Mortality deficit in New Zealand through COVID pandemic

Helen He

Population Insights

Stats NZ



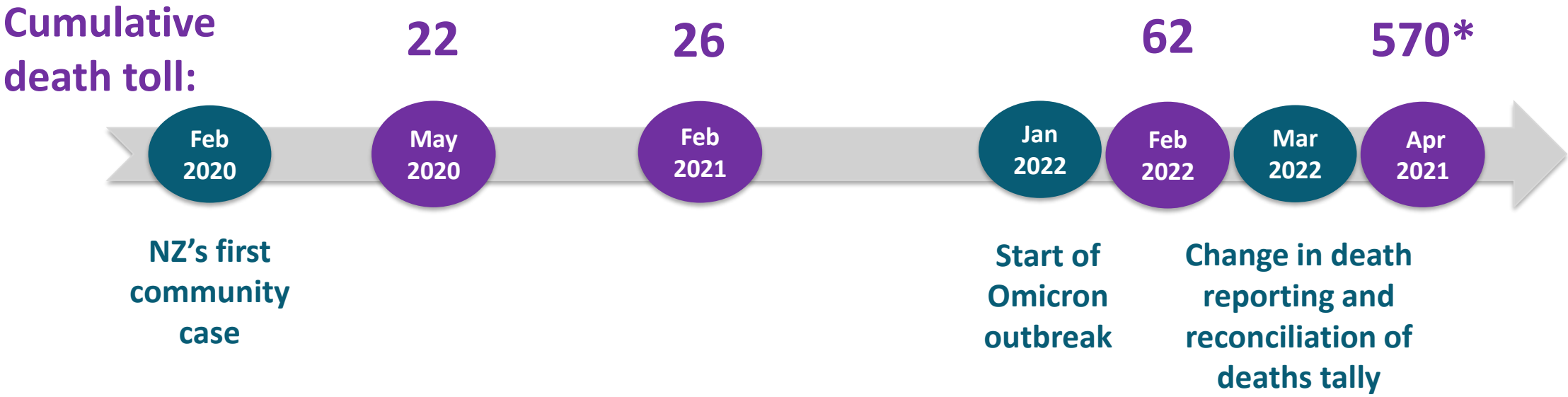
Overview

- NZ’s death registrations
- Impact on NZ deaths due to COVID-19 pandemic
- Deaths statistics and visual tools

Death registrations in New Zealand

- Very high coverage
- Very timely
  - 1 in 100 deaths registered after 1 month
  - 1 in 1,000 deaths registered after 3 months
- Quarterly death publication
  - six weeks after the reference quarter
- Covid 19 increases the demand for death publication
  - weekly data published about 2 weeks after
- Cause of death collected by Ministry of Health

COVID-19 deaths in New Zealand



*Includes all cases who died within 28 days of being reported as a COVID-19 case.

All cause weekly data

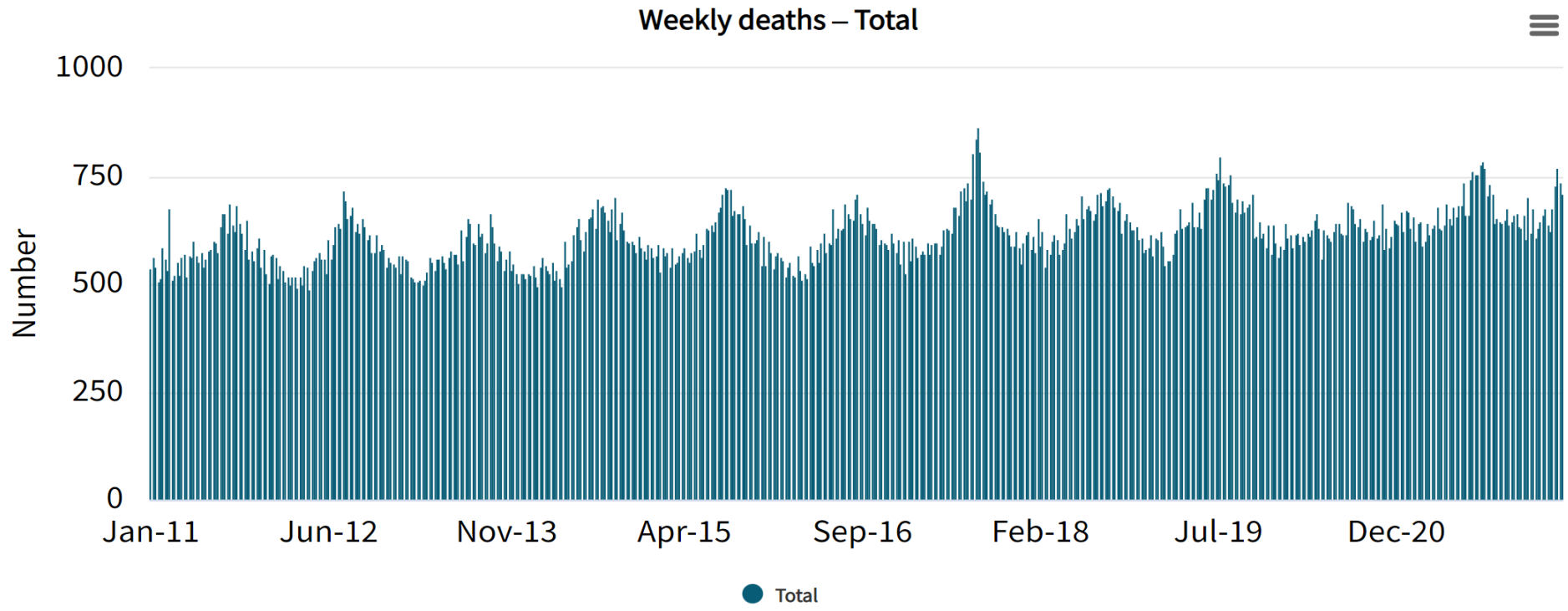
[COVID-19 data portal | Stats NZ]

