

# COVID-19 TESTING SUMMARY



NATIONAL INSTITUTE FOR  
COMMUNICABLE DISEASES

Division of the National Health Laboratory Service

SOUTH AFRICA WEEK 27 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 10 July 2021 (Week 27 of 2021).

## HIGHLIGHTS

- In the period 1 March 2020 through 10 July 2021, 13,843,120 (12,398,696 PCR and 1,444,424 antigen) tests for SARS-CoV-2 have been reported nationally.
- The number of tests reported in week 27 of 2021 (n=401,041) was less than the weekly number of tests reported in the previous week.
- The testing rate in week 27 was 673 per 100,000 persons; highest in Gauteng (1090 per 100,000 persons) and lowest in Limpopo (341 per 100,000 persons).
- In week 27 the percentage testing positive was 32.5%, which was 2.3% higher than the previous week.
- The percentage testing positive in week 27 was highest in Limpopo (51.5%), Gauteng (39.1%), North West (39.1%) and Mpumalanga (38.0%) provinces. The percentage testing positive was between 20% and 30% in the Western Cape, Northern Cape and Free State, and was <20% in the Eastern Cape and KwaZulu-Natal provinces.
- In week 27, compared to the previous week, the percentage testing positive increased in all of the 9 provinces.
- 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.

# COVID-19 TESTING SUMMARY

SOUTH AFRICA | WEEK 27 2021

## 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.

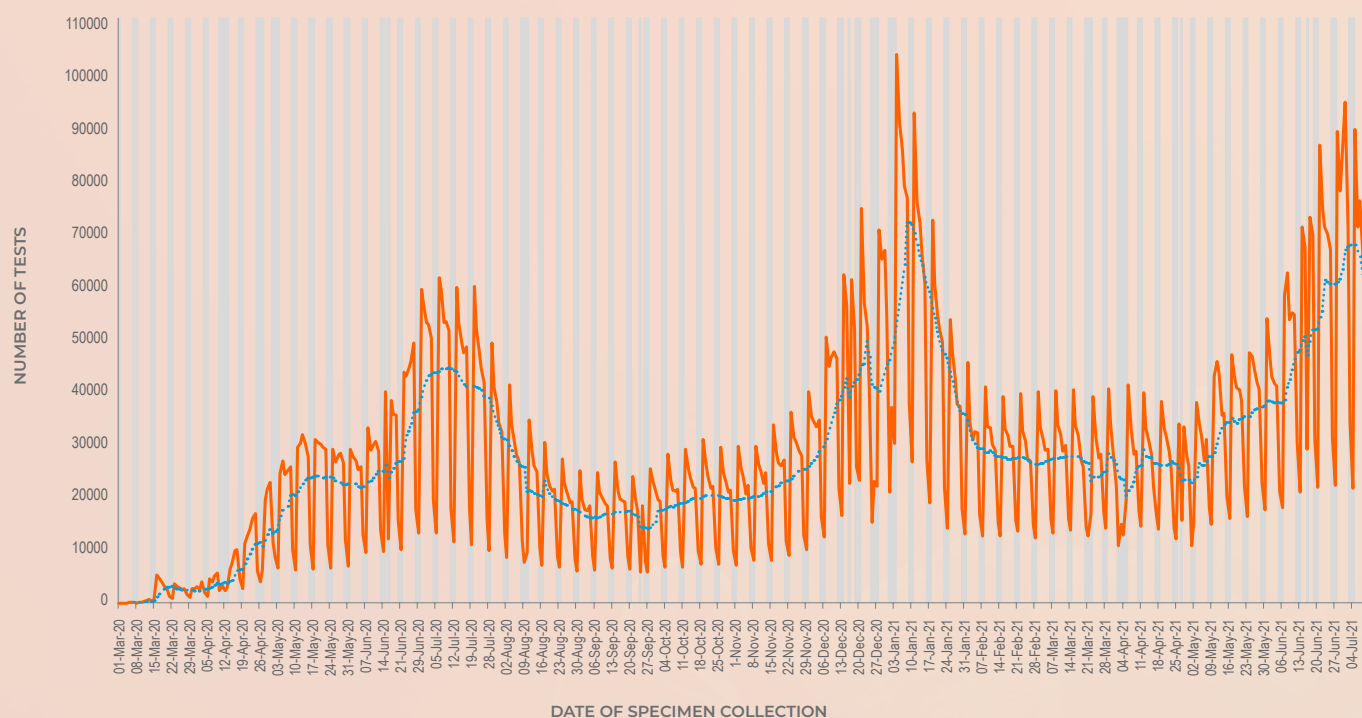
The report includes tests reported between 1 March 2020 (week 10 of 2020), the week when the first case of COVID-19 was confirmed, and 10 July 2021 (week 27 of 2021).

## Testing volumes and proportion testing positive

From 1 March 2020 through 10 July 2021, 13,843,120 SARS-CoV-2 tests were reported; 12,398,696 PCR and 1,444,424 antigen tests. The highest number of tests reported during the first wave occurred in week 28 of 2020 (beginning 5 July, n=307,914). In the second wave, weekly testing volumes increased from week 48 of 2020 (beginning 22 November), with the highest weekly number of tests since the start of the pandemic reported in week 1 of 2021 (beginning 3 January, n=501,110). In the third wave, the weekly number of tests started increasing in week 19 of 2021 (beginning 9 May), and increased weekly to 471,204 tests in week 26 of 2021. The number of tests reported in week 27 was 401,041, less than the number observed 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).

# COVID-19 TESTING SUMMARY

SOUTH AFRICA WEEK 27 2021



**Figure 1.** Number of SARS-CoV-2 tests reported by date of specimen collection, South Africa, 1 March 2020 – 10 July 2021. Blue dotted 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 27 of 2021 was 16.8% (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. The percentage testing positive in week 27 of 2021 was 32.5%, 2.3% higher than observed in the previous week (30.2%,  $P < 0.001$ ), and higher than observed since week 1 of 2021 (beginning 3 January) (Figure 2).

# COVID-19 TESTING SUMMARY

SOUTH AFRICA | WEEK 27 2021

**Table 1.** Weekly number of SARS-CoV-2 tests and positive tests reported, South Africa, 1 March 2020 – 10 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 (0.2)	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 (0.6)	2177	2.7
18	26-Apr-20	93816 (0.7)	3208	3.4
19	03-May-20	142711 (1.0)	6018	4.2
20	10-May-20	165376 (1.2)	8092	4.9
21	17-May-20	166544 (1.2)	11379	6.8
22	24-May-20	156139 (1.1)	12967	8.3
23	31-May-20	153571 (1.1)	15079	9.8
24	07-Jun-20	173905 (1.3)	22363	12.9
25	14-Jun-20	186090 (1.3)	32653	17.5
26	21-Jun-20	252100 (1.8)	55049	21.8
27	28-Jun-20	302750 (2.2)	75312	24.9
28	05-Jul-20	307914 (2.2)	86039	27.9
29	12-Jul-20	285601 (2.1)	84927	29.7
30	19-Jul-20	270898 (2.0)	78636	29.0
31	26-Jul-20	216395 (1.6)	58394	27.0
32	02-Aug-20	179573 (1.3)	40996	22.8
33	09-Aug-20	141103 (1.0)	26265	18.6
34	16-Aug-20	135014 (1.0)	21377	15.8
35	23-Aug-20	123333 (0.9)	16331	13.2
36	30-Aug-20	112762 (0.8)	12790	11.3
37	06-Sep-20	116997 (0.8)	11953	10.2
38	13-Sep-20	120715 (0.9)	12012	10.0
39	20-Sep-20	98819 (0.7)	10098	10.2
40	27-Sep-20	123062 (0.9)	11008	8.9
41	04-Oct-20	131045 (0.9)	11779	9.0
42	11-Oct-20	137976 (1.0)	12077	8.8
43	18-Oct-20	142171 (1.0)	12069	8.5
44	25-Oct-20	135851 (1.0)	11479	8.4
45	01-Nov-20	138841 (1.0)	12138	8.7
46	08-Nov-20	147009 (1.1)	14845	10.1
47	15-Nov-20	160647 (1.2)	18764	11.7
48	22-Nov-20	175695 (1.3)	22054	12.6
49	29-Nov-20	203149 (1.5)	30768	15.1
50	06-Dec-20	267924 (1.9)	53313	19.9
51	13-Dec-20	294463 (2.1)	68578	23.3
52	20-Dec-20	284558 (2.1)	81960	28.8
53	27-Dec-20	334393 (2.4)	115737	34.6
1	03-Jan-21	501110 (3.6)	151028	30.1
2	10-Jan-21	417882 (3.0)	104775	25.1



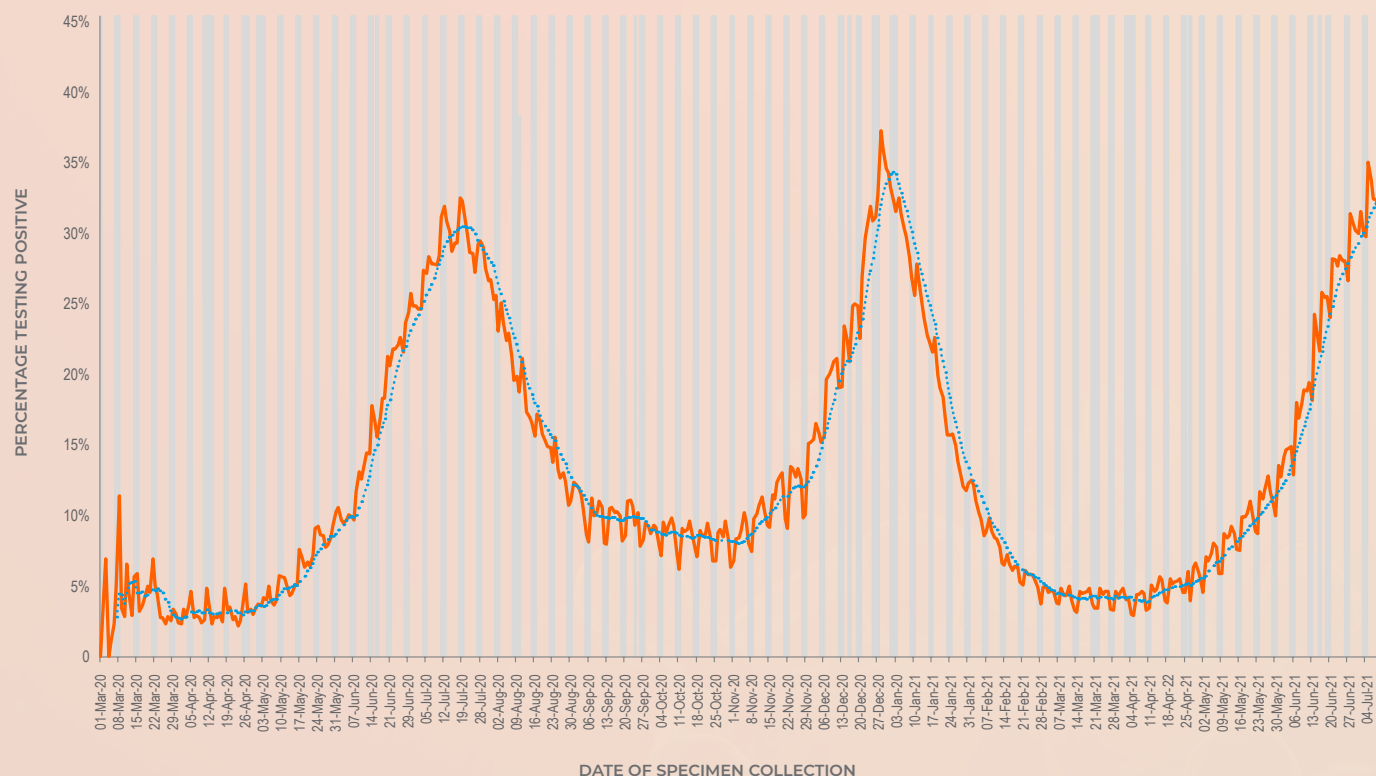
# COVID-19 TESTING SUMMARY

SOUTH AFRICA | WEEK 27 2021

3	17-Jan-21	327318 (2.4)	63244	19.3
4	24-Jan-21	249419 (1.8)	34628	13.9
5	31-Jan-21	203580 (1.5)	22356	11.0
6	07-Feb-21	193184 (1.4)	16456	8.5
7	14-Feb-21	190284 (1.4)	12138	6.4
8	21-Feb-21	184364 (1.3)	10368	5.6
9	28-Feb-21	189260 (1.4)	8672	4.6
10	07-Mar-21	192633 (1.4)	8315	4.3
11	14-Mar-21	185271 (1.3)	8133	4.4
12	21-Mar-21	171904 (1.2)	7339	4.3
13	28-Mar-21	163126 (1.2)	7058	4.3
14	04-Apr-21	180231 (1.3)	7275	4.0
15	11-Apr-21	183480 (1.3)	8828	4.8
16	18-Apr-21	184010 (1.3)	9447	5.1
17	25-Apr-21	158819 (1.1)	9163	5.8
18	02-May-21	193301 (1.4)	13407	6.9
19	09-May-21	237303 (1.7)	19821	8.4
20	16-May-21	245326 (1.8)	24090	9.8
21	23-May-21	257937 (1.9)	29548	11.5
22	30-May-21	263063 (1.9)	35783	13.6
23	06-Jun-21	329784 (2.4)	58589	17.8
24	13-Jun-21	360191 (2.6)	86219	23.9
25	20-Jun-21	419754 (3.0)	116003	27.6
26	27-Jun-21	471204 (3.4)	142340	30.2
27	04-Jul-21	401041 (2.9)	130324	32.5
Total		13,843,120 (100.0)	2,330,200	16.8

# COVID-19 TESTING SUMMARY

SOUTH AFRICA WEEK 27 2021



**Figure 2.** Percentage of tests positive for SARS-CoV-2 by date of specimen collection, South Africa, 1 March 2020 – 10 July 2021. Blue dotted 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 10 July 2021, 6,036,727 tests were reported in the public sector, with 15.9% testing positive. Over this same period, the private sector reported 7,806,393 tests, with 16.9% testing positive (Table 2). Overall, the public sector has reported 43.6 % of tests and accounted for 42.1% 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%). From week 26 to week 27 of 2021, the percentage testing positive increased by 3.5% in the public sector (27.7% in week 26 to 31.2% in week 27,  $P<0.001$ ) and by 1.0% in the

private sector (32.5% in week 26 to 33.5% in week 27,  $P<0.001$ ). In week 27 the percentage testing positive in the private sector (33.5%) was 2.3% higher than in the public sector (31.2%,  $P<0.001$ ). The private sector reported 57.4% of positive tests in week 27.

