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Daily Epidemiological Report for SARS-Cov_2

Report No. 230

Date Issued 19th Nov. 2020 @ 23h00

1. PURPOSE

The report provides a descriptive analysis of SARS-Cov-2 related cases and deaths, which were detected, reported and investigated in the Eastern Cape, as on the 19th Nov. 2020.

2. HIGHLIGHTS

a. **An increase in the number of new SARS-Cov-2 cases.**

- In the last 24 hours, 76,9% of the newly reported cases were from NM Metro and Sarah Baartman, 28,6% from BC Metro, Chris Hani and Amathole.
- The number of active cases was 9,039, where 90% were from NM Metro and Sarah Baartman, 18,8% BC Metro, Chris Hani and Amathole. The provincial recovery rate was 88,3% in the last 24 hours in the province.
- **The incidence of SARS-Cov-2 in BC Metro, Chris Hani, and Amathole, and the districts with a history of low transmission (Alfred Nzo and OR Tambo), is gradually increasing are more likely to have more than 5 per 100,000 soon.**
- **The number of tests with results available within 72 hours is gradually declining.** This may be due to the increase in the demand for testing.

b. Cov-19 related deaths

- In the last 24 hours, 43 deaths (10 occurred within the last 48 hours) were reported from Chris Hani, NM Metro and OR Tambo districts.
- **The number of deaths during the period of the re-emergence of SARS-Cov-2 continues to increase in the NM Metro and BC Metro. As the number of cases increases, the number of deaths is also increasing.**

c. Hospitalizations and outcomes

- The number of hospitalized patients was 14,944, where 68,4% occurred in the public sector and 31,6% in the private sector.

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- Twenty-six percent (25,8%) of the hospitalized cases demised and 61,8% were discharged alive. Of all the deaths which occurred, 75,1% occurred in the public sector and 24,9% in the private sector.
- **As the number of cases increases in NM Metro, hospitalizations also increases**.

d. Healthcare workers

- Eight percent (7,5%) of the SARS-Cov-2 cases were healthcare workers, i.e. 8,522 and 1,6% of healthcare workers demised.
- Majority of the healthcare workers who tested positive were nurses followed by doctors and clinical associates.
- **The number of healthcare workers who test positive for SARS-Cov-2 in the western part of the province.**

e. Key issues which require improvement

- Strengthen surveillance of SARS-Cov-2, which include the collection of specimens from eligible populations in line with the new guidelines.
- Prioritize contact tracing and monitoring to minimize the spread of the infections.
- Urgently isolate positive cases and quarantine contacts in line with the legislative or regulatory frameworks.
- Promote the use of prevention measures against SARS-Cov-2, i.e. wearing of masks, routine hand washing or sanitization, and social distancing.
- Strengthen Infection Prevention and Control (IPC) and Occupational Health & Safety (OHS) at the facility level.
- Health education, promotion, and community engagement to empower the communities to protect themselves from SARS-Cov-2.

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3. SARS-Cov-2 CASES & DEATHS

3.1. Summary of all cases and deaths

The number of newly diagnosed cases were **1,121** and **43** deaths related to SARS-Cov-2. This brings the cumulative number of cases and deaths to **113,139** and **4,200**, respectively.

Table 1. SARS-Cov-2 cases and deaths in the Eastern Cape by sex, as on 19 Nov. 2020

	No. of cases (18 Nov)	New Cases	Total	%	Deaths (18 Nov)	New Deaths		Total	Case Fatality Rate (%)
						*Newly Reported	**Newly occurred		
Male	44275	462	44737	39,5	1850	14	6	1870	4,2
Female	67724	659	68383	60,4	2307	19	4	2330	3,4
Unknown	19	0	19	0,0	0	0	0	0	0,0
Total	**112018**	**1121**	**113139**	**100,0**	**4157**	**33**	**10**	**4200**	**3,7**

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

Sixty-one percent (60,4%) of the SARS-Cov-2 cases were females and 39,6% were males. The case fatality rate related to SARS-Cov-2 was 3,7%, i.e. 4,2% among males and 3,4% females.

Table 2. Number of positive SARS-Cov-2 cases, recoveries and deaths, as on 19 Nov. 2020

District	Cases#	New Cases	Total Confirmed	Recoveries	Deaths#	New Deaths		Total Deaths	CFR%	Recovery Rate	Active Cases
						*Newly Reported	**Newly occurred				
Alfred Nzo	3510	17	3527	3429	65	0	0	65	1,8	97,2	33
Amathole	9934	55	9989	9276	361	0	0	361	3,6	92,9	352
BC Metro	22598	128	22726	21210	973	0	0	973	4,3	93,3	543
Chris Hani	10249	28	10277	9613	526	6	0	532	5,2	93,5	132
Joe Gqabi	4181	7	4188	4049	108	0	0	108	2,6	96,7	31
NM Metro	36215	659	36874	29355	1423	22	9	1454	3,9	79,6	6065
OR Tambo	13241	21	13262	12755	388	5	1	394	3,0	96,2	113
Sarah Baartman	11228	203	11431	9364	309	0	0	309	2,7	81,9	1758
Imported	369	1	370	365	2	0	0	2	0,5	98,6	3
Unspecified	493	2	495	484	2	0	0	2	0,4	97,8	9
E. Cape	**112018**	**1121**	**113139**	**99900**	**4157**	**33**	**10**	**4200**	**3,7**	**88,3**	**9039**

*** Deaths that occurred more than 48 hours ** Deaths which occurred within the past 48 hours of reporting # As on 18th Nov. 2020**

In the last 24 hours, 862 (76,9%) of the newly reported cases were from NM Metro and Sarah Baartman, 488 cases (28,6%) were from BC Metro, Chris Hani and Amathole. The number of active cases was 9,039, where 7,823 (86,5%) cases were from NM Metro and Sarah Baartman, 1,027 (11,4%) were from BC Metro, Chris Hani and Amathole. The provincial recovery rate was 88,3% in the last 24 hours in the province.

Six (6) districts have the recovery rate that is above 90% and only 2 with recovery rate less than 90%, i.e. NM Metro and Sarah Baartman. This may be attributed to the re-emergence of SARS-Cov-2 in the two districts.

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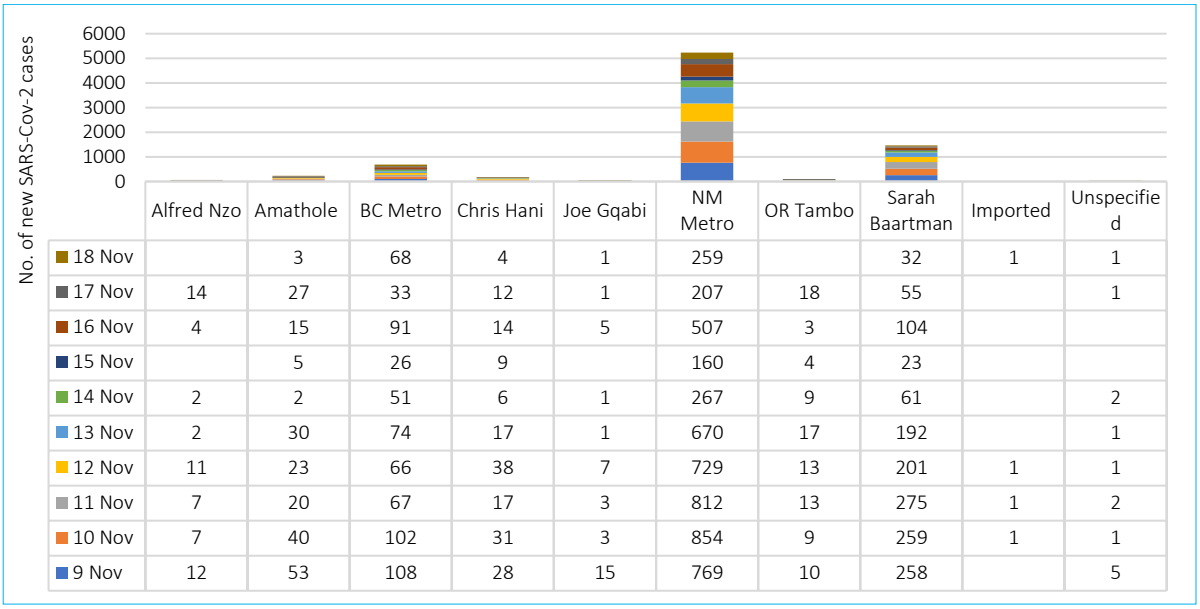
3.2. Newly diagnosed cases



	Alfred Nzo	Amathole	BC Metro	Chris Hani	Joe Gqabi	NM Metro	OR Tambo	Sarah Baartman	Imported	Unspecified
18 Nov		3	68	4	1	259		32	1	1
17 Nov	14	27	33	12	1	207	18	55		1
16 Nov	4	15	91	14	5	507	3	104		
15 Nov		5	26	9		160	4	23		
14 Nov	2	2	51	6	1	267	9	61		2
13 Nov	2	30	74	17	1	670	17	192		1
12 Nov	11	23	66	38	7	729	13	201	1	1
11 Nov	7	20	67	17	3	812	13	275	1	2
10 Nov	7	40	102	31	3	854	9	259	1	1
9 Nov	12	53	108	28	15	769	10	258		5

Fig. 1. No. of newly diagnosed SARS-Cov-2 cases in the last 10 days, as on 19th Nov. 2020

From the 09th to 18th November, the number of newly diagnosed SARS-Cov-2 cases were 7,984 (using the date of specimen collection). Eighty-four percent (83,9%) of these cases were from NM Metro (65,6%) and Sarah Baartman (18,3%). Nine percent (8,6%) of these cases were from BC Metro, and others were from the other 5 districts.

4. SARS-Cov-2 LAB TESTS & RESULTS

4.1. Test Results by Laboratory

A total of 568,135 specimens were tested by both public and private sector laboratories.

Table 3. Number of tests for Private and Public by Laboratories, as on 19 Nov. 2020

	Private	Public	Total	Percentage (%)
Alfred Nzo	2449	17103	19 552	3,4
Amathole	8339	41431	49 770	8,8
BC Metro	30821	65885	96 706	17,0
Chris Hani	6866	34990	41 856	7,4
Joe Gqabi	1281	17326	18 607	3,3
NMB Metro	35290	78555	113 845	20,0
OR Tambo	16631	44747	61 378	10,8
Sarah Baartman	3764	50513	54 277	9,6
Unclassified	112144	0	112 144	19,7
Eastern Cape	**217585**	**350550**	**568 135**	**100,0**

The public sector tested 61,7% of the specimens and 38,3% in private sector laboratories. Thirty-seven percent (37,0%) of the tests were from BC Metro and NM Metro. The department has received the database on the tests for the private sector and will update the 19,7% of unallocated tests as soon as the process of reallocation is complete.

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4.2. Tests by age group and sex

The figure below provides the percentage of SARS-Cov-2 tests by age groups, which were conducted in public sector laboratories.

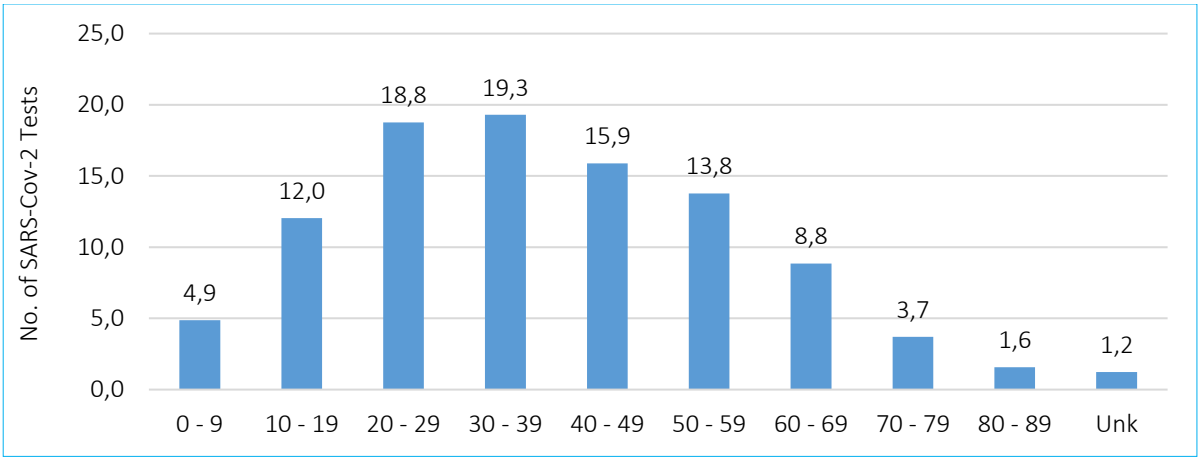

Fig. 3. SARS-Cov-2 Tests by age group & date of last report, as on 19th Nov. 2020 (N=51,440)

Most of the people who tested for SARS-Cov-2 were between the age of 20 and 39 years, i.e. the economically active age-group populations. There is a shift, which occurred from the school-going age persons, i.e. 10 to 19 years to the 20 years and above population.

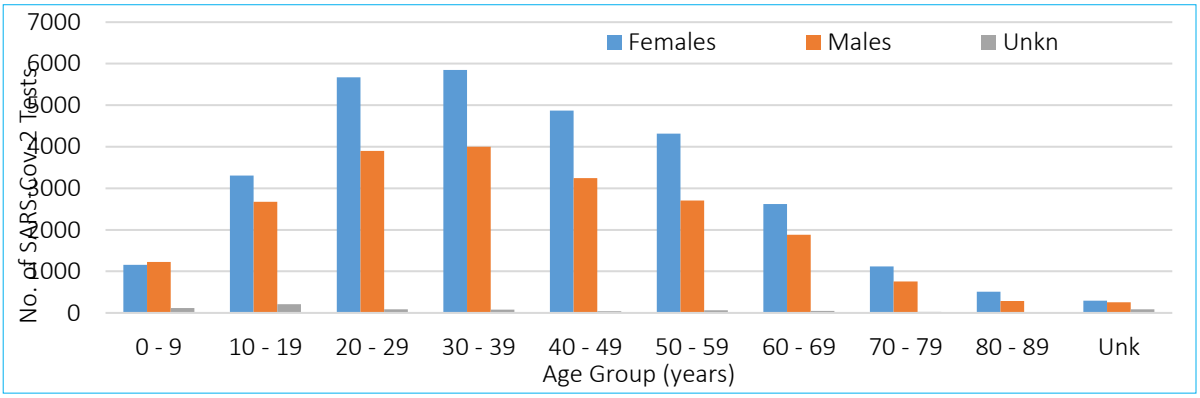

Fig. 4. No. of SARS-Cov-2 Tests by Age Group & Gender, as on 19th Nov. 2020 (N=51,440)

Majority of the persons who were tested for SARS-Cov-2 were females, i.e. 29,724 (57,8%), 20,942 (40,7%) were males, and 774 (1,5%) did not age information on sex.

