

COVID-19 Hospital Surveillance

Update: Week 35, 2022

Overview of report

This report summarises data of COVID-19 cases admitted to hospital surveillance sites in all provinces. The report is based on data collected from 5 March 2020 to 3 September 2022.

Highlights

- There was a 40% decrease in the number of new admissions in week 35 2022 (104) compared to the number of admissions in week 34 2022 (173). Delays in reporting of admissions and deaths may affect the numbers reported in the most recent week.
- Gauteng had the highest number of admissions in the past week (37/104, 35.6%), followed by KwaZulu-Natal (29/111, 27.9%) and Western Cape (11/111, 10.6%). There was no admission in Limpopo and Northern Cape in the past week.
- The highest weekly incidence risk of COVID-19 admissions reported in week 35 of 2022 was in the ≥65-year age group (0.7 admissions per 100 000 persons), and the lowest weekly incidence risk were in <20 and 20-34-years age group (0.1 admissions per 100 000 persons).

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 2021 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 3 September 2022, a total of 669 facilities submitted data on hospitalised COVID-19 cases, 408 from public sector and 262 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 2020-3 September 2022.

Facilities reporting	Public	Private
Eastern Cape	86	18
Free State	35	20
Gauteng	39	99
KwaZulu-Natal	71	47
Limpopo	41	7
Mpumalanga	31	9
North West	17	13
Northern Cape	29	6
Western Cape	59	43
South Africa	408	262

Results

Epidemiological and demographic trends in admissions

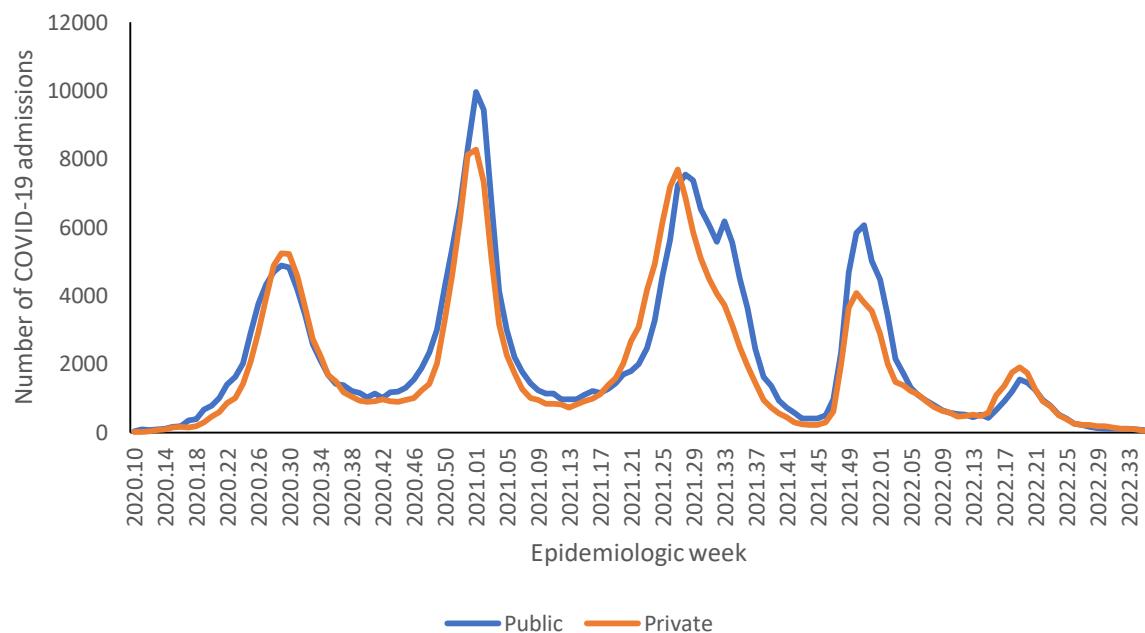


Figure 1: Number of reported COVID-19 admissions by health sector and epidemiologic week of diagnosis, South Africa, 5 March 2020-3 September 2022, N=542,358

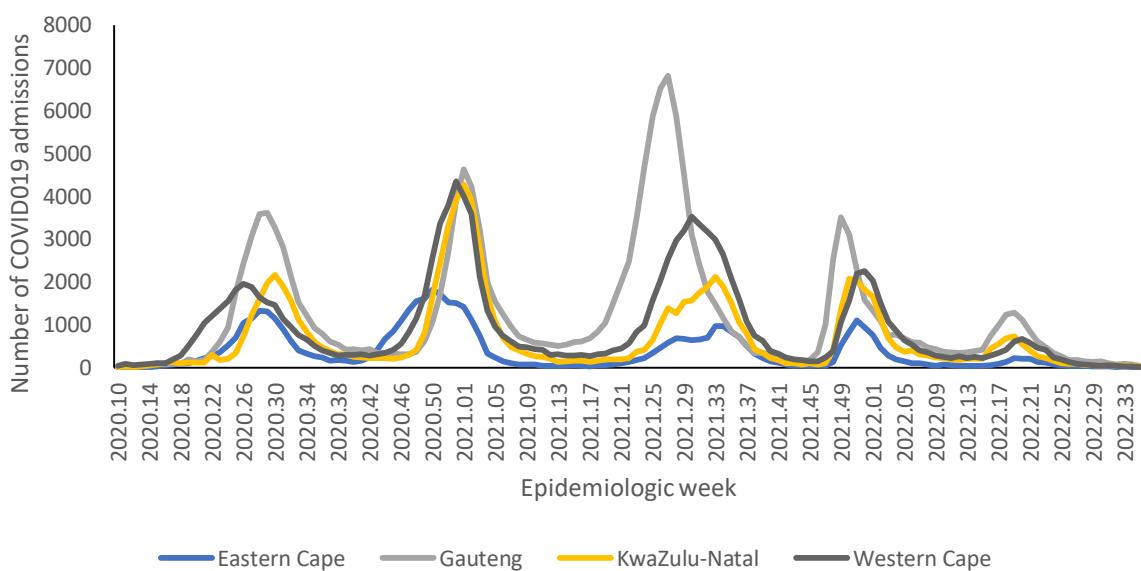


Figure 2a: Number of reported COVID-19 admissions, by provinces with highest admissions and epidemiologic week of diagnosis, South Africa, 5 March 2020-3 September 2022, N=542,358

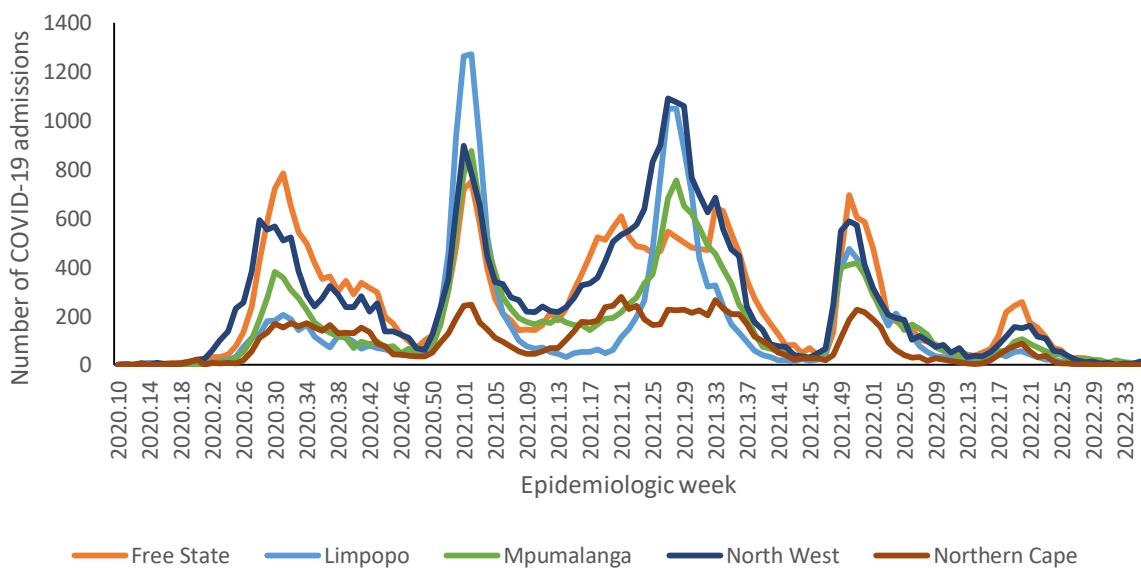


Figure 2b: Number of reported COVID-19 admissions, by provinces with lowest admissions and epidemiologic week of diagnosis, South Africa, 5 March 2020-3 September 2022, N=542,358

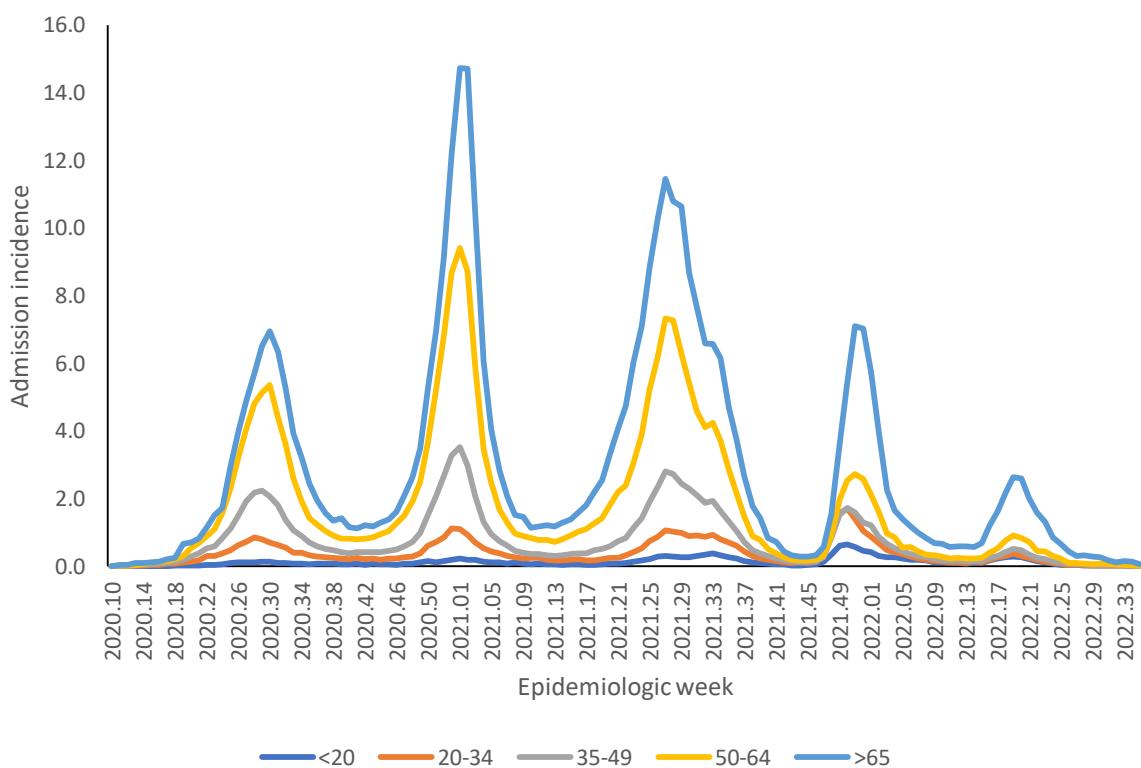


Figure 3: Incidence risk of COVID-19 admissions per 100,000 persons, by age group and epidemiologic week of diagnosis, South Africa, 5 March 2020-3 September 2022, N=542,358

