

COVID-19 HOSPITAL SURVEILLANCE UPDATE

SOUTH AFRICA

WEEK 49 2021

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 11 December 2021.

HIGHLIGHTS

- As of 11 December 2021, 447,981 COVID-19 admissions and 94,962 in-hospital deaths were reported to DATCOV from 665 facilities (407 public-sector and 258 private-sector) in all nine provinces of South Africa.
- There has also been an increase in admissions in Gauteng since week 45, North West, Mpumalanga, Limpopo and Eastern Cape provinces since week 46, Free State, KwaZulu-Natal and Western Cape since week 47, and Northern Cape since week 48.
- There has been a small increase in deaths in all provinces except Northern cape and Western Cape.

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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 11 December 2021, a total of 665 facilities submitted data on hospitalised COVID-19 cases, 407 from public sector and 258 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 2020-11 December 2021.

Name of province	Public	Private
Eastern Cape	86	18
Free State	35	20
Gauteng	40	94
KwaZulu-Natal	69	47
Limpopo	41	7
Mpumalanga	31	9
North West	17	13
Northern Cape	29	6
Western Cape	59	44
South Africa	407	258

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RESULTS

Epidemiological and geographic trends in admissions

From 5 March 2020 to 11 December 2021, a total of 447,981 COVID-19 admissions were reported from 665 facilities in all nine provinces of South Africa. South Africa experienced three waves of the COVID-19 pandemic. There has been an increase in admissions in both sectors since week 45 of 2021 (Figure 1).

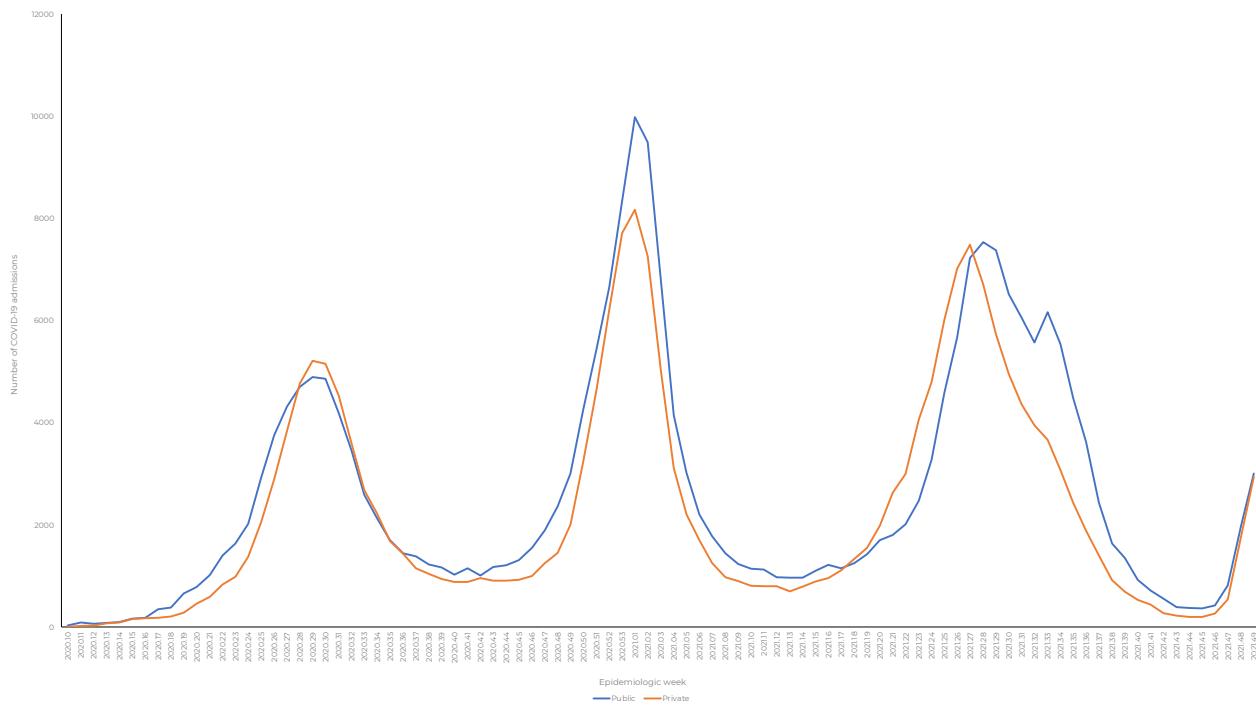


Figure 1. Number of reported COVID-19 admissions by health sector and epidemiologic week of diagnosis, South Africa, 5 March 2020-11 December 2021, N=447,981

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The majority of admissions were recorded in four provinces, Gauteng 131,828 (29%), Western Cape 99,423 (22%), KwaZulu-Natal 71,417 (16%) and Eastern Cape 41,978 (9%) provinces. The weekly COVID-19 admissions have increased in all provinces in the fourth wave (Figures 2a and 2b).

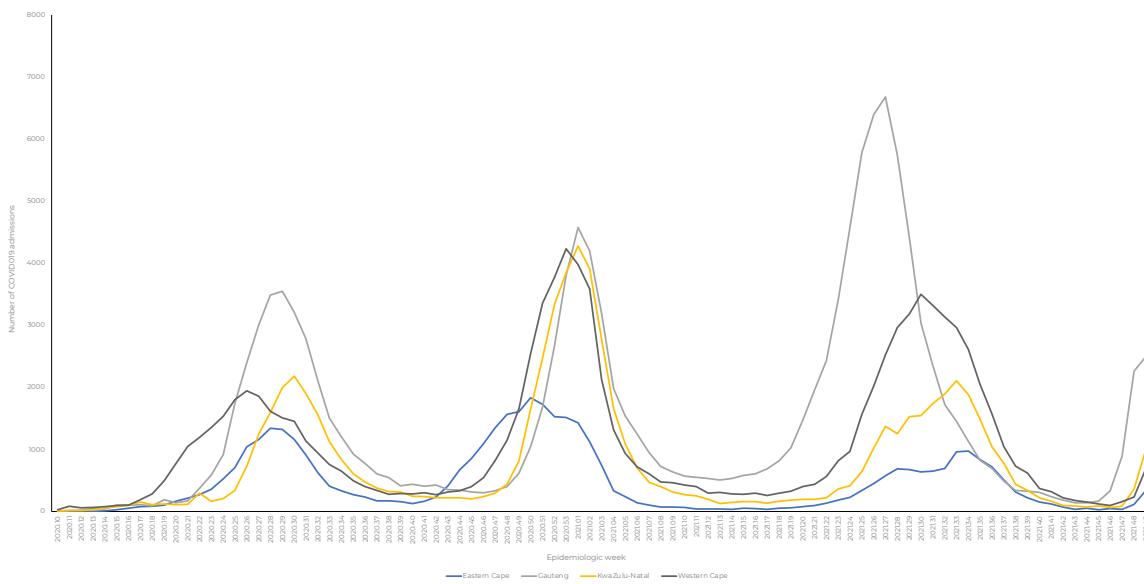


Figure 2a. Number of reported COVID-19 admissions, by provinces with highest admissions and epidemiologic week of diagnosis, South Africa, 5 March 2020-11 December 2021, N=447,981

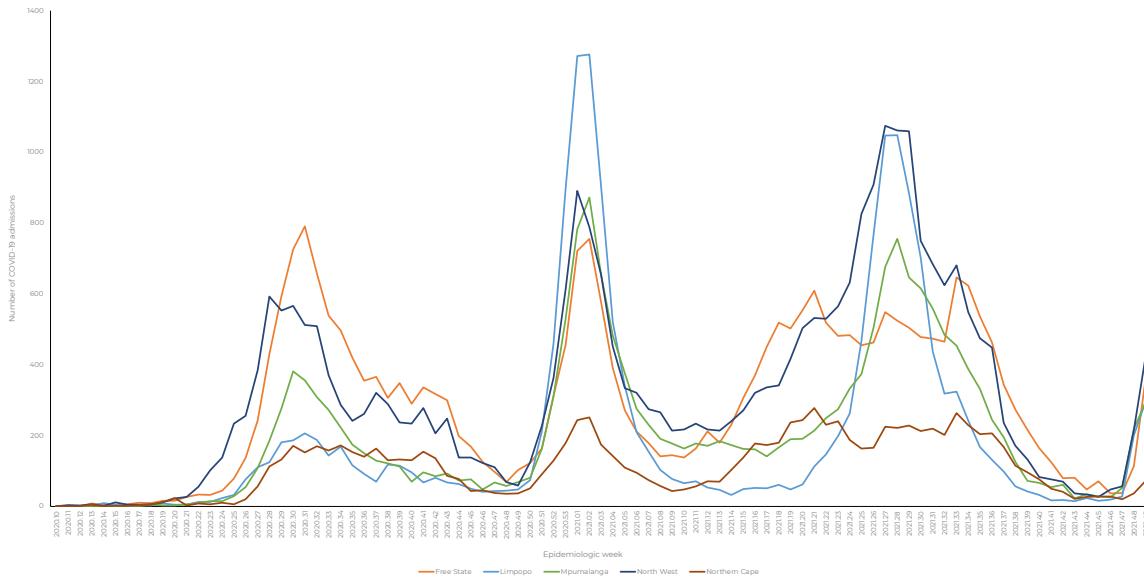


Figure 2b. Number of reported COVID-19 admissions, by provinces with lowest admissions and epidemiologic week of diagnosis, South Africa, 5 March 2020-11 December 2021, N=447,981

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EPIDEMIOLOGICAL AND GEOGRAPHIC TRENDS IN IN-HOSPITAL MORTALITY

A total of 94,962 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 three waves. There has been an increase in in-hospital COVID-19 deaths in both sectors since week 48 (Figure 3).

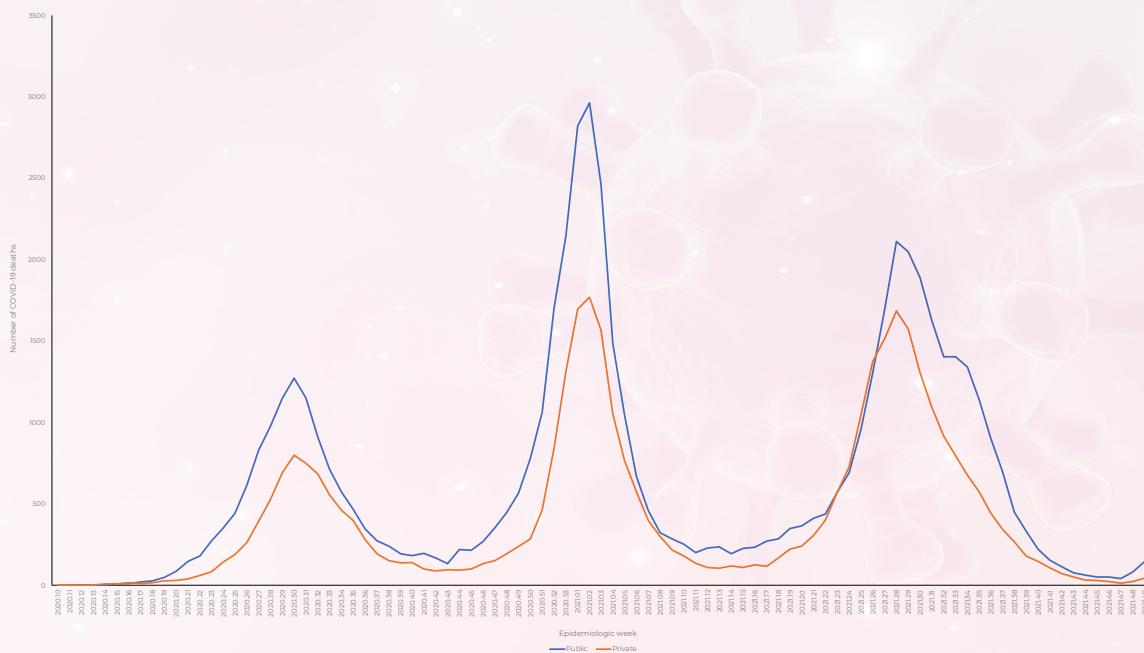


Figure 3. Number of reported COVID-19 in-hospital deaths, by health sector and epidemiologic week, South Africa, 5 March 2020-11 December 2021, N=94,962

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Most deaths were reported in Gauteng 27,947 (29%), Western Cape 17,219 (18%), KwaZulu-Natal 15,786 (18%), and Eastern Cape 12,218 (13%). There has been an increase in deaths in Gauteng and smaller increases in deaths in all provinces except Northern Cape and Western Cape. (Figures 4a and 4b).

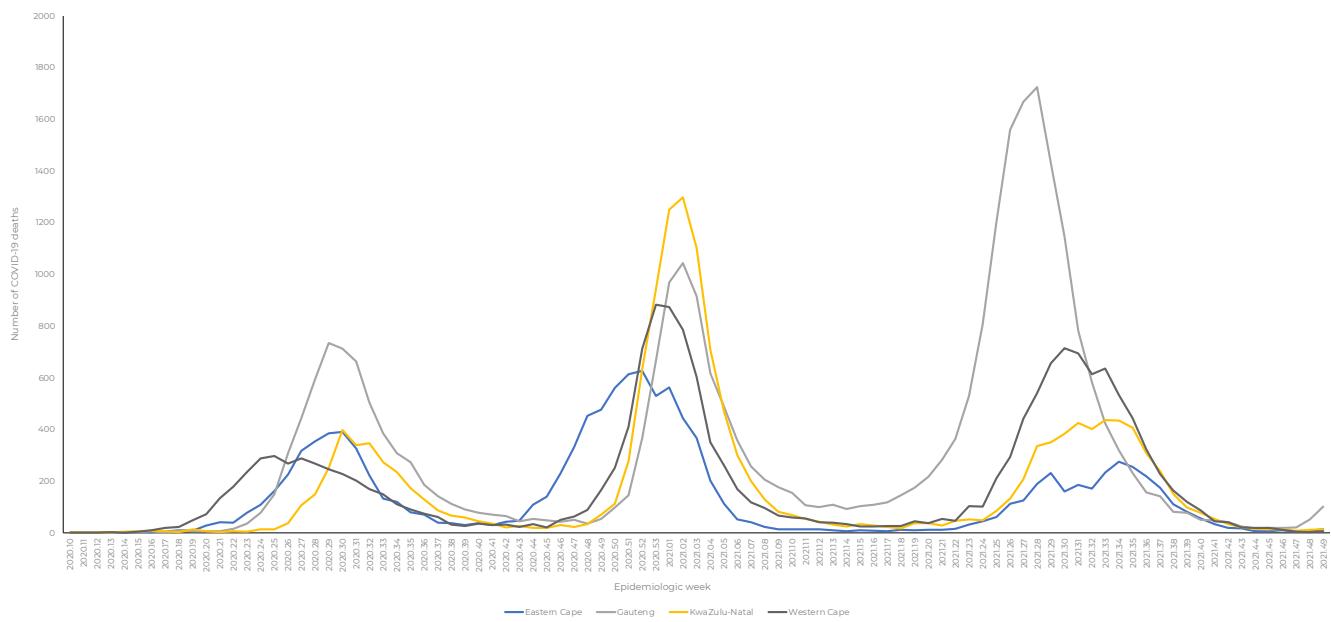


Figure 4a. Number of reported COVID-19 in-hospital deaths, by province with highest deaths and epidemiologic week of death, South Africa, 5 March 2020-11 December 2021, N=94,962