The mean turnaround time for PCR tests reported in week 27 of 2021 was 1.3 days; 1.9 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 Gauteng and Mpumalanga provinces in week 27 (Figure 4). Increases in turnaround times were observed in the Western Cape, Free State and Mpumalanga provinces in the past week, while decreases were observed in the Northern Cape and North West. Eighteen of the 28 (64.7%) NHLS laboratories performing PCR testing for SARS-CoV-2 had turnaround times  $\leq 2$  days in week 27 (Figure 5).

# COVID-19 TESTING SUMMARY

SOUTH AFRICA | WEEK 27 2021

**Table 2.** Weekly number of tests and positive tests reported, by healthcare sector, South Africa, 1 March 2020 – 10 July 2021

Week number	Week beginning	Public sector		Private sector		Public sector percentage of		Ratio of PTP <sup>a</sup>
		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)	26347	755 (2.9)	71.9	76.5	1.269
19	03-May-20	94338	4507 (4.8)	48373	1511 (3.1)	66.1	74.9	1.529
20	10-May-20	108001	5443 (5.0)	57375	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)	196376	48067 (24.5)	35.1	36.2	1.046
28	05-Jul-20	117727	32239 (27.4)	190187	53800 (28.3)	38.2	37.5	0.968
29	12-Jul-20	110664	31383 (28.4)	174937	53544 (30.6)	38.7	37.0	0.927
30	19-Jul-20	105217	30319 (28.8)	165681	48317 (29.2)	38.8	38.6	0.988
31	26-Jul-20	81248	22782 (28.0)	135147	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)	82442	15093 (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)	67340	6694 (9.9)	40.3	47.7	1.350
37	06-Sep-20	51055	6421 (12.6)	65942	5532 (8.4)	43.6	53.7	1.499
38	13-Sep-20	53707	6547 (12.2)	67008	5465 (8.2)	44.5	54.5	1.495
39	20-Sep-20	44841	5530 (12.3)	53978	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)	86048	6024 (7.0)	39.5	50.1	1.539
44	25-Oct-20	51287	5721 (11.2)	84564	5758 (6.8)	37.8	49.8	1.638
45	01-Nov-20	52999	6061 (11.4)	85842	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)	93065	8180 (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)	121880	15038 (12.3)	40.0	51.1	1.569
50	06-Dec-20	107910	24716 (22.9)	160014	28597 (17.9)	40.3	46.4	1.282
51	13-Dec-20	117212	29815 (25.4)	177251	38763 (21.9)	39.8	43.5	1.163
52	20-Dec-20	109913	34128 (31.1)	174645	47832 (27.4)	38.6	41.6	1.134
53	27-Dec-20	151631	52932 (34.9)	182762	62805 (34.4)	45.3	45.7	1.016
1	03-Jan-21	236991	71063 (30.0)	264119	79965 (30.3)	47.3	47.1	0.990
2	10-Jan-21	203986	52950 (26.0)	213896	51825 (24.2)	48.8	50.5	1.071
3	17-Jan-21	165635	34453 (20.8)	161683	28791 (17.8)	50.6	54.5	1.168
4	24-Jan-21	123220	18991 (15.4)	126199	15637 (12.4)	49.4	54.8	1.244
5	31-Jan-21	99754	12065 (12.1)	103826	10291 (9.9)	49.0	54.0	1.220
6	07-Feb-21	91275	8500 (9.3)	101909	7956 (7.8)	47.2	51.7	1.193
7	14-Feb-21	86126	6640 (7.7)	104158	5498 (5.3)	45.3	54.7	1.461
8	21-Feb-21	82437	5785 (7.0)	101927	4583 (4.5)	44.7	55.8	1.561
9	28-Feb-21	87815	4666 (5.3)	101445	4006 (3.9)	46.4	53.8	1.346
10	07-Mar-21	92170	4573 (5.0)	100463	3742 (3.7)	47.8	55.0	1.332
11	14-Mar-21	89734	4432 (4.9)	95537	3701 (3.9)	48.4	54.5	1.275
12	21-Mar-21	76306	3456 (4.5)	95598	3883 (4.1)	44.4	47.1	1.115
13	28-Mar-21	70697	3454 (4.9)	92429	3604 (3.9)	43.3	48.9	1.253
14	04-Apr-21	79038	3350 (4.2)	101193	3925 (3.9)	43.9	46.0	1.093

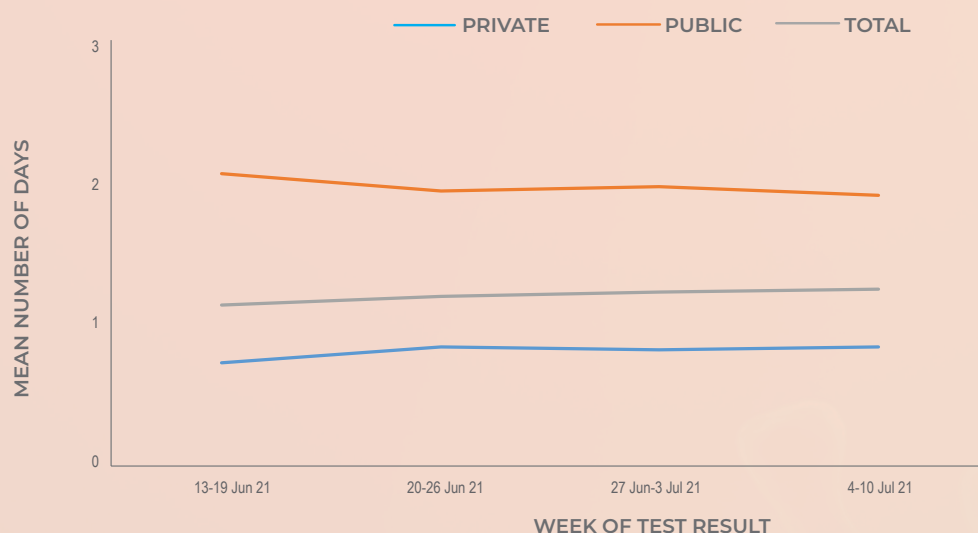


# COVID-19 TESTING SUMMARY

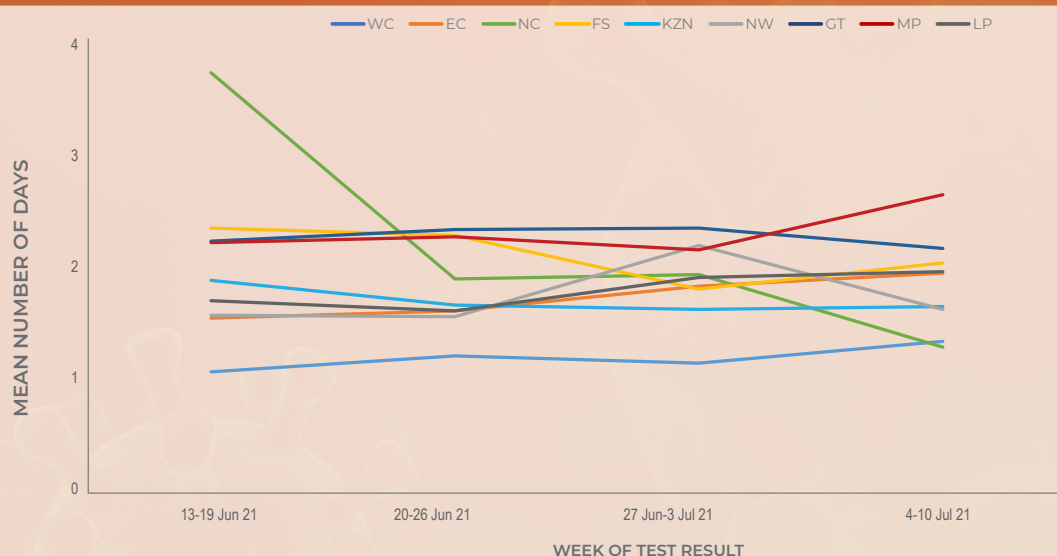
SOUTH AFRICA WEEK 27 2021

15	11-Apr-21	84803	4351 (5.1)	98677	4477 (4.5)	46.2	49.3	1.131
16	18-Apr-21	79834	4700 (5.9)	104176	4747 (4.6)	43.4	49.8	1.292
17	25-Apr-21	69492	4112 (5.9)	89327	5051 (5.7)	43.8	44.9	1.046
18	02-May-21	80750	5441 (6.7)	112551	7966 (7.1)	41.8	40.6	0.952
19	09-May-21	89630	7284 (8.1)	147673	12537 (8.5)	37.8	36.7	0.957
20	16-May-21	98400	9075 (9.2)	146926	15015 (10.2)	40.1	37.7	0.902
21	23-May-21	118171	11691 (9.9)	139766	17857 (12.8)	45.8	39.6	0.774
22	30-May-21	106512	11723 (11.0)	156551	24060 (15.4)	40.5	32.8	0.716
23	06-Jun-21	143094	19544 (13.7)	186690	39045 (20.9)	43.4	33.4	0.653
24	13-Jun-21	148177	28980 (19.6)	212014	57239 (27.0)	41.1	33.6	0.724
25	20-Jun-21	170435	41653 (24.4)	249319	74350 (29.8)	40.6	35.9	0.820
26	27-Jun-21	221866	61413 (27.7)	249338	80927 (32.5)	47.1	43.1	0.853
27	04-Jul-21	177758	55512 (31.2)	223283	74812 (33.5)	44.3	42.6	0.932
<b>Total</b>		<b>6,036,727</b>	<b>957,537 (15.9)</b>	<b>7,806,393</b>	<b>1,317,151 (16.9)</b>	<b>43.6</b>	<b>42.1</b>	<b>0.940</b>

<sup>a</sup>Ratio 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, 13 June – 10 July 2021



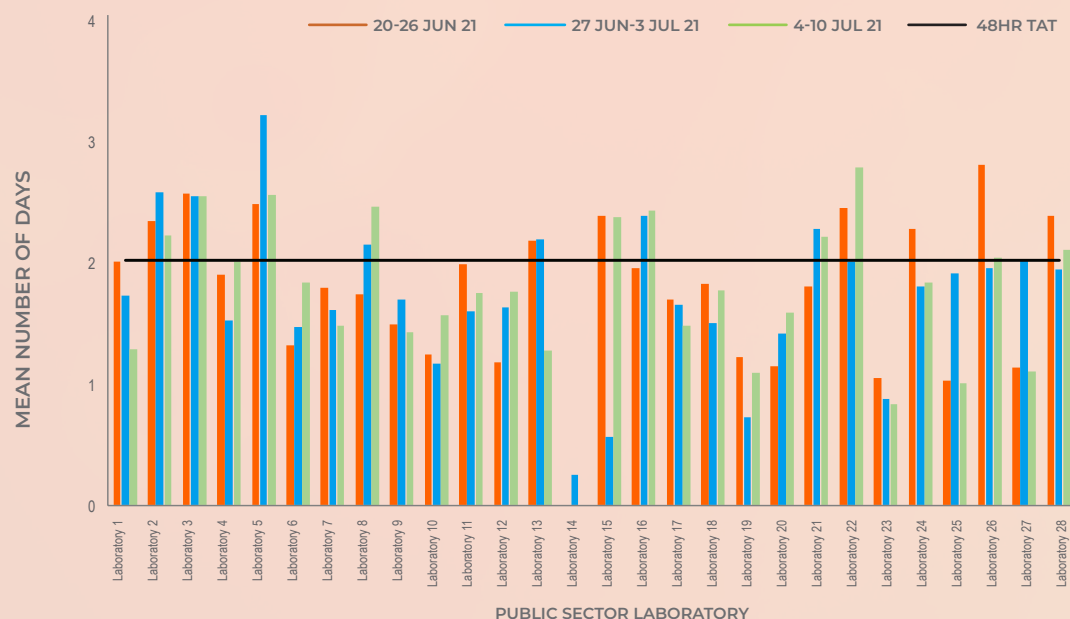
**Figure 4.** Mean number of days between date of specimen collection and date of test result for PCR tests, by week of test result and province, public sector, South Africa, 13 June – 10 July 2021. WC, Western Cape; EC, Eastern Cape; FS, Free State; KZN, KwaZulu-Natal; GT, Gauteng; NC, Northern Cape; NW, North West; MP, Mpumalanga; LP, Limpopo



