

Epidemiology and hospitalization update

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**NATIONAL INSTITUTE FOR
COMMUNICABLE DISEASES**

Division of the National Health Laboratory Service

Global COVID-19 cases and deaths – 22 April 2022 (WHO)

Global Situation

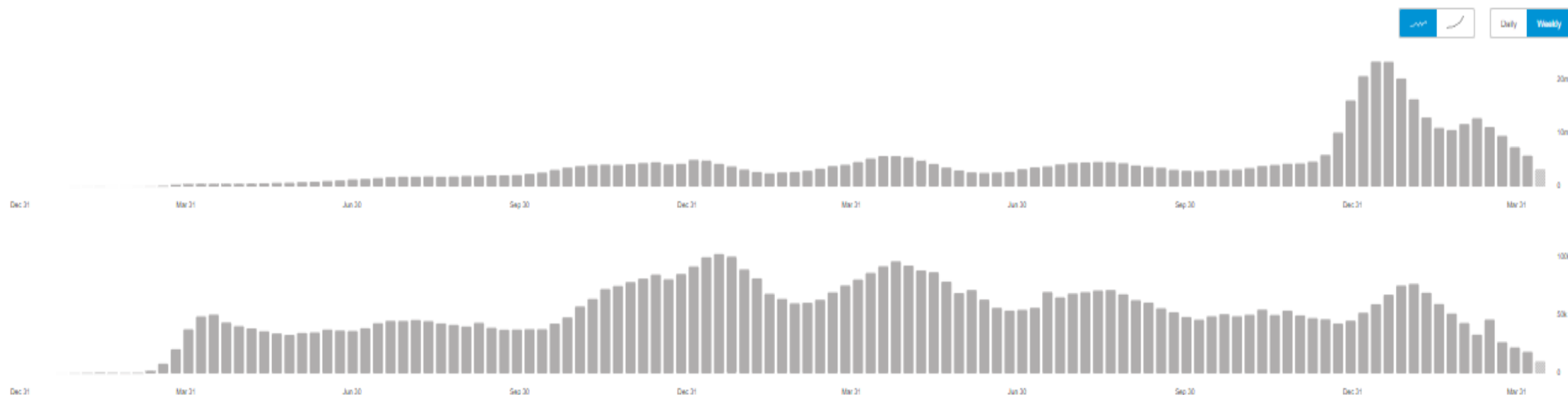
505,817,953

confirmed cases

6,213,876

deaths

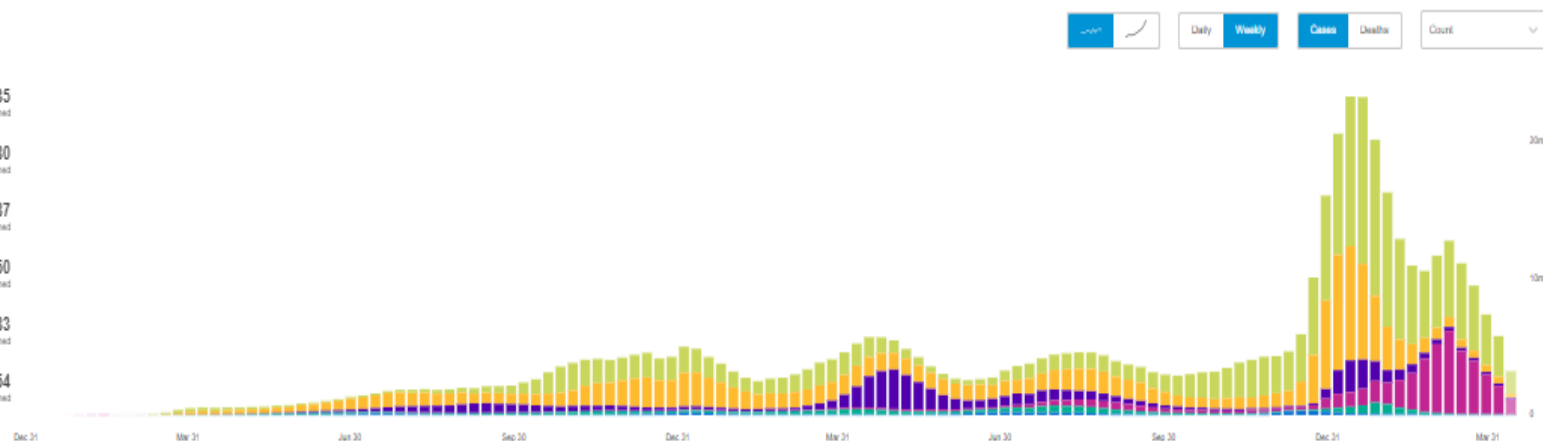
Source: World Health Organization
Data may be incomplete for the current day or week.