Stats NZ
Tatauranga Aotearoa

Select category: Total deaths (all causes)

Select an indicator: Weekly deaths by age

Select a series: Total



Corresponding API query:

https://api.stats.govt.nz/opendata/v1/Covid-19Indicators/

Select date range

2011-01-02 — 2022-04-03

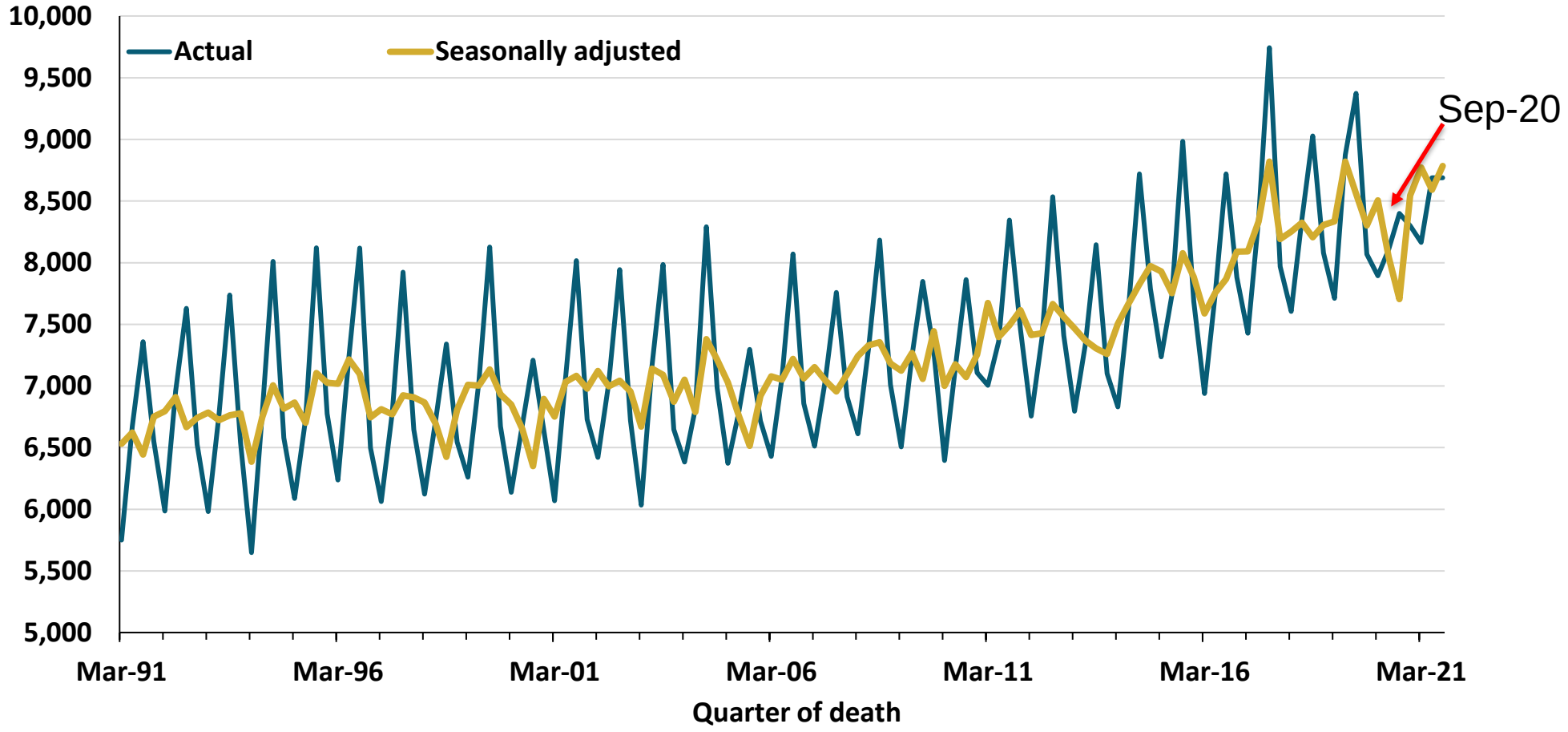
Last updated: 19 April 2022
Source: Department of Internal Affairs

