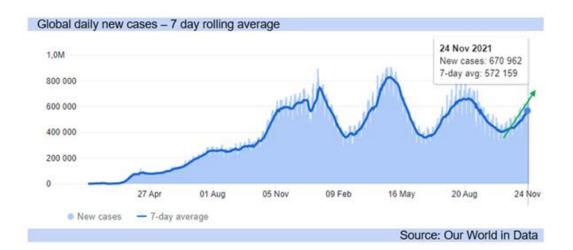
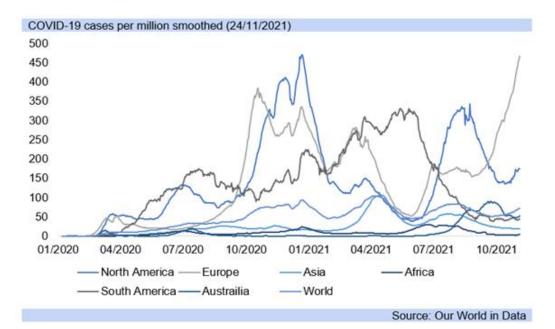
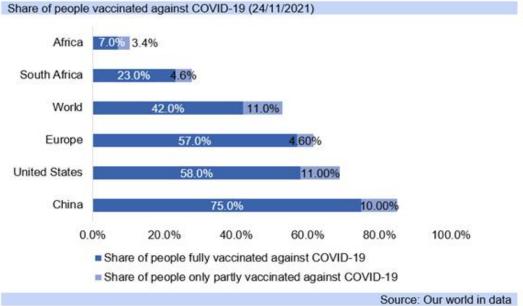


Covid-19: the new delta sub-variant is driving the fourth wave of Covid-19 infections globally, while locally SA's fourth wave may be beginning



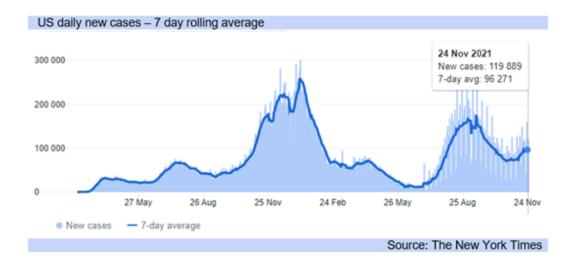




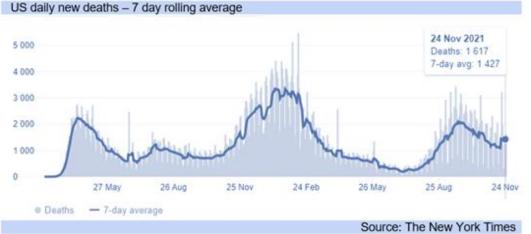




Countries, territories and areas reporting variants Alpha, Beta, Gamma and Delta Alpha Beta Delta Gamma Proportion of VOC among VOC detected, too few sequences to estimate proportion total sequences\* 0.501 - 1.000 No new VOC sequences, 0.101-0.500 VOC previously reported\*\* 0.011 - 0.100 No presence of VOC reported to WHO >0.000 - 0.010 Not applicable Source: WHO





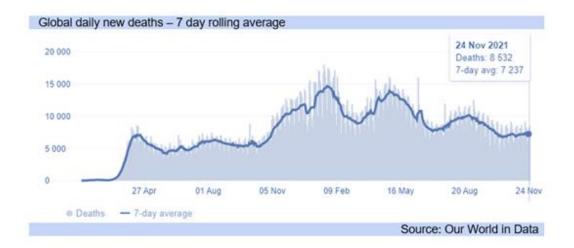


This is a composite measure based on nine response indicators including school closures, workplace closures, and travel bans, rescaled to a value from 0 to 100 (100 = strictest). If policies vary at the subnational level, the index is shown as the response level of the strictest sub-region

- South Africa is seeing a rise in daily new cases of COVID-19 infections, at 1 275 yesterday, still mild, but well up from 312 two days ago, and 116 on the 8<sup>th</sup> of November. Globally however, the fourth wave is building strongly, centered in Europe and the UK.
- The 7-day rolling average of new daily cases of COVID-19 infections was distorted by the addition of some (18 586) previously excluded cumulative tests on Tuesday, bringing the 7-day rolling average to 3 202, but this will wear out the system by next week.
- Globally, new cases are occurring at 0.6million a day on the 7-day rolling average, well up on the 11<sup>th</sup> of October, the dip between the third and fourth wave in global new COVID-19 infections on a 7-day rolling average.



