

Daily Epidemiological Report for SARS-Cov-2

Report No. 509

Date Issued: 25 August 2021

1. PURPOSE

The report provides a descriptive analysis of SARS-Cov-2 related cases and deaths, and hospitalizations in the Eastern Cape Province, as of 25 August 2021.

2. HIGHLIGHTS

2.1. New cases, active cases, and recoveries

- In the past 24 hours, 1,784 new cases (1 case was a transfer), and 34.2% of these cases were from NM Metro (609 cases) and Sarah Baartman (231 cases; 13.0%); 4.0% from Amathole (71 cases) and BC Metro (422 cases; 23.7%); 10.3% from Chris Hani (183 cases) and Joe Gqabi (53 cases; 3.0%); and 3.9% were from Alfred Nzo (70 cases) and OR Tambo (135 cases; 7.6%).
- Of the 17,066 active cases, 46.8% were from NM Metro (4,743 cases; 27.8%) and Sarah Baartman (3,245 cases; 19.0%); 8.0% from Amathole (1,371 cases) and BC Metro (2,561 cases; 15.0%); 12.4% from Chris Hani (2,113 cases) and Joe Gqabi (689 cases; 4.0%); and 2.7% from Alfred Nzo (455 cases) and OR Tambo (1,453 cases; 8.5%).
- The number of recoveries were 229,501, i.e. 88.2% recovery rate.

2.2. SARS-Cov-2 related deaths

- In the past 24 hours, 55 deaths were reported (27 occurred in the past 48 hours).

2.3. Hospitalizations and outcomes

- In the past 24 hours, 54 admissions were reported (see Table 13). The cumulative hospitalizations were 37,949, i.e. 25,815 (68.0%) in public and 12,134 (32.0%) in private. Of the hospitalized, 63.6%, i.e. 24,118 were discharged alive and 15,249 (63.2%) occurred in public sector. And 11,030 (29.1%) demised & 8,158 (74%) in public sector.

- Of the 1,069 currently admitted patients, 741 (69.3%) occurred in public and 328 (30.7%) in private. Hospitalizations in general ward were 931, i.e. 707 in public and 224 in private; 101 in ICU, i.e. 6 in public and 95 in private; 37 in High Care, i.e. 28 in public and 9 in private; 296 on oxygen, i.e. 262 in public and 34 in private; and 114 on ventilation, i.e. 85 in public and 29 in private.

2.4 Healthcare workers

- The cumulative number of healthcare workers who tested positive for SARS-Cov-2 was 12,645 with 1,242 hospitalized and 327 demised (2,6% CFR). The nurses were the most affected professional category, followed by doctors and clinical associates. In 2021, About 209 HCWs were hospitalized and 32 demised due to SARS-Cov-2 related causes.
- The number of vaccine breakthrough infections among healthcare workers was 241 and 11 were hospitalized and discharged.

2.5 Conclusion

From the previous week to date, the number of new and active cases, hospitalizations, and deaths were showing an upward trend. School outbreaks remain the driving force behind the rapid increase of cases. The highest burden of disease of SARS-Cov-2 was seen in NM Metro and Sarah Baartman, followed by BC Metro, Chris Hani and Joe Gqabi.

All districts have entered the third wave of the pandemic. Local municipalities or sub-districts to watch include Matatiele, Mbizana, and Umzimvubu in Alfred Nzo; 6 LMs from Amathole; Bhisho, Duncan, East London & West Bank in BC Metro; all LMs in in Chris Hani; all LMs in Joe Gqabi; all Sub-districts in NM Metro, all LMs in OR Tambo; and all LMs in Sarah Baartman.

There is a need to strengthen the following;

- Improve disease surveillance (including increasing testing rate), contact tracing and monitoring.
- Risk communication and community engagement (RCCE), promote the use and reinforcement of non-pharmaceutical prevention measures.

3. SARS-Cov-2 CASES & DEATHS

3.1. Summary of all cases and deaths

In the past 24 hours, **1,783 new cases, 1 transfer, and 55 deaths** were reported (27 occurred in the past 48 hours). The cumulative number of cases was **260,111** and deaths were **13,544**.

	No. of cases	Transfers	New Cases	Total Cases	%	Deaths	New Deaths		Total Deaths	CFR (%)
							*Newly Reported	**Newly occurred		
Male	105068	0	737	105805	40.7	5741	12	9	5762	5.4
Female	153257	1	1046	154304	59.3	7746	16	18	7780	5.0
Unknown	2		0	2	0.0	2	0	0	2	
Total	258327	1	1783	260111	100.0	13489	28	27	13544	5.2

* Deaths that occurred more than 48 hours ago ** Deaths that occurred within the last 48 hours of reporting

Five percent (5.2%) of the cases demised. The male CFR was 5.4% while it was 5.0% for females. However, females accounted for more new deaths.

District	Cases	Transfers	New Cases	Total Cases	Recoveries	Deaths	New Deaths		Total Deaths	CFR (%)	Recovery Rate	Active Cases
							*Newly Reported	**Newly occurred				
Alfred Nzo	9431		70	9541	8435	644	5	2	651	6.7	88.4	455
Amathole	21488	1	71	21886	19335	1174	0	6	1180	5.4	88.3	1371
BC Metro	45301		422	46097	41008	2516	3	9	2528	5.5	89.0	2561
Chris Hani	24677		183	25014	21032	1859	7	3	1869	7.4	84.1	2113
Joe Gqabi	10993		53	11096	9768	638	0	1	639	5.7	88.0	689
NM Metro	84078		609	85413	76545	4115	6	4	4125	4.8	89.6	4743
OR Tambo	25779		135	26092	23106	1525	6	2	1533	5.8	88.6	1453
Sarah Baartman	31973		231	32410	28146	1018	1	0	1019	3.1	86.8	3245
Imported	805		3	808	766	0		0	0	0.0	94.8	42
Unspecified	1696		6	1754	1360	0	0	0	0	0.0	77.5	394
E. Cape	256221	1	1783	260111	229501	13489	28	27	13544	5.2	88.2	17066

NM Metro accounted for 34.2% (609 cases) of the new cases followed by BCM with 23.7% (422 cases), then Sarah Baartman (231 cases; 13.0%); then Chris Hani (183 cases; 10.3%); OR Tambo (135 cases; 7.6%); Amathole (4.0%; 71 cases), Alfred Nzo with 70 cases (3.9%); lastly Joe Gqabi (53 cases; 3.0%). There was 1 transferred case to Amathole, bringing the total of news cases to 1,784.

Of the 17,066 active cases, the majority were from NM Metro (4,743 cases; 27.8%) and Sarah Baartman (3,245 cases, 19.0%); BCM accounted for 15% (2,561 cases); Chris Hani (2,113 cases; 12.4%); OR Tambo (1,453 cases; 7.6%); Amathole (1,371 cases; 8.0%); Joe Gqabi (689 cases; 4.0%); and lastly Alfred Nzo (455 cases; 2.6%)

The number of recoveries were 229,501 translating to a recovery rate of 88.2%.

3.2. Weekly SARS-Cov-2 Cases, Deaths and %Change

The number of new cases has decreased by 60.8% and deaths by 27.7% from week 33 and week 34. In the 4 days, 6,881 cases and 149 deaths were reported.

	Cases			Deaths			Current week cases and deaths		
	08-14 Aug	15-21 Aug	% Change	08-14 Aug	15-21 Aug	% Change	Cases 22 - 25 Aug	Deaths 22-25 Aug	Case Fatality Rate (%)
A Nzo	137	401	192,7	8	18	125,0	184	8	4,3
Amathole	303	705	132,7	5	11	120,0	584	10	1,7
BC Metro	617	1361	120,6	13	19	46,2	1106	26	2,4
Chris Hani	744	1699	128,4	28	47	67,9	665	23	3,5
Joe Gqabi	462	933	101,9	12	14	16,7	309	8	2,6
NM Metro	2963	3487	17,7	72	61	-15,3	2313	45	1,9
OR Tambo	541	958	77,1	25	28	12,0	587	17	2,9
Sarah Baartman	1317	1898	44,1	14	28	100,0	1061	12	1,1
Imported	16	8	-50,0	0	0		8	0	0,0
Unspecified	125	165	32,0	0	0		64	0	0,0
E. Cape	7225	11615	60,8	177	226	27,7	6881	149	2,2

The case fatality rate during the current week was 2.2%, with the highest deaths reported from Alfred Nzo at 4.3% followed by Chris Hani at 3.5%, then OR Tambo at 2.9%, Joe Gqabi (2.6%), and BCM at 2.4%. NM Metro, Sarah Baartman, and Amathole with less than 2%.

3.3. Average newly diagnosed cases

The average number of new cases has decreased by 35.6% from 1,661 on the 18th to 1,069 on the 24th August.

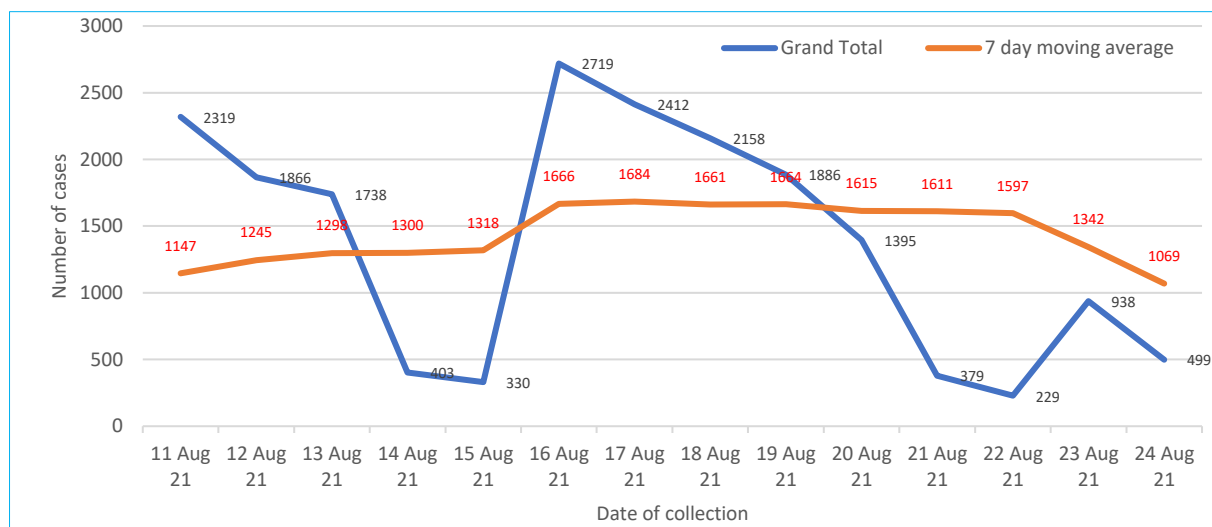


Fig. 1. Daily SARS-Cov-2 cases & 7-day moving average by date of collection, as of 23 Aug. 2021

NM Metro and Sarah Baartman continue to report the highest number of new cases, followed by BC Metro, Chris Hani, Joe Gqabi.

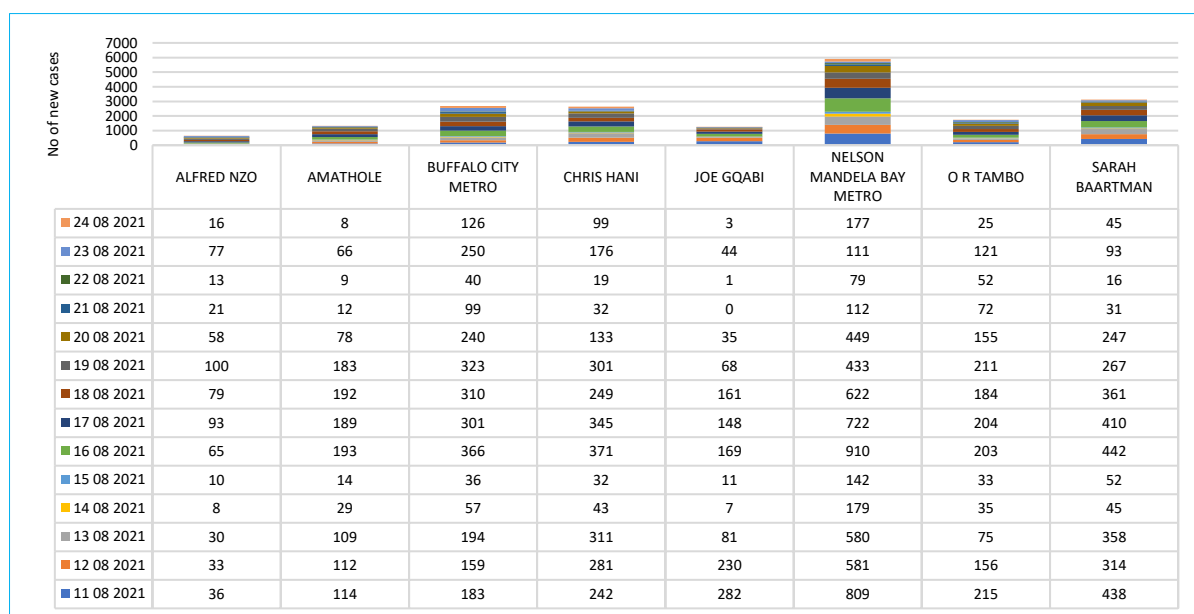


Fig. 2. Daily SARS-Cov-2 cases by district and date of collection, as of 25 August 2021

The burden of disease remains high in NM Metro and Sarah Baartman, which continues to yield high number of new cases. There is a need to improve case detection (including increasing the testing rate) and contact tracing and monitoring in all districts.

