COVID-19 HOSPITAL SURVEILLANCE UPDATE

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

OVERVIEW

This report summarises data of COVID-19 cases admitted to DATCOV hospital surveillance sites in all provinces. The report is based on data collected from 5 March 2020 to 14 August 2021.

HIGHLIGHTS

- As of 14 August 2021, 387,432 COVID-19 admissions and 82,659 in-hospital deaths were reported from 668 facilities (411 public-sector and 257 private-sector) in all nine provinces of South Africa.
- Increased admissions were observed in all provinces during the third wave, which peaked in week 27. Since then, decreases in admissions have been observed across all provinces except Western Cape and KwaZulu-Natal.
- The weekly numbers of admissions in the third wave have surpassed the peak of admissions in the second wave in Gauteng and North West in both sectors, and in Free State, Mpumalanga and Northern Cape in the private sector.

METHODS

DATCOV, a hospital surveillance system for COVID-19 admissions, was initiated on the 1 April 2020. A COVID-19 case was defined as a person with a positive reverse transcriptase polymerase chain reaction (RT-PCR) assay for SARS-CoV-2 or a person who had a positive SARS-CoV-2 antigen test who was admitted to hospital. Case fatality ratio (CFR) was calculated for all closed cases, i.e. COVID-19 deaths divided by COVID-19 deaths plus COVID-19 discharges, excluding individuals who are still admitted in hospital. For the calculation of cumulative incidence risks, StatsSA mid-year population estimates for 2020 were utilised.

We used last 7-day average incidence per 1 million capita as reported in Our World in Data; for the purposes of this analysis, using the 7-day running average (either absolute or per capita) would be equivalent. For comparisons of the last period and previous period, we used 14-day average admissions for both periods.

Data are submitted by public and private hospitals that have agreed to report COVID-19 admissions through DATCOV surveillance in all nine provinces of South Africa. On 15 July 2020, the National Health Council decided that all hospitals should report to DATCOV. As of 14 August 2021, a total of 668 facilities submitted data on hospitalised COVID-19 cases, 411 from public sector and 257 from private sector (Table 1). This reflects 100% coverage of all public and private hospitals that have had COVID-19 admissions. As new hospitals join the surveillance system, they have retrospectively captured all admissions recorded although there may be some backlogs in retrospective data capture.

Table 1. Number of hospitals reporting data on COVID-19 admissions by province and sector, South Africa, 5 March 2020-14 August 2021.

Name of province	Public Sector	Private Sector
Eastern Cape	86	18
Free State	35	20
Gauteng	40	94
KwaZulu-Natal	70	46
Limpopo	41	7
Mpumalanga	31	9
North West	18	13
Northern Cape	31	8
Western Cape	59	42
South Africa	**411**	**257**

RESULTS

Epidemiological and geographic trends in admissions

From 5 March 2020 to 14 August 2021, a total of 387,432 COVID-19 admissions were reported from 668 facilities in all nine provinces of South Africa. South Africa has entered the third wave. Since week 14 2021, numbers of COVID-19 admissions increased in both sectors until the peak in week 27, with admissions decreasing in both sectors for the past five weeks (Figure 1). Decreases in the most recent week may reflect delays in data submission in the public sector, however private sector data submission is up to date.

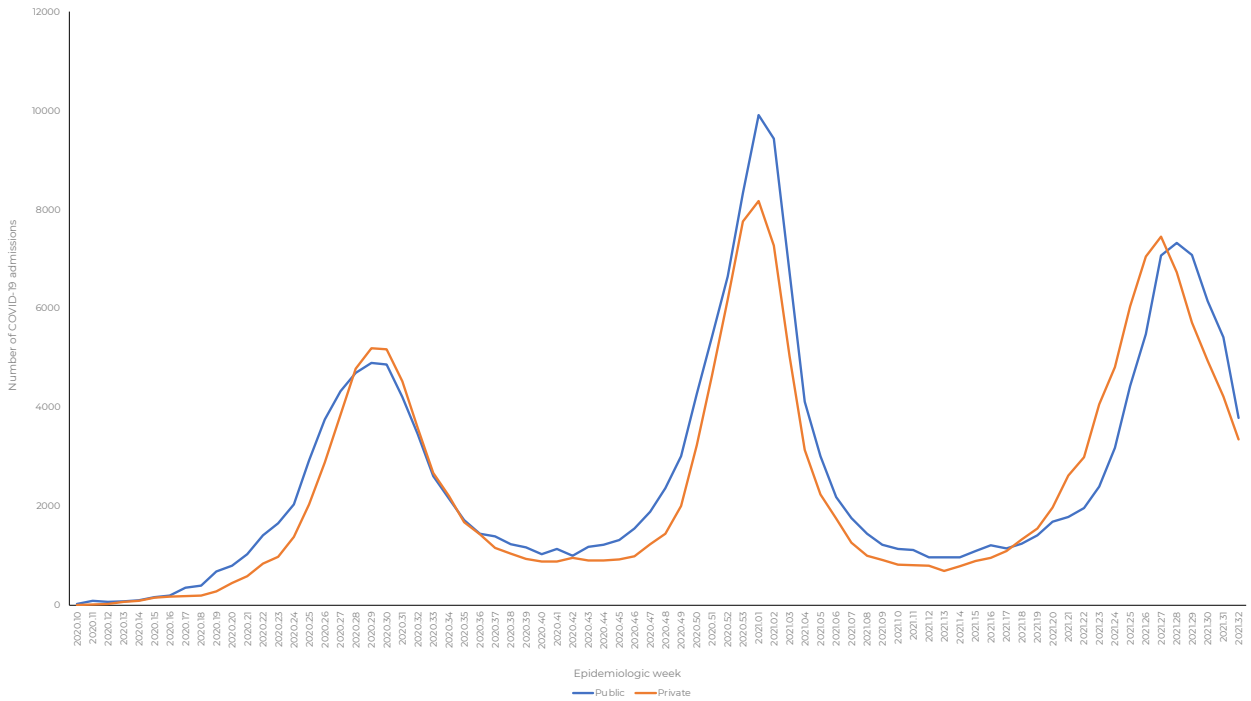

Figure 1. Number of reported COVID-19 admissions by health sector and epidemiologic week of diagnosis, South Africa, 5 March 2020-14 August 2021, n=387,432

The majority of admissions were recorded in four provinces, Gauteng 118,807 (31%), Western Cape 84,027 (22%), KwaZulu-Natal 59,960 (15%) and Eastern Cape 36,613 (10%) provinces. Weekly numbers of COVID-19 admissions have peaked in all provinces except Western Cape and KwaZulu-Natal (Figures 2a and 2b), and a decrease in admissions has been observed for the past five weeks.

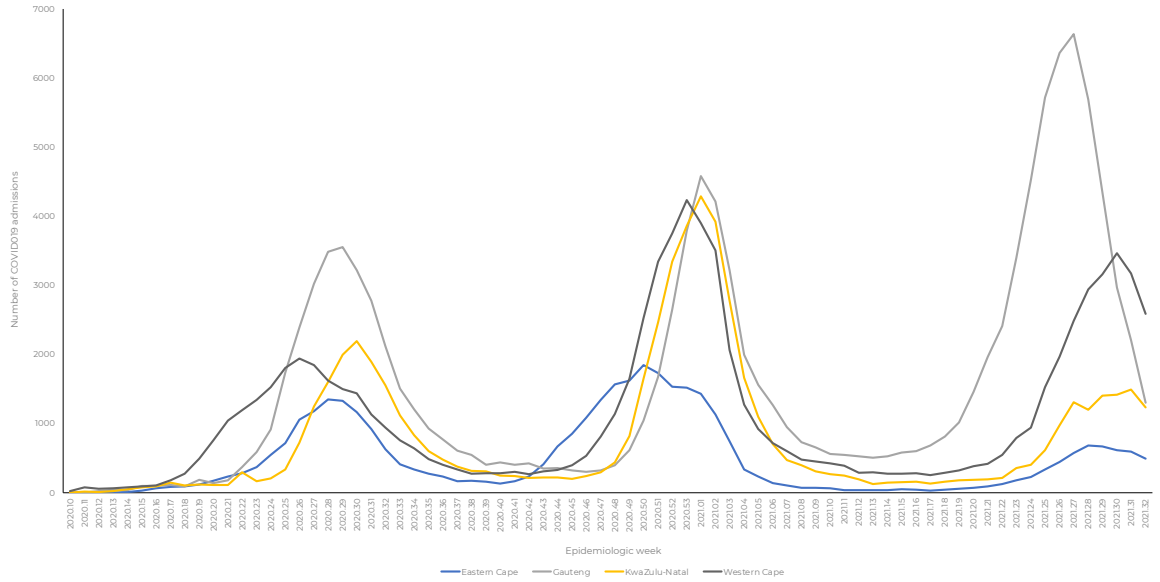

Figure 2a. Number of reported COVID-19 admissions, by provinces with highest admissions and epidemiologic week of diagnosis, South Africa, 5 March 2020-14 August 2021, n=387,432

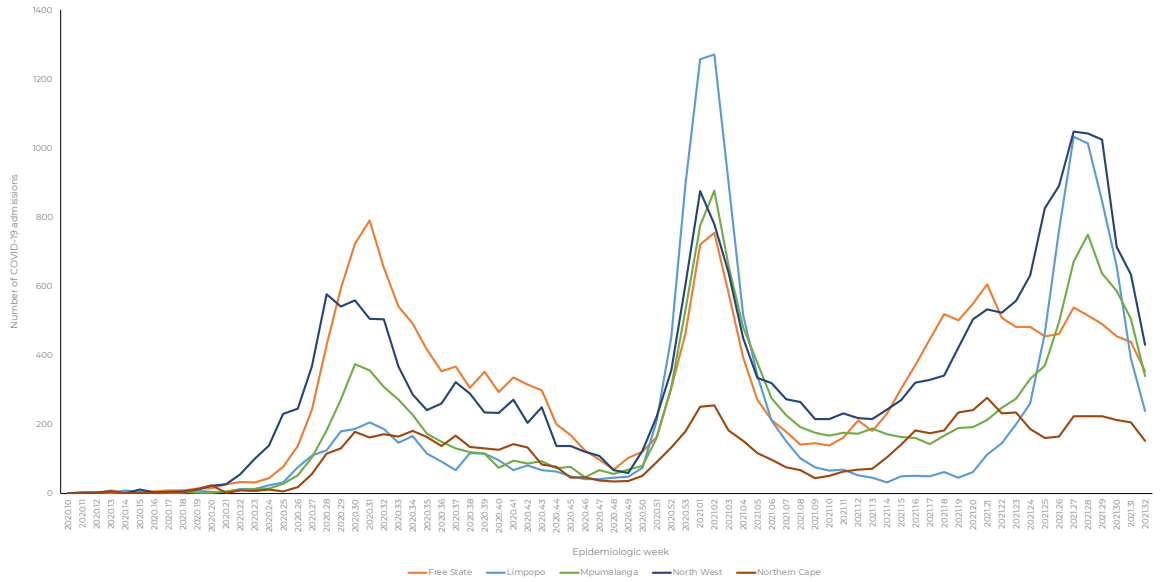

Figure 2b. Number of reported COVID-19 admissions, by provinces with lowest admissions and epidemiologic week of diagnosis, South Africa, 5 March 2020-14 August 2021, n=387,432

EPIDEMIOLOGICAL AND GEOGRAPHIC TRENDS IN IN-HOSPITAL MORTALITY

The number of deaths increased in both sectors since week 15 until the peak in week 28 (Figure 3). Decreases in deaths in both sectors have been observed in the past four weeks.

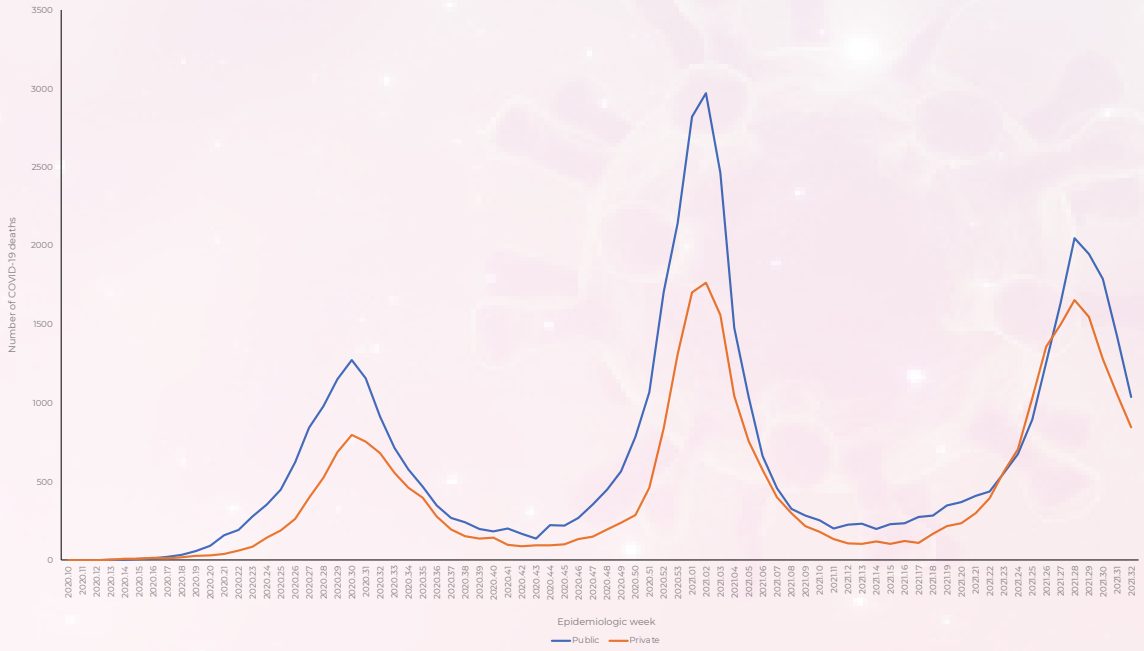

Figure 3. Number of in-hospital COVID-19 in-hospital deaths reported per week by health sector and epidemiologic week, South Africa, 5 March 2020-14 August 2021, n=82,659

Most deaths were reported in Gauteng 25,557 (31%), Western Cape 14,456 (17%), KwaZulu-Natal 13,190 (16%), and Eastern Cape 10,723 (13%). The numbers of COVID-19 deaths have decreased in most provinces over the past four weeks (Figures 4a and 4b).