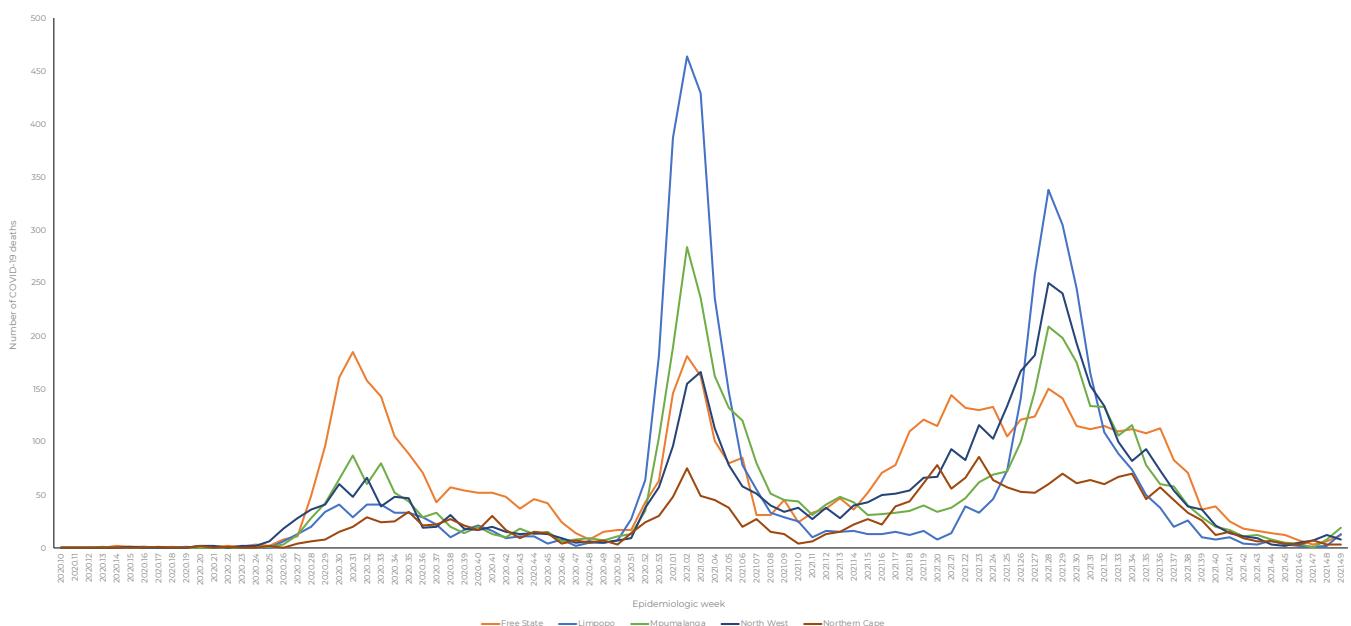


Figure 4b. Number of reported COVID-19 in-hospital deaths, by province with lowest deaths and epidemiologic week of death, South Africa, 5 March 2020-11 December 2021, N=94,962

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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 2020-11 December 2021.

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	41978	623.4	12218	181.4
Free State	2928903	26984	921.3	5615	191.7
Gauteng	15488137	131 828	851.2	27947	180.4
KwaZulu-Natal	11531628	71417	619.3	15784	136.9
Limpopo	5852553	17805	304.2	4885	83.5
Mpumalanga	4679786	19012	406.3	4540	97.0
North West	4108816	29 434	716.4	4472	108.8
Northern Cape	1292786	10 100	781.3	2280	176.4
Western Cape	7005741	99 423	1419.2	17218	245.8
South Africa	59622350	447 981	751.4	94 959	159.3

*StatsSA mid-year population estimates 2020

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PROVINCIAL TRENDS

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

Table 3. Previous 14 days and current 14 days daily average COVID-19 admissions and deaths and percentage changes, South Africa, 13 November-11 December 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	5.64	31.50	458.23	1.00	1.50	50.00
Free State	5.36	34.50	544.00	0.71	1.29	80.00
Gauteng	87.36	338.50	287.49	2.79	10.93	292.31
KwaZulu-Natal	10.29	96.14	834.72	1.50	1.71	14.29
Limpopo	3.36	35.64	961.70	0.21	1.07	400.00
Mpumalanga	5.43	36.79	577.63	0.29	1.93	575.00
North West	7.36	46.07	526.21	0.86	1.43	66.67
Northern Cape	3.43	7.86	129.17	0.71	0.43	-40.00
Western Cape	17.86	64.79	262.80	1.07	0.64	-40.00

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

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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. 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 5). There has been an increase in admissions in both sectors since week 45.

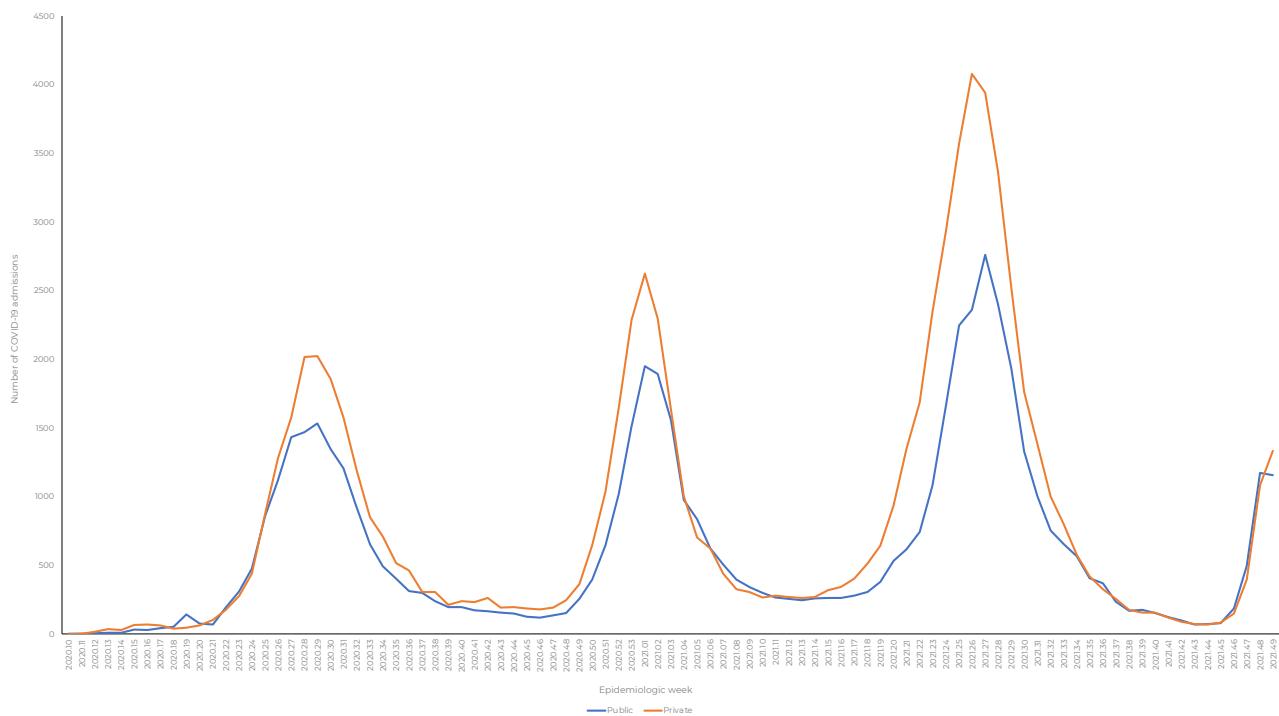


Figure 5: Number of reported COVID-19 admissions by health sector and epidemiologic week of diagnosis, Gauteng, 5 March 2020-11 December 2021, N=131,828

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There has been an increase in admissions in City of Tshwane Metro since week 45, City of Johannesburg Metro, Ekurhuleni Metro, Sedibeng and West Rand since week 46 (Figure 6).

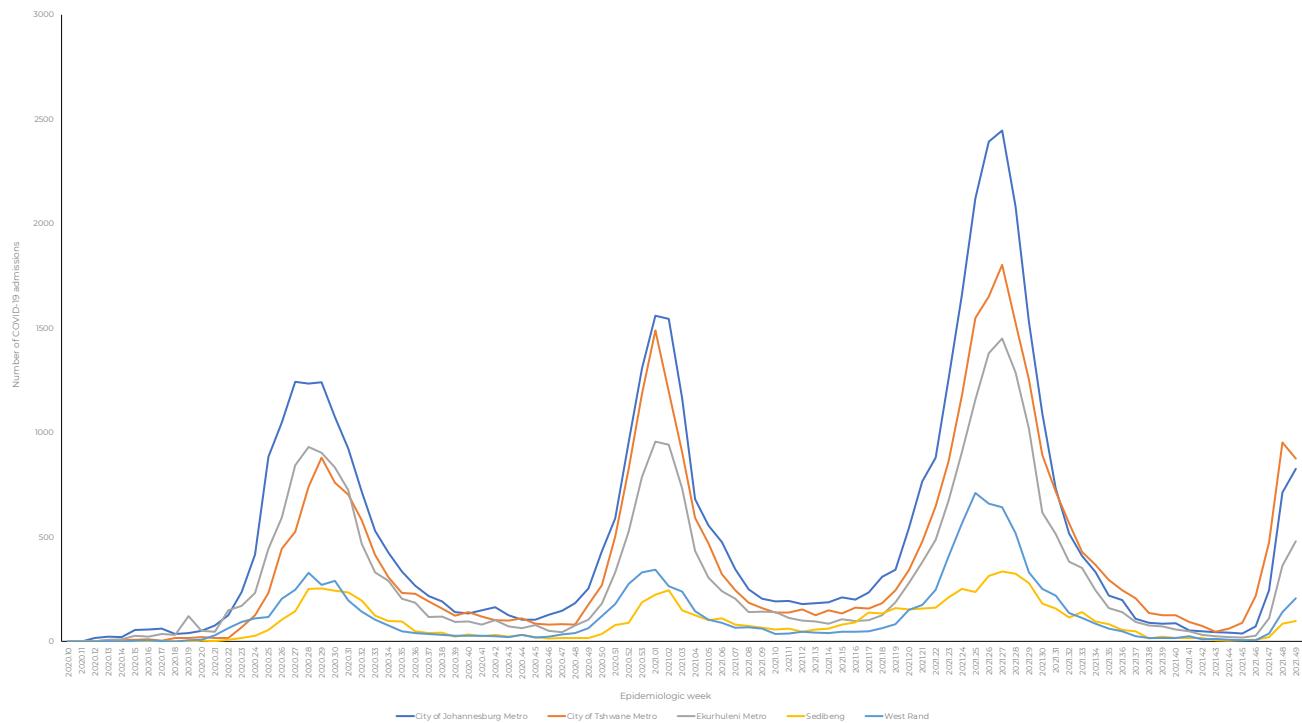


Figure 6. Number of reported COVID-19 admissions, by district and epidemiologic week, Gauteng, 5 March 2020-11 December 2021, N=131,828

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There has been a small increase in deaths in all districts (Figure 7).

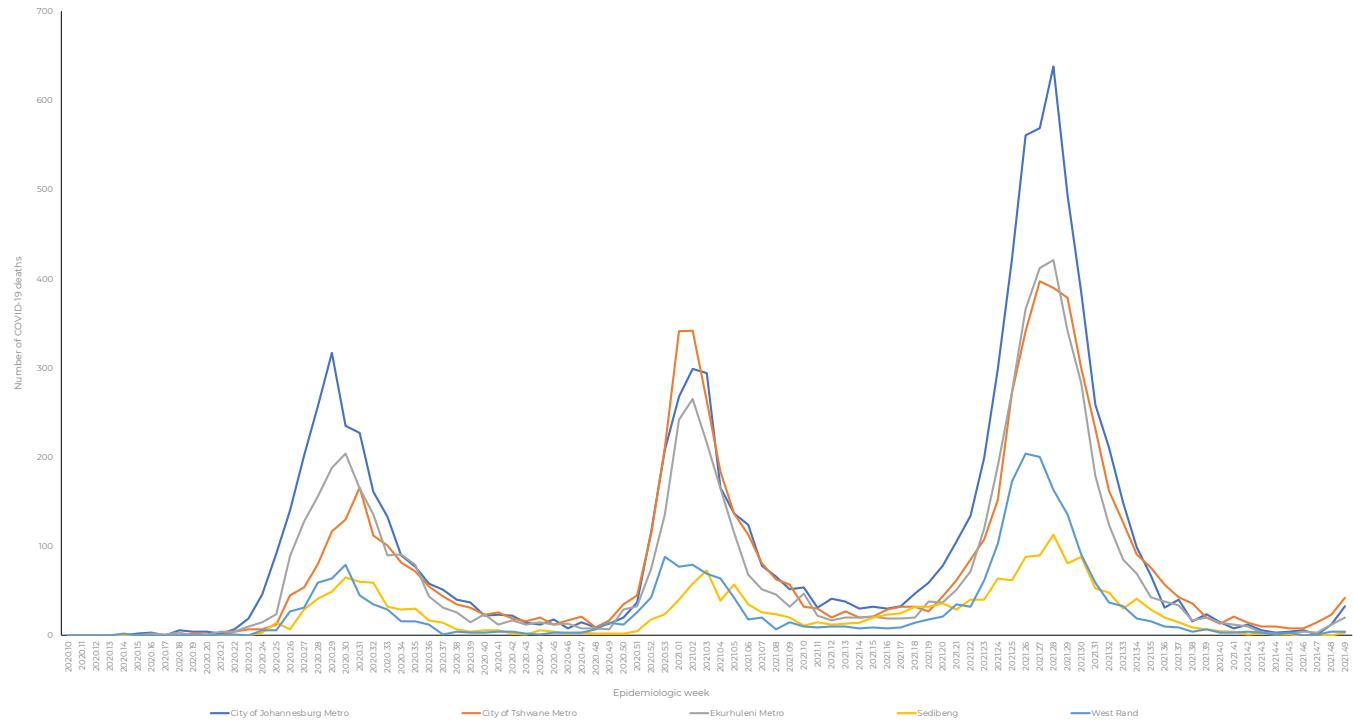


Figure 7. Number of reported COVID-19 in-hospital deaths, by district and epidemiologic week, Gauteng, 5 March 2020-11 December 2021, N=27,947

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There has been an increase in average daily COVID-19 admissions and deaths comparing the previous 14 days and the current 14 days in all districts (Table 4).

