

COVID-19 TESTING SUMMARY



NATIONAL INSTITUTE FOR
COMMUNICABLE DISEASES

Division of the National Health Laboratory Service

SOUTH AFRICA WEEK 19 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 15 May 2021 (Week 19 of 2021).

HIGHLIGHTS

- In the period 1 March 2020 through 15 May 2021, 11,056,332 tests (10,168,963 PCR and 887,369 antigen tests) for SARS-CoV-2 have been reported nationally.
- The number of tests reported in week 19 of 2021 (n=217,403) was higher than the weekly number of tests reported since early February 2021.
- The testing rate in week 19 was 365 per 100,000 persons; highest in the Northern Cape (814 per 100,000 persons) and lowest in Limpopo (79 per 100,000 persons).
- In week 19 the percentage testing positive was 8.4%, which was 1.3% higher than the previous week
- The percentage testing positive in week 19 was highest in the Northern Cape (24.1%), Free State (17.5%) and North West (15.1%) provinces. The percentage testing positive was <10% in all other provinces.
- In week 19, compared to the previous week, the percentage testing positive increased in the Western Cape, Eastern Cape, North West, Gauteng and Mpumalanga. The percentage testing positive was unchanged in the Northern Cape, Free State, KwaZulu-Natal and Limpopo provinces.
- The number of tests reported is likely underestimated as antigen tests are increasingly being used outside of laboratory settings and 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 15 May 2021 (week 19 of 2021).

Testing volumes and proportion testing positive

From 1 March 2020 through 15 May 2021, 11,056,332 SARS-CoV-2 tests were reported; 10,168,963 PCR and 887,369 antigen tests. The number of tests reported increased weekly from week 10 of 2020, with the highest number of tests reported during the first wave occurring in week 28 of 2020 (n=307,912), and subsequently decreased. Weekly testing volumes increased again from week 48 (beginning 22 November 2020), with the highest weekly number of tests since the start of the pandemic reported in week 1 of 2021 (n=500,950). In week 19 of 2021, 217,403 tests were reported, higher than the weekly testing volumes reported over recent weeks. 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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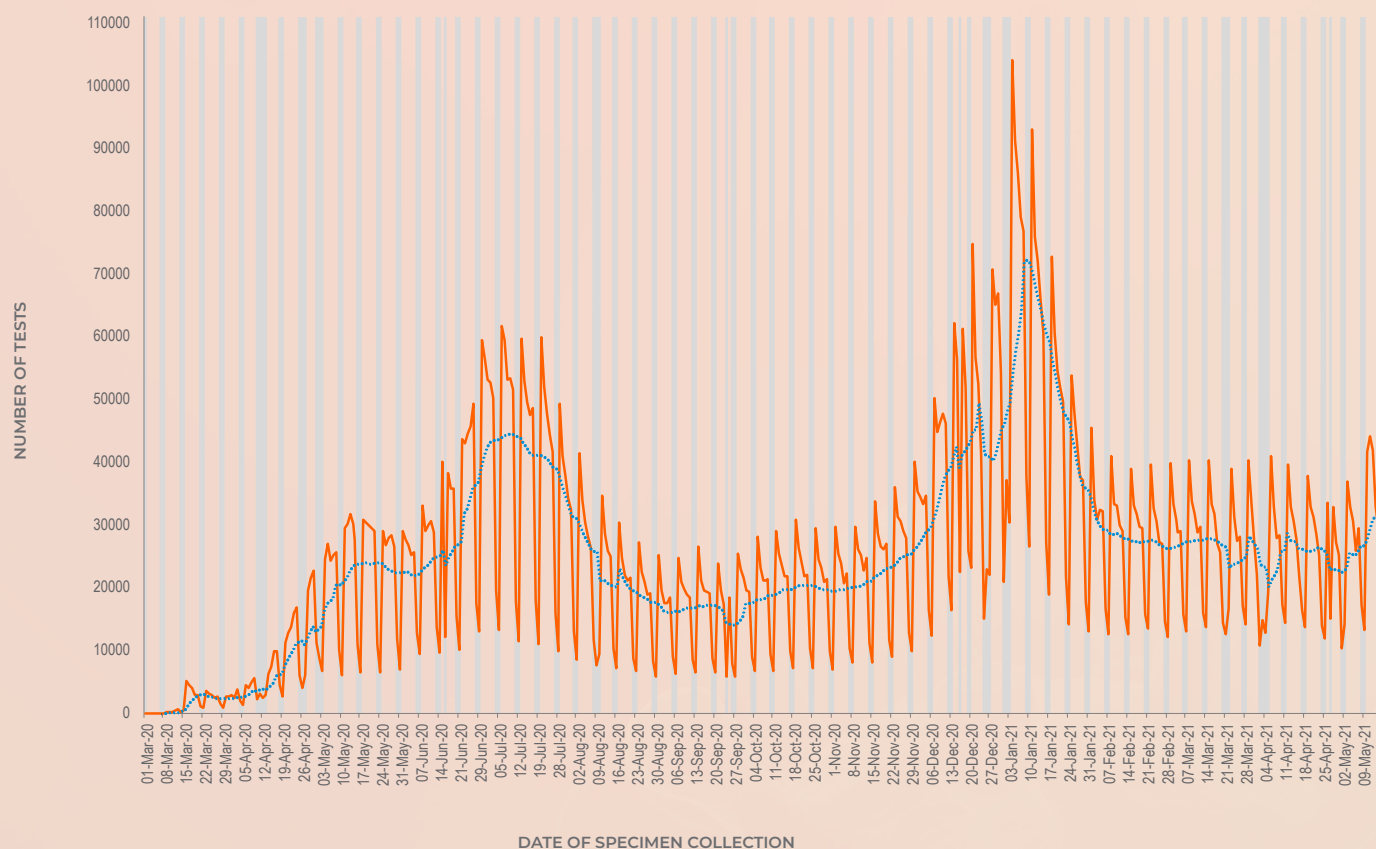


Figure 1. Number of SARS-CoV-2 tests reported by date of specimen collection, South Africa, 1 March 2020 – 15 May 2021. Blue dotted line shows the 7-day moving average of the number of tests reported. Grey bars highlight weekend days and public holidays.

The overall percentage testing positive from week 10 of 2020 through week 19 of 2021 was 15.4% (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 started increasing from week 46 of 2020, to a peak of 34.6% in week 53 of 2020. The percentage testing positive in week 19 of 2021 was 8.4%, higher than observed in the previous week (7.1%, $P < 0.001$) and higher than observed since early February 2021 (Figure 2).

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Table 1. Weekly number of SARS-CoV-2 tests and positive tests reported, South Africa, 1 March 2020 – 15 May 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 | 17544 (0.2) | 544 | 3.1 |
| 14 | 29-Mar-20 | 18248 (0.2) | 521 | 2.9 |
| 15 | 05-Apr-20 | 26299 (0.2) | 796 | 3.0 |
| 16 | 12-Apr-20 | 43752 (0.4) | 1295 | 3.0 |
| 17 | 19-Apr-20 | 79176 (0.7) | 2177 | 2.7 |
| 18 | 26-Apr-20 | 93810 (0.8) | 3205 | 3.4 |
| 19 | 03-May-20 | 142708 (1.3) | 6018 | 4.2 |
| 20 | 10-May-20 | 165374 (1.5) | 8092 | 4.9 |
| 21 | 17-May-20 | 166542 (1.5) | 11379 | 6.8 |
| 22 | 24-May-20 | 156137 (1.4) | 12967 | 8.3 |
| 23 | 31-May-20 | 153569 (1.4) | 15079 | 9.8 |
| 24 | 07-Jun-20 | 173901 (1.6) | 22361 | 12.9 |
| 25 | 14-Jun-20 | 186080 (1.7) | 32649 | 17.5 |
| 26 | 21-Jun-20 | 252096 (2.3) | 55049 | 21.8 |
| 27 | 28-Jun-20 | 302742 (2.7) | 75309 | 24.9 |
| 28 | 05-Jul-20 | 307912 (2.8) | 86038 | 27.9 |
| 29 | 12-Jul-20 | 285599 (2.6) | 84927 | 29.7 |
| 30 | 19-Jul-20 | 270892 (2.5) | 78635 | 29.0 |
| 31 | 26-Jul-20 | 216390 (2.0) | 58393 | 27.0 |
| 32 | 02-Aug-20 | 179573 (1.6) | 40996 | 22.8 |
| 33 | 09-Aug-20 | 141103 (1.3) | 26265 | 18.6 |
| 34 | 16-Aug-20 | 135012 (1.2) | 21377 | 15.8 |
| 35 | 23-Aug-20 | 123333 (1.1) | 16331 | 13.2 |
| 36 | 30-Aug-20 | 112762 (1.0) | 12790 | 11.3 |
| 37 | 06-Sep-20 | 116996 (1.1) | 11953 | 10.2 |
| 38 | 13-Sep-20 | 120713 (1.1) | 12011 | 10.0 |
| 39 | 20-Sep-20 | 98817 (0.9) | 10098 | 10.2 |
| 40 | 27-Sep-20 | 123062 (1.1) | 11008 | 8.9 |
| 41 | 04-Oct-20 | 131043 (1.2) | 11778 | 9.0 |
| 42 | 11-Oct-20 | 137974 (1.2) | 12077 | 8.8 |
| 43 | 18-Oct-20 | 142166 (1.3) | 12066 | 8.5 |
| 44 | 25-Oct-20 | 135847 (1.2) | 11478 | 8.4 |
| 45 | 01-Nov-20 | 138820 (1.3) | 12135 | 8.7 |
| 46 | 08-Nov-20 | 147007 (1.3) | 14845 | 10.1 |
| 47 | 15-Nov-20 | 160642 (1.5) | 18762 | 11.7 |
| 48 | 22-Nov-20 | 175684 (1.6) | 22051 | 12.6 |
| 49 | 29-Nov-20 | 203143 (1.8) | 30766 | 15.1 |
| 50 | 06-Dec-20 | 267914 (2.4) | 53310 | 19.9 |
| 51 | 13-Dec-20 | 294453 (2.7) | 68575 | 23.3 |
| 52 | 20-Dec-20 | 284467 (2.6) | 81950 | 28.8 |
| 53 | 27-Dec-20 | 334372 (3.0) | 115727 | 34.6 |
| 1 | 03-Jan-21 | 500950 (4.5) | 150998 | 30.1 |
| 2 | 10-Jan-21 | 417833 (3.8) | 104765 | 25.1 |
| 3 | 17-Jan-21 | 327263 (3.0) | 63232 | 19.3 |

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| | | | | |
|--------------|-----------|---------------------------|------------------|-------------|
| 4 | 24-Jan-21 | 249346 (2.3) | 34615 | 13.9 |
| 5 | 31-Jan-21 | 203367 (1.8) | 22319 | 11.0 |
| 6 | 07-Feb-21 | 193063 (1.7) | 16439 | 8.5 |
| 7 | 14-Feb-21 | 190171 (1.7) | 12124 | 6.4 |
| 8 | 21-Feb-21 | 184123 (1.7) | 10351 | 5.6 |
| 9 | 28-Feb-21 | 189134 (1.7) | 8659 | 4.6 |
| 10 | 07-Mar-21 | 192432 (1.7) | 8303 | 4.3 |
| 11 | 14-Mar-21 | 184964 (1.7) | 8115 | 4.4 |
| 12 | 21-Mar-21 | 171374 (1.6) | 7318 | 4.3 |
| 13 | 28-Mar-21 | 162709 (1.5) | 7031 | 4.3 |
| 14 | 04-Apr-21 | 178672 (1.6) | 7248 | 4.1 |
| 15 | 11-Apr-21 | 182169 (1.6) | 8780 | 4.8 |
| 16 | 18-Apr-21 | 182077 (1.6) | 9385 | 5.2 |
| 17 | 25-Apr-21 | 155347 (1.4) | 9086 | 5.8 |
| 18 | 02-May-21 | 185858 (1.7) | 13268 | 7.1 |
| 19 | 09-May-21 | 217403 (2.0) | 18352 | 8.4 |
| Total | | 11,056,332 (100.0) | 1,705,184 | 15.4 |

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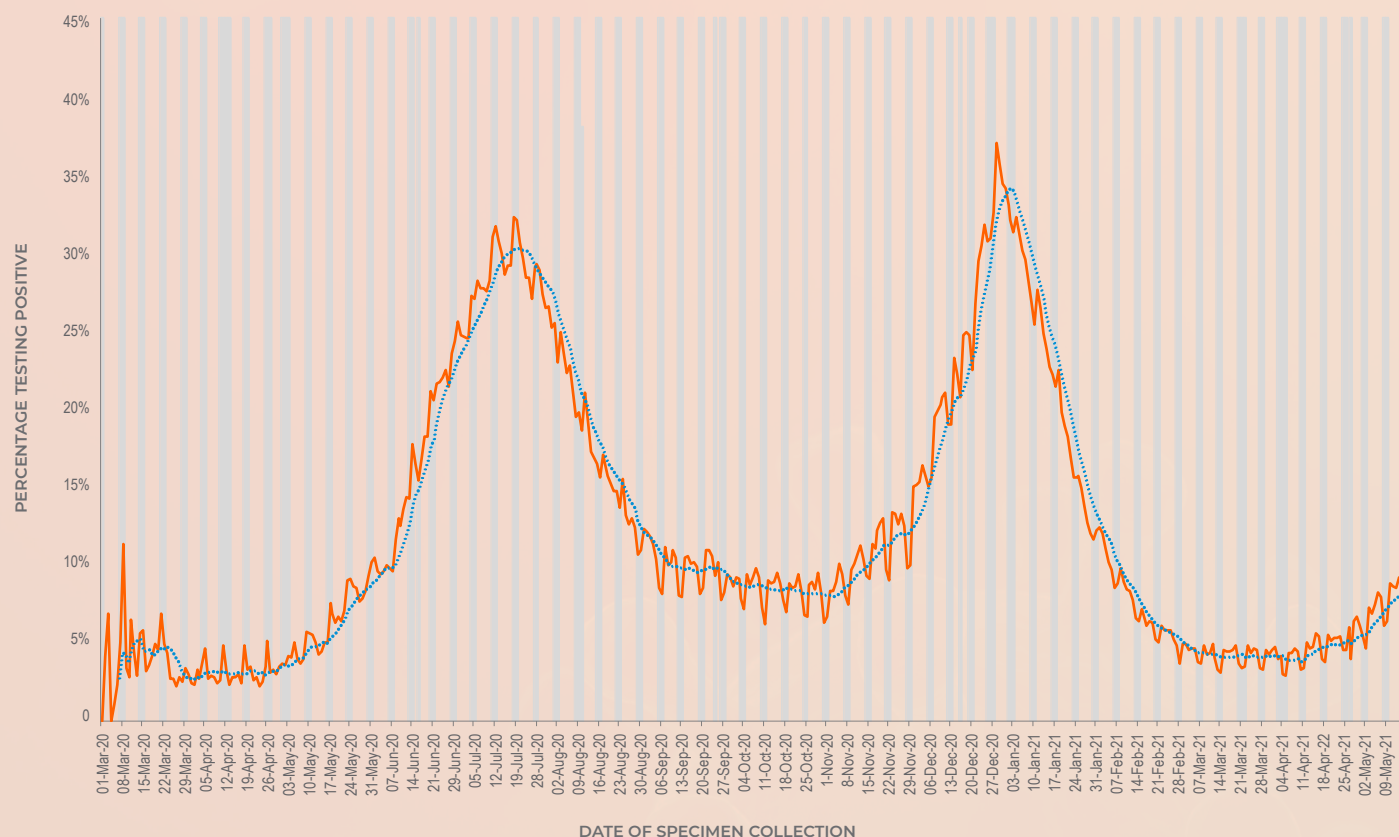


Figure 2. Percentage of tests positive for SARS-CoV-2 by date of specimen collection, South Africa, 1 March 2020 – 15 May 2021. Blue dotted line shows the 7-day moving average of the percentage testing positive. Grey bars highlight weekend days and public holidays.

