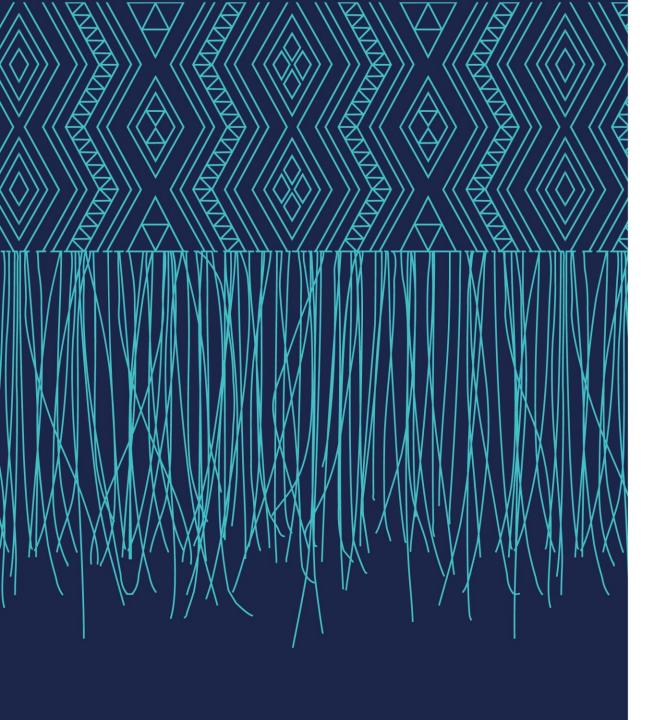
Te Whatu Ora Health New Zealand

COVID and Assisted Deaths in Aotearoall

June 2023



COVID Deaths Assisted Deaths

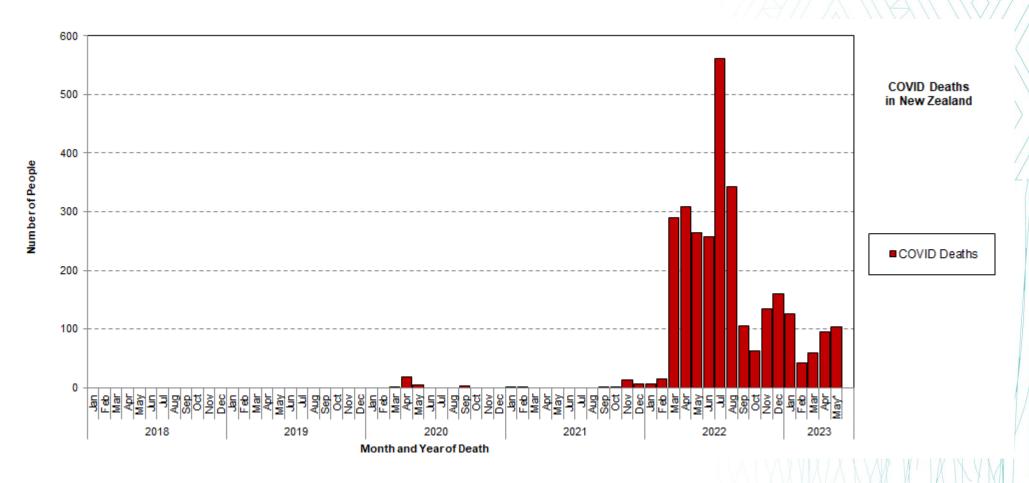
Analysis by Date of Death



Explanation

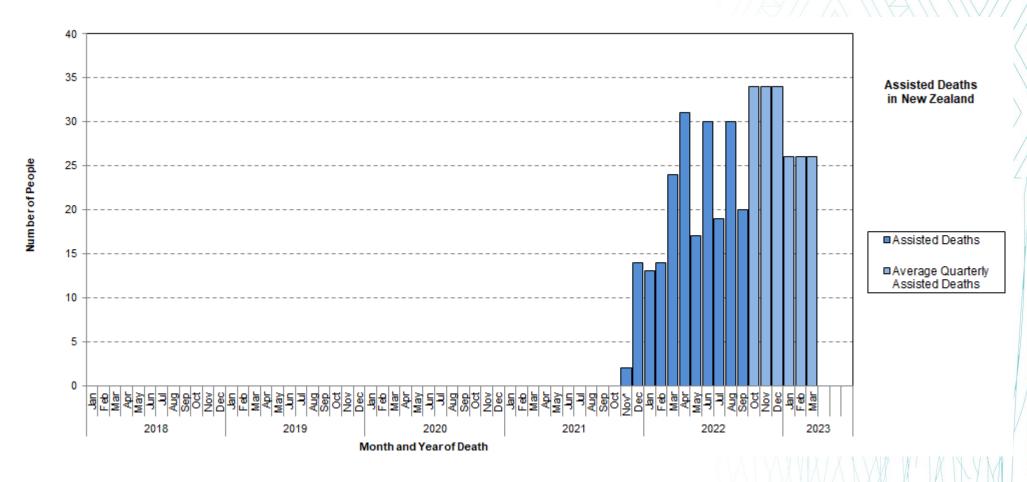
- MORT data is only available up to calendar 2018 as at June 2023.
 - Analysed by <u>date of registration</u> of death.
 - Date of death is no longer supplied, for privacy.
 - Will have a code for COVID deaths, but not for Assisted deaths.
- The analysis that follows uses other sources.
 - Analysed by <u>date of death</u>, grouped monthly and then quarterly.
 - Total deaths from Stats NZ Infoshare: https://infoshare.stats.govt.nz/
