

COVID-19 TESTING SUMMARY



NATIONAL INSTITUTE FOR
COMMUNICABLE DISEASES

Division of the National Health Laboratory Service

SOUTH AFRICA WEEK 30 2021

OVERVIEW OF REPORT

This report summarises national laboratory testing for SARS-CoV-2, the virus causing COVID-19, in South Africa. This report is based on data for specimens reported up to 31 July 2021 (Week 30 of 2021).

HIGHLIGHTS

- In the period 1 March 2020 through 31 July 2021, 14,826,086 (13,144,672 PCR and 1,681,414 antigen) tests for SARS-CoV-2 have been reported nationally.
- The number of tests reported in week 30 of 2021 (n=313,092) was higher than the weekly number of tests reported in the previous two weeks.
- The testing rate in week 30 was 525 per 100,000 persons; highest in the Western Cape (961 per 100,000 persons) and lowest in Limpopo (189 per 100,000 persons).
- In week 30 the percentage testing positive was 25.9%, which was 2.7% lower than the previous week.
- The percentage testing positive in week 30 was highest in Mpumalanga (34.5%), Limpopo (33.9%), Western Cape (32.5%), and Northern Cape (30.5%) provinces. The percentage testing positive was between 20% and 30% in the Eastern Cape, Free State, KwaZulu-Natal, North West and Gauteng.
- In week 30, compared to the previous week, the percentage testing positive decreased in the North West, Gauteng, Mpumalanga and Limpopo. The percentage testing positive remained unchanged in the Western Cape, Eastern Cape, Northern Cape, Free State and KwaZulu-Natal.
- The number of tests reported is likely underestimated as antigen tests are increasingly being used outside of laboratory settings and reporting may be delayed or results may not be reported.

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Methods

Testing for SARS-CoV-2 began on 28 January 2020 at the NICD and after the first case was confirmed on 5th March 2020, testing was expanded to a larger network of private and NHLS laboratories. Laboratory testing was conducted for people meeting the case definition for persons under investigation (PUI). This definition was updated several times over the reporting period but at different times included (i) symptomatic individuals seeking testing, (ii) hospitalised individuals for whom testing was done, (iii) individuals in high-risk occupations, (iv) individuals in outbreak settings, and (v) individuals identified through community screening and testing (CST) programmes which were implemented in April 2020 and was discontinued from the week beginning 17th May. CST was implemented differently in different provinces, and ranged from mass screening approaches (including asymptomatic individuals) to screening of individuals in contact with a confirmed case to targeted testing of clusters of cases. Respiratory specimens were submitted to testing laboratories. Testing was performed using reverse transcriptase real-time PCR, which detects SARS-CoV-2 viral genetic material. Laboratories used any one of several in-house and commercial PCR assays to test for the presence of SARS-CoV-2 RNA. Testing for SARS-CoV-2 using rapid antigen-based tests was implemented towards the end of October 2020. Results of reported rapid antigen-based tests are included in this report, however data are incomplete and efforts are ongoing to improve data completeness.

Test results were automatically fed into a data warehouse after result authorisation. We excluded specimens collected outside South Africa and duplicate entries of the same test for an individual. From week 48 of 2020 onwards, test data were reported from the Notifiable Medical Conditions Surveillance System (NMCCSS). Date of specimen receipt in the laboratory was used when date of specimen collection was missing. Proportion testing positive (PTP) was calculated as the number of positive tests/total number of tests and presented as percentage by multiplying with 100. We used 2020 mid-year population estimates from Statistics South Africa to calculate the testing rate, expressed as tests per 100,000 persons. Patient admission status for

public and private sector tests was determined based on the reported patient facility. Laboratory turnaround times were calculated as the mean number of days between specimen collection and reporting of the result. Categorical variables were compared using the chi-squared test, and continuous variables with the students t-test, with a P-value < 0.05 considered statistically significant.

Health district and sub-district (in the metros) level results were mapped based on geo-locatable public and private sector testing facilities. Estimates of overall prevalence were derived using regression techniques. Estimates were adjusted to produce district-specific positive test prevalences based on the national average age and sex profile of testing for that week. This adjustment allows more accurate comparison of the proportion testing positive across districts.

The report includes tests reported between 1 March 2020 (week 10 of 2020), the week when the first case of COVID-19 was confirmed, and 31 July 2021 (week 30 of 2021).

Testing volumes and proportion testing positive

From 1 March 2020 through 31 July 2021, 14,826,086 SARS-CoV-2 tests were reported; 13,144,672 PCR and 1,681,414 antigen tests. The highest weekly number of tests reported during the first wave occurred in week 28 of 2020 (beginning 5 July, n=307,916). In the second wave, the highest weekly number of tests were reported in week 1 of 2021 (beginning 3 January, n=501,127). In the third wave, the weekly number of tests started increasing in week 19 of 2021 (beginning 9 May), and increased weekly to a peak in week 26 of 2021 (beginning 27 June, n=478,951). The number of tests reported in week 30 was 313,092, slightly higher than the number reported in the previous week. All tests for samples collected in the previous week may not yet be reflected. Reduced testing volumes were observed over weekends and public holidays (Figure 1).

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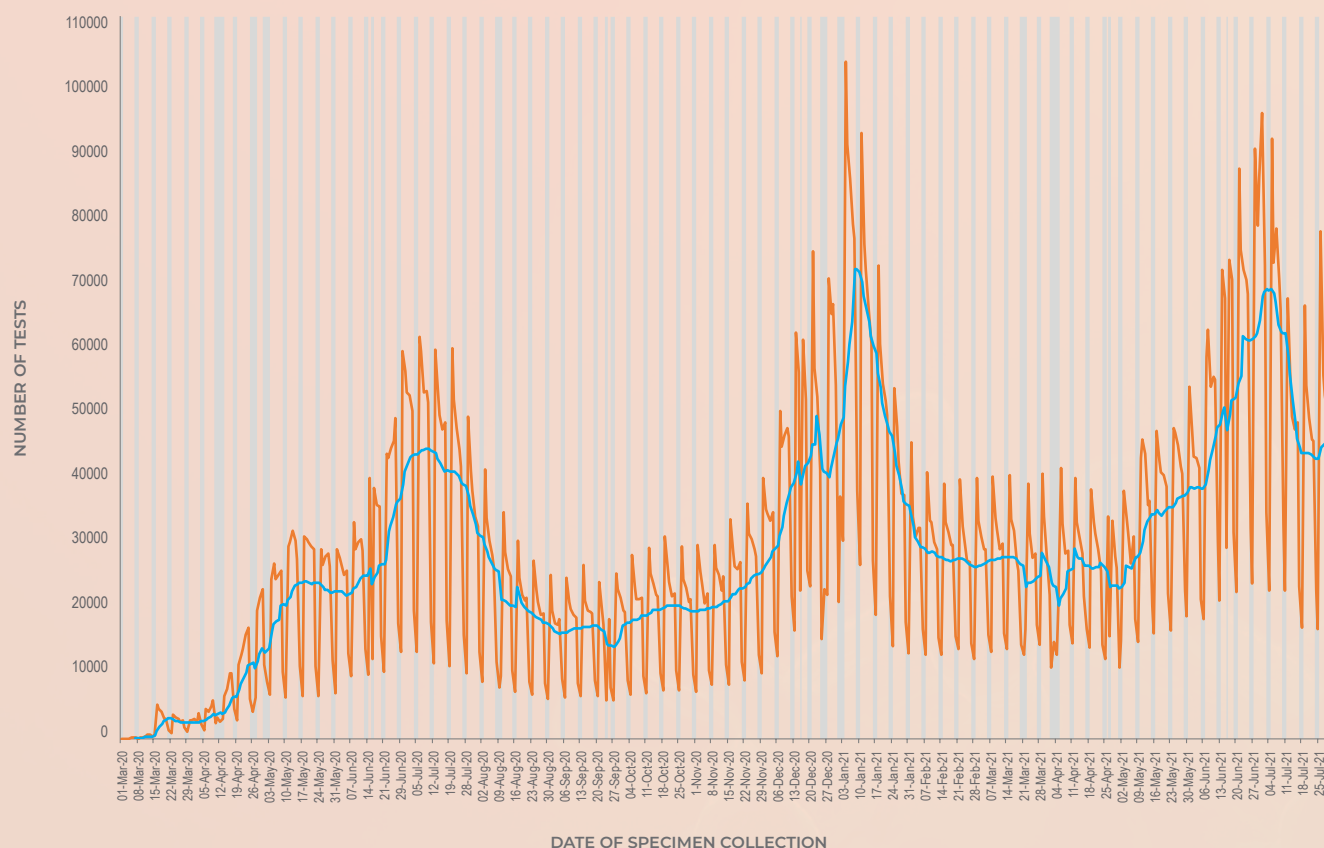


Figure 1. Number of SARS-CoV-2 tests reported by date of specimen collection, South Africa, 1 March 2020 – 31 July 2021. Blue line shows the 7-day moving average of the number of tests reported. Grey bars highlight weekend days and public holidays.

The overall percentage testing positive from week 10 of 2020 through week 30 of 2021 was 17.6% (Table 1). During the first wave of infections, the percentage testing positive peaked at 29.7% in week 29 of 2020, and subsequently decreased to 8.4% in week 44 of 2020. During the second wave of infections the percentage testing positive increased to a peak of 34.6% in week 53 of 2020, and subsequently decreased to 4.0% in week 14 of 2021. In the third wave of infections, the percentage testing positive peaked at 32.1% in week 27 of 2021 (beginning 4 July), and has subsequently decreased weekly. The percentage testing positive in week 30 of 2021 was 25.9%, which was 2.7% lower than the previous week (28.6%, $P < 0.001$) (Figure 2).

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Table 1. Weekly number of SARS-CoV-2 tests and positive tests reported, South Africa, 1 March 2020 – 31 July 2021

Week number	Week beginning	No. of tests n (%)	No. of positive tests	Percentage testing positive (%)
10	01-Mar-20	456 (0.0)	13	2.9
11	08-Mar-20	2380 (0.0)	103	4.3
12	15-Mar-20	21567 (0.1)	897	4.2
13	22-Mar-20	17545 (0.1)	544	3.1
14	29-Mar-20	18251 (0.1)	521	2.9
15	05-Apr-20	26299 (0.2)	796	3.0
16	12-Apr-20	43754 (0.3)	1295	3.0
17	19-Apr-20	79179 (0.5)	2177	2.7
18	26-Apr-20	93818 (0.6)	3209	3.4
19	03-May-20	142712 (1.0)	6018	4.2
20	10-May-20	165377 (1.1)	8092	4.9
21	17-May-20	166544 (1.1)	11379	6.8
22	24-May-20	156139 (1.1)	12967	8.3
23	31-May-20	153571 (1.0)	15079	9.8
24	07-Jun-20	173905 (1.2)	22363	12.9
25	14-Jun-20	186090 (1.3)	32653	17.5
26	21-Jun-20	252100 (1.7)	55049	21.8
27	28-Jun-20	302751 (2.0)	75313	24.9
28	05-Jul-20	307916 (2.1)	86041	27.9
29	12-Jul-20	285603 (1.9)	84927	29.7
30	19-Jul-20	270900 (1.8)	78636	29.0
31	26-Jul-20	216397 (1.5)	58394	27.0
32	02-Aug-20	179573 (1.2)	40996	22.8
33	09-Aug-20	141104 (1.0)	26266	18.6
34	16-Aug-20	135014 (0.9)	21377	15.8
35	23-Aug-20	123333 (0.8)	16331	13.2
36	30-Aug-20	112763 (0.8)	12790	11.3
37	06-Sep-20	116998 (0.8)	11953	10.2
38	13-Sep-20	120716 (0.8)	12012	10.0
39	20-Sep-20	98822 (0.7)	10098	10.2
40	27-Sep-20	123062 (0.8)	11008	8.9
41	04-Oct-20	131045 (0.9)	11779	9.0
42	11-Oct-20	137976 (0.9)	12077	8.8
43	18-Oct-20	142172 (1.0)	12069	8.5
44	25-Oct-20	135853 (0.9)	11479	8.4
45	01-Nov-20	138842 (0.9)	12138	8.7
46	08-Nov-20	147009 (1.0)	14845	10.1
47	15-Nov-20	160649 (1.1)	18765	11.7
48	22-Nov-20	175695 (1.2)	22054	12.6
49	29-Nov-20	203150 (1.4)	30768	15.1
50	06-Dec-20	267926 (1.8)	53313	19.9
51	13-Dec-20	294470 (2.0)	68578	23.3
52	20-Dec-20	284568 (1.9)	81961	28.8
53	27-Dec-20	334395 (2.3)	115738	34.6
1	03-Jan-21	501127 (3.4)	151029	30.1
2	10-Jan-21	417921 (2.8)	104788	25.1

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3	17-Jan-21	327361 (2.2)	63252	19.3
4	24-Jan-21	249467 (1.7)	34636	13.9
5	31-Jan-21	203602 (1.4)	22357	11.0
6	07-Feb-21	193219 (1.3)	16461	8.5
7	14-Feb-21	190376 (1.3)	12169	6.4
8	21-Feb-21	184433 (1.2)	10378	5.6
9	28-Feb-21	189287 (1.3)	8673	4.6
10	07-Mar-21	193178 (1.3)	8319	4.3
11	14-Mar-21	185422 (1.3)	8139	4.4
12	21-Mar-21	172588 (1.2)	7343	4.3
13	28-Mar-21	163466 (1.1)	7058	4.3
14	04-Apr-21	180496 (1.2)	7278	4.0
15	11-Apr-21	184168 (1.2)	8835	4.8
16	18-Apr-21	184585 (1.2)	9458	5.1
17	25-Apr-21	159370 (1.1)	9175	5.8
18	02-May-21	193599 (1.3)	13412	6.9
19	09-May-21	238518 (1.6)	19849	8.3
20	16-May-21	246284 (1.7)	24112	9.8
21	23-May-21	259450 (1.7)	29577	11.4
22	30-May-21	266924 (1.8)	35832	13.4
23	06-Jun-21	331936 (2.2)	58664	17.7
24	13-Jun-21	362387 (2.4)	86353	23.8
25	20-Jun-21	424727 (2.9)	116332	27.4
26	27-Jun-21	478951 (3.2)	143303	29.9
27	04-Jul-21	432151 (2.9)	138710	32.1
28	11-Jul-21	310576 (2.1)	98622	31.8
29	18-Jul-21	299036 (2.0)	85517	28.6
30	25-Jul-21	313092 (2.1)	81059	25.9
Total		14,826,086 (100.0)	2605551	17.6