Testing in private and public sectors

From 1 March 2020 through 15 May 2021, 4,821,011 tests were reported in the public sector, with 16.0% testing positive. Over this same period, the private sector reported 6,235,321 tests, with 15.0% testing positive (Table 2). Overall, the public sector has reported 43.6% of tests and accounted for 45.3% 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%). From week 18 to week 19 of 2021, the percentage testing positive increased in the public sector (7.2% in week 18 to 8.4% in week 19, $P < 0.001$) and in the private sector

(7.1% in week 18 to 8.5% in week 19, $P < 0.001$). In week 19 of 2021 the percentage testing positive was similar in the private sector (8.5%) and public sector (8.4%) ($P = 0.293$).

The mean turnaround time for PCR tests reported in week 19 of 2021 was 1.0 day; 1.7 days in the public sector and 0.6 days in the private sector (Figure 3). Turnaround times for public sector PCR tests were ≤ 2 days in all provinces except the Northern Cape (2.7 days) and Free State (2.2 days) in week 19 (Figure 4). Increases in turnaround time were observed in the Northern Cape in the past week. Twenty-two of the 28 (78.6%) NHLS laboratories performing PCR testing for SARS-CoV-2 had turnaround times ≤ 2 days in week 19 (Figure 5).

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Table 2. Weekly number of tests and positive tests reported, by healthcare sector, South Africa, 1 March 2020 – 15 May 2021

| Week number | Week beginning | Public sector | | Private sector | | Public sector percentage 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) | 14066 | 395 (2.8) | 19.8 | 27.4 | 1.526 |
| 14 | 29-Mar-20 | 5868 | 194 (3.3) | 12380 | 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) | 19585 | 623 (3.2) | 55.2 | 51.9 | 0.874 |
| 17 | 19-Apr-20 | 55110 | 1595 (2.9) | 24066 | 582 (2.4) | 69.6 | 73.3 | 1.197 |
| 18 | 26-Apr-20 | 67469 | 2453 (3.6) | 26341 | 752 (2.9) | 71.9 | 76.5 | 1.274 |
| 19 | 03-May-20 | 94338 | 4507 (4.8) | 48370 | 1511 (3.1) | 66.1 | 74.9 | 1.529 |
| 20 | 10-May-20 | 108000 | 5443 (5.0) | 57374 | 2649 (4.6) | 65.3 | 67.3 | 1.092 |
| 21 | 17-May-20 | 98648 | 7031 (7.1) | 67894 | 4348 (6.4) | 59.2 | 61.8 | 1.113 |
| 22 | 24-May-20 | 77597 | 6411 (8.3) | 78540 | 6556 (8.3) | 49.7 | 49.4 | 0.990 |
| 23 | 31-May-20 | 63945 | 6626 (10.4) | 89624 | 8453 (9.4) | 41.6 | 43.9 | 1.099 |
| 24 | 07-Jun-20 | 64655 | 8039 (12.4) | 109246 | 14322 (13.1) | 37.2 | 36.0 | 0.948 |
| 25 | 14-Jun-20 | 61149 | 11982 (19.6) | 124931 | 20667 (16.5) | 32.9 | 36.7 | 1.184 |
| 26 | 21-Jun-20 | 90454 | 20425 (22.6) | 161642 | 34624 (21.4) | 35.9 | 37.1 | 1.054 |
| 27 | 28-Jun-20 | 106370 | 27244 (25.6) | 196372 | 48065 (24.5) | 35.1 | 36.2 | 1.046 |
| 28 | 05-Jul-20 | 117727 | 32239 (27.4) | 190185 | 53799 (28.3) | 38.2 | 37.5 | 0.968 |
| 29 | 12-Jul-20 | 110664 | 31383 (28.4) | 174935 | 53544 (30.6) | 38.7 | 37.0 | 0.927 |
| 30 | 19-Jul-20 | 105215 | 30319 (28.8) | 165677 | 48316 (29.2) | 38.8 | 38.6 | 0.988 |
| 31 | 26-Jul-20 | 81246 | 22782 (28.0) | 135144 | 35611 (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) | 78874 | 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) | 65941 | 5532 (8.4) | 43.6 | 53.7 | 1.499 |
| 38 | 13-Sep-20 | 53706 | 6547 (12.2) | 67007 | 5464 (8.2) | 44.5 | 54.5 | 1.495 |
| 39 | 20-Sep-20 | 44841 | 5530 (12.3) | 53976 | 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 | 50434 | 5689 (11.3) | 80609 | 6089 (7.6) | 38.5 | 48.3 | 1.493 |
| 42 | 11-Oct-20 | 53451 | 5702 (10.7) | 84523 | 6375 (7.5) | 38.7 | 47.2 | 1.414 |
| 43 | 18-Oct-20 | 56122 | 6044 (10.8) | 86044 | 6022 (7.0) | 39.5 | 50.1 | 1.539 |
| 44 | 25-Oct-20 | 51285 | 5721 (11.2) | 84562 | 5757 (6.8) | 37.8 | 49.8 | 1.639 |
| 45 | 01-Nov-20 | 52999 | 6061 (11.4) | 85821 | 6074 (7.1) | 38.2 | 49.9 | 1.616 |
| 46 | 08-Nov-20 | 58913 | 8097 (13.7) | 88094 | 6748 (7.7) | 40.1 | 54.5 | 1.794 |
| 47 | 15-Nov-20 | 67582 | 10584 (15.7) | 93060 | 8178 (8.8) | 42.1 | 56.4 | 1.782 |
| 48 | 22-Nov-20 | 74572 | 12199 (16.4) | 101112 | 9852 (9.7) | 42.4 | 55.3 | 1.679 |
| 49 | 29-Nov-20 | 81268 | 15730 (19.4) | 121875 | 15036 (12.3) | 40.0 | 51.1 | 1.569 |
| 50 | 06-Dec-20 | 107909 | 24715 (22.9) | 160005 | 28595 (17.9) | 40.3 | 46.4 | 1.282 |
| 51 | 13-Dec-20 | 117212 | 29815 (25.4) | 177241 | 38760 (21.9) | 39.8 | 43.5 | 1.163 |
| 52 | 20-Dec-20 | 109838 | 34124 (31.1) | 174629 | 47826 (27.4) | 38.6 | 41.6 | 1.134 |
| 53 | 27-Dec-20 | 151623 | 52930 (34.9) | 182749 | 62797 (34.4) | 45.3 | 45.7 | 1.016 |
| 1 | 03-Jan-21 | 236859 | 71045 (30.0) | 264091 | 79953 (30.3) | 47.3 | 47.1 | 0.991 |
| 2 | 10-Jan-21 | 203957 | 52946 (26.0) | 213876 | 51819 (24.2) | 48.8 | 50.5 | 1.071 |
| 3 | 17-Jan-21 | 165597 | 34446 (20.8) | 161666 | 28786 (17.8) | 50.6 | 54.5 | 1.168 |
| 4 | 24-Jan-21 | 123164 | 18980 (15.4) | 126182 | 15635 (12.4) | 49.4 | 54.8 | 1.244 |
| 5 | 31-Jan-21 | 99553 | 12031 (12.1) | 103814 | 10288 (9.9) | 49.0 | 53.9 | 1.219 |
| 6 | 07-Feb-21 | 91170 | 8486 (9.3) | 101893 | 7953 (7.8) | 47.2 | 51.6 | 1.193 |
| 7 | 14-Feb-21 | 86027 | 6629 (7.7) | 104144 | 5495 (5.3) | 45.2 | 54.7 | 1.460 |
| 8 | 21-Feb-21 | 82219 | 5769 (7.0) | 101904 | 4582 (4.5) | 44.7 | 55.7 | 1.561 |
| 9 | 28-Feb-21 | 87720 | 4661 (5.3) | 101414 | 3998 (3.9) | 46.4 | 53.8 | 1.348 |
| 10 | 07-Mar-21 | 92000 | 4567 (5.0) | 100432 | 3736 (3.7) | 47.8 | 55.0 | 1.334 |
| 11 | 14-Mar-21 | 89446 | 4415 (4.9) | 95518 | 3700 (3.9) | 48.4 | 54.4 | 1.274 |
| 12 | 21-Mar-21 | 75805 | 3437 (4.5) | 95569 | 3881 (4.1) | 44.2 | 47.0 | 1.116 |
| 13 | 28-Mar-21 | 70328 | 3440 (4.9) | 92381 | 3591 (3.9) | 43.2 | 48.9 | 1.258 |

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|--------------|-----------|------------------|-----------------------|------------------|-----------------------|-------------|-------------|--------------|
| 14 | 04-Apr-21 | 77530 | 3331 (4.3) | 101142 | 3917 (3.9) | 43.4 | 46.0 | 1.109 |
| 15 | 11-Apr-21 | 83589 | 4324 (5.2) | 98580 | 4456 (4.5) | 45.9 | 49.2 | 1.144 |
| 16 | 18-Apr-21 | 77991 | 4643 (6.0) | 104086 | 4742 (4.6) | 42.8 | 49.5 | 1.307 |
| 17 | 25-Apr-21 | 66368 | 4053 (6.1) | 88979 | 5033 (5.7) | 42.7 | 44.6 | 1.080 |
| 18 | 02-May-21 | 73925 | 5337 (7.2) | 111933 | 7931 (7.1) | 39.8 | 40.2 | 1.019 |
| 19 | 09-May-21 | 75246 | 6287 (8.4) | 142157 | 12065 (8.5) | 34.6 | 34.3 | 0.984 |
| Total | | 4,821,011 | 772,008 (16.0) | 6,235,321 | 933,176 (15.0) | 43.6 | 45.3 | 1.070 |

^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)

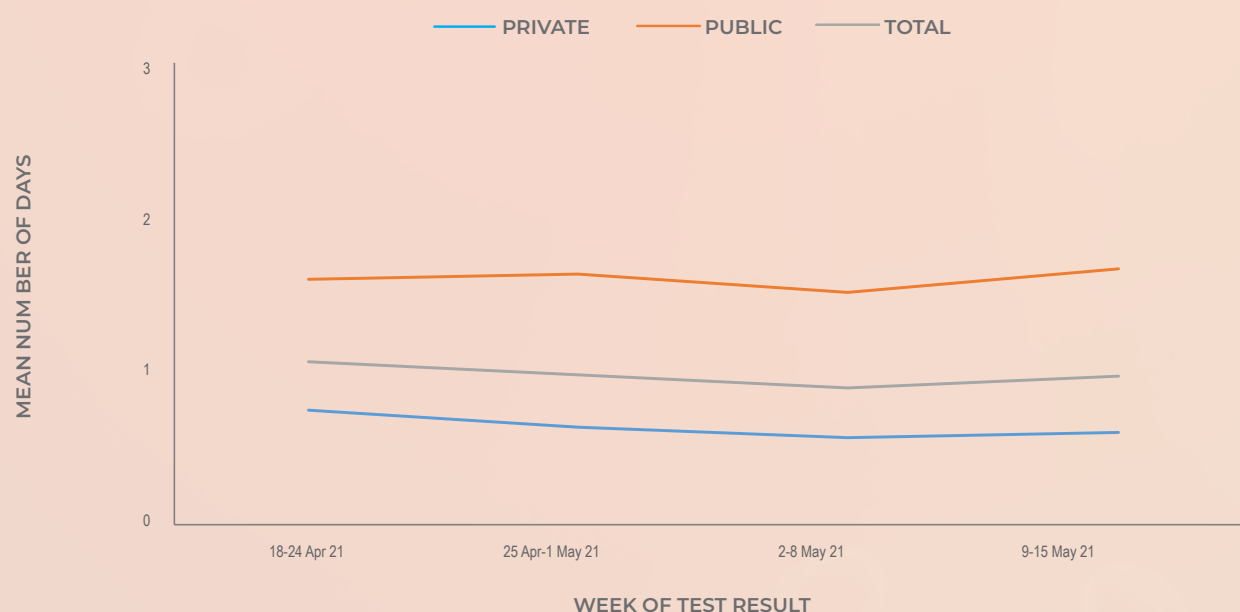


Figure 3. Mean number of days between date of specimen collection and date of test result for PCR tests, by week of test result, South Africa, 18 April – 15 May 2021

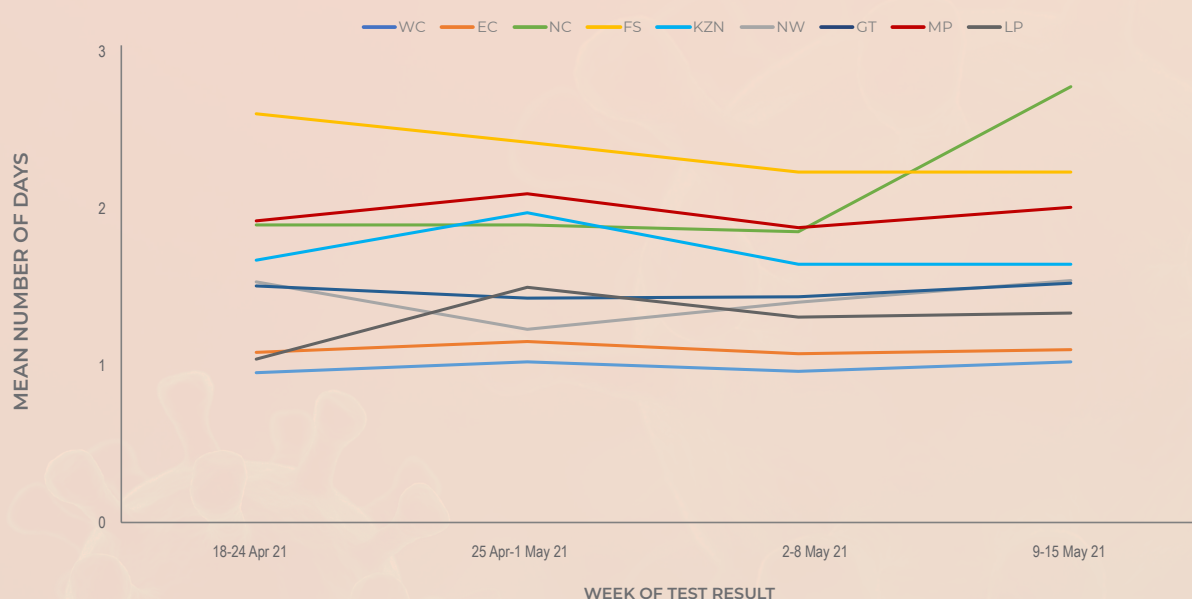


Figure 4. Mean number of days between date of specimen collection and date of test result for PCR tests, by week of test result and province, public sector, South Africa, 18 April – 15 May 2021. WC, Western Cape; EC, Eastern Cape; FS, Free State; KZN, KwaZulu-Natal; GT, Gauteng; NC, Northern Cape; NW, North West; MP, Mpumalanga; LP, Limpopo

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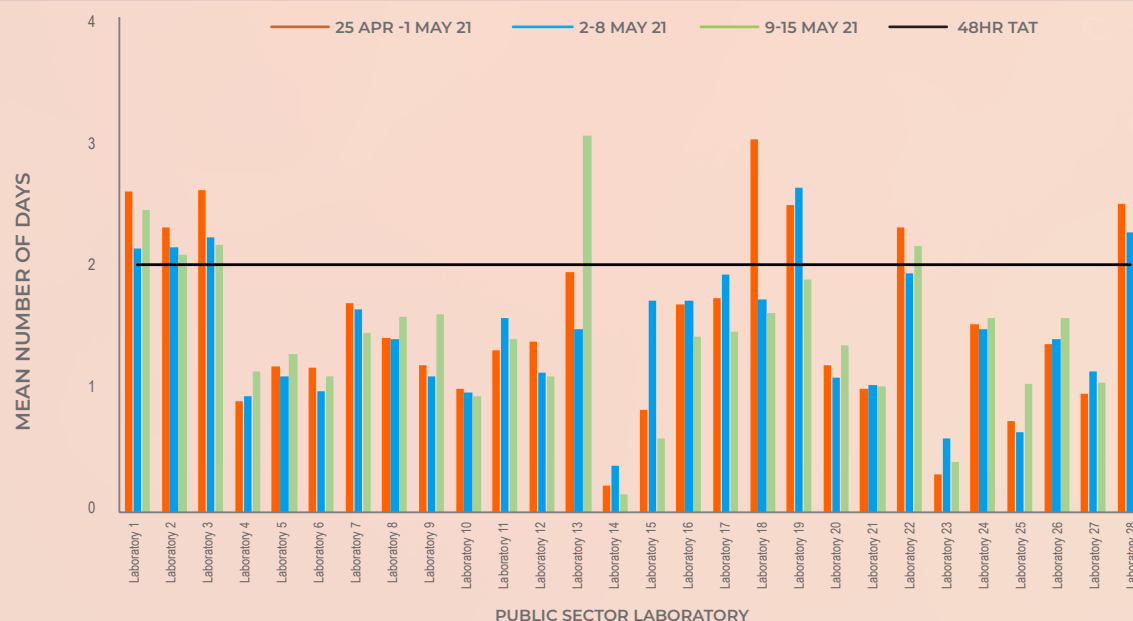


Figure 5. Mean number of days between date of specimen collection and date of test result for PCR tests, by public sector laboratory, 25 April - 15 May 2021. The horizontal black line indicates 48-hour turnaround time (TAT).

