



3 | Has the mental health of working Australians changed over the last 20 years?

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As outlined in the first two sections of this white paper, work in Australia has changed dramatically over the last 20 years. This has led to a range of changes in the way Australian workers experience psychosocial risks and protective factors in the workplace. They report that their jobs are more complex and difficult than they used to be, with less freedom as to how they do their work. At the same time knowledge and awareness of mental health in workplaces has increased and a growing number of workplaces have implemented mental health programs.

In this section we explore the overall impact of these changes on Australian workers' mental health, using three sources of evidence. We also consider whether subgroups in the working population exhibit different trends in their mental health and wellbeing over time. We cover:

1. Mental health-related incapacity claims and benefits
2. National data capturing levels of mental health symptoms
3. Suicide mortality data



Changes in mental health-related work injury claims and incapacity benefits

One of the most direct ways to assess trends in the mental health of Australia's workforces is to examine movement in rates of claim for psychological injury or longer-term incapacity benefits.

Workers' compensation claims

Within Australia, workers' compensation laws are based around a 'no fault' principle. This means that any employee who has been injured as a result of their work, has the right to claim the costs of their care and lost income. They do not need to prove that their employer was negligent, just that their injury or disease is work-related ([Safe Work Australia, 2010](#)). The rates of approved workers' compensation claims therefore provide an indication of the trends in mental health conditions that are deemed work-related.

National data collected on accepted workers' claims over the last two decades shows a sustained increase in the claims for work-related injuries attributed to mental health conditions ([Safe Work Australia, 2021](#)). From 2000–2018, the number of claims for mental health conditions increased by 51%. By 2018 they accounted for 68% of all disease-related claims.

In comparison, the number of claims for most other disease types decreased over the same period. These appear to be startling statistics, but the absolute number of claims must also be considered in light of Australian population growth over that same 20-year period. As such the number of accepted claims per 1,000 workers becomes a more accurate measure of worker mental health (see *Figure 1*).

Viewed in this way, the data then tells a different story. It appears that the likelihood of any individual worker making a work-related mental health injury claim, while fluctuating over time, has remained relatively stable. However, while the likelihood of a work-related mental health condition remained stable, the average time taken off work for mental health-related claims increased by 86% between 2000 and 2017. The costs of mental health-related claims also increased exponentially, by 209%, over the same time period. This suggests that the severity and complexity of work-related mental health conditions may have increased, with early recovery and return-to-work becoming less likely. The most commonly cited reasons for work-related mental stress (the primary mechanism of injury in mental health-related claims) in Australia are work pressure (31%), work-related harassment and/or bullying (27%) and workplace violence (14%) (Safe Work Australia, 2018).

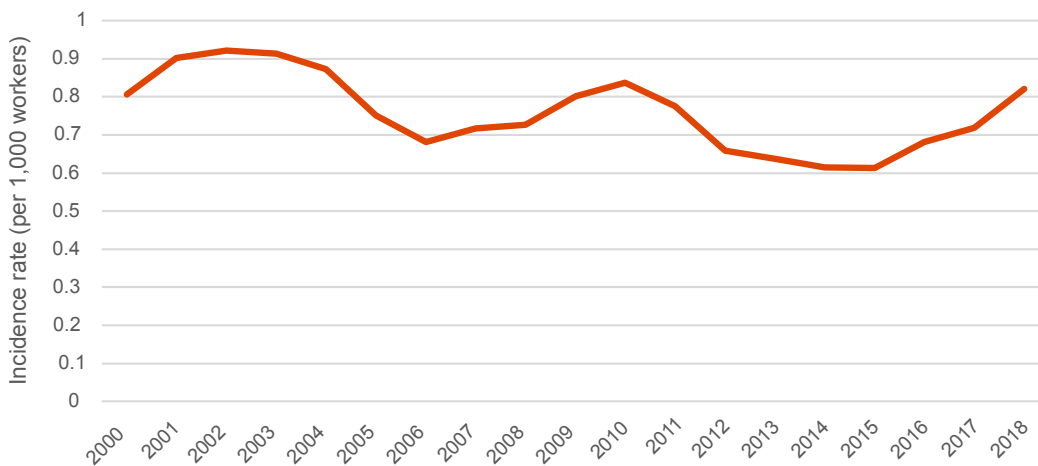


Figure 1. Rates of workers' compensation claims for mental health conditions per 1,000 workers (2000–2018*).

Note: *Each year (e.g., 2000) refers to the relevant financial year (e.g., 2000–2001). Due to differences in reporting, data from 2000–2005 and 2006–2018 are not directly comparable.

Data sources: Years 2000–2005: Australian Safety and Compensation Council (2009), *Annual Compendium of Workers' Compensation Statistics report 2006–07*. Years 2006–2011: Safe Work Australia (Safe Work Australia, 2014), *Australian Workers' Compensation Statistics report 2012–13*. Years 2012–2018: Safe Work Australia (2021), *Australian Workers' Compensation Statistics report 2018–19*.

Disability Support Pensions

An alternative way to examine trends of ill health and incapacity is to focus on the rates of Disability Support Pensions (DSP). The DSP is Australia's primary benefit for those with long-term disabling conditions which inhibit their capacity to work. In order to be awarded a DSP, an Australian resident needs to demonstrate that they have a stabilised medical condition that is causing substantial functional impairment and will prevent them from working at least 15 hours a week over the next two years (Services Australia, 2019). Of all DSP benefits received, the proportion attributed to mental health conditions increased by 57% since 2001 (Department of Social Services, 2013, 2021). Notably, in 2011 mental health conditions surpassed musculoskeletal/connective tissue conditions as the most common reason to be awarded a DSP.

