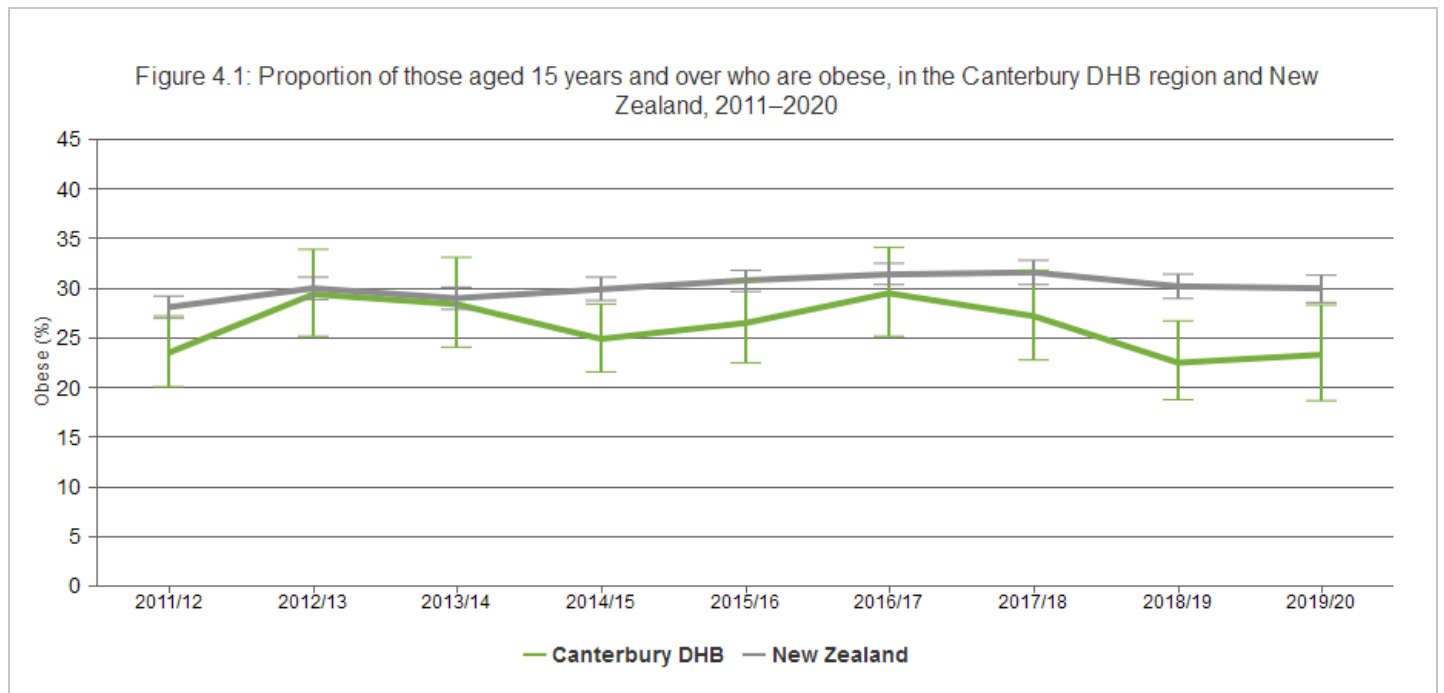


## Health: Obesity

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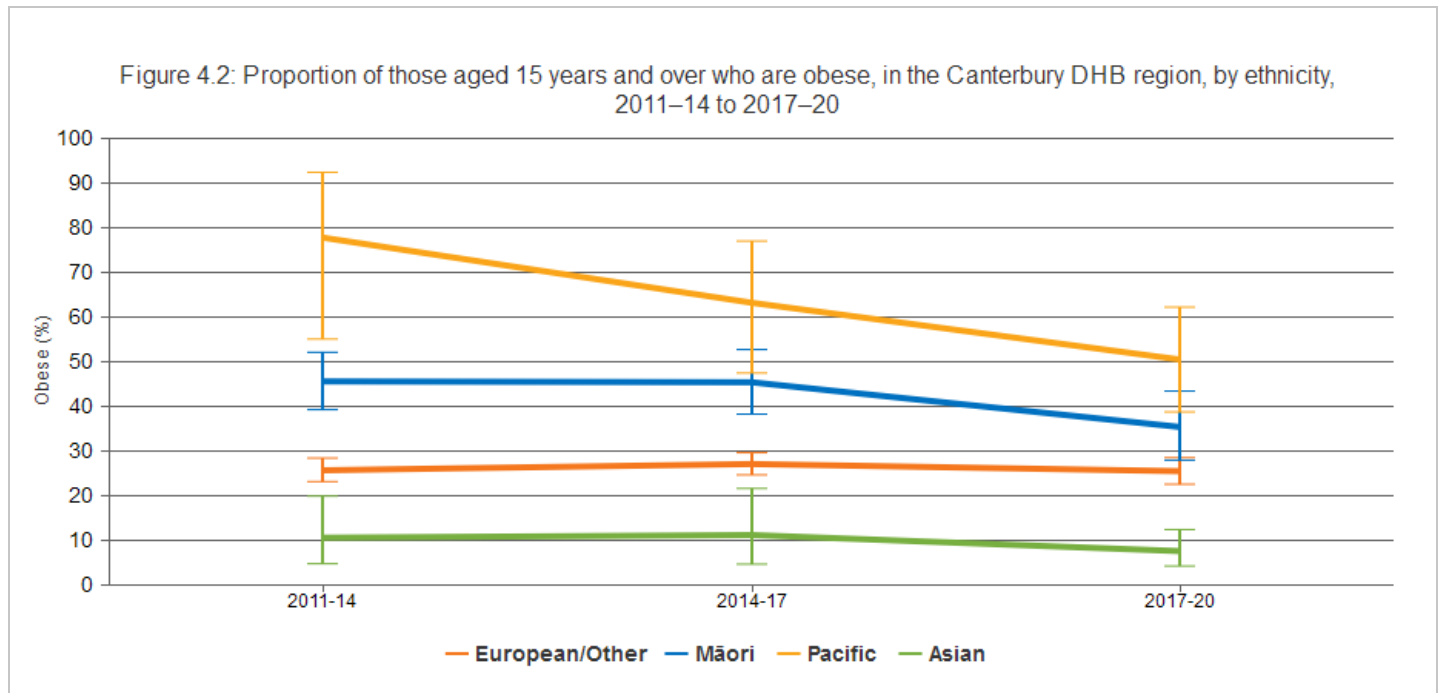
Obesity is an excessively high amount of body fat in relation to lean body mass, defined as having a Body Mass Index (BMI, calculated as kg/m<sup>2</sup>) of 30+, or equivalent for those aged under 18 years [22]. Obesity is associated with an increased risk of a number of health conditions, including type 2 diabetes, ischaemic heart disease, high blood pressure, some cancers, some forms of arthritis, and stroke [23]. Rates of obesity have increased in almost all countries in the past three to four decades and New Zealand now has one of the highest rates of obesity in the world [24,25]. Most of this increase has been attributed to increased access to foods that are more processed, affordable, and effectively marketed [26]. Energy-dense and nutrient-poor foods have become the most affordable way to meet daily calorie needs compared to nutrient-rich and high-quality foods, resulting in low income groups generally having a poorer diet than high income groups [27]. Policies and programmes that make it easier to eat healthily and exercise regularly are required to reduce obesity at the population level.

This indicator presents the proportion of those 15 years and over who are obese (Body Mass Index, calculated as kg/m<sup>2</sup>, of 30+, or equivalent for those aged <18 years), using New Zealand Health Survey data.