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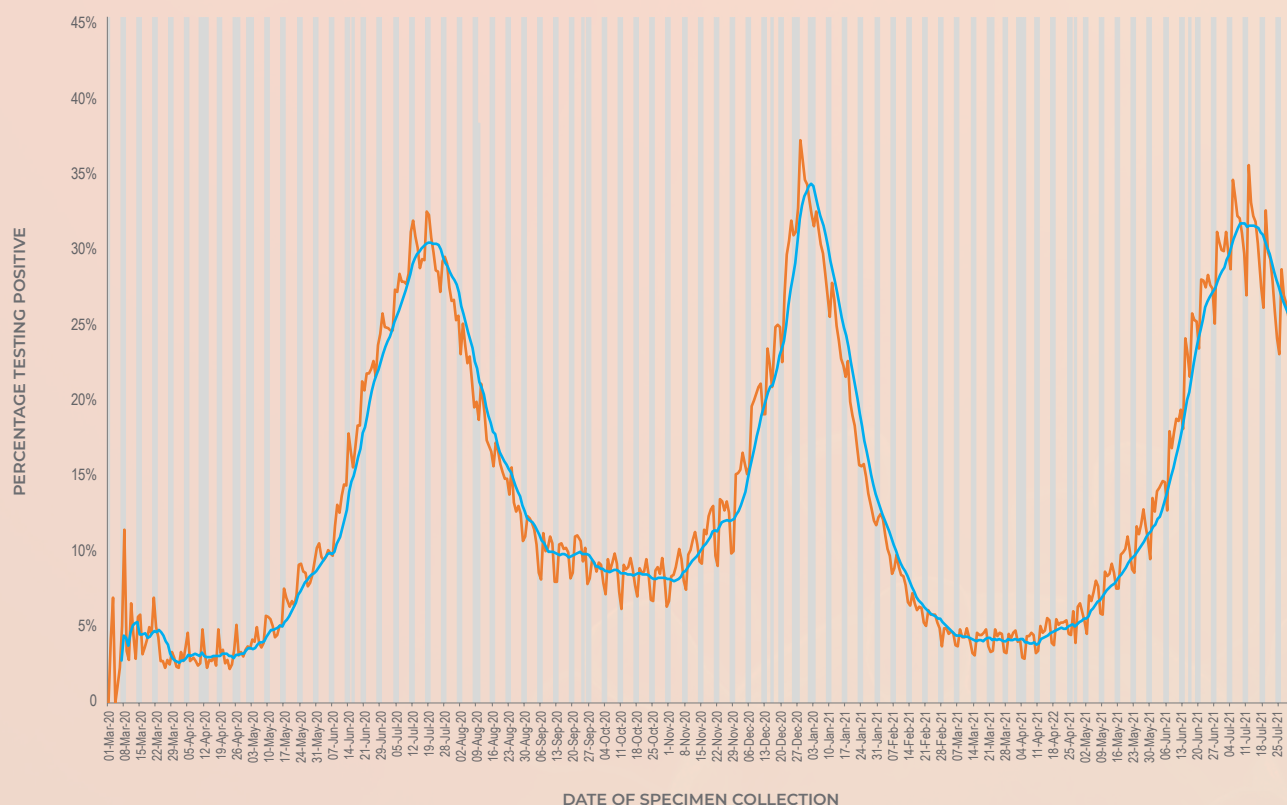


Figure 2. Percentage of tests positive for SARS-CoV-2 by date of specimen collection, South Africa, 1 March 2020 – 31 July 2021. Blue line shows the 7-day moving average of the percentage testing positive. Grey bars highlight weekend days and public holidays.

Testing in private and public sectors

From 1 March 2020 through 31 July 2021, 6,550,535 tests were reported in the public sector, with 17.6% testing positive. Over this same period, the private sector reported 8,275,551 tests, with 17.5% testing positive (Table 2). Overall, the public sector has reported 44.2% of tests and accounted for 44.3% of positive tests. In the first wave of infections the peak percentage testing positive was observed in week 30 of 2020 in the public sector (28.8%), and in week 29 of 2020 in the private sector (30.6%). In the second wave of infections the highest percentage testing positive was observed in week 53 of 2020 in both the public sector (34.9%) and private sector (34.4%). In the third wave of infections the peak percentage testing positive was observed in week 28 of 2021 (beginning 11 July) in the public sector (30.9%), and in week 27 of 2021 (beginning 4 July) in the private

sector (33.6%). From week 29 to week 30 of 2021, the percentage testing positive decreased by 2.9% in the public sector (29.4% in week 29 to 26.5% in week 30, $P < 0.001$) and decreased by 2.6% in the private sector (27.9% in week 29 to 25.3% in week 30, $P < 0.001$). In week 30 the percentage testing positive in the public sector (26.5%) was 1.2% higher than in the private sector (25.3%, $P < 0.001$).

The mean turnaround time for PCR tests reported in week 30 of 2021 was 1.1 days; 1.6 days in the public sector and 0.8 days in the private sector (Figure 3). Turnaround times for public sector PCR tests were > 2 days in Mpumalanga in week 30 (Figure 4). Increases in turnaround times were observed in the Northern Cape and KwaZulu-Natal provinces in the past week. Twenty-three of the 28 (82.1%) NHLS laboratories performing PCR testing for SARS-CoV-2 had turnaround times ≤ 2 days in week 30 (Figure 5).

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Table 2. Weekly number of tests and positive tests reported, by healthcare sector, South Africa, 1 March 2020 – 31 July 2021

Week number	Week beginning	Public sector		Private sector		Public sector proportion of		Ratio of PTP ^a
		Tests	Cases n (%)	Tests	Positive tests n (%)	Tests (%)	Positive tests (%)	
10	01-Mar-20	294	10 (3.4)	162	3 (1.9)	64.5	76.9	1.837
11	08-Mar-20	401	27 (6.7)	1979	76 (3.8)	16.8	26.2	1.753
12	15-Mar-20	1442	81 (5.6)	20125	816 (4.1)	6.7	9.0	1.385
13	22-Mar-20	3478	149 (4.3)	14067	395 (2.8)	19.8	27.4	1.526
14	29-Mar-20	5868	194 (3.3)	12383	327 (2.6)	32.2	37.2	1.252
15	05-Apr-20	11735	417 (3.6)	14564	379 (2.6)	44.6	52.4	1.366
16	12-Apr-20	24167	672 (2.8)	19587	623 (3.2)	55.2	51.9	0.874
17	19-Apr-20	55110	1595 (2.9)	24069	582 (2.4)	69.6	73.3	1.197
18	26-Apr-20	67469	2453 (3.6)	26349	756 (2.9)	71.9	76.4	1.267
19	03-May-20	94338	4507 (4.8)	48374	1511 (3.1)	66.1	74.9	1.529
20	10-May-20	108001	5443 (5.0)	57376	2649 (4.6)	65.3	67.3	1.092
21	17-May-20	98648	7031 (7.1)	67896	4348 (6.4)	59.2	61.8	1.113
22	24-May-20	77597	6411 (8.3)	78542	6556 (8.3)	49.7	49.4	0.990
23	31-May-20	63945	6626 (10.4)	89626	8453 (9.4)	41.6	43.9	1.099
24	07-Jun-20	64655	8039 (12.4)	109250	14324 (13.1)	37.2	35.9	0.948
25	14-Jun-20	61149	11982 (19.6)	124941	20671 (16.5)	32.9	36.7	1.184
26	21-Jun-20	90455	20425 (22.6)	161645	34624 (21.4)	35.9	37.1	1.054
27	28-Jun-20	106374	27245 (25.6)	196377	48068 (24.5)	35.1	36.2	1.046
28	05-Jul-20	117727	32239 (27.4)	190189	53802 (28.3)	38.2	37.5	0.968
29	12-Jul-20	110664	31383 (28.4)	174939	53544 (30.6)	38.7	37.0	0.927
30	19-Jul-20	105218	30319 (28.8)	165682	48317 (29.2)	38.8	38.6	0.988
31	26-Jul-20	81248	22782 (28.0)	135149	35612 (26.4)	37.5	39.0	1.064
32	02-Aug-20	70566	16996 (24.1)	109007	24000 (22.0)	39.3	41.5	1.094
33	09-Aug-20	58661	11172 (19.0)	82443	15094 (18.3)	41.6	42.5	1.040
34	16-Aug-20	56138	9621 (17.1)	78876	11756 (14.9)	41.6	45.0	1.150
35	23-Aug-20	50319	7790 (15.5)	73014	8541 (11.7)	40.8	47.7	1.323
36	30-Aug-20	45422	6096 (13.4)	67341	6694 (9.9)	40.3	47.7	1.350
37	06-Sep-20	51055	6421 (12.6)	65943	5532 (8.4)	43.6	53.7	1.499
38	13-Sep-20	53707	6547 (12.2)	67009	5465 (8.2)	44.5	54.5	1.495
39	20-Sep-20	44842	5530 (12.3)	53980	4568 (8.5)	45.4	54.8	1.457
40	27-Sep-20	48629	5568 (11.4)	74433	5440 (7.3)	39.5	50.6	1.567
41	04-Oct-20	50435	5690 (11.3)	80610	6089 (7.6)	38.5	48.3	1.494
42	11-Oct-20	53452	5702 (10.7)	84524	6375 (7.5)	38.7	47.2	1.414
43	18-Oct-20	56123	6045 (10.8)	86049	6024 (7.0)	39.5	50.1	1.539
44	25-Oct-20	51287	5721 (11.2)	84566	5758 (6.8)	37.8	49.8	1.638
45	01-Nov-20	52999	6061 (11.4)	85843	6077 (7.1)	38.2	49.9	1.615
46	08-Nov-20	58914	8097 (13.7)	88095	6748 (7.7)	40.1	54.5	1.794
47	15-Nov-20	67582	10584 (15.7)	93067	8181 (8.8)	42.1	56.4	1.782
48	22-Nov-20	74574	12200 (16.4)	101121	9854 (9.7)	42.4	55.3	1.679
49	29-Nov-20	81269	15730 (19.4)	121881	15038 (12.3)	40.0	51.1	1.569
50	06-Dec-20	107910	24716 (22.9)	160016	28597 (17.9)	40.3	46.4	1.282
51	13-Dec-20	117212	29815 (25.4)	177258	38763 (21.9)	39.8	43.5	1.163
52	20-Dec-20	109913	34128 (31.1)	174655	47833 (27.4)	38.6	41.6	1.134
53	27-Dec-20	151633	52933 (34.9)	182762	62805 (34.4)	45.3	45.7	1.016
1	03-Jan-21	237004	71063 (30.0)	264123	79966 (30.3)	47.3	47.1	0.990
2	10-Jan-21	204014	52958 (26.0)	213907	51830 (24.2)	48.8	50.5	1.071
3	17-Jan-21	165671	34459 (20.8)	161690	28793 (17.8)	50.6	54.5	1.168
4	24-Jan-21	123260	18999 (15.4)	126207	15637 (12.4)	49.4	54.9	1.244
5	31-Jan-21	99768	12065 (12.1)	103834	10292 (9.9)	49.0	54.0	1.220
6	07-Feb-21	91304	8505 (9.3)	101915	7956 (7.8)	47.3	51.7	1.193
7	14-Feb-21	86217	6670 (7.7)	104159	5499 (5.3)	45.3	54.8	1.465
8	21-Feb-21	82505	5795 (7.0)	101928	4583 (4.5)	44.7	55.8	1.562
9	28-Feb-21	87840	4667 (5.3)	101447	4006 (3.9)	46.4	53.8	1.345
10	07-Mar-21	92708	4576 (4.9)	100470	3743 (3.7)	48.0	55.0	1.325
11	14-Mar-21	89882	4437 (4.9)	95540	3702 (3.9)	48.5	54.5	1.274
12	21-Mar-21	76983	3459 (4.5)	95605	3884 (4.1)	44.6	47.1	1.106
13	28-Mar-21	70827	3454 (4.9)	92639	3604 (3.9)	43.3	48.9	1.254
14	04-Apr-21	79289	3352 (4.2)	101207	3926 (3.9)	43.9	46.1	1.090

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15	11-Apr-21	85476	4357 (5.1)	98692	4478 (4.5)	46.4	49.3	1.123
16	18-Apr-21	80344	4709 (5.9)	104241	4749 (4.6)	43.5	49.8	1.287
17	25-Apr-21	69975	4122 (5.9)	89395	5053 (5.7)	43.9	44.9	1.042
18	02-May-21	80967	5443 (6.7)	112632	7969 (7.1)	41.8	40.6	0.950
19	09-May-21	90796	7307 (8.0)	147722	12542 (8.5)	38.1	36.8	0.948
20	16-May-21	99310	9089 (9.2)	146974	15023 (10.2)	40.3	37.7	0.895
21	23-May-21	119620	11707 (9.8)	139830	17870 (12.8)	46.1	39.6	0.766
22	30-May-21	110264	11750 (10.7)	156660	24082 (15.4)	41.3	32.8	0.693
23	06-Jun-21	145161	19597 (13.5)	186775	39067 (20.9)	43.7	33.4	0.645
24	13-Jun-21	150185	29063 (19.4)	212202	57290 (27.0)	41.4	33.7	0.717
25	20-Jun-21	175173	41897 (23.9)	249554	74435 (29.8)	41.2	36.0	0.802
26	27-Jun-21	228948	62104 (27.1)	250003	81199 (32.5)	47.8	43.3	0.835
27	04-Jul-21	206220	62812 (30.5)	225931	75898 (33.6)	47.7	45.3	0.907
28	11-Jul-21	150511	46446 (30.9)	160065	52176 (32.6)	48.5	47.1	0.947
29	18-Jul-21	148028	43456 (29.4)	151008	42061 (27.9)	49.5	50.8	1.054
30	25-Jul-21	159660	42263 (26.5)	153432	38796 (25.3)	51.0	52.1	1.047
Total		6,550,535	1,153,774 (17.6)	8,275,551	1,451,777 (17.5)	44.2	44.3	1.004

^aRatio of percentage testing positive (PTP) in the public sector to the private sector calculated as (no. of cases/total tests in public sector)/(no. of cases/total tests in private sector)

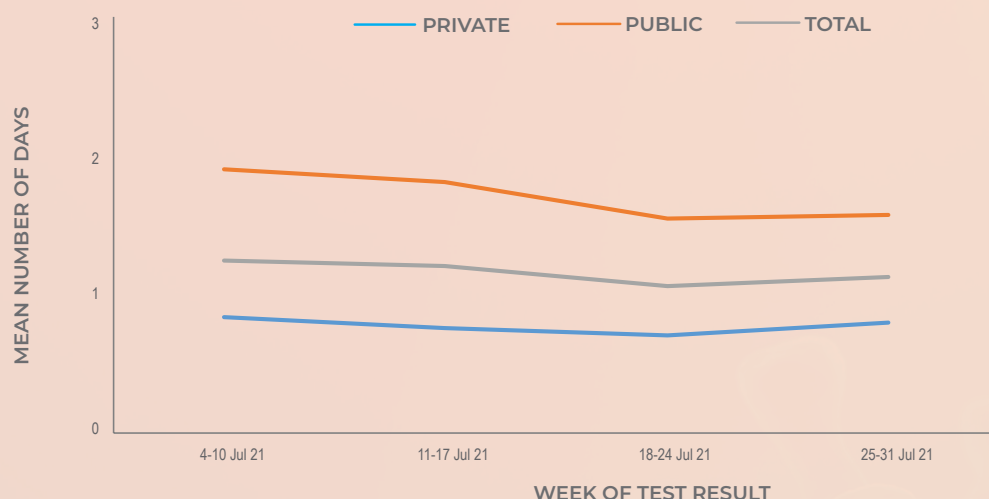


Figure 3. Mean number of days between date of specimen collection and date of test result for PCR tests, by week of test result, South Africa, 4 – 31 July 2021