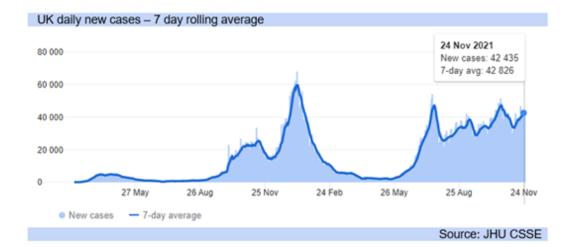
- The US is also seeing its fourth wave beginning, and this is worrying financial markets and the risk averse domestic currency is at R15.82/USD today, with very risky assets performing poorly, as the US is expected to continue tapering QE, with potential hikes even in H2.22.
- Deaths in the US are also starting to tick up from COVID-19, at 1 427 on a 7-day rolling average, approaching the peak in the third wave at 2 087, as the US's third and fourth waves did not see much collapse between them .
- In South Africa, Gauteng is reported to be leading the way in the new wave of infections, with 1 000 out of the 1 275 reported yesterday for the country in Gauteng alone. SA's positivity rate, the number of tests done, versus positive results, is also reported to be increasing.
- South Africa's National Institute for Communicable Diseases (NICD) reports "(t)he majority of new cases today are from Gauteng (80%), followed (by the) Western Cape for 5%. KwaZulu-Natal and (the) North West each accounted for 3% respectively".
- The "Eastern Cape, Limpopo, and Mpumalanga each accounted for 2% respectively; and Free State and Northern Cape each accounted for 1% respectively of today's new cases."
  "There has been an increase of 53 hospital admissions in the past 24 hours."
- The NICD further reports higher rates in Tshwane, "particularly in Tshwane amongst 10 29 year olds' ", "Localised increases in case numbers (clusters) are not unexpected, however, it is hard to say whether the increases indicate the start of a widespread resurgence."



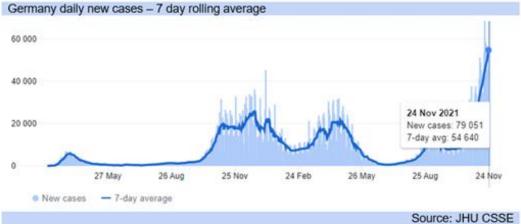
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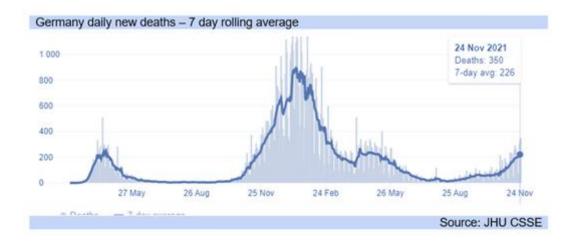