However, these figures in isolation could be misleading, given the overall proportion of the population receiving a Disability Support Pension for any reason decreased between 2001–2019 (Australian Institute of Health and Welfare, 2020), particularly after 2012 (Collie et al., 2021). Nonetheless, when considered as a proportion of the working-age population, DSP rates specifically for mental health conditions (psychological/psychiatric) increased considerably between 2001–2014 (Harvey et al., 2017). They declined between 2015–2018, although at a slower rate than for most other conditions (Collie et al., 2021). These rates appear to have stabilised since 2018 (see Figure 2). In December 2020, more than 246,000 people aged 16–64 years were receiving a DSP for a mental health condition (Department of Social Services, 2021). The available data allowed comparisons in these trends to be made for different age and gender categories between 2014 and 2020, although no notable differences emerged.

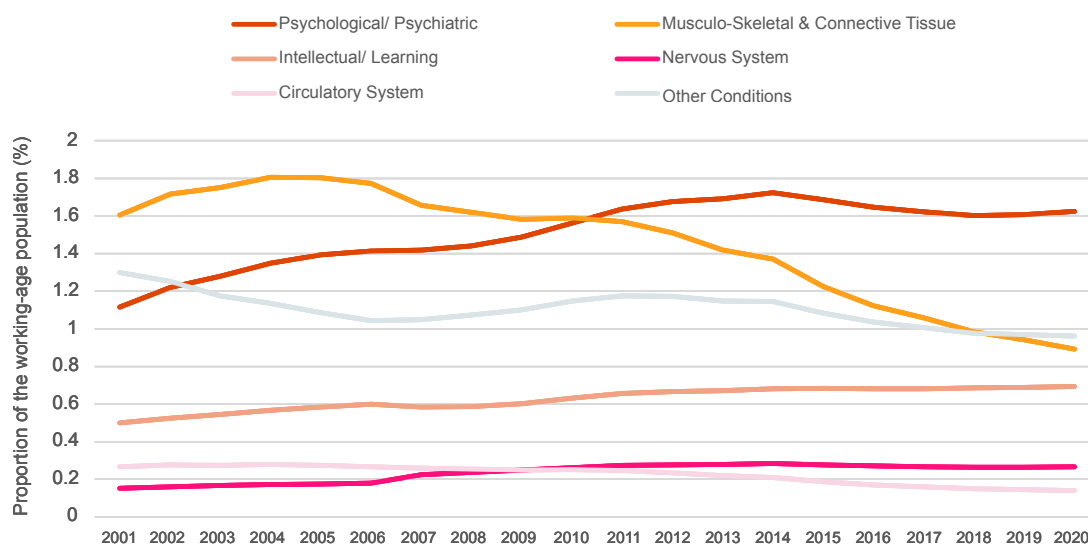
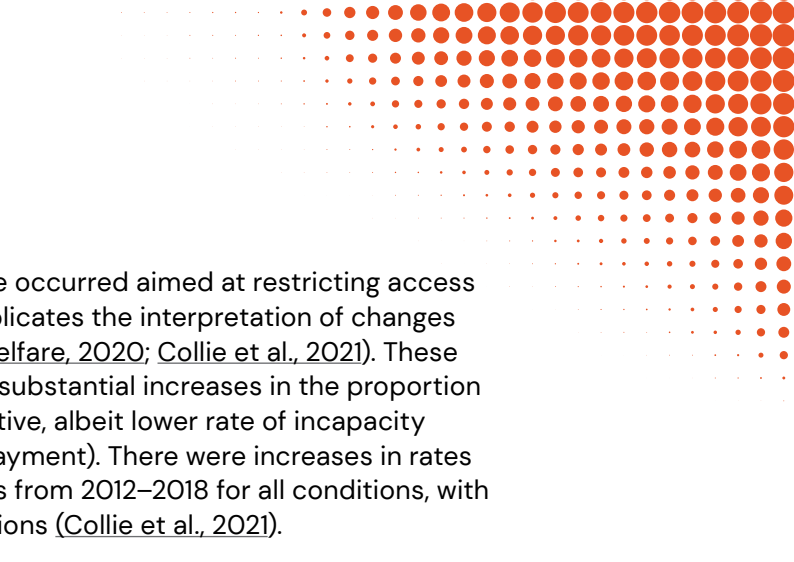


Figure 2. DSP recipients by top five medical conditions as a proportion of the working-age population (16–64 years) between 2001 and 2020.

Note: All annual population data reflects June figures. DSP data reflects December figures except for 2013 and 2014 where June data was used.

Data sources: Years 2001–2013: Department of Social Services (2013), *Characteristics of Disability Support Recipients, June 2013*; Australian Bureau of Statistics (2021c), *National, State and Territory Population*. Years 2014–2020: Department of Social Services (2021), *DSS Payment Demographic Data*; Australian Bureau of Statistics (2021c), *National, State and Territory Population*.



Unfortunately, the range of policy changes that have occurred aimed at restricting access to Disability Support Pension benefits further complicates the interpretation of changes in rates of DSP (Australian Institute of Health and Welfare, 2020; Collie et al., 2021). These broadening DSP restrictions were accompanied by substantial increases in the proportion of the working-age population accessing an alternative, albeit lower rate of incapacity benefit, the New Start Allowance (now JobSeeker Payment). There were increases in rates of those who received New Start Allowance benefits from 2012–2018 for all conditions, with the steepest increases due to mental health conditions (Collie et al., 2021).

While the rate of mental health-related workers' compensation claims has remained relatively stable over recent years, recovery from these injuries is taking longer and there has been a steady increase in costs associated with these claims. Most mental health claims are linked to work-related stress or mental stress (particularly work pressure, bullying and harassment). Rates of long-term incapacity from a mental health disorder have gradually increased over the last two decades.

Changes in reported levels of mental health symptoms

Large scale, longitudinal studies based on representative samples of the population can provide some of the clearest indications of trends in mental health symptoms over time. However, in contrast to workers' compensation data, they will not be able to provide insight into the likely causes of any symptoms or distress. In our white paper we focus on data from two such studies, the *Australian National Health Survey (ANHS)* and the *Household, Income and Labour Dynamics in Australia (HILDA) Survey*.