Epidemiological and demographic trends in in-hospital mortality

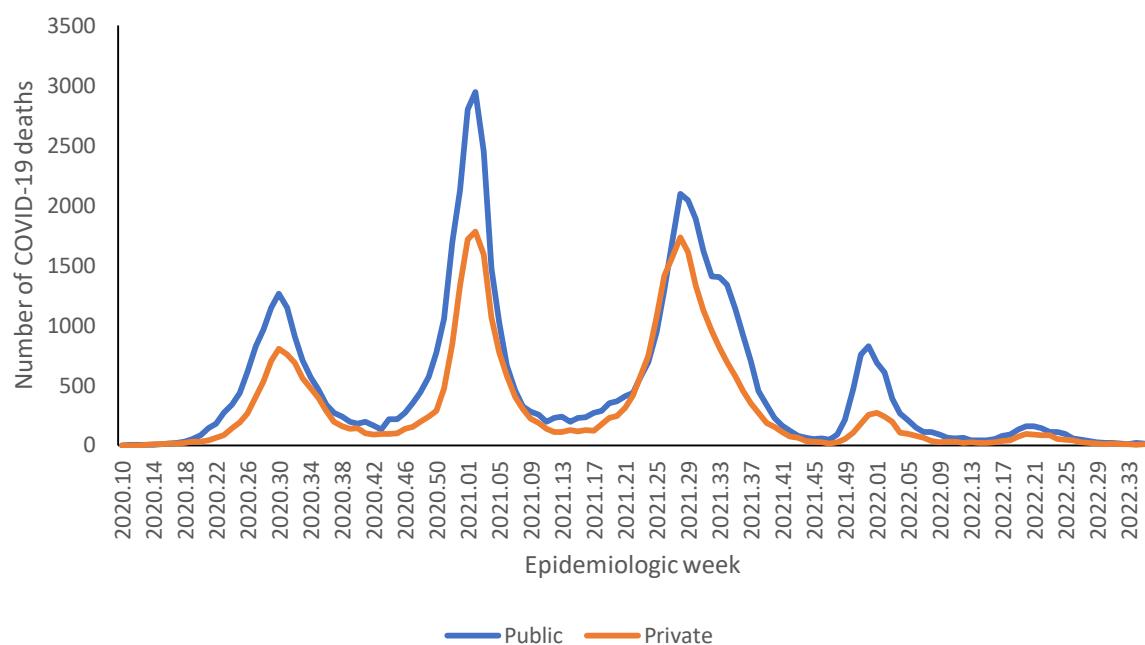


Figure 4: Number of reported COVID-19 in-hospital deaths, by health sector and epidemiologic week, South Africa, 5 March 2020-3 September 2022, N=104,307

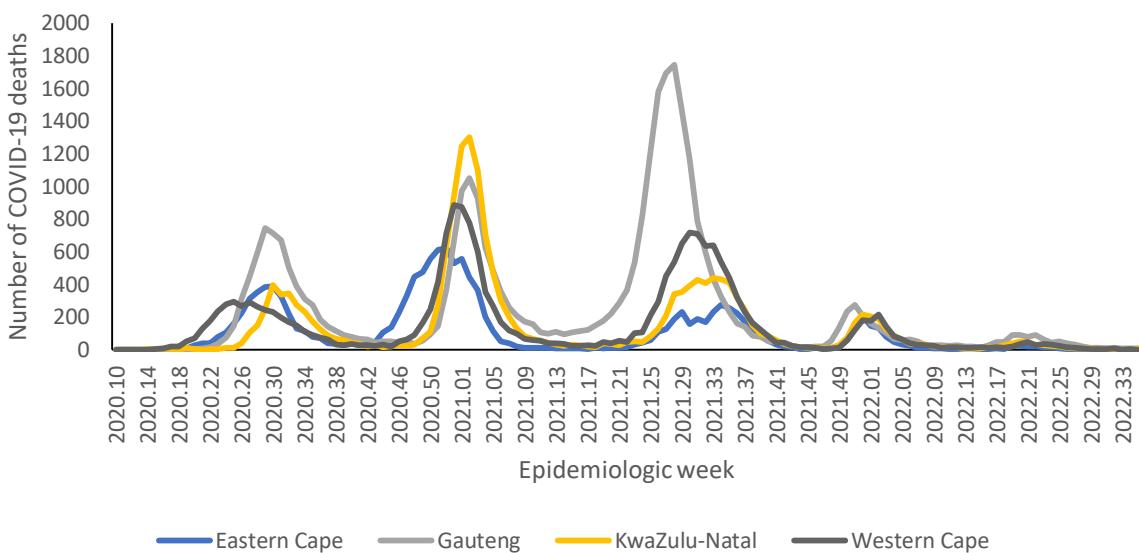


Figure 5a: Number of reported COVID-19 in-hospital deaths, by province with highest deaths and epidemiologic week of death, South Africa, 5 March 2020-3 September 2022, N=104,307

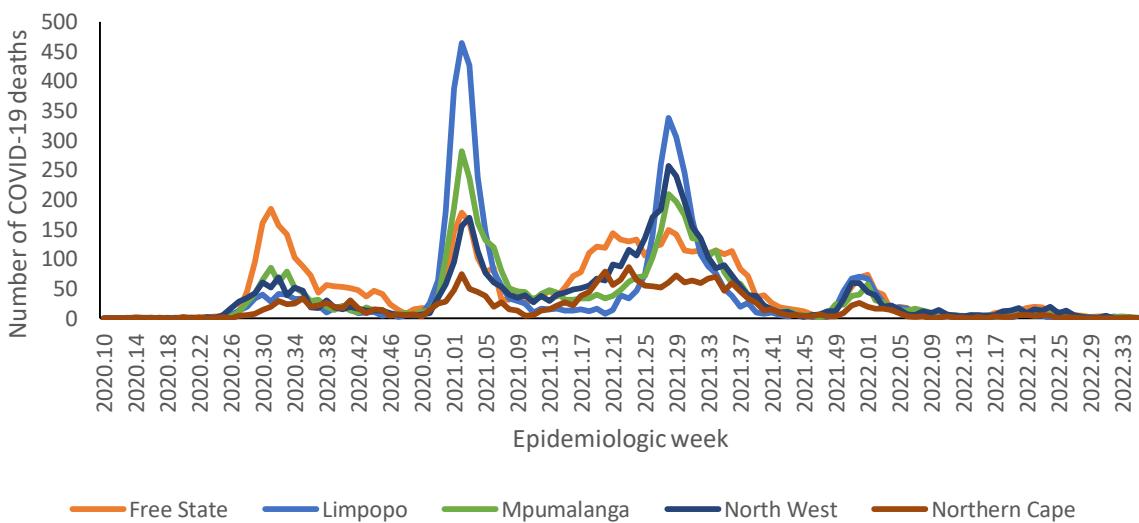


Figure 5b: Number of reported COVID-19 in-hospital deaths, by province with lowest deaths and epidemiologic week of death, South Africa, 5 March 2020-3 September 2022, N=104,307

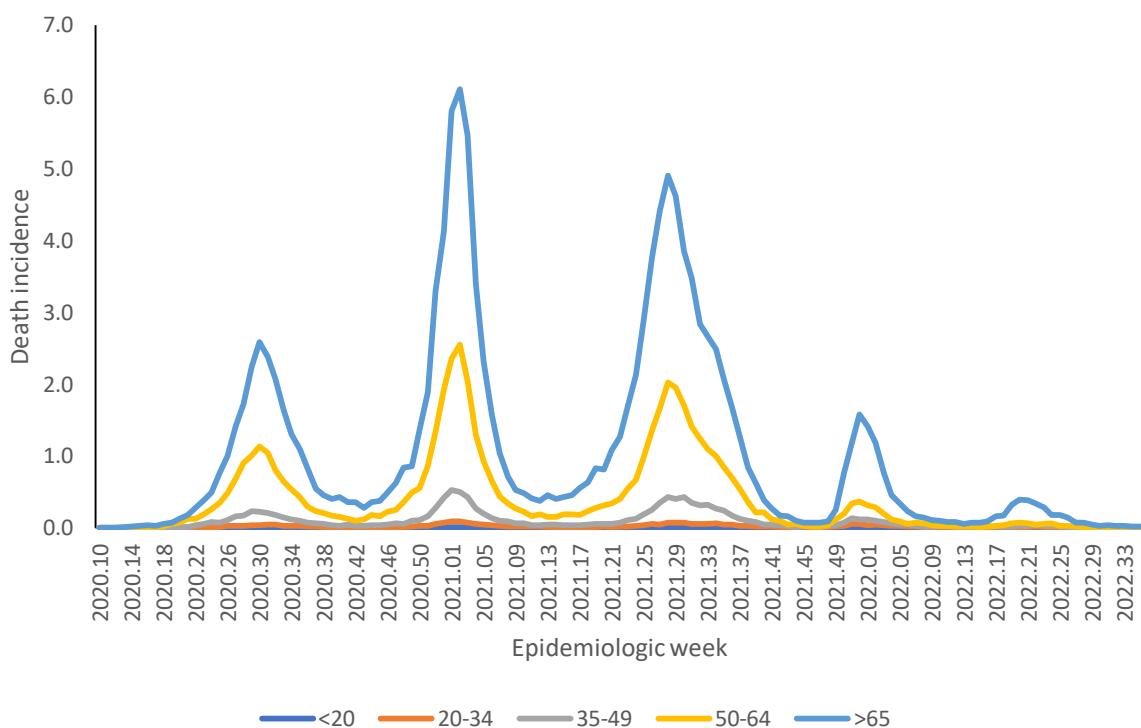


Figure 6: Incidence risk of COVID-19 in-hospital deaths per 100,000 persons, by age group and epidemiologic week of death, South Africa, 5 March 2020-3 September 2022, N=104,307

Table 4: Previous 7 days and current 7 days daily average COVID-19 admissions and deaths and percentage changes, South Africa, 20 August-3 September 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	2.29	1.00	-56.25	0.00	0.29	0.00
Free State	0.86	0.43	-50.00	0.14	0.00	-100.00
Gauteng	9.57	5.29	-44.78	1.43	1.29	-10.00
KwaZulu-Natal	5.86	4.14	-29.27	0.14	1.14	700.00
Limpopo	0.71	0.00	-100.00	0.00	0.00	0.00
Mpumalanga	1.29	0.57	-55.56	0.29	0.14	-50.00
North West	0.43	1.86	333.33	0.14	0.00	-100.00
Northern Cape	0.00	0.00	0.00	0.14	0.00	-100.00
Western Cape	3.71	1.57	-57.69	0.71	0.14	-80.00