# COVID-19 TESTING SUMMARY

SOUTH AFRICA

WEEK 27 2021

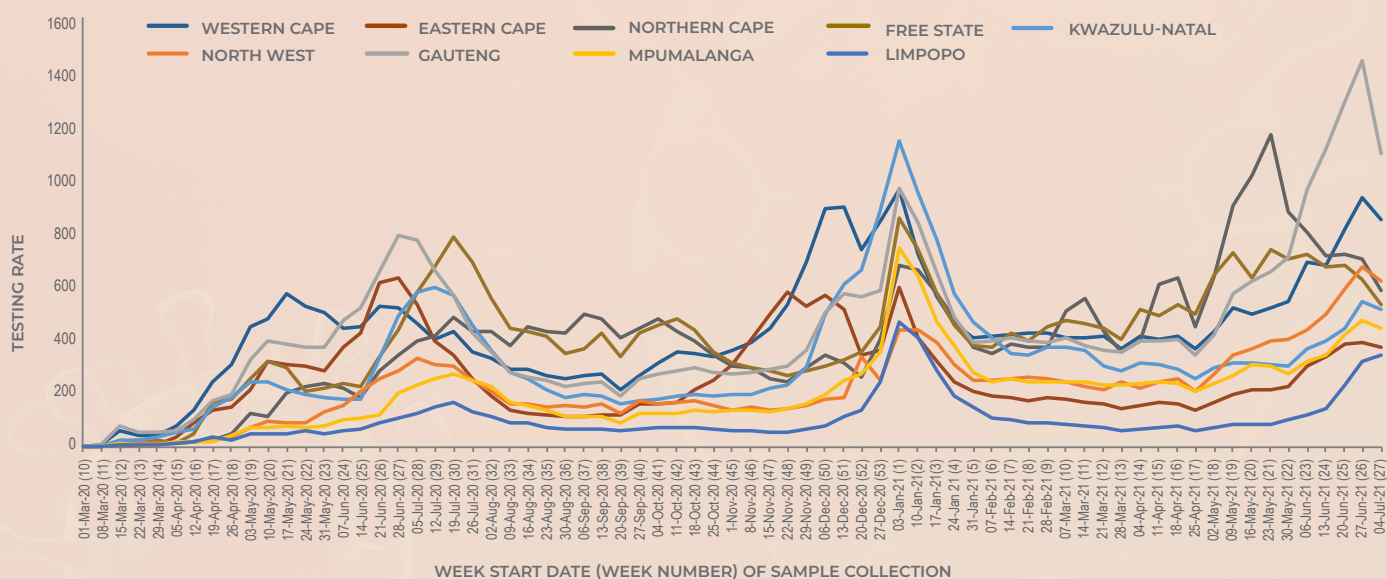


**Figure 5.** Mean number of days between date of specimen collection and date of test result for PCR tests, by public sector laboratory, 20 June – 10 July 2021. The horizontal black line indicates 48-hour turnaround time (TAT).

## Testing by province

Gauteng reported the largest number of tests (42.1%), followed by Western Cape (14.8%) and KwaZulu-Natal (14.7%) provinces in week 27 of 2021 (Table 3). The overall testing rate decreased from 790 per 100,000 persons in week 26 to 673 per 100,000 in week 27. The testing rate ranged from 1090 per 100,000 persons in Gauteng to 341 per 100,000 persons in Limpopo (Figure 6). In week 27, testing rates decreased in Gauteng, Northern Cape, Free State and Western Cape provinces. In all other provinces, testing rates were similar to the previous week.

The percentage testing positive in week 27 was highest in Limpopo (51.5%), Gauteng (39.1%), North West (39.1%) and Mpumalanga (38.0%) provinces. The percentage testing positive was between 20% and 30% in the Western Cape, Northern Cape and Free State, and was <20% in the Eastern Cape and KwaZulu-Natal provinces (Figure 7 and Table 3). Compared to the previous week, the percentage testing positive in week 27 increased ( $P \leq 0.002$ ) in all 9 provinces, with increases of  $\geq 5\%$  compared to the previous week in Limpopo and Mpumalanga. The percentage testing positive was higher than the national average, not weighted for population size, in the North West, Gauteng, Mpumalanga and Limpopo provinces (Figure 7).



**Figure 6.** Testing rate per 100,000 persons by province and week of specimen collection, South Africa, 1 March 2020 – 10 July 2021

# COVID-19 TESTING SUMMARY

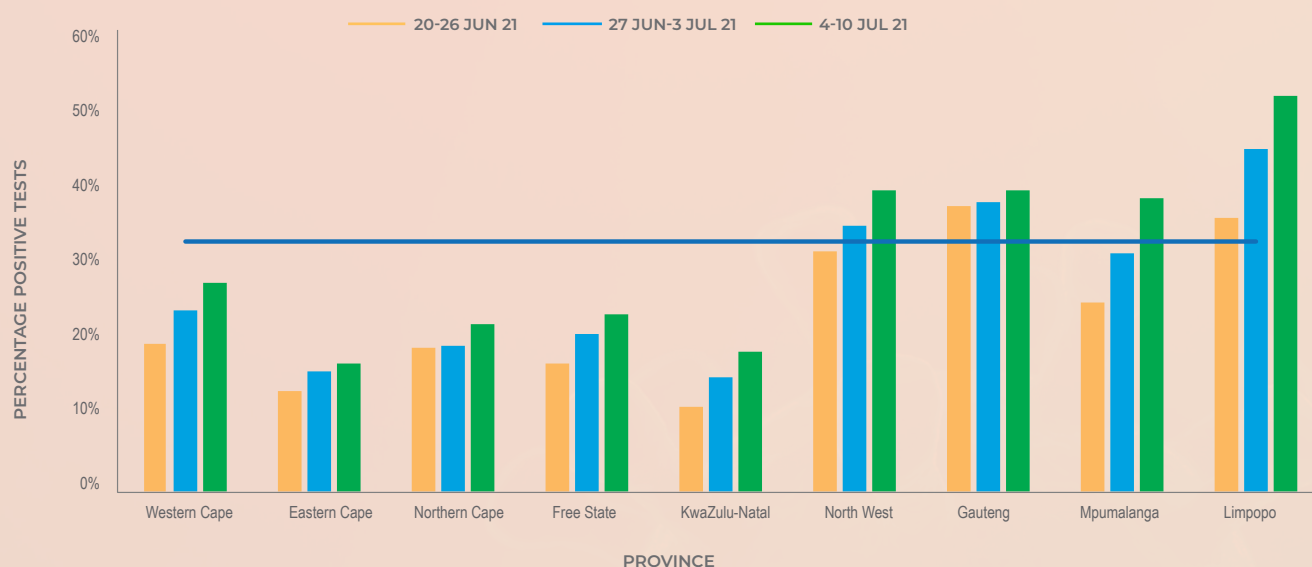
SOUTH AFRICA WEEK 27 2021

**Table 3.** Weekly number of tests and positive tests reported, by province, South Africa, 20 June – 10 July 2021

Province	Population <sup>a</sup>	20-26 Jun 2021		27 Jun-3 Jul 2021		4-10 Jul 2021		Tests per 100,000 persons	Change in percentage positive <sup>b</sup>
		No. of tests	No. positive tests (%)	No. of tests	No. positive tests (%)	No. of tests	No. positive tests (%)		
Western Cape	7005741	56862	10965 (19.3)	65069	15346 (23.6)	59361	16167 (27.2)	847	3.7%
Eastern Cape	6734001	25846	3355 (13.0)	25990	4088 (15.7)	25070	4191 (16.7)	372	1.0%
Northern Cape	1292786	9294	1728 (18.6)	9054	1709 (18.9)	7548	1639 (21.7)	584	2.8%
Free State	2928903	19849	3321 (16.7)	18199	3727 (20.5)	15545	3571 (23.0)	531	2.5%
KwaZulu-Natal	11531628	51188	5632 (11.0)	62062	9170 (14.8)	58908	10755 (18.3)	511	3.5%
North West	4108816	24248	7551 (31.1)	27516	9498 (34.5)	25248	9873 (39.1)	614	4.6%
Gauteng	15488137	199383	73844 (37.0)	222608	83710 (37.6)	168795	66021 (39.1)	1090	1.5%
Mpumalanga	4679786	19580	4793 (24.5)	22132	6837 (30.9)	20617	7833 (38.0)	441	7.1%
Limpopo	5852553	13501	4813 (35.6)	18561	8252 (44.5)	19933	10272 (51.5)	341	7.1%
Unknown		3	1 (33.3)	13	3 (23.1)	16	2 (12.5)		
<b>Total</b>	<b>59622350</b>	<b>419754</b>	<b>116003 (27.6)</b>	<b>471204</b>	<b>142340 (30.2)</b>	<b>401041</b>	<b>130324 (32.5)</b>	<b>673</b>	<b>2.3%</b>

<sup>a</sup> 2020 Mid-year population Statistics SA

<sup>b</sup> Current week compared to previous week



**Figure 7.** Weekly percentage testing positive, by province, South Africa, 20 June – 10 July 2021. The horizontal blue line shows the national mean for week 27, beginning 4 July 2021

## Testing in the public sector

In the public sector, the percentage testing positive continued to increase in the past week (27.7% in week 26 to 31.2% in week 27,  $P < 0.001$ ) (Table 4). The percentage testing positive in week 27 was highest in Limpopo (59.2%), Gauteng (42.2%) and Mpumalanga

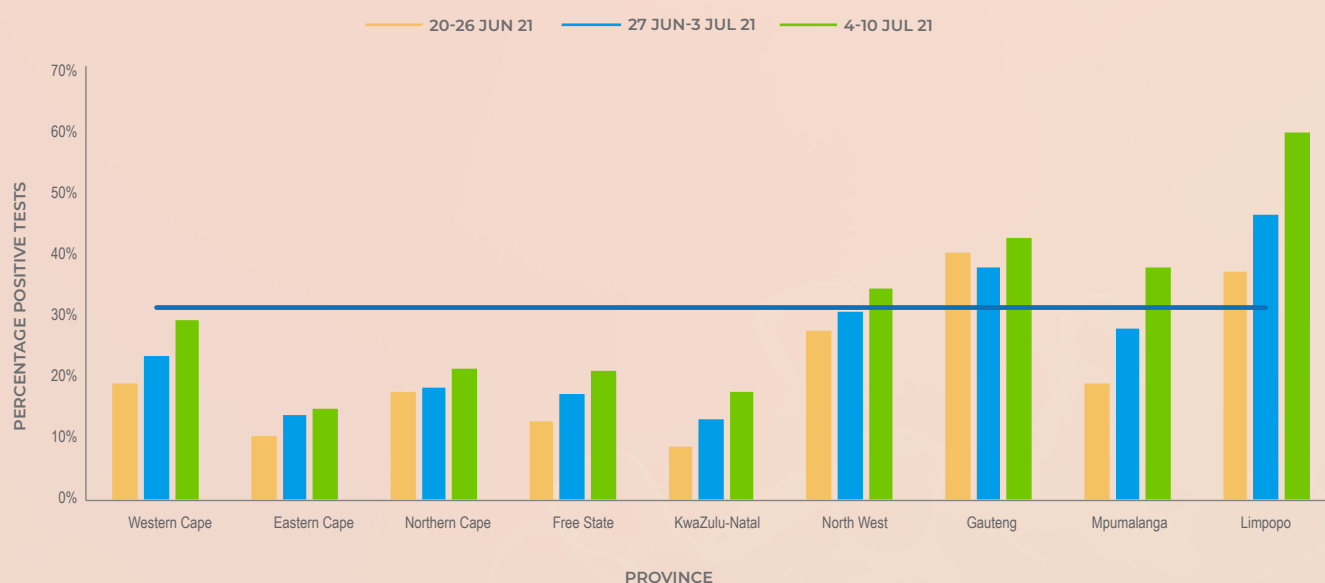
(37.6%) provinces. The percentage testing positive in the public sector remains higher than the national average, not weighted for population size, in the North West, Gauteng, Mpumalanga and Limpopo provinces (Figure 8).

# COVID-19 TESTING SUMMARY

SOUTH AFRICA WEEK 27 2021

**Table 4.** Weekly number of tests and positive tests reported in the public sector, by province, South Africa, 20 June – 10 July 2021

Province	20-26 Jun 2021		27 Jun-3 Jul 2021		4-10 Jul 2021	
	No. of tests	No. positive tests (%)	No. of tests	No. positive tests (%)	No. of tests	No. positive tests (%)
Western Cape	21750	4094 (18.8)	30071	7015 (23.3)	24817	7217 (29.1)
Eastern Cape	16539	1717 (10.4)	17065	2334 (13.7)	16679	2443 (14.6)
Northern Cape	6602	1163 (17.6)	6277	1134 (18.1)	5148	1095 (21.3)
Free State	11106	1424 (12.8)	9466	1610 (17.0)	7266	1526 (21.0)
KwaZulu-Natal	29513	2572 (8.7)	37827	4994 (13.2)	35949	6278 (17.5)
North West	11478	3139 (27.3)	13648	4164 (30.5)	11833	4032 (34.1)
Gauteng	61071	24384 (39.9)	91602	34494 (37.7)	61082	25754 (42.2)
Mpumalanga	7809	1480 (19.0)	8956	2475 (27.6)	7880	2961 (37.6)
Limpopo	4567	1680 (36.8)	6950	3191 (45.9)	7101	4205 (59.2)
Unknown	0	0 (0.0)	4	2 (50.0)	3	1 (33.3)
<b>Total</b>	<b>170435</b>	<b>41653 (24.4)</b>	<b>221866</b>	<b>61413 (27.7)</b>	<b>177758</b>	<b>55512 (31.2)</b>



**Figure 8.** Weekly percentage testing positive in the public sector, by province, South Africa, 20 June – 10 July 2021. The horizontal blue line shows the national mean for week 27 of 2021, beginning 4 July 2021.

## Facilities with high proportions testing positive

The data on testing at facility level for the public sector for week 27 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 4-10 July 2021. Nineteen of the 25 public facilities showing the highest PTP are in Limpopo, with four in Gauteng.