Testing by province

The majority of tests continued to be reported in Gauteng (38.1%), KwaZulu-Natal (16.1%) and Western Cape (15.4%) provinces in week 19 of 2021 (Table 3). The overall testing rate increased from 312 per 100,000 persons in week 18 to 365 per 100,000 in week 19. The testing rate ranged from 814 per 100,000 persons in the Northern Cape to 79 per 100,000 persons in Limpopo (Figure 6). Testing rates increased in all provinces, except Mpumalanga, in the past week.

The percentage testing positive in week 19 was highest in the Northern Cape (24.1%), Free State (17.5%) and

North West (15.1%) provinces (Figure 7 and Table 3). The percentage testing positive was <10% in all other provinces in week 19. Compared to the previous week, the percentage testing positive in week 19 increased in the Western Cape ($P<0.001$), Eastern Cape ($P<0.001$), North West ($P=0.003$), Gauteng ($P<0.001$) and Mpumalanga ($P<0.001$). The percentage testing positive was unchanged in the Northern Cape ($P=0.669$), Free State ($P=0.409$), KwaZulu-Natal ($P=0.339$) and Limpopo ($P=0.399$) provinces. The percentage testing positive was higher than the national average, not weighted for population size, in the Northern Cape, Free State, North West and Mpumalanga (Figure 7).

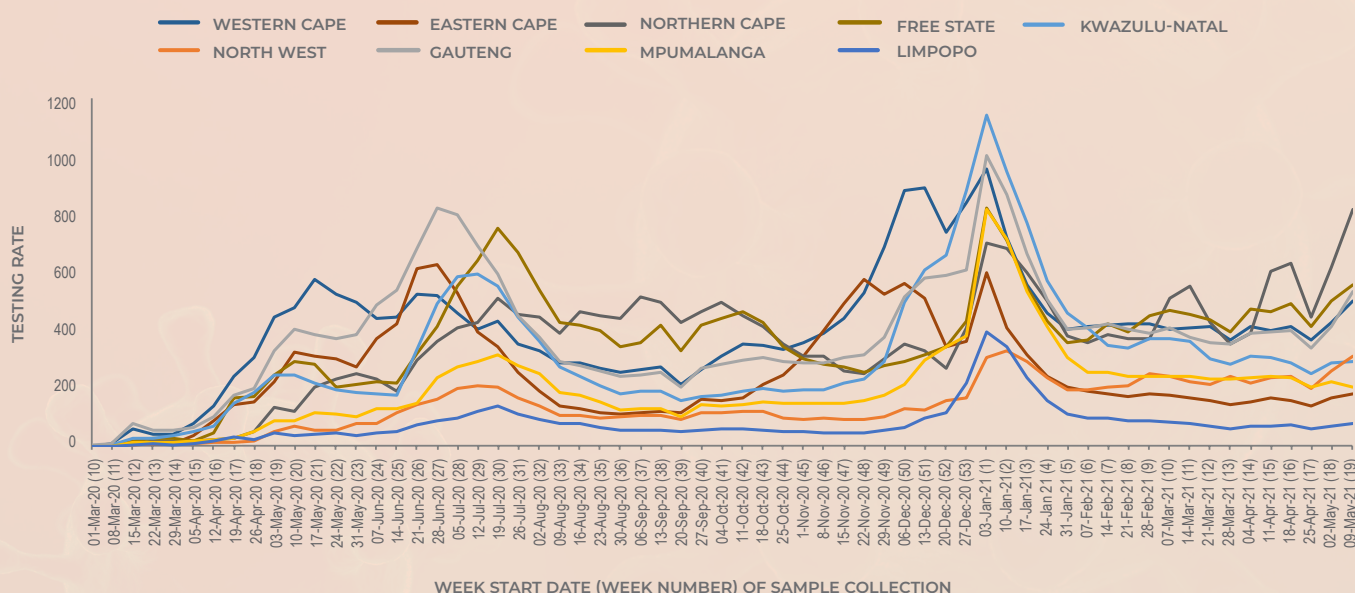


Figure 6. Testing rate per 100,000 persons by province and week of specimen collection, South Africa, 1 March 2020 – 15 May 2021

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Table 3. Weekly number of tests and positive tests reported, by province, South Africa, 25 April – 15 May 2021

| Province | Population ^a | 25 Apr-1 May 2021 | | 2-8 May 2021 | | 9-15 May 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 | 25711 | 978 (3.8) | 29913 | 1347 (4.5) | 34927 | 1815 (5.2) | 499 | 0.7% |
| Eastern Cape | 6734001 | 9210 | 142 (1.5) | 11053 | 171 (1.5) | 12270 | 342 (2.8) | 182 | 1.2% |
| Northern Cape | 1292786 | 5768 | 1226 (21.3) | 7991 | 1949 (24.4) | 10519 | 2537 (24.1) | 814 | -0.3% |
| Free State | 2928903 | 12011 | 1861 (15.5) | 14700 | 2526 (17.2) | 16260 | 2852 (17.5) | 555 | 0.4% |
| KwaZulu-Natal | 11531628 | 29016 | 501 (1.7) | 32923 | 660 (2.0) | 33458 | 706 (2.1) | 290 | 0.1% |
| North West | 4108816 | 8115 | 999 (12.3) | 10661 | 1467 (13.8) | 12821 | 1939 (15.1) | 312 | 1.4% |
| Gauteng | 15488137 | 52006 | 2614 (5.0) | 63895 | 4107 (6.4) | 82730 | 6960 (8.4) | 534 | 2.0% |
| Mpumalanga | 4679786 | 9625 | 577 (6.0) | 10298 | 804 (7.8) | 9514 | 946 (9.9) | 203 | 2.1% |
| Limpopo | 5852553 | 3463 | 161 (4.6) | 4104 | 223 (5.4) | 4650 | 234 (5.0) | 79 | -0.4% |
| Unknown | | 422 | 27 (6.4) | 320 | 14 (4.4) | 254 | 21 (8.3) | | |
| Total | 59622350 | 155347 | 9086 (5.8) | 185858 | 13268 (7.1) | 217403 | 18352 (8.4) | 365 | 1.3% |

^a 2020 Mid-year population Statistics SA

^b Current week compared to previous week

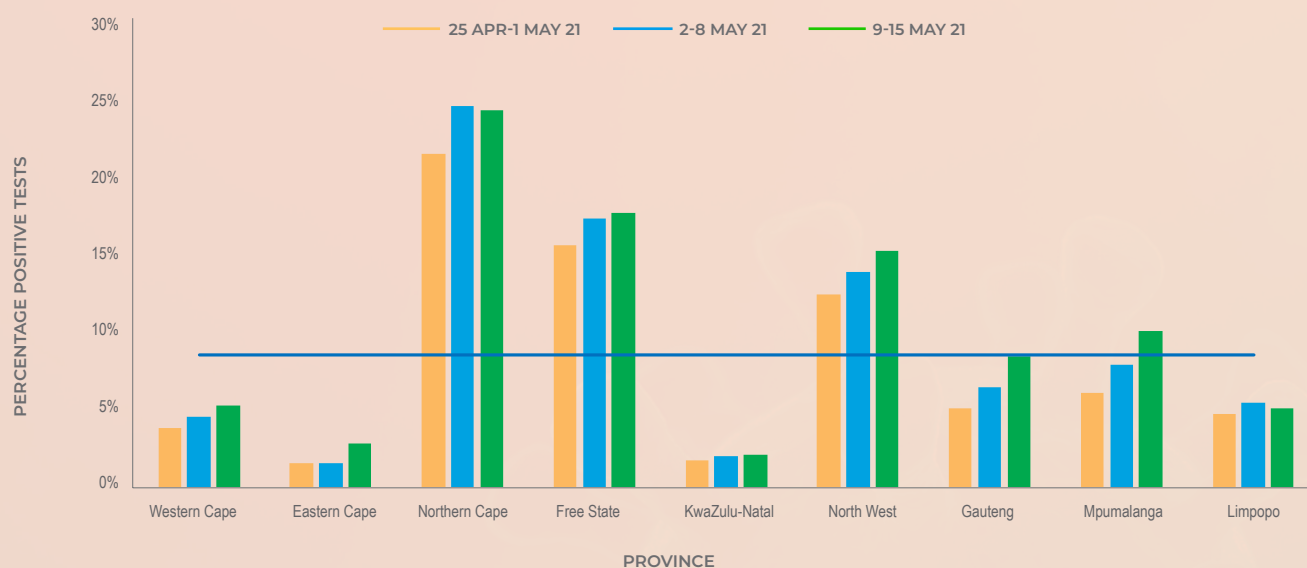


Figure 7. Weekly percentage testing positive, by province, South Africa, 25 April – 15 May 2021. The horizontal blue line shows the national mean for week 19, beginning 9 May 2021

Testing in the public sector

In the public sector, the percentage testing positive increased in the past week (7.2% in week 18 to 8.4% in week 19, $P < 0.001$) (Table 4). The percentage testing positive in week 19 was highest in the Northern

Cape (25.4%), North West (17.2%) and Free State (16.4%) provinces. The percentage testing positive in the public sector remains higher than the national average, not weighted for population size, in the Northern Cape, Free State, North West, Gauteng and Mpumalanga provinces (Figure 8).

COVID-19 TESTING SUMMARY

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Table 4. Weekly number of tests and positive tests reported in the public sector, by province, South Africa, 25 April – 15 May 2021

| Province | 25 Apr-1 May 2021 | | 2-8 May 2021 | | 9-15 May 2021 | |
|---------------|-------------------|------------------------|--------------|------------------------|---------------|------------------------|
| | No. of tests | No. positive tests (%) | No. of tests | No. positive tests (%) | No. of tests | No. positive tests (%) |
| Western Cape | 7612 | 258 (3.4) | 8511 | 391 (4.6) | 8556 | 468 (5.5) |
| Eastern Cape | 5514 | 68 (1.2) | 6301 | 65 (1.0) | 7078 | 130 (1.8) |
| Northern Cape | 3709 | 767 (20.7) | 4754 | 1126 (23.7) | 5543 | 1409 (25.4) |
| Free State | 6727 | 926 (13.8) | 7062 | 1144 (16.2) | 6938 | 1139 (16.4) |
| KwaZulu-Natal | 18654 | 276 (1.5) | 20418 | 368 (1.8) | 20211 | 378 (1.9) |
| North West | 3649 | 533 (14.6) | 4512 | 741 (16.4) | 4991 | 858 (17.2) |
| Gauteng | 14200 | 883 (6.2) | 16499 | 1152 (7.0) | 17714 | 1512 (8.5) |
| Mpumalanga | 5065 | 259 (5.1) | 4691 | 273 (5.8) | 3050 | 320 (10.5) |
| Limpopo | 957 | 63 (6.6) | 1065 | 68 (6.4) | 1161 | 73 (6.3) |
| Unknown | 281 | 20 (7.1) | 112 | 9 (8.0) | 4 | 0 (0.0) |
| Total | 66368 | 4053 (6.1) | 73925 | 5337 (7.2) | 75246 | 6287 (8.4) |

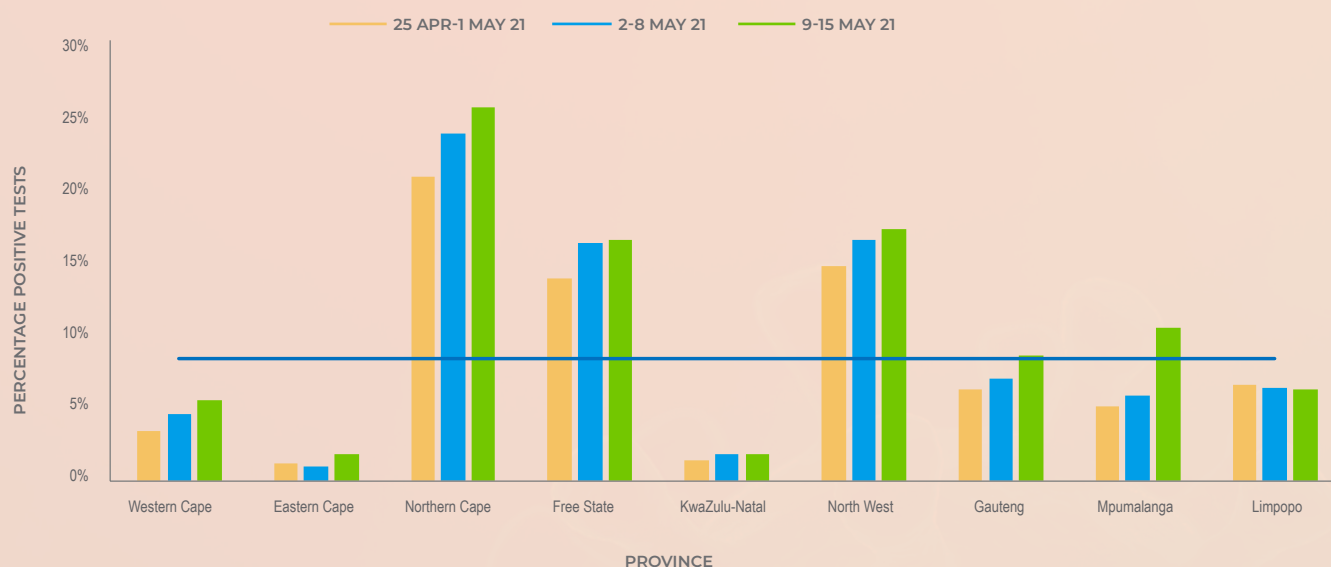


Figure 8. Weekly percentage testing positive in the public sector, by province, South Africa, 25 April – 15 May 2021. The horizontal blue line shows the national mean for week 19 of 2021, beginning 9 May 2021.