Australian National Health Survey

The ANHS has collected data on the prevalence and risk factors around long-term health conditions every three years over the past three decades. The survey assesses mental health with the commonly used 10-item Kessler Psychological Distress Scale (K10). Individuals with 'high' (≥ 22) or 'very high' (≥ 30) scores are at a much greater risk of meeting diagnostic criteria for anxiety and depressive disorders (Andrews & Slade, 2001).

As shown in *Figure 3a*, the overall picture of Australia's working-age population's mental health is one of relatively stable symptom levels between 2001 to 2017, although 11% to 13% report either high or very high levels of symptoms of psychological distress.

While the proportion of the population with elevated symptom levels decreased between 2001–2011, it has subsequently risen. While these trends were relatively consistent among men and women (*Figure 3a*), recently, young people aged 18 to 24 years had the most pronounced increases in high and very high symptoms of psychological distress (*Figure 3b*).

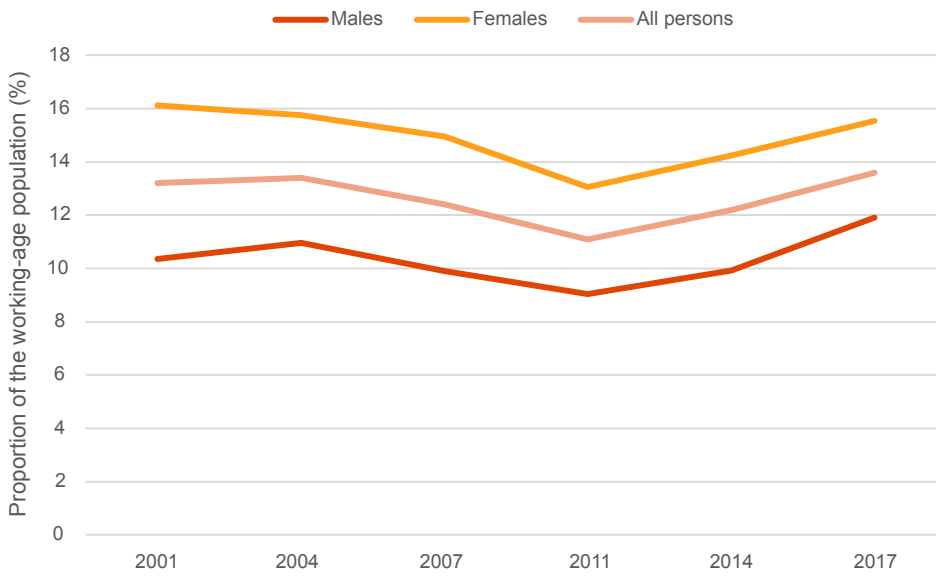


Figure 3a. Proportion of the Australian working-age population (18–64 years) within each gender with high or very high psychological distress (2001–2017*).

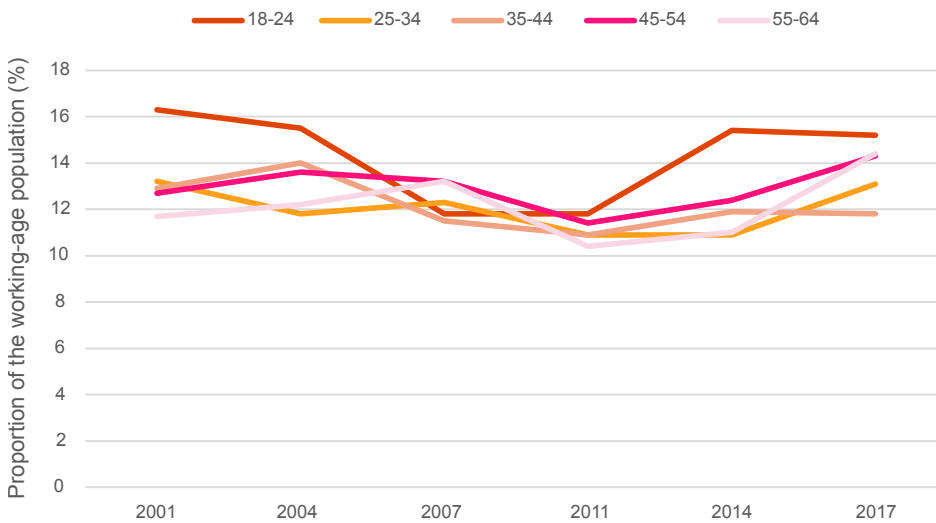


Figure 3b: Proportion of Australian working-age groups with high or very high psychological distress (2001–2017*)

Note: *Each year from 2004 onward refers to the relevant financial year (e.g., 2004–2005).

Data Source - figures 3a and 3b: Australian Bureau of Statistics (2018), Australian National Health Survey

Household, Income and Labour Dynamics in Australia

The *HILDA* study is an alternative data source for tracking rates of mental health symptoms. Its survey assesses mental health using the 5-item Mental Health Index subscale (MHi5) of the Short-Form Health Survey-36 (SF-36). This scale is commonly used in epidemiological research and lower scores (below 60) are good predictors of mood disorders (Burns et al., 2020). Published *HILDA* data echoes the *ANHS* pattern, depicting a relatively stable level of overall mental health for working-age Australians between 2001 and 2017, with some declines most recently among the younger and older adult cohorts (Burns et al., 2020). A key limitation of this previously published *HILDA* data analysis and with the *ANHS* data shown above, is the inclusion of all working-age Australians, regardless of their work status.

New analyses conducted for this report includes the latest data and was able to focus on 'employees' rather than the whole working-age population. This new data demonstrates a more noticeable decline in the mental health of Australian workers. As shown in *Figure 4a*, the mental health and the affective wellbeing scores declined for both male and female workers since 2010. This was particularly notable in younger workers, with those aged 15-24 years showing the most pronounced reduction in their mental health and wellbeing scores (*Figure 4b*). Interestingly, despite this trend, life satisfaction showed a small general increase over the same period.

