# COVID-19 TESTING SUMMARY

NATIONAL INSTITUTE FOR COMMUNICABLE DISEASES
Division of the National Health Laboratory Service

SOUTH AFRICA | WEEK 11 2022

## 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 19 March 2022 (Week 11 of 2022).**

## HIGHLIGHTS

- The number of tests reported in week 11 of 2022 (151,351: 115,528 PCR and 35,823 antigen tests) was similar to the number of tests reported in the previous week.
- In week 11, the testing rate was highest in Gauteng (396 per 100,000 persons) and lowest in Limpopo (63 per 100,000 persons).
- In week 11, the percentage testing positive was 6.2%, which was 0.8% lower than the previous week.
- In week 11, compared to the previous week, the percentage testing positive decreased in all provinces.
- The percentage testing positive in week 11 was highest in the Western Cape (11.6%) and was <10% in all other provinces.
- The percentage testing positive was highest in the 10-14 years age group (12.6%).

## Executive Summary:

- In the period 1 March 2020 through 19 March 2022, 23,364,290 tests for SARS-CoV-2 have been reported nationally: 19,417,123 PCR and 3,947,167 antigen tests.
- The number of tests reported in week 11 of 2022 (n=151,351: 115,528 PCR and 35,823 antigen tests) was similar to the number of tests reported in the previous week.
- Gauteng reported the largest proportion of tests (41.1%), followed by KwaZulu-Natal (19.2%) and Western Cape (14.3%).
- The overall testing rate was similar to the previous week (249 per 100,000 persons in week 10 to 252 per 100,000 persons in week 11).
- In week 11, the testing rate were similar to the previous week in all provinces except in Gauteng, where a slight increase was observed. The testing rate was highest in Gauteng (396 per 100,000 persons) and lowest in Limpopo (63 per 100,000 persons).
- The testing rate in week 11 was highest in the ≥80 years age group (423 per 100,000 persons).
- In week 11, the percentage testing positive was 6.2%, which was 0.8% lower than the previous week (7.0% in week 10 to 6.2% in week 11, P<0.001).
- In the past week, the percentage testing positive decreased by 0.6% in the public sector (5.5% in week 10 to 4.9% in week 11, P<0.001) and by 1.2% in the private sector (8.1% in week 10 to 6.9% week 11, P<0.001).
- In week 11, compared to the previous week, the percentage testing positive decreased in all provinces.
- The percentage testing positive in week 11 was highest in the Western Cape (11.6%) and was <10% in all other provinces.
- Health sub-districts showing the highest percentage testing positive were concentrated in the Western Cape (n=18).
- In week 11, the percentage testing positive was highest in the 10-14 years age group (12.6%).
- Antigen tests accounted for 23.7% (35,823/151,351) of tests reported in week 11, however the number of antigen tests is likely underestimated due to under-reporting and delayed reporting of antigen tests.
- In week 11 the public sector accounted for 56.4% (20,189/35,823) of antigen tests reported. A decrease in the number of antigen tests reported was observed across all provinces in the past few weeks.
- The mean turnaround time for PCR tests reported in week 11 was 0.6 days; 1.0 day in the public sector and 0.5 days in the private sector. Turnaround times for public sector PCR tests decreased in Limpopo and remained at <2 days in all provinces.
- The mean turnaround time for antigen tests reported in week 11 was 22.3 days in the public sector and 0.1 days in the private sector.

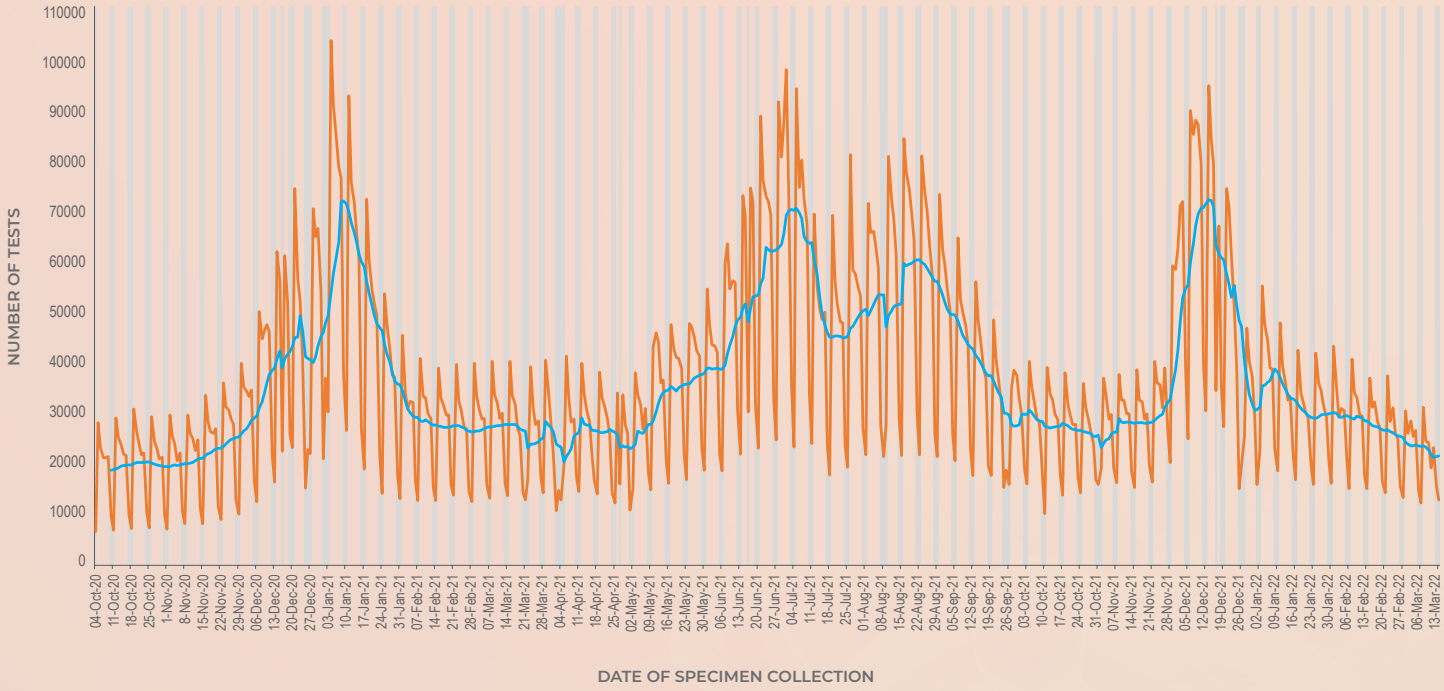


**Figure 1.** Number of SARS-CoV-2 tests reported by date of specimen collection, South Africa, 4 October 2020 – 19 March 2022. Blue line shows the 7-day moving average of the number of tests reported. Grey bars highlight weekend days and public holidays

**Table 1.** Weekly number of SARS-CoV-2 tests and positive tests reported, South Africa, 3 January 2021 – 19 March 2022

| Week number | Week beginning | No. of tests n (%) | No. of positive tests | Percentage testing positive (%) |
|---|---|---|---|---|
| 1 | 03-Jan-21 | 501383 (2.1) | 151073 | 30.1 |
| 2 | 10-Jan-21 | 418299 (1.8) | 104825 | 25.1 |
| 3 | 17-Jan-21 | 327531 (1.4) | 63282 | 19.3 |
| 4 | 24-Jan-21 | 249622 (1.1) | 34652 | 13.9 |
| 5 | 31-Jan-21 | 203796 (0.9) | 22380 | 11.0 |
| 6 | 07-Feb-21 | 193340 (0.8) | 16476 | 8.5 |
| 7 | 14-Feb-21 | 190711 (0.8) | 12191 | 6.4 |
| 8 | 21-Feb-21 | 184729 (0.8) | 10390 | 5.6 |
| 9 | 28-Feb-21 | 189730 (0.8) | 8695 | 4.6 |
| 10 | 07-Mar-21 | 193454 (0.8) | 8341 | 4.3 |
| 11 | 14-Mar-21 | 185526 (0.8) | 8156 | 4.4 |
| 12 | 21-Mar-21 | 173273 (0.7) | 7356 | 4.2 |
| 13 | 28-Mar-21 | 163974 (0.7) | 7063 | 4.3 |
| 14 | 04-Apr-21 | 180873 (0.8) | 7292 | 4.0 |
| 15 | 11-Apr-21 | 185349 (0.8) | 8847 | 4.8 |
| 16 | 18-Apr-21 | 184920 (0.8) | 9471 | 5.1 |
| 17 | 25-Apr-21 | 160024 (0.7) | 9182 | 5.7 |
| 18 | 02-May-21 | 193972 (0.8) | 13463 | 6.9 |
| 19 | 09-May-21 | 240292 (1.0) | 19939 | 8.3 |
| 20 | 16-May-21 | 248488 (1.1) | 24212 | 9.7 |
| 21 | 23-May-21 | 262636 (1.1) | 29778 | 11.3 |
| 22 | 30-May-21 | 270303 (1.2) | 36106 | 13.4 |
| 23 | 06-Jun-21 | 337911 (1.4) | 59453 | 17.6 |
| 24 | 13-Jun-21 | 370985 (1.6) | 88086 | 23.7 |
| 25 | 20-Jun-21 | 432588 (1.9) | 118653 | 27.4 |
| 26 | 27-Jun-21 | 490245 (2.1) | 146636 | 29.9 |
| 27 | 04-Jul-21 | 443837 (1.9) | 141460 | 31.9 |
| 28 | 11-Jul-21 | 320668 (1.4) | 100954 | 31.5 |
| 29 | 18-Jul-21 | 313092 (1.3) | 88443 | 28.2 |
| 30 | 25-Jul-21 | 350485 (1.5) | 88355 | 25.2 |
| 31 | 01-Aug-21 | 372223 (1.6) | 88127 | 23.7 |
| 32 | 08-Aug-21 | 359516 (1.5) | 83378 | 23.2 |
| 33 | 15-Aug-21 | 420836 (1.8) | 95388 | 22.7 |
| 34 | 22-Aug-21 | 391467 (1.7) | 78181 | 20.0 |
| 35 | 29-Aug-21 | 345227 (1.5) | 55093 | 16.0 |
| 36 | 05-Sep-21 | 300460 (1.3) | 38855 | 12.9 |
| 37 | 12-Sep-21 | 260660 (1.1) | 24018 | 9.2 |
| 38 | 19-Sep-21 | 209030 (0.9) | 14011 | 6.7 |
| 39 | 26-Sep-21 | 207754 (0.9) | 9491 | 4.6 |
| 40 | 03-Oct-21 | 197576 (0.8) | 6450 | 3.3 |
| 41 | 10-Oct-21 | 191610 (0.8) | 5043 | 2.6 |
| 42 | 17-Oct-21 | 185314 (0.8) | 3412 | 1.8 |
| 43 | 24-Oct-21 | 177118 (0.8) | 2566 | 1.4 |
| 44 | 31-Oct-21 | 182833 (0.8) | 2104 | 1.2 |
| 45 | 07-Nov-21 | 196614 (0.8) | 2320 | 1.2 |
| 46 | 14-Nov-21 | 196439 (0.8) | 4809 | 2.4 |
| 47 | 21-Nov-21 | 224205 (1.0) | 18972 | 8.5 |
| 48 | 28-Nov-21 | 380977 (1.6) | 98367 | 25.8 |
| 49 | 05-Dec-21 | 492448 (2.1) | 174975 | 35.5 |
| 50 | 12-Dec-21 | 424092 (1.8) | 154758 | 36.5 |
| 51 | 19-Dec-21 | 336746 (1.4) | 117527 | 34.9 |
| 52 | 20-Dec-21 | 214664 (0.9) | 65815 | 30.7 |
| 1 | 02-Jan-22 | 269673 (1.2) | 60924 | 22.6 |
| 2 | 09-Jan-22 | 228692 (1.0) | 35045 | 15.3 |