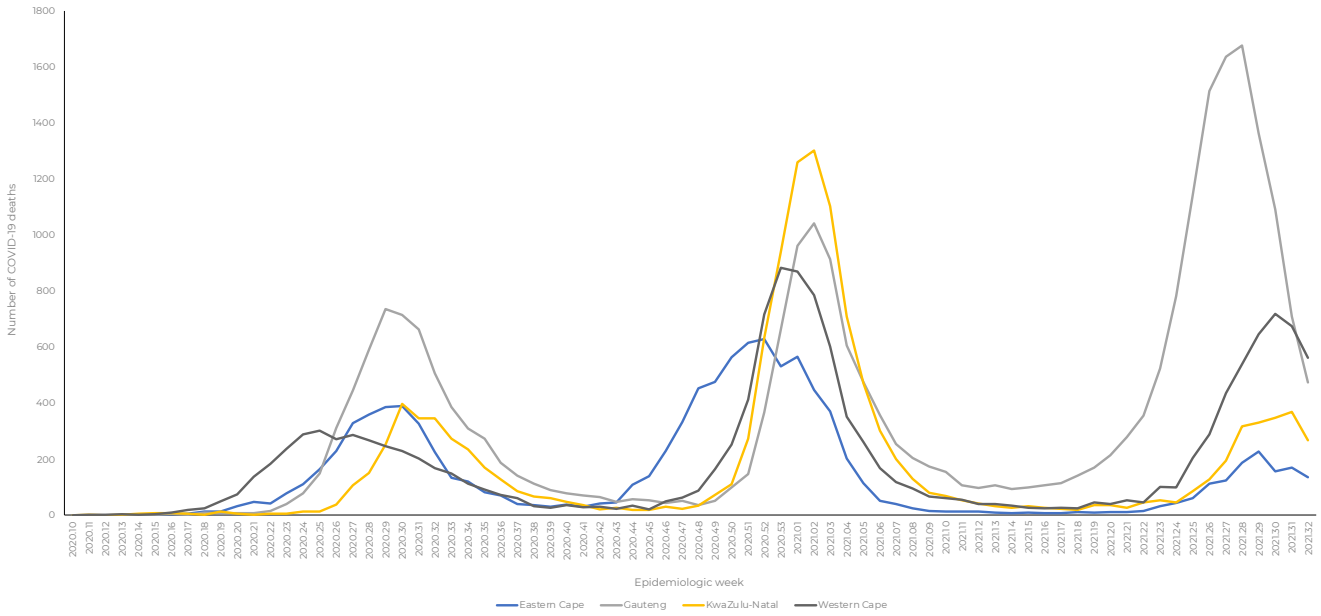

Figure 4a. Number of reported COVID-19 in-hospital deaths, by province with highest deaths and epidemiologic week of death, South Africa, 5 March 2020-14 August 2021, n=82,659

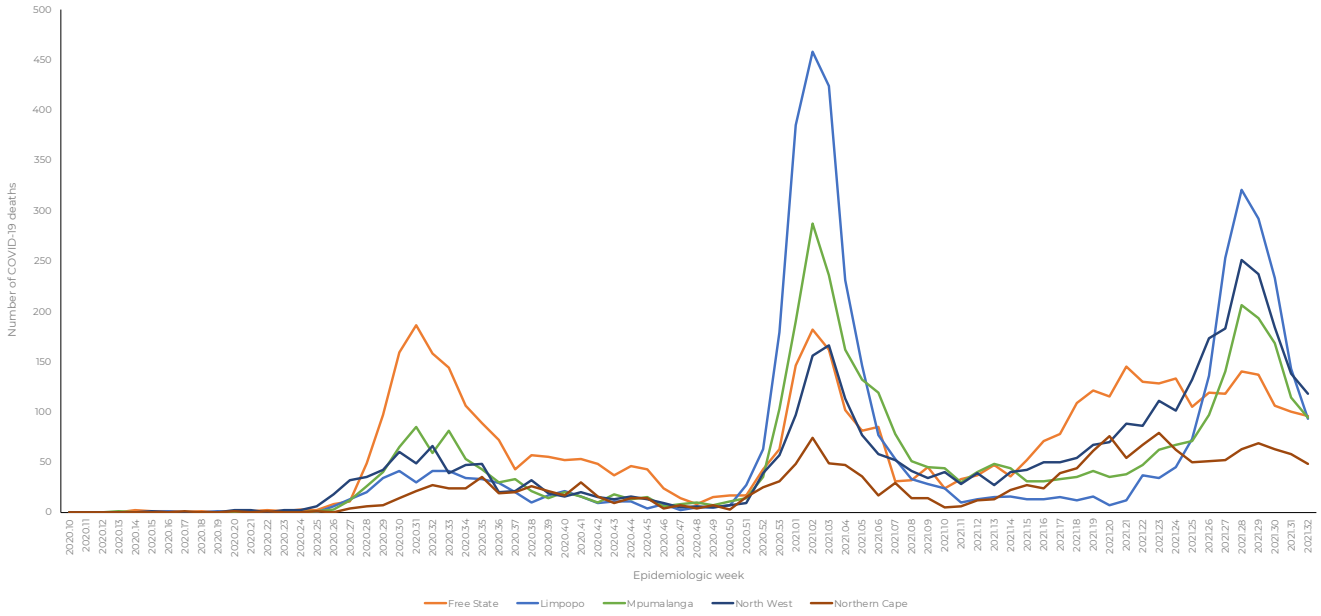

Figure 4b. Number of reported COVID-19 in-hospital deaths, by province with lowest deaths and epidemiologic week of death, South Africa, 5 March 2020-14 August 2021, n=82,659

The cumulative incidence risks of COVID-19 admissions and in-hospital deaths were highest in Western Cape, Free State and Gauteng provinces (Table 2).

Table 2. Number and cumulative incidence risk of COVID-19 hospitalisations and in-hospital deaths per 100,000 persons by province, South Africa, 5 March 2020-14 August 2021.

Province	Provincial Population mid 2020*	Cumulative admissions	Cumulative Admissions / 100,000	Cumulative deaths	Cumulative deaths / 100,000
Eastern Cape	6734001	36613	543.7	10723	159.2
Free State	2928903	22543	769.7	4774	163.0
Gauteng	15488137	118,807	767.1	25557	165.0
KwaZulu-Natal	11531628	59960	520.0	13188	114.4
Limpopo	5852553	15775	269.5	4400	75.2
Mpumalanga	4679786	16096	343.9	3862	82.5
North West	4108816	25,144	612.0	3876	94.3
Northern Cape	1292786	8,467	654.9	1821	140.9
Western Cape	7005741	84,027	1199.4	14455	206.3
South Africa	**59622350**	**387,432**	**649.8**	**82,656**	**138.6**

*StatsSA mid-year population estimates 2020

PROVINCIAL TRENDS

There was a decrease in the average daily COVID-19 admissions and deaths comparing the previous 14 days and the current 14 days in all provinces (Table 3). Decreases in the most recent week may in part reflect delays in data submission. There was only 2 of 52 (4%) districts across the country that reported increased change in incidence risk of admissions, O R Tambo (Eastern Cape) and Ugu (KwaZulu-Natal) (Appendix 1).

Table 3. Previous 14 days and current 14 days average COVID-19 admissions and deaths and percentage changes, South Africa, 17 July-14 August 2021.

Province	Hospital admissions		Percentage change in admissions	Hospital deaths		Percentage change in deaths
	Previous 14 days average admissions	Current 14 days average admissions		Previous 14 days average deaths	Current 14 days average deaths	
Eastern Cape	91.64	77.71	-15.20	27.50	21.71	-21.04
Free State	67.50	56.57	-16.19	17.36	14.00	-19.34
Gauteng	522.36	250.64	-52.02	175.14	84.43	-51.79
KwaZulu-Natal	201.93	195.07	-3.40	48.43	45.36	-6.34
Limpopo	107.36	44.93	-58.15	37.50	16.86	-55.05
Mpumalanga	87.43	60.29	-31.05	25.79	14.86	-42.38
North West	124.00	76.14	-38.59	30.00	18.29	-39.05
Northern Cape	31.07	25.57	-17.70	9.36	7.57	-19.08
Western Cape	472.86	411.14	-13.05	97.43	88.29	-9.38
South Africa	**91.64**	**77.71**	**-15.20**	**27.50**	**21.71**	**-21.04**

* Reporting of new admissions in the most recent week may be delayed

EASTERN CAPE

In the first and second waves there were higher numbers of admissions in the public sector. Weekly admissions at the peak of the second wave exceeded the weekly numbers of admissions at the peak of the first wave in both sectors. There has been increase in admissions in both sectors since week 20, however a decrease in admissions has been observed in both sectors in the past three weeks (Figure 5).

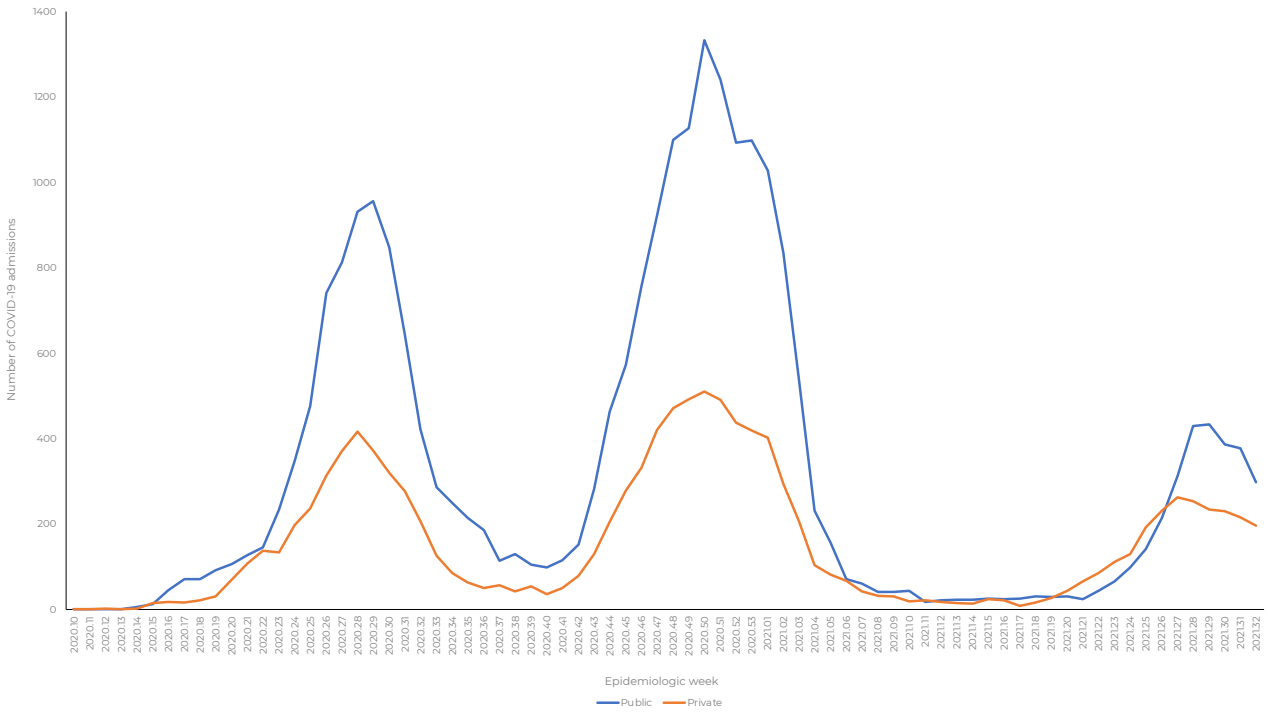

Figure 5: Number of reported COVID-19 admissions by health sector and epidemiologic week of diagnosis, Eastern Cape, 5 March 2020-14 August 2021, n=36,613

The weekly admissions at the peak of the second wave exceeded the numbers of admissions at the peak of the first wave in all districts (Figure 6). There have been increases in admissions in most districts since week 19, with highest increase in Nelson Mandela Metro, however admissions have decreased in most districts in the past four weeks.

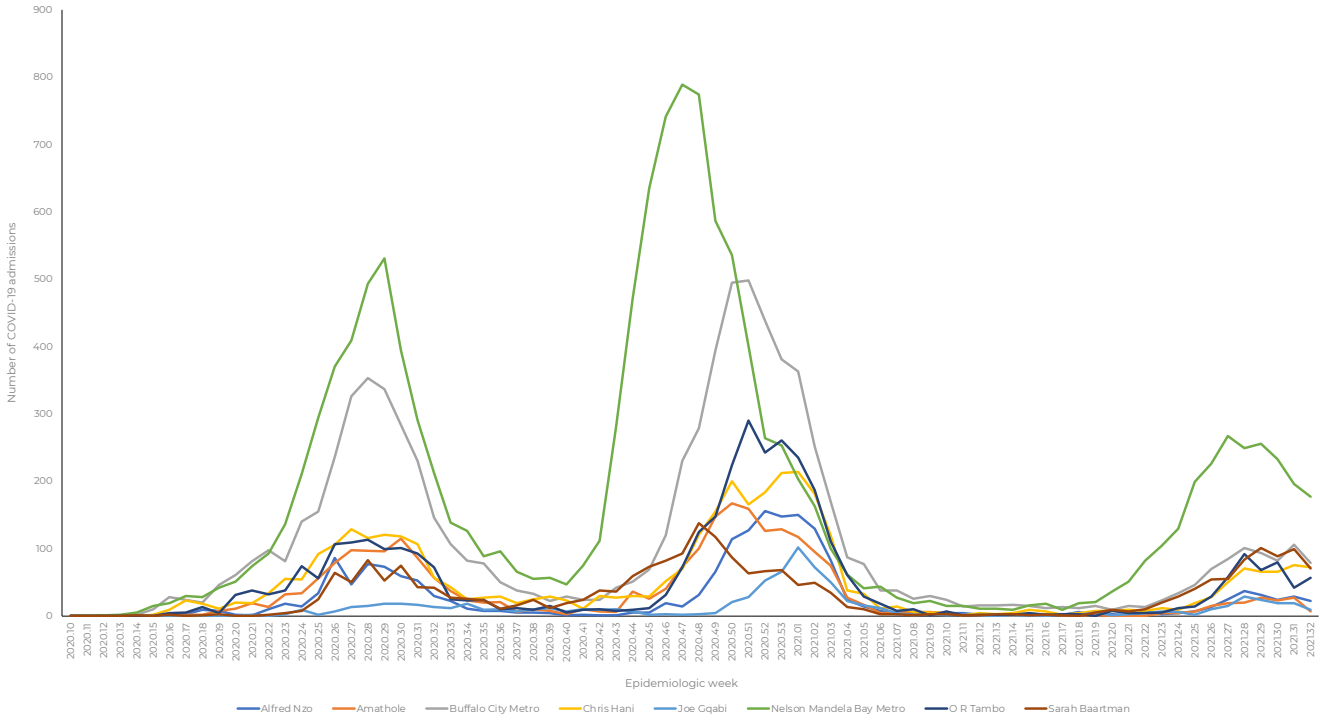

Figure 6. Number of reported COVID-19 admissions, by district and epidemiologic week, Eastern Cape, 5 March 2020-14 August 2021, n=36,613

The weekly deaths at the peak of the second wave exceeded the numbers of deaths at the peak of the first wave in all districts (Figure 7). There have been decreases in deaths in all districts in the past two weeks although some districts have shown increases in the past two weeks.

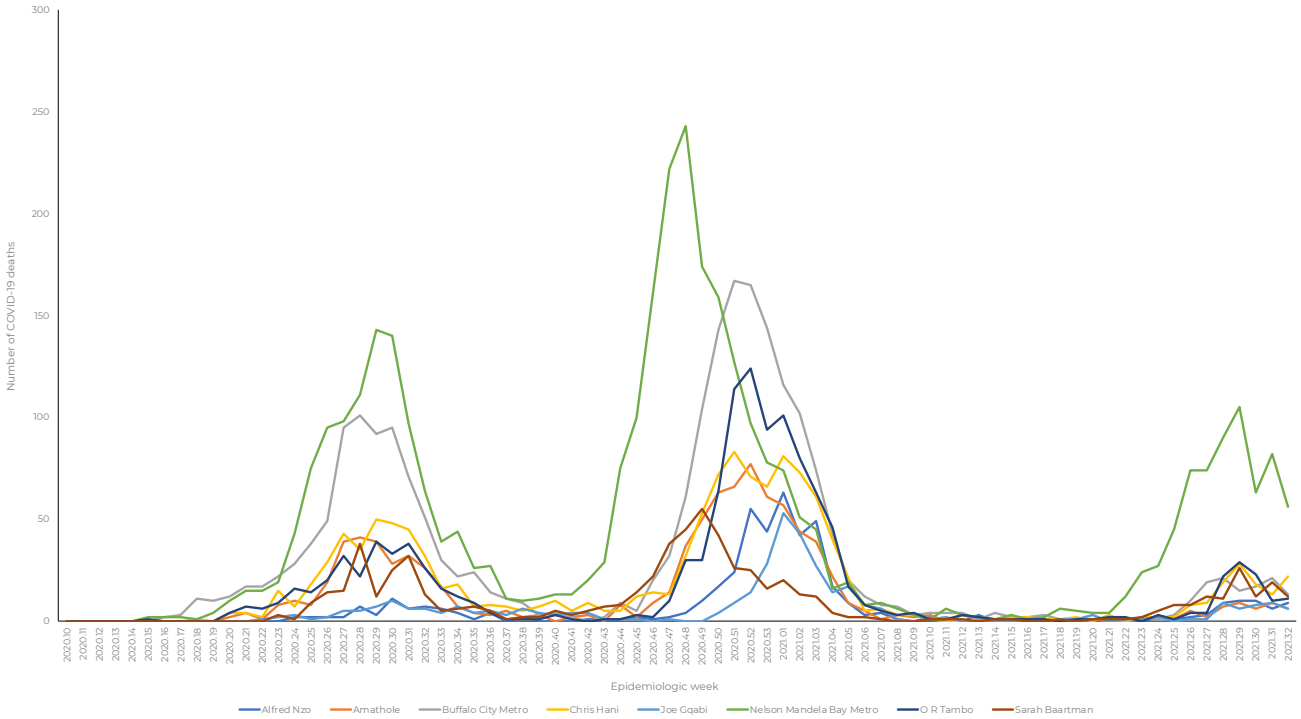

Figure 7. Number of reported COVID-19 in-hospital deaths, by district and epidemiologic week, Eastern Cape, 5 March 2020-14 August 2021, n=10,723

There has been a decrease in the average COVID-19 admissions comparing the previous 14 days and the current 14 days in all the districts except in Buffalo City Metro and Chris Hani (Table 4). The highest percentage change in admission was in Chris Hani.