Table 4: Previous 14 days and current 14 days average COVID-19 admissions and deaths and percentage changes, Gauteng, 13 November-11 December 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	22.71	110.07	384.59	0.50	3.21	542.86
City of Tshwane Metro	49.36	130.21	163.82	1.64	4.64	182.61
Ekurhuleni Metro	9.93	60.29	507.19	0.50	2.29	357.14
Sedibeng	2.07	13.07	531.03	0.07	0.21	200.00
West Rand	3.29	24.86	656.52	0.07	0.57	700.00

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EASTERN 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, while weekly admissions in the third wave were lower than the second wave in both sectors. There has been an increase in admissions in both sectors since week 46 (Figure 8).

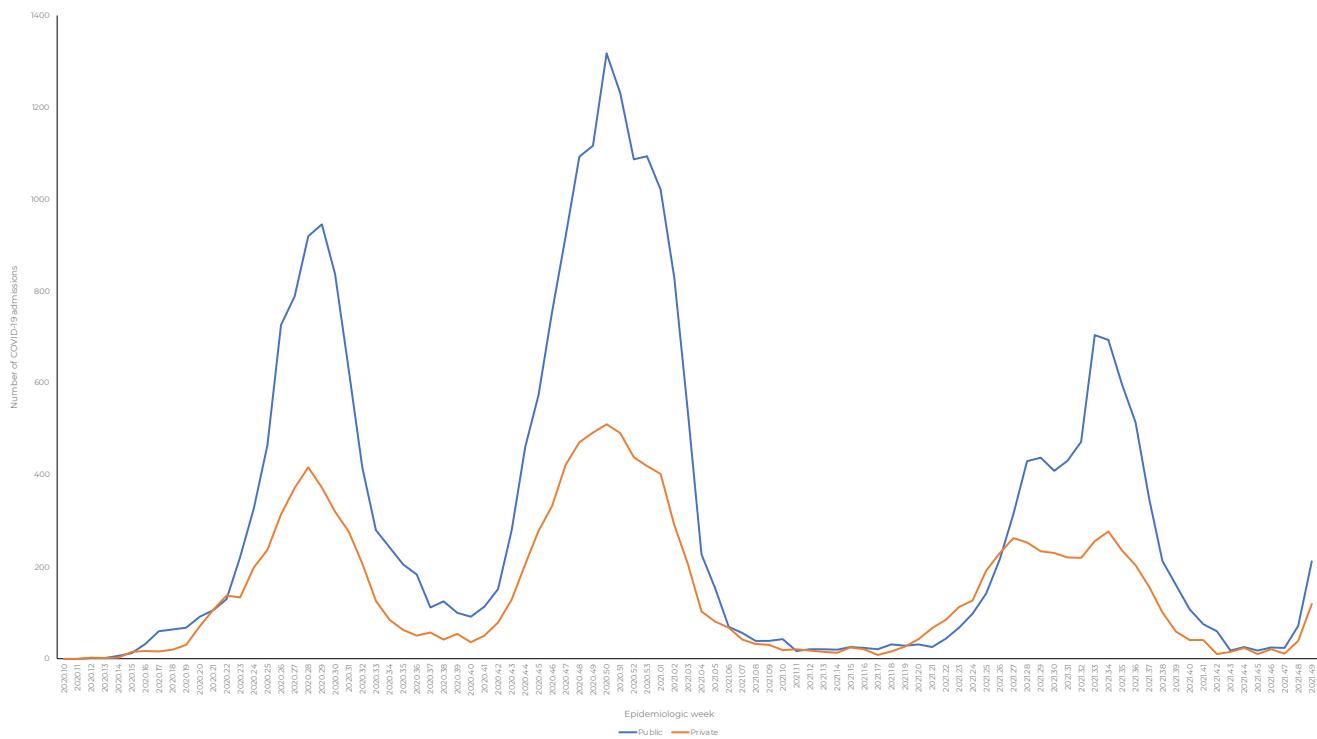


Figure 8: Number of reported COVID-19 admissions by health sector and epidemiologic week of diagnosis, Eastern Cape, 5 March 2020-11 December 2021, N=41,978

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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, while weekly admissions in the third wave were lower than the second wave in all districts (Figure 9). There has been a small increase in admissions in all districts since week 46.

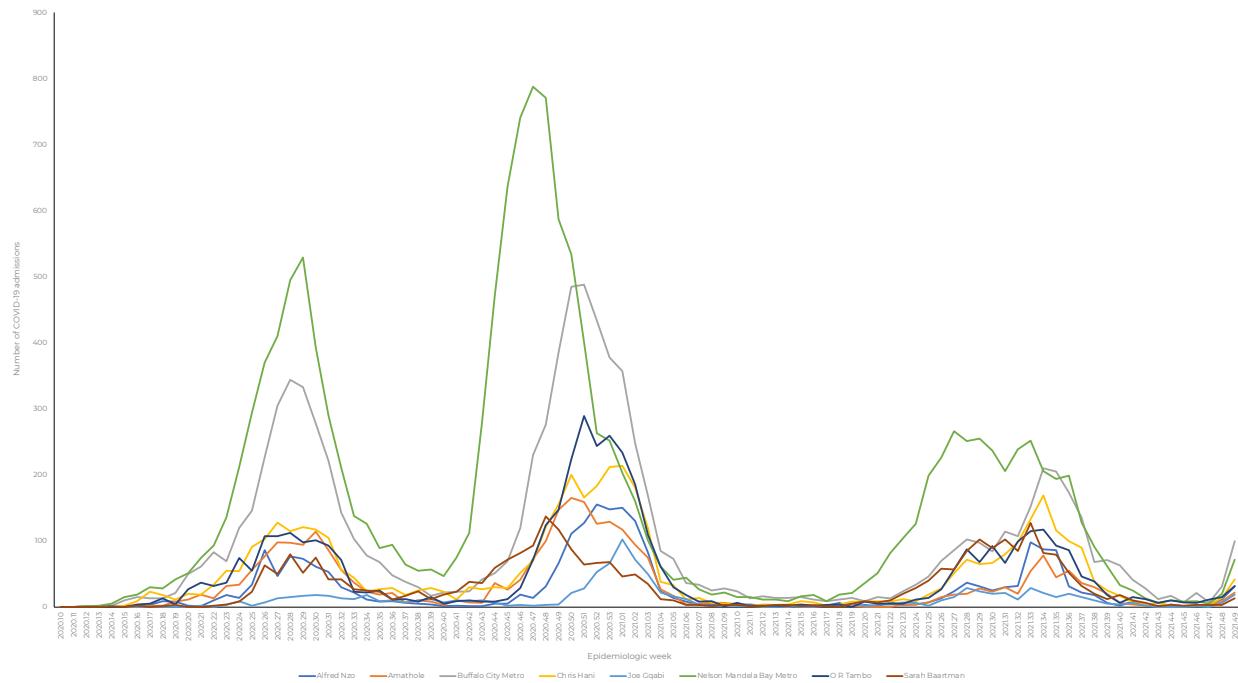


Figure 9: Number of reported COVID-19 admissions, by district and epidemiologic week, Eastern Cape, 5 March 2020-11 December 2021, N=41,978

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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, while weekly deaths in the third wave were lower than the second wave in both sectors (Figure 10). There has not been an increase in weekly numbers of deaths in all districts.

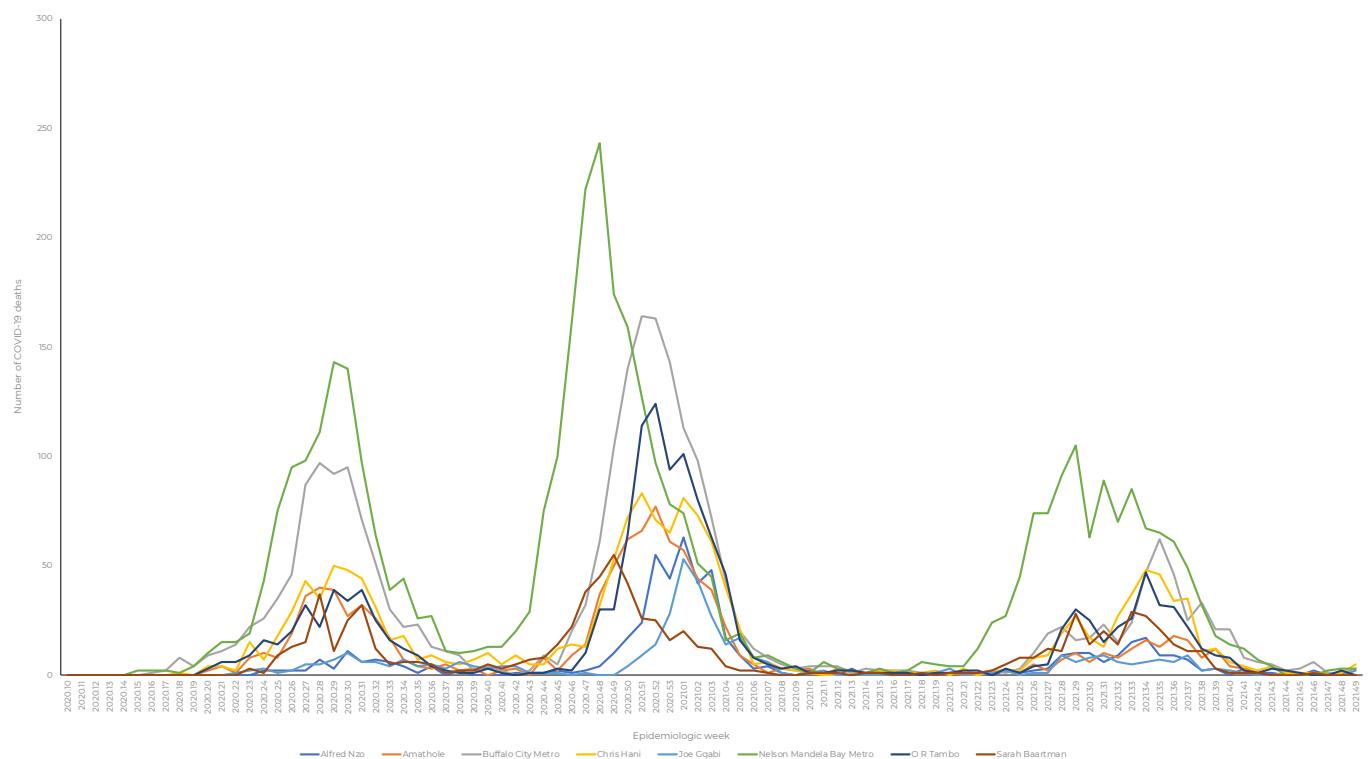


Figure 10: Number of reported COVID-19 in-hospital deaths, by district and epidemiologic week, Eastern Cape, 5 March 2020-11 December 2021, N=12,218

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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 (Table 5).

Table 5: Previous 14 days and current 14 days average COVID-19 admissions and deaths and percentage changes, Eastern Cape, 13 November-11 December 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	0.29	3.07	975.00	0.14	0.07	-50.00
Amathole	0.21	2.21	933.33	0.07	0.00	-100.00
Buffalo City Metro	2.00	9.36	367.86	0.50	0.29	-42.86
Chris Hani	0.43	4.00	833.33	0.07	0.43	500.00
Joe Gqabi	0.07	1.79	2400.00	0.00	0.14	0.00
Nelson Mandela Bay	1.00	6.57	557.14	0.14	0.43	200.00
O R Tambo	1.21	3.36	176.47	0.00	0.14	0.00
Sarah Baartman	0.43	1.14	166.67	0.07	0.00	-100.00

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FREE STATE

In the first and third waves there were roughly equal numbers of admissions in both sectors, while in the second wave there were higher numbers of admissions in the public sector (Figure 11). 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. 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. There has been an increase in admissions in both sectors since week 46.

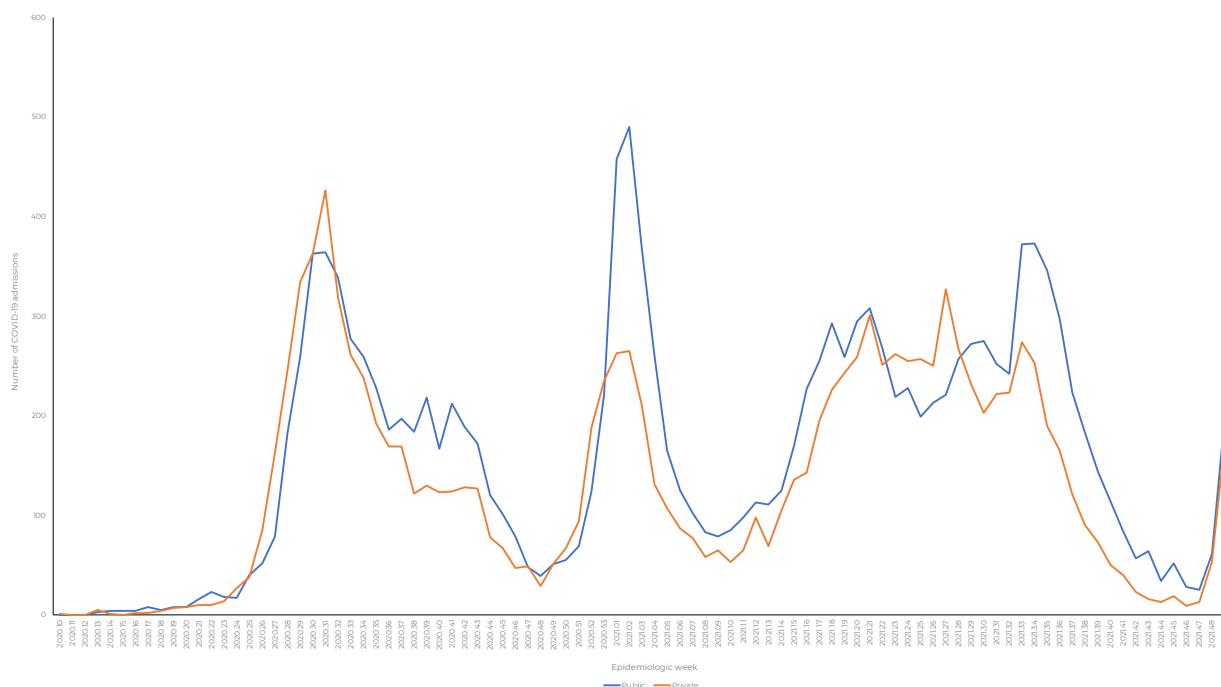


Figure 11: Number of reported COVID-19 admissions by health sector and epidemiologic week of diagnosis, Free State, 5 March 2020-11 December 2021, N=26,984

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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. Weekly admissions at the peak of the third wave exceeded the weekly numbers of admissions at the peak of the second wave in Lejweleputswa and Mangaung Metro (Figure 12). There has been an increase in admissions in all districts since week 46.