| | | | | |
|---|---|---|---|---|
| 3 | 16-Jan-22 | 203841 (0.9) | 23938 | 11.7 |
| 4 | 23-Jan-22 | 208747 (0.9) | 25704 | 12.3 |
| 5 | 24-Jan-22 | 205868 (0.9) | 22870 | 11.1 |
| 6 | 06-Feb-22 | 198958 (0.9) | 20316 | 10.2 |
| 7 | 13-Feb-22 | 186778 (0.8) | 18993 | 10.2 |
| 8 | 14-Feb-22 | 177135 (0.8) | 16210 | 9.2 |
| 9 | 27-Feb-22 | 164714 (0.7) | 13007 | 7.9 |
| 10 | 06-Mar-22 | 149636 (0.6) | 10522 | 7.0 |
| 11 | 13-Mar-22 | 151351 (0.6) | 9325 | 6.2 |
| | **Total** | **23,364,290 (100.0)** | **4,030,665** | |

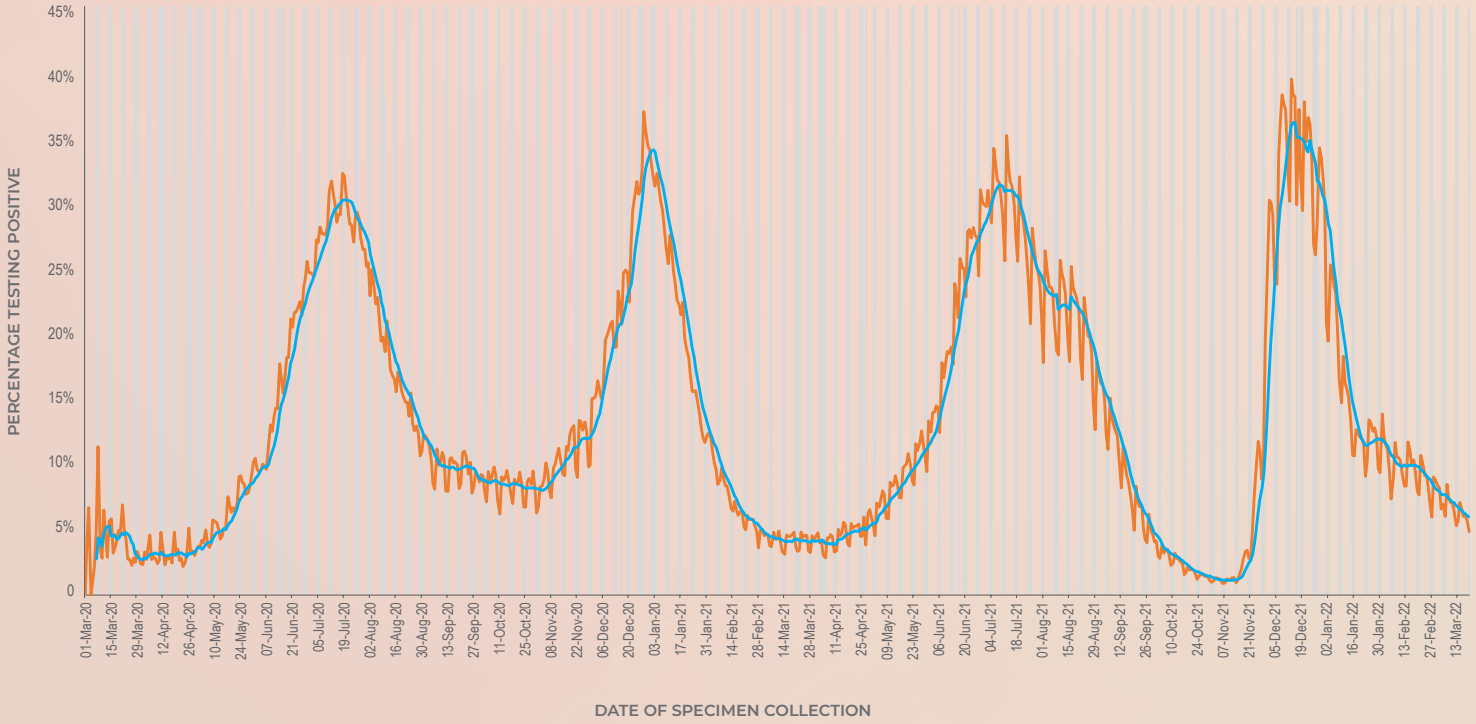


**Figure 2.** Percentage of tests positive for SARS-CoV-2 by date of specimen collection, South Africa, 1 March 2020 - 19 March 2022. Blue line shows the 7-day moving average of the percentage testing positive. Grey bars highlight weekend days and public holidays.

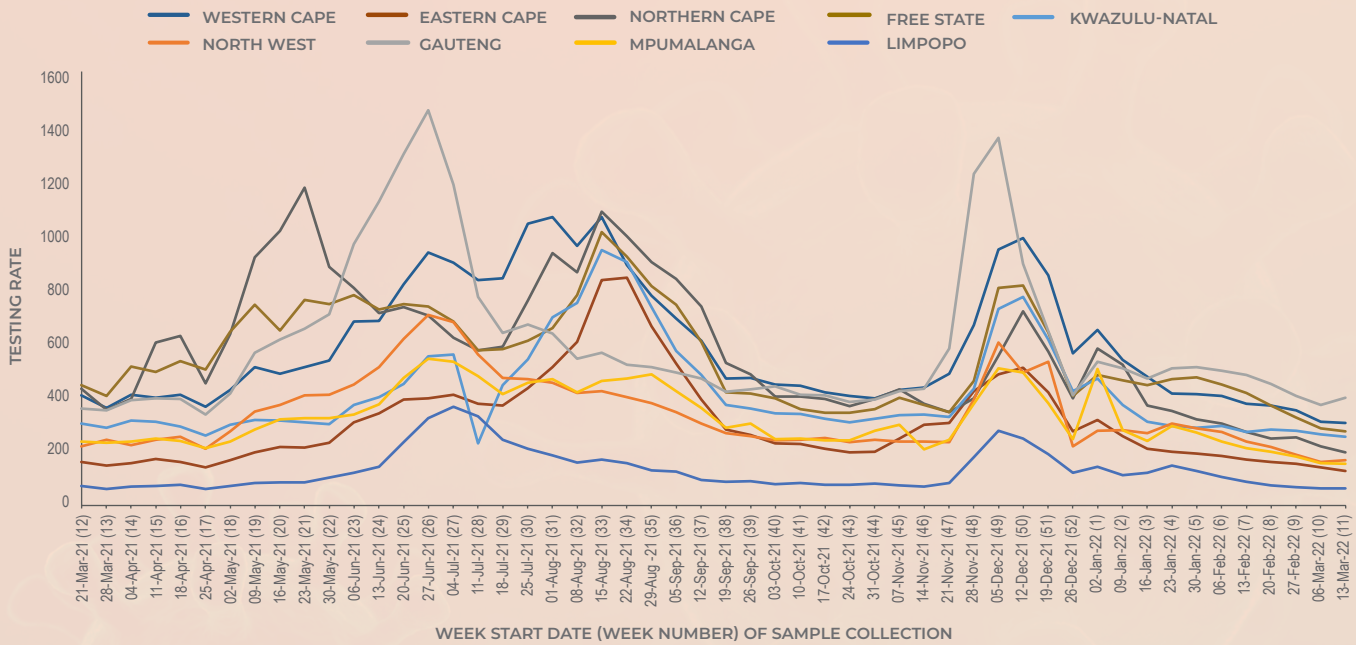


**Figure 3.** Testing rate per 100,000 persons by province and week of specimen collection, South Africa, 21 March 2021 – 19 March 2022

