



COVID-19 UPDATES

17 March 2022



CAPRISA hosts a DST-NRF Centre of Excellence in HIV Prevention



National Research Foundation



CAPRISA hosts a MRC HIV-TB Pathogenesis and Treatment Research Unit
CAPRISA hosts a DoH-MRC Special Initiative for HIV Prevention Technology

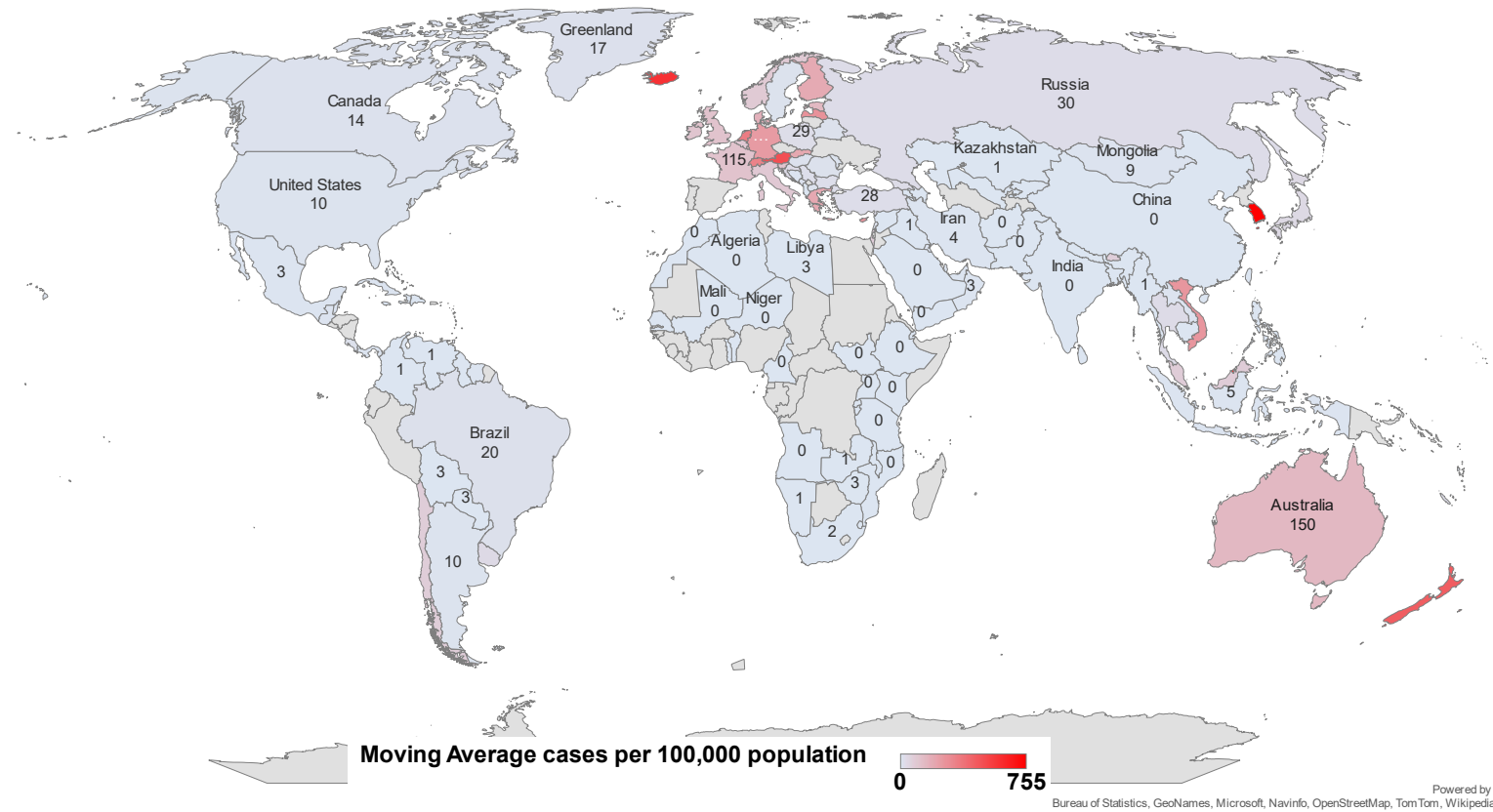


Global Covid-19 cases (per million population)



Global Covid-19 epidemic

7-day moving average cases per 100,000 population
up to - 16 March 2022



Source: Our World in Data

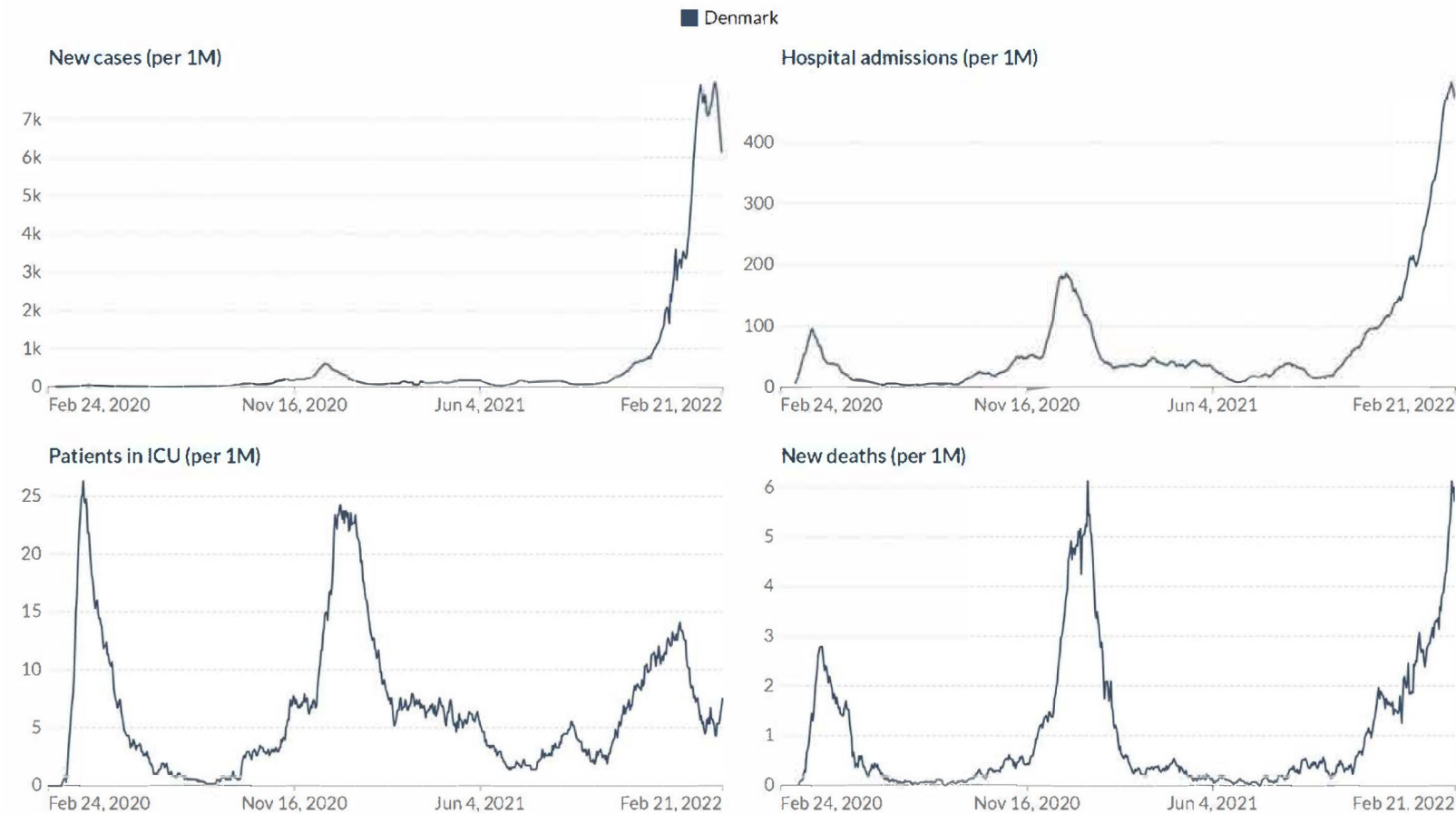
Challenges in removing public health measures in Denmark – refer to the attached blog story...

Confirmed COVID-19 cases, deaths, hospital admissions, and patients in ICU per million people

Limited testing and challenges in the attribution of cause of death means the cases and deaths counts may not be accurate.

Our World in Data

LINEAR LOG Uniform y-axis



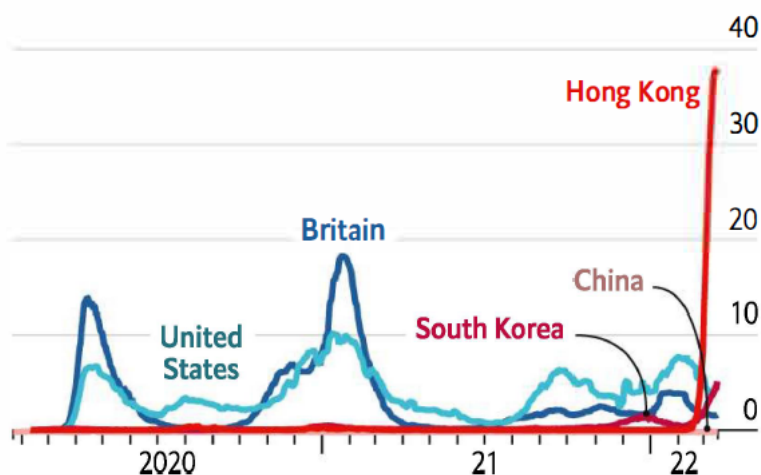
Source: Johns Hopkins University CSSE COVID-19 Data, Official data collated by Our World in Data

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Hong Kong is now the centre of the pandemic