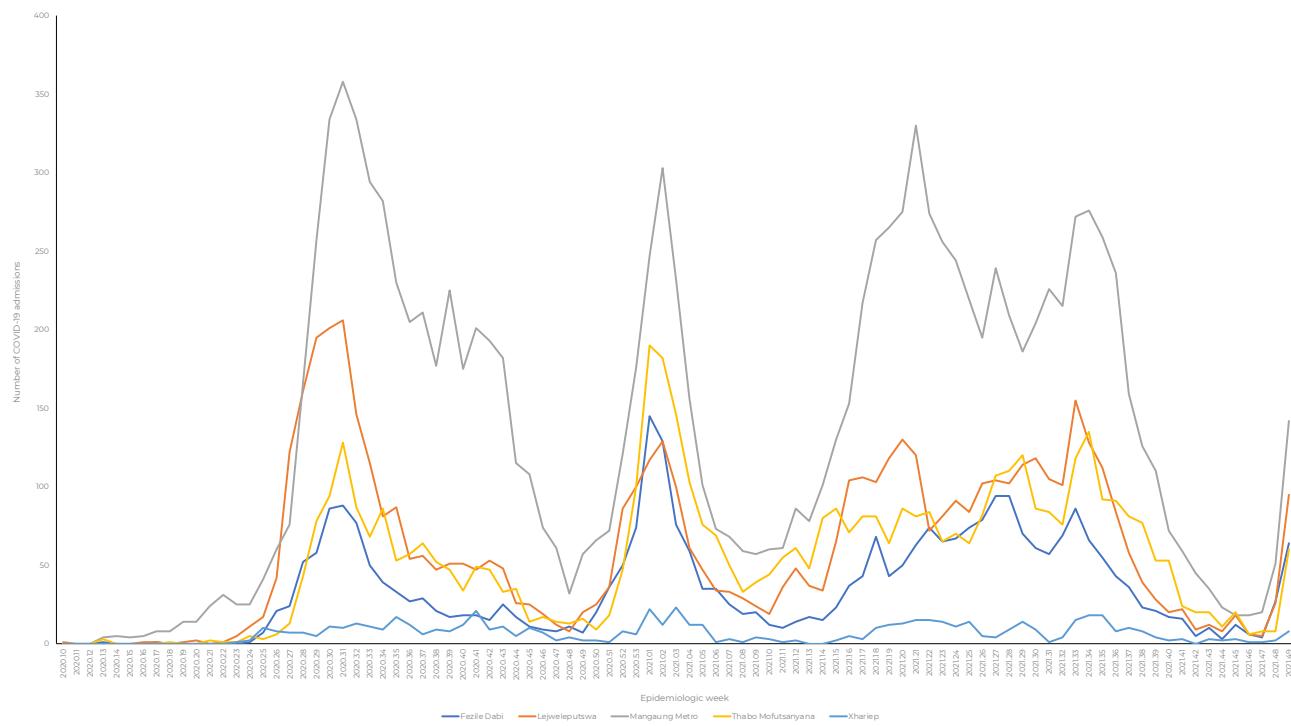


Figure 12: Number of reported COVID-19 admissions, by district and epidemiologic week, Free State, 5 March 2020-11 December 2021, N=26,984

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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. Weekly deaths at the peak of the third wave exceeded the weekly numbers of deaths at the peak of the second wave in Mangaung Metro and Lejweleputswa (Figure 13). There has been a small increase in deaths in all districts.

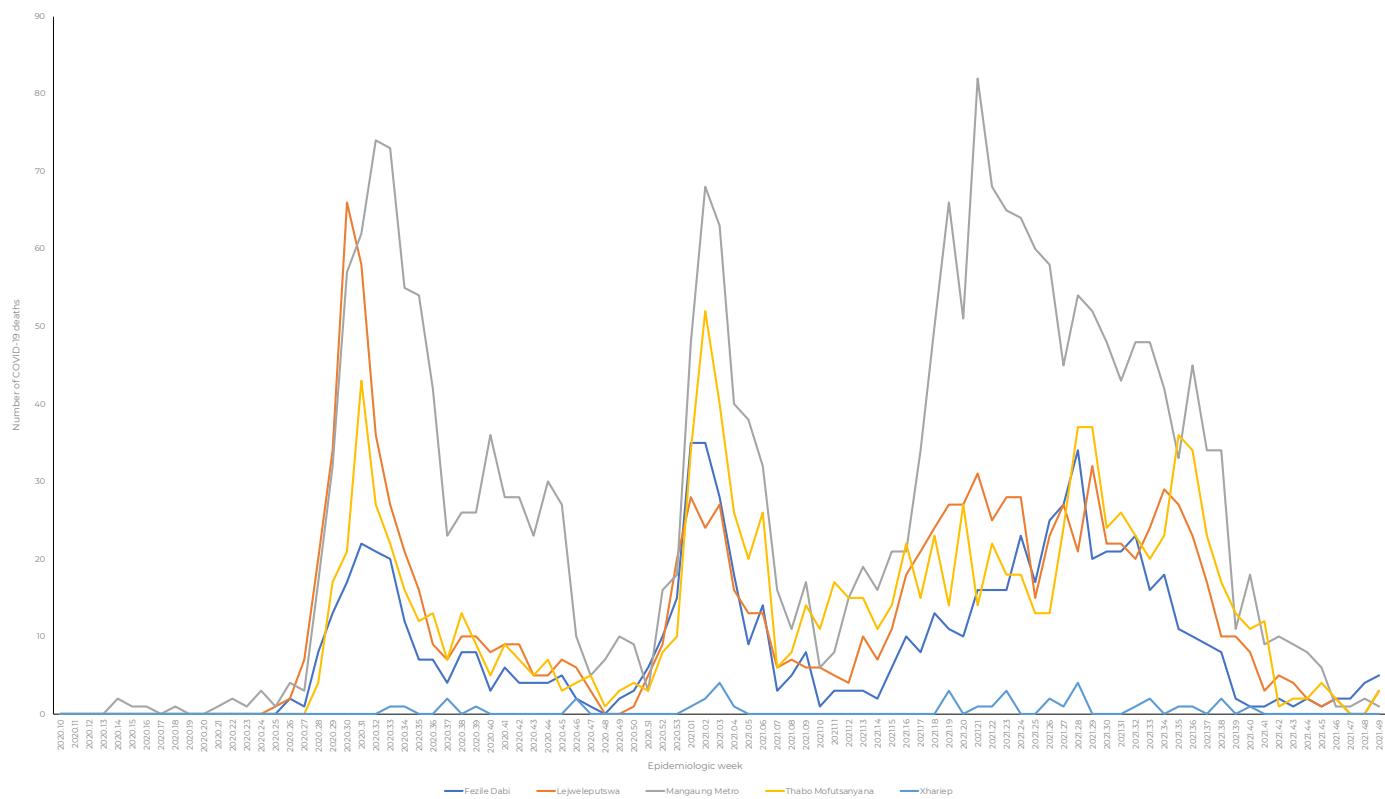


Figure 13: Number of reported COVID-19 in-hospital deaths, by district and epidemiologic week, Free State, 5 March 2020-11 December 2021, N=5,615

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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 6).

Table 6: Previous 14 days and current 14 days average COVID-19 admissions and deaths and percentage changes, Free State, 13 November-11 December 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	0.71	6.50	810.00	0.29	0.64	125.00
Lejweleputswa	0.79	8.64	1000.00	0.14	0.21	50.00
Mangaung Metro	2.71	13.79	407.89	0.14	0.21	50.00
Thabo Mofutsanyana	1.00	4.86	385.71	0.14	0.21	50.00
Xhariep	0.14	0.71	400.00	0.00	0.00	0.00

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KWAZULU-NATAL

In the first and second waves 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 third wave. 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, while weekly admissions in the third wave were lower than the second wave in both sectors (Figure 14). There has been an increase in admissions in both sectors since week 47.

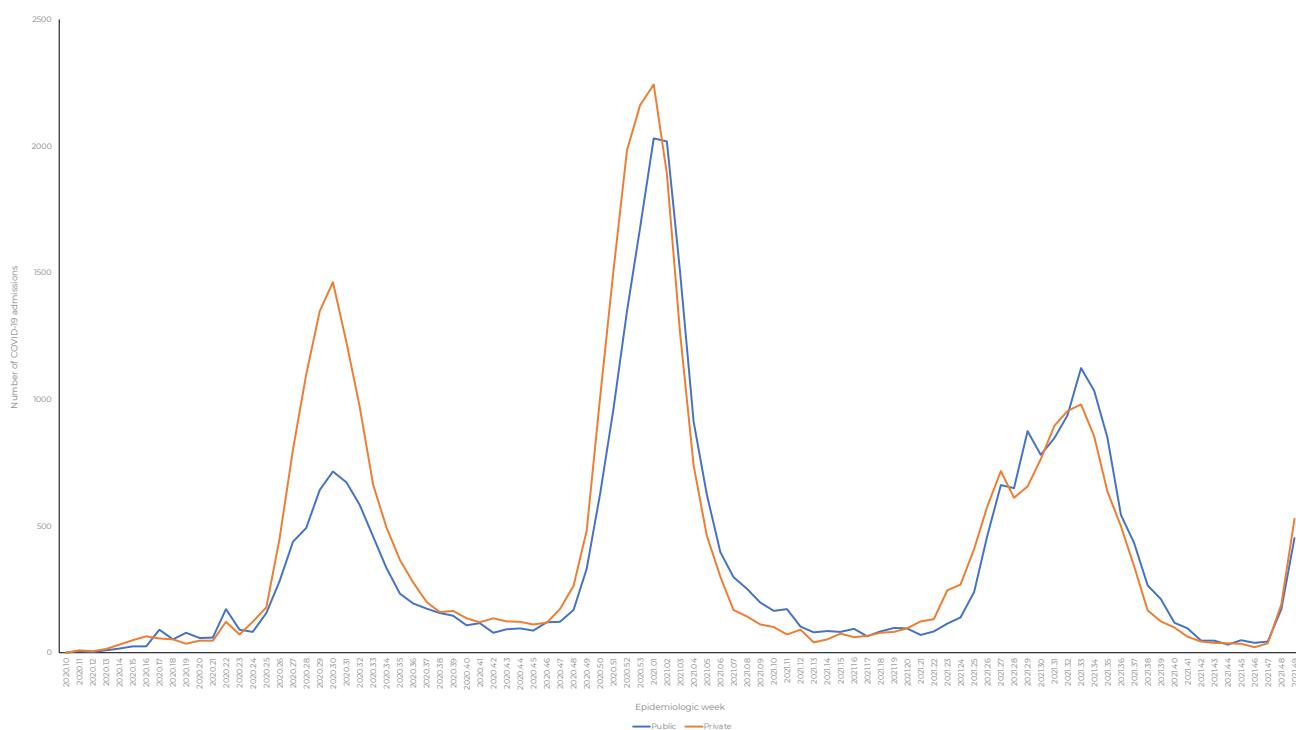


Figure 14: Number of reported COVID-19 admissions by health sector and epidemiologic week of diagnosis, KwaZulu-Natal, 5 March 2020-11 December 2021, N=71,417

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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. Weekly admissions at the peak of the third wave exceeded the weekly numbers of admissions at the peak of the second wave in Amajuba (Figure 15). There has been an increase in admissions in all districts since week 47.

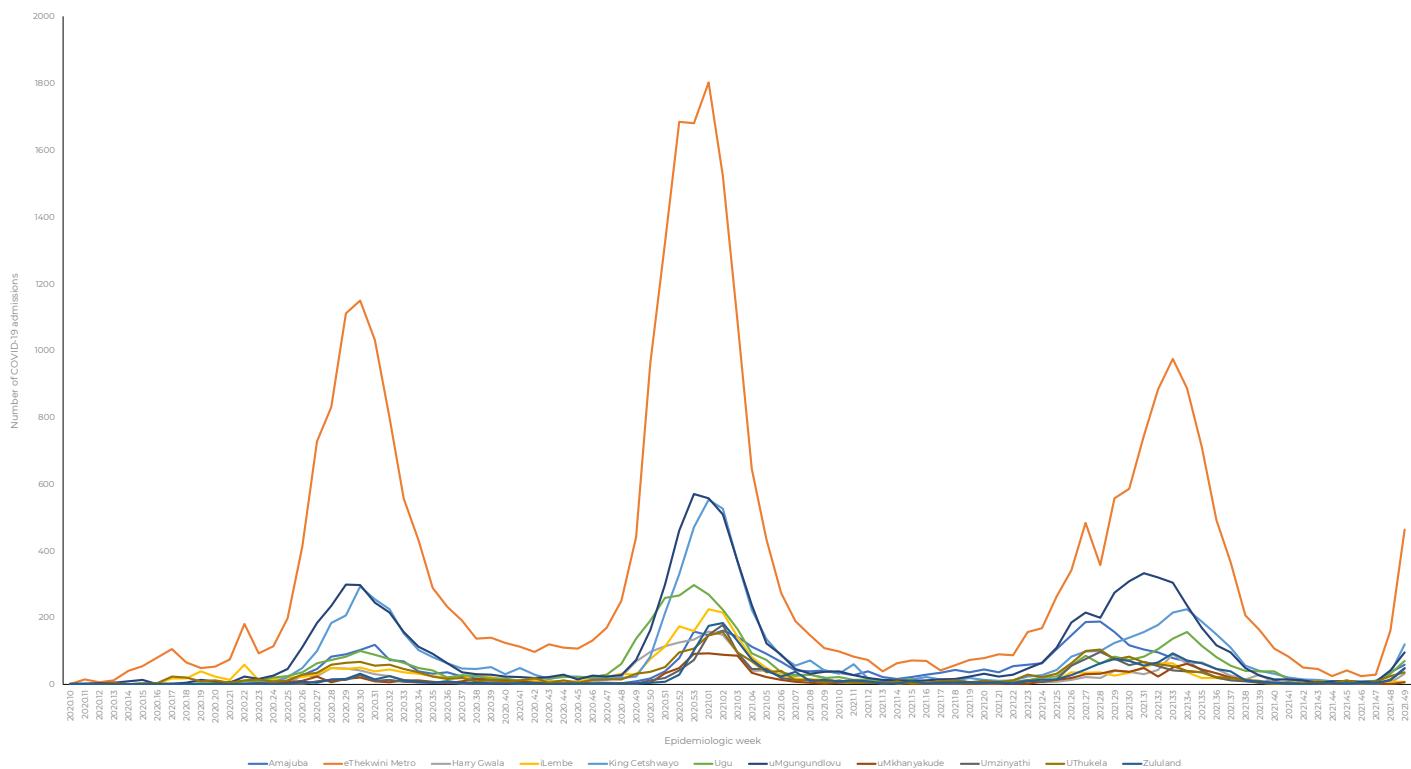


Figure 15: Number of reported COVID-19 admissions, by district and epidemiologic week, KwaZulu-Natal, 5 March 2020-11 December 2021, N=71,417

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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. Weekly deaths at the peak of the third wave exceeded the weekly numbers of deaths at the peak of the second wave in Amajuba (Figure 16) There has not been an increase in numbers of deaths in all districts.