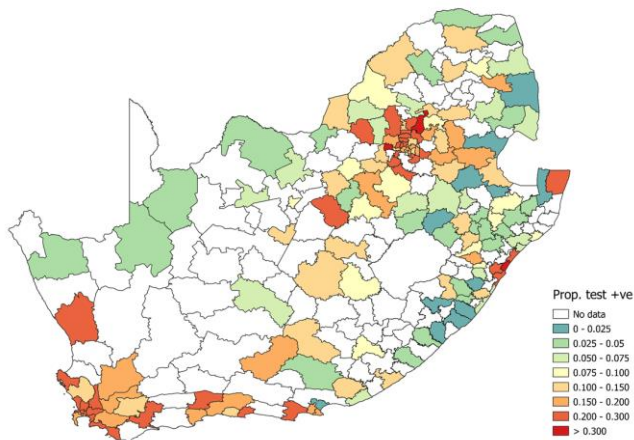
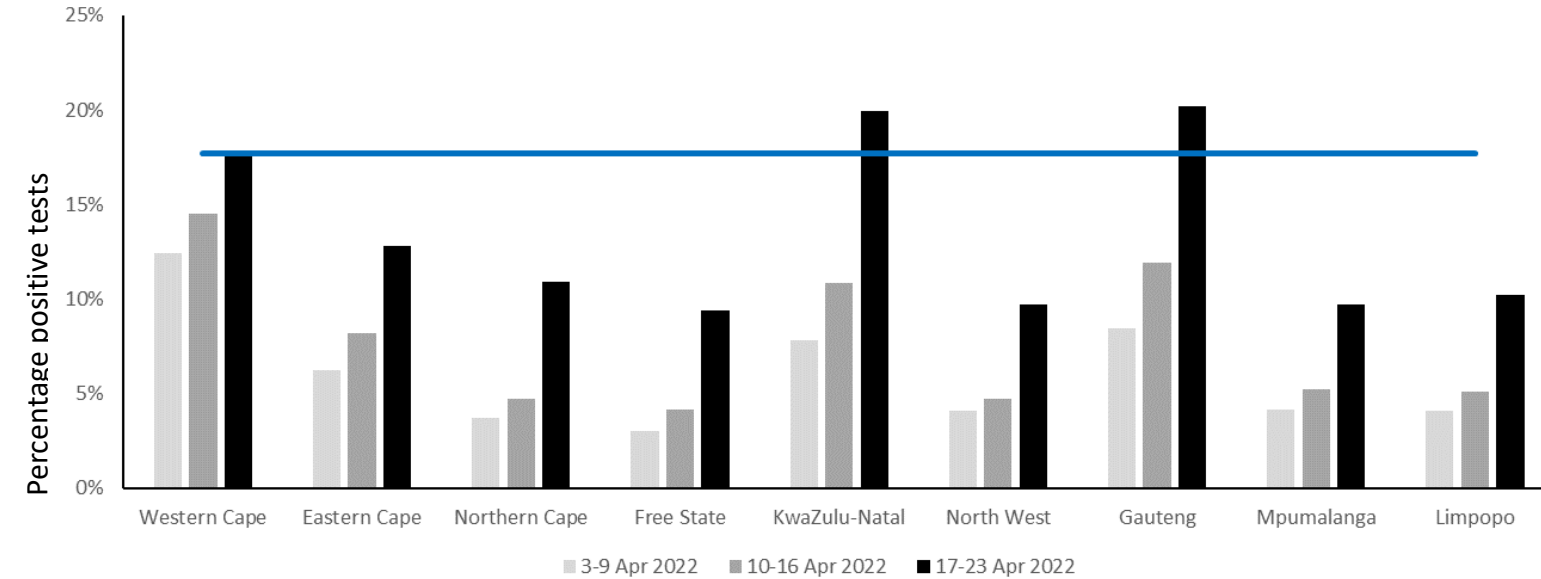
Situation by WHO Region

Europe	212,388,135	confirmed
Americas	152,265,980	confirmed
South-East Asia	57,688,287	confirmed
Western Pacific	53,081,750	confirmed
Eastern Mediterranean	21,681,983	confirmed
Africa	8,711,054	confirmed

Source: World Health Organization
Data may be incomplete for the current day or week.



Percentage testing positive



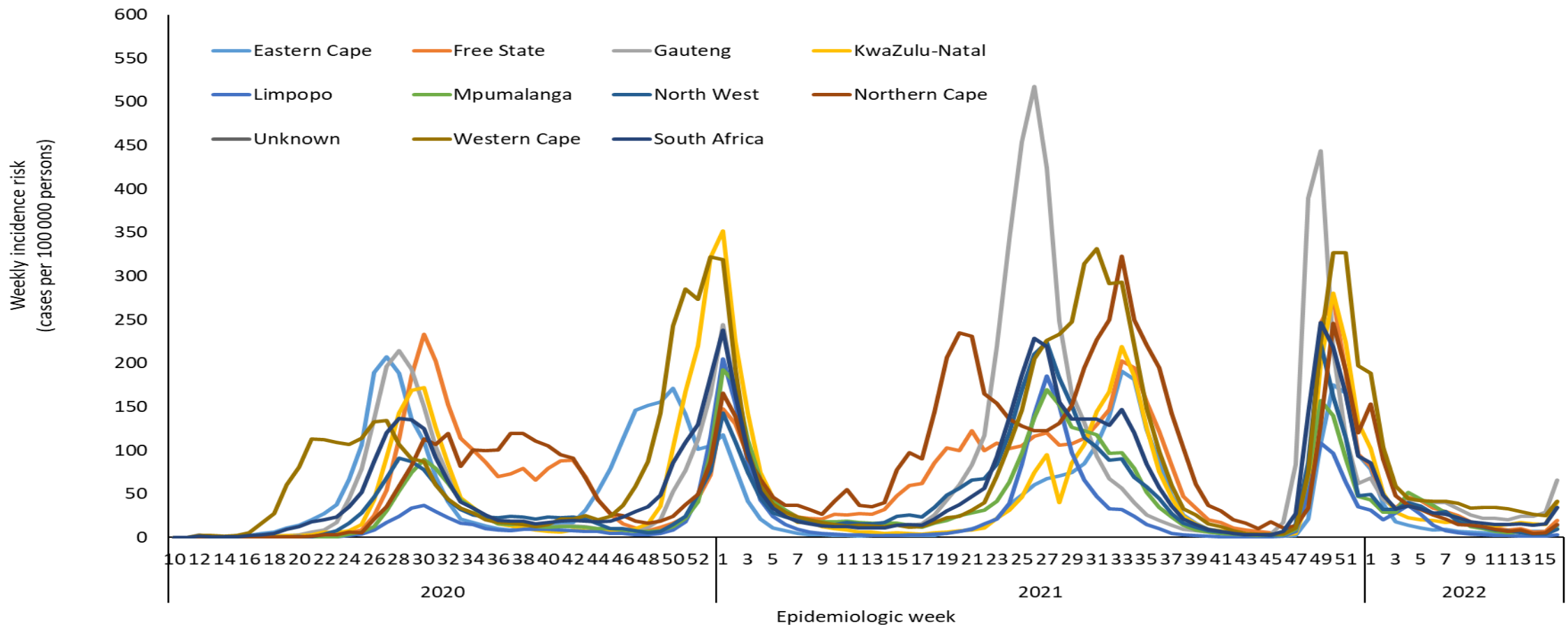
- Increased by 4.2% in public sector (6.9% in week 15 to 11.1% in week 16) and by 8.5% in private sector (12.7% in week 15 to 21.2% in week 16).
- Increased in all provinces.
- Highest in Gauteng (20.2%), followed by KwaZulu-Natal (19.9%) and Western Cape (17.9%).
- <15% in all other provinces.