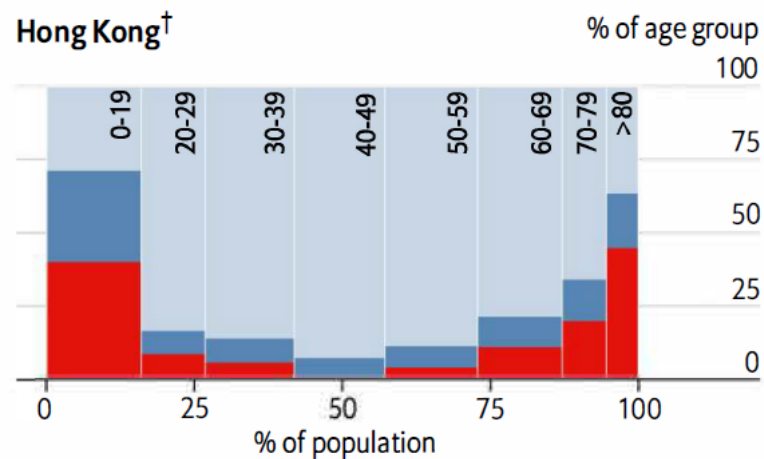
Eye of the storm

New confirmed covid-19 deaths per million people
Seven-day moving average

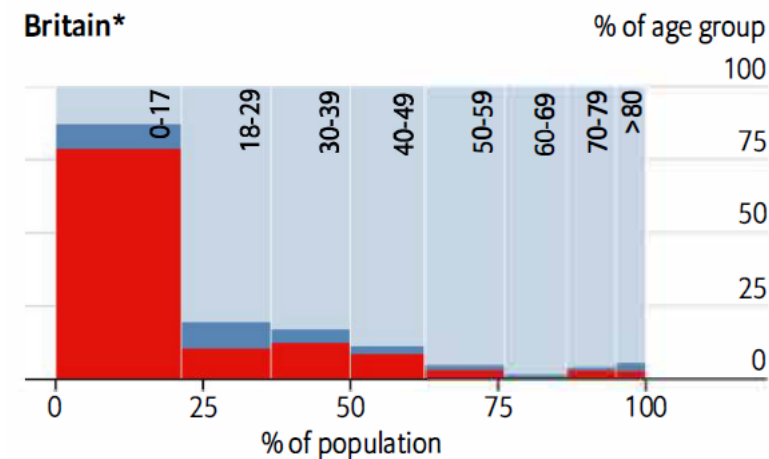


Vaccination status by age group and dosage

■ Unvaccinated ■ One dose ■ Two or more doses



Britain*



*At 16th March †At 17th March

Sources: Johns Hopkins CSSE; National Immunisation Management Service; ONS; Government of Hong Kong

HONG KONG, once famed for its low covid-19 count, is now recording the world's highest death rate from the virus. The city is facing a shortage of coffins; morgues are overflowing with victims; hospitals are struggling to cope. On March 17th 279 deaths were recorded in the city of 7.4m people. The death rate is more than twice as high as at the peak of Britain's second wave in early 2021. One model by researchers at the University of Hong Kong predicts more than 5,000 people could die of covid during this wave.

In the past few months the Omicron variant has swept through the Asia-Pacific region. But Hong Kong is an outlier in terms of deaths. Its case-fatality rate of 2% is more than ten times higher than those of New Zealand, Singapore and South Korea, where cases are also far above previous peaks. The rate in Hong Kong for unvaccinated people over 80 is 12%.

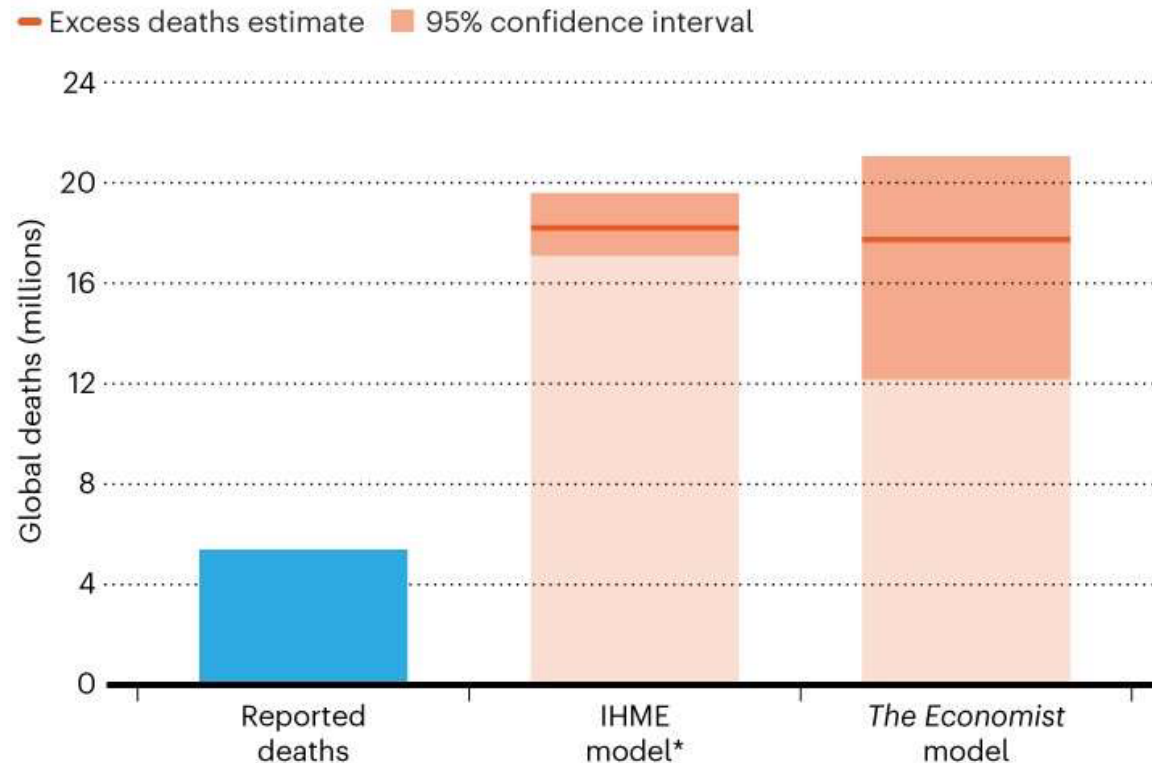
Hong Kong's elderly have been slow to get vaccinated and have almost no natural immunity from past infection. There are many reasons for their vaccine hesitancy, not least the mixed messages the government gave out about the safety of jabs when they first came out and the authorities' lacklustre effort to inoculate those in care homes. When Omicron first hit, around 65% of over-80s were unvaccinated. Even after recent drives to increase uptake, around 44% are still completely unprotected. Until recently this low vaccination rate has been of little consequence thanks to strict "zero-covid" policies across China. But as the virus sweeps through Hong Kong and several Chinese provinces report outbreaks, it is an increasing cause for concern. On the mainland, at least 40m people are under some form of lockdown (though the authorities in some provinces prefer the term "life on pause" to "lockdown"). Relatively few people have natural immunity and China's health system is not equipped to handle a large wave. Beijing may be worried about a broader wave on the mainland. ■

nature

COVID's true death toll: much higher than official records

David Adam

COVID-19 confirmed deaths (blue bar) < excess deaths (pink bars) during the pandemic (up to 27 Dec 2021)

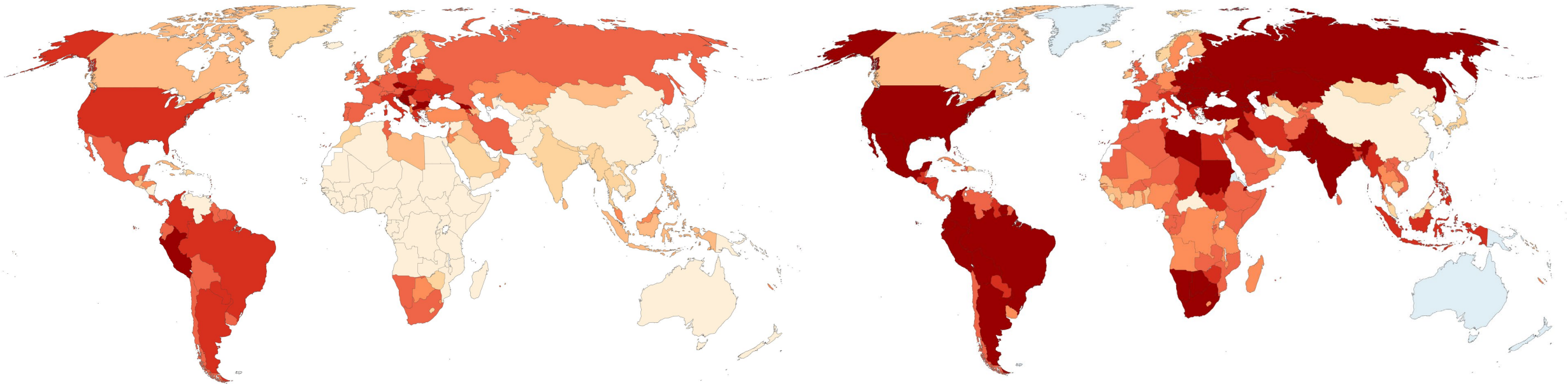


- Reported deaths: 5.9 million
- IHME model of global excess deaths: ~18.2 million
- The Economist model: ~18 million

