



COVID-19 in South Africa UPDATE

24 February 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



health
Department:
Health
REPUBLIC OF SOUTH AFRICA

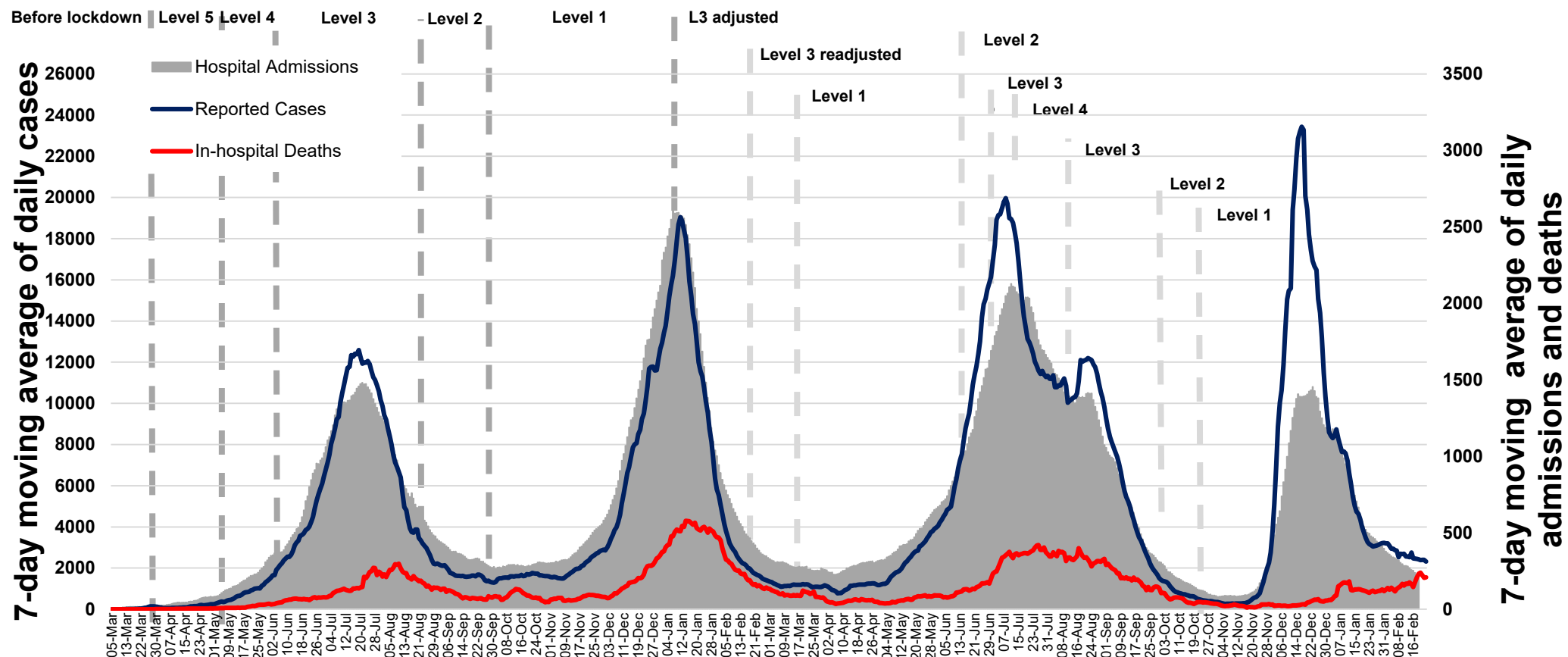
COLUMBIA
UNIVERSITY

MAILMAN SCHOOL
of PUBLIC HEALTH



Covid-19 in South Africa

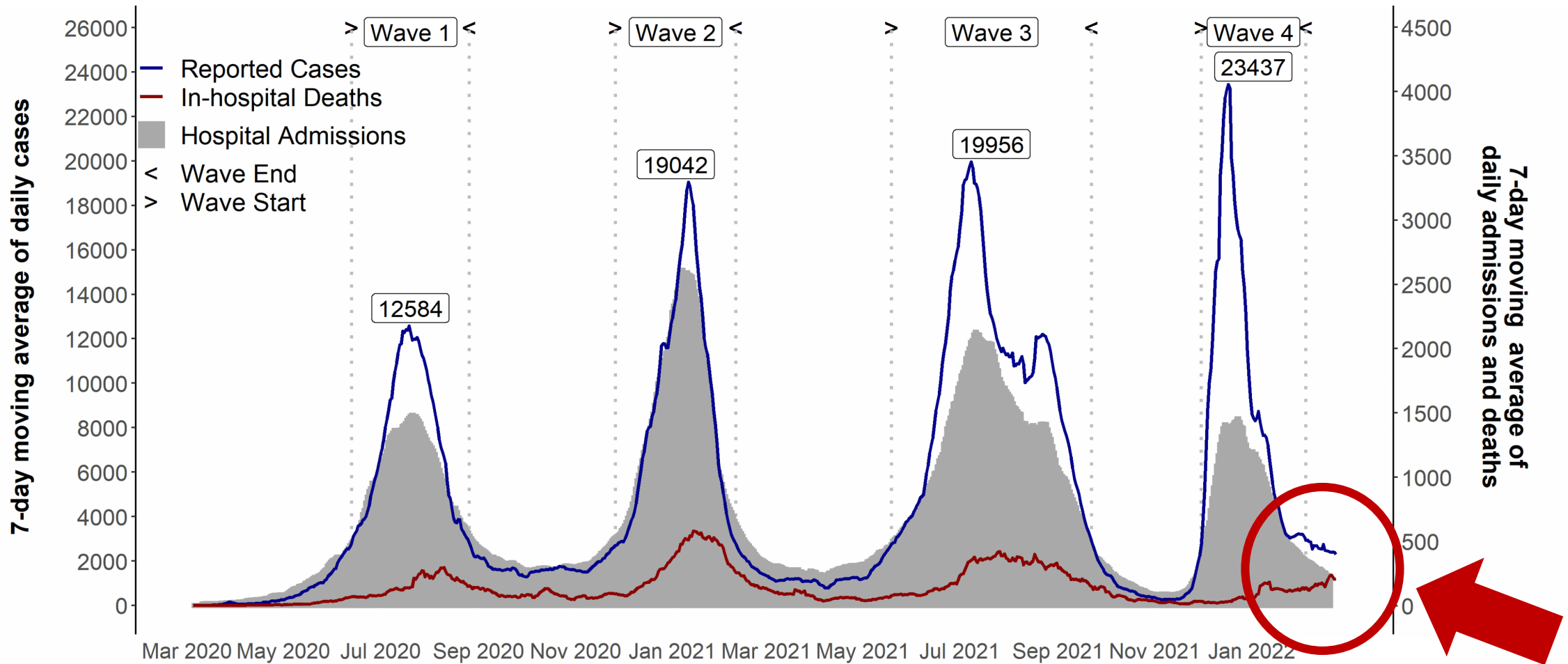
7-day moving average of new cases, hospital admissions and in-hospital Covid-19 deaths
up to - 23 February 2022