# COVID-19 TESTING SUMMARY

SOUTH AFRICA | WEEK 27 2021

**Table 5.1** Public sector healthcare facilities with a high proportion testing positive, 4-10 July 2021

Facility Name	Province	Tests	PTP (95% CI)
Facility 1	Gauteng	31	0.935 (0.849;1.022)
Facility 2	Limpopo	62	0.871 (0.788;0.954)
Facility 3	Limpopo	29	0.862 (0.737;0.988)
Facility 4	Limpopo	35	0.829 (0.704;0.953)
Facility 5	Limpopo	77	0.818 (0.732;0.904)
Facility 6	Limpopo	27	0.815 (0.668;0.961)
Facility 7	Limpopo	27	0.815 (0.668;0.961)
Facility 8	Mpumalanga	25	0.800 (0.643;0.957)
Facility 9	Limpopo	60	0.783 (0.679;0.888)
Facility 10	Gauteng	87	0.782 (0.695;0.868)
Facility 11	Limpopo	32	0.781 (0.638;0.924)
Facility 12	Limpopo	109	0.780 (0.702;0.858)
Facility 13	Limpopo	71	0.775 (0.677;0.872)
Facility 14	Gauteng	35	0.771 (0.632;0.911)
Facility 15	Limpopo	61	0.770 (0.665;0.876)
Facility 16	Limpopo	72	0.764 (0.666;0.862)
Facility 17	Limpopo	38	0.763 (0.628;0.898)
Facility 18	Limpopo	70	0.757 (0.657;0.858)
Facility 19	North West	65	0.754 (0.649;0.859)
Facility 20	Limpopo	51	0.745 (0.625;0.865)
Facility 21	Limpopo	27	0.741 (0.575;0.906)
Facility 22	Limpopo	88	0.727 (0.634;0.820)
Facility 23	Gauteng	39	0.718 (0.577;0.859)
Facility 24	Limpopo	53	0.717 (0.596;0.838)
Facility 25	Limpopo	316	0.712 (0.662;0.762)

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 4-10 July 2021, with the highest proportion testing positive nationally. The private-sector facilities with the 25 highest proportions testing positive are concentrated almost exclusively in Gauteng (16), with four in the North West, and three in Limpopo.



# COVID-19 TESTING SUMMARY

SOUTH AFRICA | WEEK 27 2021

**Table 5.2** Private sector healthcare facilities with a high proportion testing positive, 4-10 July 2021

Facility Name	Province	Tests	PTP (95% CI)
Facility 1	Gauteng	26	0.731 (0.560;0.901)
Facility 2	North West	42	0.690 (0.551;0.830)
Facility 3	Limpopo	27	0.667 (0.489;0.844)
Facility 4	Gauteng	87	0.655 (0.555;0.755)
Facility 5	Gauteng	148	0.649 (0.572;0.726)
Facility 6	Mpumalanga	130	0.638 (0.556;0.721)
Facility 7	Gauteng	27	0.630 (0.447;0.812)
Facility 8	Gauteng	110	0.627 (0.537;0.718)
Facility 9	North West	42	0.619 (0.472;0.766)
Facility 10	Gauteng	68	0.618 (0.502;0.733)
Facility 11	North West	99	0.616 (0.520;0.712)
Facility 12	Gauteng	85	0.612 (0.508;0.715)
Facility 13	Limpopo	162	0.611 (0.536;0.686)
Facility 14	Gauteng	235	0.604 (0.542;0.667)
Facility 15	Gauteng	90	0.600 (0.499;0.701)
Facility 16	Limpopo	92	0.598 (0.498;0.698)
Facility 17	Gauteng	67	0.597 (0.480;0.714)
Facility 18	North West	57	0.596 (0.469;0.724)
Facility 19	Gauteng	89	0.596 (0.494;0.697)
Facility 20	Gauteng	247	0.595 (0.534;0.656)
Facility 21	Gauteng	119	0.588 (0.500;0.677)
Facility 22	Gauteng	417	0.583 (0.535;0.630)
Facility 23	Gauteng	38	0.579 (0.422;0.736)
Facility 24	Gauteng	54	0.574 (0.442;0.706)
Facility 25	Mpumalanga	68	0.574 (0.456;0.691)

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 81% of private testing facilities) in the week from 4-10 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. Seventeen of the 25 districts are in Limpopo, three in Gauteng, and two in each of KwaZulu-Natal and Mpumalanga.

For the third week, all 25 districts with the highest PTP showed a PTP in the current week in excess of 30%. For the second consecutive week, all districts exceeded 40%, and 23 exceeded 50% (last week, 14). PTP exceeded 30% in a further 84 districts (57 last week). Significant increases were observed in 8 of the 25 districts with the highest PTP (five in Limpopo, two in KwaZulu-Natal, and one in Mpumalanga). There was again a statistically significant reduction in PTP in Randfontein, Gauteng.

# COVID-19 TESTING SUMMARY

SOUTH AFRICA | WEEK 27 2021

**Table 6.** Health sub-districts with the highest proportion testing positive based on public and private sector data for the week of 4-10 July 2021

Health district or sub-district	Province	PTP (95% CI)	Previous week
Ephraim Mogale	Limpopo	0.730 (0.663-0.797)	0.564 (0.468-0.659)
Bela-Bela	Limpopo	0.702 (0.625-0.780)	0.633 (0.556-0.710)
Makhuduthamaga	Limpopo	0.676 (0.622-0.730)	0.615 (0.559-0.671)
Imbabazane	KwaZulu-Natal	0.660 (0.532-0.787)	0.327 (0.228-0.425)
Fetakgomo	Limpopo	0.643 (0.503-0.782)	...
Blouberg	Limpopo	0.624 (0.529-0.718)	0.585 (0.487-0.683)
Mogalakwena	Limpopo	0.617 (0.580-0.655)	0.531 (0.492-0.570)
Elias Motsoaledi	Limpopo	0.599 (0.553-0.645)	0.468 (0.422-0.514)
Makhado	Limpopo	0.599 (0.573-0.624)	0.574 (0.547-0.601)
Greater Tubatse	Limpopo	0.595 (0.558-0.631)	0.474 (0.435-0.512)
Mookgopong	Limpopo	0.594 (0.518-0.671)	0.507 (0.426-0.588)
Molemole	Limpopo	0.578 (0.483-0.673)	0.416 (0.301-0.531)
Modimolle	Limpopo	0.577 (0.529-0.625)	0.411 (0.359-0.463)
Dannhauser	KwaZulu-Natal	0.573 (0.465-0.680)	0.336 (0.225-0.447)
Moretele	North West	0.572 (0.512-0.632)	0.582 (0.528-0.635)
Lepele-Nkumpi	Limpopo	0.552 (0.505-0.598)	0.473 (0.425-0.520)
Thulamela	Limpopo	0.527 (0.500-0.554)	0.492 (0.464-0.521)
Dr JS Moroka	Mpumalanga	0.525 (0.485-0.565)	0.495 (0.454-0.536)
Greater Giyani	Limpopo	0.522 (0.458-0.586)	0.491 (0.421-0.560)
Lephalale	Limpopo	0.513 (0.490-0.536)	0.508 (0.484-0.531)
Johannesburg G	Gauteng	0.508 (0.493-0.523)	0.529 (0.515-0.543)
Midvaal	Gauteng	0.504 (0.447-0.562)	0.423 (0.373-0.473)
Randfontein	Gauteng	0.501 (0.479-0.523)	0.591 (0.573-0.609)
Greater Letaba	Limpopo	0.484 (0.336-0.632)	...
Steve Tshwete	Mpumalanga	0.481 (0.462-0.499)	0.395 (0.377-0.413)

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.

SOUTH AFRICA WEEK **27** 2021

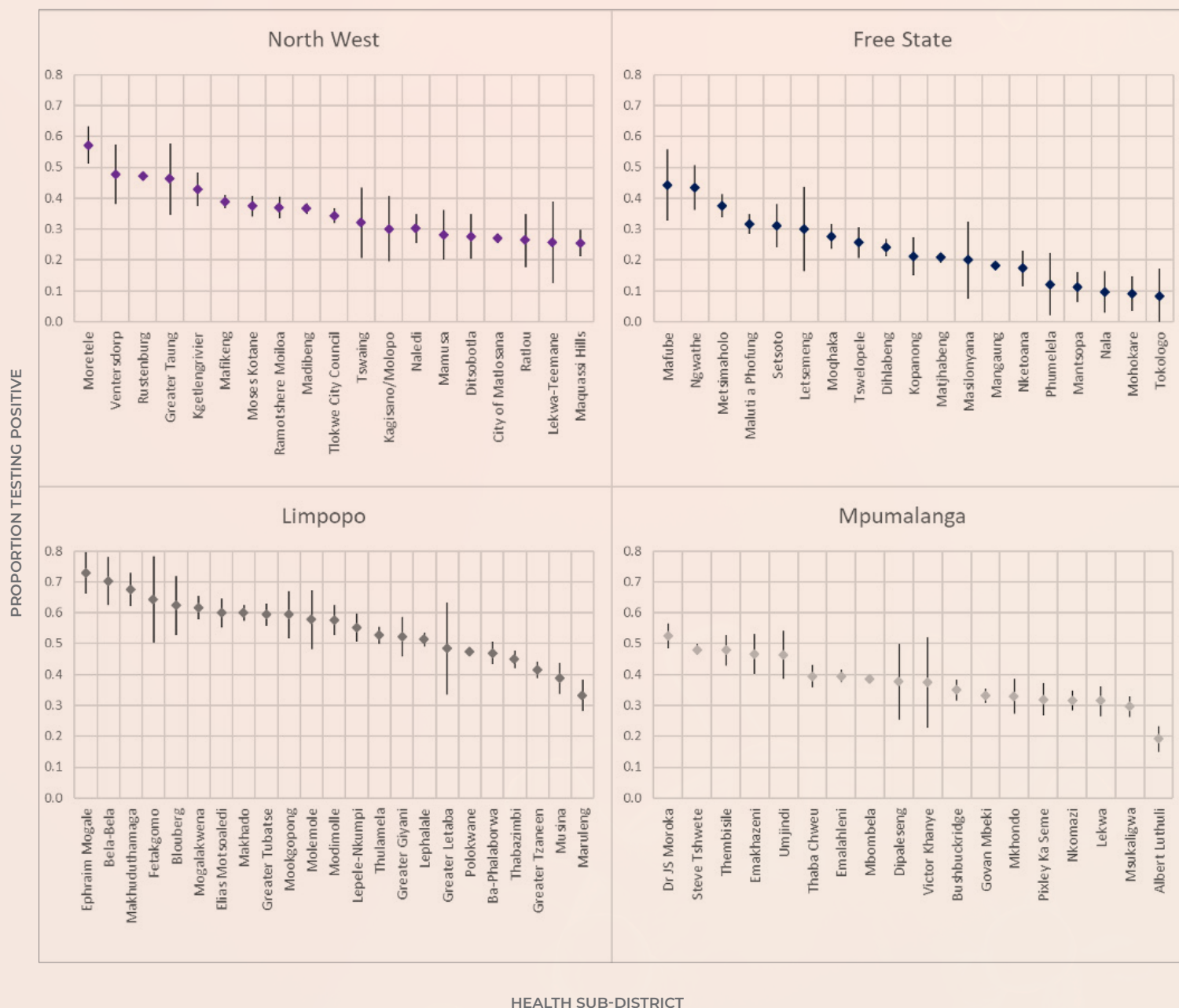


**Figure 9.1** Proportions testing positive by health sub-district in the Western Cape, Eastern Cape, Gauteng and KwaZulu-Natal provinces based on public and private sector data for the week of 4-10 July 2021.



# COVID-19 TESTING SUMMARY

SOUTH AFRICA WEEK 27 2021

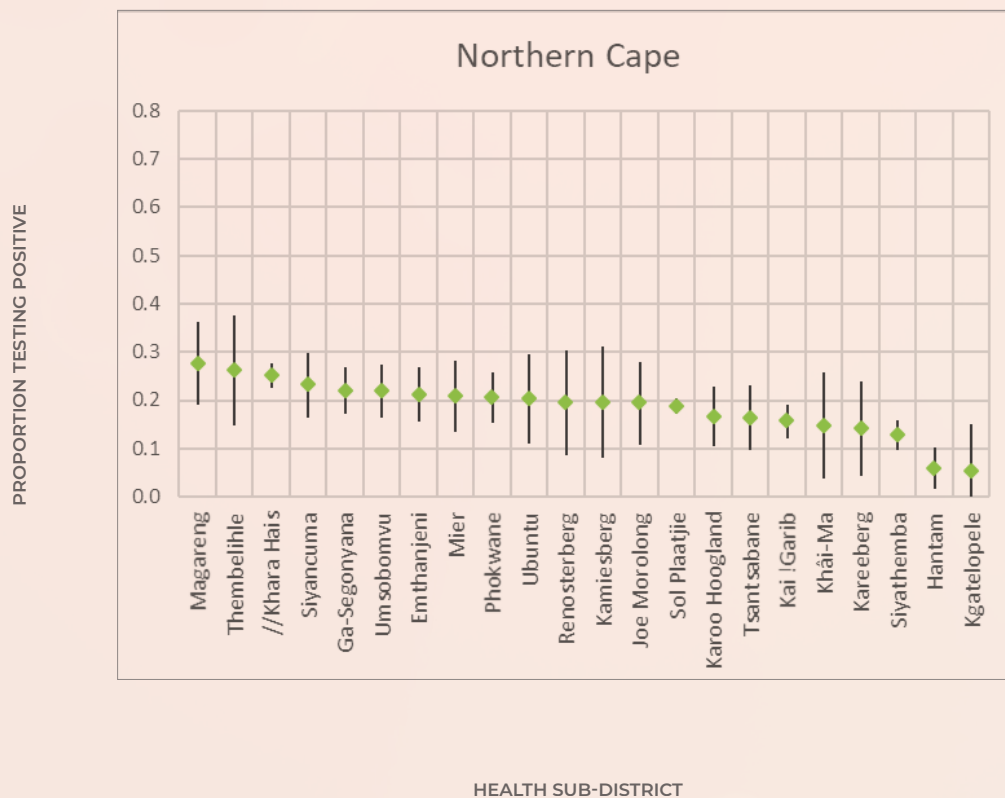


**Figure 9.2** Proportions testing positive by health sub-district in the North West, Free State, Limpopo and Mpumalanga provinces based on public and private sector data for the week of 4-10 July 2021.