High death toll of Covid-19 – excess & reported deaths

Reported Covid-19 deaths: 5.9 million

Estimated 18 million (14m – 24m) excess deaths worldwide during the pandemic



THE LANCET

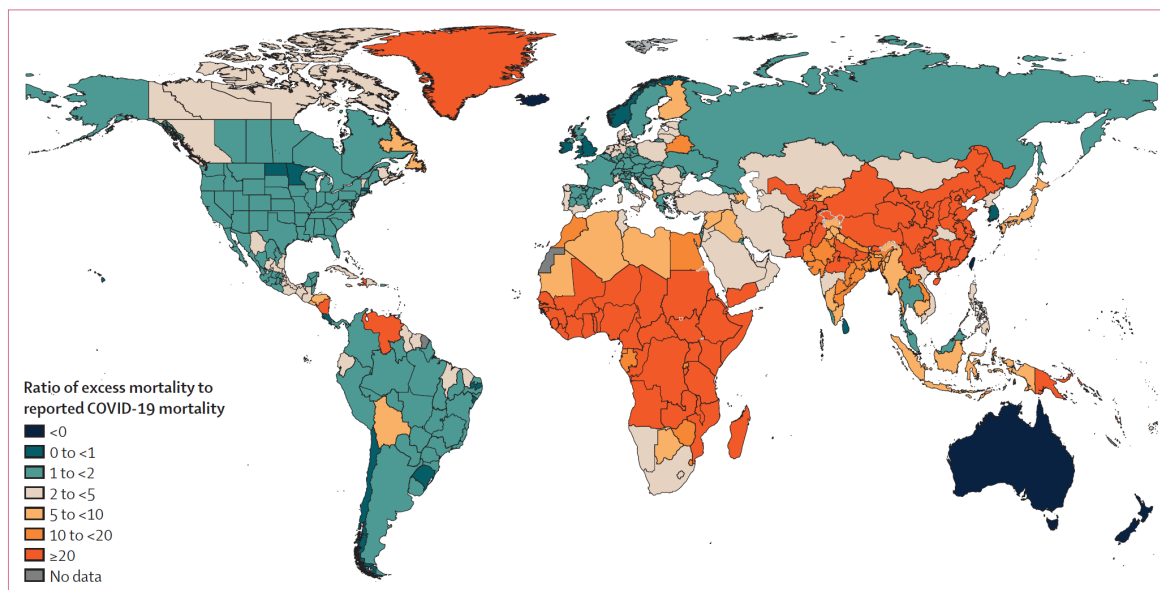
Estimating excess mortality due to the COVID-19 pandemic: a systematic analysis of COVID-19-related mortality, 2020–21

COVID-19 Excess Mortality Collaborators*

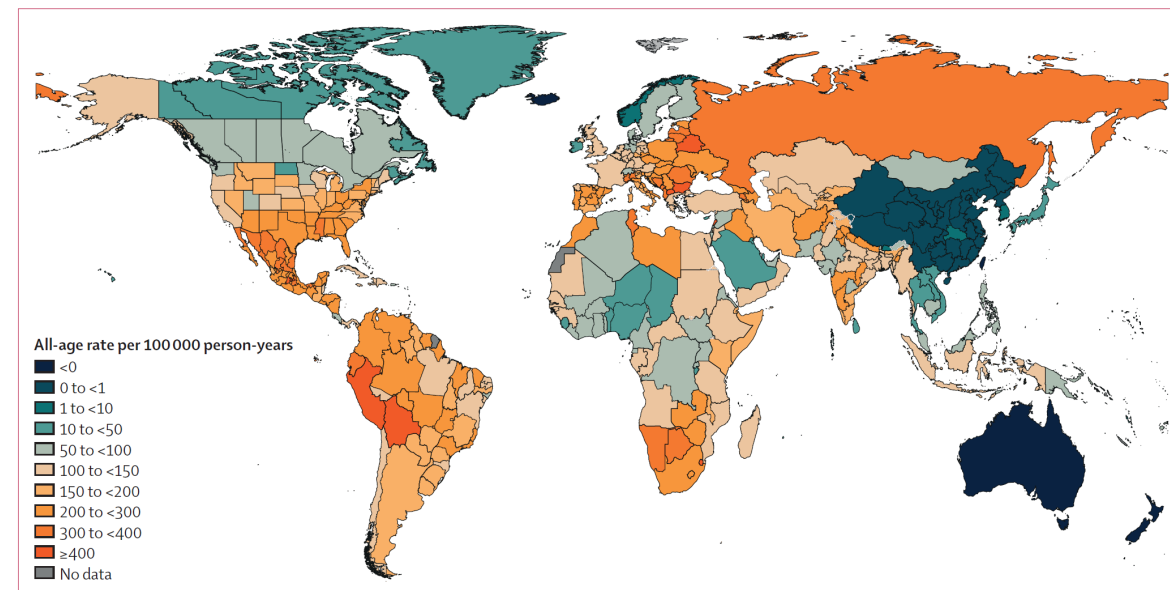
**Global all-age rate of excess mortality due to COVID-19 pandemic
~120.3 deaths per 100 000 of the population**

**Reported Covid-19 deaths worldwide:
5.94 million**

**Estimated 18.2 million excess deaths
worldwide during the pandemic**



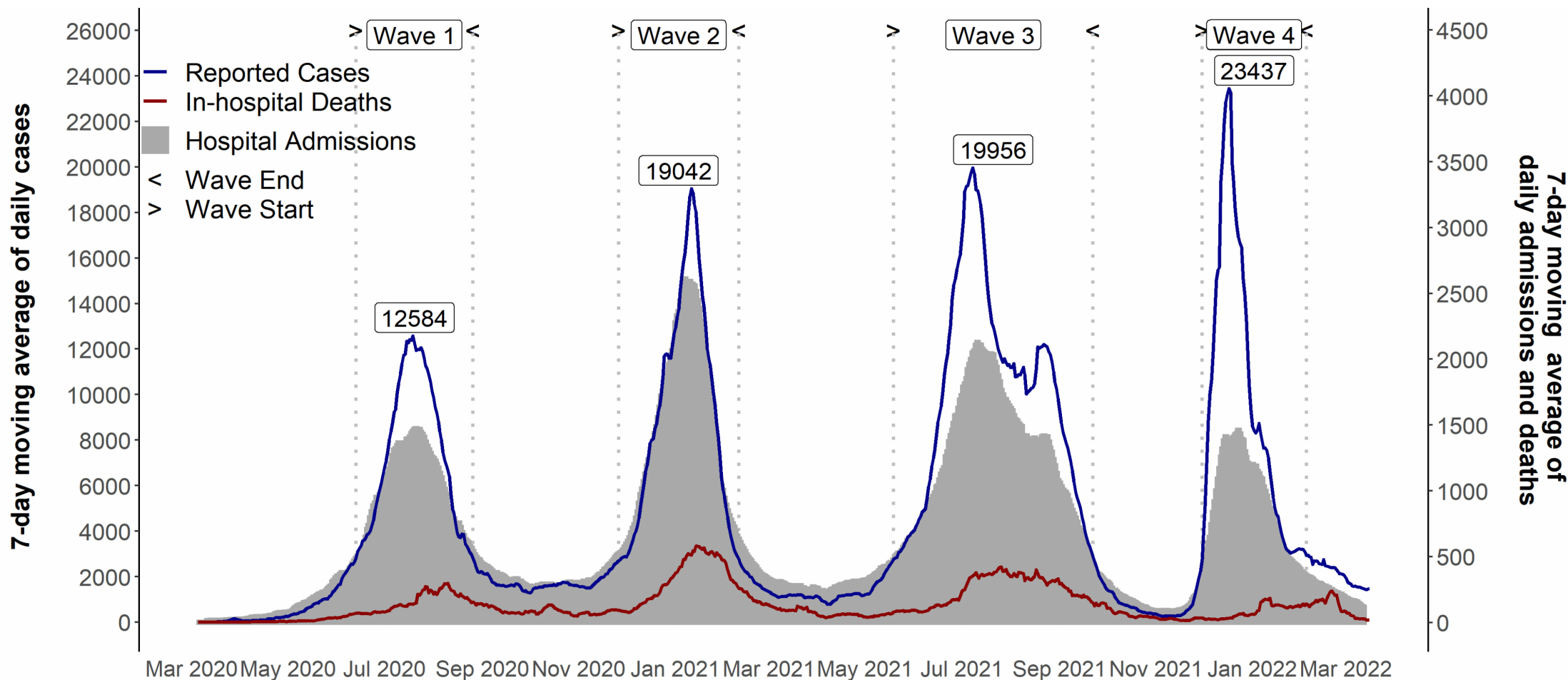
Ratio between estimated excess mortality rate due to COVID-19 and reported COVID-19 mortality rate between Jan 1, 2020, and Dec 31, 2021.



Excess mortality rate due to COVID-19 between Jan 1, 2020, and Dec 31, 2021.

Covid-19 in South Africa

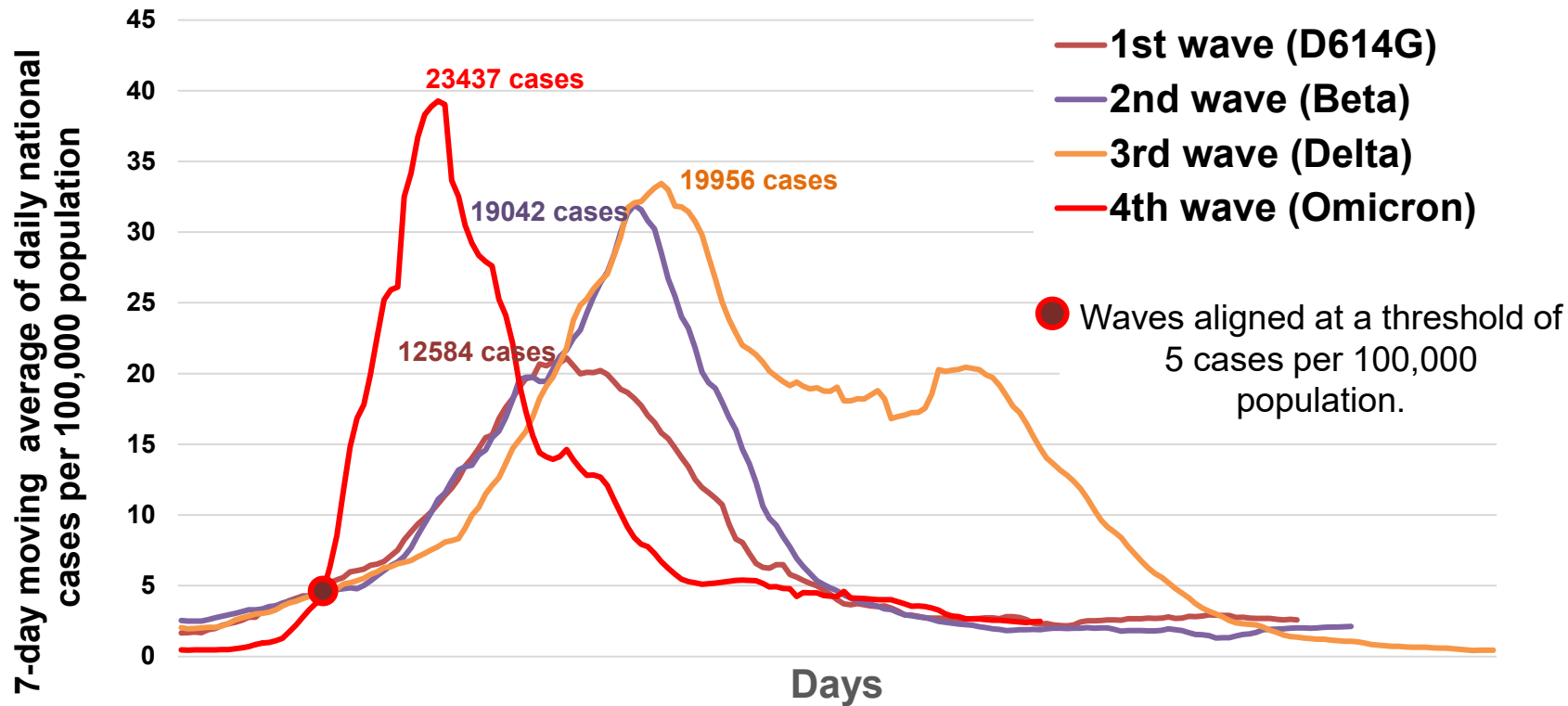
up to – 16 March 2022



Source of hospital admissions data: Lucille Blumberg, Richard Welch and Waasila Jassat – DATCOV, NICD