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

Covid-19 in South Africa

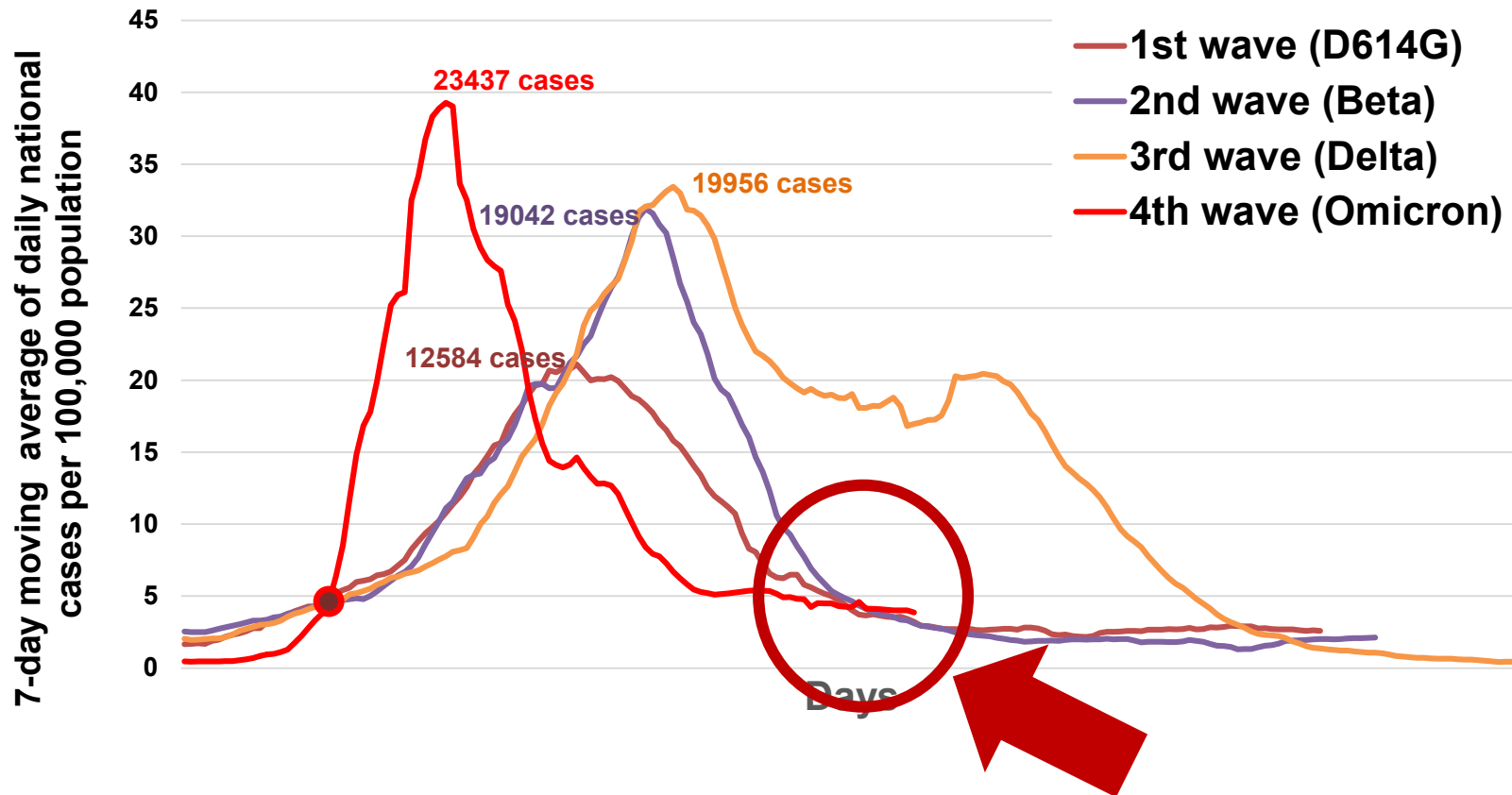
up to - 23 February 2022



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

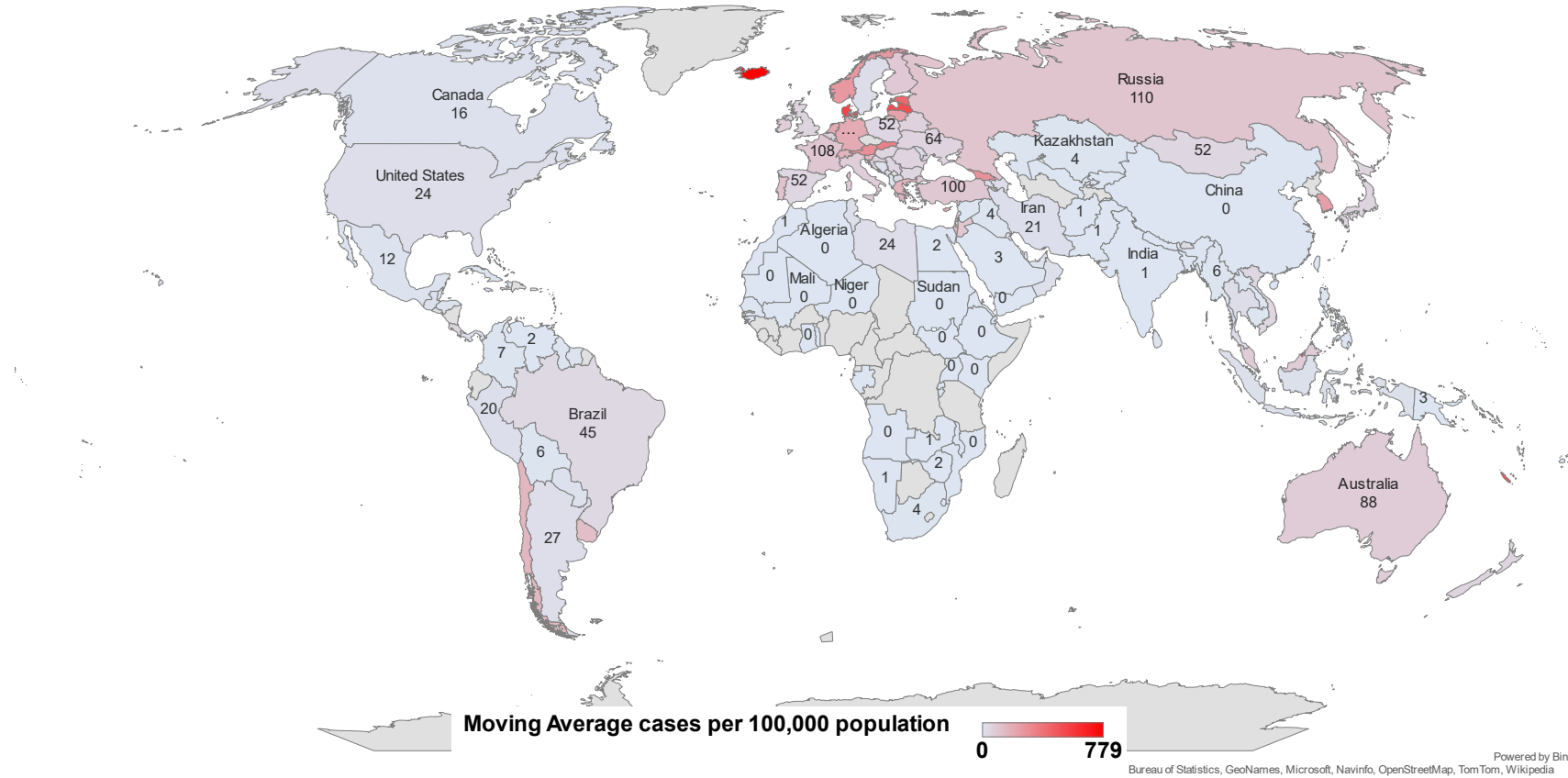
7-day moving average cases per 100,000 population
up to - 23 February 2022



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

Global Covid-19 epidemic

**7-day moving average cases per 100,000 population
up to - 23 February 2022**

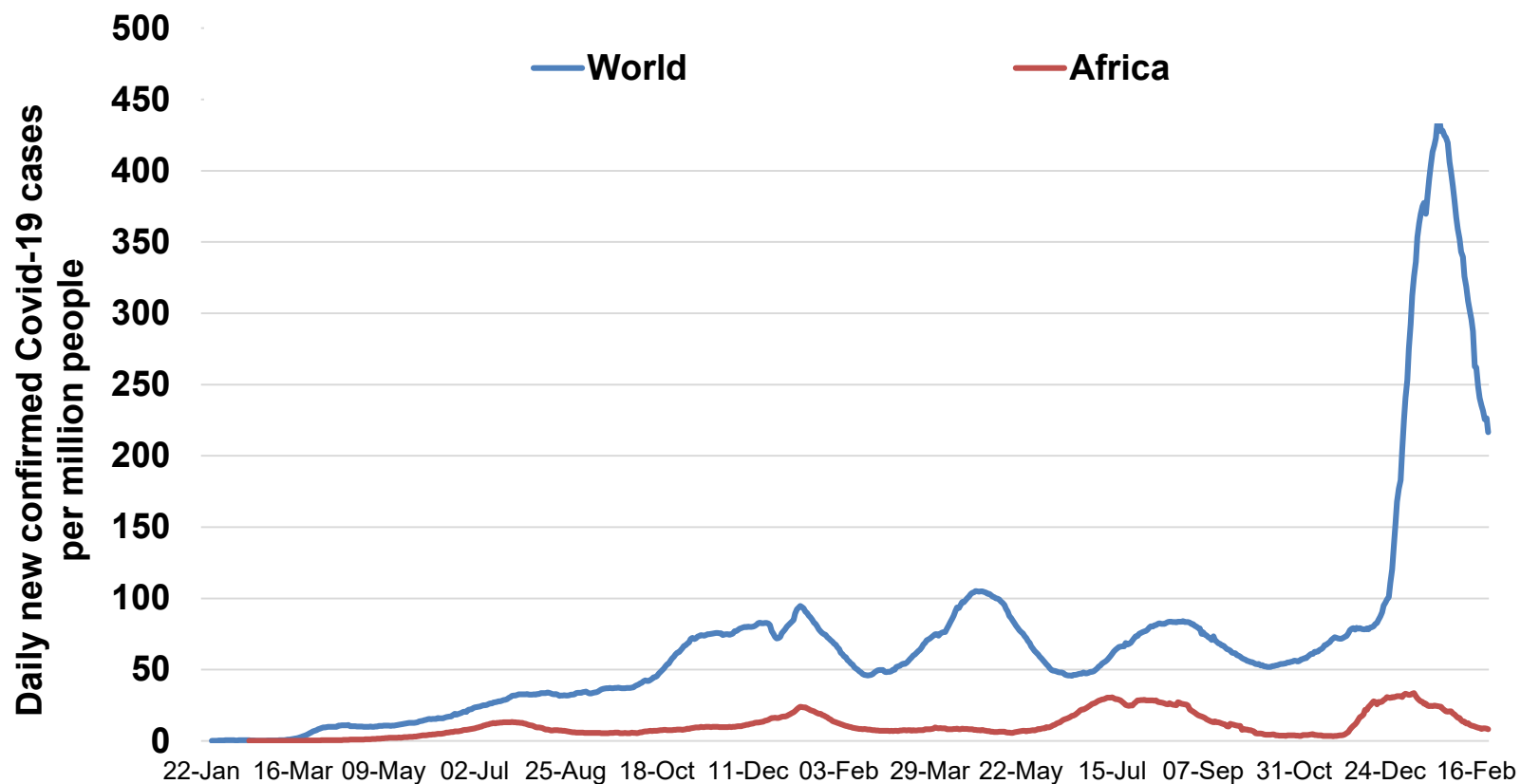


Source: *Our World in Data*

Covid-19 in Africa

Omicron variant drives 4th wave

up to - 23 February 2022



WORLD

* 403 million cumulative global case and 5.8 million deaths

AFRICA

* 11 million cumulative cases (2.7 % of global cases - 22 January 2020 up to 09 February 2022)

* 242712 deaths (CFR: 2.2%; ~4.2% of global deaths in 15% of world's population)