**Table 2.** Weekly number of tests and positive tests reported by province, South Africa, 27 February – 19 March 2022

| | | 27 Feb - 5 Mar 2022 | | 6-12 Mar 2022 | | 13-19 Mar 2022 | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Province** | **Population[a]** | **No. of tests** | **No. positive tests (%)** | **No. of tests** | **No. positive tests (%)** | **No. of tests** | **No. positive tests (%)** | **Tests per 100,000 persons** | **Change in percentage positive[b]** |
| Western Cape | 7113776 | 24940 | 2894 (11.6) | 21821 | 2678 (12.3) | 21639 | 2507 (11.6) | 304 | -0.7% |
| Eastern Cape | 6676590 | 10145 | 504 (5.0) | 9285 | 414 (4.5) | 8382 | 294 (3.5) | 126 | -1.0% |
| Northern Cape | 1303047 | 3247 | 253 (7.8) | 2818 | 208 (7.4) | 2530 | 152 (6.0) | 194 | -1.4% |
| Free State | 2932441 | 9471 | 660 (7.0) | 8295 | 437 (5.3) | 7991 | 304 (3.8) | 273 | -1.5% |
| KwaZulu-Natal | 11513575 | 31555 | 2135 (6.8) | 30191 | 1782 (5.9) | 28986 | 1582 (5.5) | 252 | -0.4% |
| North West | 4122854 | 7654 | 681 (8.9) | 6579 | 476 (7.2) | 6830 | 330 (4.8) | 166 | -2.4% |
| Gauteng | 15810388 | 63729 | 4827 (7.6) | 58340 | 3741 (6.4) | 62673 | 3610 (5.8) | 396 | -0.7% |
| Mpumalanga | 4743584 | 8463 | 726 (8.6) | 7395 | 530 (7.2) | 7294 | 337 (4.6) | 154 | -2.5% |
| Limpopo | 5926724 | 3967 | 250 (6.3) | 3685 | 193 (5.2) | 3712 | 147 (4.0) | 63 | -1.3% |
| Unknown | | 1543 | 77 (5.0) | 1227 | 63 (5.1) | 1314 | 62 (4.7) | | |
| **Total** | **60142978** | **164714** | **13007 (7.9)** | **149636** | **10522 (7.0)** | **151351** | **9325 (6.2)** | **252** | **-0.8%** |

a 2021 Mid-year population Statistics SA

b Current week compared to previous week

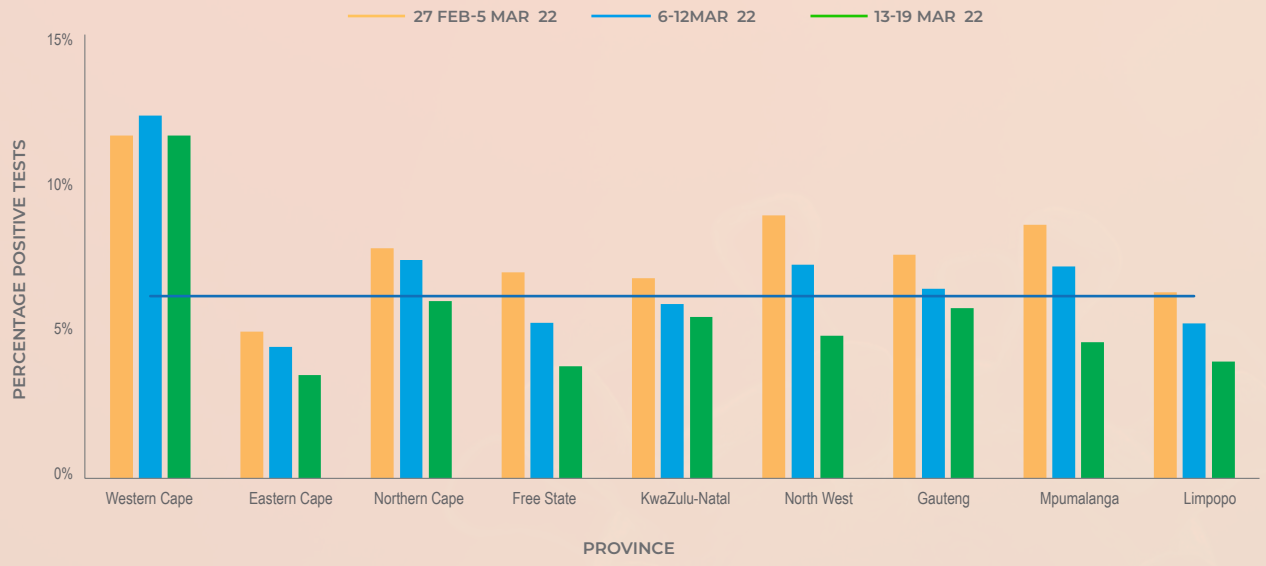


**Figure 4.** Weekly percentage testing positive by province, South Africa, 27 February – 19 March 2022. The horizontal blue line shows the national mean for week 11, beginning 13 March 2022

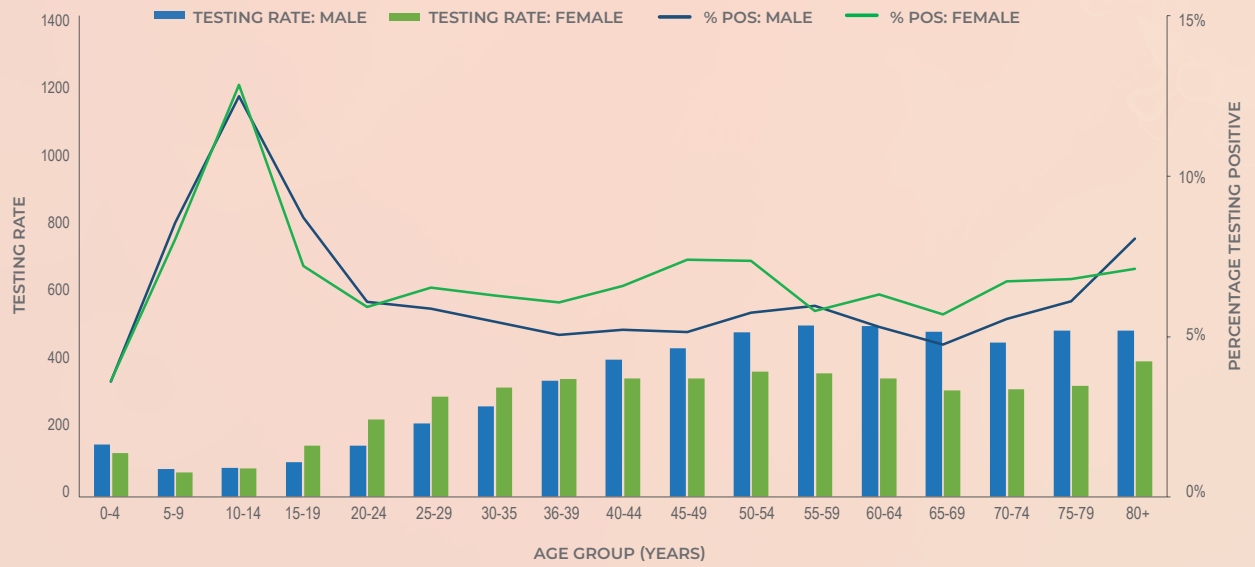


**Figure 5.** Testing rates per 100,000 persons and percentage testing positive by age group and sex, South Africa, week 11, 13-19 March 2022

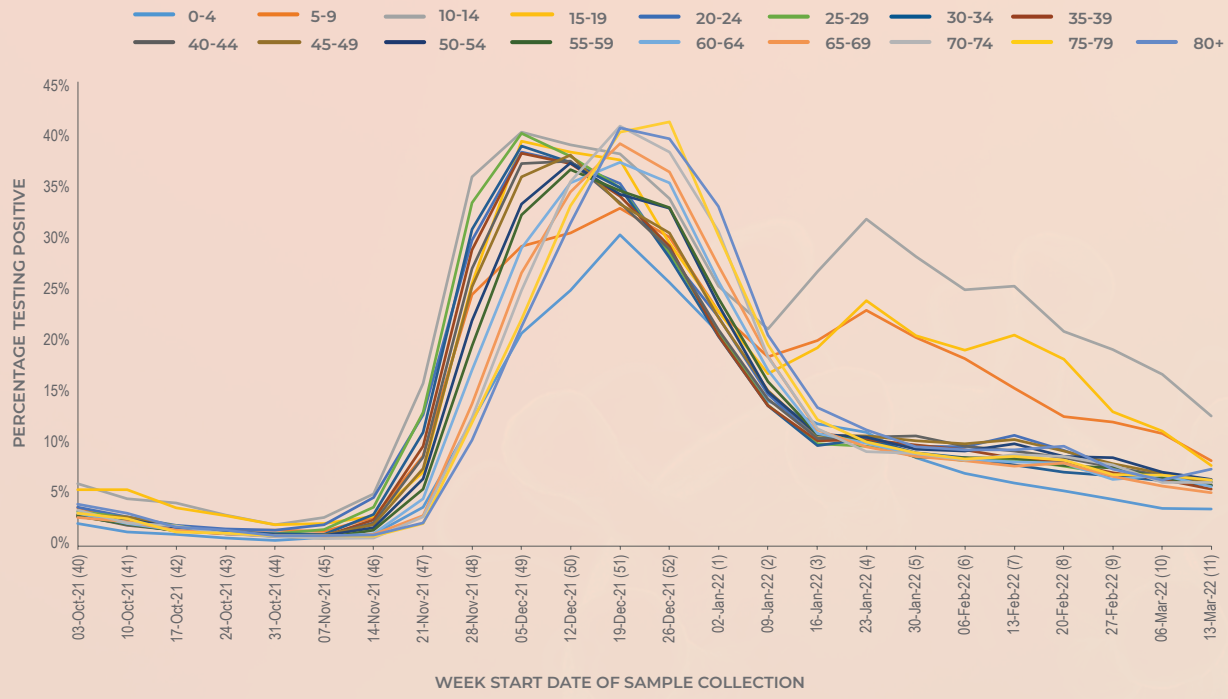


**Figure 6.** Percentage testing positive by age group and week of specimen collection, South Africa, 3 October 2021 – 19 March 2022