Week number	Week beginning	Percentage testing positive (%)
1	02-Jan-22	22.4
2	09-Jan-22	15.0
3	16-Jan-22	11.5
4	23-Jan-22	12.1
5	24-Jan-22	11.0
6	06-Feb-22	10.1
7	13-Feb-22	10.0
8	14-Feb-22	9.0
9	27-Feb-22	7.6
10	06-Mar-22	6.9
11	13-Mar-22	6.1
12	20-Mar-22	6.6
13	27-Mar-22	6.7
14	03-Apr-22	7.8
15	10-Apr-22	10.5
16	17-Apr-22	17.7

In week 16, the percentage testing positive was 17.7%, which was 7.2% higher than the previous week.

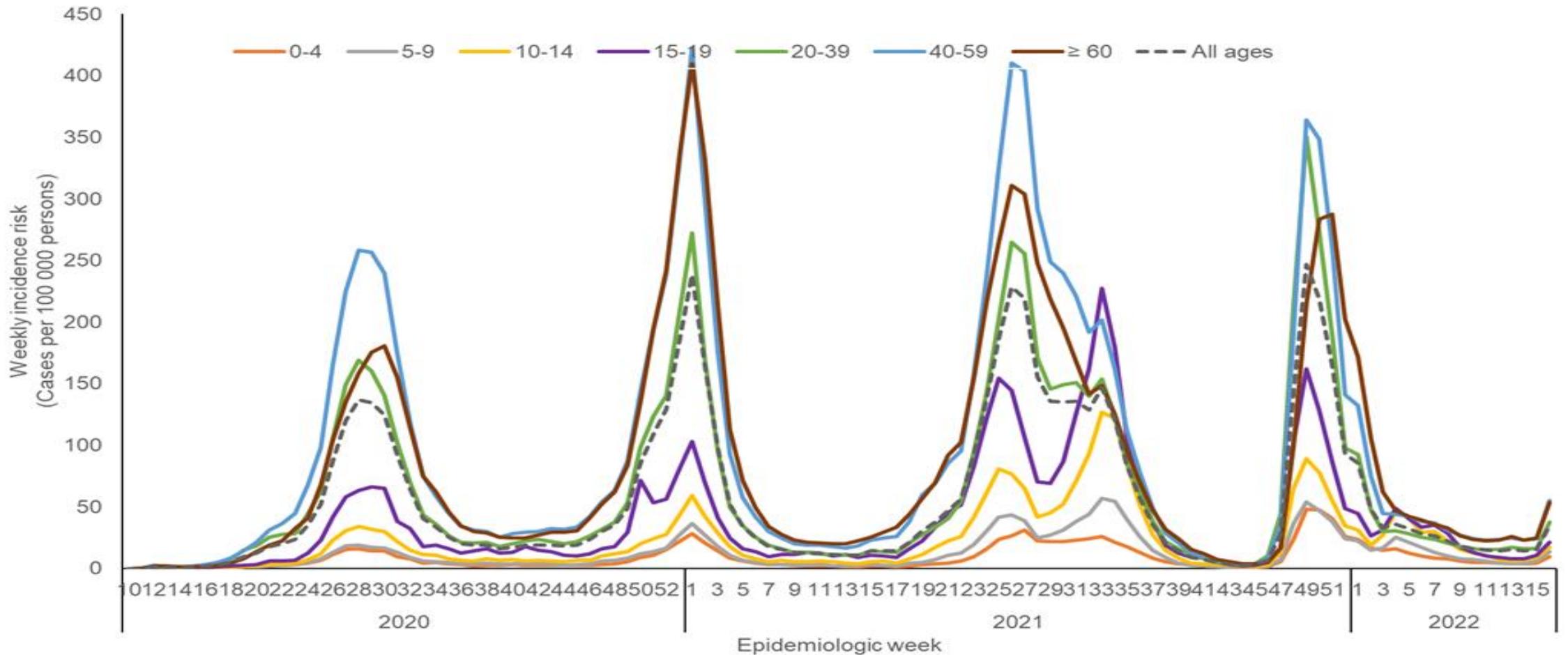
Weekly incidence of laboratory-confirmed cases by province

- In past week, Gauteng reported highest weekly incidence risk (66.0 cases per 100 000 persons), followed by Western Cape (41.7 cases per 100 000), and KwaZulu-Natal (41.2 cases per 100 000). Other provinces reported weekly incidence below 20 cases per 100 000.
- All provinces reported an increase in weekly incidence risk, compared to previous week - ranging from 1.8 cases per 100 000 (141.9% increase) in Limpopo to 36.6 cases per 100 000 (124.8% increase) in Gauteng.



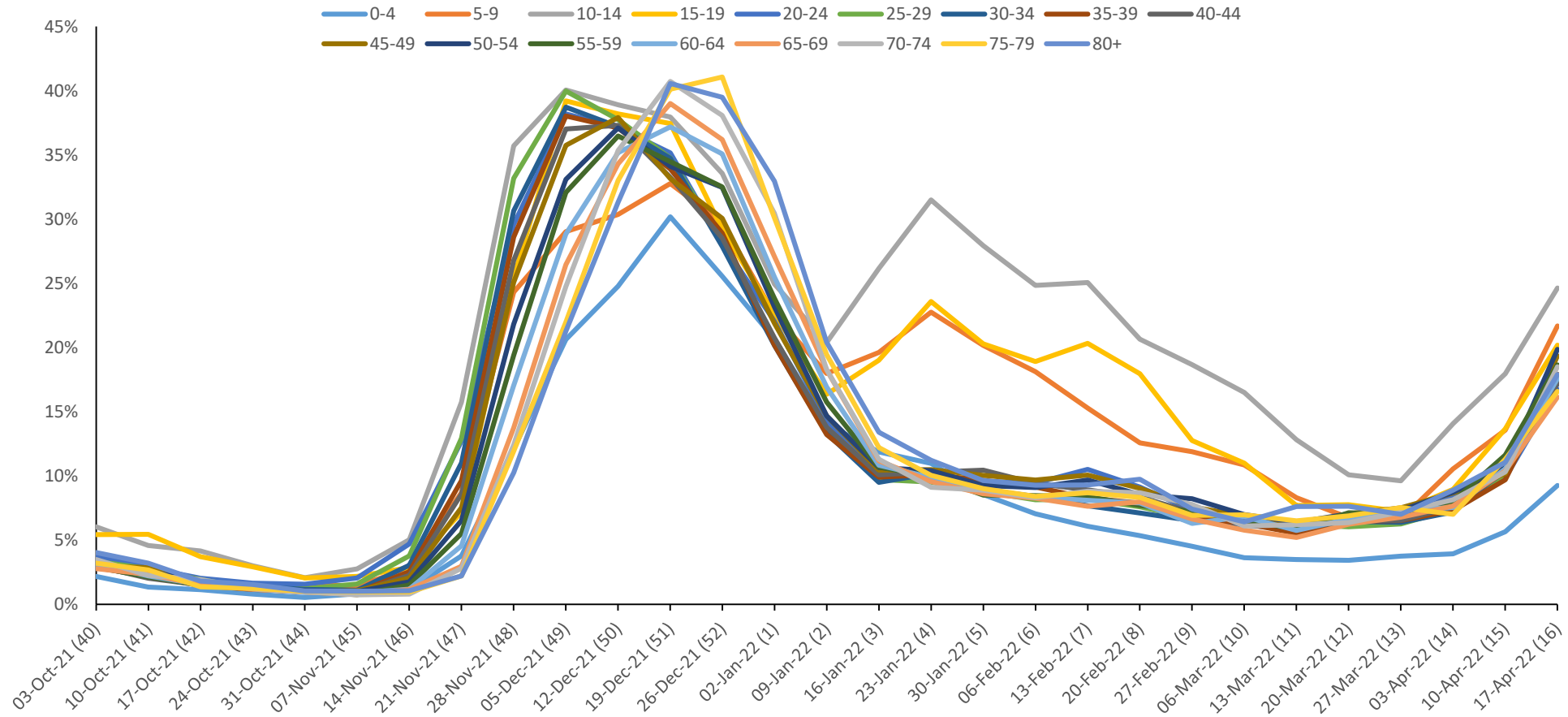
Weekly incidence of laboratory-confirmed cases by age