 - Table: Population/ Deaths/ Month and year of death (Monthly)
 - COVID deaths from Te Whatu Ora
 - https://tewhatuora.shinyapps.io/covid19/
 - Assisted Deaths from Ministry of Health
 - https://www.health.govt.nz/our-work/life-stages/assisted-dying-service/assisted-dying-service-data-and-reporting
- Definitions may not be identical but is best available for this analysis until MORT data released.

COVID Deaths



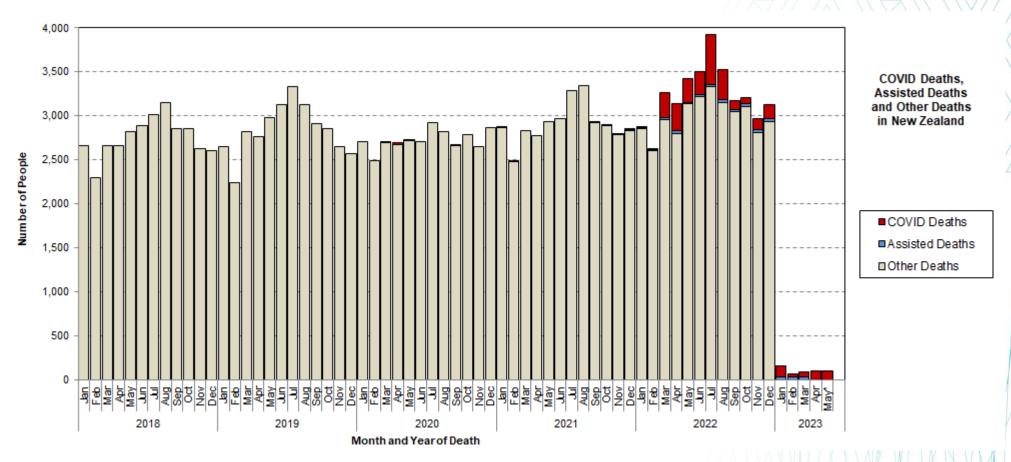
Defined as people who died with the cause of death (underlying cause or contributory cause) being attributable to COVID-19. Data for May 2023 not yet complete. Recent trends should be interpreted with caution to account for death coding delays.

