

# COVID-19 SENTINEL HOSPITAL SURVEILLANCE UPDATE

SOUTH AFRICA WEEK 3 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 23 January 2021.

## HIGHLIGHTS

- As of 23 January 2021, 188,602 COVID-19 admissions and 37,054 in-hospital deaths were reported from 635 facilities (384 public-sector and 251 private-sector) in all nine provinces of South Africa.
- There has been a resurgence in admissions in all provinces. The weekly admissions and deaths in the second wave have exceeded the numbers at the peak of the first wave in all provinces except Free State.
- Between week 2 and week 3 2021, the number of COVID-19 admissions decreased in all provinces, which may reflect delays in data submission in some cases. Admissions and deaths have decreased in Eastern Cape since week 50 2020; and in Western Cape since week 53 2020.

# COVID-19 SENTINEL HOSPITAL SURVEILLANCE UPDATE

WEEK 3 2021

## METHODS

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

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 23 January 2021, a total of 635 facilities submitted data on hospitalised COVID-19 cases, 384 from public sector and 251 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 2020-23 January 2021

| Name of province    | Public Sector | Private Sector |
|---------------------|---------------|----------------|
| Eastern Cape        | 85            | 18             |
| Free State          | 35            | 20             |
| Gauteng             | 39            | 91             |
| KwaZulu-Natal       | 65            | 45             |
| Limpopo             | 41            | 7              |
| Mpumalanga          | 30            | 9              |
| North West          | 14            | 12             |
| Northern Cape       | 16            | 8              |
| Western Cape        | 59            | 41             |
| <b>South Africa</b> | <b>384</b>    | <b>251</b>     |

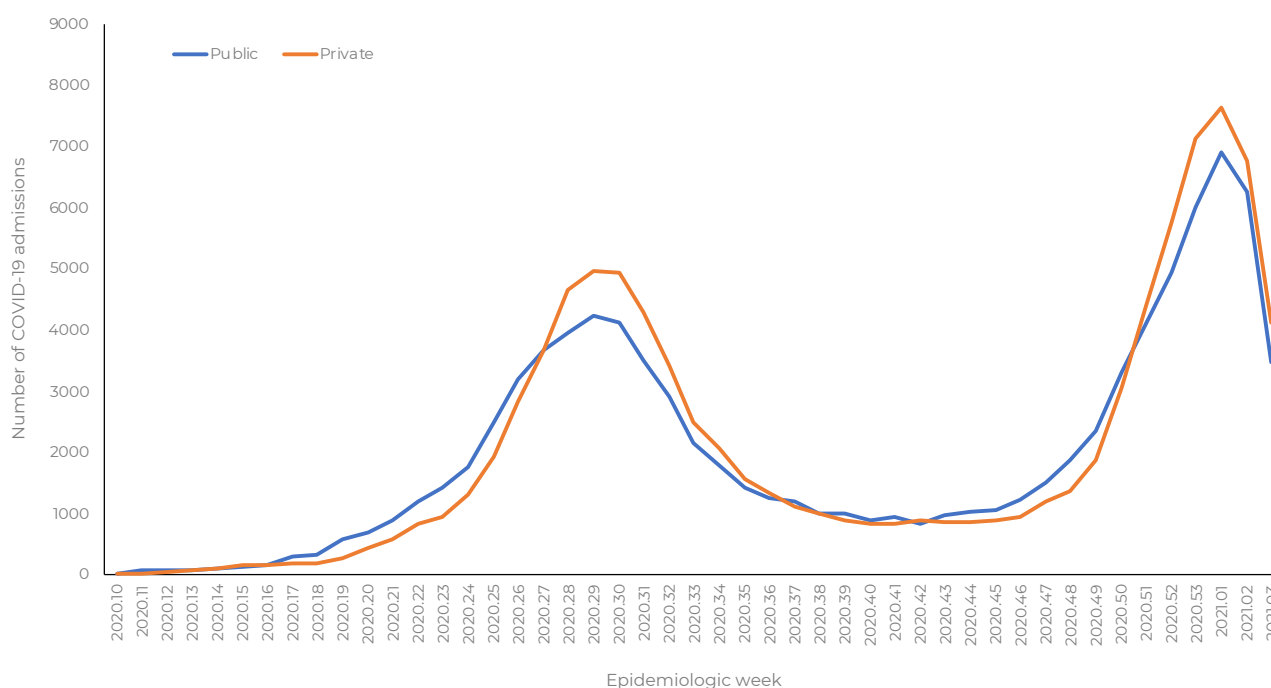
# COVID-19 SENTINEL HOSPITAL SURVEILLANCE UPDATE

WEEK 3 2021

## RESULTS

### Epidemiological and geographic trends in admissions

From 5 March 2020 to 23 January 2021, a total of 188,602 COVID-19 admissions were reported from 635 facilities in all nine provinces of South Africa. There has been a resurgence in both public and private sector since week 40 2020; the peak weekly numbers of admissions surpassed the numbers during the peak of the first wave in both sectors (Figure 1). Since week 1 2021, there have been decreases in numbers of admissions in both public and private sector, decreases in the most recent week may reflect delays in data submission.

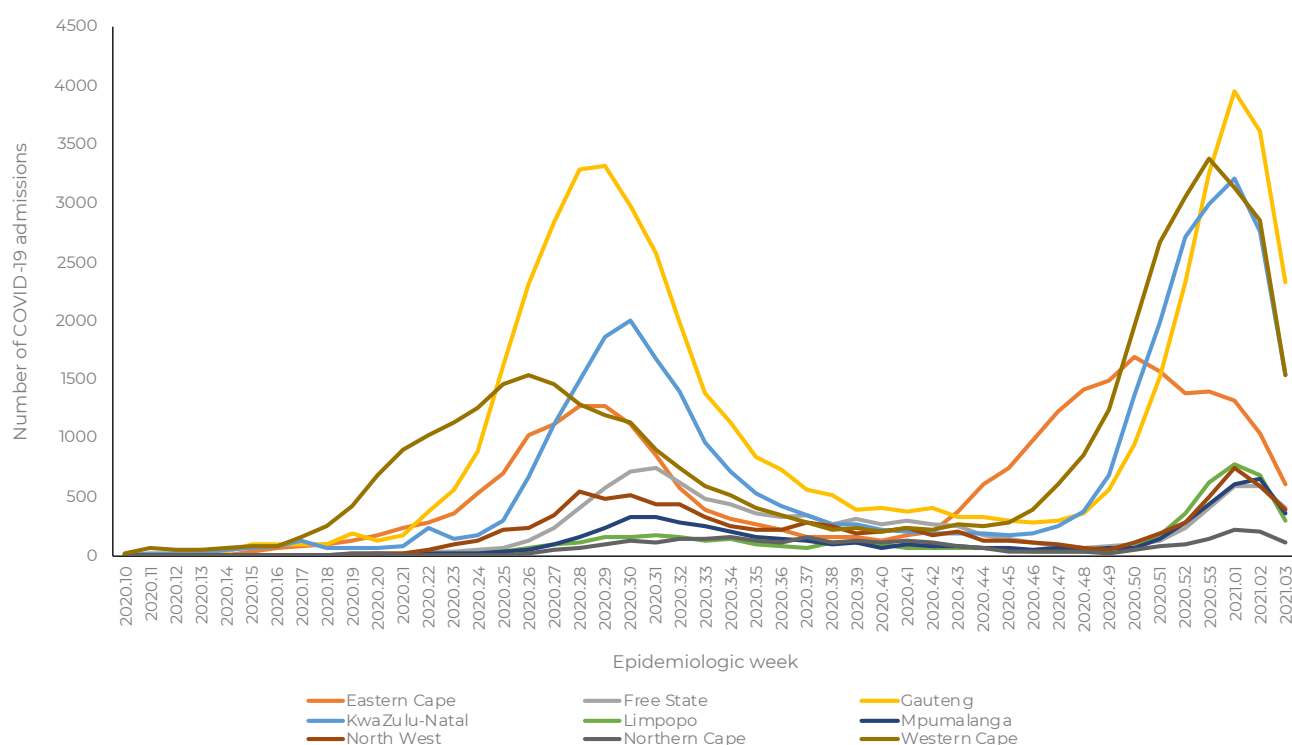


**Figure 1.** Number of reported COVID-19 admissions by health sector and epidemiologic week of diagnosis, South Africa, 5 March 2020-23 January 2021, n=188,602

# COVID-19 SENTINEL HOSPITAL SURVEILLANCE UPDATE

WEEK 3 2021

The majority of admissions were recorded in four provinces, Gauteng, Western Cape, Eastern Cape and KwaZulu-Natal provinces. Admissions have increased in Eastern Cape since week 40 2020, Western Cape since week 43 2020, KwaZulu-Natal since week 46 2020, Gauteng since week 48 2020 and all other provinces since week 48 or 49 2020 (Figure 2). The weekly numbers of admissions in all provinces except Free State surpassed the numbers during the peak of the first wave. Numbers are now decreasing in all provinces. Reductions in the most recent week may be as a result of delayed reporting.



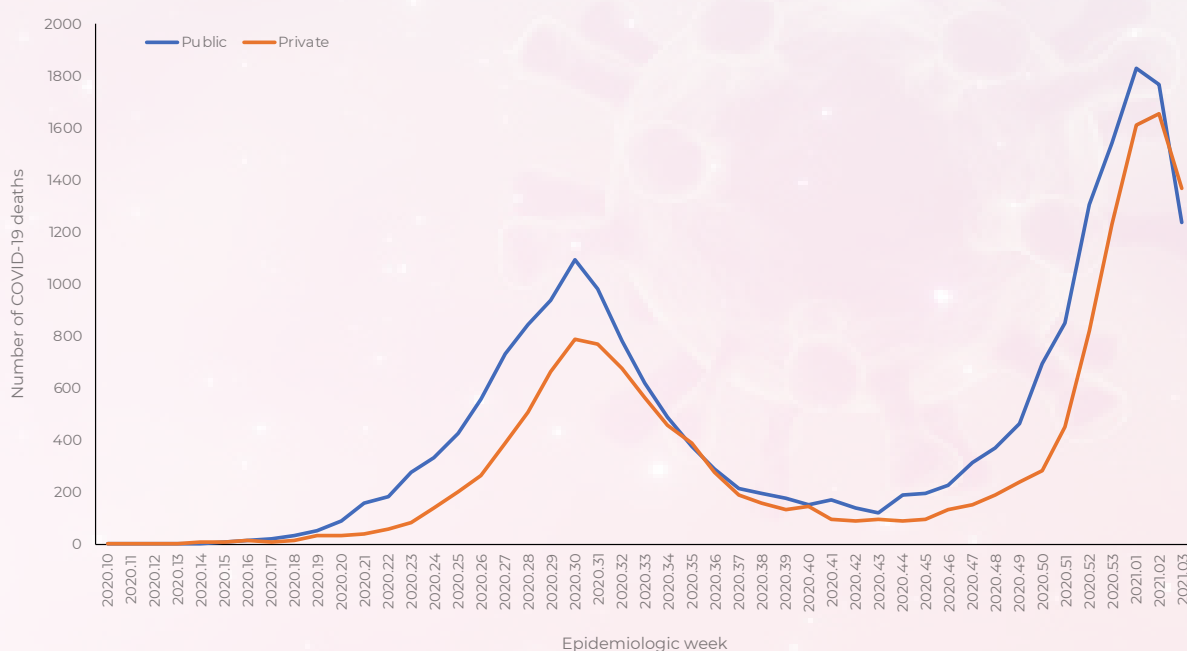
**Figure 2.** Number of reported COVID-19 admissions, by province and epidemiologic week of diagnosis, South Africa, 5 March 2020-23 January 2021, n=188,602

# COVID-19 SENTINEL HOSPITAL SURVEILLANCE UPDATE

WEEK 3 2021

## EPIDEMIOLOGICAL AND GEOGRAPHIC TRENDS IN IN-HOSPITAL MORTALITY

There has been an increase in deaths in both public and private sector since week 42 2020; the weekly numbers of deaths surpassed the numbers during the peak of the first wave in both sectors (Figure 3). In the first wave there were more deaths in the public sector whereas in the second wave the proportion of deaths in the private sector was higher.

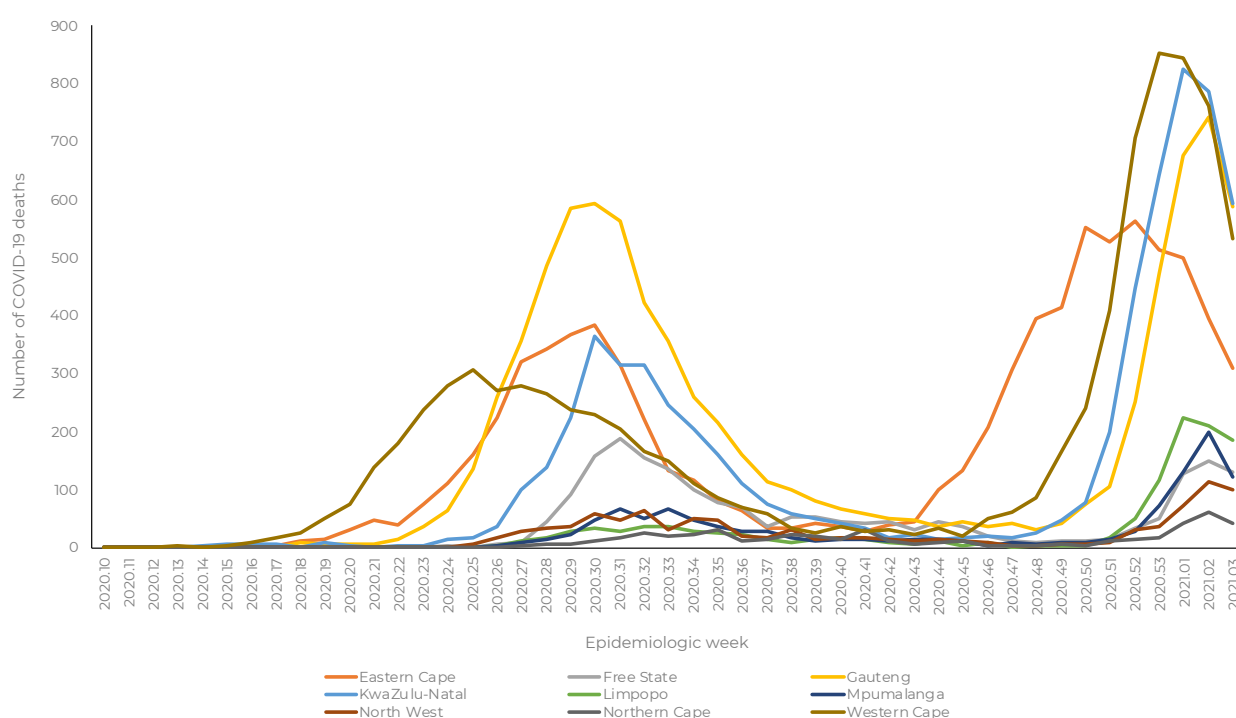


**Figure 3.** Number of in-hospital COVID-19 in-hospital deaths reported per week by health sector and epidemiologic week, South Africa, 5 March 2020-23 January 2021, n=37,054

# COVID-19 SENTINEL HOSPITAL SURVEILLANCE UPDATE

WEEK 3 2021

Most deaths were reported in Eastern Cape, Gauteng, Western Cape and KwaZulu-Natal (Figure 4). The weekly numbers of deaths in all provinces except Free State surpassed the numbers during the peak of the first wave.