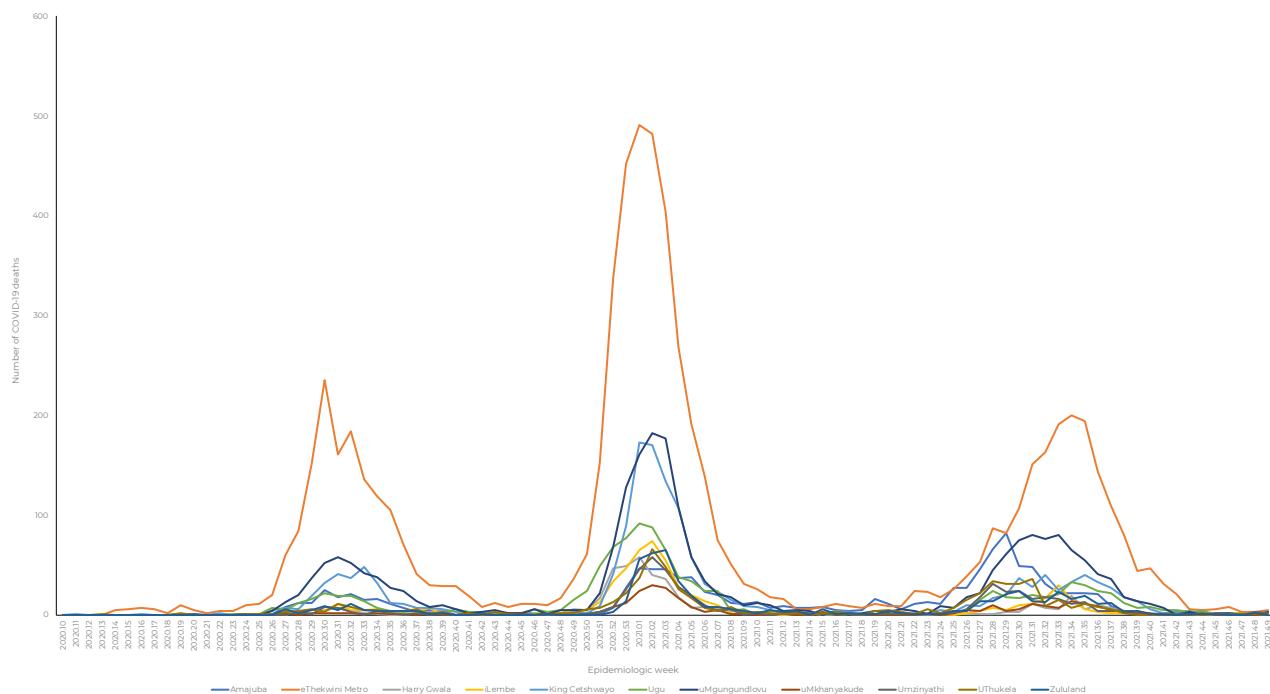


Figure 16: Number of reported COVID-19 in-hospital deaths, by district and epidemiologic week, KwaZulu-Natal, 5 March 2020-11 December 2021, N=15,786

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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 7).

Table 7: Previous 14 days and current 14 days average COVID-19 admissions and deaths and percentage changes, KwaZulu-Natal, 13 November-11 December 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	0.43	6.64	1450.00	0.00	0.00	0.00
eThekweni Metro	3.86	44.50	1053.70	0.79	0.57	-27.27
Harry Gwala	0.29	2.57	800.00	0.00	0.00	0.00
iLembe	0.64	1.00	55.56	0.00	0.00	0.00
King Cetshwayo	1.29	10.86	744.44	0.07	0.29	300.00
Ugu	1.21	7.29	500.00	0.29	0.07	-75.00
uMgungundlovu	1.07	9.79	813.33	0.14	0.21	50.00
uMkhanyakude	0.21	0.43	100.00	0.07	0.00	-100.00
Umzinyathi	0.07	4.57	6300.00	0.07	0.36	400.00
UThukela	0.64	4.36	577.78	0.07	0.07	0.00
Zululand	0.57	4.14	625.00	0.00	0.14	0.00

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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, while weekly admissions in the third wave were lower than the second wave in both sectors (Figure 17). There has been an increase in admissions in both sectors since week 46.

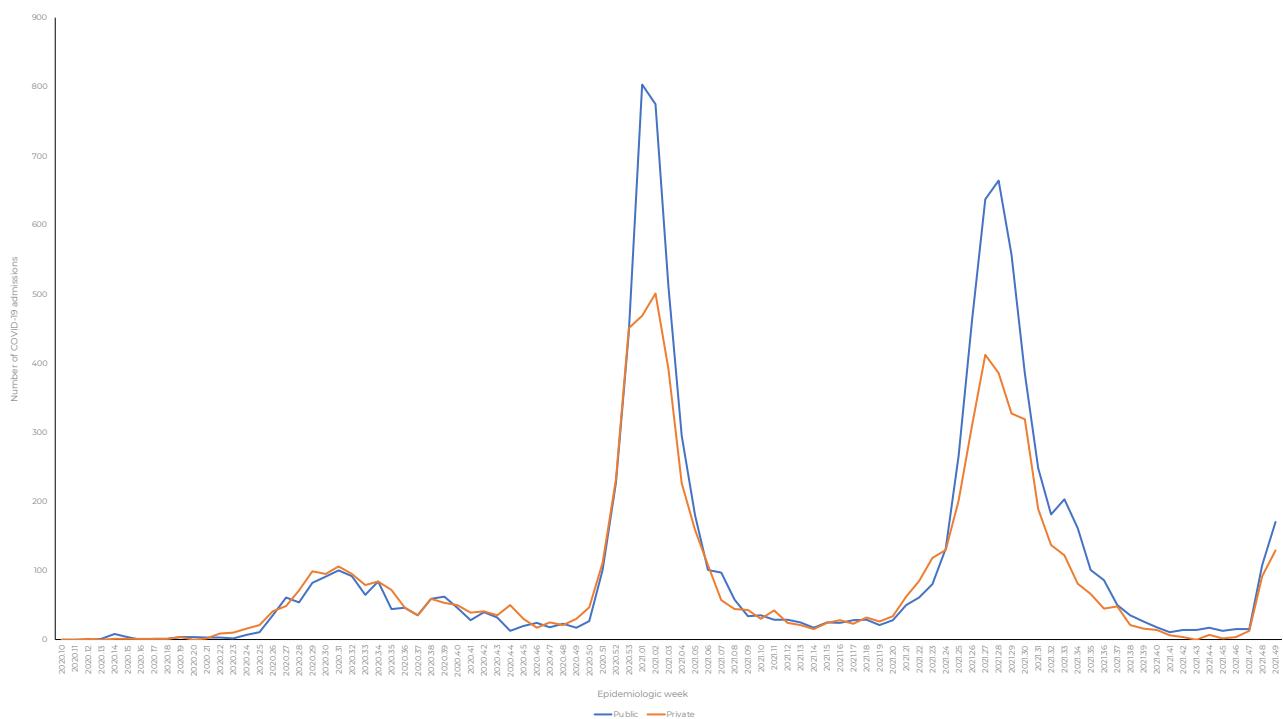


Figure 17: Number of reported COVID-19 admissions by health sector and epidemiologic week of diagnosis, Limpopo, 5 March 2020-11 December 2021, N=17,805Um enis aut quis molut que volor sam,

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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. 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). There has been an increase in admissions in all districts since week 46.

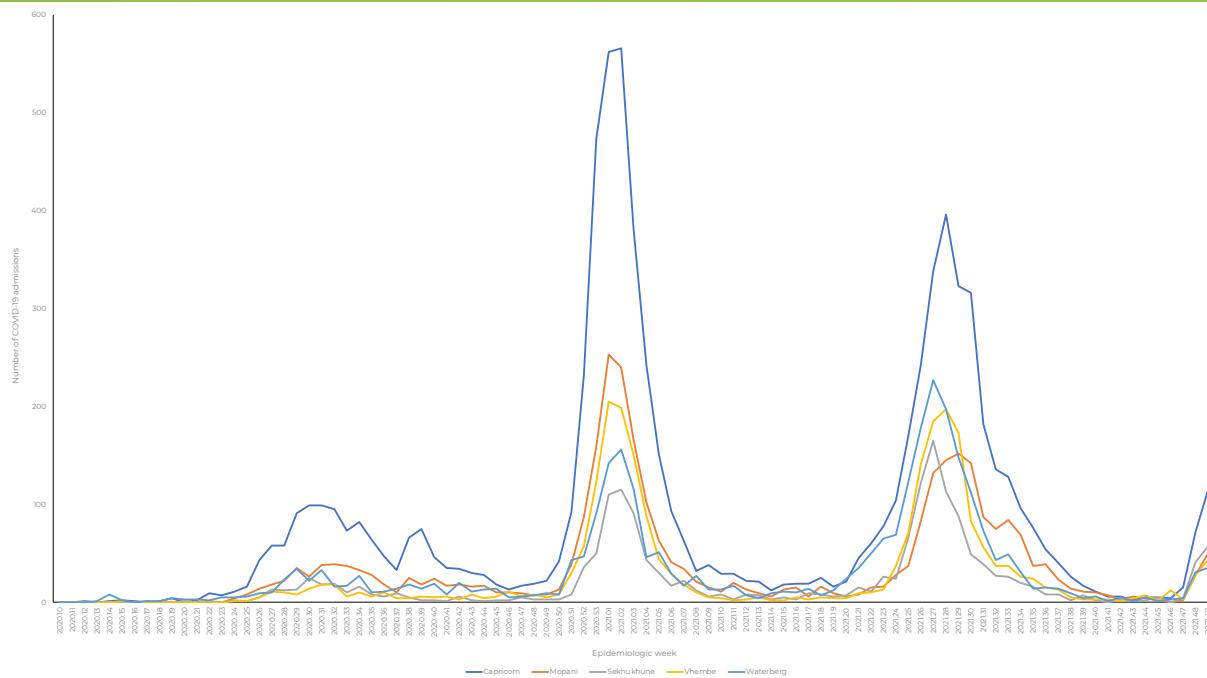


Figure 18: Number of reported COVID-19 admissions, by district and epidemiologic week, Limpopo, 5 March 2020-11 December 2021, N=17,805

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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. Weekly deaths at the peak of the third wave exceeded the weekly numbers of deaths at the peak of the second wave in Sekhukhune and Waterberg (Figure 19). There has not been an increase in the numbers of deaths in all districts.

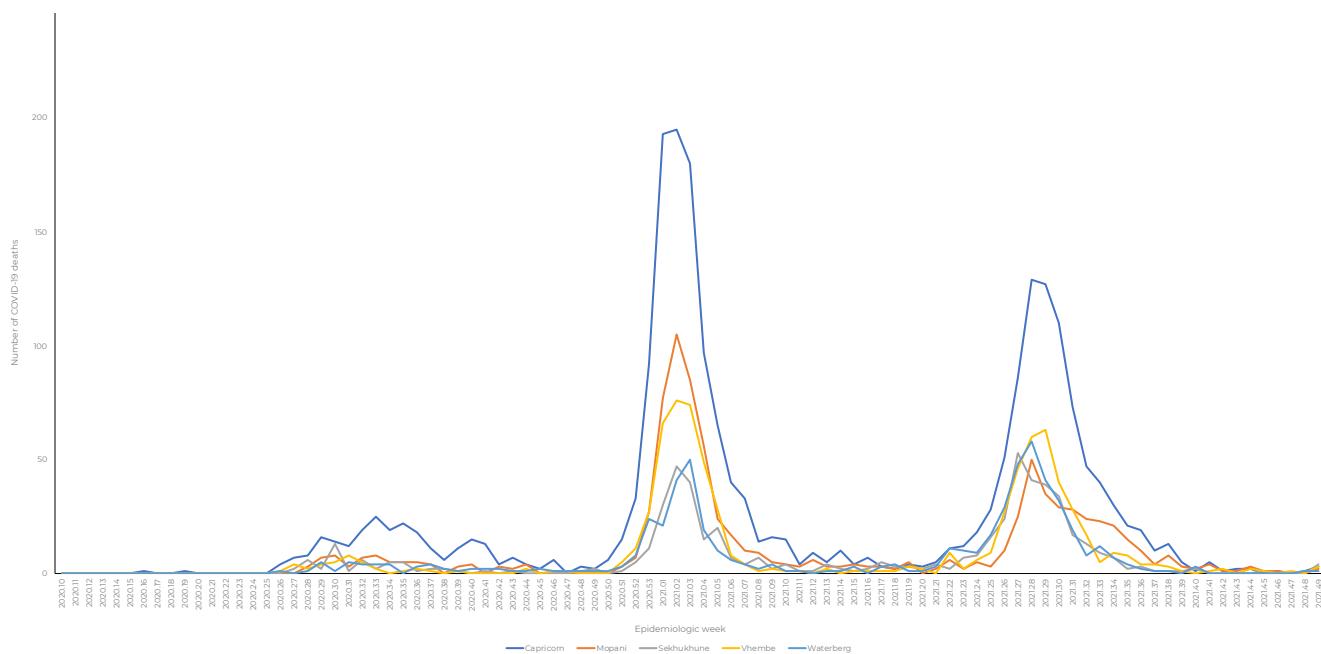


Figure 19: Number of reported COVID-19 in-hospital deaths, by district and epidemiologic week, Limpopo, 5 March 2020-11 December 2021, N=4,885

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 8).

Table 8: Previous 14 days and current 14 days average COVID-19 admissions and deaths and percentage changes, Limpopo, 13 November-11 December 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	1.36	13.29	878.95	0.07	0.29	300.00
Mopani	0.14	5.57	3800.00	0.07	0.14	100.00
Sekhukhune	0.29	7.00	2350.00	0.00	0.29	0.00
Vhembe	1.07	5.07	373.33	0.07	0.21	200.00
Waterberg	0.50	4.71	842.86	0.00	0.14	0.00

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MPUMALANGA

In the first wave 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. 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. 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). There has been an increase in admissions in both sectors since week 46.