NZ Population growing and ageing

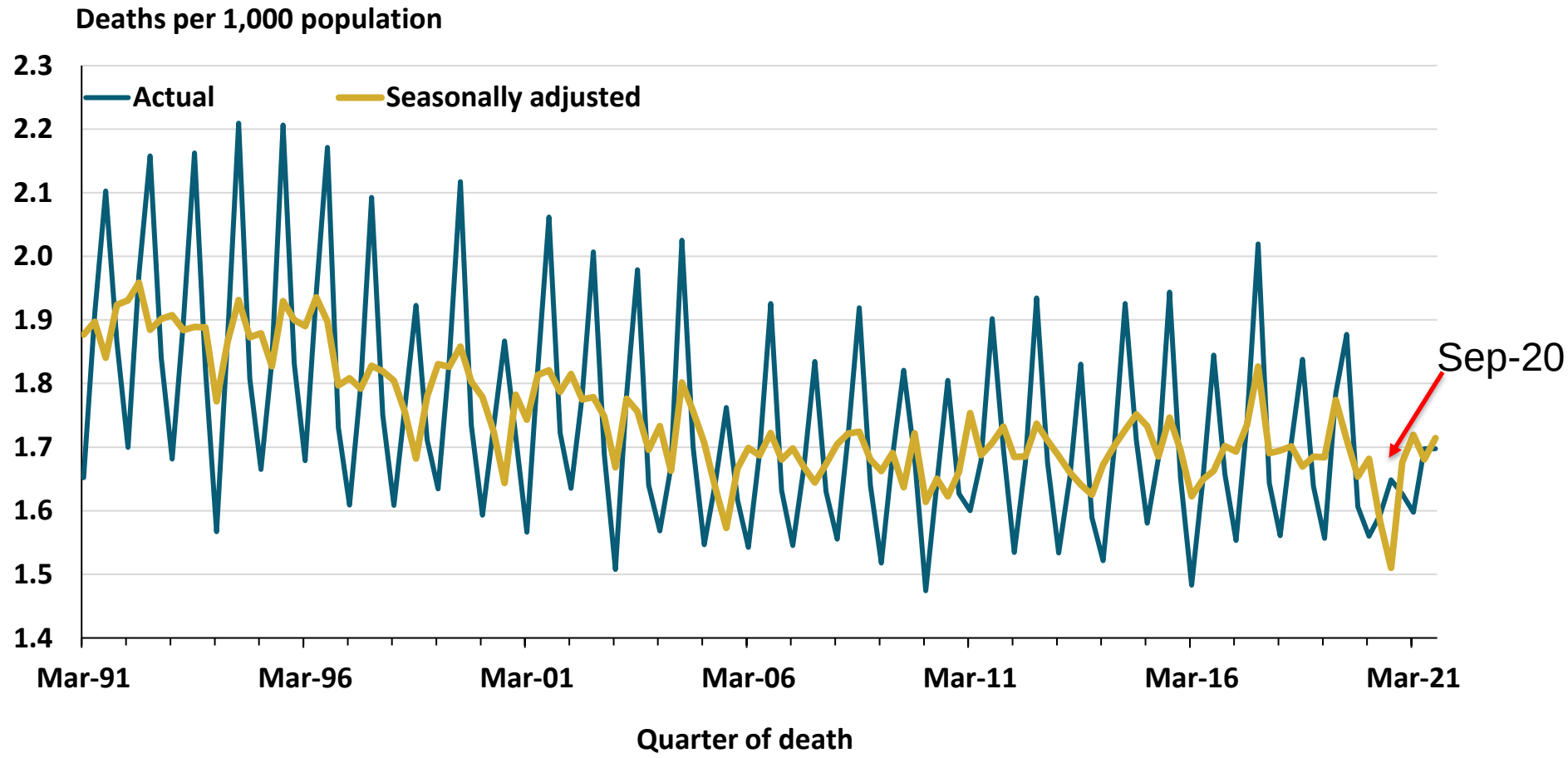
Between 2011 and 2021:

- Total population grew 16%
- 65+ population grew 39%
- 85+ population grew 28%
- Proportion of oldest population continues to increase
  - 65+: 13% to 16%
  - 85+: 1.6% to 1.8%

Quarterly deaths counts

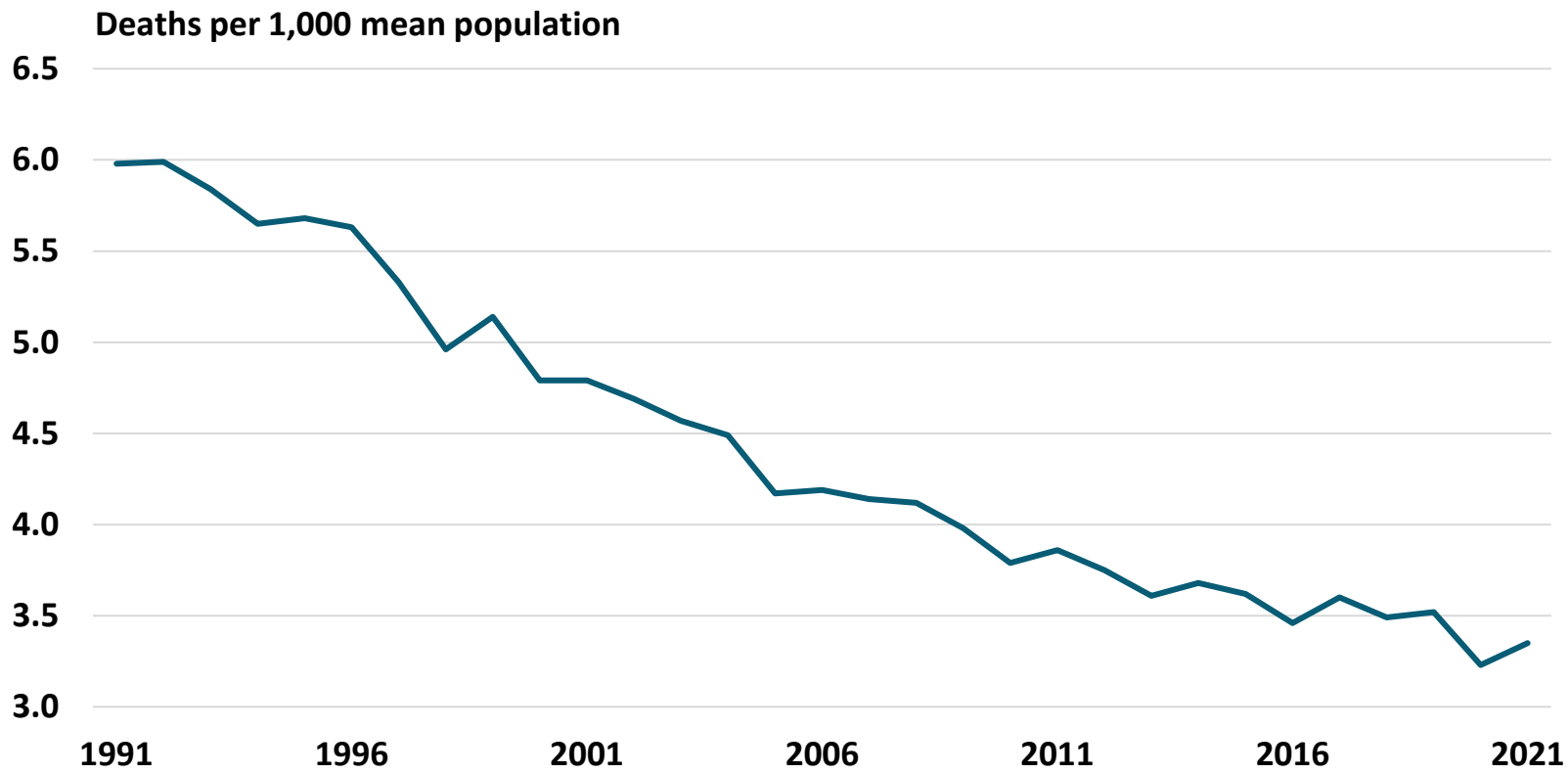


Quarterly crude death rates



Annual standardised death rates

