



Health of veterans

Web report | Last updated: 24 Jan 2023 | Topic: [Veterans](#)

About

This Health of veterans web report draws together already published material on topical health issues among Australia's veterans, using updated sources of administrative and survey data as well as data linkage where possible. The report aims to provide a comprehensive health profile of Australia's veterans, including comparisons to the wider Australian population where appropriate. It examines veterans' health status, with a particular focus on self-assessed health, health conditions, deaths, disability and health risk factors. It also identifies veterans' health service use, focusing on medicines, hospitalisations, health expenditure and homelessness.

The latest update of this report includes data from the 2020-21 National Health Survey and the 2020-21 National Study of Mental Health and Wellbeing released by the Australian Bureau of Statistics.

Cat. no: PHE 304

Findings from this report:

- [Male veterans generally had lower rates of age-specific all-cause mortality than Australian males](#)
 - [Male veterans shared similar exposure to several health risk factors compared with males who have never served](#)
 - [The majority \(76%\) of male veterans rated their health as good or better](#)
 - Male veterans were more likely to experience long-term health conditions than males who had never served
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Summary

Health of veterans is an [Australia's health](#) topic

- Health across socioeconomic groups | 07 Jul 2022
- Social determinants of health | 07 Jul 2022
- Burden of disease | 18 Aug 2021

The term 'veteran' traditionally described former Australian Defence Force (ADF) personnel who were deployed to serve in war or war-like environments. Veterans are now considered people who have any experience in the ADF including current (permanent), reserve, and former (ex-serving) personnel (Tehan 2017).

Veterans' information is available from a variety of data sources including administrative data and surveys. The 2021 Census included, for the first time, a question on ADF service. [Veterans in the 2021 Census: first result](#) summarises the initial results released by the Australian Bureau of Statistics.

The exact number of Australian veterans is unknown and varies between data sources

According to the 2021 Census of Population and Housing, more than half a million Australians (581,000) had served, or were currently serving, in the ADF (ABS 2022a).

Based on Defence administration data available to AIHW, as of 31 December 2020, almost 379,000 Australians had served at least one day in the ADF between 1 January 1985 and 31 December 2020. Of these, approximately 362,000 were alive, comprising 60,000 permanent, 39,000 reserve, and 263,000 ex-serving members (AIHW 2022). For more information, see [How many Australian veterans are there?](#)

Ex-serving ADF members are typically older

In 2020-21, males who had ever served in the ADF were typically older than males who had never served - 47% of males who served in the ADF were aged 65 years and over, compared with 18% of males who had never served. For more information, see [Who are veterans?](#)

The majority of male veterans rate their health as good or better

In 2020-21, 76% of males who had ever served in the ADF rated their health as good or better, with 45% of male veterans considering themselves to be in excellent or very good health. However, this was lower compared with people who had never served in the ADF, with 57% rating their health as excellent or very good. For more information, see [Health status](#).

Male veterans share similar exposure to several health risk factors compared with males who have never served

In 2020-21, males who had ever served in the ADF had similar exposure to several health risk factors compared with males who had never served. This included similar exposure to daily smoking, fruit and vegetable consumption, alcohol consumption, psychological distress and physical activity. However, males who had ever served in the ADF had higher exposure to being overweight or obese. For more information, see [Health risk factors](#).

Male veterans are more likely to self-report experiencing several long-term health conditions than males who have never served

In 2020-21, males who had ever served in the ADF were more likely to self-report having heart, stroke and vascular disease, arthritis, back problems, diabetes, cancer, COPD¹ and mental and behavioural conditions (including anxiety related disorders) than males who had never served. For more information, see [Health status](#).

Male veterans are more likely to have a mental or behavioural condition than males who have never served

In 2020-21, males who had ever served in the ADF were more likely to self-report having a mental or behavioural condition than males who had never served (27% compared with 17%). For more information, see [Health status](#).

Permanent, reserve and ex-serving ADF males have lower all-cause mortality rates

Age-specific all-cause mortality rates between 2002-2019 for permanent, reserve, or ex-serving ADF males were lower than rates for Australian males, except for ex-serving ADF males aged 16-29 where the rate was higher than Australian males. For more information, see [Health status](#).

Permanent and reserve males have a lower risk of suicide

Permanent and reserve males were about half as likely to die by suicide as Australian males (51% and 48% lower respectively). Ex-serving males were at a higher risk of death by suicide than Australian males (24% higher). For more information, see [Health status](#).

¹ These results include males aged 18 years and over, however, COPD occurs mostly in people aged 45 and over. While it is occasionally reported in younger age groups, in those aged 45 and over there is more certainty that the condition is COPD and not another respiratory condition. As such, COPD results should be interpreted with caution.

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Who are veterans?

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- [Definitions of veterans used in this web report](#)
- [The age profile of the veteran population](#)
- [The impact of COVID-19 on the health of veterans](#)

The term ‘veteran’ traditionally described former Australian Defence Force (ADF) personnel who were deployed to serve in war or war-like environments. Veterans are now considered people who have any experience in the ADF including current, reserve, and former (ex-serving) personnel (Tehan 2017).

The unique nature of ADF service can enhance a person’s health and wellbeing; a phenomenon known as the ‘[healthy soldier effect](#)’. Military personnel are generally physically and mentally fit, receive regular medical assessments, and have access to comprehensive medical and dental treatment as a condition of service. However, ADF service increases the likelihood of exposure to trauma (either directly or indirectly) and affects support networks, for example, separation from family during deployment (Daraganova et al. 2018; Lawrence-Wood et al. 2019).

Research as part of the Transition and Wellbeing Research Programme (TWRP) indicates that Australia’s veterans may experience health needs, outcomes and challenges that are different from the rest of the Australian population, including increased risks of mental illnesses and poorer physical health following transition out of regular ADF service (Van Hooff et al. 2019).

The Department of Veterans’ Affairs (DVA) is responsible for developing and providing a range of services, programs of care, compensation, income support, and commemoration for the veteran and defence force communities and their families (DVA 2021a). DVA provides support, services and information to various people including veterans and their dependents, serving (permanent or reserve) and ex-serving ADF members, and war widow/ers. DVA clients are typically an older population who are in need of financial, health, mental and physical support. These individuals may be likely to have physical, mental, and behavioural conditions needing them to engage in greater health service use compared with non-DVA clients and those who have never served.

The analysis presented in this report uses a range of data and different populations of ADF members, DVA clients, non-DVA clients and those who have never served.

Definitions of veterans used in this web report

There are many different sources of information on veterans. This can include information resulting from data linkage activities involving the use of administration data from the Department of Defence (Defence) to identify a particular cohort of veterans such as those who have served from 2001, or served from 1985, or from surveys where respondents have self-reported they are a veteran. It is not clear whether all people who have any experience in the ADF would necessarily report themselves as a veteran as their perception could be driven by whether a person’s military experience involved combat or war-like deployments, whether a person served in permanent or reserve service, or how a person separated from military service. This may lead to a person incorrectly believing and consequently self-reporting themselves as not being a veteran (Metraux 2014).

Different sections of this report use different definitions of veterans depending on the available data. Tables 1 and 2 describe the possible options.

Table 1: Definitions of veterans in administrative data sources

Population	Definition
Permanent or reserve ADF members	ADF members who are currently serving in the permanent or reserve service and are based on data from the current and historical ADF personnel systems. In previous reports, permanent and reserve ADF members were referred to as serving - there has however been no methodological change and this term is comparable to previous reports.
Ex-serving ADF members	ADF members who have had at least one day of permanent or reserve service who have since separated from the ADF. There are two subpopulations available for analysis being the post-2001 cohort and the post-1985 cohort. The post-2001 cohort represent those who served at least one day of service since 1 January 2001 and the post-1985 cohort represent those who served at least one day of service since 1 January 1985. These subpopulations have been used in previous AIHW reports on veterans and are based on data from the current and historical ADF personnel systems.

Clients of the Department of Veterans' Affairs (DVA)	Veterans and their families who are clients of the DVA and are in receipt of support by DVA. DVA clients may receive a range of entitlements depending on personal circumstances, such as compensation payments, means-tested pensions, and subsidised health treatments. This subpopulation is based on data from the DVA client system and is not representative of a specific ADF serving cohort. This definition is used in the Health expenditure section of this report.
Defence or DVA compensable patient	A patient whose cost of care was claimable by the hospital from Defence or DVA. This definition is used to define hospitalisations funded by Defence and DVA, with data presented in the Hospitalisations section of this report.

Table 2: Definitions of veterans in self-reported survey data sources

Population	Definition
Ever served in the ADF	Persons who self-reported as having ever served in the ADF. This sub-population includes respondents who answered "Yes" when asked "Have you ever served in the Australian Defence Force?" in the 2020-21 Australian Bureau of Statistics (ABS) National Health Survey (NHS) and may include permanent, reserve and/or ex-serving ADF members.
Never served in the ADF	Persons who self-reported to have never served in the ADF. This sub-population includes respondents who answered "No" when asked "Have you ever served in the Australian Defence Force?" in the 2020-21 NHS. This cohort may include dependants and spouses of serving and ex-serving ADF members.
Self-reported DVA Clients	Veterans and their families who perceive themselves to be DVA Clients and respond as such in surveys like the 2020-21 NHS. This sub-population includes respondents who answered "Yes" when asked "Are you a client of the Department of Veterans' Affairs or have you ever received a benefit or support from the Department of Veterans' Affairs?" in the 2020-21 NHS. The self-reported DVA Client status may not align with DVA's definition of a client. Some individuals may not interpret themselves as a DVA client if they do not consider their involvement with DVA to be a client relationship. Those who responded "No" when asked the above question are considered to be non-DVA Clients.
Veteran Specialist Homelessness Services (SHS) clients	Persons who self-reported as a current or former ADF member in the Specialist Homelessness Services Collection (SHSC). This does not include SHS clients who may have served in non-Australian defence forces, reservists who have never served as a permanent ADF member, or clients under the age of 18. This self-reported indicator may not align with the definition of a veteran based on administration data from Defence or DVA. This definition is used in the Homelessness section of this report.

Data considerations

Within this report, each section references findings from a variety of data sources that use different definitions of veterans. This means that subpopulations of veterans will often differ between sections, depending on the data source used. As such, findings across different sections of this report should not be compared.

For some sections of this report, data are only presented for males due to female population sizes being too small to report. Data on families of ADF members are also very limited and included where possible.

The age profile of the veteran population

The age profile is different amongst the different populations presented in this report, and as such some data comparisons should be used as a guide only.

As at 31 December 2019, the median age for permanent ADF members was 31 and for reserve ADF members was 37, whereas the majority of ex-serving members (79%) were aged 40 years and over (AIHW 2021).

In the 2020-21 National Health Survey (NHS), those who self-reported having ever served in the ADF were generally older, with almost half (47%) of males who had ever served in the ADF being aged 65 years or older, compared with 18% of males who had never served (AIHW analysis of ABS 2022b). Among those who had ever served, DVA clients were generally younger, with around 42%¹ aged 65 years or older compared with 49% of non-DVA clients (AIHW analysis of ABS 2022b). Within the DVA 2020-21 Annual Report however, around 53% of DVA clients were aged 65 years and over. For more information see [How many Australian veterans are there?](#)

The impact of COVID-19 on the health of veterans

Measures put in place as part of government responses to COVID-19 during 2020 and 2021 (including closing of international borders, travel bans/restrictions, lockdowns, quarantine requirements, limitations on non-urgent face-to-face work, resource reallocations and the temporary suspension of non-urgent elective surgery) may have affected the health of veterans during 2019-20 and 2020-21.

The short- and long-term impacts of COVID-19 on veteran health are still unknown. Such effects may become apparent in veterans' data in future years.

1 Proportions marked with a hash (#) have a high margin of error (MoE) and should be interpreted with caution. A high MoE is considered as greater than 10%.

