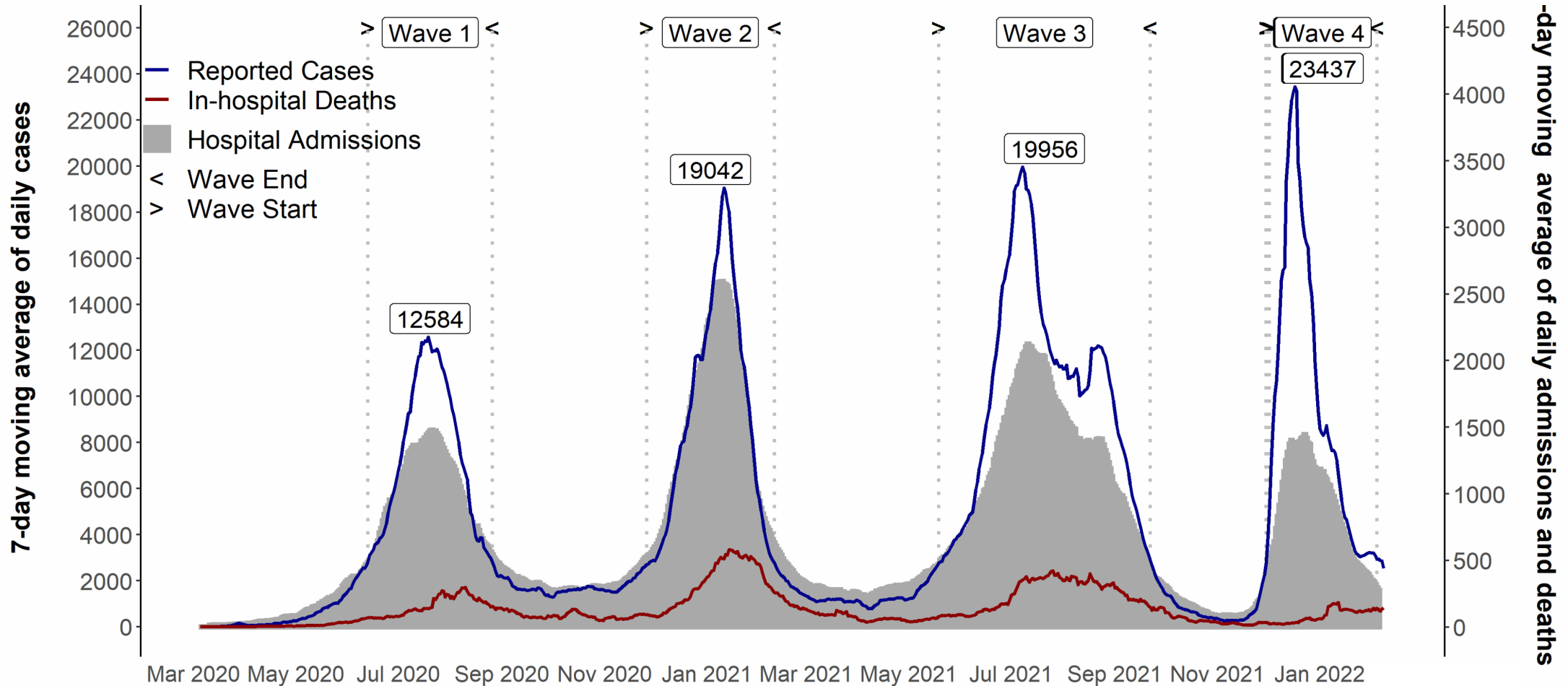


Covid-19 in South Africa

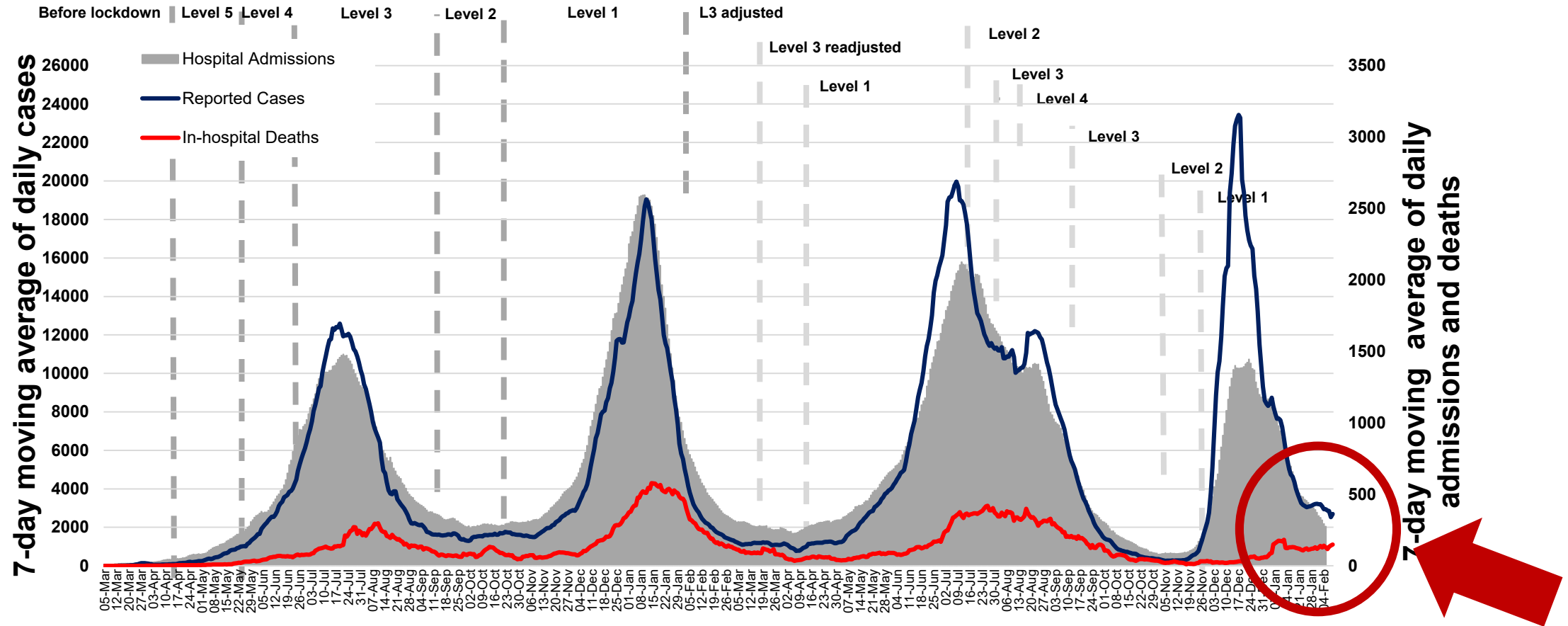
up to - 09 February 2022



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

Covid-19 in South Africa

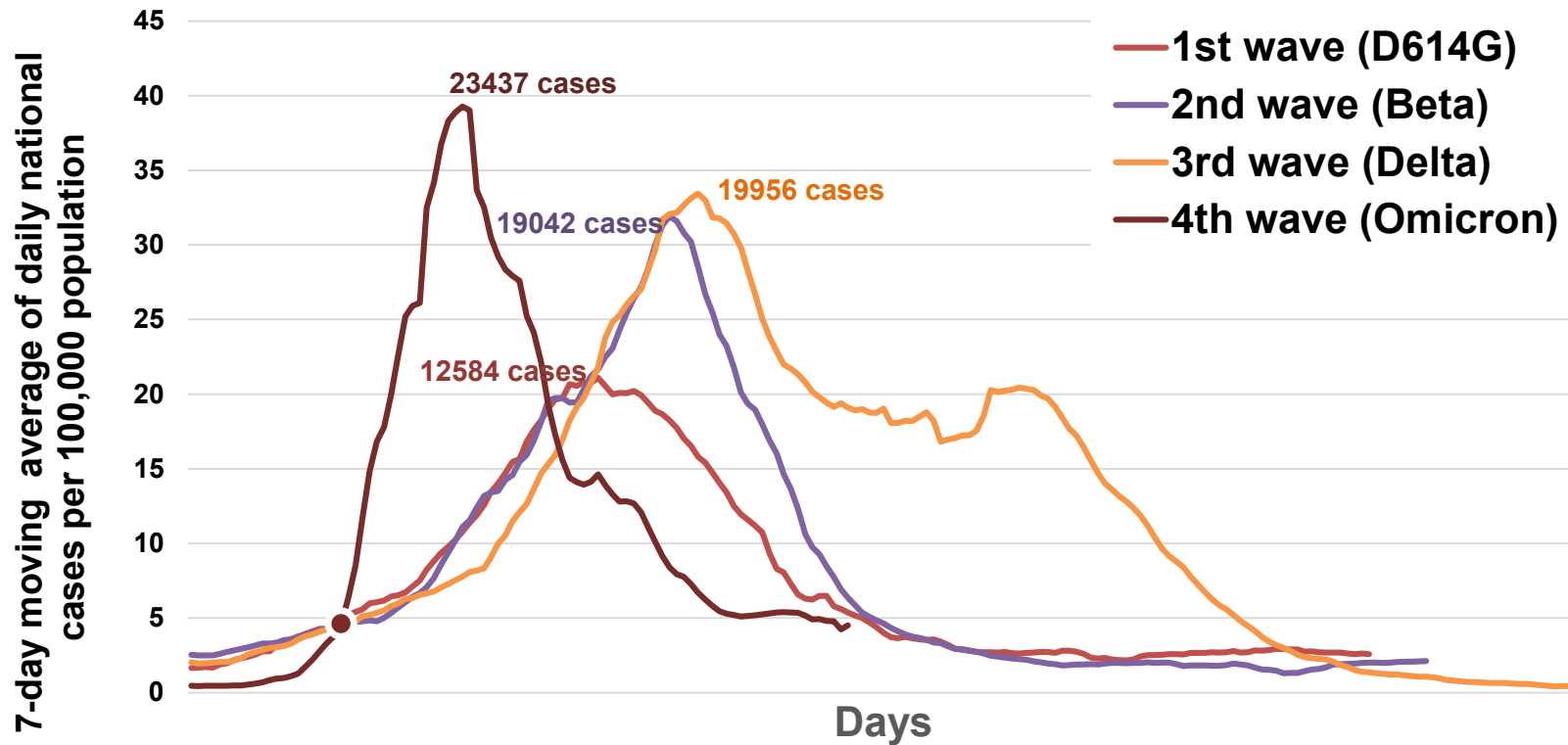
7-day moving average of new cases, hospital admissions and in-hospital Covid-19 deaths up to - 09 February 2022



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