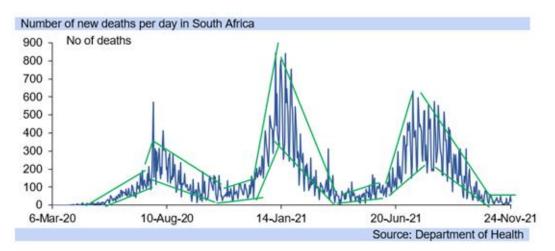




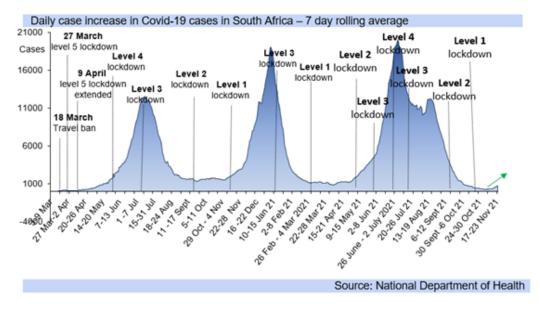












- "Genomic sequencing in South Africa has, to date, not yet detected the emergence of any new variants," the NICD adds. "At present ... 41% of adults in South Africa have received at least one dose of a COVID-19 vaccine, with 35% fully vaccinated."
- Today SA has delivered almost 25million doses of the vaccine, in a 60 million population. The Bloomberg tracker estimates it will still take SA twenty months before it reaches a vaccination rate of 75% of its population.
- Cameroon is excepted to get there in thirteen months, Sierra Leone, Uganda and Eswatini (previously Swaziland) within twelve months, the Ivory Coast eleven months, Lesotho ten, Angola and Zimbabwe nine months and Mozambique and Mauritius four (Botswana three).
- The Maldives, Greenland and Gibraltar are at over 100% vaccination rates, while Portugal, Spain, the Seychelles, Cambodia, UAE, Cayman Islands, Qatar, South Korea, Cuba, Singapore, Uruguay and Malta have over 80% of their population fully vaccinated.
- Chile, Argentina, Brunei, the Faroe Islands, Mainland China and the Falkland Islands also have over 80% coverage rates, while Bermuda, Costa Rica, Ecuador, Taiwan, New Zealand, the "Turks and Caicos", Australia, UK and Netherlands has 75% or over coverage.
- Belgium, Denmark, Ireland, Finland, Canada, Bhutan, Italy, France, Japan, Iceland, Norway, Malaysia, Isle of Man, Uruguay and Bahrain are also all over the 75% coverage mark (all Bloomberg data).
- "New strains, led by the highly transmissible delta variant, caused renewed outbreaks. Israel saw another surge of cases, which it brought under control by offering boosters to all vaccinated people."



- "Even among those who are vaccinated, the delta variant may lead to mild cases, and those who get sick are able to spread the disease to others, according to the latest data. The vaccines remain effective at reducing hospitalizations and deaths."
- While SA is not yet in a fourth wave, it may be beginning, and could become more apparent in December, if SA follows the global trajectory. However, restitution of lockdown restrictions would be very negative for the SA economy, as vaccination progress lags.

Country .	No. of doses	Doses per	Given 1+	Fully	Booster	Daily rate of
Country	administered	100 people	dose	vaccinated	dose	dose administere
Global Total	7,803,891,752	-	-	-	-	34,655,32
Greenland	102,357	179.6	124.5	65.4	-	30
Sibraltar	96,391	283.5	120.3	117.1	46.1	27
Aaldives	764,421	205.5	106.3	97.4	1.8	1,15
JAE	21,768,732	202.5	91.2	82.2	27.1	21,19
Suba	27,923,083	246.4	89.4	80.2	-	71,27
Singapore	10,083,329	176.8	88.9	87.9	-	49
ayman Islands	121,080	186.3	88.6	85.2	-	27
ortugal	16,308,391	158.7	88.1	86.9		4,69
falta	936,815	189.6	88.1	87.4	20.7	3,12
hile	40,049,234	209.6	87.9	83.4	41.3	145,51
alkland Islands	4,407	146.9	87.7	59.2	-	20
fainland China	2,449,427,000	175.0	87.5	76.9	-	6,644,64
runei	734,235	159.6	87.2	72.4		5,98
ambodia	28,482,592	172.7	85.5	80.4	13.2	22,20
eychelles	175,390	182.7	85.1	80.7	-	87
latar	4,936,861	176.6	84.4	79.4		5,98
pain	75,377,077	162.2	82.3	80.8	8.1	172,67
aroe Islands	78,347	159.9	82.1	77.8		27
outh Korea	83,557,532	161.6	81.8	78.6	4.1	162,07
rgentina	66,426,671	147.8	80.6	64.7	3.2	255,27
le of Man	150,662	177.2	80.2	76.2	-	59
ahrain	2,878,762	194.0	79.9	77.8		5,58
rance celand	103,343,680	159.4 174.2	79.8 79.8	78.2 78.6	9.4 31.2	233,29 3,64
anada	621,821	160.3	79.0	76.5		
	60,137,631		79.0	70.9	7.5	51,26
lorway Ihutan	8,433,051 1,148,146	157.4 154.1	79.0	75.1		61,46 7,28
apan	196,319,563	155.6	78.9	76.6	-	172,52
lruguay	6,731,617	191.3	78.9	75.0	37.2	4,18
falaysia	52,391,444	160.8	78.7	76.7	4.7	114.29
enmark	8,944,702	154.1	78.3	76.5	4.7	4,33
lew Zealand	7,386,242	150.0	78.2	71.7	_	18,50
alv	94,257,479	156.2	77.9	74.8	7.8	225.32
ustralia	38,706,049	151.7	77.8	72.4	1.4	85.00
eland	8,026,966	162.2	77.8	76.4	12.7	93,64
cuador	24,216,900	140.2	77.5	62.8	1.6	106,58
inland	8,463,037	153.4	77.4	72.4	-	33.07
razil	297,960,460	141.8	77.3	61.1	5.8	856,50
ermuda	101.341	160.9	76.9	75.2	8.7	1,22
elgium	18,248,142	159.3	76.9	75.6	10.4	51,22
urks & Caicos	56.343	148.3	76.9	71.4	-	61,22
letherlands	24,455,078	141.9	76.7	73.5	-	14.95
aiwan	29,749,086	126.0	76.6	49.4	_	226,79
I.K.	113.041.002	169.2	76.1	69.2	20.0	404.89
osta Rica	7,034,279	138.6	76.1	62.0	0.6	22,31
urkmenistan	7,580,976	129.5	74.7	54.8	-	1,505,84
ruba	161,336	144.1	74.6	69.5	-	.,
San Marino	49.891	146.7	74.4	71.9	_	10

