

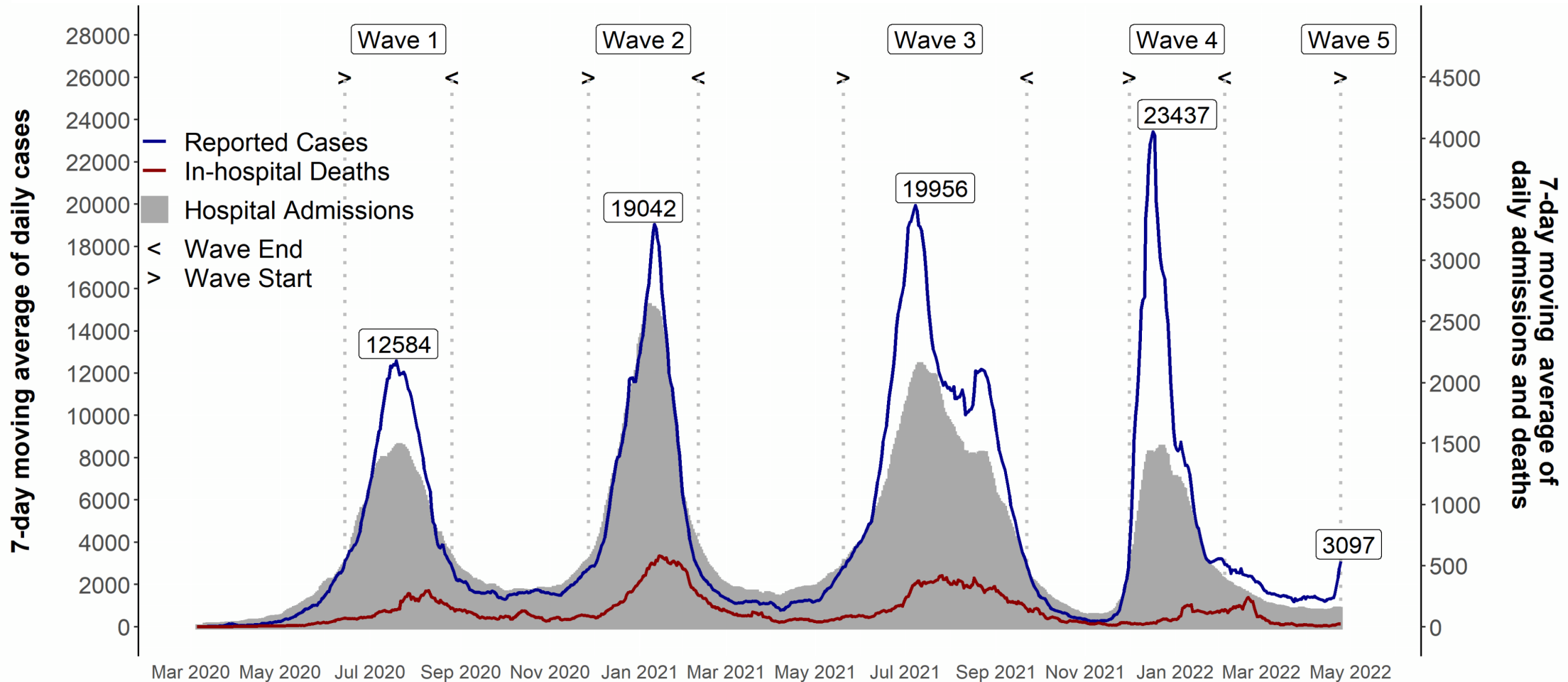


COVID-19 UPDATES

01 May 2022

Covid-19 in South Africa last week – 24 Apr

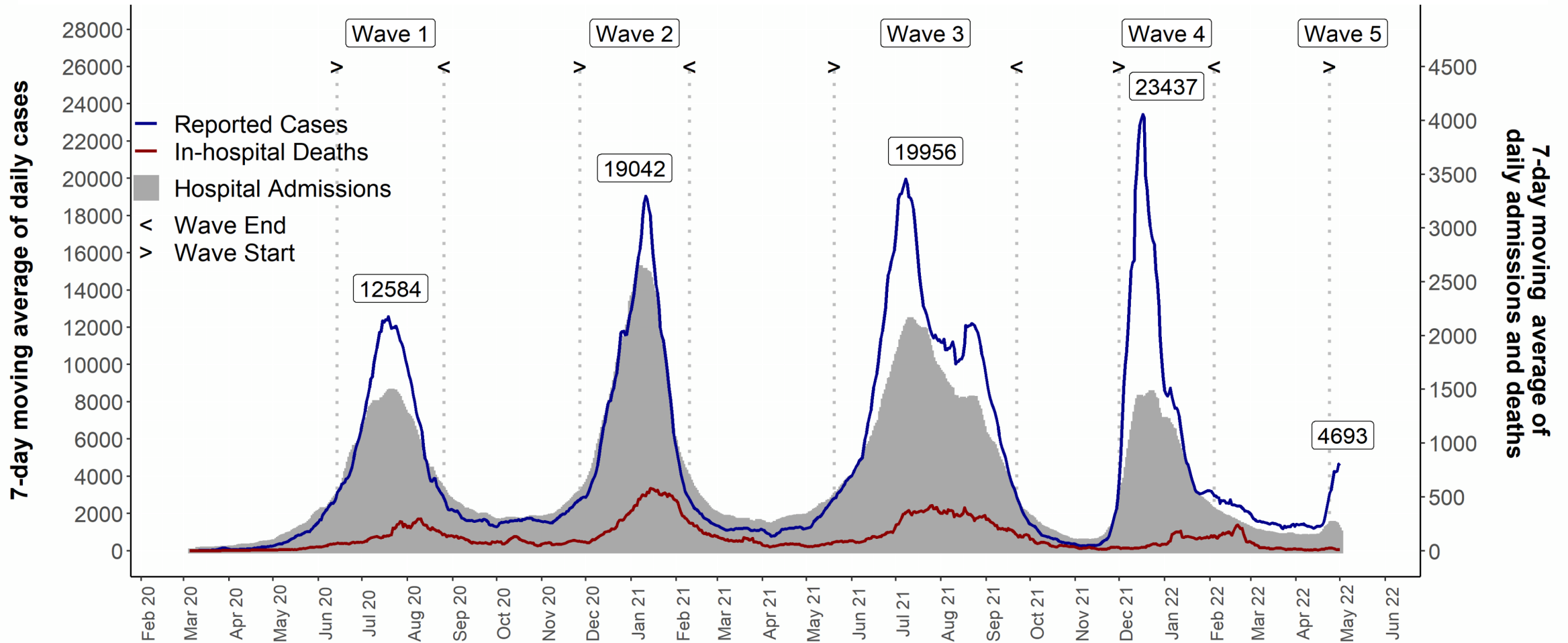
up to – 24 April 2022



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

Covid-19 in South Africa this week – 1 May

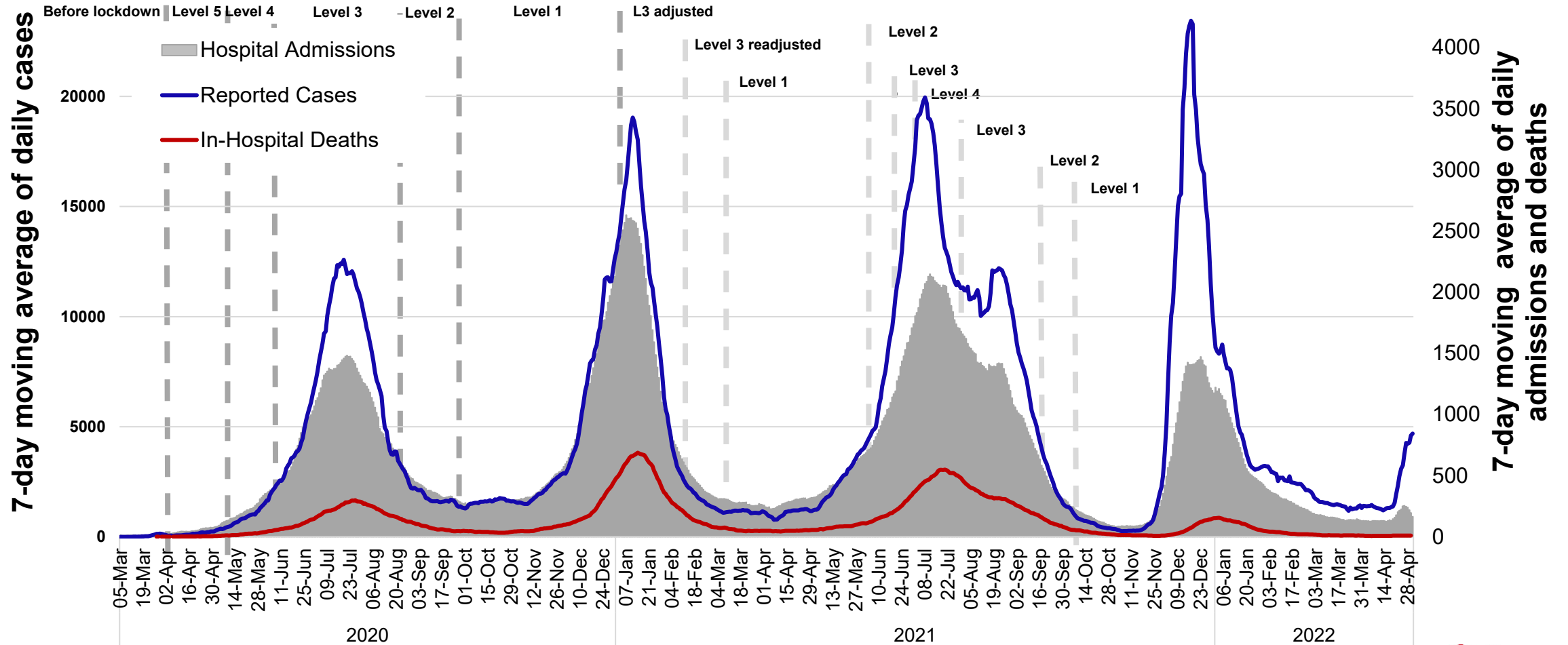
up to - 01 May 2022



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

Covid-19 in South Africa

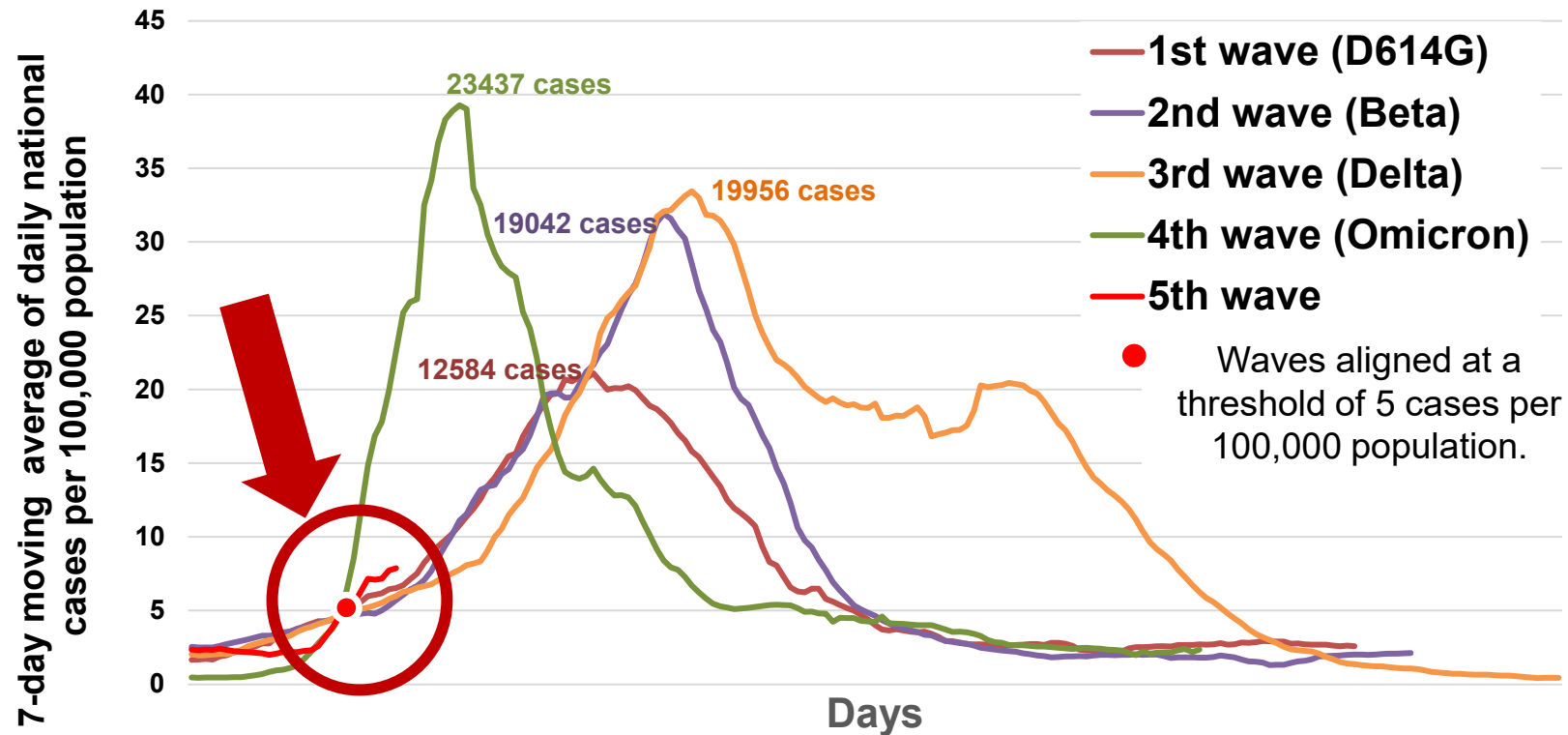
7-day moving average of new cases, hospital admissions and in-hospital Covid-19 deaths up to - 01 May 2022



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

SARS-Cov-2 cases in 1st, 2nd, 3rd, 4th & 5th waves in South Africa

7-day moving average cases per 100,000 population
up to - 01 May 2022



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

Omicron infection in vaccinated people generates good neutralisation of all variants of concern

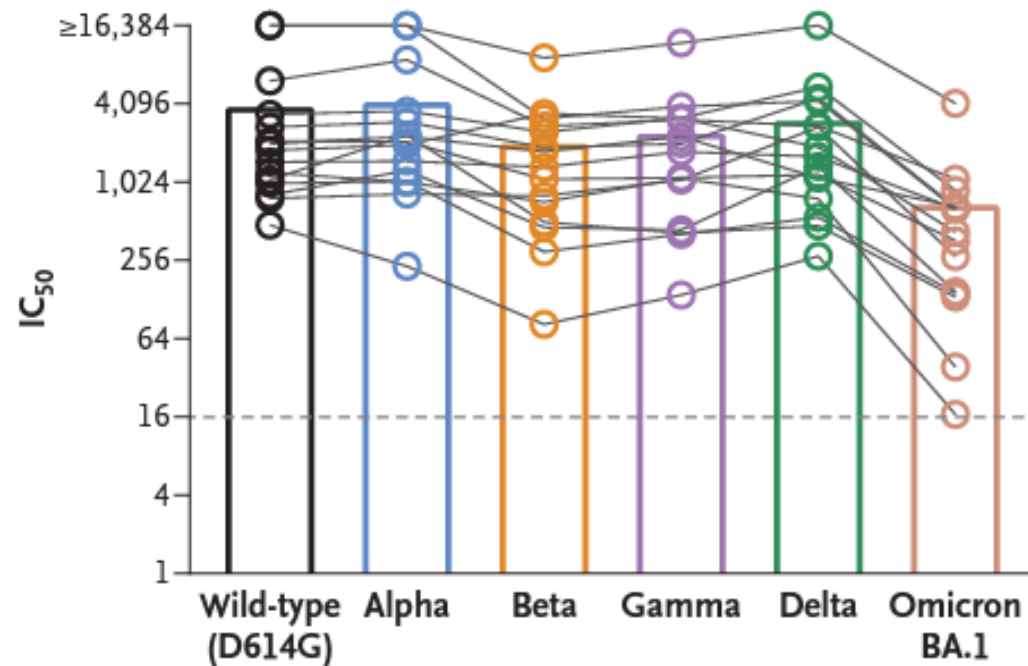


The NEW ENGLAND
JOURNAL of MEDICINE

Neutralization Profile after Recovery from SARS-CoV-2 Omicron Infection

A. Rössler, L. Knabl, D. von Laer, and J. Kimpel

Neutralization profiles after Omicron infection in vaccinated people without past infection