Assisted Deaths



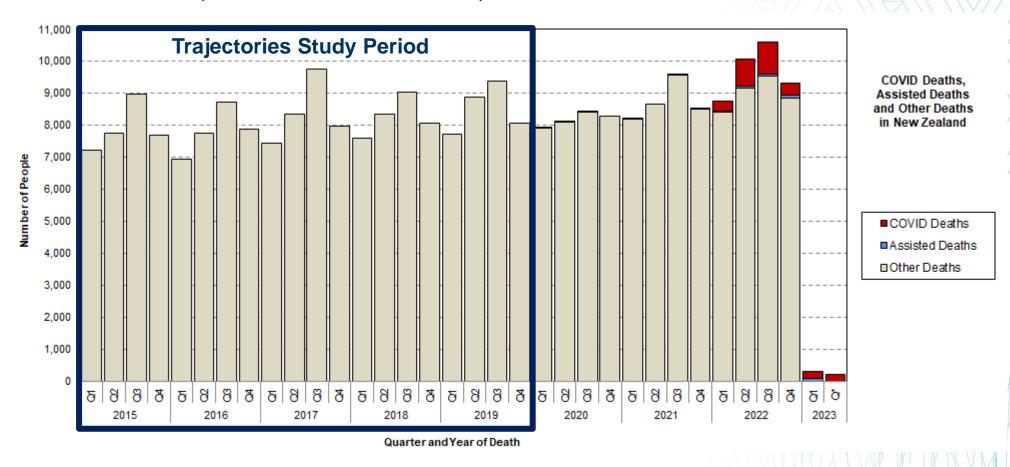
Assisted dying service available from 7 November 2021. The number of deaths is by month until September 2022, then only available by quarter and hence shown averaged over the quarter.

COVID, Assisted, and Other Deaths



This shows COVID deaths, Assisted deaths and the balance to total deaths reported by Stats NZ. Total deaths by month available only to December 2022. Note the very different monthly pattern c. deaths for 2020, due to the effects of lockdowns. The pattern is more like normal in 2021, and 2022 is impacted by high COVID deaths. Too early to see how 2023 may evolve.

COVID, Assisted, and Other Deaths



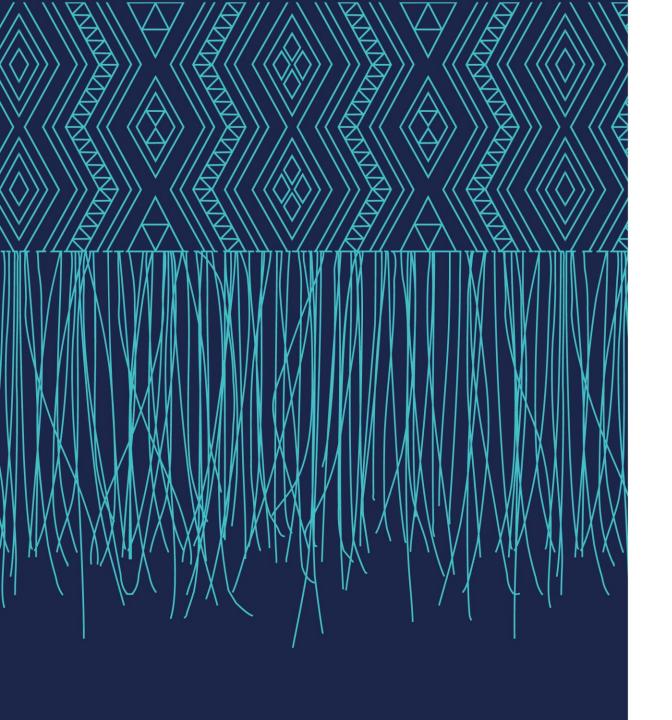
This shows COVID deaths, Assisted deaths and the balance to total deaths reported by Stats NZ, grouped into quarters. Total deaths only available to Q4 of 2022. The graph is from 2015 Q1 and shows the period of the intended Trajectories Study 2015-2019.

Lower Deaths during Lockdowns

- "Reported weekly all-cause mortality in 2020 was similar to mortality in 2015–19 until week 17
 (i.e., the fifth week of public health measures) when mortality fell below historical rates, a trend which is still evident at week 42."
- "... the reduction in deaths is substantive. Across weeks 13–42 (i.e., during and after lockdown), the mean weekly death rate was 11% lower than in 2015–19."
- "... the reduction in all-cause mortality ... remained below historical levels despite public health restrictions easing, during a period that is usually marked by an increase in all-cause mortality due to seasonal influenza and pneumonia. This continued reduction might be primarily due to the absence of an influenza epidemic in New Zealand in 2020, presumably because of public health measures that were introduced to stop the spread of COVID-19."
- "However, alternative factors, such as fewer deaths from road traffic accidents, occupational causes, air pollution, and postsurgical complications, might also have had a role in the reduction of all-cause mortality, although these effects would often manifest during, rather than after, a strict lockdown. Finally, potential late adverse effects on mortality, resulting from reduced access to health care, have not become apparent."