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

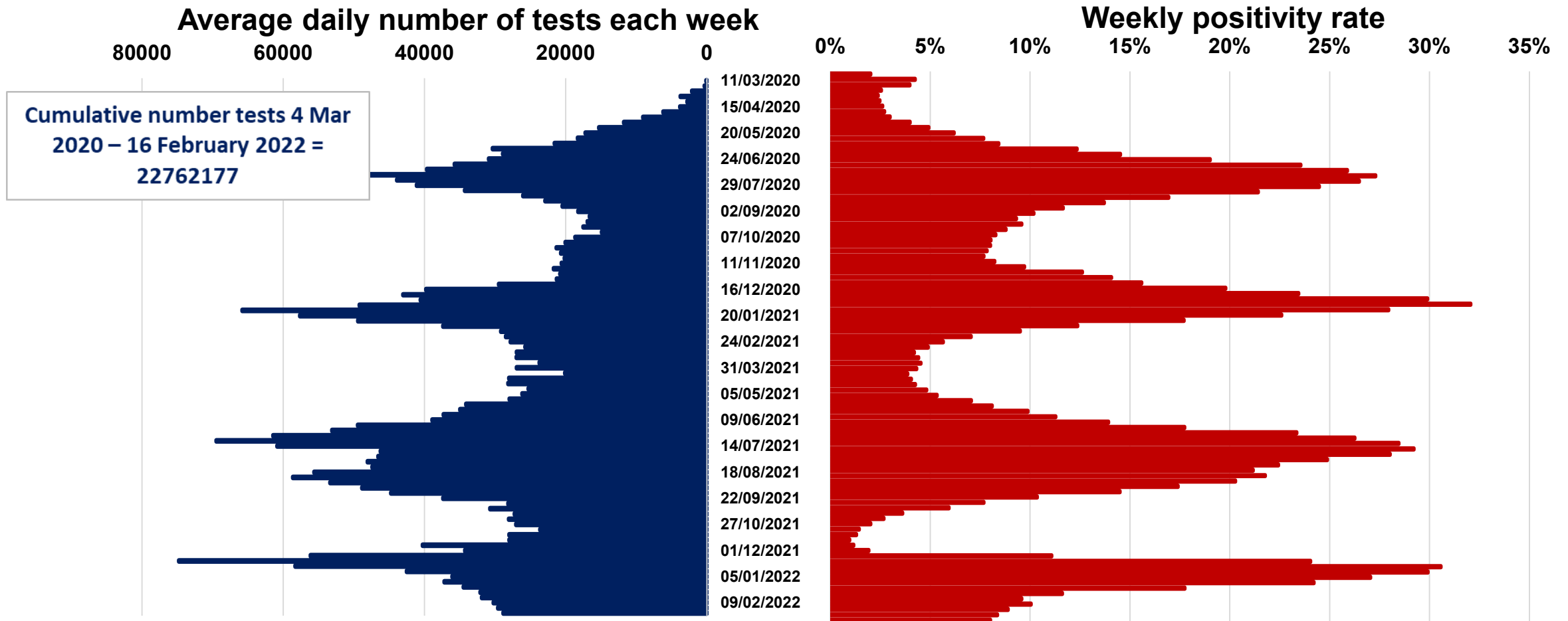
up to - 23 February 2022



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

Average daily tests and proportion of positive tests

up to – 24 February 2022

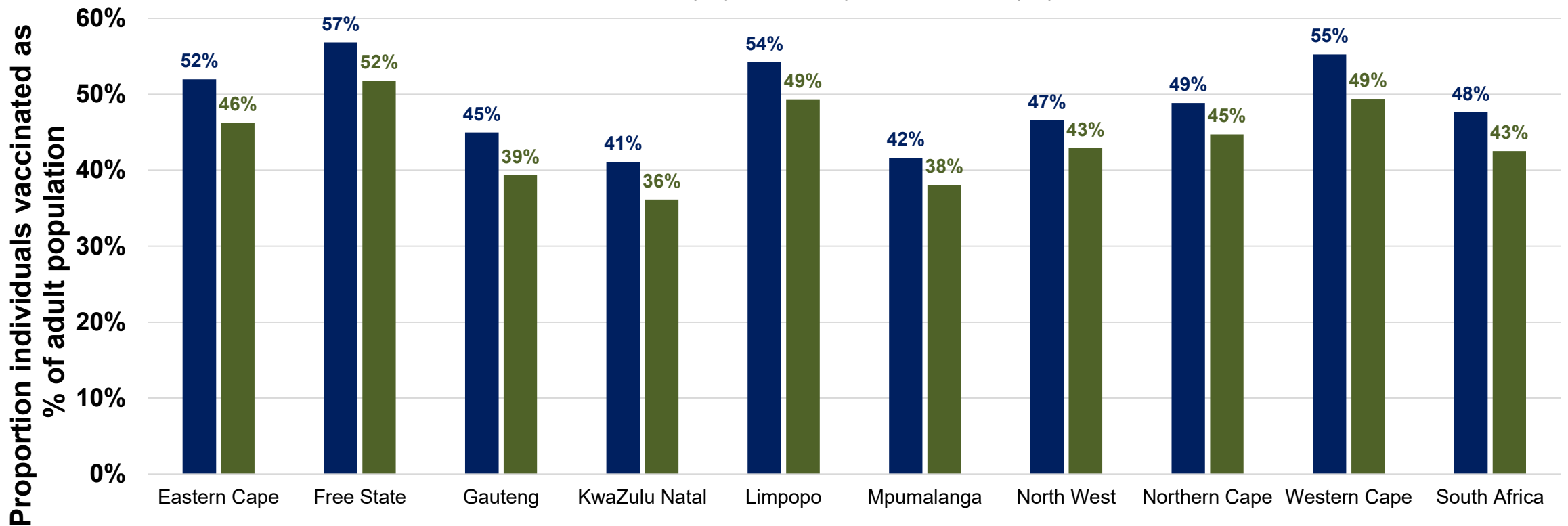


Data source: Department of Health

Proportion of individuals vaccinated as % of adult population

up to - 24 February 2022

■ Vaccinated (%) ■ Fully vaccinated (%)

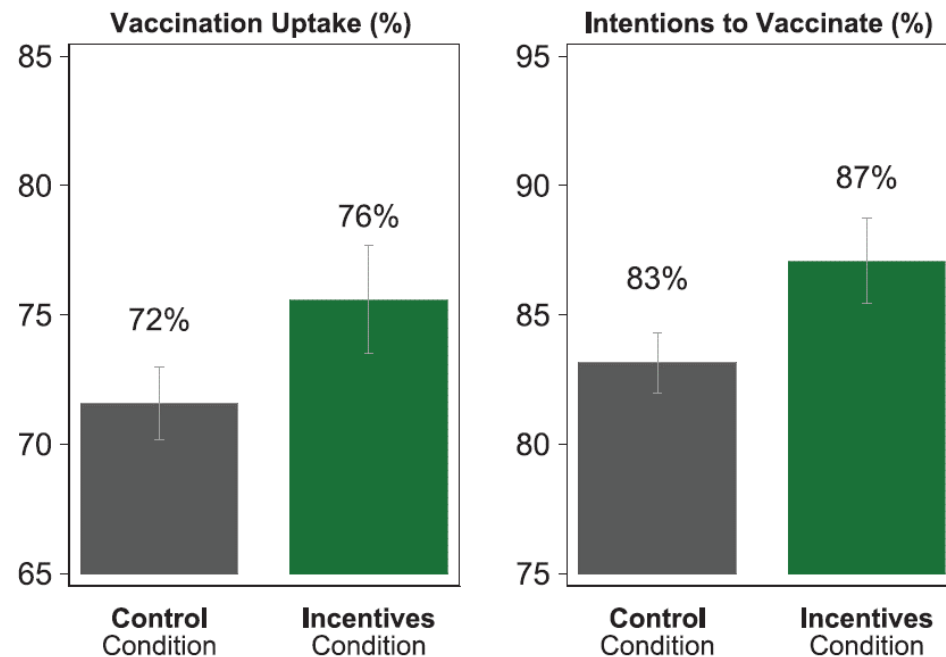


Source: Department of Health. <https://sacoronavirus.co.za/latest-vaccine-statistics/>

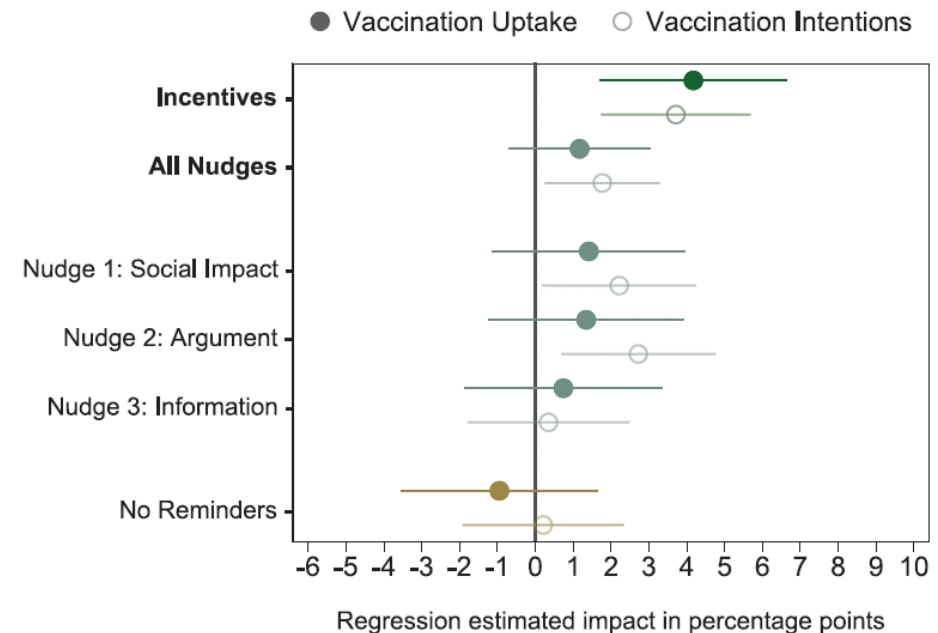
Science

Monetary incentives increase COVID-19 vaccinations

Pol Campos-Mercade^{1*†}, Armando N. Meier^{2,3*†}, Florian H. Schneider^{4*†}, Stephan Meier^{5*}, Devin Pope^{6,7*}, Erik Wengström^{8,9,10*}



Vaccination uptake and intentions to get vaccinated, among those in the incentives condition and the control condition



Regression-estimated effects of experimental conditions on vaccination uptake and vaccination intentions vs the control condition

Vaccination reduced transmission SARS-CoV-2 to contacts (in two variants)