SARS-Cov-2 cases in 1st, 2nd & 3rd and 4th waves: South Africa

7-day moving average cases per 100,000 population up to - 16 March 2022



Data source: Department of Health; Analysis: Marothi LETSOALO; Ande MCHUNU

Estimated effective reproduction rate (R) of Covid-19 in South Africa

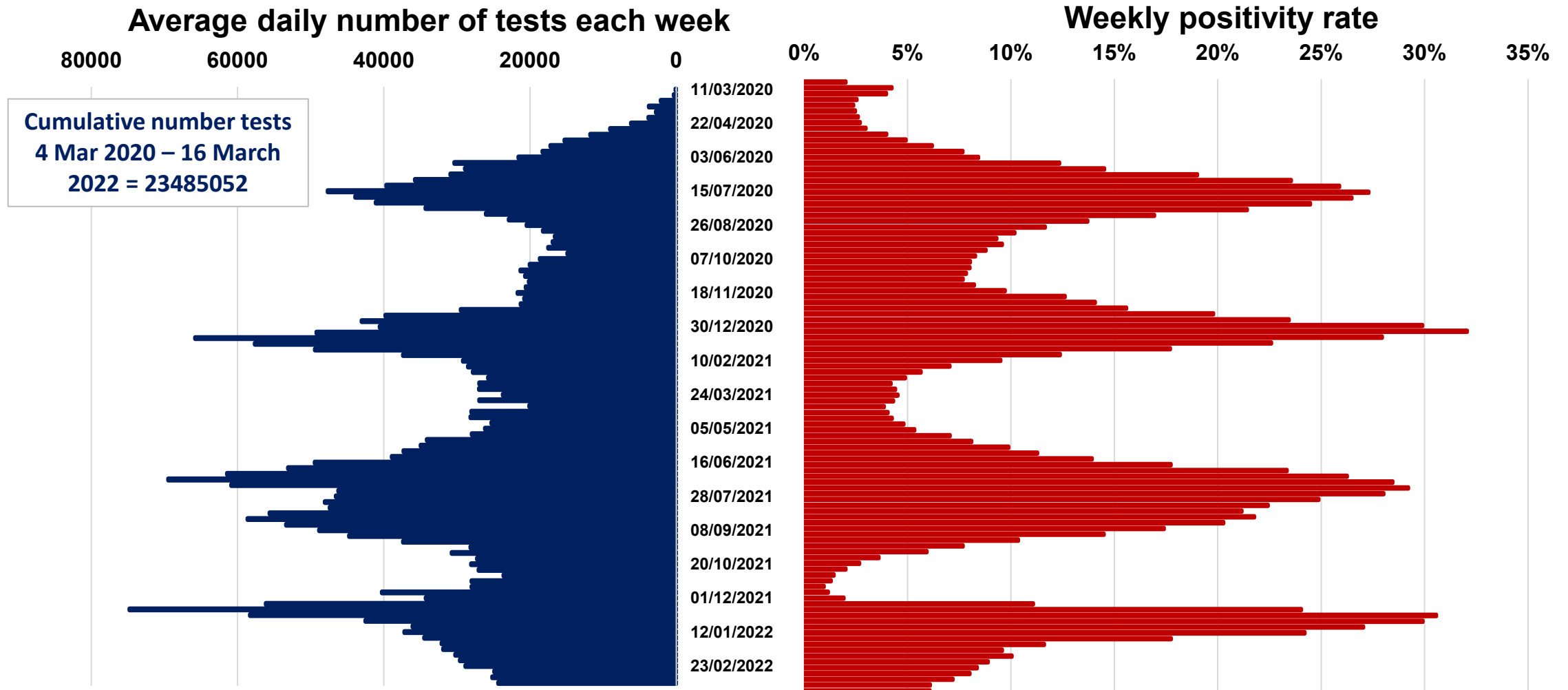
up to - 14 March 2022



Source: Our World in Data; data explorer; Johns Hopkins University [COVID-19 Dashboard](#)

Average daily tests and proportion of positive tests

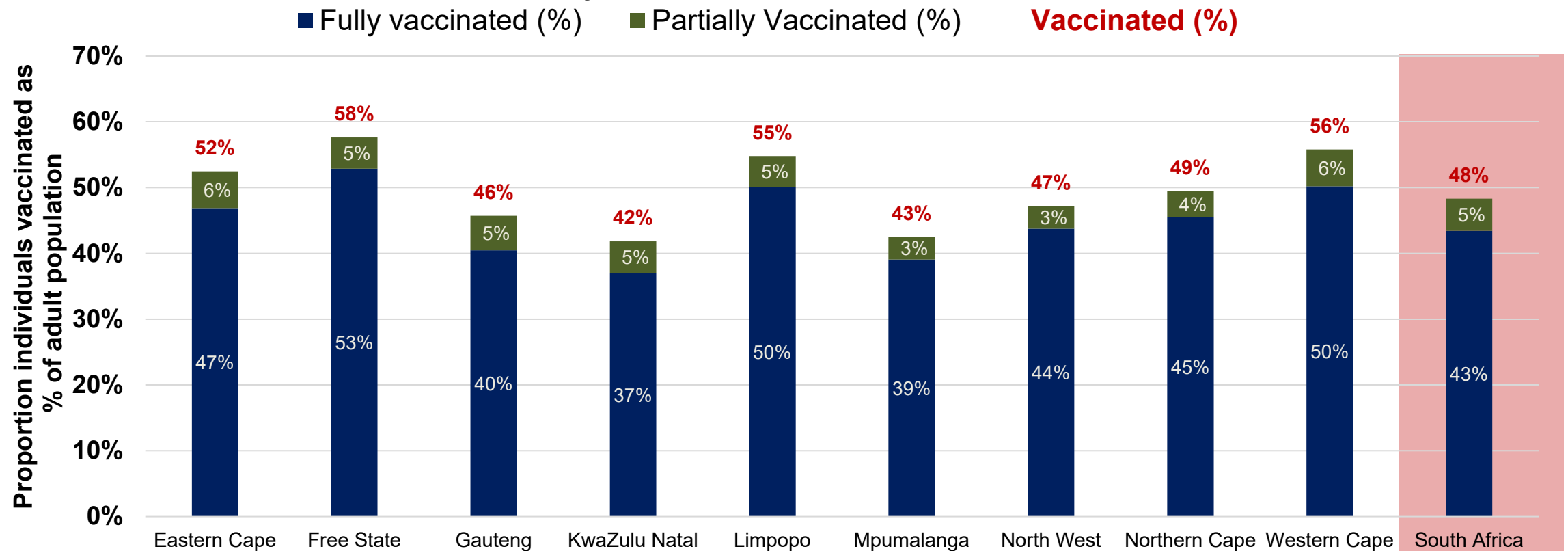
up to - 16 March 2022



Data source: Department of Health

Proportion of individuals vaccinated as % of adult population

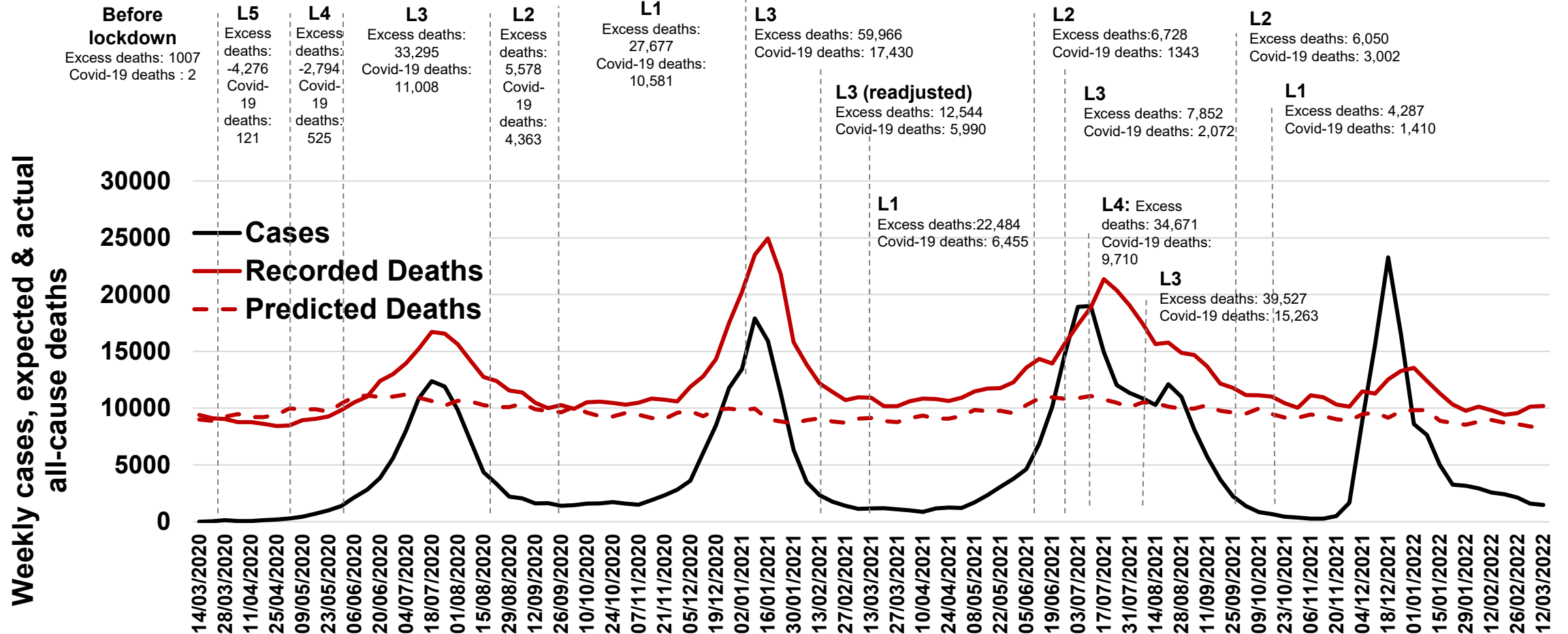
up to – 16 March 2022



Source: Department of Health. <https://sacoronavirus.co.za/latest-vaccine-statistics/>