**Figure 4.** Number of reported COVID-19 in-hospital deaths, by province and epidemiologic week of death, South Africa, 5 March 2020-23 January 2021, n=37054

# COVID-19 SENTINEL HOSPITAL SURVEILLANCE UPDATE

WEEK 3 2021

The cumulative incidence risks of COVID-19 admissions were highest in Western Cape and Eastern Cape provinces; and for deaths were highest in Eastern Cape and Western Cape 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 2020-23 January 2021

| Province            | Provincial Population mid 2020* | Cumulative admissions | Cumulative Admissions / 100,000 | Cumulative deaths | Cumulative deaths / 100,000 |
|---------------------|---------------------------------|-----------------------|---------------------------------|-------------------|-----------------------------|
| Eastern Cape        | 6734001                         | 27845                 | 413.5                           | 8252              | 122.5                       |
| Free State          | 2928903                         | 10362                 | 353.8                           | 2012              | 68.7                        |
| Gauteng             | 15488137                        | 50,763                | 327.8                           | 8205              | 53.0                        |
| KwaZulu-Natal       | 11531628                        | 34357                 | 297.9                           | 6311              | 54.7                        |
| Limpopo             | 5852553                         | 5239                  | 89.5                            | 1209              | 20.7                        |
| Mpumalanga          | 4679786                         | 5804                  | 124.0                           | 1143              | 24.4                        |
| North West          | 4108816                         | 9,474                 | 230.6                           | 993               | 24.2                        |
| Northern Cape       | 1292786                         | 3,109                 | 240.5                           | 520               | 40.2                        |
| Western Cape        | 7005741                         | 41,649                | 594.5                           | 8409              | 120.0                       |
| <b>South Africa</b> | <b>59622350</b>                 | <b>188,602</b>        | <b>316.3</b>                    | <b>37,054</b>     | <b>62.1</b>                 |

\*StatsSA mid-year population estimates 2020



# COVID-19 SENTINEL HOSPITAL SURVEILLANCE UPDATE

WEEK 3 2021

## MONITORING FOR RESURGENCE

The number of COVID-19 admissions decreased in all provinces from week 2 to week 3 2021. The highest proportion of new admissions were in Gauteng, Western Cape and KwaZulu-Natal (Table 3). Decreases in the most recent week may in part reflect delays in data submission. Xhariep was the only 1 of 52(2%) districts across the country that reported increased admissions change over the previous 14 days (Appendix 1).

**Table 3.** Percentage change in COVID-19 admissions, epidemiologic week 2 to week 3 of 2021, by province, South Africa

| Province            | Hospital admissions |              | Percentage change in admissions | Percentage of total new admissions | Incidence risk of new admissions /100,000 persons |
|---------------------|---------------------|--------------|---------------------------------|------------------------------------|---|
|                     | Week 2              | Week 3*      |                                 |                                    |   |
| Eastern Cape        | 1032                | 604          | -41                             | 8.0                                | 9.0   |
| Free State          | 595                 | 399          | -33                             | 5.3                                | 13.6  |
| Gauteng             | 3615                | 2331         | -36                             | 30.8                               | 15.1  |
| KwaZulu-Natal       | 2760                | 1538         | -44                             | 20.3                               | 13.3  |
| Limpopo             | 687                 | 300          | -56                             | 4.0                                | 5.1   |
| Mpumalanga          | 654                 | 356          | -46                             | 4.7                                | 7.6   |
| North West          | 596                 | 396          | -34                             | 5.2                                | 9.6   |
| Northern Cape       | 202                 | 115          | -43                             | 1.5                                | 8.9   |
| Western Cape        | 2855                | 1536         | -46                             | 20.3                               | 21.9  |
| <b>South Africa</b> | <b>12,996</b>       | <b>7,575</b> | <b>-42</b>                      | <b>100.0</b>                       | <b>12.7</b>                                       |

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

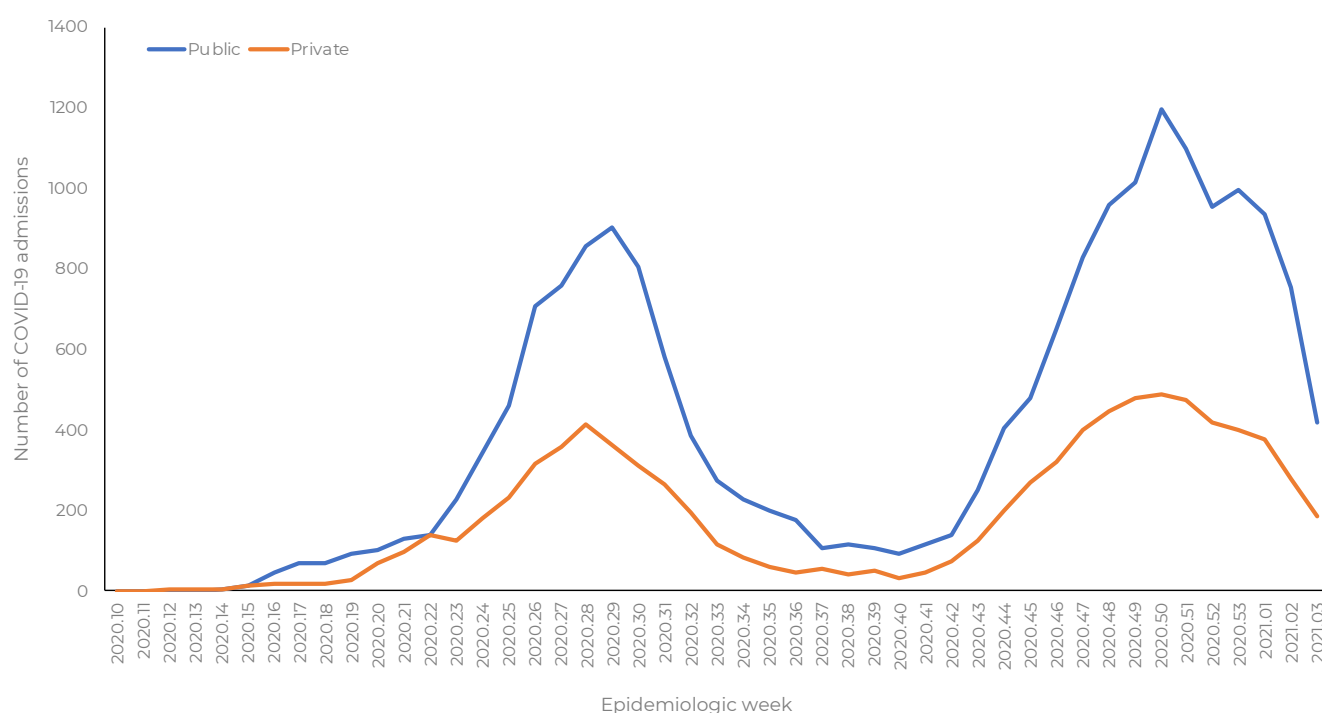


# COVID-19 SENTINEL HOSPITAL SURVEILLANCE UPDATE

WEEK 3 2021

## EASTERN CAPE

The increase in admissions in the Eastern Cape started in week 40 2020, in public and private sectors, exceeding the weekly numbers of admissions at the peak of the first wave in both sectors. Since week 50 2020, a decrease in admissions has been observed in both sectors (Figure 5).

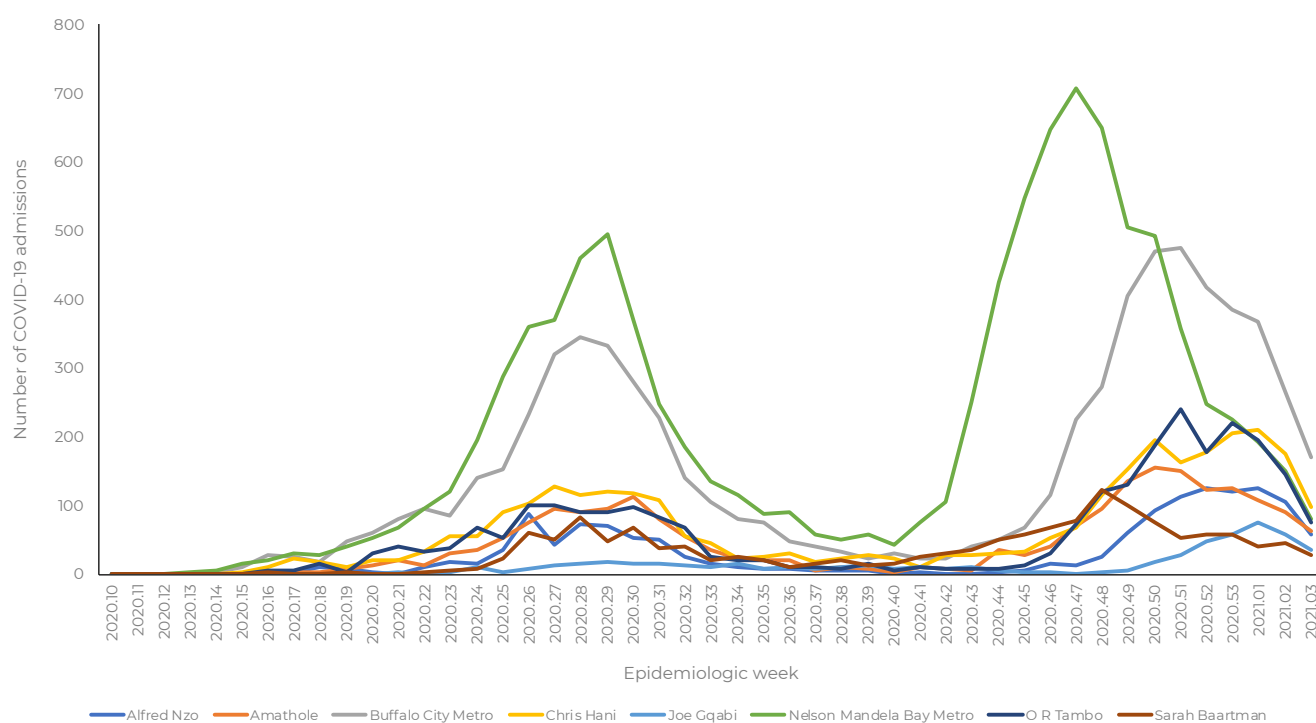


**Figure 5:** Number of reported COVID-19 admissions by health sector and epidemiologic week of diagnosis, Eastern Cape, 5 March 2020-23 January 2021

# COVID-19 SENTINEL HOSPITAL SURVEILLANCE UPDATE

WEEK 3 2021

The increase in admissions in Eastern Cape was predominantly in Nelson Mandela Bay Metro and Buffalo City Metro. The weekly admissions exceeded the numbers of admissions at the peak of the first wave in all districts (Figure 6). Admissions have decreased in Nelson Mandela Bay Metro since week 47 2020, in Sarah Baartman since week 48 2020 and in Buffalo City since week 51 2020 and in all other districts in the past three weeks.



**Figure 6.** Number of reported COVID-19 admissions, by district and epidemiologic week, Eastern Cape, 5 March 2020-23 January 2021

# COVID-19 SENTINEL HOSPITAL SURVEILLANCE UPDATE

WEEK 3 2021

All districts showed decrease in COVID-19 admission in week 2 and week 3 2021. The highest proportion of new admissions and the highest incidence risk of new admissions was in Buffalo City Metro (Table 4).

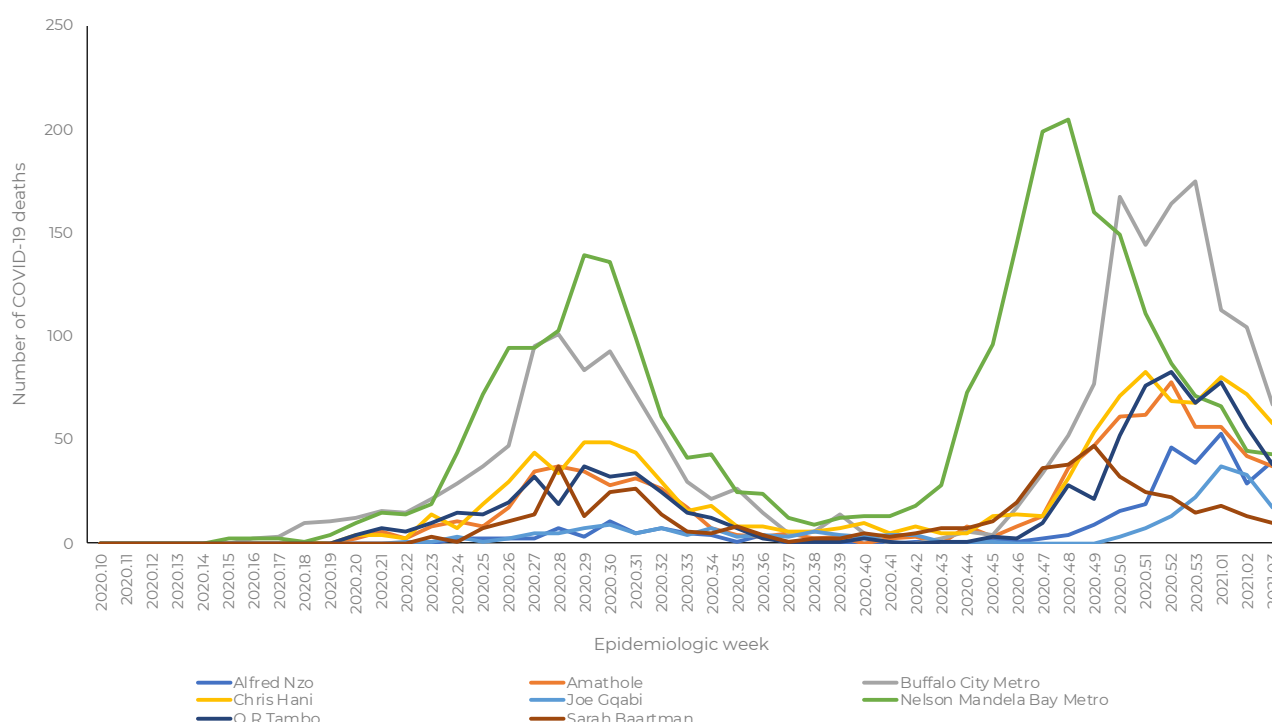
**Table 4:** Number and percentage change in COVID-19 admissions, epidemiologic week 2 to week 3 2021, by district, Eastern Cape

| District                 | Cumulative hospital admissions | Admissions Week 2 | Admissions Week 3 | Percentage change in admissions | Percentage of total new admissions | Incidence risk of new admissions /100 000 persons |
|--------------------------|--------------------------------|-------------------|-------------------|---------------------------------|------------------------------------|---|
| Alfred Nzo               | 1416                           | 104               | 57                | -45                             | 9.4                                | 1.1   |
| Amathole                 | 2143                           | 90                | 62                | -31                             | 10.3                               | 1.3   |
| Buffalo City Metro       | 6819                           | 266               | 171               | -36                             | 28.3                               | 3.5   |
| Chris Hani               | 3028                           | 175               | 97                | -45                             | 16.1                               | 2.2   |
| Joe Gqabi                | 551                            | 58                | 34                | -41                             | 5.6                                | 1.6   |
| Nelson Mandela Bay Metro | 9734                           | 149               | 79                | -47                             | 13.1                               | 1.1   |
| O R Tambo                | 2669                           | 145               | 76                | -48                             | 12.6                               | 0.8   |
| Sarah Baartman           | 1485                           | 35                | 31                | -11                             | 4.1                                | 0.8   |

# COVID-19 SENTINEL HOSPITAL SURVEILLANCE UPDATE

WEEK 3 2021

The increase in deaths in Eastern Cape was predominantly in Nelson Mandela Bay Metro and Buffalo City Metro. The weekly deaths exceeded the numbers of deaths at the peak of the first wave in all districts (Figure 7). The numbers of deaths have decreased in Nelson Mandela Bay Metro since week 47 2020, Sarah Baartman since week 48 2020 and in Buffalo City Metro since week 53 2020 and in all other districts in the first weeks of 2021.