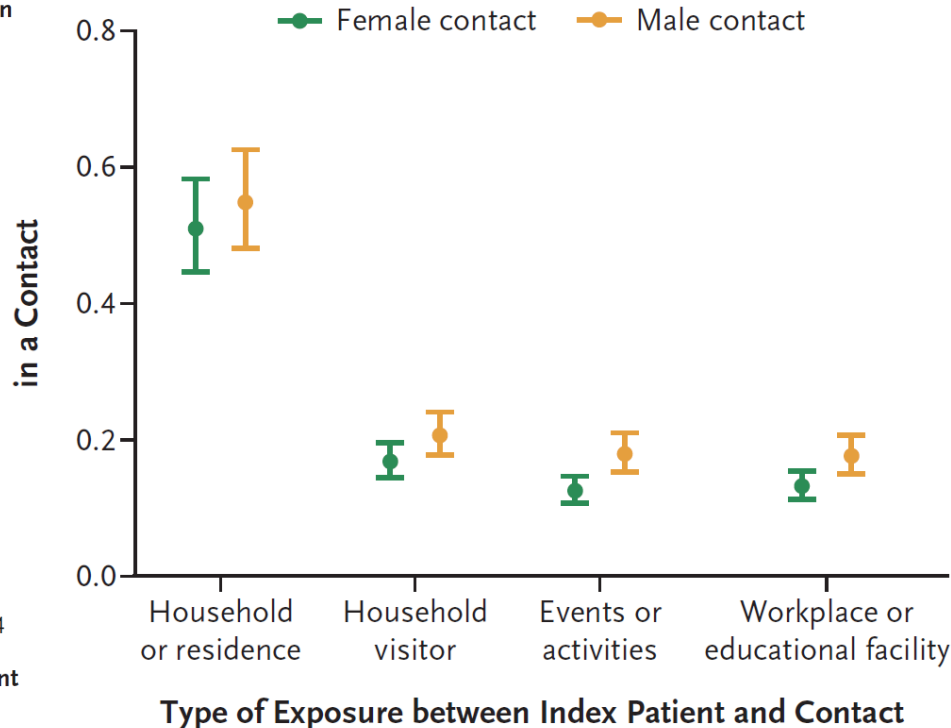
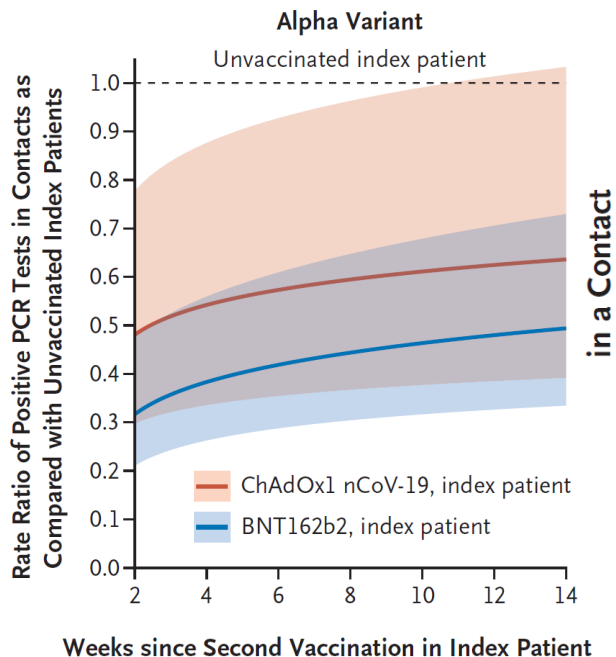


The NEW ENGLAND
JOURNAL of MEDICINE

Effect of Covid-19 Vaccination on Transmission of Alpha and Delta Variants

David W. Eyre, B.M., B.Ch., D.Phil., Donald Taylor, M.Math., Mark Purver, Ph.D.,
David Chanman Ph.D. Tom Fowler Ph.D. Koen R. Pauwels Ph.D.

Effect of Vaccination of Index Patient on Transmission

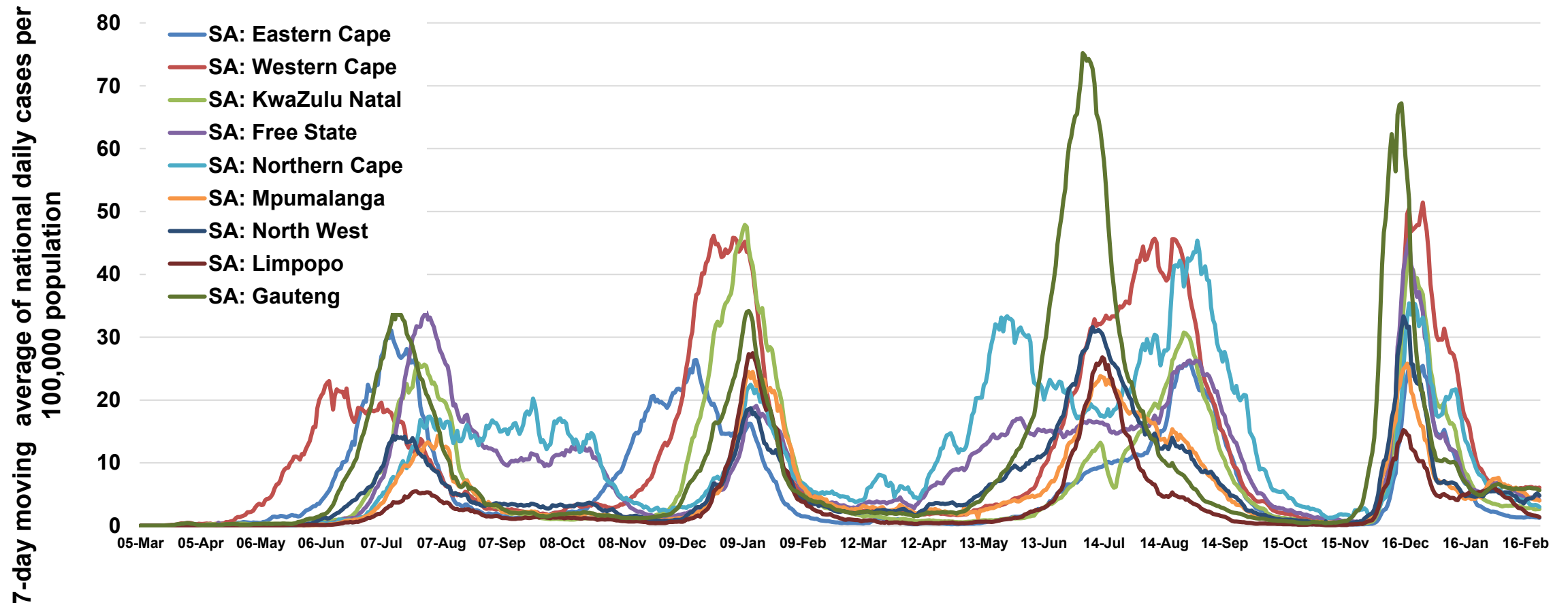


- **146,243 contacts of 108,498 index patients tested (37% +)**
- **Pfizer (X2) or AstraZeneca (X2)** → reduced infection by **68%** and **52%** in contacts when compared to infections in contacts of unvaccinated
- **Vaccine → lower viral load – ↓ infectiousness**
- **Residence contacts – high risk**

