



COUNTIES
MANUKAU
HEALTH

Alcohol-Specific Hospital Admissions in Counties Manukau

Supplementary paper to the Alcohol-Related Harm Profile, 2018

This report is available in pdf format on
www.countiesmanukau.health.nz

NOTE: This short report is a supplement to the comprehensive 'Counties Manukau Health Alcohol-Related Harm Profile' by K Wright, 2018.

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Every effort has been made to ensure that the information in this report is correct. Counties Manukau Health and the authors will not accept any responsibility for information which is incorrect, or any actions taken as a result of the information in this report.

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Contents

List of abbreviations	3
1 Introduction.....	4
2 Alcohol-Specific Hospital Admissions: Definitions and Methodology.....	6
3 Alcohol-Specific Hospital Admissions: Numbers and Rates	7

List of abbreviations

CAU	Census area unit
CM	Counties Manukau
DHB	District Health Board
ICD	International Classification of Diseases
MOH	Ministry of Health
NFD	Not Further Defined
NHI	National Health Index
NMDS	National Minimum Dataset
WHO	World Health Organization

1 Introduction

Hazardous alcohol use and alcohol-related harm cause large health, social, and economic burdens in Counties Manukau (CM) and are key drivers of inequities. As described in the **'Counties Manukau Health Alcohol-Related Harm Profile' (2018)**¹, a range of alcohol-related harm indicators can be used to provide a population-level 'picture' of alcohol-related harm. One indicator that contributes to this 'picture' is alcohol-specific hospital admissions. Harmful alcohol use contributes to hospital admissions for a range of conditions, including injuries, and chronic and mental health conditions. Alcohol-specific hospital admissions are utilised internationally as an indicator of alcohol-related harm.

This short report presents information on alcohol-specific hospital admissions for seven geographic areas (or 'localities') of the Counties Manukau Health region. It is supplementary to the comprehensive 2018 'Profile'. It is intended that this report be read in conjunction with the 'Profile'. Please refer to the 'Profile' pages 29-34 and 81-87 for detailed information on alcohol-specific hospital admissions for Counties Manukau Health by age, ethnicity, sex, socio-economic 'quintiles', and condition categories for the years 2007 to 2016.

Counties Manukau Health is one of twenty district health boards (DHBs) established under the New Zealand Health and Disability Act 2000, and provides health and disability services to approximately 550,000² people who reside in the Counties Manukau Health area. CM includes the areas of Pakuranga, Howick, Clevedon, Maangere, Ootara, Papatoetoe, Manukau, Manurewa, Takanini, Papakura, Karaka, Drury, Pukekohe, Waiuku, Tuakau, and Port Waikato. It includes parts of the local authorities of Auckland, Waikato, and Hauraki District. See Figure 1 for a map showing the Counties Manukau Health area.

Figure 1: Map showing the Counties Manukau Health area



¹ Wright, K (2018) Counties Manukau Health Alcohol-Related Harm Profile. Counties Manukau Health. Available at: <https://countiesmanukau.health.nz/assets/About-CMH/Performance-and-planning/health-status/20180710-CMH-Alcohol-Related-Harm-Profile.pdf>

² Estimation based on population projections for 2017 based on the 2013 Census (October 2016 update), as reported in the Counties Manukau health Annual Report 2018, available at: <https://countiesmanukau.health.nz/assets/About-CMH/Reports-and-planning/Annual-reports-and-plans/2017-18-CM-Health-Annual-Report-Final-for-online-publication-December-2018.pdf>

For this report, the CM area has been divided into seven geographic localities: Eastern, Maangere, Ootara, Papatoetoe, Manurewa, Papakura, and Franklin. The Census area units (CAUs) included in each locality and the estimated population (2017) resident in each locality are listed in Table 1.