# COVID-19 TESTING SUMMARY

SOUTH AFRICA WEEK 27 2021

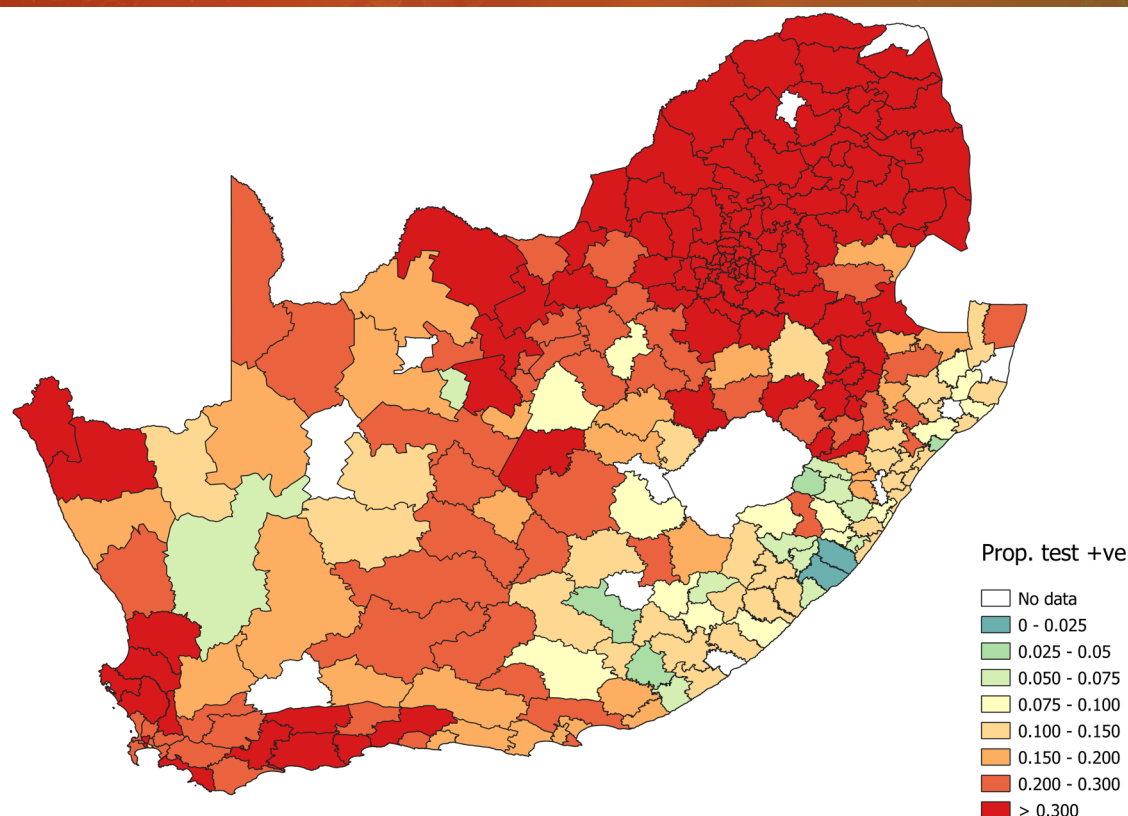


**Figure 9.3** Proportions testing positive by health sub-districts in the Northern Cape Province based on public and private sector data for the week of 4-10 July 2021.

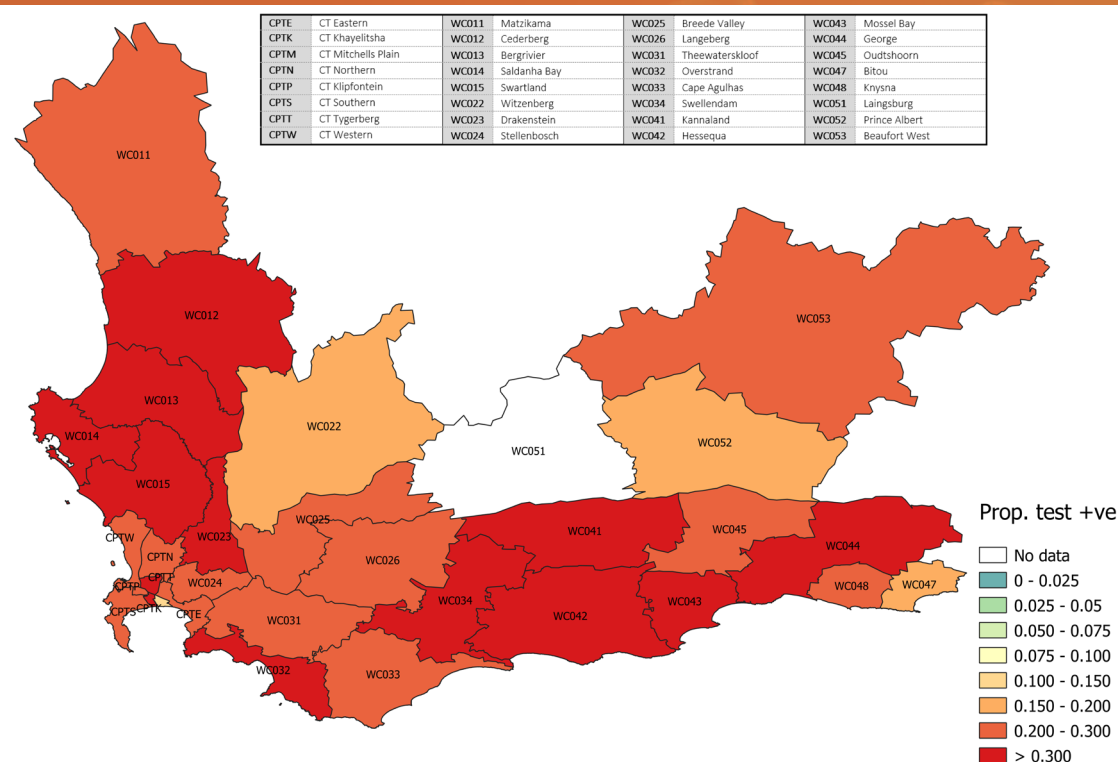
The spatial pattern of adjusted proportions testing positive, including both public and private sector data, by health district and sub-district are shown for South Africa (Figure 10), Western Cape (Figure 11), Eastern Cape (Figure 12), Northern Cape (Figure 13), Free State (Figure 14), KwaZulu-Natal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

# COVID-19 TESTING SUMMARY

SOUTH AFRICA | WEEK 27 2021



**Figure 10.** Proportion testing positive by health sub-district in South Africa for the week of 4-10 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%.



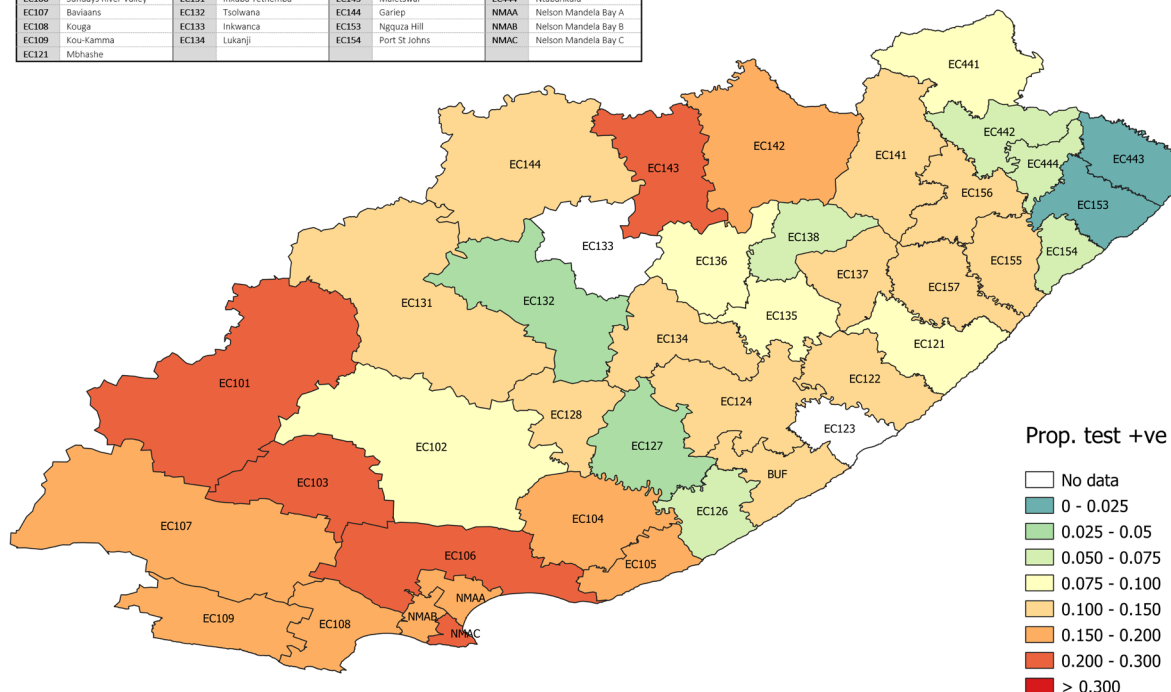
**Figure 11.** Proportion testing positive by health sub-district in the Western Cape Province for the week of 4-10 July 2021. Areas shaded white represent districts in which either (i) no tests were reported, (ii) all tests were negative, or (iii) the confidence interval exceeded 30%.

# COVID-19 TESTING SUMMARY

SOUTH AFRICA

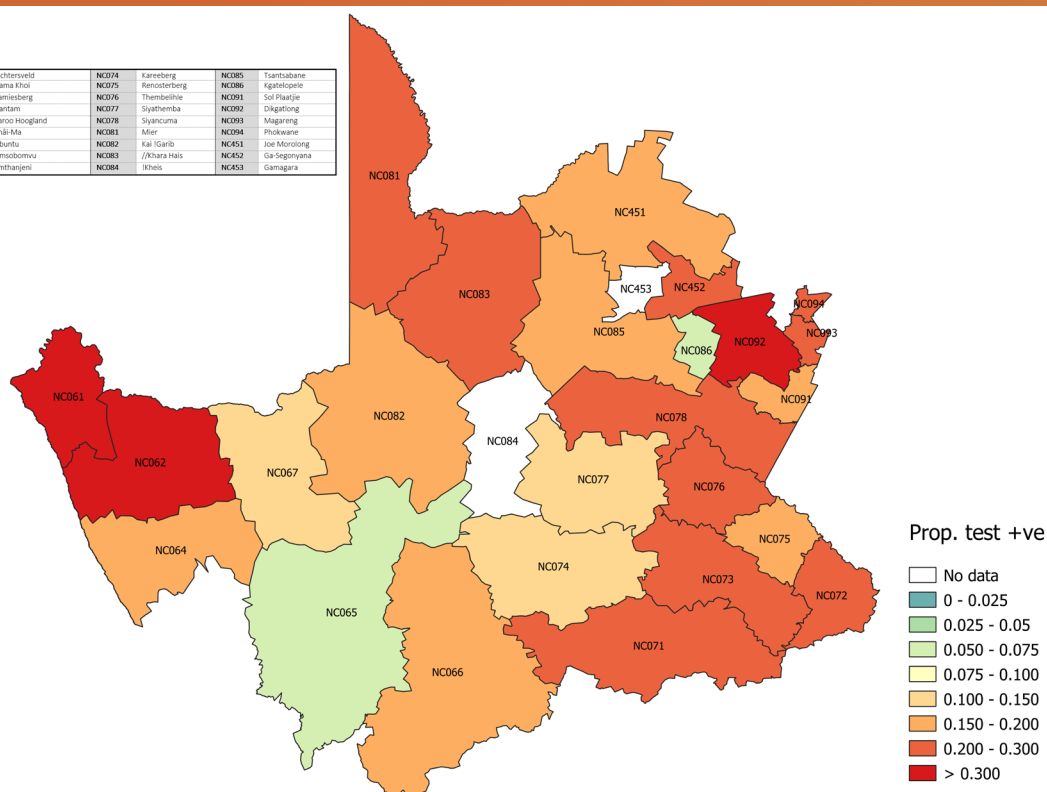
WEEK 27 2021

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	Engobo	EC157	King Sabata Dalindyebo
EC103	Ikwezi	EC126	Ngushwa	EC138	Sakhisizwe	EC441	Matatiele
EC104	Makana	EC127	Nkonkobe	EC141	Elundini	EC442	Umtzimvubu
EC105	Ndlambe	EC128	Nxuba	EC142	Senqu	EC443	Mbitana
EC106	Sundays River Valley	EC131	Imvuba Yethemba	EC143	Majetswai	EC444	Ntabankulu
EC107	Baviaans	EC132	Tsohlwana	EC144	Gartiep	NMAA	Nelson Mandela Bay A
EC108	Kouga	EC133	Inkwanca	EC153	Nqutha Hill	NMAB	Nelson Mandela Bay B
EC109	Kou-kamma	EC134	Lukanji	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 4-10 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	Tsantsabane
NC062	Nama Khoi	NC075	Renosterberg	NC086	Kgatelopele
NC064	Kamiesberg	NC076	Thembalitha	NC091	Sol Plaatje
NC065	Nardam	NC077	Siyathemba	NC092	Digatlong
NC066	Karoo Hoogland	NC078	Siyancuma	NC093	Magareng
NC067	Khal-Ida	NC081	Mier	NC094	Phokwane
NC071	Uburu	NC082	Kai IGarib	NC451	Joe Morolong
NC072	Umsobomvu	NC083	/Mama Hais	NC452	Ga-Neganyana
NC073	Emthanjeni	NC084	Ikheis	NC453	Ganagana



**Figure 13.** Proportion testing positive by health sub-district in Northern Cape Province for the week of 4-10 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%.