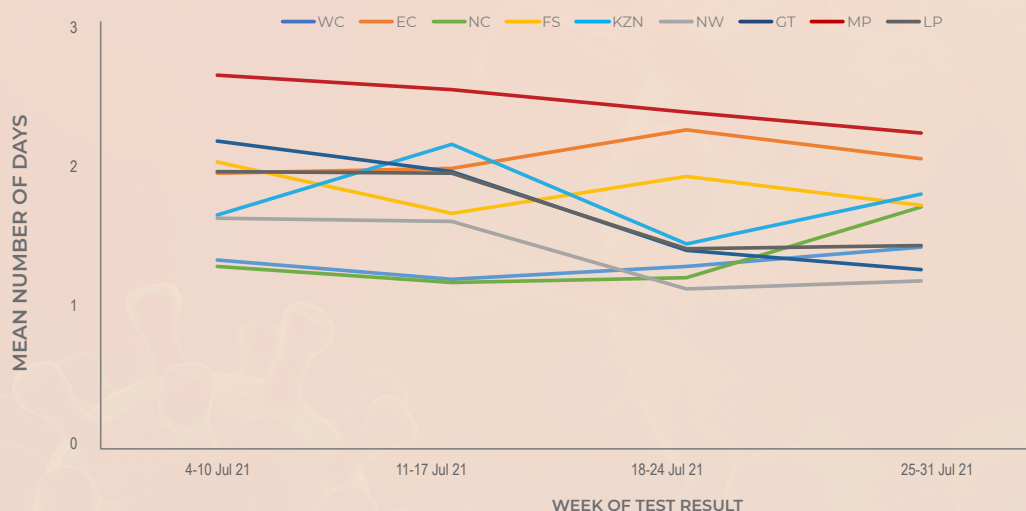


Figure 4. Mean number of days between date of specimen collection and date of test result for PCR tests, by week of test result and province, public sector, South Africa, 4 – 31 July 2021. WC, Western Cape; EC, Eastern Cape; FS, Free State; KZN, KwaZulu-Natal; GT, Gauteng; NC, Northern Cape; NW, North West; MP, Mpumalanga; LP, Limpopo

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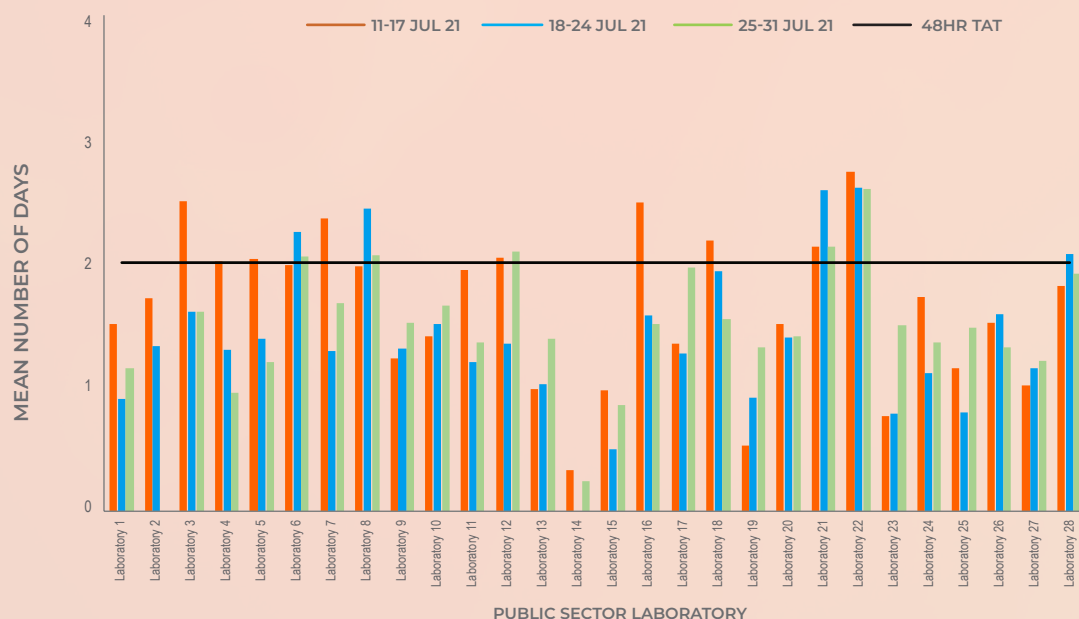


Figure 5. Mean number of days between date of specimen collection and date of test result for PCR tests, by public sector laboratory, 11 - 31 July 2021. The horizontal black line indicates 48-hour turnaround time (TAT).

Testing by province

Gauteng reported the largest proportion of tests (30.4%), followed by Western Cape (21.5%) and KwaZulu-Natal (18.4%) in week 30 of 2021 (Table 3). The overall testing rate increased from 502 per 100,000 persons in week 29 to 525 per 100,000 in week 30. The testing rate ranged from 961 per 100,000 persons in Western Cape to 189 per 100,000 persons in Limpopo (Figure 6). In week 30, testing rates increased in the Western Cape, Northern Cape and KwaZulu-Natal.

The percentage testing positive in week 30 was highest in Mpumalanga (34.5%), Limpopo (33.9%), Western

Cape (32.5%), and Northern Cape (30.5%) provinces. The percentage testing positive was between 20% and 30% in the Eastern Cape, Free State, KwaZulu-Natal, North West and Gauteng (Figure 7 and Table 3). Compared to the previous week, the percentage testing positive in week 30 decreased in the North West ($P<0.001$), Gauteng ($P<0.001$), Mpumalanga ($P=0.016$) and Limpopo ($P<0.001$). The percentage testing positive remained unchanged in the Western Cape ($P=0.191$), Eastern Cape ($P=0.852$), Northern Cape ($P=0.065$), Free State ($P=0.552$) and KwaZulu-Natal ($P=0.176$). The percentage testing positive was higher than the national average, not weighted for population size, in the Western Cape, Northern Cape, North West, Mpumalanga and Limpopo provinces (Figure 7).

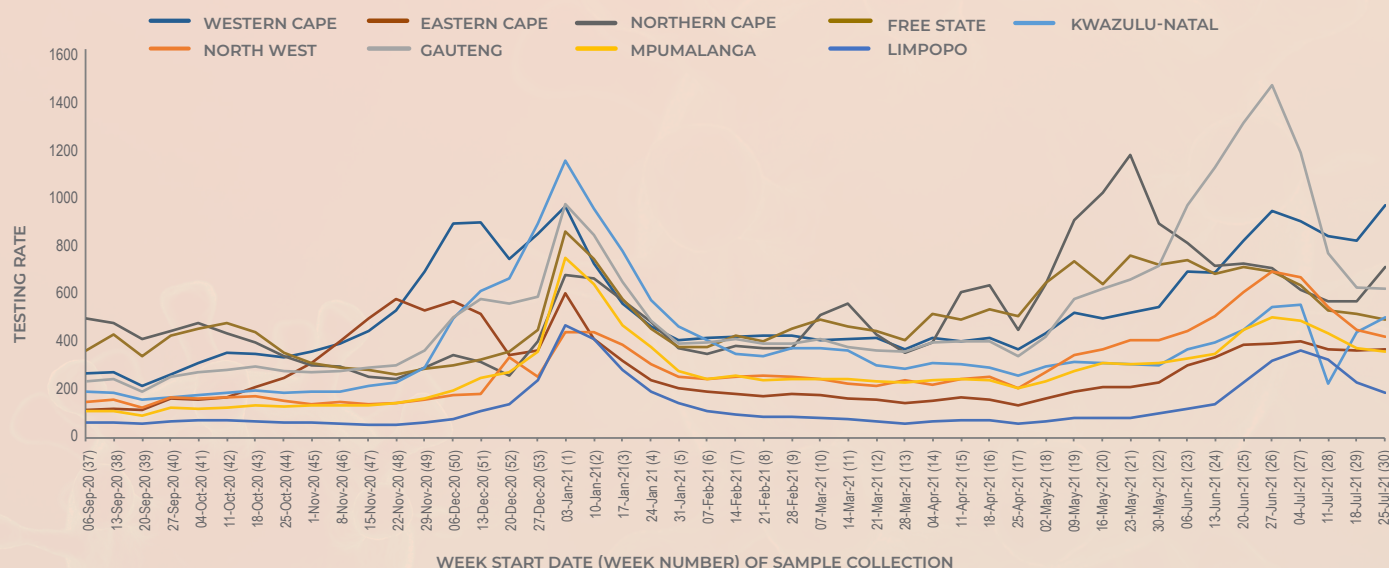


Figure 6. Testing rate per 100,000 persons by province and week of specimen collection, South Africa, 6 September 2020 – 31 July 2021

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Table 3. Weekly number of tests and positive tests reported, by province, South Africa, 11-31 July 2021

Province	Population ^a	11-17 Jul 2021		18-24 Jul 2021		25-31 Jul 2021		Tests per 100,000 persons	Change in percentage positive ^b
		No. of tests	No. positive tests (%)	No. of tests	No. positive tests (%)	No. of tests	No. positive tests (%)		
Western Cape	7005741	58283	17442 (29.9)	56992	18308 (32.1)	67338	21866 (32.5)	961	0.3%
Eastern Cape	6734001	24716	4812 (19.5)	24329	5161 (21.2)	24569	5195 (21.1)	365	-0.1%
Northern Cape	1292786	7315	1827 (25.0)	7302	2132 (29.2)	9100	2778 (30.5)	704	1.3%
Free State	2928903	15445	3478 (22.5)	15050	3423 (22.7)	14321	3299 (23.0)	489	0.3%
KwaZulu-Natal	11531628	25773	5025 (19.5)	50199	10512 (20.9)	57519	12239 (21.3)	499	0.3%
North West	4108816	22172	7925 (35.7)	18403	6407 (34.8)	17126	4714 (27.5)	417	-7.3%
Gauteng	15488137	117727	41589 (35.3)	95972	27657 (28.8)	95282	21434 (22.5)	615	-6.3%
Mpumalanga	4679786	20212	7528 (37.2)	17436	6226 (35.7)	16793	5787 (34.5)	359	-1.2%
Limpopo	5852553	18925	8996 (47.5)	13342	5689 (42.6)	11034	3746 (33.9)	189	-8.7%
Unknown		8	0 (0.0)	11	2 (18.2)	10	1 (10.0)		
Total	59622350	310576	98622 (31.8)	299036	85517 (28.6)	313092	81059 (25.9)	525	-2.7%

^a 2020 Mid-year population Statistics SA

^b Current week compared to previous week

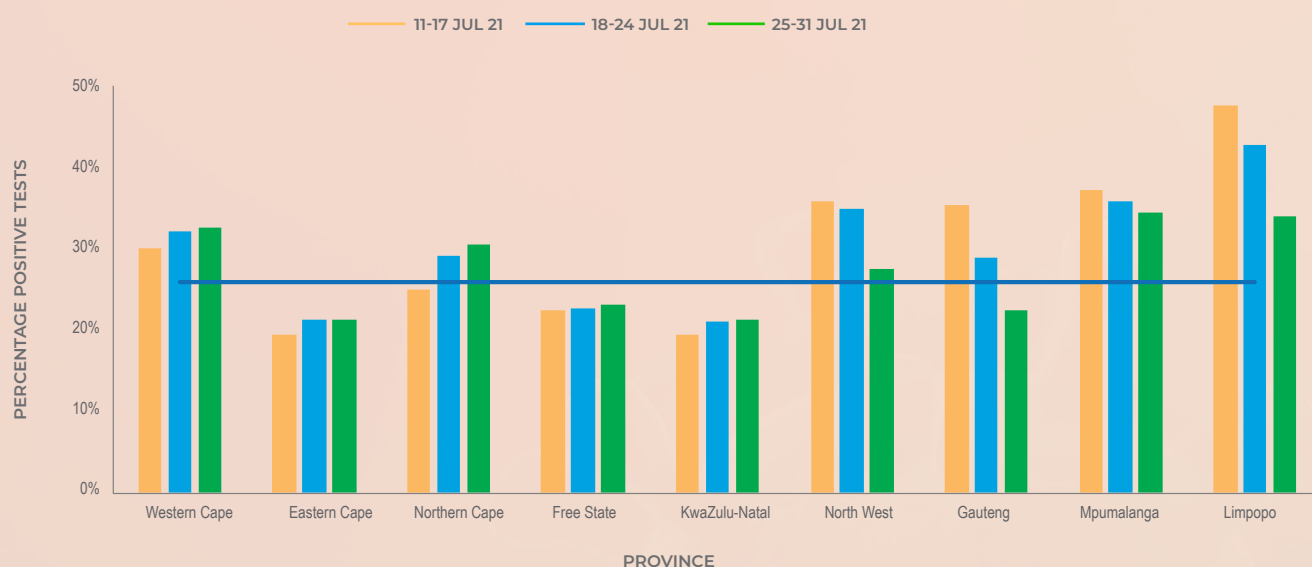


Figure 7. Weekly percentage testing positive, by province, South Africa, 11-31 July 2021. The horizontal blue line shows the national mean for week 30, beginning 25 July 2021

Testing in the public sector

In the public sector, the percentage testing positive decreased in the past week (29.4% in week 29 to 26.5% in week 30, $P < 0.001$) (Table 4). The percentage testing positive in week 30 was highest in the Western Cape

(36.2%), Limpopo (33.9%), Mpumalanga (31.5%) and Northern Cape (31.0%) provinces. The percentage testing positive in the public sector was higher than the national average, not weighted for population size, in the Western Cape, Northern Cape, North West, Mpumalanga and Limpopo provinces (Figure 8).