Facilities with high proportions testing positive

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 and at least five positive results in the week of 9-15 May 2021, with the highest proportion testing positive nationally.

Eighteen of the 25 facilities showing the highest PTP are in the Northern Cape, four in the North West, two in the Free State, and one in Gauteng.

COVID-19 TESTING SUMMARY

SOUTH AFRICA | WEEK 19 2021

Table 5.1 Public sector healthcare facilities with a high proportion testing positive, 9 - 15 May 2021

| Facility Name | Province | Tests | PTP (95% CI) |
|---------------|---------------|-------|---------------------|
| Facility 1 | Northern Cape | 26 | 0.769 (0.607;0.931) |
| Facility 2 | Northern Cape | 32 | 0.594 (0.424;0.764) |
| Facility 3 | Northern Cape | 51 | 0.569 (0.433;0.705) |
| Facility 4 | Northern Cape | 28 | 0.500 (0.315;0.685) |
| Facility 5 | Northern Cape | 157 | 0.478 (0.400;0.556) |
| Facility 6 | Northern Cape | 32 | 0.469 (0.296;0.642) |
| Facility 7 | Northern Cape | 36 | 0.444 (0.282;0.607) |
| Facility 8 | North West | 60 | 0.433 (0.308;0.559) |
| Facility 9 | Northern Cape | 38 | 0.421 (0.264;0.578) |
| Facility 10 | Northern Cape | 86 | 0.407 (0.303;0.511) |
| Facility 11 | North West | 37 | 0.405 (0.247;0.564) |
| Facility 12 | Northern Cape | 66 | 0.394 (0.276;0.512) |
| Facility 13 | Northern Cape | 115 | 0.391 (0.302;0.481) |
| Facility 14 | Northern Cape | 31 | 0.387 (0.216;0.559) |
| Facility 15 | Northern Cape | 31 | 0.387 (0.216;0.559) |
| Facility 16 | Northern Cape | 209 | 0.383 (0.317;0.449) |
| Facility 17 | Gauteng | 27 | 0.370 (0.188;0.553) |
| Facility 18 | North West | 185 | 0.368 (0.298;0.437) |
| Facility 19 | Northern Cape | 49 | 0.367 (0.232;0.502) |
| Facility 20 | Northern Cape | 121 | 0.355 (0.270;0.441) |
| Facility 21 | North West | 113 | 0.354 (0.266;0.442) |
| Facility 22 | Northern Cape | 82 | 0.354 (0.250;0.457) |
| Facility 23 | Free State | 34 | 0.353 (0.192;0.514) |
| Facility 24 | Northern Cape | 153 | 0.353 (0.277;0.429) |
| Facility 25 | Free State | 100 | 0.350 (0.257;0.443) |

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 9 - 15 May 2021, with the highest proportion testing positive nationally. Private-sector facilities with high proportions testing positive are concentrated in Gauteng (7), Free State (6), five in the Northern Cape and four in the North West.

COVID-19 TESTING SUMMARY

SOUTH AFRICA | WEEK 19 2021

Table 5.2 Private sector healthcare facilities with a high proportion testing positive, 9 - 15 May 2021

| Facility Name | Province | Tests | PTP (95% CI) |
|---------------|---------------|-------|---------------------|
| Facility 1 | Free State | 115 | 0.383 (0.294;0.471) |
| Facility 2 | Gauteng | 95 | 0.379 (0.281;0.477) |
| Facility 3 | Northern Cape | 87 | 0.356 (0.256;0.457) |
| Facility 4 | North West | 56 | 0.339 (0.215;0.463) |
| Facility 5 | Free State | 149 | 0.329 (0.253;0.404) |
| Facility 6 | KwaZulu-Natal | 47 | 0.298 (0.167;0.429) |
| Facility 7 | Northern Cape | 1325 | 0.283 (0.259;0.307) |
| Facility 8 | Northern Cape | 64 | 0.281 (0.171;0.391) |
| Facility 9 | Northern Cape | 1145 | 0.279 (0.253;0.305) |
| Facility 10 | Gauteng | 36 | 0.278 (0.131;0.424) |
| Facility 11 | Gauteng | 36 | 0.278 (0.131;0.424) |
| Facility 12 | Gauteng | 36 | 0.278 (0.131;0.424) |
| Facility 13 | North West | 263 | 0.274 (0.220;0.328) |
| Facility 14 | Free State | 140 | 0.271 (0.198;0.345) |
| Facility 15 | Gauteng | 30 | 0.267 (0.108;0.425) |
| Facility 16 | North West | 30 | 0.267 (0.108;0.425) |
| Facility 17 | Free State | 144 | 0.264 (0.192;0.336) |
| Facility 18 | Western Cape | 28 | 0.250 (0.090;0.410) |
| Facility 19 | North West | 168 | 0.250 (0.185;0.315) |
| Facility 20 | Western Cape | 155 | 0.245 (0.177;0.313) |
| Facility 21 | Gauteng | 102 | 0.245 (0.162;0.329) |
| Facility 22 | Free State | 29 | 0.241 (0.086;0.397) |
| Facility 23 | Northern Cape | 43 | 0.233 (0.106;0.359) |
| Facility 24 | Gauteng | 48 | 0.229 (0.110;0.348) |
| Facility 25 | Free State | 406 | 0.227 (0.186;0.267) |

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 70% of private testing facilities) in the week from 9 - 15 May 2021 have been located within the spatial framework of the health districts and health sub-districts (in the metros). Estimates of overall prevalence were derived using regression techniques. These estimates were then 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. 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. Fourteen of the 25 districts are in the Northern Cape, with four each in the North West and the Northern Cape.

Nine districts (eight in the Northern Cape; one in the Free State) showed a PTP in the current week in excess of 30%, compared to six in the preceding week. PTP exceeded 20% in all 25 districts (21 in the previous week). Significant increases were observed in eleven districts (6 in the Northern Cape, 2 in the Free State, and one each in the Western Cape, North West, and Gauteng). PTP in Sol Plaatje in the Northern Cape declined, although the decline is only marginally significant.

COVID-19 TESTING SUMMARY

SOUTH AFRICA | WEEK 19 2021

Table 6. Health sub-districts with the highest proportion testing positive based on public and private sector data for the week of 9 - 15 May 2021

| Health district or sub-district | Province | PTP (95% CI) | Previous week |
|---------------------------------|---------------|---------------------|---------------------|
| Joe Morolong | Northern Cape | 0.447 (0.324-0.570) | 0.285 (0.188-0.150) |
| Dikgatlong | Northern Cape | 0.388 (0.297-0.478) | ... |
| Tsantsabane | Northern Cape | 0.384 (0.292-0.476) | 0.319 (0.210-0.455) |
| Siyathemba | Northern Cape | 0.371 (0.328-0.414) | 0.284 (0.243-0.079) |
| Thembelihle | Northern Cape | 0.353 (0.254-0.453) | 0.433 (0.313-0.236) |
| Mafube | Free State | 0.324 (0.211-0.436) | 0.243 (0.127-0.186) |
| Siyancuma | Northern Cape | 0.314 (0.273-0.355) | 0.362 (0.296-0.292) |
| Kheis | Northern Cape | 0.313 (0.216-0.410) | 0.155 (0.087-0.261) |
| Ga-Segonyana | Northern Cape | 0.307 (0.257-0.357) | 0.304 (0.249-0.418) |
| Matzikama | Western Cape | 0.288 (0.231-0.346) | 0.148 (0.104-0.056) |
| Emthanjeni | Northern Cape | 0.287 (0.246-0.328) | 0.255 (0.194-0.207) |
| Letsemeng | Free State | 0.283 (0.235-0.331) | 0.165 (0.120-0.153) |
| Sol Plaatjie | Northern Cape | 0.274 (0.260-0.287) | 0.304 (0.288-0.308) |
| Moghaka | Free State | 0.265 (0.224-0.307) | 0.213 (0.169-0.252) |
| Kareeberg | Northern Cape | 0.263 (0.191-0.335) | 0.107 (0.000-0.253) |
| Maquassi Hills | North West | 0.248 (0.191-0.304) | 0.222 (0.162-0.305) |
| Naledi | North West | 0.245 (0.201-0.288) | ... |
| Gamagara | Northern Cape | 0.231 (0.156-0.307) | 0.170 (0.098-0.147) |
| Mafikeng | North West | 0.226 (0.202-0.250) | 0.218 (0.195-0.248) |
| Ratlou | North West | 0.226 (0.107-0.344) | 0.102 (0.017-0.080) |
| Midvaal | Gauteng | 0.224 (0.153-0.295) | 0.204 (0.129-0.046) |
| Dipaleseng | Mpumalanga | 0.222 (0.114-0.329) | 0.175 (0.047-0.152) |
| Tokologo | Free State | 0.218 (0.137-0.300) | 0.140 (0.072-0.159) |
| Kai Garib | Northern Cape | 0.217 (0.161-0.273) | ... |
| Umsobomvu | Northern Cape | 0.212 (0.152-0.272) | 0.164 (0.079-0.150) |

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 reported in the present week, is presented graphically below.

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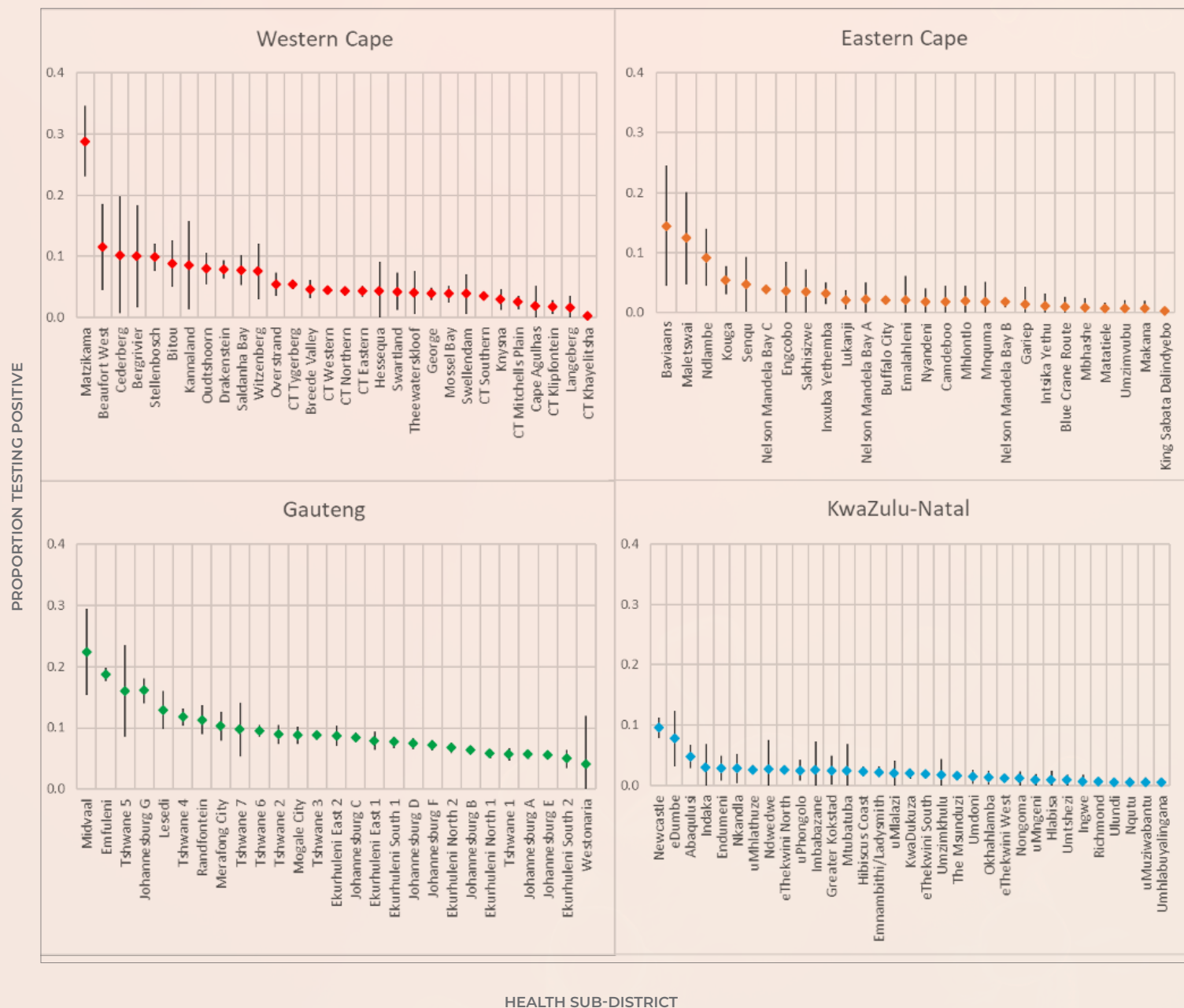


Figure 9.1 Proportions testing positive by health sub-district in the Western Cape, Eastern Cape, Gauteng and KwaZulu-Natal provinces based on public and private sector data for the week of 9 - 15 May 2021.

COVID-19 TESTING SUMMARY

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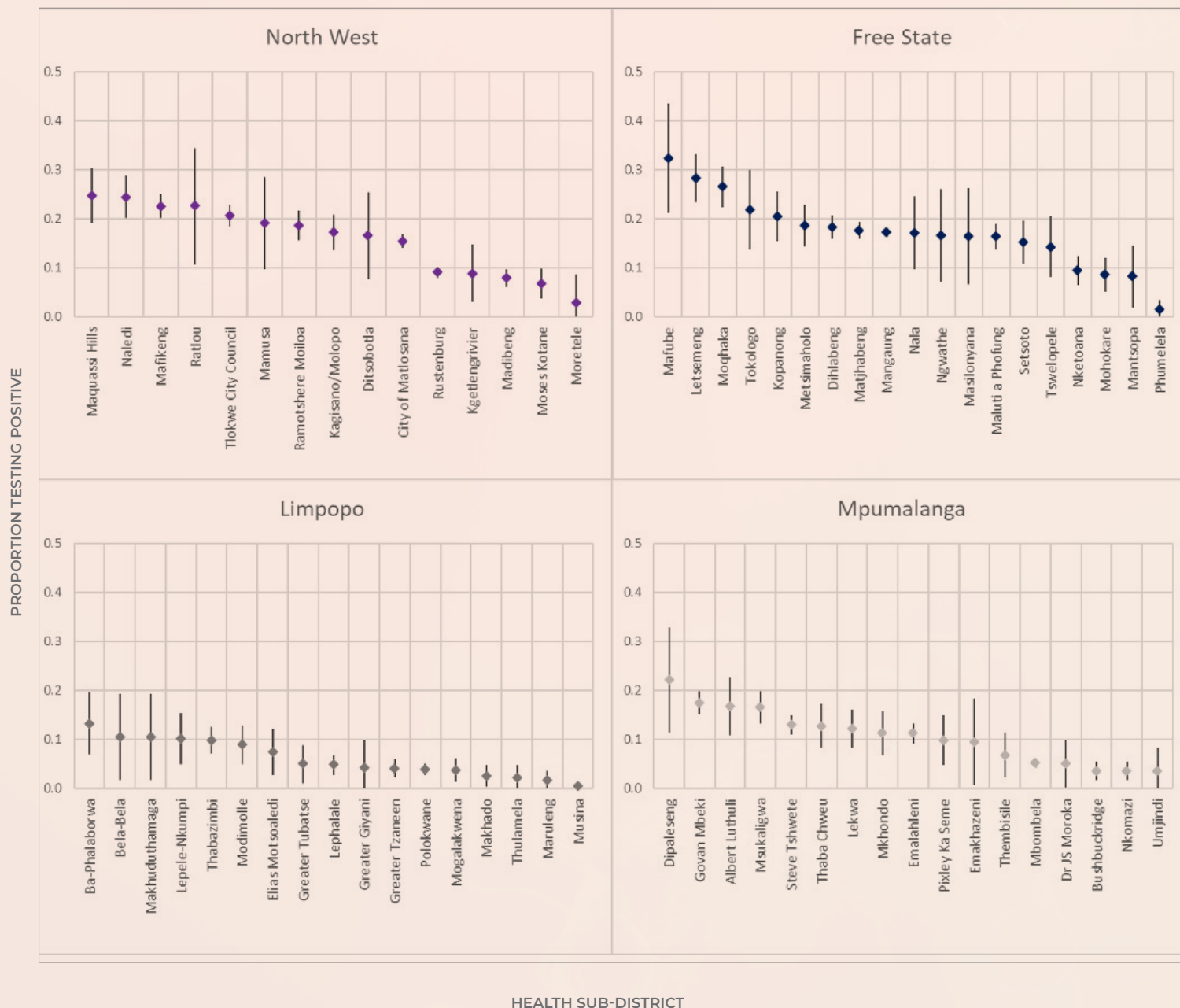


Figure 9.2 Proportions testing positive by health sub-district in the North West, Free State, Limpopo and Mpumalanga provinces based on public and private sector data for the week of 9 - 15 May 2021.