Table 4: Previous 14 days and current 14 days average COVID-19 admissions and deaths and percentage changes, Eastern Cape, 17 July-14 August 2021.

District	Previous 14 days admissions average	Current 14 days admissions average	Percentage change in admissions	Previous 14 days deaths average	Current 14 days deaths average	Percentage change in deaths
Alfred Nzo	3.93	3.64	-7.27	1.43	1.07	-25.00
Amathole	3.57	2.43	-32.00	1.07	1.07	0.00
Buffalo City Metro	12.57	13.21	5.11	2.29	2.43	6.25
Chris Hani	9.43	10.57	12.12	3.29	2.50	-23.91
Joe Gqabi	3.07	2.00	-34.88	1.00	1.07	7.14
Nelson Mandela Bay	34.93	26.64	-23.72	12.00	9.86	-17.86
O R Tambo	10.57	7.07	-33.11	3.71	1.50	-59.62
Sarah Baartman	13.57	12.14	-10.53	2.71	2.21	-18.42

FREE STATE

In the first and third waves there were roughly equal numbers of admissions in both sectors, but in the second wave there were higher numbers of admissions in the public sector (Figure 8). Weekly admissions at the peak of the second wave exceeded the weekly numbers of admissions at the peak of the first wave in the public sector. The numbers of COVID-19 admissions increased in both sectors since week 9 and have shown decreases in the public sector for the past ten weeks. Weekly admissions at the peak of third wave have exceeded the weekly numbers of admissions at the peak of the second wave in the private sector.

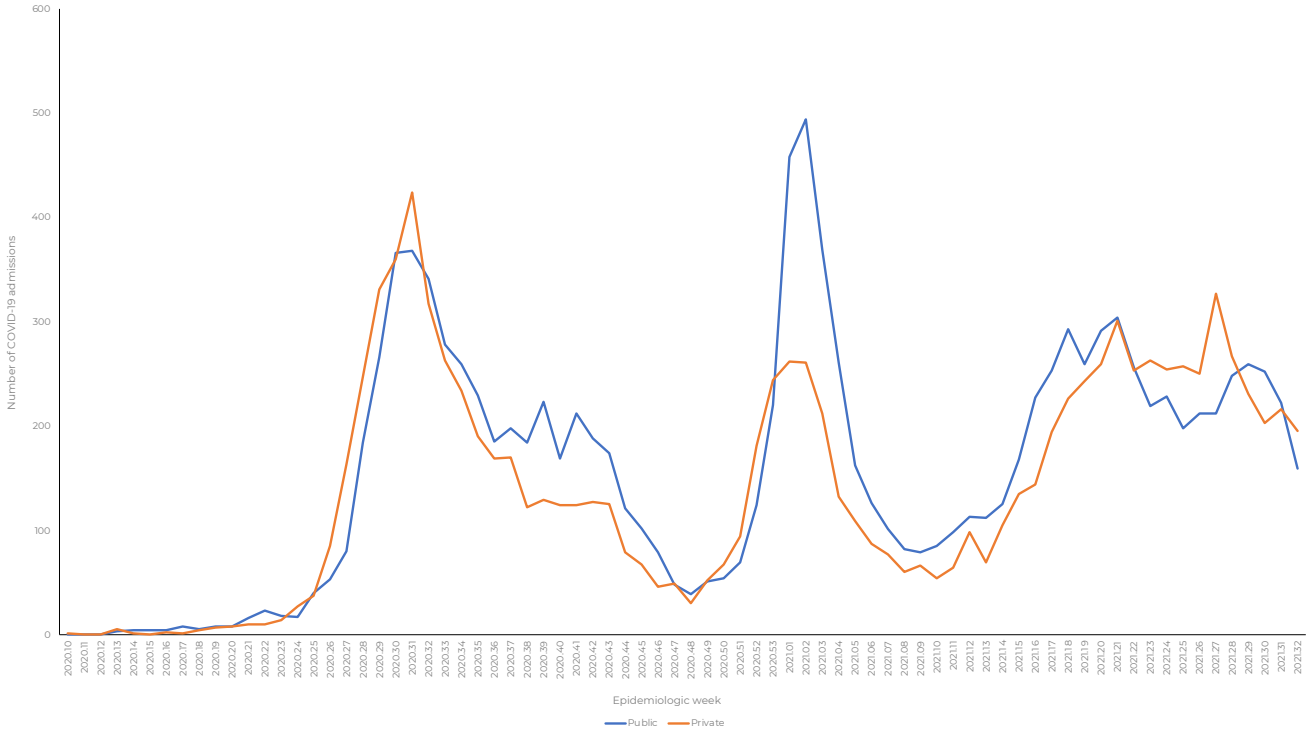

Figure 8: Number of reported COVID-19 admissions by health sector and epidemiologic week of diagnosis, Free State, 5 March 2020-14 August 2021, n=22,543

Weekly admissions at the peak of the second wave exceeded the weekly numbers of admissions at the peak of the first wave in Fezile Dabi, Thabo Mofutsanyane and Xhariep (Figure 9). Admissions increased in all districts, with highest increase in Mangaung Metro, but have shown sustained decreases for the past ten weeks in most districts except Thabo Mofutsanyane. Weekly admissions at the peak of the third wave exceeded the weekly numbers of admissions at the peak of the second wave in Mangaung Metro.

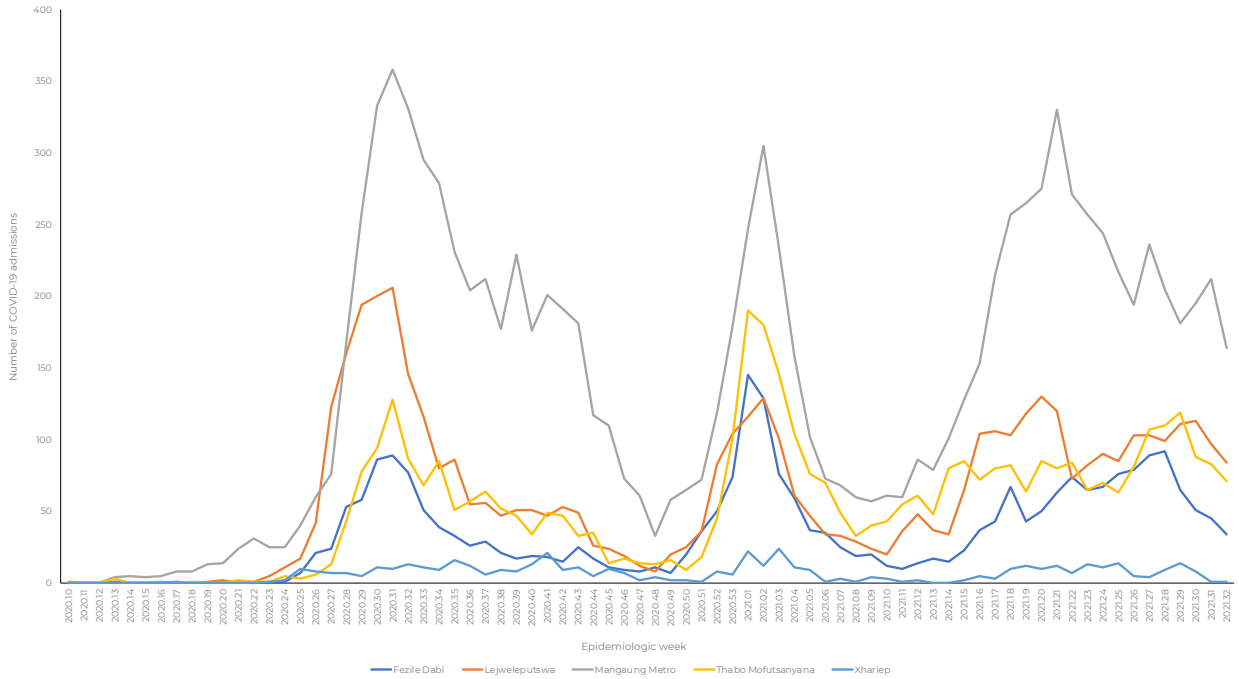

Figure 9: Number of reported COVID-19 admissions, by district and epidemiologic week, Free State, 5 March 2020-14 August 2021, n=22,543

Weekly deaths at the peak of the second wave exceeded the weekly numbers of deaths at the peak of the first wave in Thabo Mofutsanyana, Fezile Dabi and Xhariep (Figure 10). The numbers of COVID-19 deaths have increased in all districts, but have shown sustained decreases for the past nine weeks in most districts. However, there was increased deaths in Mangaung Metro, Thabo Mofutsanyane and Lejweleputswa in the past three weeks. Weekly deaths at the peak of the third wave exceeded the weekly numbers of admissions at the peak of the second wave in Mangaung Metro and Lejweleputswa.

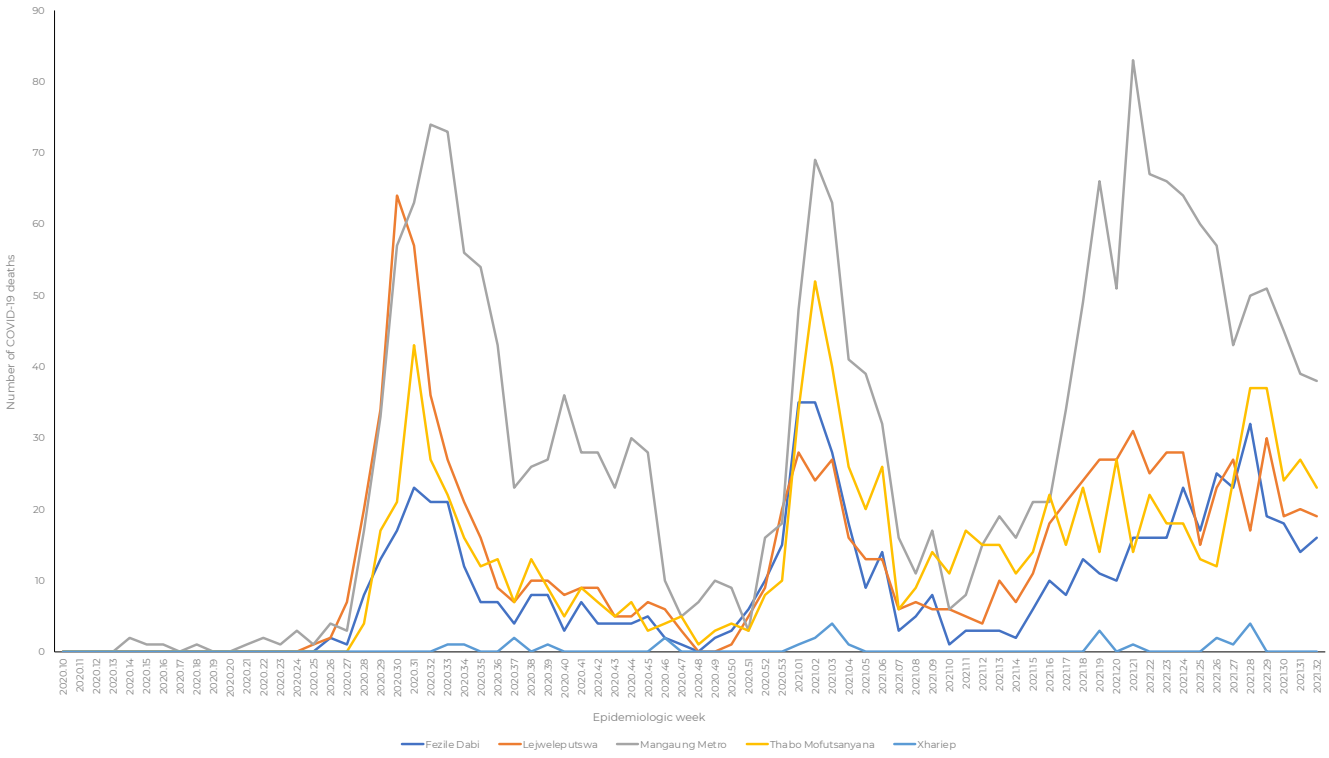

Figure 10: Number of reported COVID-19 in-hospital deaths, by district and epidemiologic week, Free State, 5 March 2020-14 August 2021, n=4,774

There has been a decrease in average COVID-19 admissions comparing the previous 14 days and the current 14 days in all the districts (Table 5).

Table 5: Previous 14 days and current 14 days average COVID-19 admissions and deaths and percentage changes, Free State, 17 July-14 August 2021.

District	Previous 14 days admissions average	Current 14 days admissions average	Percentage change in admissions	Previous 14 days deaths average	Current 14 days deaths average	Percentage change in deaths
Fezile Dabi	8.29	5.64	-31.90	2.64	2.14	-18.92
Lejweleputswa	16.00	12.93	-19.20	3.50	2.79	-20.41
Mangaung Metro	26.86	26.86	0.00	6.86	5.50	-19.79
Thabo Mofutsanyana	14.79	11.00	-25.60	4.36	3.57	-18.03
Xhariep	1.57	0.14	-90.91	0.00	0.00	0.00

GAUTENG

In all three waves there were higher numbers of admissions in the private sector. Weekly admissions at the peak of the second wave exceeded the weekly numbers of admissions at the peak of the first wave in both sectors (Figure 11). There has been an increase in admission in both sectors, more marked in the private sector, since week 14 which peaked in week 26. However, a decrease in admissions has been observed in both sectors for the past six weeks. Weekly admissions at the peak of the third wave exceeded the weekly numbers of admissions at the peak of the second wave in both sectors.

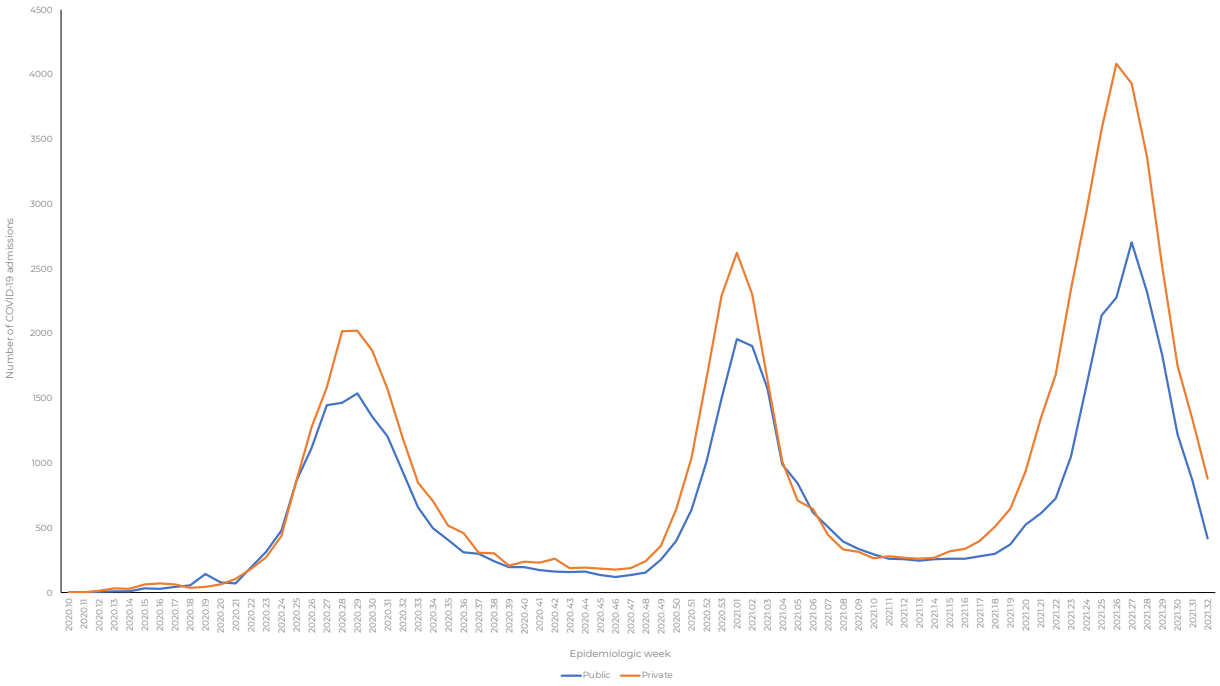

Figure 11: Number of reported COVID-19 admissions by health sector and epidemiologic week of diagnosis, Gauteng, 5 March 2020-14 August 2021, n=118,807

Weekly admissions at the peak of the second wave exceeded the weekly numbers of admissions at the peak of the first wave in City of Johannesburg Metro, City of Tshwane Metro, Ekurhuleni Metro and West Rand (Figure 12). There have been increases in admissions in all districts, however a decrease in admissions has been observed in all districts over the past five weeks. Weekly admissions at the peak of the third wave exceeded the weekly numbers of admissions at the peak of the second wave in all districts.