**Table 3.** Health sub-districts with the highest proportion testing positive based on public and private sector data for the week of 13-19 March 2022

| Health district or sub-district | Province | PTP (95% CI) | Previous week |
|---|---|---|---|
| Swartland | Western Cape | 0.340 (0.199-0.482) | 0.200 (0.074-0.325) |
| Karoo Hoogland | Northern Cape | 0.231 (0.093-0.369) | 0.270 (0.122-0.418) |
| Randfontein | Gauteng | 0.228 (0.193-0.263) | 0.315 (0.275-0.354) |
| Saldanha Bay | Western Cape | 0.222 (0.176-0.267) | 0.177 (0.138-0.216) |
| CT Northern | Western Cape | 0.192 (0.171-0.212) | 0.173 (0.154-0.192) |
| CT Eastern | Western Cape | 0.187 (0.164-0.209) | 0.147 (0.127-0.166) |
| Matzikama | Western Cape | 0.166 (0.097-0.234) | 0.167 (0.110-0.224) |
| Overstrand | Western Cape | 0.164 (0.124-0.205) | 0.137 (0.102-0.171) |
| Lephalale | Limpopo | 0.163 (0.112-0.213) | 0.099 (0.063-0.135) |
| Ga-Segonyana | Northern Cape | 0.155 (0.049-0.260) | 0.053 (0.008-0.098) |
| CT Tygerberg | Western Cape | 0.153 (0.138-0.167) | 0.159 (0.145-0.174) |
| uPhongolo | KwaZulu-Natal | 0.151 (0.105-0.197) | 0.074 (0.045-0.102) |
| Drakenstein | Western Cape | 0.150 (0.124-0.177) | 0.144 (0.120-0.168) |
| Knysna | Western Cape | 0.150 (0.101-0.200) | 0.136 (0.087-0.185) |
| Mamusa | North West | 0.141 (0.026-0.255) | 0.040 (0.000-0.094) |
| Mossel Bay | Western Cape | 0.138 (0.104-0.172) | 0.104 (0.075-0.134) |
| Swellendam | Western Cape | 0.137 (0.053-0.221) | 0.191 (0.100-0.282) |
| Breede Valley | Western Cape | 0.132 (0.092-0.172) | 0.196 (0.152-0.240) |
| George | Western Cape | 0.132 (0.106-0.158) | 0.157 (0.131-0.183) |
| Witzenberg | Western Cape | 0.132 (0.033-0.230) | 0.165 (0.076-0.255) |
| Stellenbosch | Western Cape | 0.129 (0.101-0.157) | 0.171 (0.141-0.201) |
| Nqutu | KwaZulu-Natal | 0.129 (0.080-0.177) | 0.088 (0.050-0.126) |
| CT Western | Western Cape | 0.126 (0.116-0.137) | 0.122 (0.112-0.132) |
| Oudtshoorn | Western Cape | 0.125 (0.072-0.178) | 0.135 (0.075-0.195) |
| Langeberg | Western Cape | 0.122 (0.050-0.193) | 0.121 (0.053-0.189) |

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.

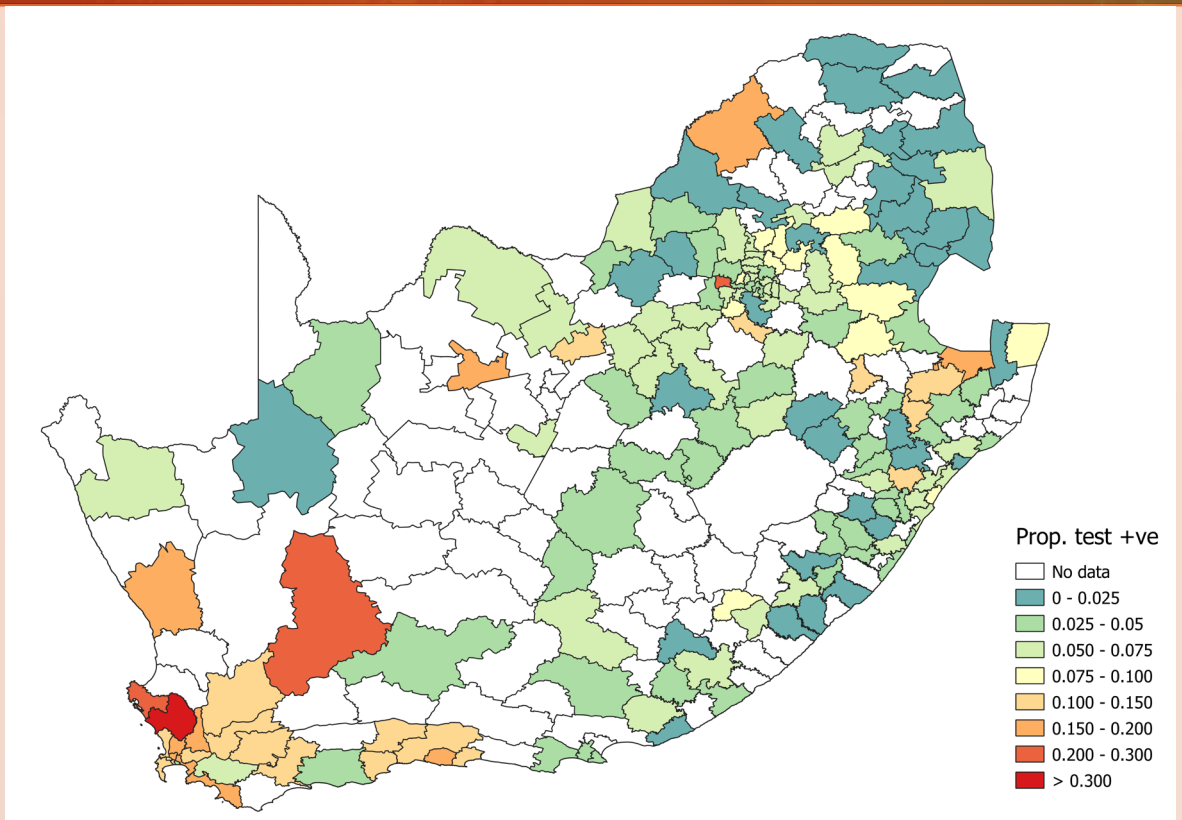


**Figure 7.** Proportion testing positive by health sub-district in South Africa for the week of 13-19 March 2022. Areas shaded white represent districts in which either (i) no tests were reported (ii) all tests were negative or (iii) the confidence interval exceeded 30%.

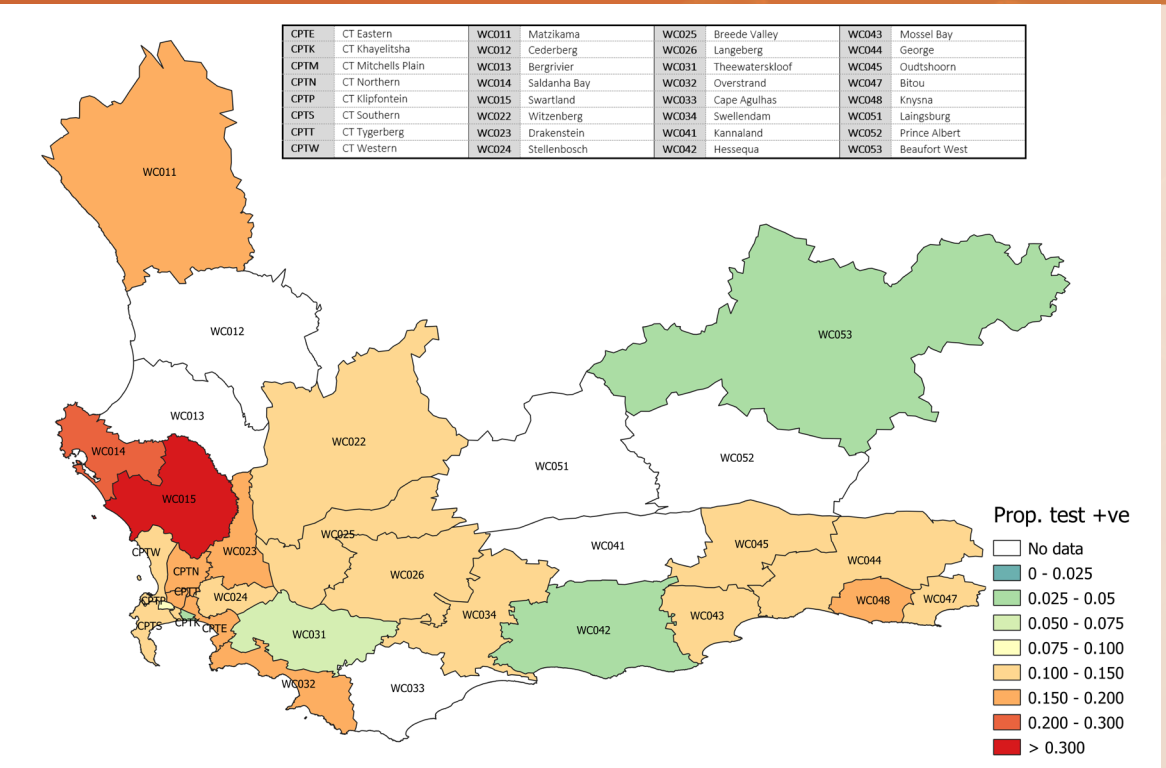


**Figure 8.** Proportion testing positive by health sub-district in the Western Cape Province for the week of 13-19 March 2022. Areas shaded white represent districts in which either (i) no tests were reported (ii) all tests were negative or (iii) the confidence interval exceeded 30%

