

COVID-19 Hospital Surveillance

Update: Week 52, 2021

Overview of report

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 1 January 2022.

Highlights

- As of 1 January 2022, 474,292 COVID-19 admissions and 96,788 in-hospital deaths were reported to DATCOV from 666 facilities (407 public-sector and 259 private-sector) in all nine provinces of South Africa.
- In the fourth COVID-19 wave dominated by Omicron, there has been an increase in admissions in Gauteng since week 45, followed by increased admissions in all other provinces. The number of admissions has decreased in all provinces since week 50.
- There has been a small increase in deaths in all provinces.

Methods

Data on hospitalisation was accessed from DATCOV, a hospital surveillance system for COVID-19 admissions, 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.

Data on SARS-CoV-2 cases diagnosed in public and private laboratories submitted to the NICD were reported from the line list on the NMCSS.

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. For comparisons of change in admission, we used 14-day daily average admissions in the current 14-day period compared to the previous 14-day period.

Severity was defined as patients receiving oxygen or invasive ventilation, treated in high care or intensive care wards, developing acute respiratory distress syndrome, or died. While oxygen, ventilation and ward of stay variables are updated daily for all admissions in the private sector, there may be delays with the data being updated in the public sector. Also, as patients remain in hospital their condition may change and percentage of severity may change over time.

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 1 January 2022, a total of 666 facilities submitted data on hospitalised COVID-19 cases, 407 from public sector and 259 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 2020-1 January 2022.

Facilities reporting	Public	Private
Eastern Cape	86	18
Free State	35	20
Gauteng	40	96
KwaZulu-Natal	69	47
Limpopo	41	7
Mpumalanga	31	9
North West	17	13
Northern Cape	29	6
Western Cape	59	43
South Africa	407	259

Results

Epidemiological and demographic trends in admissions

From 5 March 2020 to 1 January 2022, a total of 474,292 COVID-19 admissions were reported from 666 facilities in all nine provinces of South Africa. The fourth wave of the COVID-19 pandemic began in week 45 of 2021 in both sectors. There has been a decrease in admissions since week 50 (Figure 1). The weekly admissions at the peak of the fourth wave were lower than the numbers of admissions at the peak of the second and third waves in both sectors.

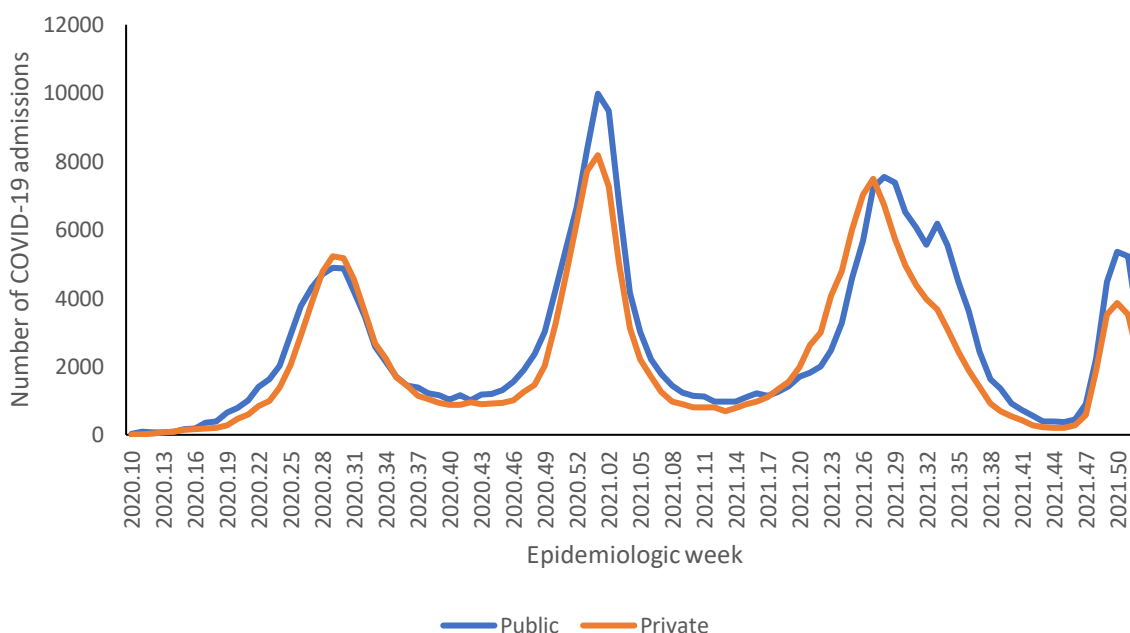


Figure 1: Number of reported COVID-19 admissions by health sector and epidemiologic week of diagnosis, South Africa, 5 March 2020-1 January 2022, N=474,292

The majority of admissions were recorded in four provinces, Gauteng 138,692 (29%), Western Cape 105,370 (22%), KwaZulu-Natal 76,554 (16%) and Eastern Cape 44,560 (9%) provinces. There has been a decrease in admissions in all provinces over the past two weeks (Figures 2a and 2b).

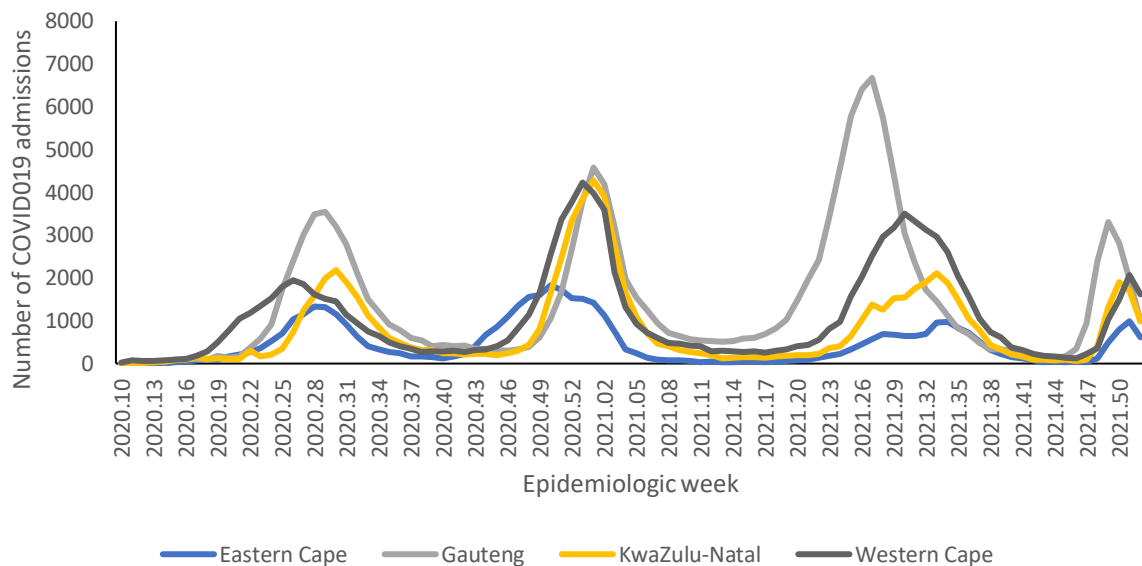


Figure 2a: Number of reported COVID-19 admissions, by provinces with highest admissions and epidemiologic week of diagnosis, South Africa, 5 March 2020-1 January 2022, N=474,292

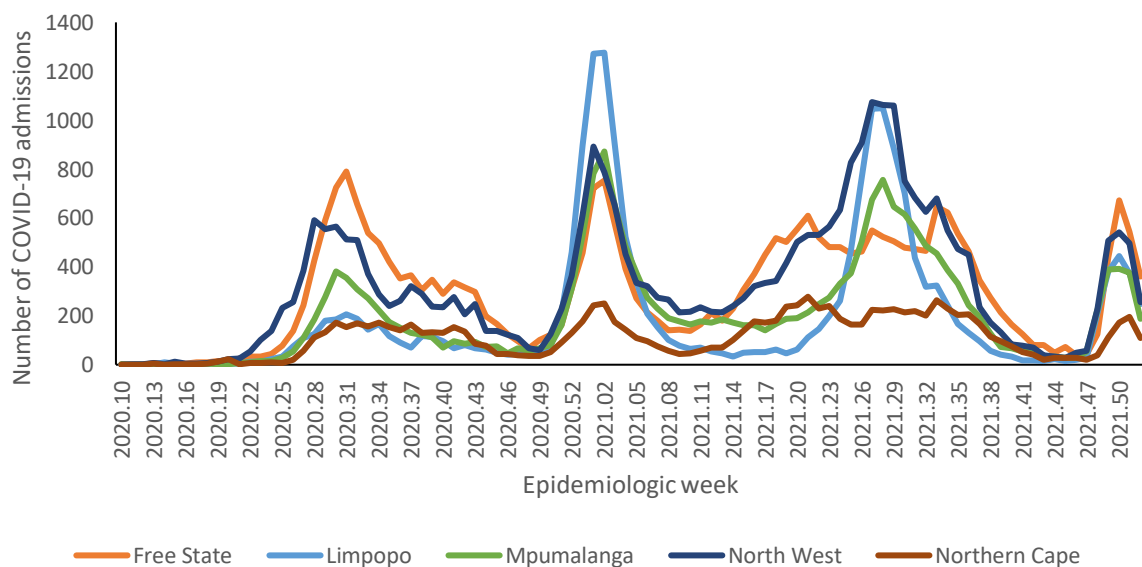


Figure 2b: Number of reported COVID-19 admissions, by provinces with lowest admissions and epidemiologic week of diagnosis, South Africa, 5 March 2020-1 January 2022, N=474,292

The incidence risk of COVID-19 admissions increased with age and was highest amongst individuals aged 65 years and older (Figure 3). During the fourth wave, there were 5,573 admissions in <20 years, 13,407 in 20-39 years, 8,857 in 40-59 years, and 10,388 in >60 years.

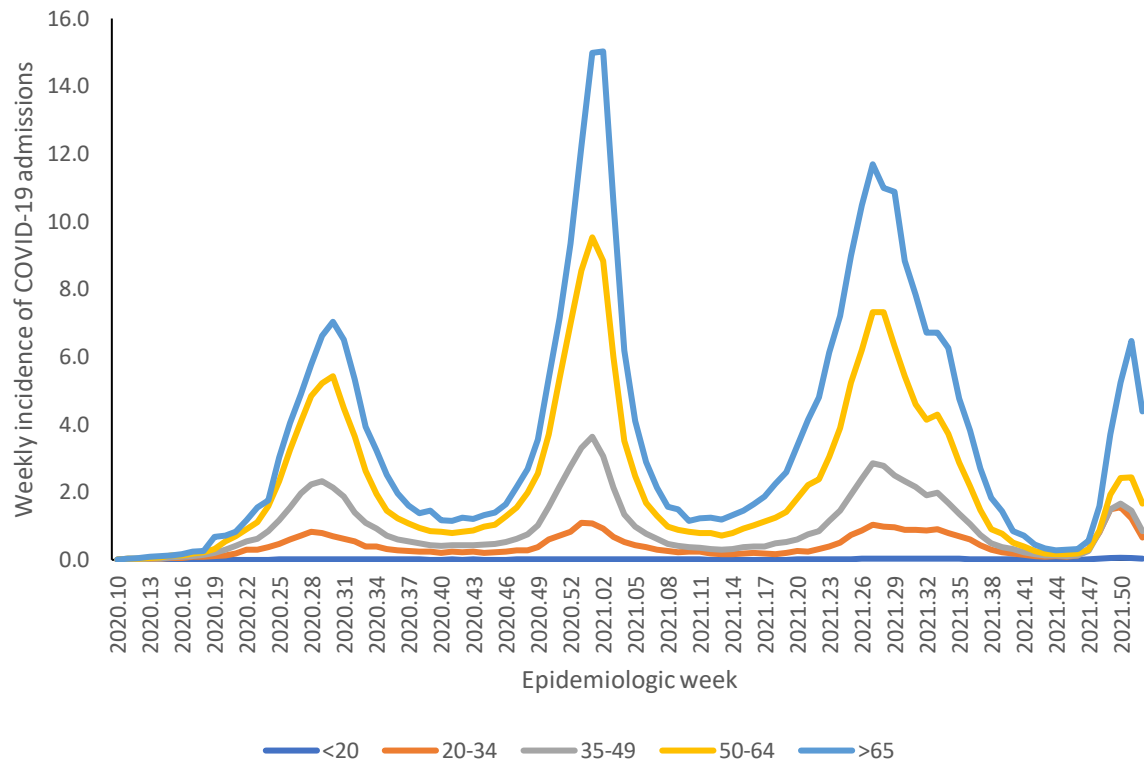


Figure 3: Incidence risk of COVID-19 admissions per 100,000 persons, by age group and epidemiologic week of diagnosis, South Africa, 5 March 2020-1 January 2022, N=474,292

Epidemiological and demographic trends in in-hospital mortality

A total of 96,788 COVID-19 in-hospital deaths were reported in all nine provinces of South Africa. More deaths have been reported in the public sector in all four waves. There has been an increase in in-hospital COVID-19 deaths in both sectors since week 48 (Figure 4). The weekly deaths at the peak of the fourth wave were lower than the numbers of deaths at the peak of the prior three waves in both sectors.