4. SARS-Cov-2 LAB TESTS & RESULTS

4.1. Test Results by Laboratory

During week 34, a total of 49,669 tests were reported, and 17,515 in the past 24 hours. Cumulatively, 1,4 million were from public (65.4%) and private sector (34.6%).

	Private	Public	Total	New Test 22-25 Aug	% New Tests 22-25 Aug	Tests 15-21 Aug
Alfred Nzo	4556	33592	38,148	312	1.0	770
Amathole	9821	83275	93,096	1540	5.1	1686
BC Metro	62909	115477	178,386	1376	4.6	2049
Chris Hani	13141	73685	86,826	1047	3.5	2026
Joe Gqabi	1281	39541	40,822	910	3.0	3059
NMB Metro	93335	206693	300,028	5918	19.8	7223
OR Tambo	30253	79259	109,512	1499	5.0	2132
Sarah Baartman	18788	118581	137,369	3047	10.2	5257
Unclassified	261634	187149	448,783	14255	47.7	25467
Eastern Cape	495718	937252	1,432,970	29904	100	49669

Thirty percent (30%) of the tests were done in NM Metro and Sarah Baartman. The lowest number of tests were observed in Alfred Nzo, OR Tambo and Amathole. There is a need to update the number of tests by district. Data is available from NICD and the 2020 was completed and currently working on the 2021 data.

4.2. Antigen Testing

Antigen Test Method was used to test 222,513 specimens and 9.1% positivity rate.

	Negative	Positive	Total	Percentage (%)	Positivity Rate (%)	New Tests 22-25 Aug	% New Tests 22-25 Aug
A Nzo	23630	1444	25074	11.9	5.8	623	6.9
Amathole	7506	1175	8681	3.7	13.5	752	8.3
BC Metro	19412	2429	21841	10.5	11.1	1177	13.1
Chris Hani	25233	2931	28164	9.6	10.4	2995	33.2
Joe Gqabi	6539	873	7412	3.1	11.8	246	2.7
NM Metro	66697	7757	74454	35.1	10.4	1343	14.9
OR Tambo	41127	2342	43469	20.2	5.4	1466	16.3
Sarah Baartman	12141	1277	13418	5.9	9.5	413	4.6
Total	202285	20228	222513	100	9.1	9015	100

In the past 24 hours, Chris Hani conducted 33.2% of the antigen tests, followed by OR Tambo (16.3%), and NM Metro (14.9%). Alfred Nzo, Amathole, Joe Gqabi, and Sarah Baartman reported less than 10% positivity rate.

4.3. Tests by age group and sex

In the last 31 days, 51,600 specimens were tested for SARS-Cov-2 in public sector laboratories. Fifty-three percent (53%) of the tests were among the 20 to 59 year's age group, and 45.6% were the younger and elderly population.

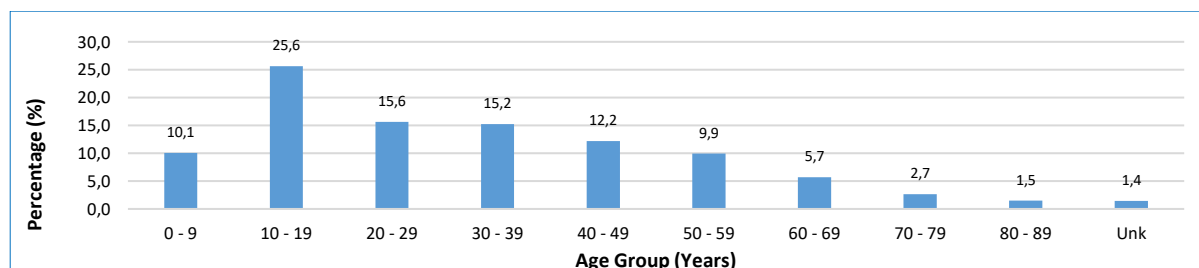


Fig. 3. Percentage of SARS-Cov-2 tests by age group in the last 31 days, as of 25 Aug. 2021

Only 1.3% of the tests lacked information on the age of the individuals.

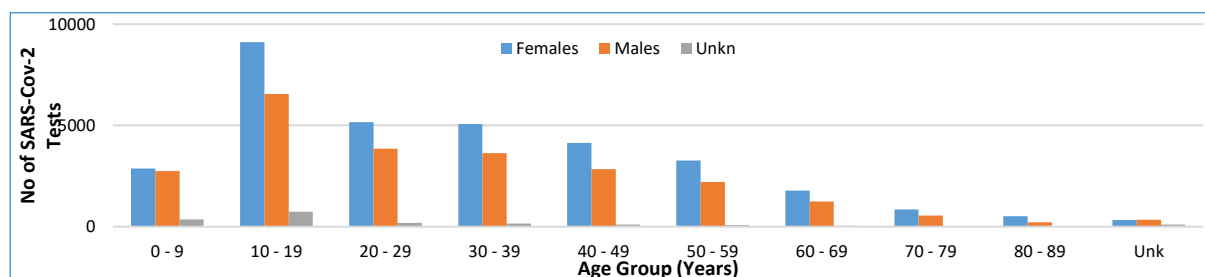


Fig. 4. No. of SARS-Cov-2 public sector tests by age group and gender, as of 25th Aug. 2021

Fifty-six percent (56.0%) of the tested individuals were females, 40.9% were males and 3.1% had no information on gender. Most tests were conducted among the 10-19 age group.

4.4. Turnaround Time

Availability of the laboratory results within a short period is essential for early response to positive cases and their contacts.

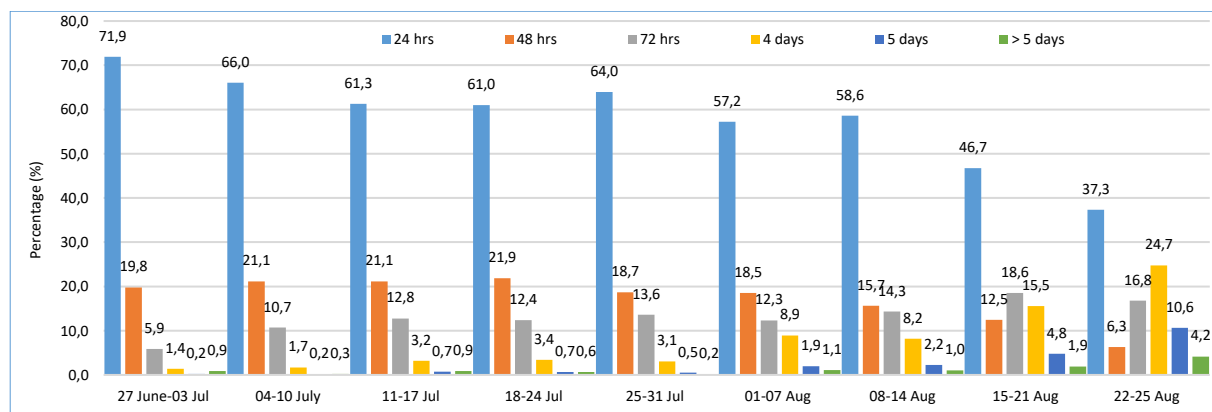


Fig. 5. Turnaround time for SARS-Cov-2 positive results by week as of 25th Aug. 2021

The 24-hour turnaround time (TAT) has decreased by 20.1% from 46.7% in week 34 to 37.3% in week 35. Similarly, the 48 hours TAT has decreased by 4.8% from 18.6% to 7.7% during the same period.

4.5. The 7-day moving average of SARS-Cov-2 tests & positivity rate

The figure below provides the 7-day moving average for the number of tests and the positivity rate over a period.

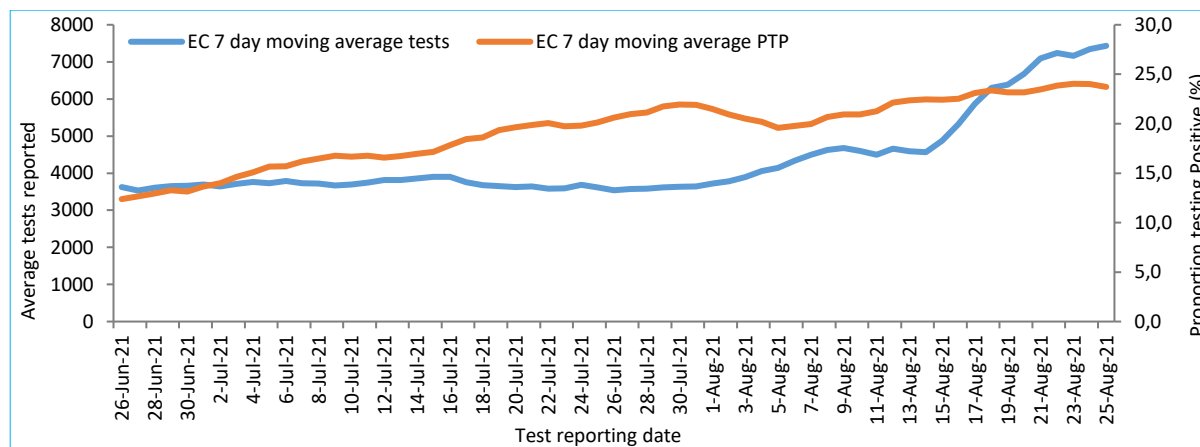


Fig. 6. 7-day moving average for SARS-Cov-2 tests & positivity rate, as of 25th Aug. 2021

In the past 7 days, the number of SARS-Cov-2 tests has increased by 16.5% from 6,382 on the 19th to 7,433 on the 25th August 2021. The positivity has increased by 2.4% from 23.2% to 23.7% during the same period.

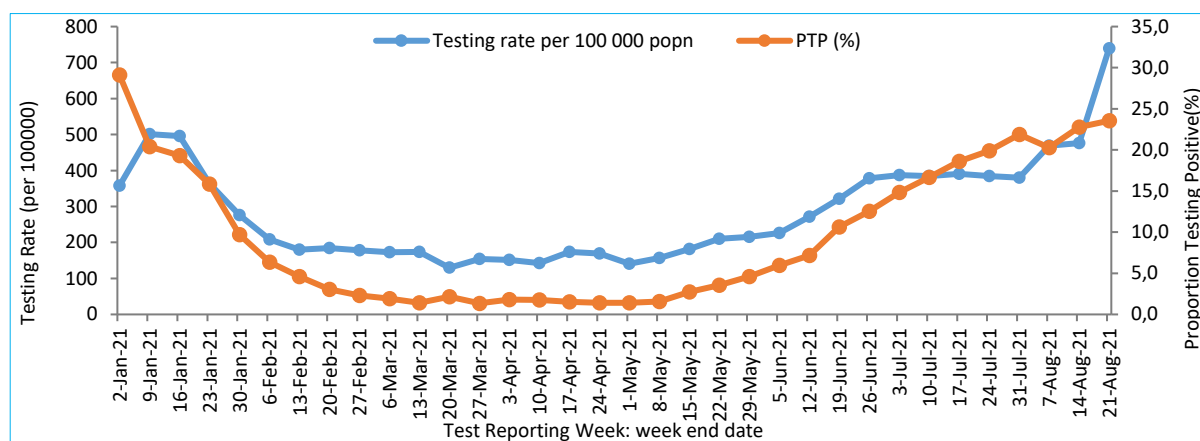


Fig. 7. Testing Rate and positivity rate for SARS-Cov-2 by week, as of 22nd August 2021

The testing rate for SARS-Cov-2 has increased by 55.5% from 476 to 740 tests per 100,000 on the 14th to 21st August 2021. The testing rate has increased to more than 200 tests per 100,000 per week.