Expected & actual all-cause deaths during Covid-19

up to – 12 March 2022

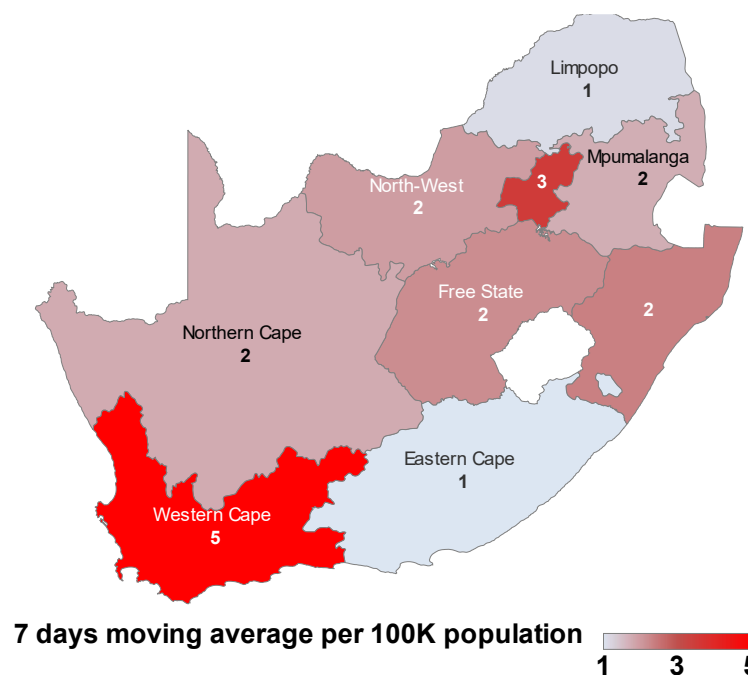


South Africa Provincial SARS-CoV-2 cases in the 4 waves

Daily new cases over last 7 days/100,000

up to - 16 March 2022

Province	Population per 100,000	7 Days Moving Average				Increase / Decrease
		at 7 days back	Per 100K at 7 days back	at a day back	100K at a day back	
Eastern Cape	67	58	1	52	1	-10%
Free State	29	69	2	60	2	-14%
Gauteng	155	544	4	536	3	-2%
KwaZulu Natal	115	263	2	256	2	-3%
Limpopo	59	56	1	53	1	-5%
Mpumalanga	47	76	2	74	2	-3%
North West	41	89	2	74	2	-17%
Northern Cape	13	24	2	21	2	-12%
Western Cape	71	356	5	357	5	0%
South Africa	597	1536	3	1483	2	-3%
Africa	13410	8484	1	6415	0	-24%
World	77952	1607959	21	1754291	23	9%