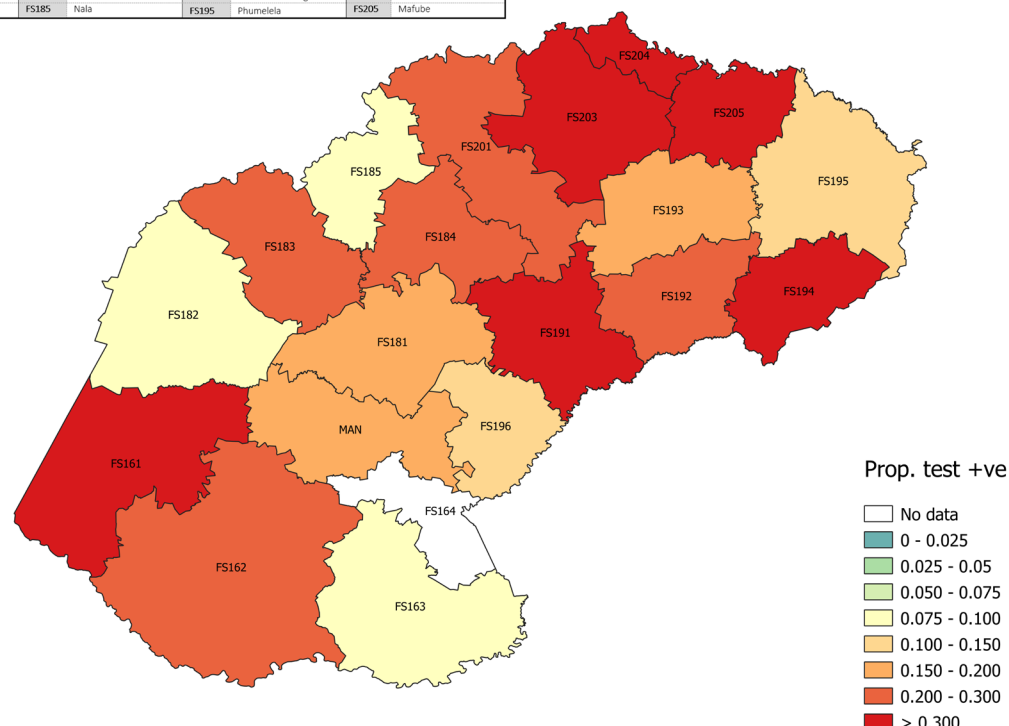


# COVID-19 TESTING SUMMARY

SOUTH AFRICA

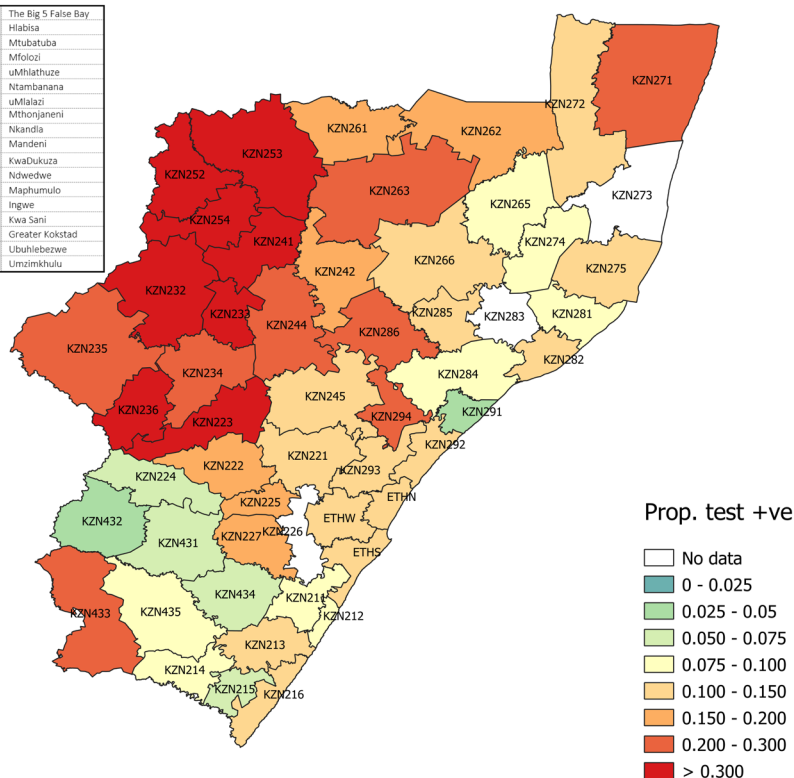
WEEK 27 2021

MAN	Mangung	FS181	Masilonyana	FS191	Setsoo	FS196	Mantsopa
FS161	Letsemeng	FS182	Tokologo	FS192	Dihlabeng	FS201	Moqhaka
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 4-10 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	Umtshezi	KZN274	Hlabisa
ETHS	eThekweni South	KZN235	Ochshambaba	KZN275	Mtubatuba
ETHW	eThekweni West	KZN236	Imbabazane	KZN281	Mfolozi
KZN211	Vulamehlo	KZN241	Endumeni	KZN282	uMhlathuze
KZN212	Umdoni	KZN242	Nqutu	KZN283	Ntambanana
KZN213	Umkhumbi	KZN244	Misinga	KZN284	uMlalazi
KZN214	uMuziwabantu	KZN245	Umvoti	KZN285	Mthonjaneni
KZN215	Ezingoleni	KZN252	Newcastle	KZN286	Nkandla
KZN216	Hibiscus Coast	KZN253	Emadlangeni	KZN291	Mandeni
KZN221	uMshwathi	KZN254	Dannhauser	KZN292	KwaDukuza
KZN222	uMngeni	KZN261	eDumbe	KZN293	Ndwedwe
KZN223	Mpofana	KZN262	uPhongolo	KZN294	Maphumulo
KZN224	Impendle	KZN263	Abaqulusi	KZN431	Ingwe
KZN225	The Mounduli	KZN265	Nongoma	KZN432	Kwa Sani
KZN226	Mkhambathini	KZN266	Ulundi	KZN433	Greater Kokstad
KZN227	Richmond	KZN271	Umkhambathini	KZN434	Ubulhebezwe
KZN232	Emnambithi/Ladysmith	KZN272	Jozini	KZN435	Umkhulu



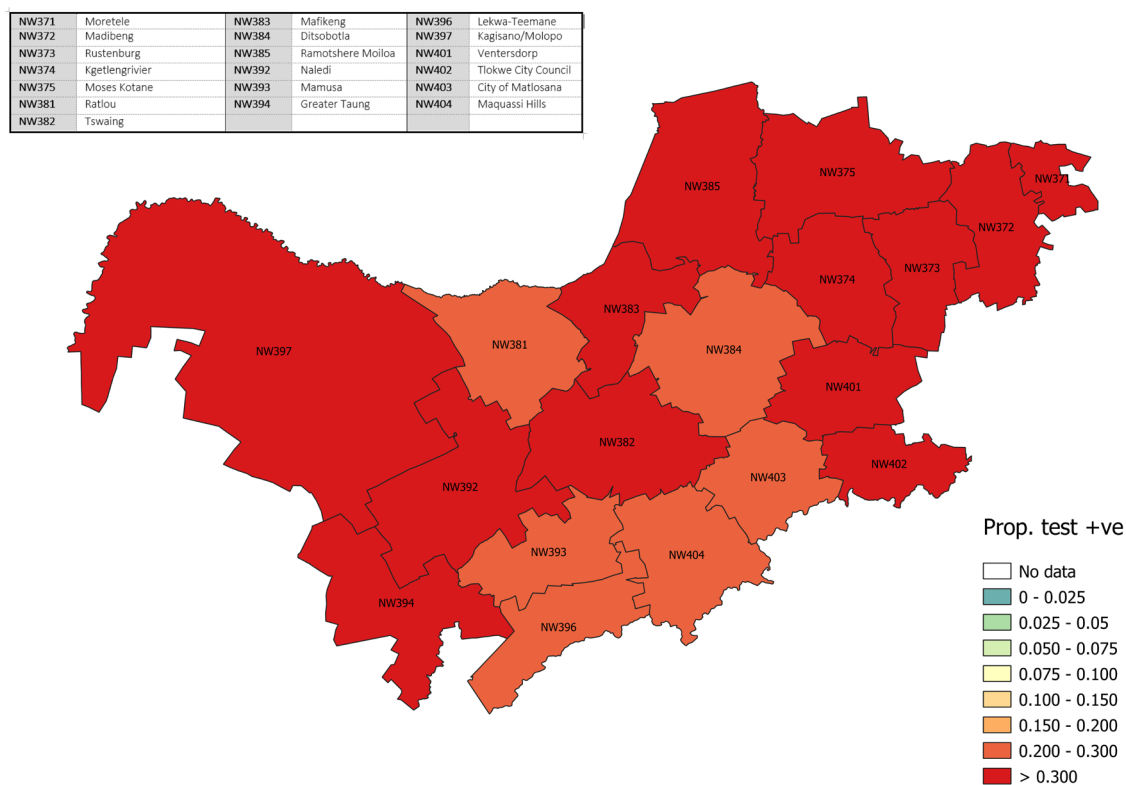
**Figure 15.** Proportion testing positive by health sub-district in KwaZulu-Natal Province for the week of 4-10 July 2021. Areas shaded white represent districts in which either (i) no tests were reported, (ii) all tests were negative, or (iii) the confidence interval exceeded 30%.



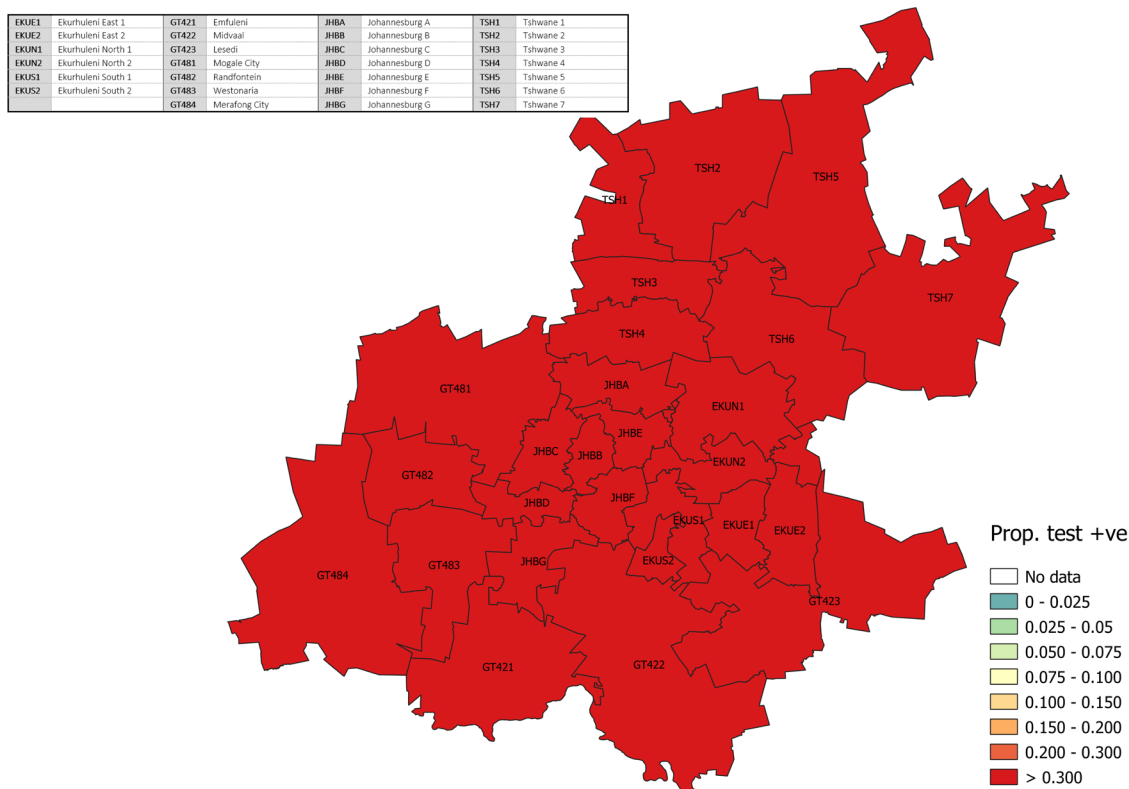
# COVID-19 TESTING SUMMARY

SOUTH AFRICA

WEEK 27 2021



**Figure 16.** Proportion testing positive by health sub-district in North West Province for the week of 4-10 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%.



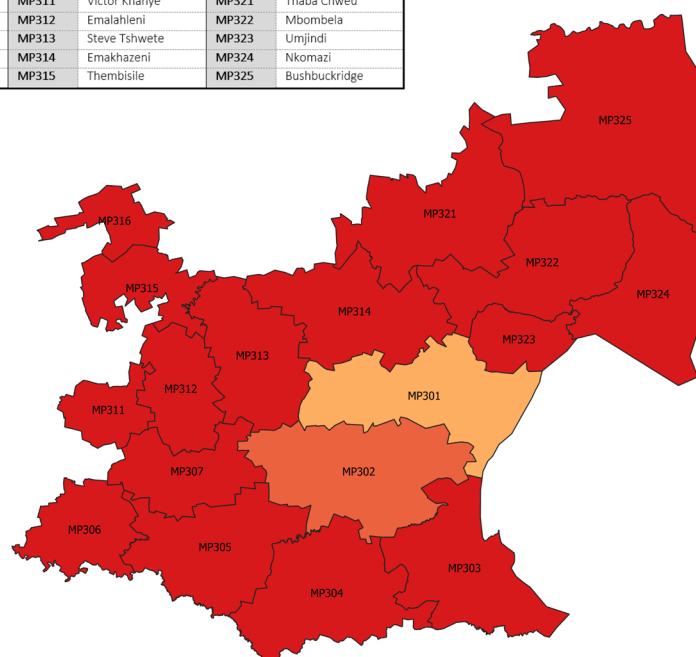
**Figure 17.** Proportion testing positive by health sub-district in Gauteng Province for the week of 4-10 July 2021. Areas shaded white represent districts in which either (i) no tests were reported, (ii) all tests were negative, or (iii) the confidence interval exceeded 30%.