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

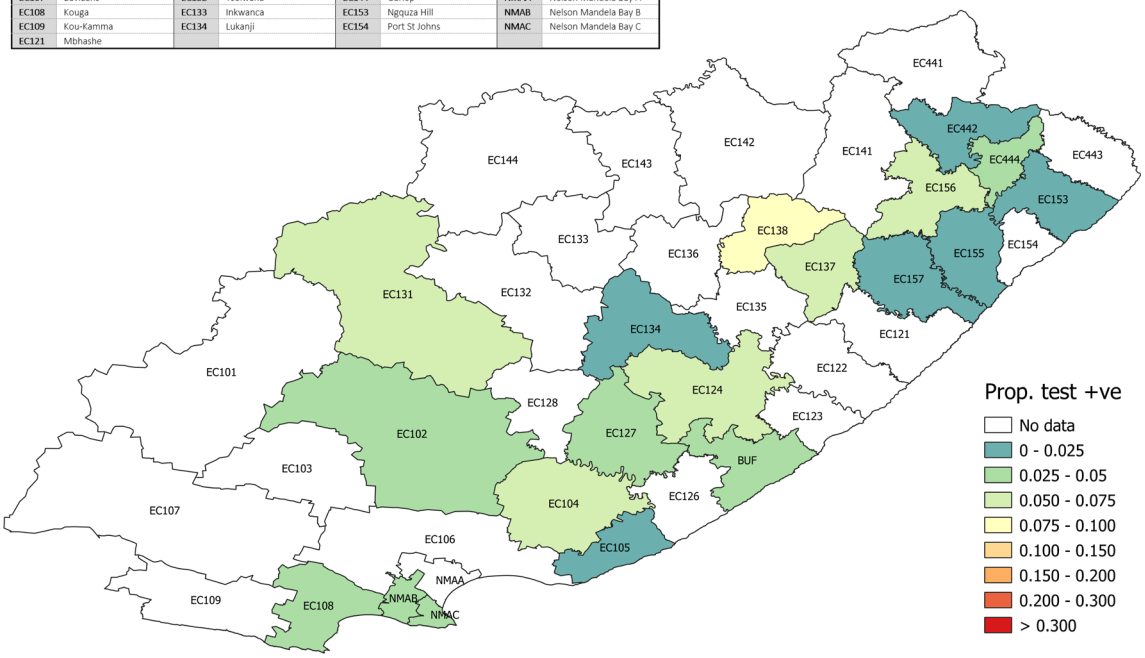


**Figure 9.** Proportion testing positive by health sub-district in the Eastern Cape Province for the week of 13-19 March 2022. Areas shaded white represent districts in which either (i) no tests were reported (ii) all tests were negative or (iii) the confidence interval exceeded 30%.

| | | | | | |
|---|---|---|---|---|---|
| NC061 | Richtersveld | NC074 | Kareeberg | NC085 | Tsantsabane |
| NC062 | Nama Khoi | NC075 | Renosterberg | NC086 | Kgatelopele |
| NC064 | Kamiesberg | NC076 | Thembelihle | NC091 | Sol Plaatjie |
| NC065 | Hantam | NC077 | Siyathemba | NC092 | Dikgatlong |
| NC066 | Karoo Hoogland | NC078 | Siyancuma | NC093 | Magareng |
| NC067 | Khâi-Ma | NC081 | Mier | NC094 | Phokwane |
| NC071 | Ubuntu | NC082 | Kai !Garib | NC451 | Joe Morolong |
| NC072 | Umsobomvu | NC083 | //Khara Hais | NC452 | Ga-Segonyana |
| NC073 | Emthanjeni | NC084 | !Kheis | NC453 | Gamagara |

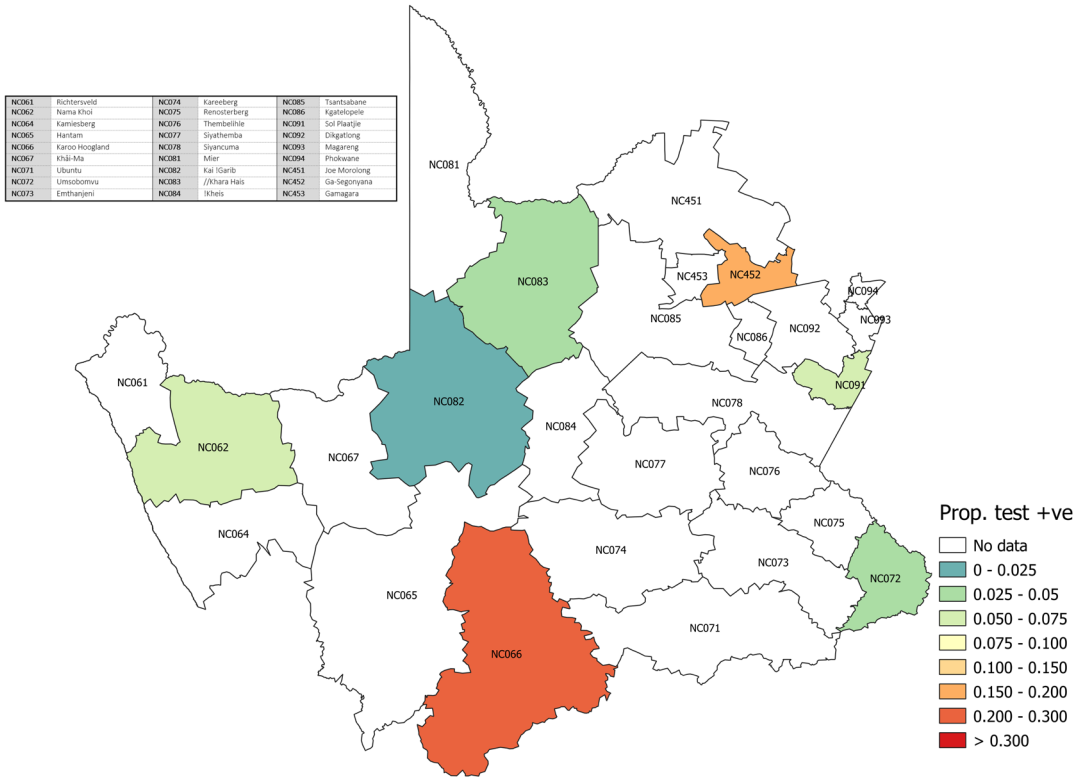


**Figure 10.** Proportion testing positive by health sub-district in Northern Cape Province for the week of 13-19 March 2022. Areas shaded white represent districts in which either (i) no tests were reported (ii) all tests were negative or (iii) the confidence interval exceeded 30%.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MAN | Mangaung | FS181 | Masilonyana | FS191 | Setsoto | 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 |

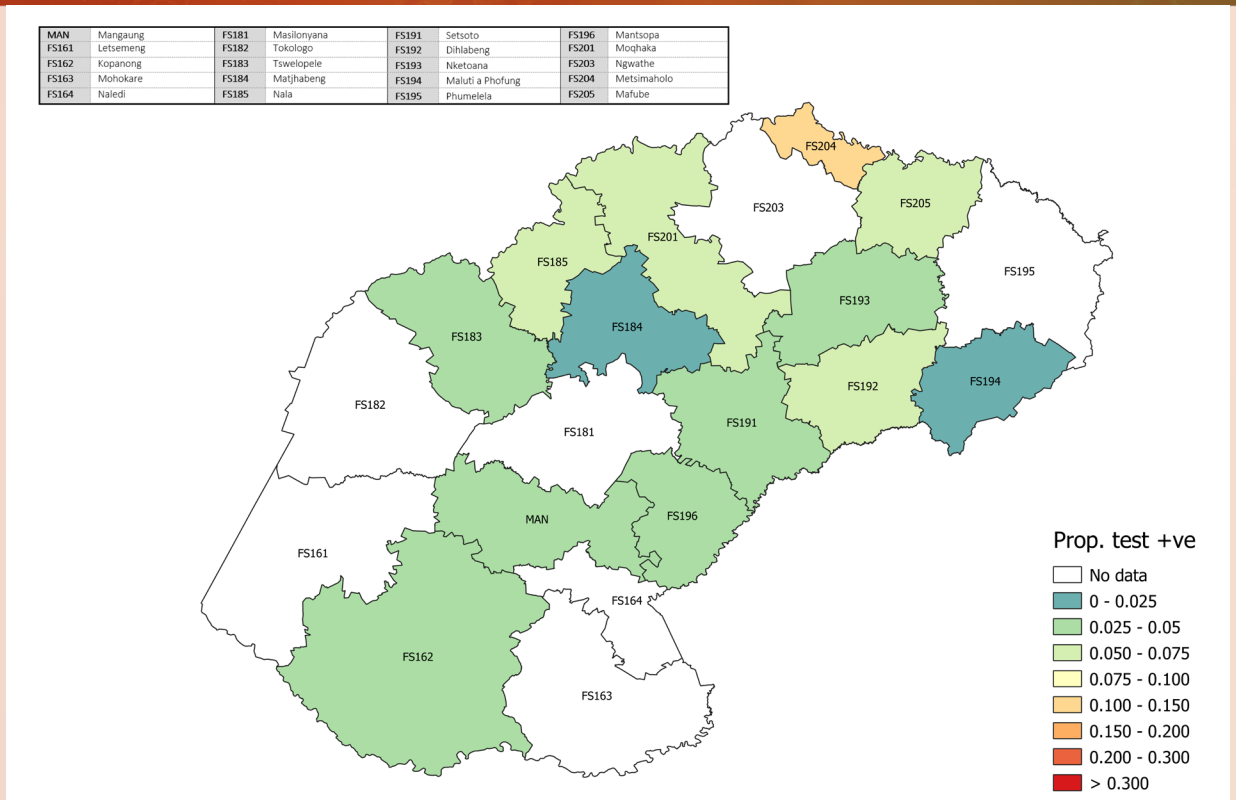


**Figure 11.** Proportion testing positive by health sub-district in Free State Province for the week of 13-19 March 2022. Areas shaded white represent districts in which either (i) no tests were reported (ii) all tests were negative or (iii) the confidence interval exceeded 30%.