The highest weekly incidence risk among cases detected in week 16 of 2022 was reported in the ≥ 80 -year age group (64.8 cases per 100 000), and lowest weekly incidence risk was in 0-4-year age group (9.4 cases per 100 000).

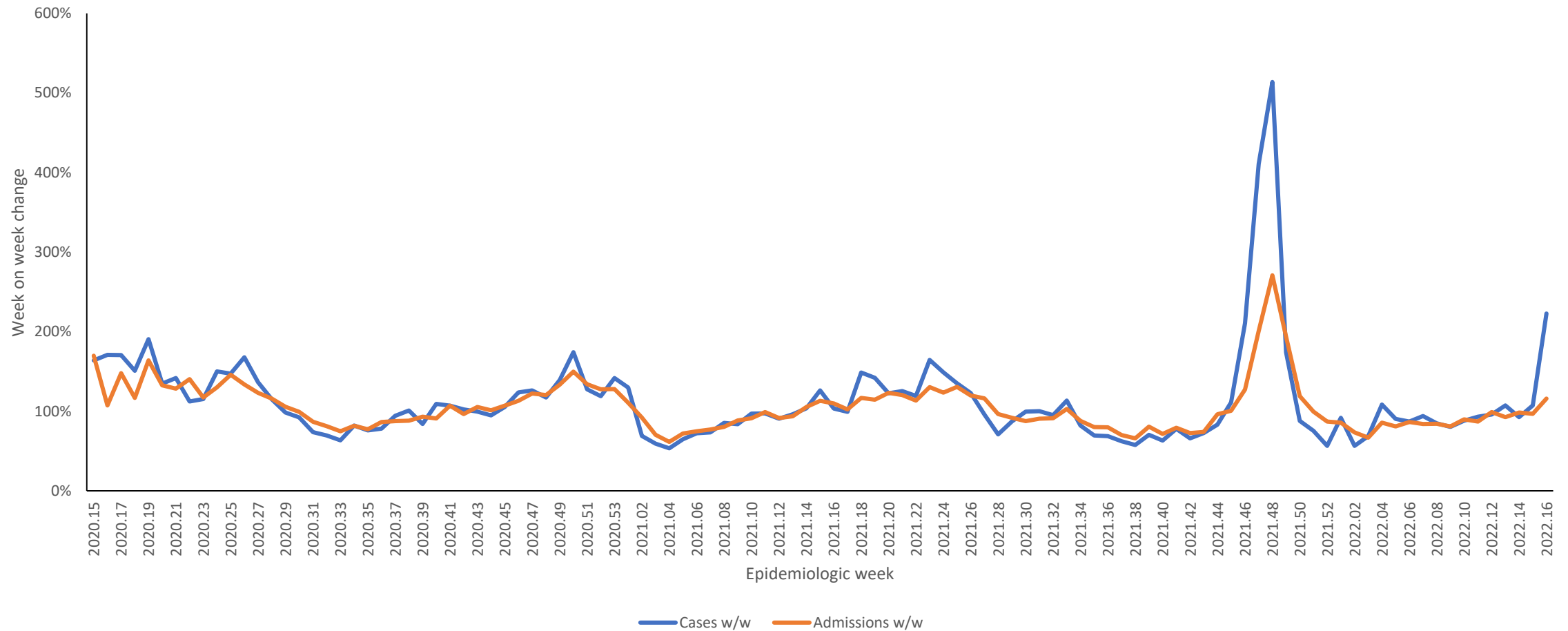


Percentage testing positive by age group and week of specimen collection