Table 1: Counties Manukau localities

Counties Manukau localities and estimated populations	CAUs included in each locality
Eastern Estimated population: 163,210	Aberfeldy, Baverstock Oaks, Beachlands – Maraetai, Bleakhouse, Botany Downs, Bucklands and Eastern Beaches, Bucklands Beach South, Burswood, Clevedon, Cockle Bay, Dannemora, Donegal Park, Edgewater, Elsmore Park, Golfland, Greenmount, Halfmoon Bay, Highbrook, Howick Central, Howick West, Kawakawa-Orere, Kilkenny, Maungamaungaroa, Mellons Bay, Millhouse, Mission Heights, Murvale, Ormiston, Pakuranga Central, Pakuranga East, Pakuranga North, Pigeon Mountain North, Pigeon Mountain South, Point View, Redoubt East, Shelly Park, Sunnyhills, Turanga
Maangere Estimated population: 71,880	Ambury, Aorere, Arahanga, Favona North, Favona South, Favona West, Harania East, Harania North, Harania West, Mangere Bridge, Mangere Central, Mangere East, Mangere South, Mangere Station, Mascot, Viscount
Ootara Estimated population: 36,175	Clover Park, Ferguson, Flat Bush, Otara East, Otara North, Otara South, Otara West, Redoubt North
Papatoetoe Estimated population: 48,240	Dingwall, Grange, Kohuora, Manukau Central, Middlemore, Papatoetoe Central, Papatoetoe East, Papatoetoe North, Papatoetoe West, Puhinui, Puhinui South, Wymondley
Manurewa Estimated population: 93,040	Beaumont, Burbank, Clendon North, Clendon South, Hillpark, Homai East, Homai West, Hyperion, Leabank, Manurewa Central, Manurewa East, Mill Road, Randwick Park, Redoubt South, Rowandale, Totara Heights, Wattle Farm, Weymouth East, Weymouth West, Wiri
Papakura Estimated population: 58,930	Ardmore, Bremner, Drury, Hingaia, Massey Park, North East Papakura, Opaheke, Pahurehure, Papakura Central, Papakura East, Papakura North, Papakura South, Red Hill, Rosehill, Takanini North, Takanini South, Takanini West
Franklin Estimated population: 74,170	Awhitu, Bledisloe Park, Bombay, Buckland, Buckland South, Eden Road - Hill Top, Glenbrook, Hunua, Kaiaua, Kingseat, Mangatawhiri, Onewhero, Opuawhanga, Otatau, Paerata - Cape Hill, Paparata, Patumahoe, Pokeno, Pukekohe North, Pukekohe West, Pukeoware, Redoubt, Runciman, South Waiuku, Tuakau, Waiuku East, Waiuku West, Whangapouri Creek

**Estimated population figures are based on Statistic NZ estimated resident population projections for 2017 (2013 Census based)*

2 Alcohol-Specific Hospital Admissions: Definitions and Methodology

As described in the 2018 'Profile', alcohol-specific hospital admissions are defined as hospital admissions in patients of all ages where the principal or secondary diagnosis is an alcohol-specific condition. Alcohol-specific conditions are wholly attributable to alcohol. Table 2 includes the ICD-10 codes used in this analysis to identify alcohol-specific (wholly attributable) conditions.³ Note two important points:

- The inclusion of secondary diagnoses, in addition to principal diagnosis, creates a broad definition of alcohol-specific hospital admissions.
- This indicator does not include conditions that are partially-attributable to alcohol (such as cancers).

Alcohol-specific hospital admission numbers and rates have been derived from analysis of encrypted (anonymised) National Health Index (NHI) event data from the Ministry of Health's National Minimum Dataset (NMDS), July 2015 to June 2018. Hospital admission events with alcohol-specific principal and/or secondary diagnosis codes listed in Table 2 were identified and counted. Hospital admission rates were derived using Statistics NZ estimated resident population estimates for 2015 to 2017 as the denominator. Direct age standardisation was based on the WHO World Standard Population.