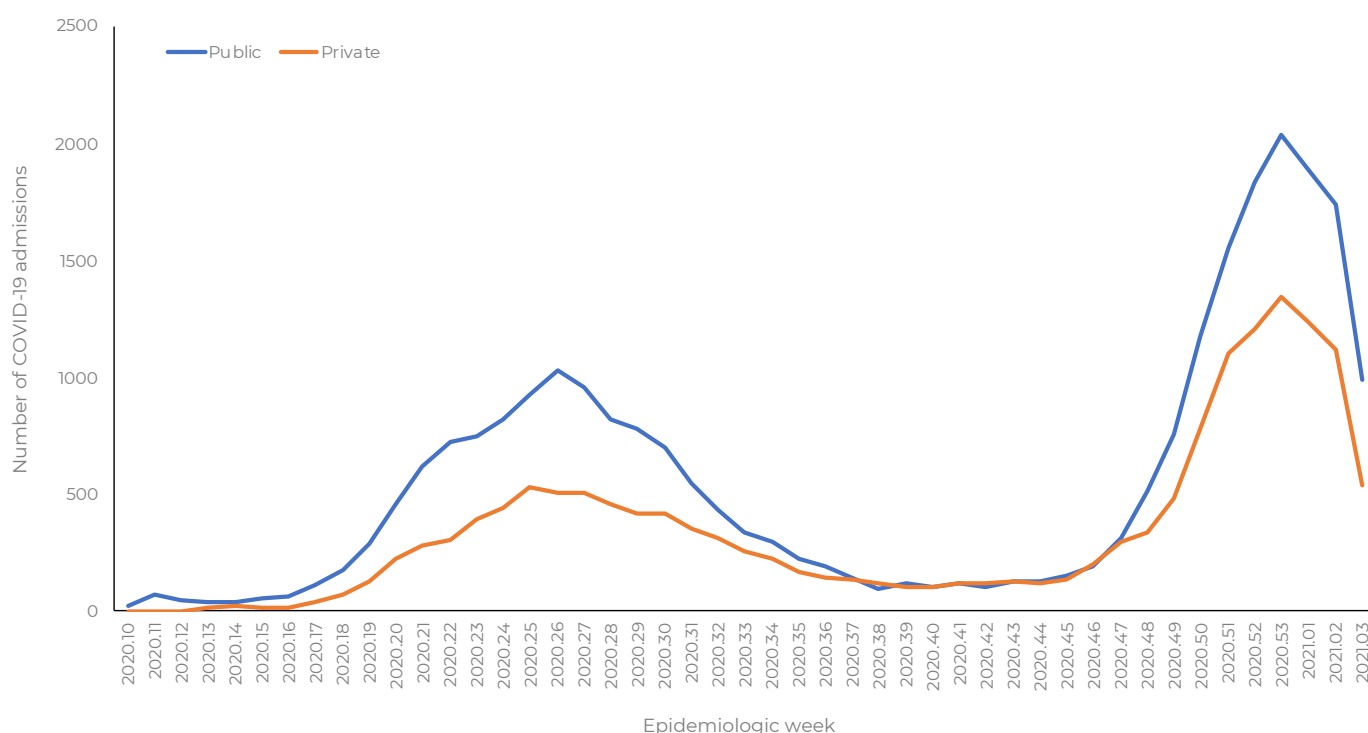
**Figure 7.** Number of reported COVID-19 in-hospital deaths, by district and epidemiologic week, Eastern Cape, 5 March 2020-23 January 2021

# COVID-19 SENTINEL HOSPITAL SURVEILLANCE UPDATE

WEEK 3 2021

## WESTERN CAPE

There was an increase in admissions reported in the Western Cape in both public and private sectors since week 43 2020, exceeding the weekly numbers of admissions at the peak of the first wave in both sectors (Figure 8). Since week 1 2021, a decrease in admissions has been observed in both sectors

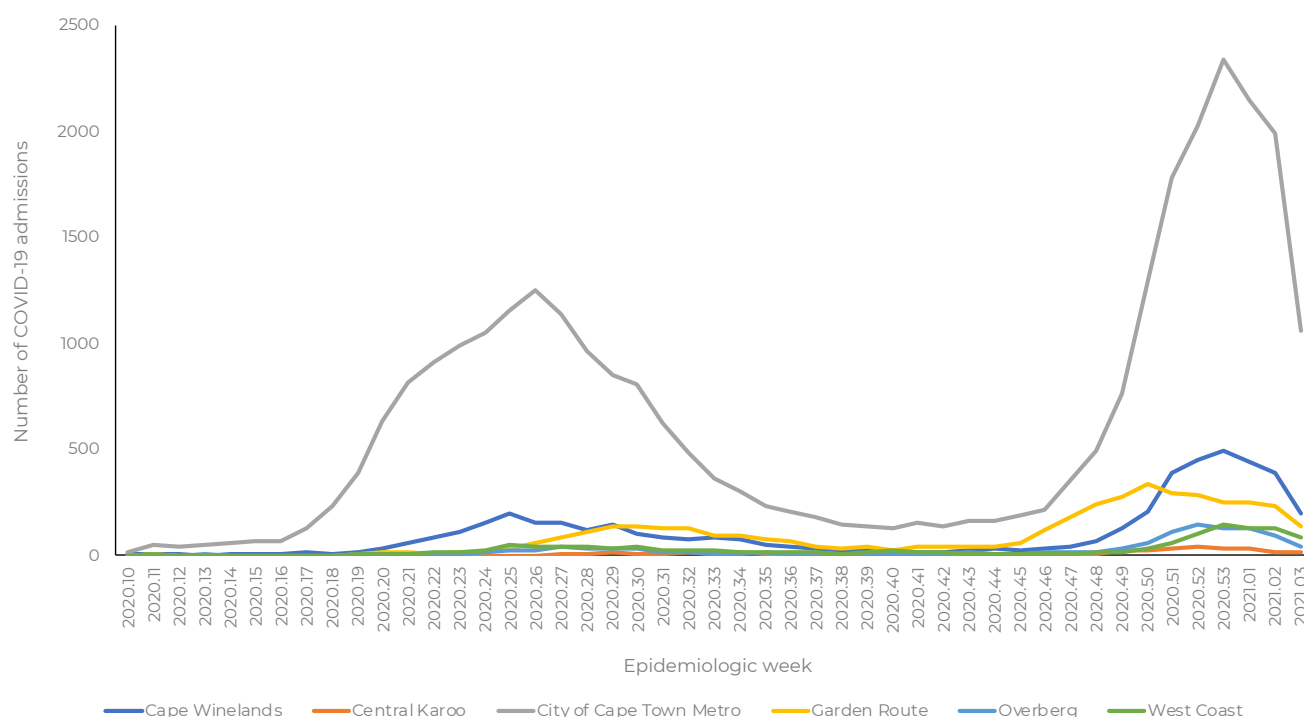


**Figure 8:** Number of reported COVID-19 admissions by health sector and epidemiologic week of diagnosis, Western Cape, 5 March 2020-23 January 2021

# COVID-19 SENTINEL HOSPITAL SURVEILLANCE UPDATE

WEEK 3 2021

The increase in admissions in Western Cape began in Garden Route then City of Cape Town Metro and Cape Winelands, exceeding the weekly numbers of admissions at the peak of the first wave in all districts (Figure 9). Admissions have decreased in Garden Route since week 48 2020, in Cape Winelands and Overberg since week 52 2020, City of Cape Town and West Coast since week 53 2020 and all other districts in week 2 and week 3 of 2021.



**Figure 9:** Number of reported COVID-19 admissions, by district and epidemiologic week, Western Cape, 5 March 2020-23 January 2021

# COVID-19 SENTINEL HOSPITAL SURVEILLANCE UPDATE

WEEK 3 2021

The highest proportion of new admissions was in City of Cape Town (Table 5).

**Table 5:** Percentage change in COVID-19 admissions, epidemiologic week 2 to week 3 2021, by district, Western Cape

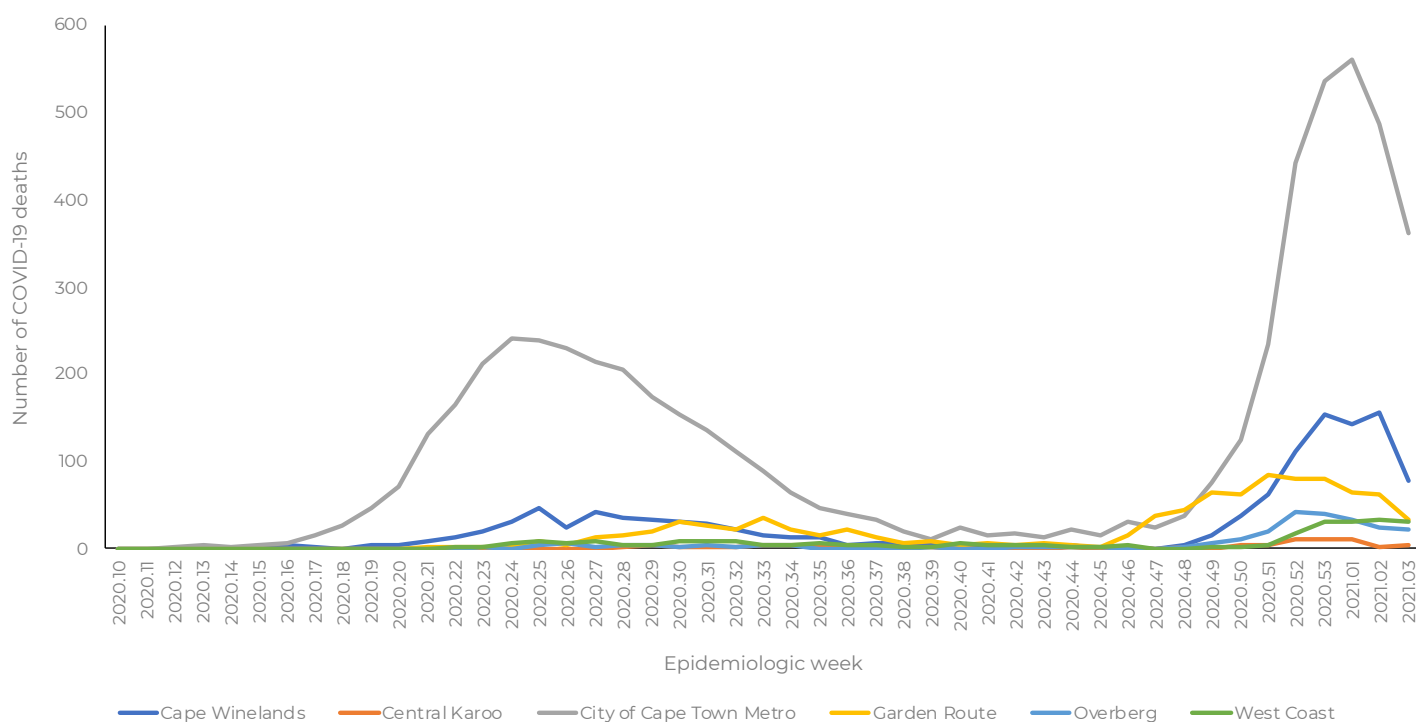
| District                | Cumulative hospital admissions | Admissions Week 2 | Admissions Week 3 | Percentage change in admissions | Percentage of total new admissions | Incidence risk of new admissions /100 000 persons |
|-------------------------|--------------------------------|-------------------|-------------------|---------------------------------|------------------------------------|---|
| Cape Winelands          | 4885                           | 390               | 198               | -49                             | 12.9                               | 1.4   |
| Central Karoo           | 365                            | 19                | 15                | -21                             | 1.0                                | 1.3   |
| City of Cape Town Metro | 29735                          | 1992              | 1057              | -47                             | 68.8                               | 1.5   |
| Garden Route            | 4212                           | 230               | 134               | -42                             | 8.7                                | 1.4   |
| Overberg                | 1157                           | 95                | 43                | -55                             | 2.8                                | 0.9   |
| West Coast              | 1295                           | 129               | 89                | -31                             | 5.8                                | 1.3   |



# COVID-19 SENTINEL HOSPITAL SURVEILLANCE UPDATE

WEEK 3 2021

The increase in deaths in Western Cape was predominantly in City of Cape Town Metro, Garden Route and Cape Winelands, exceeding the weekly numbers of deaths at the peak of the first wave in all districts (Figure 10). The numbers of deaths in Garden Route has decreased since week 51 2020.



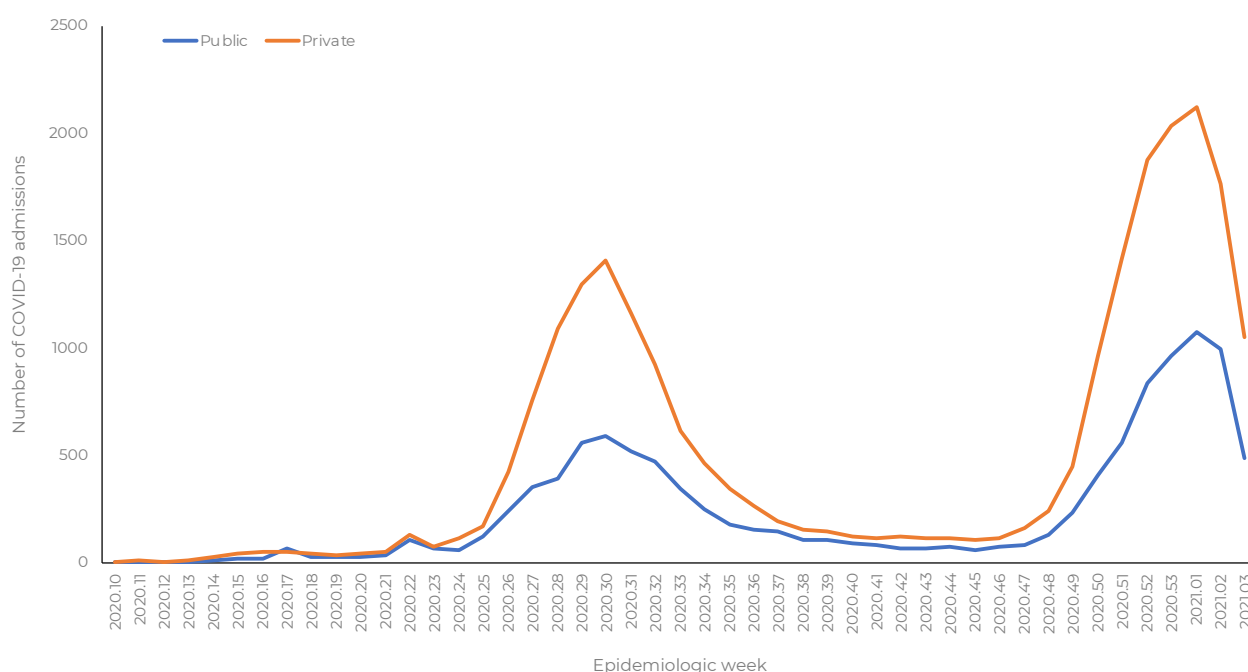
**Figure 10:** Number of reported COVID-19 in-hospital deaths, by district and epidemiologic week, Western Cape, 5 March 2020-23 January 2021

# COVID-19 SENTINEL HOSPITAL SURVEILLANCE UPDATE

WEEK 3 2021

## KWAZULU-NATAL

There has been an increase in admissions in KwaZulu-Natal in the private sector since week 46 2020 and in the public sector since week 47 2020, exceeding the weekly numbers of admissions at the peak of the first wave in both sectors (Figure 11). Numbers have been decreasing in the private and public sector since week 2 2021. Decreases in the most recent week may reflect delays in data submission.

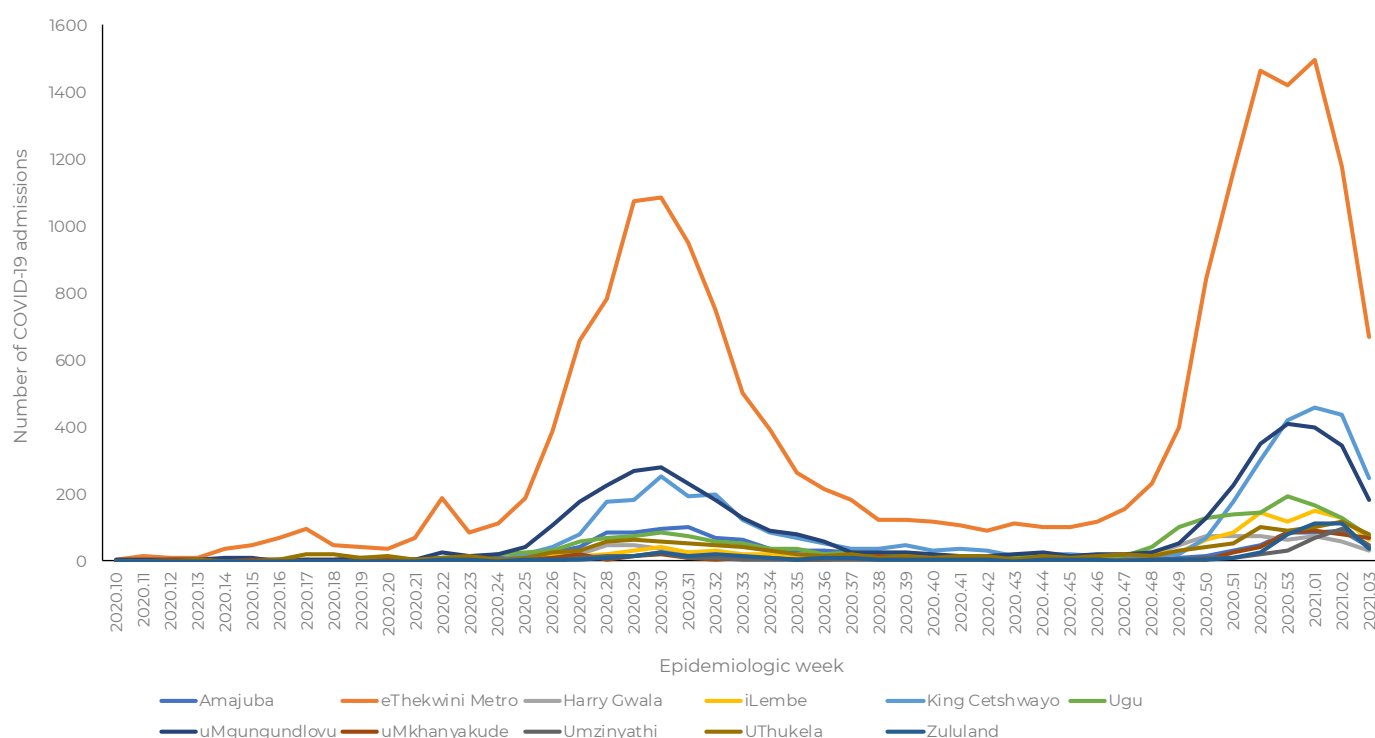


**Figure 11:** Number of reported COVID-19 admissions by health sector and epidemiologic week of diagnosis, KwaZulu-Natal, 5 March 2020-23 January 2021

# COVID-19 SENTINEL HOSPITAL SURVEILLANCE UPDATE

WEEK 3 2021

The increase in admissions in KwaZulu-Natal is predominantly in eThekweni Metro, uMgungundlovu and King Cetshwayo districts; and has exceeded the weekly numbers of admissions at the peak of the first wave in all districts except Amajuba (Figure 12). Admissions in eThekweni Metro have decreased since week 52 2020 and numbers appear to be decreasing in other districts since week 2 2021.