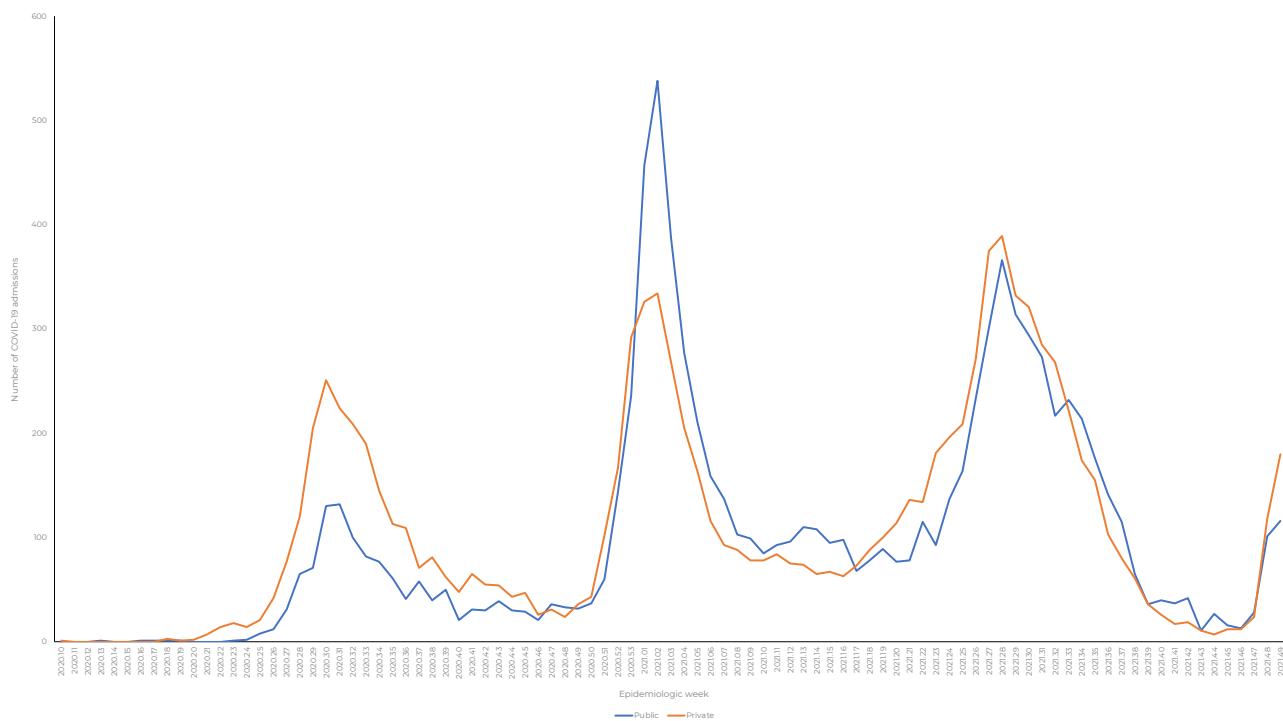
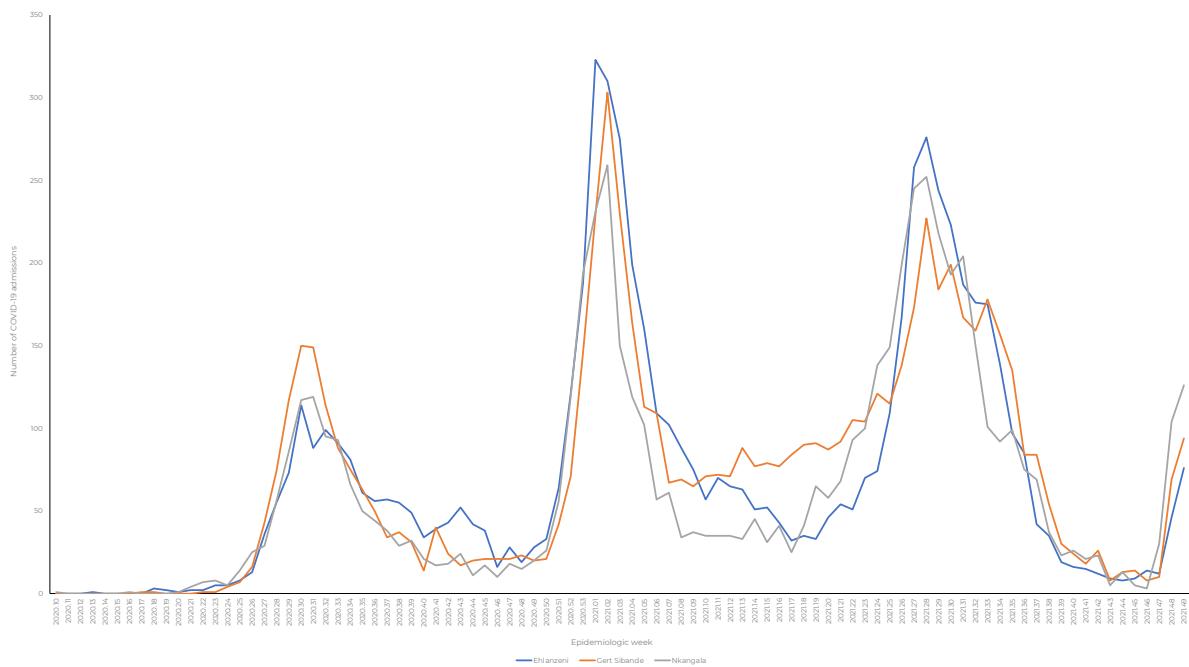


Figure 20: Number of reported COVID-19 admissions by health sector and epidemiologic week of diagnosis, Mpumalanga, 5 March 2020-11 December 2021, N=19,012

COVID-19 HOSPITAL SURVEILLANCE UPDATE

WEEK 49 2021

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, while weekly admissions in the third wave were lower than the second wave in all districts (Figure 21). There has been an increase in the number of weekly admissions in all districts since week 46.



COVID-19 HOSPITAL SURVEILLANCE UPDATE

WEEK 49 2021

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, while weekly deaths in the third wave were lower than the second wave in all districts (Figure 22). There has been an increase in the number of deaths in Nkangala.

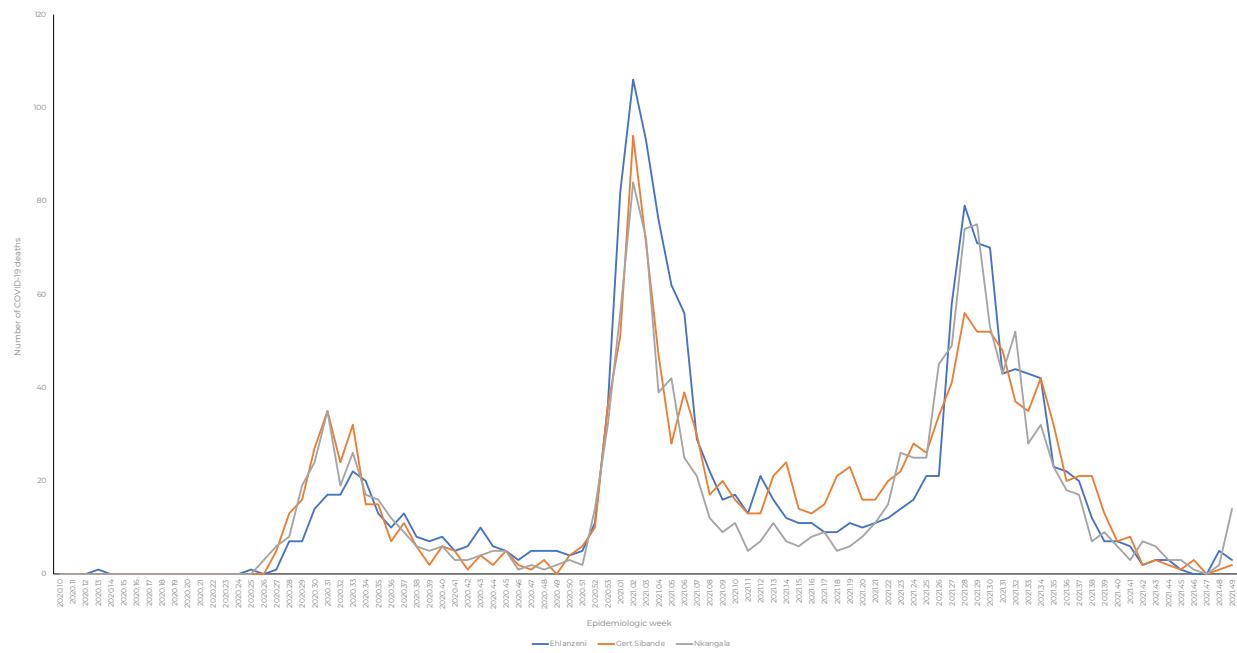


Figure 22: Number of reported COVID-19 in-hospital deaths, by district and epidemiologic week, Mpumalanga, 5 March 2020-11 December 2021, N=4,540

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 9).

Table 9: Previous 14 days and current 14 days average COVID-19 admissions and deaths and percentage changes, Mpumalanga, 13 November-11 December 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	1.79	8.71	388.00	0.00	0.57	0.00
Gert Sibande	1.29	11.64	805.56	0.21	0.21	0.00
Nkangala	2.36	16.43	596.97	0.07	1.14	1500.00

COVID-19 HOSPITAL SURVEILLANCE UPDATE

WEEK 49 2021

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. 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). There has been an increase in numbers of weekly admissions in both sectors since week 46.

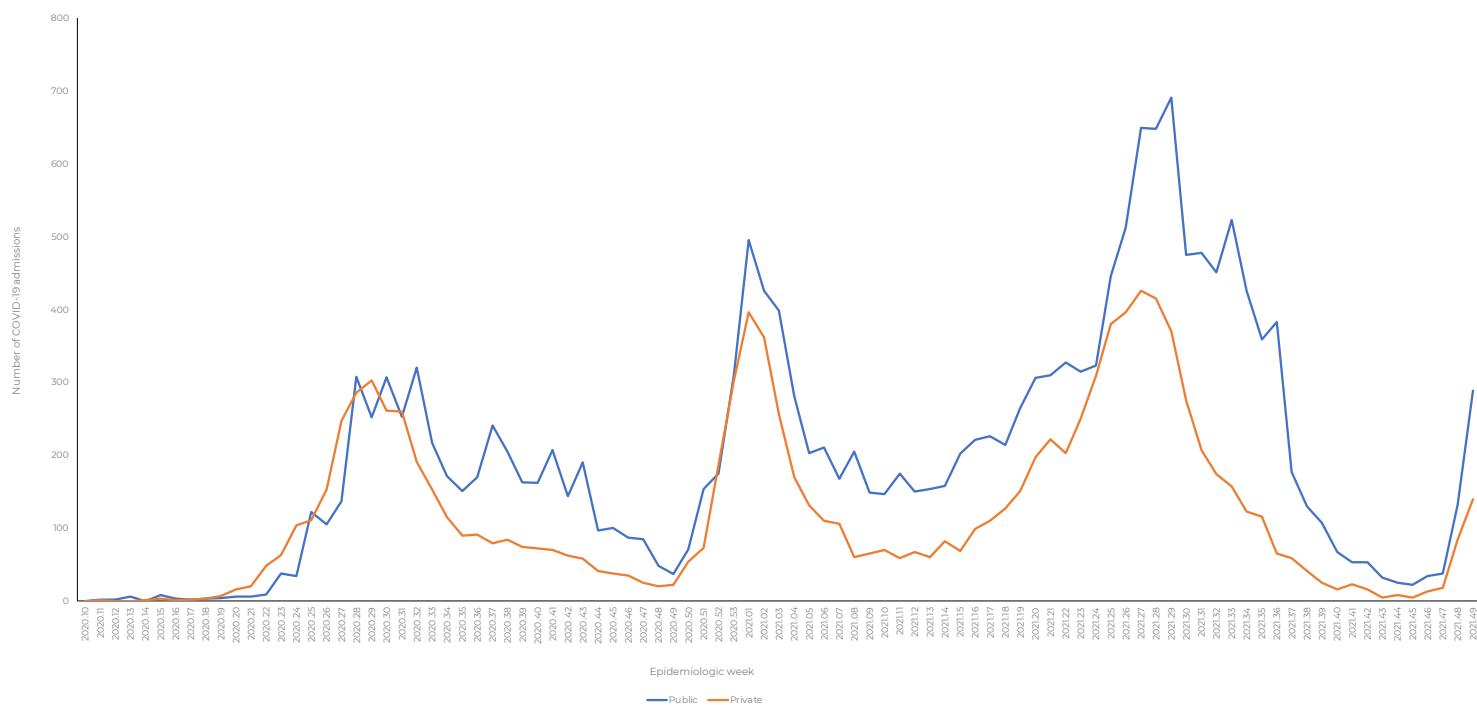


Figure 23: Number of reported COVID-19 admissions by health sector and epidemiologic week of diagnosis, North West, 5 March 2020-11 December 2021, N=29,434

COVID-19 HOSPITAL SURVEILLANCE UPDATE

WEEK 49 2021

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. 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). There has been an increase in the numbers of weekly admissions in all districts except Ngaka Modiri Molema since week 46.

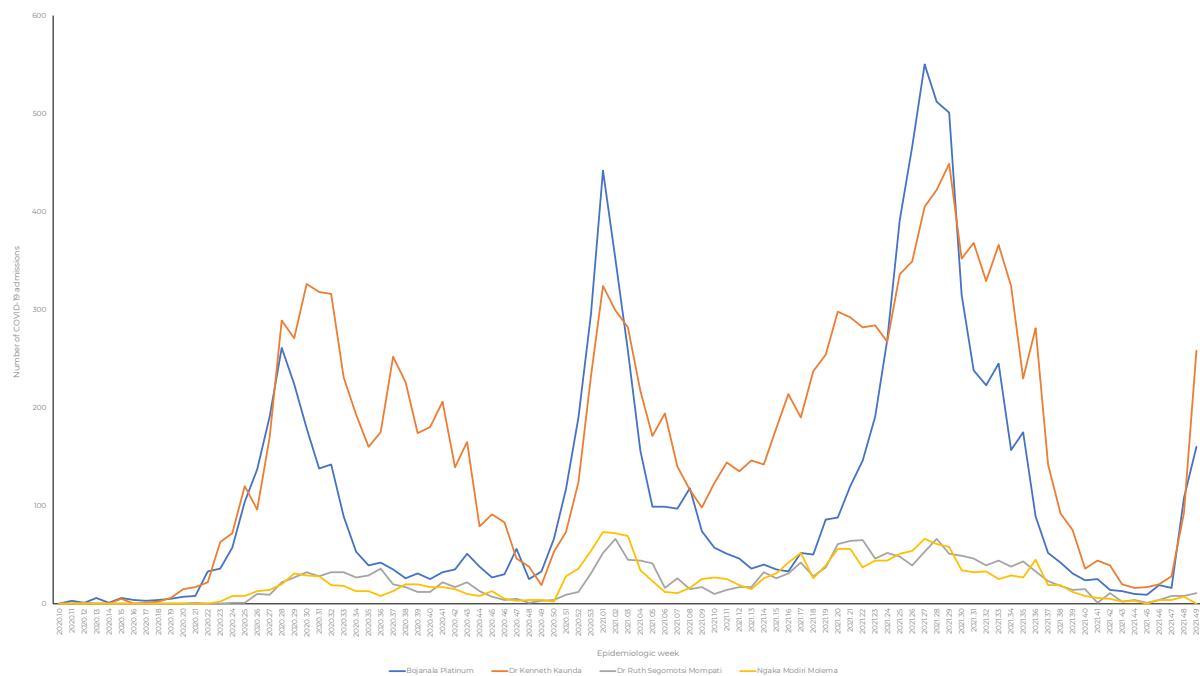


Figure 24: Number of reported COVID-19 admissions, by district and epidemiologic week, North West, 5 March 2020-11 December 2021, N=29,434

COVID-19 HOSPITAL SURVEILLANCE UPDATE

WEEK 49 2021

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. Weekly deaths at the peak of the third wave exceeded the weekly numbers of deaths at the peak of the second wave in Bojanala Platinum and Dr Kenneth Kaunda (Figure 25). There has been a small increase in deaths in Dr Kenneth Kaunda and Bojanala Platinum district.