Table 2: ICD code list for alcohol-specific condition categories

ICD code descriptor	ICD-10 code	Condition category
Alcohol-induced pseudo-Cushing's syndrome	E24.4	Endocrine
Wernicke's encephalopathy	E51.2	Neuro-psychiatric
Mental and behavioural disorders due to use of alcohol	F10	Neuro-psychiatric
Degeneration of nervous system due to alcohol	G31.2	Neuro-psychiatric
Alcoholic polyneuropathy	G62.1	Neuro-psychiatric
Alcoholic myopathy	G72.1	Neuro-psychiatric
Alcoholic cardiomyopathy	I42.6	Cardiovascular
Alcoholic gastritis	K29.2	Digestive
Alcoholic liver disease	K70	Digestive
Alcohol-induced acute pancreatitis	K85.2	Digestive
Alcohol-induced chronic pancreatitis	K86.0	Digestive
Foetal alcohol syndrome (dysmorphic)	Q86.0, O35.4, P04.3	Maternal, infant and child
Excess alcohol blood levels	R78.0	Evidence of alcohol involvement
Toxic effect of alcohol, Ethanol	T51.0	Toxic effect of alcohol
Toxic effect of alcohol, Methanol	T51.1	Toxic effect of alcohol
Toxic effect of alcohol, other alcohols	T51.8	Toxic effect of alcohol
Toxic effect of alcohol, unspecified	T51.9	Toxic effect of alcohol
Accidental poisoning by and exposure to alcohol	X45	Unintentional injuries
Intentional self-poisoning by and exposure to alcohol	X65	Intentional injuries

³ This table is also found in Appendix 3 of the 'Alcohol-Related Harm Profile'

Poisoning by and exposure to alcohol undetermined intent	Y15	Unintentional injuries
Evidence of alcohol involvement determined by blood alcohol level	Y90	Evidence of alcohol involvement
Evidence of alcohol involvement determined by level of intoxication	Y91	Evidence of alcohol involvement

3 Alcohol-Specific Hospital Admissions: Numbers and Rates

In the three year period from 1st July 2015 to 30th June 2018, there were 4,125 alcohol-specific hospital admission events of people resident in the Counties Manukau Health region, which were 10% of all alcohol-specific hospital admissions in New Zealand during this period (total n= 40,910). The number of alcohol-specific hospital admissions of CM residents equates to an age-standardised rate, for the three year period, of 245 admissions per 100,000 population.

As shown in Table 3 and Figure 2, the largest number of alcohol-specific hospital admissions by locality of residence in CM were of people living in Manurewa (n=853; 20.7% of the total number of admissions of CM residents), followed by Eastern locality (n=793, 19.2%), Maangere (n=575, 13.9%), Franklin (n=559, 13.6%), Papakura (n=542, 13.1%), Papatoetoe (n=485, 11.8%), and Ootara (n=300, 7.3%).

Alongside the absolute number of hospital admissions, it is important to consider rates of hospital admissions, as the locality areas vary in population size. As shown in Figure 3, the highest rate of alcohol-specific hospital admissions in CM was for Papatoetoe (327 per 100,000 population), followed by Manurewa (310 per 100,000), Papakura (306 per 100,000), Ootara (289 per 100,000), Maangere (271 per 100,000), and Franklin (254 per 100,000). Eastern had the lowest rate at 152 per 100,000 population. Age-standardised rates for New Zealand as a whole (269 per 100,000), Waitemata DHB (249 per 100,000), and Auckland DHB (347 per 100,000) are provided for comparison.

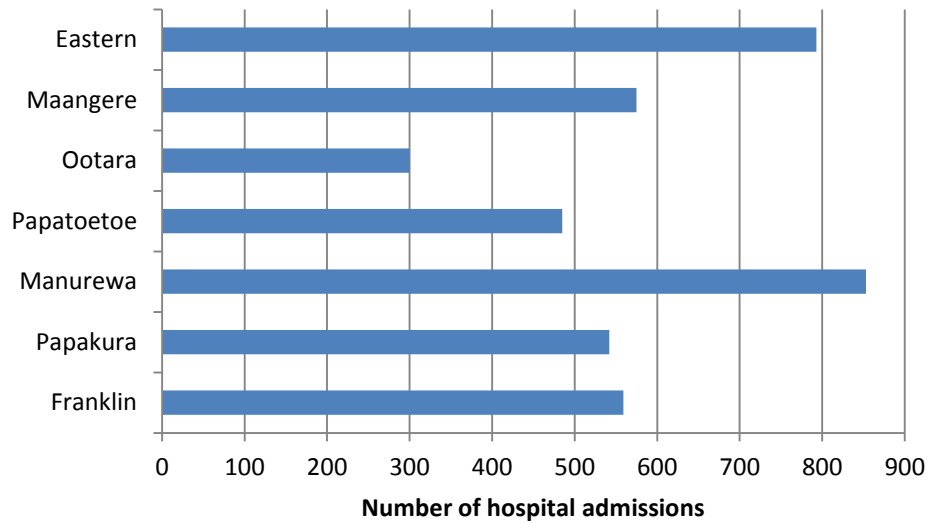
Table 3: Number and percentage of alcohol-specific hospital admissions in Counties Manukau, by locality, for the three year period July 2015 to June 2018

