

Australian Government Department of Health and Aged Care

# **Excess Mortality**

Submission from the Department of Health and Aged Care to the Senate Community Affairs References Committee Inquiry into Excess Mortality

[DATE OF SUBMISSION]



Australian Government Department of Health and Aged Care



Australian Government Department of Health and Aged Care

# Contents

Introduction	3
Terms of Reference	3
a. ABS Data on Excess Mortality	3
b. Factors contributing to Excess Mortality	4
c. Preventing Excess Mortality	5
National Preventive Health Strategy	5
d. Other related matters	5
Australia's COVID-19 response	5
Early Psychosis Youth Services	6
COVID-19 Vaccination and Excess deaths	7
International Comparisons	7
Vaccine Safety	7



Department of Health and Aged Care

### Introduction

The Department of Health and Aged Care (the department) welcomes the opportunity to make a submission to the Senate Community Affairs References Committee inquiry into Excess Mortality. The department has previously responded to multiple Senate Questions on Notice from the Senate Community Affairs Committee on this and similar questions.

The Australian Bureau of Statistics (ABS) is the definitive authority on mortality statistics and data in Australia. The department commissioned the ABS to produce a series of Provisional Mortality Statistics reports and excess mortality reports from June 2020 onwards to provide early indications of mortality patterns in Australia. These publications are in addition to the ABS reports on annual 'Deaths, Australia' and 'Causes of Death, Australia'. The ABS is anticipated to provide a separate submission to this inquiry.

The department monitors patterns of death from a range of sources. This includes the ABS data on registered deaths and other provisional sources including the National Notifiable Diseases Surveillance System, the Therapeutic Goods Administration's (TGA) Database of Adverse Event Notifications, the Australian Institute of Health and Welfare's National Mortality Database and deaths in residential aged care reported by aged care providers through the My Aged Care Portal.

# **Terms of Reference**

(a) Australian Bureau of Statistics (ABS) data showing excess deaths in recent years, with particular reference to:

(i) all-cause provisional mortality data reported by the states and territories to the ABS, and

(ii) the difference between all-cause provisional mortality data for 2021, 2022 and 2023 and the preceding years of 2015 to 2020 (inclusive);

(b) factors contributing to excess mortality in 2021, 2022 and 2023;

(c) recommendations on how to address any identified preventable drivers of excess mortality; and

(d) any other related matter.

# a. ABS Data on Excess Mortality

The Australian Bureau of Statistics (ABS) publishes regular reports, with mortality measured through assessments of all-cause and cause-specific mortality, enabling the identification of changes over time. These reports form the primary national mechanism for understanding mortality in Australia. These statistics are based on death registrations (both doctor and coroner certified) in Australia supplied by jurisdictional Registries of Births, Deaths and Marriages. This data is not directly comparable with data sourced from health surveillance systems.



The *Provisional Mortality Statistics* report monitors patterns of mortality by all-causes and specified leading causes of death. These reports were commissioned by the department to provide experts and the public with information on mortality throughout the pandemic. Throughout this report, counts of death have been compared to averages. These averages or baseline counts serve as a proxy for the expected number of deaths, so comparisons against baseline counts can provide an indication of whether mortality was higher or lower than expected. These should <u>not</u> be taken as official excess mortality estimates, as they do not consider important changes in population size, age structures, or other factors influencing mortality, but are a useful resource.

The most recent *Provisional Mortality Statistics* report was published on 26 March 2024. The key findings are that although higher than baseline mortality has been observed, allcause mortality is moving towards expected levels and that for each month in 2023 all agespecific death rates were lower than their respective month in 2022. This report states that there were 182,038 deaths occurred in 2023 (and were registered by 29 February 2024), 4.7% lower than 2022. ABS note that over 191,000 deaths occurred in 2022. This is significantly higher than usual and is not considered to be a typical year for mortality in Australia.

Excess mortality is an epidemiological concept typically defined as the difference between the observed number of deaths in a specified time period and the expected number of deaths in the same period.

The *Measuring Australia's excess mortality during the COVID-19 pandemic until August 2023* report was released on 18 December 2023 and provides excess mortality estimates for deaths occurring in Australia until the end of August 2023. This report states that deaths due to COVID-19 (as identified on death certificates) were the main contributor to excess mortality during 2022 and COVID-19 associated deaths were still a key contributor to excess mortality in Australia in 2023. Excess mortality during this period corresponded with COVID-19 waves.