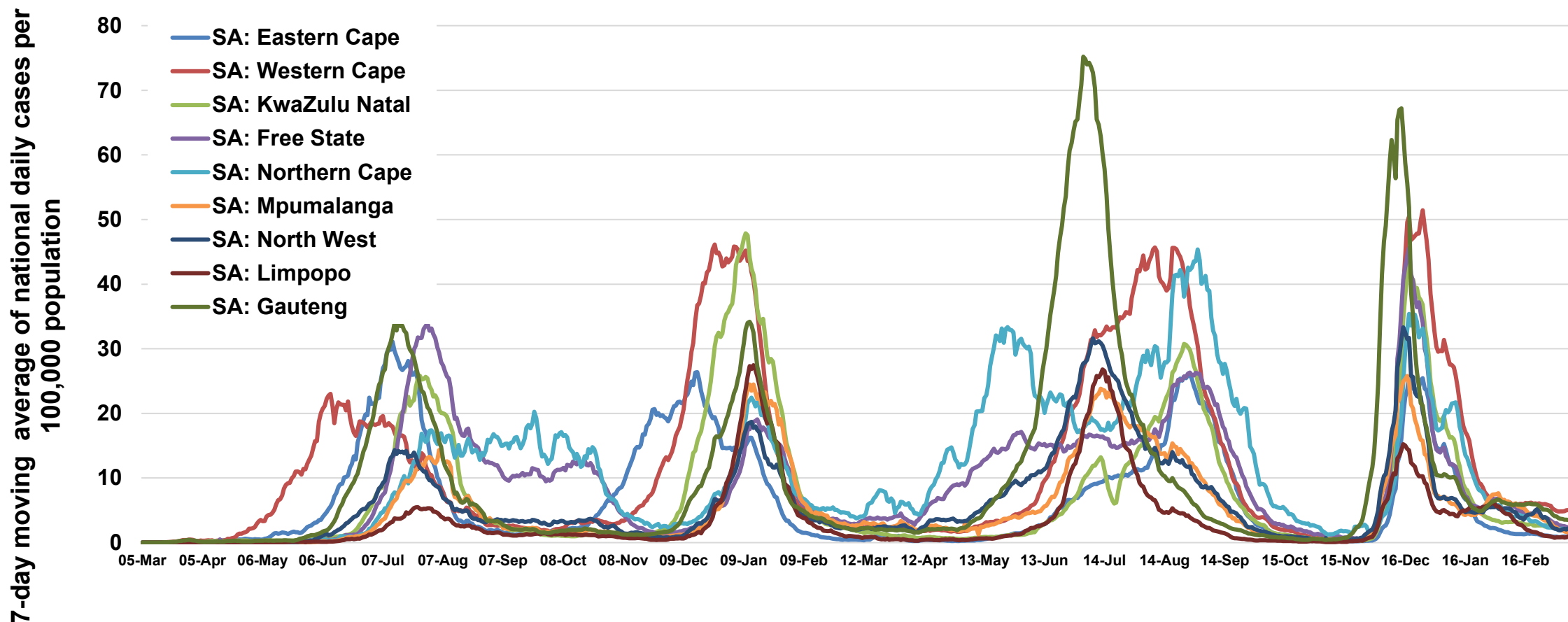


Data source: Department of Health

Confirmed SARS-Cov-2 cases by province

7-day moving average cases per 100,000 population

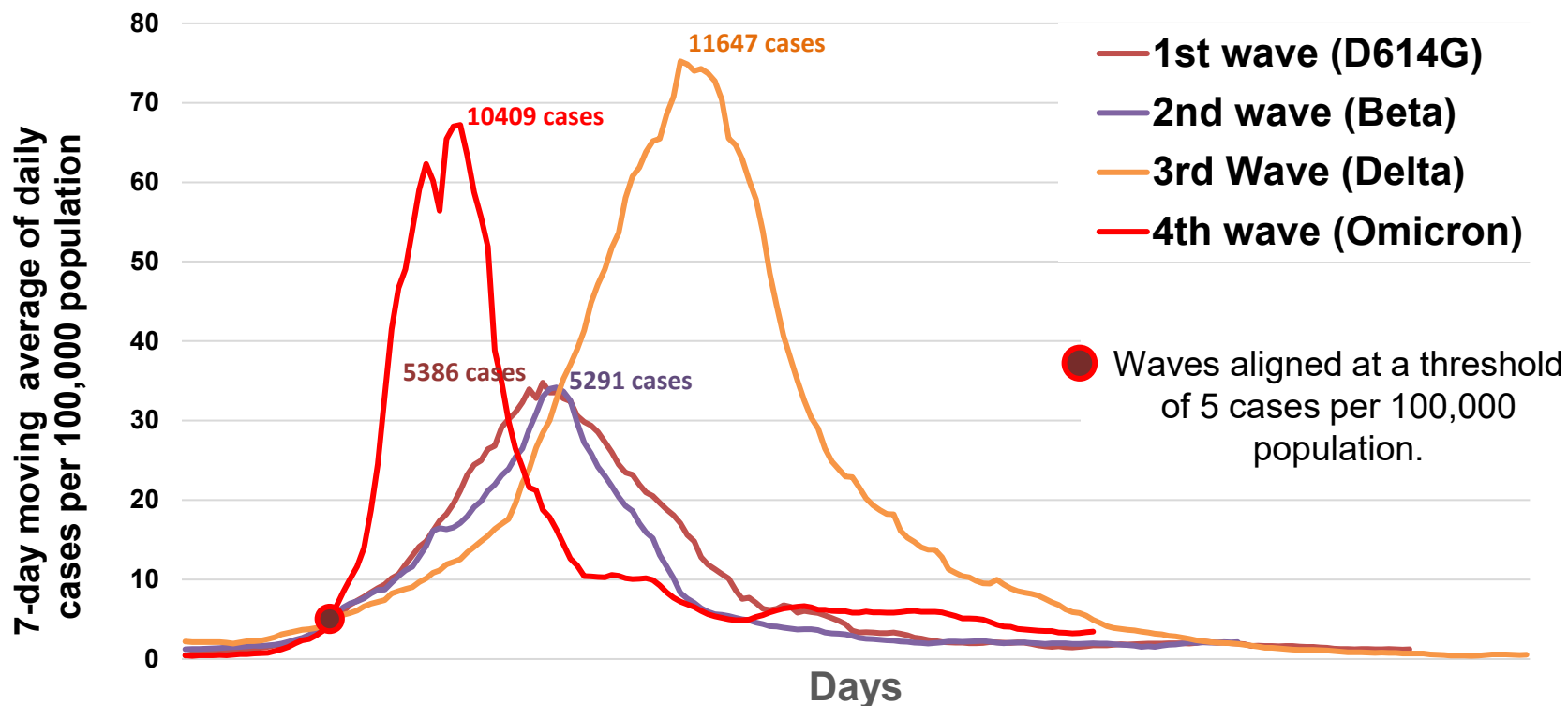
up to - 16 March 2022



Data source: Department of Health; Analysis

SARS-Cov-2 cases in 1st, 2nd & 3rd and 4th waves: Gauteng

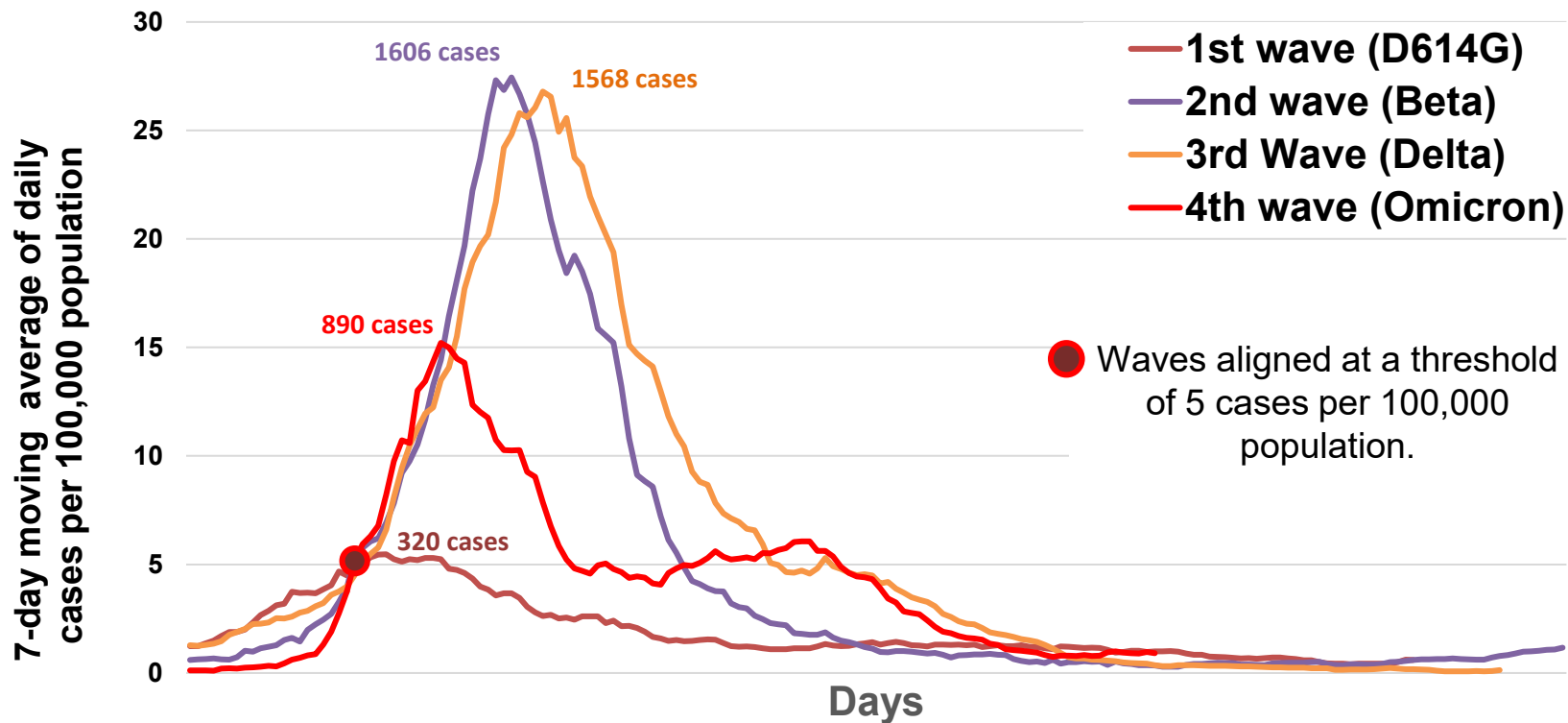
7-day moving average cases per 100,000 population
up to - 16 March 2022



Data source: Department of Health; Analysis: Marothi Letsoalo; Ande Mchunu

SARS-Cov-2 cases in 1st, 2nd & 3rd and 4th waves: Limpopo

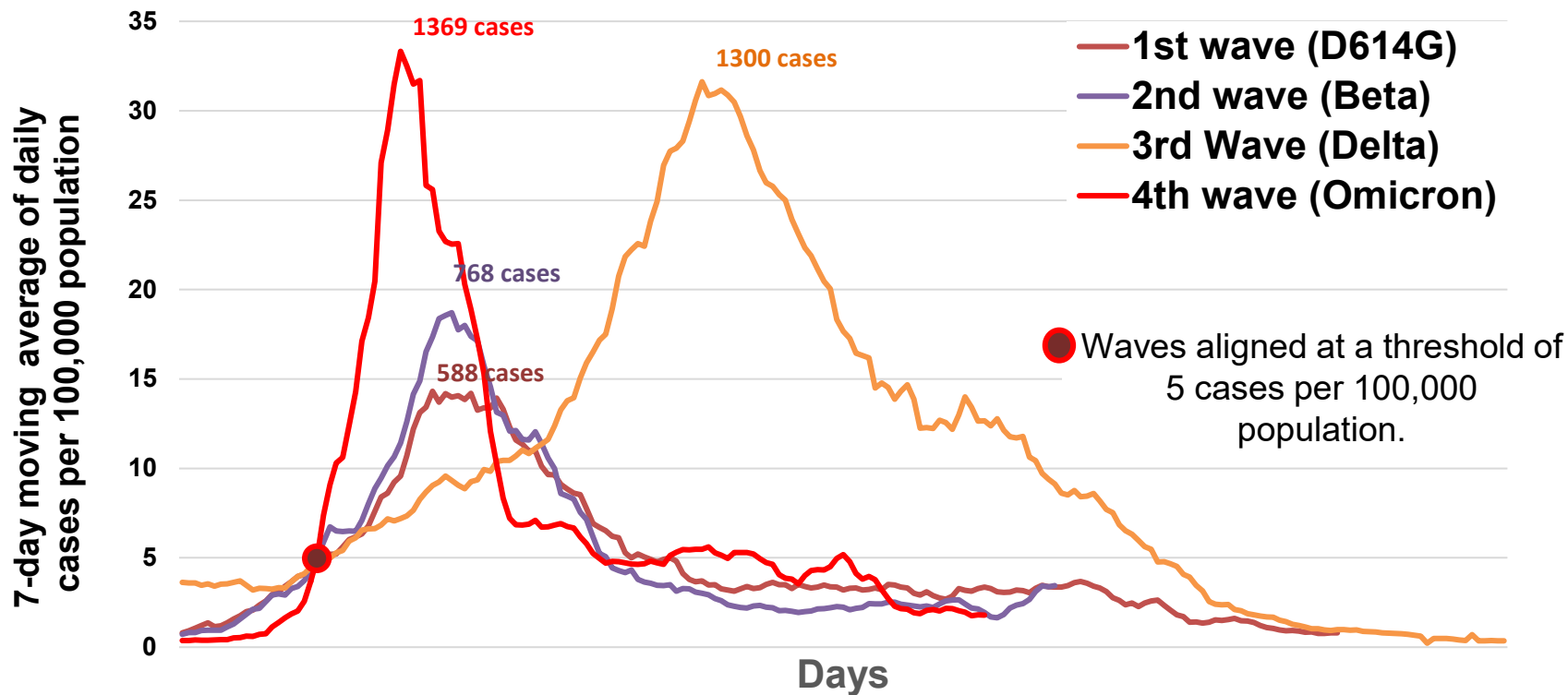
7-day moving average cases per 100,000 population
up to - 16 March 2022



Data source: Department of Health; Analysis: Marothi Letsoalo; Ande Mchunu

SARS-Cov-2 cases in 1st, 2nd & 3rd and 4th waves: North West

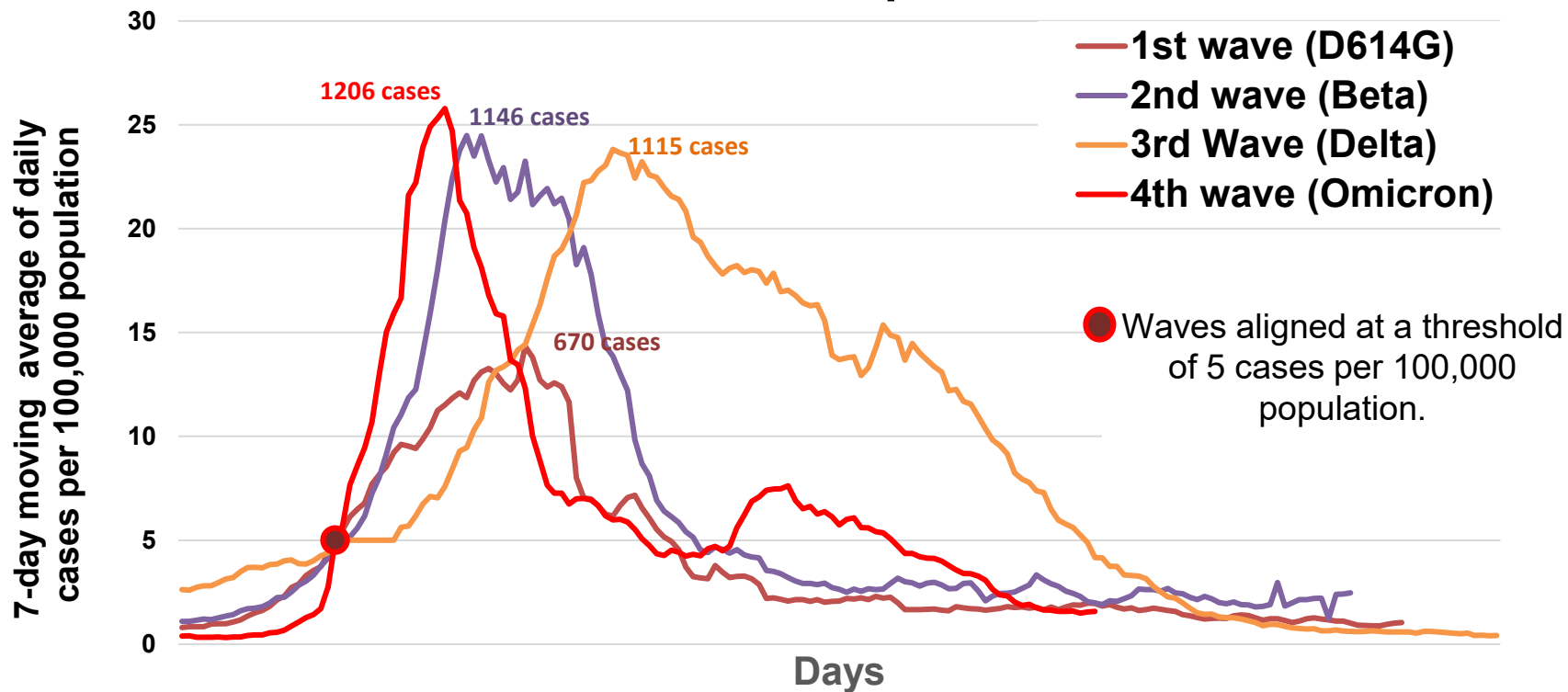
7-day moving average cases per 100,000 population
up to - 16 March 2022