Comment

- Deaths for years ending in late 2022 and early 2023 have been reported by Stats NZ as being substantially higher than for years ending in 2021. This is largely due to COVID and is after the period in 2020 when deaths were unusually low during lockdowns.
- From this analysis, total deaths in 2021 were 34,944.
- Total deaths in 2022 were 38,745 (110.9% of the 2021 total).
- There have been 2,983 COVID deaths to date (1 January 2020 to late May 2023).
 - 24 COVID deaths in 2021.
 - 2,506 COVID deaths in 2022 (6.5% of total deaths in 2022).
- There have been 394 Assisted deaths to date (7 November 2021 to 30 March 2023).
 - 16 Assisted deaths in 2021.
 - 300 Assisted deaths in 2022 (0.77% of total deaths in 2022, i.e. less than 1%).
- Still too early in 2023 to see where the levels of COVID deaths and Assisted deaths will settle.

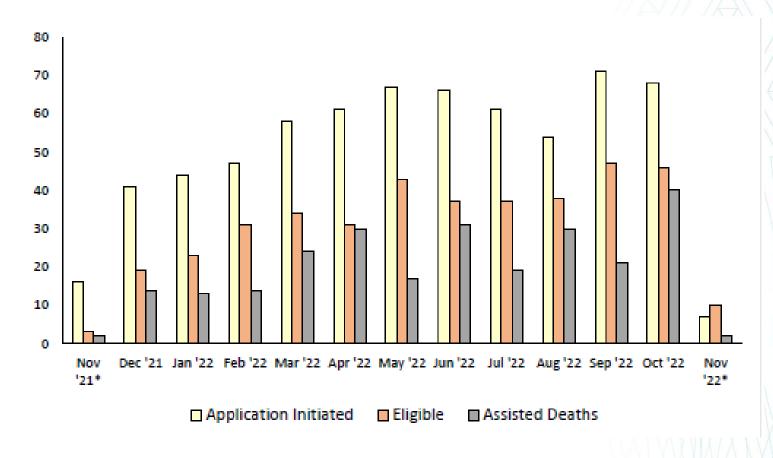


Assisted Deaths

Ministry of Health Reports



Assisted Deaths Application and Eligibility



Assisted dying service available from 7 November 2021. Over the first year there were 661 new applications, 399 were confirmed as eligible, and 257 people had an assisted death.

Reporting on Assisted Deaths

- Figures from reports for three periods are combined: from 7 November 2021 to 30 September 2022; 1 October to 31 December 2022; and 1 January 2023 to 31 March 2023.
- Applications: 1,025 people
 - 823 people (80.3% of applicants) are NZ European/Pākehā
 - 49 people (4.8%) are Māori
 - 540 people (52.7%) are women
 - 785 people (76.6%) are aged 65 years or older
 - 684 people (66.7%) have a cancer diagnosis
 - 787 people (76.8%) were receiving palliative care at the time of application.
- Eligibility confirmed: 576 people (56.2% of applications; some still in progress)
- Assisted death: 214 people (38.4% of applications)

Reporting on Assisted Deaths

 Figures from reports for three periods are combined: from 7 November 2021 to 30 September 2022; 1 October to 31 December 2022; and 1 January 2023 to 31 March 2023.

- Assisted death: 214 people
- Place of death:
 - Private residence: 318 people, (80.7% of assisted deaths)
 - Aged care facility: 38 people (9.6%)
 - Public hospital: 23 people (5.8%)
 - Hospice: 15 people (3.8%).