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

Eastern Cape

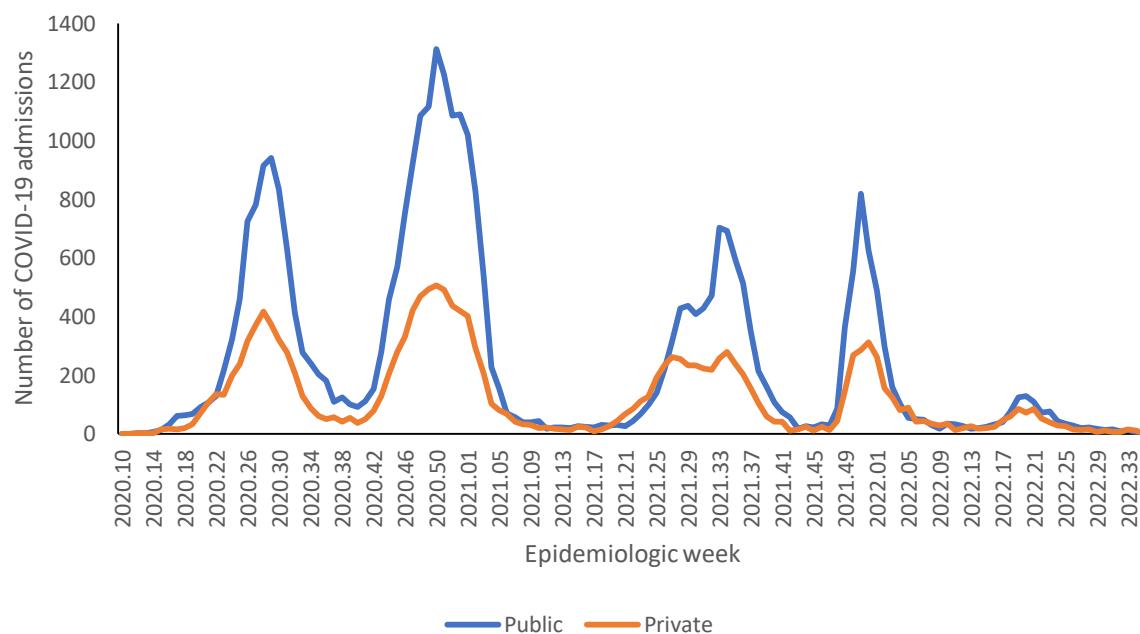


Figure 7: Number of reported COVID-19 admissions by health sector and epidemiologic week of diagnosis, Eastern Cape, 5 March 2020-3 September 2022, N=48,817

Table 5: Previous 14 days and current 14 days average COVID-19 admissions and deaths and percentage changes, Eastern Cape, 6 August-3 September 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	0.21	0.07	-66.67	0.00	0.00	0.00
Amathole	0.00	0.07	0.00	0.00	0.00	0.00
Buffalo City Metro	0.29	0.21	-25.00	0.00	0.00	0.00
Chris Hani	0.43	0.14	-66.67	0.00	0.00	0.00
Joe Gqabi	0.36	0.14	-60.00	0.00	0.07	0.00
Nelson Mandela Bay	1.21	0.57	-52.94	0.00	0.00	0.00
O R Tambo	0.21	0.36	66.67	0.07	0.07	0.00
Sarah Baartman	0.36	0.07	-80.00	0.00	0.00	0.00

Free State

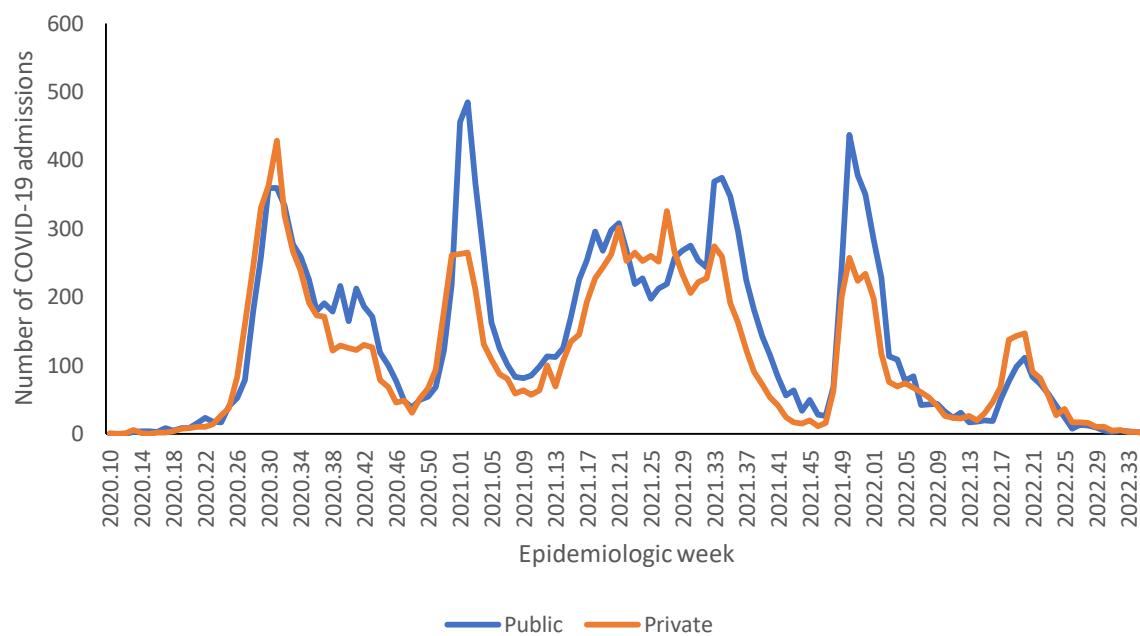


Figure 10: Number of reported COVID-19 admissions by health sector and epidemiologic week of diagnosis, Free State, 5 March 2020-3 September 2022, N=32,649

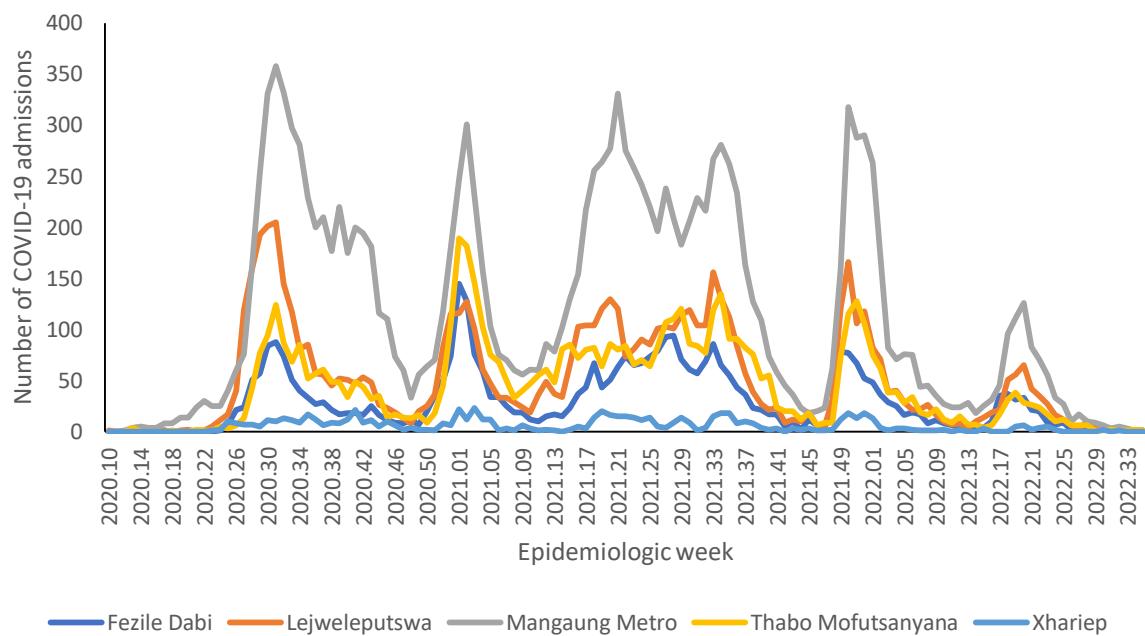


Figure 11: Number of reported COVID-19 admissions, by district and epidemiologic week, Free State, 5 March 2020-3 September 2022, N=32,649

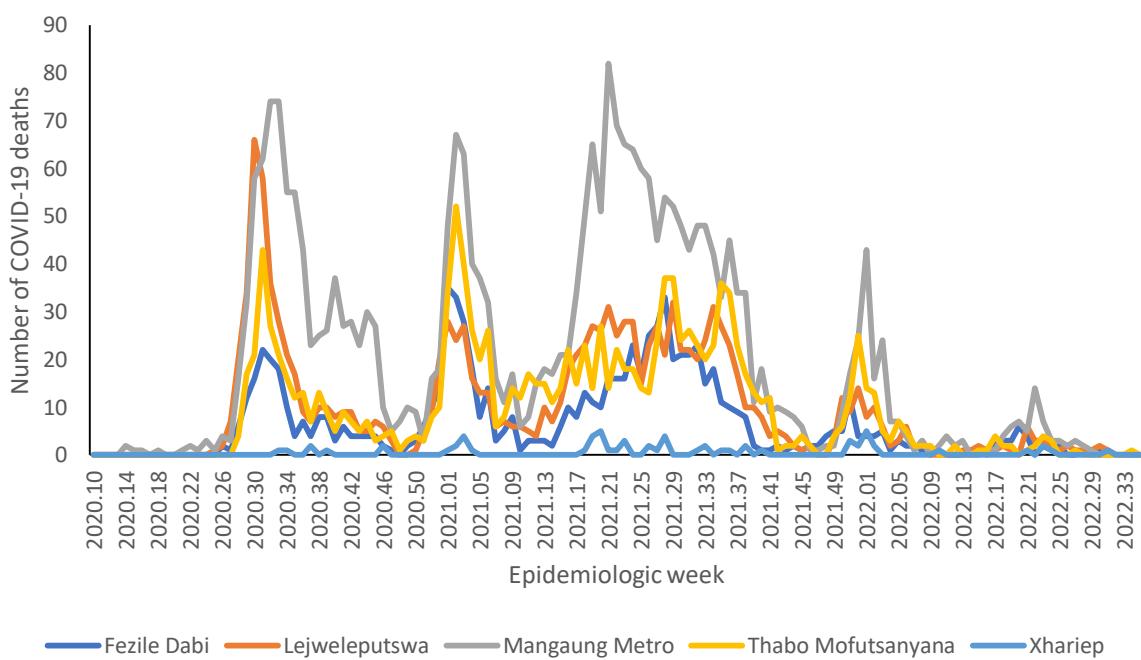


Figure 12: Number of reported COVID-19 in-hospital deaths, by district and epidemiologic week, Free State, 5 March 2020-3 September 2022, N=6,152