COVID-19 TESTING SUMMARY

SOUTH AFRICA WEEK 19 2021

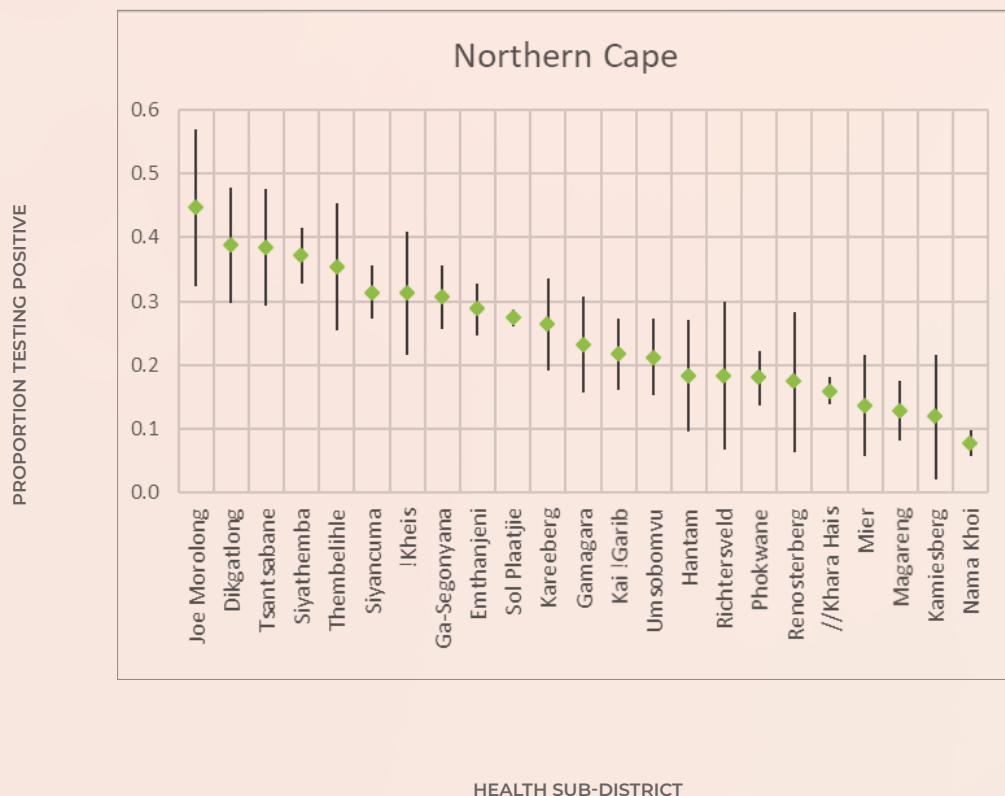


Figure 9.3 Proportions testing positive by health sub-districts in the Northern Cape Province based on public and private sector data for the week of 9 - 15 May 2021.

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

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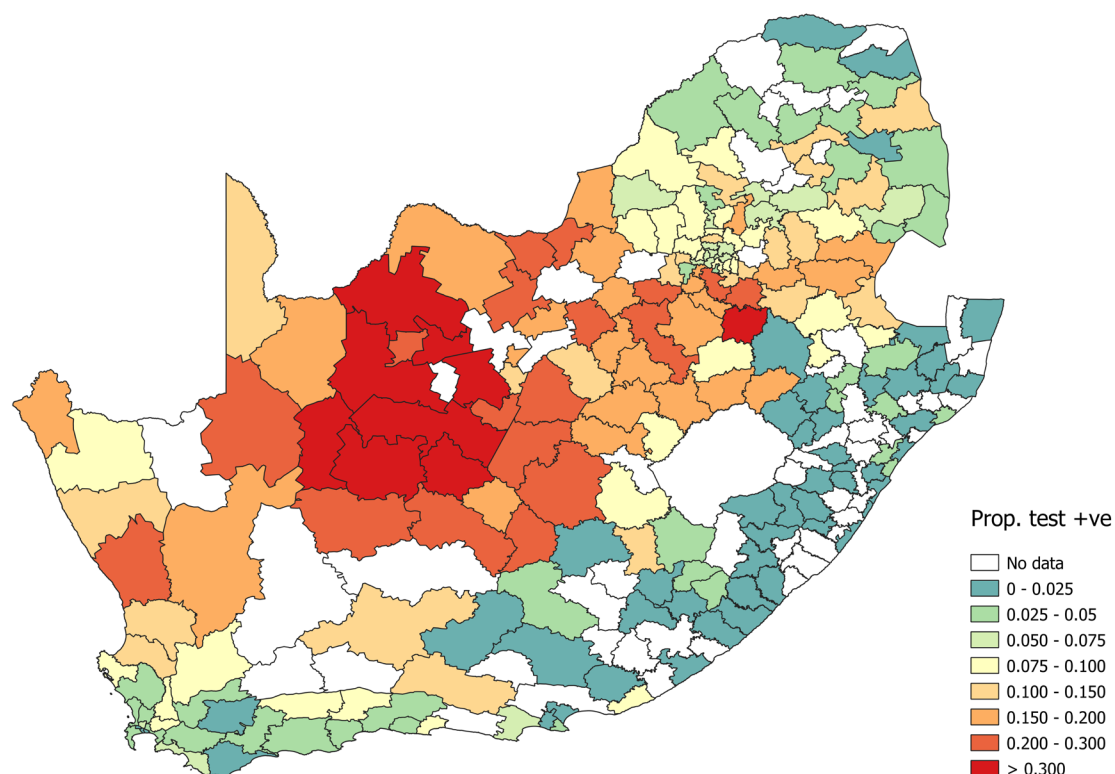


Figure 10. Proportion testing positive by health sub-district in South Africa for the week of 9 - 15 May 2021. Areas shaded white represent districts in which either (i) no tests were reported, (ii) all tests were negative, or (iii) the confidence interval exceeded 30%.

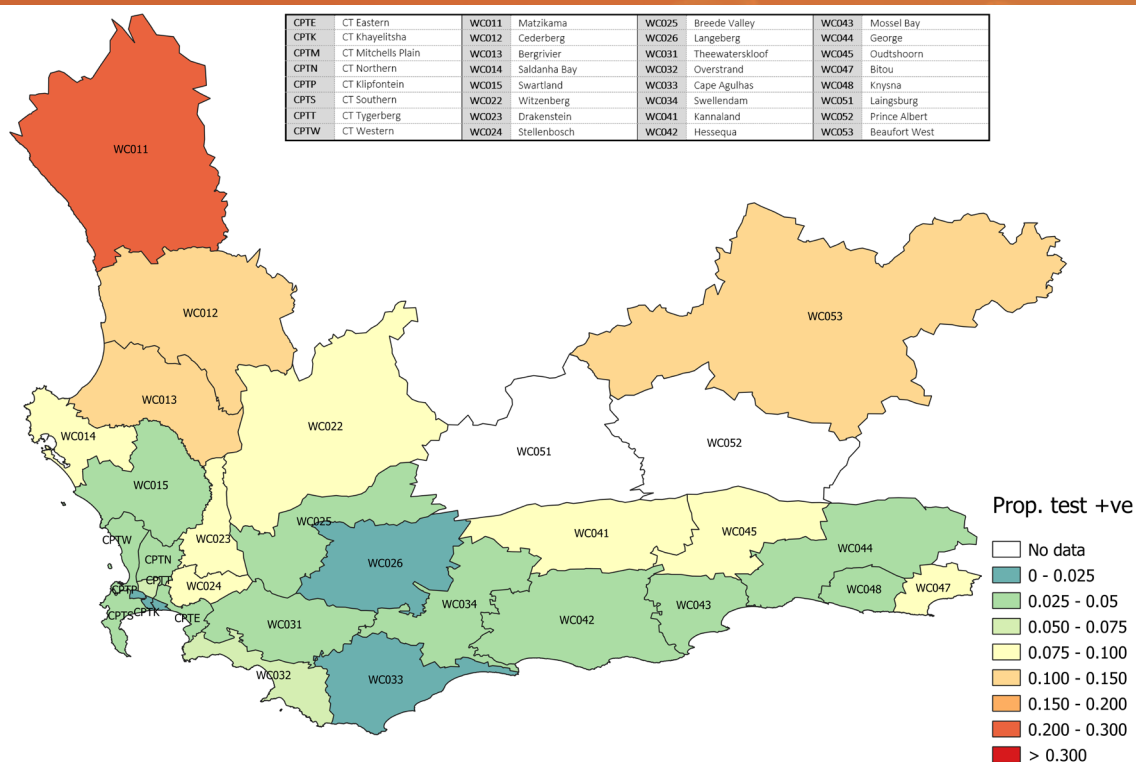


Figure 11. Proportion testing positive by health sub-district in the Western Cape Province for the week of 9 - 15 May 2021. Areas shaded white represent districts in which either (i) no tests were reported, (ii) all tests were negative, or (iii) the confidence interval exceeded 30%.

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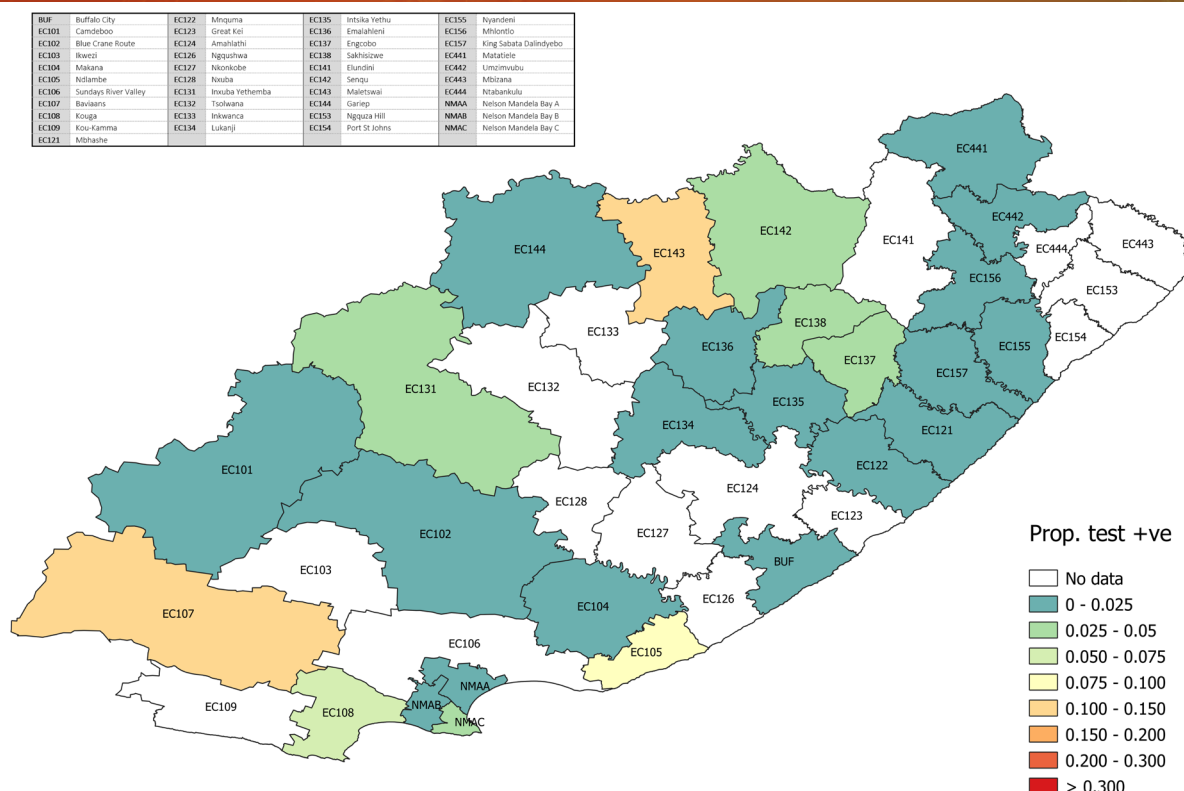


Figure 12. Proportion testing positive by health sub-district in the Eastern Cape Province for the week of 9 - 15 May 2021. Areas shaded white represent districts in which either (i) no tests were reported, (ii) all tests were negative, or (iii) the confidence interval exceeded 30%.

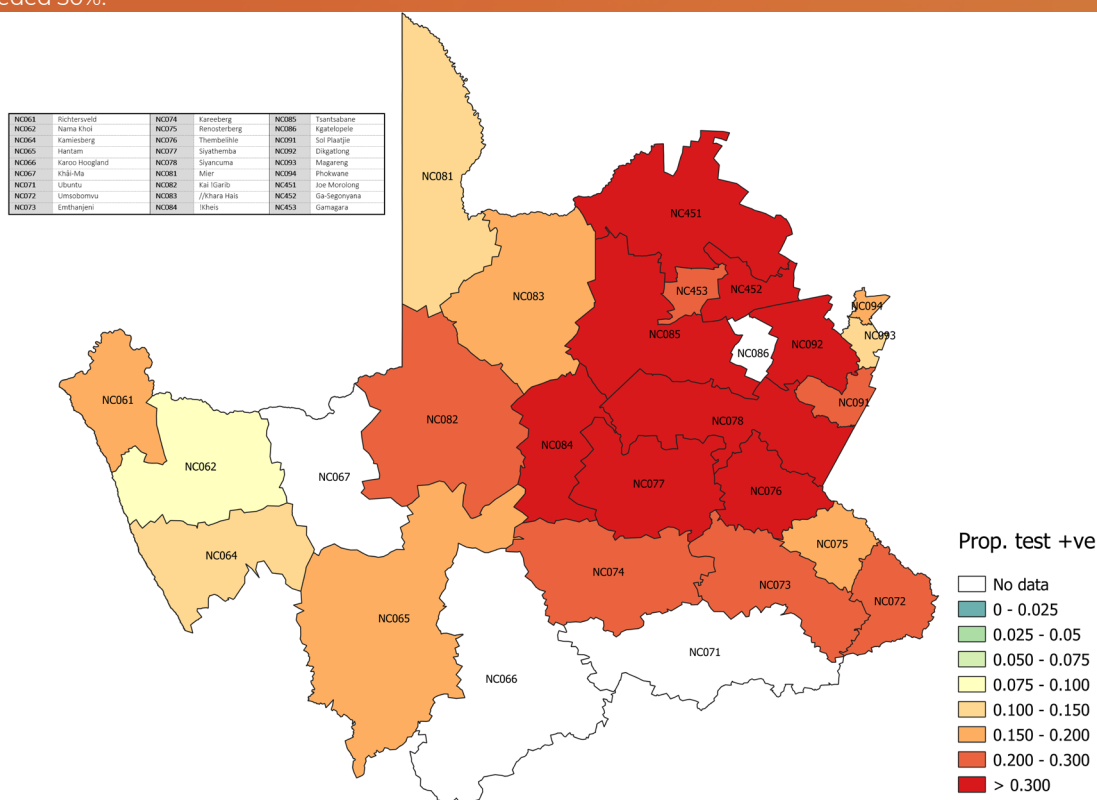


Figure 13. Proportion testing positive by health sub-district in Northern Cape Province for the week of 9 - 15 May 2021. Areas shaded white represent districts in which either (i) no tests were reported, (ii) all tests were negative, or (iii) the confidence interval exceeded 30%.