References

- ABS (Australian Bureau of Statistics) (2022a) *2021 Census will help deliver better outcomes for veterans*, ABS, Australian Government, accessed 25 November 2022.
- ABS (2022b) *Microdata: National Health Survey, 2020-21*, AIHW analysis of detailed microdata, accessed 10 October 2022.
- AIHW (Australian Institute of Health and Welfare) (2021) *Serving and ex-serving Australian Defence Force members who have served since 1985: population characteristics 2019*, AIHW, Australian Government, accessed 11 May 2022.
- Daraganova G, Smart D and Romaniuk H (2018) *Transition and Wellbeing Research Programme Family Wellbeing Study. Part 1 Families of current and ex-serving ADF members: health and wellbeing Part 1*, Department of Defence and Department of Veterans' Affairs, Australian Government, accessed 20 March 2022.
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How many Australian veterans are there?

The exact number of Australian veterans is unknown.

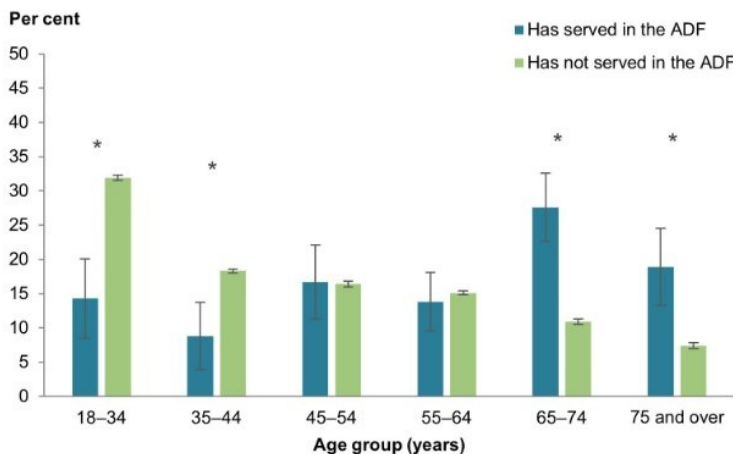
- As at June 2021, the ADF comprised more than 59,500 permanent (47,800 males and 11,700 females) and 29,700 reserve personnel¹ across the Royal Australian Navy, the Australian Army, and the Royal Australian Air Force. In 2020-21, more than 8,000 people were enlisted in permanent or reserve roles, and more than 5,600 left the ADF (Defence 2021).
- As at June 2021, there were more than 337,000 DVA beneficiaries² in receipt of pensions, allowances, and treatment or pharmaceuticals. This included approximately 240,000 veterans and 97,200 dependants (DVA 2021).
- According to the 2021 Census of Population and Housing, more than half a million Australians (581,000) had served, or were currently serving, in the ADF. Around 60,300 were in the regular service, 24,600 in the reserves service, and 496,000 were not currently serving (but had previously served in the ADF) (ABS 2022a).
- Based on Defence administration data available to AIHW, as of 31 December 2020, almost 379,000 Australians had served at least one day in the ADF between 1 January 1985 and 31 December 2020. Of these, approximately 362,000 were alive, comprising 60,000 permanent, 39,000 reserve, and 263,000 ex-serving members (AIHW 2022).

Based on self-reported data from the 2020-21 National Health Survey (NHS), it is estimated that a total of 704,500 Australians aged 18 years and over had ever served in the ADF. Of these, 579,400 (82%) were males and 125,200 (18%) were females. Of the males who had ever served in the ADF, 207,700 (36%) perceived themselves to be clients of DVA and 371,700 (64%) considered themselves to be non-DVA clients. By comparison, 8.9 million males aged 18 years and over had never served in the ADF (AIHW analysis of ABS 2022b). These estimates exclude people living in non-private dwellings at the time of the survey - such as hospitals, nursing homes (residential aged care facilities) and single quarters of military establishments - and therefore does not capture segments of the permanent, reserves and ex-serving population, including both DVA and non-DVA clients.

Figures 1 and 2 show age distributions by ADF service status and DVA client status:

- Males who had ever served in the ADF were typically older than males who had never served - 47% of males who served in the ADF were aged 65 years and over, compared with 18% of males who had never served (Figure 1).
- Of males who had ever served in the ADF, DVA clients were generally younger than non-DVA clients - around 42%³ of DVA clients were aged 65 years and over, compared with around half (49%) of non-DVA clients (Figure 2) (AIHW analysis of ABS 2022b).

Figure 1: ADF service status by age, males aged 18 years and over, 2020-21



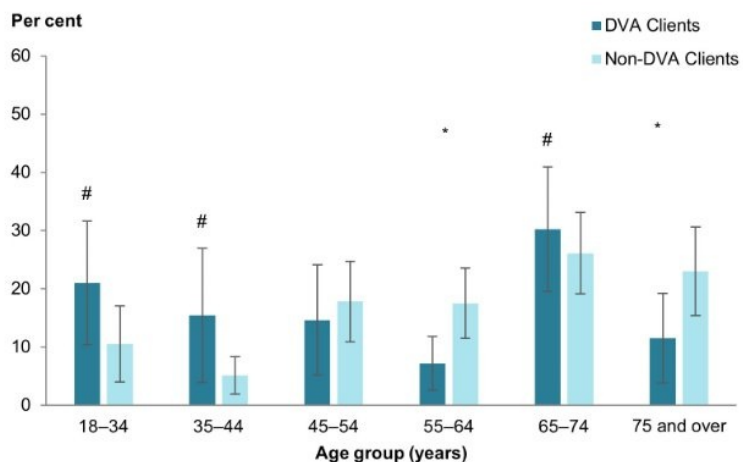
* A statistically significant difference between males who have served in the ADF and males who have never served in the ADF, calculated using the confidence interval of the difference between the two proportions.

Note: the thin vertical lines superimposed over the top end of each bar are 95% confidence intervals.

Chart: AIHW.

Source: AIHW analysis of ABS 2022b. See [Health of veterans: supplementary data tables](#) - Table S1.

Figure 2: DVA client status by age, males aged 18 years and over, 2020-21



* A statistically significant difference between males who have served in the ADF and were DVA clients, and males who have ever served in the ADF and were not DVA clients, calculated using the confidence interval of the difference between the two proportions.

Proportion has a high margin of error (MoE) and should be used with caution.

Note: the thin vertical lines superimposed over the top end of each bar are 95% confidence intervals.

Chart: AIHW.

Source: AIHW analysis of ABS 2022b. See [Health of veterans: supplementary data tables](#) - Table S1.

1 Reserves include all members (Service Categories 5, 4 and 3) and Reservists undertaking continuous full-time service (Service Option C). This does not include Service Category 2. For more information see Defence 2021.

2 Individuals receiving DVA pensions can also be employed on reserve contracts.

3 Proportions marked with a hash (#) have a high margin of error (MoE) and should be interpreted with caution. A high MoE is considered as greater than 10%.

References

ABS (Australian Bureau of Statistics) (2022a) *2021 Census will help deliver better outcomes for veterans*, ABS, Australian Government, accessed 25 November 2022.

ABS (2022b) *Microdata: National Health Survey, 2020-21*, AIHW analysis of detailed microdata, accessed 10 October 2022.

AIHW (Australian Institute of Health and Welfare) (2021) *Serving and ex-serving Australian Defence Force members who have served since 1985: population characteristics 2019*, AIHW, Australian Government, accessed 11 May 2022.

AIHW (2022) *Serving and ex-serving Australian Defence Force members who have served since 1985: suicide monitoring 1997 to 2020*, AIHW, Australian Government, accessed 06 December 2022.

Defence (Department of Defence) (2021) *Department of Defence annual report 2020-21*, Department of Defence, Australian Government, accessed 11 May 2022.

DVA (Department of Veterans' Affairs) (2021) *Department of Veterans' Affairs annual report 2020-21*, DVA, Australian Government, accessed 11 May 2022.

Latest available mental health data

Some of these statistics may cause distress. If this material raises concerns for you or if you need immediate assistance, please contact any of the following:

- [Open Arms - Veterans and Families Counselling](#) 1800 011 046
- [Open Arms Suicide Intervention page](#)
- [Defence All-hours Support Line \(ASL\)](#) 1800 628 036
- [Defence Member and Family Helpline](#) 1800 624 608
- [Defence Chaplaincy Support](#) 1300 333 362
- [ADF Mental Health Services](#)
- [Lifeline](#) 13 11 14
- [Suicide Call Back Service](#) 1300 659 467
- [Beyond Blue Support Service](#) 1300 22 4636

For information on support provided by DVA, see:

- [Mental health support services](#)
- [Free mental health care for veterans](#)

Mental health is a key component of overall health and wellbeing (WHO 2021). Mental ill-health affects and may be affected by multiple socioeconomic factors, such as a persons' access to services, living conditions, and employment status. These factors not only impact the individual but also their families and social support networks (AIHW 2022).

The National Study of Mental Health and Wellbeing (NSMHW) is a component of the Australian Bureau of Statistics' (ABS) Intergenerational Health and Mental Health Study (IHMHS) funded by the Australian Government Department of Health and Aged Care. Data for the NSMHW was collected as part of the ABS' Survey of Health and Wellbeing (SHWB) which were collected in two cohorts. The 2020-21 cohort is the first cohort for the study and was conducted between December 2020 and July 2021 during the COVID-19 pandemic. Data collection for the second cohort started in December 2021 and will finish in late 2022.

The NSMHW collected information on:

- lifetime and 12-month prevalence of selected mental disorders
- level of impairment for these disorders
- health services used for mental health problems, such as consultations with health practitioners or visits to hospital
- suicidality and self-harm behaviours
- demographic and socio-economic characteristics of people.

The sample of persons surveyed as part of the first cohort of the NSMHW is small, with less than half as many respondents compared with other recent sources of veteran mental health data such as the 2020-21 National Health Survey (NHS) (5,554 persons sampled in the 2020-21 NSMHW compared with 13,300 persons in the 2020-21 NHS). To maintain high data quality and comparability with other long-term health conditions, the 2020-21 NHS has been used to report on veteran mental health throughout the other sections of this report. This information will be updated using the combined sample from both NSMHW cohorts once it becomes available.

Prevalence of mental disorders

ABS analysis of the 2020-21 NSMHW data set estimated that there were around 622,000 people¹ aged 16-85 in Australia who have ever served in the ADF, representing 3.2% of the overall population. Of those:

- Around 1 in 7 (14%) had a 12-month mental disorder², compared with over 1 in 5 (22%) who had never served.
- Of those who had ever served and had a 12-month mental disorder:
 - 8.9% had an anxiety disorder, compared with 17% of those who had never served.
 - 4.4% had an affective disorder, compared with 7.4% of those who had never served.
 - #1.2%³ had a substance use disorder, compared with 3.3% of those who had never served (ABS 2022a).

Additional findings

AIHW has undertaken additional analysis of the 2020-21 NSMHW data set, focussing on those aged 18 years and over to align with other sections in this report. This 2020-21 NSMHW data set estimated that there were around 610,000 people¹ aged 18 years and over in Australia who have ever served in the ADF, representing 3.2% of the population.

The findings from AIHW's analysis indicate that of persons¹ aged 18 years and over:

Consultations with health professionals for mental health

- Nearly 1 in 5 (17%) of those who had ever served in the ADF self-reported having at least one mental-health related consultation with any health professional in the last 12 months. This was similar to those who had never served (17%) (AIHW analysis of ABS 2022b).

Self-management strategies for mental health

Social connectedness was similar between those who had ever served in the ADF and those who had never served in the ADF. In the four weeks prior to the NSMHW:

- Almost all survey respondents had done activities with family or friends (93% ever served and 94% never served).
- Over 4 in 5 (83%) of those who had ever served in the ADF reported having an excellent or very good ability to get support from family or friends when they need it, a rate similar to those who had never served (82%).
- Around 66% of those who had ever served in the ADF reported having an excellent or very good sense of being part of a group or community. This was similar to those who had never served (64%).
- Around 2 in 5 (#43%³ ever served and 38% never served) had participated in a club.
- Nearly 20% of those who had ever served, and 13% of those who had never served, had volunteered.
- Around 1 in 6 (14% ever served and 15% never served) had felt lonely (AIHW analysis of ABS 2022b).