Table 6: Previous 14 days and current 14 days average COVID-19 admissions and deaths and percentage changes, Free State, 6 August-3 September 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	0.21	0.14	-33.33	0.00	0.00	0.00
Lejweleputswa	0.29	0.14	-50.00	0.00	0.00	0.00
Mangaung Metro	0.57	0.14	-75.00	0.00	0.00	0.00
Thabo Mofutsanyana	0.14	0.21	50.00	0.00	0.07	0.00
Xhariep	0.07	0.00	-100.00	0.00	0.00	0.00

Gauteng

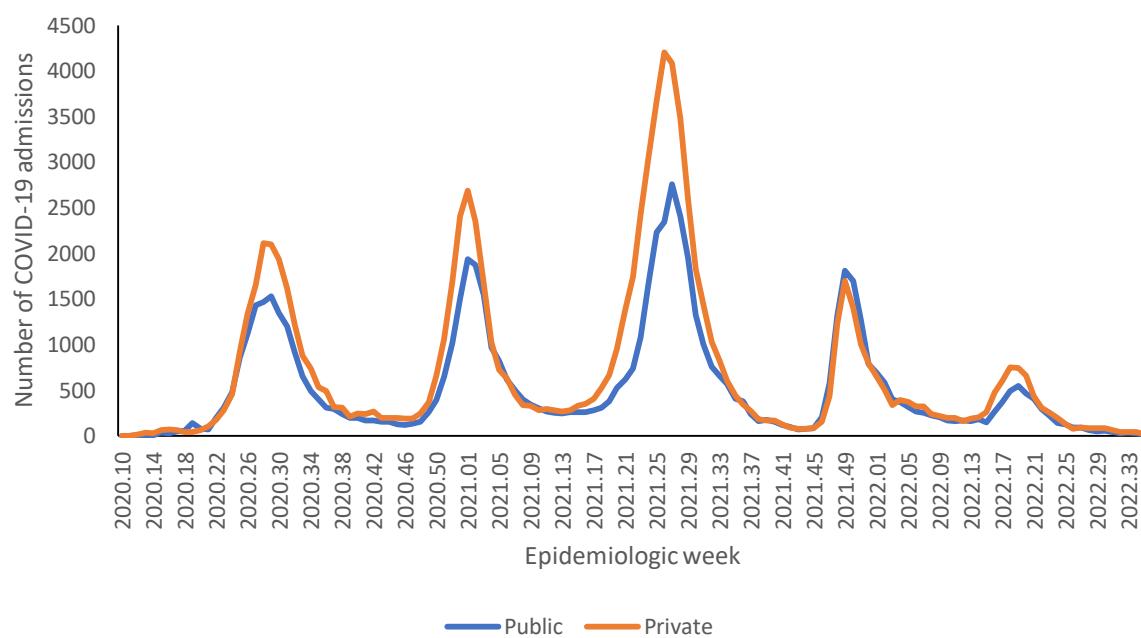


Figure 13: Number of reported COVID-19 admissions by health sector and epidemiologic week of diagnosis, Gauteng, 5 March 2020-3 September 2022, N=160,132

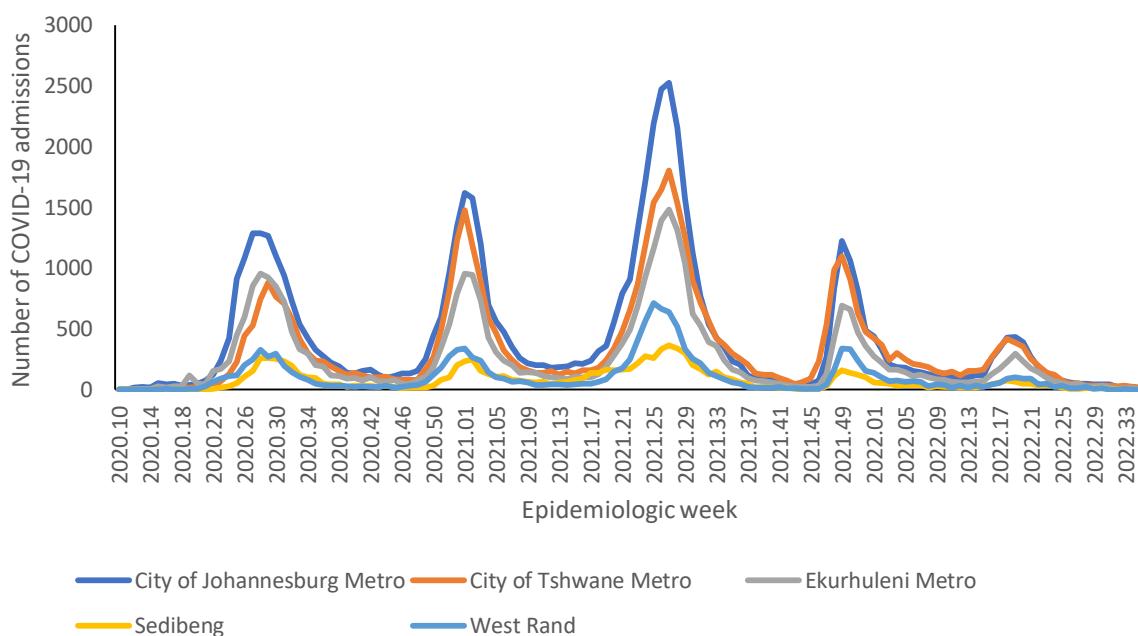


Figure 14: Number of reported COVID-19 admissions, by district and epidemiologic week, Gauteng, 5 March 2020-3 September 2022, N=160,132

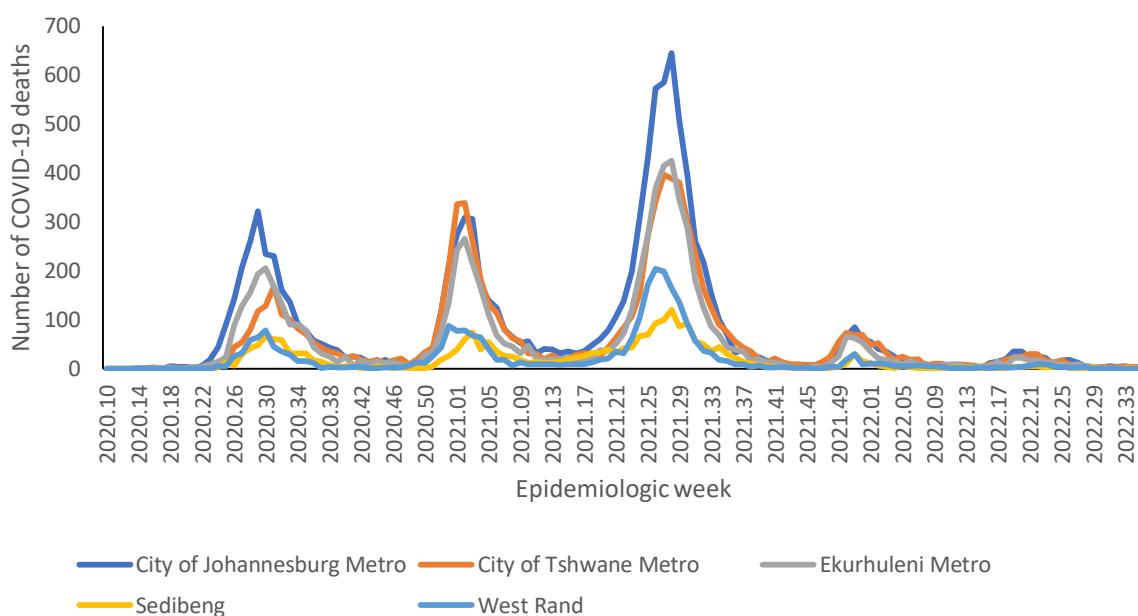


Figure 15: Number of reported COVID-19 in-hospital deaths, by district and epidemiologic week, Gauteng, 5 March 2020-3 September 2022, N=30,638



Table 7: Previous 14 days and current 14 days average COVID-19 admissions and deaths and percentage changes, Gauteng, 6 August-3 September 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	3.43	2.71	-20.83	0.64	0.29	-55.56
City of Tshwane Metro	4.36	2.79	-36.07	0.57	0.57	0.00
Ekurhuleni Metro	1.57	1.43	-9.09	0.14	0.21	50.00
Sedibeng	0.79	0.29	-63.64	0.07	0.14	100.00
West Rand	0.71	0.21	-70.00	0.07	0.14	100.00

KwaZulu-Natal

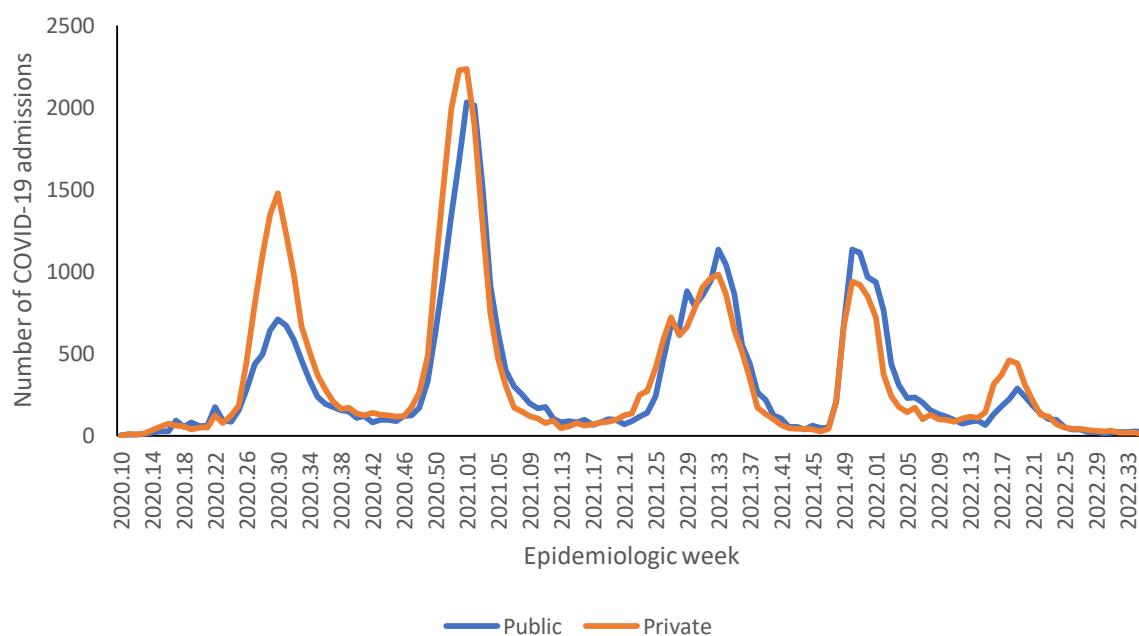


Figure 16: Number of reported COVID-19 admissions by health sector and epidemiologic week of diagnosis, KwaZulu-Natal, 5 March 2020-3 September 2022, N=89,195