4.3. Turnaround Time

During the pandemic, the turnaround time is the noticeable sign of laboratory service and used as a key performance indicator of the laboratory performance. The table below provides the turnaround time for all the tests, which tested positive from public and private laboratories, submitted to the National Institute for Communicable Diseases (NICD).

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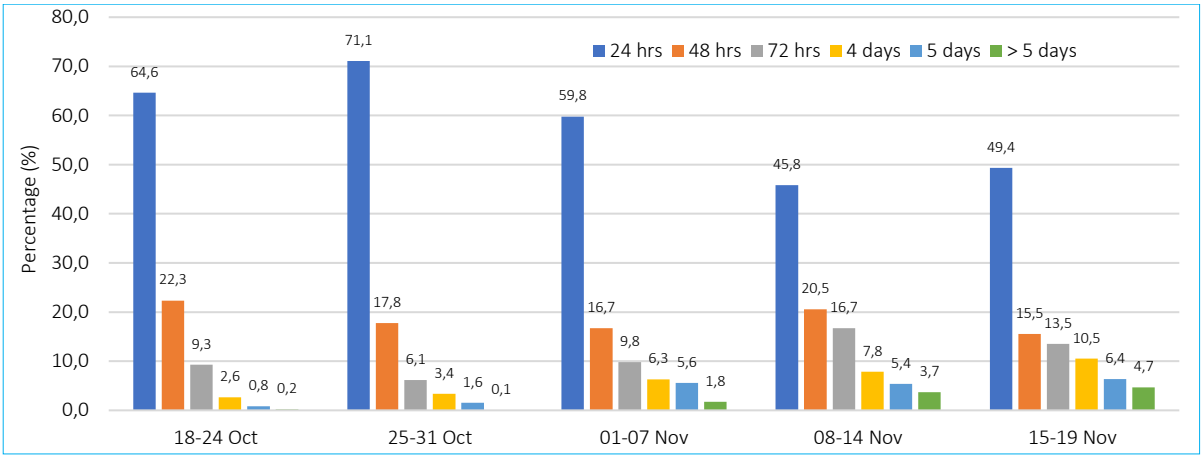

Fig. 5. Turnaround time for SARS-Cov-2 positive results by week, as on 19th Nov. 2020

Seventy-eight percent (78,4%) of the SARS-Cov-2 results were available within 72 hours in the 5 days of the current week, compared to 83,0% in the previous week. The results which were available within 24 hours have decreased from 71,1% on the 25th-31st October to 49,4% in the current week.

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

The figure below provides the 7-day moving average for the tests and the positivity rate.

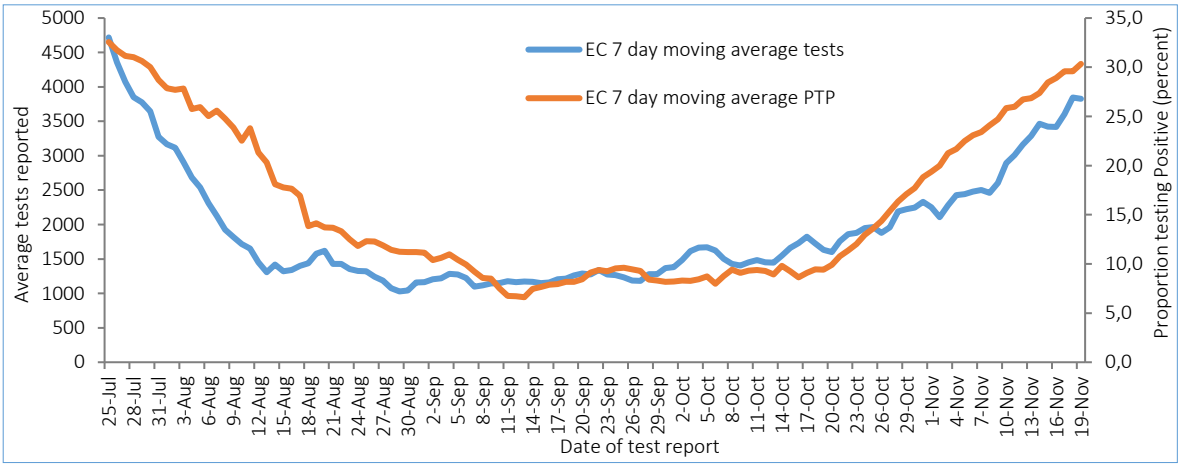

Fig. 6. 7-day moving average for lab tests and positivity rate, as on 19th Nov. 2020

The 7 day-moving average shows an increase in the positivity rate from 26,9% on the 13th to 30,3% on the 19th November, with a percentage change of 46,2%. This indicates that the proportion of specimens that test positive continues to increase as shown in the above figure. The testing rate has decreased from 59 per 100,000 to 50 per 100,000 population, with the percentage change which was -15,3%. There is a need to continue to improve the testing rate by the district.

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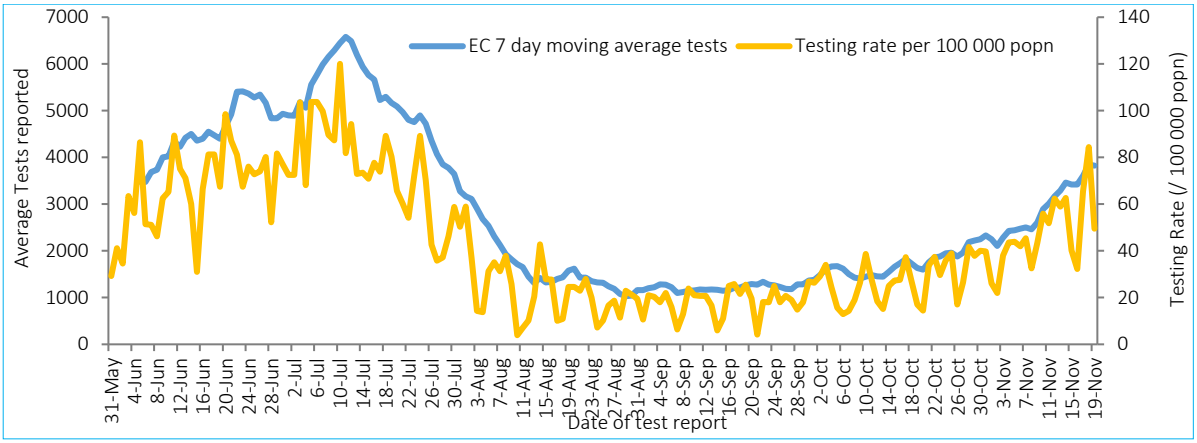

Fig. 7. 7-day moving average for tests and testing rate, as on 19th Nov. 2020

The 7 days moving average for SARS-Cov-2 tests have increased from 3,290 on the 13th to 3,826 on the 19th November, with the percentage change of 16,3%.

3. ACTIVE CASES, INCIDENCE & POSITIVITY RATE

3.1. Active SARS-Cov-2 cases and positivity rate

The number of active SARS-Cov-2 cases was 9,039, i.e. 134,6 cases per 100,000 population at risk. The cumulative positivity rate was 19,9%, with NM Metro (32,4%), followed by Chris Hani (24,6%), and BC Metro (23,5%).

Table 4. Confirmed SARS-Cov-2 cases, incidence & positivity rate, as on 19 Nov. 2020

District	Population Estimates	No. of tests done	SARS-Cov-2 Cases (ALL)	Active SARS-Cov-2 Cases	SARS-Cov-2 per 100,000	Positivity Rate
Alfred Nzo	827826	19552	3527	33	**4,0**	18,0
Amathole	798067	49770	9989	352	**44,1**	20,1
BC Metro	798798	96706	22726	543	**68,0**	23,5
Chris Hani	733743	41856	10277	132	**18,0**	24,6
Joe Gqabi	343075	18607	4188	31	9,0	22,5
NM Metro	1210803	113845	36874	6065	**500,9**	32,4
OR Tambo	1520922	61378	13262	113	7,4	21,6
Sarah Baartman	480223	54277	11431	1758	**366,1**	21,1
Imported	0	112144	370	3	0,0	0,3
Unspecified		0	495	9		
E. Cape	**6713457**	**568135**	**113139**	**9039**	**134,6**	**19,9**

Only one (1) district have less than 5 active cases per 100,000 population, i.e. Alfred Nzo. Seven (7) has reported more than 5 cases per 100,000. The highest incidence of SARS-Cov-2 was observed in NM Metro (500,9 per 100,000) and Sarah Baartman (366,1 per 100,000). Just like OR Tambo, Alfred Nzo is gradually moving out of the vigilance stage into an emerging hotspot.

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3.2. Active SARS-Cov-2 cases per 100,000

The figure provides the incidence of SARS-Cov-2 cases by district from week 10 to week 47.

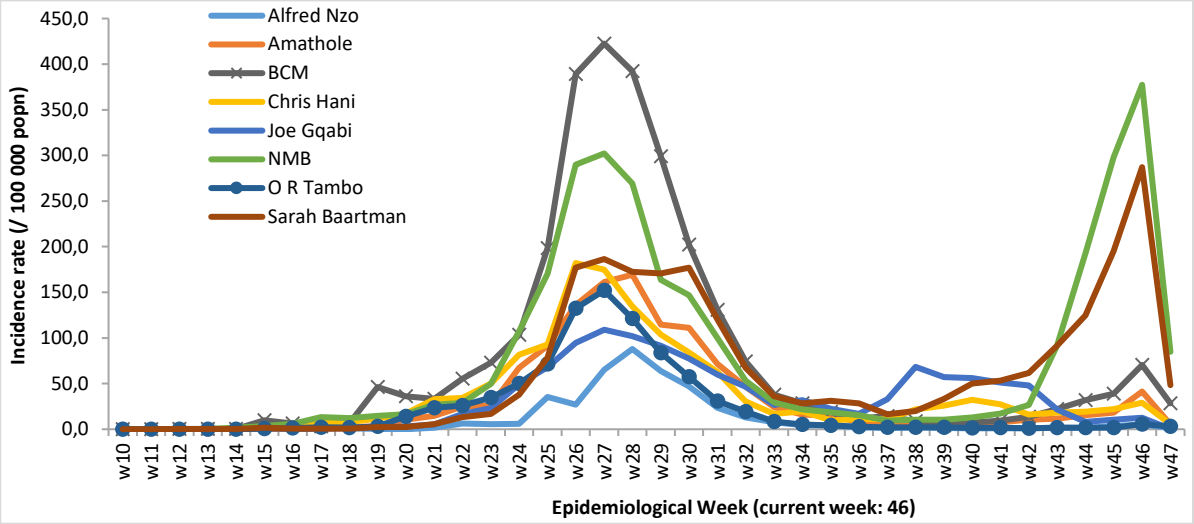

Fig. 8. The incidence (per 100,000) of SARS-Cov-2 by district, as on 18th Nov. 2020

There was a rapid increase in the incidence of SARS-Cov-2 from week 42 to week 47 in NM Metro. There was a gradual increase in the incidence of SARS-Cov-2 in both BC Metro and Sarah Baartman.

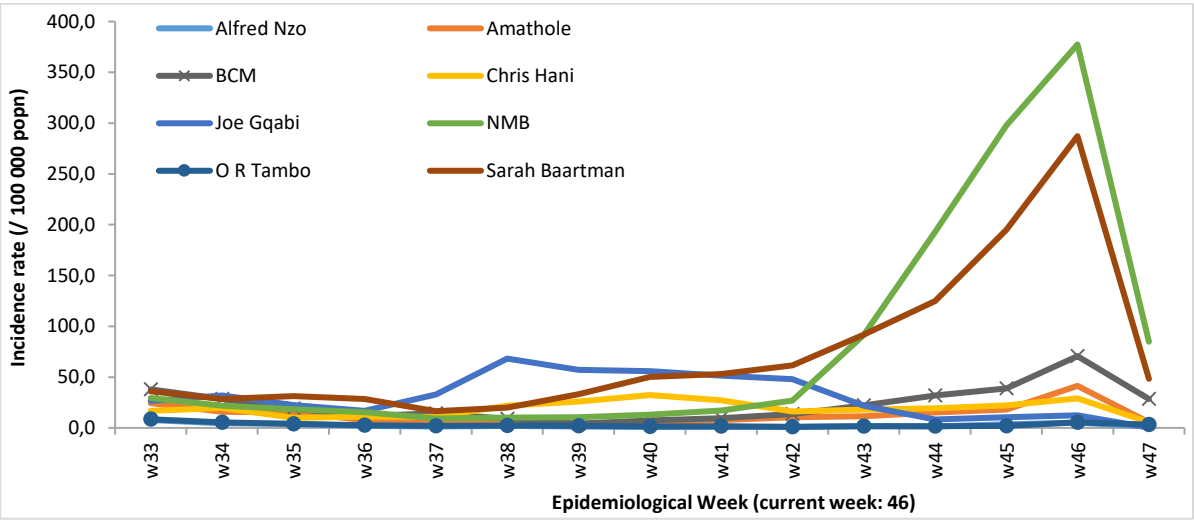

Fig. 9. Incidence of SARS-Cov-2 cases by epidemiological week, as on 18th Nov. 2020

Both NM Metro and Sarah Baartman have the highest incidence of SARS-Cov-2 cases in the province. From week 40, there was a gradual increase in the incidence of SARS-Cov-2 in BC Metro. The incidence continued to decrease from week 42 to week 47 in Joe Gqabi district.