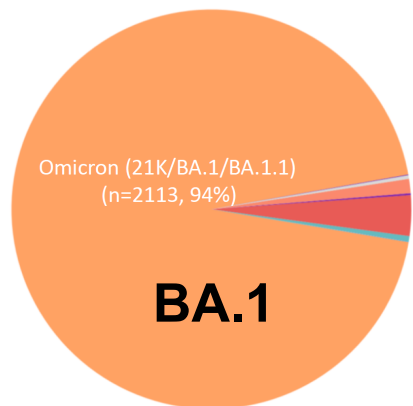
7-day moving average cases per 100,000 population up to - 09 February 2022



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

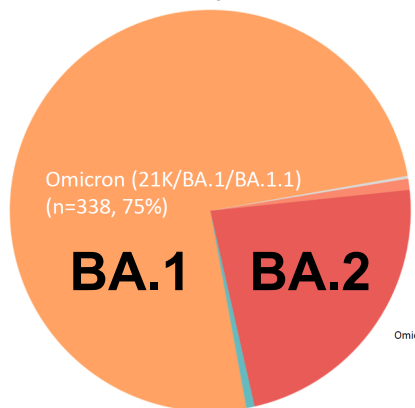
South Africa: cases ↑ in children – BA.2 spread when schools opened in January

December (N=2243)



Total Omicron in Dec: 2223 (99.1%)

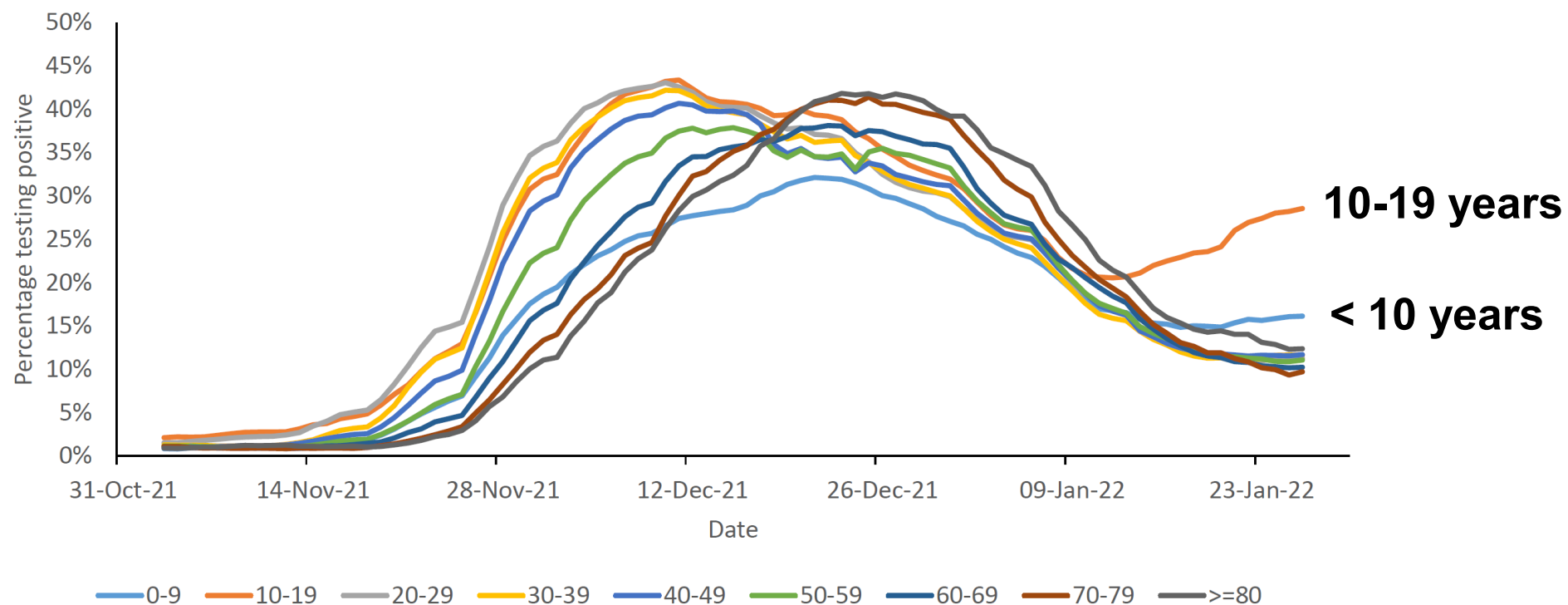
January (N=450)