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Table 4. Weekly number of tests and positive tests reported in the public sector, by province, South Africa, 11-31 July 2021

Province	11-17 Jul 2021		18-24 Jul 2021		25-31 Jul 2021	
	No. of tests	No. positive tests (%)	No. of tests	No. positive tests (%)	No. of tests	No. positive tests (%)
Western Cape	26883	8627 (32.1)	25594	9413 (36.8)	34007	12313 (36.2)
Eastern Cape	17182	3227 (18.8)	17201	3506 (20.4)	16491	3269 (19.8)
Northern Cape	4940	1234 (25.0)	4800	1392 (29.0)	6145	1907 (31.0)
Free State	9194	1899 (20.7)	8978	1902 (21.2)	7728	1729 (22.4)
KwaZulu-Natal	16839	2931 (17.4)	32777	6696 (20.4)	36149	7152 (19.8)
North West	12095	3938 (32.6)	9711	3439 (35.4)	9132	2443 (26.8)
Gauteng	46559	17414 (37.4)	35662	11726 (32.9)	38177	9615 (25.2)
Mpumalanga	9349	3230 (34.5)	7972	2789 (35.0)	7489	2361 (31.5)
Limpopo	7470	3946 (52.8)	5332	2593 (48.6)	4342	1474 (33.9)
Unknown	0	0 (0.0)	1	0 (0.0)	0	0 (0.0)
Total	150511	46446 (30.9)	148028	43456 (29.4)	159660	42263 (26.5)

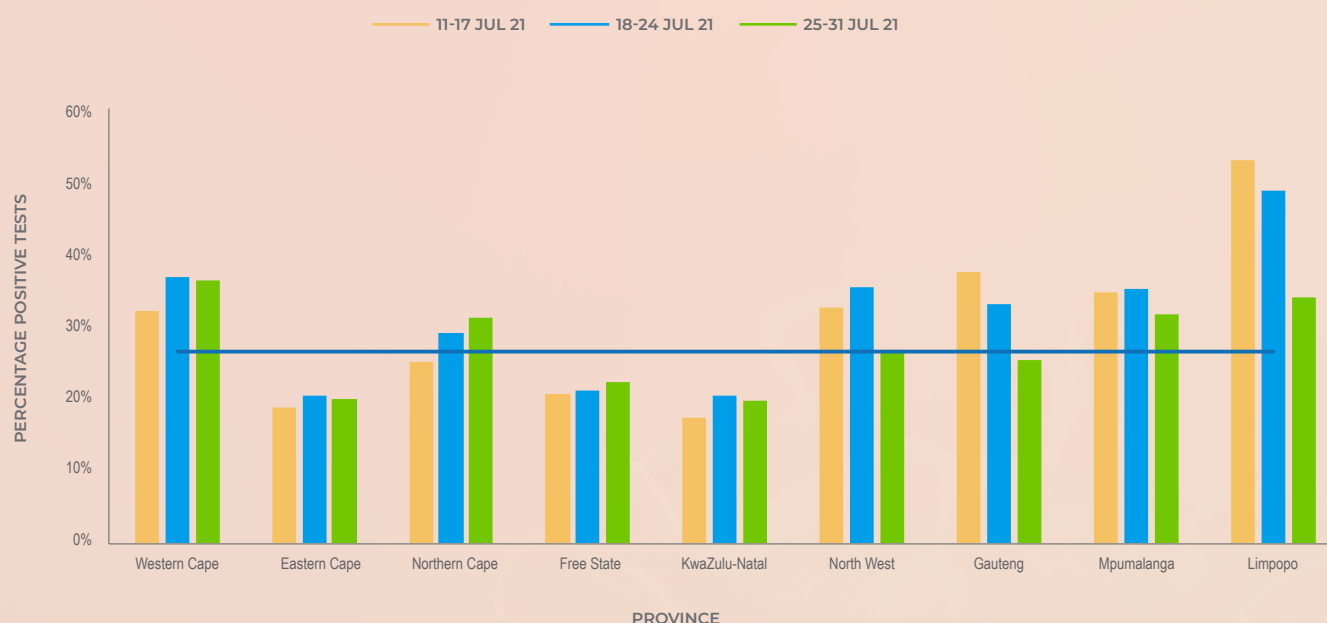


Figure 8. Weekly percentage testing positive in the public sector, by province, South Africa, 11-31 July 2021. The horizontal blue line shows the national mean for week 30 of 2021, beginning 25 July 2021.

Facilities with high proportions testing positive

The data on testing at facility level for the public sector for week 30 includes only PCR test results due to the failure of some facilities to report on negative antigen test results which, if included, would result in an overestimate of the positive test proportion (PTP). All tests (PCR and antigen) conducted in the

private sector are included. Table 5.1 shows the 25 public sector clinics, hospitals and testing laboratories (where specimens were not tied to a particular facility), that had 25 or more specimens tested by PCR and at least five positive results in the week of 25-31 July 2021. Eleven of the 25 public facilities showing the highest PTP are in the Western Cape, with four in Mpumalanga, three in Northern Cape, and two in each of KwaZulu-Natal and Limpopo.

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Table 5.1 Public sector healthcare facilities with a high proportion testing positive, 25-31 July 2021

Facility Name	Province	Tests	PTP (95% CI)
Facility 1	Western Cape	108	0.778 (0.699;0.856)
Facility 2	Western Cape	69	0.710 (0.603;0.817)
Facility 3	Mpumalanga	27	0.704 (0.531;0.876)
Facility 4	Northern Cape	32	0.688 (0.527;0.848)
Facility 5	KwaZulu-Natal	34	0.676 (0.519;0.834)
Facility 6	Gauteng	31	0.645 (0.477;0.814)
Facility 7	Western Cape	47	0.638 (0.501;0.776)
Facility 8	Limpopo	71	0.634 (0.522;0.746)
Facility 9	Western Cape	32	0.625 (0.457;0.793)
Facility 10	Western Cape	29	0.621 (0.444;0.797)
Facility 11	Western Cape	149	0.617 (0.539;0.695)
Facility 12	Mpumalanga	26	0.615 (0.428;0.802)
Facility 13	Northern Cape	39	0.615 (0.463;0.768)
Facility 14	Western Cape	73	0.603 (0.490;0.715)
Facility 15	Mpumalanga	35	0.600 (0.438;0.762)
Facility 16	Mpumalanga	35	0.600 (0.438;0.762)
Facility 17	Western Cape	418	0.596 (0.549;0.643)
Facility 18	Western Cape	254	0.594 (0.534;0.655)
Facility 19	Free State	155	0.594 (0.516;0.671)
Facility 20	Western Cape	81	0.593 (0.486;0.700)
Facility 21	Western Cape	76	0.592 (0.482;0.703)
Facility 22	North West	46	0.587 (0.445;0.729)
Facility 23	Northern Cape	46	0.587 (0.445;0.729)
Facility 24	KwaZulu-Natal	31	0.581 (0.407;0.754)
Facility 25	Limpopo	66	0.576 (0.457;0.695)

95% CI: 95% confidence interval; PTP: positive test proportion

Table 5.2 shows the 25 private sector clinics, hospitals and testing laboratories (where specimens were not tied to a particular facility), that had 25 or more specimens tested and at least five positive results in the week of 25-31 July 2021, with the highest proportion testing positive nationally. The private-sector facilities with the 25 highest proportions testing positive are spread across Gauteng (n=7), Mpumalanga (n=6), Western Cape (n=4), and KwaZulu-Natal (n=3).

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Table 5.2 Private sector healthcare facilities with a high proportion testing positive, 25-31 July 2021

Facility Name	Province	Tests	PTP (95% CI)
Facility 1	Limpopo	40	0.775 (0.646;0.904)
Facility 2	Limpopo	50	0.720 (0.596;0.844)
Facility 3	Gauteng	51	0.608 (0.474;0.742)
Facility 4	Mpumalanga	89	0.596 (0.494;0.697)
Facility 5	Western Cape	42	0.595 (0.447;0.744)
Facility 6	Gauteng	32	0.594 (0.424;0.764)
Facility 7	Mpumalanga	57	0.579 (0.451;0.707)
Facility 8	Gauteng	49	0.551 (0.412;0.690)
Facility 9	Gauteng	35	0.514 (0.349;0.680)
Facility 10	Mpumalanga	539	0.512 (0.470;0.554)
Facility 11	Mpumalanga	84	0.512 (0.405;0.619)
Facility 12	Mpumalanga	573	0.503 (0.462;0.544)
Facility 13	Gauteng	91	0.495 (0.392;0.597)
Facility 14	Gauteng	39	0.487 (0.330;0.644)
Facility 15	Free State	144	0.486 (0.404;0.568)
Facility 16	KwaZulu-Natal	35	0.486 (0.320;0.651)
Facility 17	Western Cape	157	0.484 (0.406;0.562)
Facility 18	Gauteng	89	0.483 (0.379;0.587)
Facility 19	Northern Cape	34	0.471 (0.303;0.638)
Facility 20	Western Cape	755	0.469 (0.433;0.504)
Facility 21	Mpumalanga	45	0.467 (0.321;0.612)
Facility 22	KwaZulu-Natal	65	0.462 (0.340;0.583)
Facility 23	KwaZulu-Natal	63	0.460 (0.337;0.583)
Facility 24	Eastern Cape	551	0.459 (0.418;0.501)
Facility 25	Western Cape	188	0.457 (0.386;0.529)

95% CI: 95% confidence interval; PTP: positive test proportion

Health district-level results

The data from geolocatable public testing (almost every public sector facility in the country) and private testing (approximately 83% of private testing facilities) in the week from 25-31 July 2021 have been located within the spatial framework of the health districts and health sub-districts (in the metros). Districts with fewer than 20 tests reported during the week have been excluded from the analysis.

The results, for the 25 municipalities and metropolitan health sub-districts showing the greatest proportions testing positive (PTP) are shown in the table below. There has been a notable spatial shift in the districts showing high PTP: 10 of the 25 districts are in the

Western Cape, four each in Mpumalanga and Limpopo, and three in KwaZulu-Natal.

For the sixth consecutive week, all 25 districts with the highest PTP showed a PTP in the current week in excess of 30%, and for the fifth consecutive week, all districts exceeded 40%. Only one (Cederberg in the Western Cape) exceeded 50% (last week, 11). PTP exceeded 30% in a further 71 districts (92 last week). Significant increases were observed in two of the 25 districts with the highest PTP (Kai Garib in the Northern Cape, and Emalahaleni in Mpumalanga).

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Table 6. Health sub-districts with the highest proportion testing positive based on public and private sector data for the week of 25-31 July 2021

Health district or sub-district	Province	PTP (95% CI)	Previous week
Cederberg	Western Cape	0.505 (0.450-0.560)	0.529 (0.460-0.597)
Dannhauser	KwaZulu-Natal	0.477 (0.365-0.590)	0.377 (0.228-0.527)
Hessequa	Western Cape	0.477 (0.434-0.521)	0.445 (0.398-0.492)
Umjindi	Mpumalanga	0.471 (0.392-0.551)	0.434 (0.362-0.505)
Langeberg	Western Cape	0.464 (0.420-0.509)	0.497 (0.449-0.545)
Lepele-Nkumpi	Limpopo	0.461 (0.371-0.550)	0.462 (0.407-0.517)
Tswaing	North West	0.460 (0.352-0.569)	0.619 (0.526-0.713)
!Kheis	Northern Cape	0.450 (0.319-0.582)	0.496 (0.393-0.598)
Greater Letaba	Limpopo	0.448 (0.320-0.576)	0.398 (0.288-0.507)
Swartland	Western Cape	0.443 (0.403-0.483)	0.484 (0.443-0.526)
Steve Tshwete	Mpumalanga	0.443 (0.421-0.465)	0.458 (0.436-0.480)
Beaufort West	Western Cape	0.438 (0.398-0.477)	0.471 (0.428-0.514)
Kai Garib	Northern Cape	0.436 (0.379-0.493)	0.268 (0.225-0.311)
Greater Tzaneen	Limpopo	0.434 (0.404-0.465)	0.445 (0.416-0.474)
George	Western Cape	0.430 (0.414-0.446)	0.450 (0.433-0.466)
Greater Giyani	Limpopo	0.429 (0.352-0.506)	0.440 (0.378-0.501)
CT Mitchells Plain	Western Cape	0.428 (0.408-0.448)	0.421 (0.402-0.440)
Emadlangeni	KwaZulu-Natal	0.428 (0.313-0.543)	0.346 (0.226-0.467)
Mpofana	KwaZulu-Natal	0.426 (0.360-0.492)	0.414 (0.352-0.475)
Theewaterskloof	Western Cape	0.421 (0.383-0.459)	0.368 (0.323-0.414)
Mkhondo	Mpumalanga	0.417 (0.354-0.480)	0.400 (0.337-0.463)
Saldanha Bay	Western Cape	0.417 (0.388-0.447)	0.443 (0.410-0.476)
Matzikama	Western Cape	0.417 (0.372-0.462)	0.337 (0.294-0.379)
Ratlou	North West	0.415 (0.316-0.514)	0.562 (0.482-0.641)
Emalahleni	Mpumalanga	0.415 (0.390-0.439)	0.192 (0.134-0.250)

95% CI: 95% confidence interval; PTP: adjusted positive test proportion; Elements marked in **red** have current week proportions testing positive that are **higher** than, and CIs that do not overlap with, the previous week proportions and CIs. Elements marked in **blue** have current week proportions testing positive that are **lower** than, and CIs that do not overlap with, the previous week proportions and CIs.

The data for the current week for every district with a non-zero proportion testing positive or where the range of confidence interval is not more than 30% (15% either side of the point estimate), and where more than 20 tests were conducted in the present week, is presented graphically below.

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Figure 9.1 Proportions testing positive by health sub-district in the Western Cape, Eastern Cape, Gauteng and KwaZulu-Natal provinces based on public and private sector data for the week of 25-31 July 2021.

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Figure 9.2 Proportions testing positive by health sub-district in the North West, Free State, Limpopo and Mpumalanga provinces based on public and private sector data for the week of 25-31 July 2021.

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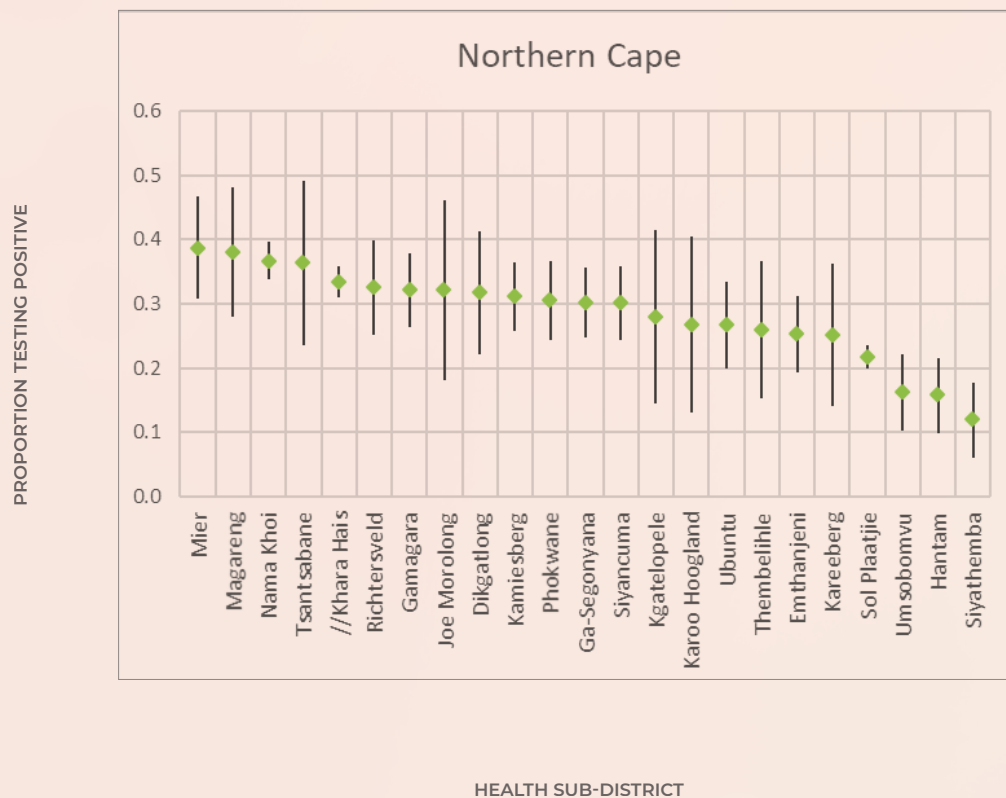


Figure 9.3 Proportions testing positive by health sub-districts in the Northern Cape Province based on public and private sector data for the week of 25-31 July 2021.

