

## Community Affairs

### ANSWERS TO QUESTIONS ON NOTICE

#### Australian Bureau of Statistics

**Division:** Australian Bureau of Statistics  
**Question No:** 5  
**Topic:** Excess Mortality  
**Reference:** Written  
**Senator:** Malcolm Roberts

**Question:**

1. Has the ABS used a measure of ‘years lost’ when analysing health emergencies, such as during the 2012 SARS period?
2. Have you converted the data for COVID mortality to a measure of ‘years lost’?
3. From your submission, figure is titled “Comparison of all-cause baseline and COVID-19 period deaths against regression, Queensland, December 2019 – March 2023” This clearly shows a spike in excess deaths coinciding with the outbreak of Omicron (yellow line) which is not explained by COVID deaths (red line). What was the cause of that spike?
4. Elevated mortality in excess of actual COVID deaths continued until October 2022 but remained above trendline across the extent of your data. Please ensure your answer addresses this continued excess mortality.
5. Referencing the graph ‘Age-standardised death rates by state of usual residence, selected years, 1973-2022’. This graph includes adjustment for age and population changes as it should. I note in your submission that the COVID Mortality Data report, now six-monthly, makes adjustments for age and population. Is the adjustment that the ABS has made the same adjustment used in this dataset - which will enable comparison of deaths against a 50-year trendline, which I’m sure will be a most revealing analysis?
6. You’ll notice the Australian age standardised death rate has been steadily declining since 1973, then along comes COVID and our COVID response and the trend reverses. Are you basing your baseline on the expectation that the death rate should be reducing in keeping with the long-term trend. I ask this because your graph ‘Comparison of all-cause baseline and COVID-19 period deaths against regression, Queensland, December 2019-March 2023’ actually shows the baseline for expected deaths is increasing on a population and age adjusted basis?
7. On what basis are you showing an increasing baseline for expected deaths rather than a reduced baseline per the 50-year trend?
8. Has the life expectancy in Australia changed, and if so at which point did that change occur?

9. Has the ABS ever recorded a different cause of death to the coded cause of death on a death certificate, or from the finding of a Coroner?

10. If the Health Department or their operatives change a death certificate, such as changing a cause of death as “vaccine” to “COVID” would your data reflect the death certificate or the Health Department adjustment?

11. Has anyone in a position of authority in the Government, either political or bureaucratic wings, asked you to “change” any aspect of the presentation of your data regarding COVID, to slow walk the data or otherwise interfere with your duties and methods?

12. Is your budget sufficient to present this data faster than you are? If your issues are budgetary, with whom have you discussed your budget?

**Answer:**

1. The ABS presents information on years of potential life lost for leading causes of premature death (such as suicide, ischaemic heart disease, lung cancer and COVID-19) in *Causes of Death, Australia*. Outbreaks such as Severe Acute Respiratory Syndrome (SARS) (2002-2004) and Middle East Respiratory Syndrome (MERS) (in 2012), are not included in the ABS’ figures. There were no deaths in Australia from SARS or MERS and so no years of life lost. You can find the ABS’ information on years of potential life lost under the heading ‘Australia’s leading causes of death’ at [www.abs.gov.au/statistics/health/causes-death/causes-death-australia/latest-release](http://www.abs.gov.au/statistics/health/causes-death/causes-death-australia/latest-release).
2. The ABS includes information on years of potential life lost from COVID-19 in *Causes of Death, Australia*. In 2022 COVID-19 accounted for 24,424 years of potential life lost. For those who died from COVID-19, an average of two to three years of life was lost.
3. The ABS’ submission to the Senate Inquiry into Excess Deaths included a graph comparing all-cause baseline and COVID-19 period deaths against the regression for Australia (not Queensland). As outlined in the ABS’ submission to the inquiry, COVID-19 as reported on the medical certificate of cause of death does not account for the total estimated excess mortality. Considerations here include:
  - There may be deaths where COVID-19 was a contributing factor, but it was not recorded on the death certificate (for example, the medical practitioner may be unaware of a present or past infection). If COVID-19 is not recorded on the death certificate it is not included in COVID-19 death tabulations presented by the ABS.
  - Periods of excess mortality have coincided with periods of high COVID-19 associated mortality. This is evident from the graph.
  - Death rates for doctor-certified deaths for ischaemic heart diseases, diabetes and dementia have been higher during times of high mortality during the pandemic.

These are all causes commonly recorded as co-morbidities for deaths associated with COVID-19.