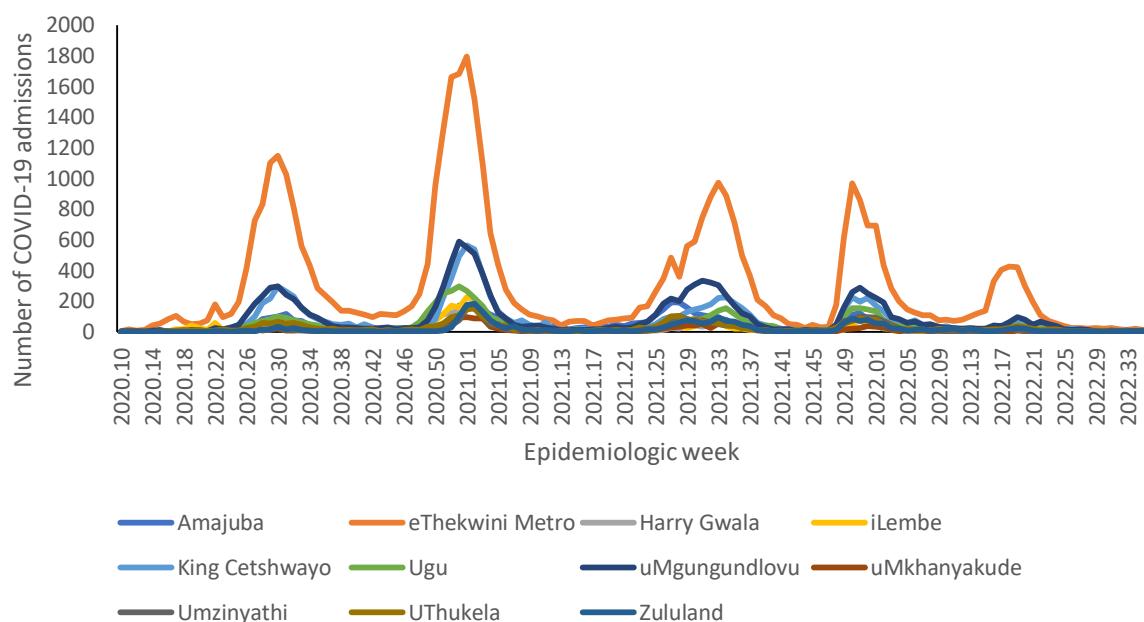


Figure 17: Number of reported COVID-19 admissions, by district and epidemiologic week, KwaZulu-Natal, 5 March 2020-3 September 2022, N=89,195

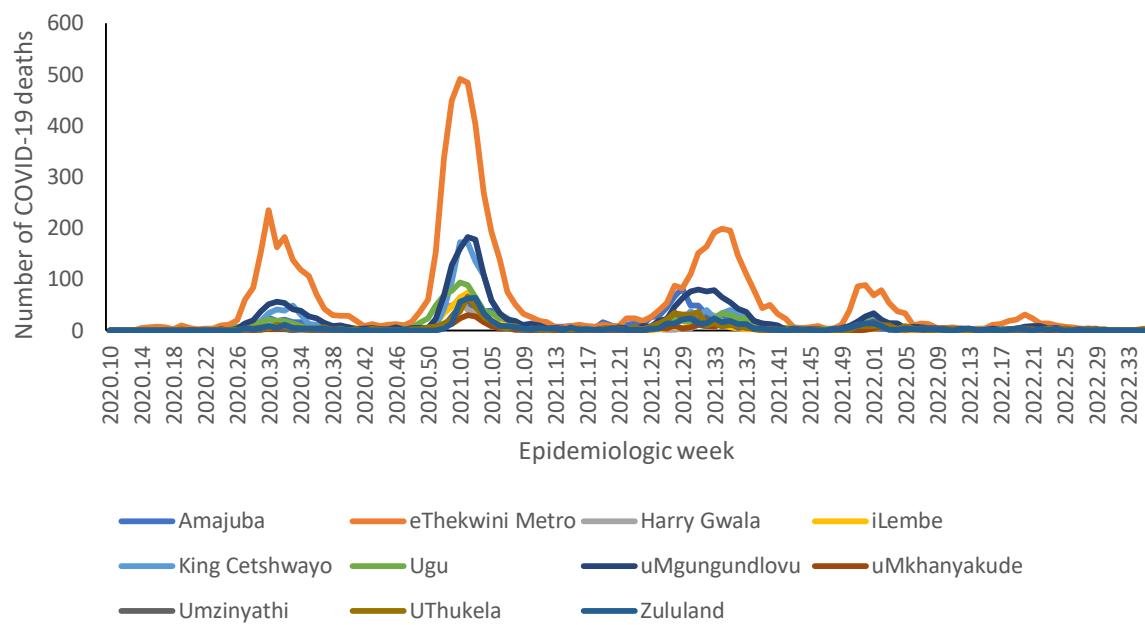


Figure 18: Number of reported COVID-19 in-hospital deaths, by district and epidemiologic week, KwaZulu-Natal, 5 March 2020-3 September 2022, N=17,567

Table 8: Previous 14 days and current 14 days average COVID-19 admissions and deaths and percentage changes, KwaZulu-Natal, 6 August-3 September 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	0.29	0.07	-75.00	0.00	0.00	0.00
eThekini Metro	2.00	2.21	10.71	0.07	0.36	400.00
Harry Gwala	0.29	0.36	25.00	0.00	0.00	0.00
iLembe	0.14	0.14	0.00	0.00	0.00	0.00
King Cetshwayo	1.00	0.50	-50.00	0.00	0.07	0.00
Ugu	0.29	0.57	100.00	0.00	0.00	0.00
uMgungundlovu	0.86	0.57	-33.33	0.00	0.07	0.00
uMkhanyakude	0.36	0.00	-100.00	0.00	0.00	0.00
Umzinyathi	0.36	0.00	-100.00	0.00	0.00	0.00
UThukela	0.07	0.29	300.00	0.07	0.14	100.00
Zululand	0.07	0.29	300.00	0.00	0.00	0.00

Limpopo

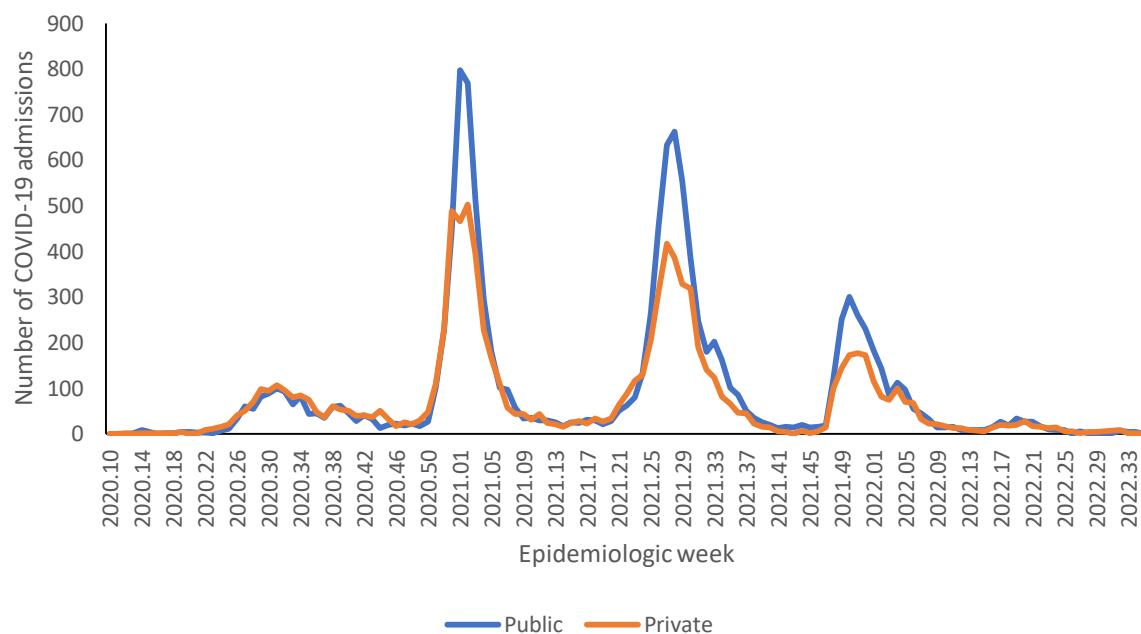


Figure 19: Number of reported COVID-19 admissions by health sector and epidemiologic week of diagnosis, Limpopo, 5 March 2020-3 September 2022, N=21,173

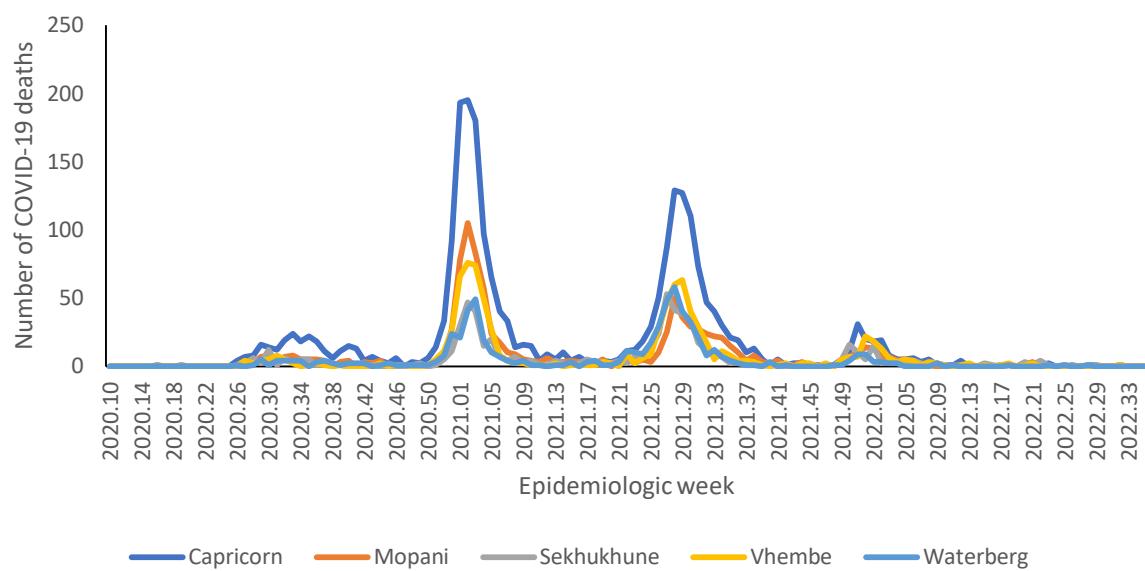


Figure 21: Number of reported COVID-19 in-hospital deaths, by district and epidemiologic week, Limpopo, 5 March 2020-3 September 2022, N=5,344

Table 9: Previous 14 days and current 14 days average COVID-19 admissions and deaths and percentage changes, Limpopo, 6 August-3 September 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	0.36	0.29	-20.00	0.07	0.00	-100.00
Mopani	0.29	0.07	-75.00	0.07	0.00	-100.00
Sekhukhune	0.14	0.00	-100.00	0.00	0.00	0.00
Vhembe	0.57	0.00	-100.00	0.07	0.00	-100.00
Waterberg	0.14	0.00	-100.00	0.00	0.00	0.00

