

Community Affairs

ANSWERS TO QUESTIONS ON NOTICE

Australian Bureau of Statistics

Division: Australian Bureau of Statistics
Question No: 1
Topic: PLIDA Data
Reference: Written
Senator: Ralph Babet

Question:

I accept that not just one factor that has led to our alarming mortality rates in Australia. I am sure that many government actions during the pandemic, including lockdowns, border closures, interruption to business and medical services have all contributed to our higher death rate.

But the elephant in the room remains. Novel vaccinations were rolled out on mass, in many cases individuals were left with a choice between keeping their job or accepting the Jab. According to Western Australian Data, these products resulted in an adverse event reporting rate that is 23.79 times greater per 100,000 doses than all other vaccines combined.

The required analysis is yet to be completed as the independent experts have not been able to access the data that is essential in ruling in or out a temporal or causal relationship with vaccination.

You administer linkage of the Australian Immunisation Register and state Births Deaths and Marriages via the Personal Level Integrated Data Asset (PLIDA).

This inquiry has received dozens of submissions, many of which have come from independent academics and researchers. Will the ABS commit to providing access to the PLIDA data asset to allow this relationship between vaccination status and mortality to be properly investigated?

Can you detail the process around project and ethical approval?

Have you granted access to any projects which seek to investigate excess mortality? And can you provide an entire list of approved projects and researchers on notice?

Answer:

The ABS provides access to Person Level Integrated Data Asset (PLIDA) data via the PLIDA Modular Product, a detailed microdata product available to approved researchers in the ABS DataLab. (The DataLab provides virtual access to files that remain in the secure ABS environment.) Researchers affiliated with Australian Government or academic research organisations can apply to use the PLIDA Modular Product. Researchers can request access by completing the ABS DataLab project proposal. The first step is to contact ABS Data Services via data.services@abs.gov.au.

All projects that use PLIDA data must go through a rigorous assessment and approval process which the ABS manages. All projects are assessed under the Five Safes Framework (i.e. safe

people, safe projects, safe settings, safe data, safe outputs). (See www.abs.gov.au/about/data-services/data-confidentiality-guide/five-safes-framework for details of this framework.) For a project to be approved, the ABS and the data custodian(s) (the government agency or organisation that collects the data and is accountable and responsible for the governance of that data) must agree to the proposed use of the data.

Information on who can access PLIDA, how to access PLIDA and costs is available at: www.abs.gov.au/about/data-services/data-integration/access-and-services.

There are no projects investigating excess mortality using PLIDA. A full list of data integration projects that are completed or underway is available at www.abs.gov.au/about/data-services/data-integration/integrated-data/person-level-integrated-data-asset-plida/plidamadip-research-projects.

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ANSWERS TO QUESTIONS ON NOTICE

Australian Bureau of Statistics

Division: Australian Bureau of Statistics
Question No: 3
Topic: Mortality
Reference: Written
Senator: Ralph Babet

Question:

1. When modelling excess mortality have you applied multiple models or just the one?
2. Is it true that 2013 was a low year for mortality (relative to trend)?
3. Was it true that 2019 was a high year for mortality (relative to trend)?
4. How was the baseline range determined?

Referring to Age Standardised mortality rates

5. Do you agree that using that range of years would tend to tip a linear trend upwards? Thereby minimising excess.
6. What other ranges of years were considered for developing the model?
7. Did they give a higher or lower excess?
8. Is it true that if you used the years 2015-2019 there would be a higher excess predicted?
9. Do you think that the deaths with (and not from) COVID should be included in the COVID deaths for the purpose of finding non-COVID excess?
10. Is this what the World Health Organisation recommends when estimating excess mortality?
11. Do you agree that COVID would have been replacing some of the deaths that may have occurred from respiratory illnesses in the frail elderly?
12. Do you think in the case where we are dealing with a high-risk situation that it might be good to provide some indication that other models predict a higher excess?
13. Has the ABS done any statistical analysis of the TGA's adverse event reporting system. Say comparing the statistics of adverse events from COVID vaccines with other vaccines?

Answers:

1. When modelling excess mortality the ABS has always used one model, an adaptation of the Serfling model (cyclical linear regression). The ABS updated the model in July 2023 to: include deaths certified by a coroner in all-cause mortality (previous reports only analysed doctor certified deaths); use age-specific death rates to model counts; and expand the baseline period used to predict the expected number of deaths.