The spatial pattern of adjusted proportions testing positive, including both public and private sector data, by health district and sub-district are shown for South Africa (Figure 10), Western Cape (Figure 11), Eastern Cape (Figure 12), Northern Cape (Figure 13), Free State (Figure 14), KwaZulu-Natal (Figure 15), North West (Figure 16), Gauteng (Figure 17), Mpumalanga (Figure 18) and Limpopo (Figure 19).

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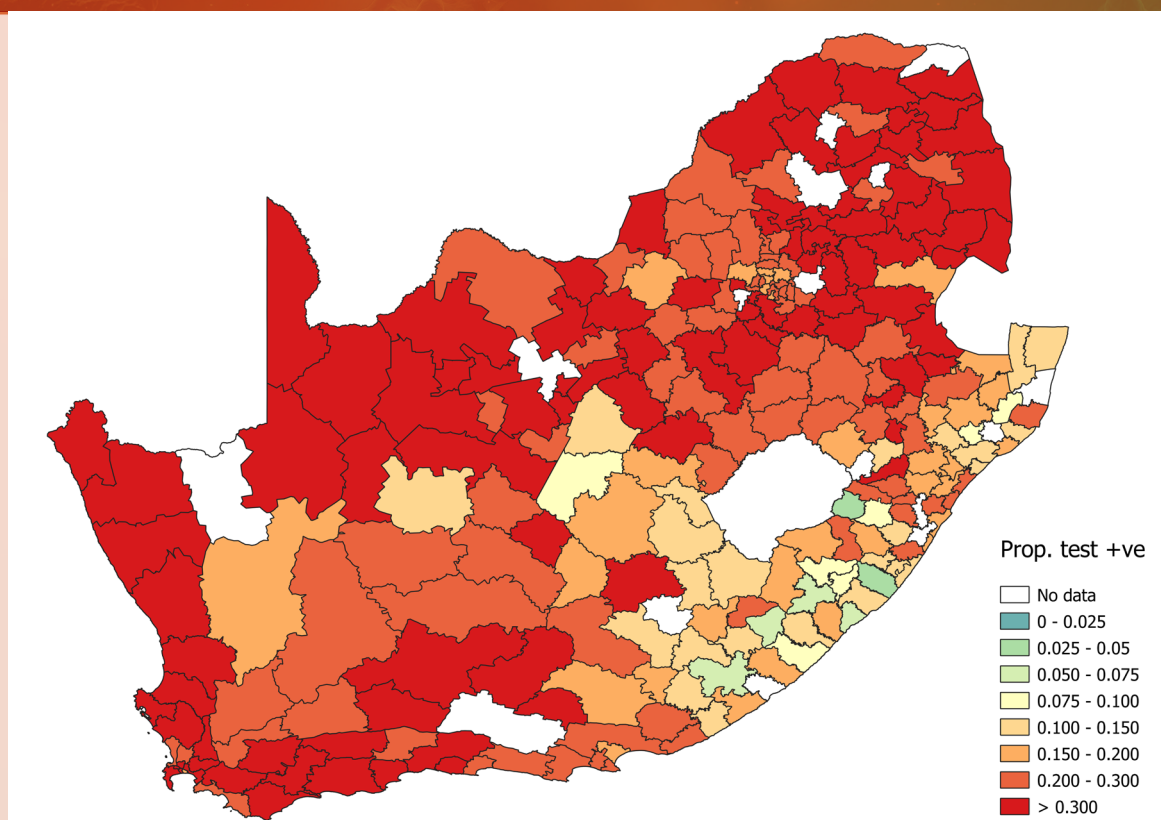


Figure 10. Proportion testing positive by health sub-district in South Africa for the week of 25-31 July 2021. Areas shaded white represent districts in which either (i) no tests were reported, (ii) all tests were negative, or (iii) the confidence interval exceeded 30%.

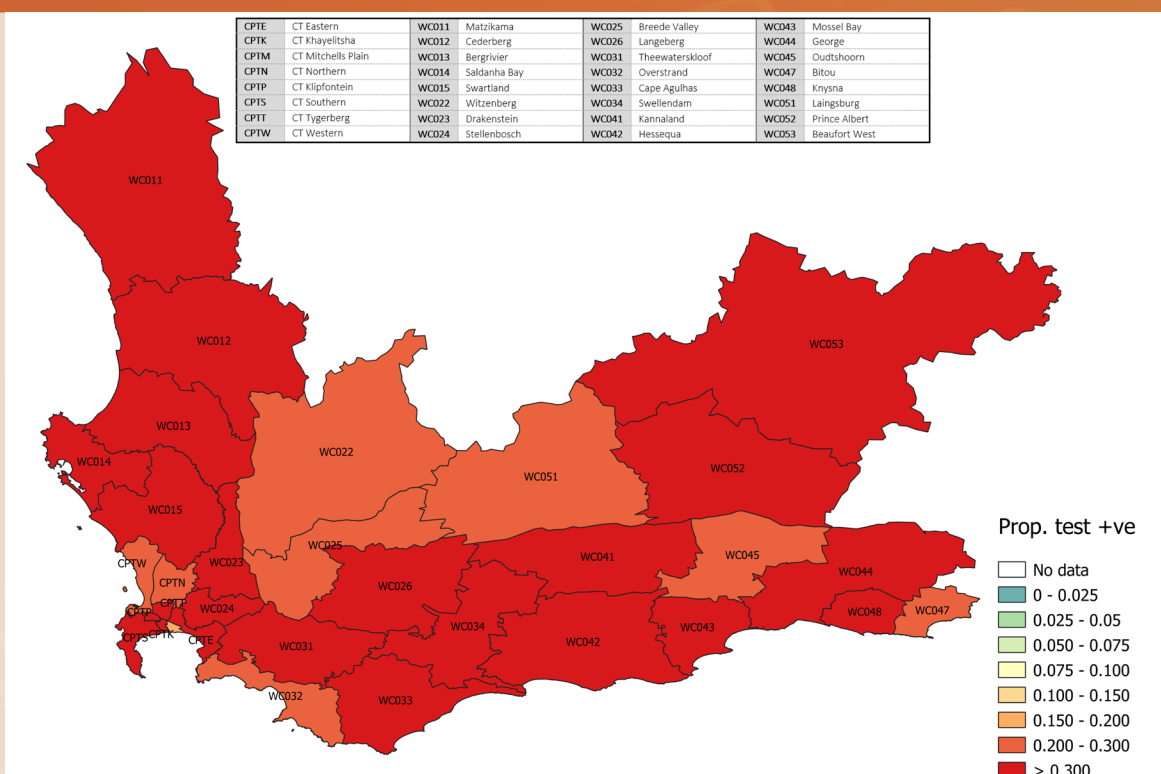


Figure 11. Proportion testing positive by health sub-district in the Western Cape Province for the week of 25-31 July 2021. Areas shaded white represent districts in which either (i) no tests were reported, (ii) all tests were negative, or (iii) the confidence interval exceeded 30%.

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BUF	Buffalo City	EC122	Mquma	EC135	Intsika Yethu	EC155	Nyandeni
EC101	Camdeboo	EC123	Great Kei	EC136	Emalahleni	EC156	Mhlontlo
EC102	Blue Crane Route	EC124	Amahlathi	EC137	Engcobo	EC157	King Sabata Dalindyebo
EC103	Ikwazi	EC126	Nguqushwa	EC138	Sakhisizwe	EC441	Mahatlele
EC104	Matana	EC127	Nkonkobe	EC141	Elundini	EC442	Umtomvubu
EC105	Ndlambe	EC128	Nxuba	EC142	Senqu	EC443	Mbizana
EC106	Sundays River Valley	EC131	Inxuba Yethemba	EC143	Maletswai	EC444	Ntabankulu
EC107	Baviaans	EC132	Tsolwana	EC144	Gariep	NMAA	Nelson Mandela Bay A
EC108	Kouga	EC133	Inkwanca	EC153	Nguza Hill	NMAB	Nelson Mandela Bay B
EC109	Kou-Kamma	EC134	Lukani	EC154	Port St Johns	NMAC	Nelson Mandela Bay C
EC121	Mbashe						

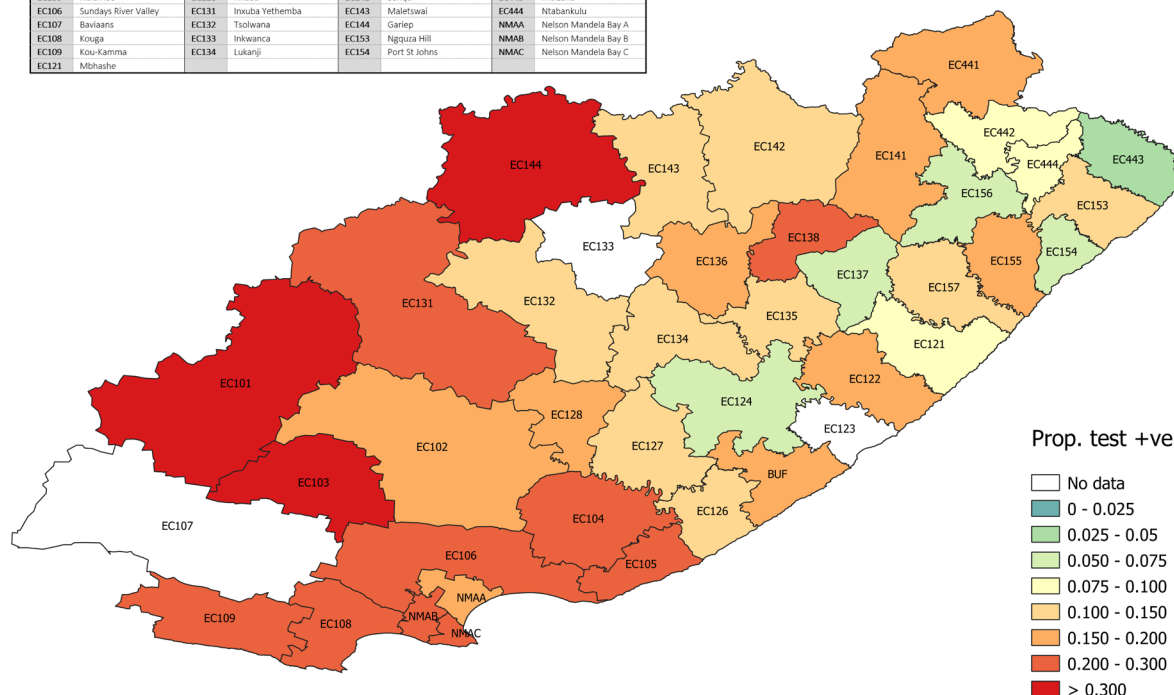


Figure 12. Proportion testing positive by health sub-district in the Eastern Cape Province for the week of 25-31 July 2021. Areas shaded white represent districts in which either (i) no tests were reported, (ii) all tests were negative, or (iii) the confidence interval exceeded 30%.

NC061	Richtersveld	NC074	Kareeberg	NC085	Tsantabane
NC062	Nama-khoi	NC075	Renosterberg	NC086	Kgatelopele
NC064	Kamiesberg	NC076	Thembelille	NC091	Sol Plaatje
NC065	Kantam	NC077	Siyathemba	NC092	Dikgatlong
NC066	Karoo-Hogland	NC078	Siyancuma	NC093	Magareng
NC067	Khali-Isa	NC081	Mier	NC094	Phokwane
NC071	Libonfu	NC082	Kai-Ikarib	NC401	Joe Morolong
NC072	Limsobomvu	NC083	//Kharas Hais	NC402	Ga-Segonyana
NC073	Eendburg	NC084	Ikheis	NC403	Gamagara

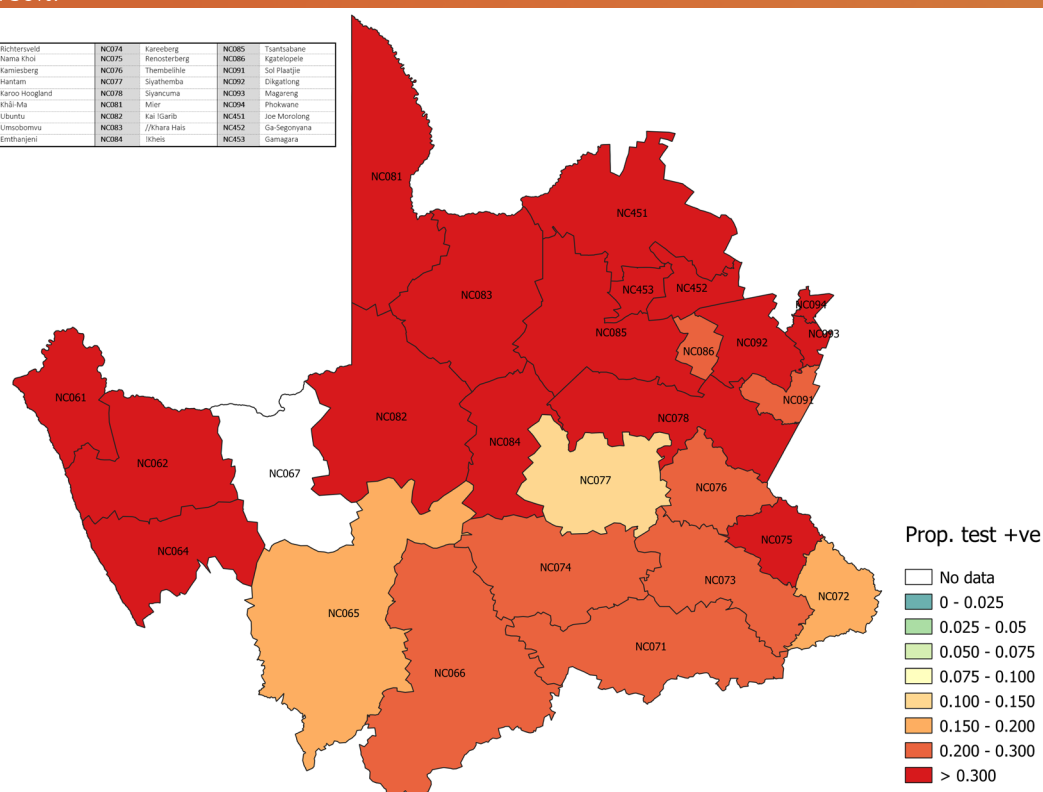


Figure 13. Proportion testing positive by health sub-district in Northern Cape Province for the week of 25-31 July 2021. Areas shaded white represent districts in which either (i) no tests were reported, (ii) all tests were negative, or (iii) the confidence interval exceeded 30%.