Data source: Department of Health; Analysis: Marothi Letsoalo; Ande Mchunu

SARS-Cov-2 cases in 1st, 2nd & 3rd and 4th waves: Mpumalanga

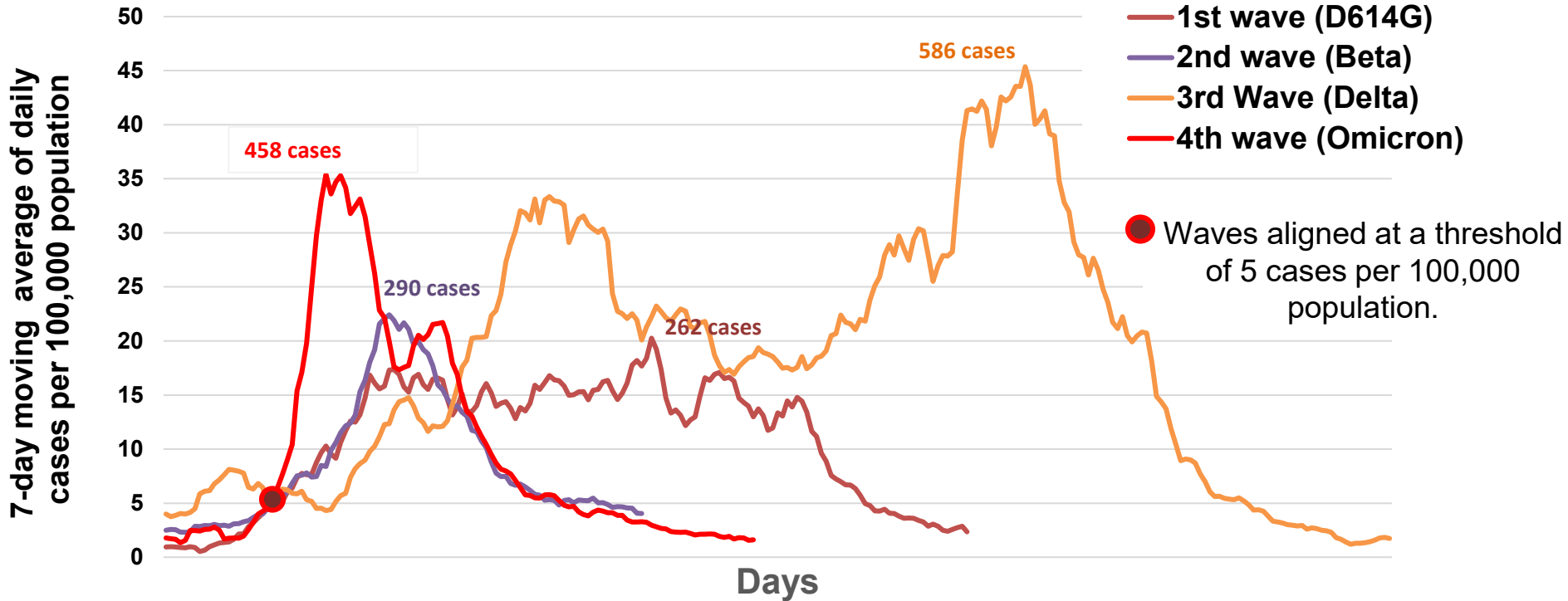
7-day moving average cases per 100,000 population
up to - 16 March 2022



Data source: Department of Health; Analysis: Marothi Letsoalo; Ande Mchunu

SARS-Cov-2 cases in 1st, 2nd & 3rd and 4th waves: Northern Cape

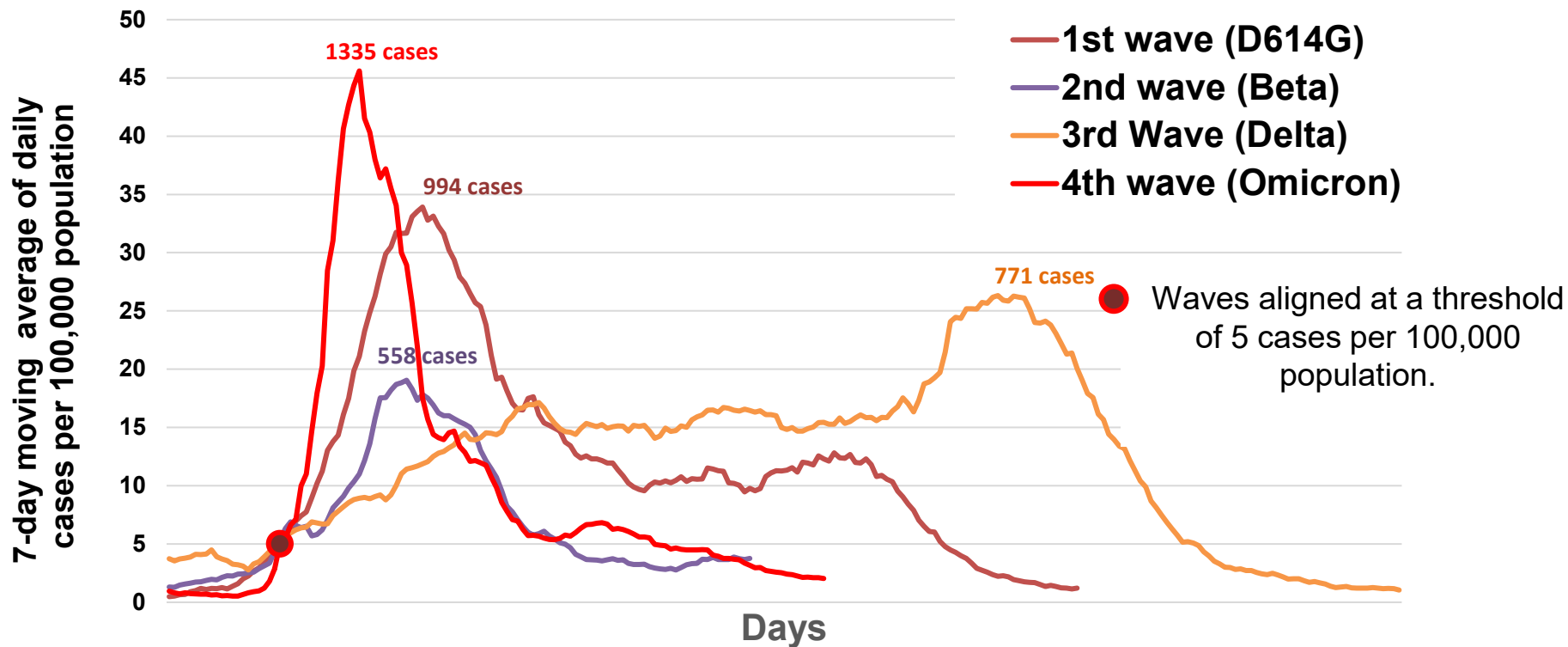
7-day moving average cases per 100,000 population up to - 16 March 2022