# COVID-19 TESTING SUMMARY

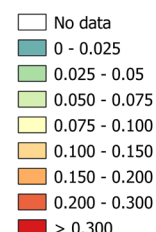
SOUTH AFRICA

WEEK 27 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	Umjindi
MP305	Lekwa	MP314	Emakhazeni	MP324	Nkomazi
MP306	Dipaleseng	MP315	Thembisile	MP325	Bushbuckridge

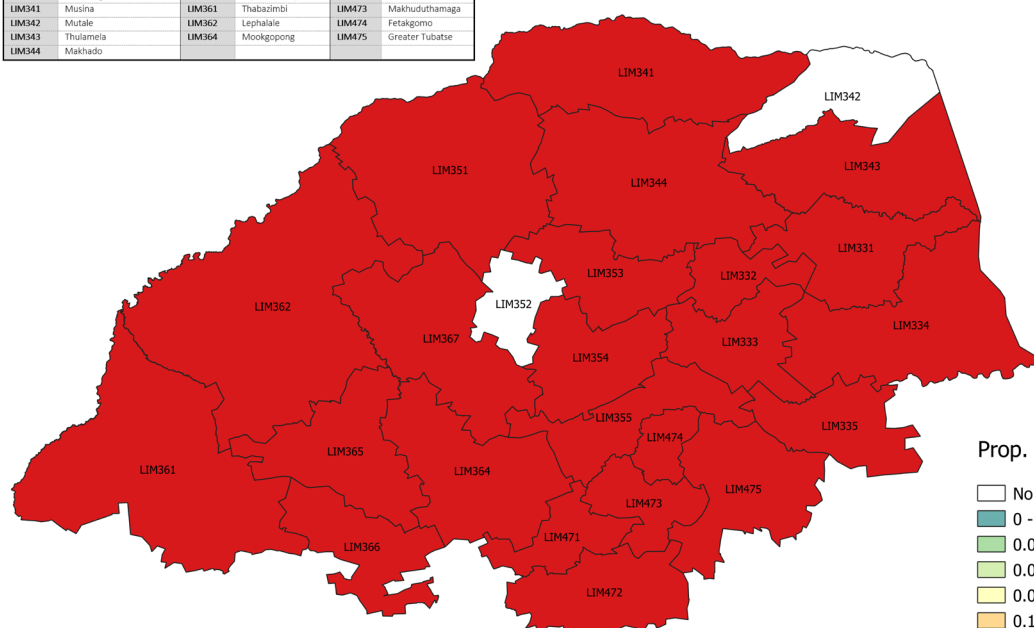


Prop. test +ve

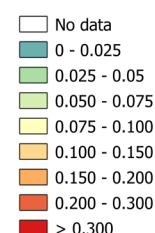


**Figure 18.** Proportion testing positive by health sub-district in Mpumalanga Province for the week of 4-10 July 2021. Areas shaded white represent districts in which either (i) no tests were reported, (ii) all tests were negative, or (iii) the confidence interval exceeded 30%.

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



Prop. test +ve



**Figure 19.** Proportion testing positive by health sub-district in Limpopo Province for the week of 4-10 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%.

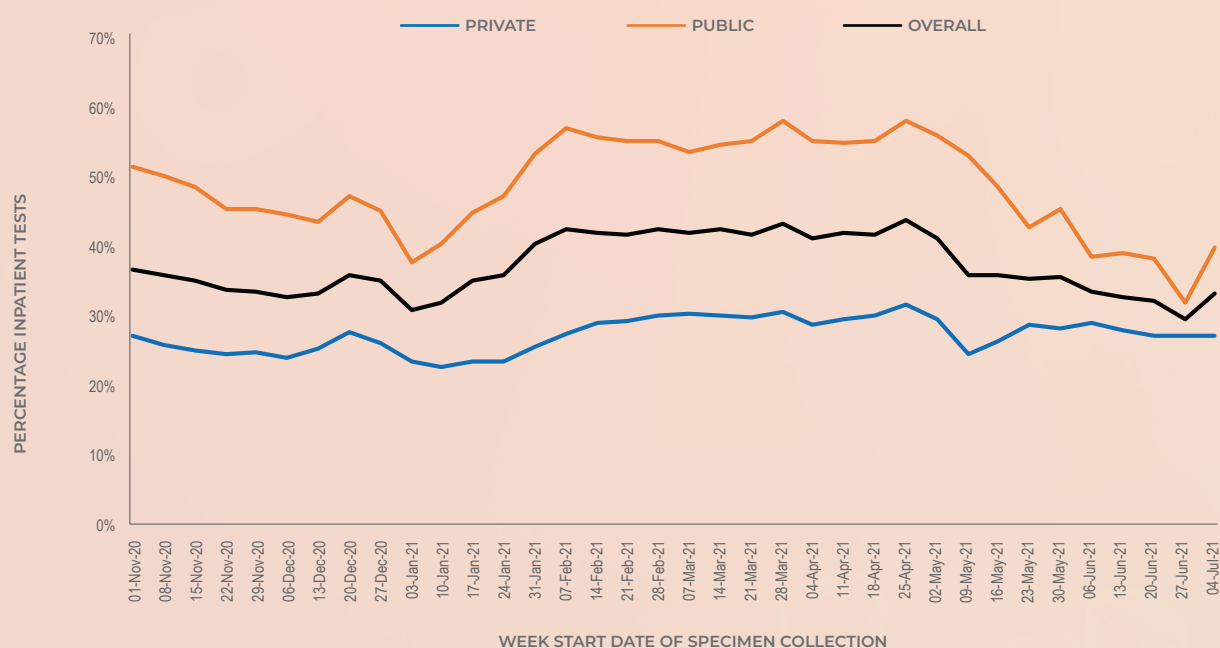
# COVID-19 TESTING SUMMARY

SOUTH AFRICA WEEK 27 2021

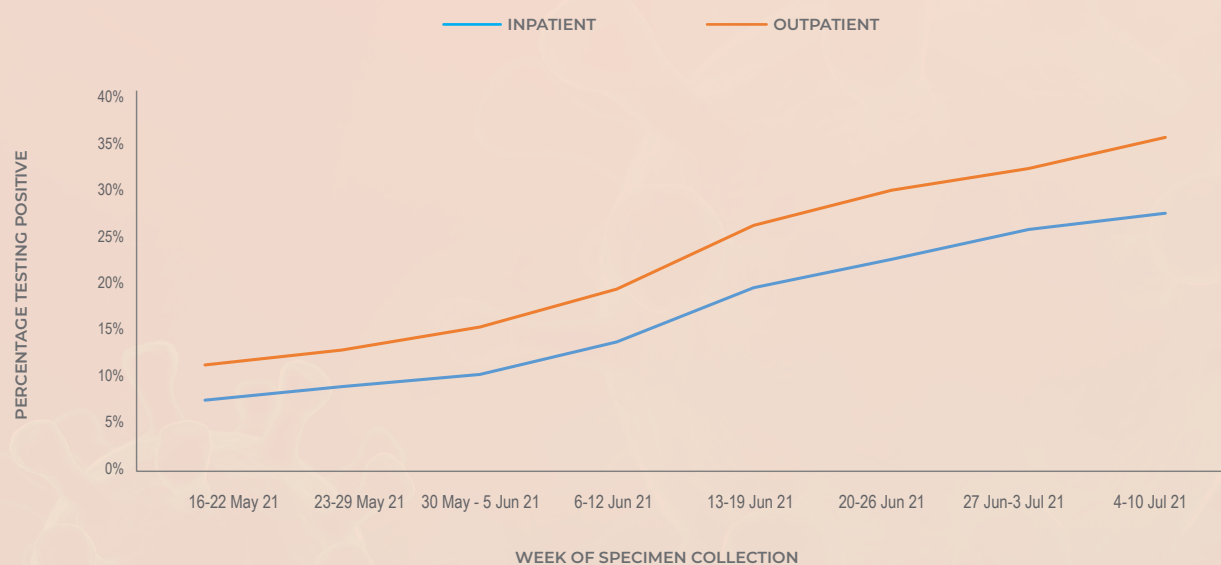
## Testing by patient admission status

In week 27 of 2021, 32.9% of reported tests were for hospitalised patients; 39.5% in the public sector and 26.7% in the private sector (Figure 20). The percentage testing positive in week 27 was higher among outpatients (35.1%) compared to inpatients (27.1%),

with increases continuing to be observed in both groups (Figure 21). In week 27 the mean laboratory turnaround time for PCR tests in the public sector was higher among outpatients (2.2 days) compared to inpatients (1.4 days) (Figure 22).



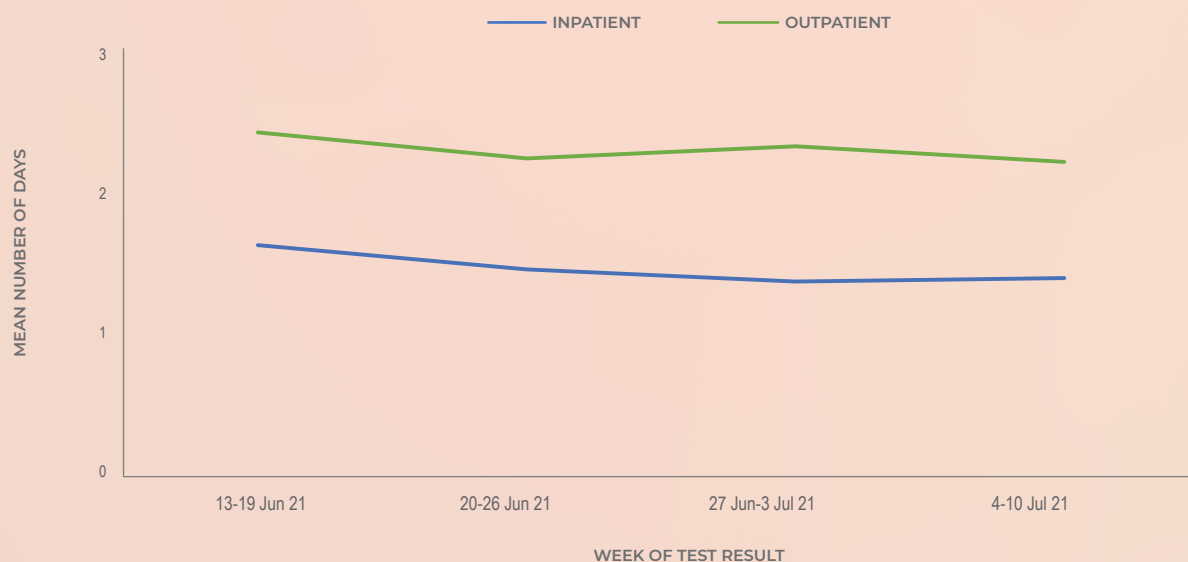
**Figure 20.** Percentage of inpatient tests reported by health sector, 1 November 2020 – 10 July 2021



**Figure 21.** Percentage testing positive by patient admission status, 16 May – 10 July 2021

# COVID-19 TESTING SUMMARY

SOUTH AFRICA WEEK 27 2021

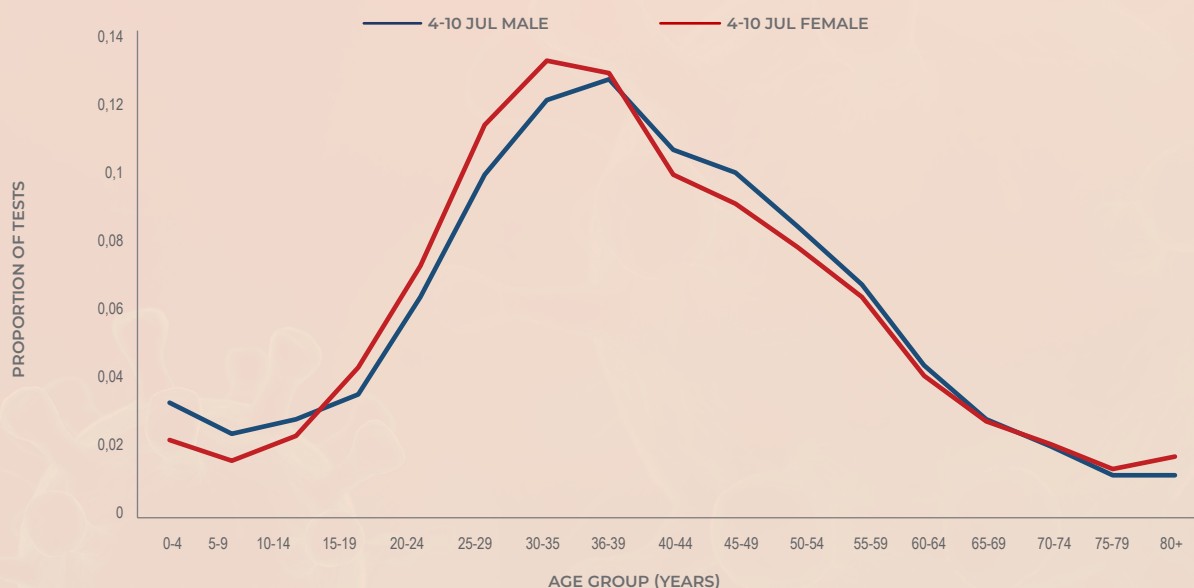


**Figure 22.** Mean number of days between date of specimen collection and date of test result for PCR tests in the public sector by patient admission status, 13 June – 10 July 2021

## Testing by age and sex

The median age of individuals tested in week 27 of 2021 was 39 years (interquartile range (IQR) 28-50) and was the same for males and females (39 years; IQR 28-50). The majority of reported tests (62.2%) were in individuals in the 20-49 years' age group (Figure 23). In week 27, the testing rate was higher in females (692 per 100,000 persons) than in males (628 per 100,000 persons) (Figure 24). Testing rates in week 27 were

highest in the 50-54 years age group (1233 per 100,000 persons). The percentage testing positive was highest in individuals aged 55-59 years (37.4%). In males (36.0%) and females (38.7%) the percentage testing positive was highest in individuals aged 55-59 years.