year ended December

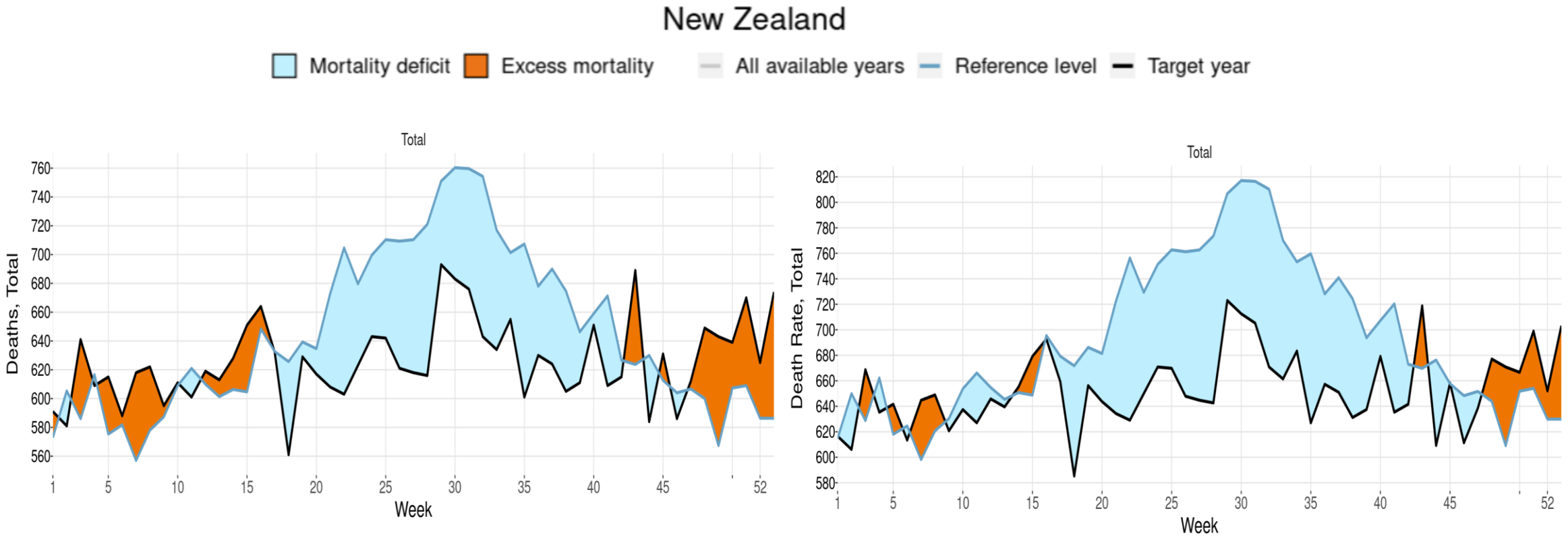


Note: The age and sex distribution of the mean estimated population for the year ended 31 December 1961 was taken as the standard.

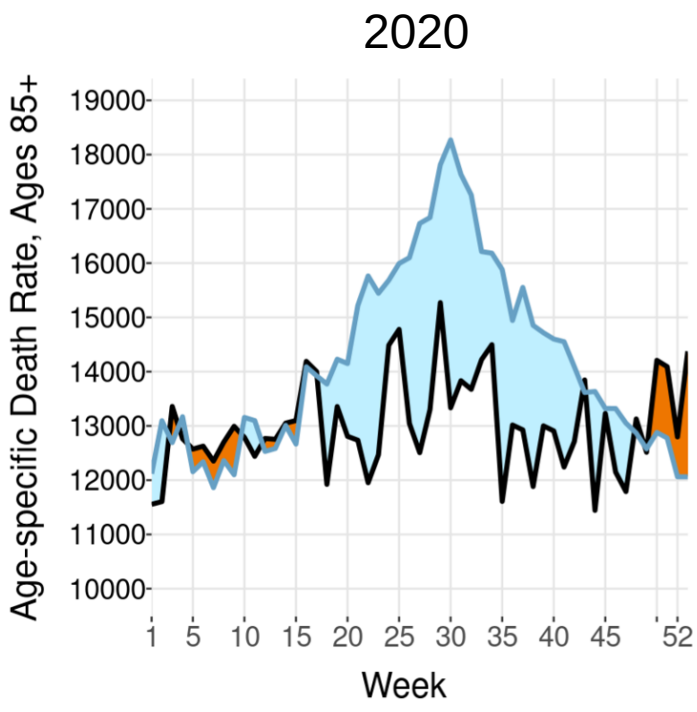
Visualisation of short-term mortality fluctuations (STMF)