Note: The daily rate is a 7-day average, or places that don't report daily, the last known average rate is used.



Country	No. of doses	Doses per	Given 1+	Fully	Booster	Daily rate
Country	administered	100 people	dose	vaccinated	dose	dose administere
Oman	5,822,656	138.8	73.7	65.2	-	8,91
Sri Lanka	29,638,112	135.9	73.0	62.9	-	9,65
Netherlands	24,455,078	141.9	76.7	73.5	-	14,95
Taiwan	29,749,086	126.0	76.6	49.4	-	226,79
J.K.	113,041,002	169.2	76.1	69.2	20.0	404,8
Costa Rica	7,034,279	138.6	76.1	62.0	0.6	22,3
urkmenistan	7,580,976	129.5	74.7	54.8	-	1,505,8
Aruba	161,336	144.1	74.6	69.5	-	8
San Marino	49,891	146.7	74.4	71.9	-	10
Oman	5,822,656	138.8	73.7	65.2	-	8,9
Sri Lanka	29,638,112	135.9	73.0	62.9	-	9,68
Panama	5,944,438	140.9	72.7	68.2	3.6	13,07
onga	116,753	116.8	72.7	44.1	-	7,0
St. Helena	7,892	131.5	72.7	58.9	-	
uxembourg	885,124	144.2	72.3	68.1	7.9	3.0
Aauritius	1.827.407	144.2	72.1	69.3	-	8.6
Saudi Arabia	47,198,981	138.5	72.0	65.4	-	41,1
Indorra	104,534	135.8	71.4	64.3	-	
	1.213.236	135.6	70.8	64.8	-	6
Sermany	118,672,955	142.8	70.8	68.2	8.0	430.8
Sweden	15,490,827	150.0	70.7	67.9	-	55.9
U	625,933,508	140.9	70.7	68.4	6.9	1,856,0
Macau	897.014	131.9	70.6	61.9	-	3.9
lustria	13,144,943	148.4	70.6	66.1	15.5	103,4
Zvprus	1.282.262	146.4	70.5	66.3	9.7	5.2
/ietnam	110,917,609	115.0	69.8	45.2	0.7	1,436,3
Colombia	54,578,363	108.3	69.7	47.1	_	374,7
J.S.	454,447,737	136.9	69.7	59.1	11.3	1,692,9
srael	16,105,938	177.9	69.3	63.7	44.8	7.2
Aorocco	48,614,680	136.6	68.8	67.8	44.0	21,3
Aongolia	4.899,110	148.6	68.5	65.2	_	30.0
Ionaco	49,980	128.2	68.4	59.8	_	1
El Salvador	9.074.239	140.6	68.3	62.4	9.9	25.2
Samoa	223,504	111.2	68.3	42.9	0.0	20,2
Switzerland	11,663,275	136.5	68.2	66.4	_	36.2
ran	102,145,229	122.7	68.0	53.7	0.9	495.4
urkey	119,726,075	144.0	67.5	60.3	16.1	120.4
hailand	89,894,183	129.1	67.1	56.3	4.4	546.0
ithuania	3,606,379	129.6	66.7	63.5	8.2	12.5
ominican Republic	13,728,071	132.5	66.2	65.8	12.7	15,20
vnguilla	19,066	127.1	66.0	61.1	12.7	10,20
atvia	2,152,346	112.1	65.6	60.2	-	5.9
eru	39,701,086	119.7	65.3	52.2	1.3	211.0
reru Greece		129.3	64.7	52.2	9.4	64,5
	13,863,104	129.3	63.7	58.8	9.4	
Sint Maarten	51,432				-	
		Source	Bloomber	rg vaccine T	racker, 25 No	ovember, 202