**Figure 12:** Number of reported COVID-19 admissions, by district and epidemiologic week, KwaZulu-Natal, 5 March 2020-23 January 2021

# COVID-19 SENTINEL HOSPITAL SURVEILLANCE UPDATE

WEEK 3 2021

The highest proportion of new admissions was in eThekwin Metro (Table 6).

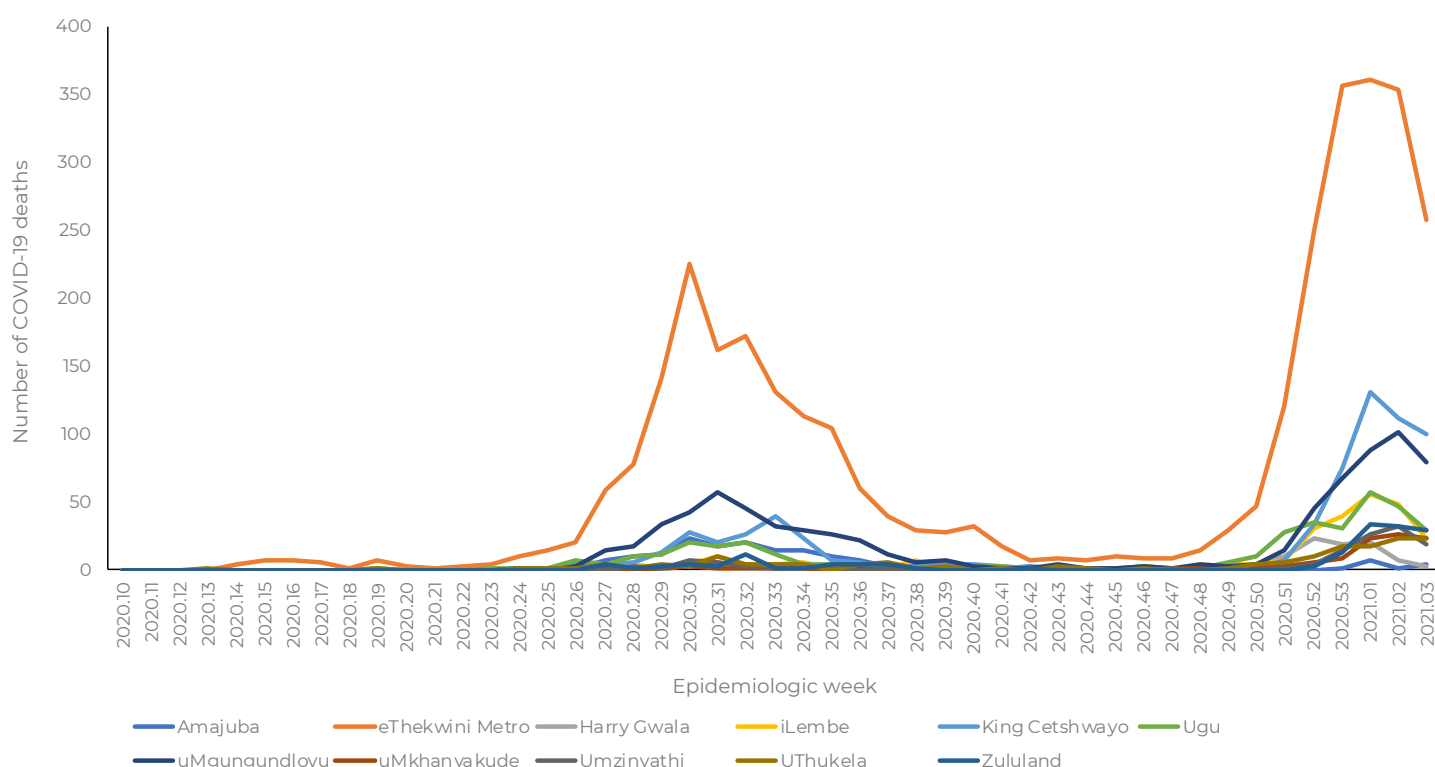
**Table 6:** Percentage change in COVID-19 admissions, epidemiologic week 2 to week 3 2021, by district, KwaZulu-Natal

| District       | Cumulative hospital admissions | Admissions Week 2 | Admissions Week 3 | Percentage change in admissions | Percentage of total new admissions | Incidence risk of new admissions /100 000 persons |
|----------------|--------------------------------|-------------------|-------------------|---------------------------------|------------------------------------|---|
| Amajuba        | 1204                           | 89                | 41                | -54                             | 2.7                                | 0.5   |
| eThekwin Metro | 18254                          | 1176              | 666               | -43                             | 43.3                               | 1.1   |
| Harry Gwala    | 795                            | 60                | 30                | -50                             | 2.0                                | 0.4   |
| iLembe         | 1159                           | 128               | 63                | -51                             | 4.1                                | 0.6   |
| King Cetshwayo | 3916                           | 434               | 249               | -43                             | 16.2                               | 1.7   |
| Ugu            | 1916                           | 127               | 74                | -42                             | 4.8                                | 0.6   |
| uMgungundlovu  | 4303                           | 344               | 182               | -47                             | 11.8                               | 1.0   |
| uMkhanyakude   | 594                            | 77                | 66                | -14                             | 4.3                                | 0.6   |
| Umzinyathi     | 390                            | 96                | 49                | -49                             | 3.2                                | 0.6   |
| UThukela       | 1297                           | 117               | 80                | -32                             | 5.2                                | 0.7   |
| Zululand       | 529                            | 112               | 38                | -66                             | 2.5                                | 0.3   |

# COVID-19 SENTINEL HOSPITAL SURVEILLANCE UPDATE

WEEK 3 2021

The increase in deaths in KwaZulu-Natal was predominantly in eThekweni, and has exceeded the weekly numbers of deaths at the peak of the first wave in all districts (Figure 13).



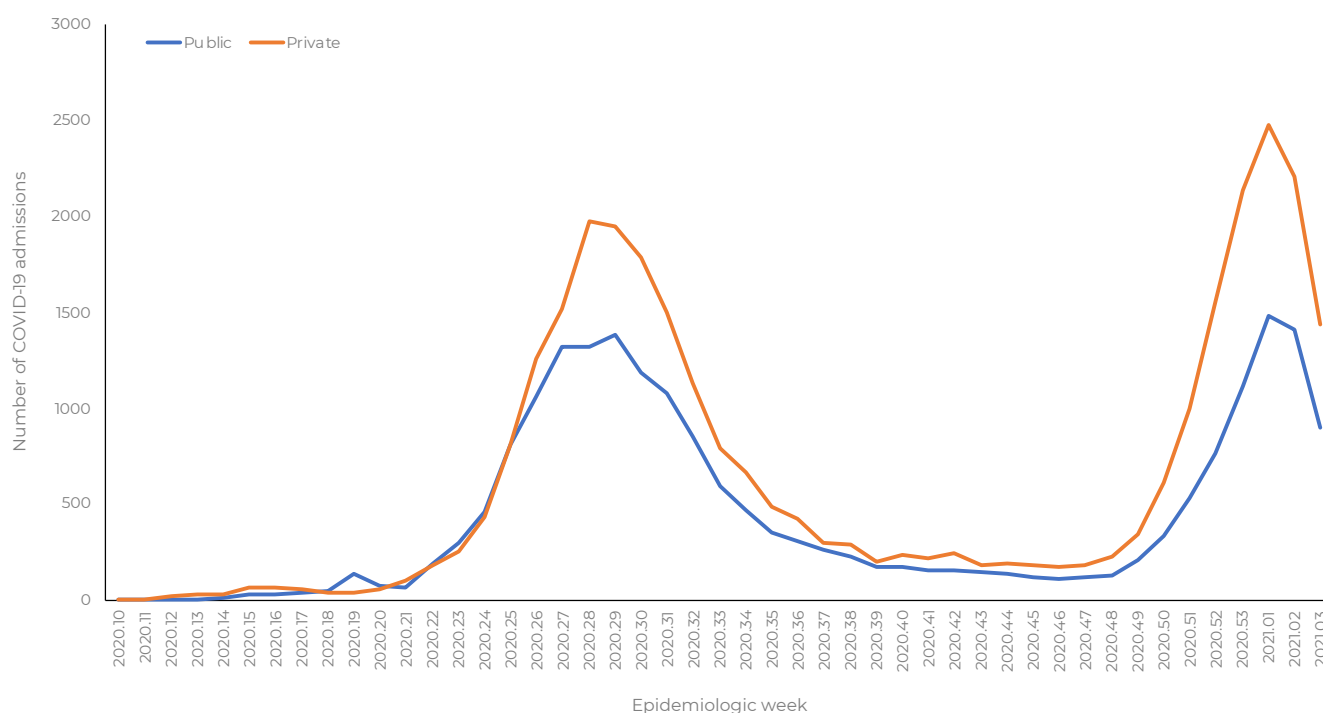
**Figure 13:** Number of reported COVID-19 in-hospital deaths, by district and epidemiologic week, KwaZulu-Natal, 5 March 2020-23 January 2021

# COVID-19 SENTINEL HOSPITAL SURVEILLANCE UPDATE

WEEK 3 2021

## GAUTENG

There has been an increase in admissions reported in Gauteng in the private and public sector since week 48 2020, exceeding the weekly numbers of admissions at the peak of the first wave in the private and public sectors (Figure 14). Weekly numbers of admissions have been decreasing since week 2 2021. Decreases in the most recent week may reflect delays in data submission.

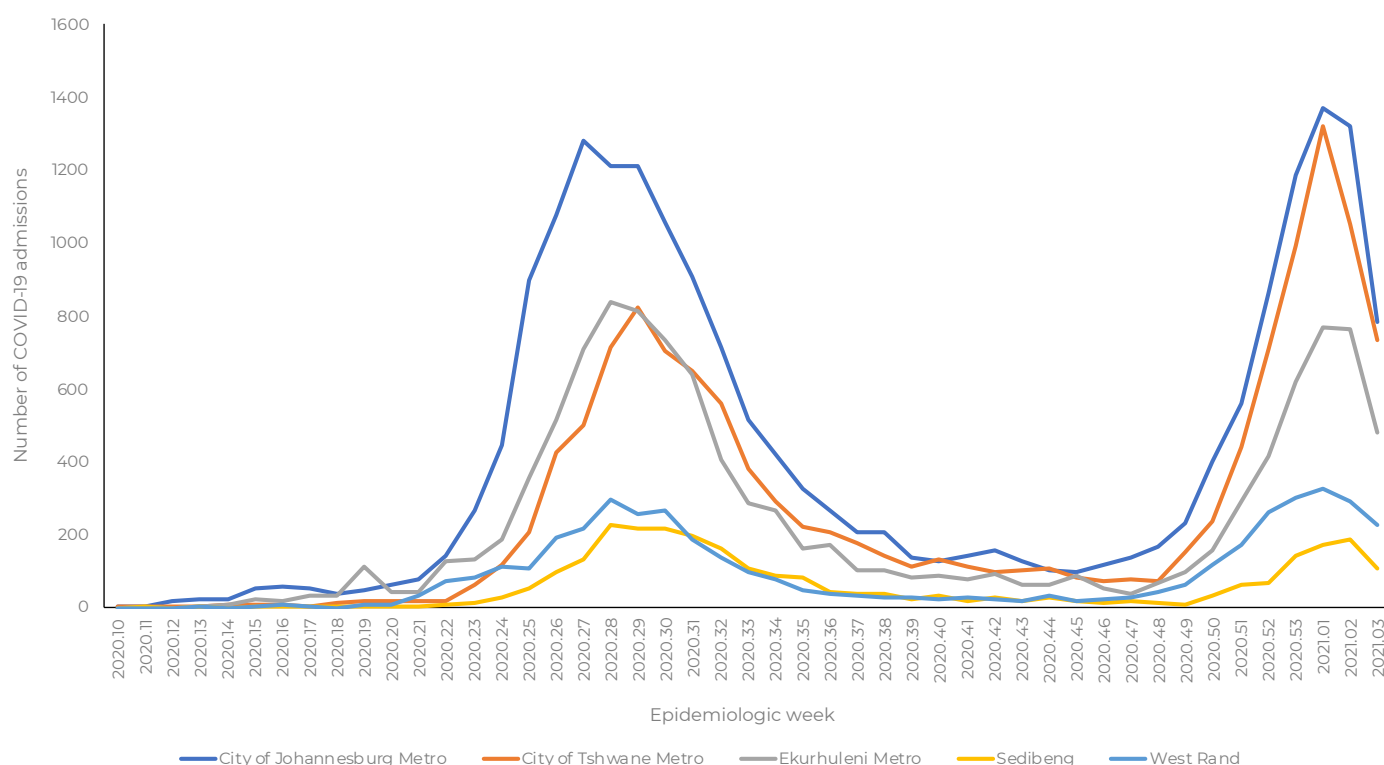


**Figure 14:** Number of reported COVID-19 admissions by health sector and epidemiologic week of diagnosis, Gauteng, 5 March 2020-23 January 2021

# COVID-19 SENTINEL HOSPITAL SURVEILLANCE UPDATE

WEEK 3 2021

The increase in admissions in Gauteng is seen predominantly in City of Johannesburg and City of Tshwane; and has exceeded the weekly numbers of admissions at the peak of the first wave in City of Johannesburg Metro, City of Tshwane Metro and West Rand (Figure 15). Numbers are decreasing in all districts. Decreases in the most recent week may reflect delays in data submission.