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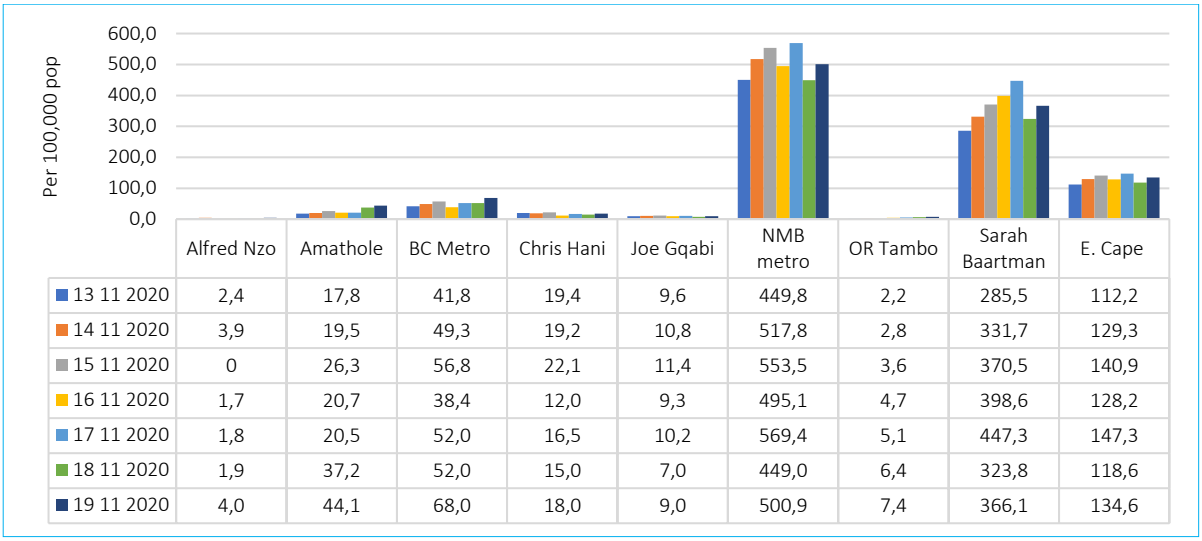

	Alfred Nzo	Amathole	BC Metro	Chris Hani	Joe Gqabi	NMB metro	OR Tambo	Sarah Baartman	E. Cape
13 11 2020	2,4	17,8	41,8	19,4	9,6	449,8	2,2	285,5	112,2
14 11 2020	3,9	19,5	49,3	19,2	10,8	517,8	2,8	331,7	129,3
15 11 2020	0	26,3	56,8	22,1	11,4	553,5	3,6	370,5	140,9
16 11 2020	1,7	20,7	38,4	12,0	9,3	495,1	4,7	398,6	128,2
17 11 2020	1,8	20,5	52,0	16,5	10,2	569,4	5,1	447,3	147,3
18 11 2020	1,9	37,2	52,0	15,0	7,0	449,0	6,4	323,8	118,6
19 11 2020	4,0	44,1	68,0	18,0	9,0	500,9	7,4	366,1	134,6

Fig. 9. Active SARS-Cov-2 cases per 100,000 by district, as on 19th Nov. 2020

In the past 7 days, the incidence of SARS-Cov-2 increased from 112,2 per 100,000 to 134,6 per 100,000. The incidence has increased in all the districts in the province including districts with low transmission rates. Only one district has less than 5 active cases per 100,000, and 7 has more than 5 active cases per 100,000 populations.

3.3. Incidence by districts

From week 33 to 42, there was evidence of low transmission of SARS-Cov-2 in NM Metro. There was a significant increase in the incidence from week 42 to 45, followed by a decrease from week 45 to 46.

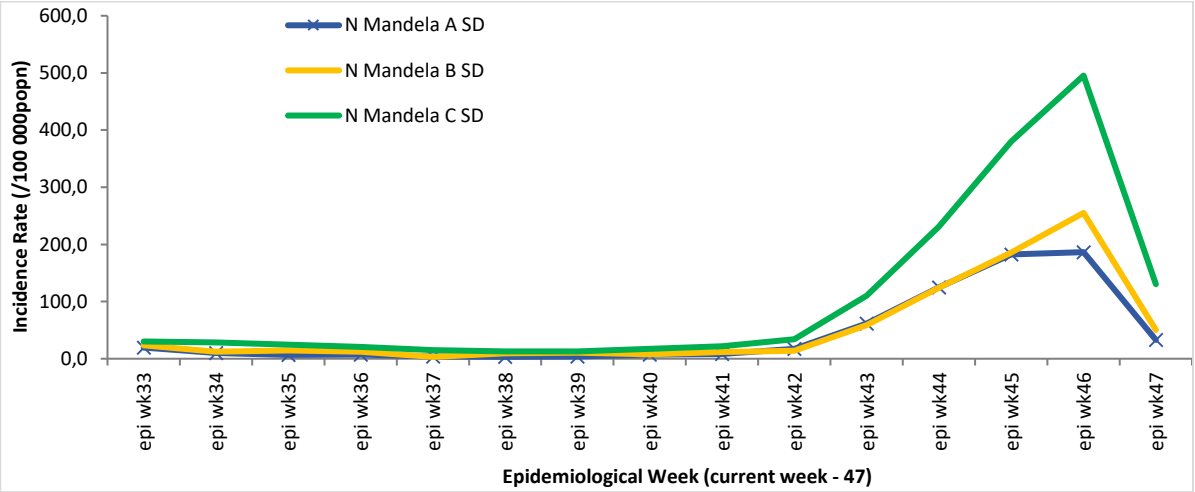

Fig. 10. Incidence of SARS-Cov-2 (per 100,000) in NM Metro, as on 18th Nov. 2020

Local transmission is evident in all sub-districts in the Metro. However, sub-district C has the highest incidence, followed by Sub-Districts B and A. The clusters, which occurred at the university and other areas, were due to the local transmission in the Metro.

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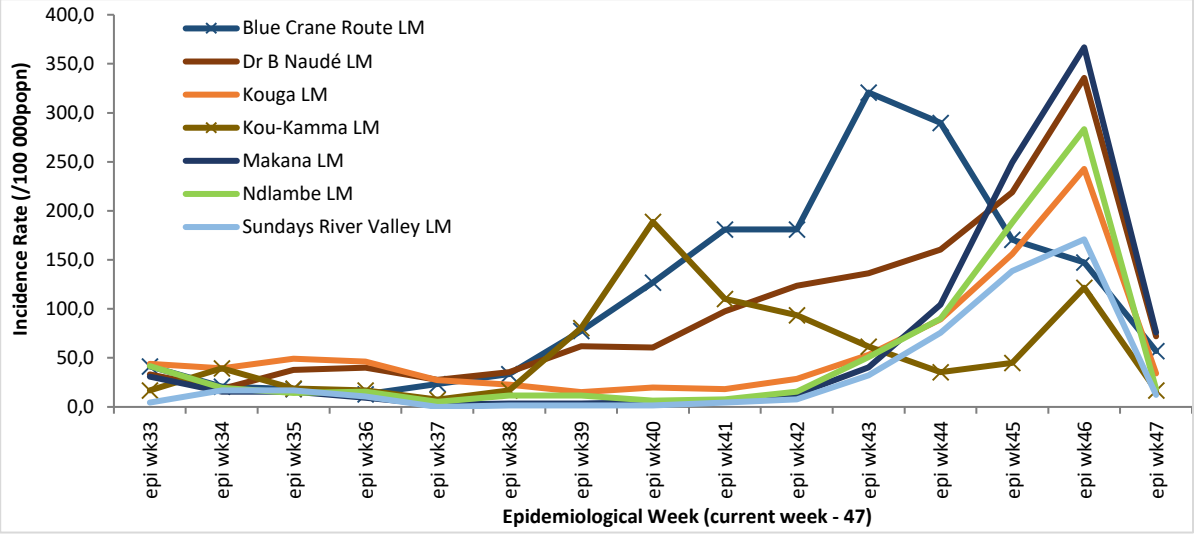

Fig. 11. Incidence of SARS-Cov-2 (per 100,000) in Sarah Baartman, as on 18th Nov. 2020

Similar to NM Metro, Sarah Baartman is also experiencing a resurgence of SARS-Cov-2. Makana, Dr. Beyers Naude, Blue Crane Route, Ndlambe, and Kouga. There is a gradual increase in the incidence of cases in Kou-Kamma.

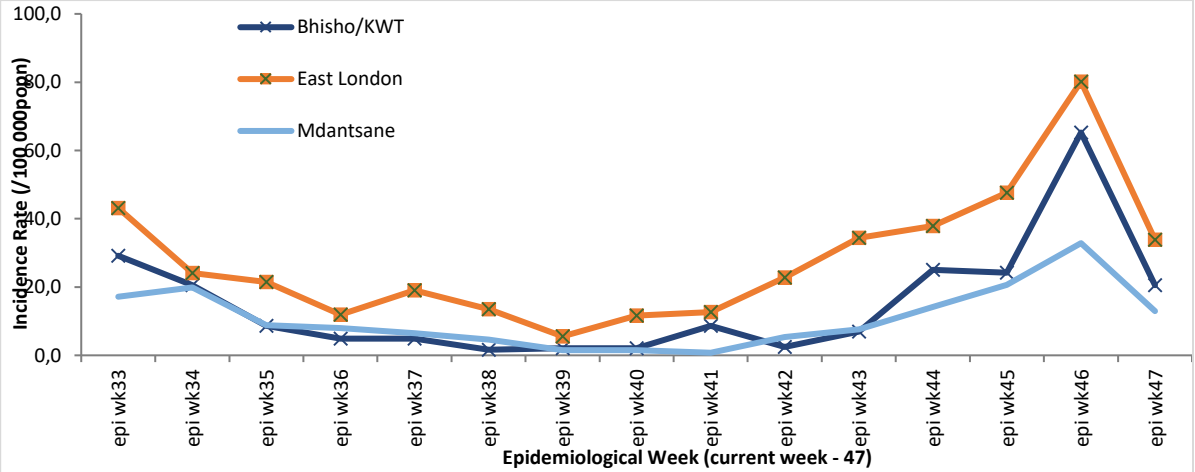

Fig. 10. Incidence of SARS-Cov-2 in Buffalo City Metro, as on 18th Nov. 2020

In the past 14 weeks, the incidence of SARS-Cov-2 had a gradual increase especially from week 39 to 47 in East London. Bisho /King Williams has the second-highest incidence of SARS-Cov-2 from week 40 but had a rapid increase from week 42. Mdantsane also had an increase in the incidence of cases from week 41 to 47, and a decrease from week 45 to 47. However, East London remains the epi-centre of the pandemic in BC Metro.

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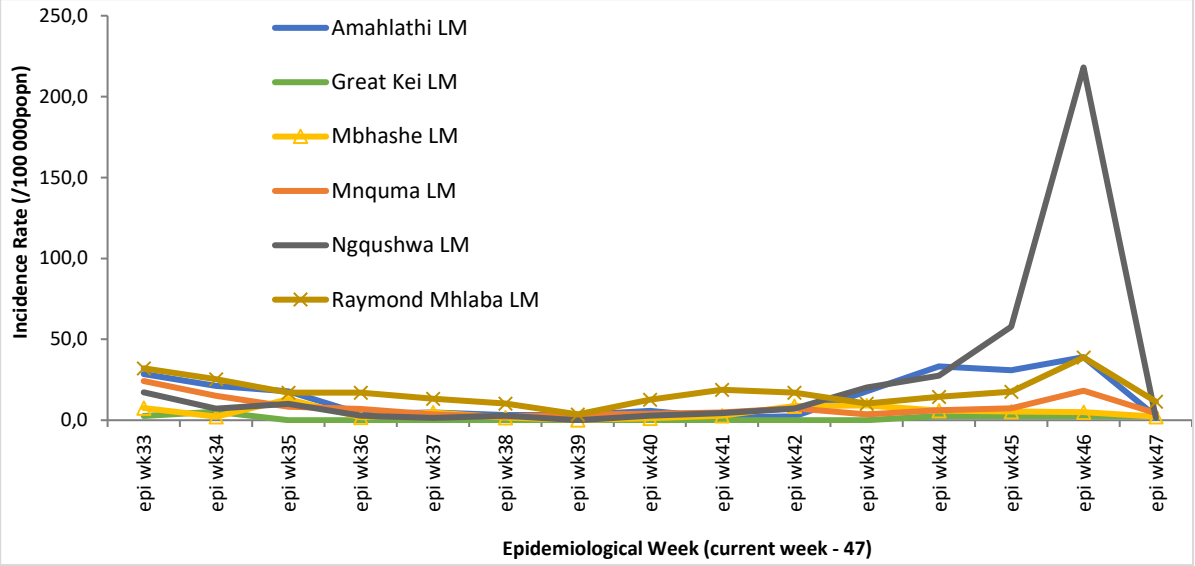

Fig. 11. Incidence of SARS-Cov-2 cases in Amathole District, as on 18th Nov. 2020

Four local municipalities reported a high incidence of SARS-Cov-2 compared to the other local municipalities, i.e. Ngqushwa, Amahlathi, Raymond Mhlaba and Mnquma.

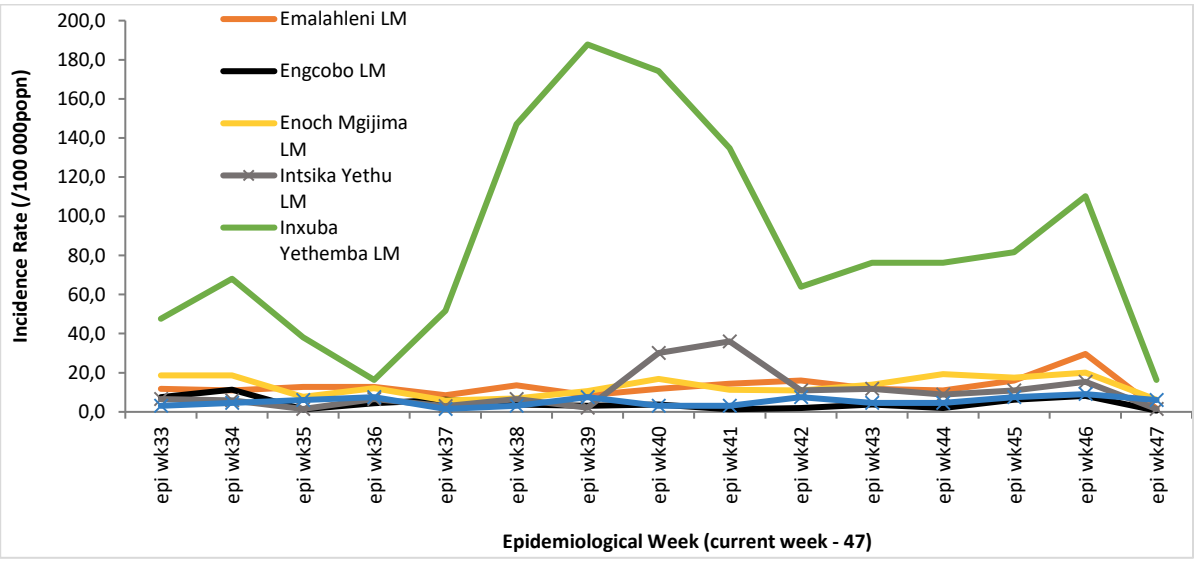

Fig. 12. Incidence of SARS-Cov-2 cases in Chris Hani District, as on 18th Nov. 2020

The highest incidence of SARS-Cov-2 occurred in Inxuba Yethemba local municipality, while the others maintain low transmission of the virus. Enoch Mgijima also showed incidence which higher than in the other districts.

Inxuba Yethemba continues to be a hotspot and requires re-enforcement of the regulations and public health interventions to eliminate local transmission.