- **Neutralization profiles** (against wild-type, α , β , γ , δ & omicron BA.1 variants) **in serum 5 - 42 days after infection with omicron**
- **Vaccine-acquired and hybrid immunity** \rightarrow **high neutralizing Ab titers against all variants after omicron infection**

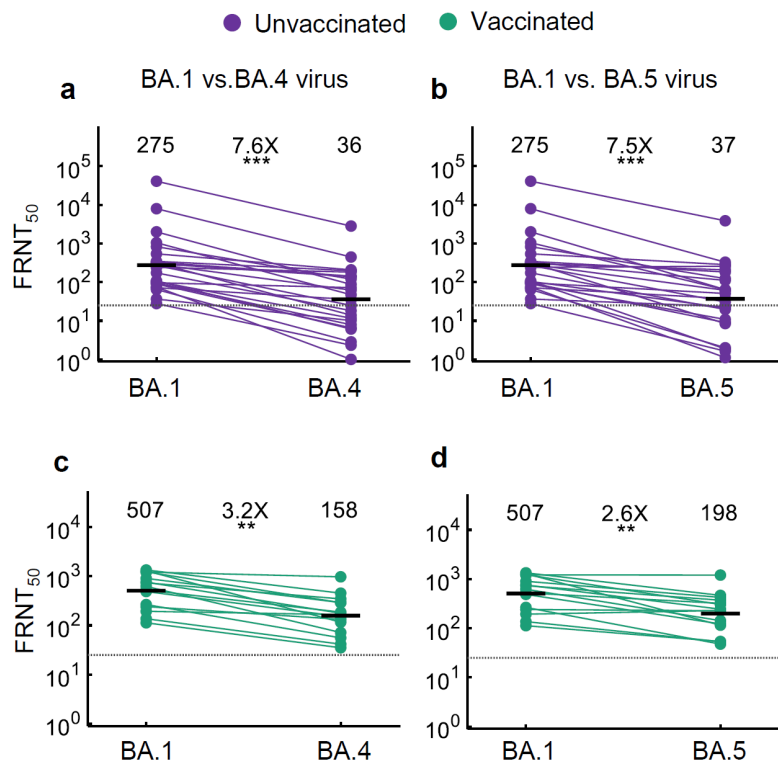
Omicron BA.1 infection in vaccinated people generates reasonable neutralisation of BA.4 & BA.5

medRxiv

Omicron sub-lineages BA.4/BA.5 escape BA.1 infection elicited neutralizing immunity

Khadija Khan^{1,2}, Farina Karim^{1,2}, Yashica Ganga¹, Mallory Bernstein¹, Zesuliwe Jule¹, Kajal Reedy¹, Sandile Cele^{1,2}, Gila Lustig³, Daniel Amoako^{4,5}, Nicole Wolter^{4,6}, Natasha Samsunder³, Aida Sivro^{3,7}, James Emmanuel San⁸, Jennifer Giandhari⁸, Hourivah Tegally^{8,9}

All participants infected in BA.1 infection wave in South Africa



- **BA.1 day 23 neutralization profiles** (against omicron BA.4 and BA.5 sub-variants)
- **BA.1 neutralising Ab titers ~7.5 times lower for BA.4 & BA.5 in unvaccinated but 2.5 to 3.5 times lower for BA.4 & BA.5 in vaccinated people**
- **People who had omicron BA.1 may be largely protected from BA.4 & BA.5, less so in unvaccinated people**

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

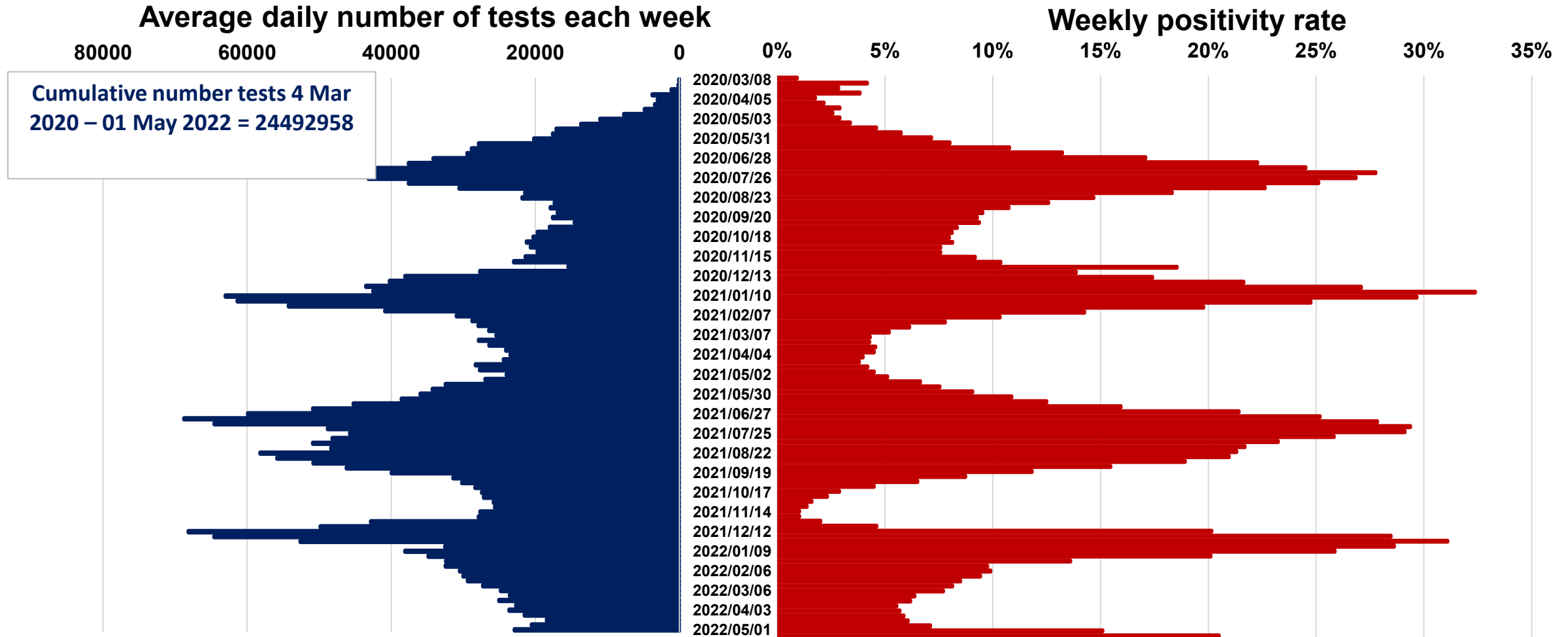
up to - 25 April 2022



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

Average daily tests and proportion of positive tests

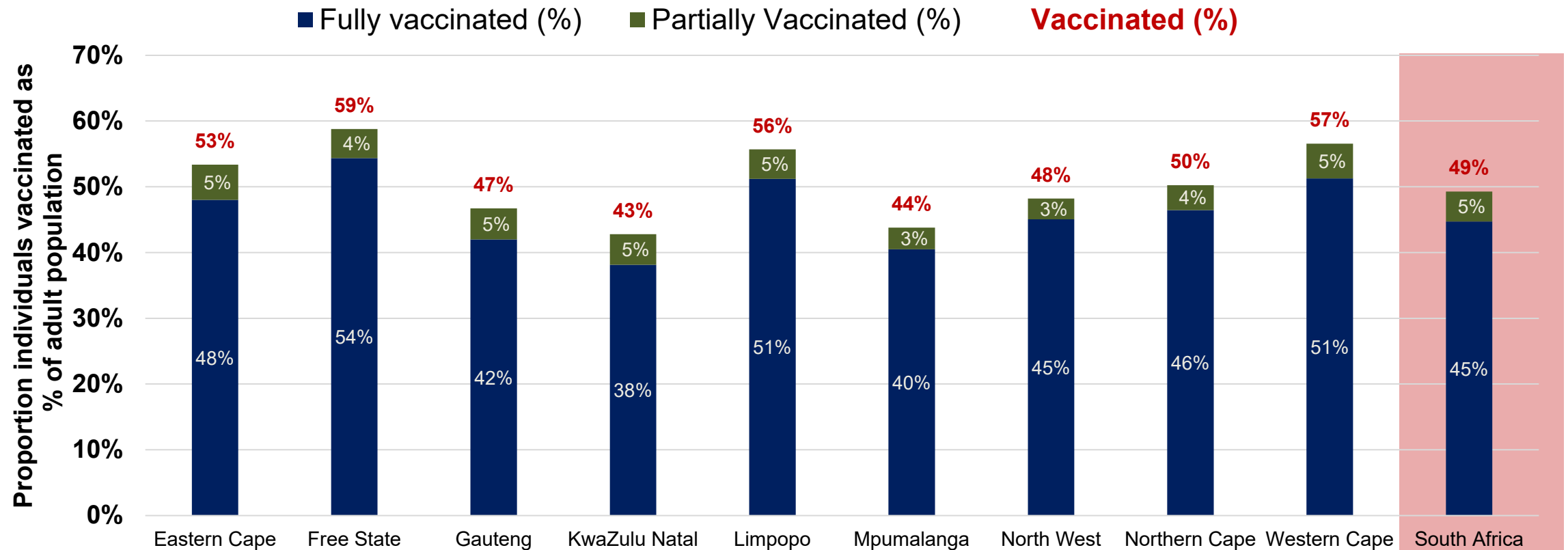
up to – 01 May 2022



Data source: Department of Health

Proportion of individuals vaccinated as % of adult population

up to - 01 May 2022



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

Covid-19 vaccination safe in pregnancy - not associated with ↑ risk of adverse peripartum outcomes

JAMA[®]
The Journal of the American Medical Association

Association of SARS-CoV-2 Vaccination During Pregnancy With Pregnancy Outcomes

Maria C. Magnus, PhD¹; Anne K. Örtqvist, MD, PhD^{2,3}; Elisabeth Dahlqvist, PhD²; et al

Association of COVID-19 Vaccination in Pregnancy With Adverse Peripartum Outcomes

Deshayne B. Fell, PhD^{1,2}; Tavleen Dhinsa, MSc^{2,3}; Gillian D. Alton, PhD^{2,3}; et al

COVID-19 mRNA Vaccines During Pregnancy
New Evidence to Help Address Vaccine Hesitancy

Elyse O. Kharbanda, MD, MPH¹; Gabriela Vazquez-Benitez, PhD¹

Ontario, Canada

- **97,590 people** - 23% vaccinated during pregnancy
- 63,6% in 3rd trimester
- 79.9% BNT162b2, 19.9% mRNA-1273, <1% other
- Findings qualitatively similar to unvaccinated individuals
- **COVID-19 vaccination during pregnancy not associated with increased risks for postpartum haemorrhage, chorioamnionitis, caesarean delivery, neonatal care admission, or low Apgar score.**

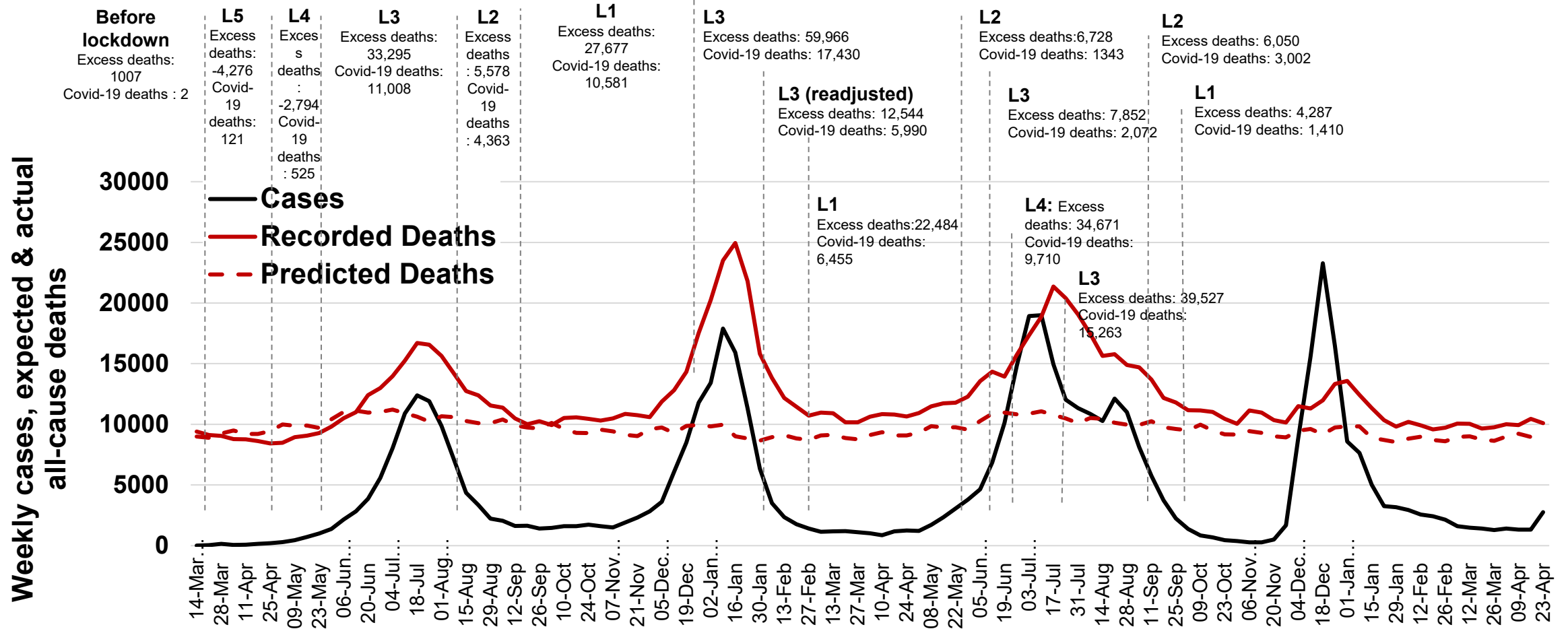
- Individuals vaccinated during pregnancy were older, less likely to be obese or smoke and had higher levels of education
- Strengths: large and well-defined population-based cohorts; validated data on vaccine exposures and birth outcomes; thoughtful approaches addressing healthy vaccinee bias and confounding by indication, immortal time bias, and cohort truncation.