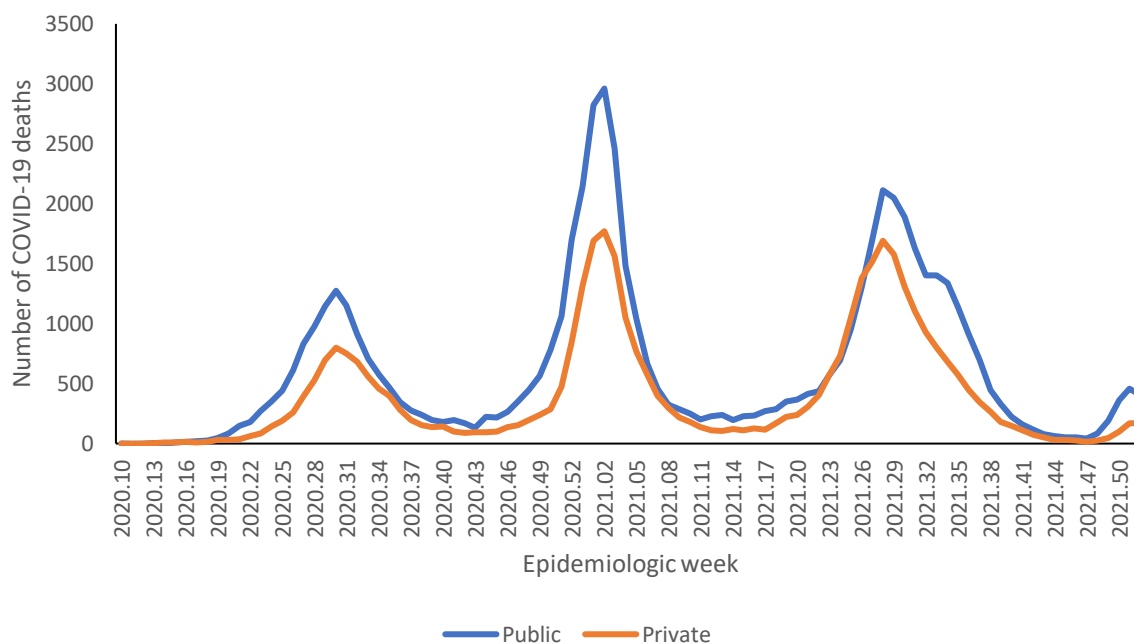


Figure 4: Number of reported COVID-19 in-hospital deaths, by health sector and epidemiologic week, South Africa, 5 March 2020-1 January 2022, N=96,788

Most deaths were reported in Gauteng 28,527 (29%), Western Cape 17,368 (18%), KwaZulu-Natal 16,092 (17%), and Eastern Cape 12,503 (13%). There has been a small increase in deaths in all provinces. (Figures 5a and 5b). The weekly deaths at the peak of the fourth wave were lower than the numbers of deaths at the peak of the prior three waves in all provinces.

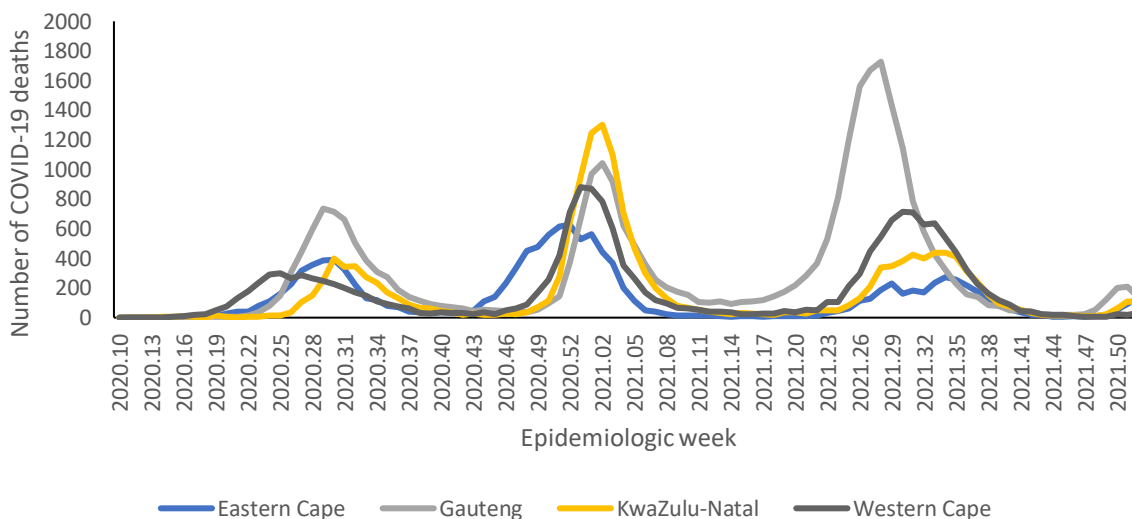


Figure 5a: Number of reported COVID-19 in-hospital deaths, by province with highest deaths and epidemiologic week of death, South Africa, 5 March 2020-1 January 2022, N=96,788

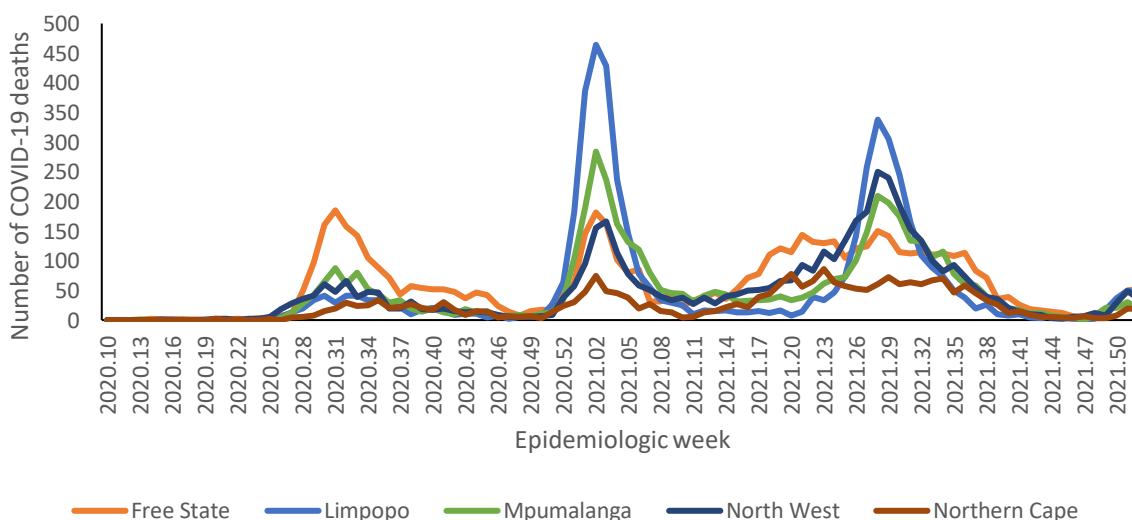


Figure 5b: Number of reported COVID-19 in-hospital deaths, by province with lowest deaths and epidemiologic week of death, South Africa, 5 March 2020-1 January 2022, N=96,788

The incidence risk of COVID-19 deaths increased with age and was highest amongst individuals aged 65 years and older (Figure 6). During the fourth wave, there were 74 deaths in <20 years, 307 in 20-39 years, 578 in 40-59 years, and 1,258 in >60 years.

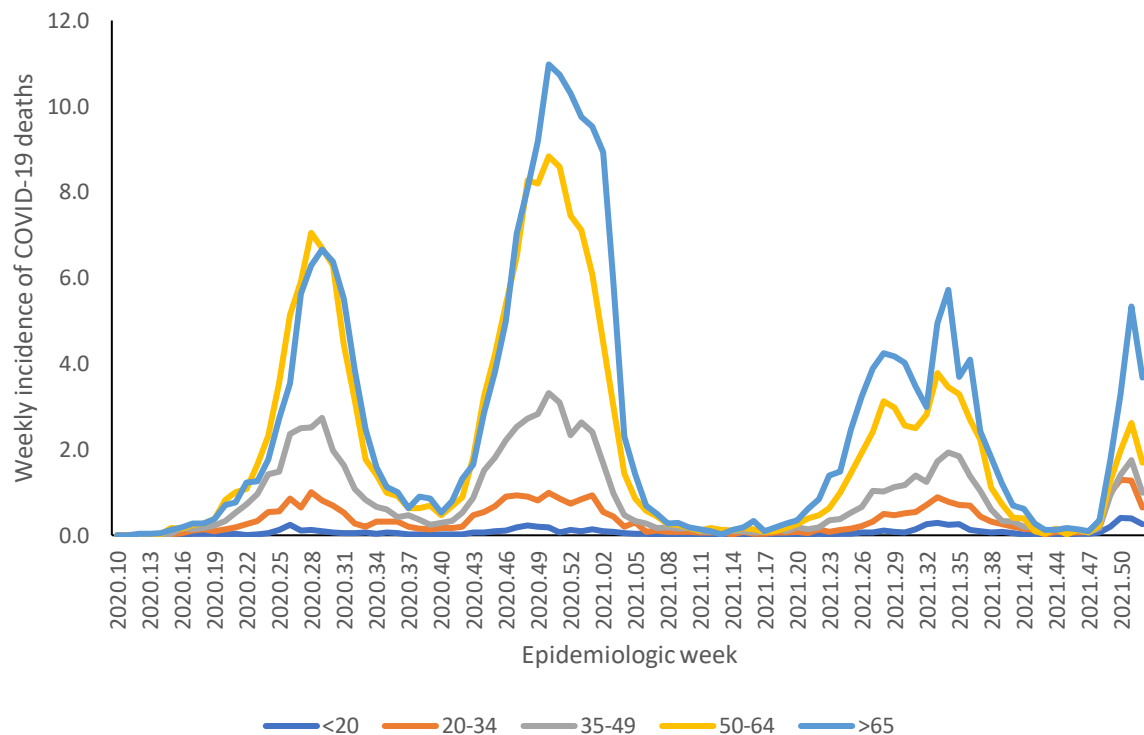


Figure 6: Incidence risk of COVID-19 in-hospital deaths per 100,000 persons, by age group and epidemiologic week of death, South Africa, 5 March 2020-1 January 2022, N=96,788

Provincial trends

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 2020-1 January 2022.

Province	Provincial Population mid 2020*	Cumulative admissions	Cumulative incidence risk of admissions / 100,000	Cumulative deaths	Cumulative incidence risk of deaths / 100,000
Eastern Cape	6734001	44560	661.7	12503	185.7
Free State	2928903	28630	977.5	5751	196.4
Gauteng	15488137	138 692	895.5	28527	184.2
KwaZulu-Natal	11531628	76554	663.9	16089	139.5
Limpopo	5852553	18973	324.2	5022	85.8
Mpumalanga	4679786	20072	428.9	4611	98.5
North West	4108816	30 820	750.1	4585	111.6
Northern Cape	1292786	10 621	821.6	2328	180.1
Western Cape	7005741	105 370	1504.1	17367	247.9
South Africa	59622350	474 292	795.5	96 783	162.3

*StatsSA mid-year population estimates 2020

There has been an increase in the average daily COVID-19 admissions and deaths comparing the previous 14 days and the current 14 days in all province except Gauteng (Table 3).

Table 3: Previous 14 days and current 14 days daily average COVID-19 admissions and deaths and percentage changes, South Africa, 4 December 2021-1 January 2022.

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	43.93	111.86	154.63	1.86	9.43	407.69
Free State	40.21	77.43	92.54	1.36	5.14	278.95
Gauteng	404.07	316.64	-21.64	12.57	27.50	118.75
KwaZulu-Natal	121.64	230.14	89.20	2.57	10.36	302.78
Limpopo	42.36	55.93	32.04	1.29	5.79	350.00
Mpumalanga	43.64	49.86	14.24	2.07	3.36	62.07
North West	52.36	70.07	33.83	1.43	5.50	285.00
Northern Cape	10.64	22.43	110.74	0.43	1.50	250.00
Western Cape	96.50	235.93	144.49	0.93	2.86	207.69

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

There has been a decrease in the average daily COVID-19 admissions in all provinces; and a decrease in deaths comparing the previous 7 days and the current 7 days in all provinces except Eastern Cape, Free State and Western Cape (Table 4).

Table 4: Previous 7 days and current 7 days daily average COVID-19 admissions and deaths and percentage changes, South Africa, 11-1 January 2022.

Province	Hospital admissions		Percentage change in admissions	Hospital deaths		Percentage change in deaths
	Previous 7 days average admissions	Current 7 days average admissions		Previous 7 days average deaths	Current 7 days average deaths	
Eastern Cape	140.57	86.71	-38.31	13.29	19.00	43.01
Free State	77.71	51.43	-33.82	7.14	7.57	6.00
Gauteng	281.43	141.57	-49.70	29.57	19.14	-35.27
KwaZulu-Natal	244.43	141.00	-42.31	15.57	14.57	-6.42
Limpopo	53.29	35.43	-33.51	7.14	6.57	-8.00
Mpumalanga	53.86	26.86	-50.13	4.29	2.71	-36.67
North West	70.86	36.71	-48.19	7.00	5.29	-24.49
Northern Cape	28.00	15.43	-44.90	2.71	2.57	-5.26
Western Cape	295.71	231.86	-21.59	2.71	4.43	63.16

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

Eastern Cape

In all four waves, there were higher numbers of admissions in the public sector. Following an increase in admissions in both sectors since week 46, there has been decreased admissions in the past week (Figure 7). Weekly admissions at the peak of the fourth wave were similar to the weekly numbers of admissions at the peak of the third wave in both sectors, and lower than the first and second waves.