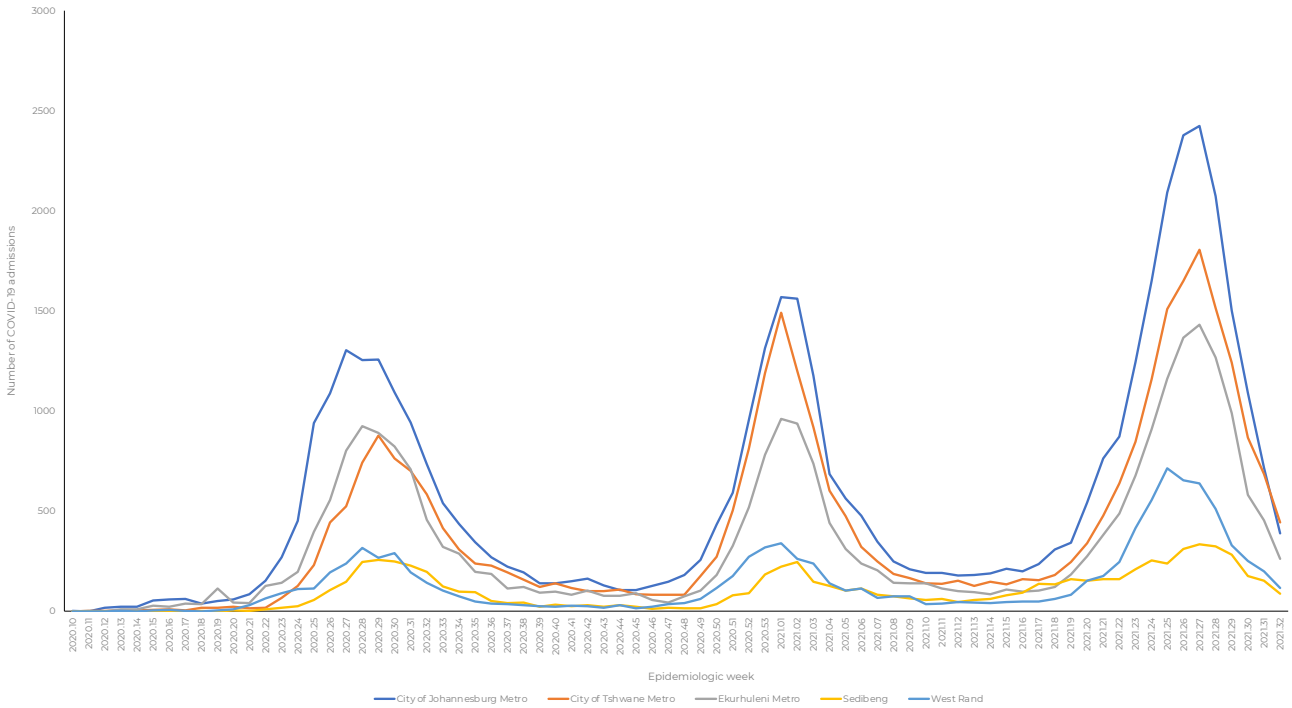

Figure 12: Number of reported COVID-19 admissions, by district and epidemiologic week, Gauteng, 5 March 2020-14 August 2021, n=118,807

Weekly deaths at the peak of the second wave exceeded the weekly numbers of deaths at the peak of the first wave in City of Tshwane Metro, Ekurhuleni Metro and West Rand (Figure 13). The numbers of COVID-19 deaths increased in all districts, however a decrease in the number of deaths has been observed in all districts over the past four weeks. Weekly admissions at the peak of the third wave exceeded the weekly numbers of admissions at the peak of the second wave in all districts.

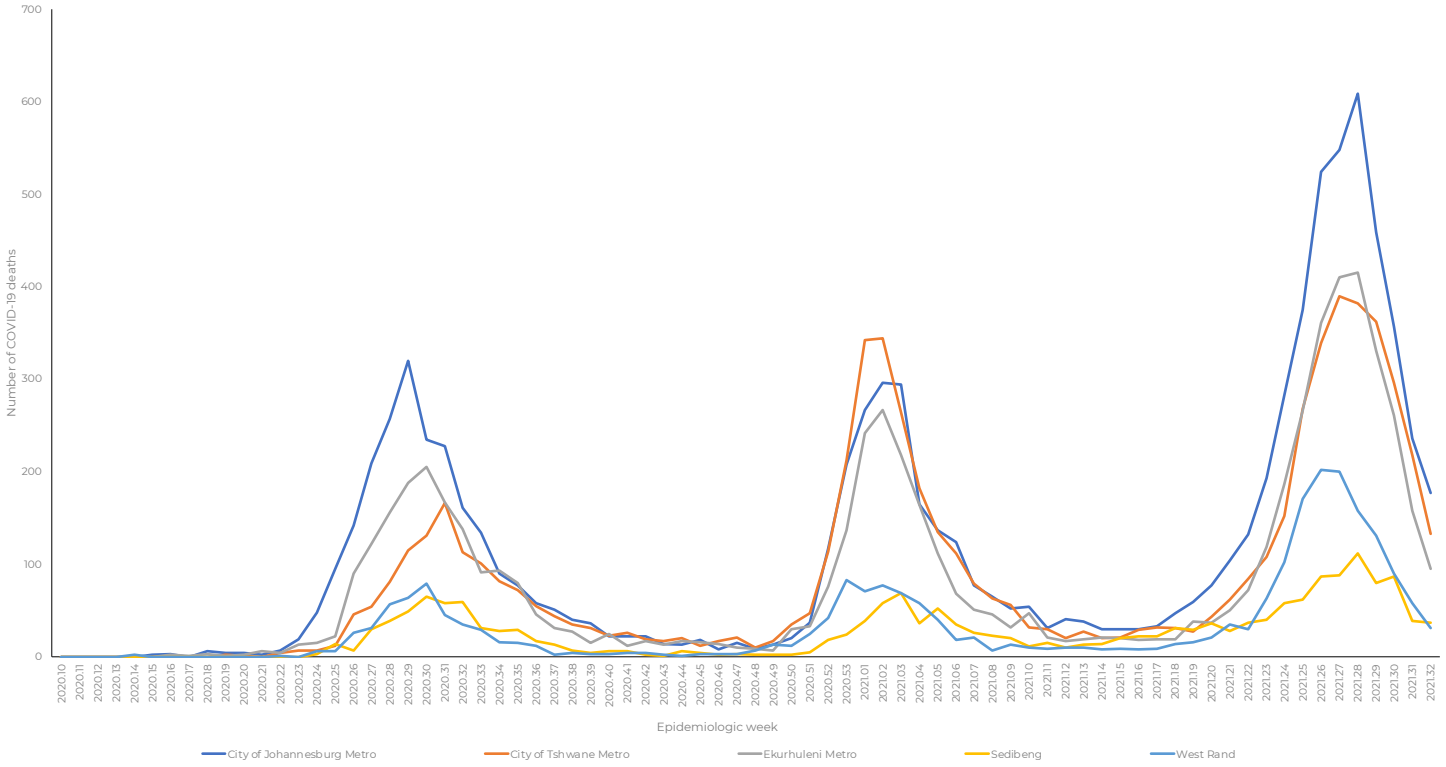

Figure 13: Number of reported COVID-19 in-hospital deaths, by district and epidemiologic week, Gauteng, 5 March 2020-14 August 2021, n=25,557

There has been a decrease in average COVID-19 admissions comparing the previous 14 days and the current 14 days in all districts (Table 6).

Table 6: Previous 14 days and current 14 days average COVID-19 admissions and deaths and percentage changes, Gauteng, 17 July-14 August 2021.

District	Previous 14 days admissions average	Current 14 days admissions average	Percentage change in admissions	Previous 14 days deaths average	Current 14 days deaths average	Percentage change in deaths
City of Johannesburg Metro	185.07	79.00	-57.31	58.21	29.50	-49.33
City of Tshwane Metro	150.79	80.64	-46.52	47.00	25.07	-46.66
Ekurhuleni Metro	112.21	51.21	-54.36	42.21	18.07	-57.19
Sedibeng	32.79	17.21	-47.49	11.93	5.43	-54.49
West Rand	41.50	22.57	-45.61	15.79	6.36	-59.73

KWAZULU-NATAL

In both first and second waves there were higher numbers of admissions in the private sector. Weekly admissions at the peak of the second wave exceeded the weekly numbers of admissions at the peak of the first wave in both sectors (Figure 14). There has been an increase in admissions in both sectors since week 22, however a decrease in the number of admissions has been observed in both sectors over the past two weeks.

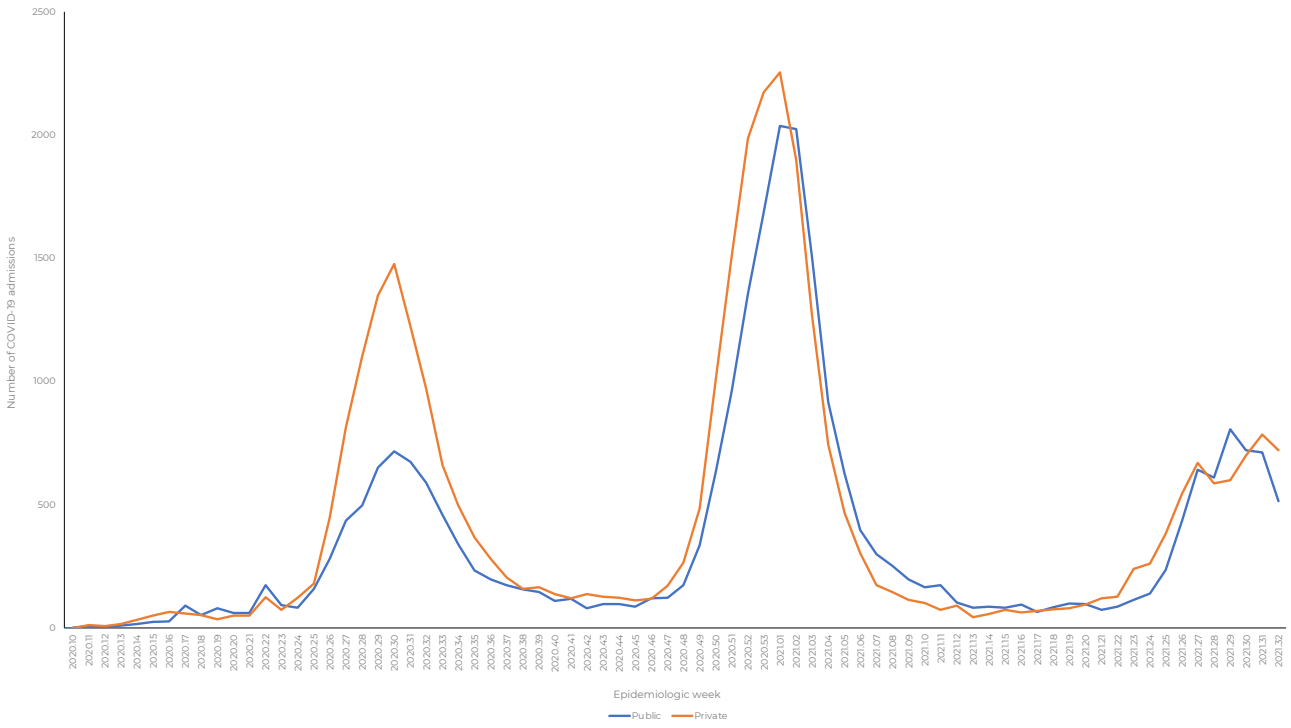

Figure 14: Number of reported COVID-19 admissions by health sector and epidemiologic week of diagnosis, KwaZulu-Natal, 5 March 2020-14 August 2021, n=59,960

Weekly admissions at the peak of the second wave exceeded the weekly numbers of admissions at the peak of the first wave in all districts except Amajuba (Figure 15). There has been an increase in admissions in a few districts, particularly in eThekwini Metro. However, a decrease in the number of admissions has been observed in all districts in the past three weeks.

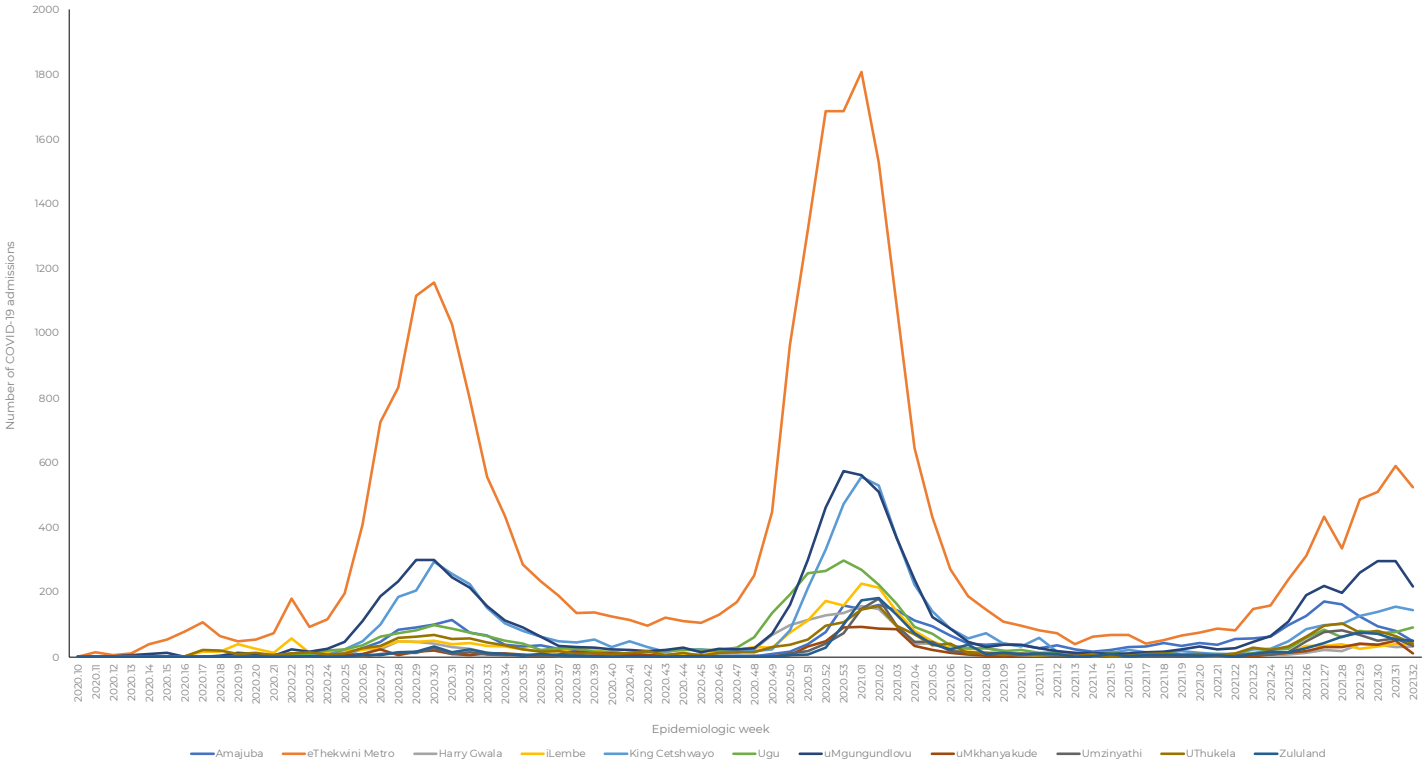

Figure 15: Number of reported COVID-19 admissions, by district and epidemiologic week, KwaZulu-Natal, 5 March 2020-14 August 2021, n=59,960

Weekly deaths at the peak of the second wave exceeded the weekly numbers of deaths at the peak of the first wave in all districts (Figure 16). Since the end of the second wave, there have been small increases in COVID-19 deaths in most districts.