# **b.** Factors contributing to Excess Mortality

According to the ABS publication *Causes of Death, Australia, 2022* released 27 September 2023, there were almost 20,000 more deaths in 2022 than in 2021. The *Measuring Australia's excess mortality during the COVID-19 pandemic until August 2023* found that COVID-19 was the main contributor to excess mortality in 2022.

There are several other drivers, often interrelated, that may explain mortality patterns observed across Australia in recent years and months. These include:

- mortality displacement: delayed deaths from existing underlying health problems due to reduced circulation of many respiratory and other diseases in 2020 and 2021, which would have otherwise contributed to deaths in those years.
- □ delays in emergency care during COVID-19 waves and influenza outbreaks.
- an ageing population, which raises the risks associated with dementia, cardiovascular disease, chronic kidney disease, respiratory disease, and diabetes.



- □ long-term health impacts of COVID-19 infection or where COVID-19 may have exacerbated another health condition causing death.
- □ reductions in the timeliness of routine healthcare (e.g., health assessments, diagnostic testing and elective surgeries).

# c. Preventing Excess Mortality

The department continues to monitor the impact of COVID-19 in the community. Data and reports on COVID-19 continue to be published monthly on the department's website. These reports include monitoring of the key indicators, such a deaths and case numbers in residential aged care, to provide a broad picture of the current state of COVID-19 in the community. It should be noted that states and territories are continually reducing and changing the way they report COVID-19 making the data received by the department increasingly unreliable.

The Australian Government has implemented several initiatives across the health system to improve the timeliness and accessibility of health care in general. The following measures will likely assist in maintaining downward pressure on excess mortality:

- Ongoing promotion and provision of vaccination against COVID-19 and influenza to the Australian population, particularly to higher-risk groups. While the absolute risk of severe outcomes from COVID-19 is now low for most of the population due to prior vaccination and infection, the Australian Technical Advisory Group on Immunisation (ATAGI) will continue to monitor the evolving risk profile of the population to inform their COVID-19 vaccine advice over time. Same for other vaccine-preventable diseases such as RSV and pertussis.
- Ongoing infection prevention and control (IPC) measures to reduce the spread and impact of COVID-19, influenza and other communicable diseases in high-risk settings such as aged care and hospitals. The Australian Commission on Safety and Quality in Health Care and the Aged Care Safety and Quality Commission continue to lead this.
- □ The opening up of Medicare Urgent Care Clinics (UCCs) to take the pressure of both emergency departments as well as general practice.

# National Preventive Health Strategy

The Australian Government recognises the critical role preventive health plays in keeping people well for longer. The National Preventive Health Strategy 2021-2030 (NPHS) was launched in December 2021. It aims to improve the health and wellbeing of all Australians at all stages of life, through a whole-of-government approach to prevention that addresses the wider determinants of health, reduces health inequities and decreases the overall burden of disease. An implementation and evaluation plan is being developed to support the implementation of the NPHS.

# d. Other related matters

# Australia's COVID-19 response

Australia implemented a comprehensive, well-coordinated, and effective response to COVID-19. The initial response focused on active and early suppression of the virus through international border restrictions, domestic testing strategies, contact tracing, isolation and



quarantine, gathering restrictions, and personal protective behaviours such as physical distancing, hand and respiratory hygiene practices and mask wearing. This approach reduced case numbers and minimised the immediate pressure on the health system, allowing additional time for further planning and preparedness. Health system and aged care capacities were bolstered through a range of activities, such as increasing the supply of equipment, consumables (including for laboratories) and personal protective equipment, establishment of general practice-led respiratory clinics, the creation of new Medicare Benefits Schedule items, and in-reach testing for residential aged care homes.

Throughout the pandemic, the Government closely monitored potential COVID-19 vaccine candidates and treatments. On 21 February 2021, the National COVID-19 Vaccination Program commenced and by the end of the year, 91.4% of people aged over 16 years in Australia were fully vaccinated. Oral antiviral treatments to reduce the risk of severe illness from COVID-19 became available for eligible people in Australia in February 2022. Safe and effective vaccines and treatments remain critical components of the ongoing strategy to ensure the best outcomes for people with COVID-19.