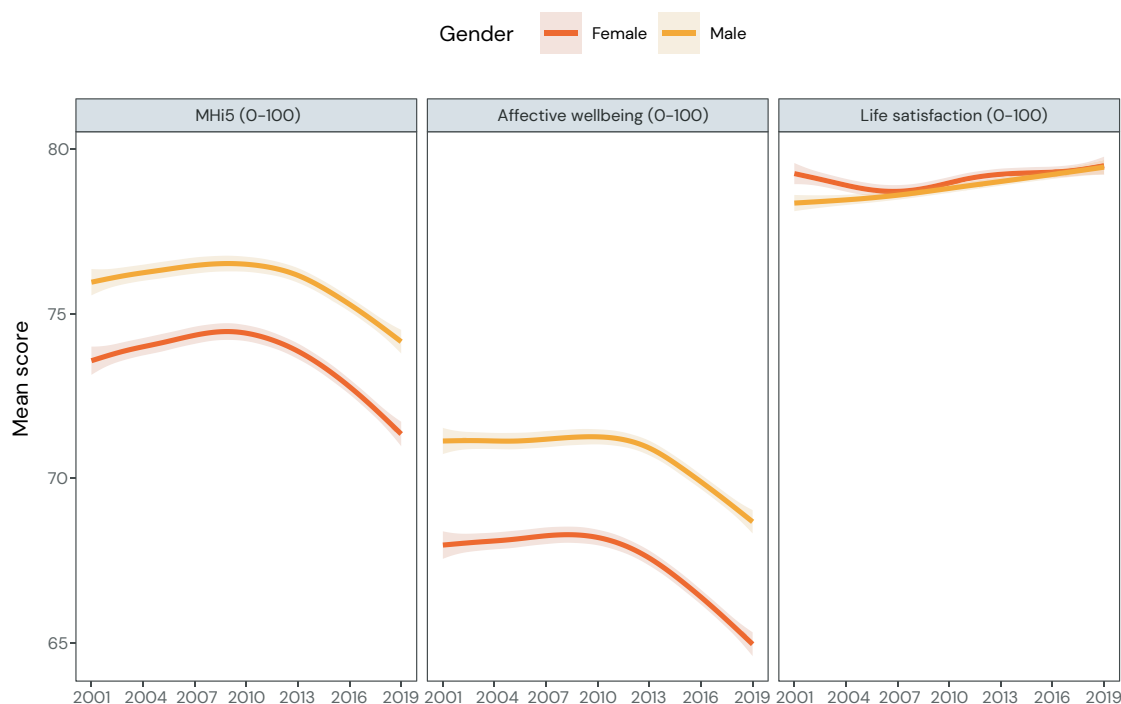


Figure 4a: Mean mental health and wellbeing scores of Australian employees by gender from 2001 to 2019 (higher scores indicate better mental health, wellbeing and life satisfaction).

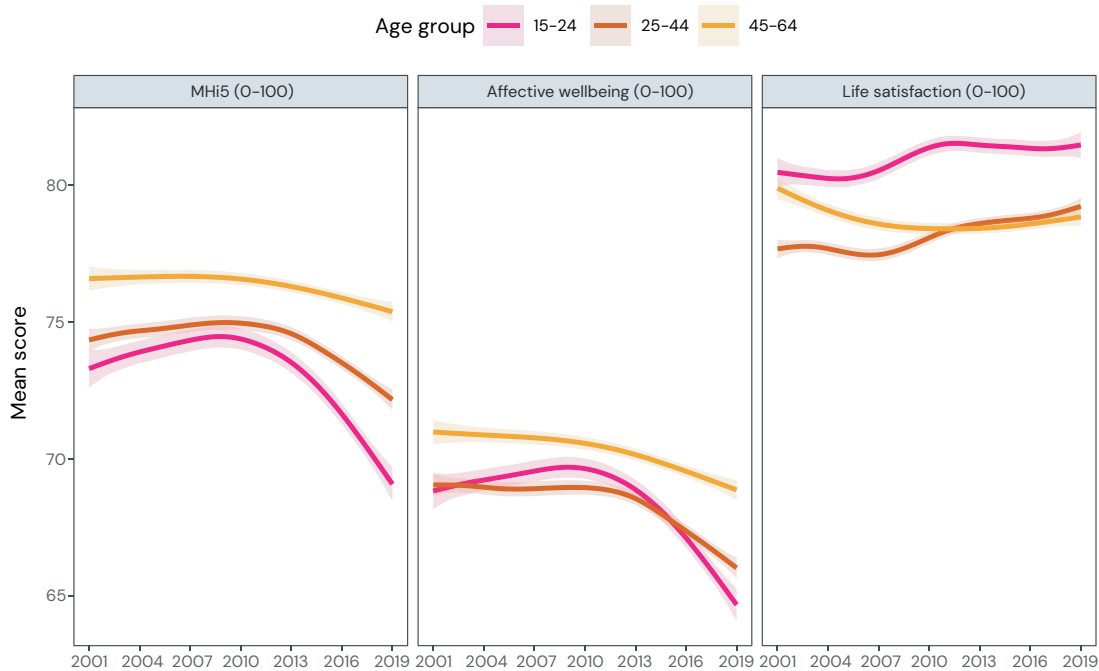


Figure 4b: Mean mental health and wellbeing scores of Australian employees by age from 2001 to 2019 (higher scores indicate better mental health, wellbeing and life satisfaction).

Note: MHi5 = 5-item Mental Health Index; Affective wellbeing = derived from the MHi5 items and four items concerned with vitality, rescaled to a score between 0–100. Life satisfaction = 1 item, ‘All things considered, how satisfied are you with your life?’ (0 to 10), rescaled here to 0–100 for comparison. Figures represent smoothed mean estimates, and shaded areas represent ±95% confidence intervals.

Data source for figures 4a and 4b: Melbourne Institute (2021), Household, Income and Labour Dynamics in Australia Survey

New analysis suggests that Australian workers have begun reporting more mental health symptoms over the last decade. Younger workers, aged under 25 years have had the greatest increase in symptoms with an associated reduction in their reported wellbeing in recent years. Similar trends over time were observed in both males and females. As each of the anonymous surveys used relies on self-reporting, it is not possible to know if these findings represent a true increase in mental disorder and/or an alteration in the way workers report symptoms within these types of surveys.