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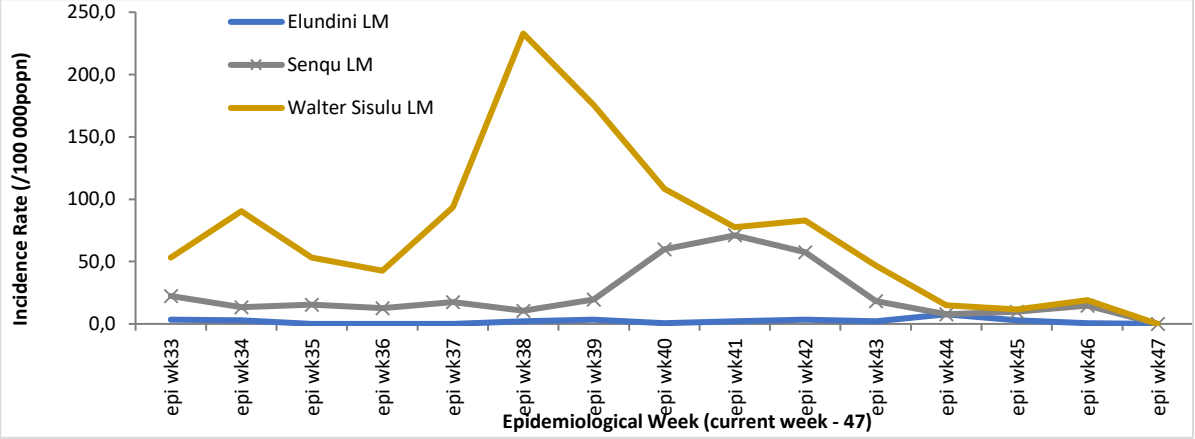

Fig. 13. Incidence (per 100,000) of SARS-Cov-2 in Joe Gqabi, as on the 18th Nov. 2020

Walter Sisulu Local municipality had a high incidence of SARS-Cov-2 for some time before week 33. However, there was a rapid increase in the incidence of the disease from week 36 and peaked after week 38, and rapidly decreased to week 47. Senqu Local Municipality also had an increase in the incidence especially from week 38 and peaked in week 41, but decreased until week 47. The incidence continues to decrease from week 44 to 47 in both Walter Sisulu and Senqu. Elundini has maintained a low incidence of the disease for more than 14 weeks.

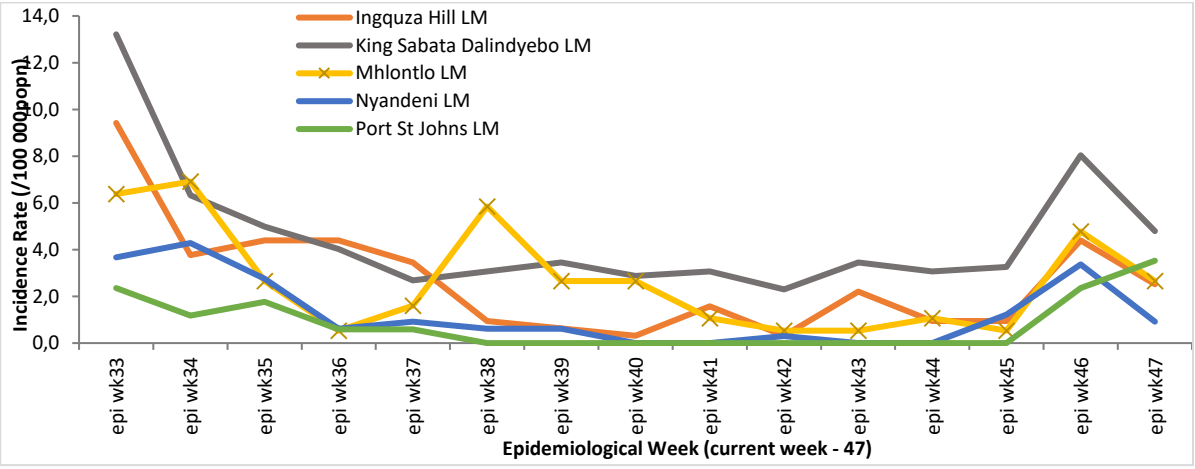

Fig. 14. Incidence (per 100,000) of SARS-Cov-2 in OR Tambo, as on 18th Nov. 2020

All the local municipalities have an upward growth in terms of the incidence of SARS-Cov-2. Hence, there is a possibility that the district may become an emerging hotspot if the number of new cases continues to increase.

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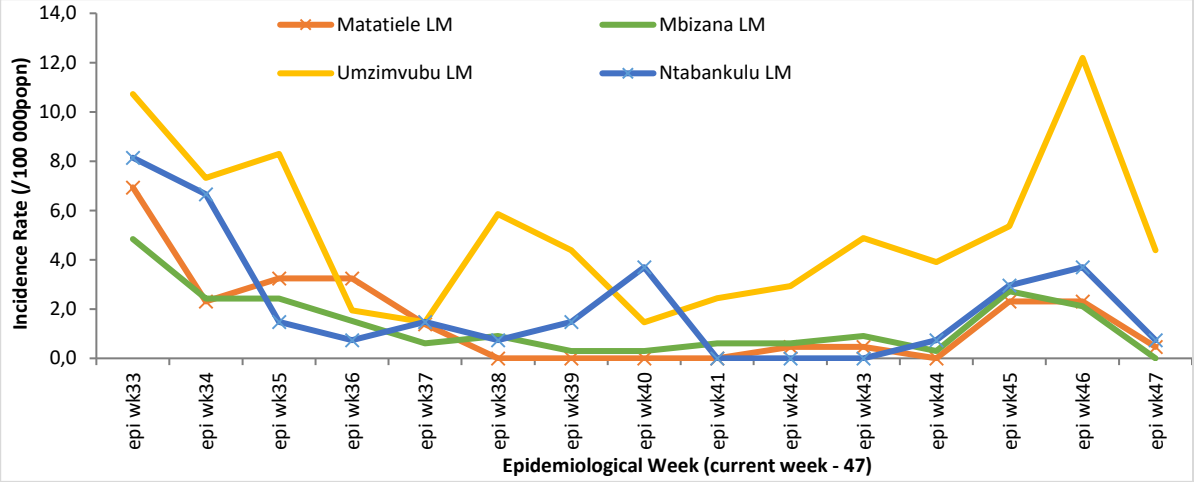
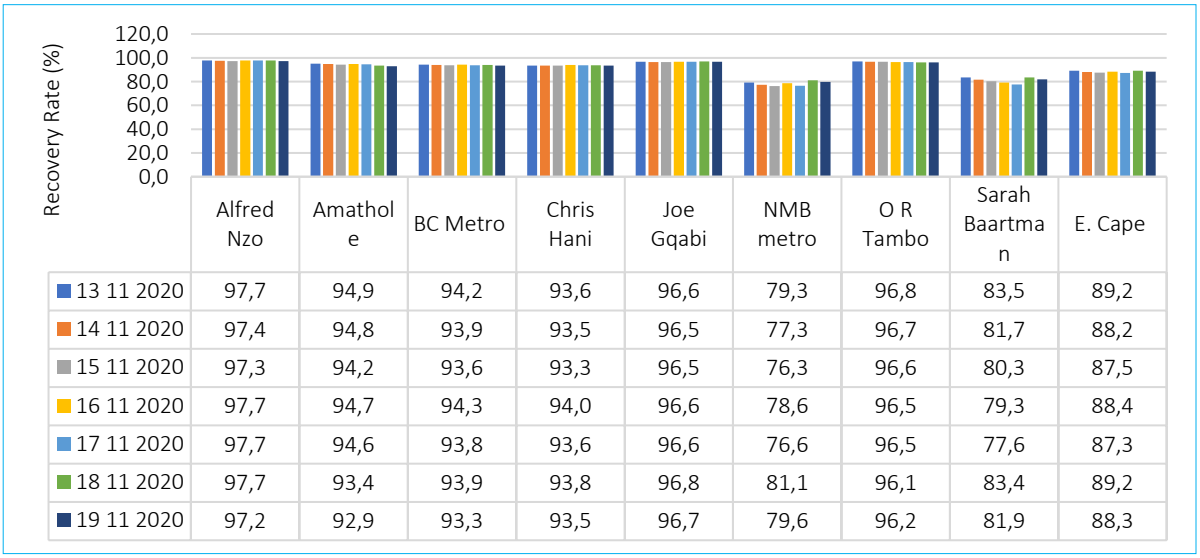


Fig. 15. The incidence of SARS-Cov-2 in Alfred Nzo, as on 18th Nov. 2020

In the past 14 weeks, the incidence of cases in Umzimvubu remains high, followed by Ntabankulu, and the other local municipalities. The district continues to have less incidence compared to the other districts.

3.4. Recovery Rate (%)

The figure below provides the recovery rate for the past 7 days.



	Alfred Nzo	Amathole	BC Metro	Chris Hani	Joe Gqabi	NMB metro	O R Tambo	Sarah Baartman	E. Cape
13 11 2020	97,7	94,9	94,2	93,6	96,6	79,3	96,8	83,5	89,2
14 11 2020	97,4	94,8	93,9	93,5	96,5	77,3	96,7	81,7	88,2
15 11 2020	97,3	94,2	93,6	93,3	96,5	76,3	96,6	80,3	87,5
16 11 2020	97,7	94,7	94,3	94,0	96,6	78,6	96,5	79,3	88,4
17 11 2020	97,7	94,6	93,8	93,6	96,6	76,6	96,5	77,6	87,3
18 11 2020	97,7	93,4	93,9	93,8	96,8	81,1	96,1	83,4	89,2
19 11 2020	97,2	92,9	93,3	93,5	96,7	79,6	96,2	81,9	88,3

Fig. 16. SARS-Cov-2 Recovery Rate (%) by districts, as on the 19th Nov. 2020 (N=99,900)

The total number of recoveries was 99,900 i.e. 88,3% recovery rate. Six (6) districts reported the recovery rate that was 90% and above, except for NM Metro and Sarah Baartman. The current increase in the number of newly diagnosed cases contributed to the reduction of the recovery rate and an increase in the number of active cases.

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3.5. Mapping of active cases, recoveries and deaths

The maps presented in this section shows the distribution of active cases, recoveries and deaths related to SARS-Cov-2. These maps show that the cases and deaths were widely distributed throughout the province.

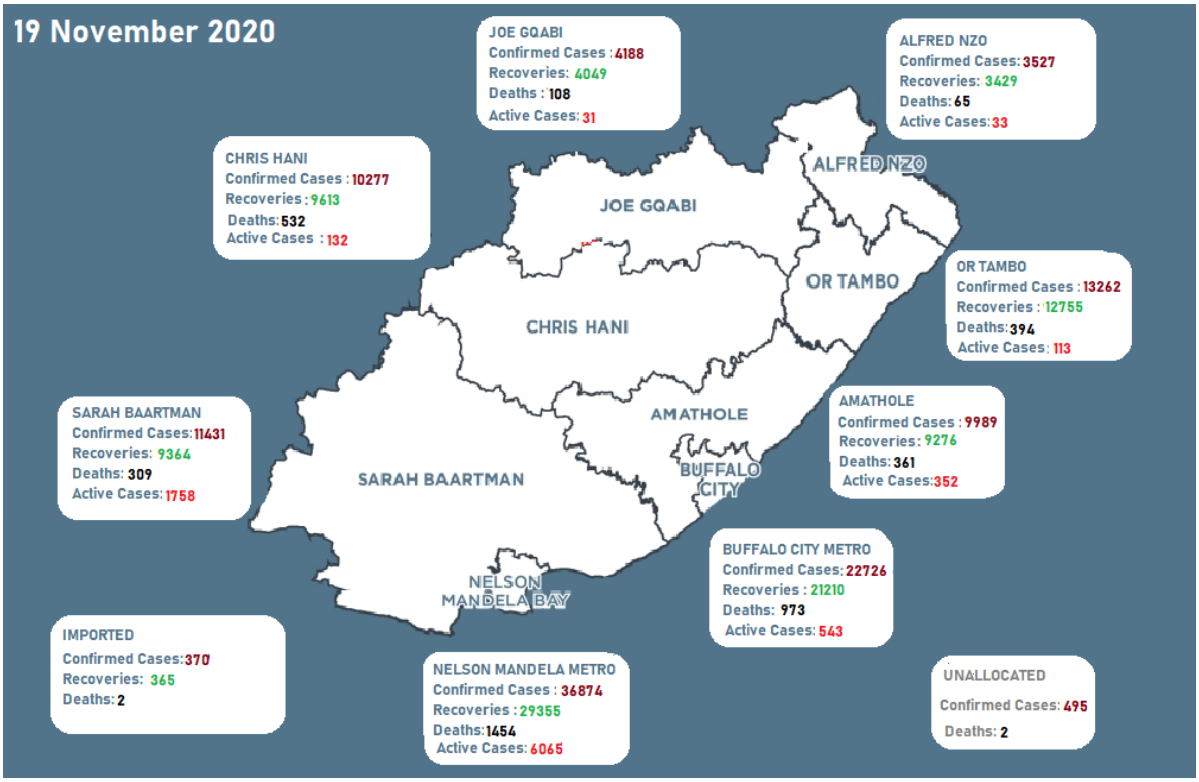

Fig. 17. No. of Covid-19 cases, recoveries and deaths, as on 19th Nov. 2020

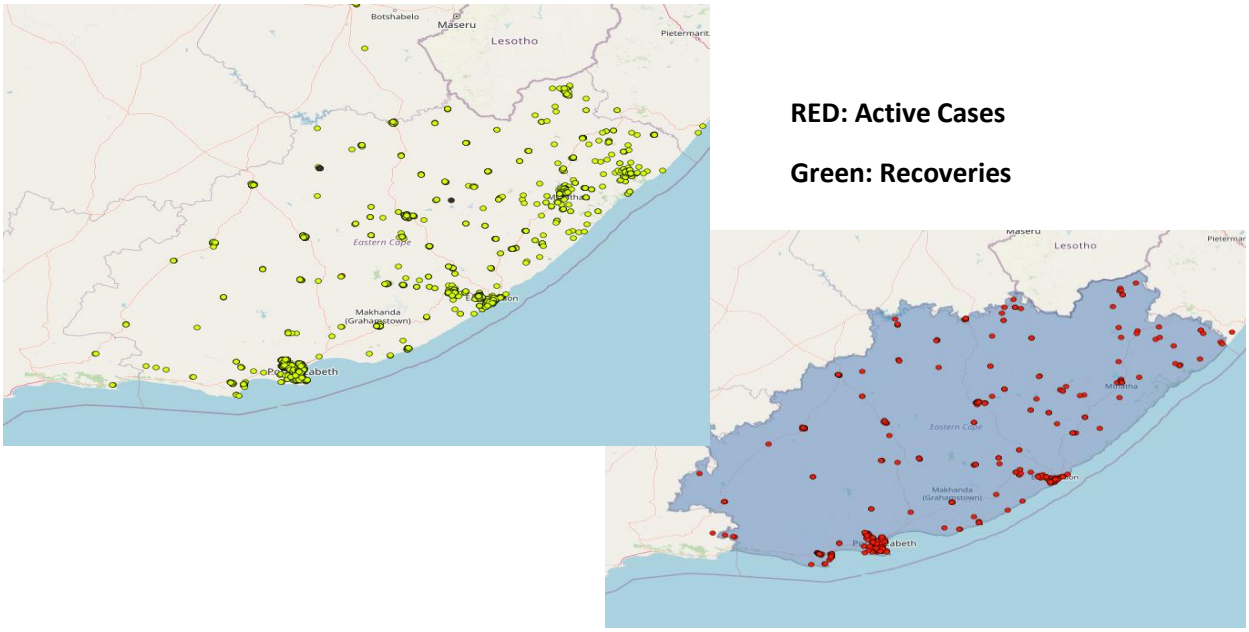

Fig. 18. SARS-Cov-2 active cases, recoveries and deaths, as on 25 October 2020

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

This graph provides the number (including cumulative) of cases and 7-day moving average.