Sweden & Norway

- **157,521 people** – 18% vaccinated during pregnancy
- 0.7%, 8.3%, and 9.1% vaccinated during 1st, 2nd and 3rd trimester, respectively
- 12.9% BNT162b2, 4.8% mRNA-1273 & 0.3% AZD1222
- **COVID-19 vaccination during pregnancy not associated with increased risk for preterm birth, stillbirth, small-for-gestational age, low Apgar score, or neonatal care admission**

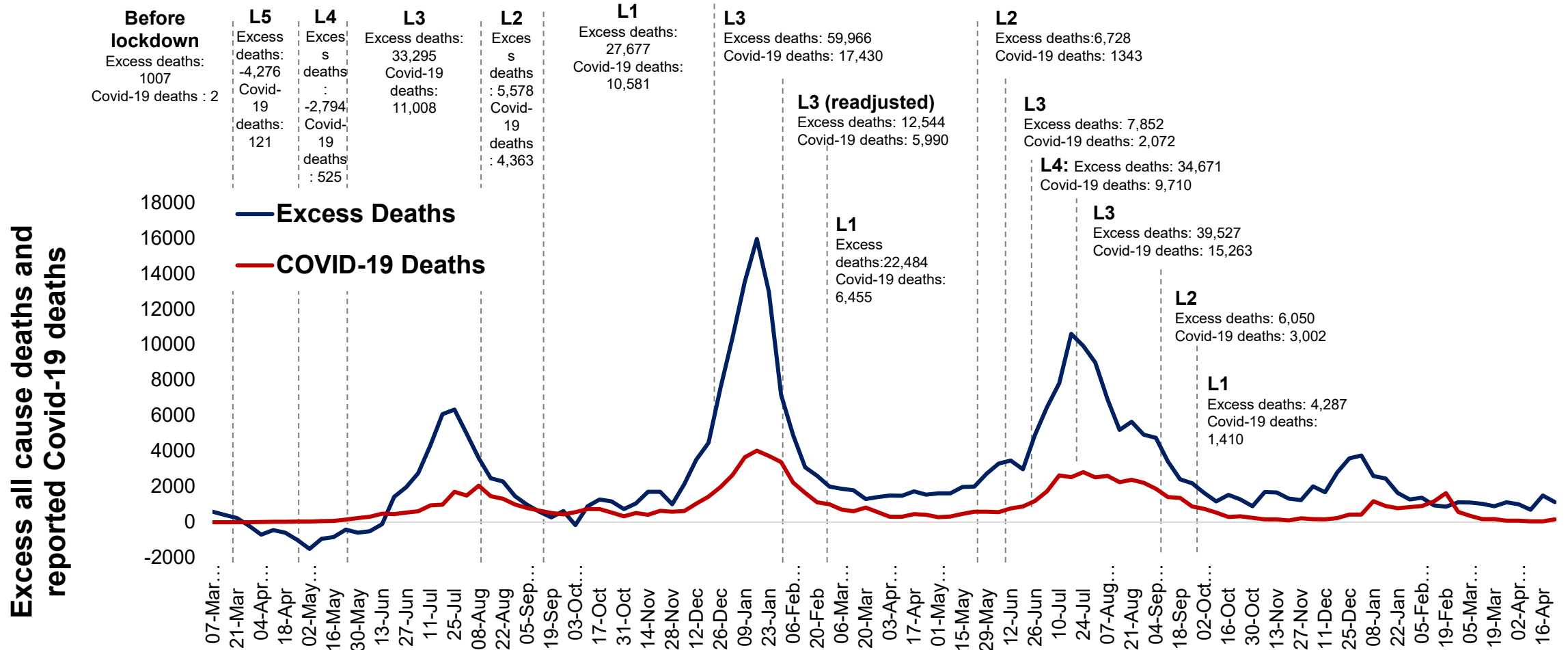
Expected & actual all-cause deaths during Covid-19