5. ACTIVE CASES, INCIDENCE & POSITIVITY RATE

5.1. Active SARS-Cov-2 Cases

The number of active cases has increased by 23.6% from 13,808 on the 21st to 17,066 on the 25th August. This is the highest number of active cases reported in the current year, which can be attributed to the current outbreaks among learners from different schools in the province.

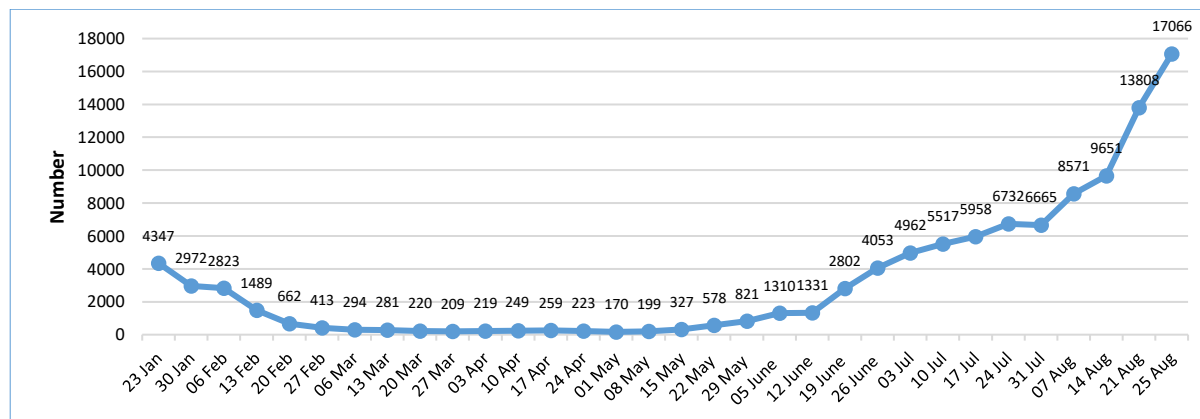


Fig. 8. Number of active SARS-Cov-2 cases by week, as of 25 August 2021

There is a need to strengthen public health surveillance, contact tracing and health education and community engagement especially after the relaxation of the restrictions. There is a high possibility of cluster outbreaks as observed in the past when there was relaxation of the restrictions.

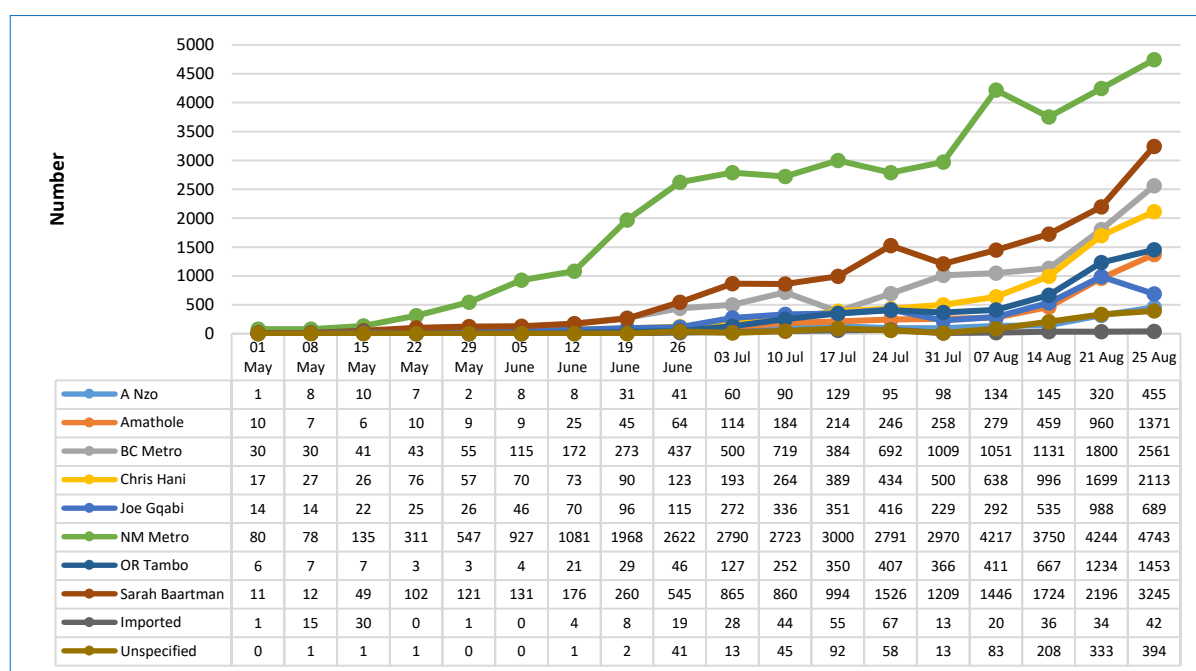


Fig. 9. Number of weekly Active SARS-Cov-2 cases by district, as of 24 August 2021

NM Metro accounted for 27% of active case, while Sarah Baartman accounted for almost 20% (19.7%), followed BC Metro, Chris Hani, OR Tambo and Amathole.

5.2. Active SARS-Cov-2 cases and the cumulative positivity rate

District	Population Estimates	Number of Tests	SARS-Cov-2 Cases (ALL)	Active SARS-Cov-2 Cases	SARS-Cov-2 per 100,000 (Active)	Cumulative Positivity Rate
Alfred Nzo	827826	38 148	9541	455	55,0	25,0
Amathole	798067	93 096	21886	1371	171,8	23,5
BC Metro	798798	178 386	46097	2561	320,6	25,8
Chris Hani	733743	86 826	25014	2113	288,0	28,8
Joe Gqabi	343075	40 822	11096	689	200,8	27,2
NM Metro	1210803	300 028	85413	4743	391,7	28,5
OR Tambo	1520922	109 512	26092	1453	95,5	23,8
S Baartman	480223	137 369	32410	3245	675,7	23,6
Imported		0	808	42	0,0	0,0
Unspecified		448 783	1754	394	0,0	0,4
E.Cape	6713457	1 432 970	260111	17066	254,2	18,2

The incidence of SARS-Cov-2 was 254.2 cases per 100,000 populations, and all the districts have more than 20 cases per 100,000 populations. The cumulative positivity rate was at 18.2%. All districts have less than a 30% positivity rate.

5.3. Incidence of SARS-Cov-2 cases

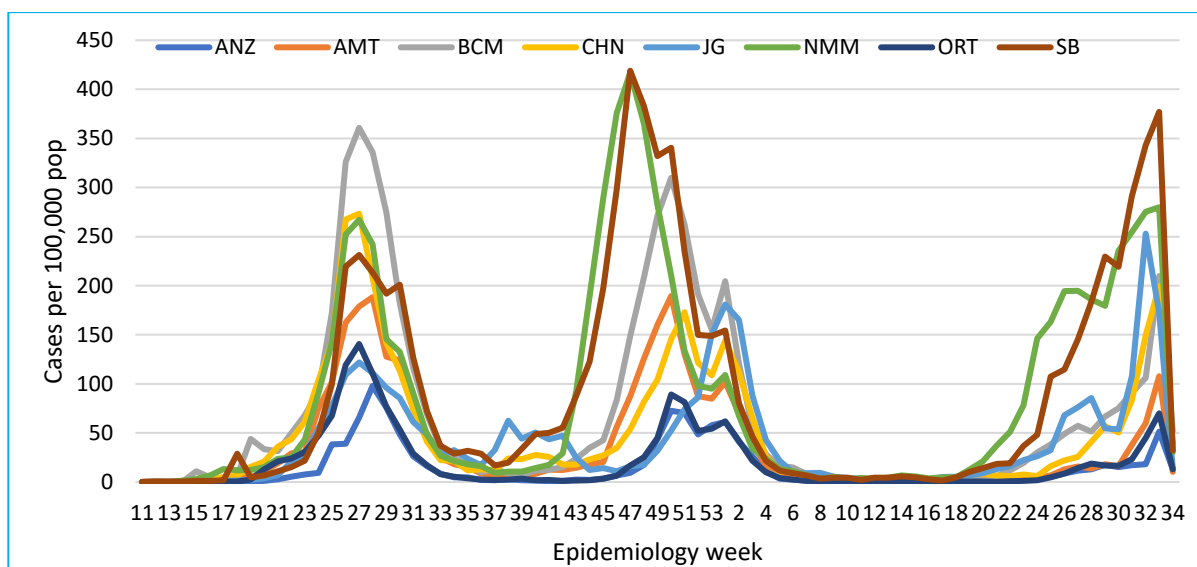


Fig. 10. Incidence of SARS-Cov-2 cases by epidemiological week, as of 25 August 2021

Between weeks 30 to 32, there was a decrease in the weekly incidence of SARS-Cov-2 cases in 3 the districts. However, both NM Metro and Sarah Baartman continue to report the highest incidence, followed by Chris Hani, BC Metro and Joe Gqabi.

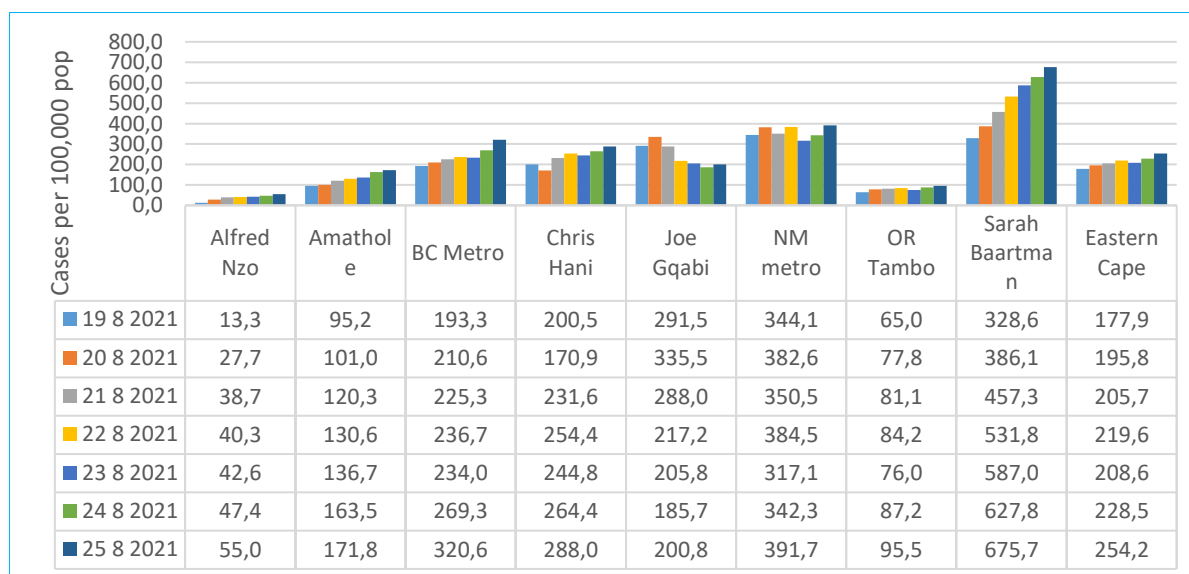


Fig. 11. Active SARS-Cov-2 cases (per 100,000 pop) by district, as of 25 August 2021

In the past 7 days, the incidence of SARS-Cov-2 increased by 42.9% from 177.9 cases to 254.2 cases per 100,000 population. All districts have shown an increase in incidence except for Joe Gqabi which is the only district which has showed a decrease in incidence.

5.4. Recovery Rate (%)

The provincial recovery rate reduced to 88.2% showing a 1.9% decline from the previous week. All districts had a recovery rate below 90%.

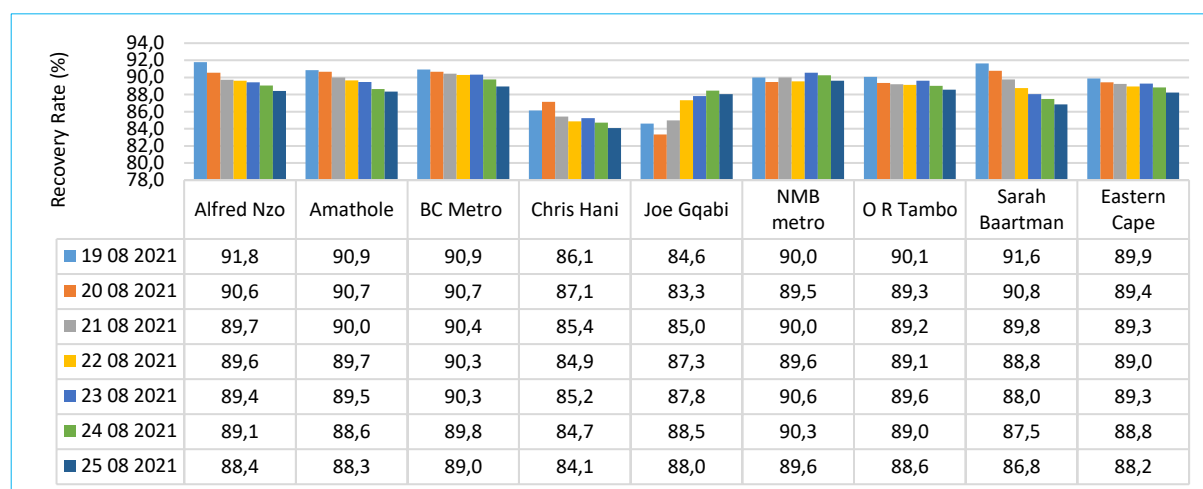


Fig. 12. SARS-Cov-2 Recovery Rate (%) by districts, as of 25 August 2021 (N=229,501)

As the number of new and active cases increases, the recovery rate also decreases. The recovery rate decreased by 1.9% in the past 7 days.

