

Suicide Data related to Mental Health Service Users (2018)

Note: the nature of the information covered in this report was previously reported in the Office of the Director of Mental Health and Addiction Services Annual Reports. The information is now being published separately as the Suicide Prevention Office has been established. It refers specifically to deaths by suicide, or deaths of undetermined intent, by mental health service users.

Mental health service users are defined in this context as people who accessed district health board or non-government organisation specialist mental health services (including services treating people with alcohol and other drugs (AOD) addiction) in the year before their death. People with no history of mental health service use in the year before their death are referred to as 'non-service users' here, although it is acknowledged that some non-service users may have used mental health or AOD services at some earlier time in their lives. This data includes ages 10–64 years.

Caution should be taken when interpreting the data provided, given the small statistical base. Further statistics on deaths by suicide is available on the <https://www.health.govt.nz/our-work/mental-health-and-addiction/suicide-prevention-new-zealand> webpage on the Ministry of Health's website.

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Overview

Every suicide is a tragedy and has a significant impact on friends, whānau and communities. People who die by suicide are almost always acutely distressed but are not necessarily mentally ill.

It is important to note that, statistically, the number of suicides per year is at a level that is classified as a low base rate event. This means that there can be quite large differences each year in the number of suicides that occur compared with a previous year, but this change is not a clear or reliable indicator of a decrease or increase in rates. Even large fluctuations in rates over short periods of time can be unreliable. Understanding data in specific population groups, including mental health service users, is even more difficult because the numbers are smaller. Therefore, looking at patterns over very long periods of time is necessary to understand longer-term trends.

In addition, methodological developments have highlighted improved ways of reporting data from low base events that are presented in this report. The intention is to improve the way in which data is analysed and presented.

Prevalence of suicide in the population for the 2018 year

In 2018, there were 545 suicides recorded in the mortality database.¹ A further 10 deaths of undetermined intent were recorded and are included in this report.

Table 1 provides data about these 555 suicide deaths (including undetermined intent) in 2018. Of these 555 people, 256 had contact with mental health services in the year before death.

Age standardised rates (ASR) for service users and non-service users should not be compared directly because of the significantly different population type and size (denominators), rather the rates in each group should be compared over time as shown in Figure 1.

Table 1: Number and age-standardised rate of suicide, by service use, people aged 10–64 years, 2018

Deaths	Service users		Non-service users		Total	
	Number	ASR	Number	ASR	Number	ASR
Deaths due to intentional self-harm	252	151.6	293	6.9	545	12.7
Deaths of undetermined intent	4	2.4	6	0.1	10	0.2

Notes: Age-standardised rate is per 100,000, standardised to the World Health Organization (WHO) standard population aged 0–64 years. Includes deaths of undetermined intent. Service user denominator excludes service users of unknown age.

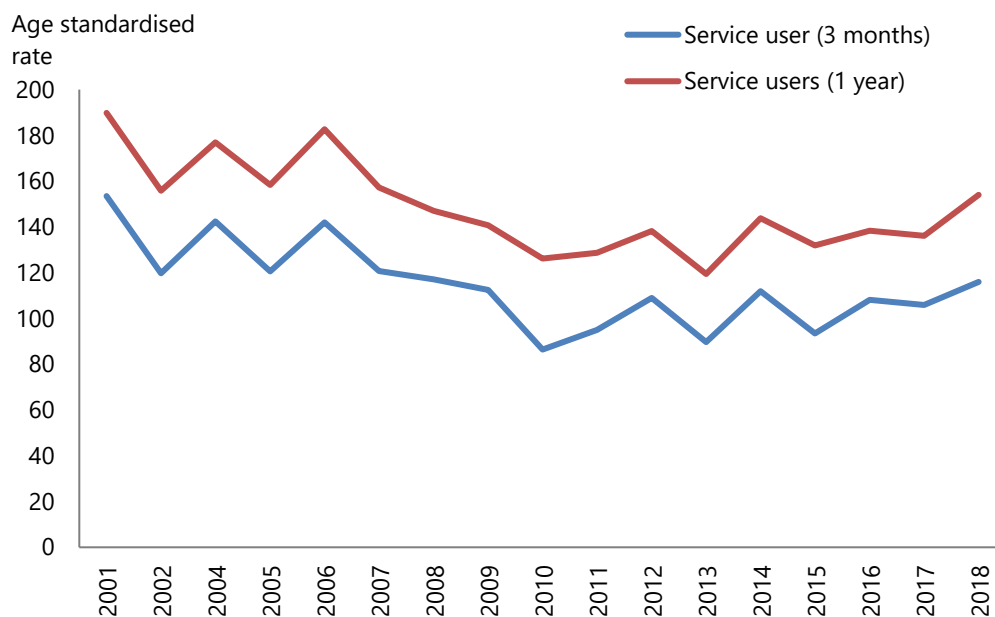
Source: Ministry of Health mortality database data; extracted on 22 June 2021.