up to – 23 April 2022



Weekly excess all cause deaths & reported Covid-19 deaths

up to – 23 April 2022



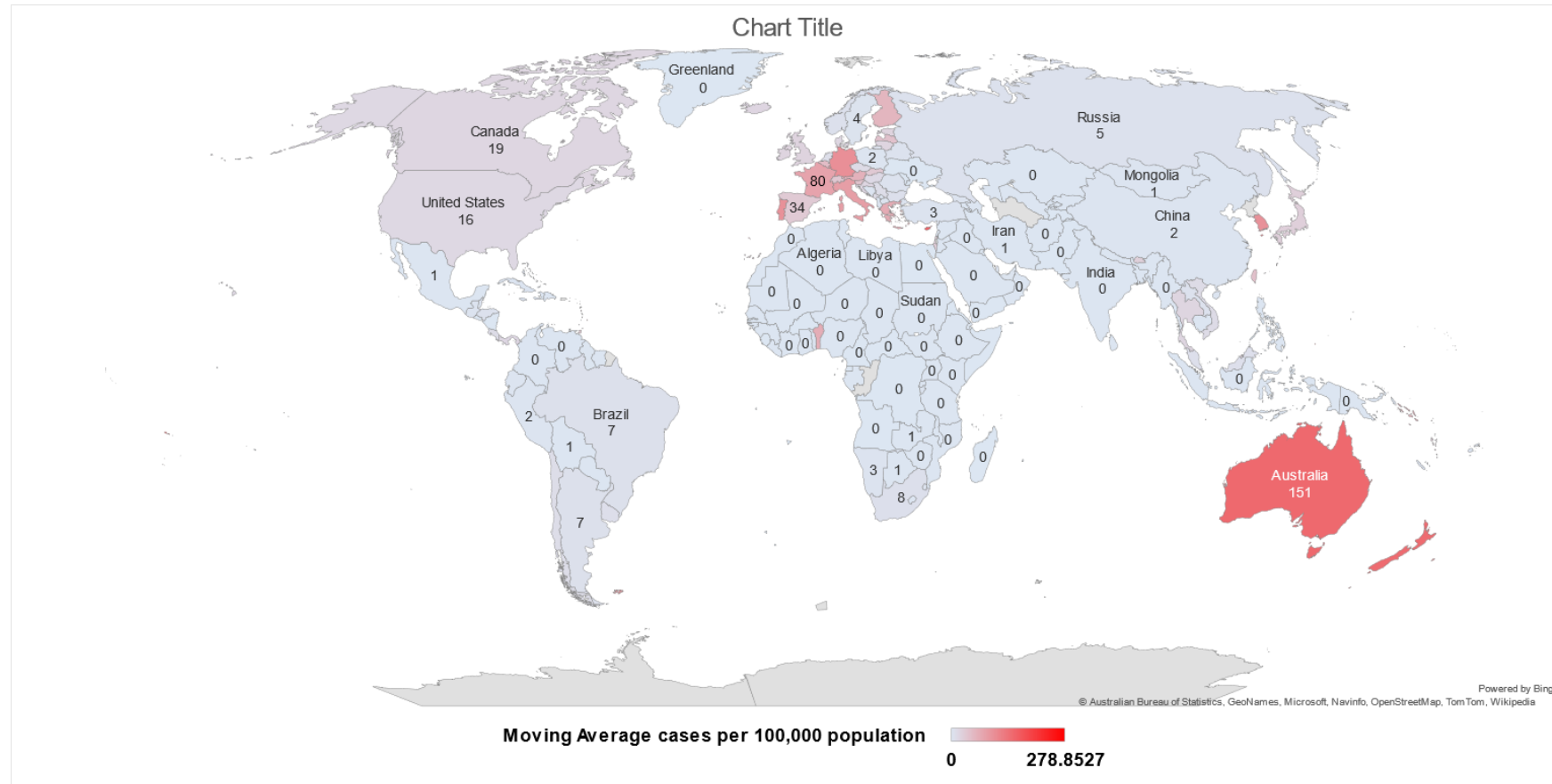
Source: Bradshaw D, et al



Global epidemiology: Reported cases by country, region and the world

Global Covid-19 epidemic

7-day moving average cases per 100,000 population
up to - 01 May 2022

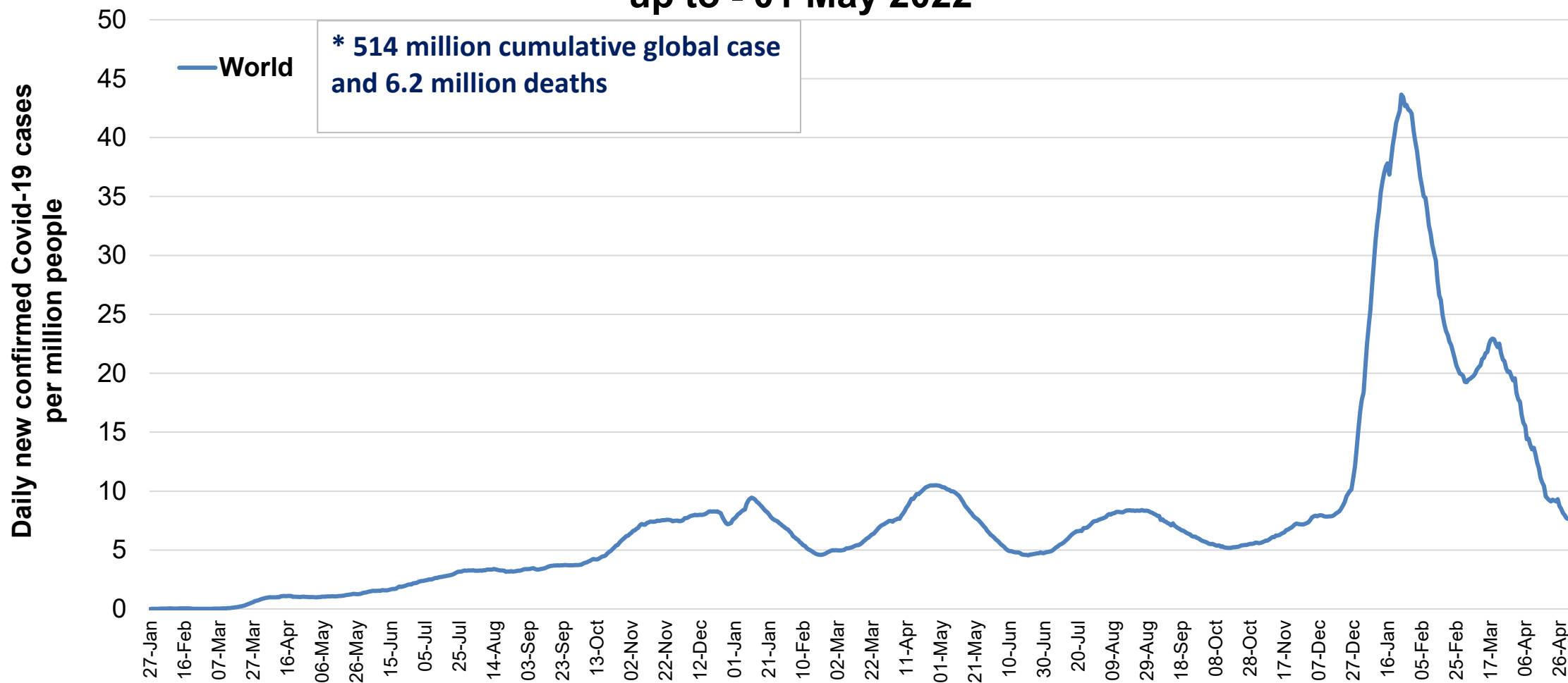


Source: Our World in Data

Covid-19 in Africa

Omicron variant drives 4th wave

up to - 01 May 2022

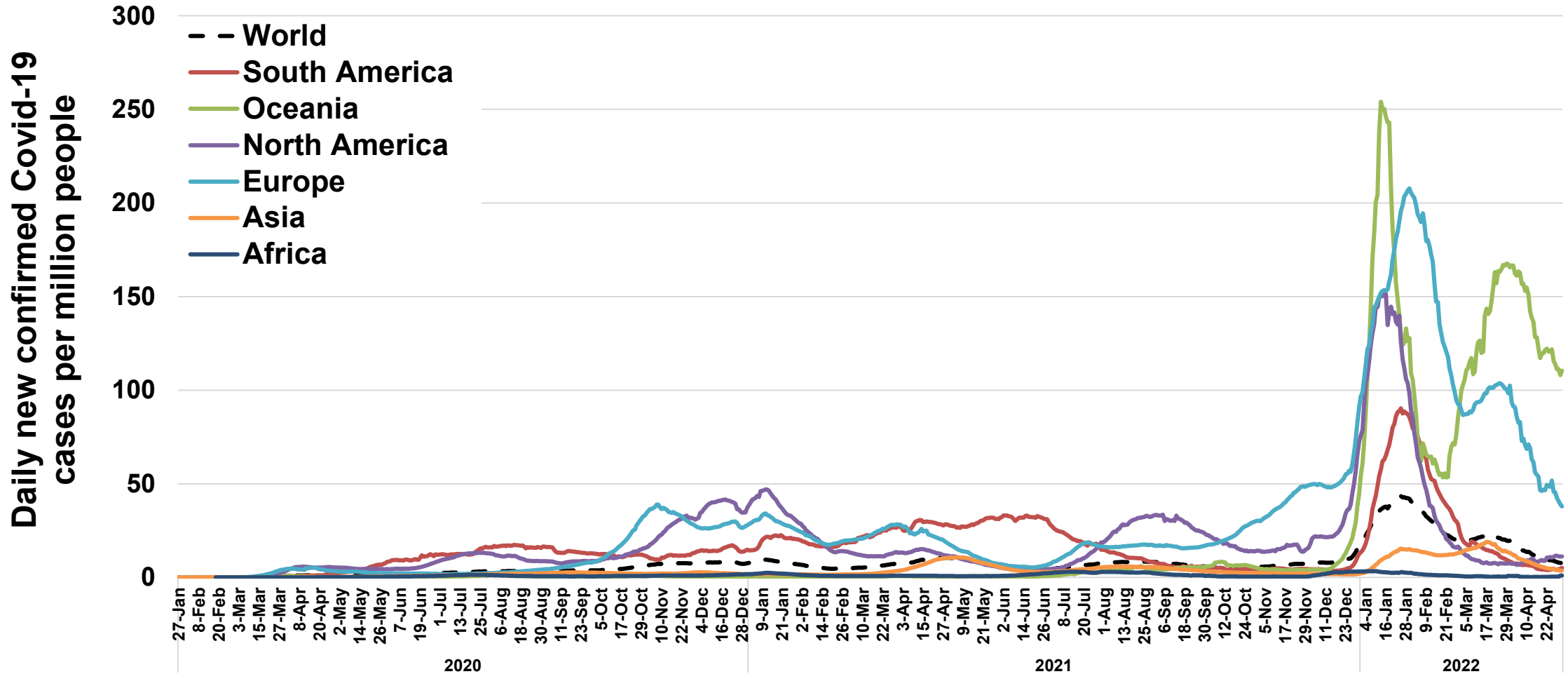


Data Source: Our World in Data; NICD

Covid-19

Global and Continents waves

up to - 01 May 2022

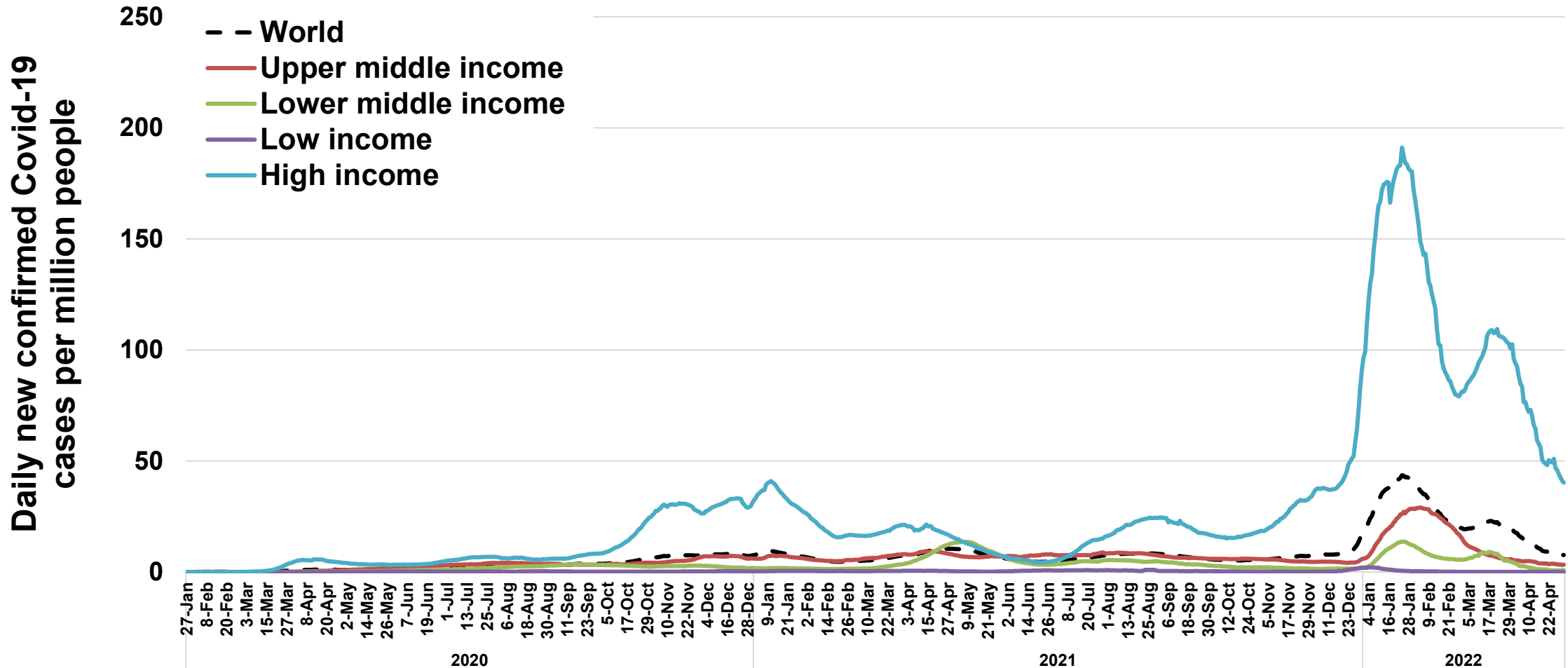


Data Source: Our World in Data; NICD

Covid-19

Countries Income level

up to - 01 May 2022



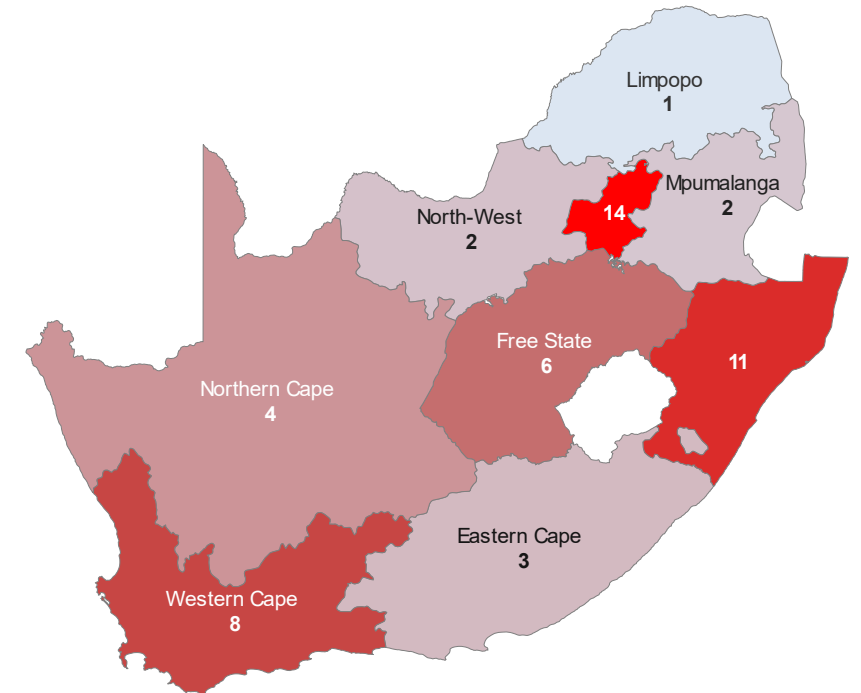
Data Source: Our World in Data; NICD

South Africa: Trends in reported provincial SARS-CoV-2 cases

Daily new cases over last 7 days/100,000

up to - 01 May 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	134	2	190	3	42%
Free State	29	89	3	181	6	104%
Gauteng	155	1633	11	2207	14	35%
KwaZulu Natal	115	739	6	1213	11	64%
Limpopo	59	29	0	50	1	73%
Mpumalanga	47	73	2	104	2	43%
North West	41	68	2	102	2	49%
Northern Cape	13	31	2	58	4	87%
Western Cape	71	455	6	587	8	29%
South Africa	597	3251	5	4693	8	44%
Africa	13410	4829	0	13973	1	189%
World	77952	733049	9	600761	8	-18%



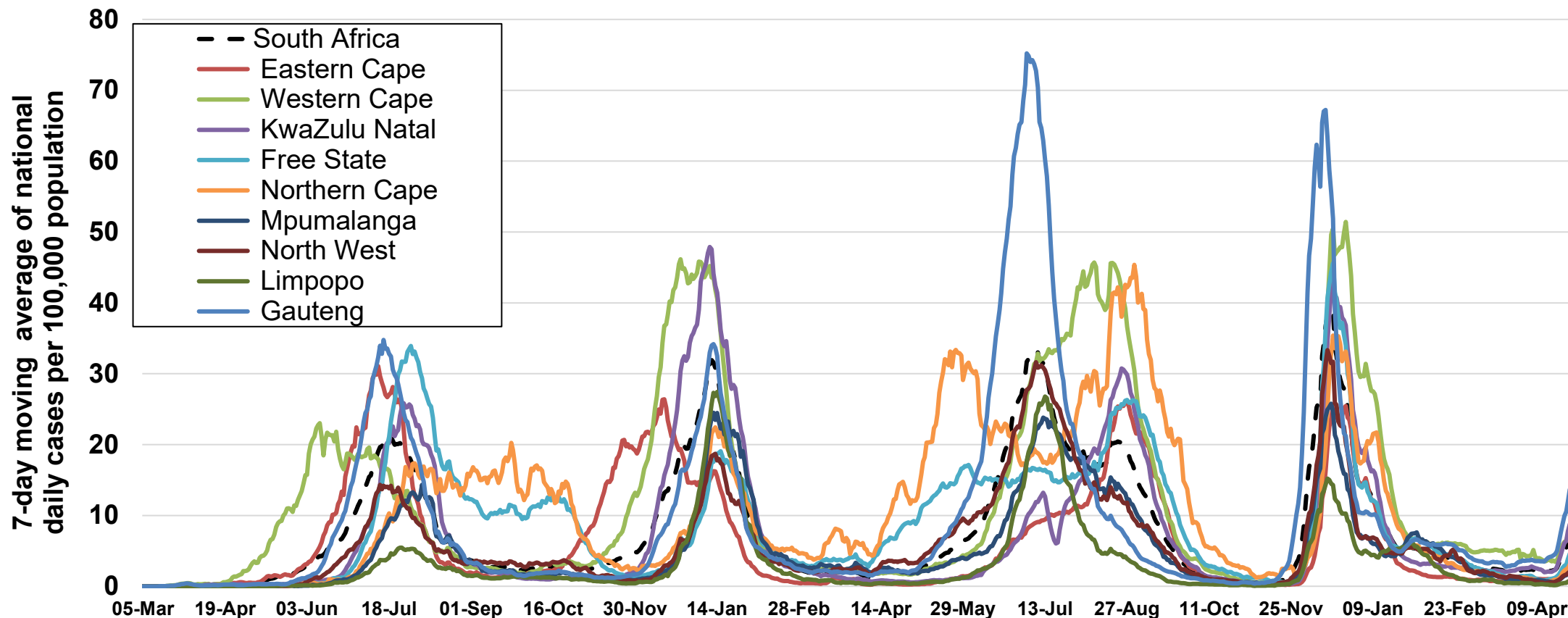
7 days moving average per 100K population

1 8 14

Data source: Department of Health

Confirmed SARS-Cov-2 cases by province

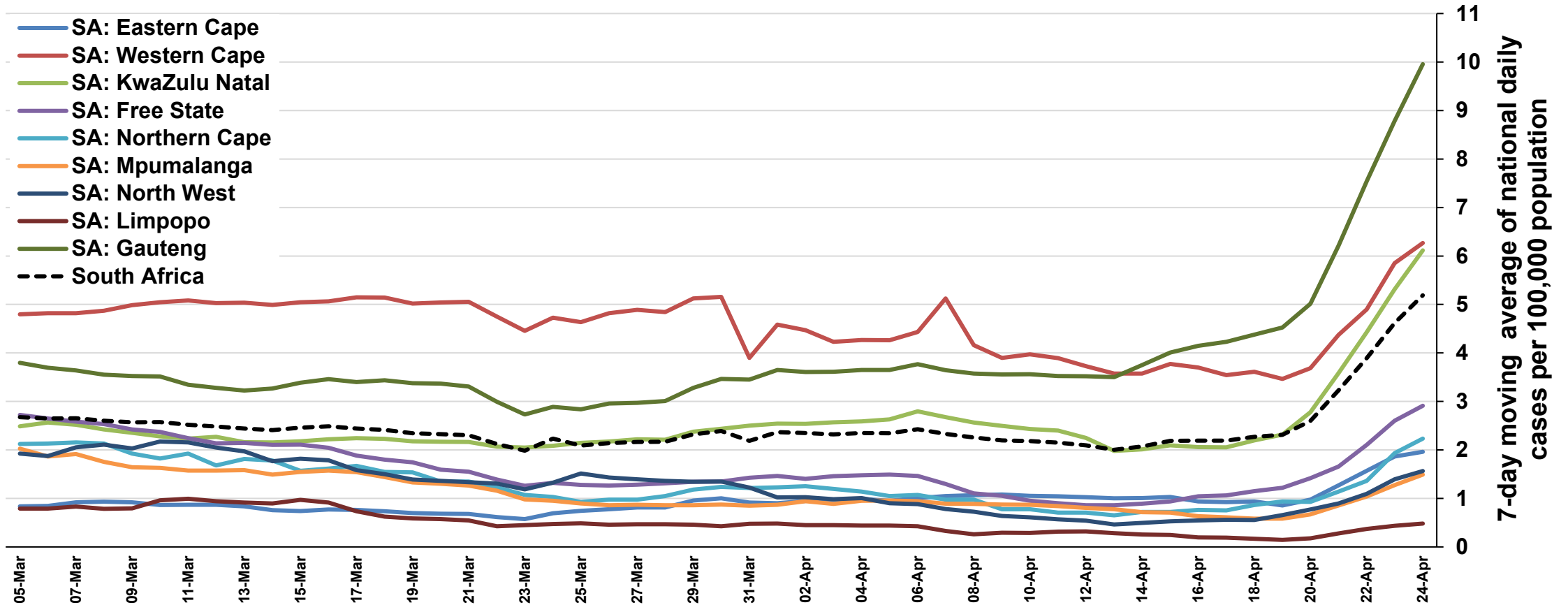
7-day moving average cases per 100,000 population
up to - 01 May 2022



Data source: Department of Health; Analysis

Last week's SARS-CoV-2 cases by province

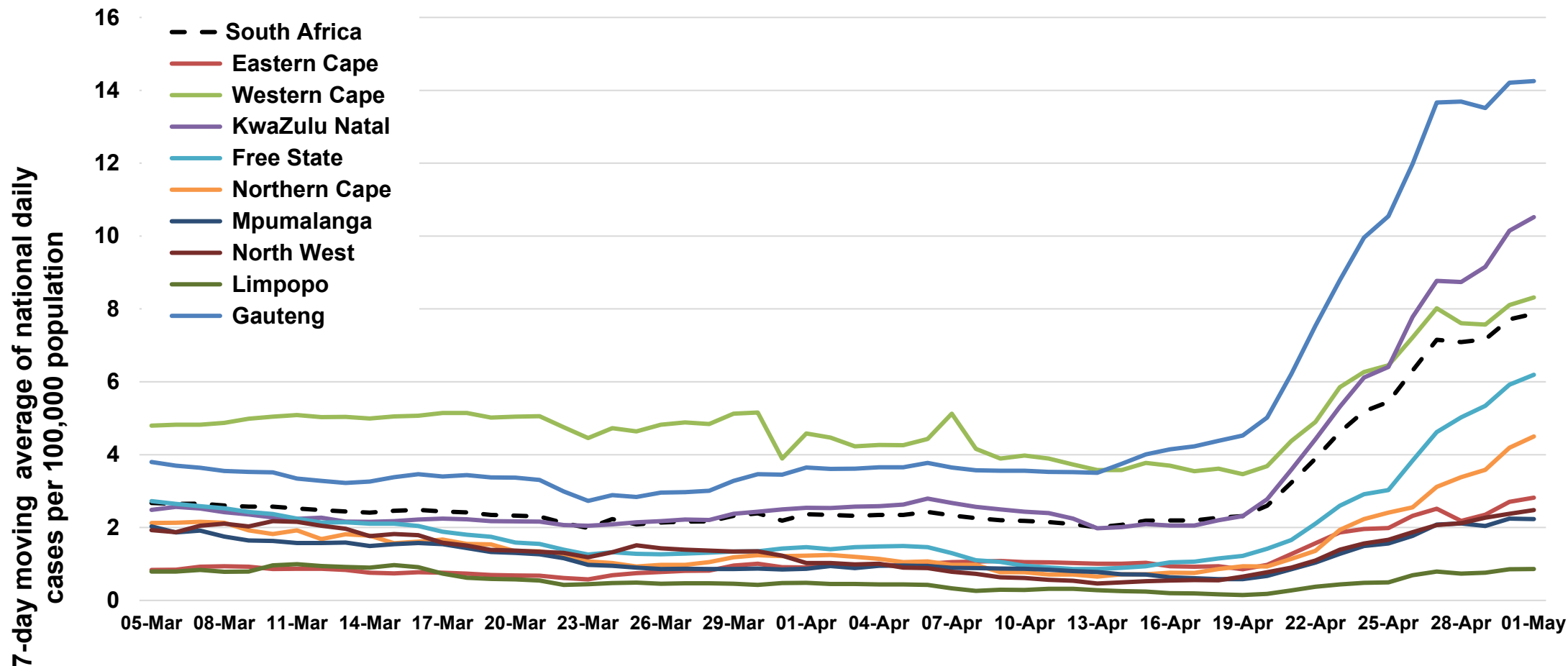
7-day moving average cases per 100,000 population
up to – 24 April 2022