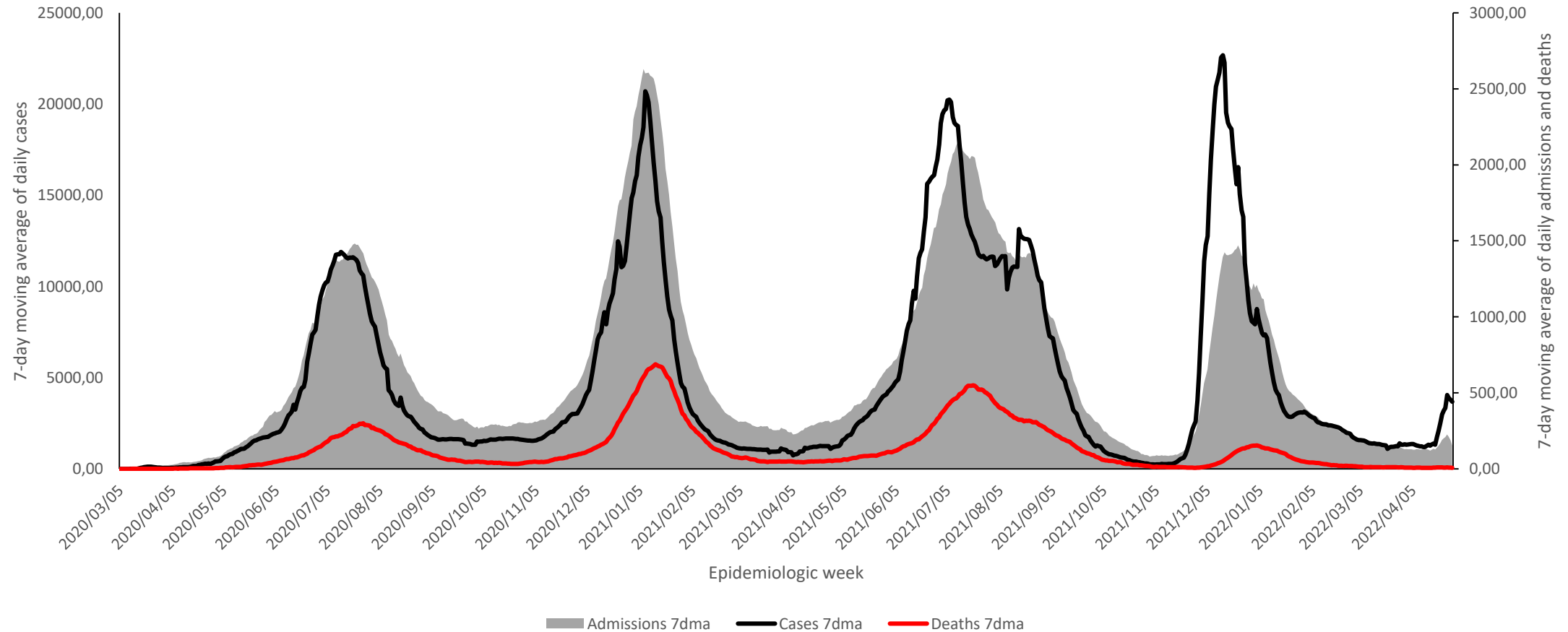
In week 16, an increases in the percentage testing positive was observed across all age groups and was highest in the 10-14 years age group (24.7%).



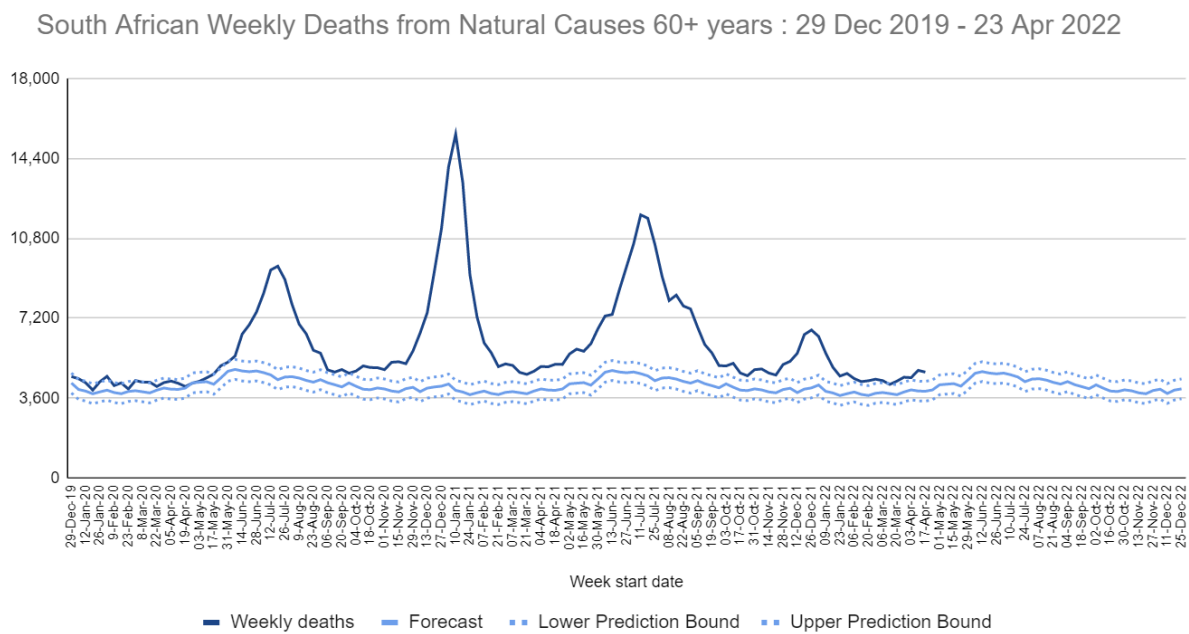
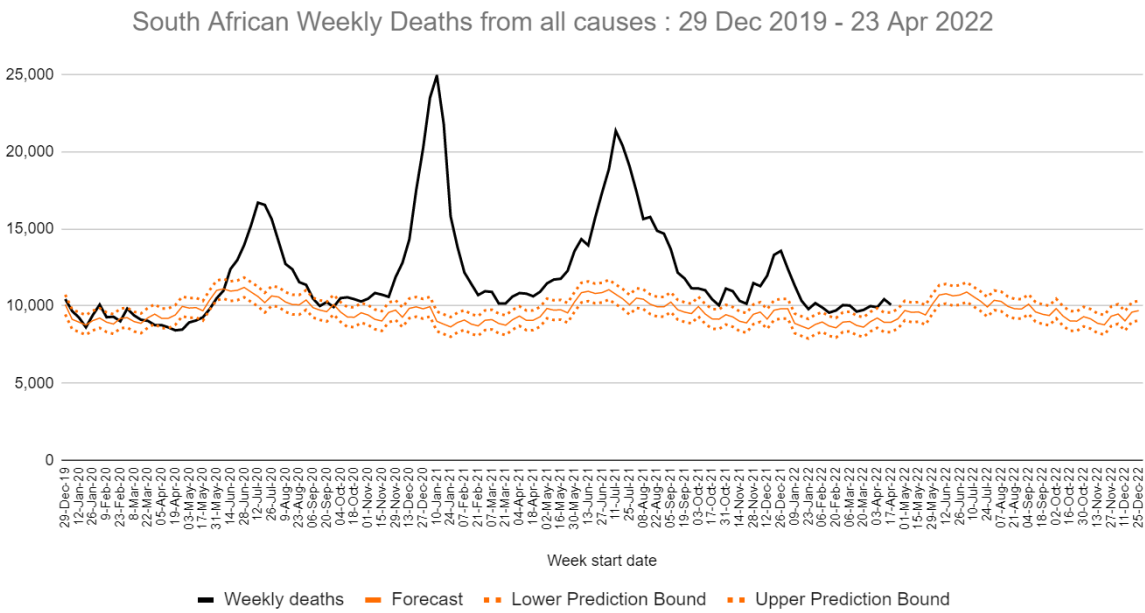
Week on week change in SARS-CoV-2 cases and COVID-19 admissions, South Africa, 5 March 2020-23 April 2022