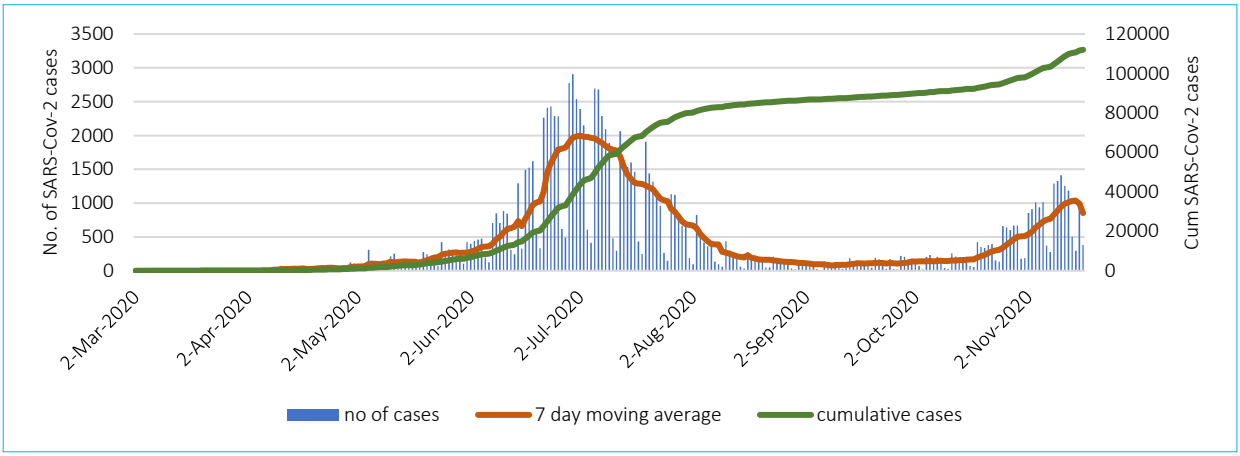

Fig. 19. The 7-day moving average for covid-19 cases by collection date, as on 19th Nov. 2020

The cumulative number of cases appear to be increasing with an increase in the number of daily or new infections, especially from the 19th October. The daily number of cases appears to be decreasing from the 09th November. However, the cumulative number of cases was showing an upward growth but with a minor change in recent days.

5. SARS-Cov-2 RELATED MORTALITY

5.1. SARS-Cov-2 related deaths

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

Table 5. Number of cases and deaths by month, as on 19th Nov. 2020

	Cases	Percent (%)	Deaths	Percent (%)	Case Fatality Rate (%)	Mortality Rate (per 100,000)
March	12	0,0	0	0,0	0,0	0,0
April	635	0,6	30	0,7	4,7	0,4
May	3280	2,9	241	5,7	7,3	3,6
June	23759	21,0	922	22,0	3,9	13,7
July	50252	44,4	1737	41,4	3,5	25,9
August	8278	7,3	529	12,6	6,4	7,9
September	2990	2,6	171	4,1	5,7	2,5
October	8619	7,6	221	5,3	2,6	3,3
November	15314	13,5	280	6,7	1,8	4,2
Unknown	0	0,0	69	1,6	0,0	1,0
Total	**113139**	**100,0**	**4200**	**100,0**	**3,7**	**62,6**

Sixty-five percent (65,4%) of the SARS-Cov-2 cases and 63,4% of the deaths occurred during the June-July period. The case fatality rate has decreased from 7,3% in May to 1,8% in November. The mortality rate in the province was 62,6 per 100,000 population. The mortality rate has decreased from 25,9 per 100,000 in July to 4,2 per 100,000 in November.

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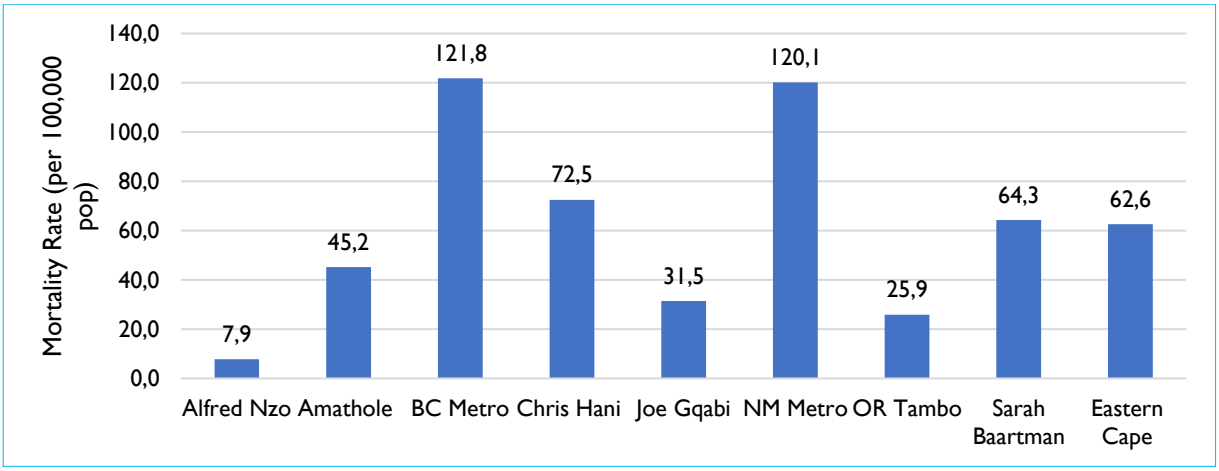

Fig. 20. SARS-Cov-2 related mortality per 100,000 pop by district, as on 19th Nov. 2020

The highest mortality rate was observed in BC Metro (121,8 deaths per 100,000), followed by NM Metro (120,1 deaths per 100,000), Chris Hani (72,5 per 100,000) and Sarah Baartman (64,3 per 100,000).

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

The figure below provides the daily reports of deaths and the cumulative number of deaths.

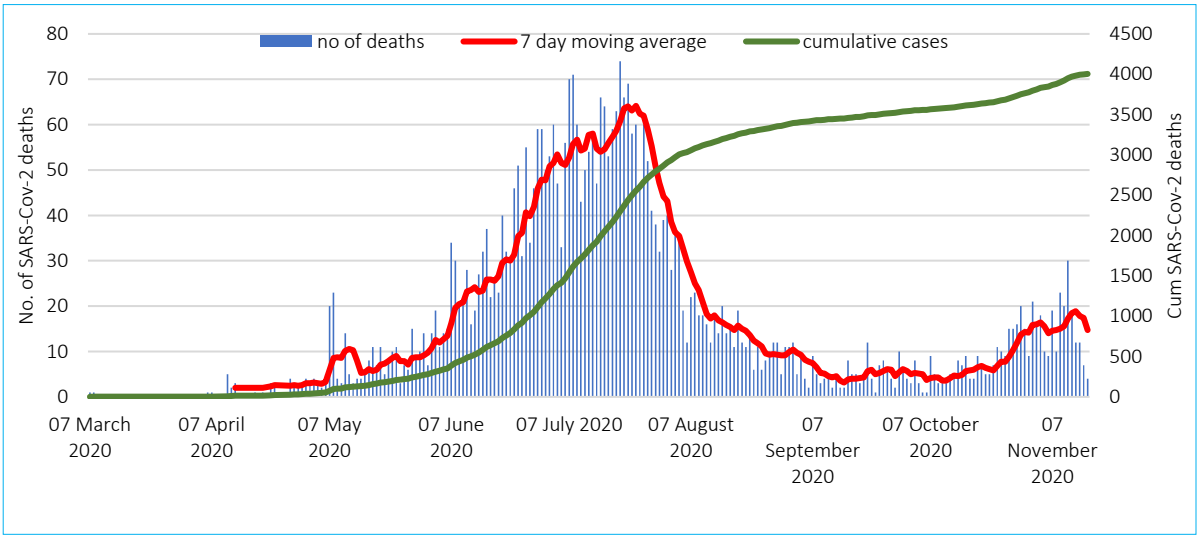

Fig. 21. Daily & cum. SARS-Cov-2 related deaths by date of demise, as on 19th Nov. 2020

The number of deaths per day related to SARS-Cov-2 appears to have increased from May and peaked on the 20th July, and declined rapidly to fewer cases in August and October. However, there was an increase in the number of deaths since the last week of October. The cumulative number of deaths appears to continue to increase from the end of October and early parts of November.

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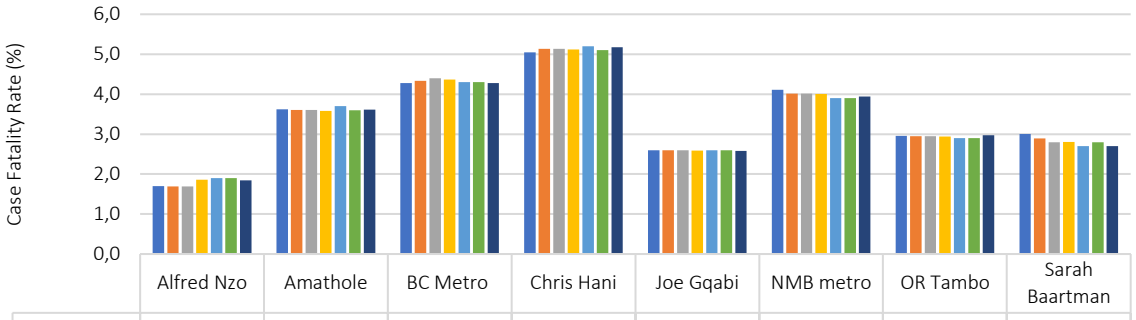
5.3. Case Fatality Rate by district

The case fatality rate for the SARS-Cov-2 has not significantly changed in the past 7 days.



	Alfred Nzo	Amathole	BC Metro	Chris Hani	Joe Gqabi	NMB metro	OR Tambo	Sarah Baartman
13 11 2020	1,7	3,6	4,3	5,0	2,6	4,1	3,0	3,0
14 11 2020	1,7	3,6	4,3	5,1	2,6	4,0	2,9	2,9
15 11 2020	1,7	3,6	4,4	5,1	2,6	4,0	2,9	2,8
16 11 2020	1,9	3,6	4,4	5,1	2,6	4,0	2,9	2,8
17 11 2020	1,9	3,7	4,3	5,2	2,6	3,9	2,9	2,7
18 11 2020	1,9	3,6	4,3	5,1	2,6	3,9	2,9	2,8
19 11 2020	1,8	3,6	4,3	5,2	2,6	3,9	3,0	2,7

Fig. 22. SARS-Cov-2 Case Fatality Rate (%) by district, as on 19th Nov. 2020 (N=4,200)

The highest case fatality rate was observed in Chris Hani (5,2%), followed by BC Metro (4,3%), NM Metro (3,9%), Amathole (3,6%), OR Tambo (3,0%), Sarah Baartman (2,7%)and Joe Gqabi (2,6%). Alfred Nzo district reported the lowest CFR, i.e. 1,8%.

5.4. Case Fatality Rate by age group

The figure below provides the case fatality rate of SARS-Cov-2 cases, which were reported.

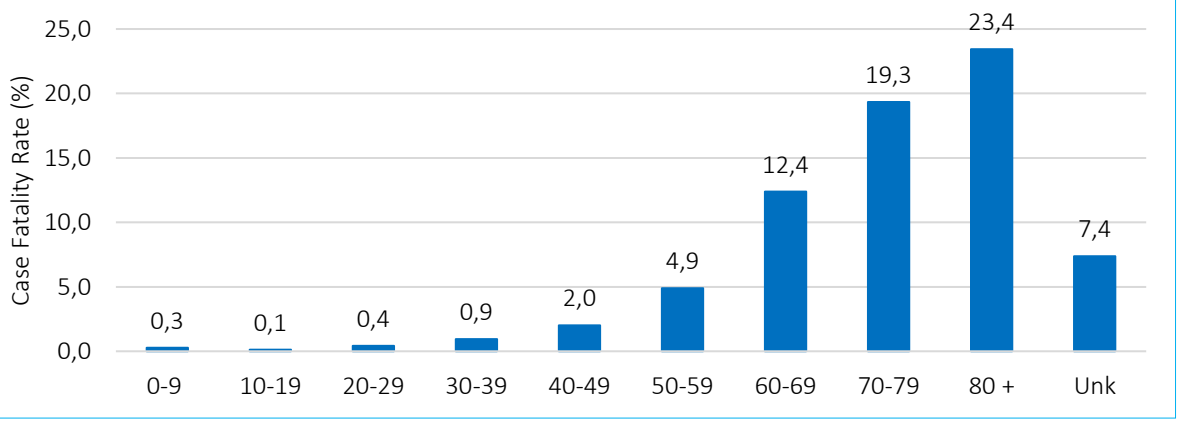


Fig. 23. SARS-Cov-2 related Case Fatality Rate (%) by age group, as on 19th Nov. 2020

The younger population had a low case fatality rate and steadily increased with the age of an individual. The implication is that the elderly who tested positive for SARS-Cov-2 must be followed up to ensure that relevant interventions are implemented to prevent severe diseases, complications, and deaths related to SARS-Cov-2.

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5.5. Deaths by health facilities

The graph provides the number of deaths by hospital or place in which the death occurred. Only hospitals with a minimum of 10 deaths are included in the figure below.