Data source: Department of Health; Analysis

This week's SARS-CoV-2 cases by province

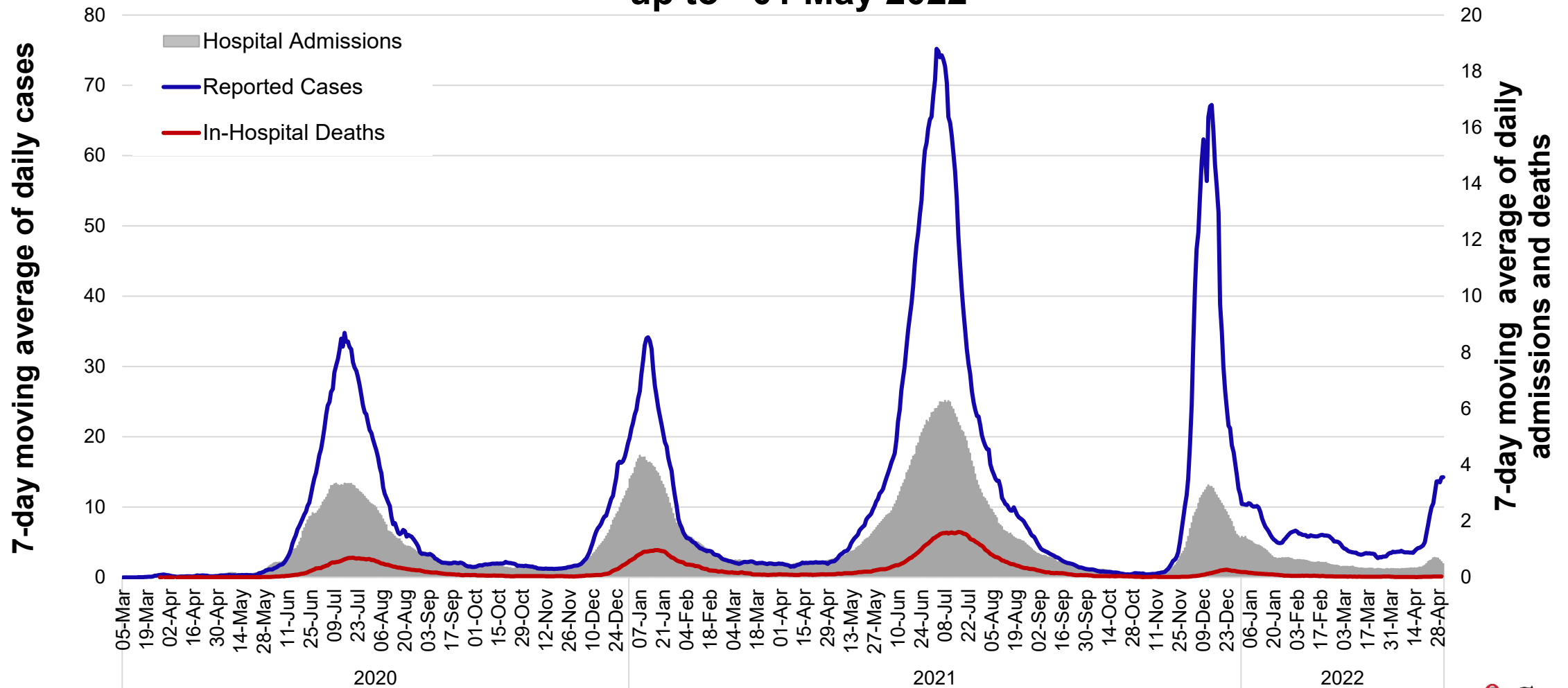
7-day moving average cases per 100,000 population
up to - 01 May 2022



Data source: Department of Health; Analysis

SARS-Cov-2 in Gauteng

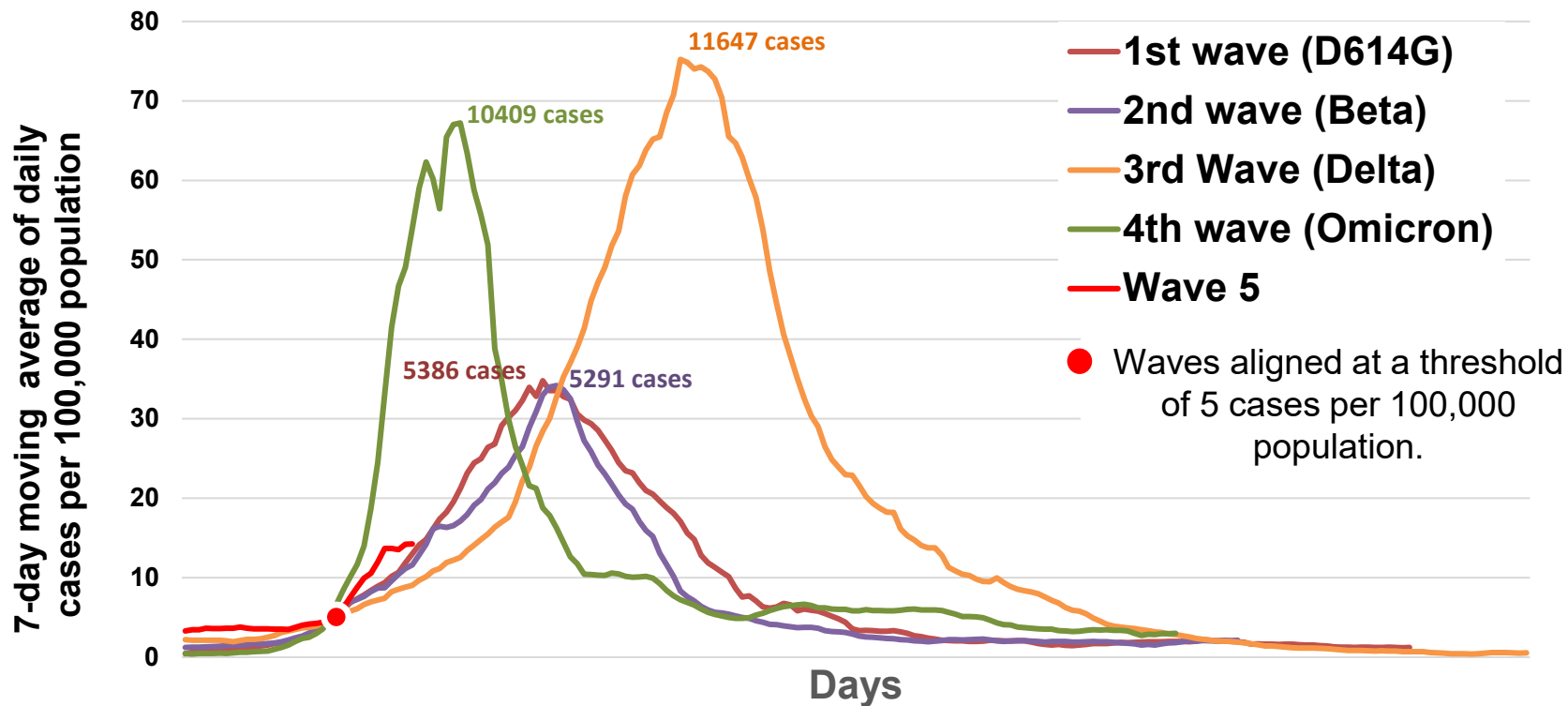
7-day moving average of new cases, hospital admissions and in-hospital Covid-19 deaths
up to - 01 May 2022



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

SARS-Cov-2 cases in 1st, 2nd, 3rd, 4th, 5th waves: Gauteng

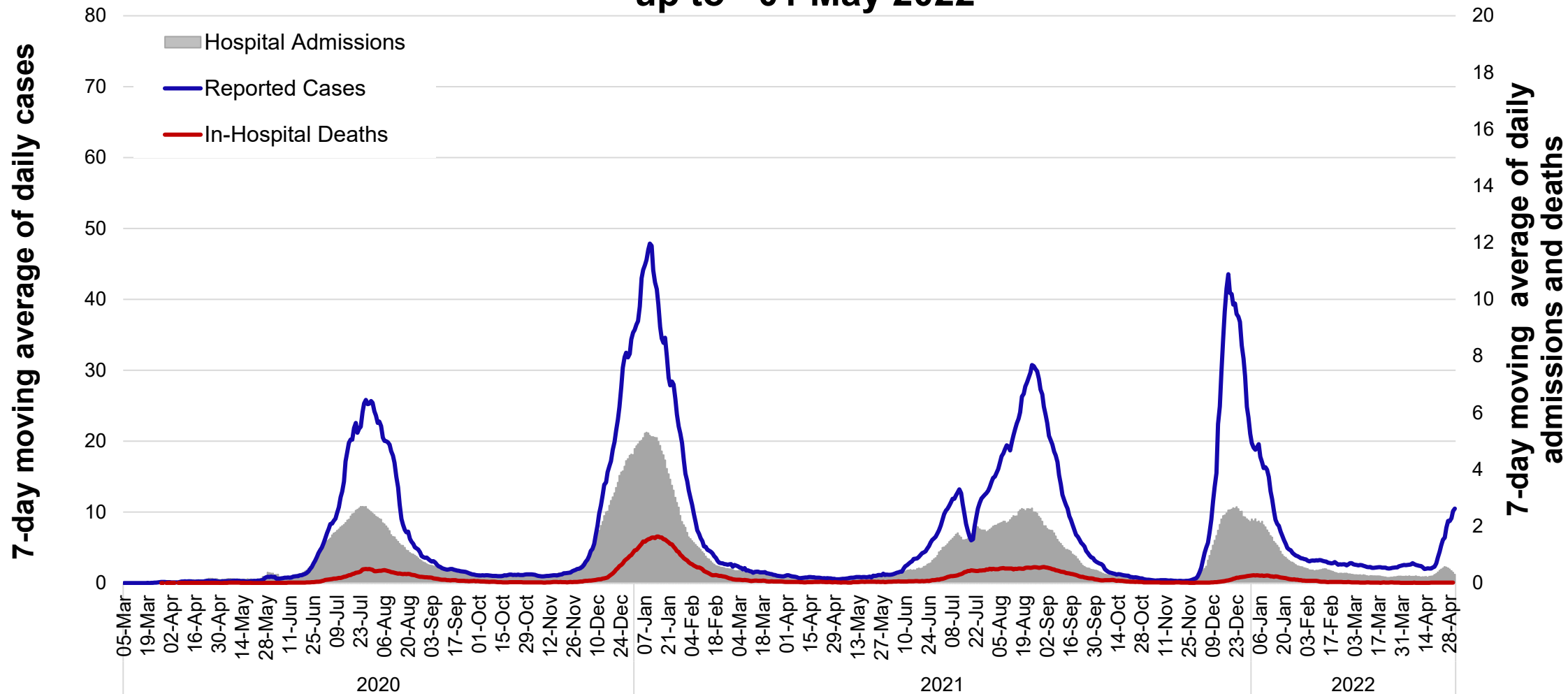
7-day moving average cases per 100,000 population
up to - 01 May 2022



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

SARS-Cov-2 in KwaZulu Natal

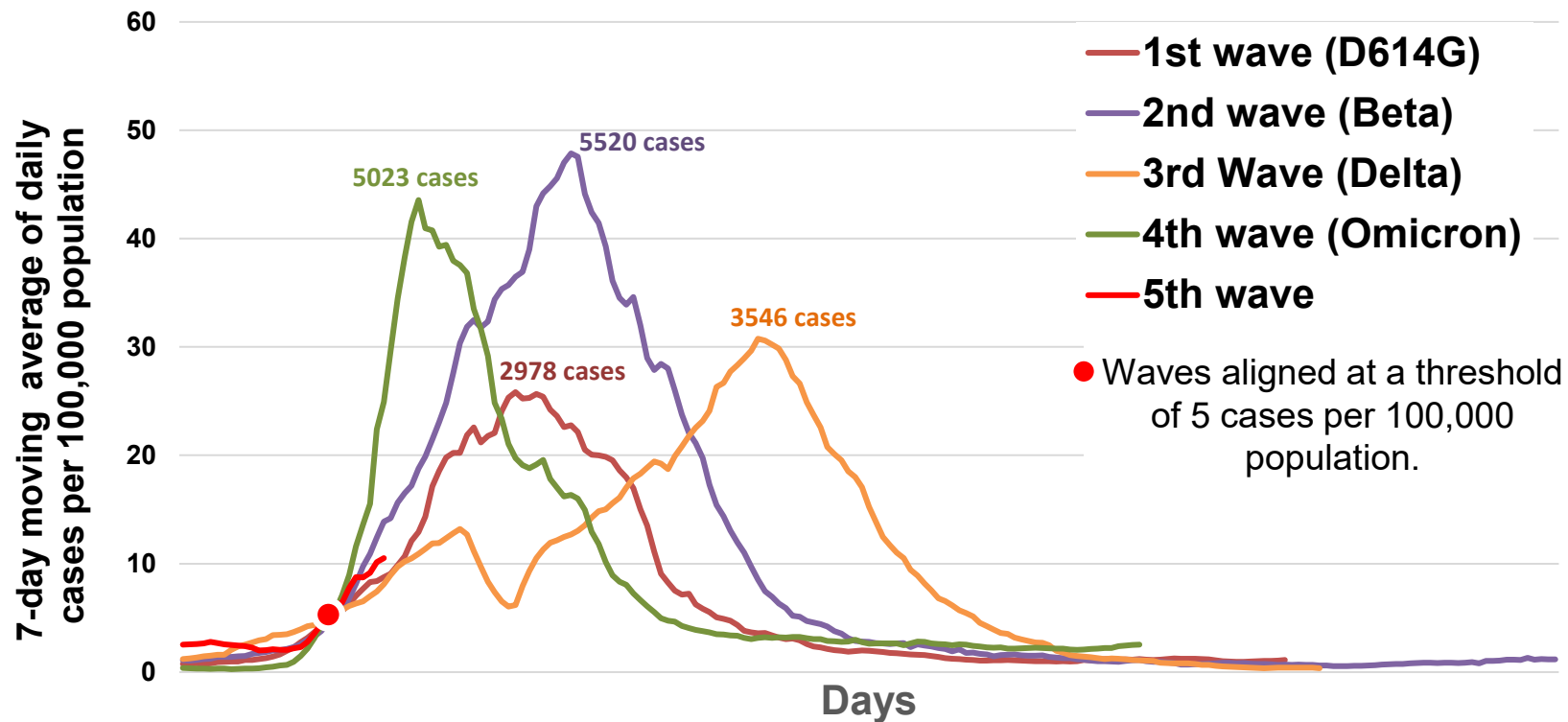
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SARS-Cov-2 cases in 1st, 2nd, 3rd, 4th, 5th waves: KwaZulu Natal

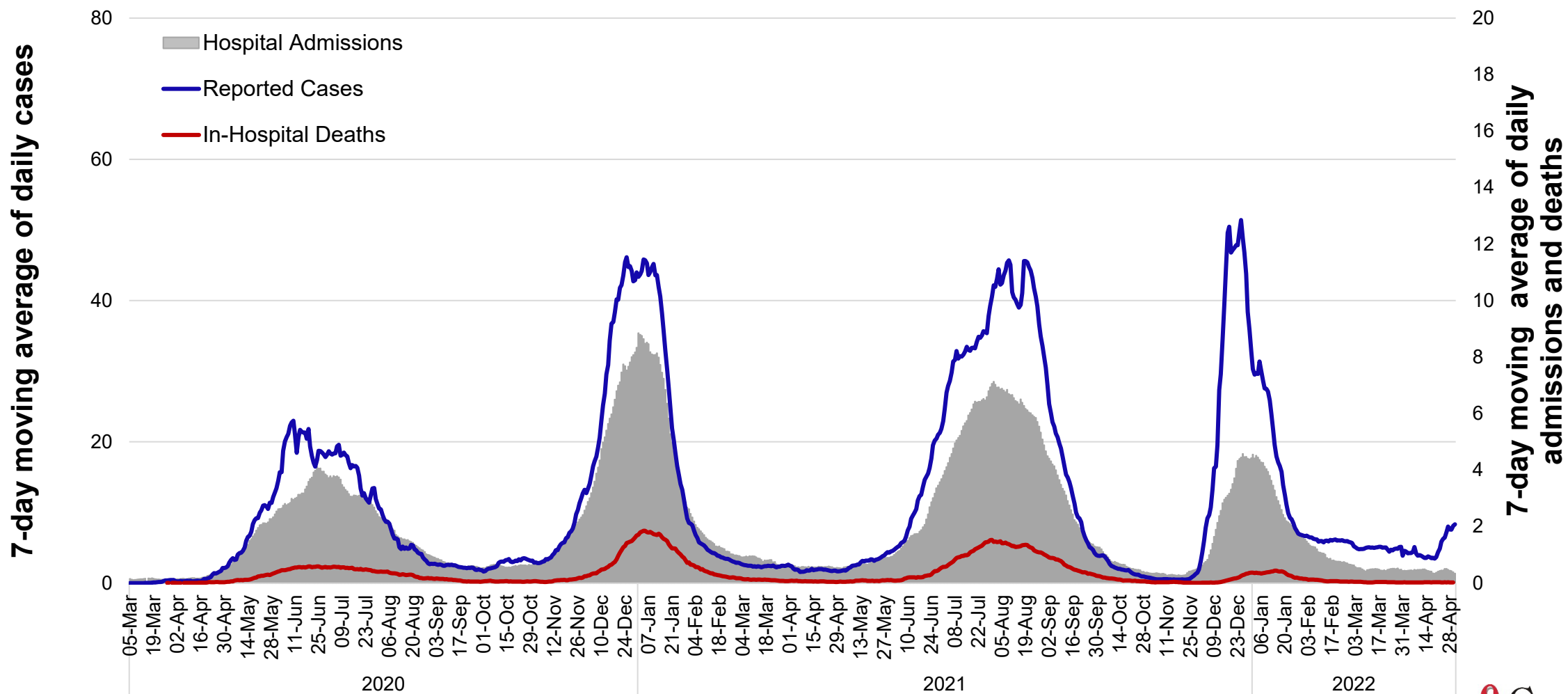
7-day moving average cases per 100,000 population up to - 01 May 2022