Global Vaccination Ca	ampaign		Given 1+	Fully	Booster	Daily rate of
Country	No. of doses	Doses per	dose	vaccinated	dose	doses
Country	administered	100 people	0036	vaccinated	0036	administered
						or an in the foreign
Antigua and	116,527	120.1	63.0	57.1	-	381
Barbuda						
Curaçao	196,985	120.8	62.8	58.0	-	120
Hong Kong	9,323,505	124.0	62.7	60.0	-	14,103
Estonia	1,501,210	113.3	62.2	59.1	-	10,648
Hungary	13,598,032	139.1	62.0	59.4	19.8	61,204
Czech Republic	13,139,604	123.4	61.5	59.0	6.3	37,606
Mexico	131,075,161	102.7	59.5	50.4	-	168,788
Slovenia	2,468,870	119.4	59.2	55.1	-	11,135
Nicaragua	6,033,123	92.4	58.9	33.6	-	311,302
Nauru	14,863	114.3	58.6	55.8		4
Tunisia	10,810,653	91.7	58.0	42.4	2.8	952,584
India	1,194,163,114	87.3	56.5	30.1	-	7,019,009
Belize	403,528	98.9	55.7	46.8	-	900
Cape Verde	539,908	98.2	55.2	43.0		1,183
Poland Barbados	40,827,691	107.5 100.3	54.4 53.3	53.5	5.8	107,421 445
Croatia	287,775 4.022,873	100.3	53.3	47.0 46.9	_	17.642
		98.9	50.8	40.9	_	
Indonesia	228,064,756	85.4 103.5	50.8	33.9	7.4	1,383,033
Azerbaijan	10,328,843	103.5	50.0	45.4		28,113 1,168
Guyana Uzbekistan	662,180 31,803,843	95.6	49.9	17.7	_	256.003
Venezuela	23,156,914	83.2	49.9	33.3	_	250,003
Laos	5,404,986	75.5	49.0	38.8	-	14,525
Trinidad and Tobago	1,275,938	91.5	48.4	45.7	_	1.835
Slovakia	5,057,416	92.8	47.8	43.2	_	22,523
Timor-Leste	1,017,255	78.7	47.6	31.0	_	6,805
Kosovo	1,607,518	89.3	47.2	42.1	-	1,454
Saint Kitts and Nevis	51,414	90.2	47.1	43.1	_	77
Serbia	7,752,661	111.3	46.6	44.4	20.3	32,382
Kazakhstan	16,647,841	89.4	46.4	42.6	=	34,147
Paraguay	5,921,882	82.8	45.8	36.9	1.2	25,109
Micronesia	79,401	76.3	45.7	-	-	109
Russia	122,757,594	83.7	43.8	36.9	2.4	797,065
Montenegro	523,689	84.1	43.4	40.5	-	972
Suriname	472,841	79.2	43.0	36.3	-	865
North Macedonia	1,675,793	80.6	42.6	38.0	3.0	2,566
Rwanda	8,084,680	65.2	42.2	23.0	-	414,273
Bolivia	8,411,426	72.8	42.0	34.2	3.1	37,680
Honduras	7,916,340	81.0	40.8	40.2	-	47,415
Jordan	7,846,525	77.9	40.7	37.3	-	18,508
Dominica	55,134	77.7	40.3	37.4	-	168
Botswana	1,254,239	52.8	39.8	17.6	-	15,768
Bahamas	274,502	72.0	39.2	35.3	-	1,280
Pakistan	121,470,994	59.3	38.8	24.2	-	228,571
Romania	14,585,468	75.2	38.7	37.4	-	73,445
		Source	: Bloombe	rg Vaccine T	racker, 25 No	ovember, 2021