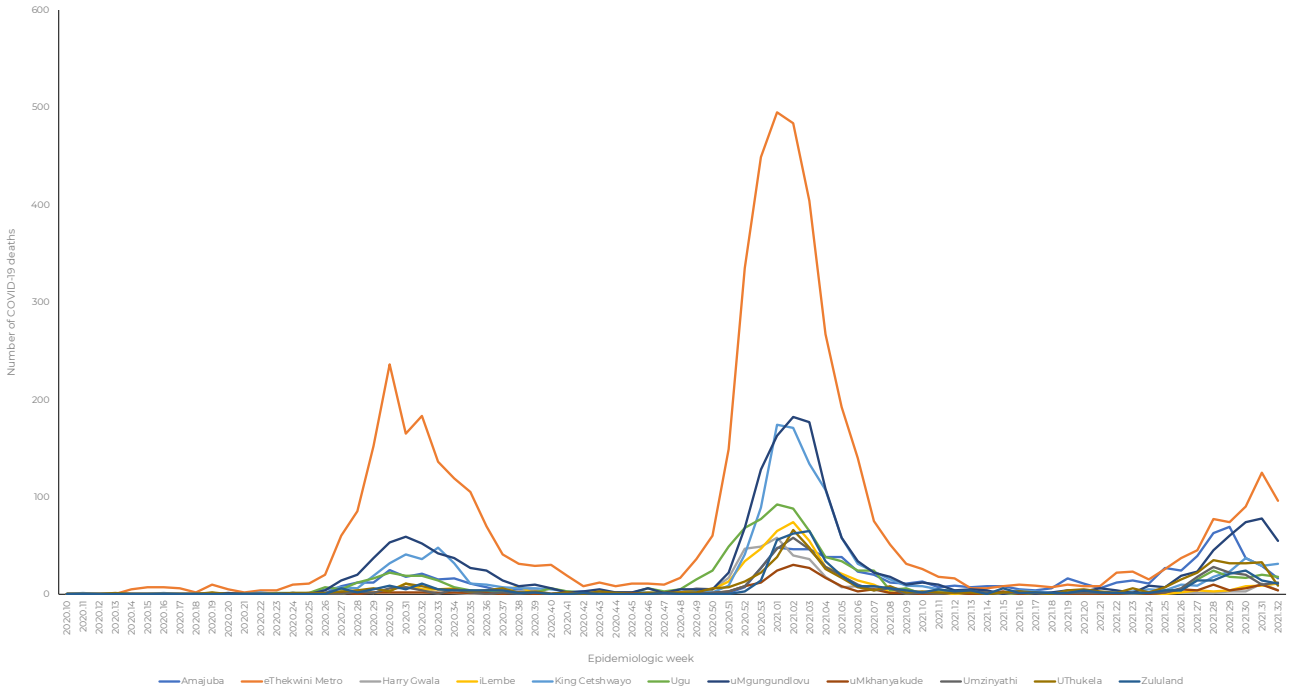

Figure 16: Number of reported COVID-19 in-hospital deaths, by district and epidemiologic week, KwaZulu-Natal, 5 March 2020-14 August 2021, n=13,190

There has been an increase in average COVID-19 admissions comparing the previous 14 days and the current 14 days in eThekwini Metro, iLembe, King Cetshwayo and Ugu. The highest percentage change in admissions was in iLembe (Table 7).

Table 7: Previous 14 days and current 14 days average COVID-19 admissions and deaths and percentage changes, KwaZulu-Natal, 17 July-14 August 2021.

District	Previous 14 days admissions average	Current 14 days admissions average	Percentage change in admissions	Previous 14 days deaths average	Current 14 days deaths average	Percentage change in deaths
Amajuba	15.64	9.29	-40.64	7.57	3.21	-57.55
eThekwini Metro	71.21	79.57	11.74	11.71	15.79	34.76
Harry Gwala	5.50	4.57	-16.88	0.43	1.07	150.00
iLembe	4.14	5.57	34.48	0.86	1.43	66.67
King Cetshwayo	19.00	21.43	12.78	4.29	4.29	0.00
Ugu	10.93	12.07	10.46	2.50	2.71	8.57
uMgungundlovu	39.79	36.79	-7.54	9.57	9.50	-0.75
uMkhanyakude	5.57	4.36	-21.79	0.71	1.00	40.00
Umzinyathi	8.50	6.57	-22.69	3.00	1.57	-47.62
UThukela	11.21	7.50	-33.12	4.57	3.00	-34.38
Zululand	10.43	7.36	-29.45	3.21	1.79	-44.44

LIMPOPO

In the first wave there were roughly equal numbers of admissions in both sectors, but in the second and third waves there were higher numbers of admissions in the public sector. Weekly admissions at the peak of the second wave exceeded the weekly numbers of admissions at the peak of the first wave in both sectors (Figure 17). There have been increased admissions in both sectors since week 19, peaking in week 28. However, a decrease in the number of admissions has been observed in both sectors over the past four weeks.

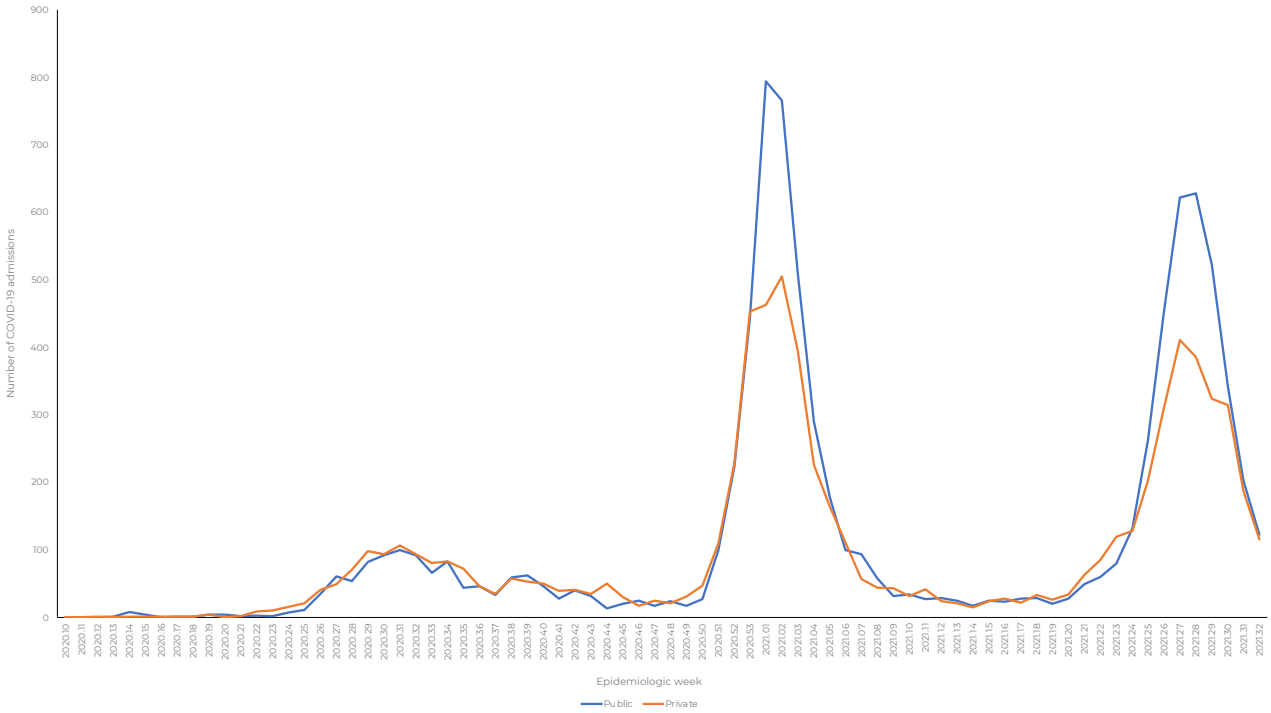

Figure 17: Number of reported COVID-19 admissions by health sector and epidemiologic week of diagnosis, Limpopo, 5 March 2020-14 August 2021, n=15,775

Weekly admissions at the peak of the second wave exceeded the weekly numbers of admissions at the peak of the first wave in all districts (Figure 18). There have been increases in admissions in all districts, however a decrease in the number of admissions has been observed in all districts over the past four weeks. Weekly admissions at the peak of the third wave exceeded the weekly numbers of admissions at the peak of the second wave in Sekhukhune and Waterberg.

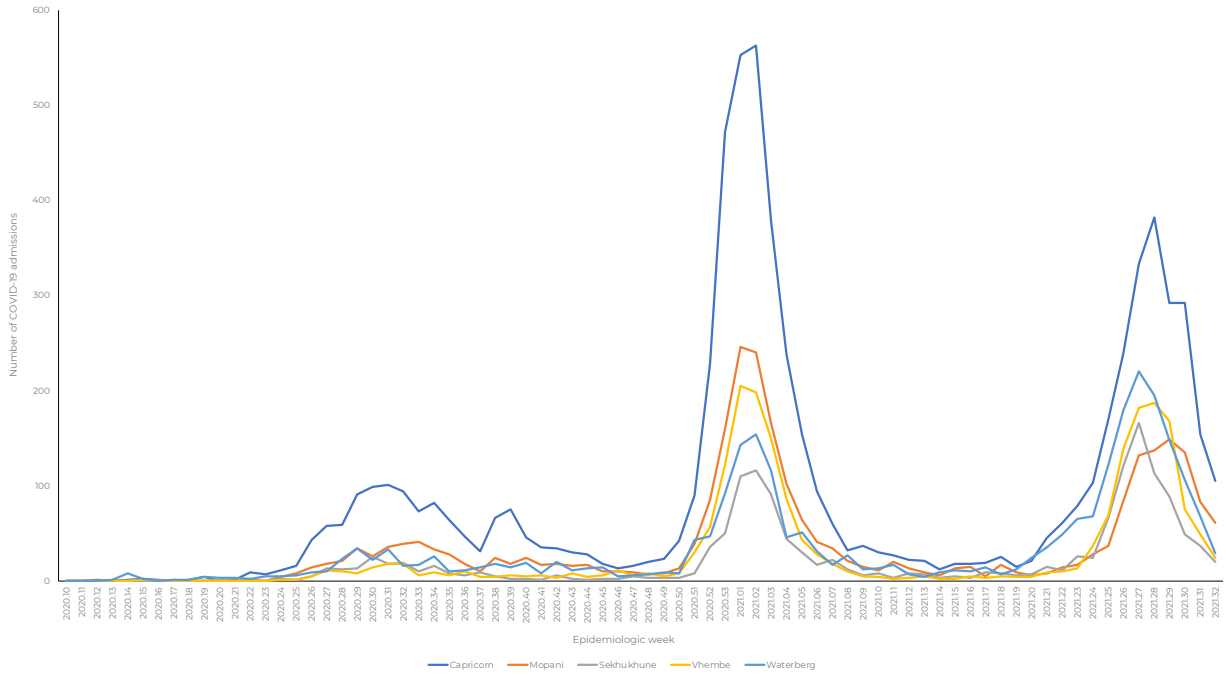

Figure 18: Number of reported COVID-19 admissions, by district and epidemiologic week, Limpopo, 5 March 2020-14 August 2021, n=15,775

Weekly deaths at the peak of the second wave exceeded the weekly numbers of deaths at the peak of the first wave in all districts (Figure 19). The numbers of COVID-19 deaths have increased in most districts, however, a decrease in the number of deaths has been observed in all districts over the past four weeks.

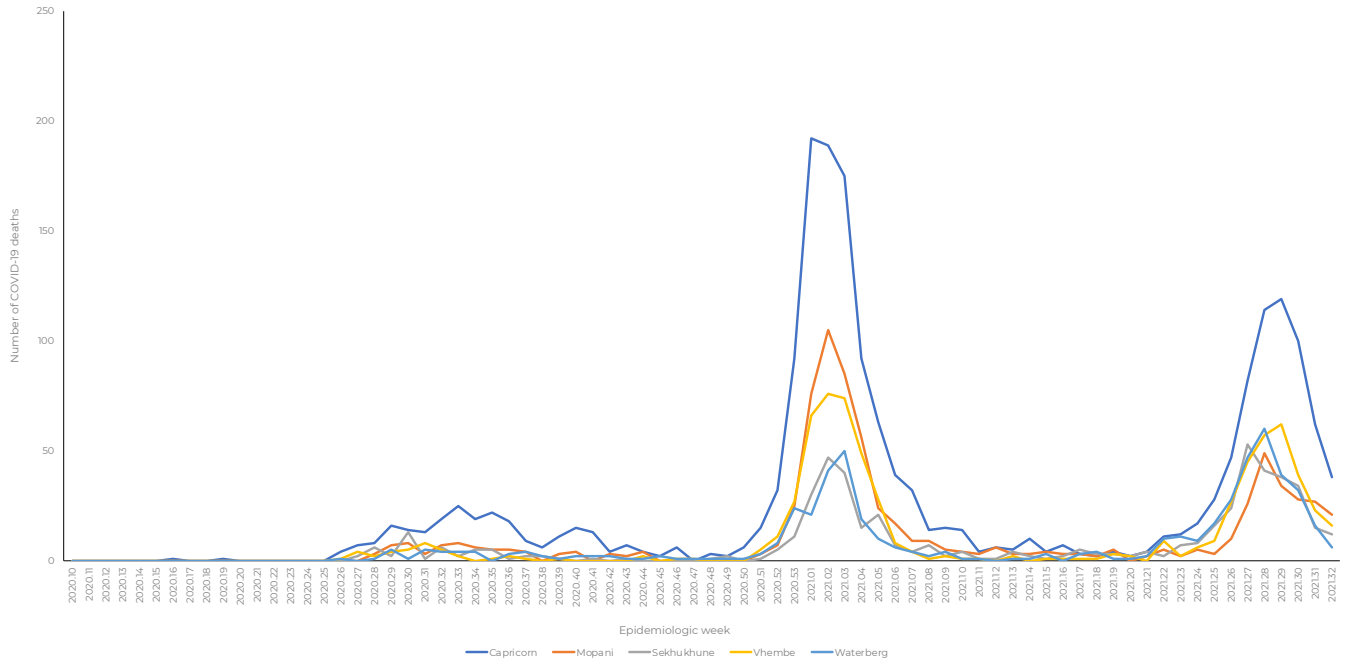

Figure 19: Number of reported COVID-19 in-hospital deaths, by district and epidemiologic week, Limpopo, 5 March 2020-14 August 2021, n=4,400

There has been a decrease in average COVID-19 admissions comparing the previous 14 days and the current 14 days in all districts (Table 8).

Table 8: Previous 14 days and current 14 days average COVID-19 admissions and deaths and percentage changes, Limpopo, 17 July-14 August 2021.

District	Previous 14 days admissions average	Current 14 days admissions average	Percentage change in admissions	Previous 14 days deaths average	Current 14 days deaths average	Percentage change in deaths
Capricorn	41.71	18.43	-55.82	15.64	7.14	-54.34
Mopani	20.29	10.29	-49.30	4.43	3.43	-22.58
Sekhukhune	9.86	4.07	-58.70	5.14	1.93	-62.50
Vhembe	17.36	5.21	-69.96	7.21	2.79	-61.39
Waterberg	18.14	6.93	-61.81	5.07	1.57	-69.01

MPUMALANGA

In the first and third waves there were higher numbers of admissions in the private sector, but in the second wave there were higher numbers of admissions in the public sector. Weekly admissions at the peak of the second wave exceeded the weekly numbers of admissions at the peak of the first wave in both sectors (Figure 20). An increase in admission in both sectors has been observed since week 16, peaking in week 28. However, a decrease in the number of admissions has been observed in both sectors over the past four weeks. Weekly admissions at the peak of the third wave exceeded the weekly numbers of admissions at the peak of the second wave in the private sector.

