

Suicide Data related to Mental Health Service Users (2017)

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 over time.

Prevalence of suicide in the population for the 2017 year

In 2017, there were 531 suicides recorded in the mortality database.¹ A further 13 deaths of undetermined intent were recorded and are included in this report.

Table 1 provides data about these 544 suicide deaths (including undetermined intent) in 2017. Of these 544 people, 225 had contact with mental health services in the year before death.

Age standardised rates 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, 2017

	Number	Age-standardised rate
Deaths due to intentional self-harm		
Service users	220	132.9
Non-service users	311	7.5
Total	531	12.9
Deaths of undetermined intent		
Service users	5	3.2
Non-service users	8	0.2
Total	13	0.3

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

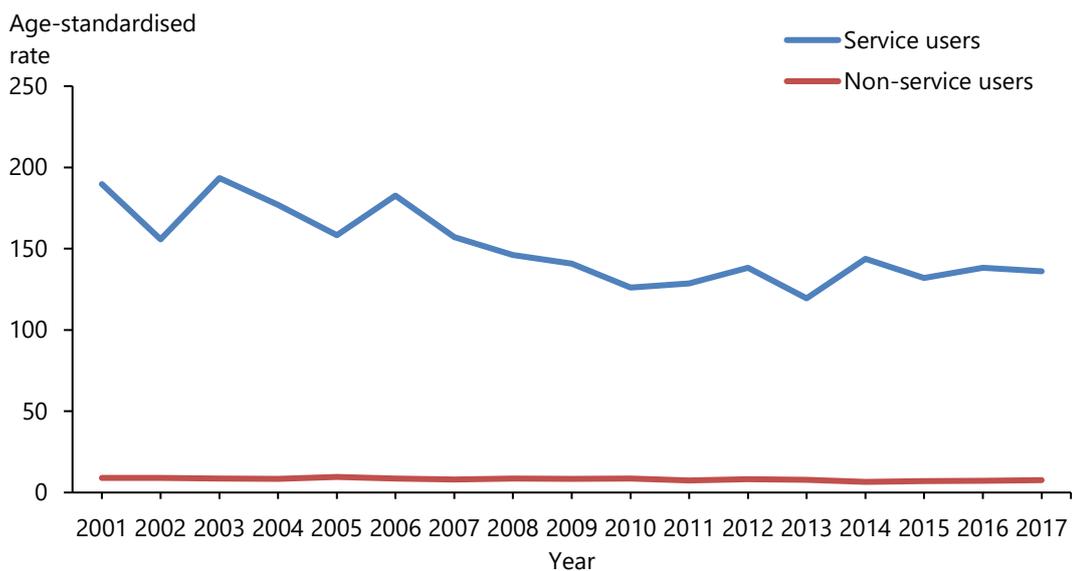
Source: Ministry of Health mortality database data; extracted on 19 April 2021.

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 and non-service users between 2001 and 2017.

Figure 1: Age-standardised rate of suicide, by service use, in people aged 10–64 years, 2001–2017



Notes: Age-standardised rate is per 100,000 population, standardised to the WHO standard population aged 0–64 years. 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 19 April 2021.

Sex and age in relation to suicide

For 2017, as Table 2 shows more males than females died by suicide. Of the service users who died by suicide in 2017, 30.2 percent were female, and 69.8 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, 2017

Sex	Service users		Non-service users		Total	
	Number	ASR	Number	ASR	Number	ASR
Males	157	177.6	251	12.0	408	19.0
Females	68	88.0	68	3.4	136	6.4
Total	225	136.1	319	7.7	544	12.6

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 19 April 2021.

Table 3 and Figure 2 show the number and rates of suicide by age band and sex for 2017. The rate of suicide among female service users was highest for those aged 55–64 years, at 203.2. per 100,000. The rate of suicide among male service users was highest for those aged 45–54 years, at 296.7 per 100,000.