**Figure 15:** Number of reported COVID-19 admissions, by district and epidemiologic week, Gauteng, 5 March 2020-23 January 2021



# COVID-19 SENTINEL HOSPITAL SURVEILLANCE UPDATE

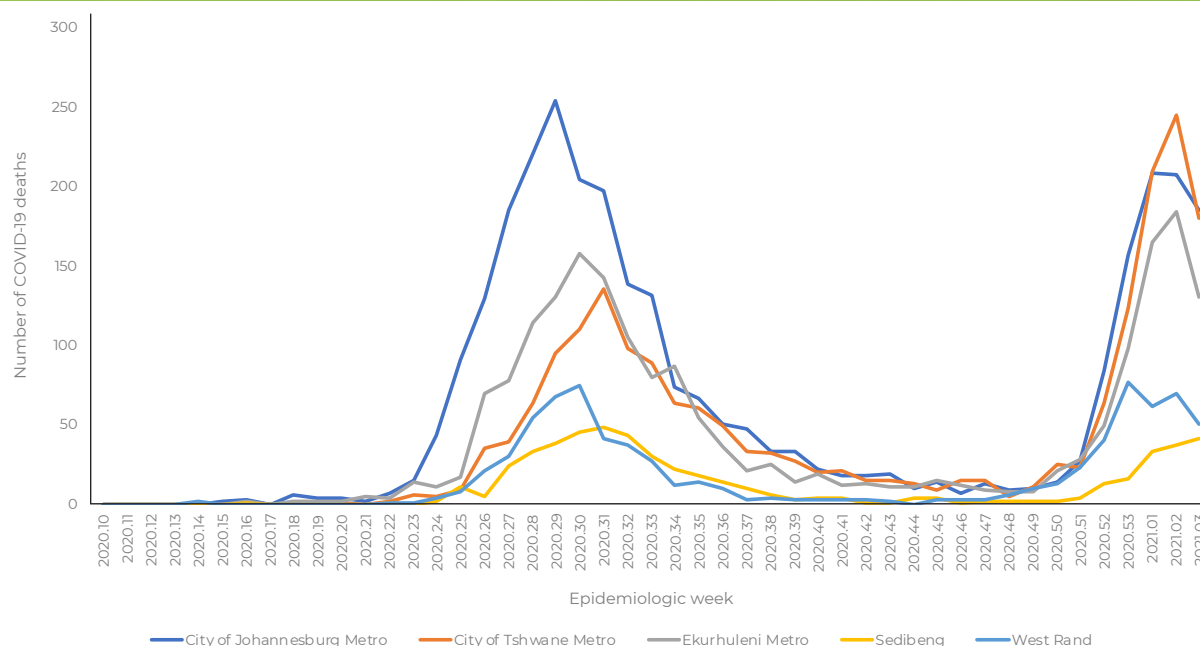
WEEK 3 2021

All districts showed decrease in COVID-19 admission in week 2 and week 3 2021. The highest proportion of new admissions were in City of Johannesburg and City of Tshwane Metros (Table 7).

**Table 7:** Percentage change in COVID-19 admissions, epidemiologic week 2 to week 3 2021, by district, Gauteng

| District                   | Cumulative hospital admissions | Admissions Week 2 | Admissions Week 3 | Percentage change in admissions | Percentage of total new admissions | Incidence risk of new admissions /100 000 persons |
|----------------------------|--------------------------------|-------------------|-------------------|---------------------------------|------------------------------------|---|
| City of Johannesburg Metro | 19644                          | 1321              | 782               | -41                             | 33.5                               | 0.6   |
| City of Tshwane Metro      | 12897                          | 1051              | 736               | -30                             | 31.6                               | 0.8   |
| Ekurhuleni Metro           | 11166                          | 766               | 478               | -38                             | 20.5                               | 0.5   |
| Sedibeng                   | 2740                           | 187               | 106               | -43                             | 4.5                                | 0.5   |
| West Rand                  | 4316                           | 290               | 229               | -21                             | 9.8                                | 1.0   |

The number of deaths has increased in all Gauteng districts, and has exceeded the weekly numbers of deaths at the peak of the first wave in City of Tshwane Metro and West Rand (Figure 16).



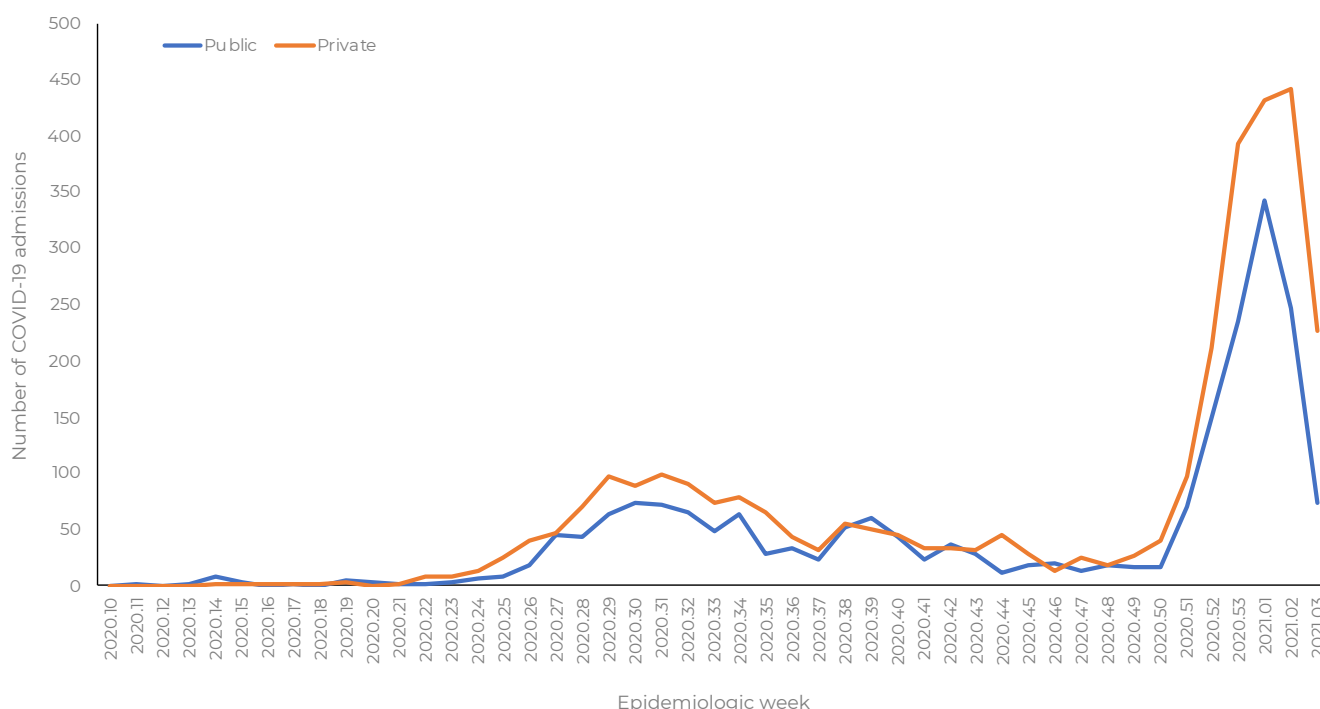
**Figure 16:** Number of reported COVID-19 in-hospital deaths, by district and epidemiologic week, Gauteng, 5 March 2020-23 January 2021

# COVID-19 SENTINEL HOSPITAL SURVEILLANCE UPDATE

WEEK 3 2021

## LIMPOPO

There has been an increase in admissions reported in Limpopo in the private sector since week 48 2020 and in the public sector since week 50 2020, exceeding the weekly numbers of admissions at the peak of the first wave in both sectors (Figure 17). Numbers of admissions have been decreasing since week 2 2021 in the public sector. Decreases in the most recent week may reflect delays in data submission.

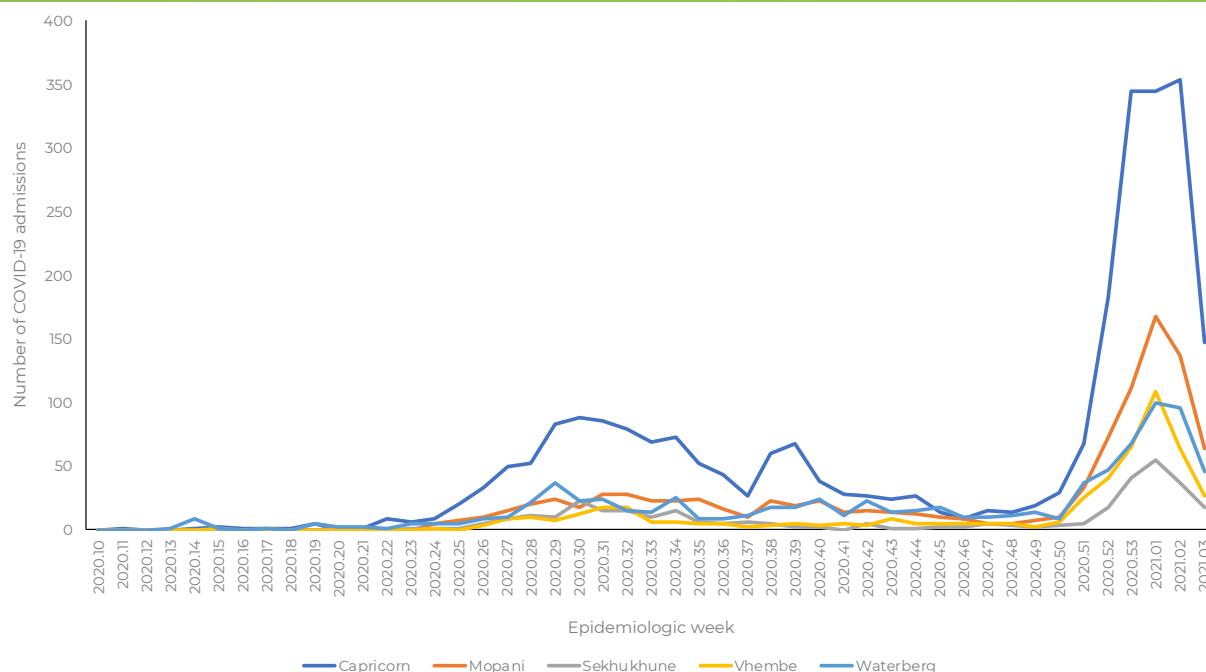


**Figure 17:** Number of reported COVID-19 admissions by health sector and epidemiologic week of diagnosis, Limpopo, 5 March 2020-23 January 2021

# COVID-19 SENTINEL HOSPITAL SURVEILLANCE UPDATE

WEEK 3 2021

The increase in admissions in Limpopo is observed predominantly in Capricorn, exceeding the weekly numbers of admissions at the peak of the first wave in all districts (Figure 18). Decreases in the most recent week may reflect delays in data submission.



**Figure 18:** Number of reported COVID-19 admissions, by district and epidemiologic week, Limpopo, 5 March 2020-23 January 2021

# COVID-19 SENTINEL HOSPITAL SURVEILLANCE UPDATE

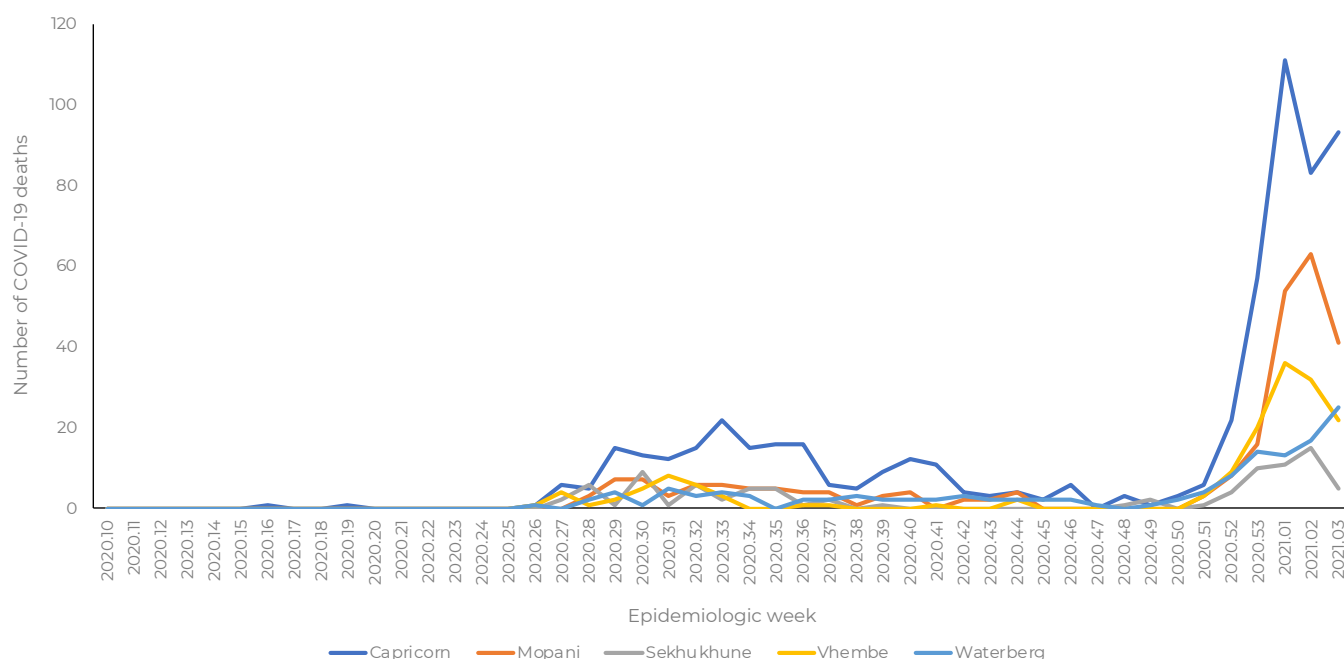
WEEK 3 2021

All districts showed decrease in COVID-19 admission in week 2 and week 3 2021. The highest proportion of new admissions was in Capricorn (Table 8).

**Table 8:** Percentage change in COVID-19 admissions, epidemiologic week 2 to week 3 2021, by district, Limpopo

| District   | Cumulative hospital admissions | Admissions Week 2 | Admissions Week 3 | Percentage change in admissions | Percentage of total new admissions | Incidence risk of new admissions /100 000 persons |
|------------|--------------------------------|-------------------|-------------------|---------------------------------|------------------------------------|---|
| Capricorn  | 2593                           | 353               | 147               | -58                             | 49.0                               | 3.7   |
| Mopani     | 1000                           | 137               | 64                | -53                             | 21.3                               | 1.8   |
| Sekhukhune | 335                            | 37                | 17                | -54                             | 5.7                                | 0.5   |
| Vhembe     | 487                            | 64                | 26                | -59                             | 8.7                                | 0.6   |
| Waterberg  | 824                            | 96                | 46                | -52                             | 15.3                               | 2.1   |

The increases in deaths have occurred in all districts but predominantly in Capricorn, exceeding the weekly numbers of deaths at the peak of the first wave in all districts (Figure 19).



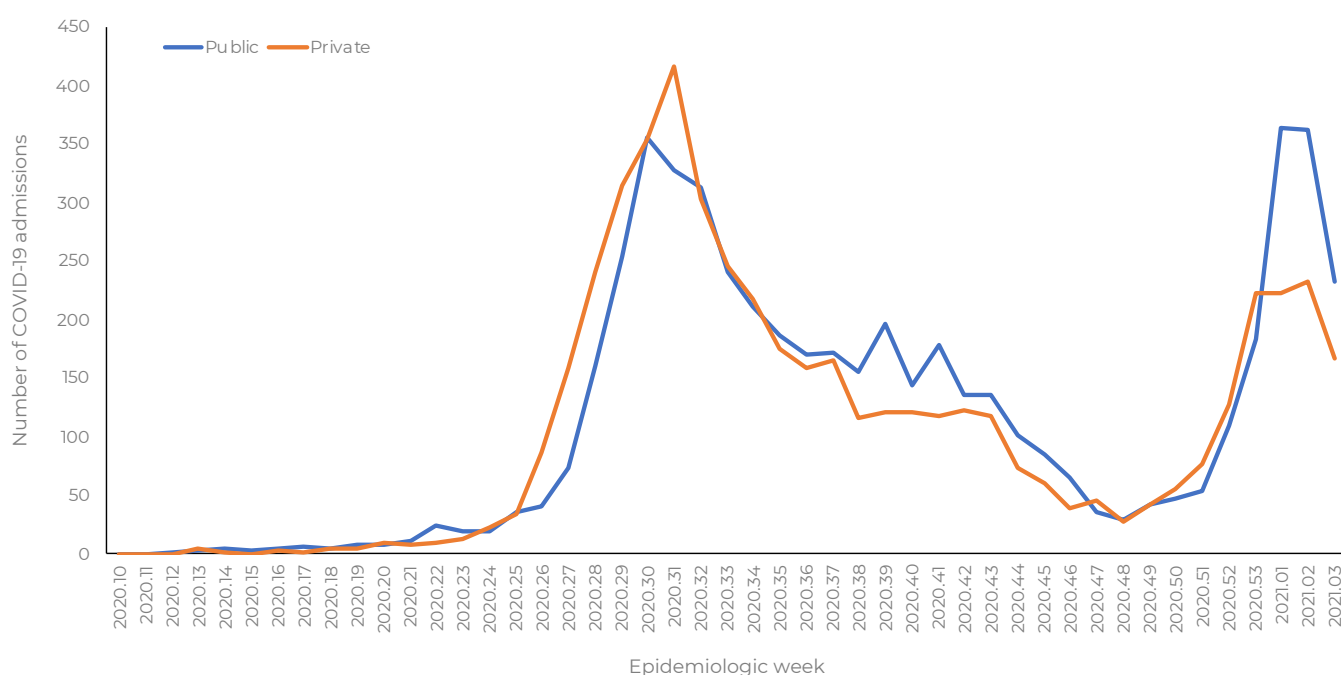
**Figure 19:** Number of reported COVID-19 in-hospital deaths, by district and epidemiologic week, Limpopo, 5 March 2020-23 January 2021

# COVID-19 SENTINEL HOSPITAL SURVEILLANCE UPDATE

WEEK 3 2021

## FREE STATE

There has been an increase in admissions reported in Free State in the private sector since week 48 2020 and in the public sector since week 50 2020 (Figure 20).