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MAN	Mangaung	FS181	Masilonyana	FS191	Setso	FS196	Mantsopa
FS161	Letsemeng	FS182	Tokologo	FS192	Dihlabeng	FS201	Moghaka
FS162	Kopanong	FS183	Tswelopele	FS193	Nketoana	FS203	Ngwathe
FS163	Mohokare	FS184	Matjhabeng	FS194	Maluti a Phofung	FS204	Metsimaholo
FS164	Naledi	FS185	Nala	FS195	Phumelela	FS205	Mafube

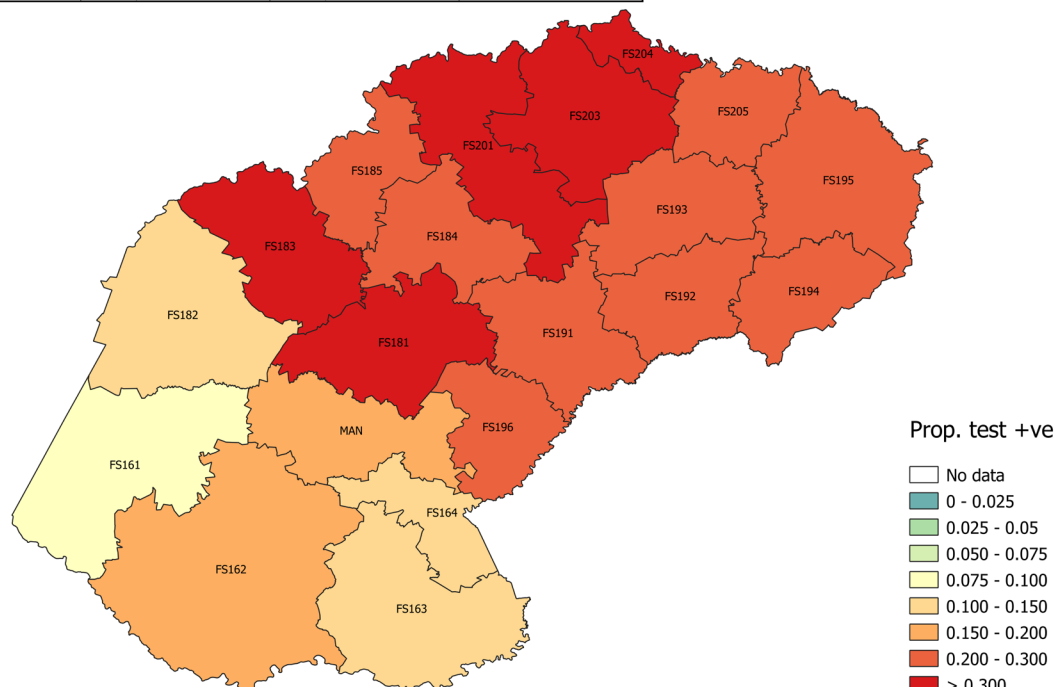


Figure 14. Proportion testing positive by health sub-district in Free State Province for the week of 25-31 July 2021. Areas shaded white represent districts in which either (i) no tests were reported, (ii) all tests were negative, or (iii) the confidence interval exceeded 30%.

ETHN	eThekweni North	KZN233	Indaka	KZN273	The Big 5 False Bay
ETHS	eThekweni South	KZN234	Umtsozi	KZN274	Hlabisa
ETHW	eThekweni West	KZN235	Okhahlamba	KZN275	Mtubatuba
KZN211	Vulamehlo	KZN236	Imbabazane	KZN281	Mfolosi
KZN212	Umdoni	KZN241	Endumeni	KZN282	uMhlathuze
KZN213	Umkumbi	KZN242	Nqutu	KZN283	Ntambanana
KZN214	uMuziwabantu	KZN244	Misinga	KZN284	uMlalazi
KZN215	Ezingolweni	KZN245	Umvoti	KZN285	Mthonjaneni
KZN216	Hlabisa Coast	KZN252	Newcastle	KZN286	Nkandla
KZN221	uMshwathi	KZN253	Emadlangeni	KZN291	Mandeni
KZN222	uMngeni	KZN254	Dannhauser	KZN292	KwaDukuza
KZN223	Mpofana	KZN261	eDumbe	KZN293	Ndwedwe
KZN224	Impendle	KZN262	uPhongolo	KZN294	Maphumulo
KZN225	The Msunduzi	KZN263	Abaqulusi	KZN431	Ingwe
KZN226	Mkhambathini	KZN265	Nongoma	KZN432	Kwa Sani
KZN227	Richmond	KZN266	Ulundi	KZN433	Greater Kokstad
KZN232	Emnambithi/Ladysmith	KZN271	Umkhambayalingana	KZN434	Ubulalebezwe
		KZN272	Josini	KZN435	Umkhambayalingana

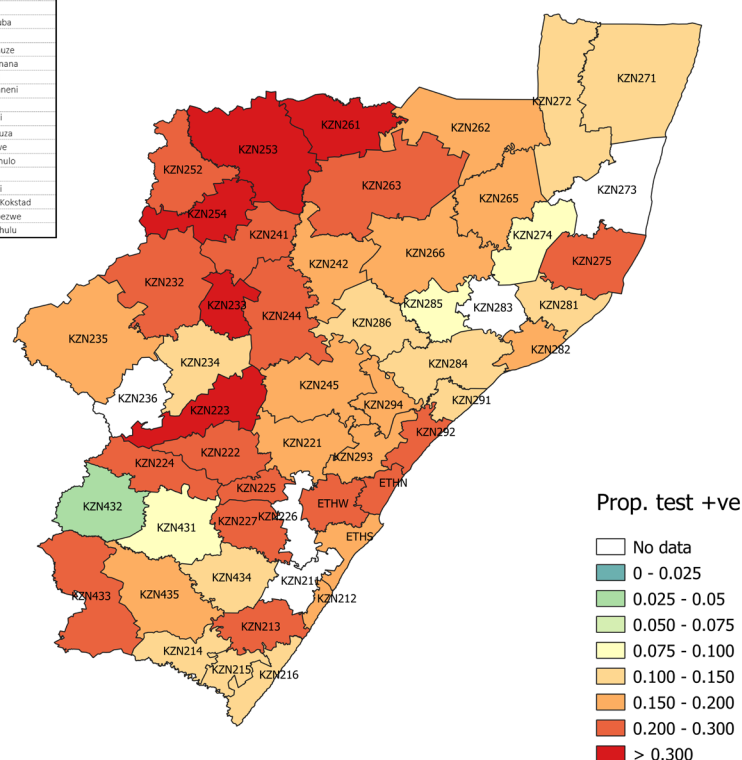


Figure 15. Proportion testing positive by health sub-district in KwaZulu-Natal Province for the week of 25-31 July 2021. Areas shaded white represent districts in which either (i) no tests were reported, (ii) all tests were negative, or (iii) the confidence interval exceeded 30%.

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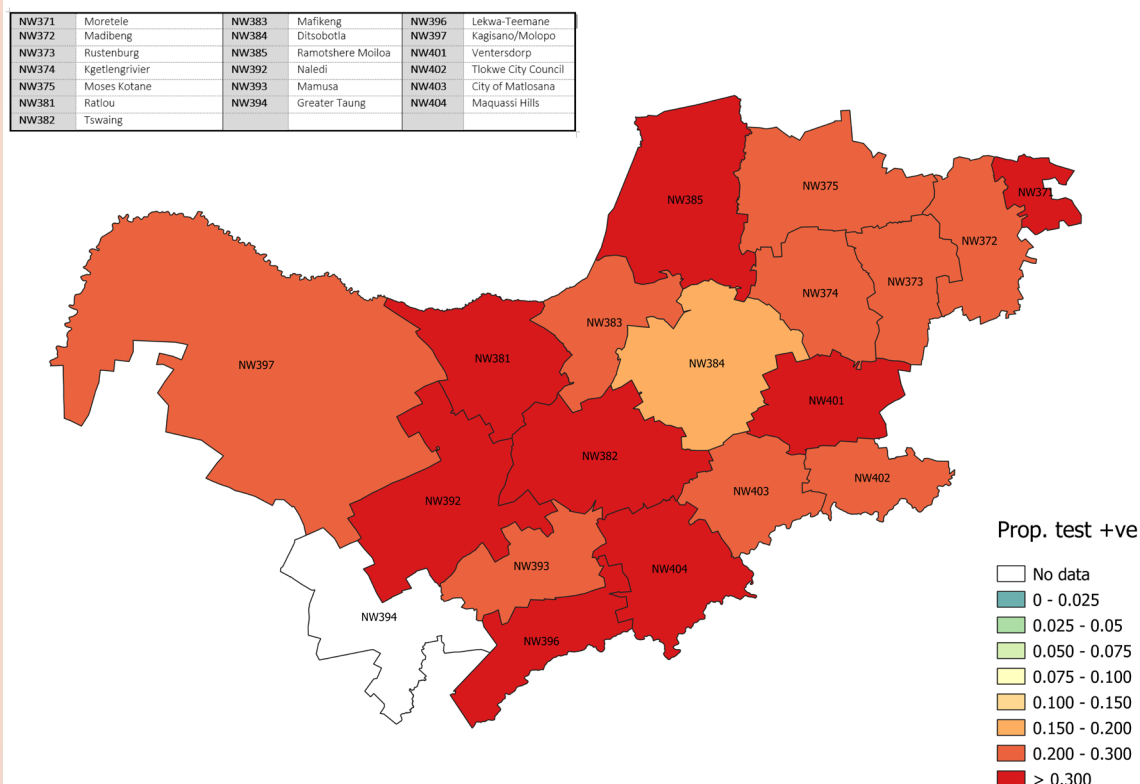


Figure 16. Proportion testing positive by health sub-district in North West Province for the week of 25-31 July 2021. Areas shaded white represent districts in which either (i) no tests were reported, (ii) all tests were negative, or (iii) the confidence interval exceeded 30%.

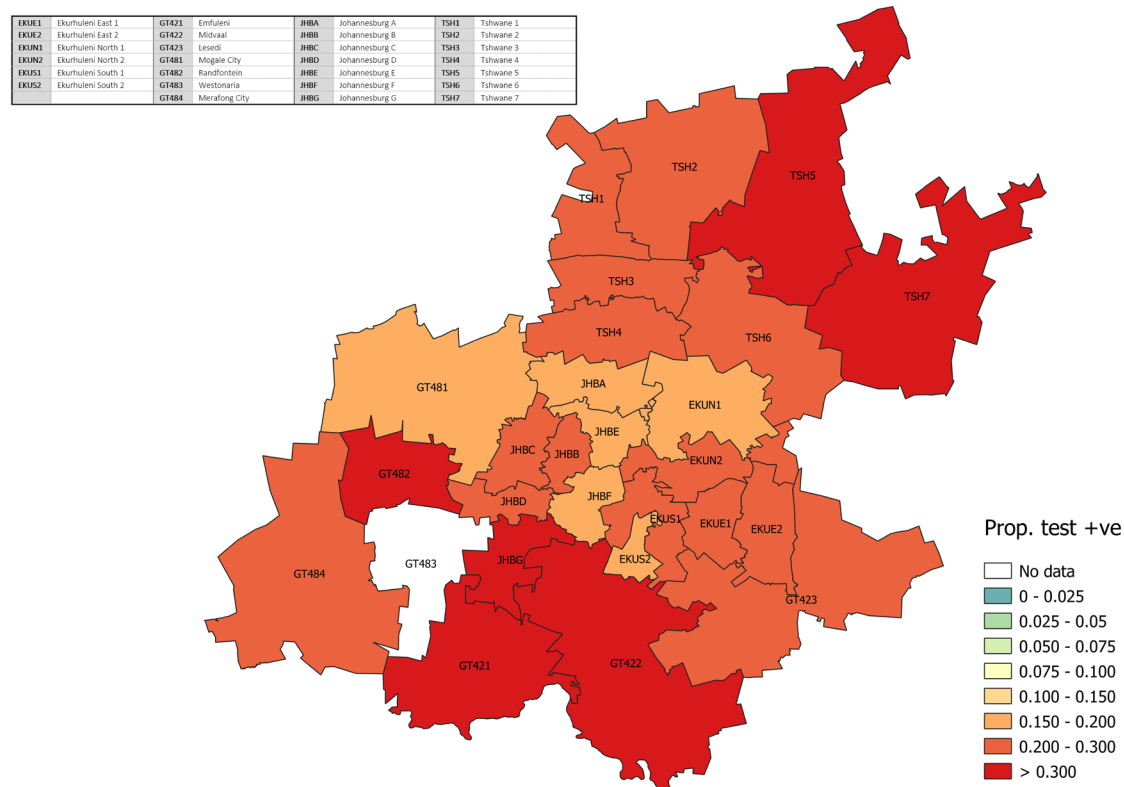


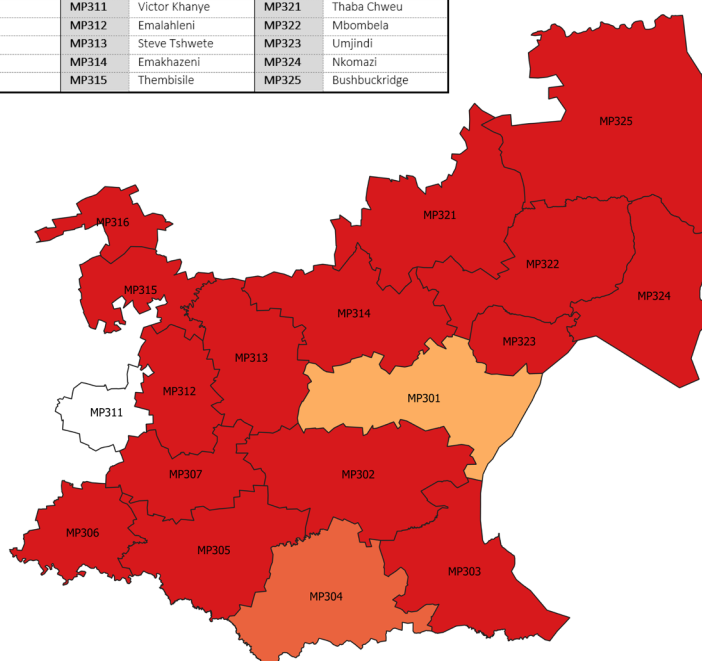
Figure 17. Proportion testing positive by health sub-district in Gauteng Province for the week of 25-31 July 2021. Areas shaded white represent districts in which either (i) no tests were reported, (ii) all tests were negative, or (iii) the confidence interval exceeded 30%.