Self-harm

- Around 1 in 15 (6.4%) of those who had ever served in the ADF self-reported having self-harmed in their lifetime, compared with around 8.5% of those who had never served (AIHW analysis of ABS 2022b).

Lived experience of suicide

Rates of suicidal thoughts and behaviours over the lifetime were similar between those who had ever served in the ADF, and those who had never served in the ADF:

- Less than 1 in 5 (19% ever served and 16% never served) had experienced suicidal thoughts.
- Less than 1 in 10 (8.6% ever served and 7.7% never served) had made suicide plans.
- Less than 1 in 12 (7.8%) of those who had ever served, and less than 1 in 20 (4.7%) of those who had never served, had attempted suicide (AIHW analysis of ABS 2022b).

There may be potential for future in-depth analyses of this study, to further examine the mental health and wellbeing of veterans using the combined sample from both NSMHW cohorts which may allow for further disaggregation of variables by mental health status and other topics within the study once the data become available (ABS 2022c).

1 Males and females combined.

2 Persons who met criteria for diagnosis of a lifetime mental disorder (with hierarchy) and had sufficient symptoms of that disorder in the previous 12 months. A person may have more than one 12-month mental disorder.

3 Proportions marked with a hash (#) have a high margin of error (MoE) and should be interpreted with caution. A high MoE is considered as greater than 10%.

References

ABS (Australian Bureau of Statistics) (2022) *National Study of Mental Health and Wellbeing*, ABS website, accessed 29 November 2022.

ABS (2022b) *Microdata: National Study of Mental Health and Wellbeing*, AIHW analysis of detailed microdata, accessed 28 November 2022.

ABS (2022c) *National Study of Mental Health and Wellbeing methodology*, ABS, Australian Government, accessed 26 October 2022.

AIHW (Australian Institute of Health and Welfare) (2022) *Mental health: prevalence and impact*, AIHW, Australian Government, accessed 26 October 2022

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Health status

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- [Self-assessed health status](#)
- [Health conditions](#)
- [Mental and behavioural conditions](#)
- [Deaths](#)
- [Disability](#)

About the 2020-21 National Health Survey

Data for 2020-21 are based on information self-reported by the participants of the Australian Bureau of Statistics (ABS) 2020-21 National Health Survey (NHS).

Previous versions of the NHS have primarily been administered by trained ABS interviewers and were conducted face-to-face. The 2020-21 NHS was conducted during the COVID-19 pandemic. To maintain the safety of survey respondents and ABS Interviewers, the survey was collected via online, using self-completed questionnaire forms.

Non-response is usually reduced through interviewer follow-up of households who have not responded. As this was not possible during lockdown periods, there were lower response rates than previous NHS cycles, which impacted sample representativeness for some sub-populations. Additionally, the impact of COVID-19 and lockdowns might also have had direct or indirect impacts on people's usual behaviour over the 2020-21 period. Due to these changes, comparisons to previous NHS data over time are not recommended when using the 2020-21 NHS results. For more information on the ABS NHS, refer to [ABS National Health Survey: First results methodology](#).

This web report includes results from the 2020-21 NHS to explore ADF service and DVA client breakdowns by demographic information such as age and sex, health status and risk factors for chronic disease.

Data considerations

Data from the 2020-21 NHS presented in this chapter have been tested for statistically significant differences at the 5% level using confidence intervals, and comprehensive tables are available in [Health of veterans: supplementary data tables](#) - Table S2 and S3. For more information on the methodology used, see [Technical notes](#).

While comparisons can be inferred from the information provided here from the 2020-21 NHS, some differences between the populations are likely to be confounded by the older age structure of the population who have ever served in the ADF, and comparisons should be used as a guide only. The results presented below have not been adjusted for age as the data could not meet requirements to do so, and readers should take this into consideration when interpreting the results presented.

Currently, women comprise around 18% of the population who have ever served in the ADF (AIHW analysis of ABS 2022a). These relatively low numbers constrain reporting on the health of women who have served, therefore this section of the report presents data for men only.

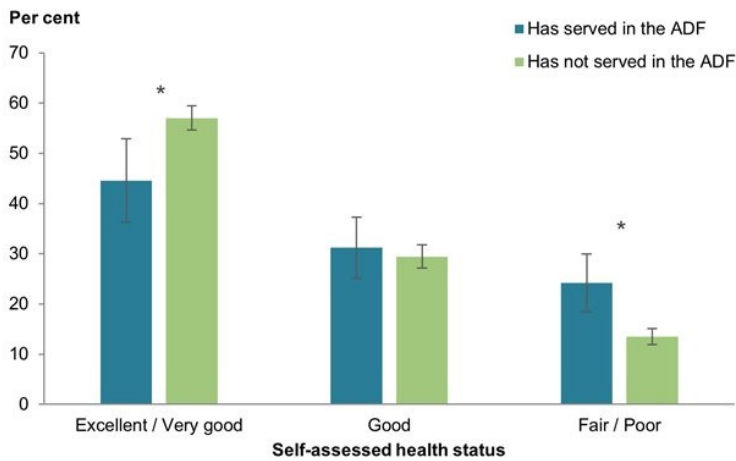
Self-assessed health status

Self-assessed health status is a commonly used measure of overall health which reflects a person's perception of his or her own health at a given time (ABS 2018a). As a self-reported measure, it captures the combined effects of physical, social, emotional, and mental health and wellbeing.

Based on self-reported data from the 2020-21 NHS among males aged 18 years and over:

- The majority of those who had ever served in the ADF rated their health as good or better (Figure 3). Around three quarters (76%) of males who had ever served in the ADF considered themselves to be in excellent, very good or good health, while 24% of people who ever served considered their health to be fair or poor.
- Males who had ever served in the ADF were less likely to rate their health as excellent or very good than those who had never served (45% compared with 57%, respectively) (AIHW analysis of ABS 2022a).

Figure 3: Self-assessed health status by ADF service status, males aged 18 years and over, 2020-21



* A statistically significant difference between males who have served in the ADF and males who have never served in the ADF, calculated using the confidence interval of the difference between the two proportions.

Note: the thin vertical lines superimposed over the top end of each bar are 95% confidence intervals.

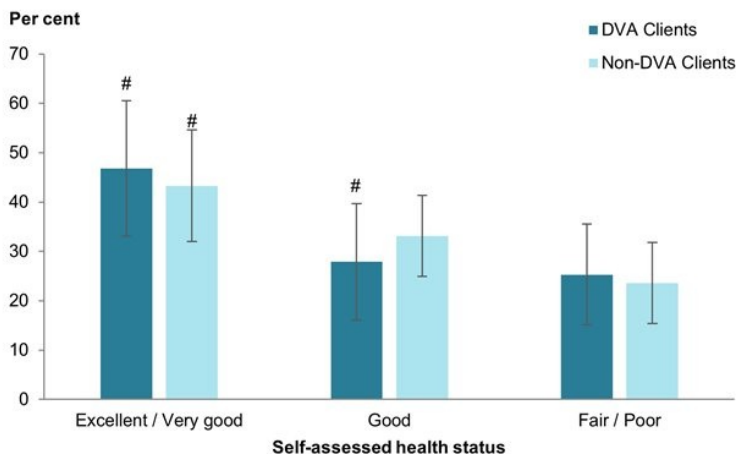
Chart: AIHW.

Source: AIHW analysis of ABS 2022a. See [Health of veterans: supplementary data tables](#) - Table S2.

Of males aged 18 years and over who had ever served and who self-reported being a DVA client in the 2020-21 NHS:

- #47%¹ of males considered their health as being excellent or very good, which was similar to those who were non-DVA clients (#43%¹) (Figure 4).
- Regardless of DVA client status, around a quarter of males who had ever served in the ADF rated their health as fair or poor (#25%¹ for DVA clients and 24% for non-DVA clients, respectively) (AIHW analysis of ABS 2022a).

Figure 4: Self-assessed health status by DVA client status, males aged 18 years and over, 2020-21



Proportion has a high margin of error (MoE) and should be used with caution.

Note: the thin vertical lines superimposed over the top end of each bar are 95% confidence intervals.

Chart: AIHW.

Source: AIHW analysis of ABS 2022a. See [Health of veterans: supplementary data tables](#) - Table S2.

Health conditions

Long-term health conditions, both physical and mental, have a significant impact on health. In particular, mental health conditions, including depression, post-traumatic stress disorder (PTSD) and alcohol dependence disorder, have been identified as an issue of concern for Australia’s veterans (DVA 2015). Those who have served in the ADF also experience these and other conditions to varying degrees.

Based on self-reported data from the 2020-21 NHS, males aged 18 years and over who had ever served in the ADF had a higher prevalence of several long-term health conditions compared with those who had never served. This includes higher rates of:

- Arthritis (33% compared with 12%)
- Back problems (31% compared with 19%)
- Heart, stroke and vascular disease (15% compared with 5.9%)
- Diabetes (14% compared with 6.9%)
- Cancer (6.7% compared with 2.6%)

- Chronic obstructive pulmonary disease (COPD²) (3.6% compared with 1.0%) (AIHW analysis of ABS 2022a).

Among those who had ever served, the prevalence of long-term health conditions was similar regardless of DVA client status (AIHW analysis of ABS 2022a).

Results for health conditions have been tested for statistically significant differences (see [Technical notes](#)). Detailed results for all self-reported long-term conditions by ADF service status and DVA client status can be found in [Health of veterans: supplementary data tables - Table S3](#).

Mental and behavioural conditions

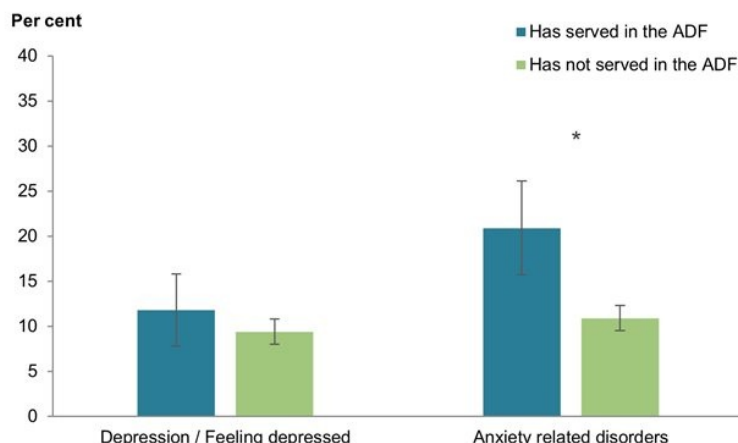
Addressing the development and management of mental disorders such as depression, PTSD, other anxiety disorders and alcohol dependence for the veteran community has been identified as a priority for the Australian Government (DVA 2015). International studies suggest an increased prevalence of dementia among veterans compared with the general population; veterans have an increased prevalence of risk factors for dementia: including traumatic brain injury sustained through active duty, PTSD, and major depressive disorder (Rafferty 2018; Singer 2015).

The disclosure of mental health conditions during service can be associated with stigma and fear of repercussions on career (Joint Standing Committee on Foreign Affairs, Defence and Trade 2019). Mental health stigma is also associated with barriers to seeking help following transition to civilian life. It may be the case that non-DVA clients (or veterans who chose not to engage with DVA) are more reluctant or less likely to disclose poor mental health rather than those who are DVA clients or who have sought support from DVA. This limitation may apply to the data presented in this report.