Confirmed SARS-Cov-2 cases by province

7-day moving average cases per 100,000 population

up to - 24 February 2022

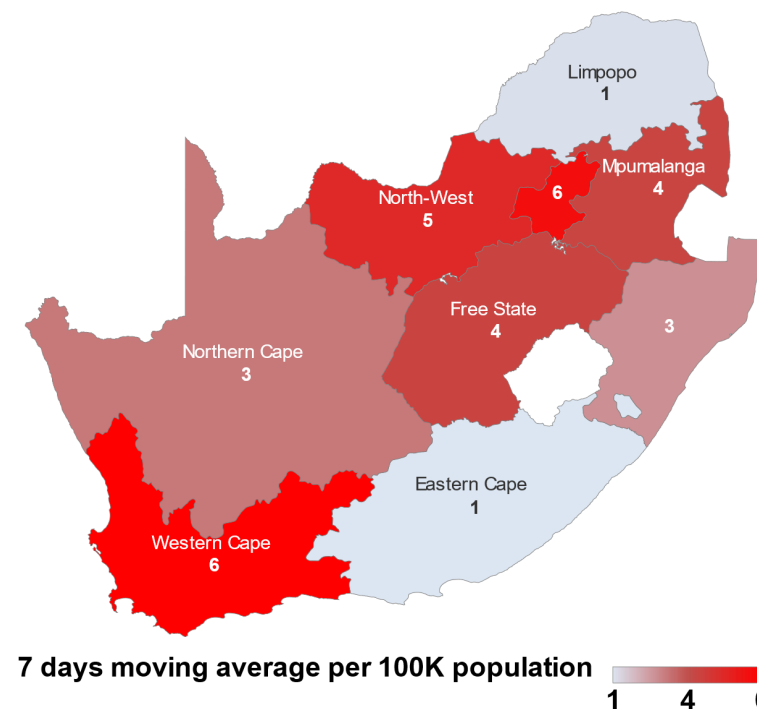


Data source: Department of Health; Analysis

Daily new cases over last 7 days/100,000

up to - 23 February 2022

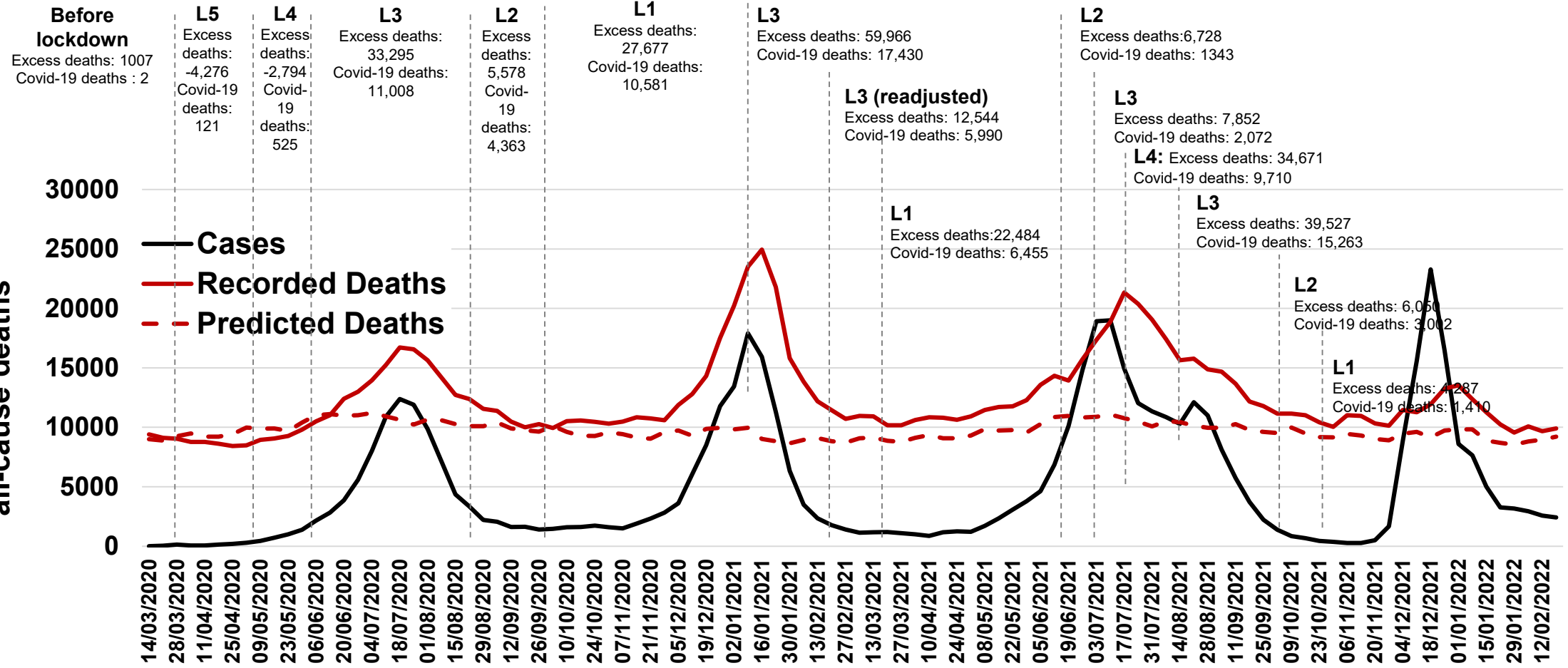
Province	Population per 100,000	7 Days Moving Average				Increase / Decrease
		at 7 days back	Per 100K at 7 days back	at a day back	100K at a day back	
Eastern Cape	67	87	1	85	1	-2%
Free State	29	133	5	118	4	-11%
Gauteng	155	933	6	874	6	-6%
KwaZulu Natal	115	322	3	303	3	-6%
Limpopo	59	111	2	79	1	-29%
Mpumalanga	47	221	5	187	4	-16%
North West	41	176	4	198	5	12%
Northern Cape	13	49	4	39	3	-21%
Western Cape	71	426	6	428	6	1%
South Africa	597	2459	4	2312	4	-6%
Africa	13410	12649	1	11240	1	-11%
World	77952	1957933	25	1705971	22	-13%



Expected & actual all-cause deaths during Covid-19

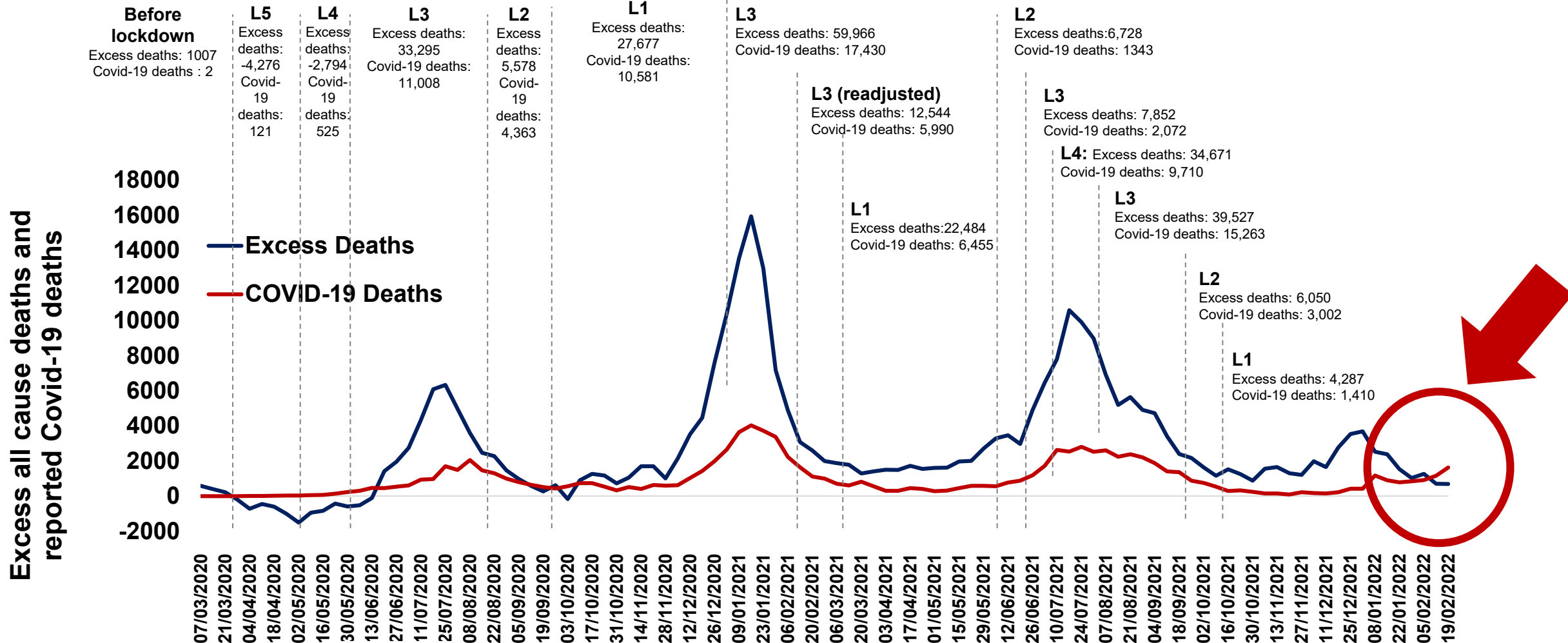
up to - 19 February 2022

Weekly cases, expected & actual
all-cause deaths



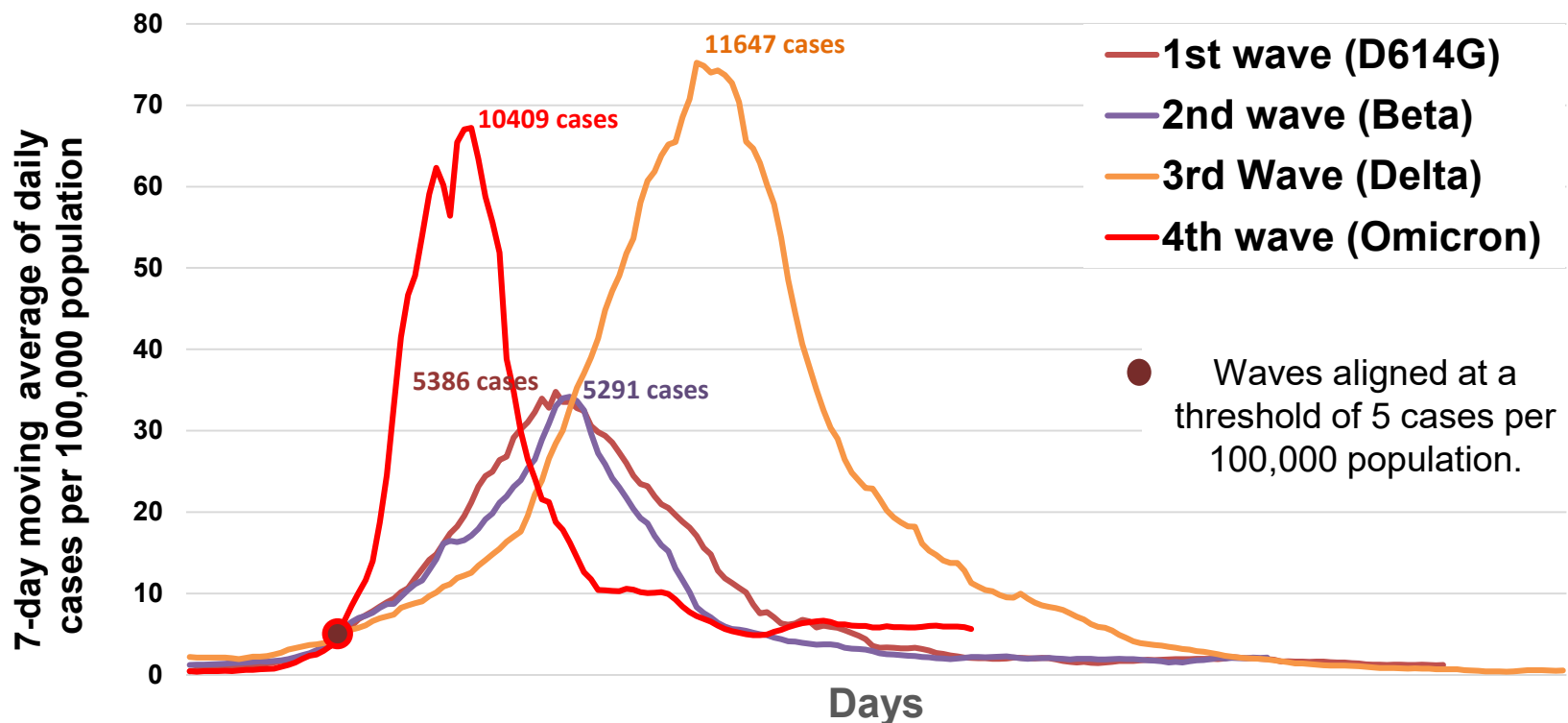
Weekly excess all cause deaths & reported Covid-19 deaths