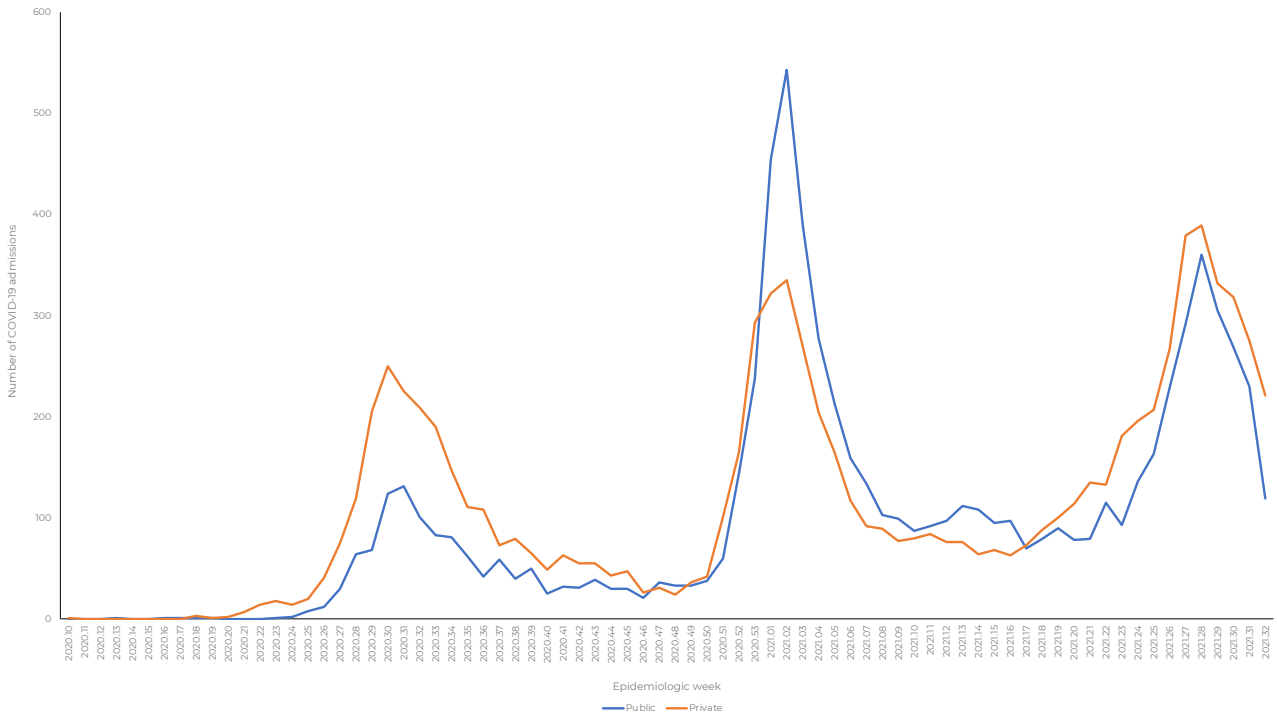

Figure 20: Number of reported COVID-19 admissions by health sector and epidemiologic week of diagnosis, Mpumalanga, 5 March 2020-14 August 2021, n=16,096

Weekly admissions at the peak of the second wave exceeded the weekly numbers of admissions at the peak of the first wave in all districts (Figure 21). There have been increases in admissions in all districts since week 17 however a decrease in the number of admissions has been observed in all districts over the past five weeks.

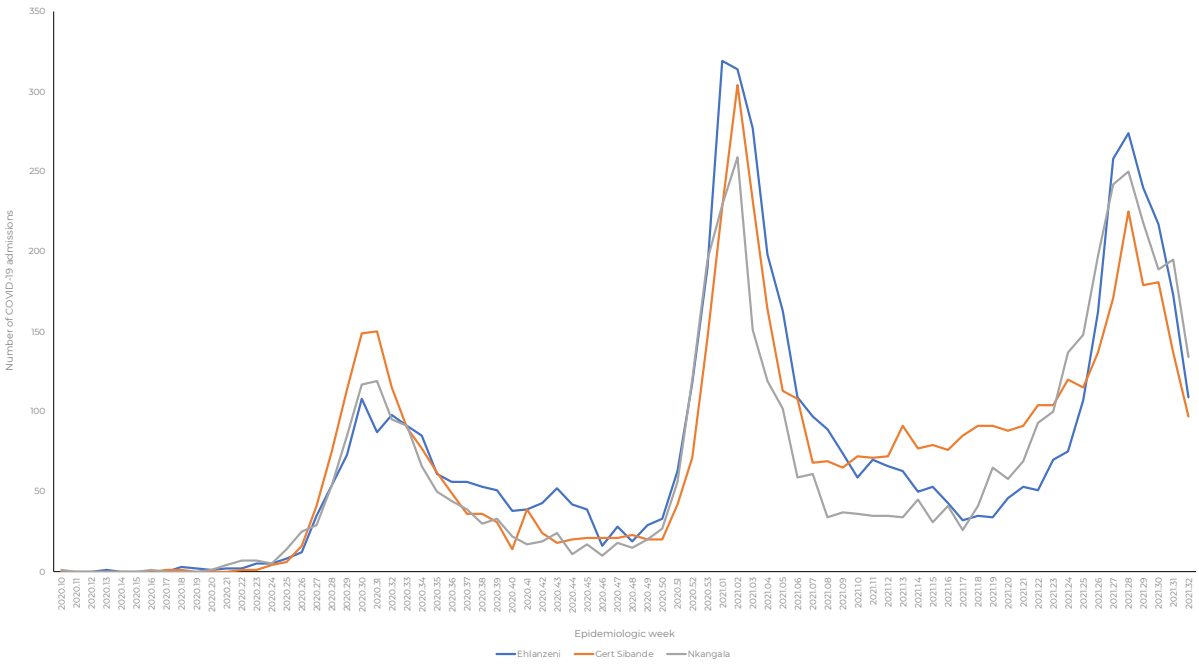

Figure 21: Number of reported COVID-19 admissions, by district and epidemiologic week, Mpumalanga, 5 March 2020-14 August 2021, n=16,096

Weekly deaths at the peak of the second wave exceeded the weekly numbers of deaths at the peak of the first wave in all districts (Figure 22). The numbers of COVID-19 deaths have increased in all districts, however a decrease in the number of deaths has been observed in all districts over the past four weeks.

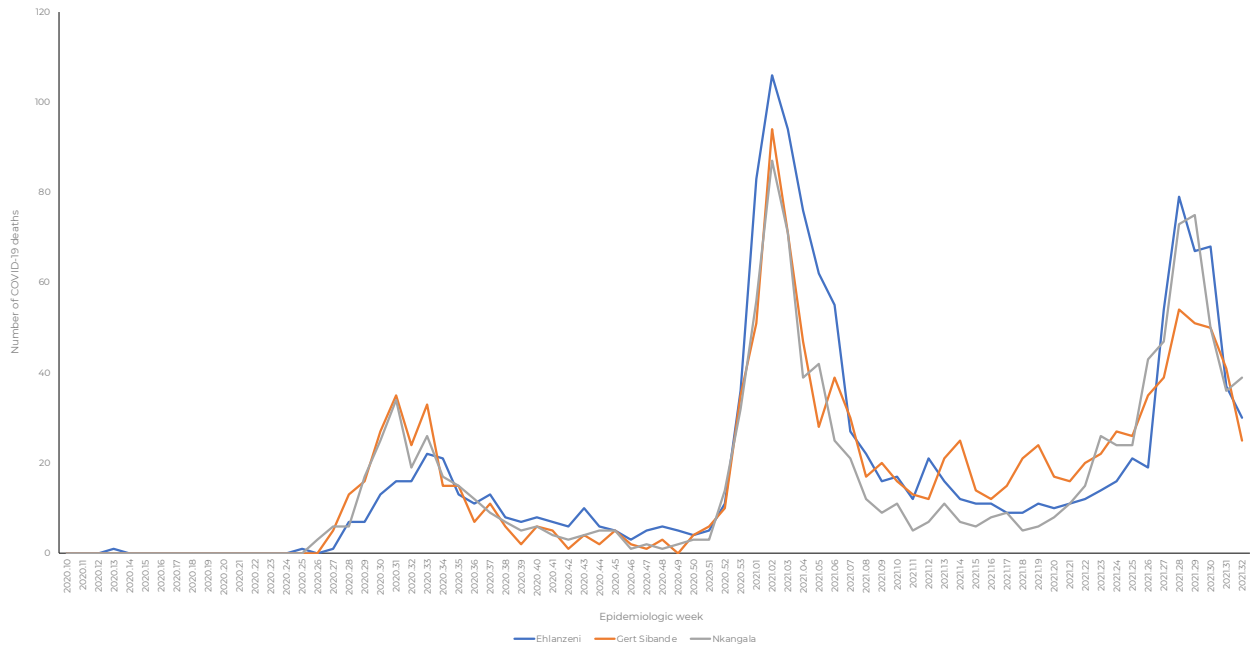

Figure 22: Number of reported COVID-19 in-hospital deaths, by district and epidemiologic week, Mpumalanga, 5 March 2020-14 August 2021, n=3,862

There has been a decrease in average COVID-19 admissions comparing the previous 14 days and the current 14 days in all districts (Table 9).

Table 9: Previous 14 days and current 14 days average COVID-19 admissions and deaths and percentage changes, Mpumalanga, 17 July-14 August 2021.

District	Previous 14 days admissions average	Current 14 days admissions average	Percentage change in admissions	Previous 14 days deaths average	Current 14 days deaths average	Percentage change in deaths
Ehlanzeni	32.64	20.07	-38.51	9.64	4.79	-50.37
Gert Sibande	25.71	16.71	-35.00	7.21	4.71	-34.65
Nkangala	29.07	23.50	-19.16	8.93	5.36	-40.00

NORTH WEST

In all three waves there were higher numbers of admissions in the public sector. Weekly admissions at the peak of the second wave exceeded the weekly numbers of admissions at the peak of the first wave in both sectors (Figure 23). The numbers of COVID-19 admissions have increased in both sectors since week 10, peaking in week 29. However, a decrease in the number of admissions has been observed in both sectors over the past three weeks. Weekly admissions at the peak of the third wave exceeded the weekly numbers of admissions at the peak of the second wave in both sectors.

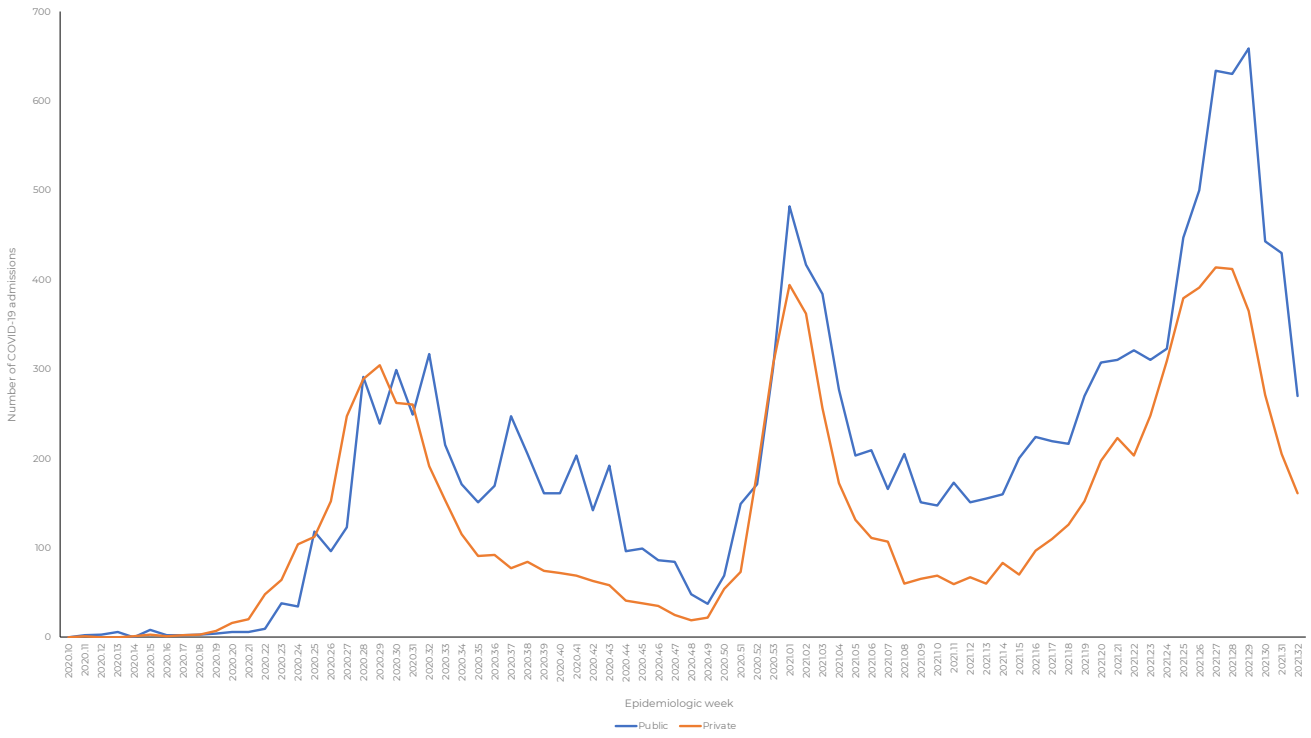

Figure 23: Number of reported COVID-19 admissions by health sector and epidemiologic week of diagnosis, North West, 5 March 2020-14 August 2021, n=25,144

Weekly admissions at the peak of the second wave exceeded the weekly numbers of admissions at the peak of the first wave in all districts except Dr Kenneth Kaunda (Figure 24). The numbers of COVID-19 admissions have increased in Dr Kenneth Kaunda district since week 9 and in Bojanala Platinum since week 14, however a decrease in the number of admissions has been observed in all districts over the past three weeks. Weekly admissions at the peak of the third wave exceeded the weekly numbers of admissions at the peak of the second wave in Bojanala Platinum and Dr Kenneth Kaunda.

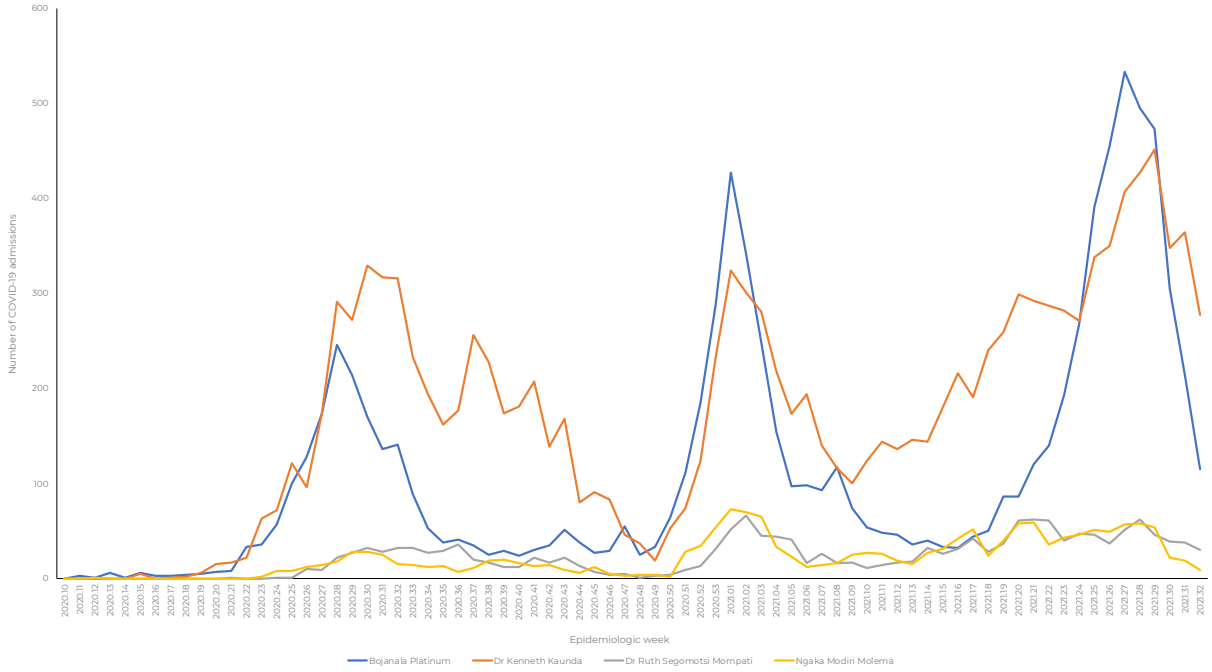

Figure 24: Number of reported COVID-19 admissions, by district and epidemiologic week, North West, 5 March 2020-14 August 2021, n=25,144

Weekly deaths at the peak of the second wave exceeded the weekly numbers of deaths at the peak of the first wave in all districts (Figure 25). The numbers of COVID-19 deaths have increased in all districts, particularly Dr Kenneth Kaunda district and Bojanala Platinum, however a decrease in the number of deaths has been observed in all districts over the past four weeks. Weekly deaths at the peak of the third wave exceeded the weekly numbers of admissions at the peak of the second wave in Bojanala Platinum and Dr Kenneth Kaunda.