5.5. Mapping of active cases, recoveries, and deaths

The map shows the distribution of SARS-Cov-2 active cases, recoveries, and deaths.

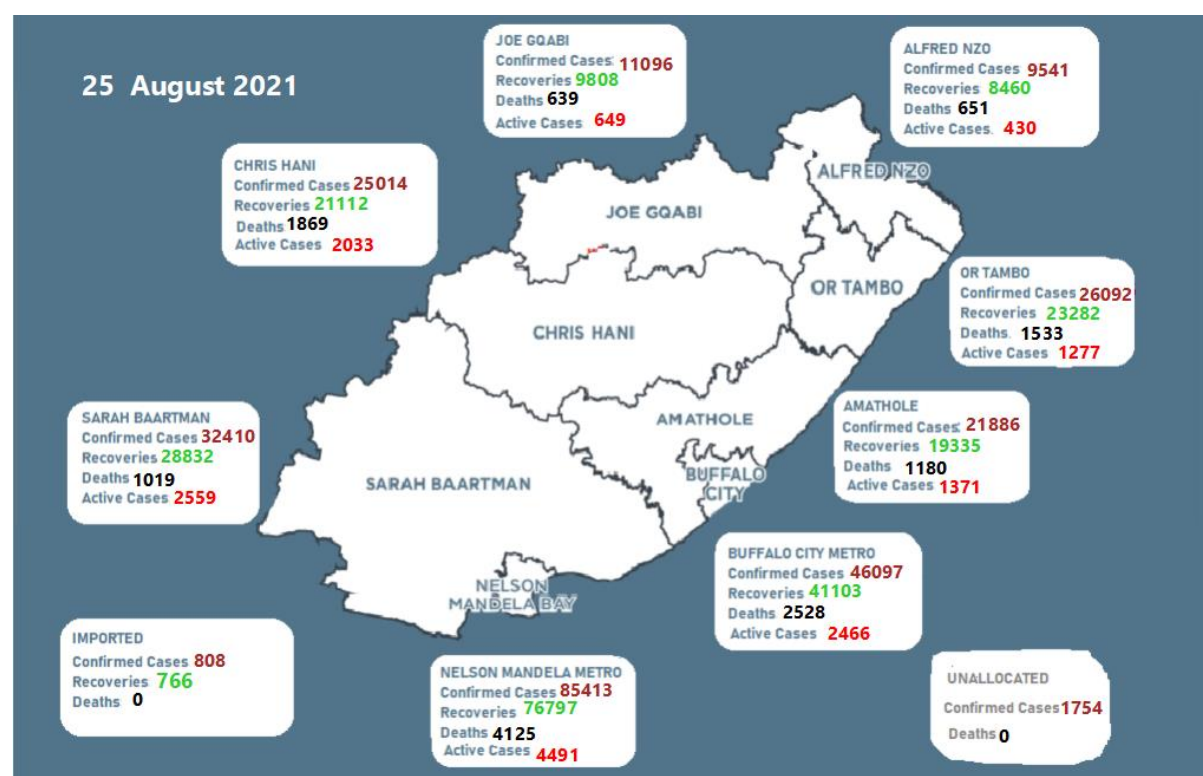


Fig. 13. The number of Covid-19 cases, recoveries, and deaths, as of 25 August 2021

6. SARS-COV-2 CASES AND 7-DAY MOVING AVERAGE

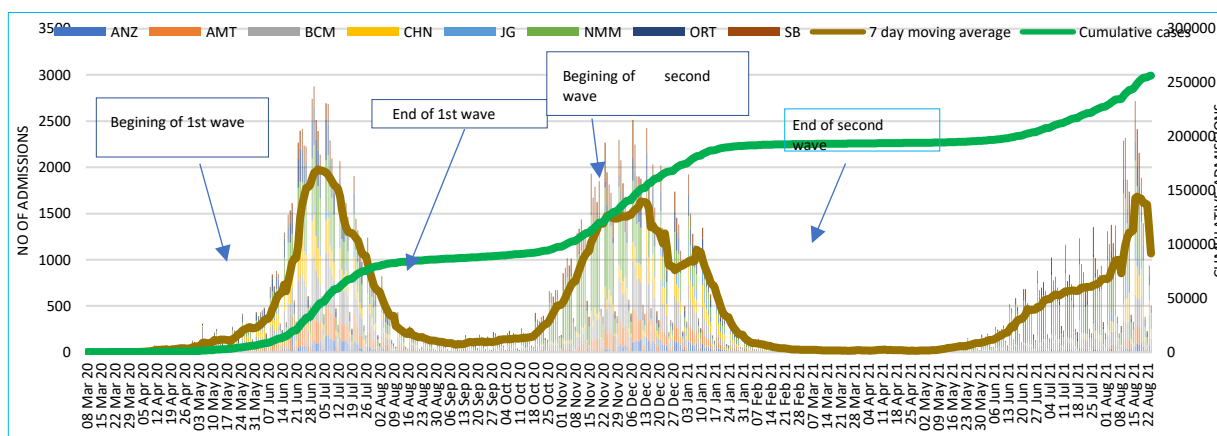


Fig. 14. The 7-day moving average for SARS-Cov-2 cases by date of collection, as of 25 Aug. 2021
After an increase in the number of new cases from the beginning of June, the number of cases were showing a decline at the end of July and mid-August.

7. SARS-Cov-2 RELATED MORTALITY

7.1. Monthly SARS-Cov-2 related case and deaths

The table below provides the number of cases, deaths, and mortality rate by month.

Month	Cases	Deaths	Percent (%)	Case Fatality Rate (%)	Mortality Rate (per 100,000)
Mar 20	13	1	0,0	7,7	0,0
Apr 20	638	35	0,3	5,5	0,5
May 20	3282	285	2,1	8,7	4,2
Jun 20	23793	1036	7,6	4,4	15,4
Jul 20	50291	2036	15,0	4,0	30,3
Aug 20	8295	669	4,9	8,1	10,0
Sep 20	2992	213	1,6	7,1	3,2
Oct 20	8626	287	2,1	3,3	4,3
Nov 20	34232	1710	12,6	5,0	25,5
Dec 20	42757	2778	20,5	6,5	41,4
Jan 21	18169	1923	14,2	10,6	28,6
Feb 21	1708	313	2,3	18,3	4,7
Mar 21	701	107	0,8	15,3	1,6
Apr 21	626	56	0,4	8,9	0,8
May 21	1905	94	0,7	4,9	1,4
Jun 21	9062	259	1,9	2,9	3,9
Jul 21	22805	935	6,9	4,1	13,9
Aug 21	30216	662	4,9	2,2	9,9
Unknown	0	145	1,1	0,0	2,2
Total	260111	13544	100,0	5,2	201,7

Twenty-one percent (20.7%) of the deaths occurred in December; 14.3% in January; 2.3% in February; 0.8% in March; 0.4% in April; 0.7% in May, 1.9% in June, 7% in July and 3.9% in August. The Case Fatality Rate was 6.5% in December, 10.6% in January, 18.3% in February, 15.3% in March, 8.9% in April, 4.9% in May, 2.9% in June, 4.1% in July and 2.2% in August.

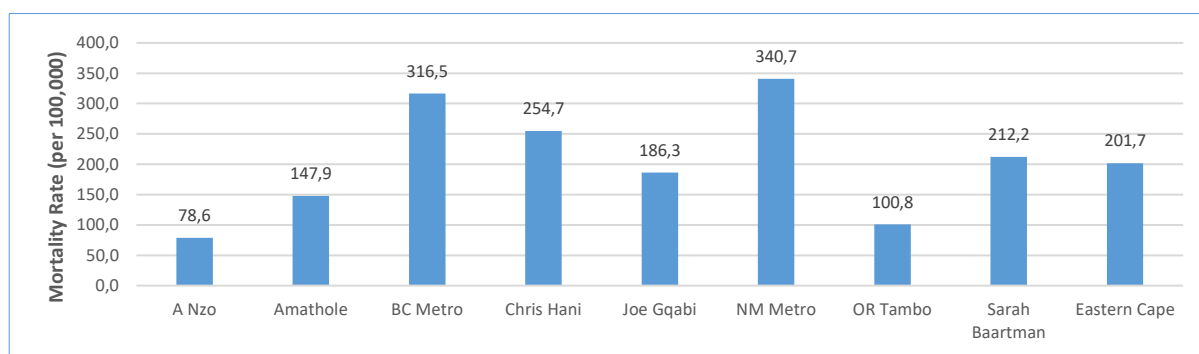


Fig. 15. SARS-Cov-2 related mortality per 100,000 by district, as of 25 Aug. 2021

The provincial mortality rate was 201,7 deaths per 100,000 populations. NM Metro reported the highest mortality rate at 340.7 per 100,000; followed by BC Metro (316.5 per 100,000); Chris Hani (254.7 per 100,000) and Sarah Baartman (212,2 per 100,000). The remaining districts reported less than 200 deaths per 100,000 population.

7.3. Number of reported SARS-Cov-2 related deaths

The figure below depicts the daily and cumulative number of SARS-Cov-2 related deaths which occurred in the province from the beginning of the pandemic.

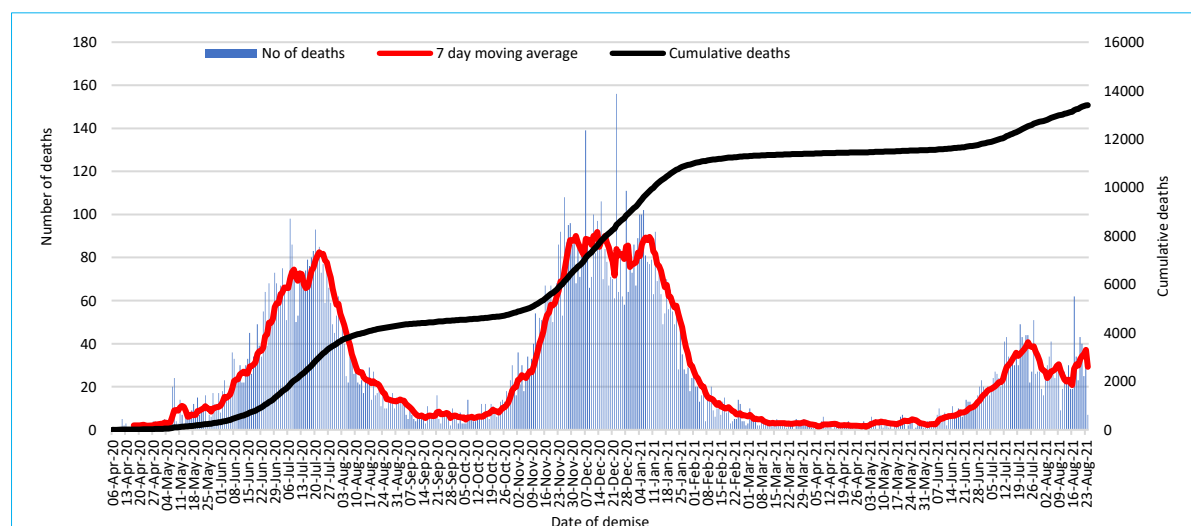


Fig. 16. Daily and cum. SARS-Cov-2 related deaths by date of demise, as of 25 August 2021

After a severe second wave, the number of deaths decreased with the number of cases. The number of deaths appear to have increased in July compared to June. As the number of cases increased, the number of deaths also increased. In the last part of July, the number of deaths appear to be decreasing with the decrease in the number of cases.

7.3. Case Fatality Rate by district

Chris Hani reported 7.4% of the SARS-Cov-2 deaths, followed by Alfred Nzo (6.8%), OR Tambo (5.8%), Joe Gqabi (5.7%), BC Metro (5.5%), Amathole (5.4%), NM Metro (4.8%) and the lowest being Sarah Baartman (3.1%).