2. 2013 was not a low year of mortality relative to trend. The mortality trend is determined from age-standardised death rates, which control for population age structure and size over time. The trend assumption is that while the number of deaths increases over time (due to population growth and ageing) the age-standardised rates should decrease (for example, because improvements in health care will lower deaths). See Table 1, below, which shows age-standardised mortality rates from 2013-2019 (the years included in the baseline for ABS' excess deaths statistics). 2013 is at the highest point in the series, at 5.5 deaths per 1,000 people, the same rate as 2014 and 2015.
3. 2019 was not a high year of mortality relative to trend. See Table 1, below. At 5.2 deaths per 1,000 people, 2019 recorded the second lowest age-standardised death rate in the baseline series. Only the rate in 2018 is lower. The low mortality rate in 2018 is well documented, likely the effect of mortality displacement after a severe influenza season in 2017. (Mortality displacement is an epidemiological concept which describes the phenomenon of a period of very high mortality being followed by a period of low mortality.)

Table 1: Deaths, Year of occurrence, Australia

	2013	2014	2015	2016	2017	2018	2019
Number of deaths	148,922	154,379	157,448	159,232	164,365	159,485	164,827
Age-standardised mortality rate(a)	5.5	5.5	5.5	5.4	5.4	5.1	5.2

(a) The age-standardised mortality rate uses the age distribution of total persons in the Australian population as at 30 June 2001 as the standard population. The rate is expressed as deaths per 1,000 people.

Source: Provisional Mortality Statistics, ABS

4. The ABS considered three key attributes when selecting the baseline range for excess deaths:
 - there needed to be enough input data available to predict the number of deaths in each jurisdiction;
 - a stable and clear mortality trend needed to be identified; and
 - the baseline period needed to be applied consistently across jurisdictions.

In addition, the ABS determined that the expected number of deaths produced by the model should meet the following assumptions:

- The number of deaths should increase over time in line with a growing and ageing population.
- The age-standardised mortality rate should decrease over time in line with improvements in health care and increased life expectancy.

Finally, the ABS intentionally excluded pandemic years from the baseline. That's because, to date, the question the ABS has been answering in producing excess deaths estimates is: *'How does the number of deaths which has occurred during the COVID-19 pandemic (2020-2023) compare to the number of deaths expected had the pandemic not occurred?'*

To decide on the baseline range, the ABS conducted a sensitivity analysis to systematically assess the impact of different reference period inputs on the outcomes of the model. This analysis tested three reference periods: 2010-2019, 2013-2019 and 2015-2019. The ABS chose 2013-2019 as the predictor reference period because it produced a more stable mortality trend for estimating expected numbers of deaths consistently across each jurisdiction compared to the reference period 2015-2019 (in use prior to July 2023). The sensitivity analysis found:

- There was a large decline in mortality between 2017 and 2018. This is likely due to the severe influenza season in 2017 causing some mortality displacement in 2018. Even controlling for 2017, when 2015-2019 was tested, the model was overcompensating for the rate of decline during 2015-19, resulting in a very low number of expected deaths in 2022 and 2023.
- Not all jurisdictions experienced a severe influenza season in 2017. Western Australia (WA), for example, had higher mortality rates in 2015 and 2016. Variability across jurisdictions meant that 2015-2019 had different outcomes across jurisdictions.
- WA had steeper declines in mortality rates between 2015-2016 and 2017 compared to other jurisdictions. Starting the baseline at the highest mortality points was overstating the rate of decline in WA and resulting in a very low number of expected deaths in 2022 and 2023.
- For smaller jurisdictions with low numbers of weekly deaths, adding additional years onto the baseline provided a more stable trend.
- There was some excess mortality in 2014, 2015 and 2017. The ABS adjusted outliers to control for these. 2013 was a year of stable mortality where no adjustments had to be made across any jurisdictions.

The mortality trend produced by the model using the 2013-2019 reference period produced similar results to the 2010-2019 reference period. The ABS selected the 2013-2019 reference period because it had two advantages over 2010-2019:

- i. There is less population change to account for from 2013. This was especially important for smaller jurisdictions where age adjustment was not as precise due to the small numbers involved.
- ii. ABS will use the same model for analysis of diseases. There were coding changes in 2013 so starting the reference period at 2013 ensures continuity of time series for this analysis.