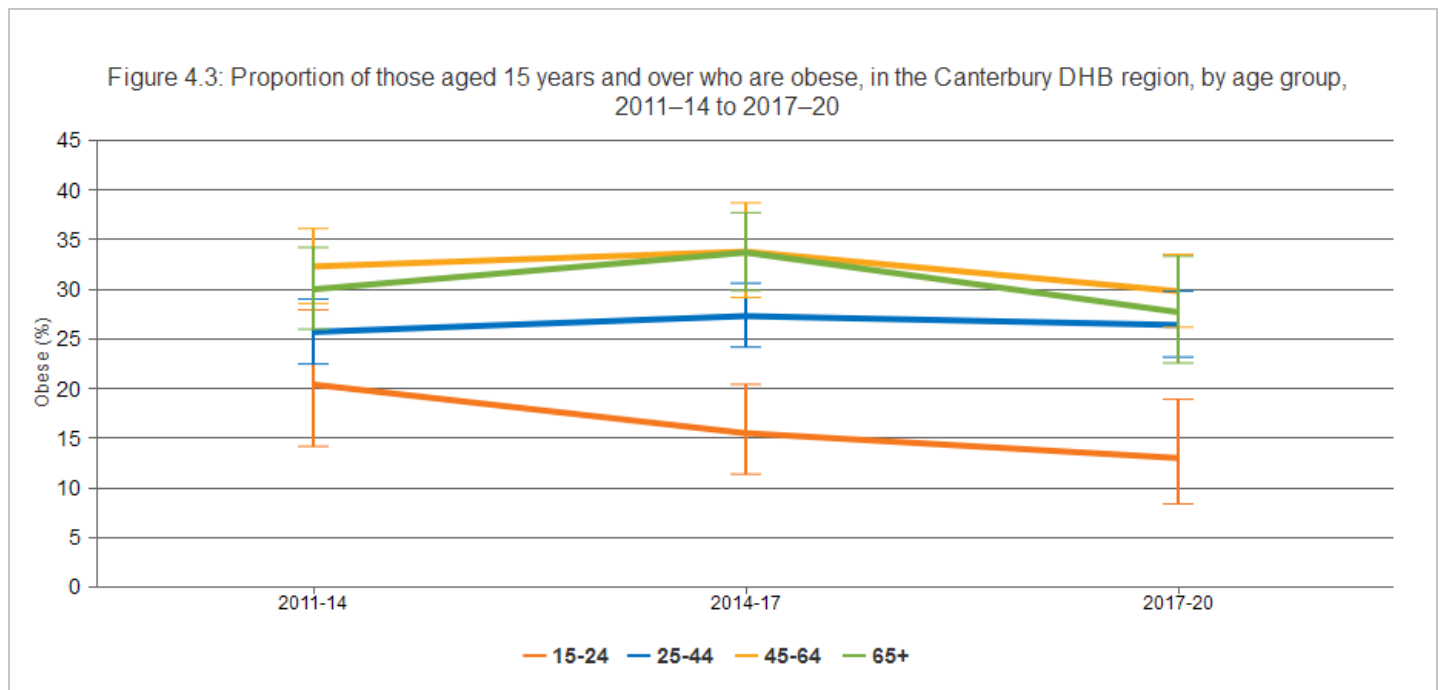
The figure shows that approximately a quarter of adult respondents (23.3%) were obese across the Canterbury DHB region in 2019/20. This proportion is statistically significantly lower than the proportion for New Zealand overall (30%). The proportion of respondents aged 15 years and over who are obese in New Zealand increased statistically significantly between 2011/12 and 2017/18 but has declined marginally since. The proportion of Canterbury respondents aged 15 years and over who are obese has also declined since 2017/18, however, the differences between timepoints are not statistically significant.