7DMA of SARS-CoV-2 cases, COVID-19 admissions and in-hospital deaths, South Africa, 5 March 2020-23 April 2022



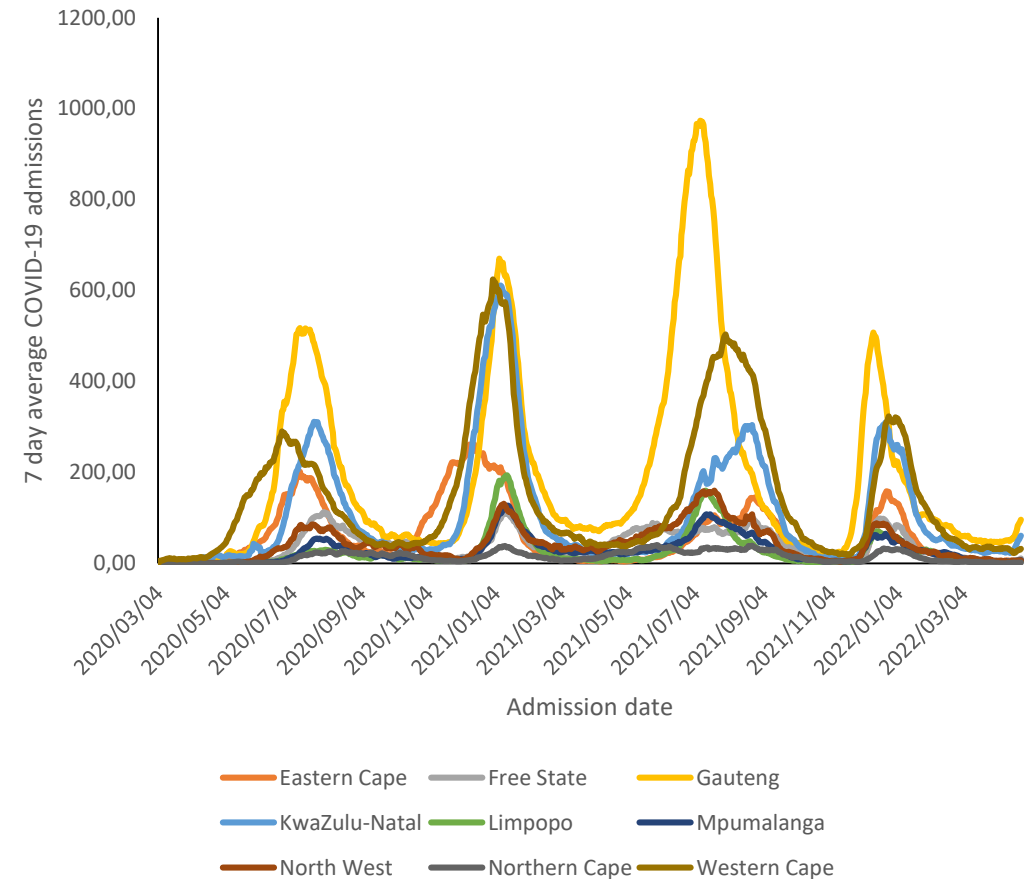
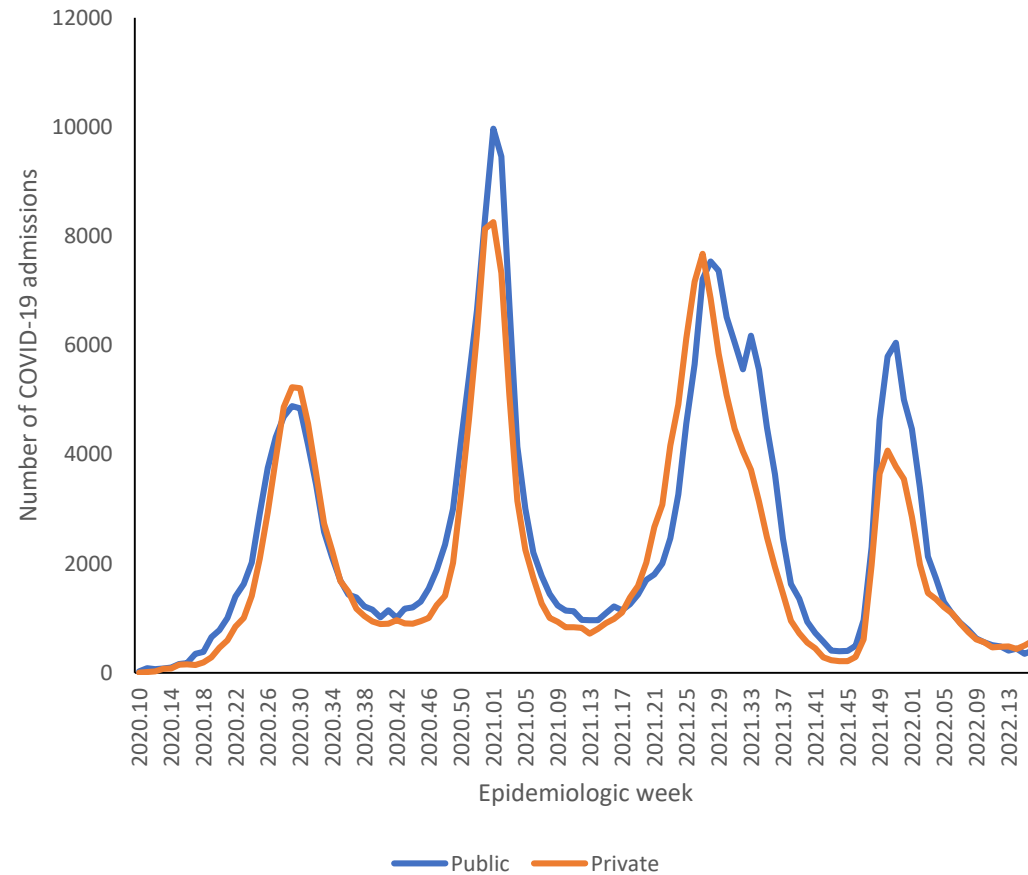
Weekly deaths, South Africa, 29 December 2019-23 April 2022, N=307,705 excess deaths