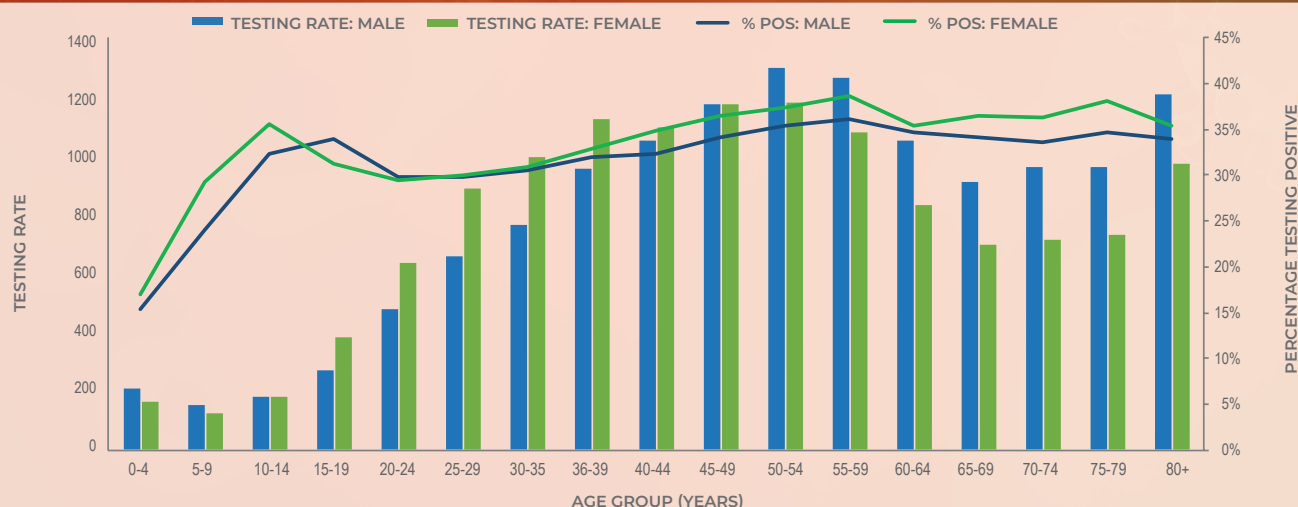


**Figure 23.** Proportion of tests by age group and sex, South Africa, week 27, 4-10 July 2021



# COVID-19 TESTING SUMMARY

SOUTH AFRICA WEEK 27 2021

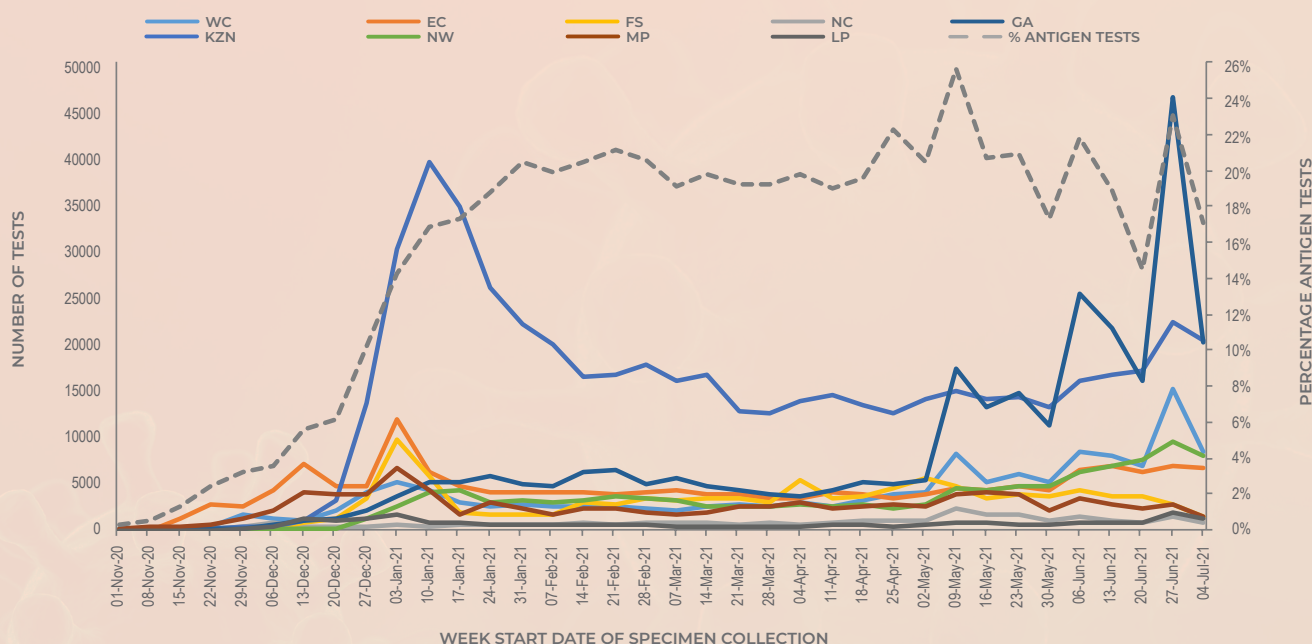


**Figure 24.** Testing rates per 100,000 persons and percentage testing positive by age group and sex, South Africa, week 27, 4-10 July 2021

## Testing by test type

Up to the end of week 27 of 2021, 10.4% (1,444,424/13,843,120) of all reported tests were antigen tests. In week 27, 17.1% (68,529/401,041) of reported tests were antigen tests (Figure 25). Overall, 80.9% of antigen tests have been performed in the public sector, and in week 27 the public sector accounted for 80.5% (55,198/68,529) of antigen tests. Since antigen testing began in November 2020, the majority of antigen tests have been reported from KwaZulu-Natal (35.7%), Gauteng (19.3%) and Eastern Cape (11.0%) provinces. In the past few weeks, KwaZulu-Natal and Gauteng have performed the highest weekly number of antigen tests, although a large decrease (46,226 in week 26 and 20,106 in week 27) in the number

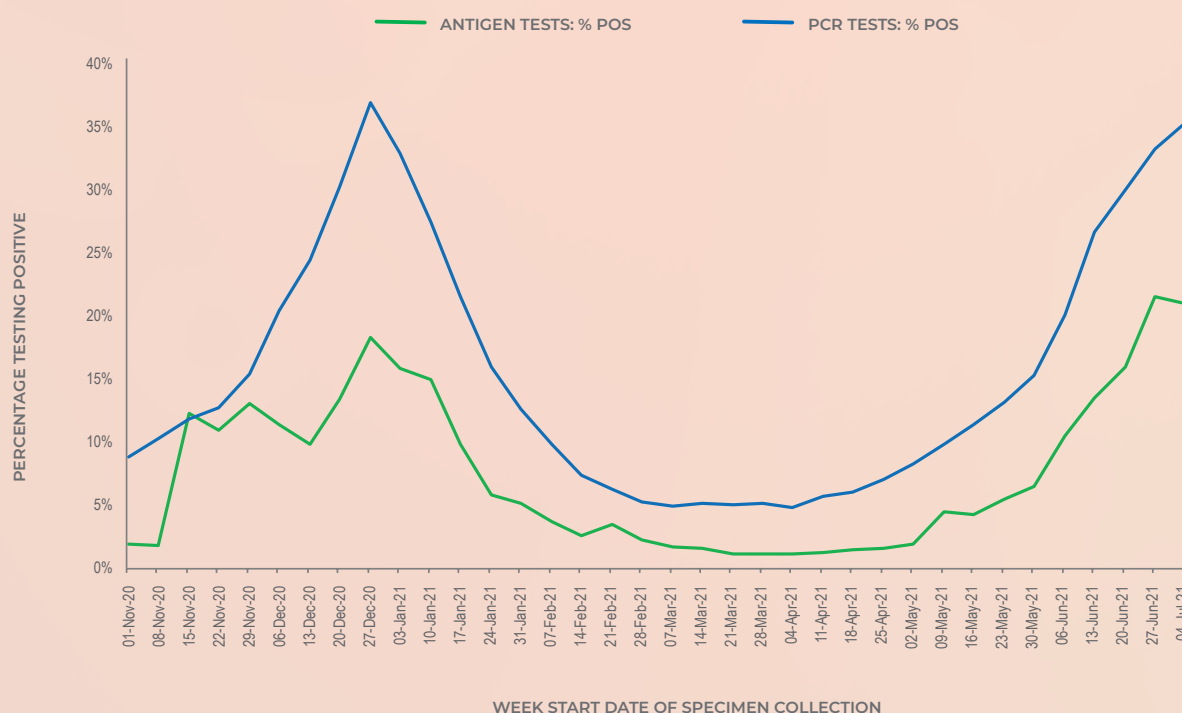
of antigen tests reported in Gauteng was observed in week 27. The percentage testing positive was higher for PCR tests compared to antigen tests, and in week 27 it was 34.9% for PCR tests and 20.7% for antigen tests (Figure 26). The mean turnaround time for antigen tests reported in week 27 increased to 5.7 days in the public sector and remained at 0.1 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.



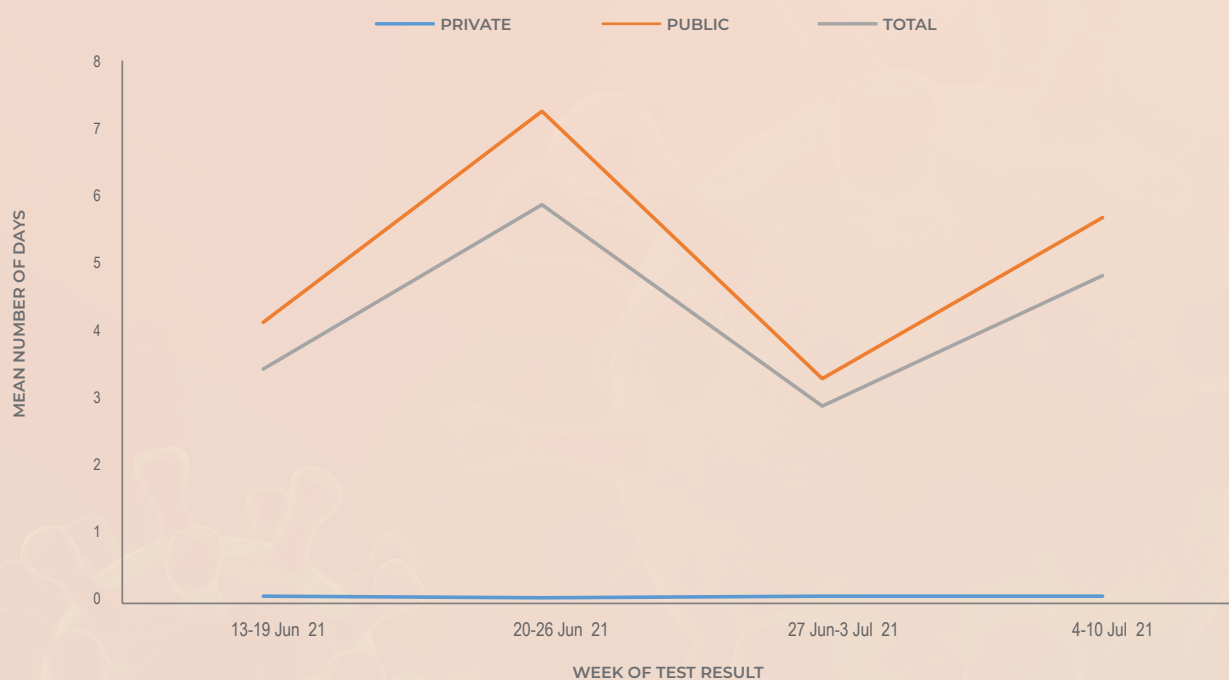
**Figure 25.** Number of antigen tests by province, and overall percentage antigen tests, South Africa, 1 November 2020 – 10 July 2021. WC, Western Cape; EC, Eastern Cape; FS, Free State; KZN, KwaZulu-Natal; GA, Gauteng; NC, Northern Cape; NW, North West; MP, Mpumalanga; LP, Limpopo

# COVID-19 TESTING SUMMARY

SOUTH AFRICA WEEK 27 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 – 10 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, 13 June - 10 July 2021

# COVID-19 TESTING SUMMARY

SOUTH AFRICA | WEEK 27 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 27 (n=401,041) was less than the number of tests reported in the previous week. Gauteng (42.1%), Western Cape (14.8%) and KwaZulu-Natal (14.7%) provinces reported the largest number of tests in week 27. The overall testing rate in week 27 was 673 per 100,000 persons; highest in Gauteng (1090 per 100,000 persons) and lowest in Limpopo (341 per 100,000 persons). Testing rates have decreased in Gauteng, Northern Cape, Free state and Western Cape provinces in the past week. Antigen tests accounted for 17.1% (68,529/401,041) of all tests reported in week 27, 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 1.3 days in week 27; 1.9 days in the public sector and 0.8 days in the private sector.

The percentage testing positive continued to increase and in week 27 the percentage testing positive was 32.5%, which increased by 2.3% compared to the previous week. The percentage testing positive in week 27 was highest in Limpopo (51.5%), Gauteng (39.1%), North West (39.1%) and Mpumalanga (38.0%) provinces. The percentage testing positive was between 20% and 30% in the Western Cape, Northern Cape and Free State, and was <20% in the Eastern Cape and KwaZulu-Natal provinces. Compared to the previous week, the percentage testing positive in week 27 increased in all 9 provinces.