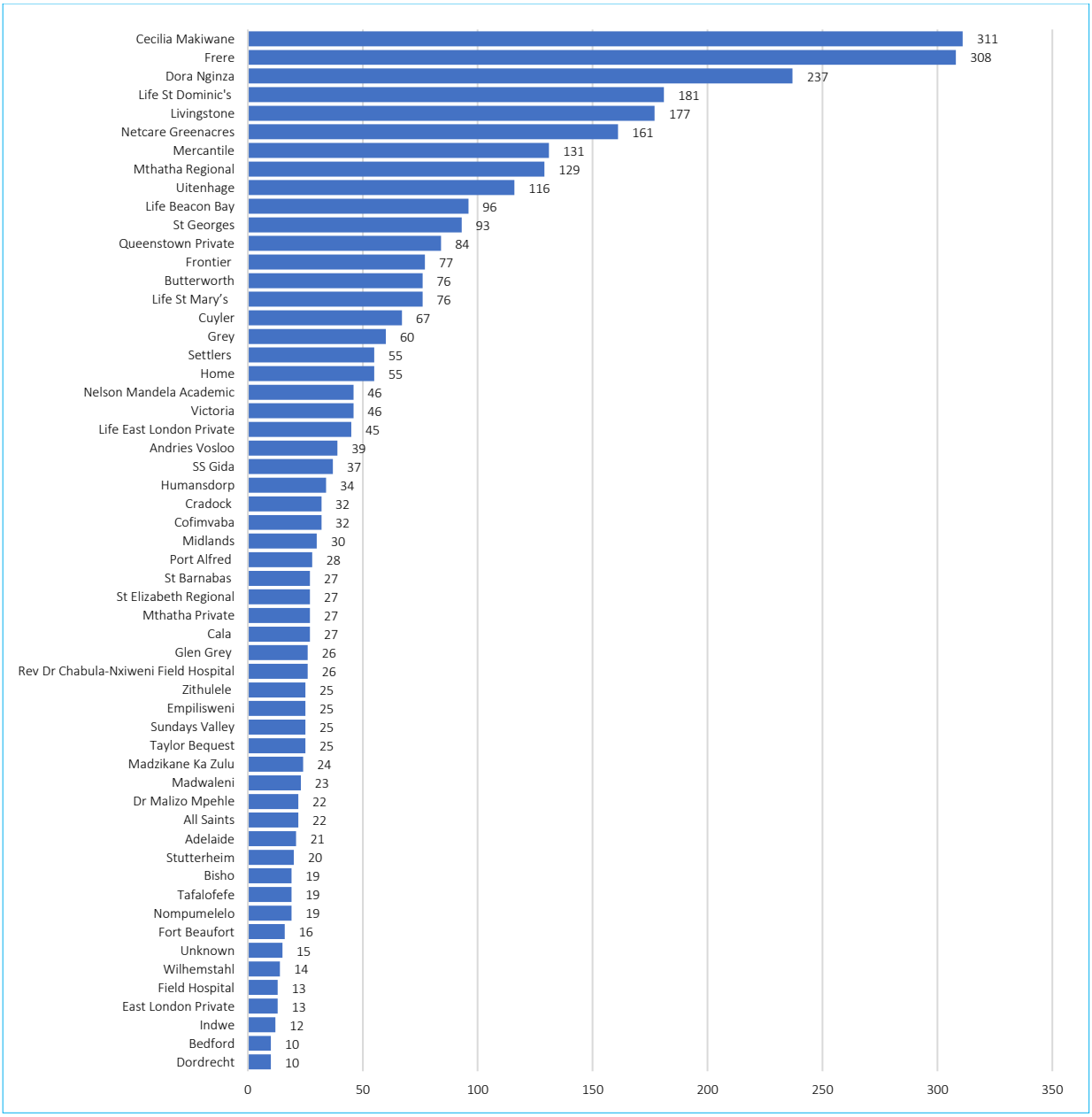

Fig. 24. No. of SARS-Cov-2 related deaths by the facility, as on 19th Nov. 2020 (N=4,200)

Fifty percent (50,0%) of the deaths occurred in 13 hospitals, i.e. 6 public and 7 private hospitals, i.e. Frere, Life St. Dominics, Dora Nginza, Mthatha Regional, Netcare Greenacres, Livingstone, Life Beacon Bay, Cecilia Makiwane, Uitenhage, Life St. Marys, Life Queenstown, Mercantile, and St. Georges hospitals. Fifty-four (54) of the deaths occurred at home, i.e. outside the health facility.

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3. DISTRICTS WITH HIGH TRANSMISSION

The section below in the report provides the maps of the health districts with high community transmission rate.

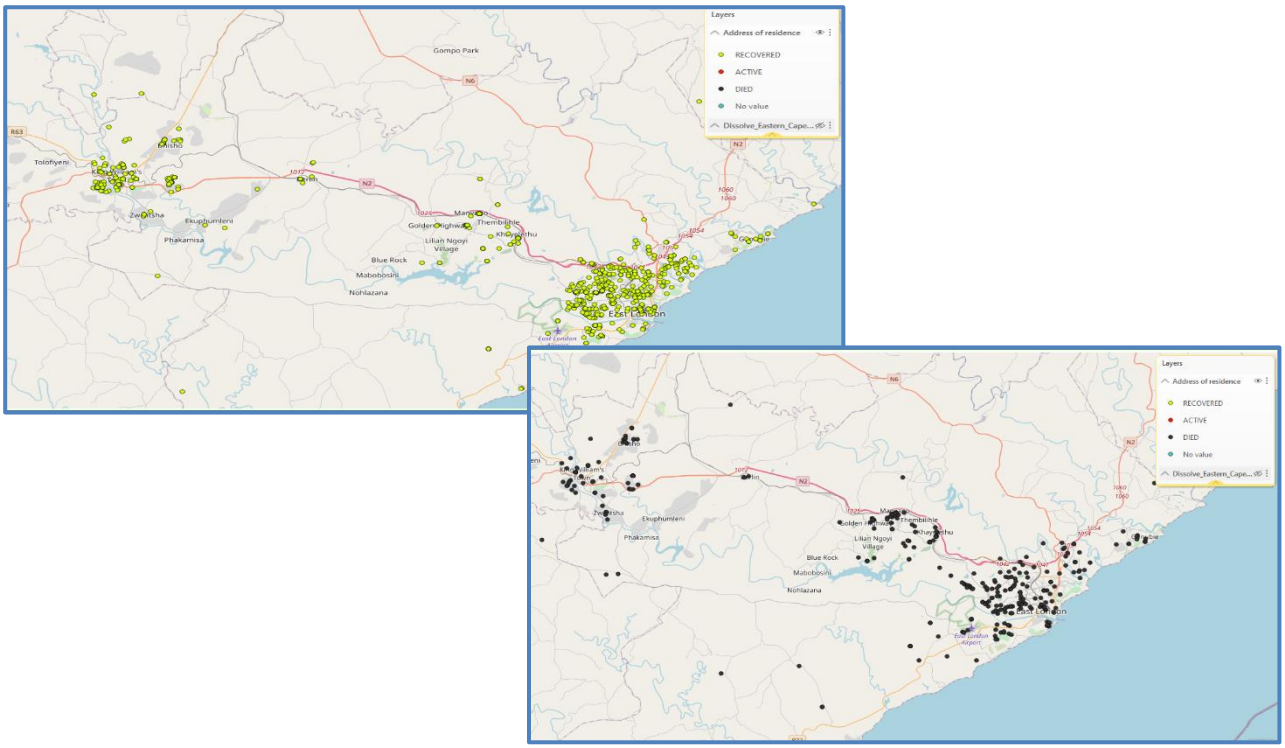

Fig. 25a. SARS-Cov-2 active cases, recoveries and deaths in Buffalo City Metro, as on 25 Oct.2020

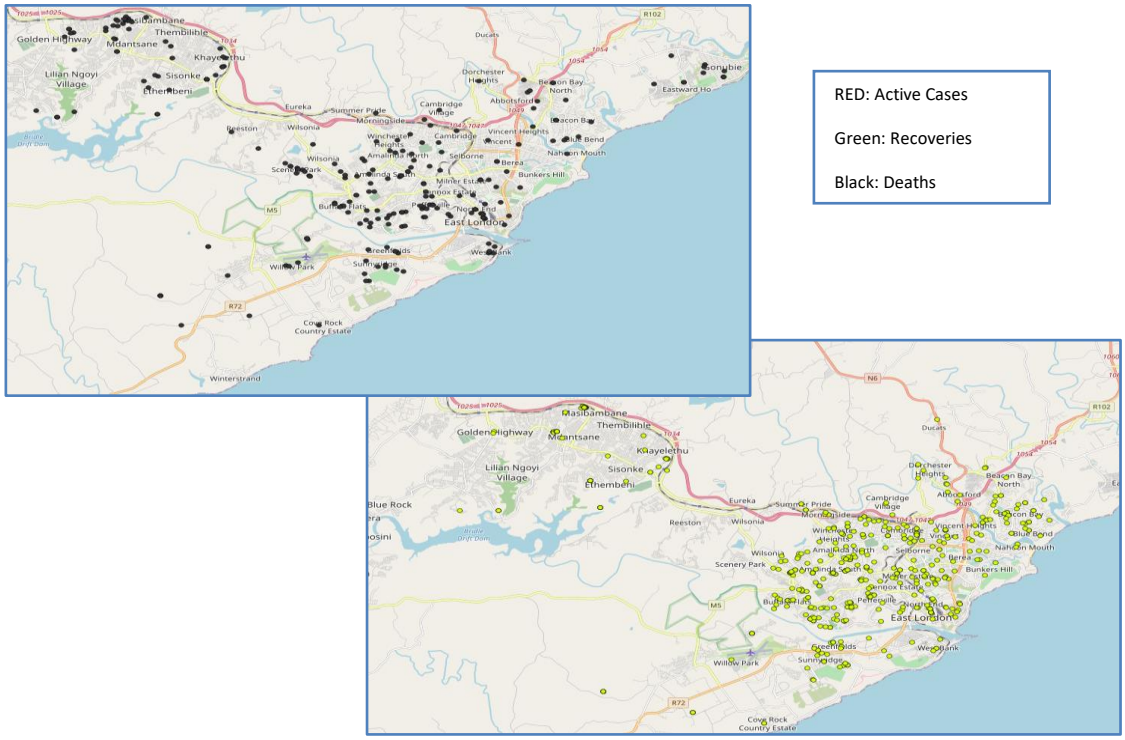

Fig. 25b. SARS-Cov-2 active cases, recoveries and deaths in Buffalo City Metro, as on 25 Oct. 2020

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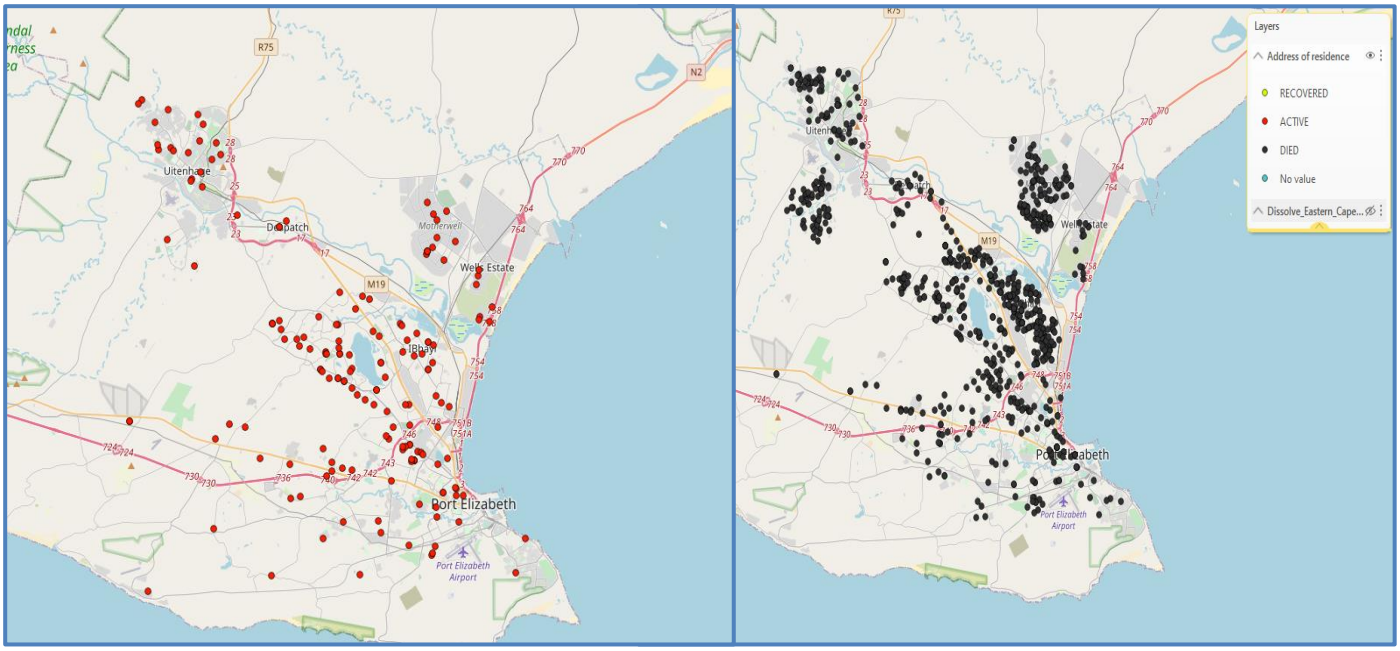

Fig. 26a. SARS-Cov-2 active cases, recoveries & deaths in NMB Metro, as on the 25 Oct. 2020