## Breakdown by ethnicity



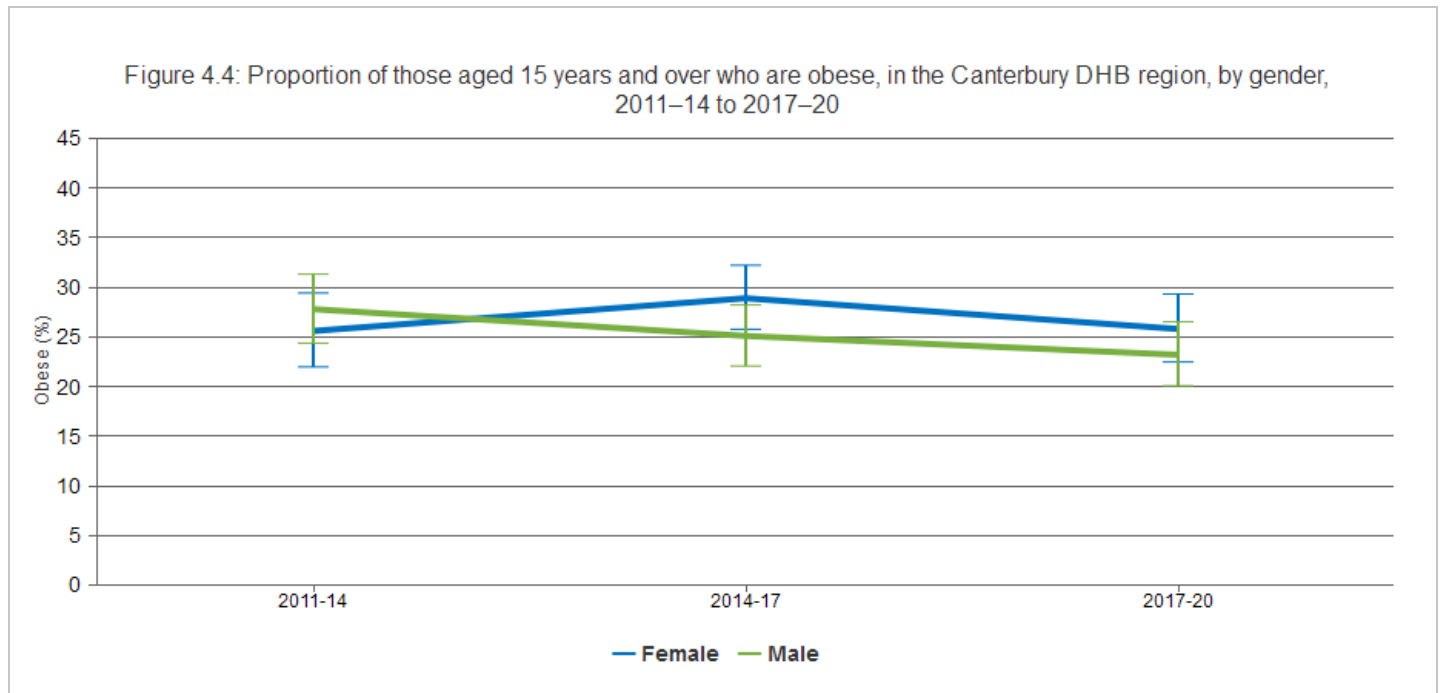
The figure shows that the proportion of Canterbury DHB region respondents, aged 15 years and over, who were obese was highest for Pacific people over the time series shown, compared with Māori, Asian, and European/Other respondents (in 2017–2020, Pacific, 50.5%; Māori, 35.4%; European/Other 25.5%, and Asian, 7.6%). The proportion of adult Māori and Pacific respondents who are obese has declined over the time series shown (notably for Pacific people), although the differences are not statistically significant.