Based on self-reported data from the 2020-21 NHS, of males aged 18 years and over:

- Over a quarter (27%) of those who had ever served in the ADF had a mental or behavioural condition, compared with less than 1 in 5 (17%) who had never served.
- 12% of males who ever served in the ADF reported having had depression or feeling depressed, which was similar to those who had never served (9.4%) (Figure 5).
- Those who had ever served in the ADF were around twice as likely to report having an anxiety-related disorder as those who had never served (21% compared with 11%) (AIHW analysis of ABS 2022a).

Figure 5: Prevalence of depression and anxiety-related conditions by ADF service status, males aged 18 years and over, 2020-21



* A statistically significant difference between males who have served in the ADF and males who have never served in the ADF, calculated using the confidence interval of the difference between the two proportions.

Note: the thin vertical lines superimposed over the top end of each bar are 95% confidence intervals.

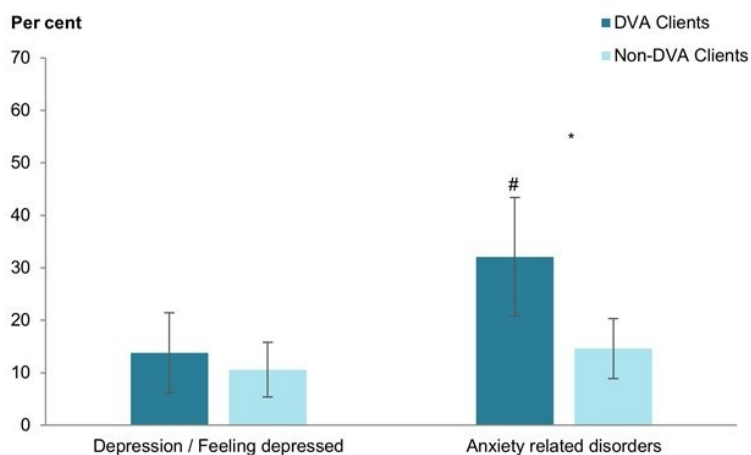
Chart: AIHW.

Source: AIHW analysis of ABS 2022a. See [Health of veterans: supplementary data tables - Table S3](#).

Of males aged 18 years and over who had ever served and who self-reported being a DVA client in the 2020-21 NHS:

- #36%¹ reported having mental and behavioural conditions, which was higher than those who were non-DVA clients (22%).
- A similar proportion of DVA clients reported depression or feeling depressed (14%) compared with non-DVA clients (11%; Figure 6).
- DVA clients were more than twice as likely to report having anxiety related disorders as non-DVA clients (#32%¹ compared with 15%, respectively) (AIHW analysis of ABS 2022a).

Figure 6: Prevalence of depression and anxiety-related conditions by DVA client status, males aged 18 years and over, 2020-21



* A statistically significant difference between males who have served in the ADF and were DVA clients, and males who have ever served in the ADF and were not DVA clients, calculated using the confidence interval of the difference between the two proportions.

Proportion has a high margin of error (MoE) and should be used with caution.

Note: the thin vertical lines superimposed over the top end of each bar are 95% confidence intervals.

Chart: AIHW.

Source: AIHW analysis of ABS 2022a. See [Health of veterans: supplementary data tables](#) - Table S3.

One indication of the mental health and wellbeing of a population is provided by measuring levels of psychological distress using the Kessler Psychological Distress Scale (K10). The K10 questionnaire was developed to yield a global measure of psychosocial distress, based on questions about people's level of nervousness, agitation, psychological fatigue and depression in the past four weeks (ABS 2018b).

Based on self-reported data from the 2020-21 NHS, of males aged 18 years and over:

- 1 in 5 (20%) males who had ever served in the ADF experienced high/very high psychological distress. This was similar to those who had never served in the ADF (16%).
- Of those who had ever served, DVA clients had similar rate of experiencing high/very high psychological distress to non-DVA clients (#19%¹ and 20% respectively) (AIHW analysis of ABS 2022).

Deaths

In 2021, a study population of members who served in the ADF between 1985 and 2019 was created by using administration data from historical and current ADF personnel systems. Previous analysis on ADF members were restricted to members who served in the ADF from 2001 and were based on the current ADF personnel system.

The expansion of the ex-serving population has more than doubled from previous analysis. The larger study population enables more detailed analysis, providing greater insight into the risk and protective factors within the permanent, reserve, and ex-serving populations. A limitation is the study population does not include members who separated prior to 1 January 1985. For more information, see [Serving and ex-serving Australian Defence Force members who have served since 1985: population characteristics 2019](#).

Between 2001 and 2019, there were 12,060 registered deaths among members with ADF service since 1 January 1985. Of these, around 10,800 (89%) occurred among ex-serving ADF members, almost 600 (5.0%) among permanent ADF members and 680 (5.6%) among reserve ADF members (Table 3).

Table 3: Number of deaths by all causes, ADF members with at least 1 day of service since 1 January 1985 and Australian population, 2001-2019

	Males	Females	Persons
Permanent	550	47	597
Reserve	628	52	680
Ex-serving	10,017	766	10,783
Total in all ADF service groups ^(a)	11,195	865	12,060
Total deaths in Australian population^(b)	1,419,131	1,339,953	2,759,084

(a) Consists of deaths by all causes for males and females aged 16 years and over for permanent, reserve, and ex-serving ADF members.

(b) Number of deaths by all causes for all ADF members are included in the Australian population deaths by all causes count.

Source: AIHW analysis of linked Defence Historical Personnel data-PMKeyS-NDI data 1985-2019, AIHW NMD 2002-2019.

The number of deaths by permanent, reserve, and ex-serving members with at least 1 day of service since 1 January 1985 by year is presented in Table 4. When interpreting Table 4, it is important to remember that the ex-serving population increases each year.

Table 4: Number of deaths by all causes, ADF members with at least 1 day of service since 1 January 1985, 2001-2019

Year	Permanent	Reserve	Ex-serving	Total in all ADF service groups ^(a)
2001	41	35	250	326
2002	42	40	252	334
2003	30	28	320	378
2004	24	33	336	393
2005	34	36	339	409
2006	29	35	369	433
2007	32	42	415	489
2008	29	30	424	483
2009	33	49	489	571
2010	42	37	502	581
2011	43	37	559	639
2012	29	38	610	677
2013	24	47	637	708
2014	26	44	723	793
2015	28	25	774	827
2016	27	37	823	887
2017	38	24	947	1,009
2018	23	32	975	1,030
2019	23	31	1,039	1,093
Total	597	680	10,783	12,060

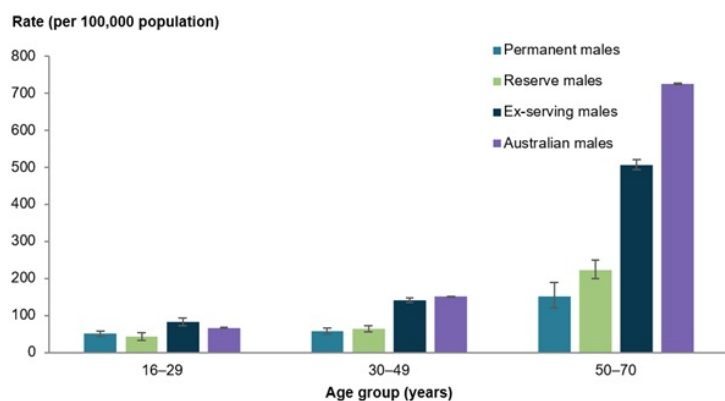
(a) Consists of deaths by all causes for males and females aged 16 years and over for permanent, reserve, and ex-serving ADF members.

Source: AIHW analysis of linked Defence historical personnel data-PMKeyS-NDI data 1985-2019.

Figures 7 and 8 show age-specific all-cause mortality rates of males and females who served in the ADF since 1985 for the period 2002-2019. Data for 2001 are not included in the calculation of these rates, as data for the permanent and reserve populations were not available before 2002 due to a change in Defence personnel management systems at that time. Analysis of ex-serving personnel was restricted to data from 2002 onwards, in line with reporting for permanent and reserve ADF population groups.

Age-specific all-cause mortality rates for permanent, reserve, or ex-serving ADF males were lower than rates for Australian males, except for ex-serving ADF males aged 16-29 where the rate was higher than Australian males (Figure 7).

Figure 7: Age-specific rates of all-cause mortality (per 100,000 population per year), males in ADF service status group with at least 1 day of service since 1 January 1985 and Australian males, 2002-2019



Notes

1. The thin vertical lines superimposed over the top end of each bar are 95% confidence intervals.
2. Rate of all-cause mortality in the Australian population matched by sex and within the same age range.

Chart: AIHW.

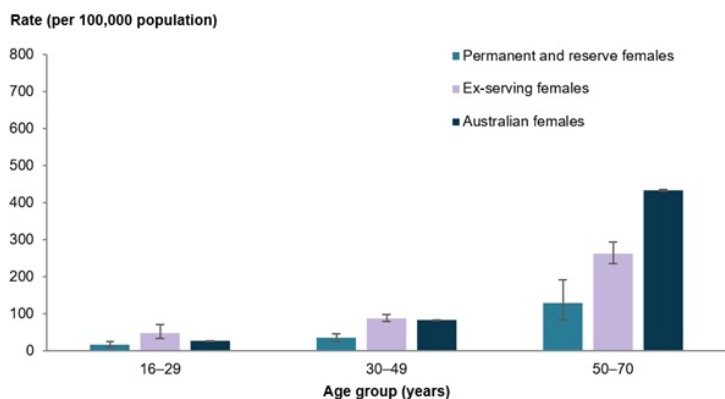
Source: AIHW analysis of linked Defence historical personnel data-PMKeyS-NDI data 1985-2019; AIHW NMD 2002-2019. See [Health of veterans: supplementary data tables - Table S4](#).

Due to the small number of deaths among females in permanent and reserve service, these service status groups have been aggregated.

Age-specific all-cause mortality rates for permanent and reserve ADF females were lower than rates for Australian females. For ex-serving ADF females compared with Australian females (Figure 8):

- Ex-serving ADF females aged 16-29 had a higher rate.
- Ex-serving ADF females aged 30-49 had a similar rate.
- Ex-serving ADF females aged 50-70 had a lower rate.

Figure 8: Age-specific rates of all-cause mortality (per 100,000 population per year), ex-serving ADF females with at least 1 day of service since 1 January 1985 and Australian females, 2002-2019



Notes

1. The thin vertical lines superimposed over the top end of each bar are 95% confidence intervals.
2. Rate of all-cause mortality in the Australian population matched by sex and within the same age range.

Chart: AIHW.

Source: AIHW analysis of linked Defence historical personnel data-PMKeyS-NDI data 1985-2019; AIHW NMD 2002-2019. See [Health of veterans: supplementary data tables - Table S5](#).

Leading causes of death

Tables 5 and 6 provide the top leading cause of death in permanent, reserve, and ex-serving ADF males and ex-serving females for 2002-2019 for age groups, with the Australian comparison.

For permanent, reserve, and ex-serving ADF males, and males in the Australian population aged 16-49, the leading cause of death was suicide, except for permanent males aged 16-29 where the leading cause was land transport accidents (Table 5). For those aged 50 years and over, the leading cause of death for all groups was Coronary Heart Disease.

Additional information on leading causes of death is available in [Health of veterans: supplementary data tables - Tables S9 and S10](#).

Age group (years)	Permanent males	Reserve males	Ex-serving males	Australian males
16-29	Land transport accidents (38.6%)	Suicide (29.2%)	Suicide (42.2%)	Suicide (29.1%)
30-49	Suicide (20.8%)	Suicide (22.4%)	Suicide (25.3%)	Suicide (17.4%)
50 years and over	Coronary heart disease (12.3%)	Coronary heart disease (11.6%)	Coronary heart disease (14.1%)	Coronary heart disease (16.5%)

(a) Excludes 174 male deaths that have no underlying cause recorded.

(b) Proportions are of all deaths with a recorded underlying cause of death within each age group.

Source: AIHW analysis of linked Defence historical personnel data-PMKeyS-NDI data 1985-2019, AIHW NMD 2002-2019.