Mpumalanga

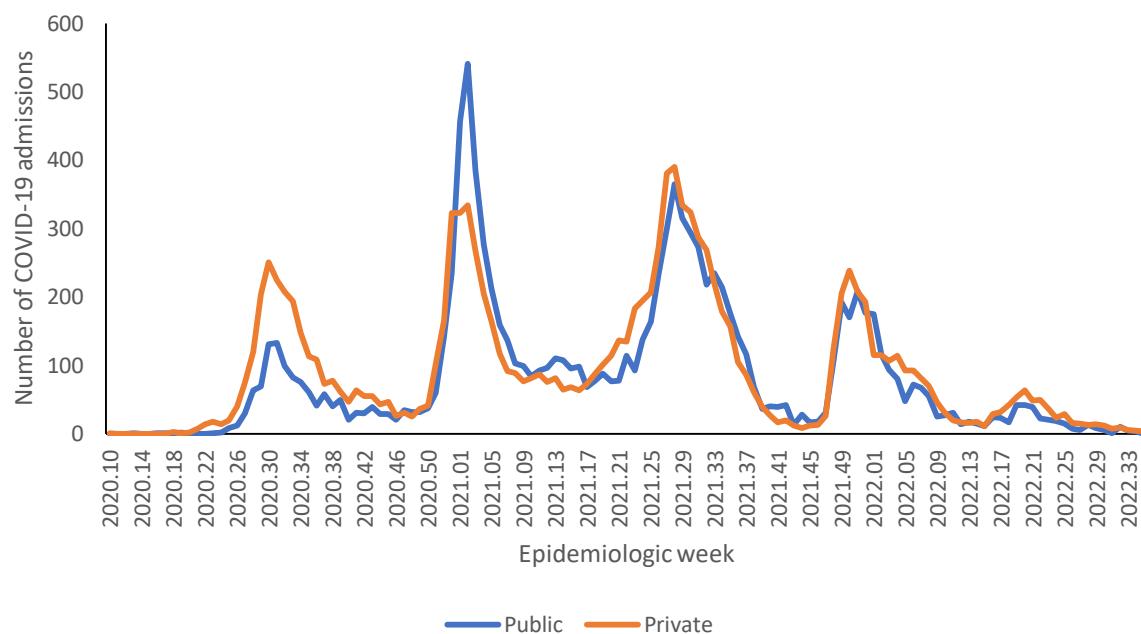


Figure 22: Number of reported COVID-19 admissions by health sector and epidemiologic week of diagnosis, Mpumalanga, 5 March 2020-3 September 2022, N=23,026

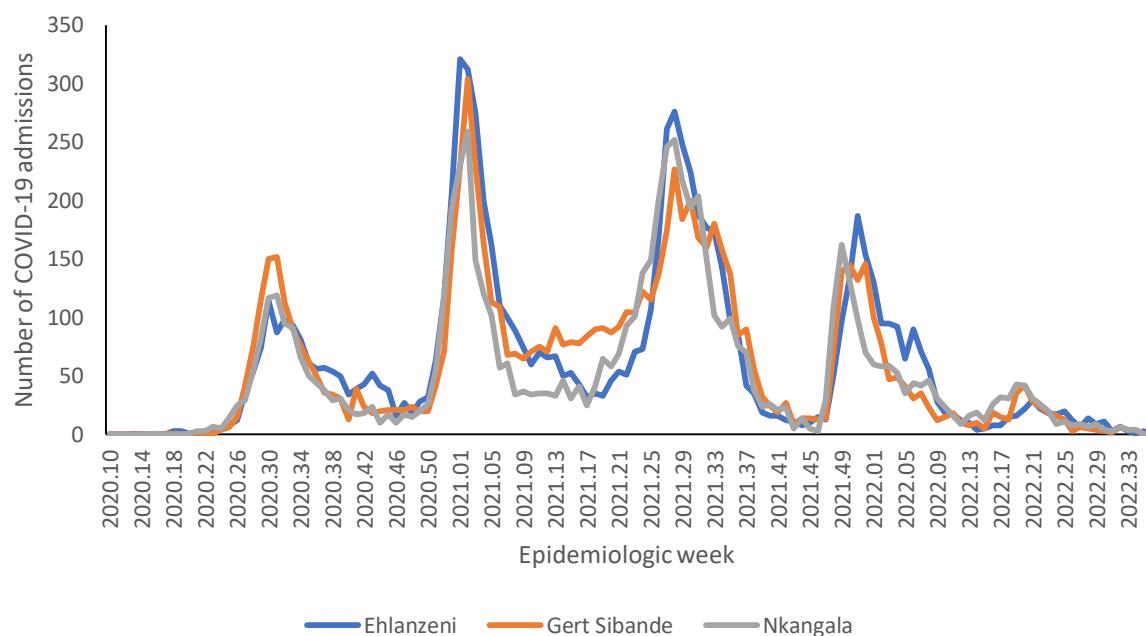


Figure 23: Number of reported COVID-19 admissions, by district and epidemiologic week, Mpumalanga, 5 March 2020-3 September 2022, N=23,026

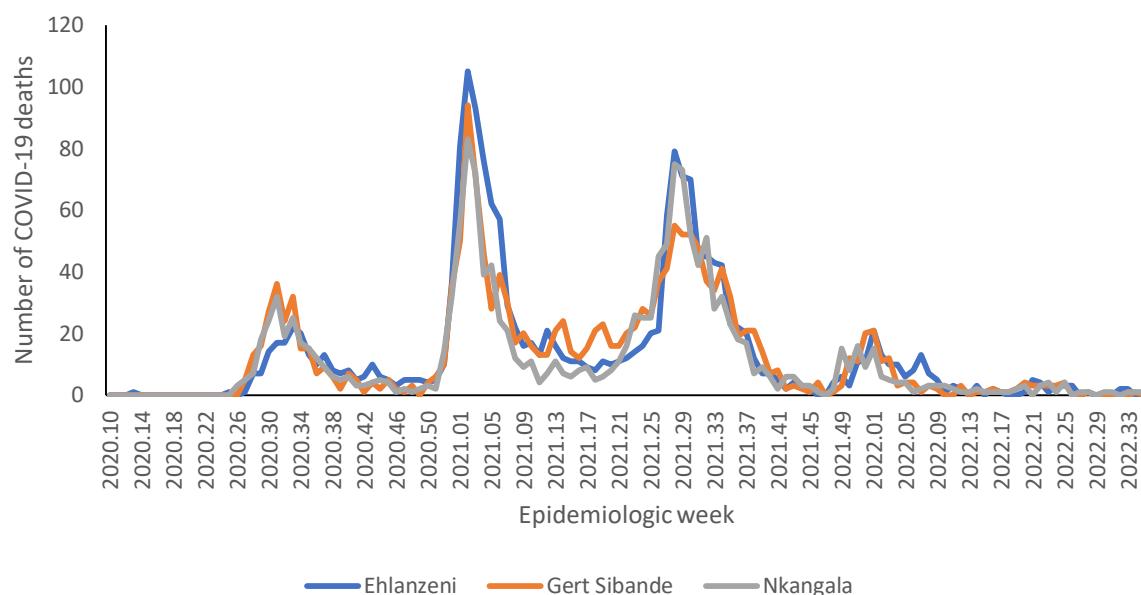


Figure 24: Number of reported COVID-19 in-hospital deaths, by district and epidemiologic week, Mpumalanga, 5 March 2020-3 September 2022, N=4,929



Table 10: Previous 14 days and current 14 days average COVID-19 admissions and deaths and percentage changes, Mpumalanga, 6 August-3 September 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	0.71	0.29	-60.00	0.29	0.00	-100.00
Gert Sibande	0.71	0.29	-60.00	0.00	0.07	0.00
Nkangala	0.71	0.36	-50.00	0.07	0.14	100.00

North West

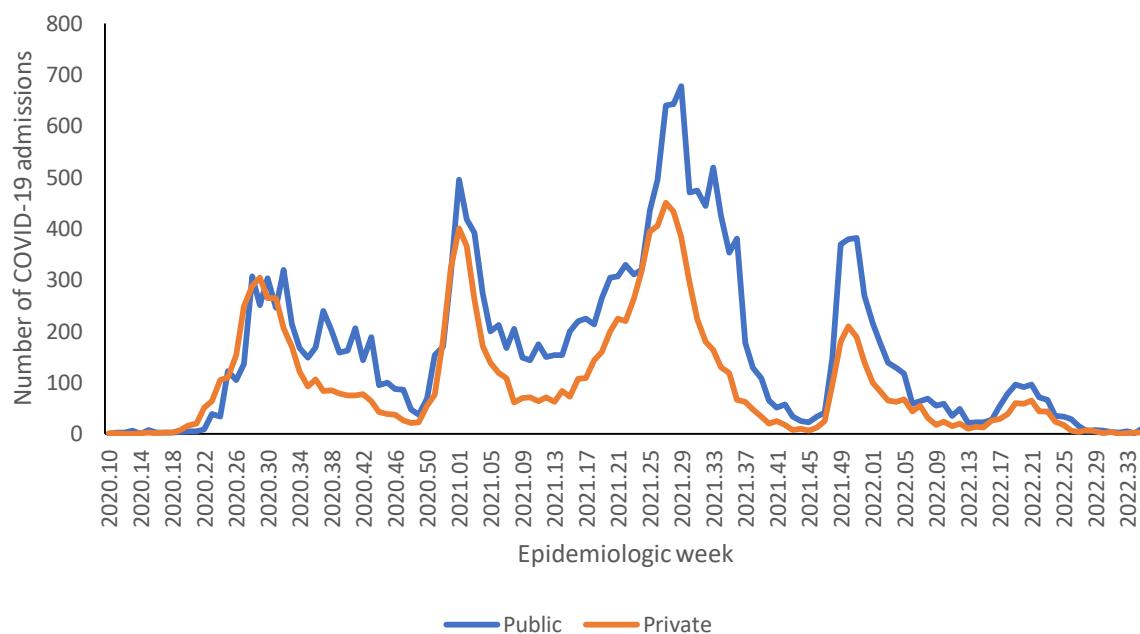


Figure 25: Number of reported COVID-19 admissions by health sector and epidemiologic week of diagnosis, North West, 5 March 2020-3 September 2022, N=34,418