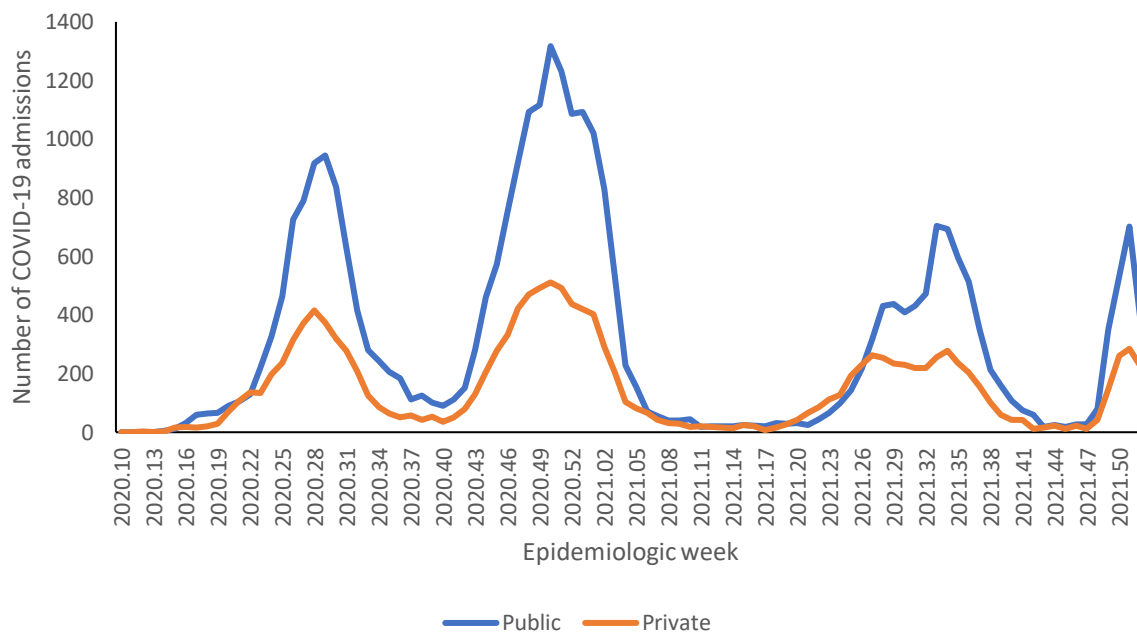


Figure 7: Number of reported COVID-19 admissions by health sector and epidemiologic week of diagnosis, Eastern Cape, 5 March 2020-1 January 2022, N=44,560

There has been an increase in admissions in all districts since week 46 and a decrease in all districts in the past week (Figure 8). The weekly admissions at the peak of the fourth wave exceeded the numbers of admissions at the peak of the third wave in all districts, but was lower than the first and second wave in all districts

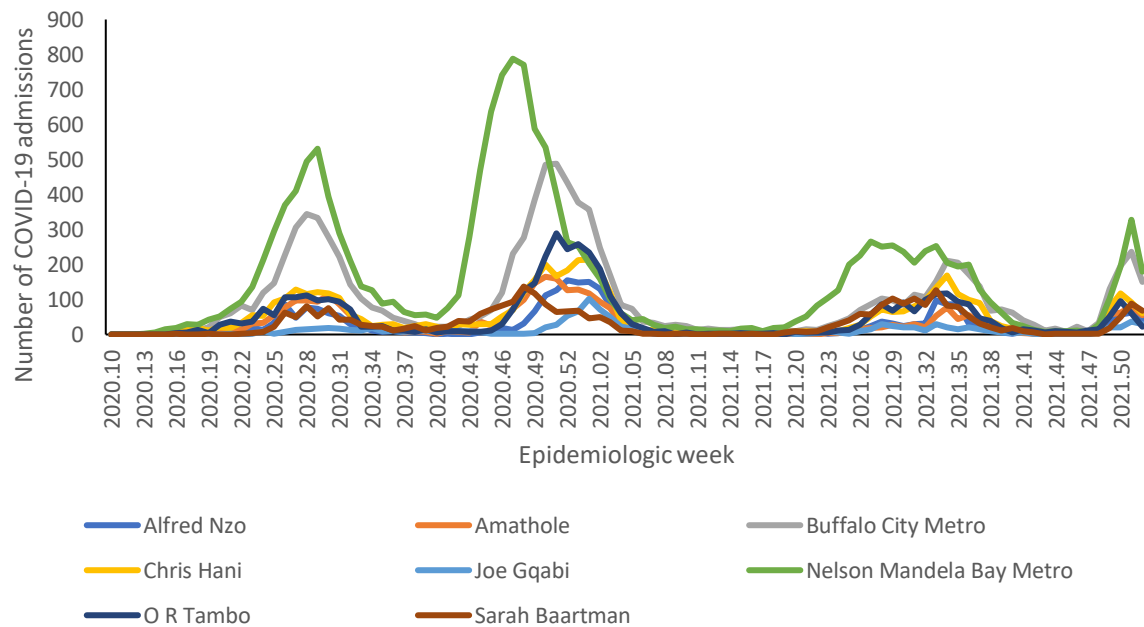


Figure 8: Number of reported COVID-19 admissions, by district and epidemiologic week, Eastern Cape, 5 March 2020-1 January 2022, N=44,560

There has been a small increase in weekly numbers of deaths in all districts (Figure 9). The weekly deaths in the fourth wave were lower than the numbers of deaths in the prior three waves in all districts.

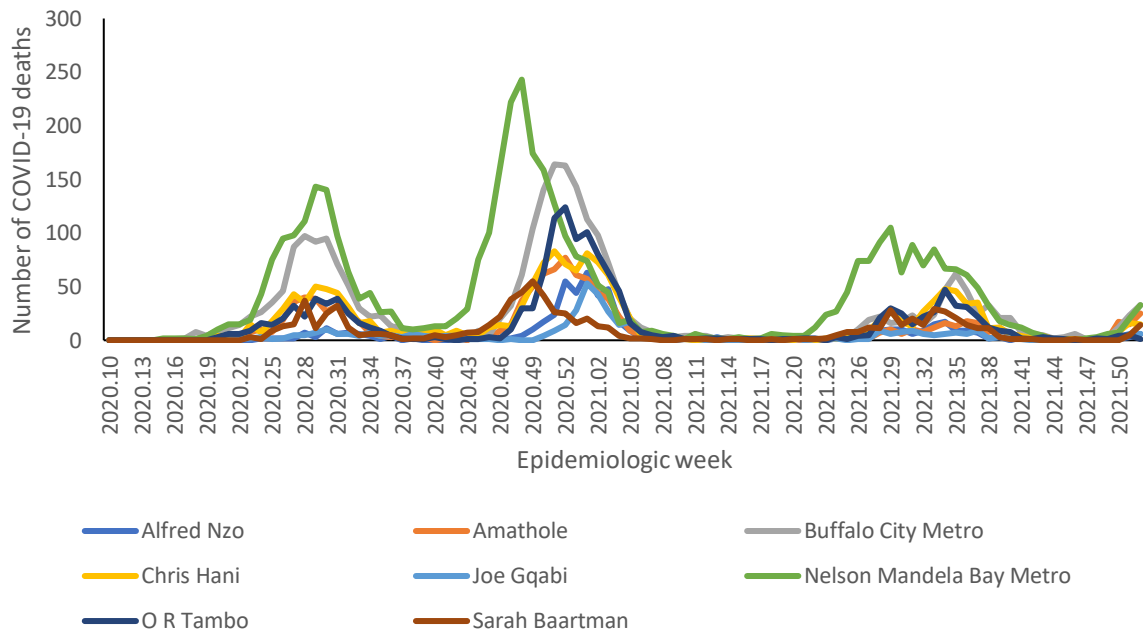


Figure 9: Number of reported COVID-19 in-hospital deaths, by district and epidemiologic week, Eastern Cape, 5 March 2020-1 January 2022, N=12,503

There has been an increase in the average daily COVID-19 admissions comparing the previous 14 days and the current 14 days in all districts except Chris Hani and OR Tambo (Table 5).

Table 5: Previous 14 days and current 14 days average COVID-19 admissions and deaths and percentage changes, Eastern Cape, 4 December 2021-1 January 2022.

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	6.86	7.43	8.33	0.07	0.64	800.00
Amathole	8.57	9.71	13.33	1.29	2.86	122.22
Buffalo City Metro	23.29	27.64	18.71	1.07	4.00	273.33
Chris Hani	13.93	10.93	-21.54	0.93	2.21	138.46
Joe Gqabi	2.93	4.64	58.54	0.36	0.86	140.00
Nelson Mandela Bay	21.14	36.07	70.61	0.93	3.79	307.69
O R Tambo	10.57	6.00	-43.24	0.36	0.43	20.00
Sarah Baartman	4.86	11.21	130.88	0.00	1.36	0.00

Free State

In the first and third waves there were roughly equal numbers of admissions in both sectors, while in the second and fourth waves there were higher numbers of admissions in the public sector (Figure 10). Following an increase in admissions in both sectors since week 46, there has been decreased admissions since week 50. Weekly admissions at the peak of the fourth wave exceeded the weekly numbers of admissions at the peak of the third wave in the public sector but were lower than the second wave.

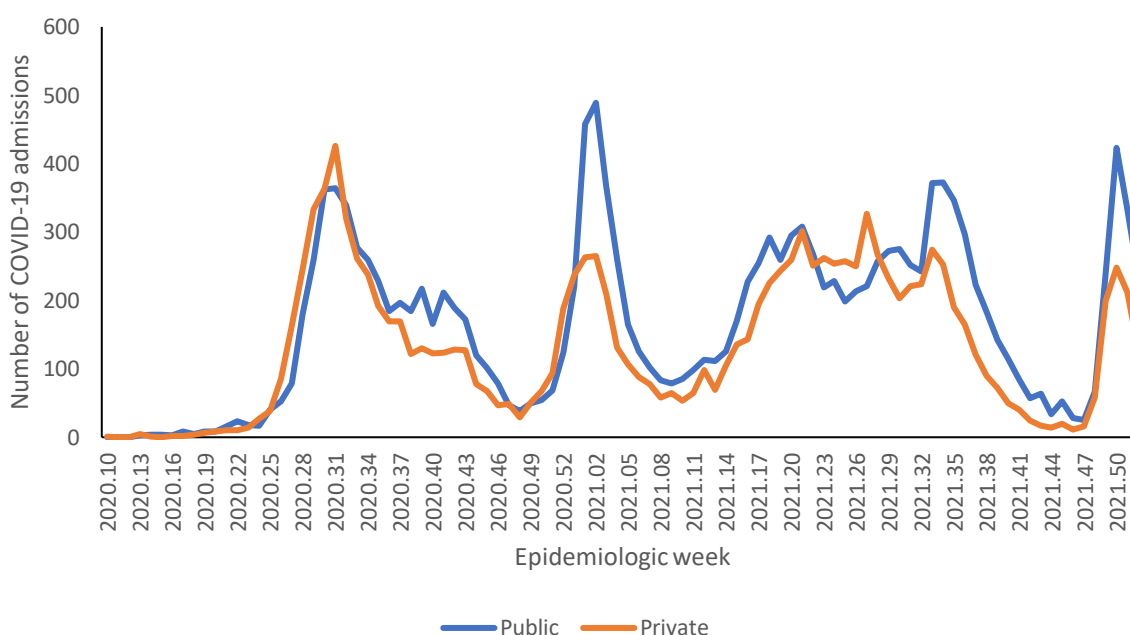


Figure 10: Number of reported COVID-19 admissions by health sector and epidemiologic week of diagnosis, Free State, 5 March 2020-1 January 2022, N=28,630

There has been an increase in admissions in all districts since week 46 and decreased admissions since week 50 (Figure 11). Weekly admissions at the peak of the fourth wave was similar to the weekly numbers of admissions at the peaks of the prior three waves in all districts.

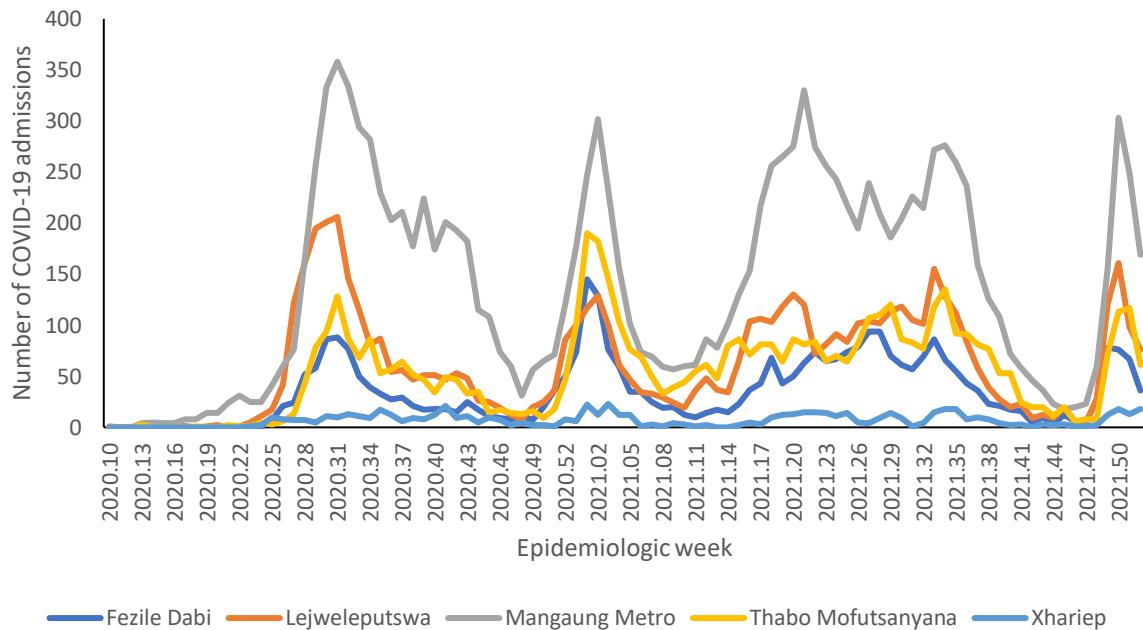


Figure 11: Number of reported COVID-19 admissions, by district and epidemiologic week, Free State, 5 March 2020-1 January 2022, N=28,630

There has been a small increase in deaths in all districts (Figure 12). Weekly deaths in the fourth wave were lower than the weekly numbers of deaths in the prior three waves in all districts.