¹ These numbers are subject to change. The mortality database is a dynamic collection, and changes can be made even after the data is considered nominally final.

Changes in number of suicides over time

Figure 1 shows the changes in the rates of suicide by service users between 2001 and 2018. Service users are defined here as both those seen within three months by a mental health or addiction service (likely to be in some form of treatment) and those seen within one year of their suicide by a mental health or addiction service.

Figure 1: Age-standardised rate of suicide, by service use, in people aged 10–64 years, 2001–2018



Notes: Age-standardised rate is per 100,000 population, standardised to the WHO standard population aged 0–64 years. Includes deaths of undetermined intent. The service user population is much smaller than the non-service user population and will therefore produce rates more prone to fluctuation from year to year.

Source: Ministry of Health mortality database data, extracted on 22 June 2021.

Sex and age in relation to suicide

For 2018, as Table 2 shows more males than females died by suicide. Of the service users who died by suicide in 2018, 32.8 percent were female, and 67.2 percent were male.

When considering these numbers, it is important to note that these age-standardised rates by sex are even more highly variable over time because they are derived from a small service user population.

Table 2: Number and age-standardised rate of suicide, by service use and sex, people aged 10–64 years, 2018

Sex	Service users		Non-service users		Total	
	Number	ASR	Number	ASR	Number	ASR
Male	172	194.9	224	10.7	396	18.3
Female	84	107.9	75	3.4	159	7.2
Total	256	154.0	299	7.0	555	12.7

Notes: ASR = Age-standardised rate. Includes deaths of undetermined intent. Age-standardised rate is per 100,000, standardised to the WHO standard population aged 0–64 years. Service user denominator excludes service users of unknown age.

Source: Ministry of Health mortality database data, extracted on 22 June 2021.

Table 3 and Figure 2 show the number and rates of suicide by age band and sex for 2018. The rate of suicide among female service users was highest for those aged 55–64 years, at 215.9 per 100,000. The rate of suicide among male service users was highest for those aged 55–64 years, at 398.5 per 100,000.