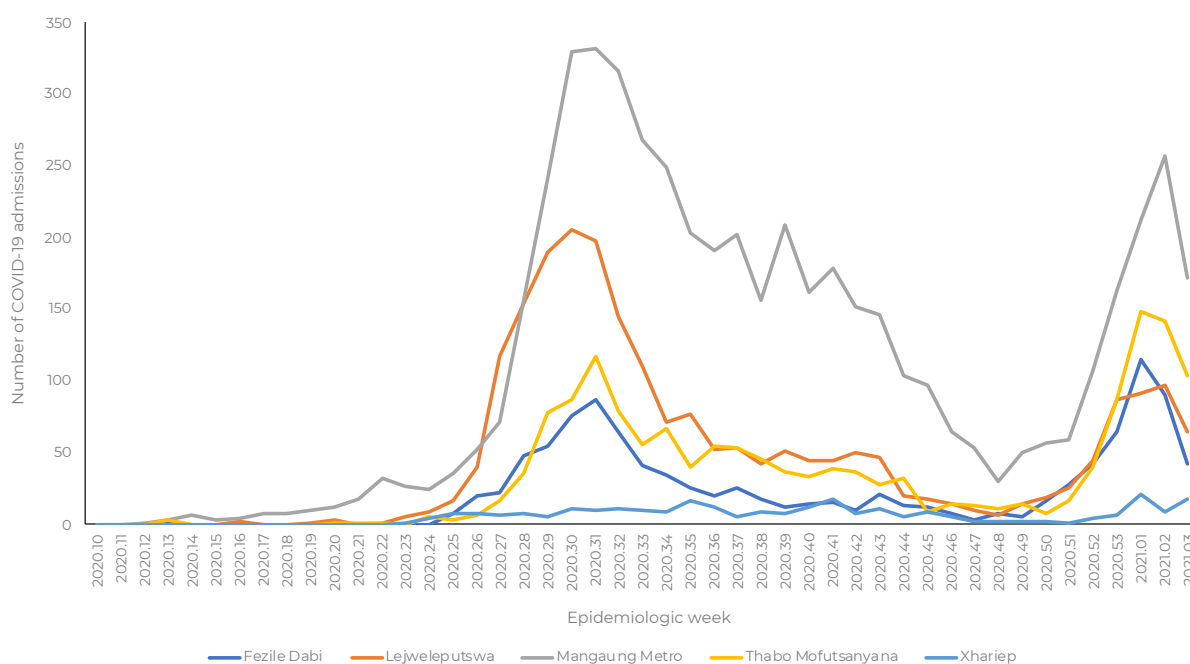


**Figure 20:** Number of reported COVID-19 admissions by health sector and epidemiologic week of diagnosis, Free State, 5 March 2020-23 January 2021

# COVID-19 SENTINEL HOSPITAL SURVEILLANCE UPDATE

WEEK 3 2021

The increase in admissions in Free State is seen in all districts except Xhariep, exceeding the weekly numbers of admissions at the peak of the first wave in Fezile Dabi and Thabo Mofutsanyane (Figure 21).



**Figure 21:** Number of reported COVID-19 admissions, by district and epidemiologic week, Free State, 5 March 2020-23 January 2021

# COVID-19 SENTINEL HOSPITAL SURVEILLANCE UPDATE

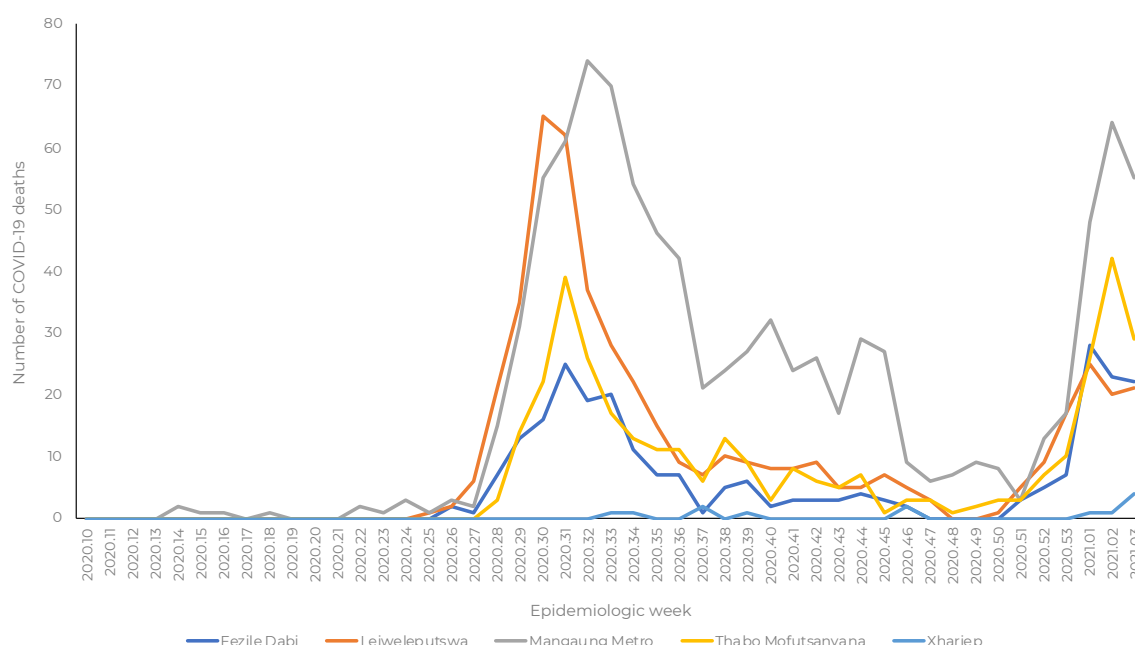
WEEK 3 2021

The number of COVID-19 admissions increased in one of five districts from week 2 to week 3 2021, Xhariep. The highest proportion of new admissions were in Mangaung Metro (Table 9).

**Table 9:** Percentage change in COVID-19 admissions, epidemiologic week 2 to week 3 2021, by district, Free State

| District           | Cumulative hospital admissions | Admissions Week 2 | Admissions Week 3 | Percentage change in admissions | Percentage of total new admissions | Incidence risk of new admissions /100 000 persons |
|--------------------|--------------------------------|-------------------|-------------------|---------------------------------|------------------------------------|---|
| Fezile Dabi        | 1061                           | 90                | 42                | -53                             | 10.5                               | 2.1   |
| Lejweleputswa      | 2236                           | 97                | 64                | -34                             | 16.0                               | 2.5   |
| Mangaung Metro     | 5230                           | 257               | 172               | -33                             | 43.1                               | 4.9   |
| Thabo Mofutsanyana | 1560                           | 142               | 104               | -27                             | 26.1                               | 3.4   |
| Xhariep            | 275                            | 9                 | 17                | 89                              | 4.3                                | 3.3   |

The increases in deaths have occurred in all districts, exceeding the weekly numbers of deaths at the peak of the first wave in Fezile Dabi (Figure 22).



**Figure 22:** Number of reported COVID-19 in-hospital deaths, by district and epidemiologic week, Free State, 5 March 2020-23 January 2021

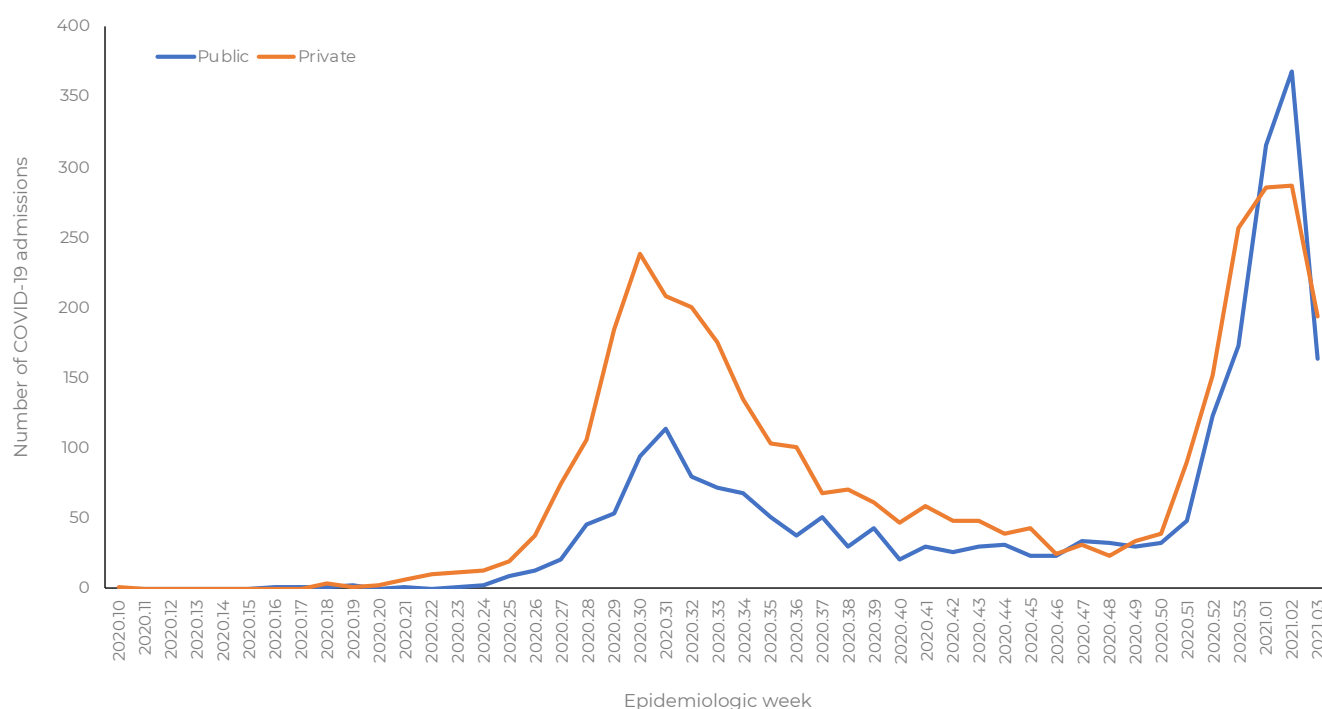


# COVID-19 SENTINEL HOSPITAL SURVEILLANCE UPDATE

WEEK 3 2021

## MPUMALANGA

There has been an increase in admissions reported in Mpumalanga in the private sector since week 48 2020 and the public sector since week 51 2020, exceeding the weekly numbers of admissions at the peak of the first wave in both sectors (Figure 23).

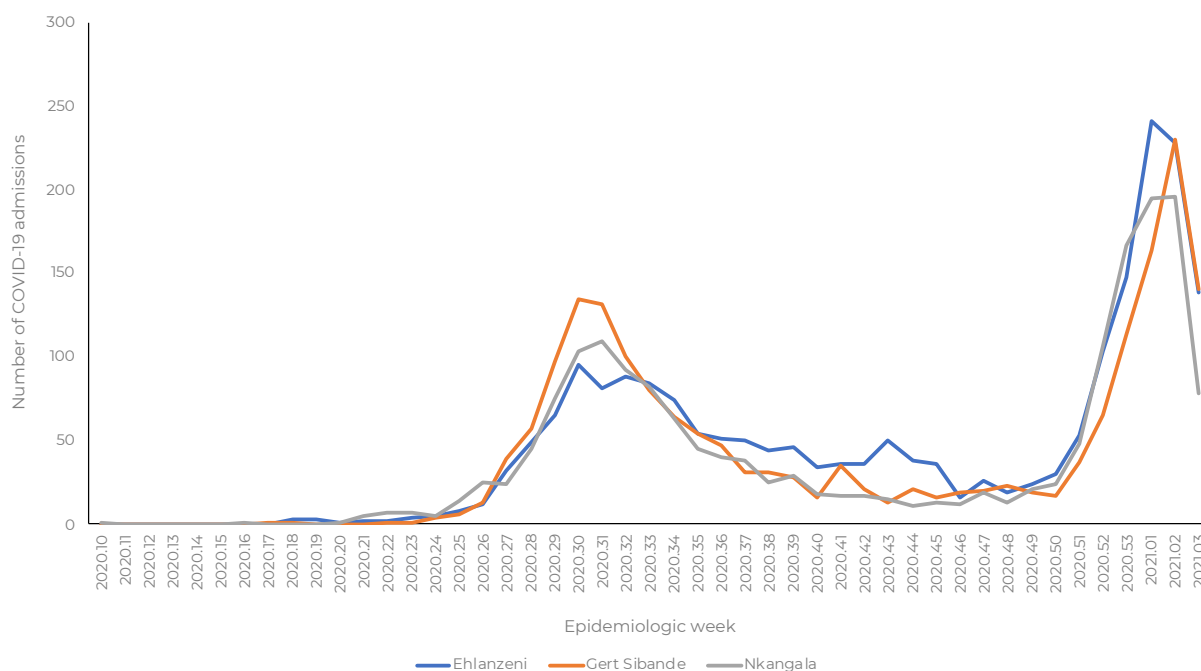


**Figure 23:** Number of reported COVID-19 admissions by health sector and epidemiologic week of diagnosis, Mpumalanga, 5 March 2020-23 January 2021

# COVID-19 SENTINEL HOSPITAL SURVEILLANCE UPDATE

WEEK 3 2021

The increase in admissions in Mpumalanga is observed in all districts, exceeding the weekly numbers of admissions at the peak of the first wave in all districts (Figure 24).



**Figure 24:** Number of reported COVID-19 admissions, by district and epidemiologic week, Mpumalanga, 5 March 2020-23 January 2021

# COVID-19 SENTINEL HOSPITAL SURVEILLANCE UPDATE

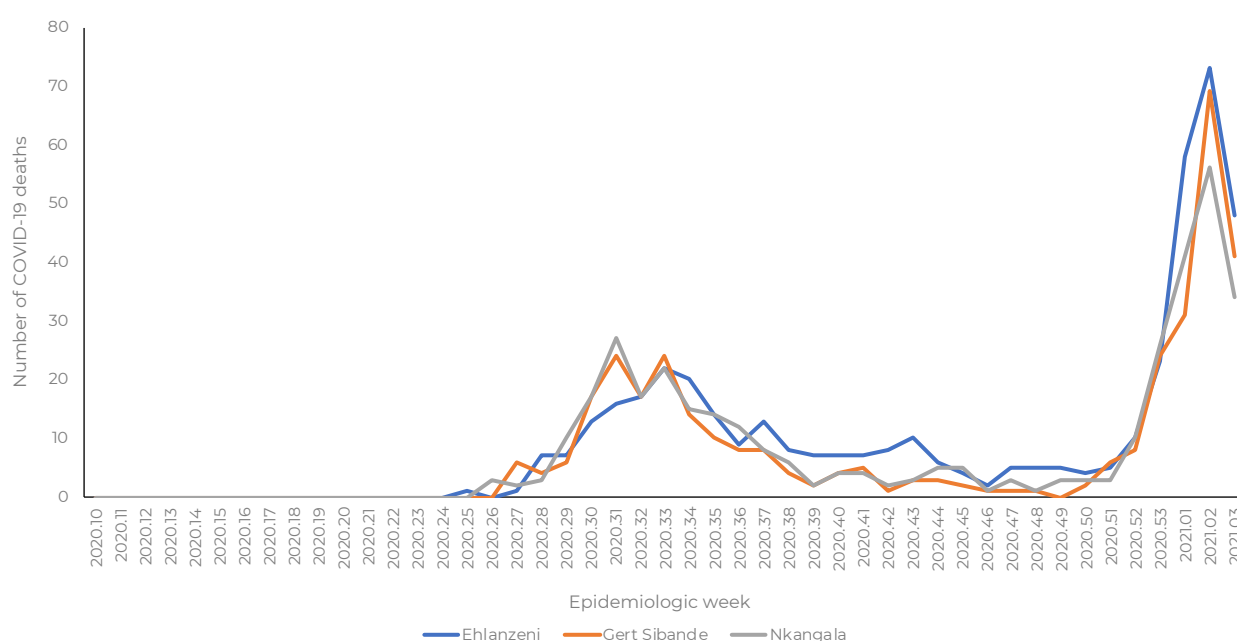
WEEK 3 2021

All districts showed decrease in COVID-19 admission in week 2 and week 3 2021. The highest proportion of new admissions were in Gert Sibande (Table 10).