The effects of COVID-19 on mental health

When assessing recent changes in workers’ mental health, it is clear we also need to consider the period from March 2020 when COVID-19 was declared a global pandemic by the World Health Organisation. Inevitably the pandemic radically shifted the daily life and working conditions of Australians by increasing job insecurity, financial strain, and isolation (Ruffolo et al., 2021).

The ABS has released representative Australian data from three timepoints since March 2020 that depicts levels of psychological distress and uses the same measure (K10) as the ANHS data shown in *Figure 3*. Sampling methods for this new survey were similar, although not identical to those used for the ANHS, so caution must be applied when directly comparing the two datasets. Nevertheless, they provide a valuable comparison between pre- and post-pandemic levels of distress in the working-age population.

As seen in *Figure 5*, the proportions of individuals in all working-age categories experiencing elevated psychological distress in 2020–2021 were markedly higher than the 2017 estimates. This increase in mental health symptoms was most dramatic for young adults, aged 18 to 34 years. Additional previously published representative Australian data confirms that the financial distress and overall work and social impairments triggered by COVID-19 are associated with worse mental health, even after accounting for demographic factors and job loss (Batterham et al., 2021; Dawel et al., 2020).

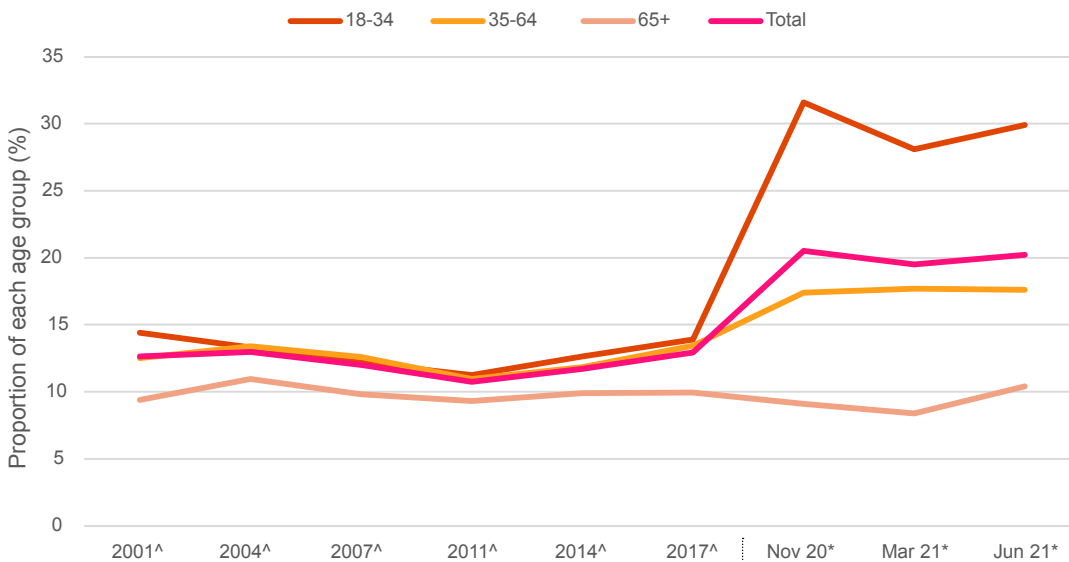


Figure 5. Proportion of Australian population age categories with high or very high psychological distress (K10) before and during the COVID-19 pandemic.

Note: ^ Data from the ABS ANHS conducted that year. Each year from 2004 onward refers to the relevant financial year (e.g., 2004–2005). * Data from the ABS Household Impacts of COVID-19 Survey.

Data Sources: 2001 – 2017: Australian Bureau of Statistics (2018), National Health Survey. Nov 2020, Mar 2021, Jun 2021: Australian Bureau of Statistics (2021b), Household Impacts of COVID-19 Survey.

Emerging research regarding mental health since the onset of the COVID-19 pandemic sends a clear message that the mental health of Australian workers, particularly younger workers, is under threat due to disruptions to work and social lives.

Mortality data on deaths by suicide

Rates of death by suicide, or intentional self-harm, also provide a valuable indicator of mental ill-health among the population and how it may have changed over time. Suicide is a complex multi-factorial phenomenon. Mental illness may be one of several contributing factors involved in a death by suicide. However, symptoms of mental illness usually play a central role and a change in the rates of suicide is often used as an objective measure of the mental health of an entire population (Haw & Hawton, 2015).

In Australia, the *ABS Causes of Death statistics* are compiled annually and include all deaths that occurred and were registered in Australia. This information is provided to the ABS from individual registrars and the National Coronial Information System (for those deaths certified by a coroner) for compilation into aggregate statistics that are made publicly available on the ABS website. The data presented in *Figures 6 and 7* comprises national statistics for deaths by intentional self-harm (Australian Bureau of Statistics, 2021a).

As shown in *Figure 6*, between 2001 and 2019, the age-standardised rates of suicide among the population of Australia aged between 20–64 years remained relatively stable. There was a slight decrease in rates between 2001 and 2011, particularly for men, however they appeared to return to 2001 levels by 2017. There is a very similar trend when integrating the ABS data with that from the Australian Institute of Health and Welfare National Mortality Database (Australian Institute of Health and Welfare, 2021).