As part of the Australian Government's response, to February 2024, \$168.6 million from the Medical Research Future Fund (MRFF) and \$62.4 million from the National Health and Medical Research Council (NHMRC) has been invested in COVID-19 research including for diagnostics, vaccine development, antiviral development, clinical trials, digital health research infrastructure, studying the human immune response to COVID-19 infection, community information needs and behavioural responses during outbreaks.

The Government continues to invest in COVID-19 research, and on 24 April 2023 announced a \$50 million investment from the MRFF for research into Post-Acute Sequalae of COVID-19 (PASC), commonly known as long COVID.

A list of MRFF funded projects, including COVID-19 research projects, is available on the MRFF website at https://www.health.gov.au/resources/publications/medical-research-future-fund-mrff-grant-recipients.

# Early Psychosis Youth Services

The Early Psychosis Youth Services (EPYS) Program provides early intervention treatment and support to young people aged 12 to 25 years who are at ultra-high risk of, or actively experiencing, their first episode of psychosis. Life expectancy for people living with schizophrenia can be 15-20 years shorter than the general population<sup>1</sup>. EPYS aims to reduce the risk of transition to full-threshold psychosis and long-term mental ill-health through prevention, early detection, and coordinated care delivery. EPYS is currently delivered from 14 headspace services in six locations across Australia: Western Sydney, South-Eastern Queensland, North Perth, South-Eastern Melbourne, Darwin and Adelaide, with additional services being established in the ACT and Tasmania.

<sup>&</sup>lt;sup>1</sup> <u>Mortality in Schizophrenia-Spectrum Disorders: Recent Advances in Understanding and Management - PMC</u> (nih.gov)



## COVID-19 Vaccination and Excess deaths

There is no credible evidence to suggest that COVID-19 vaccines have contributed to excess deaths in Australia or overseas.

Independent analysis of Australian death data by the Actuaries Institute found that the timing and shape of excess mortality does not support a link to vaccination.

In November 2023, the National Centre for Immunisation Research and Surveillance published a paper titled "Effectiveness of COVID-19 vaccination against COVID-19 specific and all-cause mortality in older Australians: a population based study" in The Lancet, Regional Health, Western Pacific<sup>2</sup>. This world world-leading research examines the relationship between COVID-19 vaccines for COVID and all-cause mortality. This rigorous, peer reviewed study was commissioned by the department and confirmed that vaccines protected against COVID-19 death and found no evidence that vaccines contributed to higher all-cause mortality.

### International Comparisons

The Australian Institute of Health and Welfare (AIHW) report on 'Health system spending on the response to COVID-19 in Australia 2019-20 to 2021-22', demonstrates that Australia had one of the lowest global excess death rates [published November 2023].

- □ Australia's excess mortality rate (2020-22) ranked 5th lowest of 31 studied countries.
- Excess mortality in Australia was 4.4% in this period, compared to an average excess mortality of 14% across 30 countries, including the USA and UK. Global excess mortality data do not correlate with high vaccination rates - in general, countries with high vaccination rates had lower rates of excess mortality.

In February 2023, the OECD published a report on the COVID-19 outcomes across the OECD countries (found in Ready for the Next Crisis? Investing in Health System Resilience). The report found in 2020-21, Australia had one of the lowest global excess death rates, with the excess mortality rate ranking as 5th lowest of thirty-five studied countries.

#### Vaccine Safety

The TGA rigorously assesses all vaccines for safety, quality, and effectiveness before they are supplied. Rigorous scientific studies have shown that the protective benefits of vaccination, including COVID-19 vaccination, far outweigh the potential risks, including those of serious but very rare side effects. The safety and effectiveness of COVID-19 vaccines has also been validated by both post market surveillance and real-world data collected on millions of people globally. Vaccination remains the most effective way to reduce severe illness, hospitalisation and death from infection. It has saved many lives in Australia, and around the world.

<sup>&</sup>lt;sup>2</sup> Effectiveness of COVID-19 vaccination against COVID-19 specific and all-cause mortality in older Australians: a population based study - The Lancet Regional Health – Western Pacific