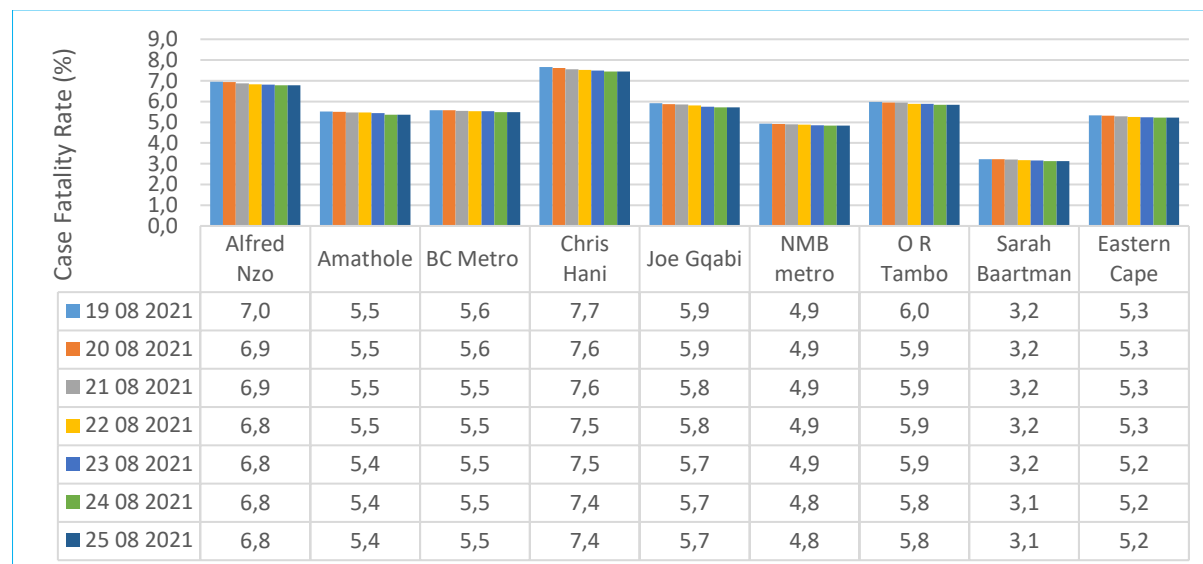


Fig. 17. SARS-Cov-2 Case Fatality Rate (%) by district, as of 25 August 2021 (N=13,544)

Over the 7-day period, the case fatality rate has decreased by 1.9% in the province. There was a change in case fatality rate in 7 districts, with exception in Sarah Baartman.

7.4. Case Fatality Rate by age group

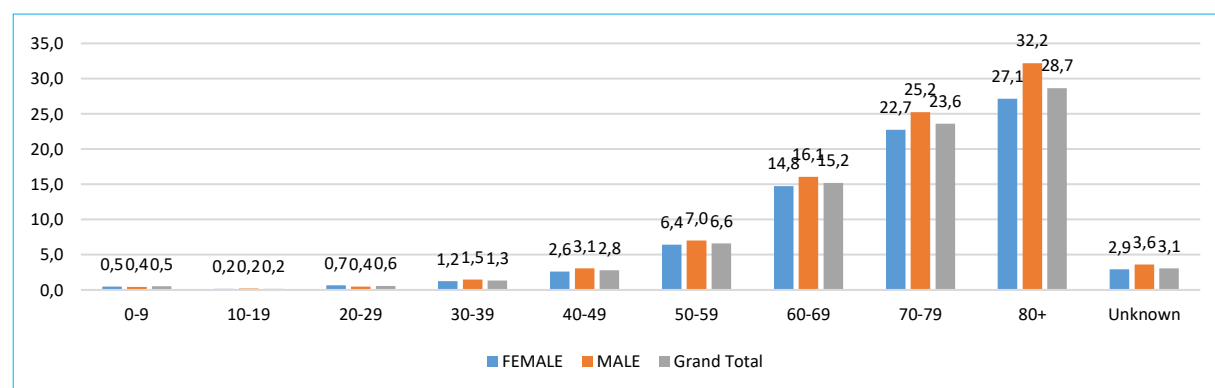


Fig. 18. SARS-Cov-2 related Case Fatality Rate (%) by age group, as of 25 Aug. 2021

The case fatality rate increases with increasing age. The younger population reported a low case fatality rate compared to the older population that had an increased case fatality rate. The male population had a higher case fatality rate compared to the female population.

7.5. Excess versus reported deaths

Data is from the Medical Research Council (as of 3rd Aug. 2021) and ECDOH (as of 09th Aug).

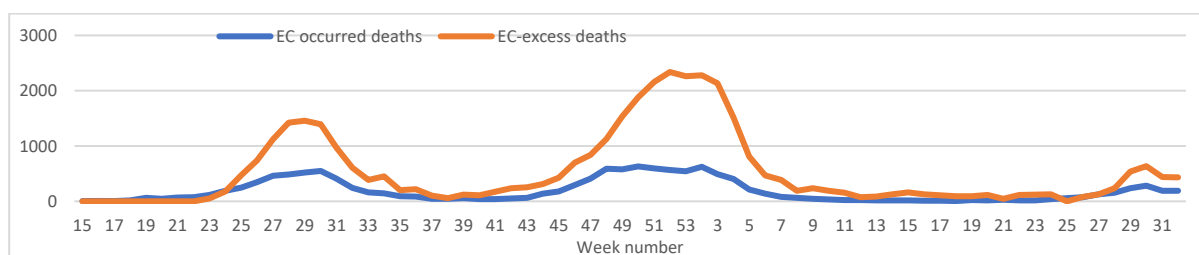


Fig. 19. Excess & reported Covid-19 deaths by week, as of 16th Aug. 2021 (ECDOH, MRC¹)

The number of excess deaths was 36,536 in the E. Cape, 3,921 in BC Metro and 5,854 in NM Metro, and 26,321 from other districts. The gap between the numbers of reported SARS-Cov-2 related deaths and excess deaths appears to be narrower in BC Metro and NM Metro compared to the provincial figures.

Like the provincial figures, there were notable gaps during the first and second peaks of the pandemic.

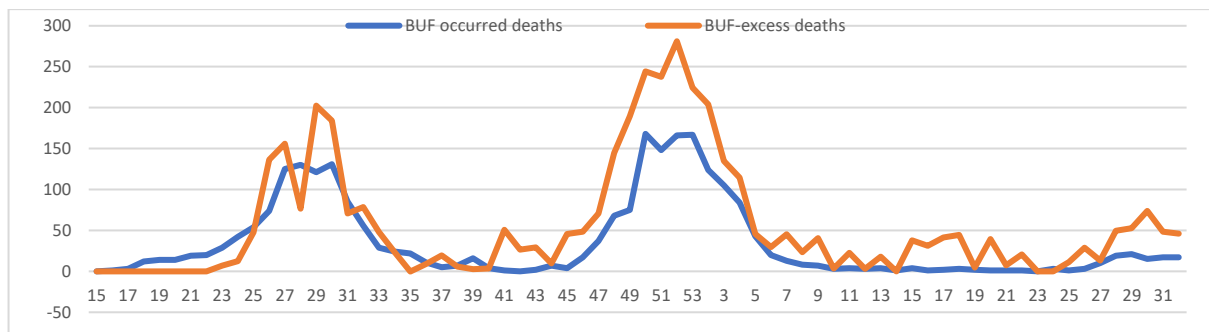


Fig. 20. Reported SARS-Cov-2 versus excess deaths in BC Metro, as of the 16th Aug. 2021

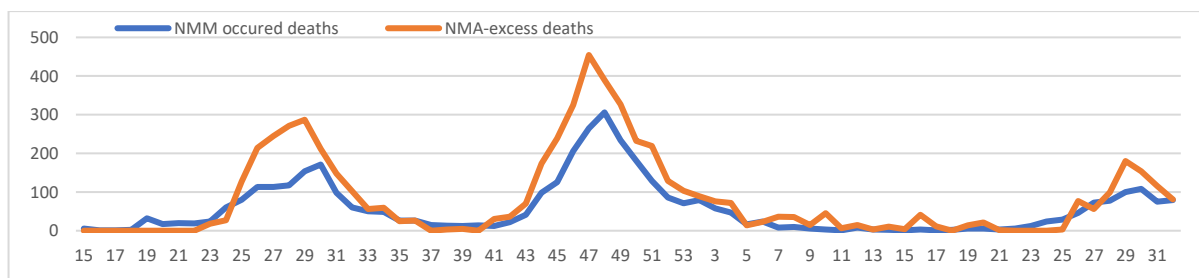


Fig. 21. Reported SARS-Cov-2 versus excess deaths in NM Metro, as of the 16th Aug. 2021

Figures 20 and 21 shows that the gap between the number of excess deaths in BC Metro and NM Metro appears to be narrower, which is contrary to the provincial picture.

¹ Medical Research Council (MRC) data was updated on the 03 Aug. 2021

7.6. Post-mortem tests (PMTs) and results

As of the 25th August, there were 4,646 PMTs which were done and 1,210 (26%) confirmed positive for SARS-Cov-2.

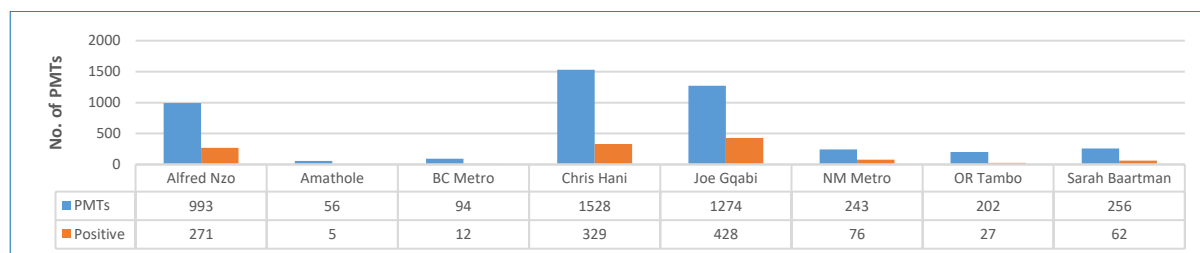


Fig. 22. Number of Post-Mortem Tests & Positive Cases by district, as of 24th Aug. 2021

Of all the PMTs, 3,795 (81.7%) were from Alfred Nzo, Chris Hani, and Joe Gqabi. Similarly, 1028 (85%) of the 1,210 confirmed cases were from the 3 districts.

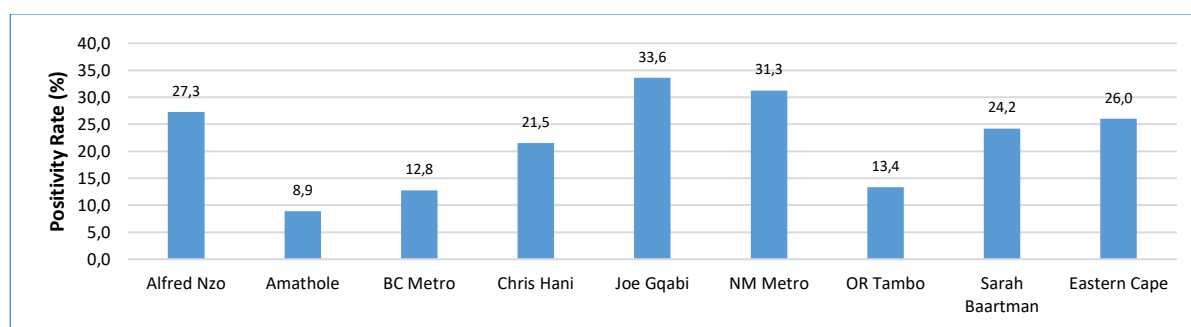


Fig. 23. Post-mortem SARS-Cov-2 positivity rate by district, as of 24th August 2021

Twenty-six percent (26%) of the PMTs tested positive. Joe Gqabi reported the highest positivity rate, followed by NM Metro, Alfred Nzo, Sarah Baartman and Chris Hani.

In the past 22 days, 514 PMTs were conducted and 126 tested positive for SARS-Cov-2.

	01-07 Aug		08-14 Aug		15-21 Aug		22-23 Aug		01-22 Aug	
	PMTs	Positive	PMTs	Positive	PMTs	Positive	PMTs	Positive	PMTs	Positive
Alfred Nzo	28	7	33	5	37	6	0	0	98	18
Amathole	4	0	1		1		0		6	0
BC Metro	0	0	1		2	1	0	0	3	1
Chris Hani	45	5	64	16	63	22	0	0	172	43
Joe Gqabi	34	12	47	8	39	11	0	0	120	31
NM Metro	15	2	26	9	23	11	1	0	65	22
OR Tambo	8	0	13	4	13	2	0	0	34	6
Sarah Baartman	5	3	6	1	5	1	0	0	16	5
Eastern Cape	139	29	191	43	183	54	1	0	514	126

7.7. Deaths by health facilities

The figure below provides the number of deaths by health facility, i.e. public and private.