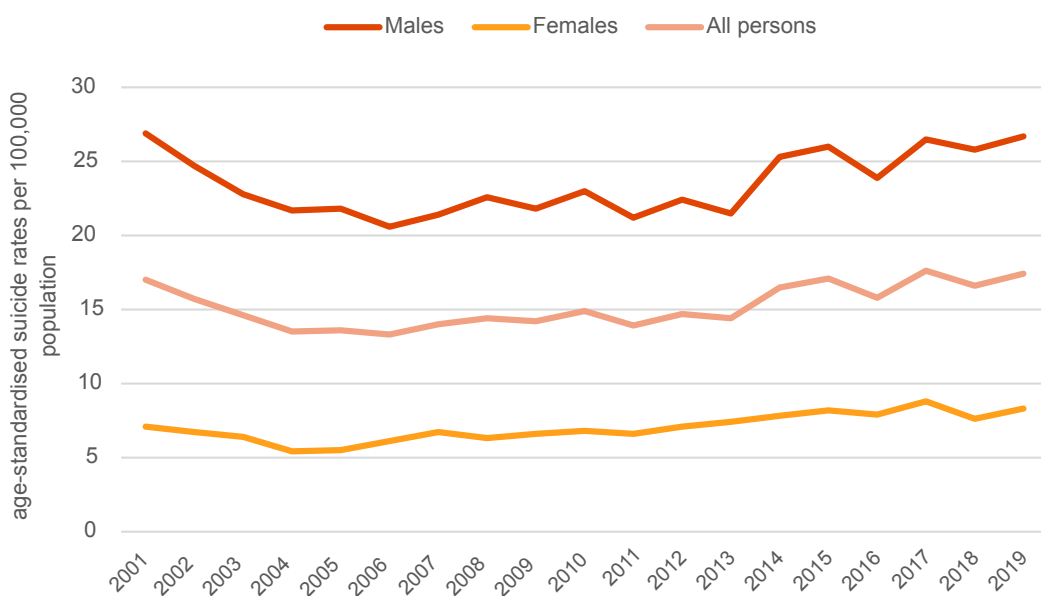


Figure 6: Age-standardised rates of suicide among the Australian working-age population overall, and for male and females, 20–64 years (2001–2019).
Note: Age-standardised death rate: Death rate per 100,000 estimated resident population at 30 June (mid-year).
Data sources: Australian Bureau of Statistics (2021a), *Causes of death, Australia* (2001–2019).

Looking at suicide rates among specific age categories within the working-age population over time, *Figures 7a to 7c* show broadly similar trends in suicide rates across these age brackets. Statistical testing confirmed no significant changes in suicide rates overall, nor in any of the 10-year age groups for males or females over each decade (2001–2011 and 2011–2017), or the entire period (2001–2017). Broadly, the age distribution for suicide is similar for both males and females (Australian Bureau of Statistics, 2021a) with the majority of suicides occurring in younger to middle-aged cohorts. For example, in 2019, 54.7% of suicide cases were aged between 30 and 59.

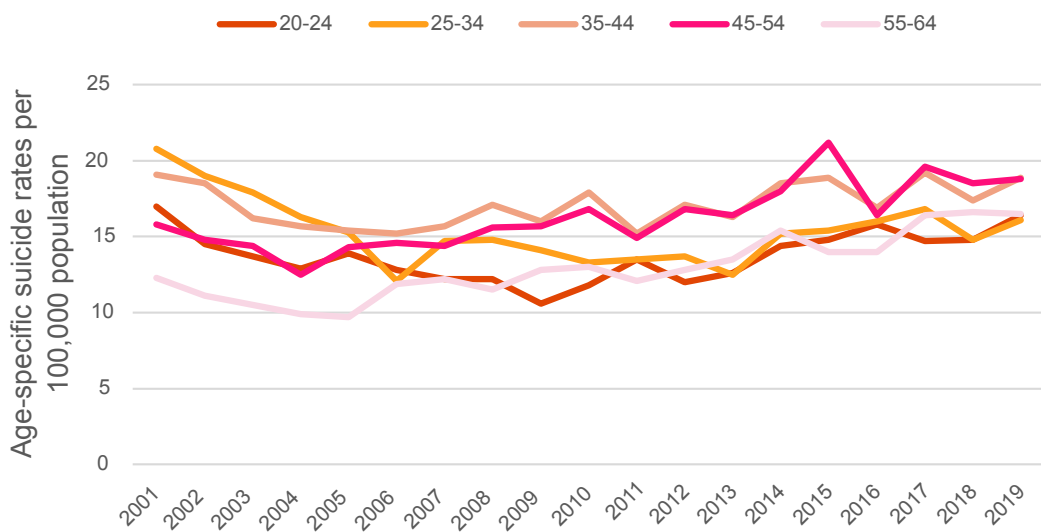


Figure 7a: Age-specific rates of suicide among the Australian population overall in 5- and 10-year age categories, 20–64 years (2001–2019).

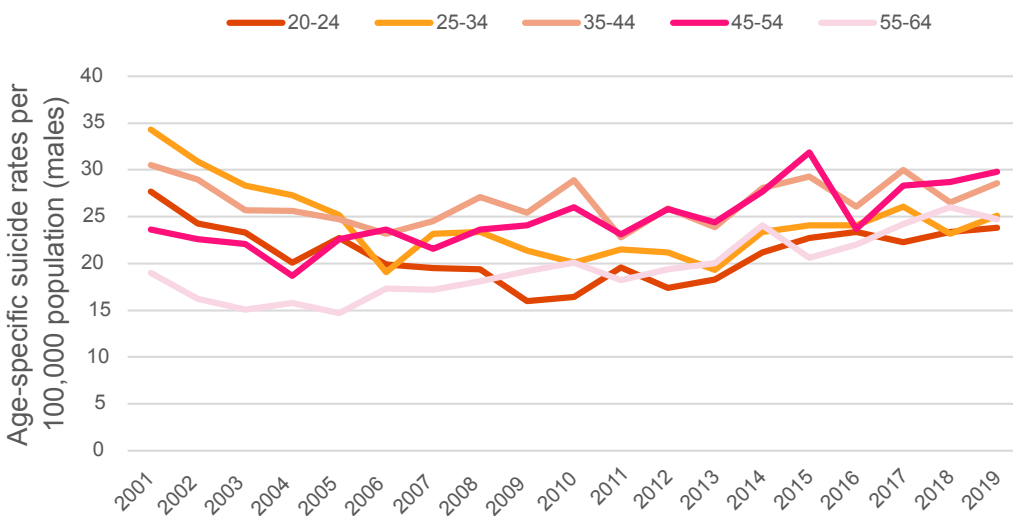


Figure 7b: Age-specific rates of suicide among Australian population for males in 5- and 10-year age categories, 20–64 years (2001–2019).