## Breakdown by age



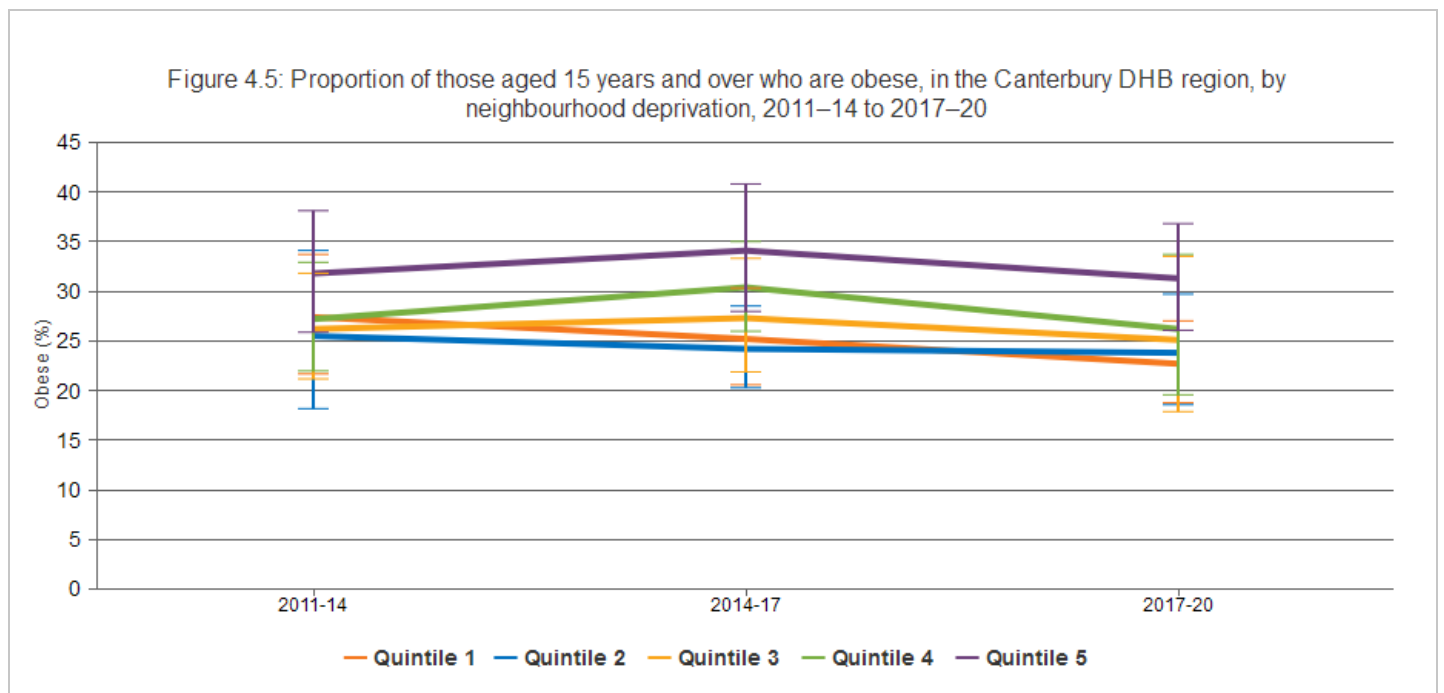
The figure shows that the proportion of respondents aged 15 years and over who are obese in the Canterbury DHB region is higher for the older age groups, in particular for those aged 25 to 44 years (26.4%), 45 to 64 years (29.8%), and those aged 65+ years (27.7%) in 2017-20 (i.e. a statistically significantly higher proportion for all of the older age groups than for those aged 15 to 24 years (13.0%), in both the 2014-17 and 2017-20 time periods).

## Breakdown by gender



The figure shows that statistically similar proportions of female and male respondents, aged 15 years and over, are obese in the Canterbury DHB region (25.8% and 23.2% respectively, for 2017–20).

## Breakdown by deprivation



The figure indicates that adult obesity in the Canterbury DHB region is associated with socioeconomic deprivation. The differences indicate that respondents (aged 15 years and over) who live in neighbourhoods that have the least deprived NZDep18 scores are less likely to be obese compared with respondents who live in neighbourhoods with the most deprived NZDep18 scores (for 2017–20, Quintile 1, 22.7%; Quintile 2, 23.8%; Quintile 3, 25.1%; Quintile 4, 26.2%; and Quintile 5; 31.3%). However, the differences are not statistically significant.

## Data Sources

**Source:** Ministry of Health.

**Survey/data set:** New Zealand Health Survey to 2020. Access publicly available data from the Ministry of Health website [https://minhealthnz.shinyapps.io/nz-health-survey-2020-21-annual-data-explorer/\\_w\\_0bb7535a/#!/explore-indicators](https://minhealthnz.shinyapps.io/nz-health-survey-2020-21-annual-data-explorer/_w_0bb7535a/#!/explore-indicators)

**Source data frequency:** Survey conducted continuously with data reported annually. Regional results (pooled data) released every 3 years.