up to – 19 February 2022



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

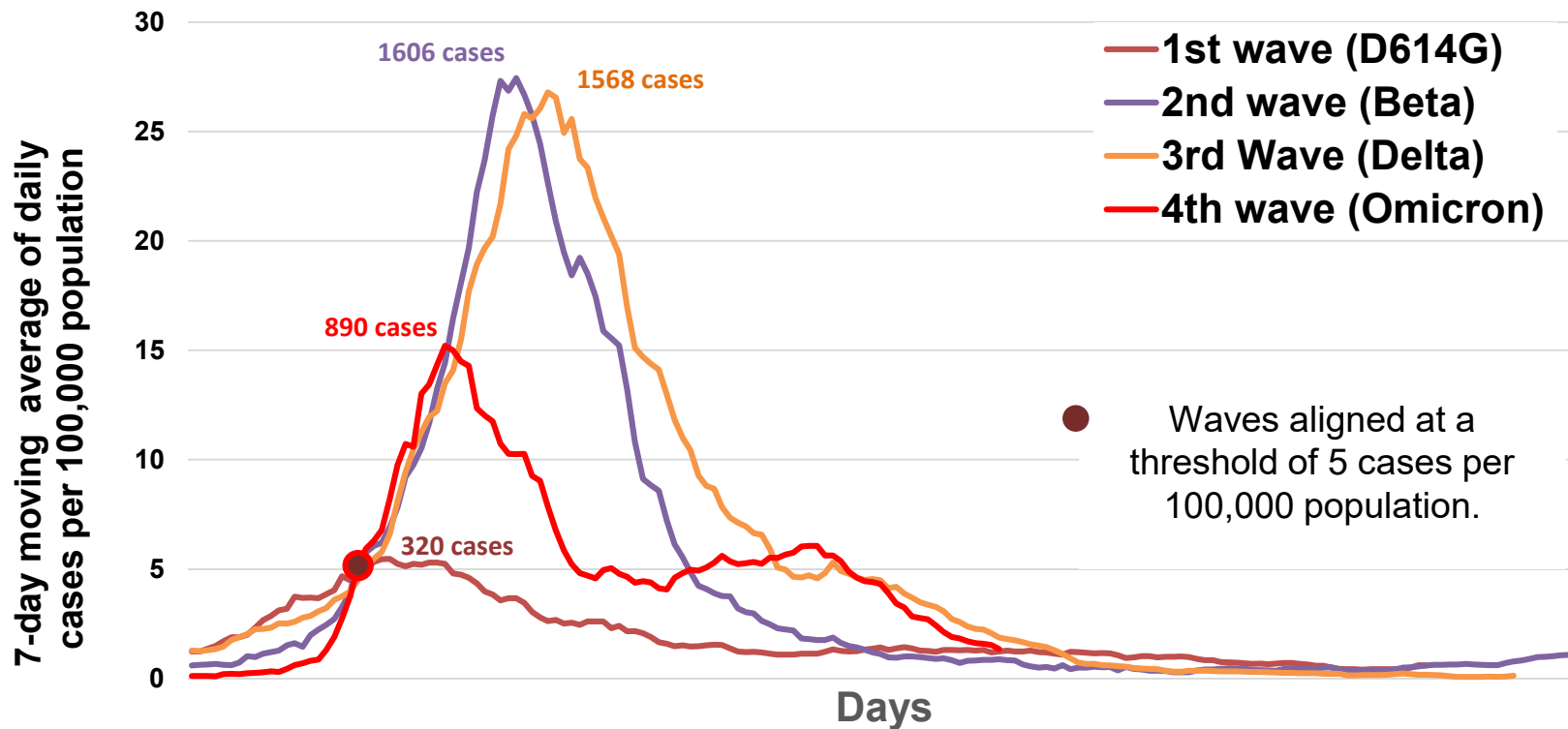
7-day moving average cases per 100,000 population
up to - 23 February 2022



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

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

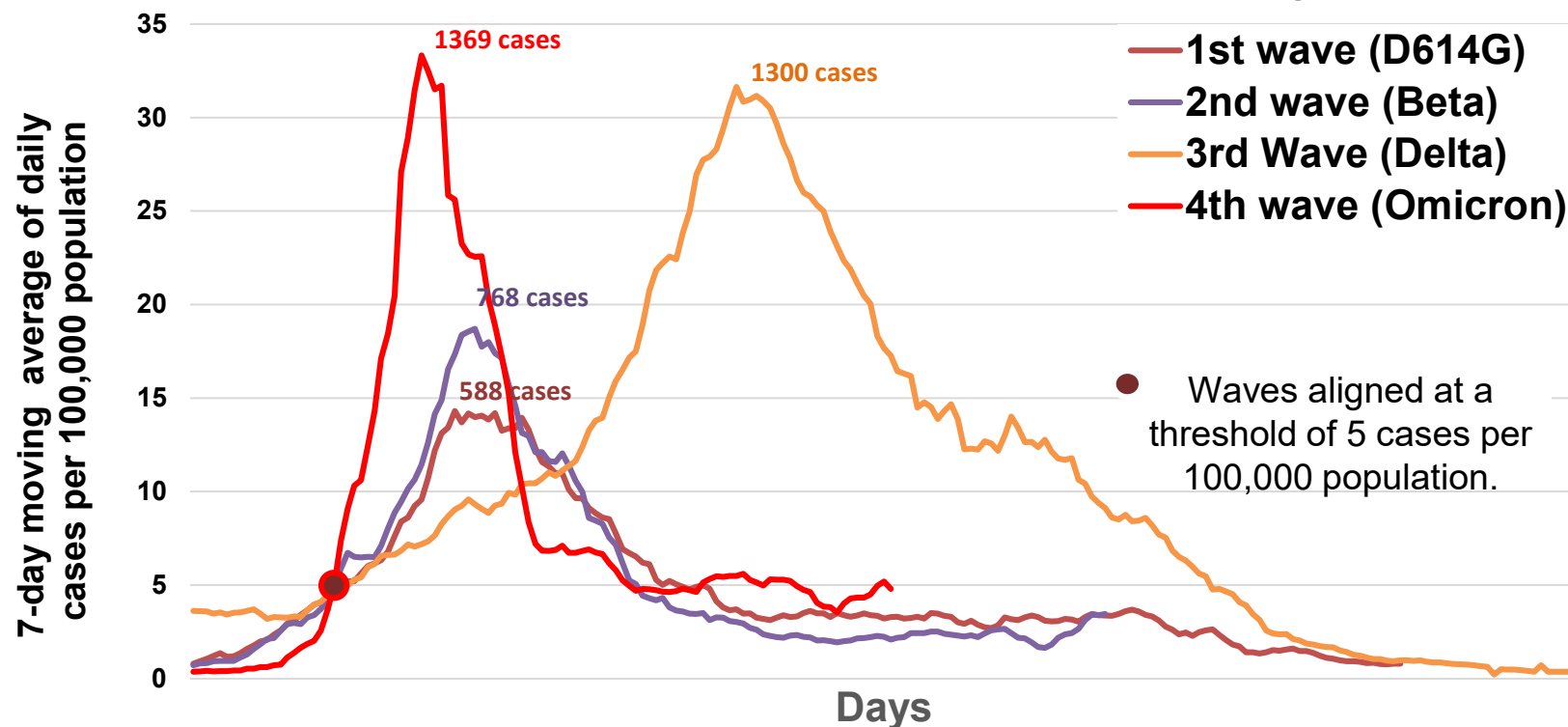
7-day moving average cases per 100,000 population
up to - 23 February 2022



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

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

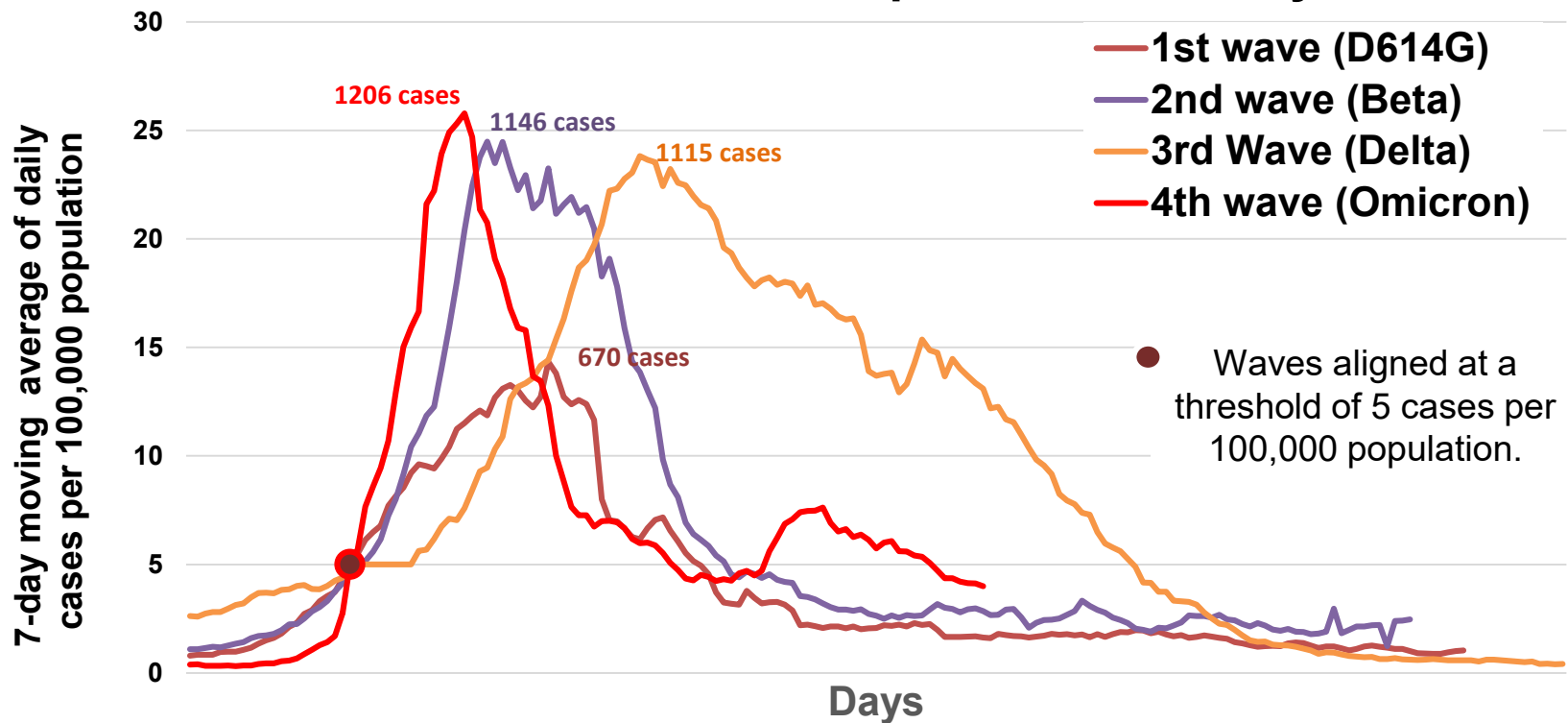
7-day moving average cases per 100,000 population
up to - 23 February 2022