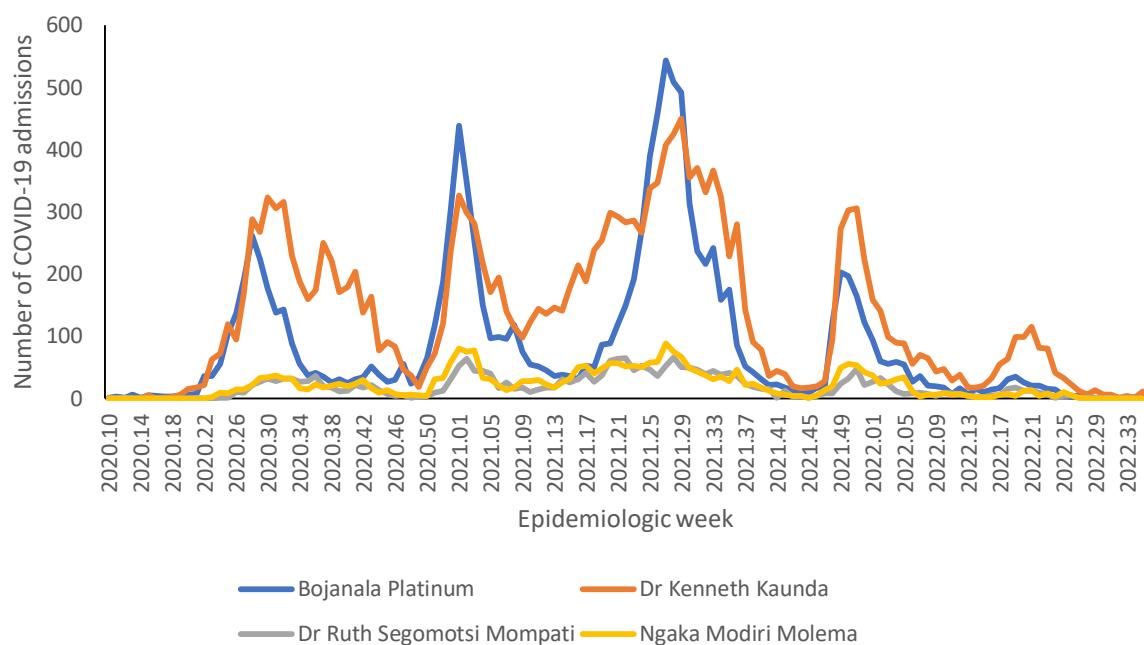


Figure 26: Number of reported COVID-19 admissions, by district and epidemiologic week, North West, 5 March 2020-3 September 2022, N=34,418

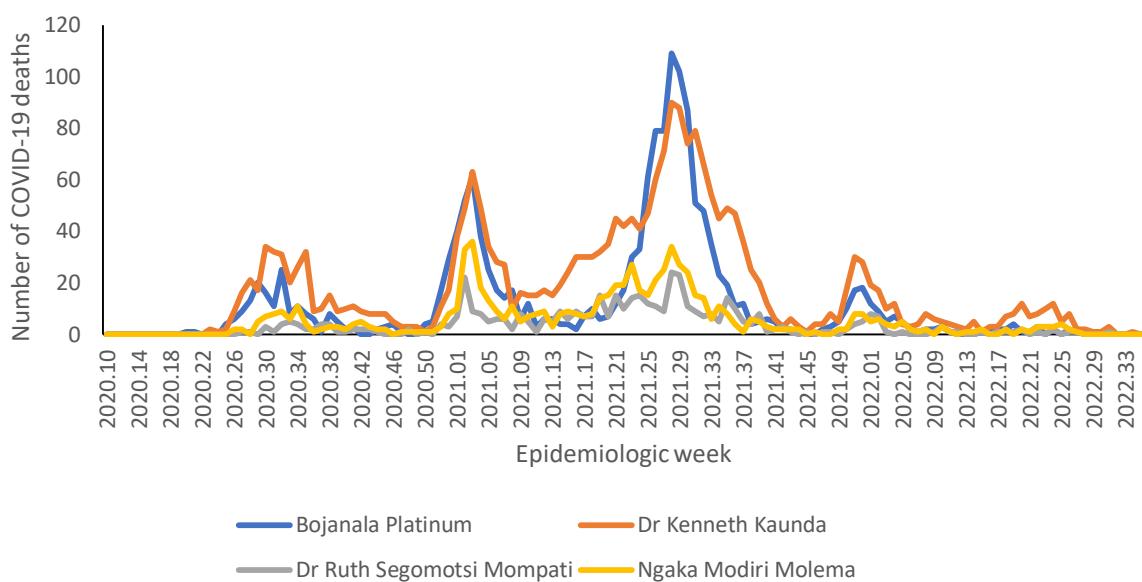


Figure 27: Number of reported COVID-19 in-hospital deaths, by district and epidemiologic week, North West, 5 March 2020-3 September 2022, N=5,017

Table 11: Previous 14 days and current 14 days average COVID-19 admissions and deaths and percentage changes, North West, 6 August-3 September 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	0.14	0.29	100.00	0.00	0.00	0.00
Dr Kenneth Kaunda	0.36	0.86	140.00	0.00	0.07	0.00
Dr Ruth Segomotsi Mompati	0.07	0.00	-100.00	0.00	0.00	0.00
Ngaka Modiri Molema	0.00	0.00	0.00	0.00	0.00	0.00

Northern Cape

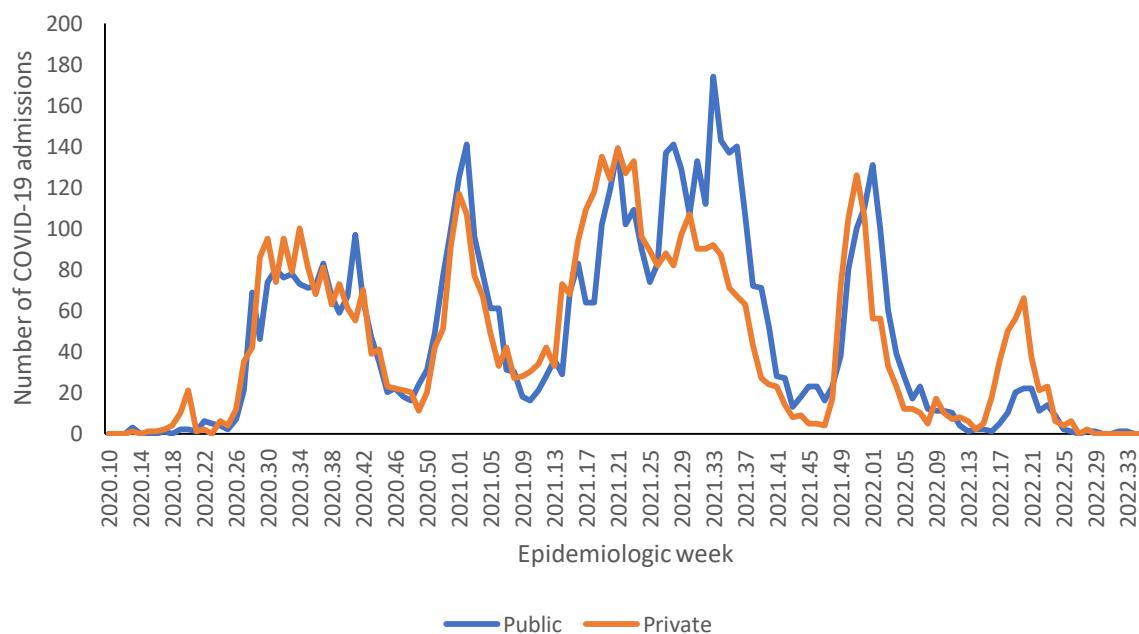


Figure 28: Number of reported COVID-19 admissions by health sector and epidemiologic week of diagnosis, Northern Cape, 5 March 2020-3 September 2022, N=11,937

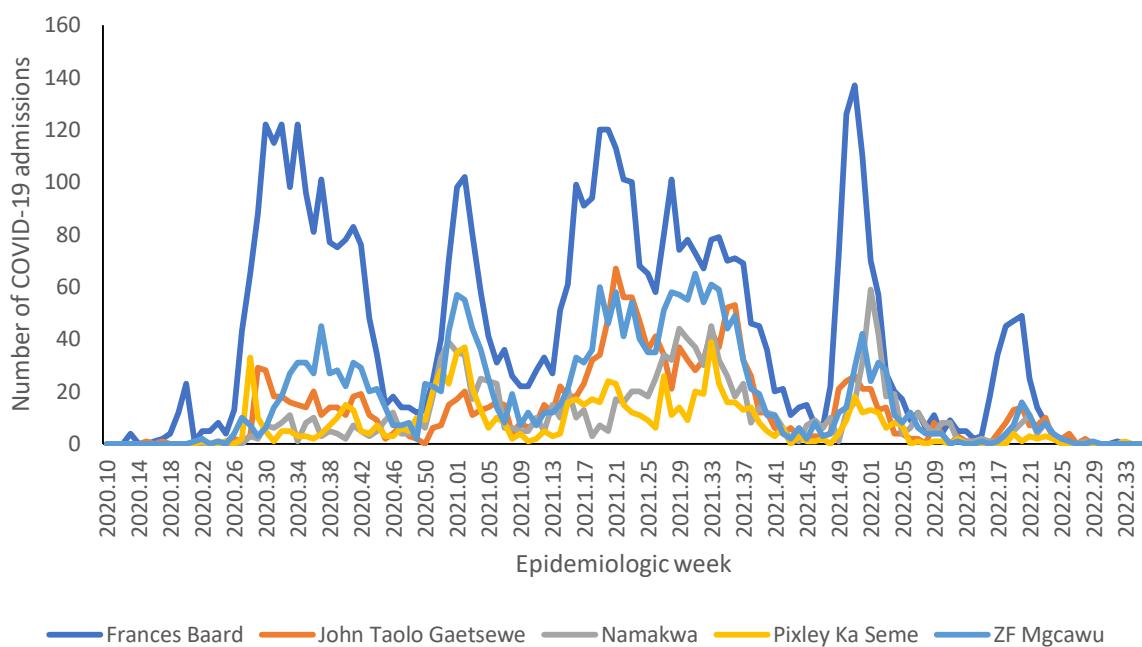


Figure 29: Number of reported COVID-19 admissions by district and epidemiologic week, Northern Cape, 5 March 2020-3 September 2022, N=11,937

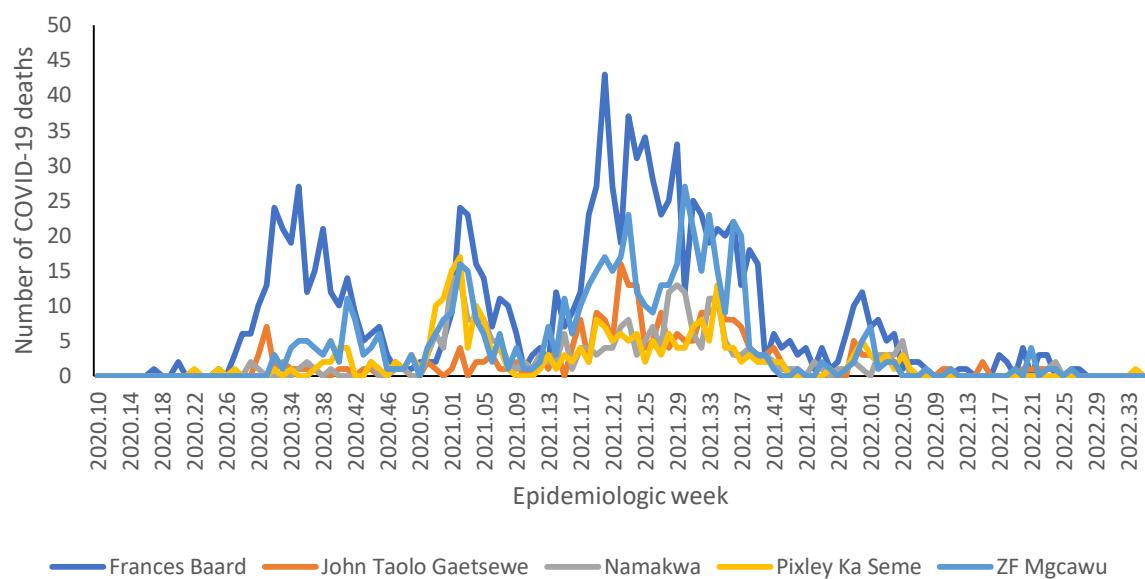


Figure 30: Number of reported COVID-19 in-hospital deaths, by district and epidemiologic week, Northern Cape, 5 March 2020-3 September 2022, N=2,461