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SARS-Cov-2 in Western Cape

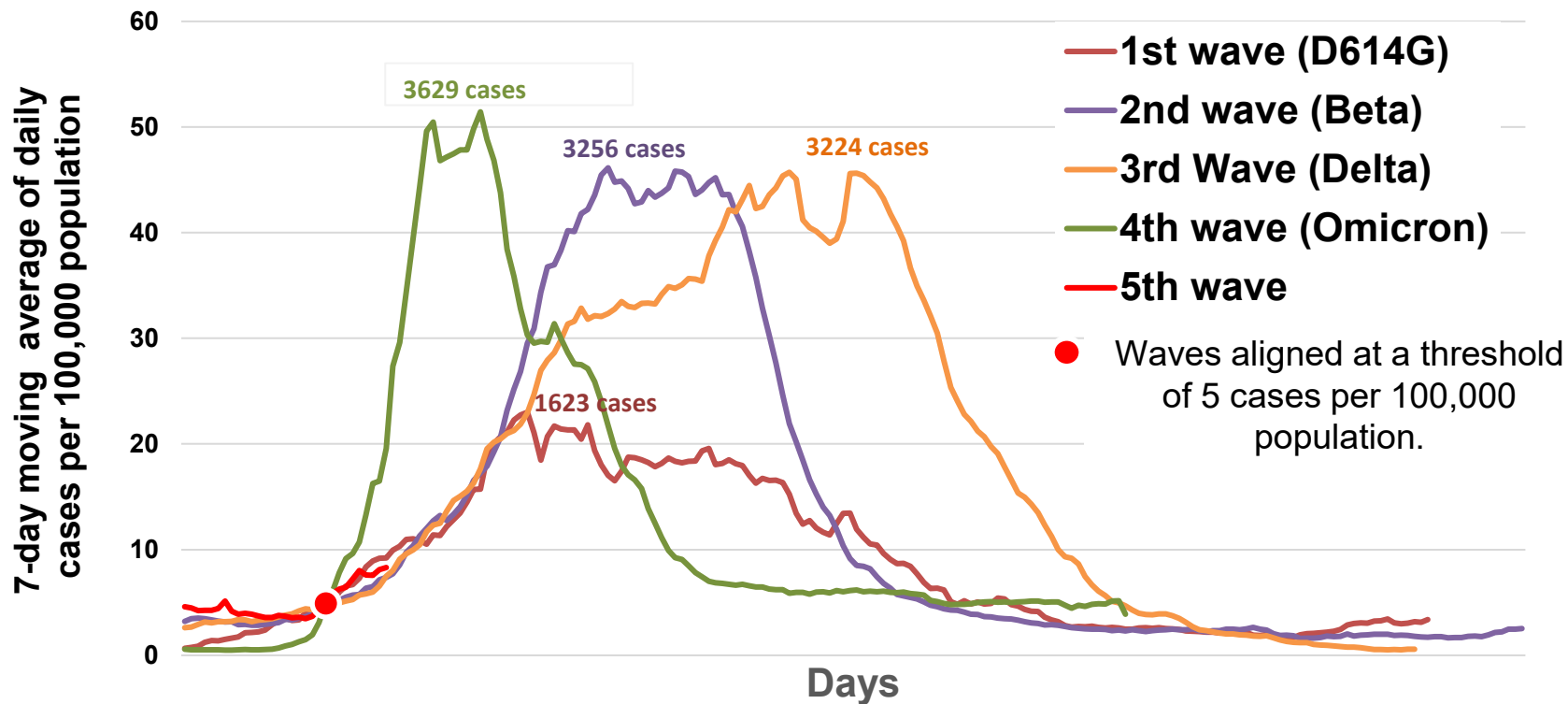
7-day moving average of new cases, hospital admissions and in-hospital Covid-19 deaths up to - 01 May 2022



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

SARS-Cov-2 cases in 1st, 2nd, 3rd, 4th, 5th waves: Western Cape

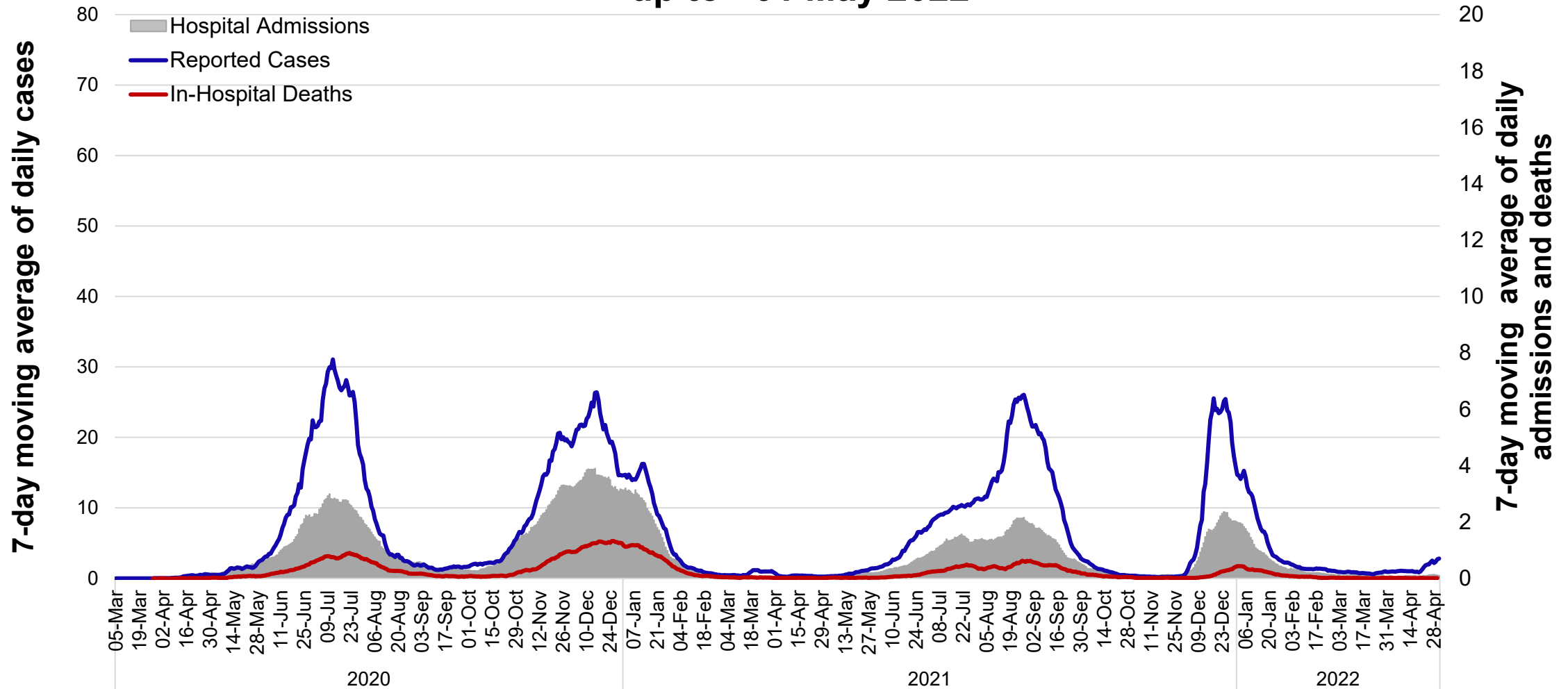
7-day moving average cases per 100,000 population
up to - 01 May 2022



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

SARS-Cov-2 in Eastern Cape

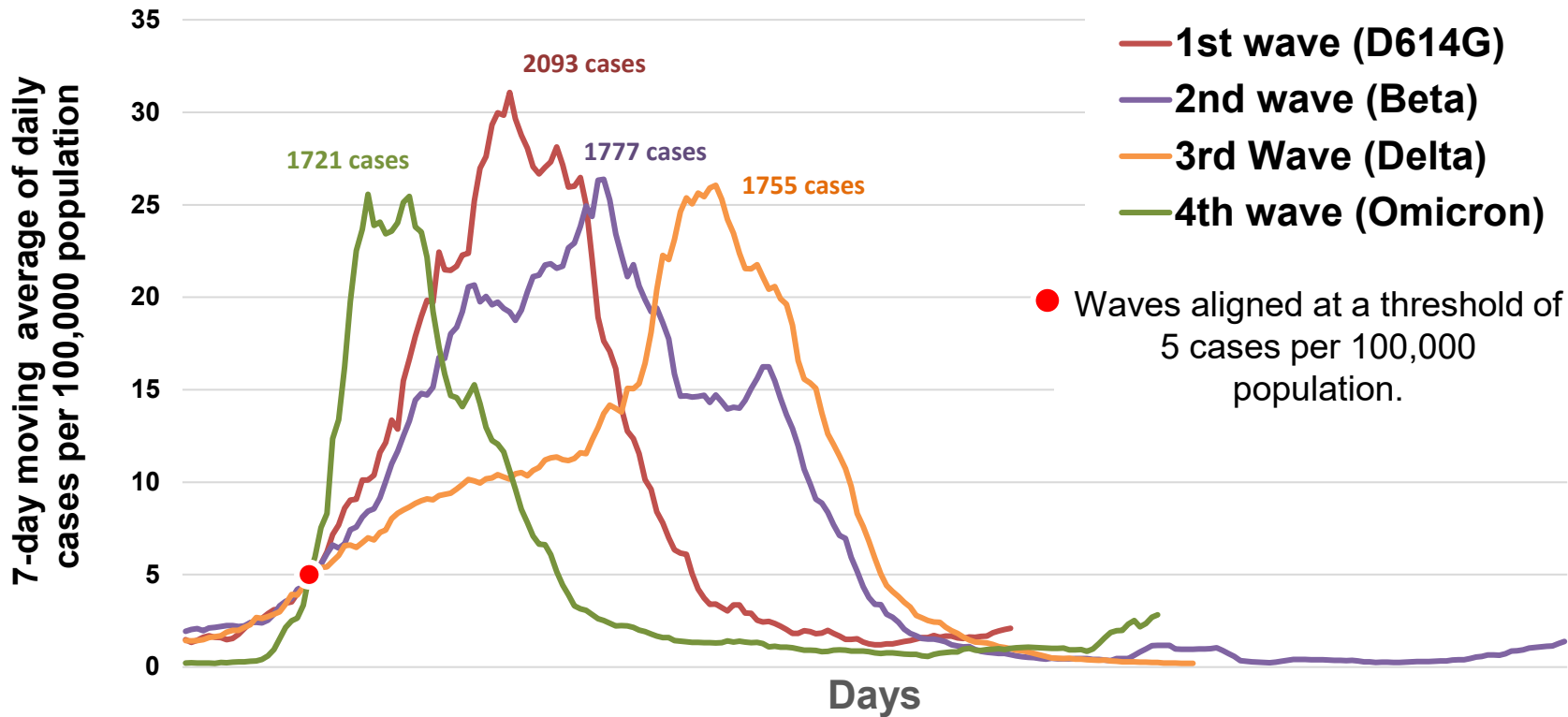
7-day moving average of new cases, hospital admissions and in-hospital Covid-19 deaths up to - 01 May 2022



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SARS-Cov-2 cases in 1st, 2nd, 3rd, 4th, 5th waves: Eastern Cape

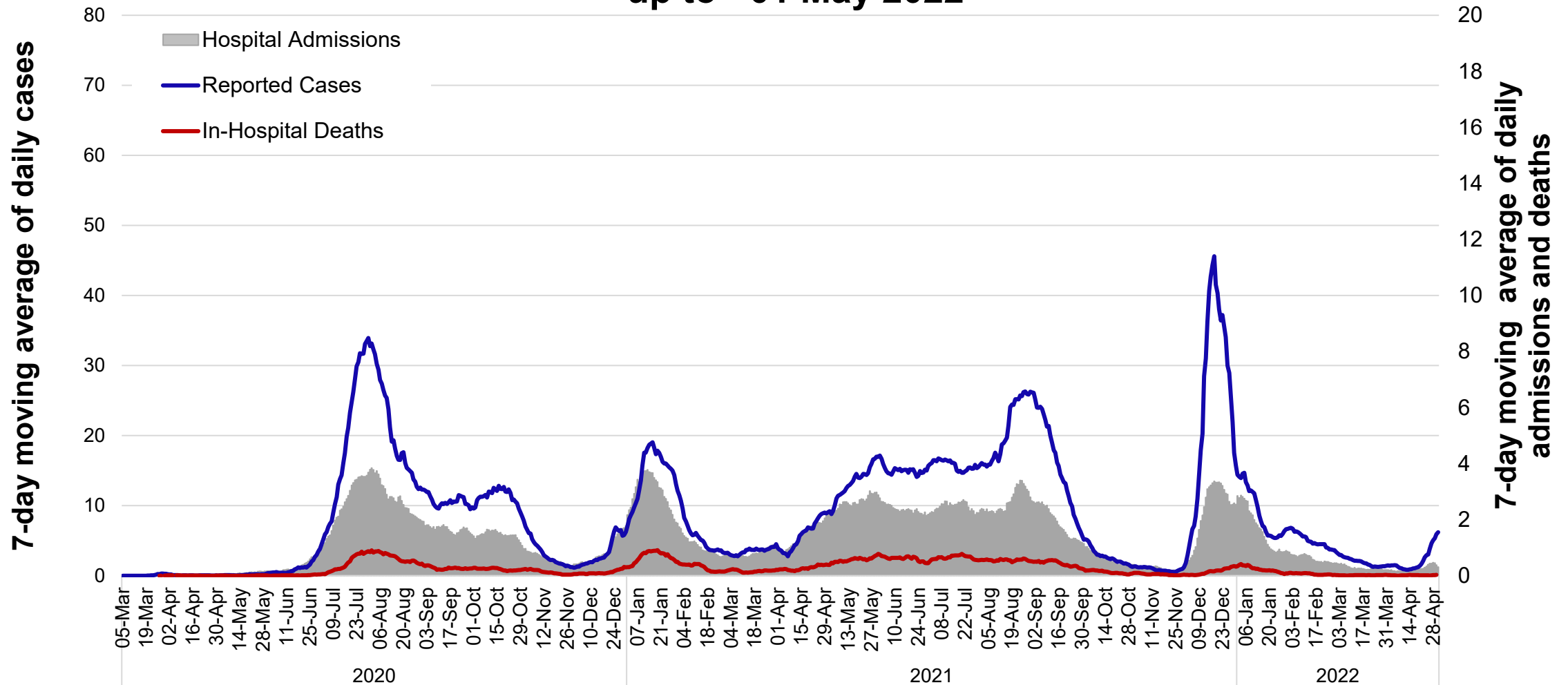
7-day moving average cases per 100,000 population
up to - 01 May 2022