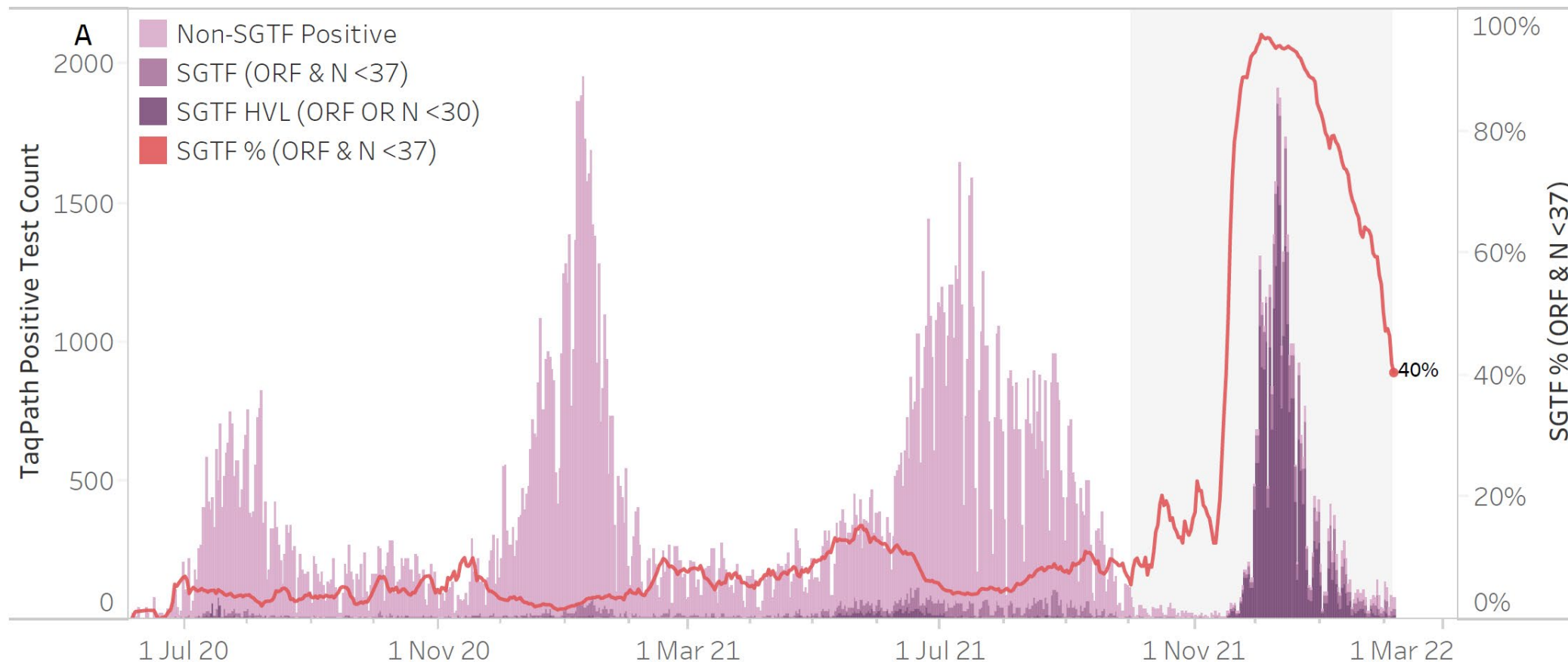
Delta (21J) (n=3, 1%)

Total Omicron in Jan: 446 (99.1%)

7 day moving average of percentage testing positive by age group (for PCR tests only), South Africa, 31 October 2021-29 January 2022



% of tests on TaqPath Thermo-Fisher PCR test that are S-gene target failure












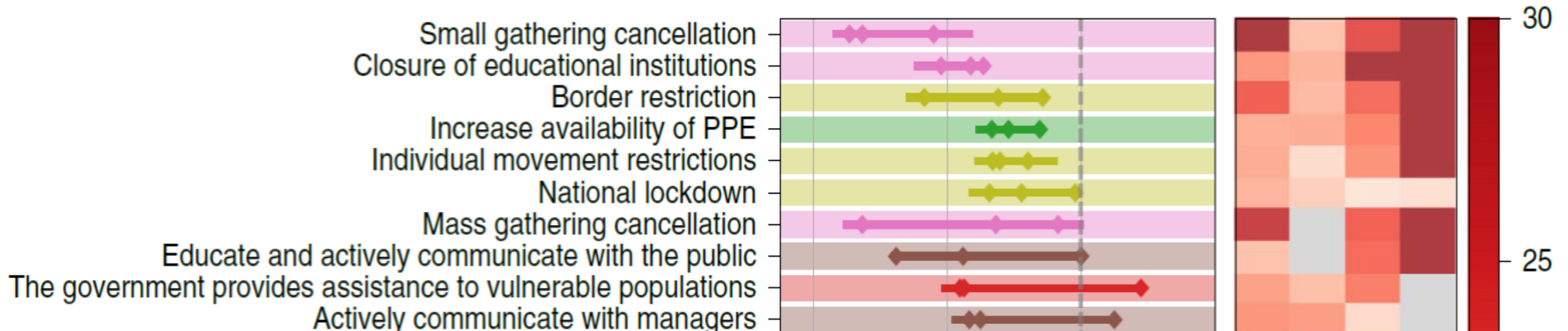
Source: Scott L, et al. Covid-19 Laboratory Diagnostics Cycle Threshold (Ct) value update: Data to 6 February 2022, NHLS.