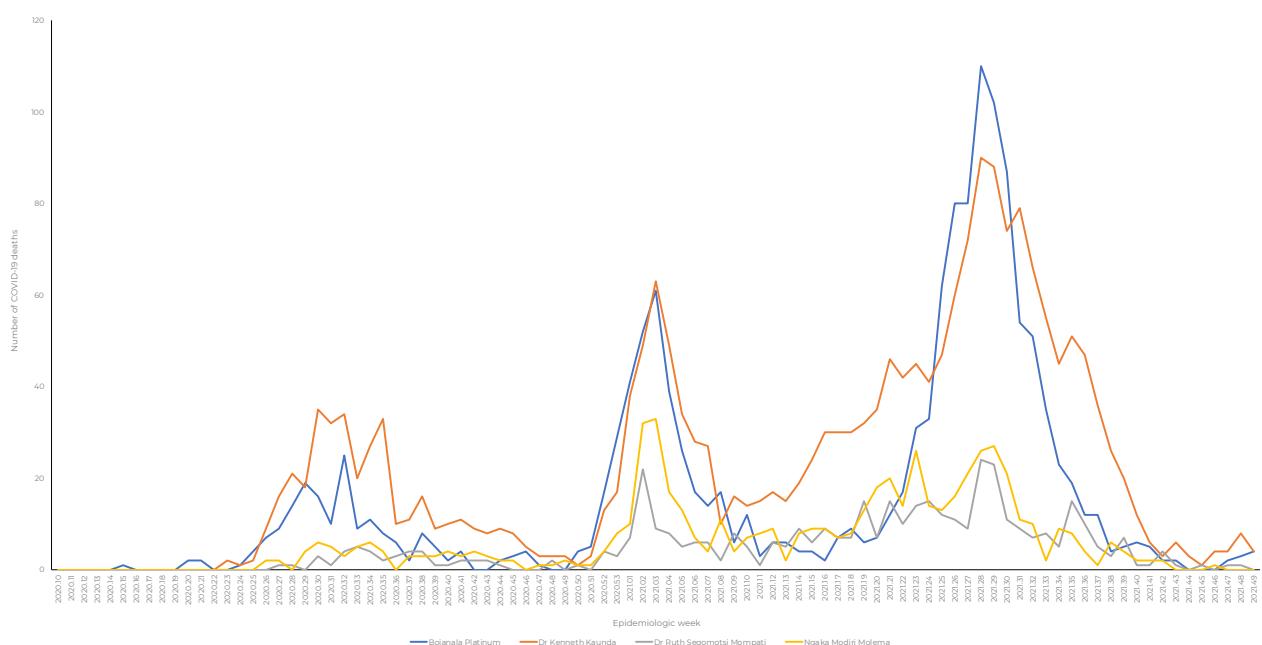


Figure 25: Number of reported COVID-19 in-hospital deaths, by district and epidemiologic week, North West, 5 March 2020-11 December 2021, N=4,472

There has been an increase in average daily COVID-19 admissions comparing the previous 14 days and the current 14 days in all districts except Ngaka Modiri Molema (Table 10).

Table 10: Previous 14 days and current 14 days average COVID-19 admissions and deaths and percentage changes, North West, 13 November-11 December 2021.

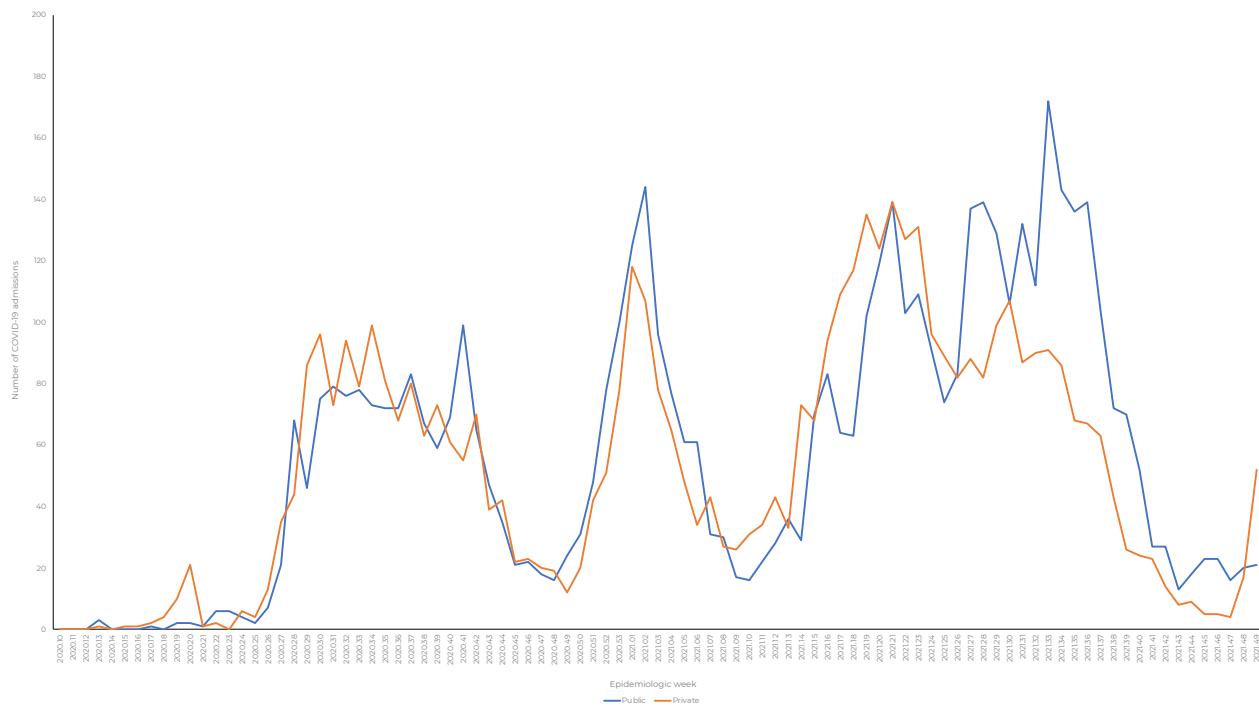
District	Previous 14 days admissions average	Current 14 days admissions average	Percentage change in admissions	Previous 14 days deaths average	Current 14 days deaths average	Percentage change in deaths
Bojanala Platinum	2.50	19.14	665.71	0.14	0.50	250.00
Dr Kenneth Kaunda	3.43	25.07	631.25	0.57	0.86	50.00
Dr Ruth Segomotsi Mompati	0.86	1.36	58.33	0.07	0.07	0.00
Ngaka Modiri Molema	0.57	0.50	-12.50	0.07	0.00	-100.00

COVID-19 HOSPITAL SURVEILLANCE UPDATE

WEEK 49 2021

NORTHERN CAPE

In all three waves there were roughly equal numbers of admissions in both sectors, however a second increase in the third wave was concentrated more 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. 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 26). There has been increases in admissions in both sectors since week 47.



COVID-19 HOSPITAL SURVEILLANCE UPDATE

WEEK 49 2021

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. 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 27). There has been an increase in weekly admissions in all districts except Namakwa.

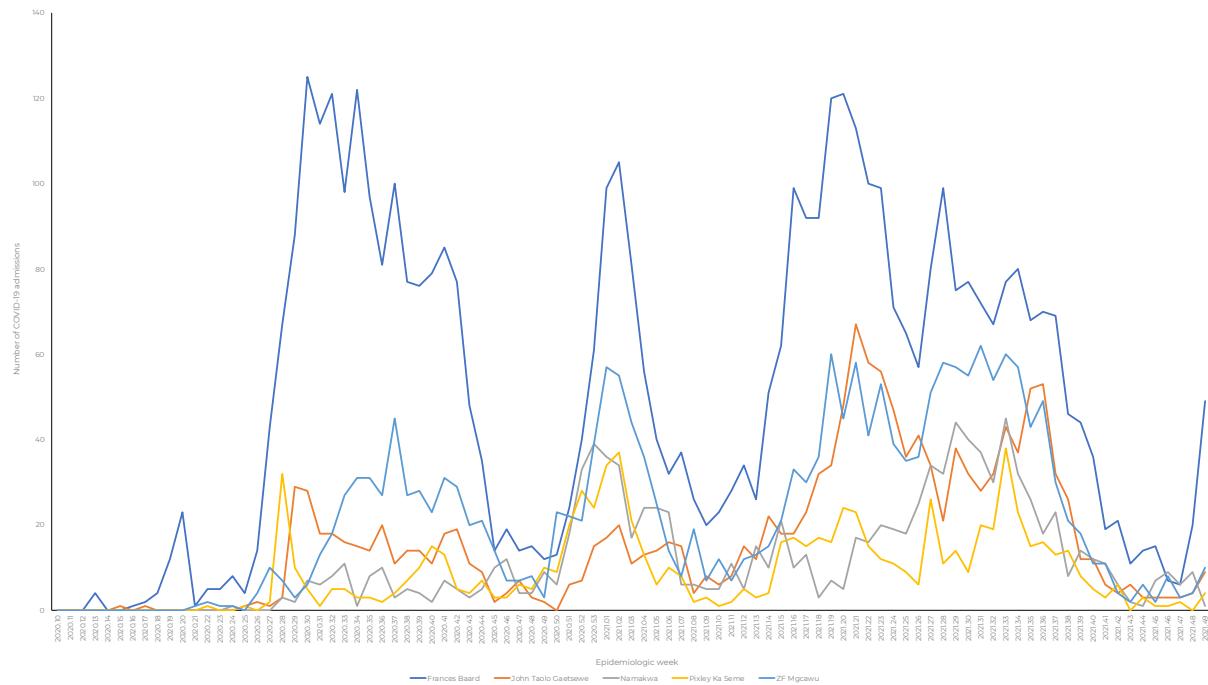


Figure 27: Number of reported COVID-19 admissions by district and epidemiologic week, Northern Cape, 5 March 2020-11 December 2021, N=10,100

COVID-19 HOSPITAL SURVEILLANCE UPDATE

WEEK 49 2021

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. 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). There have been no increases in deaths in all districts.

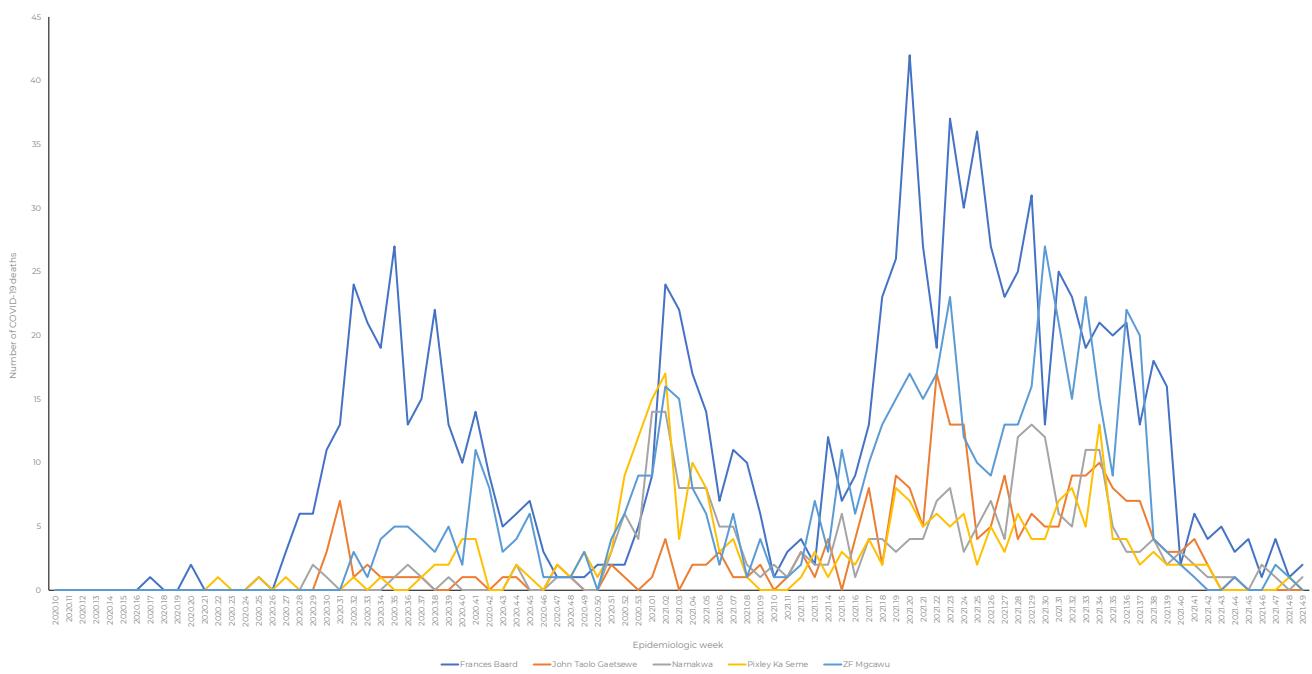


Figure 28: Number of reported COVID-19 in-hospital deaths, by district and epidemiologic week, Northern Cape, 5 March 2020-11 December 2021, N=2,280

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 Namakwa (Table 11).

Table 11: Previous 14 days and current 14 days average COVID-19 admissions and deaths and percentage changes, Northern Cape, 13 November-11 December 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	0.93	4.93	430.77	0.36	0.21	-40.00
John Taolo Gaetsewe	0.43	0.93	116.67	0.00	0.00	0.00
Namakwa	1.07	0.71	-33.33	0.21	0.07	-66.67
Pixley Ka Seme	0.21	0.29	33.33	0.00	0.07	0.00
ZF Mgcawu	0.79	1.00	27.27	0.14	0.07	-50.00

COVID-19 HOSPITAL SURVEILLANCE UPDATE

WEEK 49 2021

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, while weekly admissions in the third wave were lower than the second wave in both sectors (Figure 29). There has been an increase in admissions in both sectors since week 47.

