcohol-related causes.XIII
- Alcohol-attributable deaths are responsible for approximately 8% of all deaths among Māori, including 3.9% of deaths among Māori females and 11.3% of deaths among Māori males.XIV
- Those who consume more than four standard drinks on a single occasion more than double their risk of injury over the next six hours, and the more they drink the greater the risk.
- Those who consume more than two drinks a day face a greater that 1:100 risk of dying an alcohol-related death.
- New Zealand has a high rate of death by drowning compared to similar countries, and studies have found between 28% and 40% of those deaths were among people who had consumed alcohol. XVII
- A high proportion of fire fatalities (44%) involve alcohol either directly or indirectly. Alcohol was a factor in 70% of fire fatalities among adults over the age of 17 years. XVIII

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^X Ministry of Health. 2007. *Alcohol Use in New Zealand Analysis of the 2004 New Zealand Health Behaviours survey – Alcohol Use.* Wellington: Ministry of Health.

XI Watson P, McDonald B. 1999. *Nutrition During Pregnancy – Report To The Ministry of Health*. Auckland: Massey University. Mathew S, Kitson K, Watson P. 2001 *Assessment of Risk of Foetal Alcohol Syndrome and other Alcohol Related Effects in New Zealand: A survey of Midwives in New Zealand*. Report to the Alcohol Advisory Council of New Zealand.

Zealand. XII Ministry of Health. 2007. *Alcohol Use in New Zealand Analysis of the 2004 New Zealand Health Behaviours survey – Alcohol Use.* Wellington: Ministry of Health.

XIII Connor J, Broad R, Jackson S, et al. 2005. The Burden of Death, Disease and Disability Due to Alcohol in New Zealand. *ALAC Occasional Publication 23*. Wellington: Alcohol Advisory Council (available at

http://www.alac.org.nz/FileLinks/12067_BurdenFull.516b09e5.pdf).

XIV Alcohol Advisory Council of NZ. 2005. The burden of death, disease and disability due to alcohol in New Zealand: ALAC Occasional Publication no 23. Wellington: ALAC.

NHMRC. 2009. Australian Guidelines to Reduce Health Risks from Drinking Alcohol. Canberra: National Health and Medical Research Council.

⁽available at http://www.nhmrc.gov.au/publications/synopses/_files/ds10-alcohol.pdf). XVI NHMRC. 2009. Australian Guidelines to Reduce Health Risks from Drinking Alcohol.

Canberra: National Health and Medical Research Council.

(available at http://www.nhmrc.gov.au/publications/synonses/_files/ds10-alcohol_publications/synonses/_fil

⁽available at http://www.nhmrc.gov.au/publications/synopses/_files/ds10-alcohol.pdf). XVII McDonald G, Taylor B, Carter M, et al. 2005. *Circumstances Surrounding Drowning in Those Under 25 in New Zealand*. Wellington: Child and Youth Mortality Review Committee and Water Safety New Zealand. (available at http://www.watersafety.org.nz/pdfs/ CYMRC percent20Report percent2080-02.pdf); Smith G, Coggan C, Koelmeyer T, et al. 1999. *The Role of Alcohol in Drowning and Boating Deaths in the Auckland Region*. Auckland: Auckland Regional Alcohol and Drug Service, Auckland.

- $\bullet~$ Up to 30% of deaths from suicide and self-inflicted injury are estimated to be attributable to alcohol. $^{\rm XIX}$
- Of the 972 participants responding to a survey about injury, 30% said they had been injured as a result of drinking.^{XX}
- In May 2008, a study in the Hawke's Bay Regional Hospital emergency department found that alcohol contributed to 18.2% of injury presentations, rising to 67% between midnight and 6am. XXI
- ACC estimates that up to 22% of all ACC claims had alcohol as a contributing factor, suggesting that alcohol-related claims to ACC alone cost around \$650 million each year.
- A total of 5,413 young people were hospitalised with alcohol-related admissions between 2002 and 2006. XXIII

Road crashes

- Alcohol-related crashes accounted for 30% of our total road toll in 2007.
- In 2007, alcohol was a contributing factor in 97 fatal traffic crashes resulting in 105 deaths. XXIV
- In 2007 there were a further 1389 injury crashes resulting in 419 serious injuries and 1256 minor injuries. XXV
- For every 100 alcohol or drug impaired drivers killed in crashes, 54 of their passengers and 42 sober road users die with them. XXVI

Alcohol-related disease

- Long-term effects of alcohol contribute to over 60 different conditions including breast cancer, gastrointestinal conditions, mental and fetal disorders.
- Drinking over two drinks a day is recognised as a leading preventable cause of cardiovascular disease (CVD), including cardiomyopathy (heart muscle

XVIII Miller D. 2005. *Human Behaviour Contributing to Unintentional Residential Fire Deaths* 1997-2003. Wellington: New Zealand Fire Service Commission Research Report Number 47

XIX New Zealand mortality data from New Zealand Health Information Service. Alcoholattributable fractions from Collins DJ, Lapsley H M. 2008. *The Costs of Tobacco, Alcohol and Illicit Drug Abuse to Australian Society in 2004/05.* Canberra: Commonwealth of Australia. 120-121.