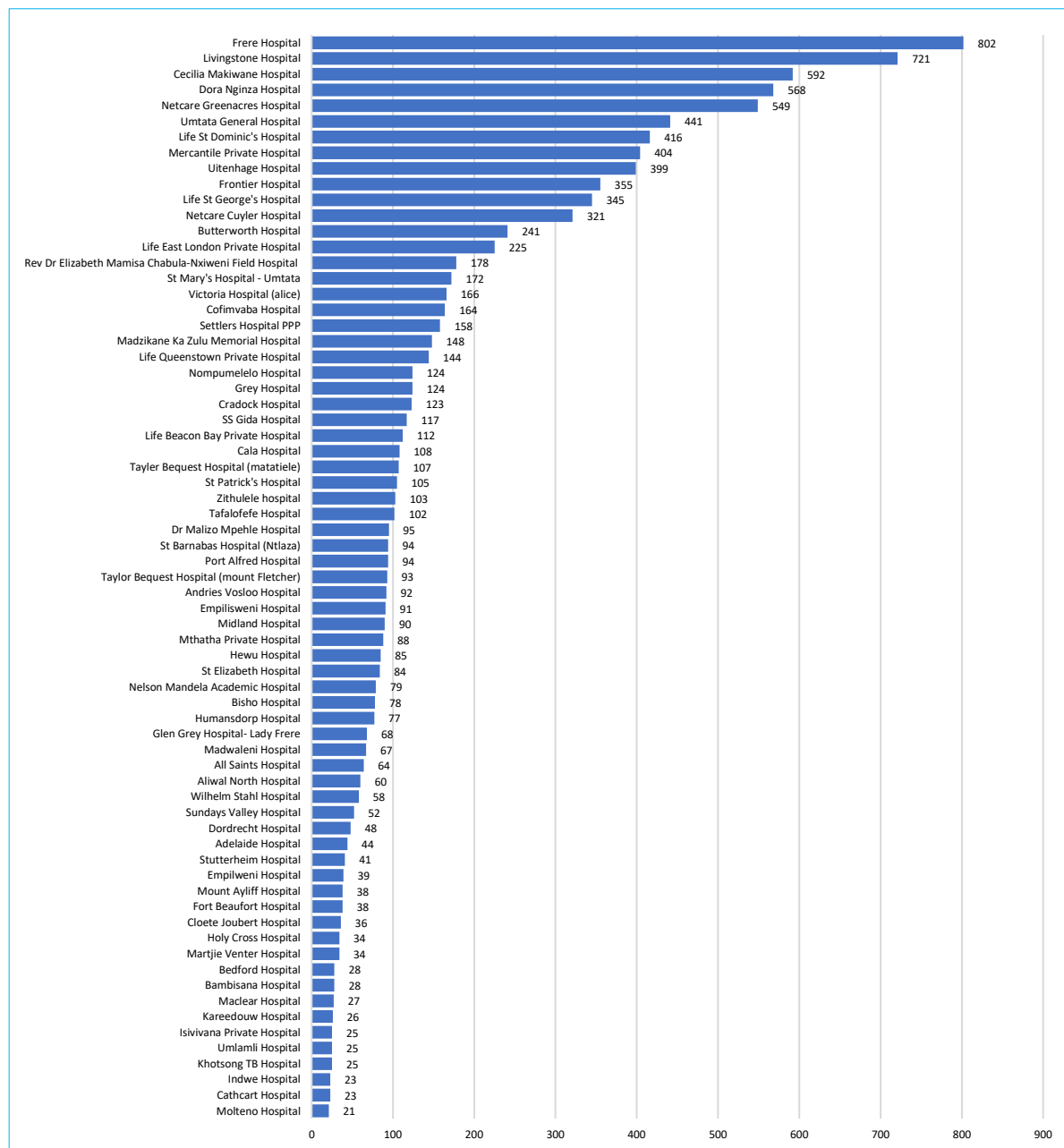


Fig. 24. Number of SARS-Cov-2 related deaths by the facility, as of 25 Aug. 2021

Fifty-eight percent (58.1%) of the deaths occurred in 14 hospitals, i.e., 8 public and 6 private sectors. The public hospitals include Frere, Livingstone, CMH, Dora Nginza, Frontier, Mthatha, Uitenhage, and Butterworth hospitals. And the private hospitals include Netcare Greenacres, Life St. Dominics, Mercantile, Life St Georges, and Netcare Cuyler and Life East London Private hospitals. These hospitals reported more than 200 deaths from the beginning of the pandemic. Only hospitals with a minimum of 20 deaths are included in the above-mentioned figure.

8. HEALTHCARE WORKERS

8.1. Cases and deaths among healthcare workers (HCWs)

The number of HCWs who tested SARS-Cov-2 positive was 12,645 and 327 demised.

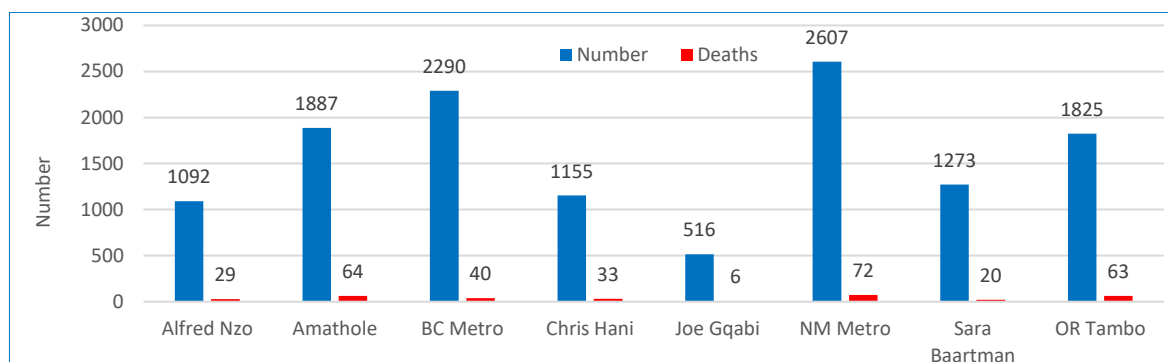


Fig. 25. SARS-Cov-2 positive Healthcare Workers, as of 25th August 2021 (N = 12,645)

The number of HCWs who tested positive for SARS-Cov-2 in NM Metro 2,607 (72 deaths), BC Metro 2,290 (40 deaths), Amathole 1,887 (64 deaths), OR Tambo 1,825 (63 deaths), Sarah Baartman 1,273 (20 deaths), Chris Hani 1,155 (33 deaths), Alfred Nzo 1,092 cases (29 deaths) and Joe Gqabi (516 cases, 6 deaths).

8.2. SARS-Cov-2 Cases by job category

The table below provides the number of selected healthcare professionals employed by the State and SARS-Cov-2 cases by job categories, and the positivity rate of that job category.

	Population	Cases	Positivity Rate (%)
Admin	12434	882	7.1
Allied Professionals	3041	270	8.9
Doctors & Clinical Assoc	2369	487	20.6
Nurses	20650	5158	25.0
Emergency Medical Services	2498	297	11.9

The positivity rate among the nurses was 25.0%, followed by doctors and clinical associates (20.6%), allied professionals (8.9%), EMS (11.9%), and admin personnel (7.1%). The positivity rates among healthcare workers negatively affect patient safety, staff morale and confidence, and the capacity of the State to provide quality health services to the population.

8.3. Admissions of healthcare workers

The cumulative number of admissions of health workers from 2020 to date was 1,249. From January to date, 209 (68 in public and 141 in private sector) healthcare workers were hospitalized, i.e. 73 on January, 20 in February, 7 on March, 9 in April, 13 in May, 16 in June, 33 in July and 38 in August. Thirty-two (32) deaths occurred from January to date.

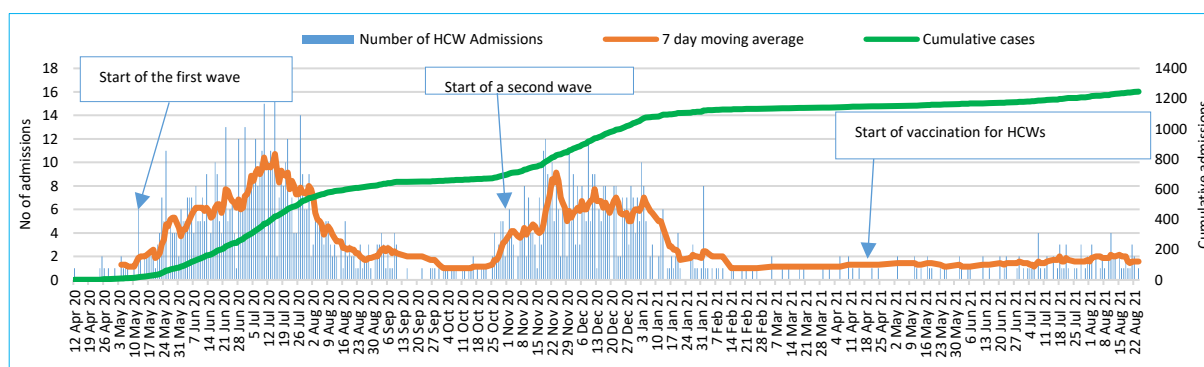


Fig. 26. No. of SARS-Cov-2 related admissions of healthcare workers, as of 25 Aug. 2021
The number of hospitalizations has not significantly changed from the February to date. There is a decrease which was observed from the beginning of August to date.

8.4. Vaccine Breakthrough Infections among HCWs

A vaccine breakthrough infection is defined as the detection of SARS-Cov-2 RNA or antigen in a respiratory specimen collected from a person ≥ 14 days after they have completed all recommended doses of the Covid-19 vaccine (adapted from CDC 2021).

	Vaccinated & tested positive days later	Admitted and discharged
Alfred Nzo	10	2
Amathole	35	2
BC Metro	8	1
Chris Hani	10	0
Joe Gqabi	6	0
NM Metro	141	6
OR Tambo	9	0
Sarah Baartman	22	0
Eastern Cape	241	11

The number of vaccine breakthrough infections was 241, with only 11 cases which were admitted and discharged. Majority of the reported cases were from NM Metro (141) followed by Amathole (35), Sarah Baartman (22), Alfred Nzo and Chris Hani at 10 and other districts had less than 10 breakthrough infections.

8.5. Case Fatality Rate (%) among HCWs

The figure below provides the cases fatality rate among all healthcare workers.

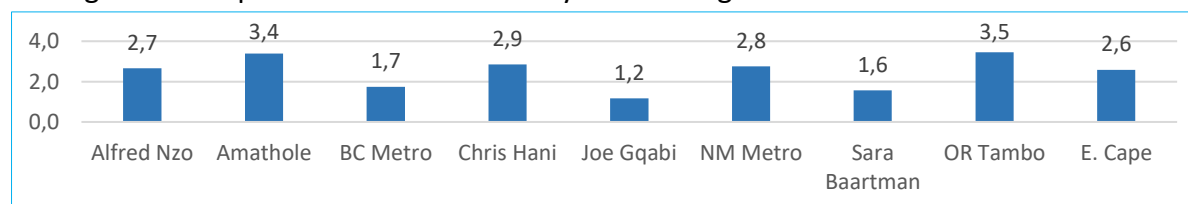


Fig. 27. SARS-Cov-2 Case Fatality Rate (%) among HCWs, as of 25 August 2021 (N=327)

The case fatality rate among healthcare workers was 2.6%. Five (5) districts reported more than 2% case fatality rate and only 3 with less than 2%. OR Tambo reported the highest case fatality rate (3.5%), followed by Amathole, NM Metro, Chris Hani, and Alfred Nzo.

9. Hospitalization and outcomes

7.1. Admissions and outcomes

In the past 24 hours, 54 admissions were reported (see Table 13). The cumulative hospitalizations were 37,949, i.e. 25,815 (68.0%) in public and 12,134 (32.0%) in private. Of the hospitalized, 63.6%, i.e. 24,118 were discharged alive and 15,249 (63.2%) occurred in public sector. And 11,030 (29.1%) demised & 8,158 (74%) in public sector.