- Mortality displacement is an epidemiological term for mortality occurring at an earlier time than otherwise expected. As Australia had lower than expected mortality in 2020, it is likely some reverse mortality displacement was experienced. This means deaths that may have occurred in 2020 had 2020 followed usual patterns of mortality, may have instead occurred in later years.
- There is some evidence that changes in how people accessed health care during the pandemic may have affected health outcomes. The ABS cannot measure the impact of this in its excess mortality statistics.

4. Please see the response to question 3.

5. The ABS includes a graph on age-standardised death rates for selected years from 1973 to 2022 in *Causes of Death, Australia, 2022*. ABS' six-monthly releases measuring Australia's excess mortality during the COVID-19 pandemic adjust for age and population plus other factors such as seasonal patterns and outliers (for example, higher deaths in the winter of 2017 due to an unusually bad influenza season).

The same principles apply when adjusting for age and population in these outputs. In both cases, the ABS produces a mortality rate using a numerator that accounts for age (number of deaths in a particular age group in the population of interest) and a denominator that accounts for population and age (number of people in a particular age group in the population of interest). Both outputs show the same trend, with death rates decreasing over time and the number of deaths increasing. However, the two outputs are not designed to be comparable as they have different purposes. For example, in the graph covering 1973 to 2022 the ABS calculated mortality rates based on annual counts of deaths while in the excess mortality article the ABS calculated weekly mortality rates. This required differences in approach for the excess mortality article to account for small numbers of deaths at a weekly level.

6. The ABS' excess deaths includes two trend components. First, as Australia's population ages and gets bigger, the absolute number of deaths should increase over time. Second, enhanced medical interventions and increasing life expectancy mean age-standardised mortality rates should fall over time. Please see the ABS' answer to your question on notice from the public hearing of the Senate Inquiry into Excess Deaths (reference: Hansard, page 6, (IQ24-000005)) for more detail.

7. As Australia's population ages and gets bigger, the absolute number of deaths should increase over time. The fifty-year trend reduction is based on age-standardised mortality rates which is a different measure. Please see the response to question 6 for more detail.

8. Life expectancy changes over time. The ABS' most recent *Life expectancy* publication was released 8 November 2023 and showed that life expectancy at birth was 81.2 years for males and 85.3 years for females in 2020-2022, a decrease of 0.1

years for both from the previous period (2019-2021). This was the first time life expectancy had decreased since the mid 1990s. For more information on life expectancy changes over time, please see [www.abs.gov.au/statistics/people/population/life-expectancy/2020-2022](http://www.abs.gov.au/statistics/people/population/life-expectancy/2020-2022).

9. The medical certificate of cause of death (death certificate) used for doctor certified deaths does not include coded causes of death. Instead, the doctor completing the certificate fills in information about the cause of death including information about the disease or condition directly leading to death and other significant conditions contributing to the death. The ABS assigns International Classification of Diseases (ICD-10) codes to all conditions on the death certificate and applies international rules to select an underlying cause of death.

Similarly, coroners do not code the cause of death. For coroner-referred deaths, the ABS reviews the coroner's finding of the cause of death as well as the coronial brief. The coronial brief generally includes additional information on the context of death and medical history (contained in the coronial findings, toxicology reports and pathology reports). The ABS then codes the death from that information, using ICD-10 and international rules. More information on how the ABS codes death is available in the Methodology of *Causes of Death, Australia*. See [www.abs.gov.au/methodologies/causes-death-australia-methodology/2022#mortality-coding](http://www.abs.gov.au/methodologies/causes-death-australia-methodology/2022#mortality-coding).

10. ABS codes causes of death using the medical certificate of cause of death completed by doctors and the information in the National Coronial Information System for coroner-referred deaths.
11. No-one in a position of authority in the Government has ever asked the ABS to change any aspect of the presentation of the data regarding COVID or to change the timing of release of the data or to interfere with ABS duties or methods.
12. The ABS releases about 25 mortality-related outputs per year, up from about six releases per year prior to the pandemic. These outputs include:
  - the Provisional Mortality series, providing summary monthly reports to allow timely tracking of the number of deaths (with more detailed reports published every two months)
  - *National, state and territory population*, providing deaths numbers every quarter
  - two reports per year on excess deaths
  - *Causes of Death, Australia*, which provides annual, very detailed reports on causes of death and takes considerable time to compile.

The key driver for the choice of frequency of these outputs is not related to budget. The Director-General of the World Health Organization called an end to the emergency phase of the pandemic in May 2023.

This factored into decisions about frequency of reporting for the provisional mortality series and excess mortality outputs. Releasing excess mortality numbers twice a year allows for one report covering the winter period when deaths are typically high, and one report to cover the full calendar year.

The ABS releases all its statistics as early as possible after receiving, coding, and quality-assuring all the information.