The leading cause of death for ex-serving ADF females, and females in the Australian population was death by suicide for those aged 16-29 (Table 6). Whereas for those aged 30-49 and 50 years and over, the leading cause of death was different for ex-serving ADF females, and females in the Australian population.

Figures were too small to present leading causes of death by age group for permanent and reserve ADF females separately.

Table 6: Leading cause of death among ex-serving females^(a) and Australian females, by age, 2002-2019

Age group (years)	Ex-serving females	Australian females
16-29	Death by suicide (41.4%)	Death by suicide (22.0%)
30-49	Death by suicide (18.0%)	Breast cancer (12.6%)
50 years and over	Breast cancer (14.6%)	Coronary heart disease (14.3%)

(a) Excludes one female death that has no underlying cause recorded.

(b) Proportions are of all deaths with a recorded underlying cause of death within each age group.

Source: AIHW analysis of linked Defence historical personnel data-PMKeyS-NDI data 1985-2019, AIHW NMD 2002-2019.

Death by suicide among ADF members

There is continuing concern within the ADF and the wider Australian community about deaths by suicide in permanent, reserve, and ex-serving ADF members. In particular, the ex-serving members may face increased risk of death by suicide (AIHW 2021). For the latest available information on serving and ex-serving ADF members who died by suicide, see [Serving and ex-serving Australian Defence Force members who have served since 1985: suicide monitoring 1997 to 2020](#).

The below section uses data from the [Serving and ex-serving Australian Defence Force members who have served since 1985: suicide monitoring 2001 to 2019](#) report to remain consistent with the data reference periods used in the broader Deaths section of this report.

Death by suicide by age and service status group

Between 2001 and 2019 there were 1,273 certified deaths by suicide among members with ADF service since 1 January 1985 (AIHW 2021).

For those with service since 1985, the rate of death by suicide was highest for ex-serving males. Rates of death by suicide between 2002 and 2019 by service status and sex were as follows:

- 11.3 per 100,000 population per year for permanent males
- 12.5 per 100,000 population per year for reserve males
- 29.8 per 100,000 population per year for ex-serving males
- 14.9 per 100,000 population per year for ex-serving females.

Due to the small number of deaths by suicide among females in permanent and reserve service, rates of deaths by suicide are not reported for these subgroups.

Compared with the Australian population and after adjusting for age, rates of deaths by suicide between 2002 and 2019 were:

- 51% lower for permanent males
- 48% lower for reserve males
- 24% higher for ex-serving males
- 102% (or 2.02 times) higher for ex-serving females (AIHW 2021).

Younger age groups are at greater risk of suicide

The rates of death by suicide for both ex-serving males and females between 2002 and 2019 varied by age at time of death by suicide. Between 2002 and 2019, the rate of death by suicide for ex-serving males aged 50 years and over was lower than ex-serving males under 50 years of age (18.9 and 35.2 per 100,000 population per year). However, ex-serving females' rates of death by suicide were similar regardless of age at death by suicide (AIHW 2021).

Those with a longer length of service have lower rates of death by suicide

Rates of death by suicide between 2002 and 2019 for ex-serving males decreased as length of service increased. The rate of death by suicide was lowest for ex-serving males who served more than 20 years (15.4 per 100,000 population per year) and highest for those who had served less than one year (46.4 per 100,000 population per year) (AIHW 2021).

Those who separate as commissioned officers have lower rates of death by suicide

Between 2002 and 2019, the rates of death by suicide for ex-serving males who were commissioned officers at the time of separation was half that of those who were all other ranks (15.1 compared with 31.8 per 100,000 population per year). For ex-serving females, rates of death by suicide were similar for both commissioned officers and all other ranks (AIHW 2021).

Members who separate voluntarily have lower rates of death by suicide

Due to a change in the way the reason for separating from the ADF was recorded in 2002, analysis is presently only reported for ADF members who separated from 1 January 2003 onwards. Between 2003 and 2019, the rate of death by suicide for ex-serving males by reason for separation was lowest for those who separated voluntarily (22.2 per 100,000 population per year) and highest for those whose reason for separation was involuntary medical (73.1 per 100,000 population per year). In addition, ex-serving males who separated voluntarily from the ADF have a similar rate of death by suicide as the Australian males (22.4 compared with 22.2 per 100,000 population per year) (AIHW 2021).

If you need help or support, please contact:

[Open Arms - Veterans and Families Counselling](#) 1800 011 046

[Open Arms Suicide Intervention](#)

[Defence All-hours Support Line \(ASL\)](#) 1800 628 036

[Defence Member and Family Helpline](#) 1800 624 608

[Defence Chaplaincy Support](#) 1300 333 362

[ADF Mental Health Services](#)

[Lifeline](#) 13 11 14

[Suicide Call Back Service](#) 1300 659 467

[Beyond Blue Support Service](#) 1300 22 4636

For information on support provided by DVA, see:

[Mental health support services](#)

[Free mental health care for veterans](#)

Disability

A disability or restrictive long-term health condition exists if a limitation, restriction, impairment, disease, or disorder has lasted, or is expected to last, for 6 months or more, and restricts everyday activities (ABS 2019).

According to the 2020-21 NHS, a disability or restrictive long-term condition is classified by whether or not a person has a specific limitation or restriction. There are 5 levels of activity limitation in the 2020-21 NHS: profound, severe, moderate, mild and school/employment restriction. These are based on whether a person needs help, has difficulty, or uses aids or equipment with any core activities (mobility, self-care, and communication).

According to self-reported data from the 2020-21 NHS, almost 2 in 5 (37%) males who had ever served in the ADF had a disability with a limitation or restriction, while 1 in 5 (20%) had a disability but with no limitation or restriction. These proportions were around twice as high as those of males who had never served (17% and 12%, respectively) (AIHW analysis of ABS 2022a).

Further information will be available from the [Survey of Disability, Ageing and Carers \(SDAC\)](#), with detailed information from this survey expected to be available from the ABS in late-2023.

The DVA supports many veterans who suffer from injuries or diseases caused or aggravated by ADF service. As at 30 June 2021, there were over 189,500 veterans with an accepted disability, equating to 72% of the DVA treatment population (DVA 2021).

1 Proportions marked with a hash (#) have a high MoE and should be interpreted with caution. A high MoE is considered as greater than 10%.

2 These results include males aged 18 years and over, however, COPD occurs mostly in people aged 45 and over. While it is occasionally reported in younger age groups, in those aged 45 and over there is more certainty that the condition is COPD and not another respiratory condition. As such, COPD results should be interpreted with caution.

References

ABS (Australian Bureau of Statistics) (2018a) *Self-assessed health status*, ABS, Australian Government, accessed 11 May 2022.

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ABS (2019) *Disability, Ageing and Carers, Australia: Summary of Findings, 2018*, ABS, Australian Government, accessed 11 May 2022.

ABS (2022a) *Microdata: National Health Survey, 2020-21*, AIHW analysis of detailed microdata, accessed 10 October 2022.

ABS (2022b) *National Study of Mental Health and Wellbeing*, ABS, Australian Government, accessed 30 September 2022.

AIHW (Australian Institute of Health and Welfare) (2021) *Serving and ex-serving Australian Defence Force members who have served since 1985: suicide monitoring 2001 to 2019*, AIHW, Australian Government, accessed 11 May 2022.

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DVA (2021) *Department of Veterans' Affairs annual report 2020-21*, DVA, Australian Government, accessed 11 May 2022.

Joint Standing Committee on Foreign Affairs, Defence and Trade (2019). *Inquiry into transition from the Australian Defence Force (ADF)*, Parliament of the Commonwealth of Australia, Australian Government, accessed 26 October 2022.

Rafferty LA, Cawkill PE, Setvelink SAM, Greenberg K and Greenberg N (2018) '*Dementia, post-traumatic stress disorder and major depressive disorder: a review of the mental health risk factors for dementia in the military veteran population*', *Psychological Medicine*, 48(9):1400-1409, doi:10.1017/S0033291717001386.

Singer CM (2015) 'Dementia risk factors in veterans', *Journal of Aging Life Care*, accessed 29 June 2020.



Health risk factors

Data considerations

Data from the 2020-21 NHS presented in this chapter have been tested for statistically significant differences at the 5% level using confidence intervals, and comprehensive tables are available in [Health of veterans: supplementary data tables - Table S6](#). For more information on the methodology used, see [Technical notes](#).

While comparisons can be inferred from the information provided here from the 2020-21 NHS, some differences between the populations are likely to be confounded by the older age structure of the population who have ever served in the ADF, and comparisons should be used as a guide only. The results presented below have not been adjusted for age as the data could not meet requirements to do so, and readers should take this into consideration when interpreting the results presented.

Currently, women comprise around 18% of the population who have ever served in the ADF (based on self-reported data from the 2020-21 NHS). These relatively low numbers constrain reporting on the health of women who have served, therefore this section of the report presents data for men only.

A person's health and their capacity to remain healthy can be affected by a wide range of lifestyle factors, which can influence a person's health in the short or long term. These can be protective or detrimental.

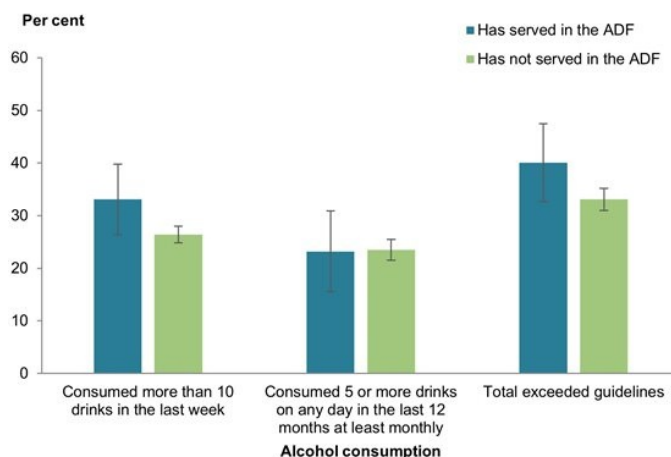
Veterans' health is influenced by health behaviours that may be related to ADF service or individual lifestyle. Screening at recruitment and aspects of serving in the ADF, such as the requirement to maintain a high level of physical fitness and regular health assessments may act as a protective factor for veterans' health.

The results presented below have not been adjusted for age as the data could not meet requirements to do so. Given the nature of DVA clients and the age structure of the ADF population, some results below are likely to be confounded by age and as such comparisons should be used as a guide only.

Based on self-reported data from the 2020-21 NHS, of males aged 18 years and over:

- **Smoking:** 11% of those who ever served in the ADF smoked daily, which was similar to those who had never served (13%). Around 1 in 6 (#16%¹) DVA clients, and around 1 in 12 (8.4%) non-DVA clients, smoked daily.
- **Alcohol consumption:** 2 in 5 (40%) of males who had ever served in the ADF exceeded the Australian Adult Alcohol Guideline², while 1 in 3 (33%) of males who had never served in the ADF exceeded the Guideline (Figure 9). Almost half (#47%¹) of all DVA clients exceeded alcohol guidelines, while 36% of non-DVA clients exceeded the Guideline (Figure 10).

Figure 9: Proportion of males aged 18 and over who exceeded the Australian Alcohol Guidelines, by ADF service status, 2020-21



Notes:

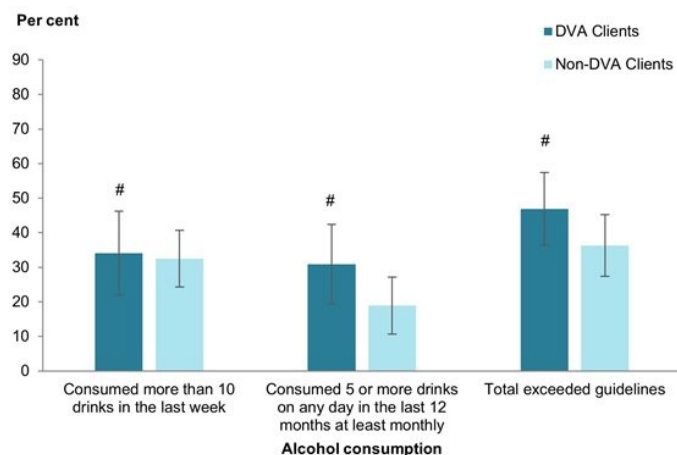
1. For healthy persons aged 18 years and over who exceeded the guidelines either consumed more than 10 standard drinks per week or more than 4 standard drinks on a single day at least 12 or more times in the last 12 months.
2. The thin vertical lines superimposed over the top end of each bar are 95% confidence intervals.