**Table 10:** Percentage change in COVID-19 admissions, epidemiologic week 2 to week 3 2021, by district, Mpumalanga

| District     | Cumulative hospital admissions | Admissions Week 2 | Admissions Week 3 | Percentage change in admissions | Percentage of total new admissions | Incidence risk of new admissions /100 000 persons |
|--------------|--------------------------------|-------------------|-------------------|---------------------------------|------------------------------------|---|
| Ehlanzeni    | 2109                           | 228               | 138               | -39                             | 38.8                               | 2.1   |
| Gert Sibande | 1889                           | 230               | 140               | -39                             | 39.3                               | 3.2   |
| Nkangala     | 1806                           | 196               | 78                | -60                             | 21.9                               | 1.4   |

The increases in deaths is observed in all districts, exceeding the weekly numbers of deaths at the peak of the first wave in all districts (Figure 25).



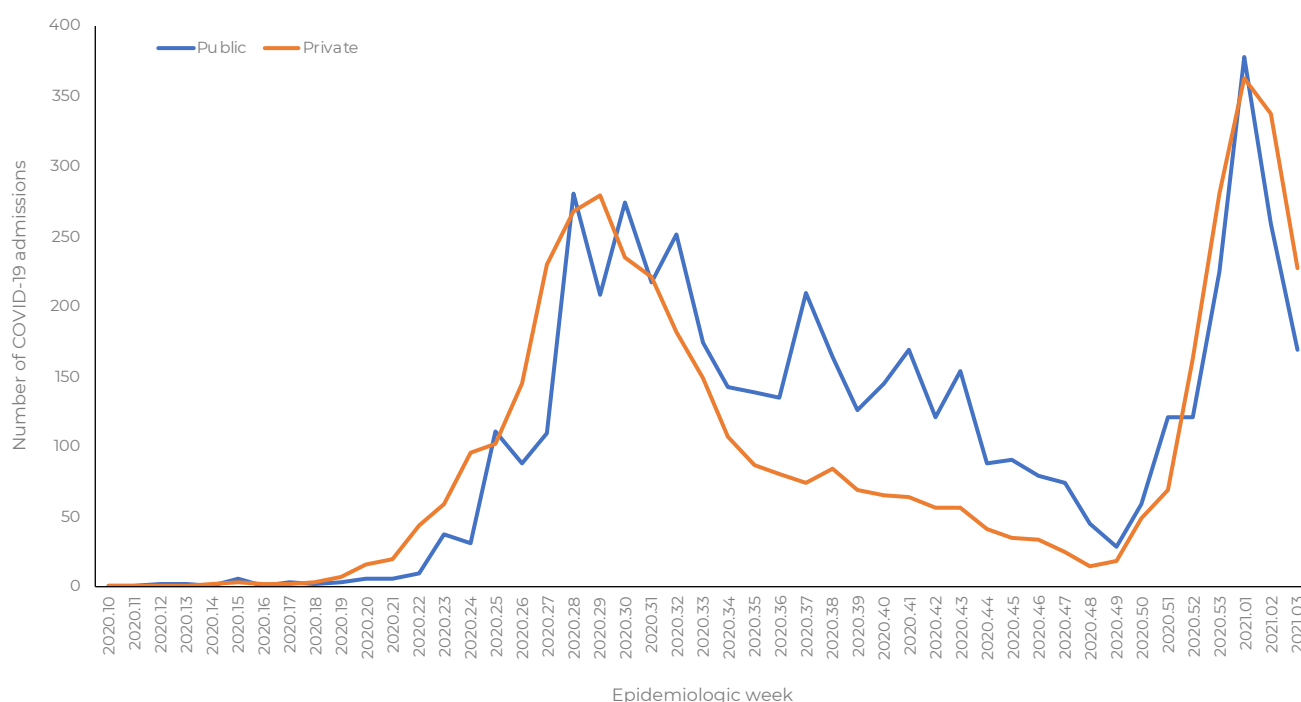
**Figure 25:** Number of reported COVID-19 in-hospital deaths, by district and epidemiologic week, Mpumalanga, 5 March 2020-23 January 2021

# COVID-19 SENTINEL HOSPITAL SURVEILLANCE UPDATE

WEEK 3 2021

## NORTH WEST

There has been an increase in admissions reported in North West in the private sector since week 48 2020 and in the public sector since week 49 2020, exceeding the weekly numbers of admissions at the peak of the first wave in both sectors (Figure 26). Numbers of admissions are decreasing since week 2 2021.

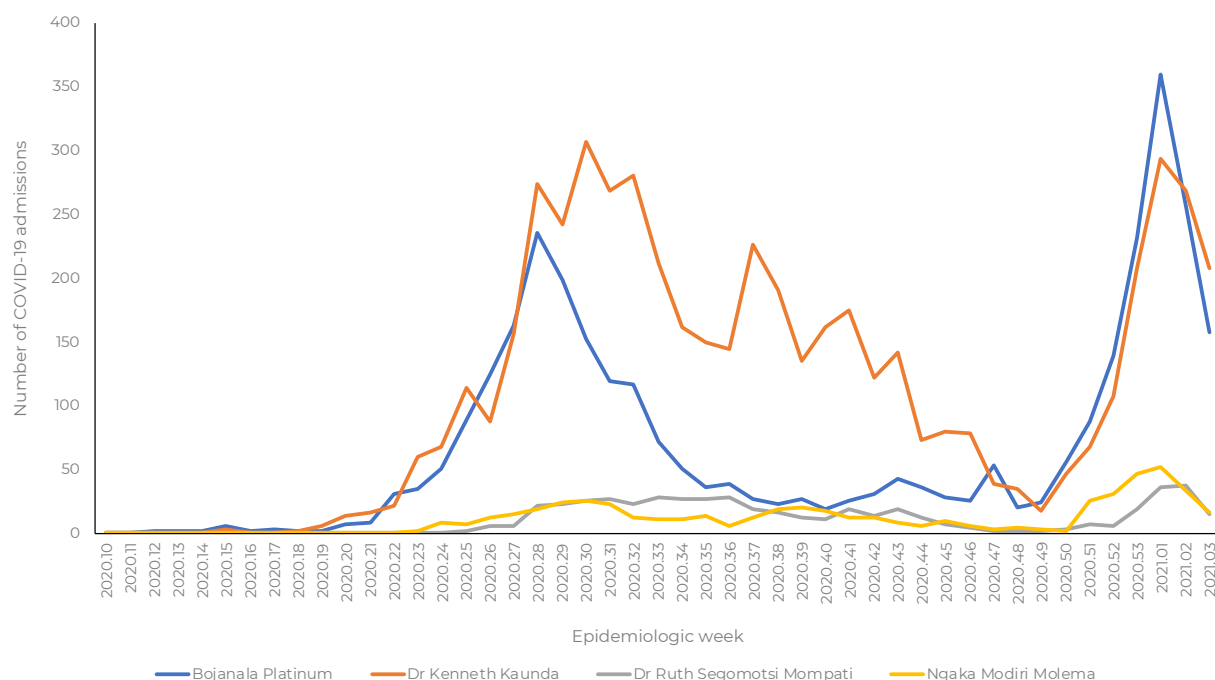


**Figure 26:** Number of reported COVID-19 admissions by health sector and epidemiologic week of diagnosis, North West, 5 March 2020-23 January 2021

# COVID-19 SENTINEL HOSPITAL SURVEILLANCE UPDATE

WEEK 3 2021

The increase in admissions in North West is observed predominantly in Dr Kenneth Kaunda and Bojanala Platinum, exceeding the weekly numbers of admissions at the peak of the first wave in all districts except Dr Kenneth Kaunda (Figure 27).



**Figure 27:** Number of reported COVID-19 admissions, by district and epidemiologic week, North West, 5 March 2020-23 January 2021

# COVID-19 SENTINEL HOSPITAL SURVEILLANCE UPDATE

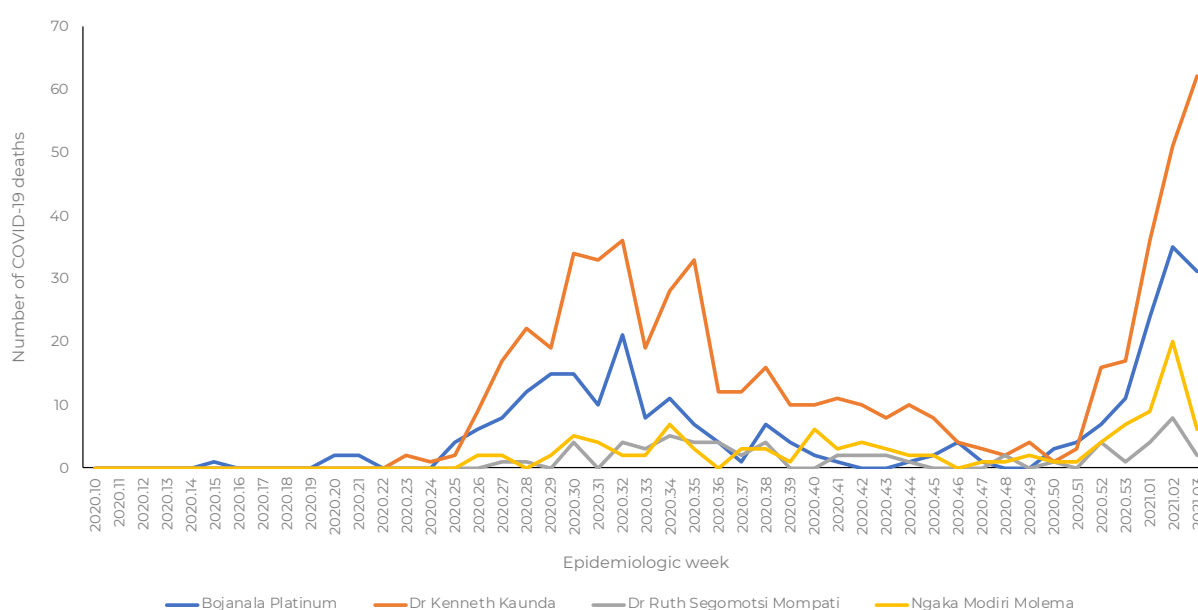
WEEK 3 2021

All districts showed decrease in COVID-19 admission in week 2 and week 3 2021. The highest proportion of new admissions were in Dr Kenneth Kaunda and Bojanala Platinum (Table 11).

**Table 11:** Percentage change in COVID-19 admissions, epidemiologic week 2 to week 3 2021, by district, North West

| District                  | Cumulative hospital admissions | Admissions Week 2 | Admissions Week 3 | Percentage change in admissions | Percentage of total new admissions | Incidence risk of new admissions /100 000 persons |
|---------------------------|--------------------------------|-------------------|-------------------|---------------------------------|------------------------------------|---|
| Bojanala Platinum         | 3204                           | 257               | 157               | -39                             | 39.6                               | 2.1   |
| Dr Kenneth Kaunda         | 5254                           | 269               | 208               | -23                             | 52.5                               | 6.6   |
| Dr Ruth Segomotsi Mompoti | 498                            | 37                | 15                | -59                             | 3.8                                | 0.8   |
| Ngaka Modiri Molema       | 518                            | 33                | 16                | -52                             | 4.0                                | 0.4   |

The increases in deaths have occurred in all districts, exceeding the weekly numbers of deaths at the peak of the first wave in all districts (Figure 28).



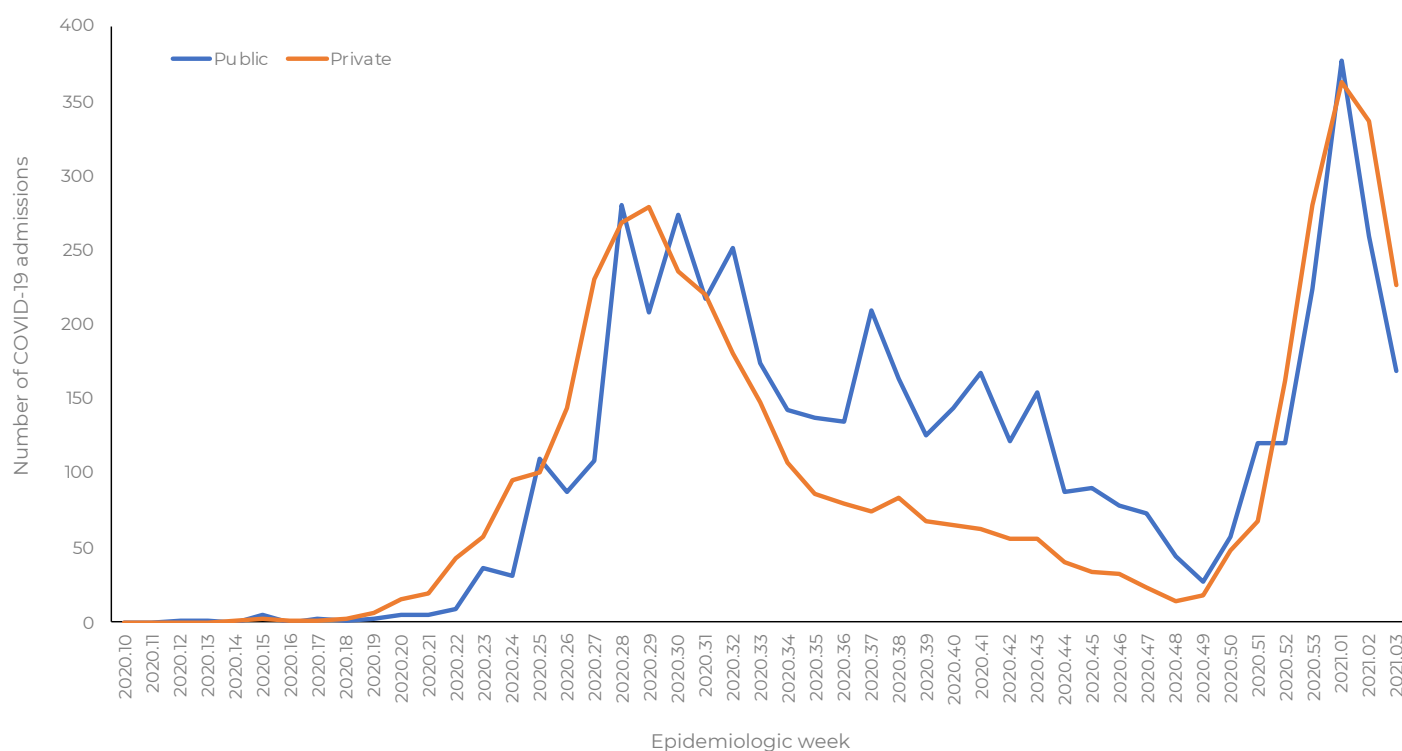
**Figure 28:** Number of reported COVID-19 in-hospital deaths, by district and epidemiologic week, North West, 5 March 2020-23 January 2021

# COVID-19 SENTINEL HOSPITAL SURVEILLANCE UPDATE

WEEK 3 2021

## NORTHERN CAPE

There has been an increase in admissions reported in Northern Cape in the public and private sector since week 49 2020, exceeding the weekly numbers of admissions at the peak of the first wave in both sectors (Figure 29). Numbers of admissions have been decreasing since week 2 2021 in both sectors. Decreases in the most recent week may reflect delays in data submission.