Table 11. No. of hospitalizations by district and sector, as of 25 Aug 2021

Districts	Public	Private	Total	Died	Case Fatality Rate (%)	Discharged to date	Discharged (%)
Alfred Nzo	1941	124	2065	487	23,6	1201	58,2
Amathole	2552	0	2552	948	37,1	1512	59,2
BC Metro	4603	3728	8331	2260	27,1	5888	70,7
Chris Hani	3055	904	3959	1334	33,7	2423	61,2
Joe Gqabi	900	0	900	382	42,4	453	50,3
NM Metro	7627	6069	13696	3621	26,4	8704	63,6
O R Tambo	2779	1093	3872	1273	32,9	2362	61,0
Sarah Baartman	2358	216	2574	725	28,2	1575	61,2
Eastern Cape	25815	12134	37949	11030	29,1	24118	63,6

Joe Gqabi has the highest case fatality rate (42.4%) among the hospitalized, followed by Amathole (37.1%), Chris Hani (33.7%) and OR Tambo (32.9%). BC Metro discharged more than 70% of the hospitalized and the lowest discharge rate was seen in Joe Gqabi (50.3%).

Table 12. No. of SARS-Cov-2 hospitalizations and outcomes, as of 25 Aug 2021

Eastern Cape	Public	Private	Total
Cumulative Admissions	25815	12134	37949
Died	8158	2872	11030
Discharged Alive	15249	8869	24118
Transferred Out	1649	54	1703
Currently Admitted	741	328	1069
In ICU	6	95	101
In High Care	28	9	37
In General	707	224	931
On Oxygen	262	34	296
Ventilated	85	29	114

Of the 1,069 currently admitted patients, 741 (69.3%) occurred in public and 328 (30.7%) in private. Hospitalizations in general ward were 931, i.e. 707 in public and 224 in private; 101 in ICU, i.e. 6 in public and 95 in private; 37 in High Care, i.e. 28 in public and 9 in private; 296 on oxygen, i.e. 262 in public and 34 in private; and 114 on ventilation, i.e. 85 in public and 29 in private.

Districts	Currently admitted	In ICU	Ventilated	Oxygenated	Admitted in Past Day
Alfred Nzo	93	0	0	14	11
Amathole	47	0	0	17	4
BC Metro	150	27	3	27	4
Chris Hani	122	9	1	50	10
Joe Gqabi	23	0	0	10	2
NM Metro	439	56	107	96	13
O R Tambo	121	9	3	45	4
Sarah Baartman	74	0	0	37	6
Eastern Cape	1069	101	114	296	54

ECP District	Previous 14 days admission average	Current 14 days admissions average	Percentage change in admissions	Previous 14 days death average	Current 14 days deaths average	Percentage change in deaths
Alfred Nzo	3.93	3.36	-14.55	1.43	0.93	-35.00
Amathole	3.57	2.29	-36.00	1.07	0.93	-13.33
Buffalo City Metro	12.50	11.50	-8.00	2.29	2.14	-6.25
Chris Hani	9.43	9.79	3.79	3.29	2.36	-28.26
Joe Gqabi	3.07	1.86	-39.53	1.00	1.00	0.00
N Mandela Metro	34.93	24.93	-28.63	12.00	9.29	-22.62
O R Tambo	10.14	6.71	-33.80	3.36	1.50	-55.32
Sarah Baartman	13.57	11.07	-18.42	2.71	2.00	-26.32
Eastern Cape	91.14	71.50	-21.55	27.14	20.14	-25.79

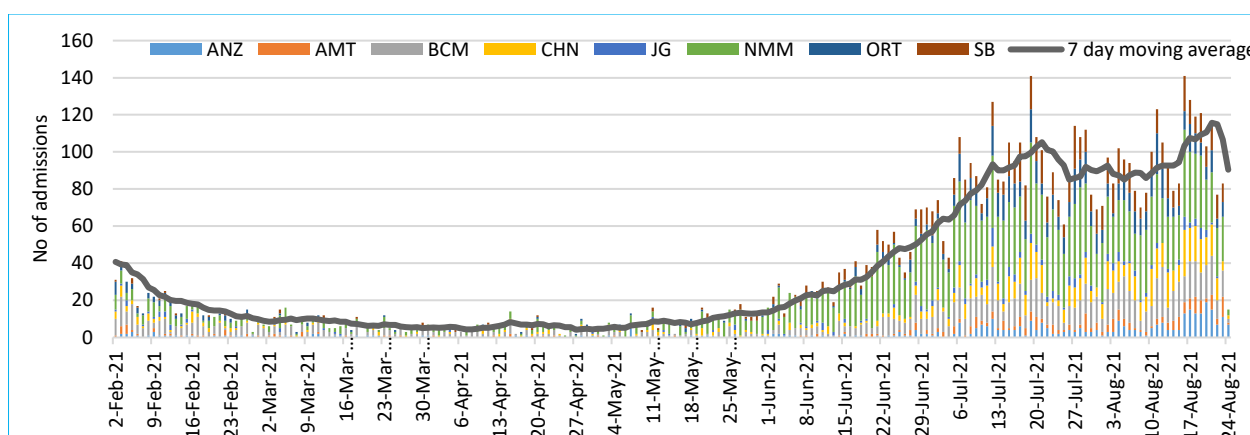


Fig. 28. Average (7 days moving) daily admissions by districts, as of 22nd Aug. 2021 (DATCOV)

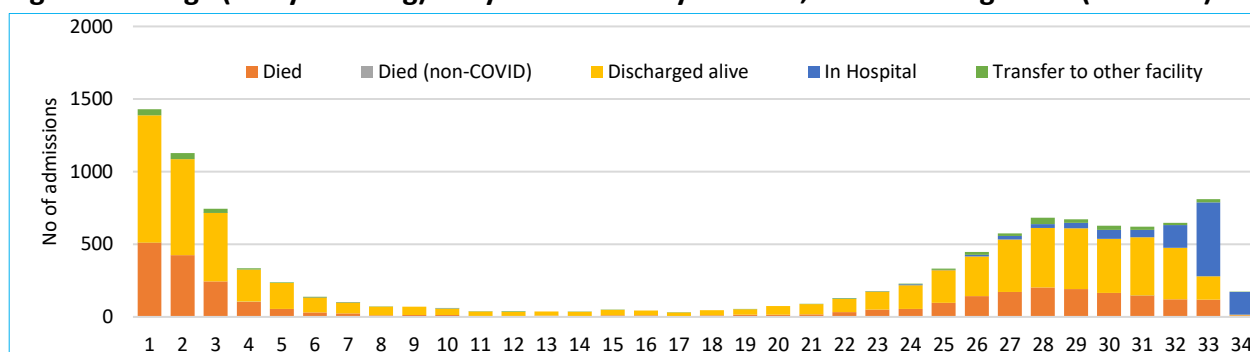


Fig. 29. Hospitalizations & outcomes by admission week, as of 22nd Aug. 2021 (DATCOV)

There was an increase in the number of patients who remained in hospital from week 24 to week 28 and shown a decline to week 32.

7.2. Co-morbidities among admitted cases and deaths

The most common co-morbidities among the hospitalized SARS-Cov-2 patients were hypertension (46.5%) and diabetes (30.3%) among hospitalized SARS-Cov-2 cases. Two other commonly reported co-morbidities HIV (9.3%), obesity (6.9%) and asthma (4.3%).

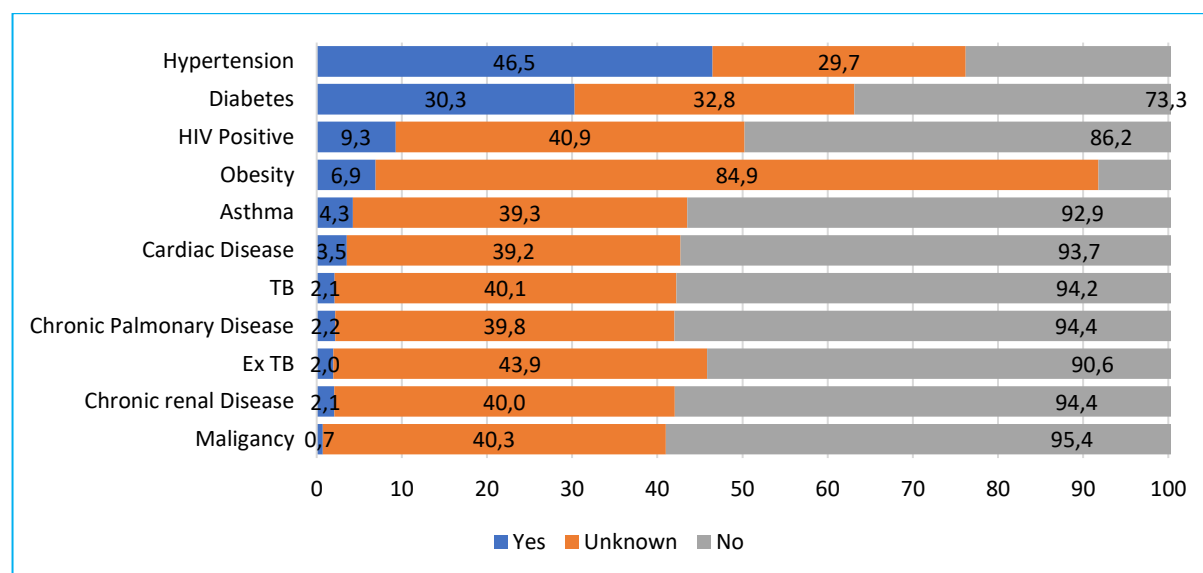


Fig. 30. Co-morbidities among SARS-Cov-2 hospitalizations, as of 25 Aug. 2021 (DATCOV)

A significant percentage of hospitalized patients did not have co-morbidities. This may have resulted in the underestimation of the burden of co-morbidities among hospitalized cases.

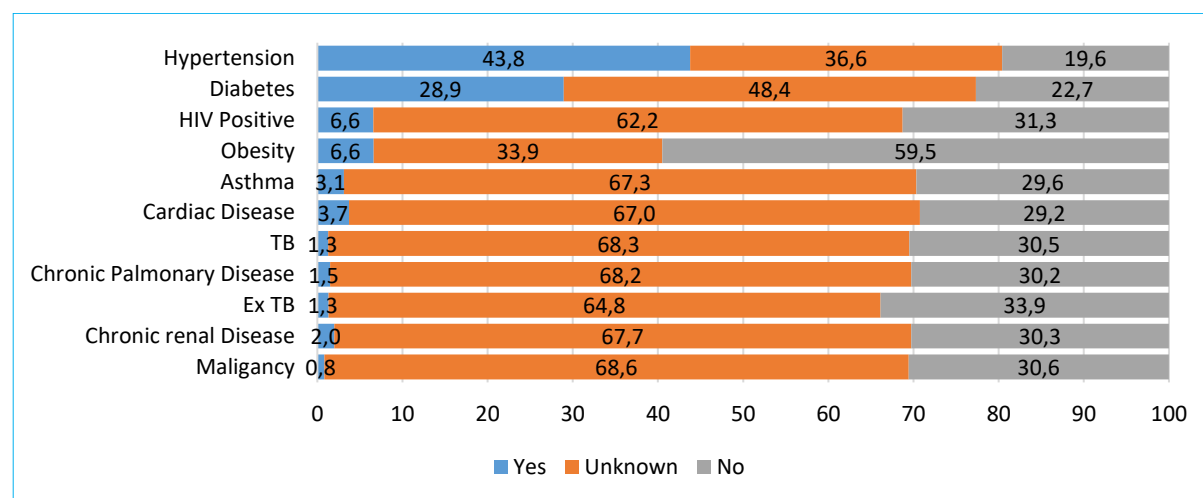


Fig. 31. Co-morbidities among SARS-Cov-2 cases who demised, as of 25 Aug. 2021 (DATCOV)

The most common comorbidities among those cases that demised in the hospital include hypertension (43.8%) and diabetes (28.9%). Other 4 co-morbidities were reported, i.e. HIV (6.6%), obesity (6.6%), cardiac diseases (3.7%), and asthma (3.1%).