Ranking the effectiveness of worldwide COVID-19 government interventions

nature

Nils Haug ^{1,2,7}, Lukas Geyrhofer ^{2,7}, Alessandro Londei ³, Elma Dervic ^{1,2}, Amélie Desvars-Larrive ^{2,4}, Vittorio Loreto ^{2,3,5}, Beate Pinior ^{2,4}, Stefan Thurner^{1,2,6} and Peter Klimek ^{1,2} 

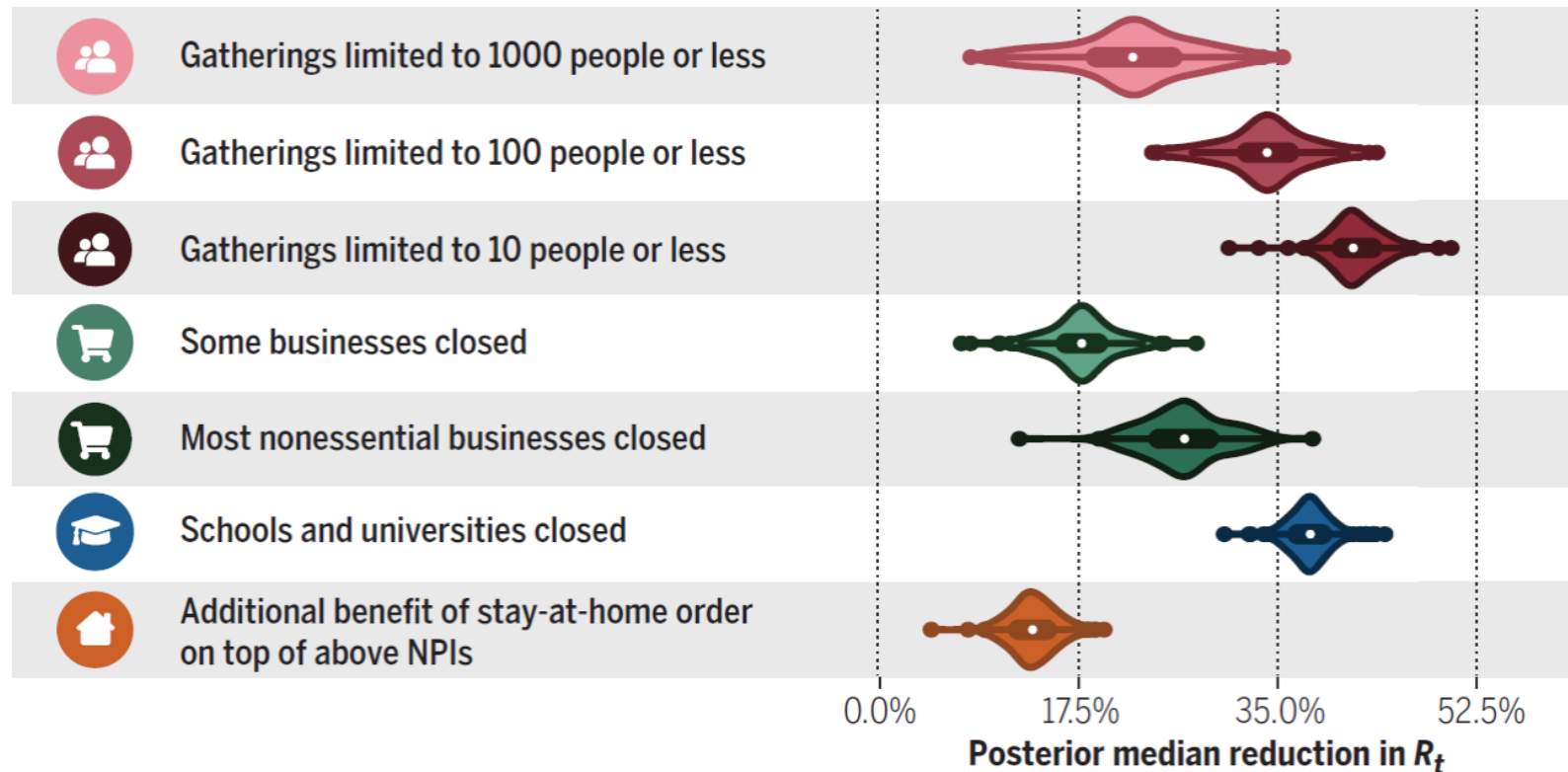


>1000 interventions assessed across 225 countries to identify the most effective government measures to slow viral transmission



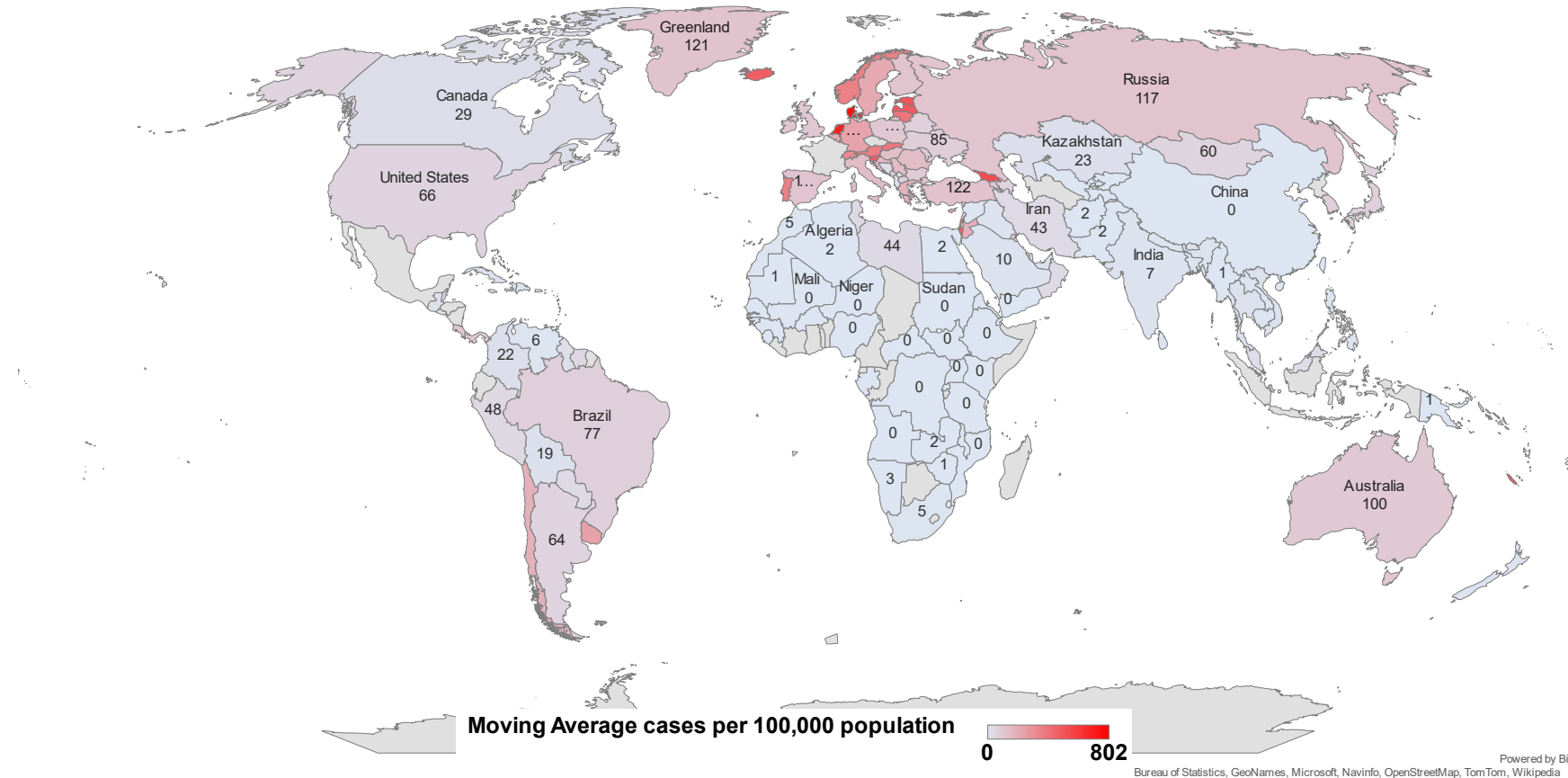
Inferring the effectiveness of government interventions against COVID-19