Data source: Department of Health; Analysis: Marothi Letsoalo; Ande Mchunu

SARS-Cov-2 cases in 1st, 2nd & 3rd and 4th waves: Free State

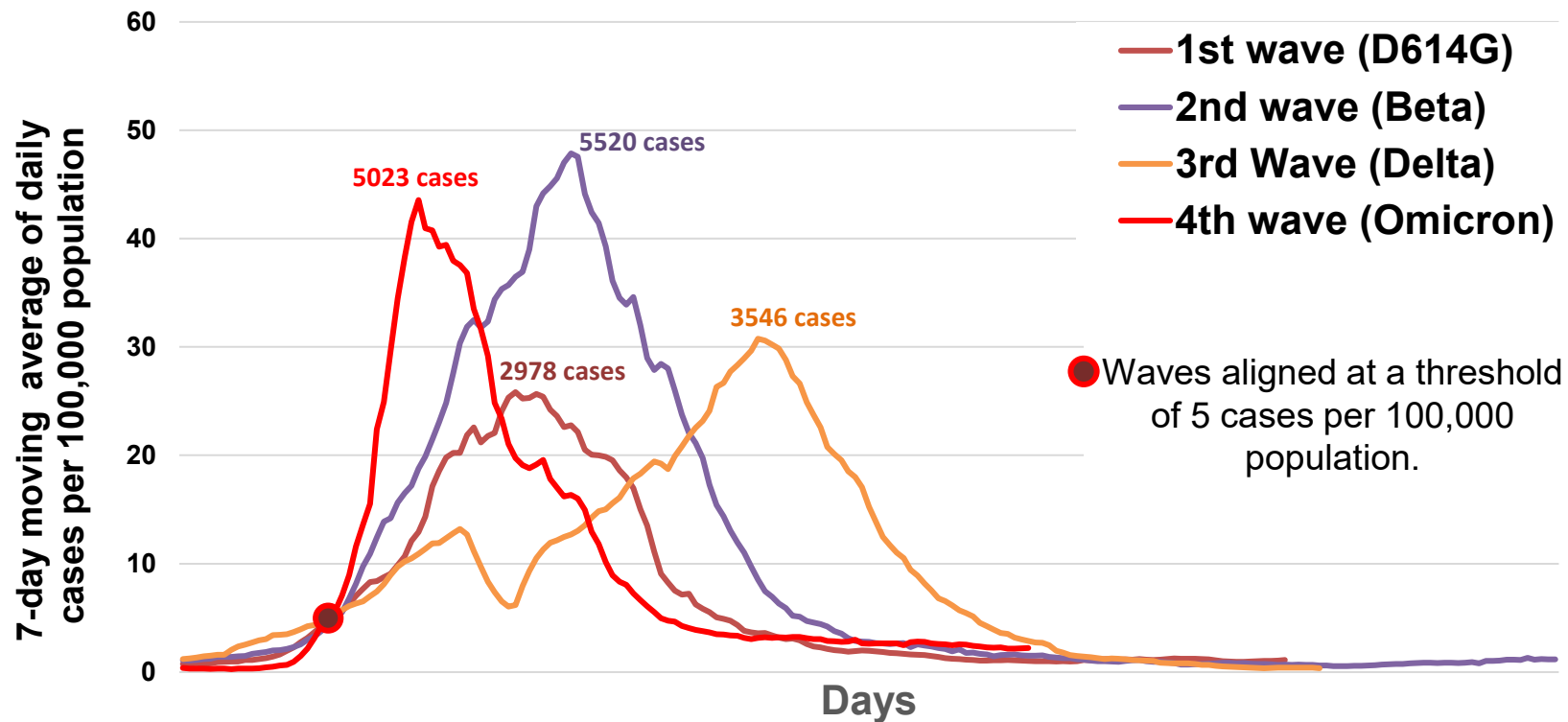
7-day moving average cases per 100,000 population up to - 16 March 2022



Data source: Department of Health; Analysis: Marothi Letsoalo; Ande Mchunu

SARS-Cov-2 cases in 1st, 2nd & 3rd and 4th waves: KwaZulu Natal

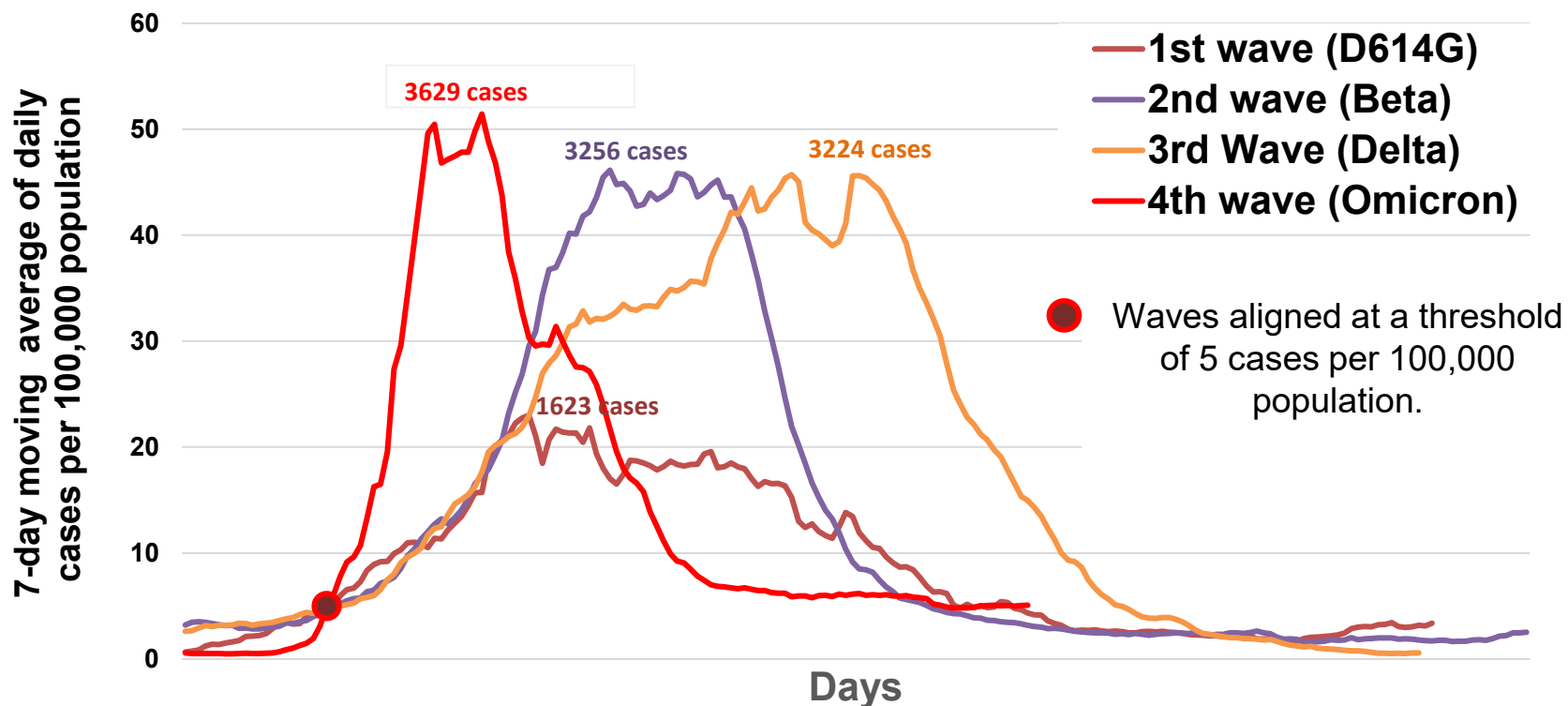
7-day moving average cases per 100,000 population
up to - 16 March 2022



Data source: Department of Health; Analysis: Marothi Letsoalo; Ande Mchunu

SARS-Cov-2 cases in 1st, 2nd & 3rd and 4th waves: Western Cape

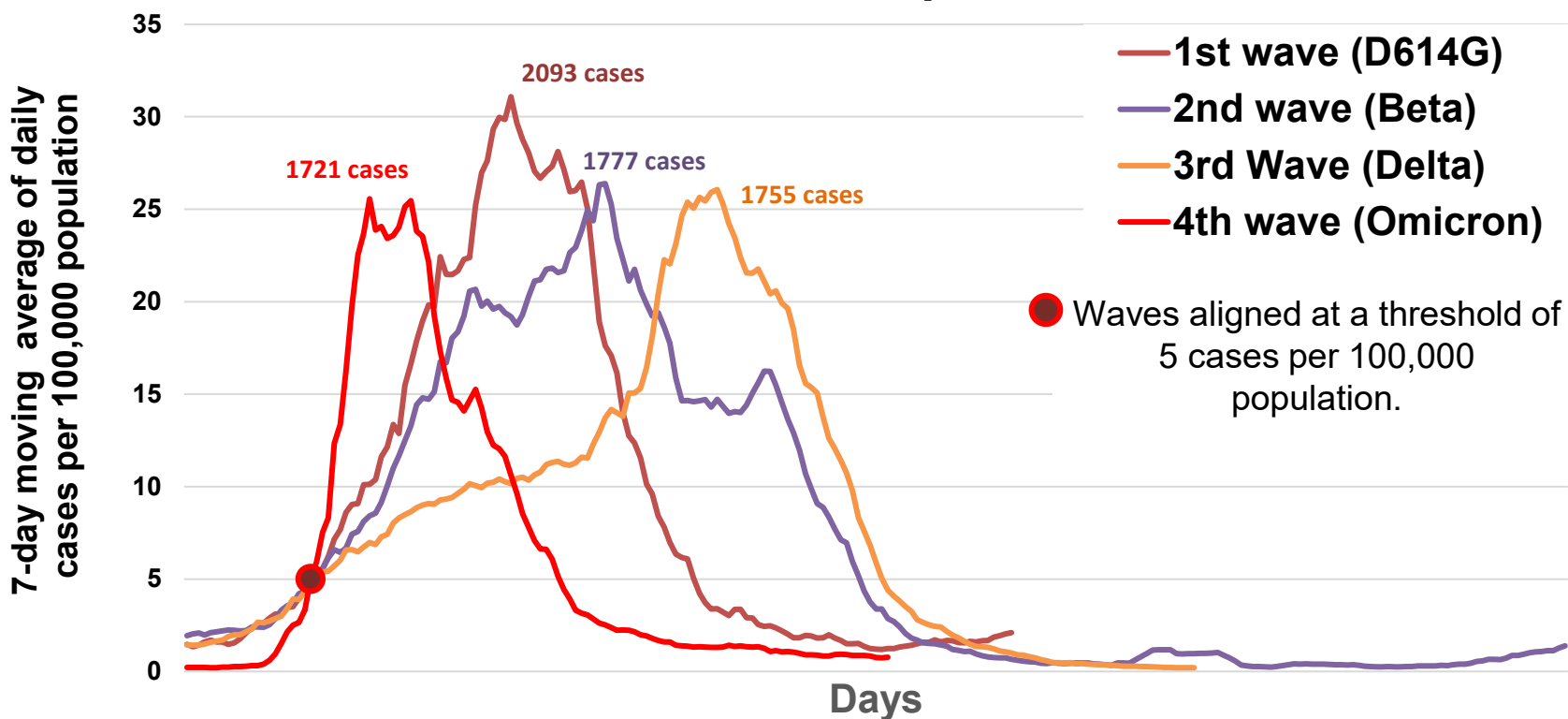
7-day moving average cases per 100,000 population
up to - 16 March 2022



Data source: Department of Health; Analysis: Marothi Letsoalo; Ande Mchunu

SARS-Cov-2 cases in 1st, 2nd & 3rd and 4th waves: Eastern Cape

7-day moving average cases per 100,000 population
up to - 16 March 2022



Data source: Department of Health; Analysis: Marothi Letsoalo; Ande Mchunu