COVID-19 TESTING SUMMARY

SOUTH AFRICA

WEEK 30 2021

MP301	Albert Luthuli	MP307	Govan Mbeki	MP316	Dr JS Moroka
MP302	Msukaligwa	MP311	Victor Khanye	MP321	Thaba Chweu
MP303	Mkhondo	MP312	Emalahleni	MP322	Mbombela
MP304	Pixley Ka Seme	MP313	Steve Tshwete	MP323	Umgindi
MP305	Lekwa	MP314	Emakhazeni	MP324	Nkomazi
MP306	Dipaleseng	MP315	Thembisile	MP325	Bushbuckridge



Prop. test +ve

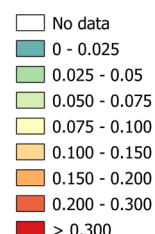
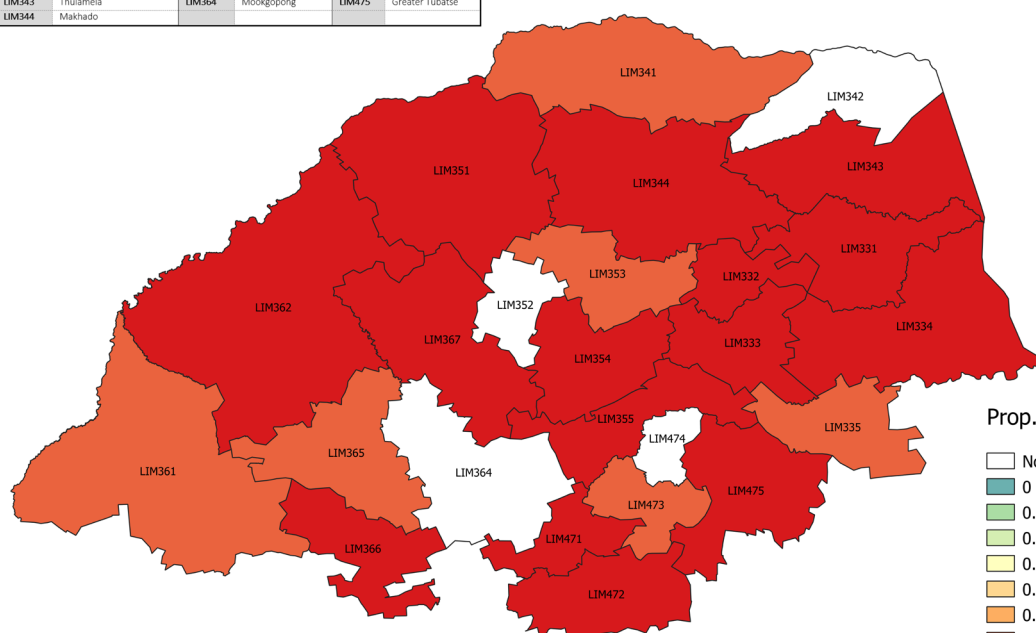


Figure 18. Proportion testing positive by health sub-district in Mpumalanga Province for the week of 25-31 July 2021. Areas shaded white represent districts in which either (i) no tests were reported, (ii) all tests were negative, or (iii) the confidence interval exceeded 30%.

LIM331	Greater Giyani	LIM351	Blouberg	LIM365	Modimolle
LIM332	Greater Letaba	LIM352	Aganang	LIM366	Bela-Bela
LIM333	Greater Tzaneen	LIM353	Molemole	LIM367	Mogalakwena
LIM334	Ba-Phalaborwa	LIM354	Potokwane	LIM471	Ephraim Mogale
LIM335	Maruleng	LIM355	Lepele-Nkumpi	LIM472	Elias Motosoledi
LIM341	Musina	LIM361	Thabazimbi	LIM473	Makhuduthamaga
LIM342	Mutale	LIM362	Lephalale	LIM474	Fetakgomo
LIM343	Thulamela	LIM364	Mookgopong	LIM475	Greater Tubatse
LIM344	Makhado				



Prop. test +ve

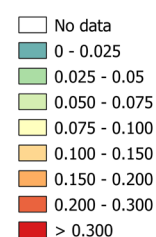


Figure 19. Proportion testing positive by health sub-district in Limpopo Province for the week of 25-31 July 2021. Areas shaded white represent districts in which either (i) no tests were reported, (ii) all tests were negative, or (iii) the confidence interval exceeded 30%.

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Testing by patient admission status

In week 30 of 2021, 35.2% of reported tests were for hospitalised patients; 41.9% in the public sector and 27.3% in the private sector (Figure 20). The percentage testing positive in week 30 was higher among outpatients (28.6%) compared to inpatients (21.7%),

and have decreased from the previous week in both groups (Figure 21). In week 30 the mean laboratory turnaround time for PCR tests in the public sector was higher among outpatients (1.8 days) compared to inpatients (1.3 days) (Figure 22).

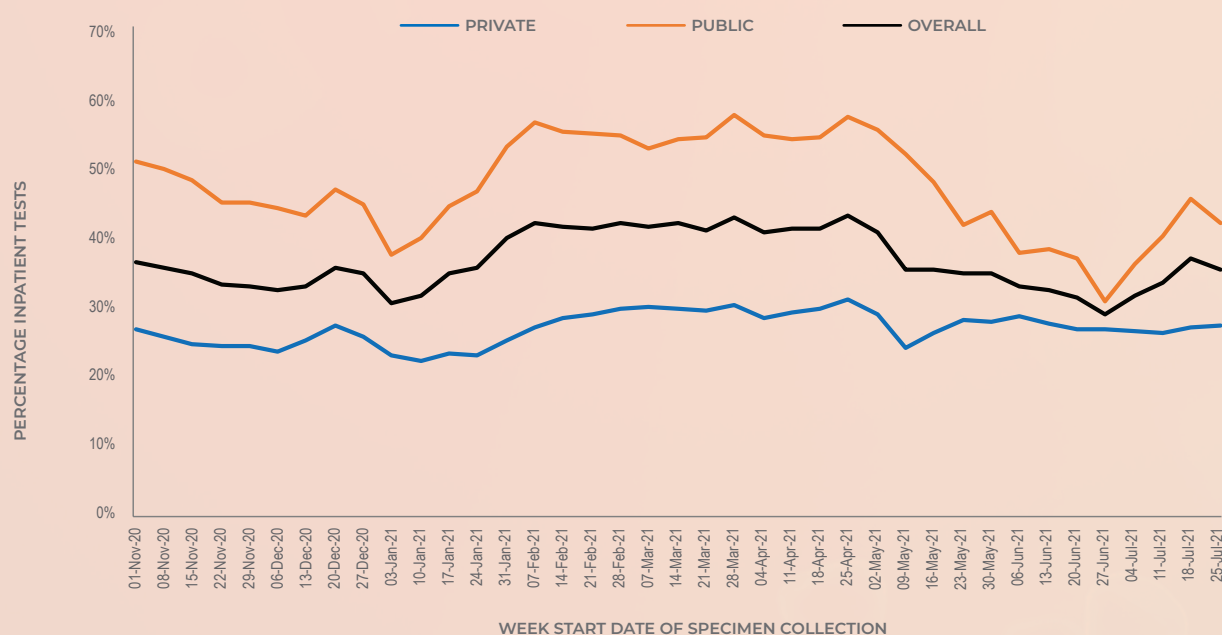


Figure 20. Percentage of inpatient tests reported by health sector, 1 November 2020 – 31 July 2021

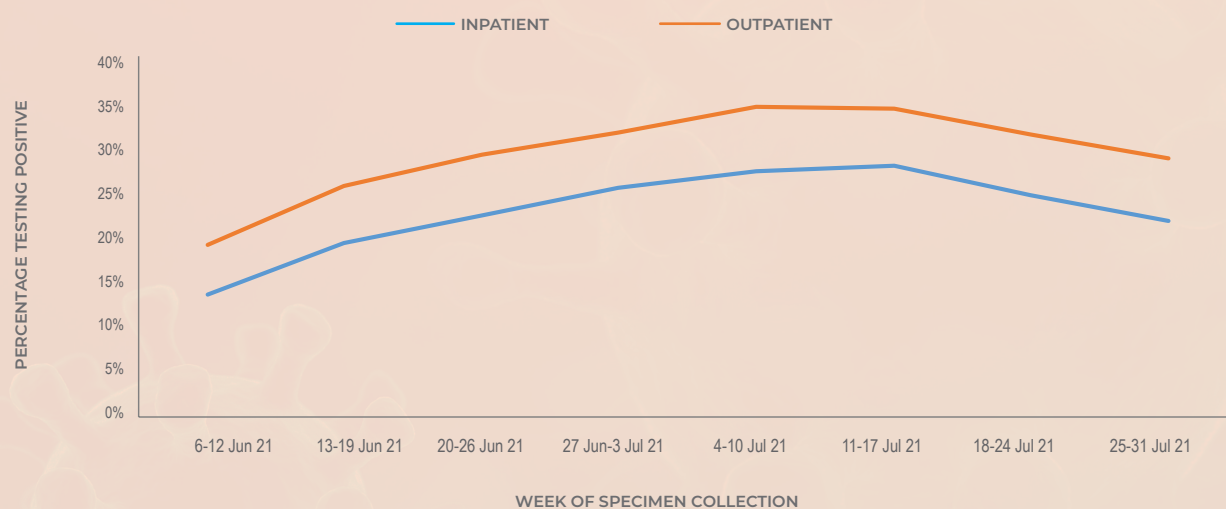


Figure 21. Percentage testing positive by patient admission status, 6 June – 31 July 2021

COVID-19 TESTING SUMMARY

SOUTH AFRICA WEEK 30 2021

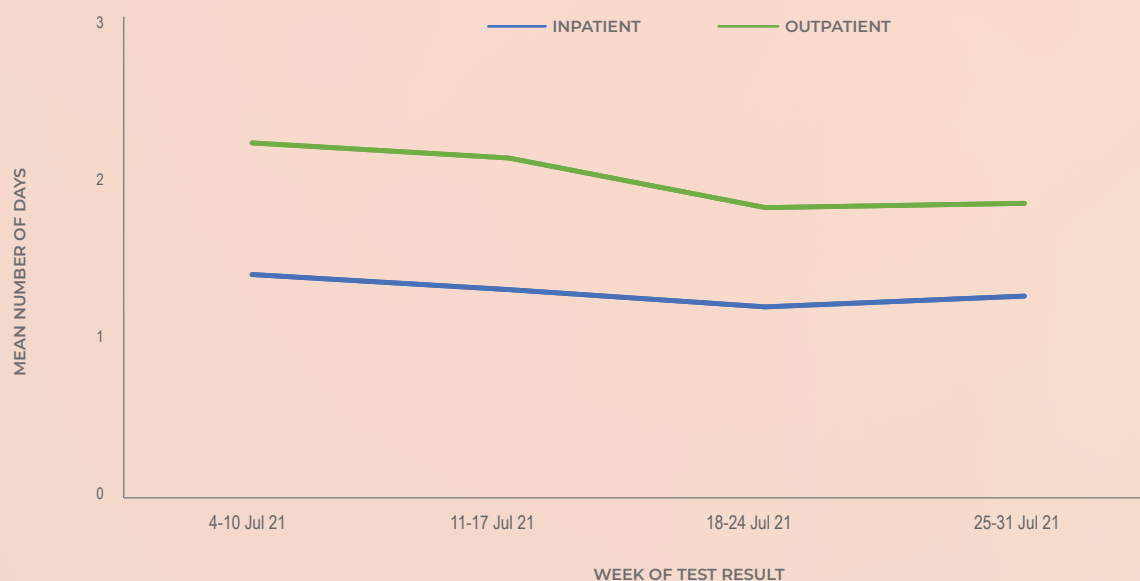


Figure 22. Mean number of days between date of specimen collection and date of test result for PCR tests in the public sector by patient admission status, 4 – 31 July 2021

Testing by age and sex

The median age of individuals tested in week 30 of 2021 was 38 years (interquartile range (IQR) 28-51), and was similar among males (38 years; IQR 27-51) and females (37 years; IQR 27-51). The majority of reported tests (59.6%) were in individuals in the 20-49 years' age group (Figure 23). In week 30, the testing rate was higher among females (532 per 100,000 persons) than males (493 per 100,000 persons) (Figure 24). Testing

rates in week 30 were highest in the ≥ 80 years age group (1030 per 100,000 persons). The percentage testing positive was highest in individuals aged 55-59 years (31.0%), and in this same age group in males (29.3%) and in females (32.7%).