| | | | | | |
|---|---|---|---|---|---|
| ETHN | eThekwini North | KZN233 | Indaka | KZN273 | The Big 5 False Bay |
| ETHS | eThekwini South | KZN234 | Umtshezi | KZN274 | Hlabisa |
| ETHS | eThekwini South | KZN235 | Okhahlamba | KZN275 | Mtubatuba |
| ETHW | eThekwini West | KZN236 | Imbabazane | KZN281 | Mfolozi |
| KZN211 | Vulamehlo | KZN241 | Endumeni | KZN282 | uMhlathuze |
| KZN212 | Umdoni | KZN242 | Nqutu | KZN283 | Ntambanana |
| KZN213 | Umzumbe | KZN244 | Msinga | 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 Msunduzi | KZN265 | Nongoma | KZN432 | Kwa Sani |
| KZN226 | Mkhambathini | KZN266 | Ulundi | KZN433 | Greater Kokstad |
| KZN227 | Richmond | KZN271 | Umhlabuyalingana | KZN434 | Ubuhlebezwe |
| KZN232 | Emnambithi/Ladysmith | KZN272 | Jozini | KZN435 | Umzimkhulu |

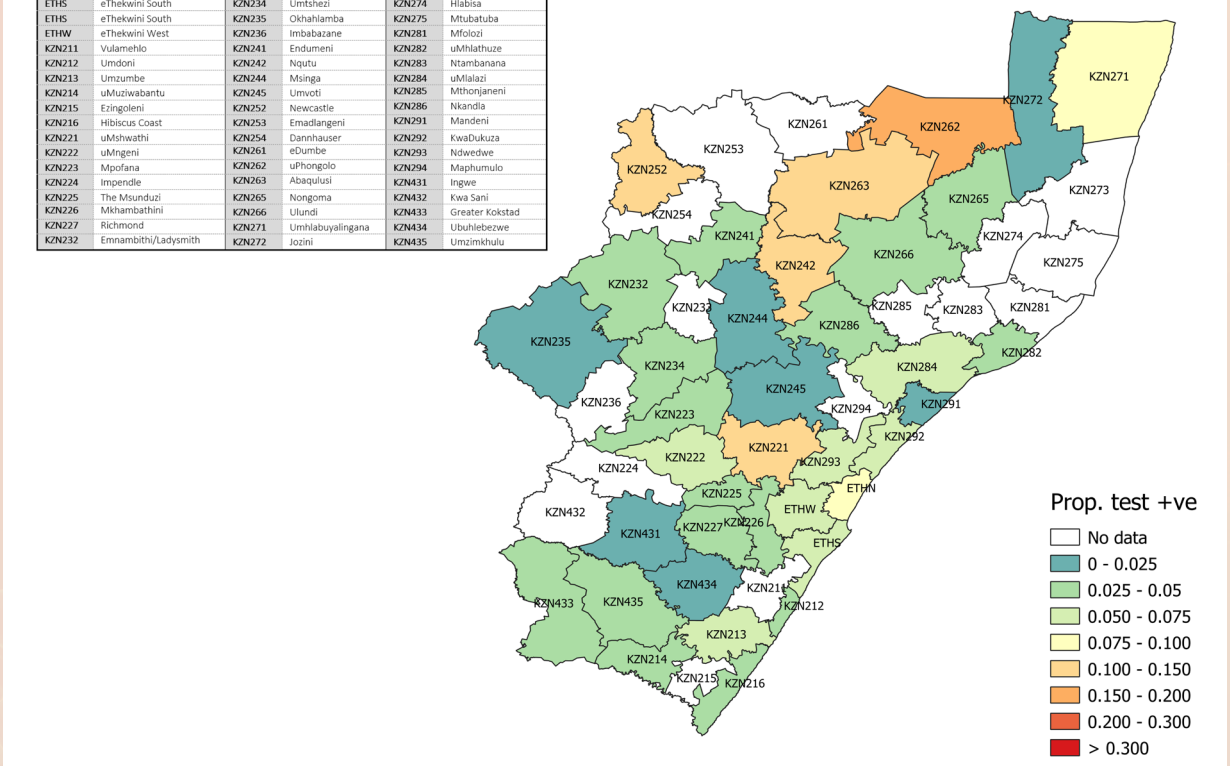


**Figure 12.** Proportion testing positive by health sub-district in KwaZulu-Natal Province for the week of 13-19 March 2022. Areas shaded white represent districts in which either (i) no tests were reported (ii) all tests were negative or (iii) the confidence interval exceeded 30%.

| | | | | | |
|---|---|---|---|---|---|
| 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 | Tlokwe City Council |
| NW375 | Moses Kotane | NW393 | Mamusa | NW403 | City of Matlosana |
| NW381 | Ratlou | NW394 | Greater Taung | NW404 | Maquassi Hills |
| NW382 | Tswaing | | | | |

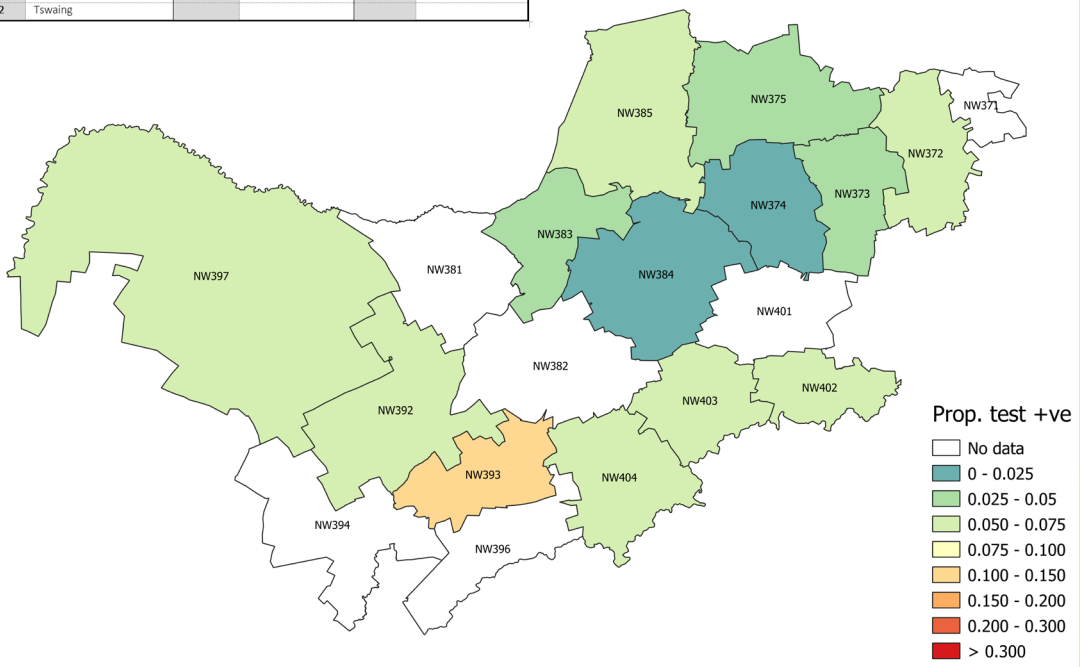


**Figure 13.** Proportion testing positive by health sub-district in North West Province for the week of 13-19 March 2022. Areas shaded white represent districts in which either (i) no tests were reported (ii) all tests were negative or (iii) the confidence interval exceeded 30%.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| EKUE1 | Ekurhuleni East 1 | GT421 | Emfuleni | JHBA | Johannesburg A | TSH1 | Tshwane 1 |
| EKUE2 | Ekurhuleni East 2 | GT422 | Midvaal | 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 |

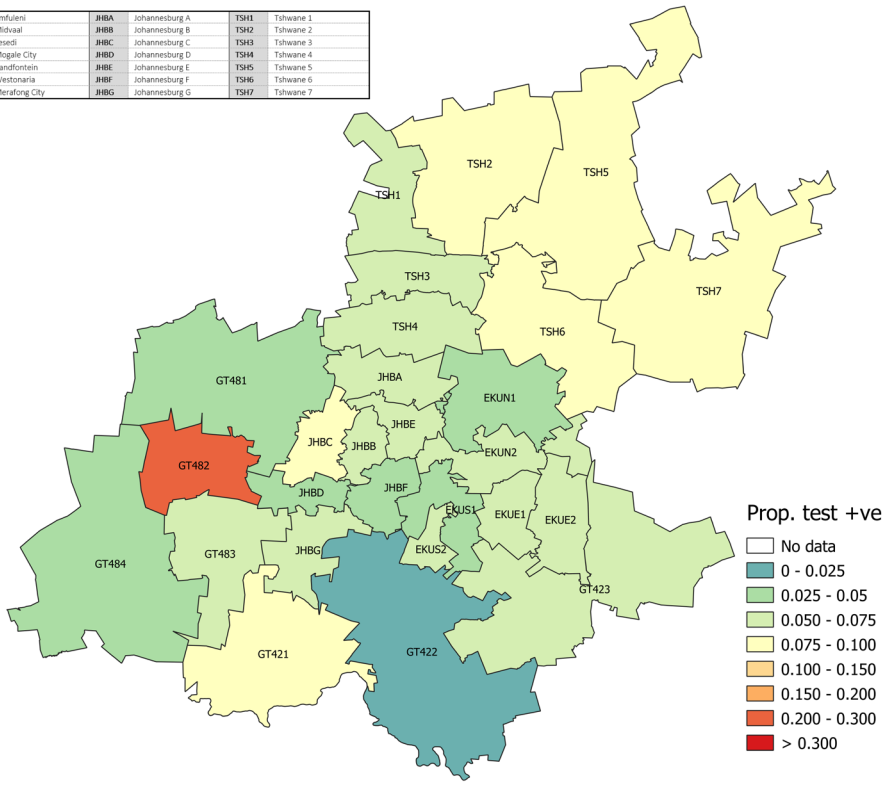


**Figure 14.** Proportion testing positive by health sub-district in Gauteng Province for the week of 13-19 March 2022. Areas shaded white represent districts in which either (i) no tests were reported (ii) all tests were negative or (iii) the confidence interval exceeded 30%.