Counties Manukau locality	Number of alcohol-specific hospital admissions	Percentage of total alcohol-specific hospital admissions in Counties Manukau
Eastern	793	19.2%
Maangere	575	13.9%
Ootara	300	7.3%
Papatoetoe	485	11.8%
Manurewa	853	20.7%
Papakura	542	13.1%
Franklin	559	13.6%
Counties Manukau nfd	18	0.4%
Total CM Health	4125	100%

Source: NMDS 2015-2018, MOH, analysed by CM Health

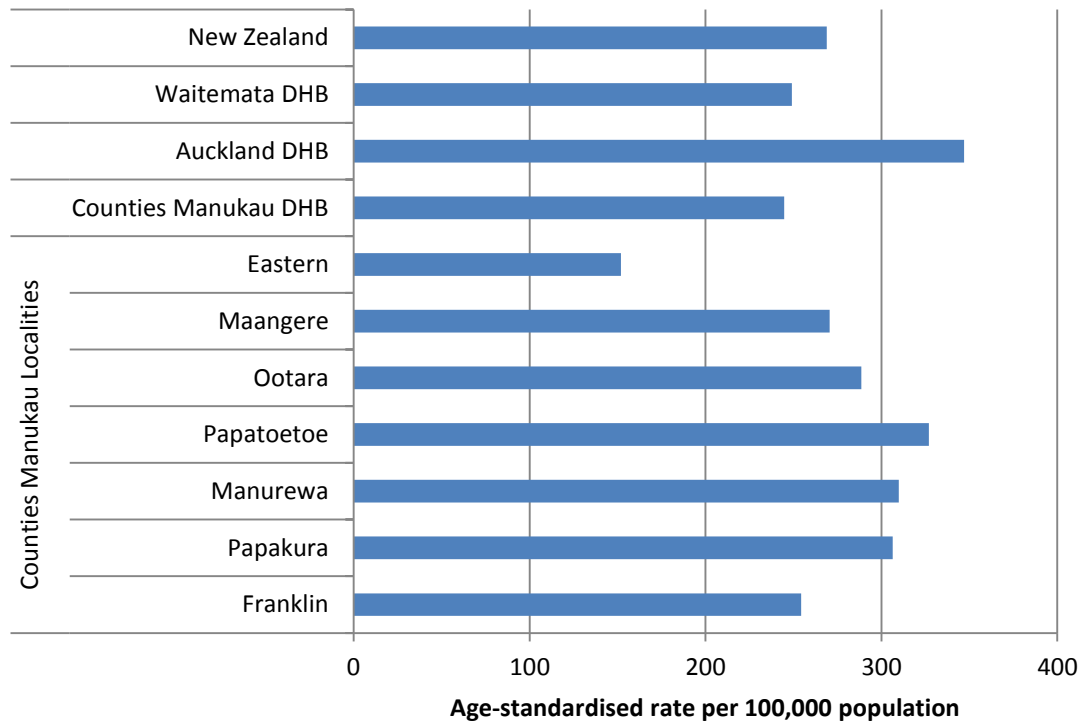
*Nfd = Not further defined (i.e. address not known so unable to determine locality of residence)

Figure 2: Numbers of alcohol-specific hospital admissions in Counties Manukau, by locality, for the three year period July 2015 to June 2018



Source: NMDS 2015-2018, MOH, analysed by CM Health

Figure 3: Rates of alcohol-specific hospital admissions in New Zealand, the Auckland metro DHBs, and Counties Manukau localities, for the three year period July 2015 to June 2018



Source: NMDS 2015-2018, MOH, analysed by CM Health