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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 |

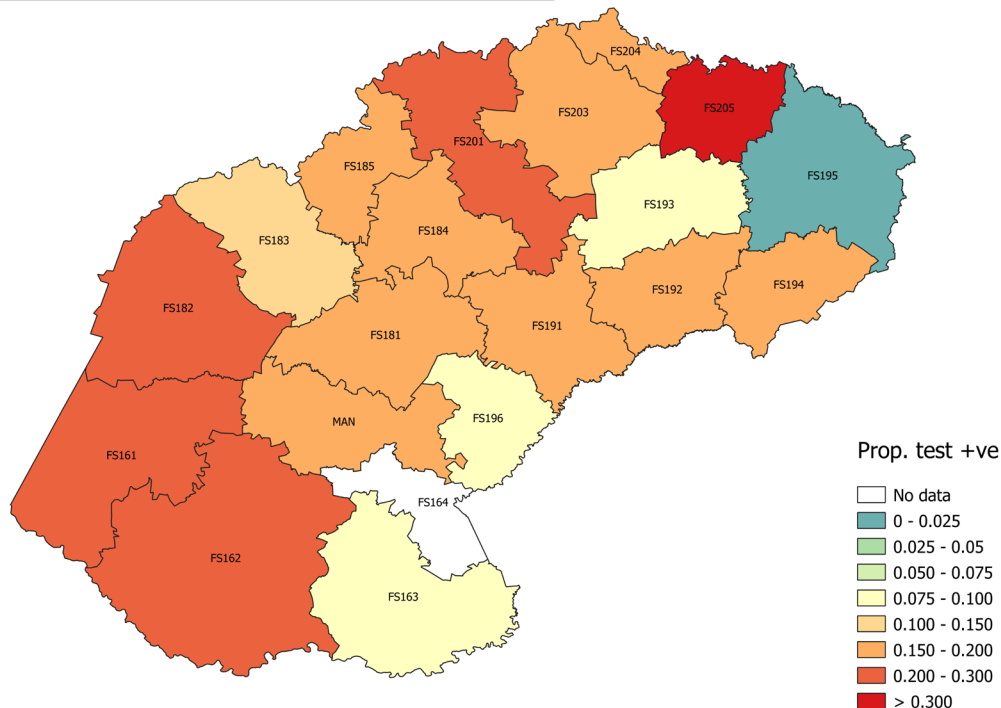


Figure 14. Proportion testing positive by health sub-district in Free State Province for the week of 9 - 15 May 2021. Areas shaded white represent districts in which either (i) no tests were reported, (ii) all tests were negative, or (iii) the confidence interval exceeded 30%.

| | | | | | |
|--------|----------------------|--------|-----------------|--------|---------------------|
| ETHN | eThekweni North | KZN233 | Indaka | KZN273 | The Big 5 False Bay |
| ETHS | eThekweni South | KZN234 | Umtshezi | KZN274 | Hiabisa |
| ETHS | eThekweni South | KZN235 | Okhahlamba | KZN275 | Mtubatuba |
| ETHW | eThekweni West | KZN236 | Imbabazane | KZN281 | Mfolozi |
| KZN211 | Vulamehlo | KZN241 | Endumeni | KZN282 | uMhlathuze |
| KZN212 | Umdoni | KZN242 | Nqutu | KZN283 | Ntambanana |
| KZN213 | Umtzombe | KZN244 | Mzinga | KZN284 | uMlalazi |
| KZN214 | uMuziwabantu | KZN245 | Umvoti | KZN285 | Mthonjaneni |
| KZN215 | Esiqolweni | KZN252 | Newcastle | KZN286 | Nkandla |
| KZN216 | Hlabisa 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 Msunduzi | KZN265 | Nongoma | KZN432 | Kwa Sani |
| KZN226 | Mkhambathini | KZN266 | Ulundi | KZN433 | Greater Kokstad |
| KZN227 | Richmond | KZN271 | Umlabuyalingana | KZN434 | Ubuhlebezwe |
| KZN232 | Ennambithi/Ladysmith | KZN272 | Jozini | KZN435 | Umtzimkhulu |

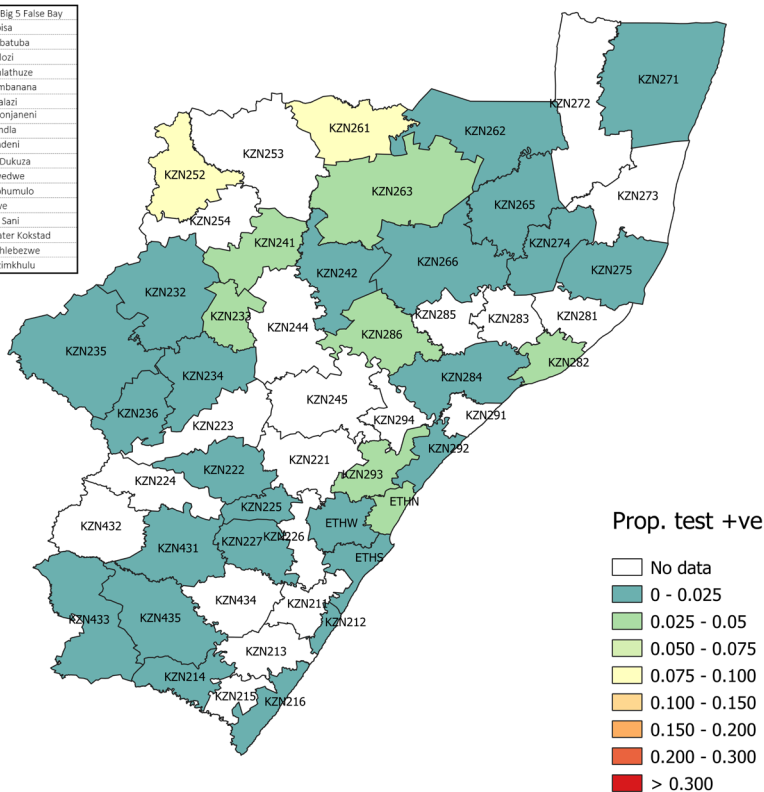


Figure 15. Proportion testing positive by health sub-district in KwaZulu-Natal Province for the week of 9 - 15 May 2021. Areas shaded white represent districts in which either (i) no tests were reported, (ii) all tests were negative, or (iii) the confidence interval exceeded 30%.

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| | | | | | |
|-------|----------------|-------|-------------------|-------|-----------------------|
| NW371 | Moretele | NW383 | Mafikeng | NW396 | Lekwa-Teemane |
| NW372 | Madibeng | NW384 | Ditsobotla | NW397 | Kagisano/Molopo |
| NW373 | Rustenburg | NW385 | Ramotshere Moiloa | NW401 | Ventersdorp |
| NW374 | Kgetlengrivier | NW392 | Naledi | NW402 | Tlokweng City Council |
| NW375 | Moses Kotane | NW393 | Mamusa | NW403 | City of Matlosana |
| NW381 | Ratlou | NW394 | Greater Taung | NW404 | Maquassi Hills |
| NW382 | Tswaing | | | | |

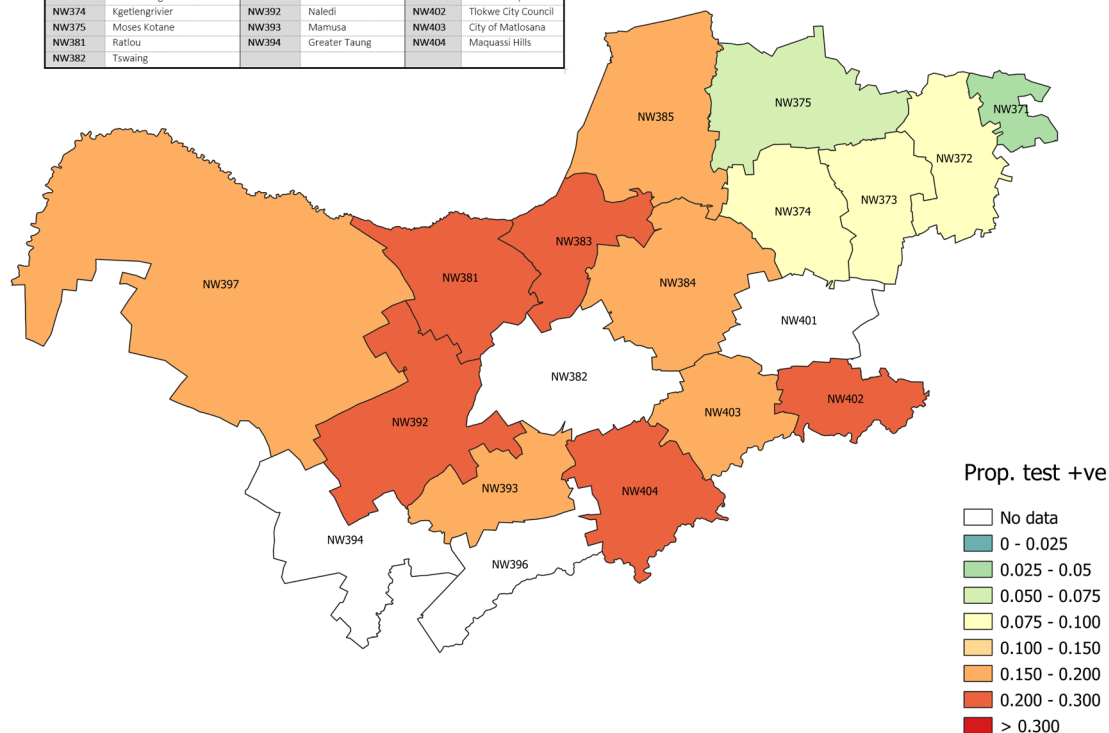


Figure 16. Proportion testing positive by health sub-district in North West Province for the week of 9 - 15 May 2021. Areas shaded white represent districts in which either (i) no tests were reported, (ii) all tests were negative, or (iii) the confidence interval exceeded 30%.

| | | | | | | | |
|-------|--------------------|-------|---------------|------|----------------|------|-----------|
| EKUE1 | Ekurhuleni East 1 | GT421 | Emfuleni | JHBA | Johannesburg A | TSH1 | Tshwane 1 |
| EKUE2 | Ekurhuleni East 2 | GT422 | Mikvaal | JHBB | Johannesburg B | TSH2 | Tshwane 2 |
| EKUN1 | Ekurhuleni North 1 | GT423 | Lesedi | JHBC | Johannesburg C | TSH3 | Tshwane 3 |
| EKUN2 | Ekurhuleni North 2 | GT481 | Mogale City | JHBD | Johannesburg D | TSH4 | Tshwane 4 |
| EKUS1 | Ekurhuleni South 1 | GT482 | Randfontein | JHBE | Johannesburg E | TSH5 | Tshwane 5 |
| EKUS2 | Ekurhuleni South 2 | GT483 | Westonaria | JHBF | Johannesburg F | TSH6 | Tshwane 6 |
| | | GT484 | Merafong City | JHBG | Johannesburg G | TSH7 | Tshwane 7 |

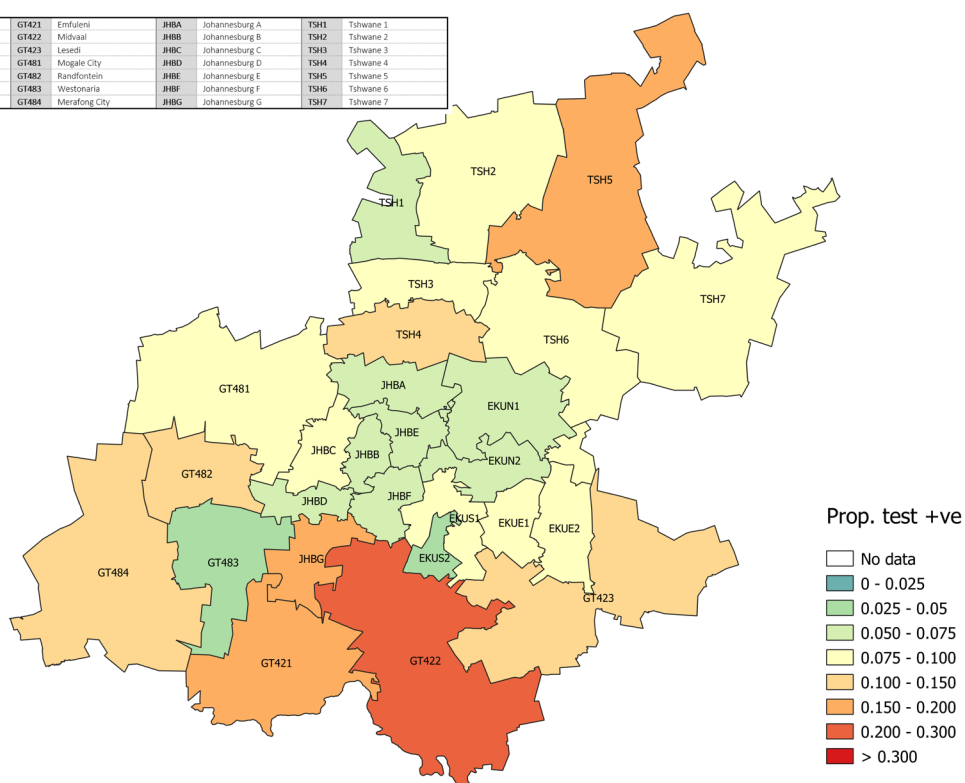


Figure 17. Proportion testing positive by health sub-district in Gauteng Province for the week of 9 - 15 May 2021. Areas shaded white represent districts in which either (i) no tests were reported, (ii) all tests were negative, or (iii) the confidence interval exceeded 30%.