Jan M. Brauner^{*†}, Sören Mindermann^{*†}, Mrinank Sharma^{*†}, David Johnston, John Salvatier, Tomáš Gavenčiak, Anna B. Stephenson, Gavin Leech, George Altman, Vladimir Mikulik, Alexander John Norman, Joshua Teperowski Monrad, Tamay Besiroglu, Hong Ge, Meghan A. Hartwick, Yee Whye Teh, Leonid Chindelevitch[‡], Yarin Gal[‡], Jan Kulveit[‡]



Global Covid-19 epidemic

7-day moving average cases per 100,000 population
up to - 09 February 2022

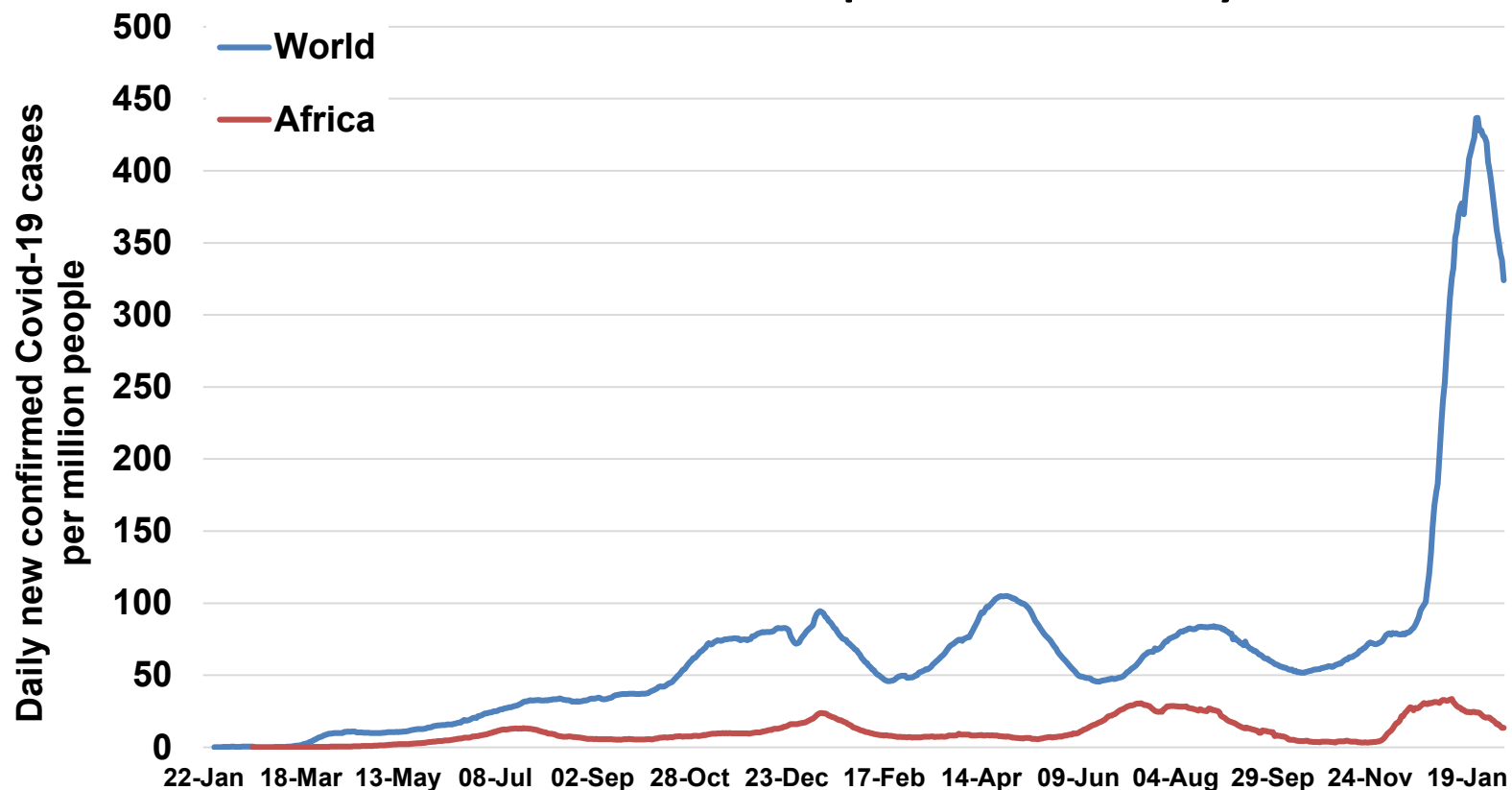


Source: Our World in Data

Covid-19 in Africa

Omicron variant drives 4th wave

up to – 09 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)

nature

How sneezing hamsters sparked a COVID outbreak in Hong Kong

Hamsters are only the second species known to have spread SARS-CoV-2 to humans.

Preprints with THE LANCET

Transmission of SARS-CoV-2 (variant Delta) from pet hamsters to humans and onward human propagation of the adapted strain: a case study

Hui-Ling Yen PhD^{1*}, Thomas HC Sit BVSc^{2*}, Christopher J Brackman BVSc², Shirley SY Chuk BVSc², Samuel MS Cheng MPhil¹, Haoran Gu PhD¹, Lydia D.I Chang MPH¹, Pavithra Krishnan