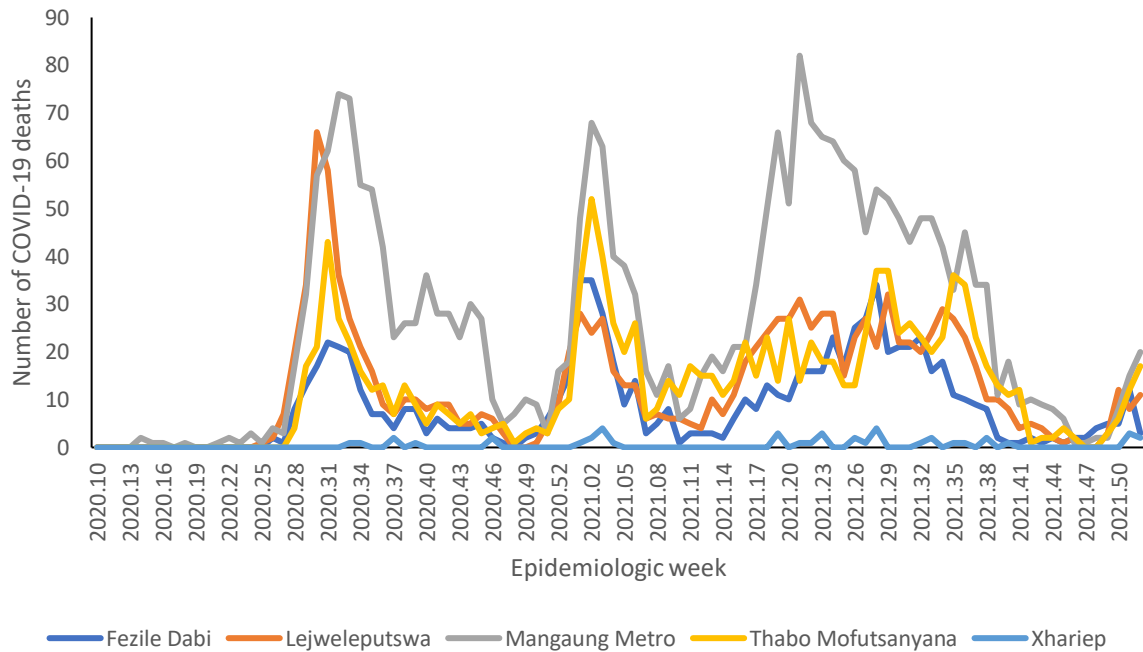


Figure 12: Number of reported COVID-19 in-hospital deaths, by district and epidemiologic week, Free State, 5 March 2020-1 January 2022, N=5,751

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

Table 6: Previous 14 days and current 14 days average COVID-19 admissions and deaths and percentage changes, Free State, 4 December 2021-1 January 2022.

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	11.00	7.36	-33.12	0.71	1.07	50.00
Lejweleputswa	20.14	12.43	-38.30	1.07	1.36	26.67
Mangaung Metro	32.79	29.86	-8.93	0.71	2.50	250.00
Thabo Mofutsanyana	13.21	12.71	-3.78	0.64	2.07	222.22
Xhariep	2.14	2.21	3.33	0.00	0.36	0.00

Gauteng

In the first three waves there were higher numbers of admissions in the private sector while in the fourth wave there were equal numbers of admissions in the public and private sectors. Following an increase in admissions in both sectors since week 45, the numbers of weekly admissions has decreased in both sectors since week 49 (Figure 13). Weekly admissions at the peak of the fourth wave were lower than the weekly numbers of admissions in the prior three waves in both sectors.

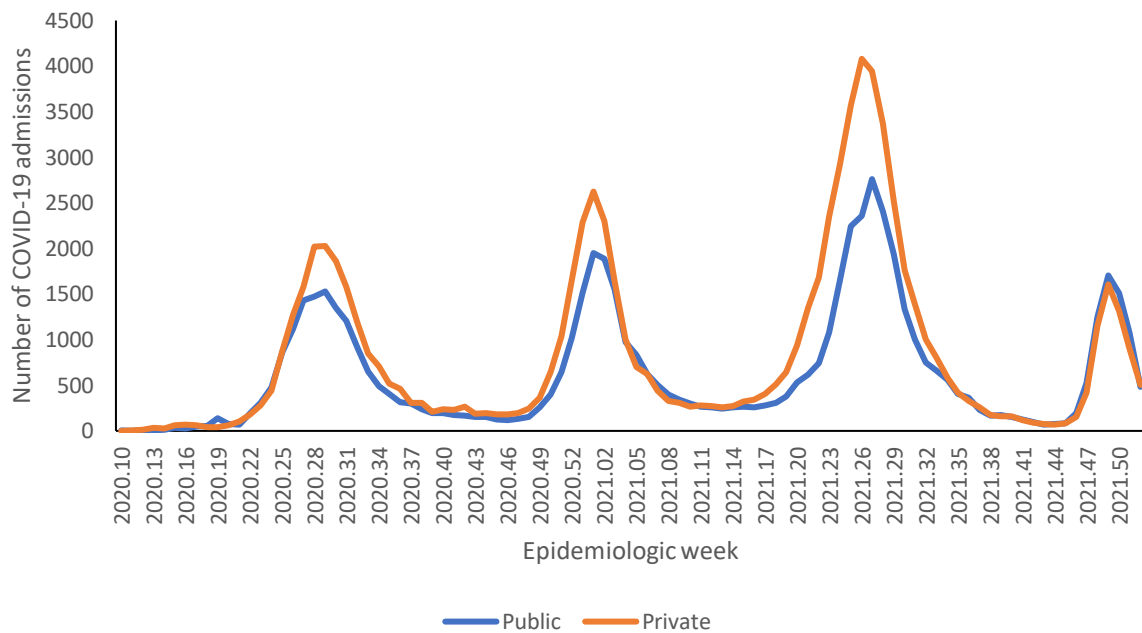


Figure 13: Number of reported COVID-19 admissions by health sector and epidemiologic week of diagnosis, Gauteng, 5 March 2020-1 January 2022, N=138,692

There has been an increase in admissions since week 45 and decreased admissions in all districts since week 49 (Figure 14). Weekly admissions at the peak of the fourth wave were lower than the weekly numbers of admissions at the peak of the second and third waves in all districts.

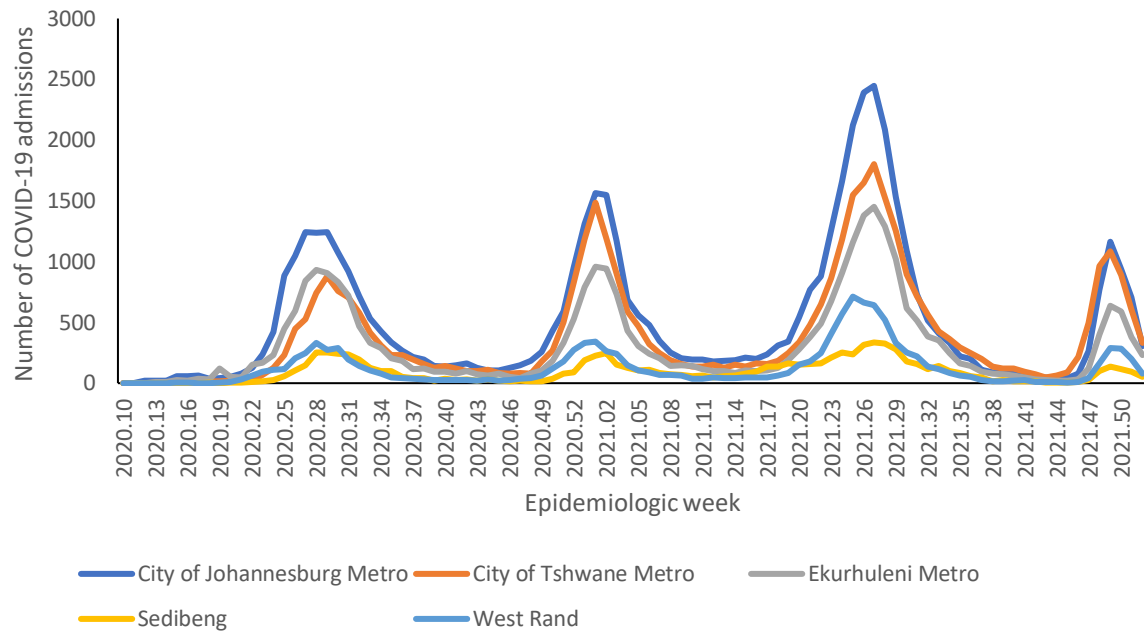


Figure 14: Number of reported COVID-19 admissions, by district and epidemiologic week, Gauteng, 5 March 2020-1 January 2022, N=138,692

There has been a small increase in deaths in all districts (Figure 15). Weekly deaths at the peak of the fourth wave were lower than the weekly numbers of deaths at in the peak of the prior three waves in all districts

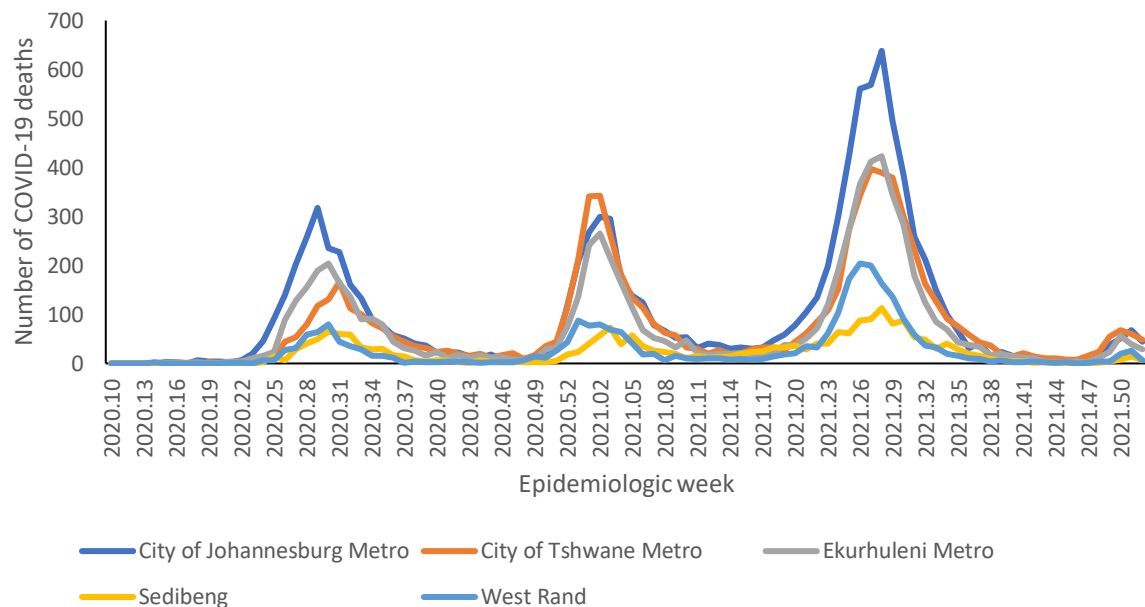


Figure 15: Number of reported COVID-19 in-hospital deaths, by district and epidemiologic week, Gauteng, 5 March 2020-1 January 2022, N=28,527

There has been a decrease in average daily COVID-19 admissions comparing the previous 14 days and the current 14 days in all district (Table 7).

Table 7: Previous 14 days and current 14 days average COVID-19 admissions and deaths and percentage changes, Gauteng, 4 December 2021-1 January 2022.

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	149.64	72.00	-51.89	6.36	8.07	26.97
City of Tshwane Metro	140.36	66.07	-52.93	8.71	7.64	-12.30
Ekurhuleni Metro	87.50	43.29	-50.53	5.57	4.86	-12.82
Sedibeng	17.79	10.50	-40.96	0.86	1.43	66.67
West Rand	40.93	19.64	-52.01	1.64	2.36	43.48

KwaZulu-Natal

In the first wave there were higher numbers of admissions in the private sector but there have been equal numbers of admissions in the public and private sector in the second, third and fourth waves. Following an increase in admissions in both sectors since week 47, there has been decreased admissions since week 50 (Figure 16). Weekly admissions at the peak of the fourth wave were similar to the weekly numbers of admissions at the peak of the third wave in both sectors but lower than the second wave.

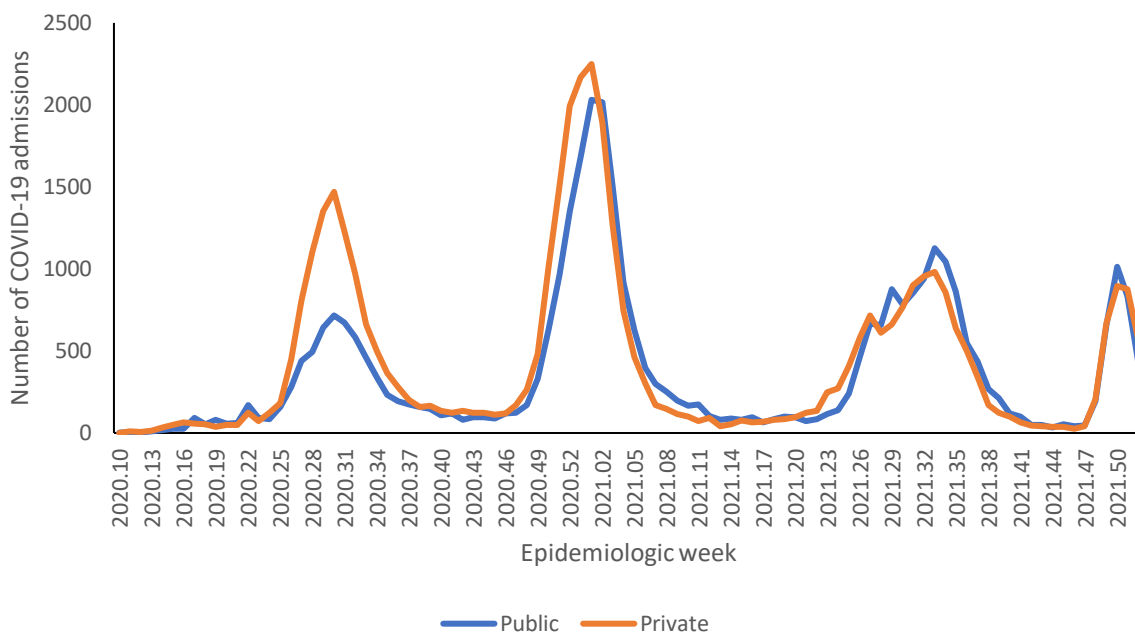


Figure 16: Number of reported COVID-19 admissions by health sector and epidemiologic week of diagnosis, KwaZulu-Natal, 5 March 2020-1 January 2022, N=76,554

There has been an increase in admissions in all districts since week 47 and decreased admissions since week 50 (Figure 17). Weekly admissions at the peak of the fourth wave were similar to the weekly numbers of admissions at the peak of the third wave in all districts but lower than the second wave.