Chart: AIHW.

Source: AIHW analysis of ABS 2022. See [Health of veterans: supplementary data tables - Table S6](#).

Source: ABS (2018) Microdata: National Health Survey, 2017-18, ABS cat no. 4324.0.55. 001, findings based on TableBuilder analysis. Canberra: ABS. See [Health of veterans: supplementary data tables](#) - Table S6.

Figure 10: Proportion of males aged 18 and over who exceeded the Australian Alcohol Guidelines, by DVA client status, 2020-21



Proportion has a high margin of error (MoE) and should be used with caution.

Notes:

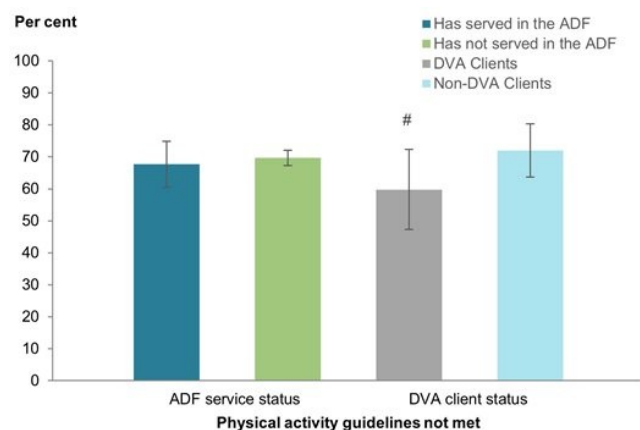
1. For healthy persons aged 18 years and over who exceeded the guidelines either consumed more than 10 standard drinks per week or more than 4 standard drinks on a single day at least 12 or more times in the last 12 months.
2. The thin vertical lines superimposed over the top end of each bar are 95% confidence intervals.

Chart: AIHW.

Source: AIHW analysis of ABS 2022. See [Health of veterans: supplementary data tables](#) - Table S6.

- **Overweight and obesity:** 75% of those who had ever served in the ADF were overweight or obese according to the standard BMI classification³, which was higher than those who had never served (61%)⁴. DVA clients had similar rates of being overweight or obese to non-DVA clients (#72%¹ and 77% respectively). Using physical measurement data taken as part of the 2017-18 NHS, of males aged 18 years and over, 82% of those who had ever served in the ADF were overweight or obese, which was higher than those who had never served (74%). In 2017-18, DVA clients had similar rates of being overweight or obese to non-DVA clients (85% and 80%, respectively)⁵.
- **Fruit and vegetable consumption:** around 55% of males did not eat the recommended two serves of fruit⁶, regardless of ADF service status or DVA client status. Around 94% of males who had ever served in the ADF, and 96% of males who had never served, did not meet the recommended vegetable guidelines⁵. Of those who had ever served, 89% of DVA clients, and 97% of non-DVA clients, did not meet the recommended vegetable guidelines.
- **Physical activity:** around 70% of males did not meet the 2014 Physical Activity guidelines⁷ (including workplace activity) regardless of ADF service status (Figure 11). Over half of DVA clients (#60%¹), and 72% of non-DVA clients did not meet the physical activity guidelines (Figure 11).

Figure 11: Proportion of males aged 18 and over who did not meet the physical activity guidelines, regardless of ADF service status or DVA client status, 2020-21



Proportion has a high margin of error (MoE) and should be used with caution.

Notes:

1. The Physical activity and Exercise guidelines outline how much physical activity Australians should do depending on their age.
2. The thin vertical lines superimposed over the top end of each bar are 95% confidence intervals.

Chart: AIHW.

Source: AIHW analysis of ABS 2022. See [Health of veterans: supplementary data tables](#) - Table S6.

1 Proportions marked with a hash (#) have a high MoE and should be interpreted with caution. A high MoE is considered as greater than 10%.

2 For healthy persons aged 18 years and over who exceeded the guideline either consumed more than 10 standard drinks per week or more than 4 standard drinks on a single day at least 12 or more times in the last 12 months.

3 Due to the COVID-19 pandemic, BMI in the 2020-21 NHS was derived from self-reported height and weight. This method underestimates actual levels of overweight and obesity due to the tendency for people to over-report their height and under-report their weight. As such, these results should be interpreted with caution.

4 BMI does not distinguish between the weight of fat or muscle in an individual (Health Direct 2016). This means that people who are relatively healthy but who have higher proportions of muscle may be incorrectly classed as overweight or obese. Due to the level of fitness required to enlist in the ADF, higher rates of overweight/obesity in the ADF population may be in part due to different physical characteristics, and may not indicate the increased health risk generally associated with excess body weight (AIHW 2018).

5 Overweight and obese classification is derived from measured height and weight. In 2017-18, 33.8% of respondents aged 18 years and over did not have their height, weight or both measured. For these respondents, imputation was used to obtain height, weight and BMI scores. Overweight and obesity is defined by a BMI of 25kg/m² or more. For more information, see glossary.

6 The 2013 Australian Dietary Guidelines recommend that adults eat 2 serves of fruit and 5-6 serves of vegetables per day to achieve adequate fruit and vegetable intake (NHMRC 2013). Refer to *Glossary* for more information.

7 The Physical activity and Exercise guidelines developed by the Department of Health outline how much physical activity Australians should do depending on their age. Refer to *Glossary* for more information.

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Health service use

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DVA provides services to support permanent, reserve and ex-serving ADF members during and after ADF service. Veterans may use these services, or those available to all Australians through mainstream providers.

DVA funds health-related services and programs where clinically required for eligible veterans and their families (those with a DVA-issued health card). DVA funding of health care for entitled veterans is 'demand driven and uncapped' - this means that the Australian Government increases health care funding if needed (DVA 2018).

Medicines

The Australian Government subsidises many medications. All Australian residents who hold a current Medicare card can access medications listed under the Pharmaceutical Benefits Scheme (PBS), subject to patient entitlement status. The Repatriation Pharmaceutical Benefits Scheme (RPBS), funded by DVA, subsidises medications listed under the PBS and additional medications and items for eligible veterans, war widows/widowers, and their dependants.

In 2017-18, more than 1 million medications were dispensed under the PBS/RPBS to around 70,000 ex-serving ADF members with service between 1 January 2001 and 1 July 2017. This was an average of 16 medications dispensed per person (AIHW 2019).

After accounting for age and sex differences, similar proportions of the ex-serving and Australian populations were dispensed medications in 2017-18 (72% and 71%, respectively) (AIHW 2019). Among ex-serving ADF members:

- 37% were dispensed at least 1 nervous system medication (including antidepressants and anxiolytics) - compared with 31% for all Australians.
- 22% were dispensed at least one cardiovascular system medication (for example for hypertension or high cholesterol) - compared with 24% for all Australians.

Policies regarding mental health treatment for ex-serving ADF members have undergone change in recent years to facilitate early access to mental health treatment. The full effect of these changes may not be reflected for the ex-serving ADF members captured in this data. Due to these policies, ex-serving ADF members have different pricing structures for, and access to, medications from the Australian population. These factors may influence the levels of dispensing between ex-serving members and the Australian population.

Almost 1 in 6 (17%) of the ex-serving ADF population were dispensed at least 1 antidepressant in 2017-18 (AIHW 2019). After accounting for differences in the age and sex structures of the populations, 20% of all ex-serving ADF members received at least 1 dispensing for antidepressants, compared with 15% in the Australian population. On average, ex-serving ADF members who received at least 1 dispensing for antidepressants, received 9 dispensing per person, similar to the Australian population (AIHW 2020).

More information is available in the report *Medications dispensed to contemporary ex-serving Australian Defence Force members, 2017-18*.

Hospitalisations

Defence funds all hospital care for permanent and reserve ADF members while DVA funds hospital care for eligible ex-serving ADF members and eligible dependants.

Data are available for public and private hospitalisations by source of funding, which allows the identification of hospitalisations where the cost of care was funded by DVA or Defence. Individuals are asked on presentation at a hospital if they are a DVA or Defence eligible patient and are referred to as a compensable patient. However, the eligibility to receive hospital treatment as a DVA compensable patient may not necessarily have been confirmed by DVA.

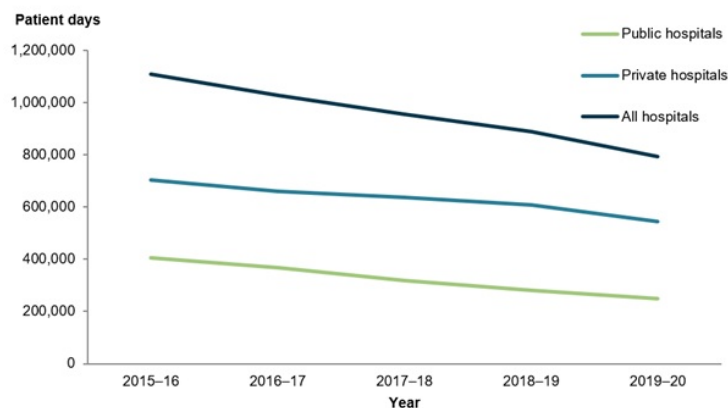
In 2019-20, data from the National Hospitals Morbidity Database (NHMD) shows:

- Around 10,700 hospitalisations were funded by Defence, and 200,600 were funded by DVA. Combined, this represented 1.9% of all hospitalisations (AIHW 2021a).
- DVA- and Defence-funded hospitalisations occurred most frequently in private hospitals (71% of DVA-funded hospitalisations and 82% of Defence-funded hospitalisations). For all other Australian hospitalisations, 39% were in private hospitals (AIHW 2021a).

- DVA-funded hospitalisations have been declining since 2015-16 (by 5.1% on average each year before COVID-19), while total hospitalisations in Australia have indicated a consistent upward trend (by 2.9% on average per year before COVID-19), except for 2019-20 where the number of hospitalisations decreased by 2.8% compared with 2018-19 (AIHW 2021a). The decrease in the number of hospitalisations was due to the impacts that COVID-19 had on the hospital system, including restrictions on some types of hospital services.

Between 2015-16 and 2019-20, DVA patient days¹ decreased by 8.0% on average each year (decreasing by 11% in public hospitals and 6.2% in private hospitals; Figure 12). This is likely attributable to the declining number of funded DVA hospitalisations which may be confounded by the declining number of the older DVA Gold Card population and increasing number of younger DVA White Card population (DVA 2021). In comparison, patient days across all Australian funding sources² has remained relatively stable over the same period (increased by 0.5% in public hospitals, increased by 0.3% in private hospitals, and overall increased by 0.4% on average each year) (AIHW 2021a).

Figure 12: Department of Veterans’ Affairs hospital patient days, 2015-16 to 2019-20



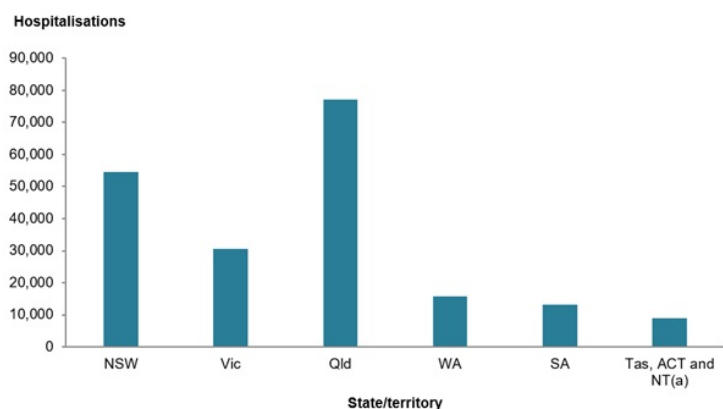
Note: Appendix information with notes on definitions and data limitations is available to download at [Hospitals info and downloads - About the data](#).