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

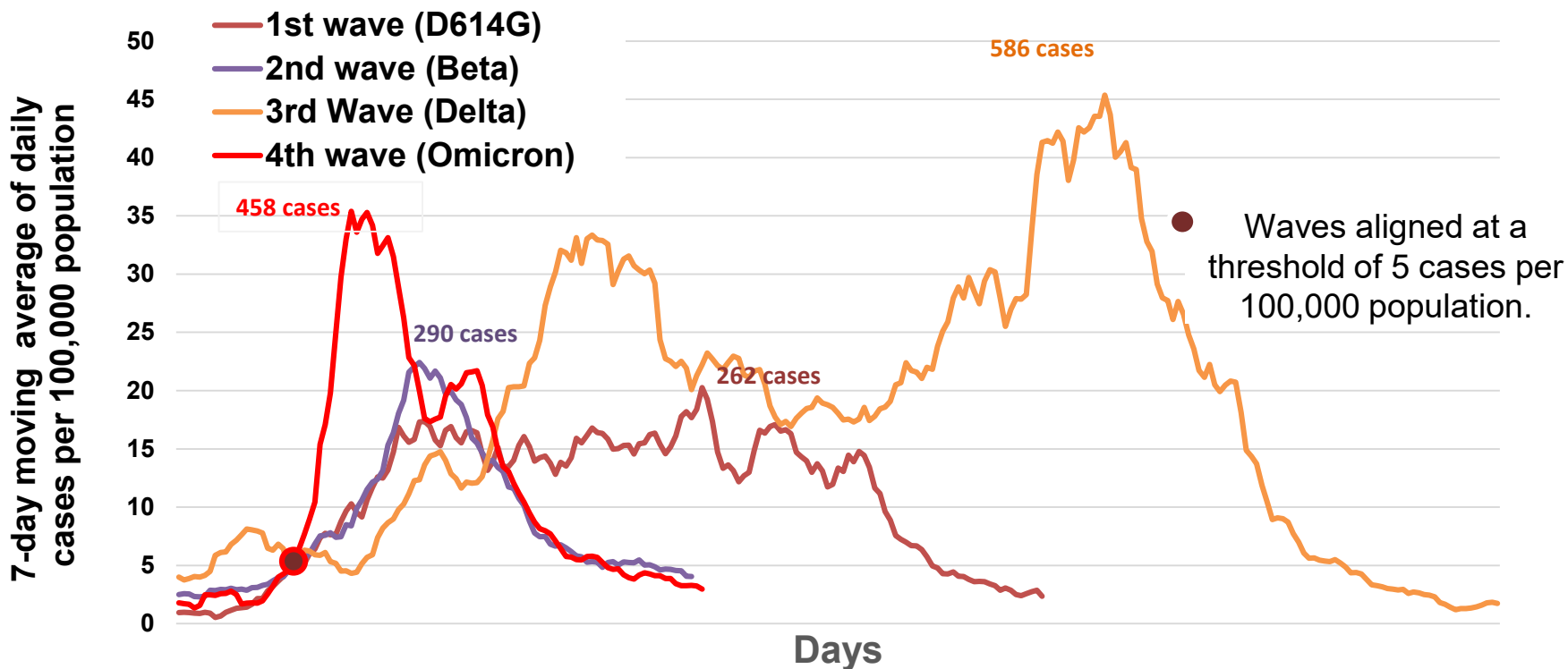
7-day moving average cases per 100,000 population
up to - 23 February 2022



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

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

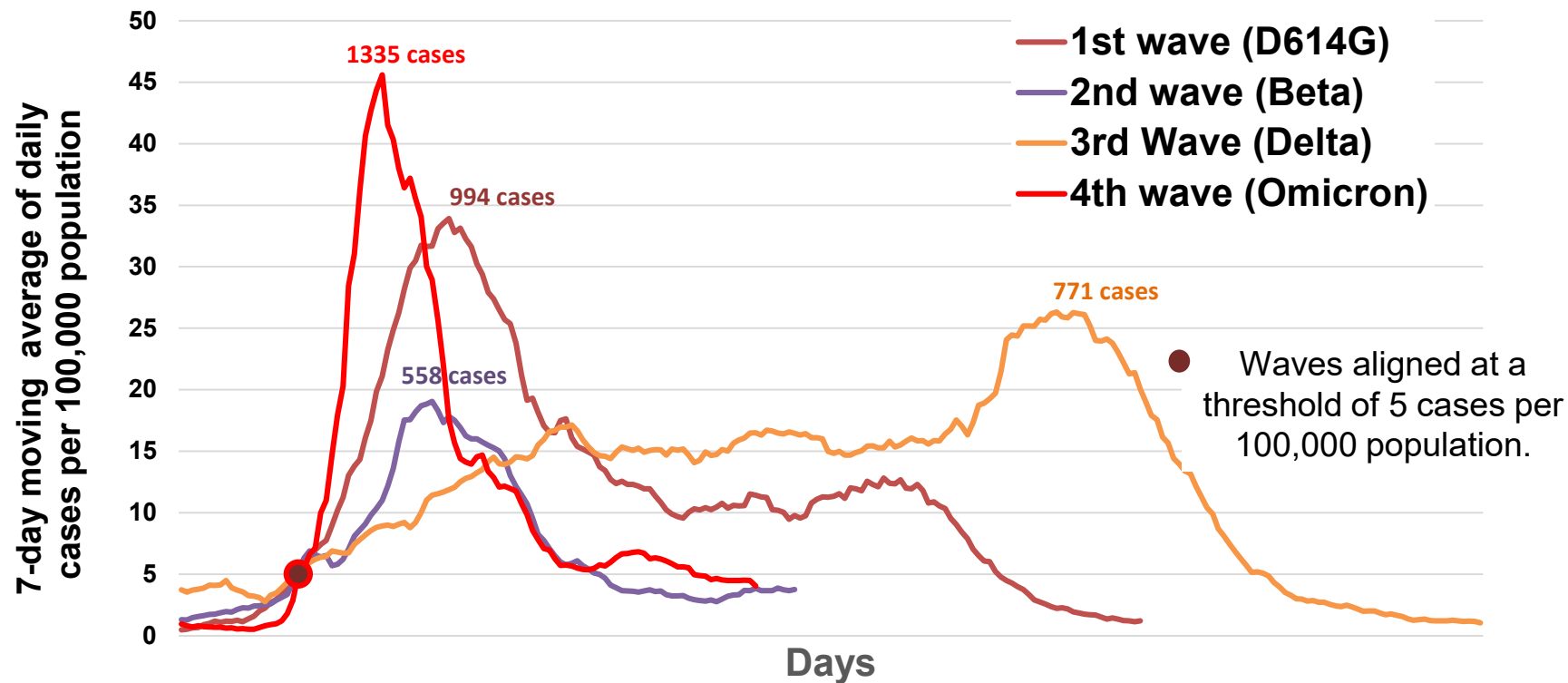
7-day moving average cases per 100,000 population
up to - 23 February 2022