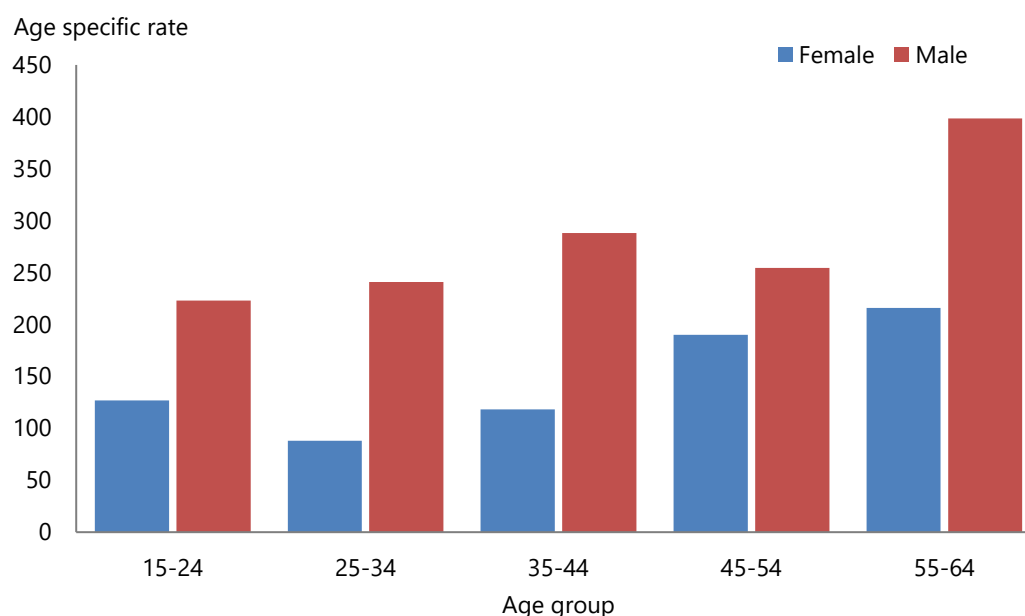
Table 3: Number and age-specific rate of suicide, by age-group, sex and service use, people aged 15–64 years, 2018

Age band years	Service users				Non-service users			
	Female		Male		Female		Male	
	Number	ASR	Number	ASR	Number	ASR	Number	ASR
15–24	24	127.0	39	223.1	18	6.1	53	16.5
25–34	12	87.9	39	241.1	12	3.6	46	14.5
35–44	12	118.1	36	288.2	9	3.0	34	12.4
45–54	18	190.1	28	254.5	24	7.4	50	16.9
55–64	14	215.9	28	398.5	12	4.1	40	14.6

Notes: Age-specific rate. Includes deaths of undetermined intent. The 10–14-year-old age group was excluded from this analysis because of the small numbers.

Source: Ministry of Health mortality database data, extracted on 22 June 2021.

Figure 2: Age-specific rate of suicide, by age-group, sex and service use, people aged 15–64 years, 2018



Source: Ministry of Health mortality database data, extracted on 22 June 2021.

Ethnicity and suicide

For 2018, Table 4 indicates among people using mental health services in 2018, the age-standardised rate of suicide was higher for Māori (123.4 per 100,000 service users) than for Pacific peoples (114.2 per 100,000 service users), but lower than the age-standardised rate of suicide for those in the 'Other' category (164.4 per 100,000 service users). The suicide rate for Māori non-service users was higher than for all non-Māori non-service users. (Note: the suicide rate for Pacific peoples is highly variable over time).

Table 4: Number and age-standardised rate of suicide and deaths of undetermined intent, by ethnicity and service use, people aged 10–64 years, 2018

Ethnicity	Service users		Non-service users		Total	
	Number	ASR	Number	ASR	Number	ASR
Maori	67	123.4	70	12.1	137	24.5
Pacific	11	114.2	13	4.2	24	9.3
Other	178	164.4	216	6.1	394	10.9
Total	256	154.0	299	7.0	555	12.7

Note: ASR = Age-standardised rate.

Source: Ministry of Health mortality database data, extracted on 19 April 2021.

Service users who died by suicide during 2018

Of the 256 service users who died by suicide and undetermined intent in 2018, five died while they were inpatients, ten died within a week of being discharged, and 80 died within 12 months of discharge from an inpatient service.²

An overview of service users dying by suicide 2001–2018

From 2001 to 2018, 3,314 service users died by suicide.³ Of this total, 65 service users (2.0 percent) died while inpatients, 196 (5.9 percent) died within a week of being discharged and 936 (28.2 percent) died within 12 months of discharge from an inpatient service.

Of the 3,314 service user suicides since 2001, 3,273 people had received treatment from a community mental health team in the 12 months before their death, and 819 had received treatment from an alcohol and drug team in the 12 months before their death.

² Excluding those who received treatment on the day of their death and those who died within a week of being discharged from an inpatient service.

³ Includes deaths of undetermined intent.