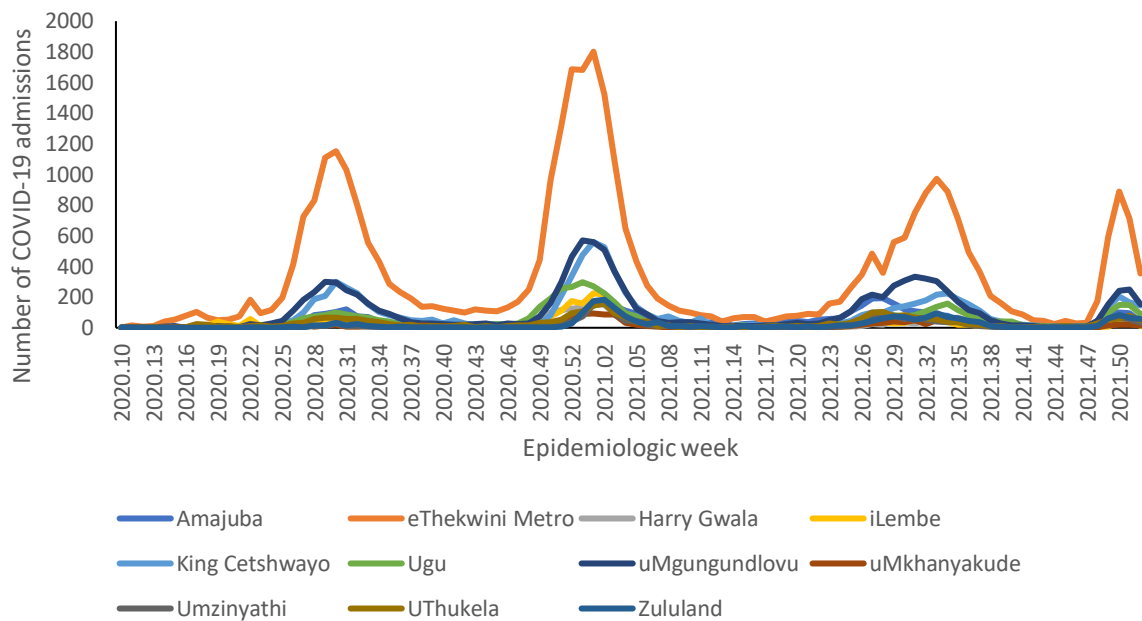


Figure 17: Number of reported COVID-19 admissions, by district and epidemiologic week, KwaZulu-Natal, 5 March 2020-1 January 2022, N=76,554

There has been a small increase in numbers of deaths in eThekwin Metro (Figure 18). Weekly deaths at the peak of the fourth wave were lower than the weekly numbers of deaths in the prior three waves in all districts.

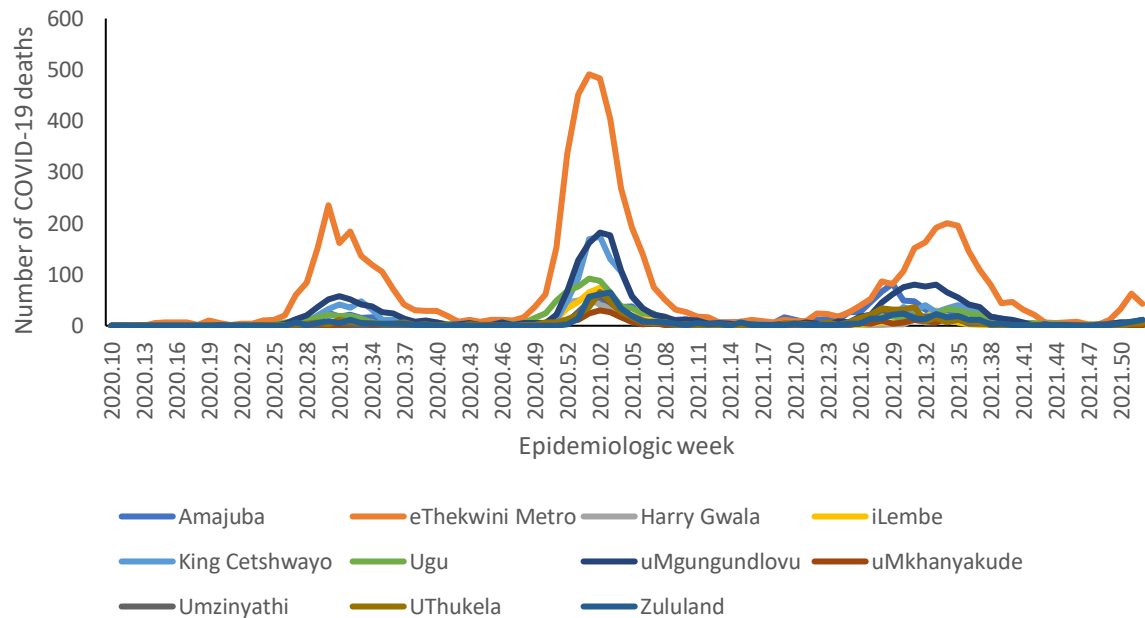


Figure 18: Number of reported COVID-19 in-hospital deaths, by district and epidemiologic week, KwaZulu-Natal, 5 March 2020-1 January 2022, N=16,092

There has been a decrease in average daily COVID-19 admissions comparing the previous 14 days and the current 14 days in all districts except iLembe, uMgungundlovu, uMkhanyakude and UThukela (Table 8).

Table 8: Previous 14 days and current 14 days average COVID-19 admissions and deaths and percentage changes, KwaZulu-Natal, 4 December 2021-1 January 2022.

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	13.50	9.64	-28.57	0.36	0.43	20.00
eThekweni Metro	106.14	76.14	-28.26	3.14	7.57	140.91
Harry Gwala	7.21	7.14	-0.99	0.14	0.64	350.00
iLembe	3.86	4.79	24.07	0.00	0.07	0.00
King Cetshwayo	24.64	22.21	-9.86	0.64	0.93	44.44
Ugu	17.64	17.36	-1.62	0.14	1.07	650.00
uMgungundlovu	28.21	28.64	1.52	0.79	1.29	63.64
uMkhanyakude	2.50	2.71	8.57	0.00	0.00	0.00
Umzinyathi	8.43	6.36	-24.58	0.43	1.14	166.67
UThukela	8.14	9.00	10.53	0.07	0.57	700.00
Zululand	10.29	8.71	-15.28	0.43	1.36	216.67

Limpopo

In the first wave there were roughly equal numbers of admissions in both sectors, but in the second, third and fourth waves there were higher numbers of admissions in the public sector. Following an increase in admissions in both sectors since week 46, there has been decreased admissions since week 50 (Figure 19). Weekly admissions at the peak of the fourth wave were lower than the weekly numbers of admissions at the peak of the second and third waves in both sectors.

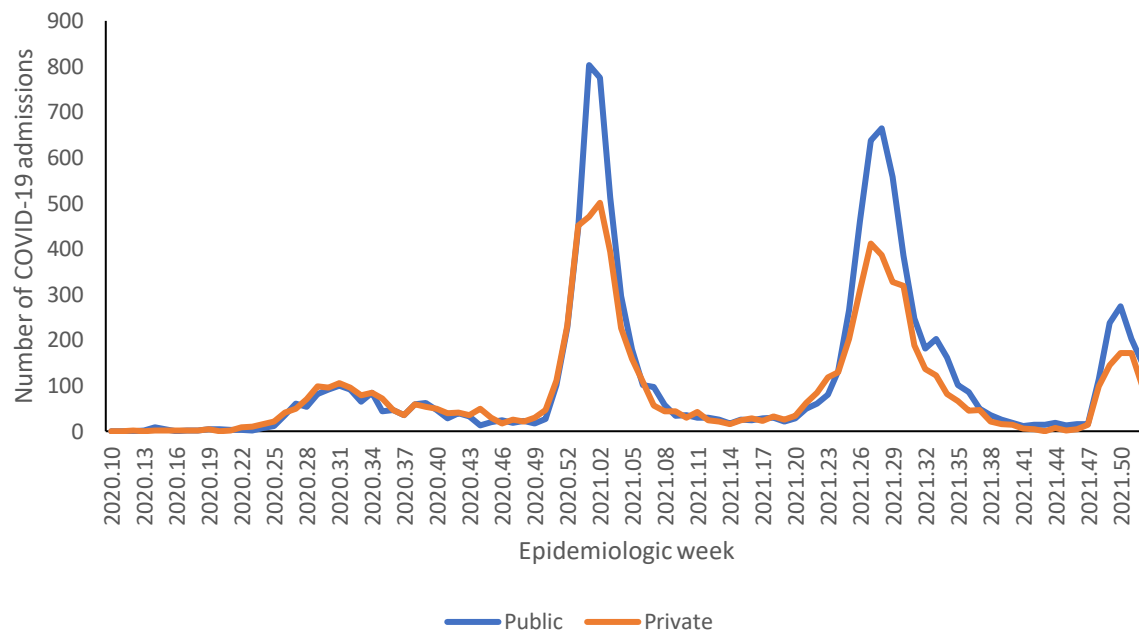


Figure 19: Number of reported COVID-19 admissions by health sector and epidemiologic week of diagnosis, Limpopo, 5 March 2020-1 January 2022, N=18,973

There has been an increase in admissions in all districts since week 46 and decreased admissions since week 50 (Figure 20). Weekly admissions at the peak of the fourth wave were lower than the weekly numbers of admissions at the peak of the second and third waves in all districts.

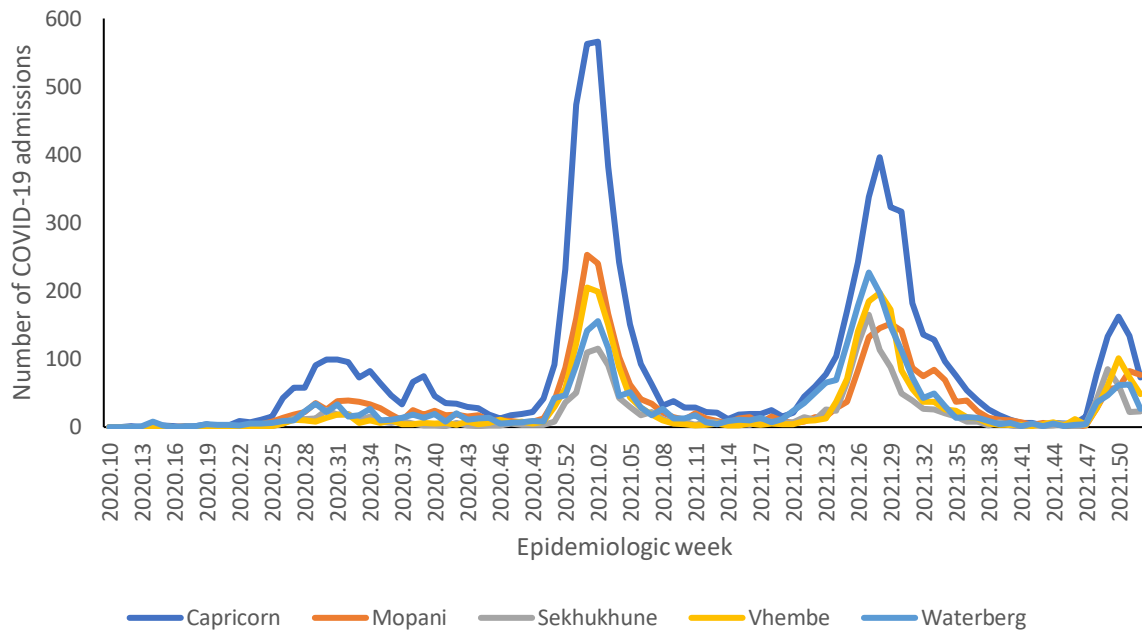


Figure 20: Number of reported COVID-19 admissions, by district and epidemiologic week, Limpopo, 5 March 2020-1 January 2022, N=18,973

There has been a small increase in the numbers of deaths in all districts (Figure 21). Weekly deaths at the peak of the fourth wave were lower than the weekly numbers of deaths at the peak of the second and third waves in all districts.

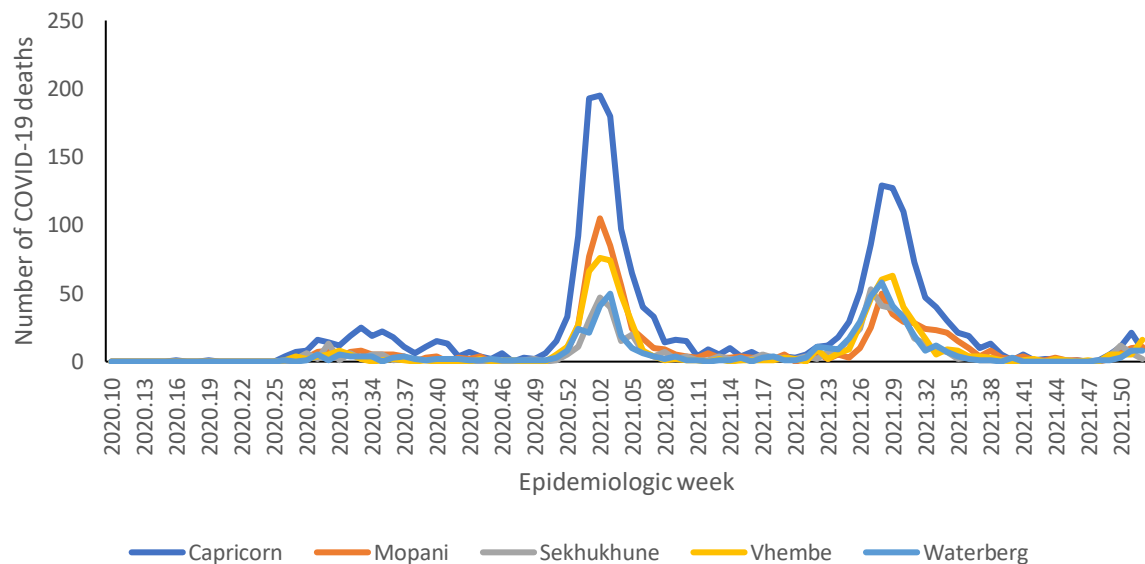


Figure 21: Number of reported COVID-19 in-hospital deaths, by district and epidemiologic week, Limpopo, 5 March 2020-1 January 2022, N=5,023

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

Table 9: Previous 14 days and current 14 days average COVID-19 admissions and deaths and percentage changes, Limpopo, 4 December 2021-1 January 2022.