Table 12: Previous 14 days and current 14 days average COVID-19 admissions and deaths and percentage changes, Northern Cape, 6 August-3 September 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	0.07	0.00	-100.00	0.00	0.00	0.00
John Taolo Gaetsewe	0.00	0.00	0.00	0.00	0.00	0.00
Namakwa	0.00	0.00	0.00	0.00	0.00	0.00
Pixley Ka Seme	0.07	0.00	-100.00	0.00	0.07	0.00
ZF Mgcawu	0.00	0.00	0.00	0.00	0.00	0.00

Western Cape

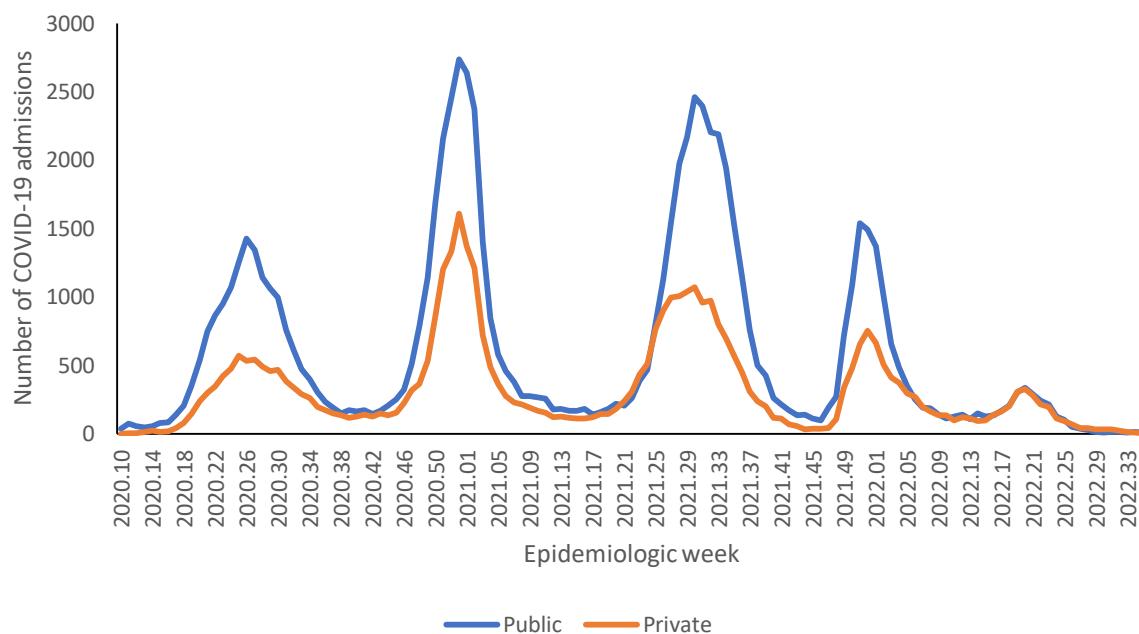


Figure 31: Number of reported COVID-19 admissions by health sector and epidemiologic week of diagnosis, Western Cape, 5 March 2020-3 September 2022, N=121,011

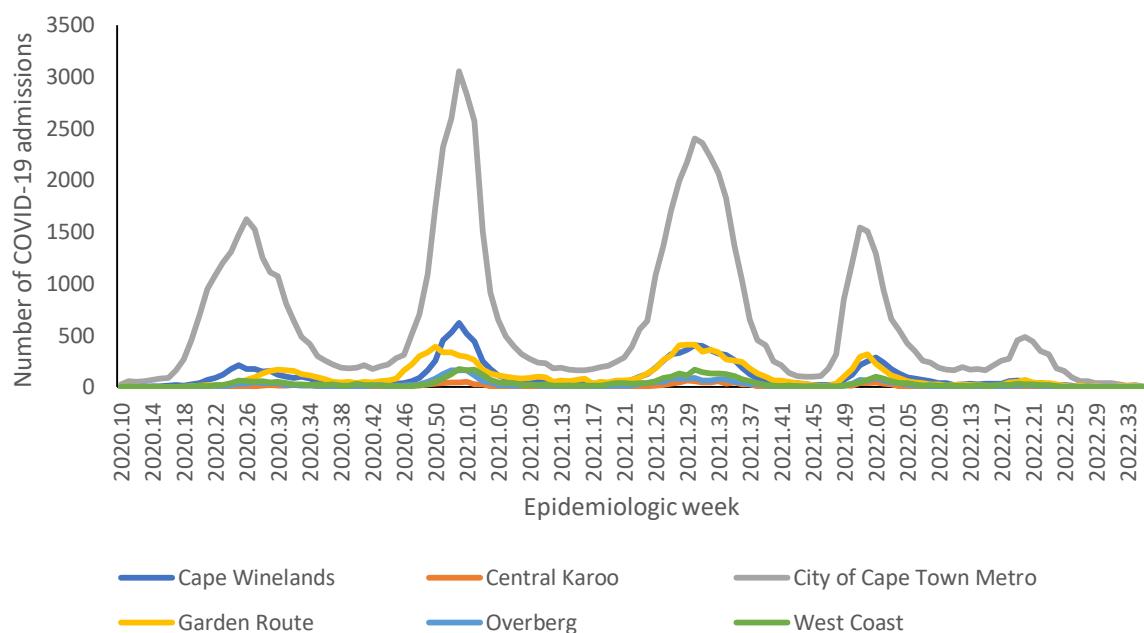


Figure 32: Number of reported COVID-19 admissions, by district and epidemiologic week, Western Cape, 5 March 2020-3 September 2022, N=121,011

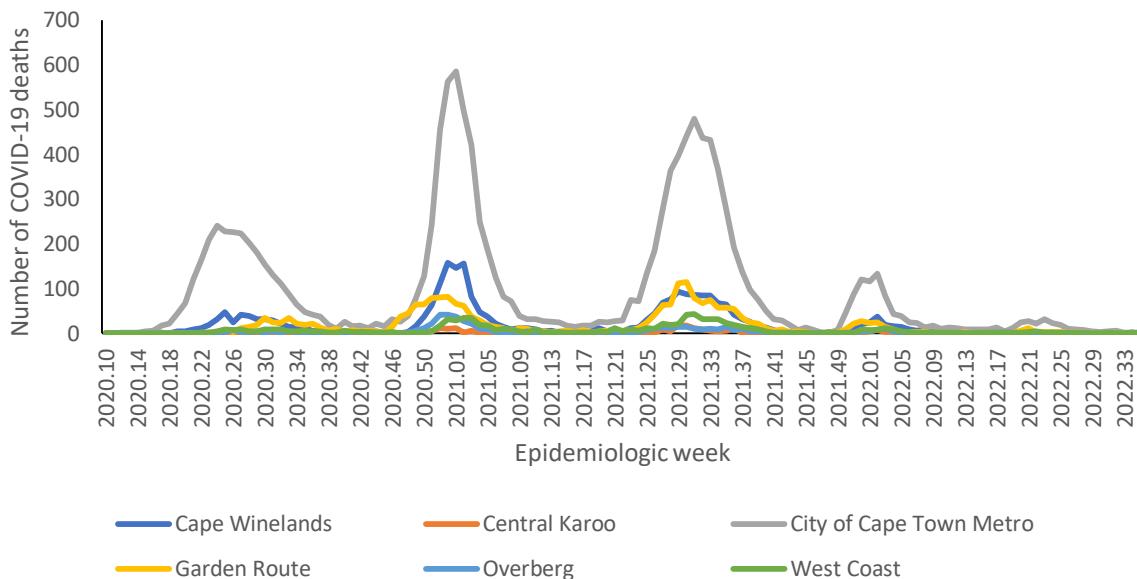


Figure 33: Number of reported COVID-19 in-hospital deaths, by district and epidemiologic week, Western Cape, 5 March 2020-3 September 2022, N=18,894

Table 13: Previous 14 days and current 14 days average COVID-19 admissions and deaths and percentage changes, Western Cape, 6 August-3 September 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	0.21	0.00	-100.00	0.07	0.14	100.00
Central Karoo	0.00	0.00	0.00	0.00	0.07	0.00
City of Cape Town Metro	2.93	2.07	-29.27	0.57	0.14	-75.00
Garden Route	0.71	0.43	-40.00	0.07	0.00	-100.00
Overberg	0.07	0.07	0.00	0.00	0.00	0.00
West Coast	0.14	0.07	-50.00	0.00	0.07	0.00

Limitation

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)



	Waterberg	3352	446.84	0	0.00	100.00
Mpumalanga	Ehlanzeni	8156	446.08	3	0.16	200.00
	Gert Sibande	7847	618.91	0	0.00	-100.00
	Nkangala	7023	426.33	1	0.06	-75.00
	Bojanala Platinum	11448	587.63	2	0.10	-33.33
North West	Dr Kenneth Kaunda	17739	2208.26	11	1.37	1000.00
	Dr Ruth Segomotsi Mompati	2394	513.16	0	0.00	100.00
	Ngaka Modiri Molema	2837	313.53	0	0.00	100.00
	Frances Baard	5603	1346.97	0	0.00	100.00
Northern Cape	John Taolo Gaetsewe	1703	616.23	0	0.00	100.00
	Namakwa	1366	1167.61	0	0.00	100.00
	Pixley Ka Seme	934	443.89	0	0.00	100.00
	ZF Mgcawu	2331	822.76	0	0.00	100.00
	Cape Winelands	13629	1425.91	0	0.00	100.00
Western Cape	Central Karoo	1405	1853.76	0	0.00	100.00
	City of Cape Town Metro	84704	1810.34	11	0.24	-65.63
	Garden Route	13370	2128.15	2	0.32	-50.00
	Overberg	3323	1087.62	0	0.00	-100.00
	West Coast	4583	976.15	0	0.00	-100.00



NATIONAL INSTITUTE FOR
COMMUNICABLE DISEASES

Division of the National Health Laboratory Service