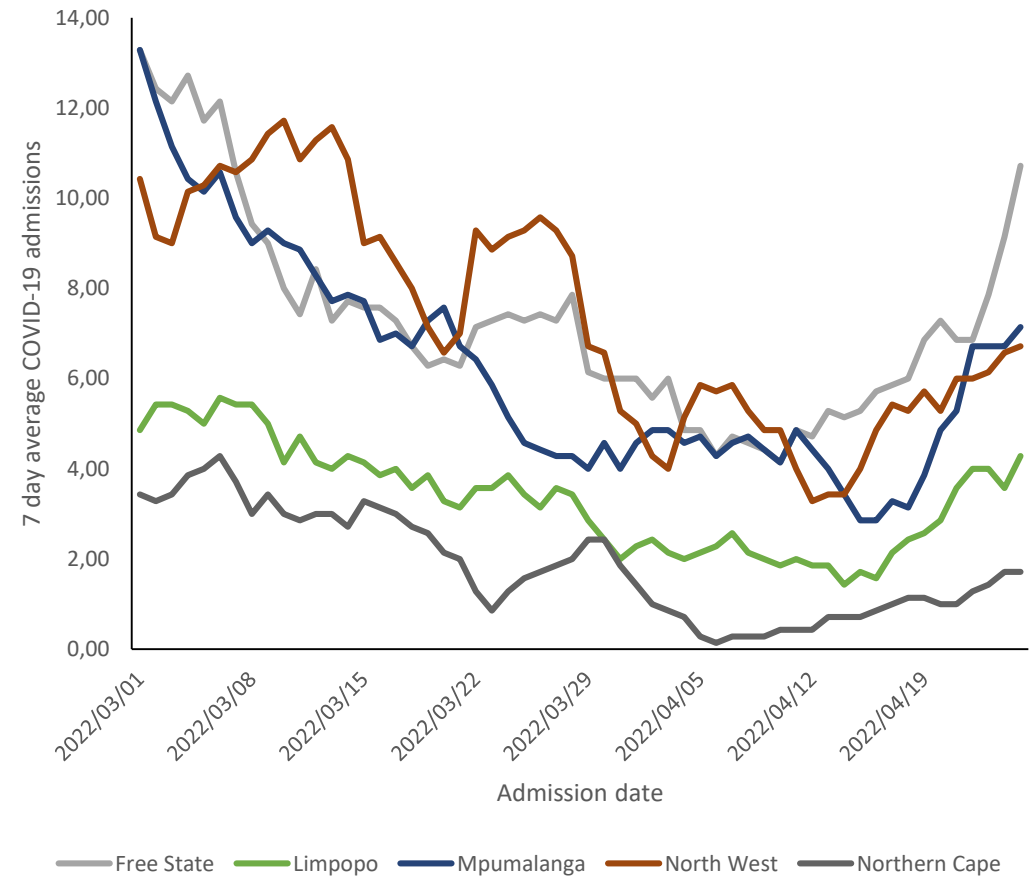
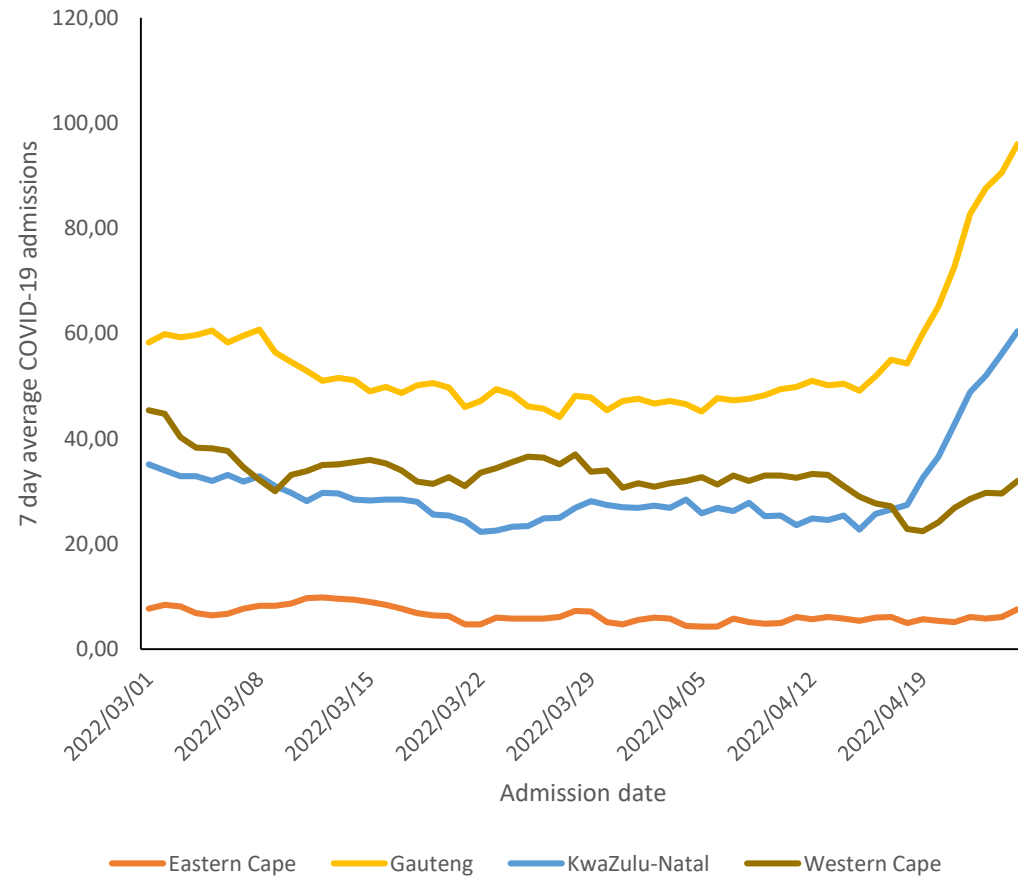
Black line shows the weekly number of deaths
Orange/blue lines shows the number predicted from historical data with bounds of uncertainty – a lower bound and upper bound