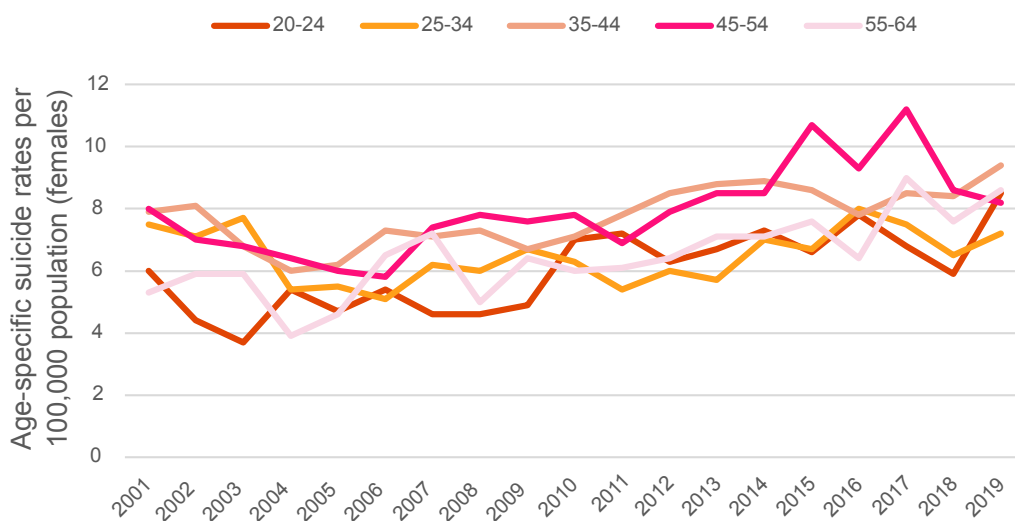


Figure 7c: Age-specific rates of suicide among Australian population for females in 5- and 10-year age categories, 20–64 years (2001–2019).

Note: Age-specific death rates reflect the number of deaths for a specific age group, expressed per 100,000 of the estimated resident population as at 30 June for that same age group.

Data source for figures 7a – 7c: Australian Bureau of Statistics (2021a), *Causes of Death, Australia* (2001–2019).

Long-term trends in suicide mortality rates internationally and across important socio-political events are also valuable points of reference to understand changes in the last 20 years in Australia. When considering the suicide mortality trends of 28 countries over the period before and after the 2008 global recession, for instance, it was found that suicide rates decreased in most countries, though not Australia, between 2004–2006 and 2013–2015 (Alicandro et al., 2019).

Some authors have suggested that the global COVID-19 pandemic and the resulting economic and social disruptions may have created a ‘perfect storm of antecedent conditions for suicide’ (Brown & Schuman, 2021, p. 213). Given that official suicide mortality data can be delayed due to registration, coronial processing, data transfer and administration, it will likely take some time to assess the impacts of the pandemic on Australia’s suicide rate.

However, reassuringly the Australian suicide mortality data that is emerging by state, has found no change in suicide mortality rates among the general population over the first seven months of the pandemic in Queensland (Leske et al., 2021). Similarly, the frequency of suicides in Victoria did not change following the pandemic onset (Dwyer et al., 2021). Furthermore, there was no apparent deviation from the expected number of suicides in Tasmania over the first four months of the pandemic, and there was in fact a significantly lower number of suicides in New South Wales than was expected over this period (Pirkis et al., 2021).

A recent examination of suicide rates in 21 high and upper middle-income countries found that suicide numbers remained largely unchanged or declined during the early months of the pandemic when compared to expected levels based on pre-pandemic figures (Pirkis et al., 2021).

The available data indicates that suicide rates have remained relatively stable among the Australian working-age population over the last 20 years.

Conclusion

A number of concerning trends regarding the mental health of Australian workers have emerged. New analysis shows that the amount of mental health symptoms reported by Australian workers has gradually increased over the last decade. This trend is most apparent among younger workers aged under 25 years. Young people have also reported a steep increase in mental health symptoms over the last year, suggesting changes brought about by the COVID-19 pandemic may have accelerated the trend towards worsening mental health that was already emerging for younger workers. While the rate of mental health-related workers' compensation claims has remained relatively stable recently, recovery from these injuries is taking longer and there has been a steady increase in claims relating to harassment or bullying in the workplace.