More information is available from the Methodology section of the excess deaths reports (www.abs.gov.au/articles/measuring-australias-excess-mortality-during-covid-19-pandemic-until-first-quarter-2023#methodology).

5. The ABS does not agree that using 2013-2019 as the baseline period for excess deaths would ‘tip a linear trend upwards’. Please see responses to questions 2-4, above.
6. Please see response to question 4, above.
7. Please see response to question 4, above.

8. Please see response to question 4, above.
9. The ABS' excess mortality figures represent the response to the research question: *'How does the number of deaths which has occurred during the COVID-19 pandemic (2020-2023) compare to the number of deaths expected had the pandemic not occurred?'*. To properly measure the impact of the virus, deaths directly caused by COVID-19 and deaths where COVID-19 significantly contributed to death should be considered.

A death 'with' COVID-19 does not mean that the person simply had the virus present at death. A death 'with' COVID-19 is defined as one where there is a clear alternate pathway to death (e.g. metastasised cancer) but the virus had a significant impact on the deceased person's health. For these people the certifying practitioner has listed COVID-19 as a contributing condition to death.

10. The World Health Organization (WHO) does not provide official international advice on excess mortality methods. The role of the WHO in producing excess mortality figures has been to create estimates at an international, regional and national level to enable international comparisons. The WHO has published information on its methodology for estimating excess deaths in the following paper: <https://www.who.int/publications/m/item/methods-for-estimating-the-excess-mortality-associated-with-the-covid-19-pandemic>. This paper outlines that COVID-19 deaths data is sourced from Australian health surveillance counts supplied regularly to the WHO. The counts used by the WHO in their modelling of excess deaths also include deaths 'due to' and 'with' COVID-19.
11. It is not known what the mortality pattern would have been if COVID-19 was not in circulation. It would not be accurate to state that COVID-19 replaced deaths of elderly people who may have died from other respiratory diseases. Key points are:
- Excess mortality in older age groups has in the past occurred in years with severe influenza seasons. Due to public health initiatives such as stay at home measures there were few deaths due to influenza in the early years of the pandemic. This reduced mortality in most ages, but especially in those aged over 85 years.
 - It cannot be known what the mortality patterns for respiratory disease would have been if COVID-19 had not occurred.
 - Gains in life expectancy are increasingly coming from older age groups. For example, the latest ABS life expectancy figures show that someone who reaches the age of 90 has, on average, another five years of life left.
 - People who die from COVID-19 have still recorded premature mortality. The *ABS Causes of Death, Australia* publication showed for those who died from COVID-19, an average of two to three years of life was lost despite the high median age at death.

12. Inputs to the models, including the choice of baseline, can change the numbers. The ABS explains this in the Methodology section of the ABS excess deaths reports, stating that: ‘Choosing the reference period (i.e. the number of years in the baseline) is important as it can change the expected number of deaths.’ See: www.abs.gov.au/articles/measuring-australias-excess-mortality-during-covid-19-pandemic-until-first-quarter-2023#methodology.
13. The ABS has not done any statistical analysis of the TGA's adverse event reporting system.

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ANSWERS TO QUESTIONS ON NOTICE

Australian Bureau of Statistics

Division: Australian Bureau of Statistics
Question No: 2
Topic: Vaccination status on death certificate
Reference: Written
Senator: Ralph Babet

Question:

The ABS produces the cause of death certification paper which is to be used to guide medical practitioners when completing certificates of cause of death.

Can you advise if vaccination status is included on a death certificate?

For example, a patient receives a vaccination 28 days prior to death. Does this medical procedure have to be recorded on the death certificate?

[https://www.ausstats.abs.gov.au/ausstats/subscriber.nsf/0/475BC02643DB45EDCA25750B000E38A4/\\$File/1205055001_2008.pdf](https://www.ausstats.abs.gov.au/ausstats/subscriber.nsf/0/475BC02643DB45EDCA25750B000E38A4/$File/1205055001_2008.pdf)

Answer:

Vaccination status is not recorded on the death certificate unless the vaccine led to a complication which caused, or significantly contributed to, death.