SOURCE: BIOOMDERG V Note: The daily rate is a 7-day average, or places that don't report daily, the last known average rate is used.



Country	No. of doses	Doses per	Given 1+	Fully	Booster	Daily rate
Country	administered	100 people	dose	vaccinated	dose	administere
Sao Tome and	114,251	53.6	38.6	15.0	-	41
Principe	77 500 0 44					
Philippines	77,560,344	72.3	37.8	40.3	-	840,03
Albania	2,050,342	71.4	36.9	32.9	1.7	7,94
Grenada	73,320	67.3	36.4	30.8	-	17
Aoldova	1,594,761	59.5	35.4	34.3	-	3,2
Belarus	5,685,092	60.0	34.4	25.6	-	39,3
Suatemala	9,692,583	55.0	32.7	21.9	-	57,1
Comoros	476,350	54.5	31.8	22.7	-	1,9
Bangladesh	91,737,886	55.1	31.8	20.4	-	781,6
Vepal	16,709,662	58.7	31.3	26.8	-	33,55
Jkraine	23,501,133	56.3	31.2	24.6	-	241,3
Iontserrat	2,949	59.0	30.6	28.5	-	
Cuwait	2,668,082	56.2	30.6	19.4	-	3,5
Beorgia	2,112,851	56.7	30.3	26.4	-	6,6
ajikistan	5,059,324	54.4	30.0	24.4	-	29,6
St. Lucia	99,339	55.2	29.9	25.3	-	3
ebanon	3,822,121	55.7	29.2	26.6	-	18,8
outh Africa	25,002,232	42.5	28.4	23.7	-	93,6
esotho	617,671	30.2	28.4	27.9	-	3,2
Ayanmar	24,253,764	45.9	27.8	18.1	_	300,1
St. Vincent and the Grenadines	52,717	47.9	27.4	20.0	-	4
frenadines Aauritania	1 725 000	42.5	26.0	16.5	-	3.5
	1,725,899		25.7			
lulgaria	3,221,605	46.3		24.7	-	15,8
losnia and	1,553,874	47.1	25.2	21.8	-	6,7
lerzegovina	2.234.121	34.0	24.9	9.1	-	11.7
ibya umenia	2,234,121	37.4	24.9	12.5	_	42.0
imbabwe	6,454,719	43.3	24.9	12.5	_	42,0
swatini	293.353	26.3	24.0	22.4	-	32,3
amaica	1.082.214	39.7	24.2	18.2	_	4.0
amaica	36,906,765	37.2	23.8	14.1	_	522.1
olomon Islands	193,817	30.2	23.5	6.7	_	1.5
ngola	8,798,259	29.2	20.4	8.8	_	141.0
Buinea-Bissau	363.573	20.5	19.4	1.0	_	6.7
lozambique	8,891,246	28.5	19.0	9.5	_	178.9
quatorial Guinea	443,135	32.6	18.1	14.5	_	3
aq	11,380,981	29.1	18.0	11.1	_	132.0
vrgyzstan	1,958,801	30.7	17.0	13.6	_	10.0
Jgeria	12.008.974	27.7	15.4	12.2	<0.1	79.0
Vamibia	630,212	25.6	14.3	11.5	~0.1	1.1
000	1,507,722	18.7	12.4	6.3	_	9.0
Guinea	2,535,695	18.6	12.1	6.6	_	10.7
Afghanistan	5,116,767	13.8	11.5	9.3	-	162.1
Republic of the	625,579	13.7	10.9	2.8	-	8,2
Congo	020,010	13.1	10.5	2.0		0,20