Metadata for this indicator is available at <https://www.canterburywellbeing.org.nz/our-wellbeing/index-data>

## REFERENCES

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This is the full reference list for **Health**.

- 1 Marmot M, Allen J, Bell R, Bloomer E, Goldblatt P (2012) WHO European review of social determinants of health and the health divide. *Lancet* 380: 1011-1029.
- 2 Keefe V, Reid P, Ormsby C, Robson B, Purdie G, et al. (2002) Serious health events following involuntary job loss in New Zealand meat processing workers. *International Journal of Epidemiology* 31: 1155-1161.
- 3 Howden-Chapman P, Matheson A, Crane J, Viggers H, Cunningham M, et al. (2007) Effect of insulating existing houses on health inequality: cluster randomised study in the community. *BMJ* 334: 460.
- 4 Ross CE, Wu C-I (1995) The Links Between Education and Health. *American Sociological Review* 60: 719-745.
- 5 McKee-Ryan F, Song Z, Wanberg CR, Kinicki AJ (2005) Psychological and physical well-being during unemployment: a meta-analytic study. *J Appl Psychol* 90: 53-76.
- 6 Cormack DM, Harris RB, Stanley J (2014) Investigating the Relationship between Socially-Assigned Ethnicity, Racial Discrimination and Health Advantage in New Zealand. *PLoS ONE* 8: e84039.
- 7 Robson B, Harris R (2007) *Hauora: Māori Standards of Health IV. A study of the years 2000–2005*; Robson B, Harris R, editors. Wellington: Te Rōpū Rangahau Hauora a Eru Pōmare.
- 8 Hider P (1998) *Acute medical admissions: a critical appraisal of the literature*. New Zealand Health Technology Assessment Clearing House.
- 9 Peter M. Fayers, Hays RD, editors (2005) *Assessing Quality of Life in Clinical Trials: Methods and Practice*. 2 ed. Oxford: UK: Oxford University Press. 467 p.
- 10 Idler EL, Benyamini Y (1997) Self-rated health and mortality: a review of twenty-seven community studies. *J Health Soc Behav* 38: 21-37.
- 11 CDHB (2017) *Canterbury Wellbeing Survey, June 2017: Report prepared by Nielsen for the Canterbury District Health Board and partnering agencies*. Christchurch: Canterbury District Health Board.
- 12 Health Promotion Agency (2020) Smokefree facts and figures. Retrieved from <https://www.smokefree.org.nz/smoking-its-effects/facts-figures>.
- 13 Ministry of Health (2019) *Annual Data Explorer 2018/19: New Zealand Health Survey* [Data File]. Retrieved from <https://minhealthnz.shinyapps.io/nz-health-survey-2018-19-annual-data-explorer/>.
- 14 National Center for Chronic Disease Prevention and Health Promotion (US) (2014) *The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General. Patterns of Tobacco Use Among U.S. Youth, Young Adults, and Adults*. Atlanta (GA): Office on Smoking and Health, Centers for Disease Control and Prevention (US).
- 15 U.S. Department of Health and Human Services (USDHHS) (1994) *A report of the Surgeon General: Preventing tobacco use among young people*. Atlanta, GA: Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health.
- 16 U.S. Department of Health and Human Services (USDHHS) (2012) *Preventing Tobacco Use Among Youth and Young Adults: A Report of the Surgeon General*. Atlanta (GA): Centers for Disease Control and Prevention (US).
- 17 Ministry of Health (2013) *Health Loss in New Zealand: A report from the New Zealand Burden of Diseases, Injuries and Risk Factors Study, 2006–2016*. Wellington: Ministry of Health.
- 18 Banks E, Joshy G, Weber MF, Liu B, Grenfell R, et al. (2015) Tobacco smoking and all-cause mortality in a large Australian cohort study: findings from a mature epidemic with current low smoking prevalence. *BMC Medicine* 13: 38.
- 19 World Health Organization (2015) *WHO report on the global tobacco epidemic, 2015: Raising taxes on tobacco*. Geneva: WHO. ISBN 978 92 4 069460 6.
- 20 Ministry of Health (2018) *Regional Data Explorer 2014–17: New Zealand Health Survey* [Data File].
- 21 Ministry of Health (2017) *Methodology Report 2016/17: New Zealand Health Survey*. Wellington: Ministry of Health.
- 22 WHO (2007) *Global Database on Body Mass Index*. Geneva: World Health Organization.
- 23 Ministry of Health (2017) *Clinical Guidelines for Weight Management in New Zealand Adults*. Wellington: Ministry of Health, Clinical Trials