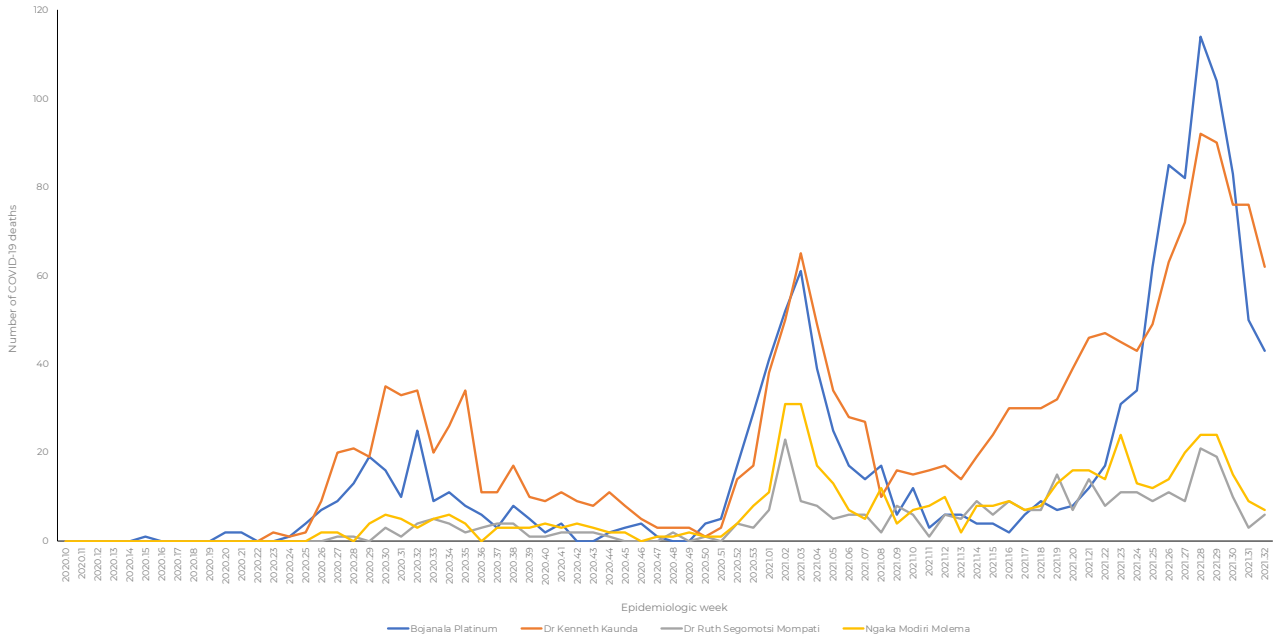

Figure 25: Number of reported COVID-19 in-hospital deaths, by district and epidemiologic week, North West, 5 March 2020-14 August 2021, n=3,876

There has been a decrease in average COVID-19 admissions comparing the previous 14 days and the current 14 days in all districts (Table 10).

Table 10: Previous 14 days and current 14 days average COVID-19 admissions and deaths and percentage changes, North West, 17 July-14 August 2021.

District	Previous 14 days admissions average	Current 14 days admissions average	Percentage change in admissions	Previous 14 days deaths average	Current 14 days deaths average	Percentage change in deaths
Bojanala Platinum	55.50	23.50	-57.66	13.36	6.64	-50.27
Dr Kenneth Kaunda	57.00	45.79	-19.67	11.79	9.86	-16.36
Dr Ruth Segomotsi Mompati	6.07	4.86	-20.00	2.07	0.64	-68.97
Ngaka Modiri Molema	5.43	2.00	-63.16	2.79	1.14	-58.97

NORTHERN CAPE

In both first and second waves there were roughly equal numbers of admissions in both sectors, but in the third wave there were higher numbers of admissions in the private sector. Weekly admissions at the peak of the second wave exceeded the weekly numbers of admissions at the peak of the first wave in both sectors (Figure 26). The numbers of COVID-19 admissions have increased in both sectors since week 9. A decrease in the number of admissions has been observed in both sectors over the past ten weeks, however there have been some increases in recent weeks. Weekly admissions at the peak of the second wave exceeded the weekly numbers of admissions at the peak of the second wave in the private sector.

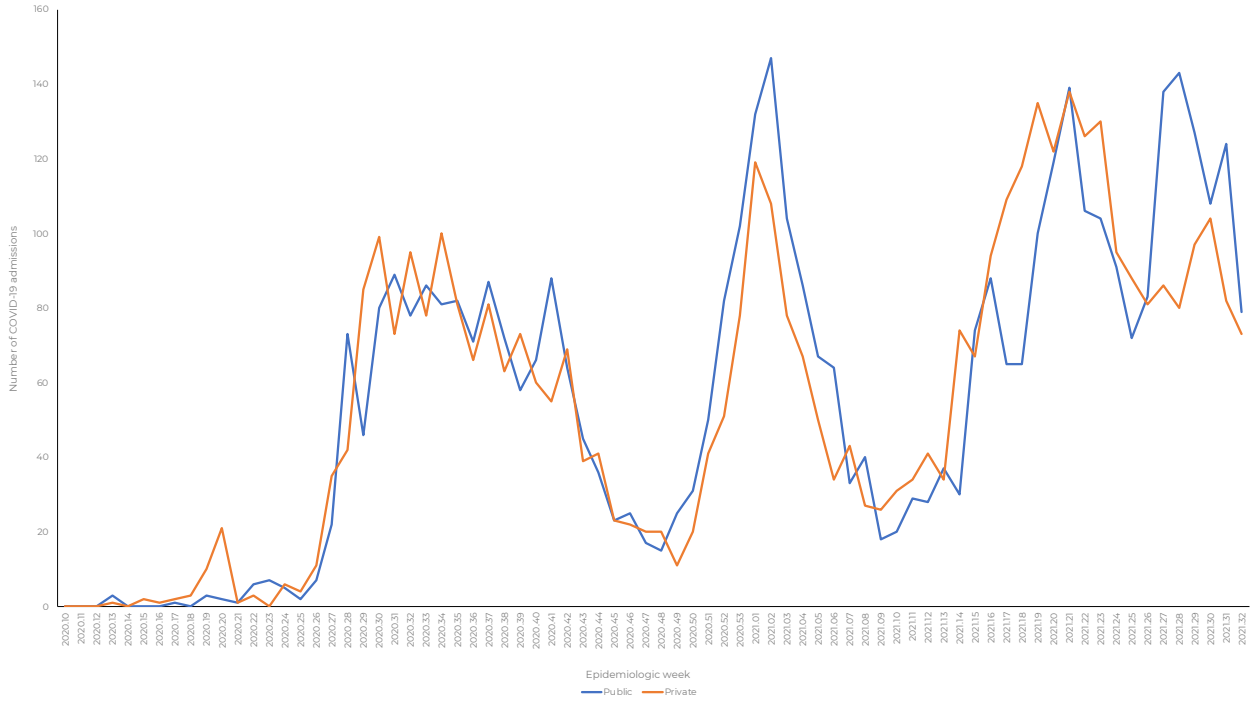

Figure 26: Number of reported COVID-19 admissions by health sector and epidemiologic week of diagnosis, Northern Cape, 5 March 2020-14 August 2021, n=8,467

Weekly admissions at the peak of the second wave exceeded the weekly number of admissions during the peak of the first wave in Pixley Ka Seme, Namakwa and ZF Mgcawu districts (Figure 27). The numbers of admissions have decreased in all districts over the past ten weeks, however some increases in admissions have been observed in the past week in Pixley Ka Seme. Weekly admissions at the peak of the third wave exceeded the weekly numbers of admissions at the peak of the second wave in Frances Baard, ZF Mgcawu and John Taolo Gaetsewe districts.

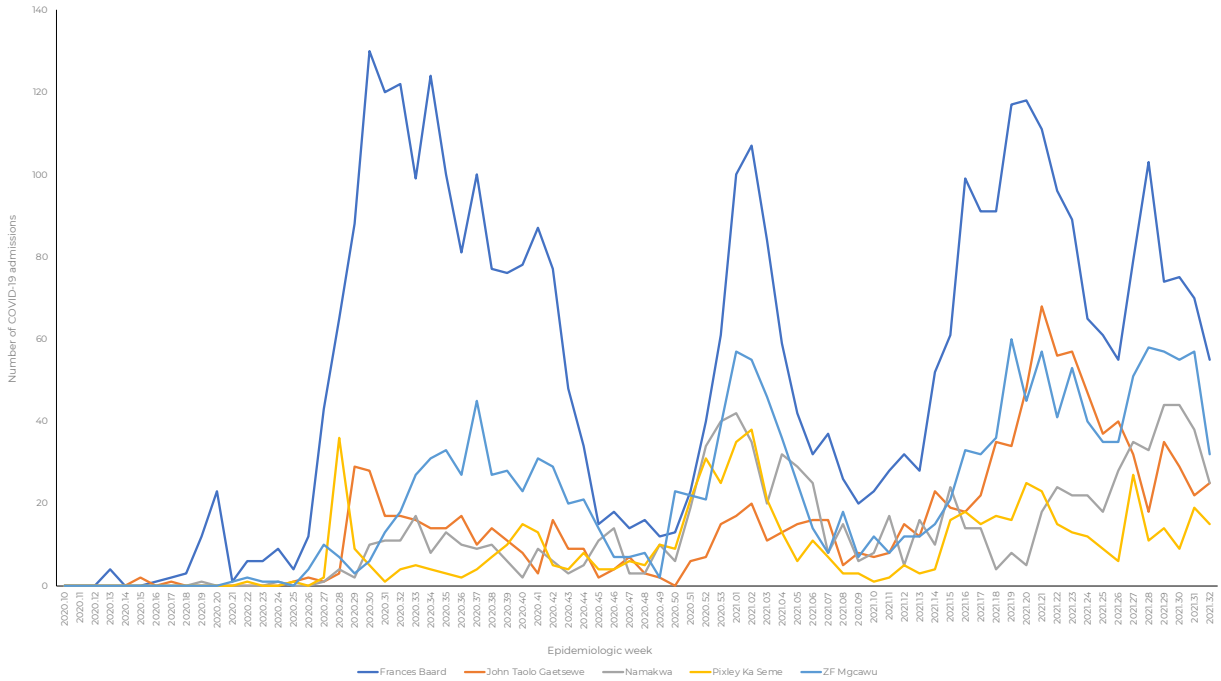

Figure 27: Number of reported COVID-19 admissions, by district and epidemiologic week, Northern Cape, 5 March 2020-14 August 2021, n=8,467

Weekly deaths at the peak of the second wave exceeded the weekly numbers of deaths at the peak of the first wave in Pixley ka Seme, Namakwa and ZF Mgcawu districts (Figure 28). The numbers of COVID-19 deaths have increased in all districts, and while there has been some decrease in deaths earlier on, an increase in the number of deaths has been observed in all districts over the past four weeks. Weekly deaths at the peak of the third wave exceeded the weekly numbers of deaths at the peak of the second wave in Frances Baard, John Taolo Gaetsewe and ZF Mgcawu district.

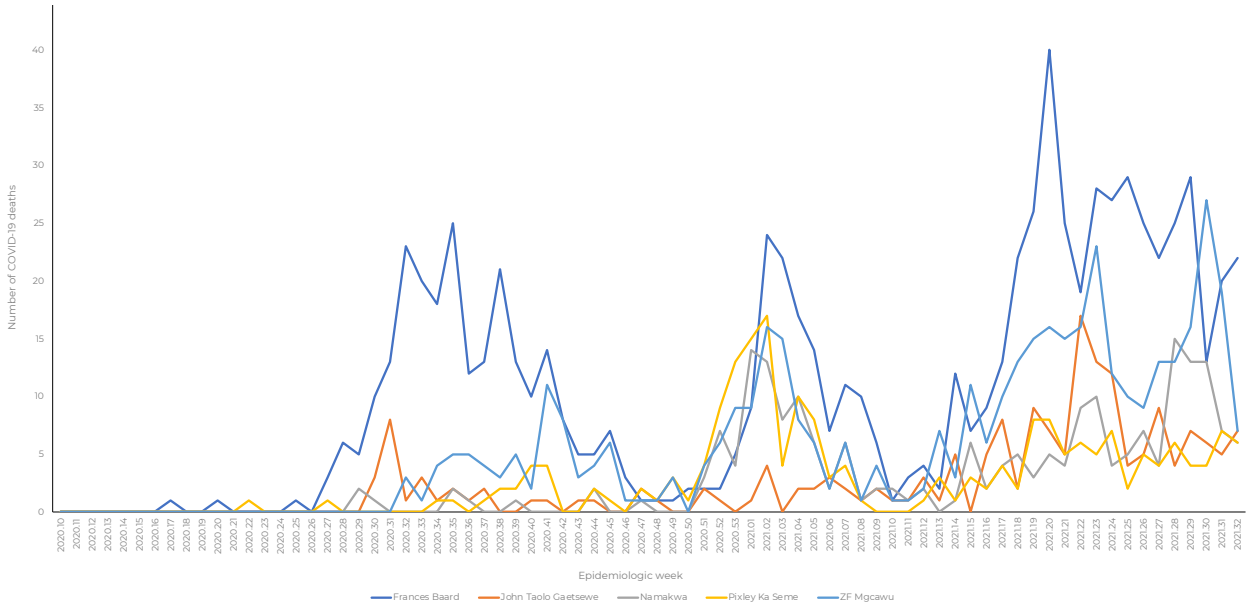

Figure 28: Number of reported COVID-19 in-hospital deaths, by district and epidemiologic week, Northern Cape, 5 March 2020-14 August 2021, n=1,821

There has been a decrease in average COVID-19 admissions comparing the previous 14 days and the current 14 days in all the districts except Pixley Ka Seme. (Table 11).

Table 11: Previous 14 days and current 14 days average COVID-19 admissions and deaths and percentage changes, Northern Cape, 17 July-14 August 2021.

District	Previous 14 days admissions average	Current 14 days admissions average	Percentage change in admissions	Previous 14 days deaths average	Current 14 days deaths average	Percentage change in deaths
Frances Baard	10.57	8.93	-15.54	2.93	3.00	2.44
John Taolo Gaetsewe	4.57	3.36	-26.56	0.93	0.86	-7.69
Namakwa	6.29	4.50	-28.41	1.86	0.93	-50.00
Pixley Ka Seme	1.64	2.43	47.83	0.57	0.93	62.50
Siyanda	0.00	0.00	0.00	0.00	0.00	0.00
ZF Mgcawu	8.00	6.36	-20.54	3.07	1.86	-39.53

WESTERN CAPE

In all three waves there were higher numbers of admissions in the public sector. Weekly admissions at the peak of the second wave exceeded the weekly numbers of admissions at the peak of the first wave in both sectors (Figure 29). There has been an increase in admissions in both sectors since week 17, however a decrease in the number of admissions has been observed in both sectors in the past two weeks.