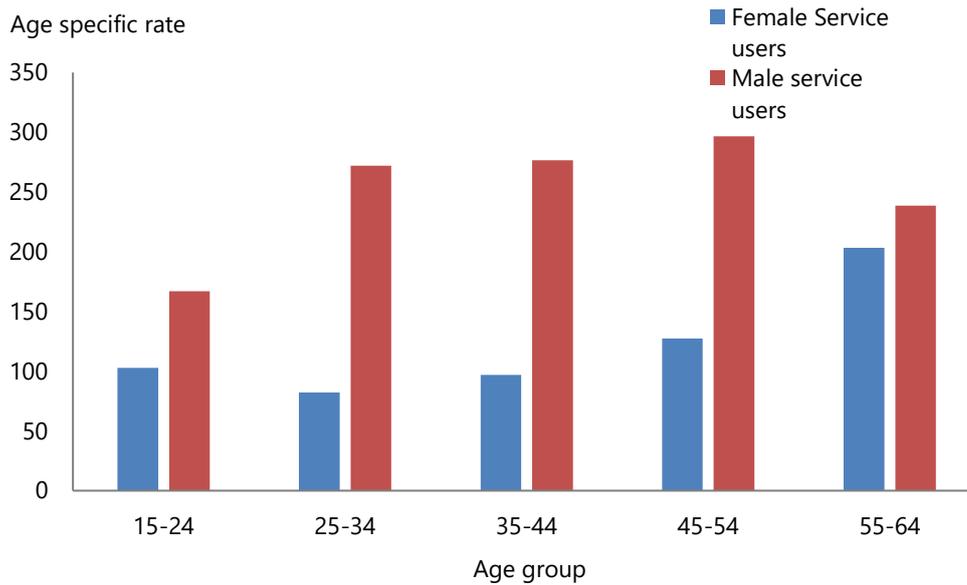
Table 3: Number and age-specific rate of suicide, by age-group, sex and service use, people aged 15–64 years, 2017

Age band years	Service users				Non-service users			
	Female		Male		Female		Male	
	Number	ASR	Number	ASR	Number	ASR	Number	ASR
15–24	19	102.9	30	167.1	23	7.5	56	17.0
25–34	11	82.1	43	272.0	16	4.9	46	14.3
35–44	10	96.9	34	276.4	6	2.0	45	16.8
45–54	12	127.4	33	296.7	12	3.7	60	20.3
55–64	13	203.2	16	238.7	8	2.8	40	14.9

Notes: ASR = 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 19 April 2021.

Figure 2: Age-specific rate of suicide, by age-group, sex and service use, people aged 15–64 years, 2017



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

Ethnicity and suicide

For 2017, Table 4 indicates among people using mental health services in 2017, the age-standardised rate of suicide was higher for Māori (105.6 per 100,000 service users) than for Pacific peoples (36.7 per 100,000 service users), but lower than the age-standardised rate of suicide for those in the 'Other' category (153.5 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, 2017

Ethnicity	Service users		Non-service users		Total	
	Number of deaths	ASR	Number of deaths	ASR	Number of deaths	ASR
Māori	57	105.6	88	15.2	145	26.2
Pacific	5	36.7	17	6.4	22	9.0
Other	163	153.5	214	6.2	377	10.9
Total	225	136.1	319	7.7	544	12.6

Note: ASR = Age-standardised rate.

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

Service users who died by suicide during 2017

Of the 225 service users who died by suicide and undetermined intent in 2017, five died while they were inpatients, eight died within a week of being discharged, and 55 died within 12 months of discharge from an inpatient service.²

An overview of service users who died by suicide 2001–2017

From 2001 to 2017, 3,057 service users died by suicide.³ Of this total, 60 service users (2.0 percent) died while inpatients, 186 (6.1 percent) died within a week of being discharged and 871 (28.5 percent) died within 12 months of discharge from an inpatient service.

Of the 3,057 service users who died by suicide since 2001, 3,017 had received treatment from a community mental health team in the 12 months before their death, and 730 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.