3 577 773

No Screened



1 432 970

Total Lab Tests



260 111

Positive Cases



230 855

Recoveries



13 544

Deaths

DISTRICT	TOTAL SCREENED	TOTAL TESTED	TOTAL CASES	RECOVERIES	DEATHS	ACTIVE CASES	AREAS
ALFRED NZO	694 706	38 148	9 541	8 460	651	430	Badibanise,Bhakubha,Bizana,Brooksnek,Cedarville,Chithwa,Dutyini,Emanxiweni,Ezinteteni,Kokstad,Lucingweni,Matluti, Mandileni , Matatiele,Mount Ayliff, Mount Frere , Ndantana, Ngcingo , Ntabakhulu, Sugar Bush, Tabankulu
AMATHOLE	658 126	93 096	21 886	19 335	1180	1 371	Adelaide, Alice, Bolotwa, Butterworth, Cathcart, Centane, Cuba, Debe Nek, Dikana, Elliotdale, Ethafeni, Frankfort, Fort Beaufort, Ibika, Idutywa, Keiskammahoe, Willowale, Lower Mhangcolo,Debe Nek, Mgababa, Nyaniso, Peddie
BUFFALO CITY METRO	210 367	178 386	46 097	41 103	2528	2 466	Abbottsford, Amalinda , Beacon Bay, Bisho, Braelyn, Buffalo Flats, Dimbaza, Duncan Village, East London, Ginsberg, Gonubie, Greenfields, Haven Hills, King William's Town, Mamata, Mdantsane, Masingata, Mantlani, Nahoon, Ndevana, Needs Camp, Parkside, Selbourne, Sunnyridge, Sunset Bay,Tshatshu, Vincent, West Bank, Zweitsa
CHRIS HANI	515 346	86 826	25 014	21 112	1869	2 033	Bankies, Dordrecht, Dukathole, Ekunene, Ezibeleni, Kwanobuhle, Mcwangele, Madeira Park, New Rest, Ngcobo, Ngonyama, Popcorn Valley, Qebe, Qoqodala, Queenstown, Sigadleni, Vaalbank, Sada, Middleburg, Thornhill, Ndzamela, Mlungisi,Westbourne,Ntlonze, Maya Village,Ekuphumleni, TopTown, Vleipoort, Zola
JOE GOABI	87 855	40 822	11 096	9 808	639	649	Aliwal North, Barkley East, Bhodi, Land Camp, Ugie, Inglewood, Maclear, Solomzi, Sunduza,Robberv, Venterstad
NELSON MANDELA METRO	856 883	300 028	85 413	76 797	4125	4 491	Algoa Park, Bethelsdorp, Bloemendal, Bluewater Bay, Booyens Park, Cotswold, Cuyler, Daleview, Despatch, Fernglen Port, Gelvandale, Govan Mbeki, Heath Park, Helenvale, Jacksonville, Joe Slovo, Kabega Park, Kamama Park, Kamvelile, Khayalethu, Kleinskool, Kwa Dwesi, Kwa-Magxaki, Kwanobuhle, Kwanoxolo, KwaZakhele, Lovemore Heights, Missionvale, Motherwell, Mount Croix, New Brighton, Newton Park, North End, Port Elizabeth, Rowallan Park, Salt Lake, Sardinia Bay, Schauderville, Sherwood, Silvertown, Soweto-On-Sea, Steve Tshwete, Summerstrand, Tamboville, Uitenhage, Veeplaas, Walmer, West End, Westering, Zwide, Lorraine, Hillside, Daleview
OR TAMBO	265 613	109 512	26 092	23 282	1533	1 277	Gomora, Lutatweni, Machibi, Majola, Mandilini, New Payne Ngqeleni, Ntsimbini, Old Payne, Libode, Lusikisiki, Mqanduli, Tombo, Marhewini, Mpikwana,Bhongweni,Cibeni, Flagstaff, Magcakeni, Ngangelizwe, Ngqanda, Tyevelana, Pollar Park, Tabase Mission, Slovo Park, Southernwood, Waterfall Park, Zandukwana,Zimbane, Ziphuzana
SARAH BAARTMAN	288 877	137 369	32 410	28 832	1019	2 559	Aberdeen, Alexandria, Graaf-Reinet, Grahamstown, Jeffrey's Bay, Joubertina, Humansdorp, Parson, St. Francis Bay, Kirkwood, Lotusville, Bergendal, Bratenfel, Joza, Santaville, Somerset East, Thornhill, Willomore
IMPORTED*	-	0	808	766	0	42	Bloemfontein, Ceres, Cape Town, Dunoos, Fishoek, George, Green Point, Gugulethu, Hout Bay, Langa, Khayelitsha, Knysna, Phillipi, Stellenbosch, Strand
PENDING	-	448 783	1754	1360	0	394	
GRAND TOTALS	3 577 773	1 432 970	260 111	230 855	13 544	15 712	

ACKNOWLEDGEMENTS

- The epidemiological and surveillance functions continue because of the strong partnership between the following stakeholders.
- WHO supported epidemiologists, biostatisticians, and technical support.
- The National Institute for Communicable Diseases (NICD) provided the province with epidemiologists and technical support
- The data analyst from TB/HIV Care has supported data management, mapping of the cases and other functions in the department
- Right to Care assists in mapping the cases in different areas in the province
- Centre for Disease Control (Atlanta-Pretoria) provided the Department with an epidemiologist and a statistician to support the province
- The Department of Health, both the National and Provincial Department of Health repurposed the employees to focus on the control and prevention of the pandemic
- Laboratories; National Health Laboratory Services, Pathcare and Ampath for prompt and regular reporting of SARS-Cov-2 newly diagnosed cases.

PROVINCE						
Indicator	Description	week 32	week 33	% change	Phase/Threshold	Target
New cases (seven day moving Average)	COVID-19 cases (percentage change from previous week)	709	1042	47,0		< 10% increase from previous week
Active cases incidence	Active COVID-19 cases per 100 000 population	143,32	205,05	43,1		< 10% increase from previous week
Current COVID-19 hospital admissions	Current COVID-19 hospital admissions (Public and Private)	825	996	20,7		< 10% increase from previous week
COVID-19 mortality	COVID-19 deaths in the last 7 days	1,93	2,84	47,2		< 10% increase from previous week
All cause mortality						
Positivity Rate	Percentage of positive tests of all tests conducted within a geographical area		18,7			Positivity rate rising above 20% in ageographical area constitute an alert
Testing rate	Number of tests/ 100000 population		581			Testing rate should be 200 cases per 100000 population

ALFRED NZO						
Indicator	Description	week 32	week 33	% change	Phase/Threshold	Target
New cases (seven day moving Average)	COVID-19 cases (percentage change from previous week)	15	51	240,0		< 10% increase from previous week
Active cases incidence	Active COVID-19 cases per 100 000 population	17,52	36,66	109,2		< 10% increase from previous week
Current COVID-19 hospital admissions	Current COVID-19 hospital admissions (Public and Private)	29	48	65,5		< 10% increase from previous week
COVID-19 mortality	COVID-19 deaths in the last 7 days	0,85	2,05	141,2		< 10% increase from previous week
All cause mortality						
Positivity Rate	Percentage of positive tests of all tests conducted within a geographical area		19,4			Positivity rate rising above 20% in ageographical area constitute an alert
Testing rate	Number of tests/ 100000 population		222			Testing rate should be 200 cases per 100000 population

AMATHOLE						
Indicator	Description	week 32	week 33	% change	Phase/Threshold	Target
New cases (seven day moving Average)	COVID-19 cases (percentage change from previous week)	31	56	80,6		< 10% increase from previous week
Active cases incidence	Active COVID-19 cases per 100 000 population	57,51	120,29	109,2		< 10% increase from previous week
Current COVID-19 hospital admissions	Current COVID-19 hospital admissions (Public and Private)	16	41	156,3		< 10% increase from previous week
COVID-19 mortality	COVID-19 deaths in the last 7 days	0,63	1,00	58,7		< 10% increase from previous week
All cause mortality						
Positivity Rate	Percentage of positive tests of all tests conducted within a geographical area		15,0			Positivity rate rising above 20% in ageographical area constitute an alert
Testing rate	Number of tests/ 100000 population		328			Testing rate should be 200 cases per 100000 population

BUFFALO CITY METRO						
Indicator	Description	week 32	week 33	% change	Phase/Threshold	Target
New cases (seven day moving Average)	COVID-19 cases (percentage change from previous week)	73	152	108,2		< 10% increase from previous week
Active cases incidence	Active COVID-19 cases per 100 000 population	141,59	225,34	59,1		< 10% increase from previous week
Current COVID-19 hospital admissions	Current COVID-19 hospital admissions (Public and Private)	127	139	9,4		< 10% increase from previous week
COVID-19 mortality	COVID-19 deaths in the last 7 days	1,25	2,25	80,0		< 10% increase from previous week
All cause mortality						
Positivity Rate	Percentage of positive tests of all tests conducted within a geographical area		36,2			Positivity rate rising above 20% in ageographical area constitute an alert
Testing rate	Number of tests/ 100000 population		367			Testing rate should be 200 cases per 100000 population

CHRIS HANI						
Indicator	Description	week 32	week 33	% change	Phase/Threshold	Target
New cases (seven day moving Average)	COVID-19 cases (percentage change from previous week)	77	162	110,4		< 10% increase from previous week
Active cases incidence	Active COVID-19 cases per 100 000 population	135,74	231,55	70,6		< 10% increase from previous week
Current COVID-19 hospital admissions	Current COVID-19 hospital admissions (Public and Private)	92	110	19,6		< 10% increase from previous week
COVID-19 mortality	COVID-19 deaths in the last 7 days	3,54	5,86	65,5		< 10% increase from previous week
All cause mortality						
Positivity Rate	Percentage of positive tests of all tests conducted within a geographical area		17,0			Positivity rate rising above 20% in ageographical area constitute an alert
Testing rate	Number of tests/ 100000 population		913			Testing rate should be 200 cases per 100000 population

JOE GQABI						
Indicator	Description	week 31	week 33	% change	Phase/Threshold	Target
New cases (seven day moving Average)	COVID-19 cases (percentage change from previous week)	39	48	23,1		< 10% increase from previous week
Active cases incidence	Active COVID-19 cases per 100 000 population	155,94	287,98	84,7		< 10% increase from previous week
Current COVID-19 hospital admissions	Current COVID-19 hospital admissions (Public and Private)	9	24	166,7		< 10% increase from previous week
COVID-19 mortality	COVID-19 deaths in the last 7 days	2,62	3,50	33,6		< 10% increase from previous week
All cause mortality						
Positivity Rate	Percentage of positive tests of all tests conducted within a geographical area		8,4			Positivity rate rising above 20% in ageographical area constitute an alert
Testing rate	Number of tests/ 100000 population		1180			Testing rate should be 200 cases per 100000 population

NELSON MANDELA BAY						
Indicator	Description	week 32	week 33	% change	Phase/Threshold	Target
New cases (seven day moving Average)	COVID-19 cases (percentage change from previous week)	311	336	8,0		< 10% increase from previous week
Active cases incidence	Active COVID-19 cases per 100 000 population	309,71	350,51	13,2		< 10% increase from previous week
Current COVID-19 hospital admissions	Current COVID-19 hospital admissions (Public and Private)	355	426	20,0		< 10% increase from previous week
COVID-19 mortality	COVID-19 deaths in the last 7 days	3,88	4,29	10,6		< 10% increase from previous week
All cause mortality						
Positivity Rate	Percentage of positive tests of all tests conducted within a geographical area		23,9			Positivity rate rising above 20% in ageographical area constitute an alert
Testing rate	Number of tests/ 100000 population		812			Testing rate should be 200 cases per 100000 population

OR TAMBO						
Indicator	Description	week 32	week 33	% change	Phase/Threshold	Target
New cases (seven day moving Average)	COVID-19 cases (percentage change from previous week)	61	101	65,6		< 10% increase from previous week
Active cases incidence	Active COVID-19 cases per 100 000 population	43,85	81,13	85,0		< 10% increase from previous week
Current COVID-19 hospital admissions	Current COVID-19 hospital admissions (Public and Private)	108	123	13,9		< 10% increase from previous week
COVID-19 mortality	COVID-19 deaths in the last 7 days	0,79	1,12	41,8		< 10% increase from previous week
All cause mortality						
Positivity Rate	Percentage of positive tests of all tests conducted within a geographical area		14,1			Positivity rate rising above 20% in ageographical area constitute an alert
Testing rate	Number of tests/ 100000 population		332			Testing rate should be 200 cases per 100000 population

SARAH BAARTMAN						
Indicator	Description	week 32	week 33	% change	Phase/Threshold	Target
New cases (seven day moving Average)	COVID-19 cases (percentage change from previous week)	102	136	33,3		< 10% increase from previous week
Active cases incidence	Active COVID-19 cases per 100 000 population	359,00	457,29	27,4		< 10% increase from previous week
Current COVID-19 hospital admissions	Current COVID-19 hospital admissions (Public and Private)	89	85	-4,5		< 10% increase from previous week
COVID-19 mortality	COVID-19 deaths in the last 7 days	2,92	5,00	71,2		< 10% increase from previous week
All cause mortality						
Positivity Rate	Percentage of positive tests of all tests conducted within a geographical area		15,6			Positivity rate rising above 20% in ageographical area constitute an alert
Testing rate	Number of tests/ 100000 population		1274			Testing rate should be 200 cases per 100000 population