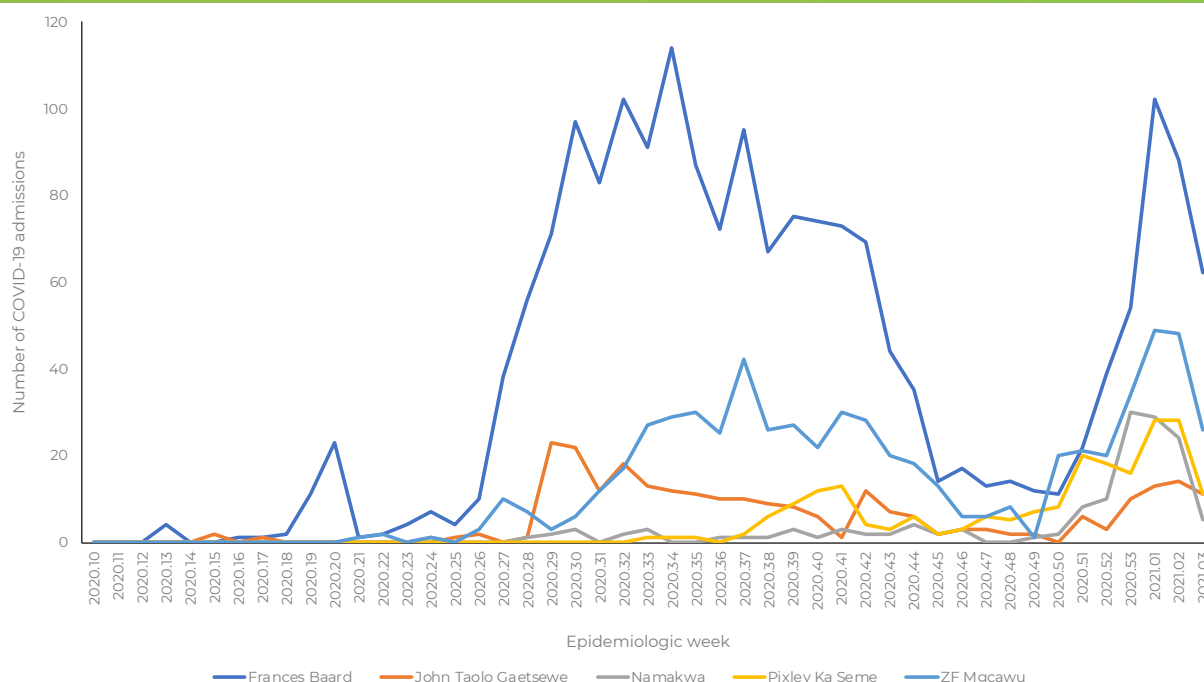
**Figure 29:** Number of reported COVID-19 admissions by health sector and epidemiologic week of diagnosis, Northern Cape, 5 March 2020–23 January 2021



# COVID-19 SENTINEL HOSPITAL SURVEILLANCE UPDATE

WEEK 3 2021

The increase in admissions in Northern Cape was observed across all districts; and exceeded the weekly number of admissions during the peak of the first wave in Pixley ka Seme, Namakwa and ZF Mgcawu districts (Figure 30). Decreases in the most recent week may reflect delays in data submission.



**Figure 30:** Number of reported COVID-19 admissions, by district and epidemiologic week, Northern Cape, 5 March 2020-23 January 2021

# COVID-19 SENTINEL HOSPITAL SURVEILLANCE UPDATE

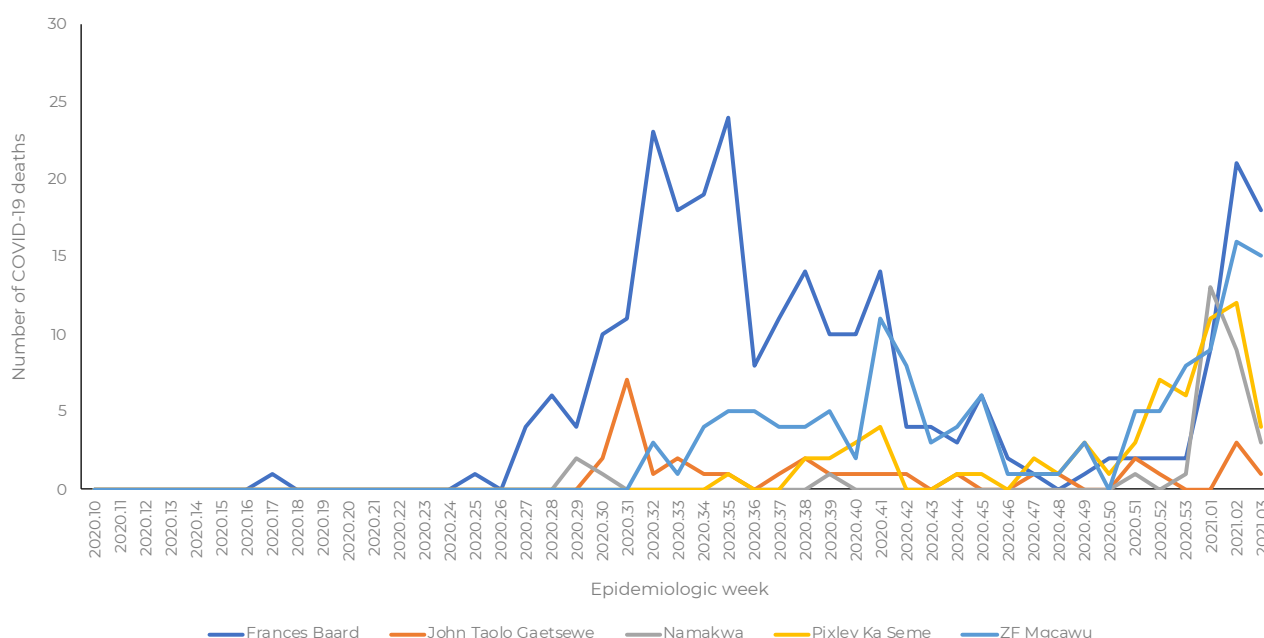
WEEK 3 2021

All districts showed decrease in COVID-19 admission in week 2 and week 3 2021. The highest proportion of new admissions were in Frances Baard district (Table 12).

**Table 12:** Percentage change in COVID-19 admissions, epidemiologic week 2 to week 3 2021, by district, Northern Cape

| District            | Cumulative hospital admissions | Admissions Week 2 | Admissions Week 3 | Percentage change in admissions | Percentage of total new admissions | Incidence risk of new admissions /100 000 persons |
|---------------------|--------------------------------|-------------------|-------------------|---------------------------------|------------------------------------|---|
| Frances Baard       | 1861                           | 88                | 62                | -30                             | 53.9                               | 13.0  |
| John Taolo Gaetsewe | 256                            | 14                | 11                | -21                             | 9.6                                | 3.5   |
| Namakwa             | 144                            | 24                | 5                 | -79                             | 4.3                                | 3.8   |
| Pixley Ka Seme      | 210                            | 28                | 11                | -61                             | 9.6                                | 4.5   |
| ZF Mgcawu           | 638                            | 48                | 26                | -46                             | 22.6                               | 8.1   |

The increases in deaths have occurred in all districts except John Taolo Gaetsewe, exceeding the weekly numbers of deaths at the peak of the first wave in in Pixley ka Seme, Namakwa and ZF Mgcawu districts (Figure 31).



**Figure 31:** Number of reported COVID-19 in-hospital deaths, by district and epidemiologic week, Northern Cape, 5 March 2020-23 January 2021

# COVID-19 SENTINEL HOSPITAL SURVEILLANCE UPDATE

WEEK 3 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 are in the process of recruiting 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.

# COVID-19 SENTINEL HOSPITAL SURVEILLANCE UPDATE

WEEK 3 2021

## 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 SENTINEL HOSPITAL SURVEILLANCE UPDATE

WEEK 3 2021

## APPENDIX

**Table 13:** Percentage average change in hospital admissions over 14 days, by district, South Africa, 2 January-23 January 2021

| Province      | District                   | Total admissions | Incidence (per 100k) | New admissions | New admissions incidence (per 100k) | % average change (14 days) |
|---------------|----------------------------|------------------|----------------------|----------------|-------------------------------------|----------------------------|
| Eastern Cape  | Alfred Nzo                 | 1416             | 170.14               | 57             | 6.85                                | -45.19                     |
|               | Amathole                   | 2143             | 268.14               | 62             | 7.76                                | -31.11                     |
|               | Buffalo City Metro         | 6819             | 851.44               | 171            | 21.35                               | -35.71                     |
|               | Chris Hani                 | 3028             | 416.13               | 97             | 13.33                               | -44.57                     |
|               | Joe Gqabi                  | 551              | 159.73               | 34             | 9.86                                | -41.38                     |
|               | Nelson Mandela Bay Metro   | 9734             | 802.43               | 79             | 6.51                                | -46.98                     |
|               | O R Tambo                  | 2669             | 174.20               | 76             | 4.96                                | -47.59                     |
|               | Sarah Baartman             | 1485             | 306.93               | 28             | 5.79                                | -37.78                     |
| Free State    | Fezile Dabi                | 1061             | 207.99               | 42             | 8.23                                | -53.33                     |
|               | Lejweleputswa              | 2236             | 342.10               | 64             | 9.79                                | -34.02                     |
|               | Mangaung Metro             | 5230             | 600.51               | 172            | 19.75                               | -33.07                     |
|               | Thabo Mofutsanyana         | 1560             | 203.97               | 104            | 13.60                               | -26.76                     |
|               | Xhariep                    | 275              | 212.45               | 17             | 13.13                               | 88.89                      |
| Gauteng       | City of Johannesburg Metro | 19644            | 334.85               | 782            | 13.33                               | -40.80                     |
|               | City of Tshwane Metro      | 12897            | 345.85               | 736            | 19.74                               | -29.97                     |
|               | Ekurhuleni Metro           | 11166            | 280.40               | 478            | 12.00                               | -37.60                     |
|               | Sedibeng                   | 2740             | 286.75               | 106            | 11.09                               | -43.32                     |
|               | West Rand                  | 4316             | 452.06               | 229            | 23.99                               | -21.03                     |
| KwaZulu-Natal | Amajuba                    | 1204             | 211.03               | 41             | 7.19                                | -53.93                     |
|               | eThekweni Metro            | 18254            | 458.50               | 666            | 16.73                               | -43.37                     |
|               | Harry Gwala                | 795              | 154.66               | 30             | 5.84                                | -50.00                     |
|               | iLembe                     | 1159             | 166.87               | 63             | 9.07                                | -50.78                     |
|               | King Cetshwayo             | 3916             | 403.43               | 249            | 25.65                               | -42.63                     |
|               | Ugu                        | 1916             | 238.98               | 74             | 9.23                                | -41.73                     |
|               | uMgungundlovu              | 4303             | 374.36               | 182            | 15.83                               | -47.09                     |

# COVID-19 SENTINEL HOSPITAL SURVEILLANCE UPDATE

WEEK 3 2021

| Province      | District                  | Total admissions | Incidence (per 100k) | New admissions | New admissions incidence (per 100k) | % average change (14 days) |
|---------------|---------------------------|------------------|----------------------|----------------|-------------------------------------|----------------------------|
|               | uMkhanyakude              | 594              | 86.47                | 66             | 9.61                                | -14.29                     |
|               | Umzinyathi                | 390              | 68.71                | 49             | 8.63                                | -48.96                     |
|               | UThukela                  | 1297             | 181.60               | 80             | 11.20                               | -31.62                     |
|               | Zululand                  | 529              | 60.06                | 38             | 4.31                                | -66.07                     |
| Limpopo       | Capricorn                 | 2593             | 198.25               | 147            | 11.24                               | -58.36                     |
|               | Mopani                    | 1000             | 84.40                | 64             | 5.40                                | -53.28                     |
|               | Sekhukhune                | 335              | 28.14                | 17             | 1.43                                | -54.05                     |
|               | Vhembe                    | 487              | 34.12                | 26             | 1.82                                | -59.38                     |
|               | Waterberg                 | 824              | 111.02               | 46             | 6.20                                | -52.08                     |
| Mpumalanga    | Ehlanzeni                 | 2109             | 115.33               | 138            | 7.55                                | -39.47                     |
|               | Gert Sibande              | 1889             | 152.07               | 140            | 11.27                               | -39.13                     |
|               | Nkangala                  | 1806             | 112.25               | 78             | 4.85                                | -60.20                     |
| North West    | Bojanala Platinum         | 3204             | 166.17               | 157            | 8.14                                | -38.91                     |
|               | Dr Kenneth Kaunda         | 5254             | 658.63               | 208            | 26.07                               | -22.68                     |
|               | Dr Ruth Segomotsi Mompati | 498              | 105.27               | 15             | 3.17                                | -59.46                     |
|               | Ngaka Modiri Molema       | 518              | 56.93                | 16             | 1.76                                | -51.52                     |
| Northern Cape | Frances Baard             | 1861             | 448.53               | 62             | 14.94                               | -29.55                     |
|               | John Taolo Gaetsewe       | 256              | 94.30                | 11             | 4.05                                | -21.43                     |
|               | Namakwa                   | 144              | 124.55               | 5              | 4.32                                | -79.17                     |
|               | Pixley Ka Seme            | 210              | 99.58                | 11             | 5.22                                | -60.71                     |
|               | ZF Mgcawu                 | 638              | 227.94               | 26             | 9.29                                | -45.83                     |
| Western Cape  | Cape Winelands            | 4885             | 518.98               | 198            | 21.04                               | -49.23                     |
|               | Central Karoo             | 365              | 485.93               | 15             | 19.97                               | -21.05                     |
|               | City of Cape Town Metro   | 29735            | 645.71               | 1057           | 22.95                               | -46.94                     |
|               | Garden Route              | 4212             | 675.37               | 134            | 21.49                               | -41.74                     |
|               | Overberg                  | 1157             | 385.78               | 43             | 14.34                               | -54.74                     |
|               | West Coast                | 1295             | 281.03               | 89             | 19.31                               | -31.01                     |

# COVID-19 SENTINEL HOSPITAL SURVEILLANCE UPDATE

WEEK 3 2021

## APPENDIX

**Table 14:** Number of reported COVID-19 admissions and in-hospital deaths by age and gender, South Africa, 5 March 2020-23 January 2021

| Age (years)  | ADMISSIONS    |              |            |               | DEATHS       |              |           |              |
|--------------|---------------|--------------|------------|---------------|--------------|--------------|-----------|--------------|
|              | Female        | Male         | Unknown    | Total         | Female       | Male         | Unknown   | Total        |
| 0-4          | 1173          | 1414         | 7          | 2594          | 40           | 37           | 1         | 78           |
| 5-9          | 310           | 416          | 3          | 729           | 8            | 10           | 0         | 18           |
| 10-14        | 547           | 495          | 0          | 1042          | 11           | 11           | 0         | 22           |
| 15-19        | 1660          | 900          | 3          | 2563          | 42           | 38           | 0         | 80           |
| 20-24        | 2991          | 1464         | 2          | 4457          | 99           | 66           | 0         | 165          |
| 25-29        | 5300          | 2448         | 4          | 7752          | 218          | 132          | 0         | 350          |
| 30-34        | 7417          | 4296         | 0          | 11713         | 414          | 311          | 0         | 725          |
| 35-39        | 8376          | 5918         | 4          | 14298         | 614          | 535          | 0         | 1149         |
| 40-44        | 8172          | 7115         | 4          | 15291         | 777          | 815          | 1         | 1593         |
| 45-49        | 9379          | 8613         | 6          | 17998         | 1189         | 1247         | 1         | 2437         |
| 50-54        | 10847         | 9662         | 1          | 20510         | 1632         | 1693         | 0         | 3325         |
| 55-59        | 11621         | 10150        | 8          | 21779         | 2350         | 2281         | 1         | 4632         |
| 60-64        | 10192         | 9233         | 6          | 19431         | 2596         | 2769         | 2         | 5367         |
| 65-69        | 8194          | 7188         | 4          | 15386         | 2579         | 2453         | 0         | 5032         |
| 70-74        | 6487          | 5767         | 12         | 12266         | 2151         | 2169         | 4         | 4324         |
| 75-79        | 4708          | 3853         | 1          | 8562          | 1680         | 1583         | 0         | 3263         |
| 80-84        | 3337          | 2393         | 4          | 5734          | 1255         | 998          | 1         | 2254         |
| 85-89        | 1822          | 1132         | 1          | 2955          | 719          | 529          | 0         | 1248         |
| 90-94        | 789           | 396          | 1          | 1186          | 355          | 205          | 0         | 560          |
| >=95         | 283           | 183          | 0          | 466           | 105          | 56           | 0         | 161          |
| Unknown      | 937           | 851          | 102        | 1890          | 126          | 151          | 4         | 281          |
| <b>Total</b> | <b>104542</b> | <b>83887</b> | <b>173</b> | <b>188602</b> | <b>18960</b> | <b>18089</b> | <b>15</b> | <b>37064</b> |