- 24 Ministry of Health (2018) Obesity. Retrieved from [www.health.govt.nz/our-work/diseases-and-conditions/obesity](http://www.health.govt.nz/our-work/diseases-and-conditions/obesity)
- 25 Ministry of Health (2016) *Annual Update of Key Results 2015/16: New Zealand Health Survey*. Wellington: Ministry of Health.
- 26 Swinburn BA, Sacks G, Hall KD, McPherson K, Finegood DT, et al. (2011) The global obesity pandemic: shaped by global drivers and local environments. *Lancet* 378: 804-814.
- 27 Drewnowski A (2009) Obesity, diets, and social inequalities. *Nutr Rev* 67 Suppl 1: S36-39.
- 28 Physical Activity Guidelines Advisory Committee (2018) *2018 Physical Activity Guidelines Advisory Committee Scientific Report*. Washington, DC: U.S. Department of Health and Human Services.
- 29 McLean G, Tobias M (2004) *The New Zealand Physical Activity Questionnaire: Report on the validation of the NZPAQ-long and NZPAQ-short form physical activity questionnaires*. Wellington: Sport and Recreation New Zealand.
- 30 Craig CL, Marshall AL, Sjoström M, Bauman AE, Booth ML, et al. (2003) International physical activity questionnaire: 12-country reliability and validity. *Med Sci Sports Exerc* 35: 1381-1395.
- 31 Ministry of Health (2018) Annual Data Explorer 2017/18: New Zealand Health Survey [Data File].
- 32 Babor TF, Higgins-Biddle JC, Saunders JB, Monteiro MG, World Health Organization (2001) *AUDIT: the alcohol use disorders identification test: guidelines for use in primary health care*. Geneva: World Health Organization.
- 33 Ministry of Health (2013) Hazardous drinking in 2011/12: Findings from the New Zealand Health Survey. Retrieved from [www.moh.govt.nz/NoteBook/nbbooks.nsf/0/81BF301BDCF63B94CC257B6C006ED8EC/\\$file/12-findings-from-the-new-zealand-health-survey.pdf](http://www.moh.govt.nz/NoteBook/nbbooks.nsf/0/81BF301BDCF63B94CC257B6C006ED8EC/$file/12-findings-from-the-new-zealand-health-survey.pdf)
- 34 Braillon A, Dubois G (2005) Alcohol and public health. *Lancet* 365: 1387.
- 35 Health Promotion Agency (2016) *Alcohol – the Body and Health Effects: A brief overview*. Wellington: Health Promotion Agency.
- 36 GBD 2016 Alcohol Collaborators (2018) Alcohol use and burden for 195 countries and territories, 1990-2016: a systematic analysis for the Global Burden of Disease Study 2016. *Lancet* 392: 1015-1035.
- 37 Connor, J., Kydd, R., Shield, K., & Rehm, J. (2015). The burden of disease and injury attributable to alcohol in New Zealanders under 80 years of age: marked disparities by ethnicity and sex. *N Z Med J*, 128(1409), 15-28.
- 38 Hall JJ, Taylor R (2003) Health for all beyond 2000: the demise of the Alma-Ata Declaration and primary health care in developing countries. *Med J Aust* 178: 17-20.
- 39 Winnard D, Crampton P, Cumming J, Sheridan N, Neuwelt P, et al. (2008) *Population Health – Meaning in Aotearoa New Zealand? A discussion paper to support implementation of the Primary Health Care Strategy*. Auckland: Auckland Regional Public Health Service.
- 40 Neuwelt P, Matheson D, Arroll B, Dowell A, Winnard D, et al. (2009) Putting population health into practice through primary health care. *NZ Med J* 122: 98-104.
- 41 Schluter PJ, Hamilton GJ, Deely JM, Ardagh MW (2016) Impact of integrated health system changes, accelerated due to an earthquake, on emergency department attendances and acute admissions: a Bayesian change-point analysis. *BMJ Open* 6: e010709.
- 42 Galenkamp H, Deeg DJH, de Jongh RT, Kardaun JWP, Huisman M (2016) Trend study on the association between hospital admissions and the health of Dutch older adults (1995–2009). *BMJ Open* 6: e011967.
- 43 Mordal J, Bramness JG, Holm B, Mørland J. (2008) Drugs of abuse among acute psychiatric and medical admissions: laboratory based identification of prevalence and drug influence. *Gen Hosp Psychiatry* 30(1):55-60.
- 44 Kessler RC, Angermeyer M, Anthony JC, R DEG, Demyttenaere K, et al. (2007) Lifetime prevalence and age-of-onset distributions of mental disorders in the World Health Organization's World Mental Health Survey Initiative. *World Psychiatry* 6: 168-176.
- 45 Ministry of Health (2017) *Office of the Director of Mental Health Annual Report 2016*. Wellington: Ministry of Health.
- 46 Ministry of Health (2018) PRIMHD: Mental health data. Retrieved from [www.health.govt.nz/nz-health-statistics/national-collections-and-surveys/collections/primhd-mental-health-data](http://www.health.govt.nz/nz-health-statistics/national-collections-and-surveys/collections/primhd-mental-health-data)
- 47 Oakley Browne MA (2006) Lifetime prevalence and lifetime risk of DSM-IV disorders. In: Oakley Browne MA, Wells JE, Scott KM, editors. *Te Rau Hinengaro: The New Zealand Mental Health Survey*. Wellington: Ministry of Health.
- 48 Kessler RC, Foster CL, Saunders WB, Stang PE (1995) Social consequences of psychiatric disorders, I: Educational attainment. *American Journal of Psychiatry* 152: 1026–1032.
- 49 The Mental Health Commission (1998) *Blueprint for Mental Health services in New Zealand. How things need to be*. Wellington: The Mental Health Commission.