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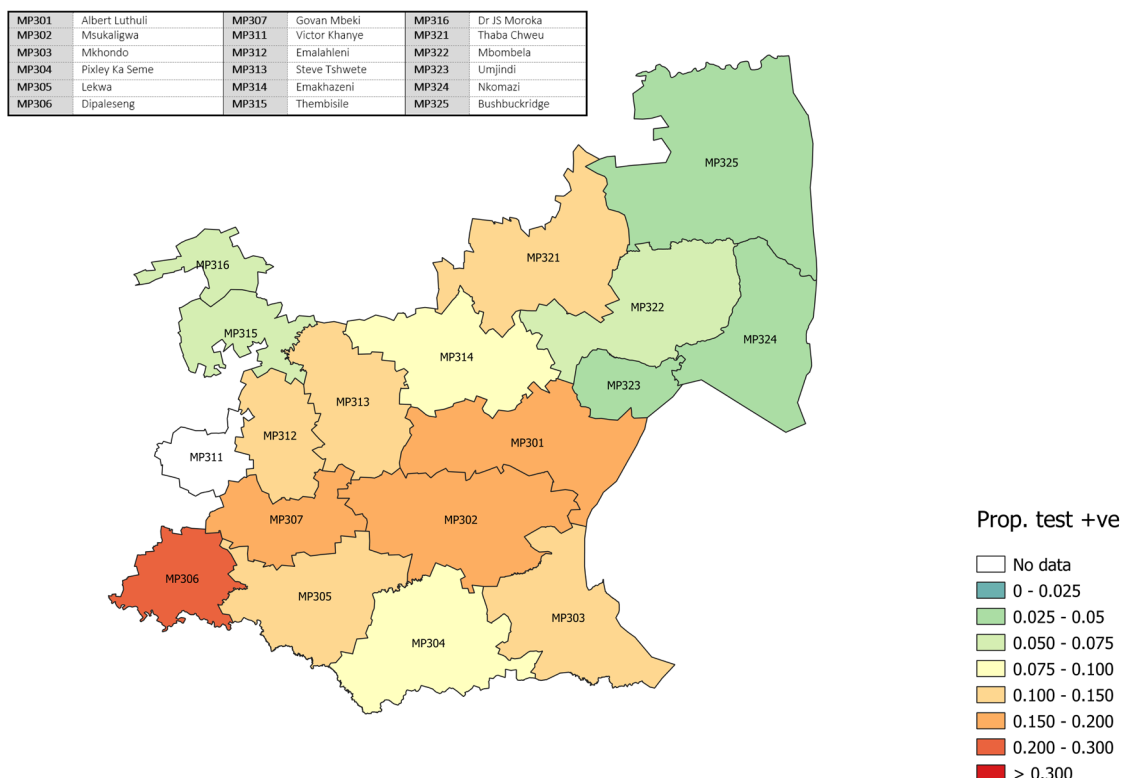


Figure 18. Proportion testing positive by health sub-district in Mpumalanga Province for the week of 9 - 15 May 2021. Areas shaded white represent districts in which either (i) no tests were reported, (ii) all tests were negative, or (iii) the confidence interval exceeded 30%.

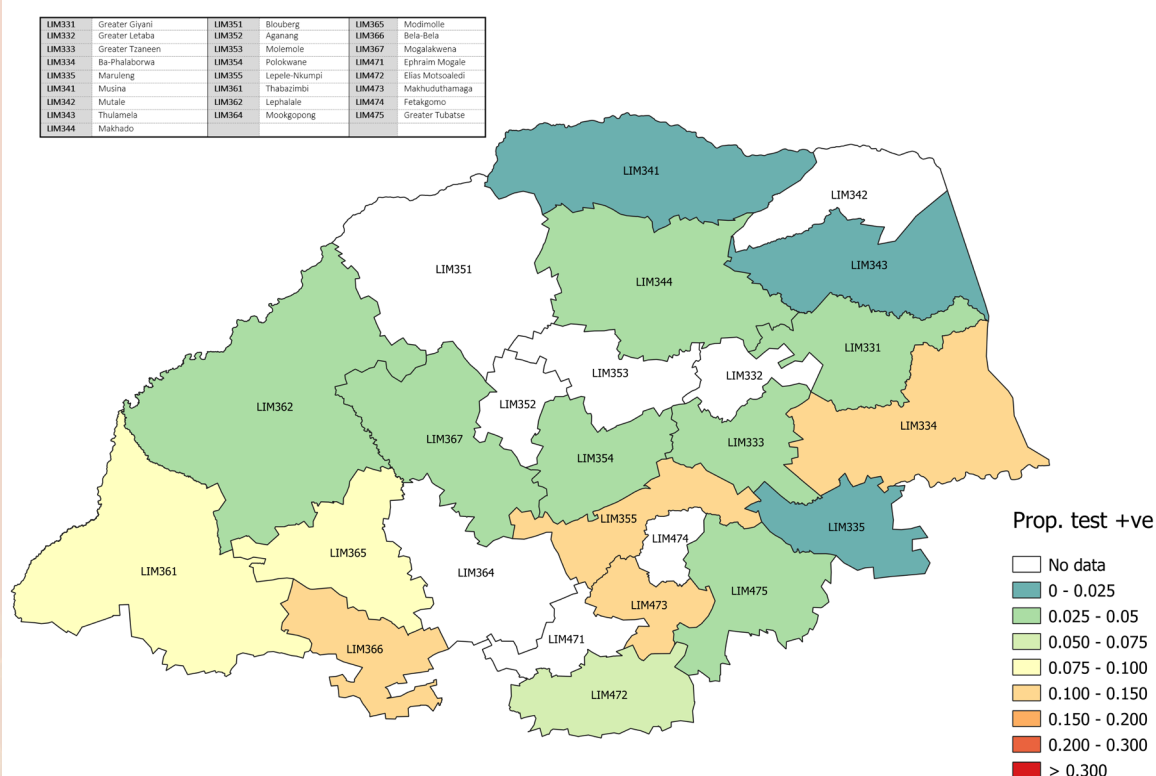


Figure 19. Proportion testing positive by health sub-district in Limpopo Province for the week of 9 - 15 May 2021. Areas shaded white represent districts in which either (i) no tests were reported, (ii) all tests were negative, or (iii) the confidence interval exceeded 30%.

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Testing by patient admission status

In week 19 of 2021, 37.4% of reported tests were for hospitalised patients; 58.5% in the public sector and 25.1% in the private sector (Figure 20). The percentage testing positive in week 19 was higher among outpatients (9.7%) compared to inpatients (6.5%),

with increases observed in both groups (Figure 21). In week 19 the mean laboratory turnaround time for PCR tests in the public sector continued to be lower for inpatients (1.3 days) compared to outpatients (2.0 days) (Figure 22).

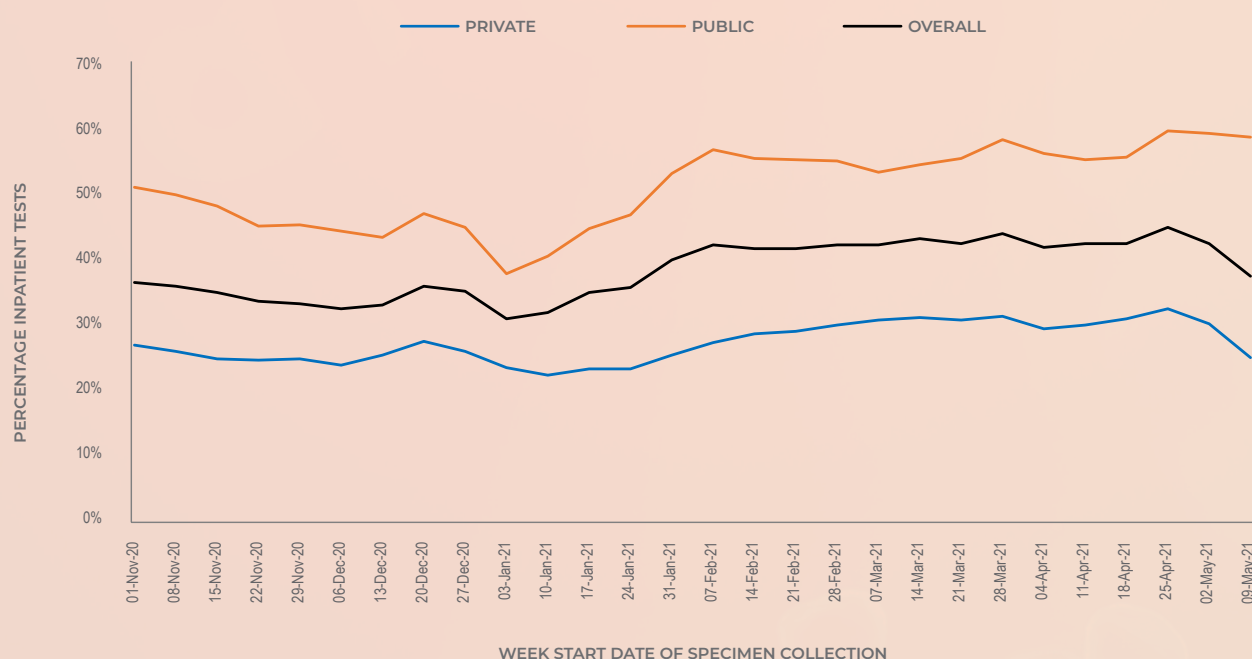


Figure 20. Percentage of inpatient tests reported by health sector, 1 November 2020 – 15 May 2021

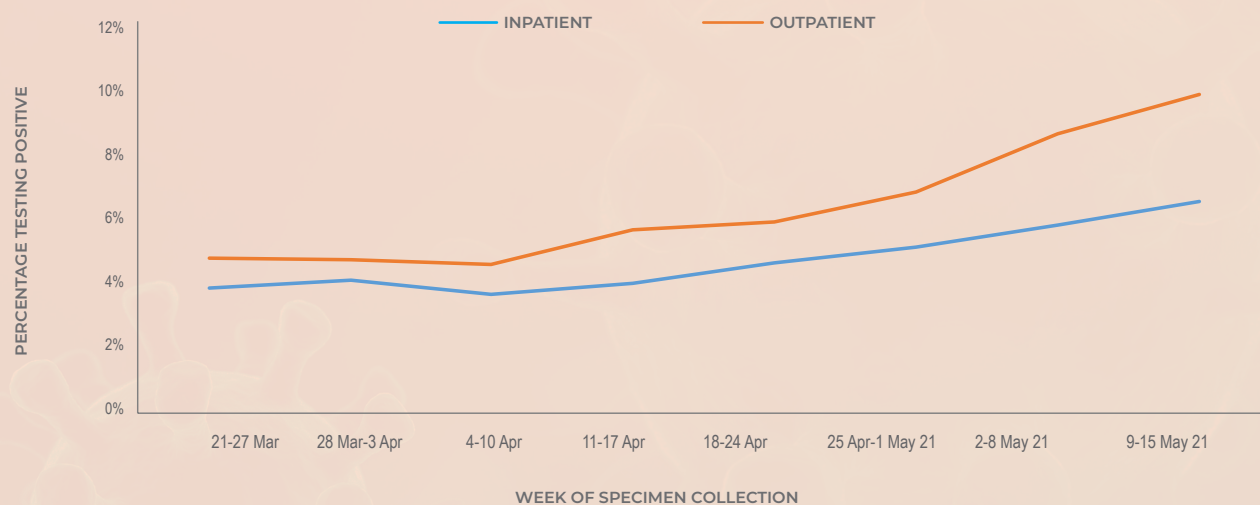


Figure 21. Percentage testing positive by patient admission status in the public sector, 21 March – 15 May 2021

COVID-19 TESTING SUMMARY

SOUTH AFRICA WEEK 19 2021

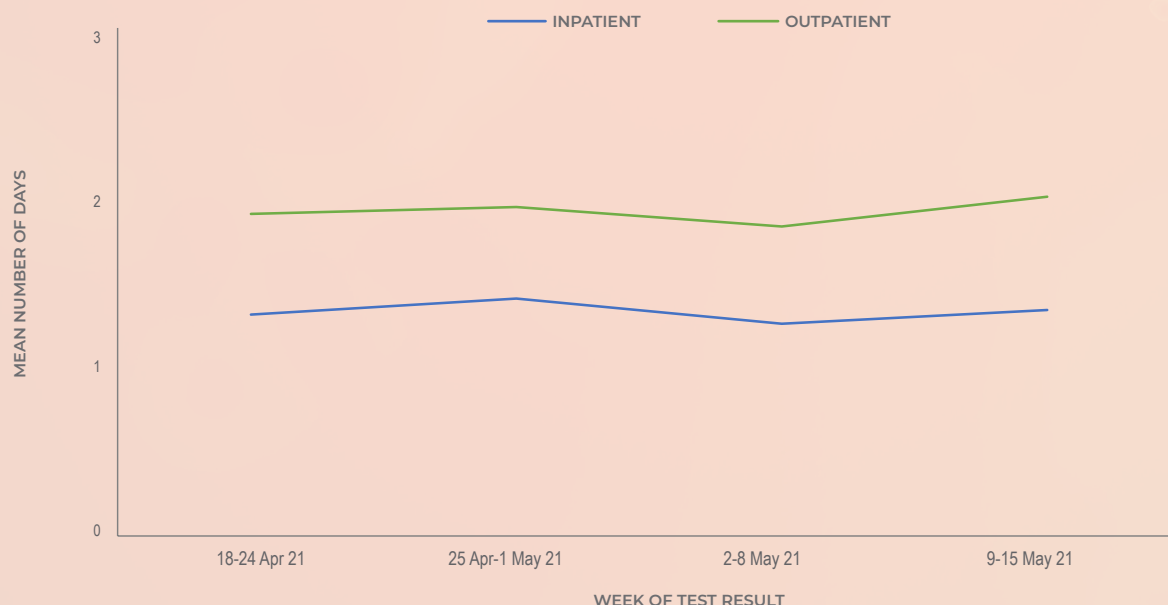


Figure 22. Mean number of days between date of specimen collection and date of test result for PCR tests in the public sector by patient admission status, 18 April – 15 May 2021

Testing by age and sex

The mean age of individuals tested in week 19 of 2021 was 40.3 years, and was similar among males (40.5 years) and females (40.2 years). The majority of reported tests (51%) were in individuals in the 20-49 years' age group, with a peak in the 50-54 year age group (Figure 23). In week 19, the testing rate was higher in females (366 per 100,000 persons) than in males (348 per 100,000 persons) (Figure 24). Testing rates in week

19 were highest in the 50-54 year age group in both males (1349 per 100,000 persons) and females (1101 per 100,000 persons). The percentage testing positive was highest in individuals aged 55-59 years (10.5%) and 65-69 years (10.5%). In males, the percentage testing positive was highest in individuals aged 65-69 years (10.4%). In females, the highest percentage testing positive was observed in individuals aged 55-59 years (11.7%).