^{XX} Kirkwood. 18 May 2009. *Analysis of Waitemata District Alcohol Behaviour Survey.* Wellington: Alcohol Advisory Council of New Zealand.

Hawke's Bay District Health Board. March 2009. *Alcohol Related Injury Presentations*. Medical Officer of Health Public Health Advice, Public Health Report.

McIlraith J. 2009. Rape Victims' Support Systems Must be Addressed. *Otago Daily Times.* Dunedin.

XXIII Craig E, Jackson C, NZCYES Steering Committee et al. 2007. *Monitoring the Health of New Zealand Children and Young People: Indicator Handbook.* Paediatric Society of New Zealand. New Zealand Child and Youth Epidemiology Service.

Ministry of Transport. 2008. *Alcohol and Drug Crash Factsheet*. Wellington: Ministry of Transport.

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- degeneration), coronary artery disease, high blood pressure, dangerous heart rhythms and strokes. $^{\rm XXVII}$
- Alcohol is a teratogen in that it causes birth defects when consumed during pregnancy, and is the leading preventable cause of mental retardation in the western world. International studies estimate that 1% of live births have a fetal alcohol spectrum disorder. XXVIII
- The International Agency for Research on Cancer has classed alcohol as a Group 1 carcinogen, that is, there is enough evidence to be sure that the substance or exposure is "carcinogenic to humans".
- Cancers are responsible for around 25% of alcohol-attributable deaths and 7% of the burden of disease from alcohol in New Zealand. XXX
- People with alcohol use disorders have a high prevalence of other mental health disorders, substance use disorders and physical health problems, and have much higher use of health services than the general population. XXXII
- Māori are approximately twice as likely to have alcohol use disorders.
- Over 120,000 New Zealanders currently suffer from a clinically diagnosable alcohol use disorder. XXXII
- Over the course of a lifetime an estimated 11.4% will have met the criteria for alcohol abuse. A further 40,300 meet the more severe criteria for alcohol dependence or alcoholism. XXXIII

Young people

Young people experience more harm per standard drink than older drinkers.

 The 18 to 29 year age group has the highest rates of alcohol-related mortality, hospital presentations for alcohol-related injuries and the highest rates of offending after consuming alcohol.

Recent large prospective studies have found no protective factor against heart disease from light to moderate consumption in middle age. Ref: Naimi TS, Brown DW, Brewer RD, et al. 2005. Cardiovascular risk factors and confounders among non-drinking and moderate-drinking U.S. adults. *American Journal Preventive Medicine* 29(3):243. XXVIII Sampson P, Streissguth A, Bookstein F, et al. 1997. Incidence of Fetal Alcohol Syndrome and Prevalence of Alcohol Related Neurodevelopmental Disorder. *Teratology, Vol.* 56, No 5: 317-326.

XXIX International Agency for Research on Cancer. Consumption of Alcoholic Beverages. Summary of data reported to be published in *Volume 96 of the IARC Monographs* (available at http://monographs.iarc.fr/ENG/ Meetings/96-alcohol.pdf).
XXX Connor J, Broad J, Jackson R, et al. 2005. *The Burden of Death, Disease and Disability*

*** Connor J, Broad J, Jackson R, et al. 2005. The Burden of Death, Disease and Disability Due to Alcohol in New Zealand. ALAC Occasional Publication 23. Wellington: Alcohol Advisory Council of New Zealand, Wellington.

(available at http://www.alac.org.nz/FileLinks/12067BurdenFull.516b09e5.pdf).

XXXI Wells J, Baxter J, Schaaf D. 2006. Substance Use Disorders in Te Rau Hinengaro: The

New Zealand Mental Health Survey. Wellington: Alcohol Advisory Council of New Zealand. XXXII Based on Wells J, Baxter J, Schaaf D. 2006. Substance Use Disorders in Te Rau Hinengaro: The New Zealand Mental Health Survey. Wellington: Alcohol Advisory Council of New Zealand. (available at

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NHMRC. 2009. *Australian Guidelines to Reduce Health Risks from Drinking Alcohol.* Canberra: National Health and Medical Research Council. (available at http://www.nhmrc.gov.au/publications/synopses/_files/ds10-alcohol.pdf); 57; Department for Children, Schools and Families. 2009. *Consultation on children, Young People and Alcohol.* London: Department for Children, Schools and Families. (available at http://news.bbc.co.uk/1/shared/bsp/hi/pdfs/29_01_09_consultationonchildren.pdf).