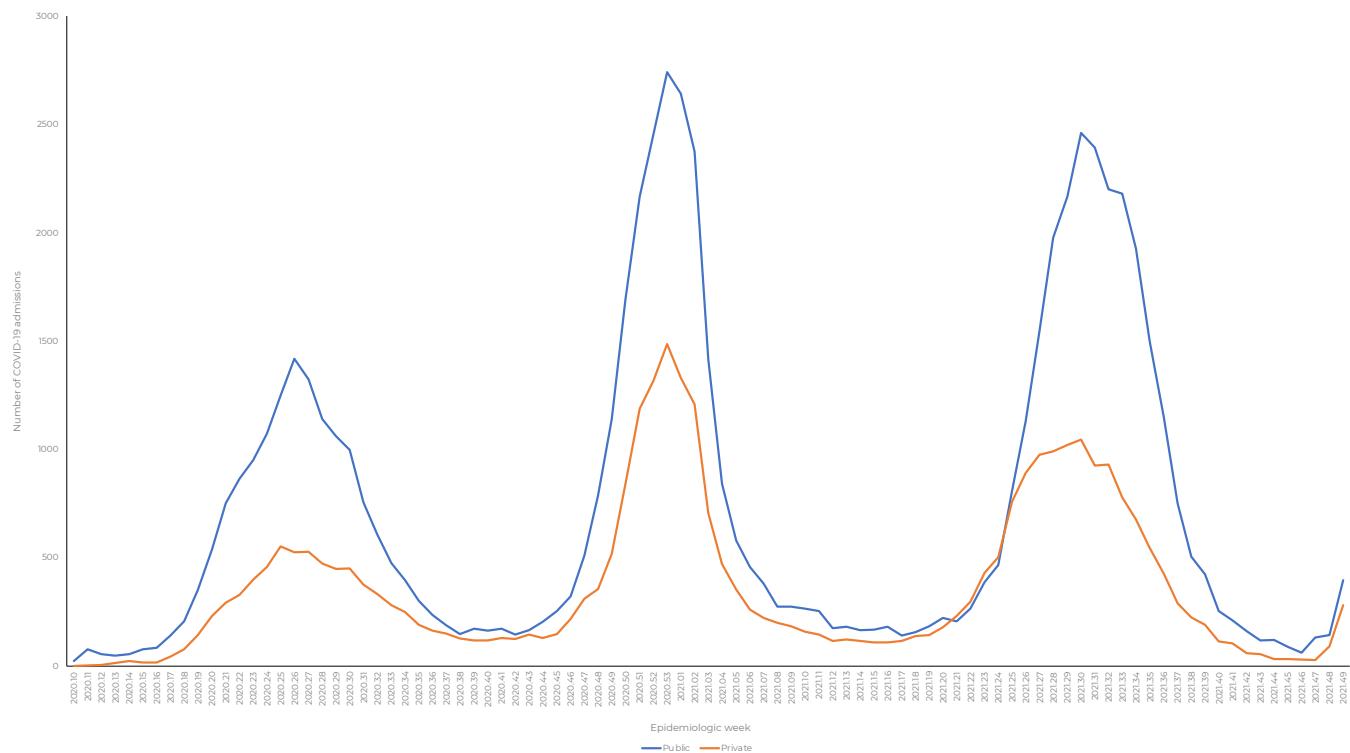


Figure 29: Number of reported COVID-19 admissions by health sector and epidemiologic week of diagnosis, Western Cape, 5 March 2020-11 December 2021, N=99,423

COVID-19 HOSPITAL SURVEILLANCE UPDATE

WEEK 49 2021

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. Weekly number of admissions in the third wave exceeded the weekly numbers of admissions at the peak of the second wave in Central Karoo and Garden Route (Figure 30). There has been an increase in admissions in all districts except Central Karoo since week 47.

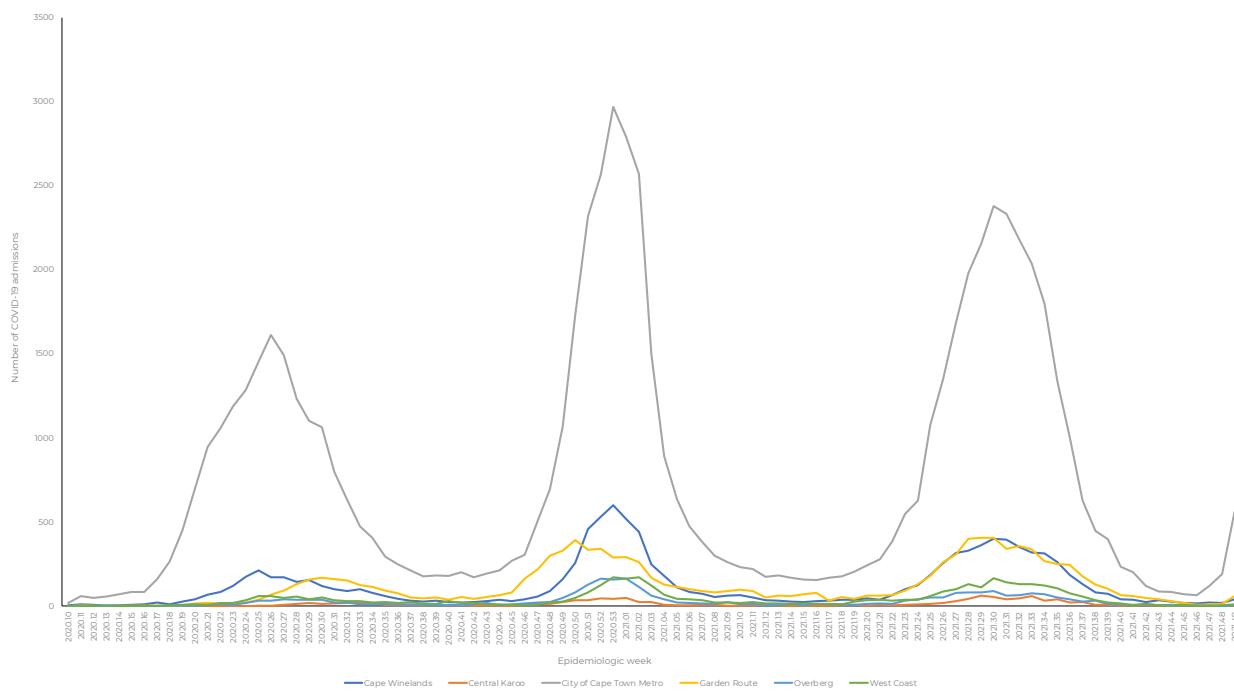


Figure 30: Number of reported COVID-19 admissions, by district and epidemiologic week, Western Cape, 5 March 2020-11 December 2021, N=99,423

COVID-19 HOSPITAL SURVEILLANCE UPDATE

WEEK 49 2021

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. Weekly number of deaths in the third wave exceeded the weekly numbers of deaths at the peak of the second wave in Central Karoo, Garden Route and West Coast (Figure 31). There have been no increases in the numbers of deaths in all districts.

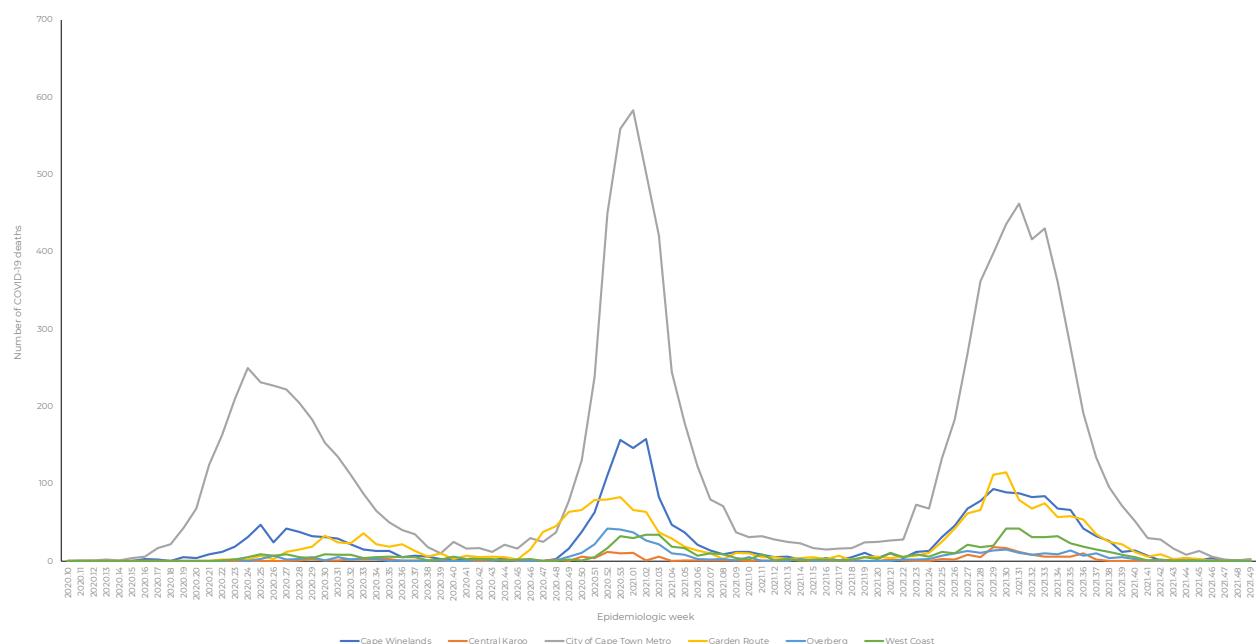


Figure 31: Number of reported COVID-19 in-hospital deaths, by district and epidemiologic week, Western Cape, 5 March 2020-11 December 2021, N=17,219

There has been a small increase in average daily COVID-19 admissions comparing the previous 14 days and the current 14 days in all districts except Central Karoo (Table 12).

Table 12: Previous 14 days and current 14 days average COVID-19 admissions and deaths and percentage changes, Western Cape, 13 November-11 December 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	2.57	4.29	66.67	0.29	0.21	-25.00
Central Karoo	0.43	0.36	-16.67	0.07	0.00	-100.00
City of Cape Town Metro	13.14	53.50	307.07	0.57	0.29	-50.00
Garden Route	1.07	5.29	393.33	0.07	0.07	0.00
Overberg	0.29	0.36	25.00	0.07	0.00	-100.00
West Coast	0.36	1.00	180.00	0.00	0.07	0.00

COVID-19 HOSPITAL SURVEILLANCE UPDATE

WEEK 49 2021

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.

COVID-19 HOSPITAL SURVEILLANCE UPDATE

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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)

COVID-19 HOSPITAL SURVEILLANCE UPDATE

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APPENDIX

Table 13: Percentage incidence change in hospital admissions over 14 days, by district, South Africa, 27 November-11 December 2021.

Province	District	Total admissions	Incidence (per 100k)	New admissions	New admissions incidence (per 100k)	% average change (14 days)
Eastern Cape	Alfred Nzo	2346	281.89	32	3.85	166.67
	Amathole	2860	357.86	22	2.75	100.00
	Buffalo City Metro	9204	1149.24	103	12.86	202.94
	Chris Hani	4552	625.57	42	5.77	200.00
	Joe Gqabi	1020	295.68	20	5.80	233.33
	Nelson Mandela Bay Metro	14713	1212.88	75	6.18	257.14
	O R Tambo	4395	286.85	32	2.09	88.24
	Sarah Baartman	2890	597.33	13	2.69	225.00
Free State	Fezile Dabi	3187	624.75	66	12.94	144.44
	Lejweleputswa	5563	851.13	110	16.83	307.41
	Mangaung Metro	12761	1465.23	157	18.03	161.67
	Thabo Mofutsanyana	4889	639.24	60	7.85	650.00
	Xhariep	608	469.70	9	6.95	350.00
Gauteng	City of Johannesburg Metro	47143	803.59	848	14.45	14.29
	City of Tshwane Metro	36296	973.32	967	25.93	-10.46
	Ekurhuleni Metro	28721	721.23	497	12.48	32.53
	Sedibeng	8364	875.33	103	10.78	14.44
	West Rand	11473	1201.69	209	21.89	43.15
KwaZulu-Natal	Amajuba	4026	705.67	61	10.69	74.29
	eThekweni Metro	32977	828.32	479	12.03	181.76
	Harry Gwala	2175	423.13	32	6.23	700.00
	iLembe	2703	389.18	7	1.01	-22.22
	King Cetshwayo	7768	800.27	122	12.57	269.70
	Ugu	4710	587.48	70	8.73	100.00
	uMgungundlovu	9568	832.41	102	8.87	137.21

COVID-19 HOSPITAL SURVEILLANCE UPDATE

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Province	District	Total admissions	Incidence (per 100k)	New admissions	New admissions incidence (per 100k)	% average change (14 days)
	uMkhanyakude	1290	187.80	6	0.87	100.00
	Umgonyathi	1645	289.83	50	8.81	194.12
	UThukela	2643	370.06	37	5.18	42.31
	Zululand	1923	218.32	47	5.34	327.27
Limpopo	Capricorn	7565	578.38	115	8.79	55.41
	Mopani	3177	268.13	51	4.30	82.14
	Sekhukhune	1751	147.11	59	4.96	31.11
	Vhembe	2441	171.03	44	3.08	57.14
	Waterberg	2873	387.08	35	4.72	9.38
Mpumalanga	Ehlanzeni	6589	360.30	78	4.27	59.18
	Gert Sibande	6587	530.29	102	8.21	34.21
	Nkangala	5843	363.17	127	7.89	15.45
North West	Bojanala Platinum	10267	532.48	162	8.40	39.66
	Dr Kenneth Kaunda	15194	1904.69	296	37.11	193.07
	Dr Ruth Segomotsi Mompati	2032	429.53	11	2.33	37.50
	Ngaka Modiri Molema	1971	216.63	0	0.00	-100.00
Northern Cape	Frances Baard	4699	1132.53	51	12.29	142.86
	John Taolo Gaetsewe	1472	542.22	11	4.05	175.00
	Namakwa	1070	925.50	1	0.86	-90.91
	Pixley Ka Seme	824	390.73	4	1.90	100.00
	ZF Mgcawu	2039	728.47	10	3.57	66.67
Western Cape	Cape Winelands	11241	1194.25	48	5.10	60.00
	Central Karoo	1129	1503.07	2	2.66	-33.33
	City of Cape Town Metro	69546	1510.23	625	13.57	145.10
	Garden Route	11196	1795.21	70	11.22	311.76
	Overberg	2663	887.94	5	1.67	100.00
	West Coast	3759	815.73	10	2.17	42.86

COVID-19 HOSPITAL SURVEILLANCE UPDATE

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APPENDIX

Table 14: Number of reported COVID-19 admissions and in-hospital deaths by age and gender, South Africa, 5 March 2020-11 December 2021.

Age (years)	ADMISSIONS				DEATHS			
	Female	Male	Unknown	Total	Female	Male	Unknown	Total
0-4	3932	4888	27	8847	138	144	2	284
5-9	1141	1446	7	2594	23	22	0	45
10-14	1820	1755	7	3582	58	47	0	105
15-19	5262	2824	2	8088	123	111	0	234
20-24	8298	4127	4	12429	280	217	1	498
25-29	13458	6081	11	19550	641	410	0	1051
30-34	17652	10055	6	27713	1090	902	1	1993
35-39	18944	13759	18	32721	1625	1501	4	3130
40-44	17638	15617	10	33265	2028	2087	0	4115
45-49	19995	19618	12	39625	2991	3134	1	6126
50-54	23530	21841	9	45380	4143	4236	1	8380
55-59	26257	23736	12	50005	5889	5869	5	11763
60-64	23035	21010	16	44061	6310	6489	4	12803
65-69	19724	17533	13	37270	6531	6055	5	12591
70-74	16490	14447	17	30954	5717	5527	4	11248
75-79	12200	9953	9	22162	4479	4141	2	8622
80-84	9181	6285	7	15473	3644	2788	3	6435
85-89	4841	2966	2	7809	1988	1439	0	3427
90-94	2090	1014	1	3105	965	528	0	1493
>=95	636	315	2	953	304	135	0	439
Unknown	1183	1167	45	2395	69	111	0	180
Total	247307	200437	237	447981	49036	45893	33	94962