Human and hamster cases in this outbreak



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

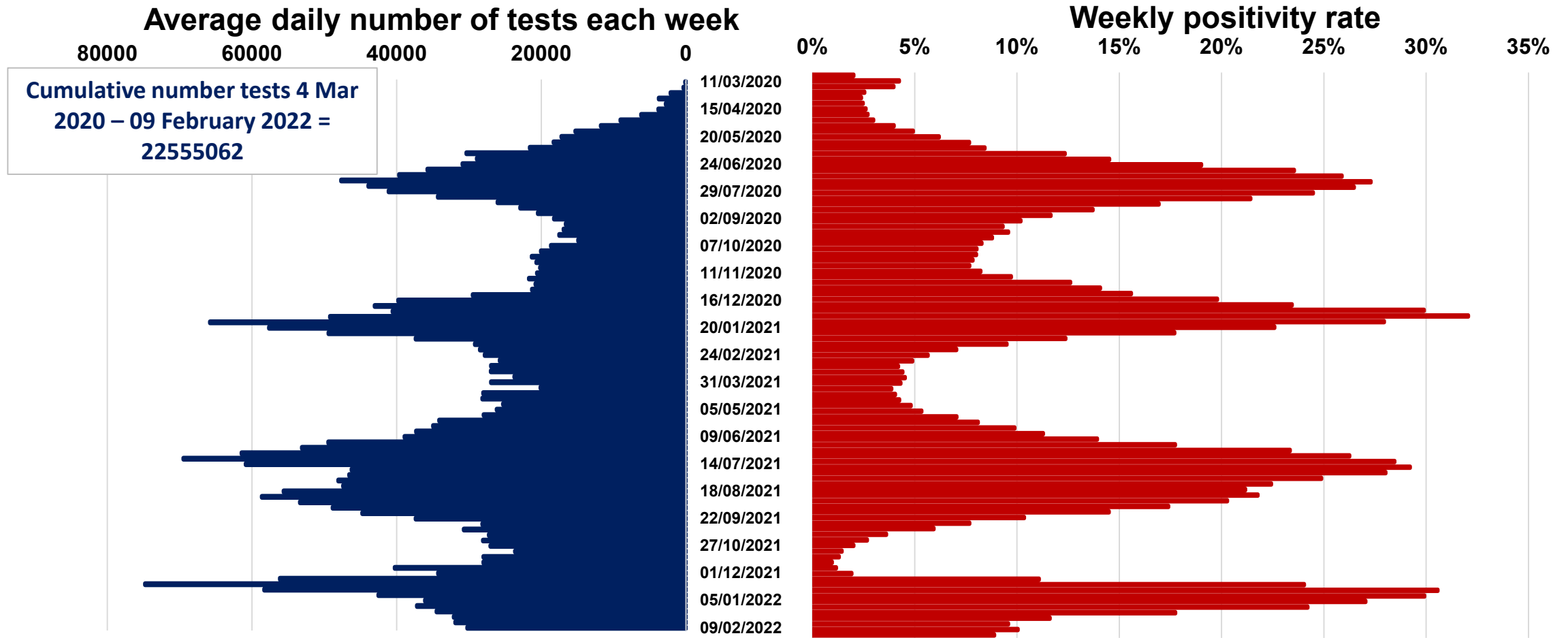
up to - 06 February 2022



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

Average daily tests and proportion of positive tests

up to – 09 February 2022

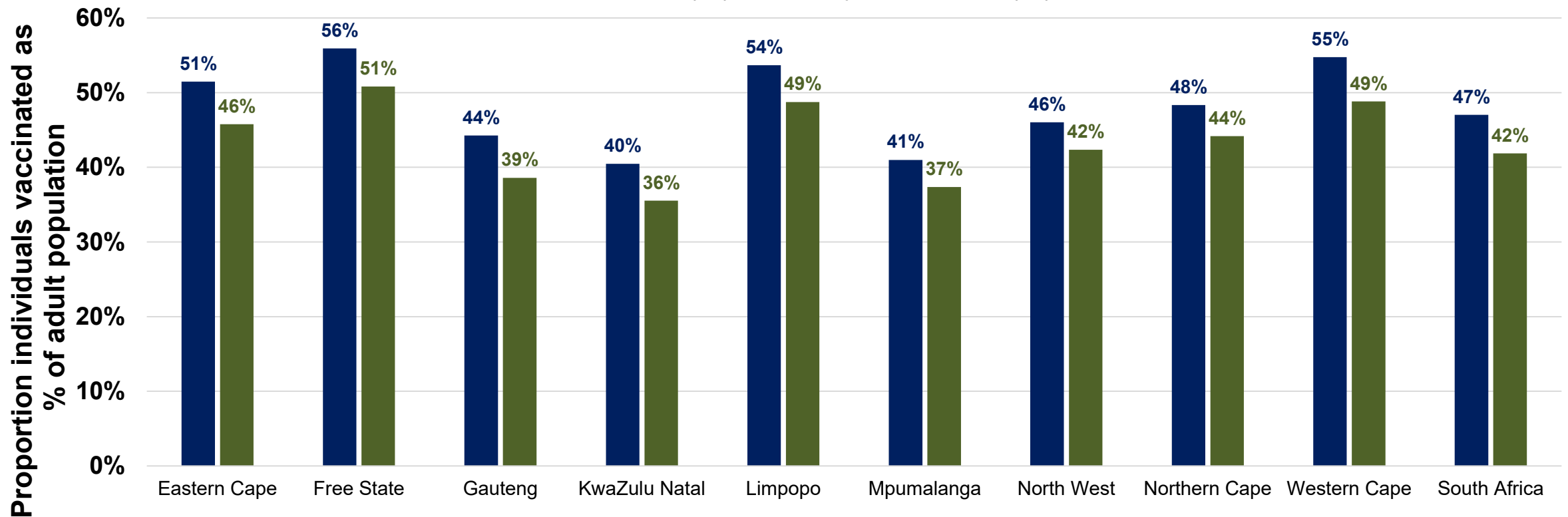


Data source: Department of Health

Proportion of individuals vaccinated as % of adult population

up to - 09 February 2022

■ Vaccinated (%) ■ Fully vaccinated (%)