| | | | | | |
|---|---|---|---|---|---|
| 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 |

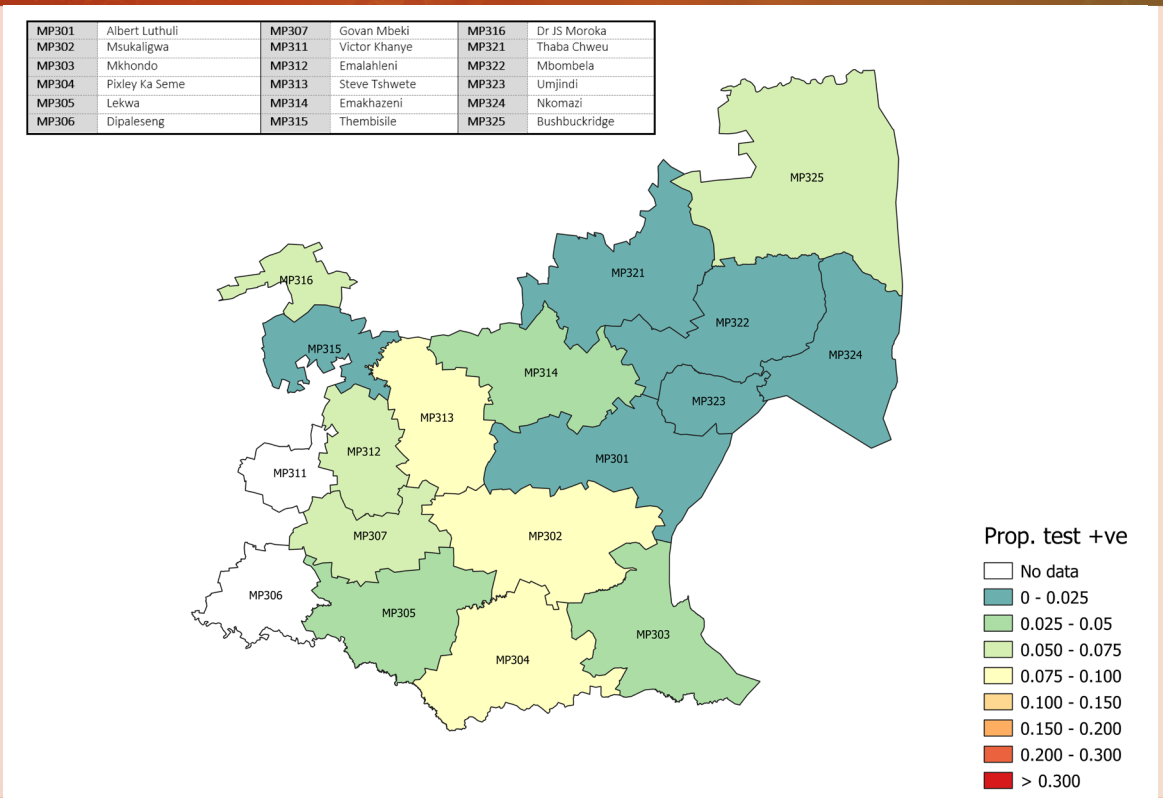


**Figure 15.** Proportion testing positive by health sub-district in Mpumalanga Province for the week of 13-19 March 2022. Areas shaded white represent districts in which either (i) no tests were reported (ii) all tests were negative or (iii) the confidence interval exceeded 30%.

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

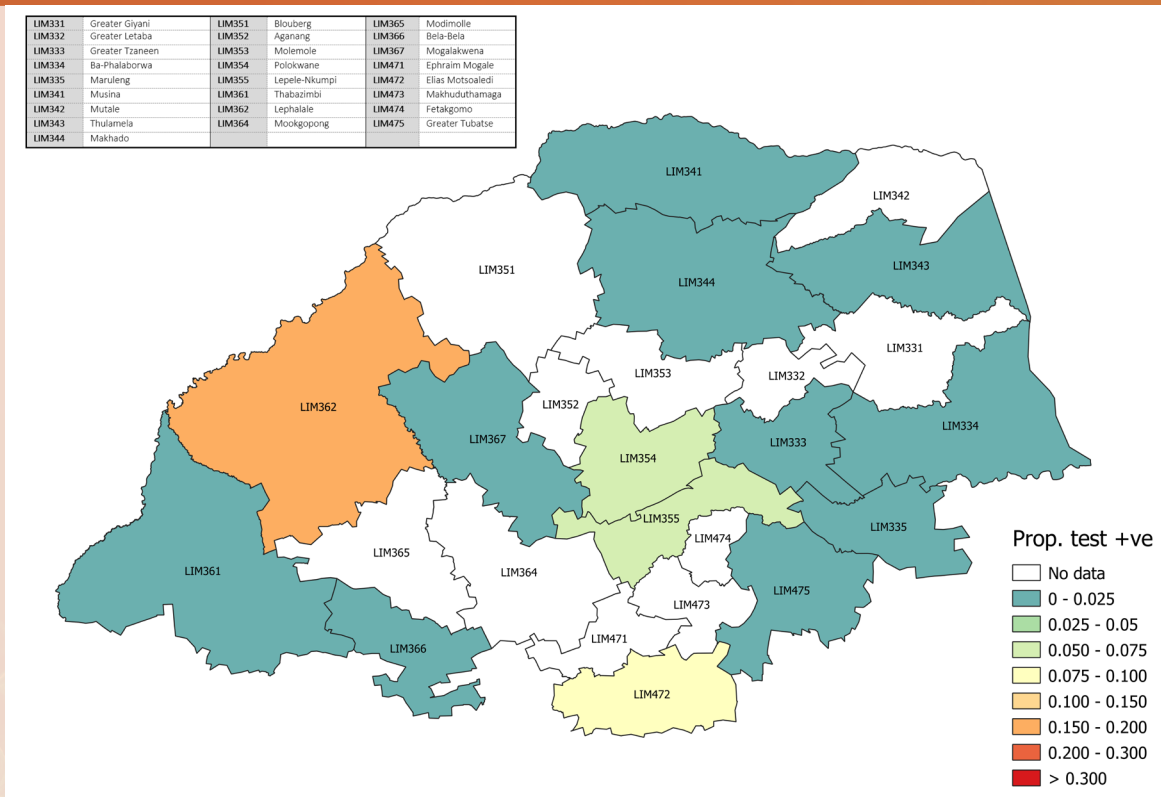


**Figure 16.** Proportion testing positive by health sub-district in Limpopo Province for the week of 13-19 March 2022. Areas shaded white represent districts in which either (i) no tests were reported (ii) all tests were negative or (iii) the confidence interval exceeded 30%.

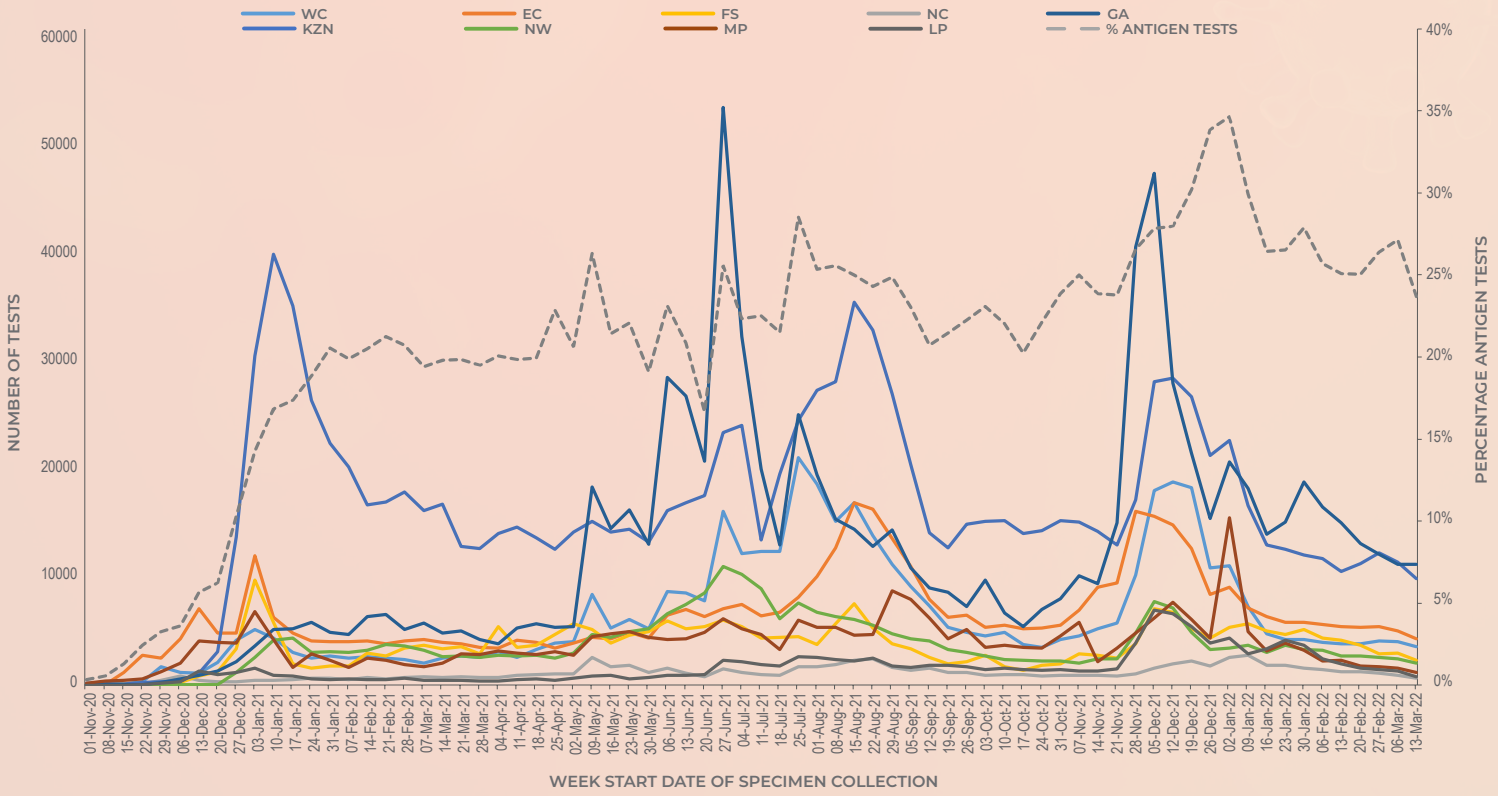


**Figure 17.** Number of antigen tests by province and overall percentage antigen tests, South Africa, 1 November 2020 – 19 March 2022. WC Western Cape; EC Eastern Cape; FS Free State; KZN KwaZulu-Natal; GA Gauteng; NC Northern Cape; NW North West; MP Mpumalanga; LP Limpopo