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

SARS-Cov-2 in Free State

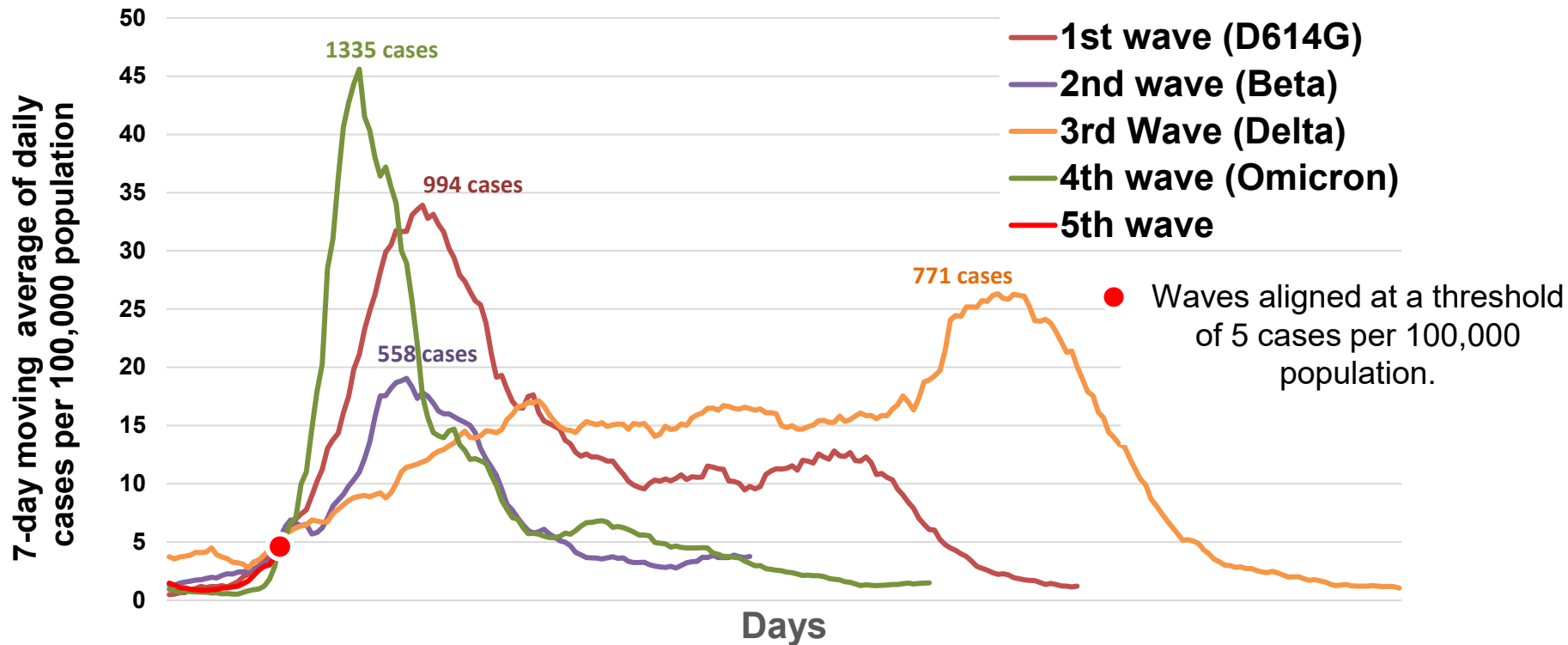
7-day moving average of new cases, hospital admissions and in-hospital Covid-19 deaths up to - 01 May 2022



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

SARS-Cov-2 cases in 1st, 2nd, 3rd, 4th, 5th waves: Free State

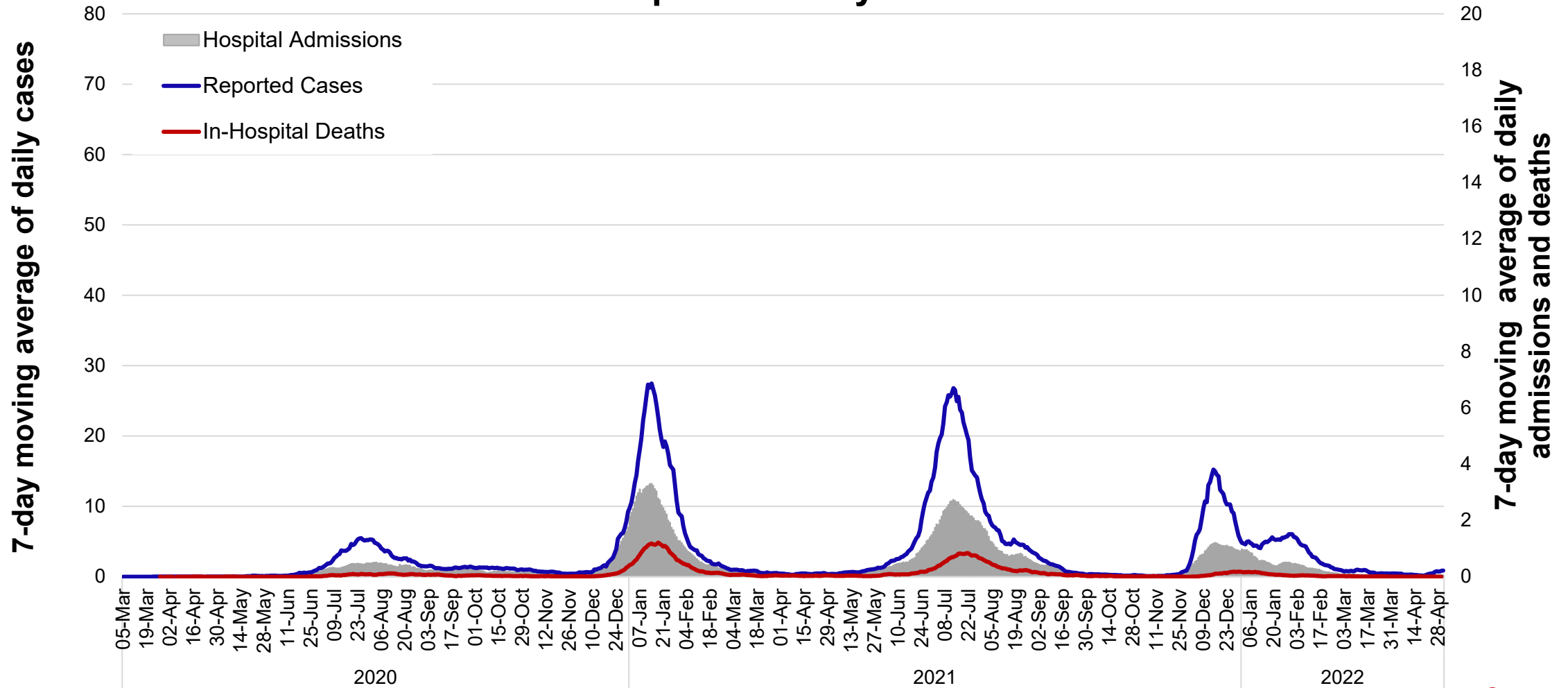
7-day moving average cases per 100,000 population up to - 01 May 2022



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

SARS-Cov-2 in Limpopo

7-day moving average of new cases, hospital admissions and in-hospital Covid-19 deaths up to - 01 May 2022

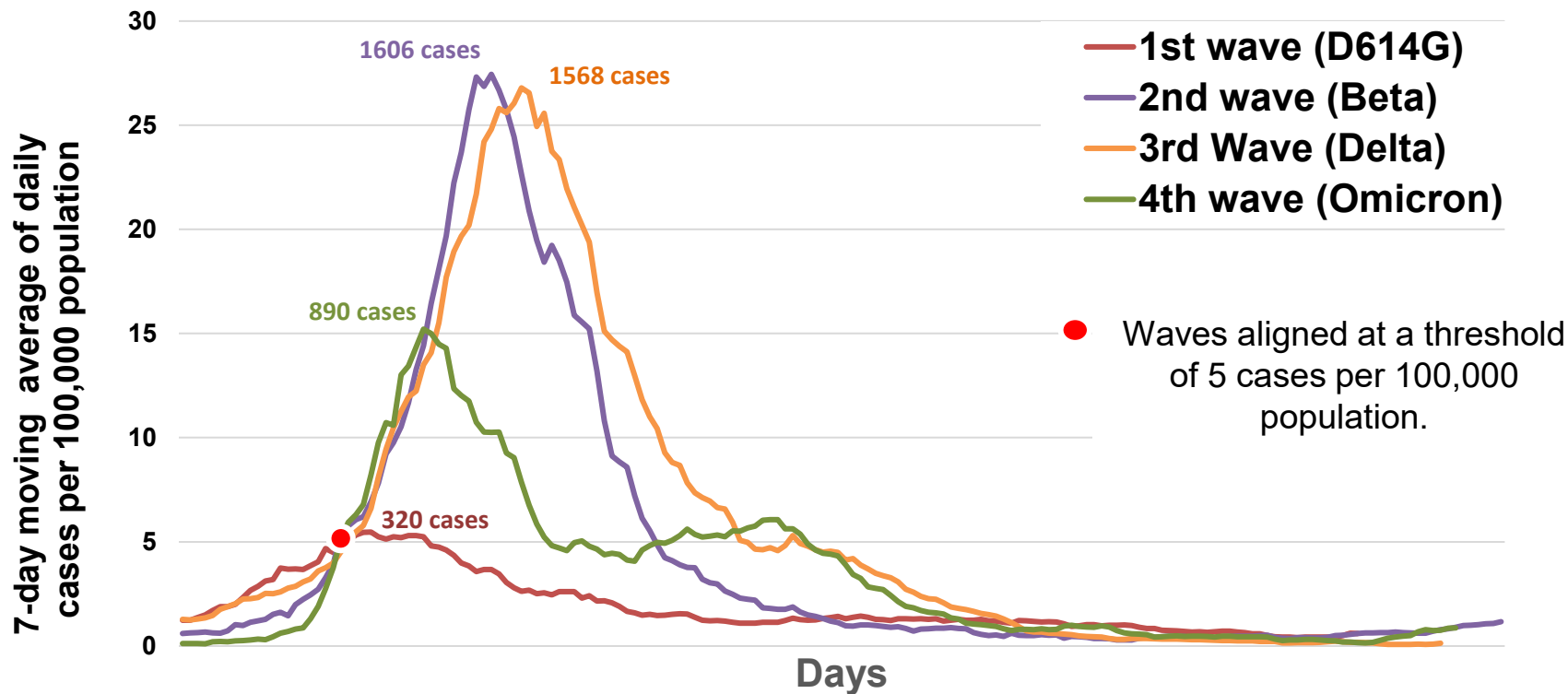


Source of hospital admissions data: Lucille Blumberg, Richard Welch and Waasila Jassat – DATCOV, NICD

SARS-Cov-2 cases in 1st, 2nd, 3rd, 4th, 5th waves: Limpopo

7-day moving average cases per 100,000 population

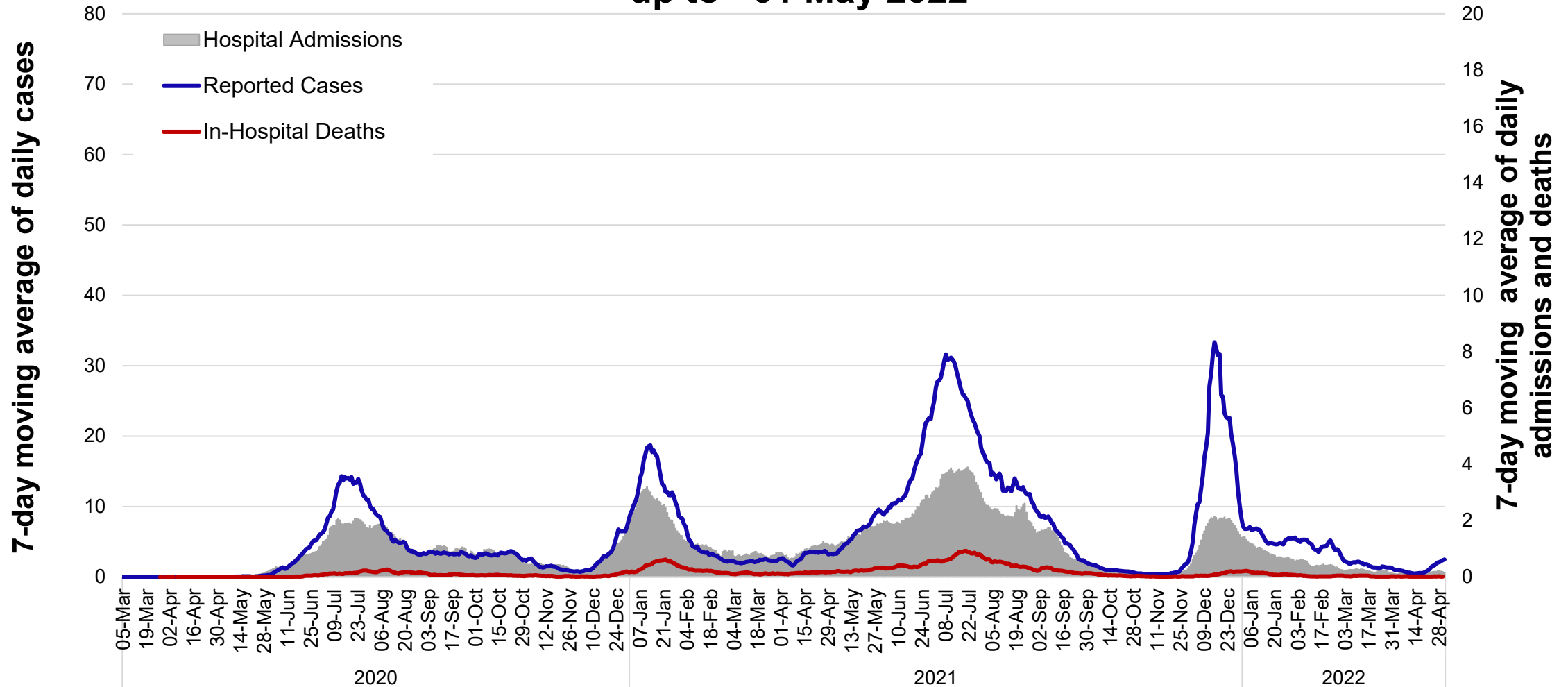
up to - 01 May 2022



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

SARS-Cov-2 in North West

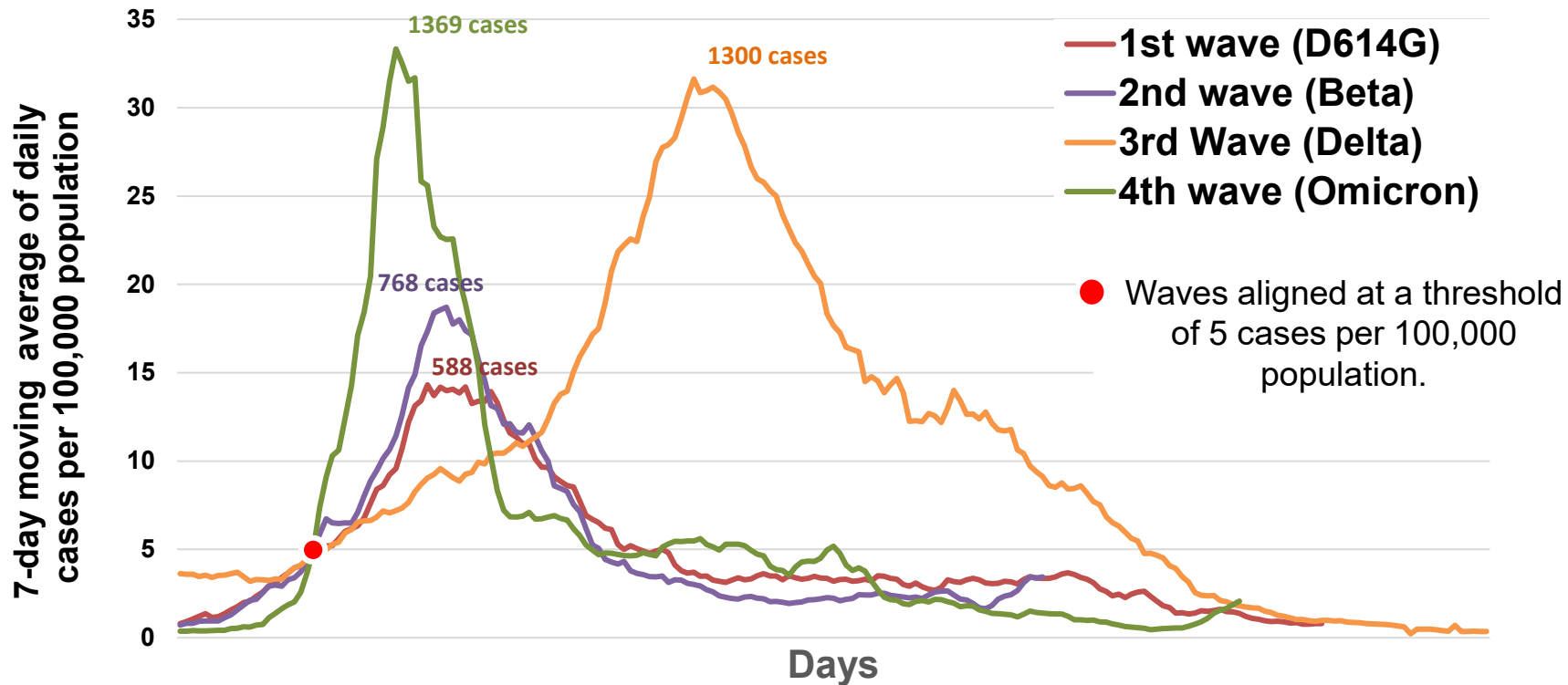
7-day moving average of new cases, hospital admissions and in-hospital Covid-19 deaths up to - 01 May 2022