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	21.07	14.79	-29.83	1.14	2.14	87.50
Mopani	8.14	11.29	38.60	0.57	1.50	162.50
Sekhukhune	10.50	3.21	-69.39	1.14	0.57	-50.00
Vhembe	11.57	8.64	-25.31	0.71	1.50	110.00
Waterberg	7.79	6.43	-17.43	0.29	1.14	300.00

Mpumalanga

In the first and fourth waves there were higher numbers of admissions in the private sector, in the second wave there were higher numbers of admissions in the public sector, and in the third wave there were equal numbers of admissions in both sectors. Following an increase in admissions in both sectors since week 46, there has been decreased admissions since week 50 (Figure 22). Weekly admissions at the peak of the fourth wave were lower than the weekly numbers of admissions at the peak of the second and third waves in both sectors.

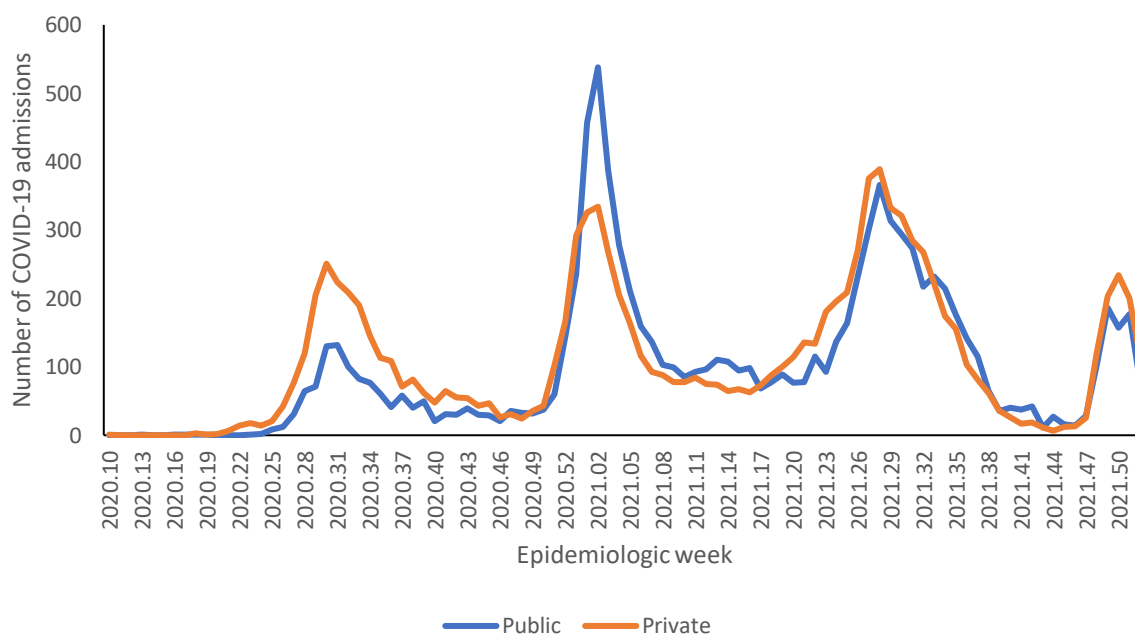


Figure 22: Number of reported COVID-19 admissions by health sector and epidemiologic week of diagnosis, Mpumalanga, 5 March 2020-1 January 2022, N=20,072

There has been an increase in the number of weekly admissions in all districts since week 46 and decreased admissions in since week 49 (Figure 23). Weekly admissions at the peak of the fourth wave were lower than the weekly numbers of admissions at the peak of the second and third waves in all districts.

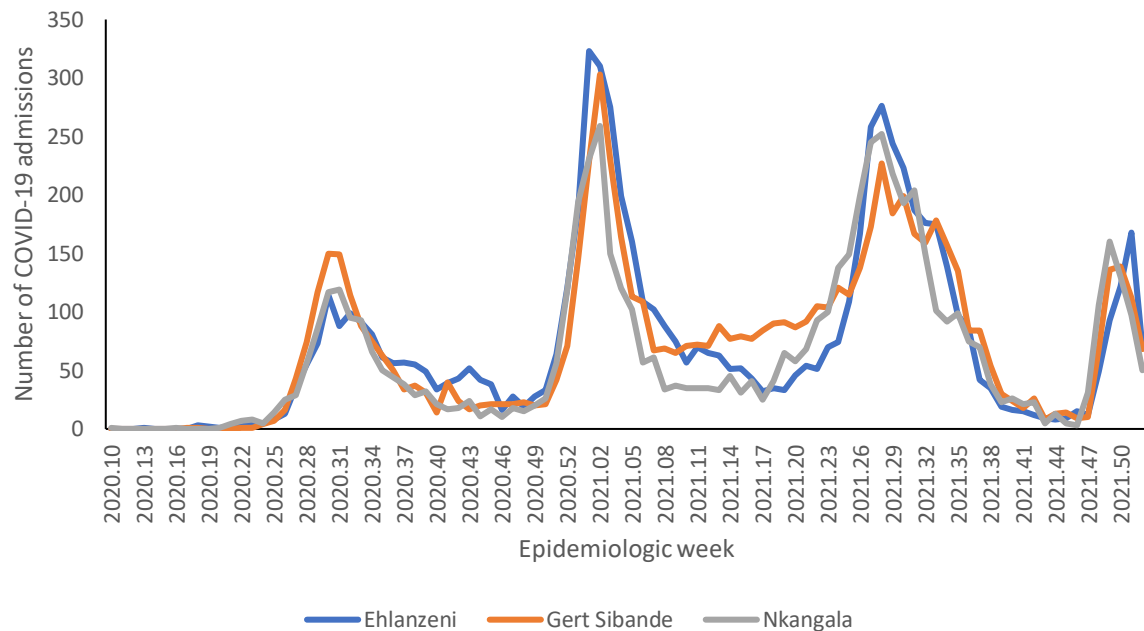


Figure 23: Number of reported COVID-19 admissions, by district and epidemiologic week, Mpumalanga, 5 March 2020-1 January 2022, N=20,072

There has been a small increase in the number of deaths in all districts (Figure 24). Weekly deaths at the peak of the fourth wave were lower than the weekly numbers of deaths at the peak of the prior three waves in all districts.

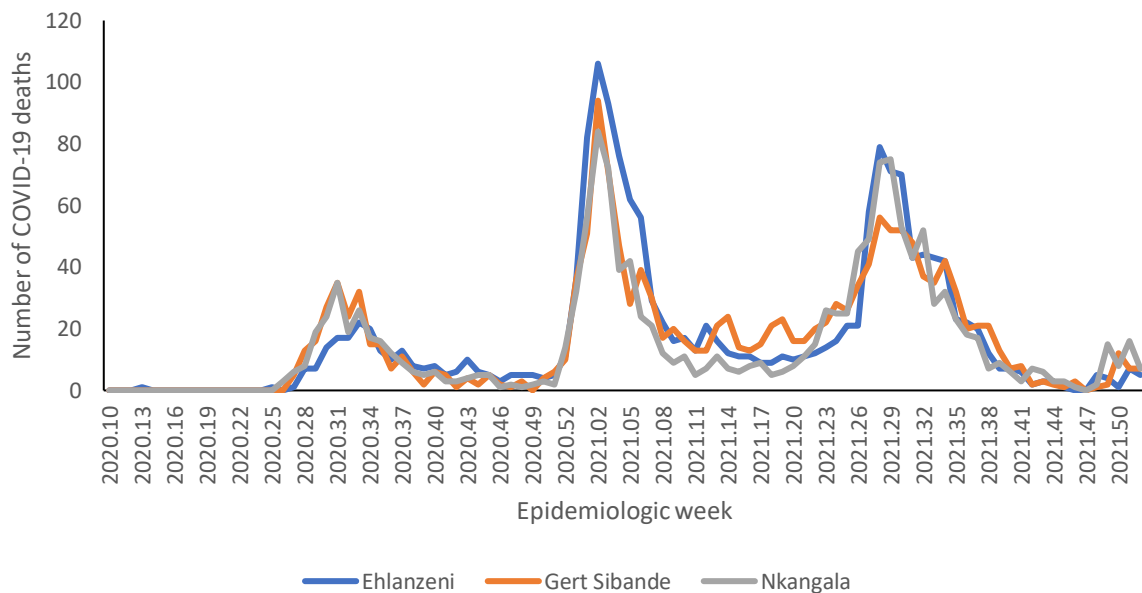


Figure 24: Number of reported COVID-19 in-hospital deaths, by district and epidemiologic week, Mpumalanga, 5 March 2020-1 January 2022, N=4,611

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

Table 10: Previous 14 days and current 14 days average COVID-19 admissions and deaths and percentage changes, Mpumalanga, 4 December 2021-1 January 2022.

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	15.36	17.00	10.70	0.36	0.86	140.00
Gert Sibande	19.64	12.86	-34.55	1.00	1.00	0.00
Nkangala	20.71	10.50	-49.31	1.64	1.64	0.00

North West

In all four waves there were higher numbers of admissions in the public sector. Following an increase in admissions in both sectors since week 46, there has been decreased admissions since week 49 (Figure 25). Weekly admissions at the peak of the fourth wave were lower than the weekly numbers of admissions at the peak of the second and third waves in both sectors.

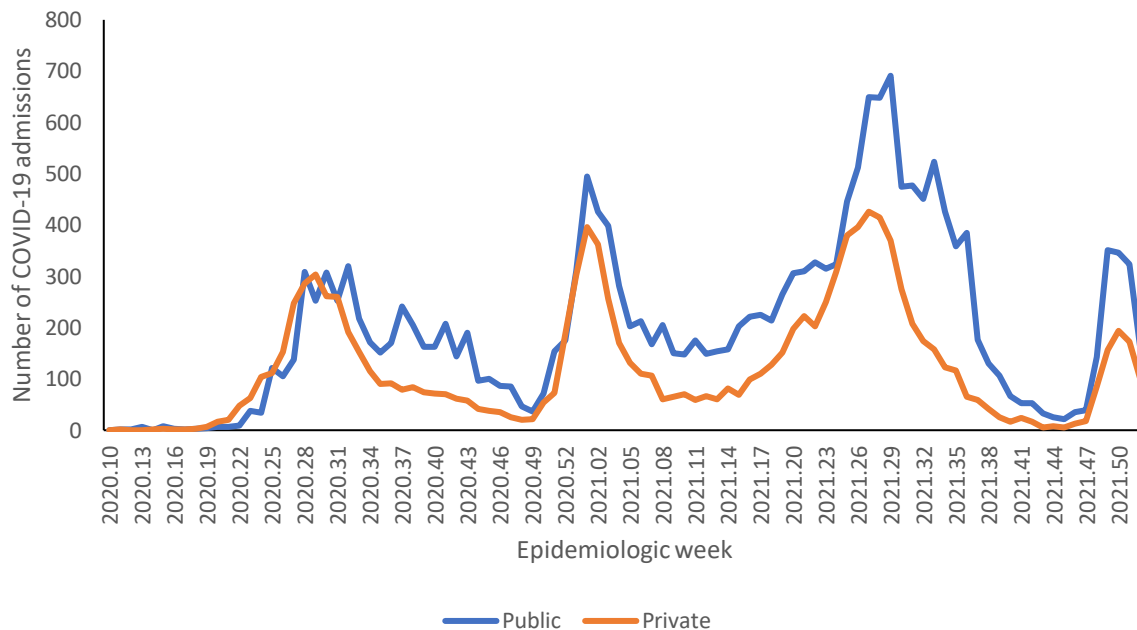


Figure 25: Number of reported COVID-19 admissions by health sector and epidemiologic week of diagnosis, North West, 5 March 2020-1 January 2022, N=30,820

There has been an increase in the numbers of weekly admissions in all districts since week 46 and decreased admissions since week 50 (Figure 26). Weekly admissions at the peak of the fourth wave were lower than the weekly numbers of admissions at the peak of the second and third waves in all districts.