Chart: AIHW.

Source: AIHW (2021) Admitted patient care 2019-20 7: Costing and funding, Table S7.2. See [Health of veterans: supplementary data tables - S7](#).

In 2019-20, around 201,000 hospitalisations were funded by DVA, with most of these occurring in Queensland (38%) and New South Wales (27%) (AIHW 2021a) (Figure 13), aligning with the states where the majority of DVA clients are located (DVA 2021).

Figure 13: Department of Veterans’ Affairs-funded hospitalisations, by states and territories, 2019-20



(a) Data for private hospital separations for Tasmania, ACT and NT are not reported individually in the source data. Figure is calculated from the difference between total amount and other states and territories.

Note: Appendix information with notes on definitions and data limitations is available to download at [Hospitals info and downloads - About the data](#).

Chart: AIHW.

Source: AIHW (2021) Admitted patient care 2019-20 7: Costing and funding, Table S7.3. See [Health of veterans: supplementary data tables - S8](#).

More information is available in the report [Hospitals - Admitted patient care 2019-20](#).

Health expenditure

The Australian Government funds DVA by making payments through DVA for health services and programs to eligible veterans and their families and their carers. DVA issues various health cards (Orange, Gold and White card) that entitle holders to a range of health service benefits. The cards differ by the degree to which holders can access DVA health support and by eligibility criteria.

DVA-supported health services and treatments include mental health services, various medical and allied health services, rehabilitation support (including adaptive equipment, aids and appliances, and support to return to work), and benefit-paid pharmaceuticals (AIHW 2021b).

In 2019-20, DVA spent \$2.9 billion on health-related services; the majority was spent on primary health care services (\$1.4 billion) and hospital services (\$1.3 billion) (AIHW 2021b).

Total DVA spending decreased by 1.8% in 2019-20. Over the decade to 2019-20, there was a consistent decline in DVA spending on hospital services, with spending on public hospital services decreasing by an average of 5.4% per year and private hospital services by 4.3% in real terms. DVA spending on primary health care also decreased in real terms by a yearly average of 2.8%, accompanied by an average decrease in spending on other services by 2.6%. This may be attributed to the declining size of the older DVA Gold Card population accessing fewer services, noting the average cost of providing support for Gold Card holders is higher than the other DVA Card types (AIHW 2018b; DVA 2021).

Based on the number of people in the DVA treatment population, DVA spent over \$11,400 on health per member of the treatment population in 2019-20, which is 44% higher than the health spending per person in the total Australian population (around \$7,900) (AIHW 2021b). This may reflect the different age profiles and subsequent needs of the DVA treatment population. Clients of DVA are also covered for services not covered for the general Australian population.

More information is available in the report [Health expenditure Australia 2019-20](#).

Homelessness

Serving ADF members have access to housing and rental assistance through Defence Housing Australia. However, once members discharge from the ADF they are no longer able to access this housing support. Serving or ex-serving ADF members can access a range of housing and homelessness services through government and non-government organisations (Defence 2017).

To provide a better understanding of the extent to which serving and ex-serving ADF members may need support from specialist homelessness services (SHS), the self-reported Australian Defence Force (ADF) indicator³, termed 'veteran SHS clients' throughout the rest of this section, was introduced into the Specialist Homelessness Services Collection (SHSC) in July 2017. In 2020-21, around 1,300 veteran SHS clients received support from specialist homelessness services (AIHW 2021c). This made up less than 1% of all SHS clients. All data presented below can be found in AIHW's [Specialist homelessness services annual report 2020-21](#).

Client characteristics

In 2020-21, of the veteran SHS clients:

- Two fifths of clients (41%) were not in the labour force (compared with 35% of all SHS clients).
- Around 2 in 5 lived alone (compared with 32% of all SHS clients).
- Two thirds (67%) had previously been assisted by SHS agency at some point since July 2011 (compared with 61% of all SHS clients).

Reasons for seeking assistance

- In 2020-21, the main reason for seeking assistance was experiencing housing crisis (21% or around 300 veteran SHS clients), followed by inadequate or inappropriate dwelling conditions (14% or around 200 veteran SHS clients). By comparison, 53% of all SHS clients nominated accommodation issues and 34% of all SHS clients nominated experiencing housing crisis as the main reasons for seeking assistance.
- Both homeless and at-risk veteran SHS clients identified housing crisis as either their main reason or second main reason for seeking assistance (26% or around 200 veteran SHS clients and 17% or almost 100 veteran SHS clients respectively).

Housing situation

In 2020-21, of the veteran SHS clients:

- On presentation to services for assistance more than half (54%) were experiencing homelessness (compared with 43% of all SHS clients):
 - 21% were rough sleeping (compared with 8.7% of all SHS clients).
 - Around 1 in 5 (20%) were in short-term or emergency accommodation (compared with 16% of all SHS clients).
- Just under half (46%) presented to services at risk of homelessness (compared with 57% of all SHS clients):
 - 26% were in private or other housing (compared with 31% of all SHS clients).
 - 9.4% were in public or community housing (compared with 12% of all SHS clients).

¹Patient days: The total number of days for all patients who were admitted for an episode of care and who separated during a specified reference period. A patient who is admitted and separated on the same day is allocated 1 patient day. METeOR identifier: 270045.

² Funding sources includes public patients, private health insurance, self-funded, workers compensation, motor vehicle third party personal claims, DVA, and other.

3 The ADF indicator is not applicable to clients who may have served in non-Australian defence forces, reservists who have never served as a permanent ADF member or clients under the age of 18.

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Technical notes

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Summary of change in study population for deaths data

The previous Australia's Health article on [Health of veterans](#), presented information on the post-2001 ex-serving ADF members cohort based on the current ADF personnel system. Where possible, data have been updated to be based on the post-1985 ex-serving ADF members cohort. The study population does not include ADF members who separated prior to 1 January 1985. Research is constrained by what is technically possible with the systems and information infrastructure in place before 1985.

The AIHW, in collaboration with Defence and DVA, is working to increase the range of data available about veterans through data linkage initiatives and survey opportunities.

Age-standardised rates

Age-standardised rates are rates standardised to a specific standard age structure to facilitate comparison between populations with different age structures and over time by reducing the impact of different age structures. The age-standardised proportions in this report have been directly age-standardised to the 2001 Australian standard population.

For some instances when using data from the 2020-21 National Health Survey (NHS) involving small samples sizes, particularly for self-reported DVA clients, the counts did not satisfy the minimum data quality requirements for conducting age-standardisation. In these instances, a general comment about the possible impact of age on the data comparisons being made has been included.

Using survey-based data

Data from the NHS are based on self-reported veteran status. As only a sample of people in Australia were surveyed, results needed to be converted into estimates for the whole population. This was done through a process called weighting:

- Each person or household is given a number (known as a weight) to reflect how many people or households they represent in the whole population
- A person or household's initial weight is based on their probability of being selected in the sample.

The person and household level weights are then calibrated to align with independent estimates of the in-scope population, referred to as 'benchmarks' (ABS 2022). The weighted estimates are not intended to represent the veteran population, and therefore may over- or under-represent certain types of veterans.

Veterans made up a small portion of the overall NHS sample, which may cause some issues with the reliability and validity of results in this report. The sample of veterans who were also DVA clients was even smaller, so any differences observed between this group and others mentioned in this report should be interpreted with caution and may be due to chance.

Statistics that are based on a sample of data rather than the whole population are subject to a degree of error, termed sampling error. This error describes the difference between the result obtained from the sample and the 'true' result for the whole population. The relative standard error (RSE) of an estimate indicates the level of sampling error it is subject to. Estimates with an RSE of greater than 50% are generally considered not fit for most purposes (ABS 2022).

The level of uncertainty associated with sampling error can be represented using confidence intervals. In this report, confidence intervals display the range in which there is a 95% chance the true value lies. In relevant bar graphs, the vertical lines at the top of each bar represent the confidence intervals. Narrow confidence intervals indicate high precision in results, and wide confidence intervals indicate lower precision. Sample-based results from a small population group, such as veterans, are more likely to have wide confidence intervals. As a result of sampling error, it is possible that a difference between two sample-based results is due to sampling error rather than being a true difference.

The ABS survey data presented in this report have been tested for statistically significant differences using 95% confidence intervals:

- If the confidence intervals for two results do not overlap, the difference is statistically significant

- If the confidence intervals for two results do overlap, it is likely but not certain that the difference is not statistically significant. In this case, a confidence interval for the difference is calculated. If the confidence interval for the difference does not include zero (0), the difference is statistically significant. This was the primary method used for testing statistical significance throughout this report.

A statistically significant result means that any differences due to chance under the null hypothesis would occur fewer than 1 in 20 times. Where comparisons are found to be not statistically significant, there may still be a real difference of practical importance that the statistical test did not detect.

There are a number of methods to test statistical significance, each with varying levels of precision. This method has been used where data were sourced directly from the ABS. The significance of results from other studies or reports has been presented as published by the original authors, though the method used may differ from the method presented here.

A second source of error in sample-based statistics is non-sampling error. Non-sampling error is caused by factors other than those related to sample selection. It is any factor that results in the data values not accurately reflecting the true value of the population. It can occur at any stage throughout the survey process. Examples include:

- selected people that do not respond (e.g. refusals, non-contact)
- questions being misunderstood
- responses being incorrectly recorded
- errors in coding or processing the survey data (ABS 2022).

Data quality

Data quality statements for the primary data sources used are available on the ABS website: [National Health Survey: First Results methodology](#).

Abbreviations

ABS	Australian Bureau of Statistics
ADF	Australian Defence Force
AIHW	Australian Institute of Health and Welfare
BMI	Body Mass Index
COPD	Chronic obstructive pulmonary disease
DVA	Department of Veterans' Affairs
ERP	Estimated Resident Population
NDI	National Death Index
NHMD	National Hospital Morbidity Database
NHMRC	National Health and Medical Research Council
NHS	National Health Survey
NMD	National Mortality Database
NSMHW	National Study of Mental Health and Wellbeing
PBS	Pharmaceutical Benefits Scheme
PMKeyS	Personnel Management Key Solution
RPBS	Repatriation Pharmaceutical Benefits Scheme (RPBS)
SDAC	Survey of Disability, Ageing and Carers
SHSC	Specialist Homelessness Services Collection

Glossary

age-specific rate: A rate for a specific age group. The numerator and denominator relate to the same age group.

age-standardisation: A way to remove the influence of age when comparing populations with different age structures. This is usually necessary because the rates of many events (e.g. deaths, service use) vary with age. The age structures of the different populations are converted to the same 'standard' structure, and then the disease rates that would have occurred with that structure are calculated and compared.

age structure: The relative number of people in each age group in a population.

alcohol consumption risk guidelines: The Australian Adult Alcohol Guideline 2020 is based on Guideline 1 of the Australian Guidelines to Reduce Health Risks from Drinking Alcohol. Persons aged 18 years and over who exceeded the guideline either consumed more than 10 standard drinks per week or more than 4 standard drinks on a single day at least 12 or more times in the last 12 months.

Standard drink: A drink containing 10g of pure alcohol (equivalent to 12.5ml).

As a drink, this is any of the following:

- 100 ml of wine
- 3/4 can (285 ml) of full strength beer or cider
- 1 can (375 ml) of mid-strength beer
- 425 ml of light beer
- 60 ml port or sherry
- 30 ml spirits.