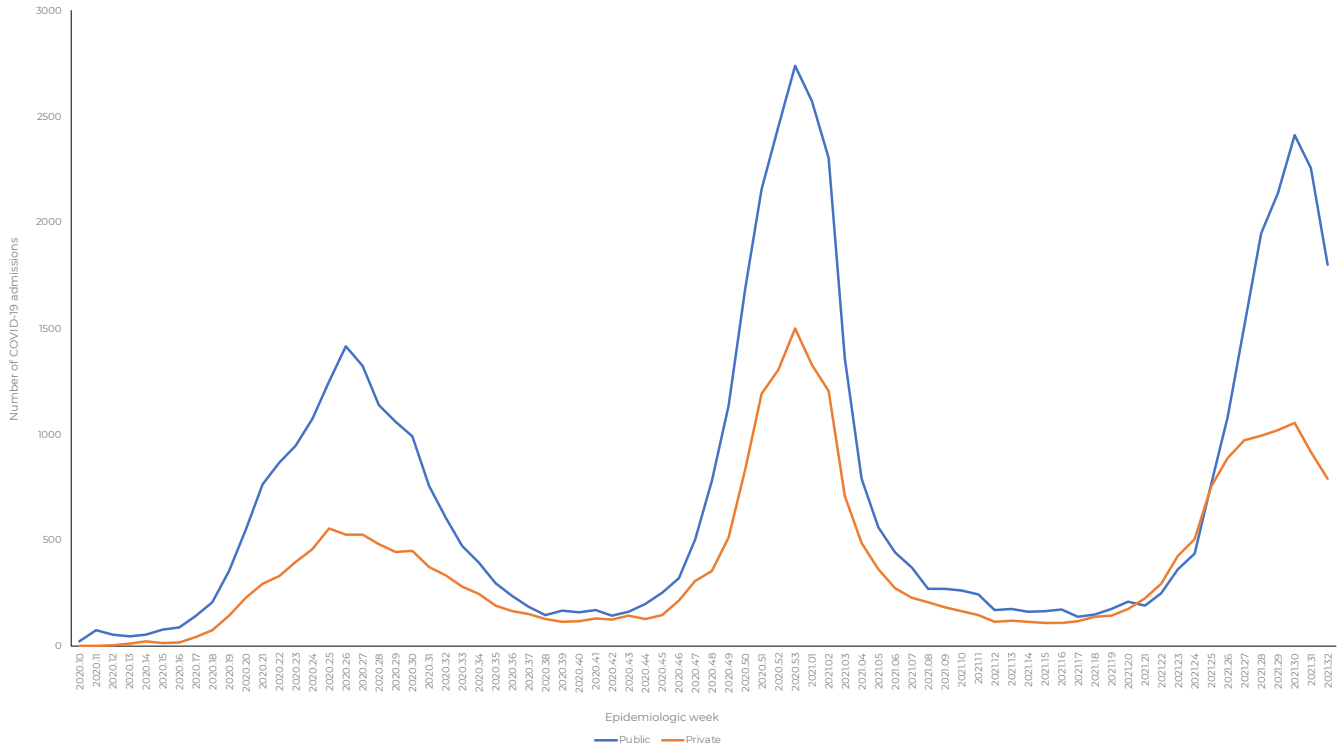

Figure 29: Number of reported COVID-19 admissions by health sector and epidemiologic week of diagnosis, Western Cape, 5 March 2020-14 August 2021, n=84,027

Weekly admissions at the peak of the second wave exceeded the weekly numbers of admissions at the peak of the first wave in all districts (Figure 30). There have been increases in admissions in all districts, particularly City of Cape Town, however a decrease in the number of admissions has been observed in all districts in the past two weeks. Weekly number of admissions in the third wave exceeded the weekly numbers of admissions at the peak of the second wave in Garden Route.

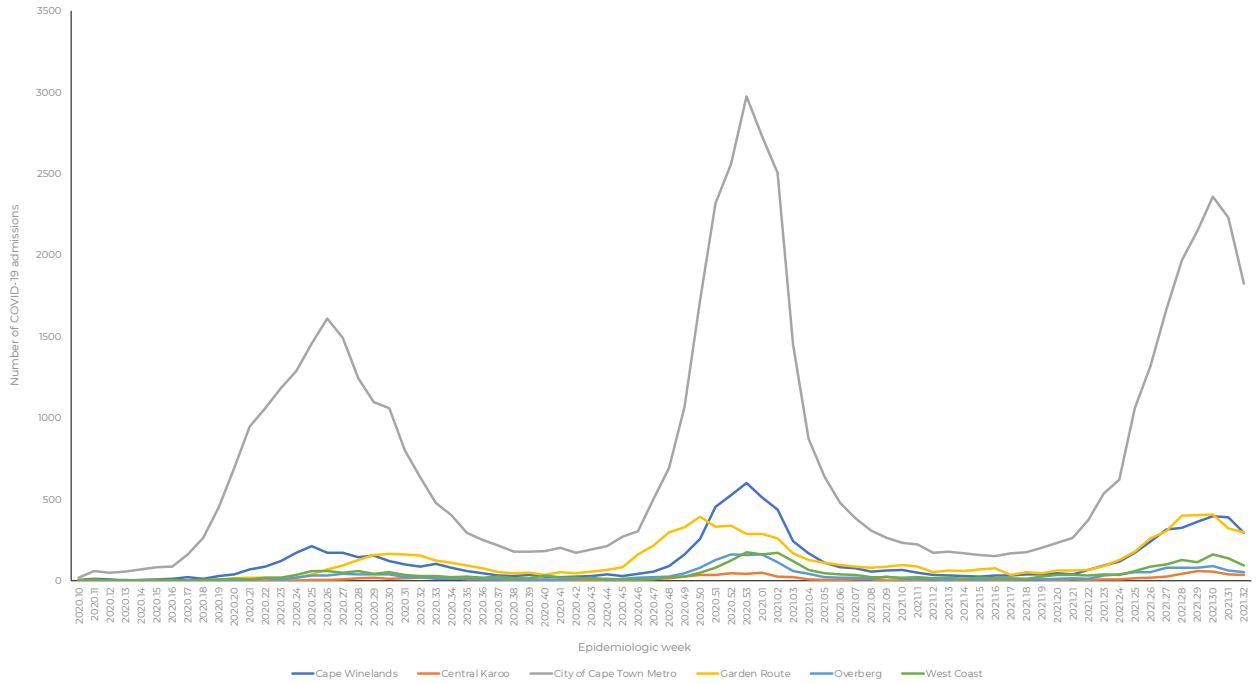

Figure 30: Number of reported COVID-19 admissions, by district and epidemiologic week, Western Cape, 5 March 2020-14 August 2021, n=84,027

Weekly deaths at the peak of the second wave exceeded the weekly numbers of deaths at the peak of the first wave in all districts (Figure 31). There have been decreases in deaths in all districts in the past two weeks. Weekly number of deaths in the third wave exceeded the weekly numbers of deaths at the peak of the second wave in Garden Route.

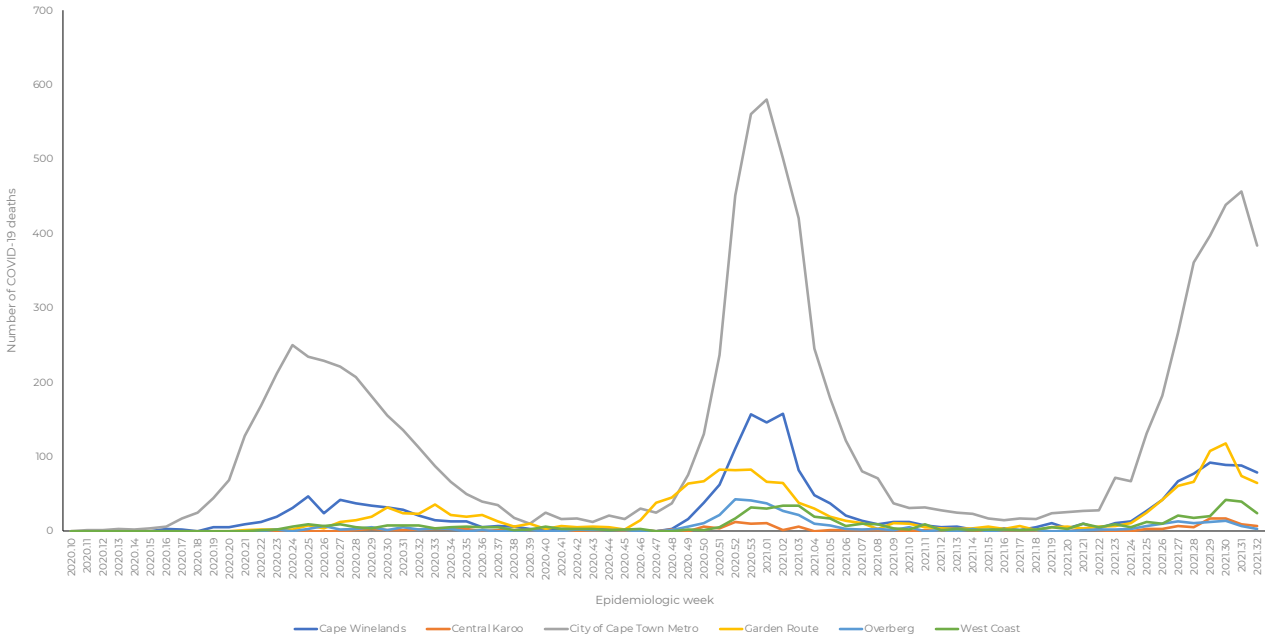

Figure 31: Number of reported COVID-19 in-hospital deaths, by district and epidemiologic week, Western Cape, 5 March 2020-14 August 2021, n=14,456

There has been a decrease in average COVID-19 admissions comparing the previous 14 days and the current 14 days in all the districts (Table 12).

Table 12: Previous 14 days and current 14 days average COVID-19 admissions and deaths and percentage changes, Western Cape, 17 July-14 August 2021.

District	Previous 14 days admissions average	Current 14 days admissions average	Percentage change in admissions	Previous 14 days deaths average	Current 14 days deaths average	Percentage change in deaths
Cape Winelands	54.07	48.64	-10.04	12.93	11.93	-7.73
Central Karoo	8.14	5.14	-36.84	2.43	1.14	-52.94
City of Cape Town Metro	321.57	289.50	-9.97	59.64	60.00	0.60
Garden Route	57.57	43.71	-24.07	16.14	9.93	-38.50
Overberg	11.93	8.00	-32.93	1.86	0.71	-61.54
West Coast	19.57	16.14	-17.52	4.43	4.57	3.23

LIMITATIONS

DATCOV now includes reporting from all hospitals with COVID-19 admissions but many hospitals are yet to reach complete submission of historic data. Data quality in a surveillance system is dependent on the information submitted by healthcare institutions. It is not possible for the NICD to verify or check the quality of all these data, however, the NICD has built-in data quality checks. Delays in reporting of admissions and deaths may affect the numbers reported in the most recent week. The National Department of Health have recruited data capturers to support hospitals to improve data submission.

As hospitals reached capacity, admission criteria may change and therefore influence trends and inferences about the progression of the epidemic. DATCOV only reports hospital-based admissions and deaths and therefore does not include deaths occurring outside hospitals. DATCOV now has a module to record out-of-hospital deaths.

ACKNOWLEDGEMENTS

All public and private sector hospitals submitting data to DATCOV

Private hospital groups submitting data to DATCOV:

- Netcare
- Life Healthcare
- Mediclinic Southern Africa
- National Hospital Network (NHN)
- Clinix Health Group
- Lenmed
- Joint Medical Holdings (JMH)

APPENDIX

Table 13: Percentage average change in hospital admissions over 14 days, by district, South Africa, 31 July-14 August 2021.

Province	District	Total admissions	Incidence (per 100k)	New admissions	New admissions incidence (per 100k)	% average change (14 days)
Eastern Cape	Alfred Nzo	1933	232.26	24	2.88	-25.00
	Amathole	2484	310.81	7	0.88	-74.07
	Buffalo City Metro	8137	1016.02	81	10.11	-28.32
	Chris Hani	3763	517.14	74	10.17	-5.13
	Joe Gqabi	865	250.75	9	2.61	-52.63
	Nelson Mandela Bay Metro	13353	1100.77	183	15.09	-11.17
	O R Tambo	3717	242.60	59	3.85	37.21
	Sarah Baartman	2444	505.15	74	15.29	-31.48
Free State	Fezile Dabi	2630	515.56	38	7.45	-15.56
	Lejweleputswa	4709	720.47	89	13.62	-20.54
	Mangaung Metro	10765	1236.05	169	19.40	-24.55
	Thabo Mofutsanyana	4004	523.53	73	9.54	-18.89
	Xhariep	481	371.59	1	0.77	0.00
Gauteng	City of Johannesburg Metro	43785	746.35	426	7.26	-45.94
	City of Tshwane Metro	31198	836.61	496	13.30	-35.92
	Ekurhuleni Metro	25865	649.51	291	7.31	-40.73
	Sedibeng	7597	795.06	99	10.36	-42.44
	West Rand	10526	1102.50	130	13.62	-39.25
KwaZulu-Natal	Amajuba	3503	614.00	57	9.99	-36.67
	eThekwini Metro	27389	687.96	544	13.66	-13.10
	Harry Gwala	1785	347.26	35	6.81	-10.26
	iLembe	2473	356.06	40	5.76	-6.98
	King Cetshwayo	6546	674.38	144	14.84	-10.56
	Ugu	3877	483.58	95	11.85	15.85
	uMgungundlovu	8244	717.22	226	19.66	-27.80

COVID-19 HOSPITAL SURVEILLANCE UPDATE

WEEK **32** 2021

Province	District	Total admissions	Incidence (per 100k)	New admissions	New admissions incidence (per 100k)	% average change (14 days)
	uMkhanyakude	1027	149.51	11	1.60	-80.00
	Umzinyathi	1356	238.91	37	6.52	-37.29
	UThukela	2347	328.61	42	5.88	-37.31
	Zululand	1503	170.64	51	5.79	-7.27
Limpopo	Capricorn	6745	515.69	109	8.33	-34.34
	Mopani	2754	232.43	68	5.74	-29.90
	Sekhukhune	1547	129.97	20	1.68	-51.22
	Vhembe	2158	151.20	24	1.68	-52.94
	Waterberg	2614	352.19	37	4.99	-50.67
Mpumalanga	Ehlanzeni	5683	310.76	113	6.18	-37.91
	Gert Sibande	5482	441.33	117	9.42	-24.52
	Nkangala	4967	308.72	144	8.95	-28.71
North West	Bojanala Platinum	8701	451.26	121	6.28	-45.98
	Dr Kenneth Kaunda	13121	1644.82	292	36.60	-24.35
	Dr Ruth Segomotsi Mompati	1704	360.19	31	6.55	-20.51
	Ngaka Modiri Molema	1654	181.79	9	0.99	-52.63
Northern Cape	Frances Baard	4033	972.02	58	13.98	-26.58
	John Taolo Gaetsewe	1119	412.19	27	9.95	-3.57
	Namakwa	982	849.39	26	22.49	-39.53
	Pixley Ka Seme	686	325.30	15	7.11	-21.05
	ZF Mgcawu	1683	601.28	34	12.15	-50.00
Western Cape	Cape Winelands	9645	1024.69	416	44.20	-32.25
	Central Karoo	884	1176.89	48	63.90	0.00
	City of Cape Town Metro	61032	1325.35	2721	59.09	-23.52
	Garden Route	9324	1495.05	379	60.77	-13.67
	Overberg	2306	768.90	63	21.01	-35.05
	West Coast	3121	677.28	110	23.87	-33.73

APPENDIX

Table 14: Number of reported COVID-19 admissions and in-hospital deaths by age and gender, South Africa, 5 March 2020-14 August 2021.

	ADMISSIONS				DEATHS			
Age (years)	Female	Male	Unknown	Total	Female	Male	Unknown	Total
0-4	2974	3531	16	6521	104	113	2	219
5-9	806	985	6	1797	16	18	0	34
10-14	1301	1248	1	2550	43	38	0	81
15-19	3933	2034	3	5970	100	93	0	193
20-24	6356	3164	7	9527	226	175	1	402
25-29	10829	4823	10	15662	532	326	0	858
30-34	14442	8369	5	22816	902	737	0	1639
35-39	15921	11806	18	27745	1344	1242	3	2589
40-44	15246	13691	14	28951	1703	1800	1	3504
45-49	17656	17295	12	34963	2559	2662	1	5222
50-54	21066	19528	8	40602	3557	3699	2	7258
55-59	23395	21175	20	44590	5131	5131	9	10271
60-64	20650	18895	19	39564	5586	5769	5	11360
65-69	17502	15775	19	33296	5721	5391	6	11118
70-74	14488	12993	21	27502	4972	4957	7	9936
75-79	10681	8872	9	19562	3888	3663	3	7554
80-84	8031	5557	10	13598	3174	2474	4	5652
85-89	4150	2636	5	6791	1694	1244	0	2938
90-94	1810	874	1	2685	836	462	0	1298
>=95	540	295	2	837	251	121	0	372
Unknown	950	910	43	1903	64	97	0	161
Total	**212727**	**174456**	**249**	**387432**	**42403**	**40212**	**44**	**82659**