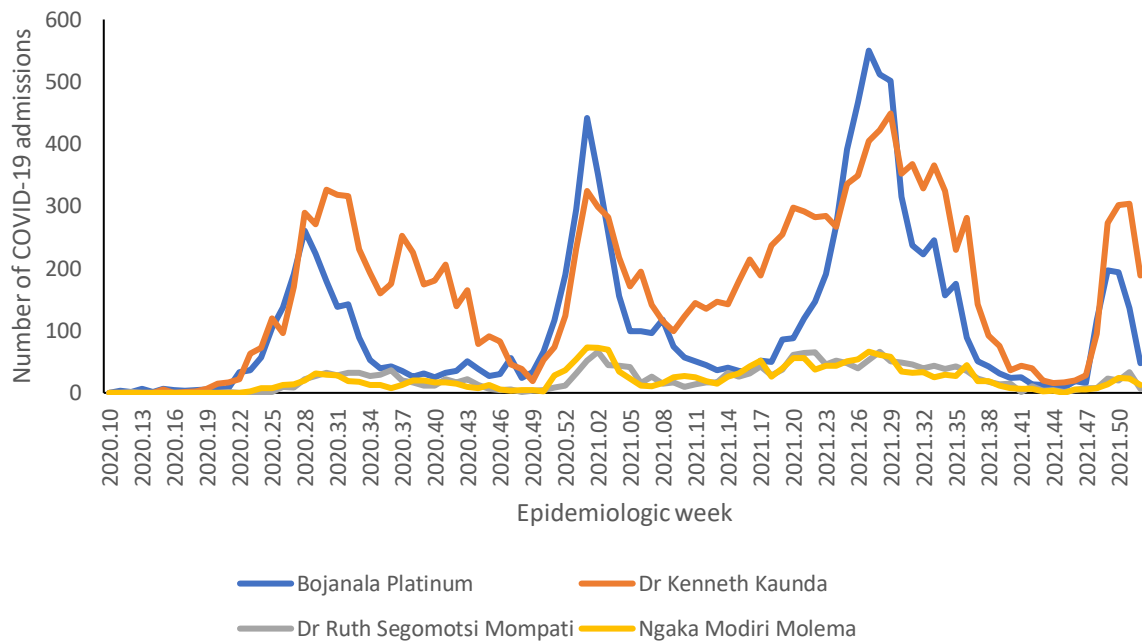


Figure 26: Number of reported COVID-19 admissions, by district and epidemiologic week, North West, 5 March 2020-1 January 2022, N=30,820

There has been an increase in deaths in Dr Kenneth Kaunda and Bojanala Platinum district (Figure 27). Weekly deaths at the peak of the fourth wave were lower than the weekly numbers of deaths at the peak of the second and third waves in all districts.

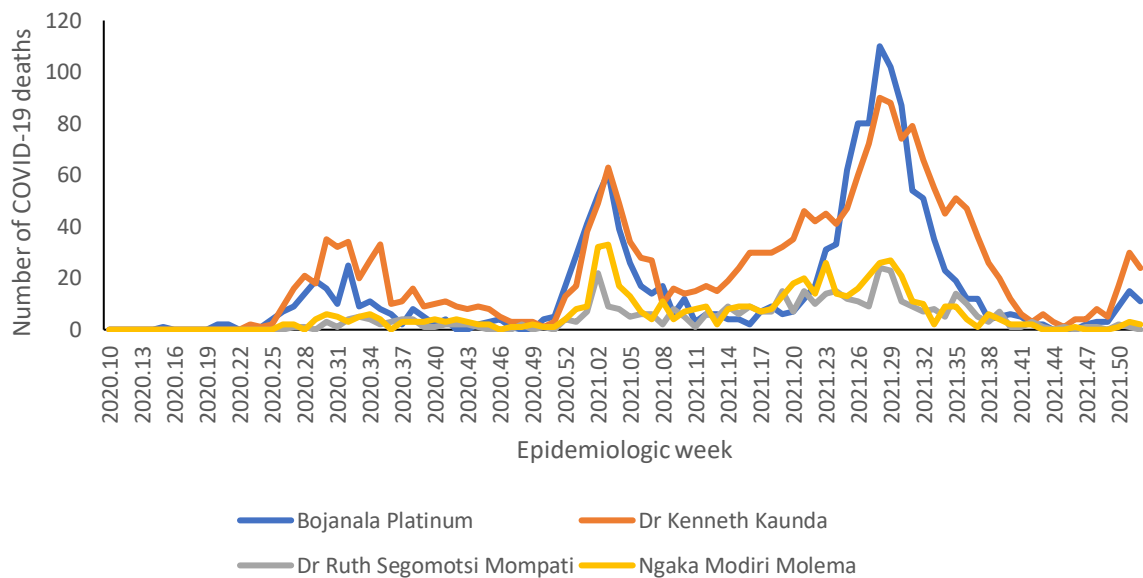


Figure 27: Number of reported COVID-19 in-hospital deaths, by district and epidemiologic week, North West, 5 March 2020-1 January 2022, N=4,585

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

Table 11: Previous 14 days and current 14 days average COVID-19 admissions and deaths and percentage changes, North West, 4 December 2021-1 January 2022.

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	27.93	13.14	-52.94	0.86	1.86	116.67
Dr Kenneth Kaunda	41.07	35.21	-14.26	1.57	3.86	145.45
Dr Ruth Segomotsi Mompoti	3.07	2.86	-6.98	0.14	0.07	-50.00
Ngaka Modiri Molema	2.71	2.57	-5.26	0.07	0.36	400.00

Northern Cape

In all four waves there were roughly equal numbers of admissions in both sectors. Following an increase in admissions in both sectors since week 47, there has been decreased admissions since week 50 (Figure 28). Weekly admissions at the peak of the fourth wave were lower than the weekly numbers of admissions at the peak of the second and third waves in both sectors.

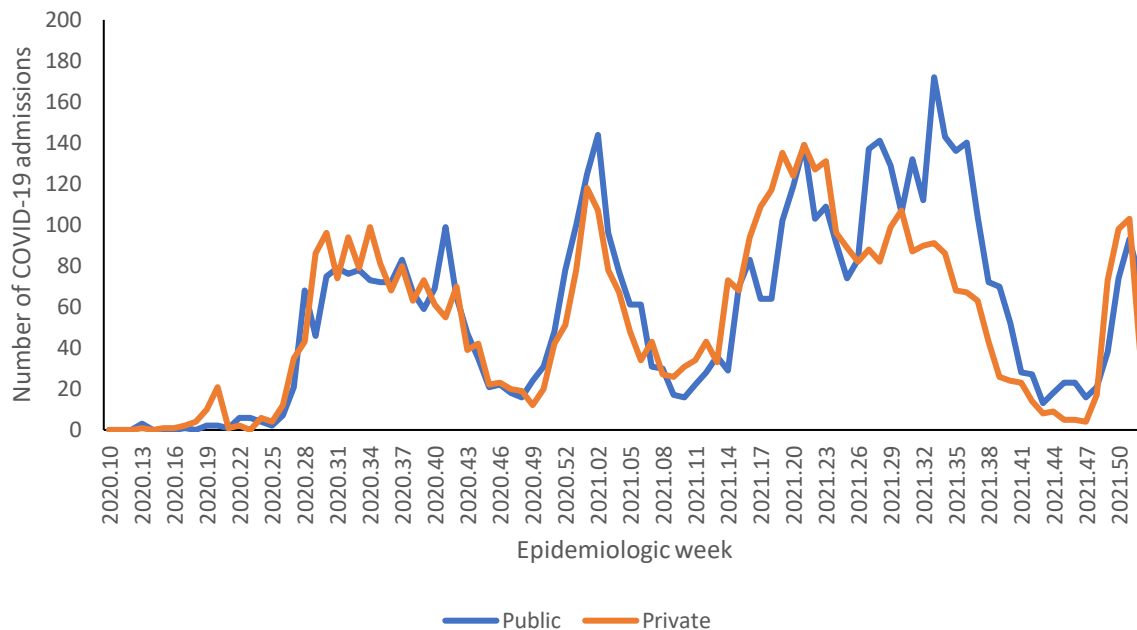


Figure 28: Number of reported COVID-19 admissions by health sector and epidemiologic week of diagnosis, Northern Cape, 5 March 2020-1 January 2022, N=10,621

There has been an increase in weekly admissions in all districts since week 47 and decreased admissions since week 50 (Figure 29). Weekly admissions at the peak of the fourth wave were similar to the weekly number of admissions during the peak of the prior three waves in Frances Baard districts, but lower than the prior three waves in the other districts.

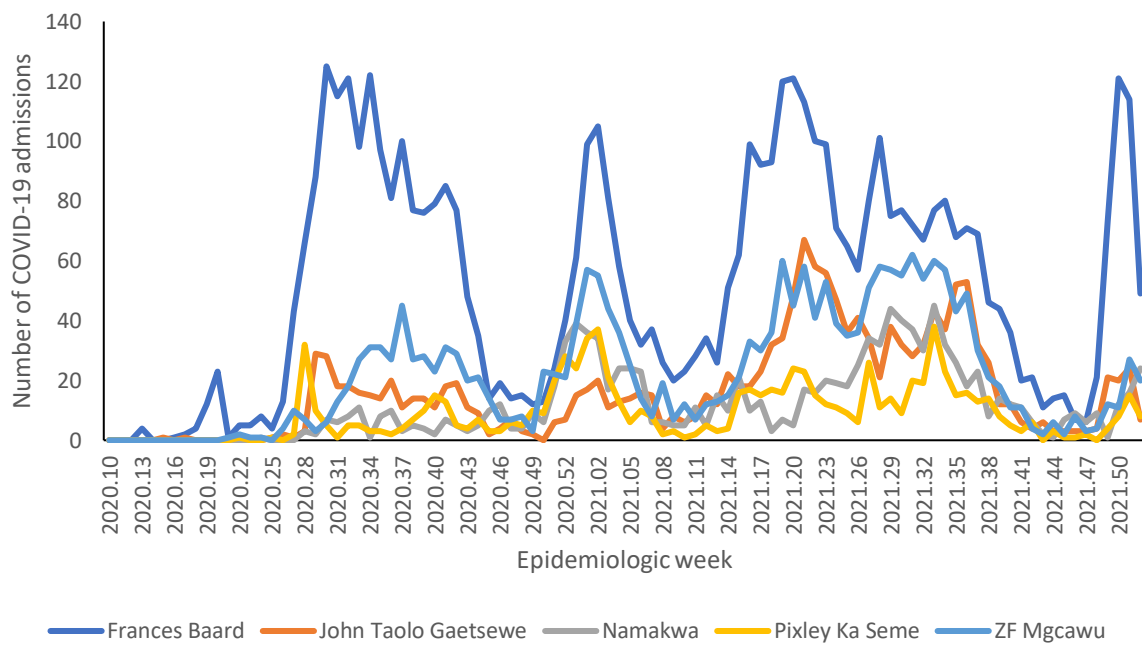


Figure 29: Number of reported COVID-19 admissions by district and epidemiologic week, Northern Cape, 5 March 2020-1 January 2022, N=10,621

There has been a small increase in deaths in all districts (Figure 30). Weekly deaths at the peak of the fourth wave were lower than the weekly numbers of deaths at the peak of the prior three waves in all districts.

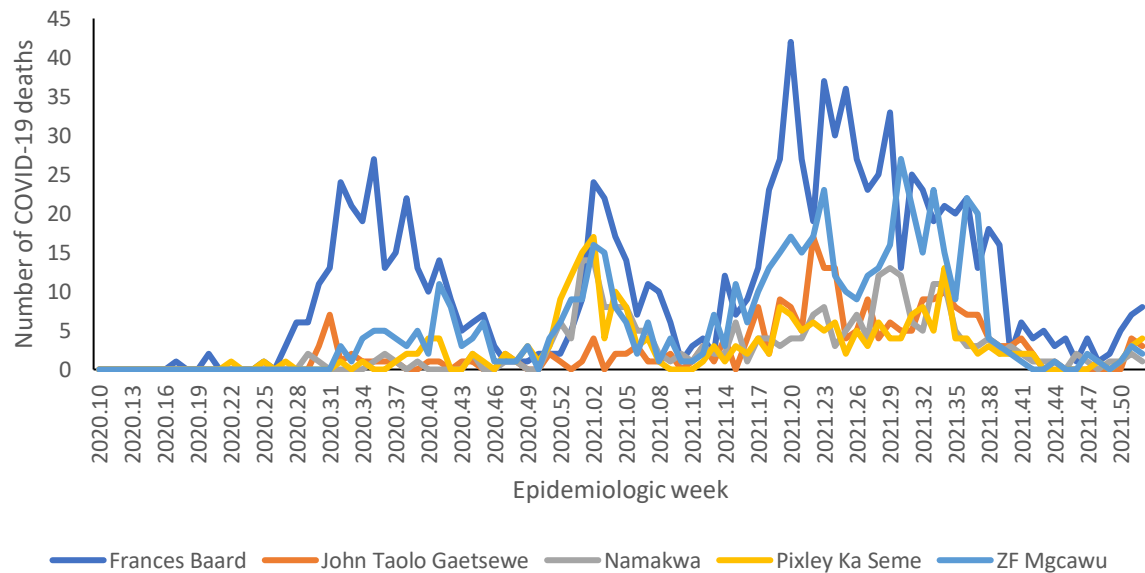


Figure 30: Number of reported COVID-19 in-hospital deaths, by district and epidemiologic week, Northern Cape, 5 March 2020-1 January 2022, N=2,328

There has been a decrease in average daily COVID-19 admissions comparing the previous 14 days and the current 14 days in Frances Baard and John Taolo Gaetsewe (Table 12).

Table 12: Previous 14 days and current 14 days average COVID-19 admissions and deaths and percentage changes, Northern Cape, 4 December 2021-1 January 2022.

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	13.86	11.64	-15.98	0.50	1.07	114.29
John Taolo Gaetsewe	2.93	2.21	-24.39	0.00	0.50	0.00
Namakwa	0.93	2.86	207.69	0.14	0.21	50.00
Pixley Ka Seme	0.86	1.64	91.67	0.07	0.50	600.00
ZF Mgcawu	1.64	3.36	104.35	0.07	0.36	400.00

Western Cape

In all four waves there were higher numbers of admissions in the public sector. Following an increase in admissions in both sectors since week 47, there has been decreased admissions since week 51 (Figure 31). Weekly admissions at the peak of the fourth wave were lower than the weekly numbers of admissions at the peak of the second and third waves in both sectors.