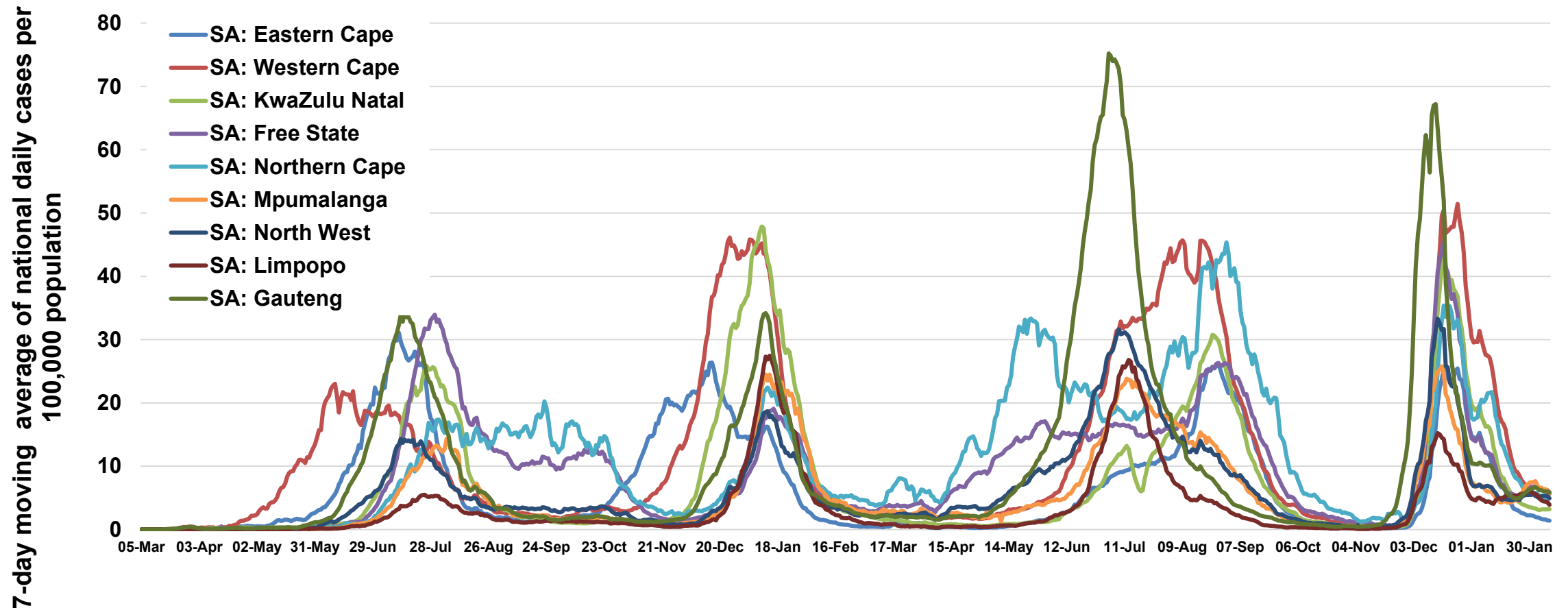


Source: Department of Health. <https://sacoronavirus.co.za/latest-vaccine-statistics/>

Confirmed SARS-Cov-2 cases by province

7-day moving average cases per 100,000 population

up to - 09 February 2022

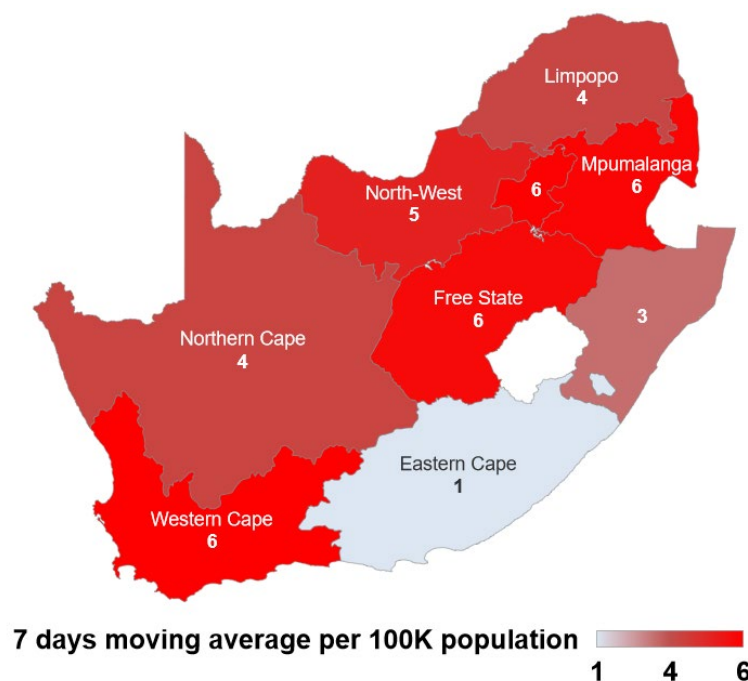


Data source: Department of Health; Analysis

Daily new cases over last 7 days/100,000

up to - 09 February 2022

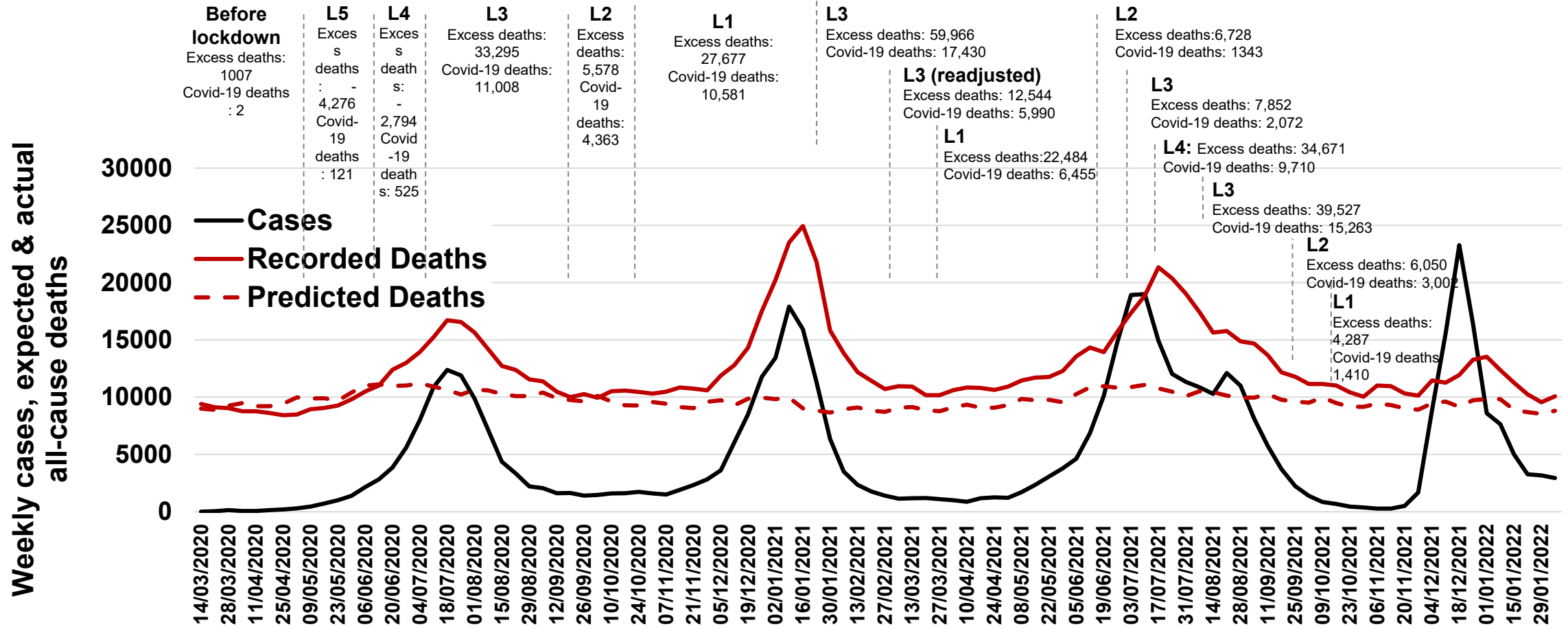
Province	Population per 100,000	7 Days Moving Average				Increase / Decrease
		at 7 days back	Per 100K at 7 days back	at a day back	100K at a day back	
Eastern Cape	67	129	2	94	1	-27%
Free State	29	197	7	164	6	-16%
Gauteng	155	1006	6	900	6	-11%
KwaZulu Natal	115	363	3	367	3	1%
Limpopo	59	314	5	228	4	-27%
Mpumalanga	47	324	7	268	6	-17%
North West	41	212	5	203	5	-4%
Northern Cape	13	74	6	51	4	-31%
Western Cape	71	464	7	414	6	-11%
South Africa	597	3082	5	2690	5	-13%
Africa	13410	25536	2	18621	1	-27%
World	77952	3110232	40	2551037	33	-18%