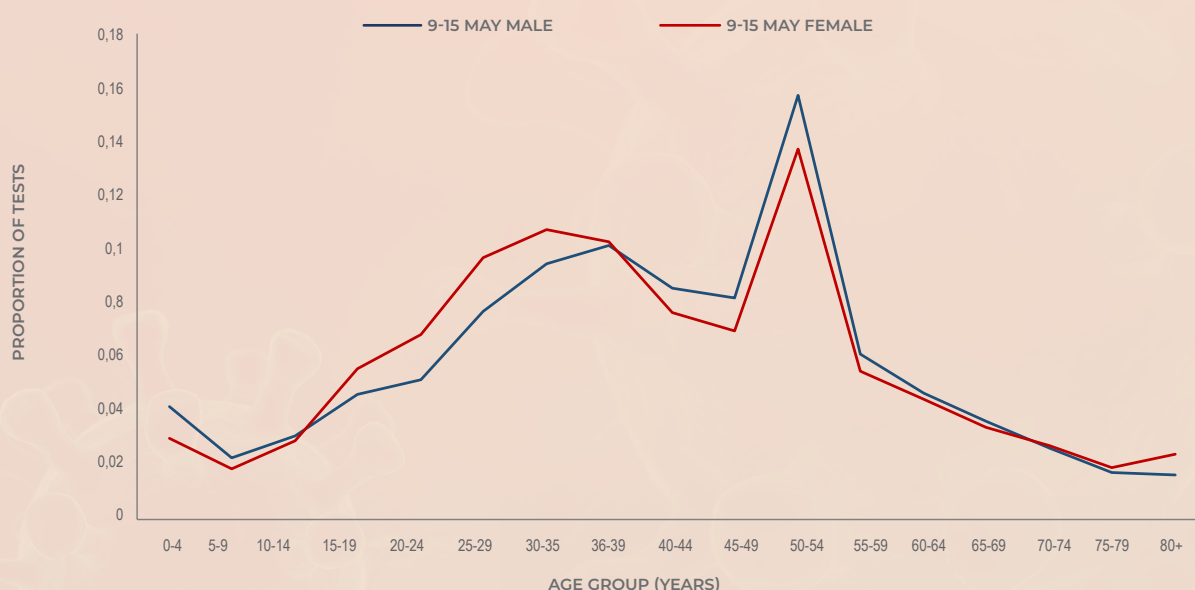


Figure 23. Proportion of tests by age group and sex, South Africa, week 19, 9 - 15 May 2021

COVID-19 TESTING SUMMARY

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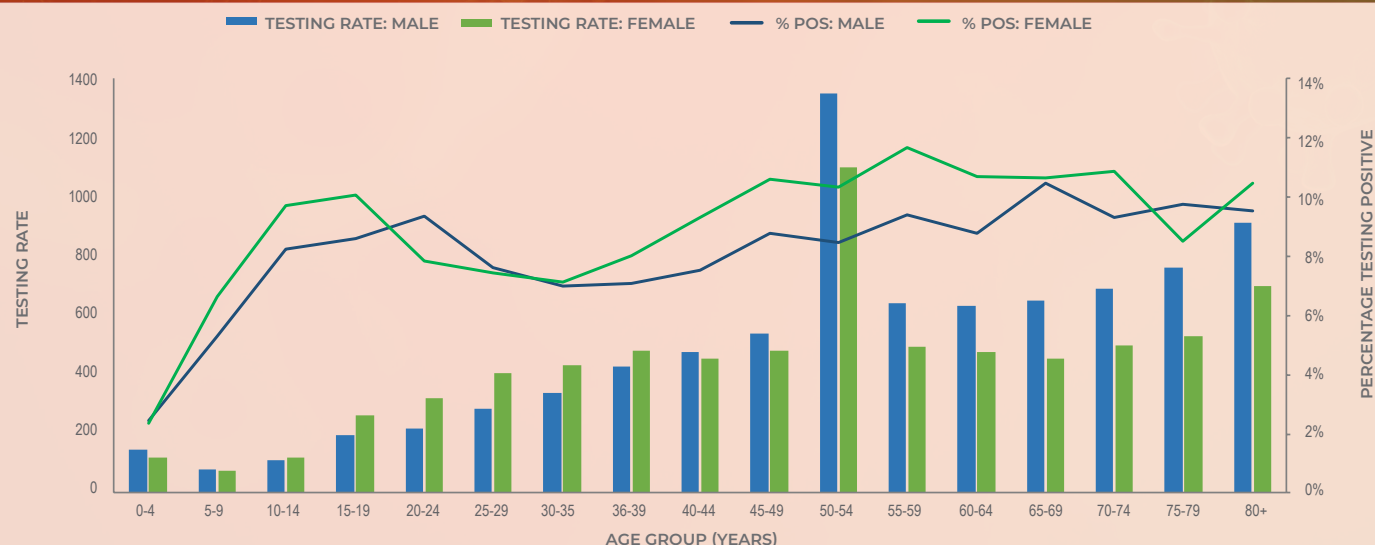


Figure 24. Testing rates per 100,000 persons and percentage testing positive by age group and sex, South Africa, week 19, 9 - 15 May 2021

Testing by test type

Up to the end of week 19 of 2021, 8.0% (887,369/11,056,332) of all reported tests were antigen tests. The percentage of antigen tests increased in the past week, and in week 19 22.1% of reported tests were antigen-based (Figure 25). Overall, 80.1% of antigen tests have been performed in the public sector, however in week 19 antigen testing increased in the private sector and accounted for 61.5% (29,562/48,077) of antigen tests. The majority of antigen tests have been reported in KwaZulu-Natal (42.8%),

Eastern Cape (12.6%) and Gauteng (12.3%) provinces. Increases in the number of antigen tests were observed in Gauteng and Western Cape in the past week. The percentage testing positive was higher for PCR tests compared to antigen tests, and in week 19 was 9.5% for PCR tests and 4.8% for antigen tests (Figure 26). The mean turnaround time for antigen tests reported in week 19 was 3.9 days in the public sector and <0.1 day in the private sector (Figure 27). Not all antigen tests are included in this report, efforts are ongoing to improve completeness

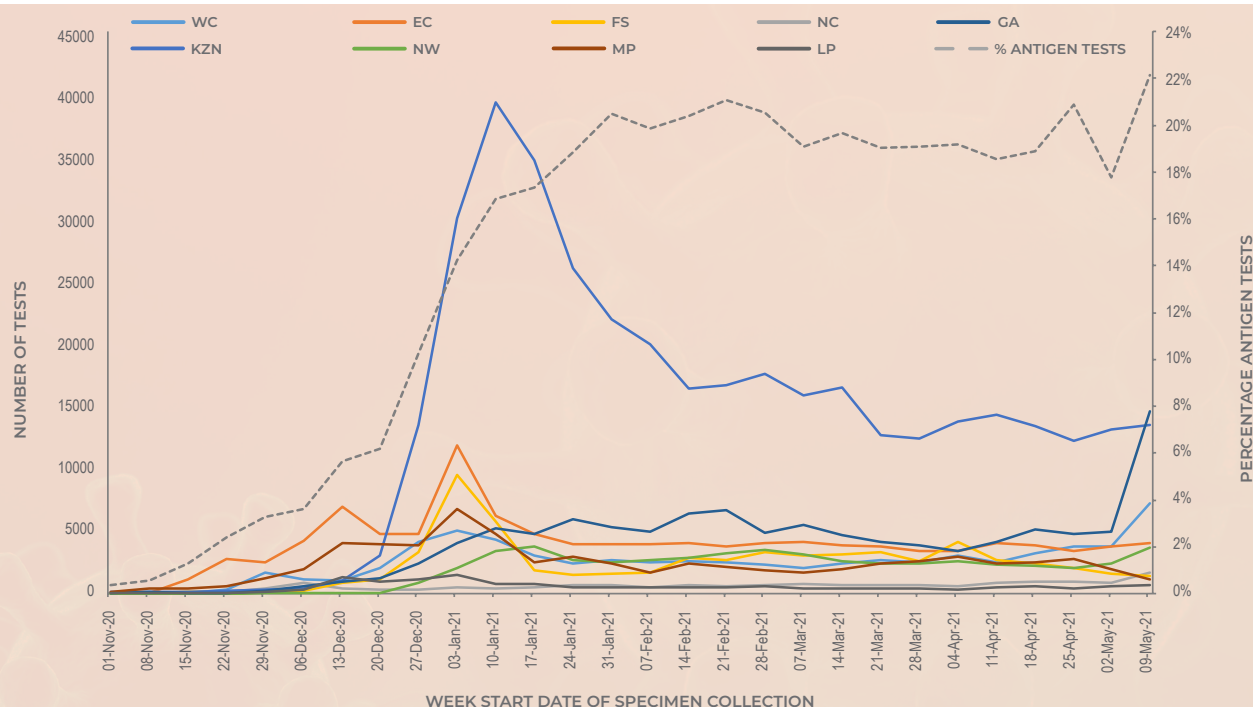


Figure 25. Number of antigen tests by province, and overall percentage antigen tests, South Africa, 1 November 2020 – 15 May 2021. WC, Western Cape; EC, Eastern Cape; FS, Free State; KZN, KwaZulu-Natal; GT, Gauteng; NC, Northern Cape; NW, North West; MP, Mpumalanga; LP, Limpopo

COVID-19 TESTING SUMMARY

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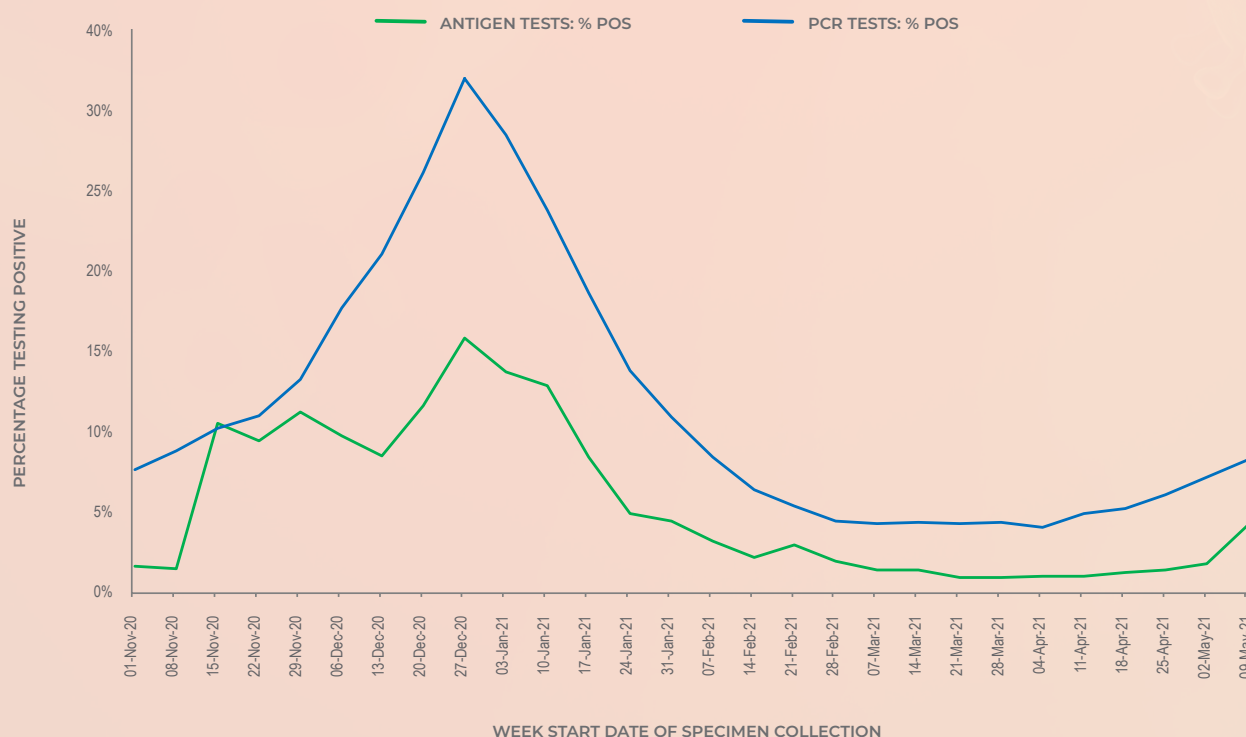


Figure 26. Percentage of laboratory tests positive for SARS-CoV-2 by test type and date of specimen collection, South Africa, 1 November 2020 – 15 May 2021

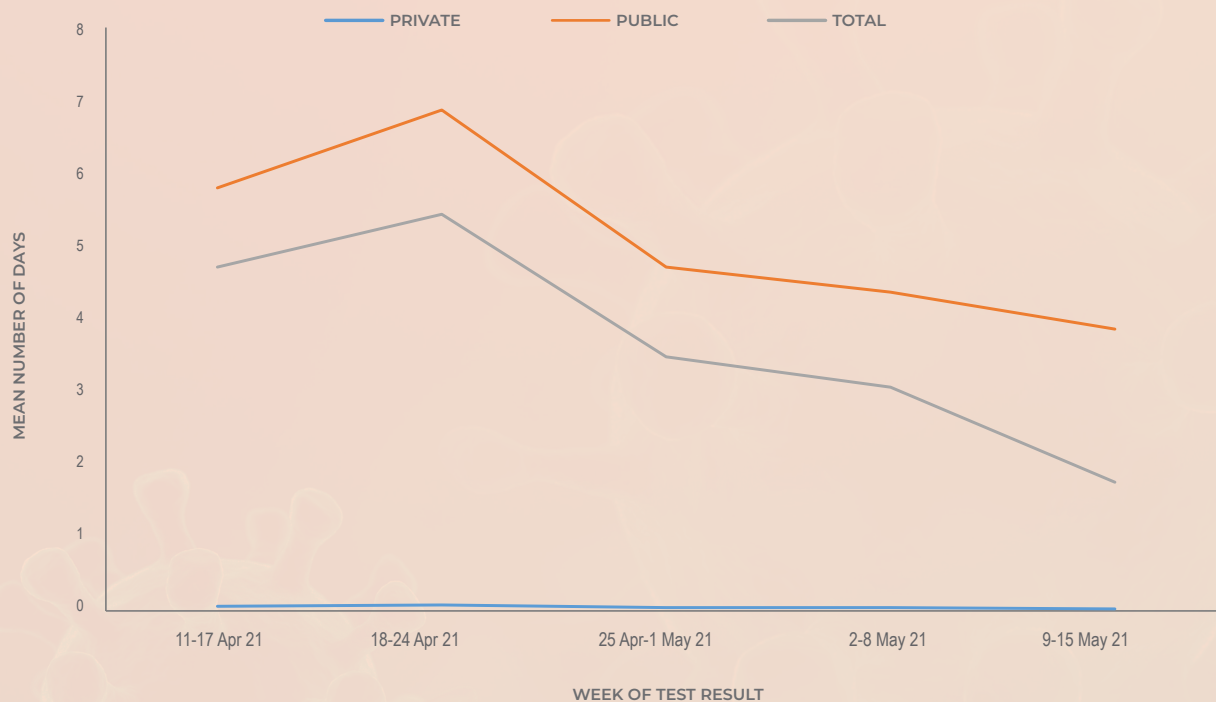


Figure 27. Mean number of days between date of specimen collection and date of test result for antigen tests, by week of test result, South Africa, 11 Apr – 15 May 2021

COVID-19 TESTING SUMMARY

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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 19 (n=217,403) was higher than the weekly number of tests reported since early February 2021. Gauteng (38.1%), Western Cape (16.1%) and KwaZulu-Natal (15.4%) provinces reported the largest number of tests in week 19. The overall testing rate in week 19 was 365 per 100,000 persons; highest in the Northern Cape (814 per 100,000 persons) and lowest in Limpopo (79 per 100,000 persons). Testing rates increased in all provinces, except Mpumalanga, in the past week. Antigen tests accounted for 22.1% (48,077/217,403) of all tests reported in week 19. The overall mean laboratory turnaround time for PCR tests was 1.0 day in week 19; 1.7 days in the public sector and 0.6 days in the private sector.

The percentage testing positive has increased in recent weeks and in week 19 of 2021 the percentage testing positive was 8.4%, which increased by 1.3% compared the previous week. The percentage testing positive in week 19 was highest in the Northern Cape (24.1%), Free State (17.5%) and North West (15.1%) provinces. The percentage testing positive was <10% in all other provinces. Compared to the previous week, the percentage testing positive increased in the Western Cape, Eastern Cape, North West, Gauteng and Mpumalanga. The percentage testing positive was unchanged in the Northern Cape, Free State, KwaZulu-Natal and Limpopo provinces.