References

- Alicandro, G., Malvezzi, M., Gallus, S., La Vecchia, C., Negri, E., & Bertuccio, P. (2019). Worldwide trends in suicide mortality from 1990 to 2015 with a focus on the global recession time frame. *International Journal of Public Health*, 64(5), 785–795.
- Andrews, G., & Slade, T. (2001). Interpreting scores on the Kessler Psychological Distress Scale (K10). *Australian and New Zealand Journal of Public Health*, 25(6), 494–497. <https://doi.org/https://doi.org/10.1111/j.1467-842X.2001.tb00310.x>
- Australian Bureau of Statistics. (2018). *National Health Survey: First results*. Retrieved from <https://www.abs.gov.au/statistics/health/health-conditions-and-risks/national-health-survey-first-results>
- Australian Bureau of Statistics. (2021a). *Causes of death, Australia*. <https://www.abs.gov.au/statistics/health/causes-death/causes-death-australia>
- Australian Bureau of Statistics. (2021b). *Household Impacts of COVID-19 Survey*. <https://www.abs.gov.au/statistics/people/people-and-communities/household-impacts-covid-19-survey/latest-release>
- Australian Bureau of Statistics. (2021c). *National, state and territory population*. <https://www.abs.gov.au/statistics/people/population/national-state-and-territory-population>
- Australian Institute of Health and Welfare. (2020). *People with disability in Australia*. <https://www.aihw.gov.au/getmedia/ee5ee3c2-152d-4b5f-9901-71d483b47f03/aihw-dis-72.pdf.aspx?inline=true>
- Australian Institute of Health and Welfare. (2021). *Suicide and self-harm monitoring: Deaths by suicide over time*. <https://www.aihw.gov.au/suicide-self-harm-monitoring/data/deaths-by-suicide-in-australia/suicide-deaths-over-time>
- Australian Safety and Compensation Council. (2009). *Compendium of workers' compensation statistics Australia 2006–07*. Retrieved from <https://nswbar.asn.au/circulars/2009/mar09/comp.pdf>
- Batterham, P. J., Calear, A. L., McCallum, S. M., Morse, A. R., Banfield, M., Farrer, L. M., Gulliver, A., Cherbuin, N., Rodney Harris, R. M., & Shou, Y. (2021). Trajectories of depression and anxiety symptoms during the COVID 19 pandemic in a representative Australian adult cohort. *Medical Journal of Australia*, 214(10), 462–468.
- Brown, S., & Schuman, D. L. (2021). *Suicide in the time of COVID 19: A perfect storm*. *The Journal of Rural Health*, 37, 211–214. <https://doi.org/10.1111/jrh.12458>
- Burns, R. A., Butterworth, P., & Crisp, D. A. (2020). Age, sex and period estimates of Australia's mental health over the last 17 years. *Australian and New Zealand Journal of Psychiatry*, 54(6), 602–608.
- Collie, A., Sheehan, L. R., & Lane, T. J. (2021). Changes in access to Australian Disability Support Benefits during a period of social welfare reform. *Journal of Social Policy*, 1–23. <https://doi.org/10.1017/S0047279420000732>
- Dawel, A., Shou, Y., Smithson, M., Cherbuin, N., Banfield, M., Calear, A. L., Farrer, L. M., Gray, D., Gulliver, A., & Housen, T. (2020). The effect of COVID-19 on mental health and wellbeing in a representative sample of Australian adults. *Frontiers in Psychiatry*, 11, 1026.
- Department of Social Services. (2013). *Characteristics of Disability Support Pension recipients*. Retrieved from https://www.dss.gov.au/sites/default/files/documents/01_2014/dsp_characteristics_report_2013_final.pdf
- Department of Social Services. (2021). *DSS payment demographic data*. Retrieved from <https://data.gov.au/dataset/ds-dga-cff2ae8a-55e4-47db-a66d-e177fe0ac6a0/details?q=>
- Dwyer, J., Dwyer, J., Hiscock, R., O'Callaghan, C., Taylor, K., Millar, C., Lamb, A., & Bugeja, L. (2021). COVID 19 as a context in suicide: Early insights from Victoria, Australia. *Australian and New Zealand Journal of Public Health*. 10.1111/1753-6405.13132. doi: 10.1111/1753-6405.13132
- Harvey, S. B., Deady, M., Wang, M. J., Mykletun, A., Butterworth, P., Christensen, H., & Mitchell, P. B. (2017). Is the prevalence of mental illness increasing in Australia? Evidence from national health surveys and administrative data, 2001–2014. *Medical Journal of Australia*, 206(11), 490–493.
- Haw, C., & Hawton, K. (2015). Suicide is a complex behaviour in which mental disorder usually plays a central role. *Australian & New Zealand Journal of Psychiatry*, 49(1), 13–15. <https://doi.org/10.1177/0004867414555419>
- Kettlewell, N., Morris, R. W., Ho, N., Cobb-Clark, D. A., Cripps, S., & Glozier, N. (2020). The differential impact of major life events on cognitive and affective wellbeing. *SSM Population Health*, 10, 100533. <https://doi.org/10.1016/j.ssmph.2019.100533>
- Leske, S., Kölves, K., Crompton, D., Arensman, E., & De Leo, D. (2021). Real-time suicide mortality data from police reports in Queensland, Australia, during the COVID-19 pandemic: An interrupted time-series analysis. *The Lancet Psychiatry*, 8(1), 58–63.
- Melbourne Institute. (2021). *HILDA Survey*. Retrieved from <https://melbourneinstitute.unimelb.edu.au/hilda>
- Pirkis, J., John, A., Shin, S., DelPozo-Banos, M., Arya, V., Analuisa-Aguilar, P., Appleby, L., Arensman, E., Bantjes, J., & Baran, A. (2021). Suicide trends in the early months of the COVID-19 pandemic: An interrupted time-series analysis of preliminary data from 21 countries. *The Lancet Psychiatry*, 8(7), 579–588.
- Ruffolo, M., Price, D., Schoultz, M., Leung, J., Bonsaksen, T., Thygesen, H., & Geirdal, A. Ø. (2021). Employment uncertainty and mental health during the COVID-19 pandemic initial social distancing implementation: A cross-national study. *Global Social Welfare*, 8(2), 141–150.
- Safe Work Australia. (2010). *Key workers' compensation information, Australia 2010*. https://www.actuaries.org/CTTEES_SOCSEC/Documents/Australia%20WC_Informationbooklet2010.pdf
- Safe Work Australia. (2014). *Australian workers' compensation statistics, 2012–13*. Retrieved from <https://www.safeworkaustralia.gov.au/system/files/documents/1904/australian-workers-compensation-statistics-2012-13.pdf>
- Safe Work Australia (2018) *Mental Health*. Retrieved from <https://www.safeworkaustralia.gov.au/topic/mental-health>
- Safe Work Australia. (2021). *Australian workers' compensation statistics, 2018–19*. Retrieved from https://www.safeworkaustralia.gov.au/sites/default/files/2021-01/Australian%20Workers%20%20Compensation%20Statistics%202018-19p%20FINAL_2.pdf
- Services Australia. (2019). *Disability Support Pension: General medical rules*. Retrieved from <https://www.servicesaustralia.gov.au/individuals/services/centrelink/disability-support-pension/who-can-get-it/medical-rules/general-medical-rules>