



Incidence of suicide among serving and ex-serving Australian Defence Force personnel 2001–2014

There is strong and increasing public interest in, and concern about, the incidence of suicide among serving and ex-serving Australian Defence Force (ADF) personnel. While the incidence of suicide among current serving full-time ADF personnel is known, there has been limited information available about ex-serving personnel.

The Department of Veterans' Affairs (DVA) commissioned the Australian Institute of Health and Welfare (AIHW) to calculate, for the first time, accurate numbers and rates of suicide deaths among people who have transitioned from full-time service in the ADF.

Preliminary results of this analysis are presented here for 3 ADF populations—serving full-time, reserve and ex-serving personnel—and show the number of suicide deaths for 2001–2014 and the comparative rate of suicide death for 2002–2014 (for men only; the number of women in the study meant valid comparisons were not possible).

Further detail and analysis of these results will be provided in the final report to be released in mid-2017.

ADF populations

serving full-time: ADF members serving in a regular capacity in the Royal Australian Navy, Australian Army or Royal Australian Air Force on or after 1 January 2001, on continuous full-time service, or participating in the gap year program.

reserve: ADF members in the active or inactive reserve forces for the Royal Australian Navy, Australian Army or Royal Australian Air Force, on or after 1 January 2001. Most ADF members leaving full-time service are transitioned into the inactive reserve forces unless there are medical grounds preventing this.

ex-serving: ADF members in the serving or reserve population on or after 1 January 2001 and who separated from the ADF after 1 January 2001.

Summary

In 2001–2014, there were **292** certified suicide deaths among people with at least 1 day of ADF service since 2001. Of these:

- **84** occurred in the serving full-time population
- **66** occurred in the reserve population
- **142** occurred in the ex-serving population
- **272** were men and **20** were women.

After adjusting for age, when compared with all Australian men*, the suicide rate was:

- **53% lower** for men serving full-time**
- **46% lower** for men in the reserve**
- **13% higher** for ex-serving men
 - the comparative suicide rate for ex-serving men varied by age and was higher for those aged 18–24**.

* It was not possible to calculate valid comparisons for women.

** The difference in suicide rates was statistically significant.

Number of deaths from suicide

This study identified 292 certified suicide deaths in 2001–2014 among serving and ex-serving personnel with at least 1 day of ADF service in that period. This total includes 84 suicide deaths in the serving full-time population, 66 in the reserve population and 142 in the ex-serving population.

Men accounted for more than 9 in 10 suicide deaths (272 deaths, 93%). Women accounted for 20 deaths (7%).

Nearly 3 in 5 suicide deaths among serving and ex-serving personnel were of people aged 18–34 (170 deaths, 58%). Of these:

- 66 deaths (23%) were among people aged 18–24
- 58 (20%) were people aged 25–29
- 46 (16%) were aged 30–34.

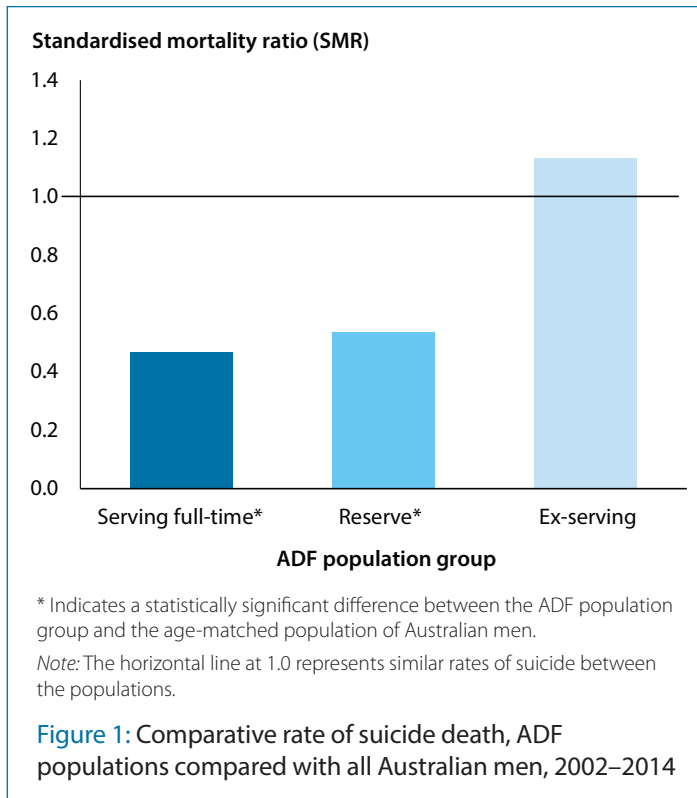
There were 122 suicide deaths (42%) among serving and ex-serving personnel aged 35 and over.

Population comparisons

Overall

In 2002–2014, compared with all Australian men, the suicide rate was 53% lower among men serving full-time and 46% lower among men in the reserve population, after adjusting for age (Figure 1). These differences were statistically significant.

The rate of suicide was 13% higher among ex-serving men compared with all Australian men, after adjusting for age.