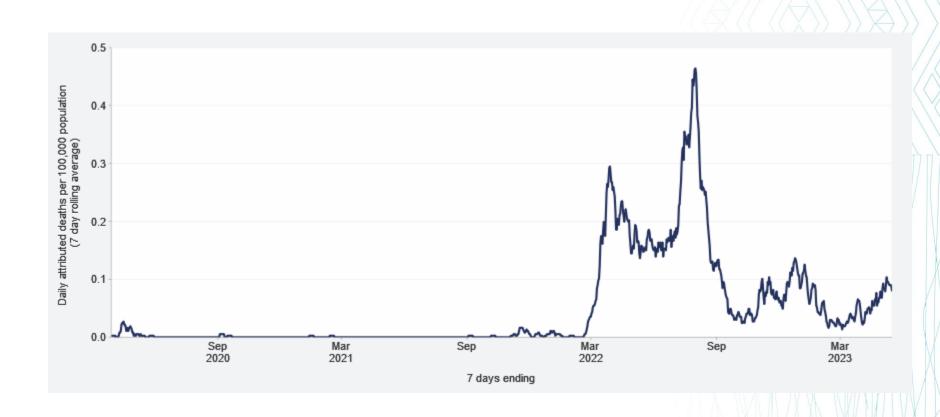


COVID Deaths

Te Whatu Ora graphs
7-day rolling average,
per 100,000 population

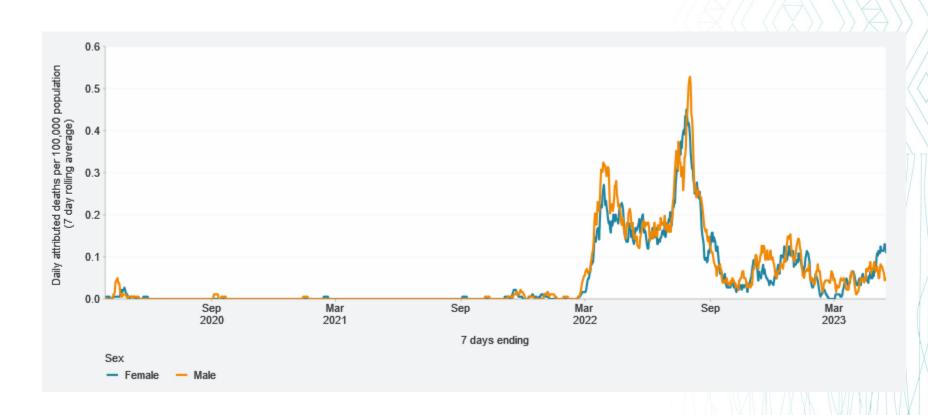


COVID Deaths in Total



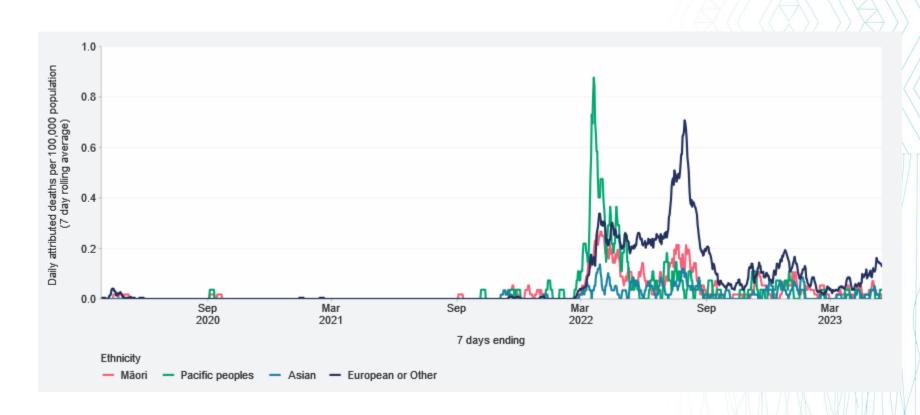
The rate of deaths appears to be entering another wave as winter begins in 2023. Over the full period, there were 2,983 deaths in total.

COVID Deaths by Gender



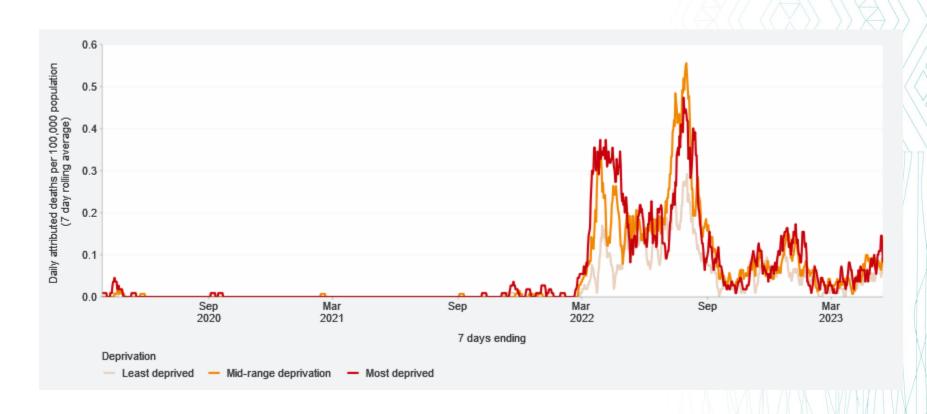
The rates for men and women have differed at times. Over the full period, Female deaths are 47.5% of the total, and Male deaths 52.5% of the total. This is rather a surprise relative to the age bands shown later.