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

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

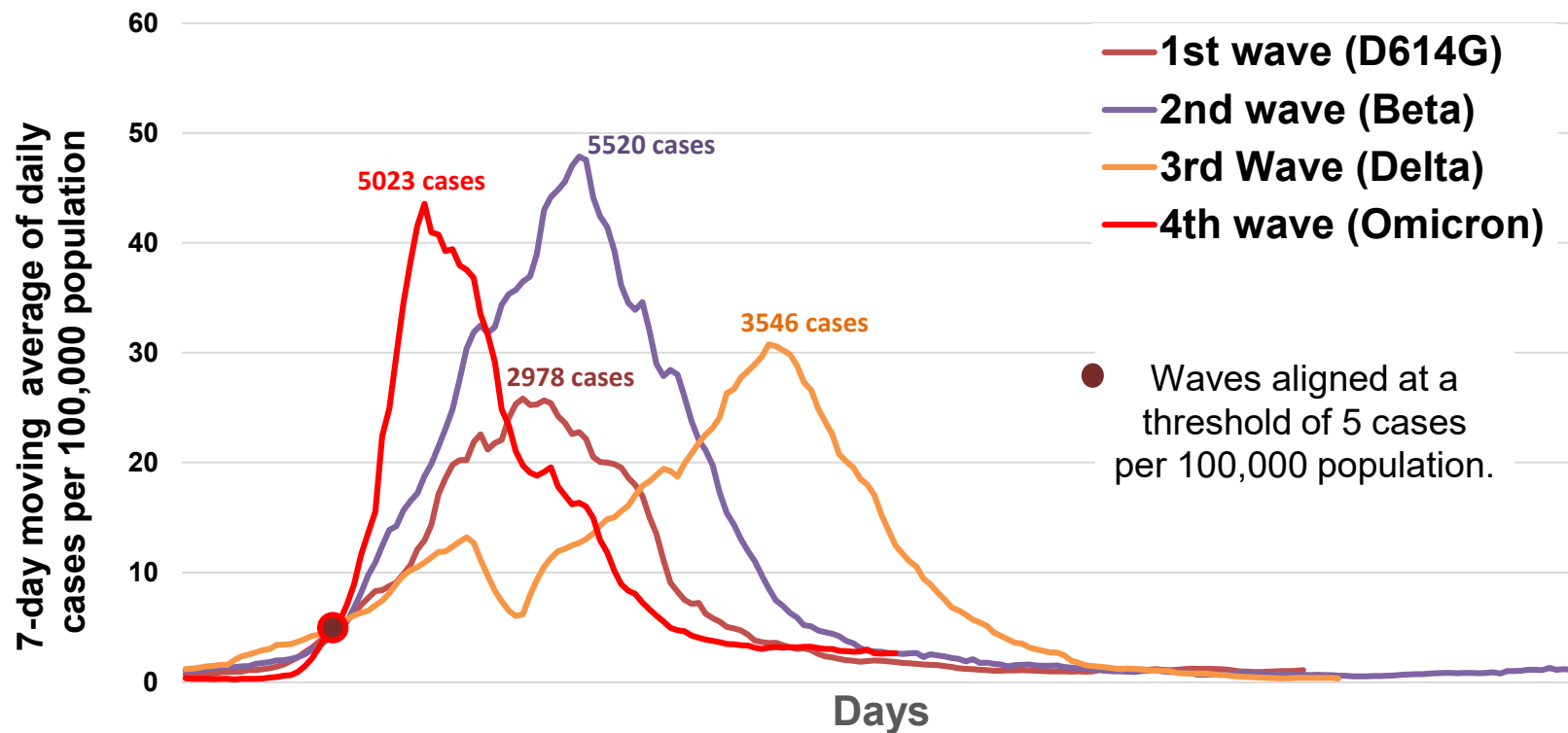
7-day moving average cases per 100,000 population
up to - 23 February 2022



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

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

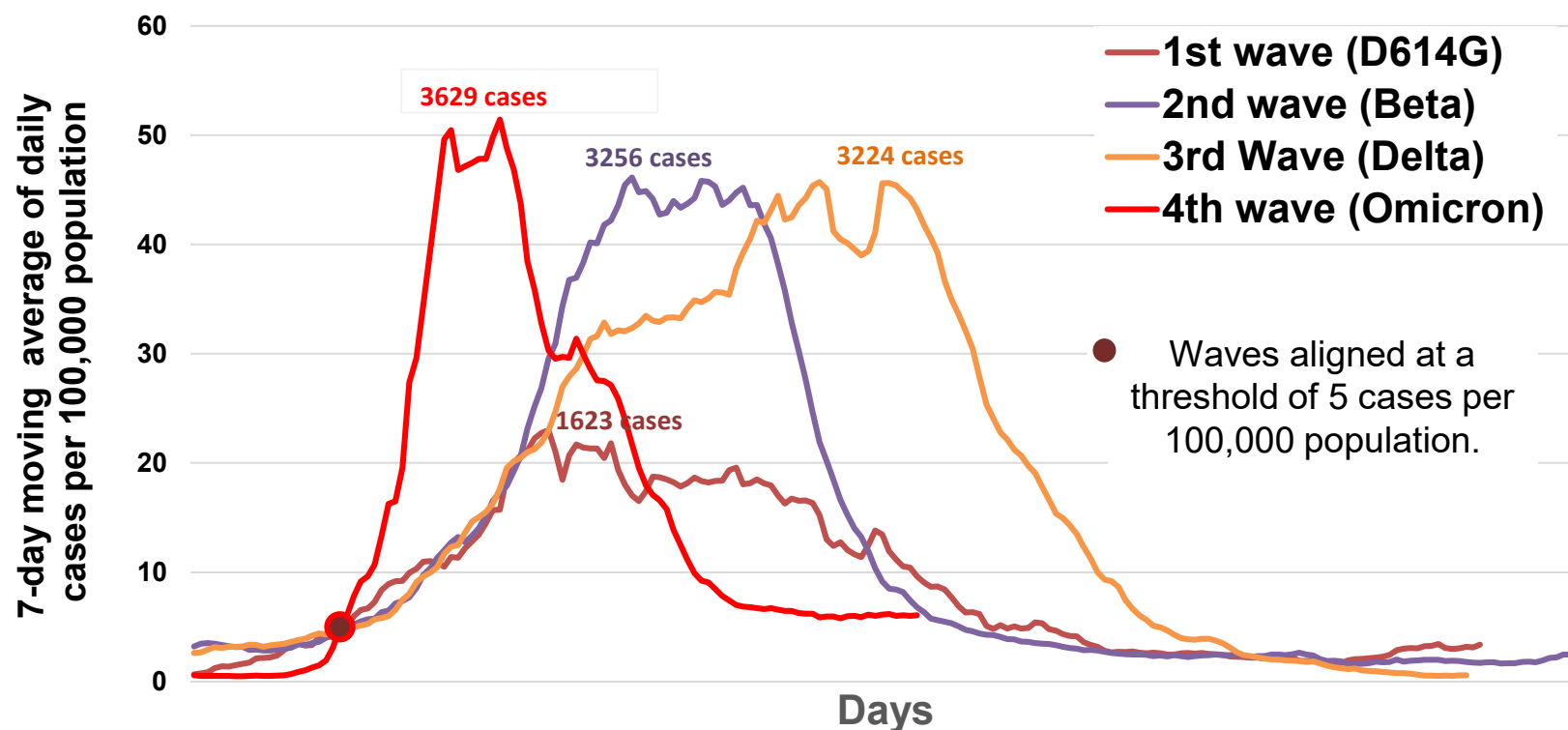
7-day moving average cases per 100,000 population
up to - 23 February 2022



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

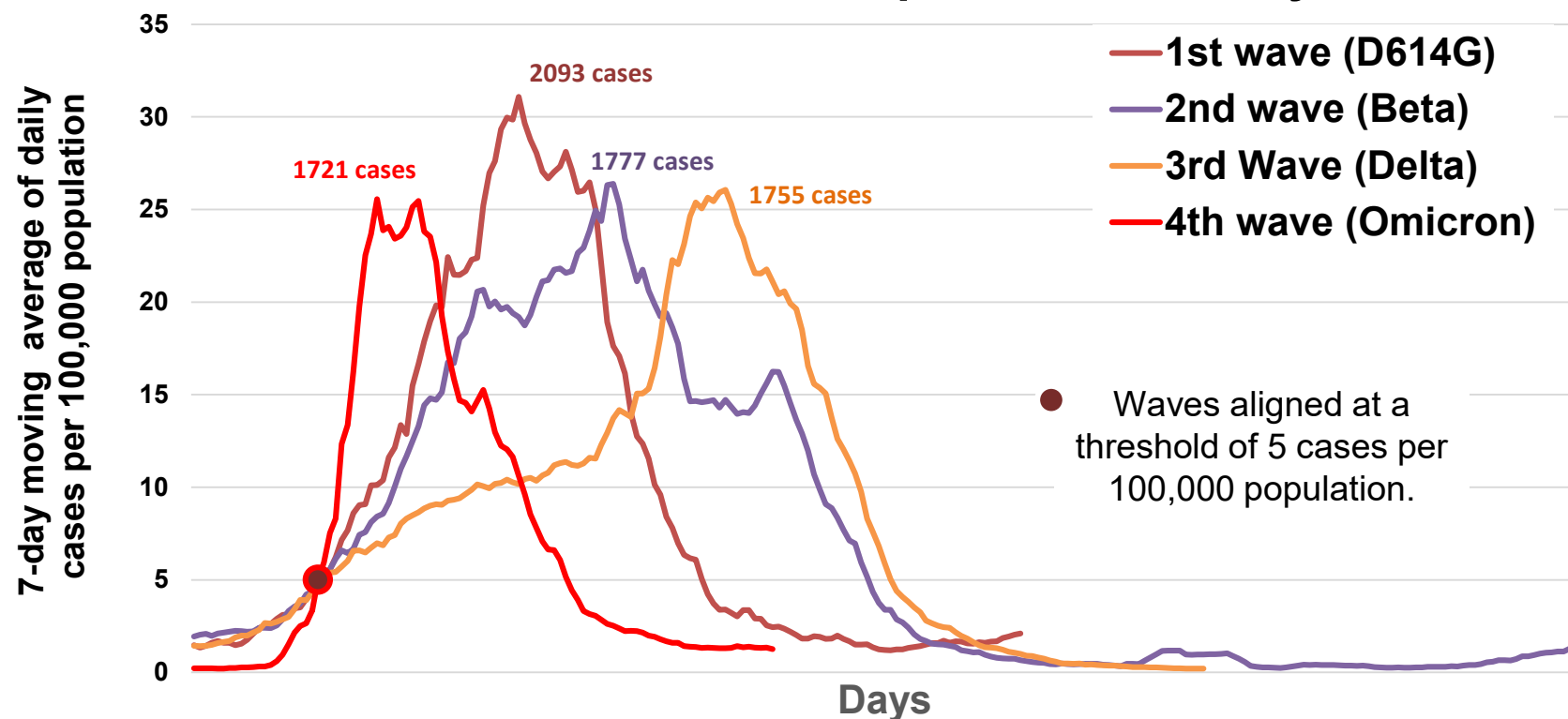
7-day moving average cases per 100,000 population
up to - 23 February 2022



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

7-day moving average cases per 100,000 population
up to - 23 February 2022



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