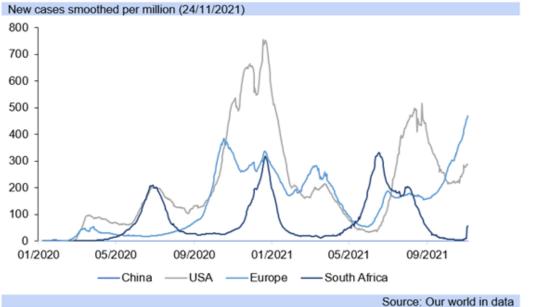
Source: Bloomberg Vaccine Tracker, 25 November, 2021 Note: The daily rate is a 7-day average, or places that don't report daily, the last known average rate is used.

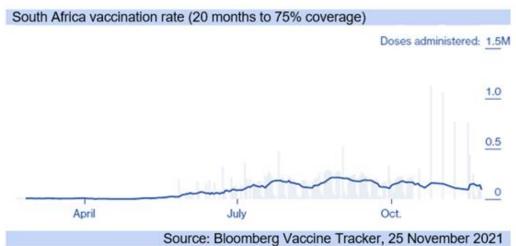


Global Vaccination C			Given 1+	Fully	Booster	Daily rate o
Country	No. of doses administered	Doses per 100 people	dose	vaccinated	dose	doses
						administered
Liberia	589,628	12.9	10.8	10.0	-	10,790
Ivory Coast	3,845,788	14.6	10.2	4.5	-	79,19
Gambia	268,008	11.4	10.1	9.5	-	6
Uganda	4,835,777	12.1	9.6	2.3	-	187,41
Kenya	6,597,597	13.9	8.6	5.3	-	61,35
Ghana	3,367,531	11.2	8.4	2.8	-	22,42
Senegal	1,961,144	12.0	8.1	5.4	-	64
Gabon	273,421	13.1	7.8	5.4	-	2,74
Sierra Leone	744,826	9.5	7.7	3.9	-	18,139
Central African	422,496	8.9	7.6	6.8	-	
Republic						
Djibouti	96,168	8.9	6.8	2.4	-	8
Malawi	1,375,450	6.8	5.3	2.9	-	5,55
Sudan	2,698,219	6.2	5.3	1.3	-	22,58
Ethiopia	5,786,422	6.0	4.5	1.5	-	145,56
Somalia	1,139,332	7.6	4.5	3.8	-	29,15
Zambia	1,035,796	5.7	4.4	3.5	-	4,93
Nigeria	9,483,387	4.7	3.0	1.7	-	78,05
Papua New Guinea	435,991	5.1	3.0	2.1	-	14,12
Benin	383,501	3.2	2.9	2.5	-	2,58
Cameroon	859,760	3.4	2.8	2.0	-	60,32
Mali	627,924	3.3	2.6	1.5	-	1,74
Niger	963,041	4.1	2.2	2.0	-	3,71
Burkina Faso	661,796	3.3	1.9	1.5	-	13,14
Madagascar	625,884	2.3	1.8	1.6	-	4,29
Yemen	759,220	2.4	1.7	1.1	-	1,59
Tanzania	1,337,045	2.4	1.6	1.7	-	15,97
South Sudan	218,154	1.6	1.4	1.0	-	4,81
Chad	249,651	1.6	1.1	0.4	-	1,91
Haiti	184,769	1.6	1.0	0.6	-	4,38
DR Congo	167,791	0.2	0.1	<0.1	-	63
Eritrea	-	-	-	-	-	
Guernsey	104,131	-	-	-	-	
Jersey	181,102	-	-	-	-	57
Syria	1,342,360	-	-	-	-	57
		Source	e: Bloombe	rg Vaccine T	racker, 25 No	ovember, 202
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Note: The daily rate is a 7-day average, or places that don't report daily, the last known average rate is used.







Note: Coverage ma exceed 100% in some places, as shots may be administered to non-residents. The "daily rate estimate" is a seven-day trailing average, interpolation is used for jurisdictions with infrequent updates. Data from Bloomberg's Covid-19 Vaccine Tracker.