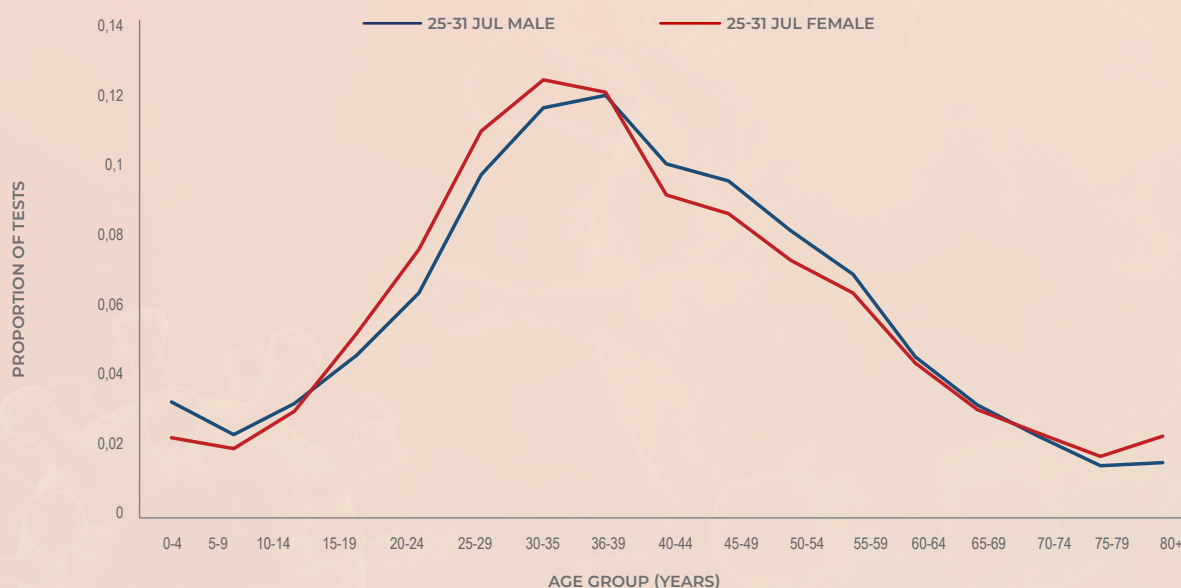


Figure 23. Proportion of tests by age group and sex, South Africa, week 30, 25-31 July 2021

COVID-19 TESTING SUMMARY

SOUTH AFRICA WEEK 30 2021

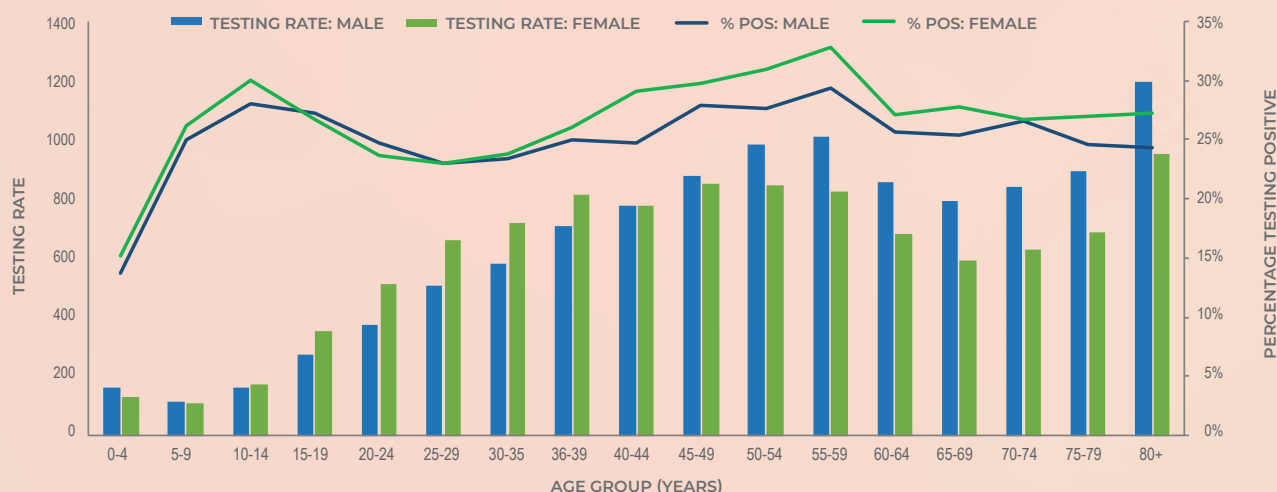


Figure 24. Testing rates per 100,000 persons and percentage testing positive by age group and sex, South Africa, week 30, 25-31 July 2021

Testing by test type

Up to the end of week 30 of 2021, 11.3% (1,681,414/14,826,086) of all reported tests were antigen tests. In week 30, 22.9% (71,651/313,092) of reported tests were antigen tests (Figure 25). Overall, 81.5% of antigen tests have been performed in the public sector, and in week 30 the public sector accounted for 84.9% of antigen tests. Since antigen testing began in November 2020, the majority of antigen tests have been reported from KwaZulu-Natal (34.1%) and Gauteng (20.1%) provinces. In the past few weeks, KwaZulu-Natal, Gauteng and Western Cape have performed the highest weekly number of antigen tests, with increases in the number of antigen tests reported from these three

provinces in the past week. The percentage testing positive in week 30 was higher for PCR (27.8%) tests compared to antigen (19.3%) tests (Figure 26). The mean turnaround time for antigen tests reported in week 30 decreased to 4.2 days in the public sector and remained low (0.2 days) in the private sector (Figure 27). The number of antigen tests reported is likely underestimated as antigen tests are increasingly being used outside of laboratory settings and results may not be reported or reporting may be delayed. In addition, if only positive antigen tests were reported, this would have resulted in an overestimation of percentage testing positive and likely accounts for the increase in percentage testing positive observed for antigen tests in the past week.

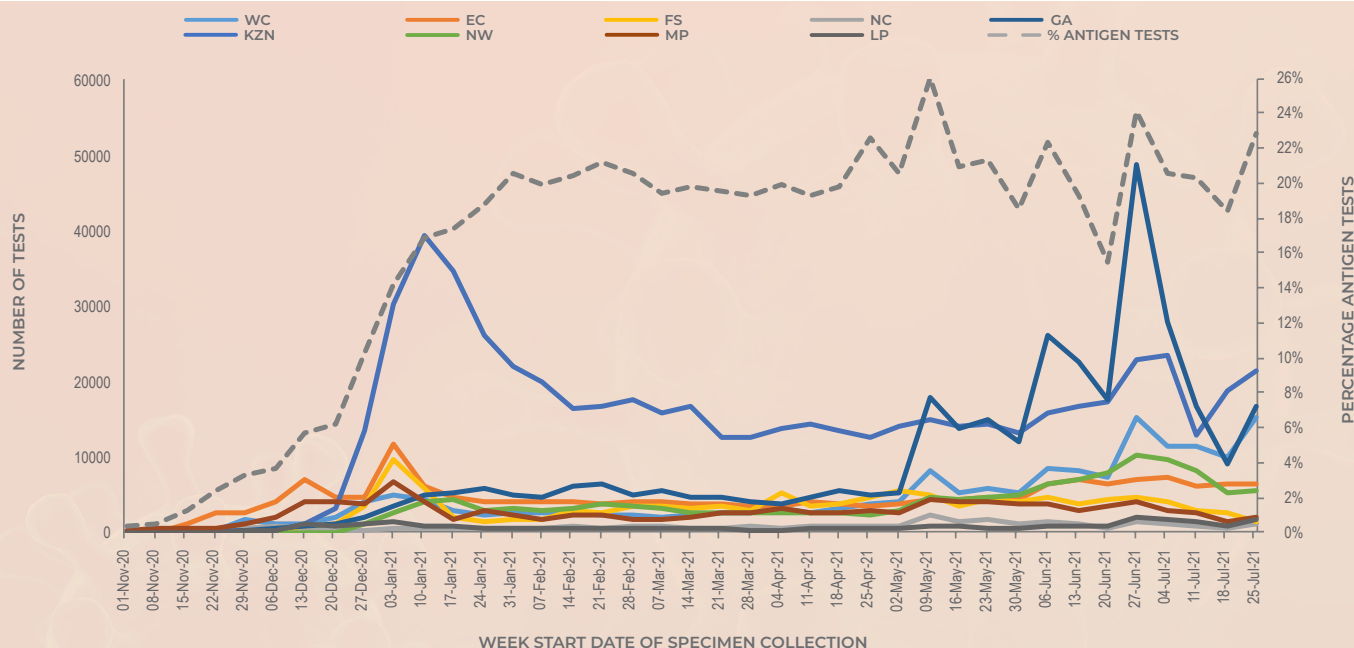


Figure 25. Number of antigen tests by province, and overall percentage antigen tests, South Africa, 1 November 2020 – 31 July 2021. WC, Western Cape; EC, Eastern Cape; FS, Free State; KZN, KwaZulu-Natal; GA, Gauteng; NC, Northern Cape; NW, North West; MP, Mpumalanga; LP, Limpopo

COVID-19 TESTING SUMMARY

SOUTH AFRICA WEEK 30 2021

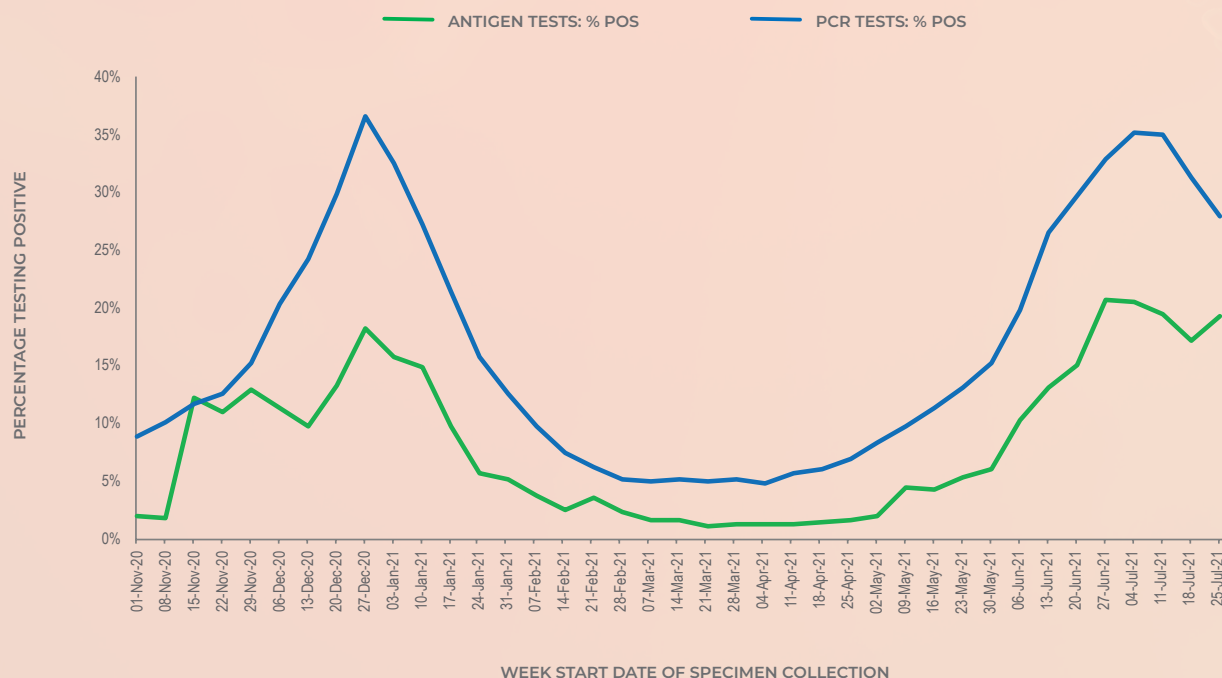


Figure 26. Percentage of laboratory tests positive for SARS-CoV-2 by test type and date of specimen collection, South Africa, 1 November 2020 – 31 July 2021

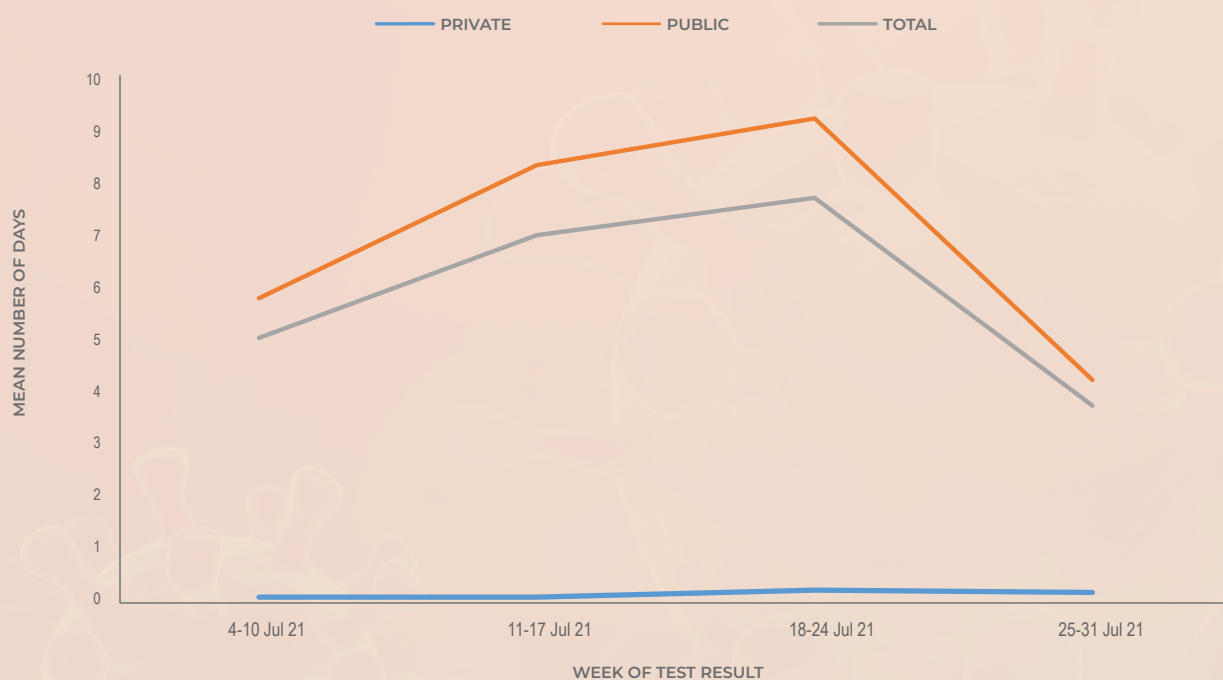


Figure 27. Mean number of days between date of specimen collection and date of test result for antigen tests, by week of test result, South Africa, 4 - 31 July 2021

COVID-19 TESTING SUMMARY

SOUTH AFRICA | WEEK 30 2021

Limitations

- A backlog in testing of samples by laboratories affects the reported number of tests. As a result, numbers tested during this period may change in subsequent reports.
- If higher-priority specimens were tested preferentially, this would likely result in an inflated proportion testing positive.
- Different and changing testing strategies (targeted vs. mass testing and PCR vs. antigen-based tests) used by different provinces makes percentage testing positive and number of reported tests difficult to interpret and compare.
- Health district and sub-district level were mapped based on the testing facility and not place of residence.
- Patient admission status was categorised based on the reported patient facility and may not reflect whether the patient was actually admitted to hospital.
- Antigen tests may be underestimated as they are used in a number of different settings and results may not be reported.

CONCLUSIONS

The number of tests reported in week 30 (n=313,092) was higher than the number of tests reported in the previous two weeks. Gauteng (30.4%), Western Cape (21.5%) and KwaZulu-Natal (18.4%) provinces reported the largest number of tests in week 30. The overall testing rate in week 30 was 525 per 100,000 persons; highest in the Western Cape (961 per 100,000 persons) and lowest in Limpopo (189 per 100,000 persons). Testing rates increased in the Western Cape, Northern Cape and KwaZulu-Natal in the past week. Antigen tests accounted for 22.9% (71,651/ 14,826,086) of all tests reported in week 30, however the number of antigen tests is likely underestimated due to under-reporting and delayed reporting of antigen tests. The overall mean laboratory turnaround time for PCR tests was 1.1 days in week 30; 1.6 days in the public sector and 0.8 days in the private sector.

The percentage testing positive in week 30 was 25.9%, which was 2.7% lower than the previous week. The percentage testing positive in week 30 was highest in Mpumalanga (34.5%), Limpopo (33.9%), Western Cape (32.5%), and Northern Cape (30.5%) provinces. The percentage testing positive was between 20% and 30% in the Eastern Cape, Free State, KwaZulu-Natal, North West and Gauteng. Compared to the previous week, the percentage testing positive in week 30 decreased in the North West, Gauteng, Mpumalanga and Limpopo. The percentage testing positive remained unchanged in the Western Cape, Eastern Cape, Northern Cape, Free State and KwaZulu-Natal.