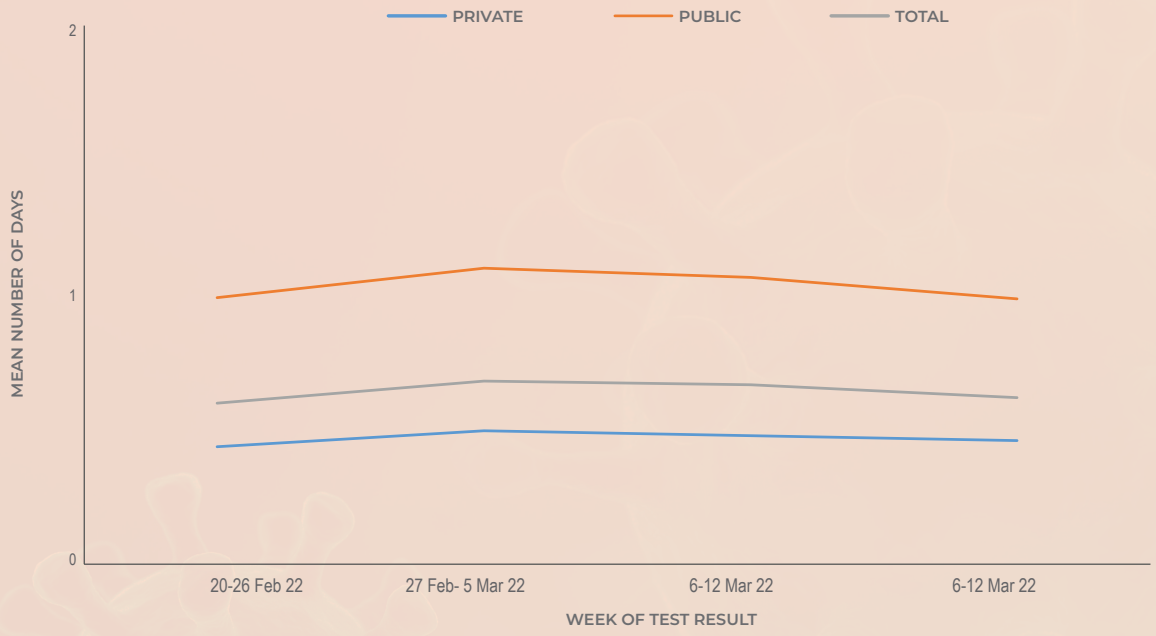


**Figure 18.** Mean number of days between date of specimen collection and date of test result for PCR tests by week of test result, South Africa, 20 February - 19 March 2022.

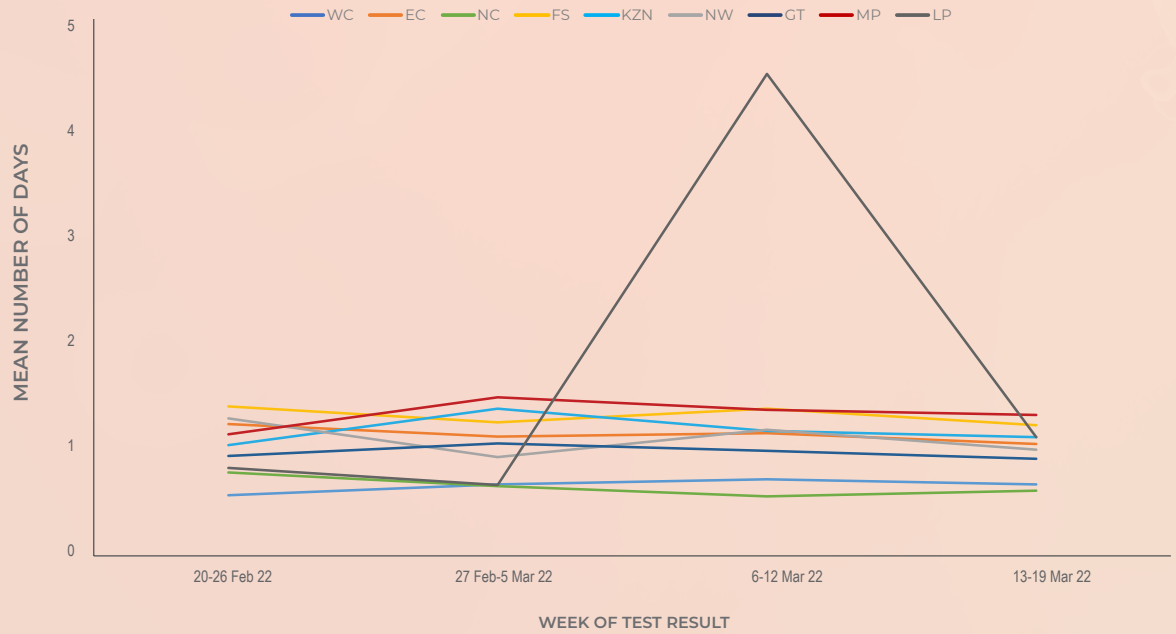


**Figure 19.** Mean number of days between date of specimen collection and date of test result for PCR tests in the public sector by week of test result and province, South Africa, 20 February – 19 March 2022. WC Western Cape; EC Eastern Cape; FS Free State; KZN KwaZulu-Natal; GT Gauteng; NC Northern Cape; NW North West; MP Mpumalanga; LP Limpopo

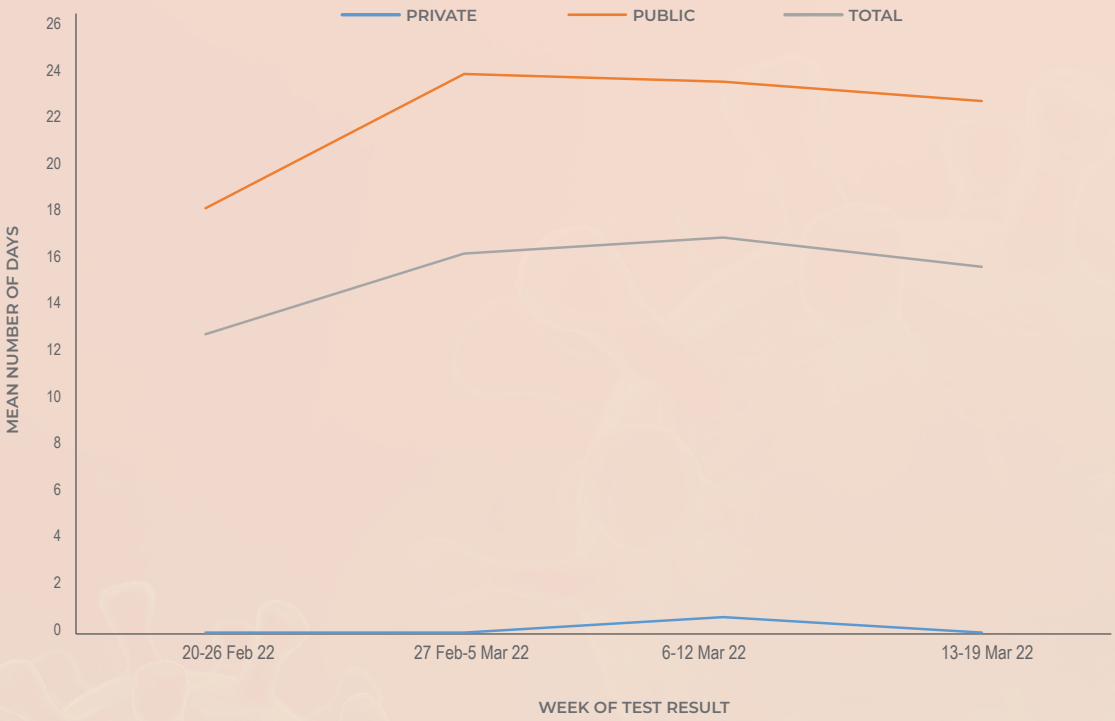


**Figure 20.** Mean number of days between date of specimen collection and date of test result for antigen tests by week of test result, South Africa, 20 February – 19 March 2022.

## 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 49 of 2020 onwards, test data were reported from the Notifiable Medical Conditions Surveillance System (NMCSS). 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. Testing rates were calculated using mid-year population estimates from Statistics South Africa and expressed as tests per 100,000 (2019 estimates were used from week 10 – 40 of 2020, 2020 estimates were used from week 41 2021 to week 1 of 2022 and 2021 estimates were used from week 2 of 2022 and onwards). 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, 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 (approximately 98% of public sector facilities in the country) and private (approximately 78% of private testing facilities) 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. Districts with fewer than 20 tests reported during the week have been excluded from the analysis.

## 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, PCR vs. antigen-based tests or prioritisation of severe or at-risk cases during epidemic waves) 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.