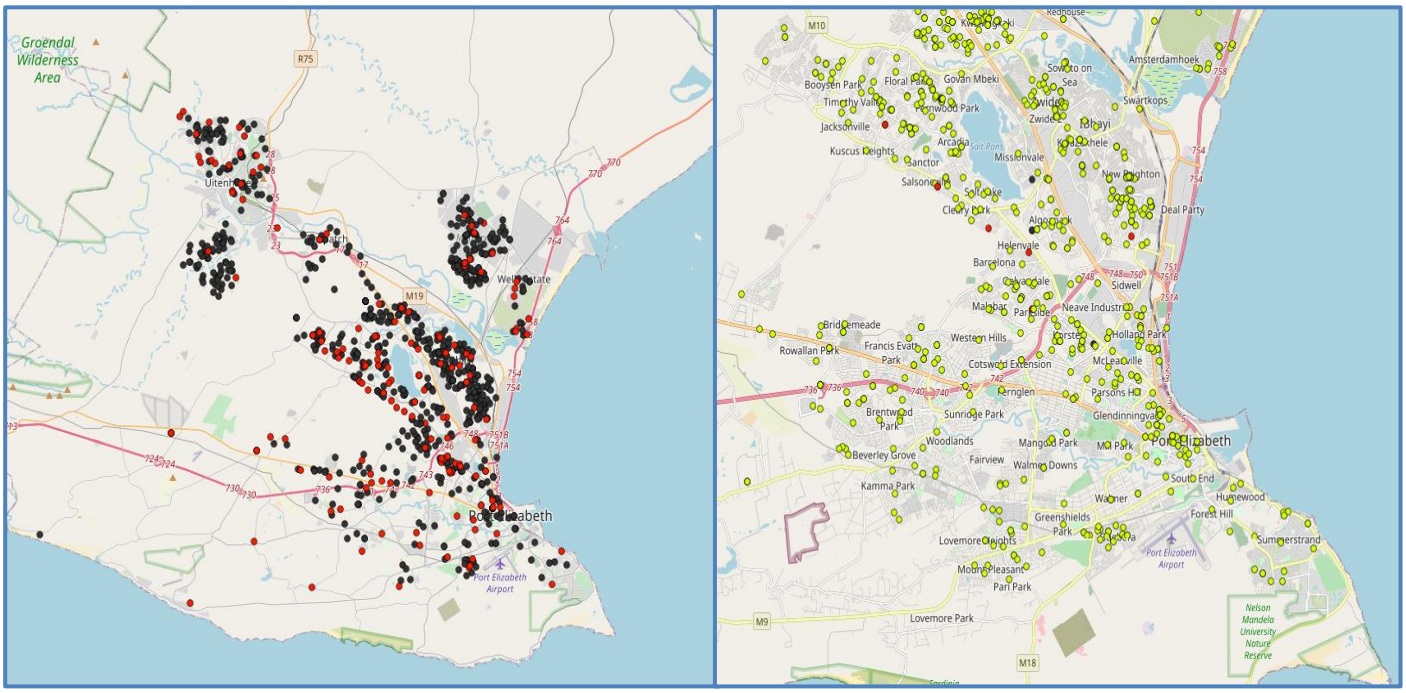

Fig. 26b. SARS-Cov-2 active cases, recoveries & deaths in NMB Metro, as on the 25 Oct. 2020

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Fig. 27. SARS-Cov-2 active cases, recoveries, and deaths in Sarah Baartman, as on 25 Oct. 2020

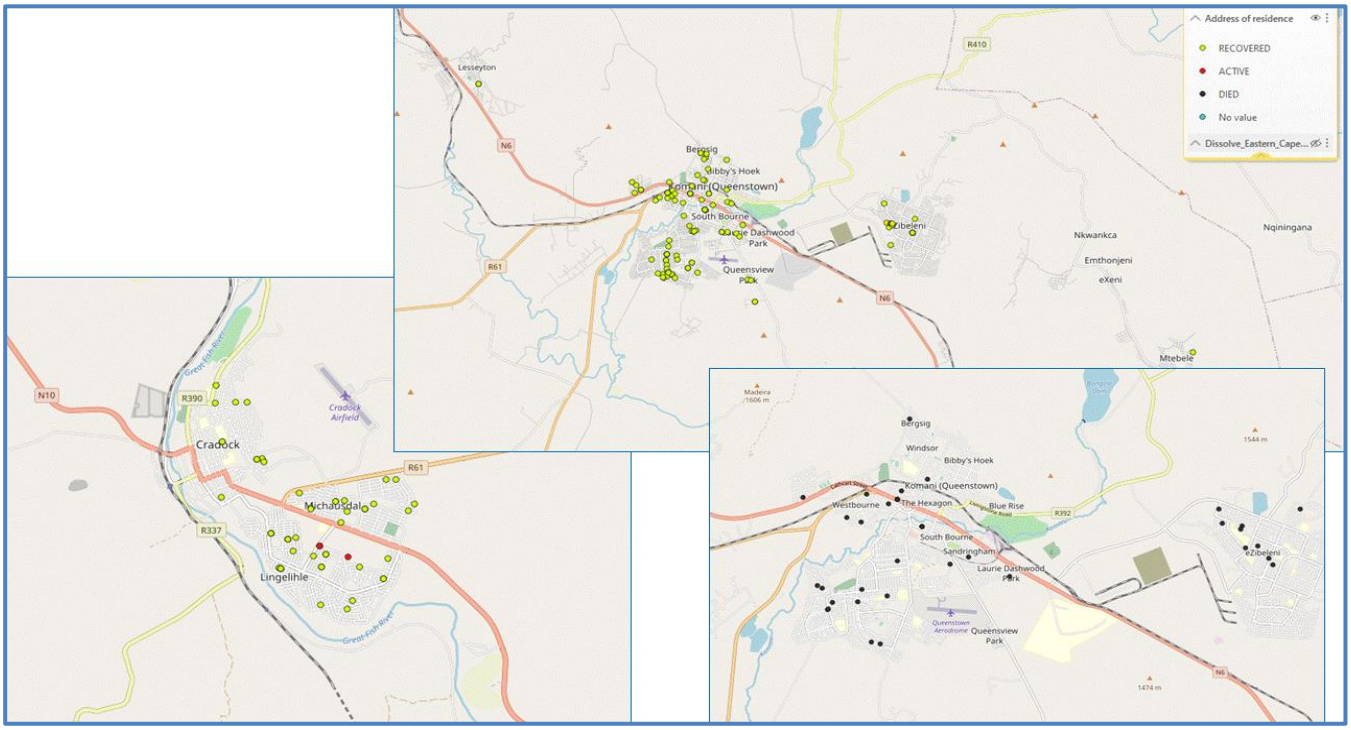

Fig. 28. SARS-Cov-2 active cases, recoveries and deaths in Chris Hani, as on 25 Oct. 2020

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4. HEALTHCARE WORKERS

4.1. Cases and deaths among HCWs

A total number of 8,522 healthcare workers tested positive for SARS-Cov-2 and 133 persons demised.

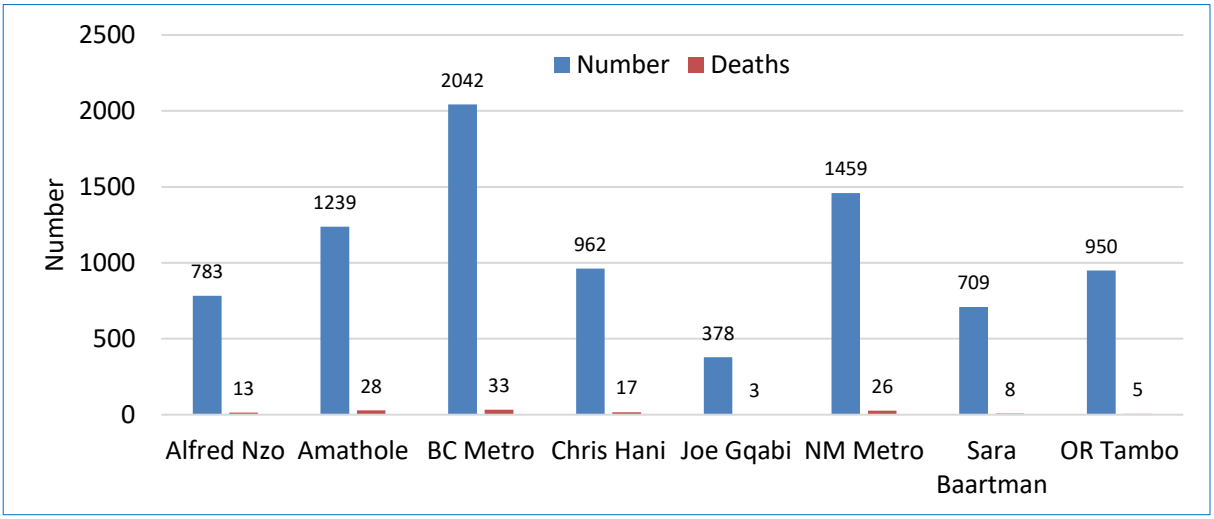

Fig. 29. SARS-Cov-2 positive Healthcare Workers, as on 14th Nov. 2020 (N = 8,522)

The number of healthcare workers who tested positive for SARS-Cov-2 in BC Metro was 2,042 (33 deaths), 1,459 in NM Metro (26 deaths), 1,239 in Amathole (28 deaths), 962 in Chris Hani (17 deaths), 950 in OR Tambo (5 deaths), and 709 in Sarah Baartman (8 deaths). Two districts reported the lowest number of cases, i.e. Alfred Nzo (783 cases & 13 deaths) and Joe Gqabi (378 cases & 3 deaths).

4.2. 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.

Table 6. SARS-Cov-2 cases by selected job categories, as on 14th Nov. 2020

	Number	Cases	Positivity Rate (%)
Admin	12434	595	4,8
Allied Professionals	3041	131	4,3
Doctors & Clinical Associates	2369	270	11,4
Nurses	20650	3514	17,0
Emergency Medical Services	2498	157	6,3

The positivity rate for the nurses was 17,0%, followed by doctors and clinical associates (11,4%), allied professionals (4,3%), EMS (6,3%), and admin personnel (4,8%). The positivity rates among healthcare workers have a negative impact on the capacity of the State to provide quality health services to the population.

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4.3. SARS-Cov-2 cases among HCWs in NM Metro and Sarah Baartman

The epi-curve for healthcare workers who tested positive in NM Metro and Sarah Baartman.

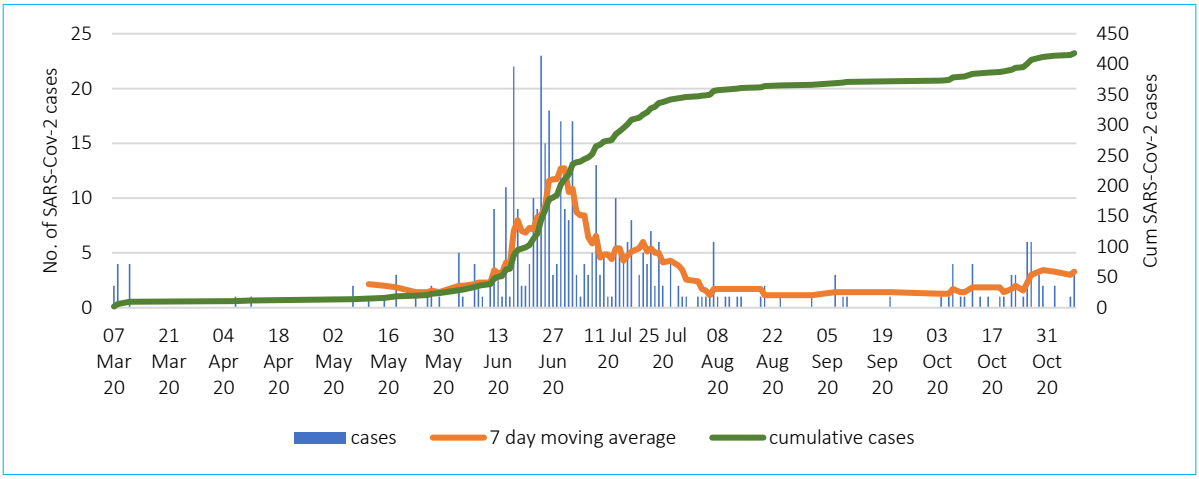

Fig. 30. No. of SARS-Cov-2 cases in NM Metro and Sarah Baartman, as on 13th Nov. 2020

The 7-day moving average shows an increase in the number of cases among healthcare workers that occurred during June and July. After the June-July period, there was a decrease in the number of healthcare workers who tested positive for SARS-Cov-2. However, the number of cases has increased from the middle of October, mimicking the epi-curve for the general population. Similar to the general population, the cumulative number of cases among healthcare workers appear to continue to increase with time.

4.4. Case Fatality Rate (%) among HCWs

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

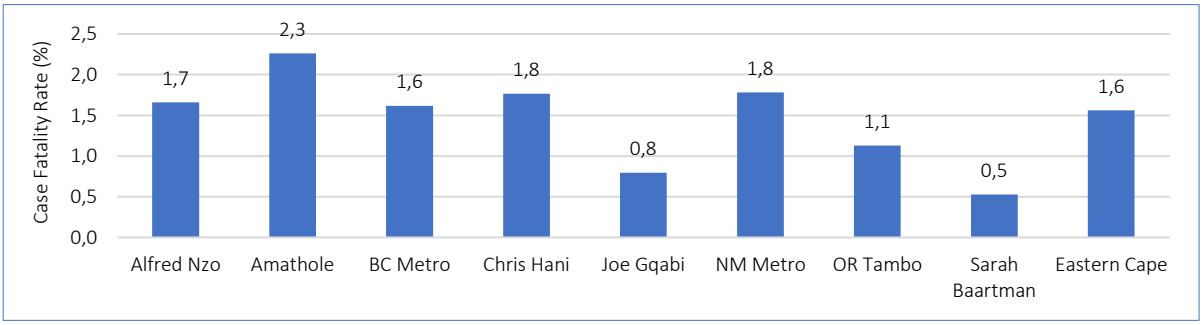

Fig. 31. SARS-Cov-2 Case Fatality Rate (%) among HCWs, as on 14th Nov. 2020 (N = 133)

The case fatality rate among healthcare workers was 1,6%. The highest case fatality rate was observed in Amathole (2,3%), followed by NM Metro (1,8%), Chris Hani (1,8%), A. Nzo (1,7%), BC Metro (1,6%), and OR Tambo (1,1 %). The lowest case fatality rate was observed in Sarah Baartman (0.5%) and Joe Gqabi (0,8%) districts.

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5. Hospitalization and outcomes

The data, which was used in this section of the report, was from DATCOV database.

5.1. Admissions and outcomes

Table 7. No. of hospitalizations by districts, as on 19th Nov. 2020

Districts	Public	Private	Total	Percentage (%)
Alfred Nzo	543	6	549	3,7
Amathole	1041	0	1041	7,0
Buffalo City Metro	2102	1395	3497	23,4
Chris Hani	1167	310	1477	9,9
Joe Gqabi	204	0	204	1,4
Nelson Mandela Bay Metro	3683	2744	6427	43,0
O R Tambo	752	218	970	6,5
Sarah Baartman	725	54	779	5,2
Total	10217	4727	14944	100,0

The total number of hospitalizations was 14,944, where 10,217 (68,4%) of these hospitalizations occurred in the public sector and 4,727 (31,6%) in the private sector. Sixty-six percent (66,4%) of the admissions or hospitalizations were from BC Metro (23,4%) and NM Metro (43,0%).

Table 8. No. of hospitalizations and outcomes, as on 19th Nov. 2020

Eastern Cape	Public	Private	Total
Cumulative Admissions	10217	4727	**14944**
Died	2894	960	3854
Discharged Alive	5907	3325	9232
Transferred Out	642	3	645
Currently Admitted	723	439	1162
In ICU	19	102	121
In High Care	11	8	19
In General	693	329	1022
On Oxygen	250	119	369
Ventilated	5	47	52

Twenty-six percent (25,8%) of the hospitalized cases demised and 61,8% were discharged alive. Of all the deaths which occurred, 75,1% occurred in the public sector and 24,9% in the private sector. The number of currently admitted patients was 1,162, and 1,022 were in the general ward, 121 in ICU, 19 in High Care, 369 on oxygen, and 52 were on ventilators.