Data source: Department of Health

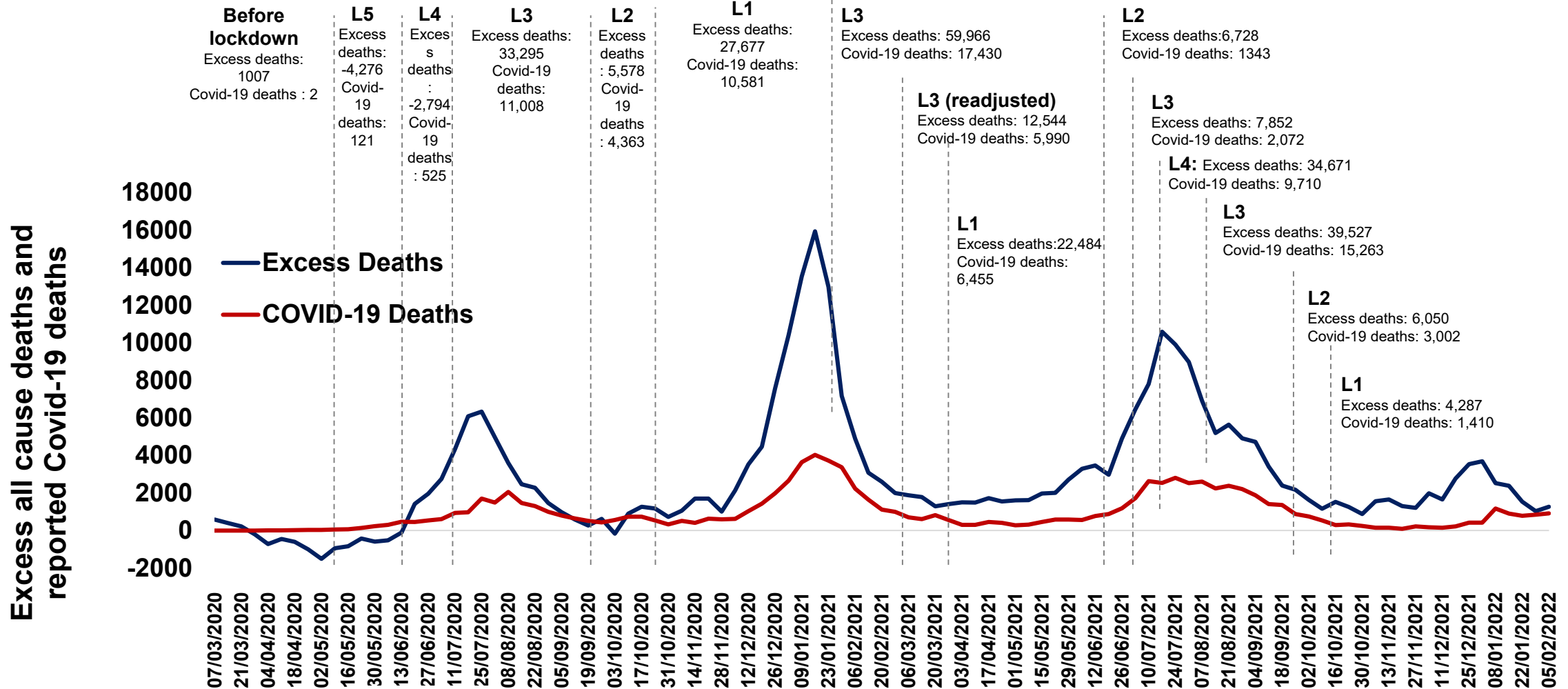
Expected & actual all-cause deaths during Covid-19

up to - 5 February 2022



Weekly excess all cause deaths & reported Covid-19 deaths

up to – 5 February 2022



Source: Bradshaw D, et al

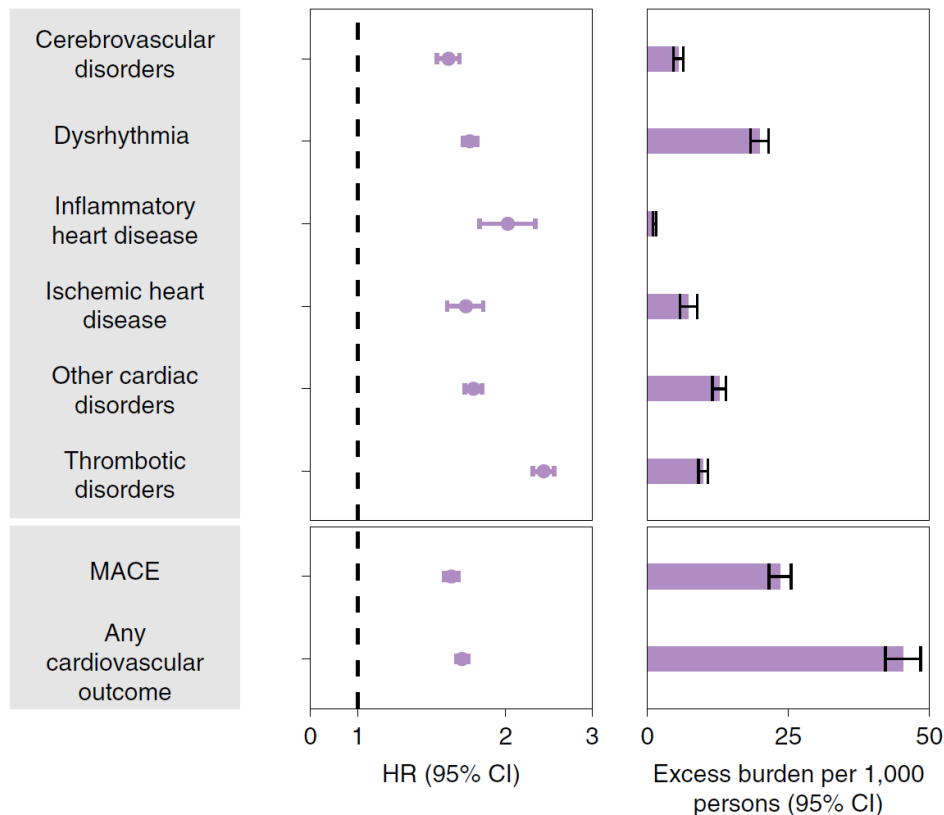


The Covid-19 illness burden long after infection

nature
medicine

Long-term cardiovascular outcomes of COVID-19

Yan Xie ^{1,2,3}, Evan Xu ^{1,4}, Benjamin Bowe^{1,2} and Ziyad Al-Aly ^{1,2,5,6,7} 



- **153,760 Covid-19 infected people vs 5m current and historical control groups**
- **>50% ↑ risk of cardiovascular disease - from stroke to heart attacks & myocarditis after first 30 days for more than 1 year later**
- **↑ risk in ICU, hospitalized & mild Covid-19**
- **↑ risk regardless of age, race, sex and other CHD risk factors like diabetes, HYT, obesity & ↑ lipids**