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SARS-Cov-2 cases in 1st, 2nd, 3rd, 4th, 5th waves: North West

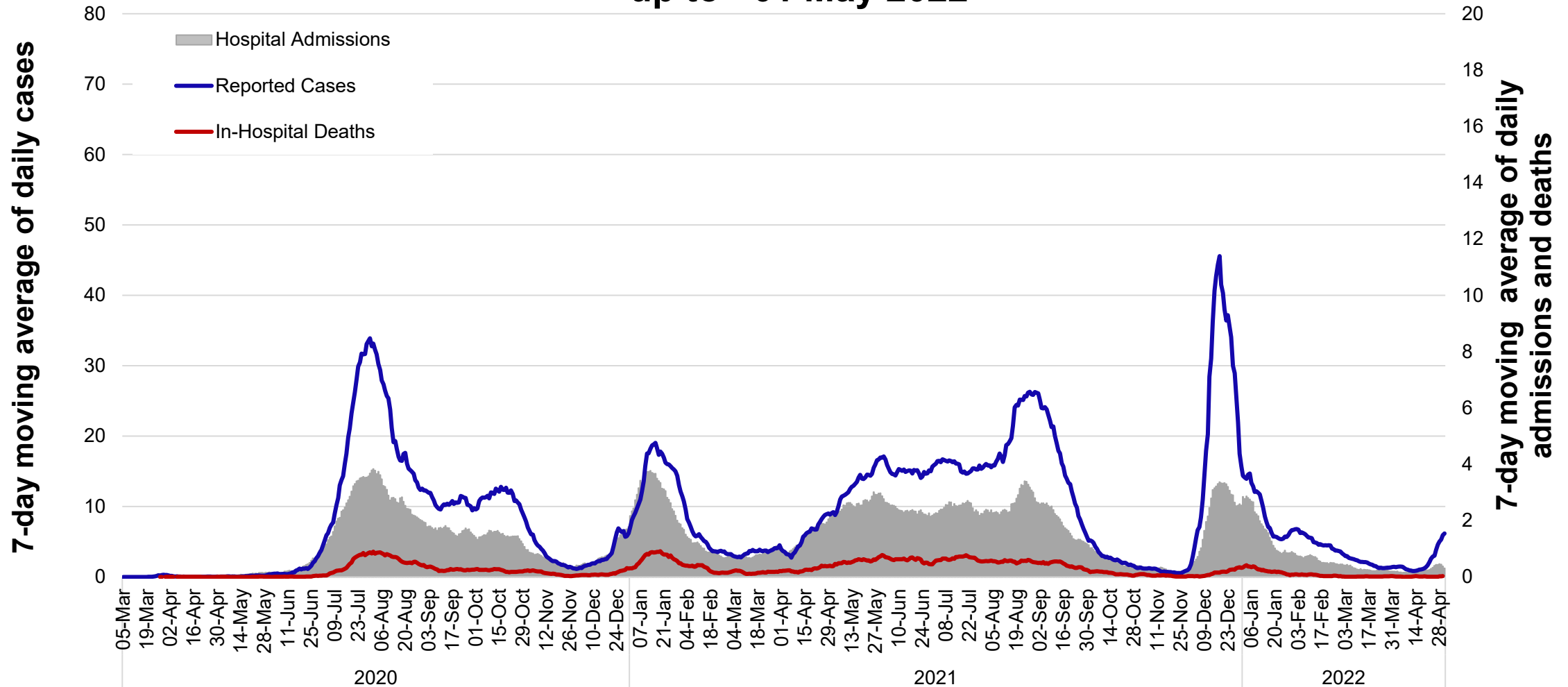
7-day moving average cases per 100,000 population
up to - 01 May 2022



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

SARS-Cov-2 in Mpumalanga

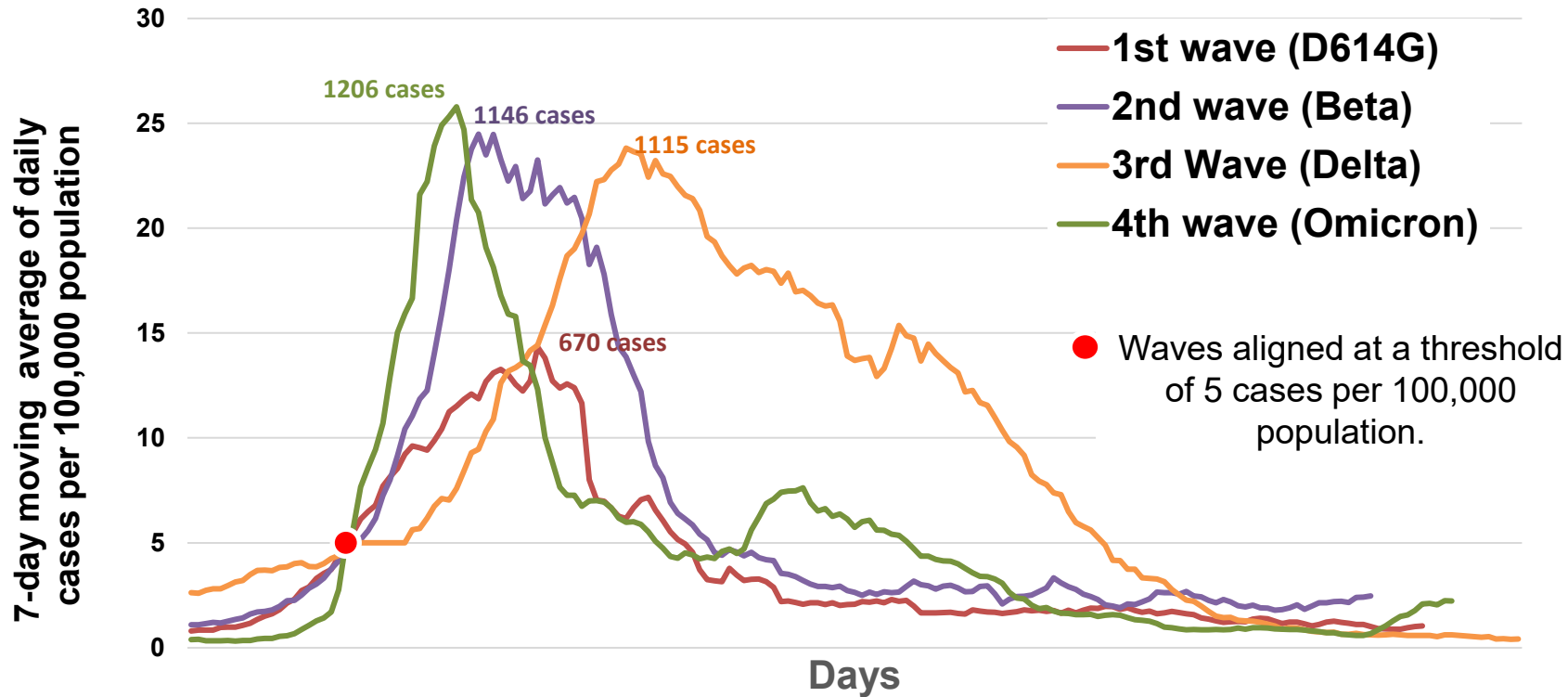
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SARS-Cov-2 cases in 1st, 2nd, 3rd, 4th, 5th waves: Mpumalanga

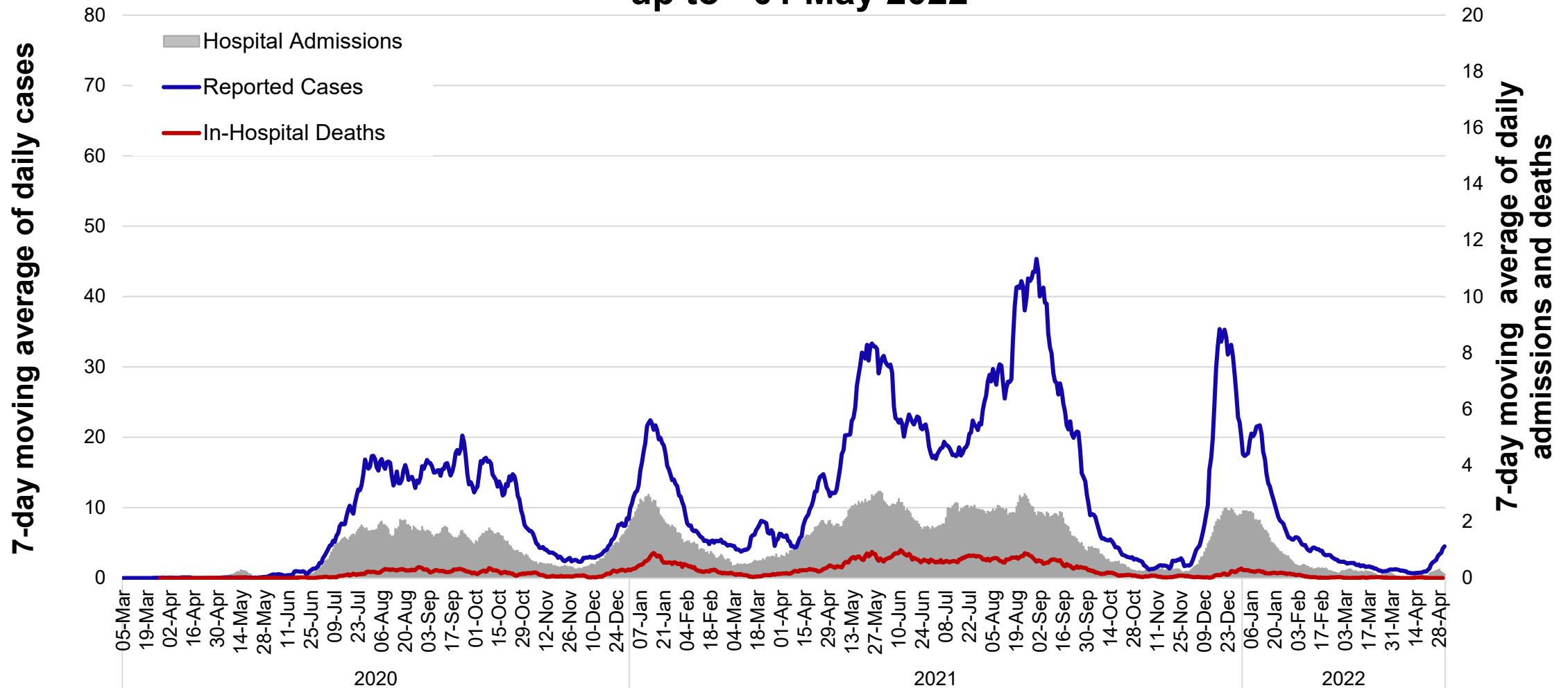
7-day moving average cases per 100,000 population up to - 01 May 2022



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

SARS-Cov-2 in Northern Cape

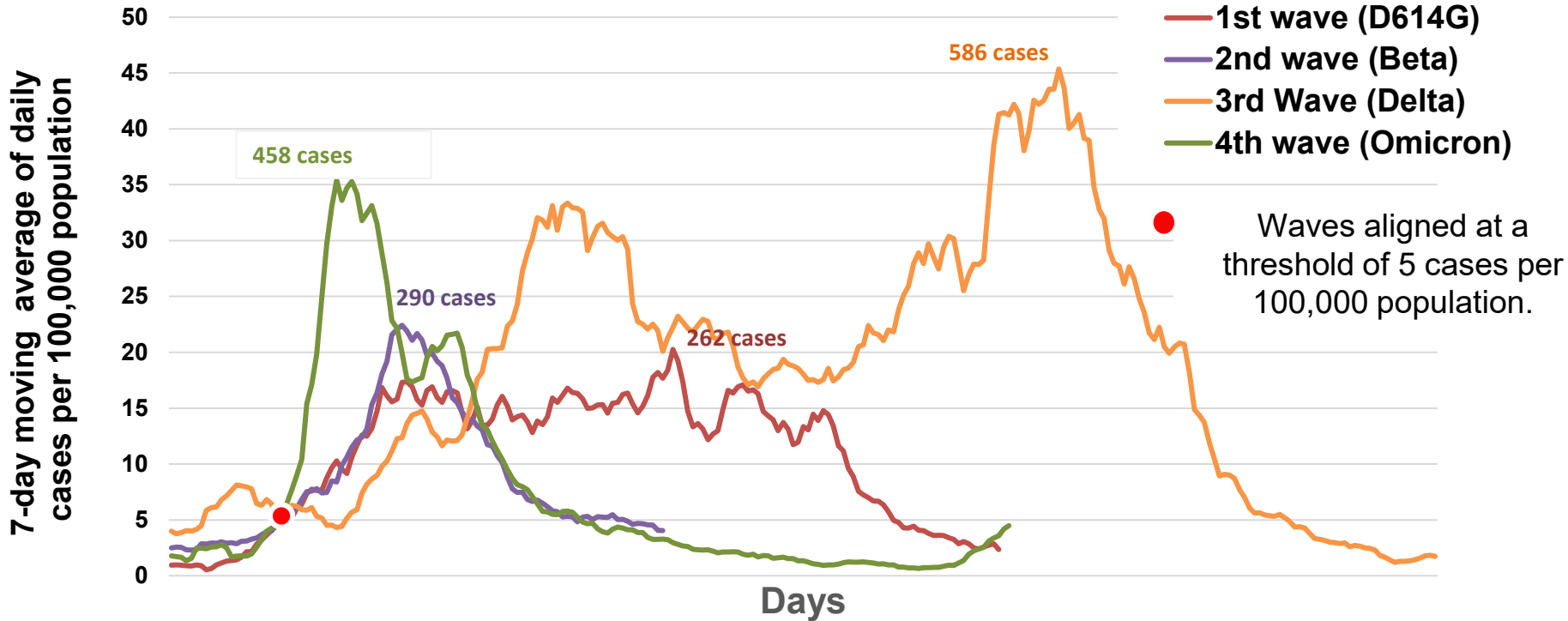
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Source of hospital admissions data: Lucille Blumberg, Richard Welch and Waasila Jassat – DATCOV, NICD

SARS-Cov-2 cases in 1st, 2nd, 3rd, 4th, 5th waves: Northern Cape

7-day moving average cases per 100,000 population up to - 01 May 2022



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