- 50 The Mental Health Commission (2012) *Blueprint II Improving mental health and wellbeing for all New Zealanders. How things need to be*. Wellington: The Mental Health Commission.
- 51 Cerdá M, Tracy M, Galea S (2011) A prospective population based study of changes in alcohol use and binge drinking after a mass traumatic event. *Drug & Alcohol Dependence* 115: 1-8.
- 52 Fergusson DM, Horwood J, Boden JM, Mulder RT (2014) Impact of a Major Disaster on the Mental Health of a Well-Studied Cohort. *JAMA Psychiatry* 71: 1025-1031.
- 53 Galea S, Nandi A, Vlahov D (2005) The epidemiology of post-traumatic stress disorder after disasters. *Epidemiol Rev* 27: 78-91.
- 54 Gluckman P (2011) *The psychological consequences of the Canterbury earthquakes*. Wellington: Office of the Prime Minister's Science Advisory Committee.
- 55 Kessler RC, McLaughlin KA, Koenen KC, Petukhova M, Hill ED, et al. (2012) The importance of secondary trauma exposure for post-disaster mental disorder. *Epidemiology and Psychiatric Sciences* 21: 35-45.
- 56 Lock S, Rubin GJ, Murray V, Rogers MB, Amlot R, et al. (2012) Secondary stressors and extreme events and disasters: a systematic review of primary research from 2010-2011. *PLoS Curr* 4.
- 57 Kerdelmidis M, Reid MC. (2019) *Wellbeing recovery after mass shootings: information for the response to the Christchurch mosque attacks 2019. Rapid literature review*. Christchurch, New Zealand: Planning and Funding, Canterbury District Health Board.