- Young people who drink before going out (commonly known as 'pre-loading')
 were four times more likely to drink 20 or more standard drinks on a usual
 night out, and twice as likely to be involved in a fight in the city or to be
 sexually assaulted, than those who did not drink beforehand. XXXV
- Heavy drinking among teenagers and young adults is associated with poorer brain functioning, particularly in terms of attention and visuospatial skills, and alcohol has detrimental effects on adolescents' liver, hormones, bone density and brain structure. XXXVI

Crime, violence and anti-social behaviour

- In a report on the costs of harmful alcohol and drug use, the health costs of providing treatment to victims of crime in the year 2005/06 were estimated to be \$97.8 million. Lost income, pain and suffering were not included in this estimate. XXXVII
- The Alcohol Use in New Zealand survey found 16.6% of 18-24 year-olds had been physically assaulted in the preceding 12 months by somebody who was drinking, 12% had been sexually harassed and 4.8% had been involved in a motor vehicle accident as a result of somebody else's drinking.XXXVIII
- For all age groups, just under 6% of respondents aged 12 to 65 reported having been physically assaulted by someone who was drinking and 5.3% had been sexually harassed.
- Of 2,581 patients in Christchurch presenting with facial fractures, almost half (49%) were alcohol-related. Interpersonal violence accounted for 78% of these injuries, and motor vehicle crashes for accounted for 13%.^{XL}
- Alcohol is associated with an increased risk of aggressive behaviour and interpersonal violence. At least 31% of all types of recorded criminal offending in 2007/08 were committed by a person who had consumed alcohol prior to committing the offence. XLI
- In 2007/08 over 20,000 violent offences were committed by an offender who had consumed alcohol prior to the offence. XLII
- Young males under 25 years are most likely to be apprehended for these offences. XLIII

XXXV Hughes K, Anderson Z, Morleo M, et al. 2008. *Alcohol, Nightlife and Violence: The Relative Contributions of Drinking Before and During Nights Out to Negative Health and Criminal Justice Outcomes.* United Kingdom: Centre for Public Health, John Moores University, Faculty of Health and Applied Social Sciences.

Tapert S, Caldwell L, Burke C. 2004/2005. *Alcohol and the Adolescent Brain: Human Studies*. Alcohol Research and Health. USA: National Institute on Alcohol Abuse and Alcoholism.

XXXVII Tapert S, Caldwell L, Burke C, 2004/2005. *Alcohol and the Adolescent Brain: Human Studies* Alcohol Research and Health. USA: National Institute on Alcohol Abuse and Alcoholism.

XXXVIII Ministry of Health. 2007. Alcohol Use in New Zealand Analysis of the 2004 New Zealand Health Behaviours survey – Alcohol Use. Public Health Intelligence Occasional Bulletin No. 40. Wellington: Ministry of Health.

XXXIX Ibid

XL Lee K, Snape L. 2008. The Role of Alcohol in Maxillofacial Fractures. *New Zealand Medical Journal 2978*.

XLI New Zealand Police National Alcohol Assessment. April 2009. Wellington: New Zealand Police. (available at http://www.police.govt.nz).
XLII Ibid

XLIII Ibid

- Pre-loading, combined with the extended trading hours of many inner city clubs and bars, is believed to be linked to high levels of intoxication in public places and associated offending.
- Prevalence of intoxication in public places and the behaviours or offending associated with it are making significant demands on our police and diverting resources away from other important issues.
- Harmful use of alcohol is imposing significant costs on our criminal justice sector, including our courts and prison service. In about 80% of cases that come before the District Court criminal courts the offender will have an alcohol or other drug dependency or abuse issue that is connected with their offending. XLIV
- The harmful use of alcohol also creates large numbers of victims and can interfere with other citizens' enjoyment of their communities and public places.

Sexual behaviour

- A study on the harmful effects of alcohol on sexual behaviors among Otago University students found that 25% reported risky sexual behaviors as a result of drinking alcohol in the last three months; 15% of males and 11% of females reported having unprotected sex; 19% of males and 16% of females reported having sex they later regretted and almost one third reported experiencing an unwanted sexual advance as a result of others' drinking alcohol.
- An analysis of 20 years of sexual assault data in Dunedin shows that 56% of assaults occurred between midnight and 8am, and in 60% of these assaults, alcohol had been involved, sometimes in extraordinarily large amounts. XLVI

XLIV Walker J, District Court and Youth Court Judge. December 2008. Wellington. *Address to the Fetal Alcohol Spectrum Disorder & Justice Seminar, Blenheim.*XLV Cashell-Smith M, Connor J, Kypri K, 2007. Harmful Effects of Alcohol on Sexual Behaviour in a New Zealand University Community. *Drug and Alcohol Review 645.*XLVI McIlraith J. 22 April 2009. Rape Victims' Support Systems Must be Addressed. *Otago Daily Times* Dunedin.