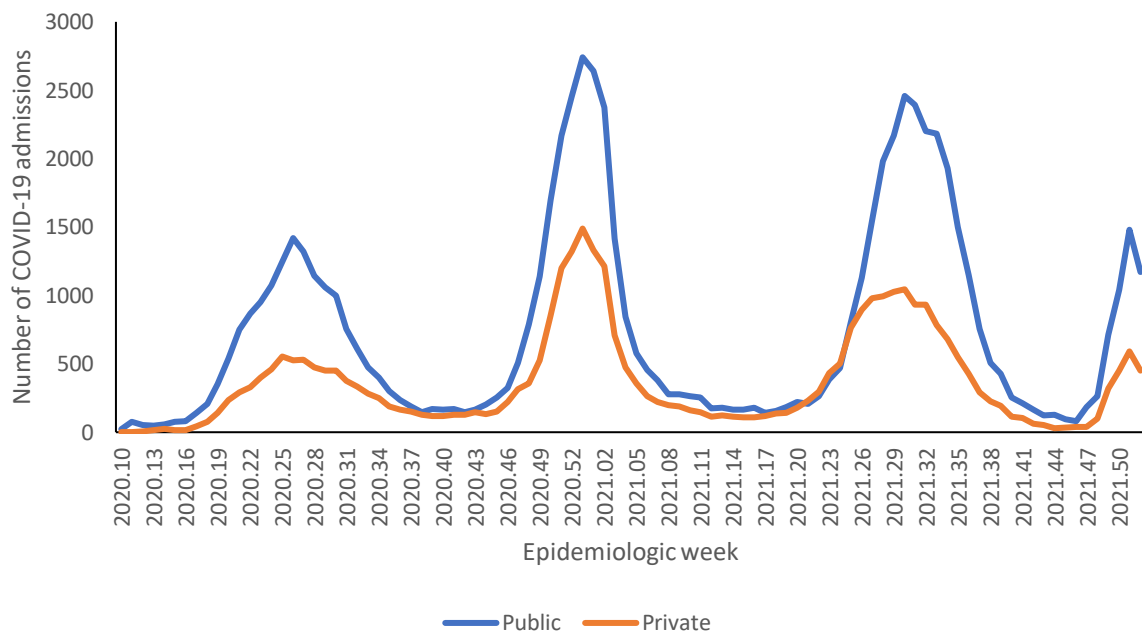


Figure 31: Number of reported COVID-19 admissions by health sector and epidemiologic week of diagnosis, Western Cape, 5 March 2020-1 January 2022, N=105,370

There has been an increase in admissions in all districts since week 47 and decreased admissions since week 50 (Figure 32). Weekly admissions at the peak of the fourth wave were lower than the weekly numbers of admissions at the peak of the second and third waves in all districts.

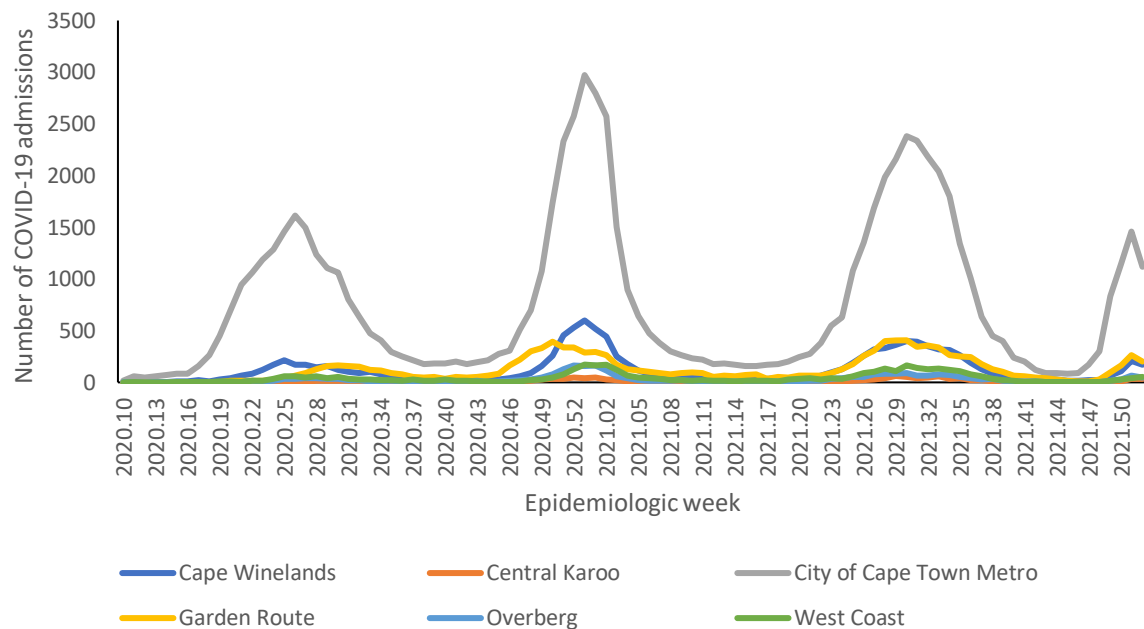


Figure 32: Number of reported COVID-19 admissions, by district and epidemiologic week, Western Cape, 5 March 2020-1 January 2022, N=105,370

There has been a small increase in the numbers of deaths in City of Cape Town Metro (Figure 33). Weekly deaths at the peak of the fourth wave were lower than the weekly numbers of deaths at the peak of the prior three waves in all districts.

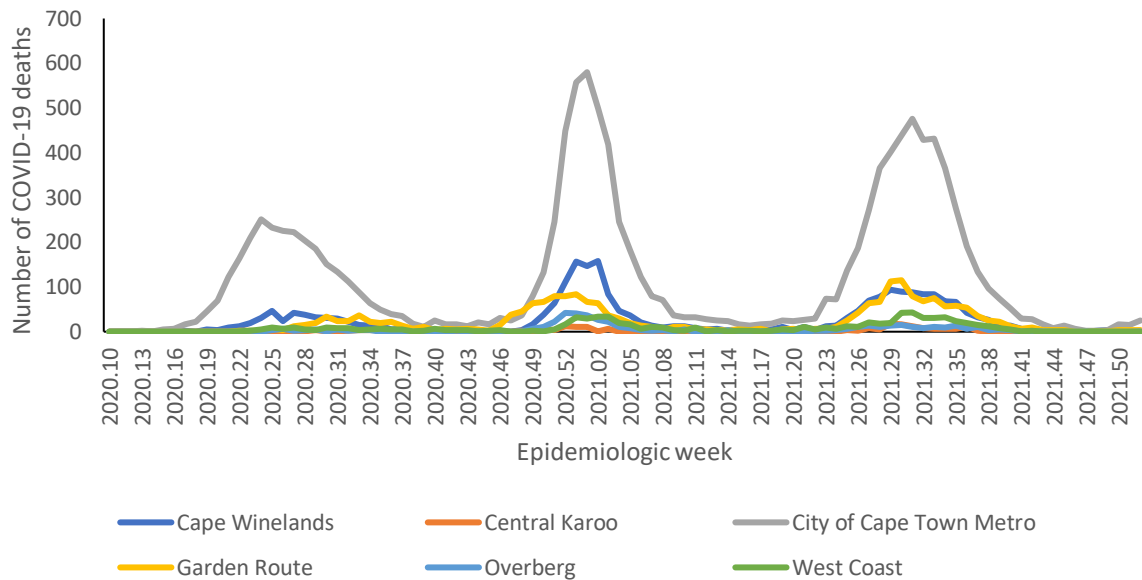


Figure 33: Number of reported COVID-19 in-hospital deaths, by district and epidemiologic week, Western Cape, 5 March 2020-1 January 2022, N=17,368

There has been an increase in average daily COVID-19 admissions comparing the previous 14 days and the current 14 days in all districts (Table 13).

Table 13: Previous 14 days and current 14 days average COVID-19 admissions and deaths and percentage changes, Western Cape, 4 December 2021-1 January 2022.

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	12.57	27.14	115.91	0.43	0.14	-66.67
Central Karoo	1.64	5.21	217.39	0.00	0.00	0.00
City of Cape Town Metro	141.21	183.64	30.05	1.36	2.86	110.53
Garden Route	18.64	33.29	78.54	0.29	0.50	75.00
Overberg	3.21	7.86	144.44	0.00	0.07	0.00
West Coast	2.79	6.64	138.46	0.00	0.00	0.00

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.

Severity data has some inherent limitations. We rely on a proxy indicator for severity and do not have clinical or laboratory parameters to ascertain clinical severity. In the early and late phases of the wave there is likely to be lower severity due to there being sufficient hospital capacity. It may take a few weeks for hospitalisation outcomes to accumulate. Early reporting on case fatality ratio is also biased particularly in older adults who may have longer admissions and are more likely to die.

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 14: Percentage incidence change in hospital admissions over 14 days, by district, South Africa, 11 December 2021-1 January 2022.

Province	District	Total admissions	Incidence (per 100k)	New admissions	New admissions incidence (per 100k)	% average change (14 days)
Eastern Cape	Alfred Nzo	2517	302.43	1	0.12	-97.62
	Amathole	3099	387.76	0	0.00	-100.00
	Buffalo City Metro	9834	1227.91	0	0.00	-100.00
	Chris Hani	4859	667.76	5	0.69	-91.07
	Joe Gqabi	1107	320.90	1	0.29	-96.43
	Nelson Mandela Bay Metro	15459	1274.38	1	0.08	-99.45
	O R Tambo	4595	299.90	0	0.00	-100.00
	Sarah Baartman	3102	641.15	2	0.41	-97.01
Free State	Fezile Dabi	3380	662.58	3	0.59	-91.89
	Lejweleputswa	5921	905.90	2	0.31	-97.50
	Mangaung Metro	13509	1551.12	4	0.46	-97.80
	Thabo Mofutsanyana	5198	679.64	3	0.39	-94.83
	Xhariep	661	510.65	1	0.77	-94.12
Gauteng	City of Johannesburg Metro	49560	844.79	6	0.10	-98.10
	City of Tshwane Metro	38236	1025.34	9	0.24	-97.43
	Ekurhuleni Metro	30161	757.39	2	0.05	-99.14
	Sedibeng	8678	908.19	1	0.10	-98.21
	West Rand	12142	1271.76	2	0.21	-97.44
KwaZulu-Natal	Amajuba	4354	763.16	0	0.00	-100.00
	eThekweni Metro	35115	882.02	6	0.15	-98.37
	Harry Gwala	2343	455.81	0	0.00	-100.00
	iLembe	2815	405.30	1	0.14	-90.00
	King Cetshwayo	8377	863.01	4	0.41	-97.20
	Ugu	5142	641.37	6	0.75	-93.75
	uMgungundlovu	10278	894.18	2	0.17	-98.73
	uMkhanyakude	1357	197.55	2	0.29	-86.67
	Umzinyathi	1804	317.85	3	0.53	-90.00
	UThukela	2851	399.18	3	0.42	-93.48
	Zululand	2145	243.53	6	0.68	-88.68
Limpopo	Capricorn	7967	609.12	0	0.00	-100.00
	Mopani	3405	287.37	1	0.08	-98.75
	Sekhukhune	1884	158.28	1	0.08	-95.45
	Vhembe	2683	187.99	3	0.21	-93.48

	Waterberg	3042	409.85	3	0.40	-88.89
Mpumalanga	Ehlanzeni	6974	381.36	0	0.00	-100.00
	Gert Sibande	6948	559.35	1	0.08	-98.57
	Nkangala	6160	382.87	0	0.00	-100.00
North West	Bojanala Platinum	10684	554.10	0	0.00	-100.00
	Dr Kenneth Kaunda	15997	2005.35	14	1.76	-92.31
	Dr Ruth Segomotsi Mompoti	2106	445.17	1	0.21	-87.50
	Ngaka Modiri Molema	2050	225.31	0	0.00	-100.00
Northern Cape	Frances Baard	5018	1209.42	1	0.24	-98.04
	John Taolo Gaetsewe	1537	566.16	0	0.00	-100.00
	Namakwa	1120	968.75	0	0.00	-100.00
	Pixley Ka Seme	855	405.43	0	0.00	-100.00
	ZF Mgcawu	2100	750.27	0	0.00	-100.00
Western Cape	Cape Winelands	11803	1253.95	6	0.64	-97.01
	Central Karoo	1236	1645.52	0	0.00	-100.00
	City of Cape Town Metro	74274	1612.90	53	1.15	-95.97
	Garden Route	11908	1909.38	3	0.48	-98.64
	Overberg	2828	942.96	0	0.00	-100.00
	West Coast	3891	844.38	1	0.22	-98.18

Table 15: Number of reported COVID-19 admissions and in-hospital deaths by age and gender, South Africa, 5 March 2020-1 January 2022.

	ADMISSIONS				DEATHS			
Age Group (Years)	Female	Male	Unknown	Total	Female	Male	Unknown	Total
0-4	4708	5834	31	10573	155	162	2	319
5-9	1331	1723	7	3061	24	25	0	49
10-14	2036	1983	8	4027	60	53	0	113
15-19	5878	3181	3	9062	129	117	0	246
20-24	9383	4623	5	14011	293	225	1	519
25-29	14994	6745	13	21752	660	433	0	1093
30-34	19336	10890	8	30234	1128	945	1	2074
35-39	20343	14567	19	34929	1659	1545	4	3208
40-44	18449	16359	12	34820	2071	2142	0	4213
45-49	20721	20355	13	41089	3032	3177	1	6210
50-54	24263	22646	9	46918	4190	4302	1	8493
55-59	27103	24478	12	51593	5958	5952	5	11915
60-64	23827	21875	19	45721	6392	6576	5	12973
65-69	20547	18279	15	38841	6612	6140	6	12758
70-74	17326	15203	18	32547	5823	5633	4	11460
75-79	12840	10518	10	23368	4571	4243	3	8817
80-84	9733	6753	8	16494	3724	2872	3	6599
85-89	5227	3211	2	8440	2052	1488	0	3540
90-94	2255	1107	1	3363	997	553	0	1550
>=95	701	340	2	1043	316	141	0	457
Unknown	1172	1189	45	2406	69	113	0	182
Total	262173	211859	260	474292	49915	46837	36	96788