COVID Deaths by Ethnicity



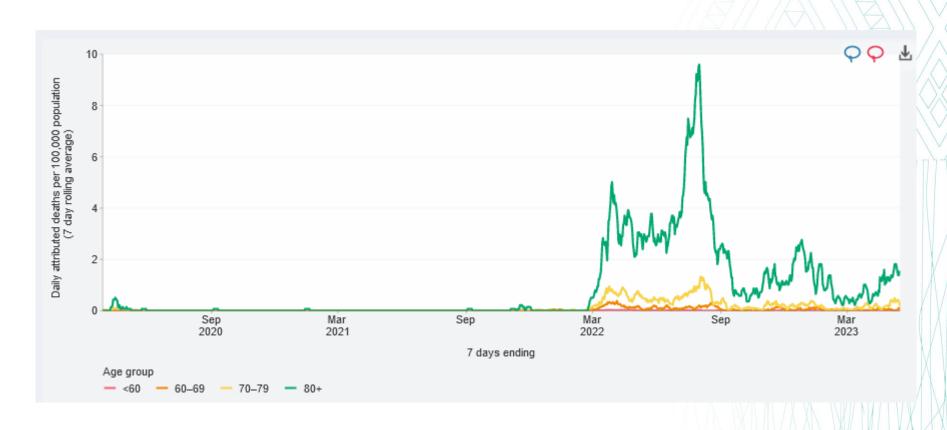
There were substantial differences in the rates by prioritised ethnicity at times, with a wave of Pacific deaths around April 2022, followed later by a wave of European or Other. Over the full period, Major deaths were 8.9% of the total; Pacific peoples 5.0%; Asian 4.0%; and European or Other were 82.1% of total deaths.

COVID Deaths by Deprivation



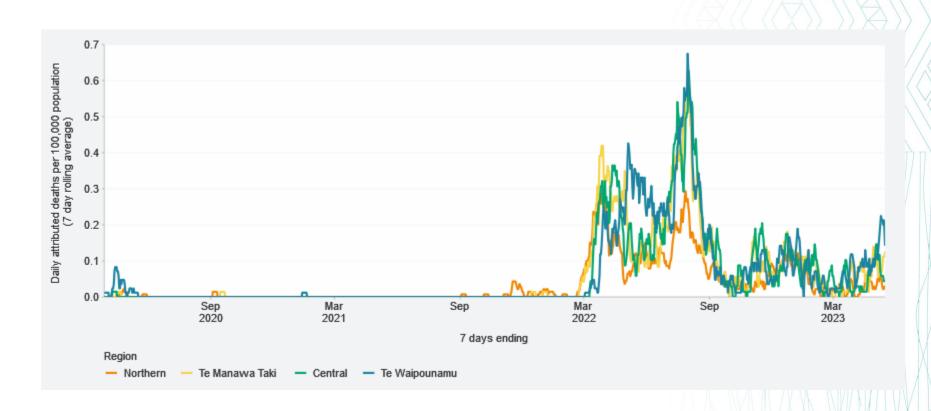
Broadly, those in the more deprived areas have had higher death-rates, although at times there are differences. Over the full period, 19.9% of total deaths were in the Least Deprived group; 43.6% in the Mid-range Deprivation group; and 36.5% in the Most Deprived group.

COVID Deaths by Age Band



There are much higher death rates in the 80+ age band throughout, with deaths under age 60 barely visible on this scale. Over the full period, 4.9% of deaths were under age 60; 7.8% were age 60-69, 20.0% were age 70-79; and 67.3% were age 80+.

COVID Deaths by Region



The waves began at different times in different regions. Death rates in the Northern Region appear to be somewhat lower than in the other regions in later waves. Over the full period, Northern had 27.7% of total deaths; Te Manawa Taki 22.1%; Central 21.4%; and Te Waipounamu 28.7% of total deaths.

Te Whatu Ora Health New Zealand

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