The measure is defined in the Australia New Zealand Food Standards Code - Standard 2.7.1, and is the basis for all labelling of alcoholic drinks in Australia (NHMRC 2020).

Australian Dietary Guidelines: The NHMRC's 2013 Australian Dietary Guidelines were used to assess whether fruit and vegetable consumption met the recommendations.

Usual daily intake of fruit: Refers to the number of serves of fruit (excluding drinks and beverages) usually consumed each day, as reported by the respondent. A serve is approximately 150 grams of fresh fruit or 50 grams of dried fruit. Adequate daily fruit intake refers to whether the respondent met the minimum number of serves as recommended in the Australian Dietary Guidelines. For males and females aged 18 years and over, a daily intake of 2 serves is recommended.

Usual daily intake of vegetables: Refers to the number of serves of vegetables (excluding drinks and beverages) usually consumed each day, as reported by the respondent. A serve is approximately half a cup of cooked vegetables (including legumes) or one cup of salad vegetables - equivalent to approximately 75 grams. Adequate daily vegetable intake refers to whether the respondent met the minimum number of serves as recommended in the Australian Dietary Guidelines:

- For males aged 19 to 50 years old, a daily intake of 6 serves is recommended.
- For males aged 51 to 70 years old, a daily intake of 5.5 serves is recommended.
- For males aged 70 years over, a daily intake of 5 serves is recommended.
- For females aged 19 years and over, a daily intake of 5 serves is recommended, except for breastfeeding females aged 19 to 50 years old, a daily intake of 7.5 serves is recommended.

Australia's Physical Activity and Sedentary Behaviour Guidelines: the 2014 guidelines recommend that adult Australians aged 18-64:

- be active on most, preferably all, days every week
- accumulate 150 to 300 minutes of moderate intensity physical activity or 75 to 150 minutes of vigorous intensity physical activity, or an equivalent combination of both moderate and vigorous activities, each week
- do muscle-strengthening activities on at least 2 days each week
- minimise and break up long periods of sitting

For Australians aged 65 and over, at least 30 minutes of moderate intensity physical activity on most, preferably all, days. They should also do a range of activities that incorporate fitness, strength, balance and flexibility.

Body Mass Index (BMI): The most used method of assessing whether a person is normal weight, underweight, overweight or obese, which is calculated by dividing the person's weight (in kilograms) by their height (in metres) squared; that is, $\text{kg} \div \text{m}^2$. For both men and women, underweight is a BMI below 18.5, acceptable weight is from 18.5 to less than 25, overweight is from 25 to less than 30, and obese is 30 and over. Sometimes overweight and obese are combined and defined as a BMI of 25 and over. In the 2020-21 NHS, due to the COVID-19 pandemic BMI was self-reported via respondents recording their height and weight.

cancer (malignant neoplasm): A large range of diseases where some of the body's cells become defective, begin to multiply out of control, invade and damage the area around them, and can then spread to other parts of the body to cause further damage.

cardiovascular disease/condition: Any disease of the circulatory system, namely the heart (cardio) or blood vessels (vascular). Includes angina, heart attack, stroke, and peripheral vascular disease. Also known as circulatory disease.

cause(s) of death: All diseases, morbid conditions, or injuries that either resulted in or contributed to death - and the circumstances of the accident or violence that produced any such injuries - that are entered on the Medical Certificate of Cause of Death.

commissioned officer: An appointed Defence member who holds a rank of Midshipman or Officer Cadet, or higher.

condition (health condition): A broad term that can be applied to any health problem, including symptoms, diseases, and various risk factors (such as high blood cholesterol, and obesity). Often used synonymously with disorder.

confidence interval: A range determined by variability in data, within which there is a specified (usually 95%) chance that the true value of a calculated parameter lies.

COVID-19: A disease of the respiratory system, particularly in the early stages of the illness, caused by the coronavirus SARS-CoV-2. Common early symptoms are similar to other respiratory illnesses, but the infection can have a wide variety of manifestations. In some people the infection can progress to become a more severe disease, with the immune system overreacting, resulting in inflammation and lack of oxygen to many parts of the body. This can lead to multiple organ failure and death. Severe symptoms tend to develop in the second week of the disease.

data linkage: The bringing together (linking) of information from two or more different data sources that are believed to relate to the same entity; for example, the same individual or the same institution. This linkage can yield more information about the entity and in certain cases, provide a time sequence - helping to 'tell a story', show 'pathways' and perhaps unravel cause and effect. The term is used synonymously with 'record linkage' and 'data integration'.

dependant: The partner, parent, step-parent, grandparent, child, step-child, grandchild, sibling or half-sibling of a permanent or former ADF member. The member's partner's parent, step-parent, child or step-child may also be included as dependants. Further, a dependant may also include a person who stands in the position of a parent to the member, or a person in respect of whom the member stands in the position of a parent.

disability: An umbrella term for any or all of an impairment of body structure or function, a limitation in activities, or a restriction in participation. Disability is a multidimensional concept and is considered as an interaction between health conditions and personal and environmental factors.

discharge (ADF): Separation from the ADF.

ex-serving ADF members: ADF members in the serving or reserve population on or after 1 January 1985 and who separated after 1 January 1985.

hospitalisation: Synonymous with admission and separation; that is, an episode of hospital care that starts with the formal admission process and ends with the formal separation process. An episode of care can be completed by the patient's being discharged, being transferred to another hospital or care facility, or dying, or by a portion of a hospital stay starting or ending in a change of type of care (for example, from acute to rehabilitation).

in real terms: Growth in spending, expressed in constant prices, is referred to as 'real growth' or 'growth in real terms' and represents changes in the real value of the amount of money spent in a given year.

length of service: Length of service describes the time between joining the ADF and separation. Note that the separation point used in this analysis reflects full separation from the ADF - that is, when a member is no longer in permanent or reserve service. For example, a member who transitions from full time service to the inactive reserves is counted as permanent for the purpose of length of service calculations until he or she separates from the reserves.

Medicare: A national, government-funded scheme that subsidises the cost of personal medical services for all Australians and aims to help them afford medical care. The Medicare Benefits Schedule (MBS) is the listing of the Medicare services subsidised by the Australian Government. The schedule is part of the wider Medicare Benefits Scheme (Medicare).

mental illness (or mental disorders): Disturbances of mood or thought that can affect behaviour and distress the person or those around them, so that the person has trouble functioning normally. They include anxiety disorders, depression, and schizophrenia.

mortality: Number or rate of deaths in a population during a given time period.

musculoskeletal condition: One of a group of conditions, along with arthritis and other conditions that affects the bones, muscles, and joints. These other conditions include back pain and problems, juvenile arthritis, osteoarthritis, osteopenia, osteoporosis (low bone density) and rheumatoid arthritis.

outcome (health outcome): A health-related change due to a preventive or clinical intervention or service. (The intervention may be single or multiple, and the outcome may relate to a person, group or population, or be partly or wholly due to the intervention.)

patient days: The total number of days for all patients who were admitted for an episode of care and who separated during a specified reference period. A patient who is admitted and separated on the same day is allocated 1 patient day.

permanent ADF members: A term that describes ADF members serving in a regular capacity in the Navy, Army or Air Force on continuous full-time service, or participating in the gap year program.

Pharmaceutical Benefits Scheme (PBS): A national, government-funded scheme that subsidises the cost of a wide range of pharmaceutical drugs for all Australians to help them afford standard medications. The Schedule of Pharmaceutical Benefits (schedule) lists all the medicinal products available under the PBS and explains the uses for which they can be subsidised.

prevalence: The number or proportion (of cases, instances, and so forth) in a population at a given time. In relation to cancer, refers to the number of people alive who had been diagnosed with cancer in a prescribed period (usually 1, 5, 10 or 26 years).

psychological distress: Unpleasant feelings or emotions that affect a person's level of functioning and interfere with the activities of daily living. This distress can result in having negative views of the environment, others and oneself, and manifest as symptoms of mental illness, including anxiety and depression.

rank: Rank describes organisational and workforce structures that determine a member's position, conditions, opportunities, and entitlements (such as pay and conditions). The analysis here is based on rank at time of separation. It is presented in two broad groups: commissioned officers and all ranks other than commissioned officer.

rate: One number (the numerator) divided by another number (the denominator). The numerator is commonly the number of events in a specified time. The denominator is the population "at risk" of the event. Rates (crude rates, age-specific rates and age-standardised - see age-standardisation) are generally multiplied by a number such as 100,000 to create whole numbers.

reason for separation: The reasons that ADF members separate from the ADF can be categorised into three broad groups:

- voluntary separation
- other involuntary separation
- involuntary medical separation.

The separation point used in this analysis reflects full separation from the ADF, that is, when a member is no longer permanent or reserve. Separation reason is therefore the reason recorded for leaving the last engagement with the ADF.

Repatriation Pharmaceutical Benefits Scheme (RPBS): The RPBS is subsidised by the [Department of Veterans' Affairs \(DVA\)](#), and can be accessed by veterans who have the following DVA cards:

- Gold or Orange Card (all medical conditions)
- White Card (specific medical conditions).

Under the RPBS, eligible veterans/war widow(er)s may receive:

- items listed for supply in the PBS
- items listed under the RPBS, including wound care products
- items not listed on either the PBS or RPBS schedules, if clinically justified.
- All medicines supplied under the RPBS are dispensed at the concessional rate (or free if the patient has reached their Safety Net threshold).

reserve/reservist ADF members: ADF members in the active or inactive reserve forces for the Navy, Army or Air Force. Most members leaving full-time service make the transition to the inactive reserve forces, unless there are medical or other grounds preventing this.

risk: The probability of an event occurring during a specified period of time.

service: The three broad arms of the ADF - the Navy, Army and Air Force.

service status: The broad nature of an individual's employment with the ADF, namely: permanent (previously referred to as serving), reserve and ex-serving.

statistical significance: A statistical measure indicating how likely the observed difference is due to chance alone.

suicide: An action intended to deliberately end one's own life.

transition: The process of moving from full-time, part-time or reserve ADF service into civilian life.

underlying cause of death: The disease or injury that initiated the train of events leading directly to death; that is, the primary or main cause of death. The underlying cause of death as reported on the National Mortality Database is used to assign the cause of death.

weighting: Adjustment of the characteristics of one group so they are statistically similar to the characteristics of another group so that comparisons of the effect under study can be more certain.

References

ABS (Australian Bureau of Statistics) (2022) *National Health Survey: First Results methodology*, ABS, Australian Government, accessed 06 December 2022.

NHMRC (National Health and Medical Research Council) (2022) *Australian Guidelines to Reduce Health Risks from Drinking Alcohol*, NHMRC, Australian Government, accessed 06 December 2022.

Where do I go for more information?

For more information on the health of veterans, see the following AIHW reports:

- [Serving and ex-serving Australian Defence Force members who have served since 1985: suicide monitoring 2001 to 2019](#)
- [Serving and ex-serving Australian Defence Force members who have served since 1985: population characteristics 2019](#)
- [Final report to the Independent Review of Past Defence and Veteran Suicides](#)
- [Medications dispensed to contemporary ex-serving Australian Defence Force members, 2017-18](#)
- [Specialist homelessness services annual report 2020-21](#)

What support is available?

- [Open Arms - Veterans and Families Counselling](#) 1800 011 046

- [Open Arms Suicide Intervention page](#)
- [Defence All-hours Support Line \(ASL\) 1800 628 036](#)
- [Defence Member and Family Helpline 1800 624 608](#)
- [Defence Chaplaincy Support 1300 333 362](#)
- [ADF Mental Health Services](#)
- [Lifeline 13 11 14](#)
- [Suicide Call Back Service 1300 659 467](#)
- [Beyond Blue Support Service 1300 22 4636](#)

For information on support provided by DVA, see:

- [Mental health support services](#)
- [Free mental health care for veterans](#)





Data





Related material

Related topics

- [Risk factors](#)
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