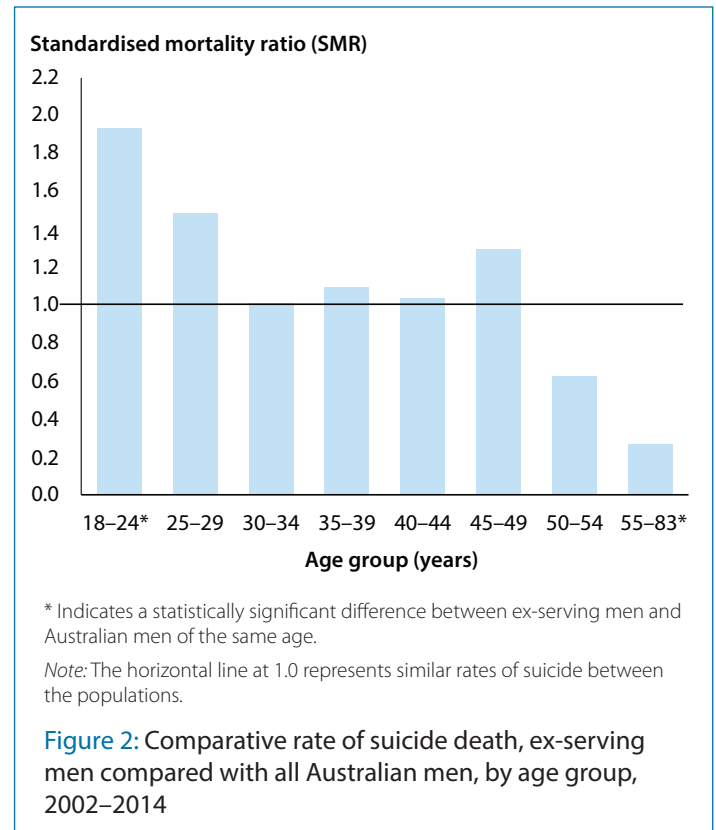


By age

In 2002–2014, younger ex-serving men were at higher risk of suicide death compared with all Australian men of the same age (Figure 2).

Among ex-serving men, those aged 18–24 accounted for 1 in 6 suicide deaths (23 deaths, 17%) and had a suicide rate almost 2 times as high as Australian men of the same age. This difference was statistically significant.

Ex-serving men aged 25–29 accounted for slightly more deaths overall (28 deaths, 21%) and had a suicide rate 1.5 times as high as Australian men of the same age.



Technical terminology

suicide death rate: Number of suicide deaths occurring in 2002–2014, divided by the total population in that period. Comparative analyses adjust for differences in age structure between the ADF populations and the Australian population.

standardised mortality ratio (SMR): A comparison of the suicide rates in the ADF populations with the Australian population, adjusting for differences in age structure. An SMR of 1.0 indicates similar rates in each population. An SMR greater than 1.0 indicates the ADF population has a higher rate compared with the Australian population, and an SMR less than 1.0 indicates the ADF population has a lower rate compared with the Australian population.

statistical significance: A statistical measure that provides an indication of the strength of the reported difference in suicide rates between the ADF populations and Australian population. In figures 1 and 2, statistically significant differences are indicated by an asterisk.

Younger men in the serving full-time and reserve populations also accounted for a higher proportion of suicide deaths compared with other men in those populations, although had lower rates of suicide death compared with all Australian men of the same age.

Further analysis

This study fills a gap in information relating to suicide deaths among serving full-time, reserve and ex-serving personnel with contemporary service experience. The results presented here are preliminary, and the study is ongoing.

Detailed findings by demographic and service specific characteristics, and more complete population-level comparisons, will be publicly available in mid-2017.

Method and data sources

The analysis population for this study was derived from the Personnel Management Key System (PMKeyS) database (held by the Department of Defence), which was then linked with the National Death Index (held by the AIHW).

This was supplemented by information from Defence's database of confirmed and suspected suicide deaths (the Defence Suicide Database).

The suicide deaths data presented here are calculated from certified deaths information only; that is, official fact of death and cause of death determination (including suicide death) from the Registrars of Births, Deaths and Marriages in each state and territory and the National Coronial Information System, compiled and coded by the Australian Bureau of Statistics.

These data underpin the National Mortality Database and Defence Suicide Database, the sources of certified death information used in this study. For information on how deaths are registered, coded and updated in Australia, see <<http://www.aihw.gov.au/deaths/about-deaths-data/>>.

Differences between the results of this study and other publicly reported estimates may be due to the scope of the studies and/or the source of cause of death information. Points to consider when interpreting these findings:

- The PMKeyS data are available only from 1 January 2001. Information on people who served in or separated from the ADF before that date was not available for this study.
- At the time of publication, certified cause of death data were available for deaths up to and including 31 December 2014.
- Cause of death information for 2013 and 2014 are *revised* and *preliminary*, respectively, and subject to revision.
- The number of suicide deaths among women in this study (20) means that it is not possible to make valid comparisons with the general population. Comparative results are presented only for men.
- Complete ADF population data are available from 2002, so comparative analyses are possible for 2002–2014 only.

- This study may exclude an unknown number of deaths that were suspected to be suicide deaths and officially attributed to another cause after investigation by a coroner.
- Changes in coding practices and revisions to data over time may affect the number of deaths attributed to suicide.
- The results of this study cannot be used to estimate the number of suicide deaths among people who left the ADF before 1 January 2001 and cannot be extrapolated to the broader veteran/ex-serving population in Australia.

If you need assistance or support, please contact:

Veterans and Veterans Families Counselling Service
1800 011 046, or <www.vvcs.gov.au>

ADF All-hours Support Line 1800 628 036

Operation Life Online
<<http://at-ease.dva.gov.au/suicideprevention>>

Lifeline 13 11 14, or <www.lifeline.org.au>

Suicide Call Back Service 1300 659 467, or
<<https://www.suicidcallbackservice.org.au>>

beyondblue Support Service 1300 22 4636, or
<www.beyondblue.org.au>

Acknowledgments

The AIHW, as a Commonwealth Integrating Authority, undertook the data linkage as well as the subsequent data analysis.

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The AIHW Ethics Committee, the DVA Human Research Ethics Committee and the Australian Defence Human Research Ethics Committee approved the research.

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