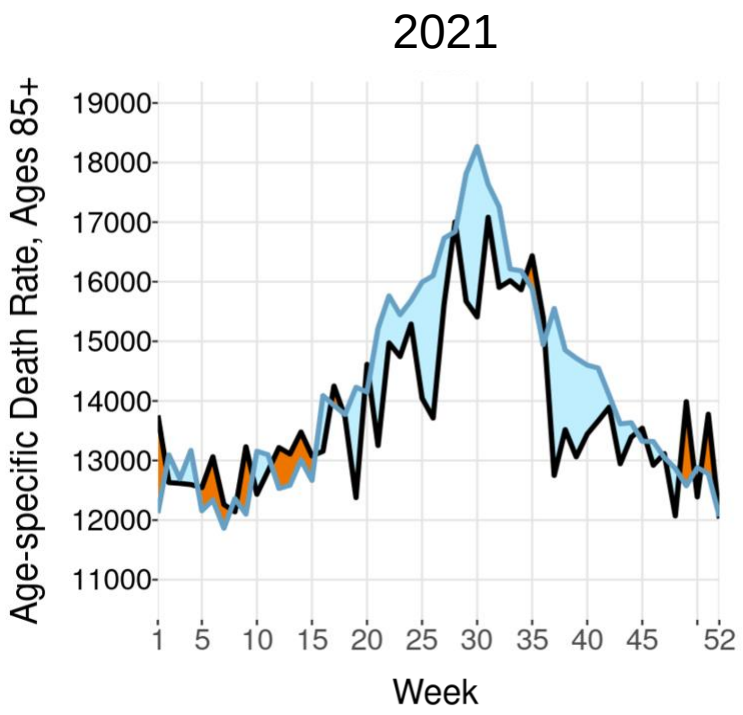
- Human Mortality Database
- Weekly death counts or death rates for 38 countries
- Open sources

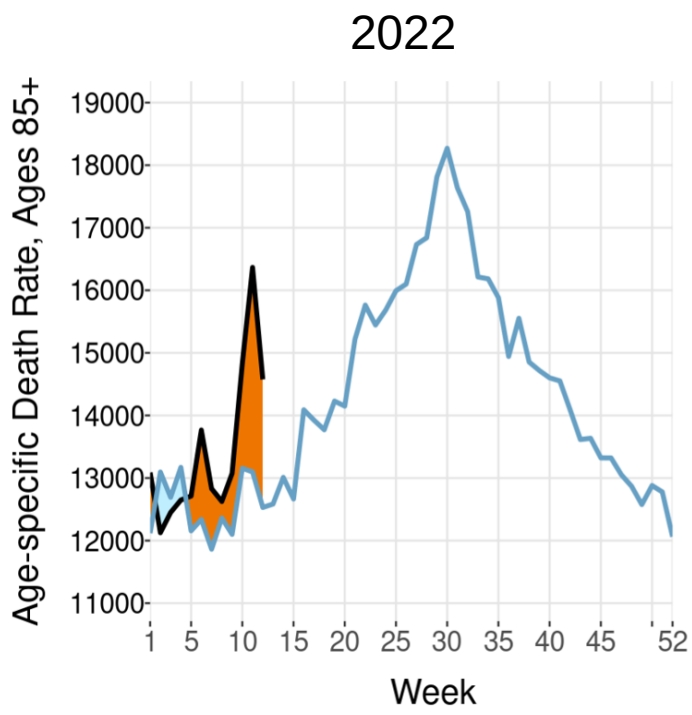
Mortality deficit/excess mortality in New Zealand, 2020



Age-specific death rates, age 85+







Summary

- Consistent findings from various mortality indicators
  - Mortality deficit in 2020, 2021
  - Excess mortality in early 2022 (?)
- Analysis needs to include rates, preferably age-specific
- Ongoing demand for very timely death statistics
- Questions?