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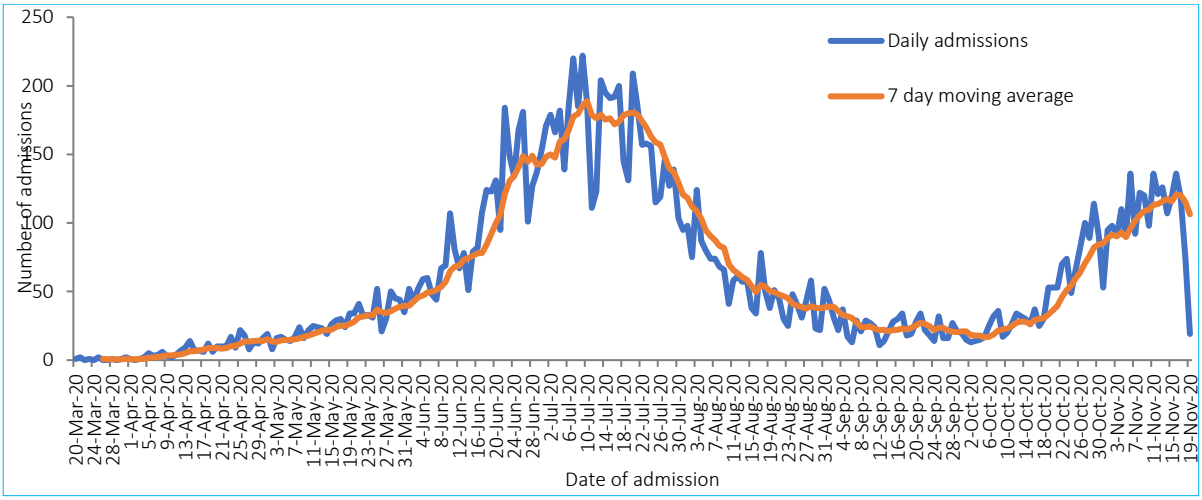

Fig. 32. 7-day moving average of admitted cases, as on 19th Nov. 2020 (DATCOV)

The number of hospitalizations appears to have increased from the first week of October to the 15th November, and later decreased in November. As the number of newly diagnosed cases increased, the number of daily hospitalizations also increased. The resurgence of SARS-Cov-2 cases in BC Metro, NM Metro, Sarah Baartman and Amathole has contributed to the increase in the number of admissions.

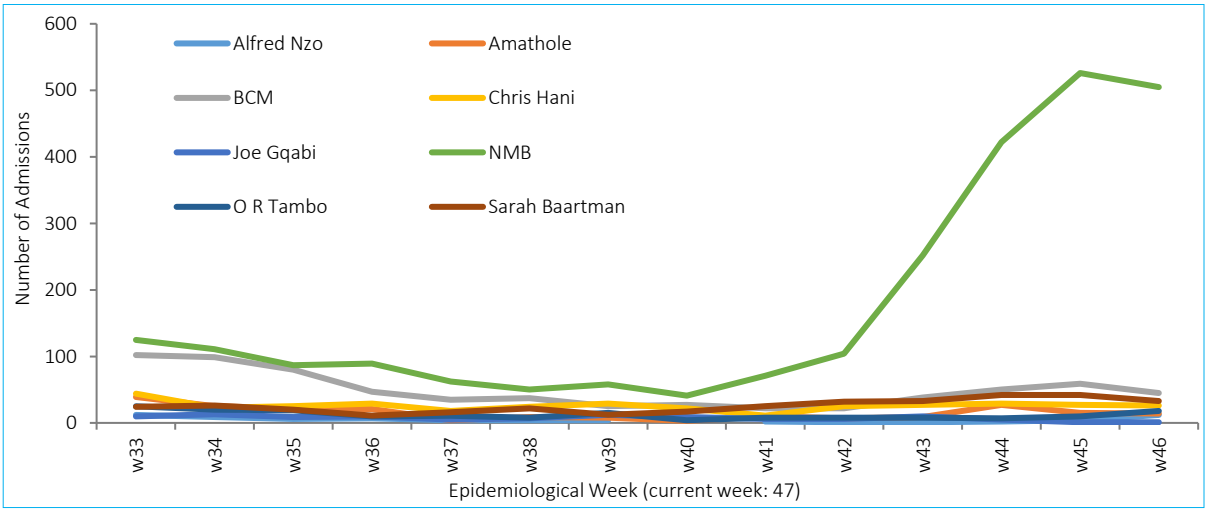

Fig. 33. No. of admissions by district and epidemiological week, as on 18th Nov. 2020

The number of admissions has increased from week 40 to week 45 in NM Metro. However, from week 45 to week 46, the number of admissions appear to be decreasing. Just like the other districts, OR Tambo reported a low number of admissions. However, from week 44, there was a gradual increase in the number of hospitalizations in OR Tambo.

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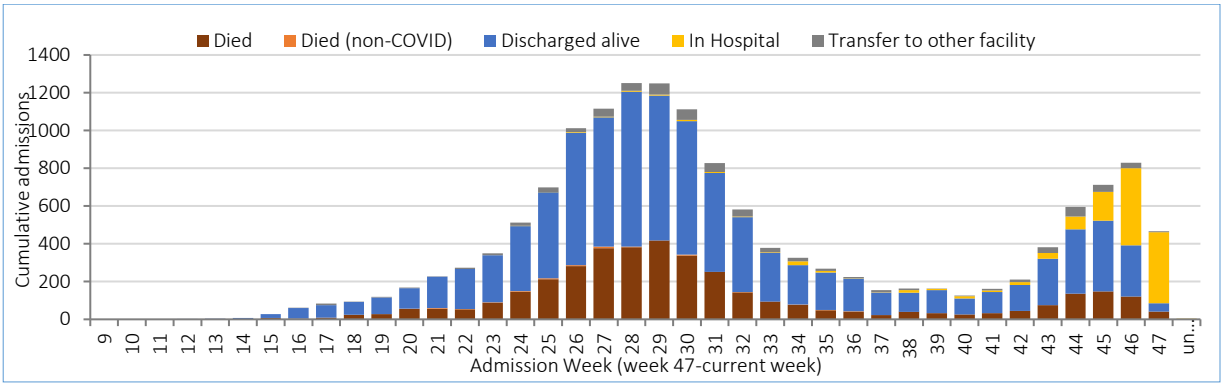

Fig. 34. Hospitalizations & outcomes by admission week, as on 19th Nov. 2020 (DATCOV)

From week 40 to 46, the number of hospitalizations has increased with an increase in the number of cases. The number of patients who remained in hospitals has increased during the same period. Hence, there was a high number of patients who were currently admitted in the hospitals especially during week 45 and week 46. The current resurgence has significantly contributed to the increase in the number of admissions and patients who remained in hospital receiving services.

5.2. Co-morbidities among admitted cases

The figure below provides the co-morbidities of all the SARS-Cov-2 related admissions.

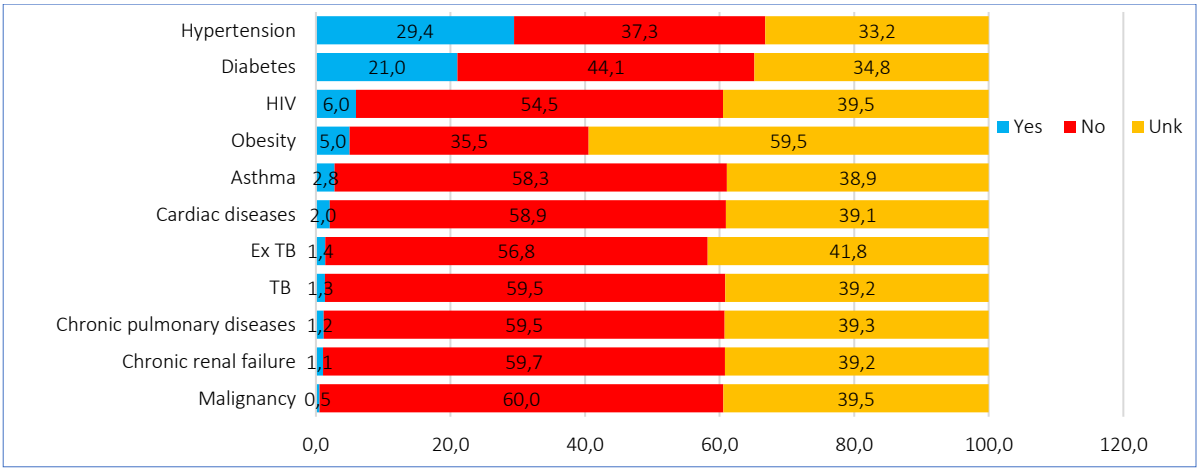

Fig. 35. Co-morbidities of SARS-Cov-2 hospitalizations, as on 15th Nov. 2020 (DATCOV)

The most common co-morbidities were hypertension (29,4%) and diabetes (21,0%) among hospitalized SARS-Cov-2 cases. Four other co-morbidities which were common include HIV (6,0%), obesity (5,0%) and asthma (2,8%). A significant percentage of hospitalized patients did not have co-morbidities. The concern was those cases without information on the presence or absence of the co-morbidities. This may have resulted in the under-estimation of the burden of co-morbidities among hospitalized SARS-Cov-2 cases.

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6. CONCLUSION

During the second half of October, SARS-Cov-2 re-emerged in Buffalo City Metro. This was attributed to the parties which were held by the university students. The western part of the province has both a gradual increase in the number of cases in Sarah Baartman and a rapid increase in Nelson Mandela Metro.

More than 80% of the cases were from NM Metro and Sarah Baartman and the other cases were from other districts. The re-emergence of SARS-Cov-2 was driven by poor compliance with the regulations by the communities, which includes failure to wear masks in the public, lack of social distancing, and routine hand washing or sanitization. The unbanning of selling of liquor and opening of the taverns, unsupervised funeral have become public health risks, which may contribute to the spread of the disease. This continues to threaten the public health interventions and reverse the gains, which have already achieved.

There is also a need to continue to strengthen public health surveillance of the disease and improve investigation and response to the outbreaks. This includes strengthening the monitoring and evaluation of the pandemic.

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DISTRICT	TOTAL SCREENED	TOTAL TESTED	TOTAL CASES	RECOVERIES	DEATHS	ACTIVE CASES	AREAS
ALFRED NZO	694 706	19 274	3 527	3 429	65	33	Badibanise,Bhakubha,Bizana,Brooksnek,Cedarville,Chithwa,Dutyini,Emanxiweni,Ezinteteni,Kokstad,Lucingweni,Maluti, Mandileni , Matatiele ,Mount Ayliff, Mount Frere , Ndlantana, Ngcingo , Ntabakhulu, Sugar Bush, Tabankulu
AMATHOLE	658 126	48 691	9 989	9 276	361	352	Adelaide, Alice, Bolotwa, Butterworth, Cathcart, Centane, Cuba, Debe Nek, Dikana, Elliotdale, Ethafeni, Frankfort, Fort Beaufort, Ibika, Idutywa, Keiskammahoek, Willowale, Lower Mbhangcolo,Debe Nek, Mgababa, Nyaniso, Peddie
BUFFALO CITY METRO	210 367	95 425	22 726	21 210	973	543	Abbottsford, Amalinda , Beacon Bay, Bisho, Braelynn, Buffalo Flats, Dimbaza, Duncan Village, East London, Ginsberg, Gonubie, Greenfields, Haven Hills, King William's Town, Mamata, Mdantsane, Masingata, Mantlaneni, Nahoon, Ndevana, Needs Camp, Parkside, Selbourne, Sunnyridge, Sunset Bay,Tshatshu, Vincent, West Bank, Zwelitsha
CHRIS HANI	515 346	41 282	10 277	9 613	532	132	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,Ekuphumuleni, TopTown, Vleipoort, Zola
JOE GQABI	87 855	18 391	4 188	4 049	108	31	Aliwal North, Barkley East, Bhodi, Land Camp, Ugie, Inglewood, Maclear, Solomzi, Sunduza,Robbern,Venterstsad
NELSON MANDELA METRO	856 883	107 713	36 874	29 355	1454	6 065	Algoa Park, Bethelsdorp, Bloemendal, Bluewater Bay, Booysens Park, Cotswold, Cuyler, Daleview, Despatch, Fernglen Port, Gelvandale, Govan Mbeki, Heath Park, Helenvale, Jacksonville, Joe Slovo, Kabega Park, Kamma Park, Kamvelihle, 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	60 947	13 262	12 755	394	113	Gomora, Lutatweni, Machibi, Majola, Mandilini ,New Payne Ngqeleni, Ntsimbini, Old Payne, Libode, Lusikisiki, Mqanduli, Tombo, Marhewini, Mpikwana,Bhongweni,Cibeni, Flagstaff,Magcakeni,Ngangelizwe, Ngqanda,Tyebelana, Pollar Park, Tabase Mission, Slovo Park, Southernwood, Waterfall Park, Zandukwana,Zimbane, Ziphunzana
SARAH BAARTMAN	288 877	47 803	11 431	9 364	309	1 758	Aberdeen, Alexandria, Graaf-Reinet, Grahamstown, Jeffrey's Bay, Jourbertina, Humansdorp, Parson, St. Francis Bay, Kirkwood, Lotusville, Bergendal, Bratenfel, Joza, Santaville, Somerset East, Thornhill, Willomore
IMPORTED*	-	2 869	370	365	2	3	Bloemfontein, Ceres, Cape Town, Dunoon, Fishoek, George, Green Point, Gugulethu, Hout Bay, Langa, Khayelitsha, Knysna, Phillipi, Stellenbosch, Strand
PENDING	-	103 202	495	484	2	9	
GRAND TOTALS	3 577 773	545 597	113 139	99 900	4 200	9 039	

ACKNOWLEDGEMENTS

The epidemiological and surveillance functions continue to happen because of the strong partnership between the following stakeholders;

- Centre for Disease Control (Atlanta-Pretoria). CDC provided the Department with an epidemiologist and a statistician to support the province.
- DOH. Both the National and Provincial Department of Health re-purposed the employees to focus on the control and prevention of the pandemic.
- NICD. The NICD provided the province with epidemiologists and technical support.
- Laboratories, i.e National Health Laboratory Services, Pathcare and Ampath for prompt and regular reporting of SARS-Cov-2 cases.
- WHO. Just like CDC, WHO provided the Department with epidemiologists and surveillance officer to support the province.
- TB/HIV Care. The data analyst from TB/HIV Care has been useful in data management, mapping of the cases and other functions in the department.
- Right to Care. Assist in mapping the cases in different areas in the province.