Source: MRC Burden of Disease Research Unit

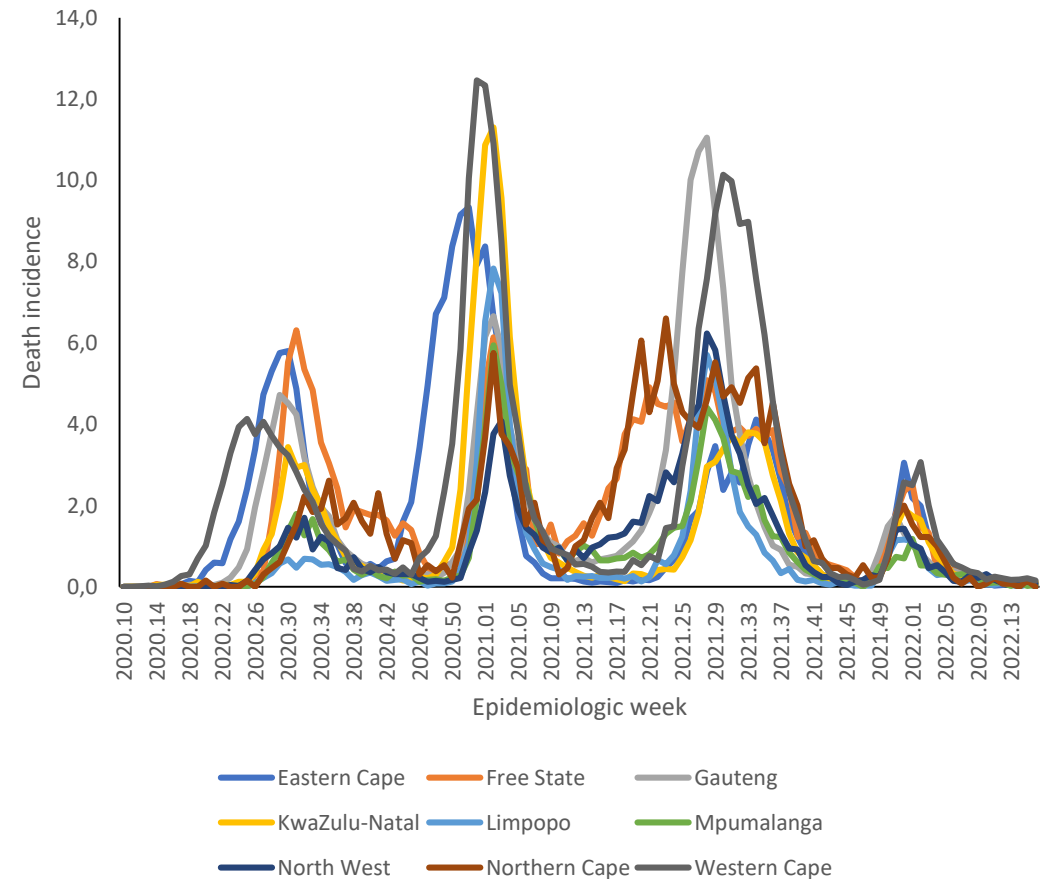
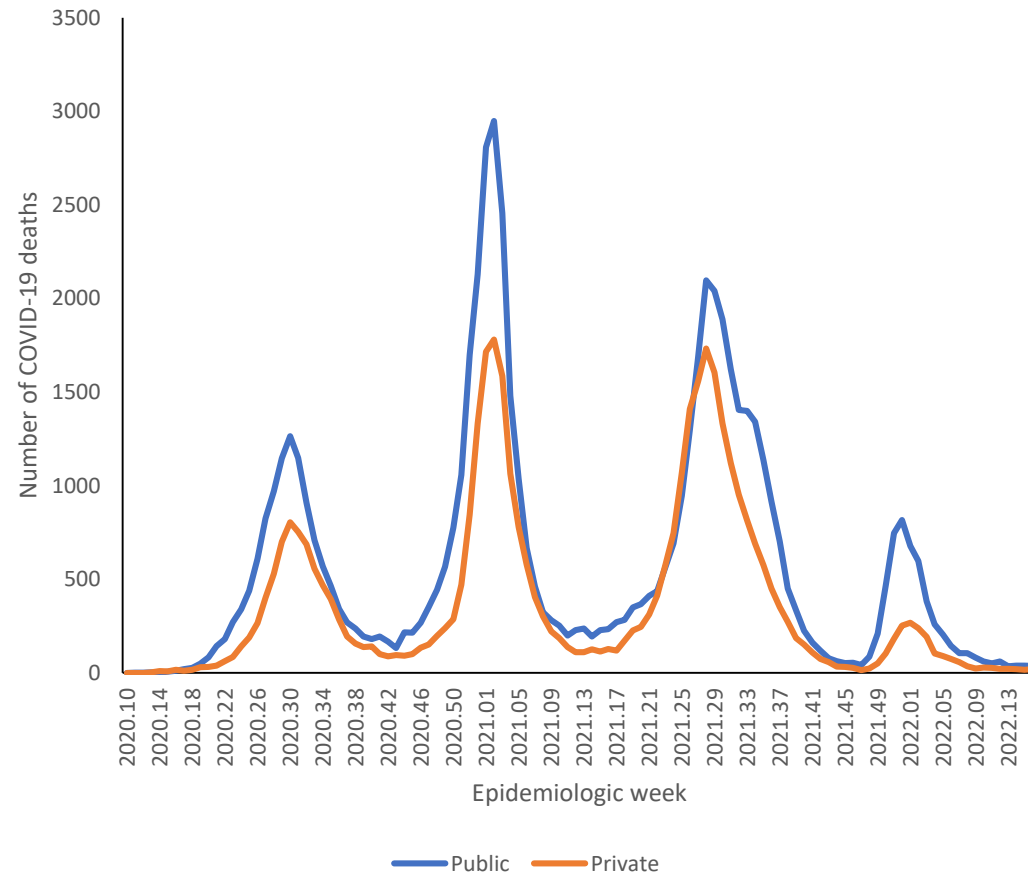
Number of reported COVID-19 admissions, South Africa, by epidemiologic week and health sector, 5 March 2020-23 April 2022



7DMA COVID-19 admissions, by province, South Africa, 1 March-25 April 2022



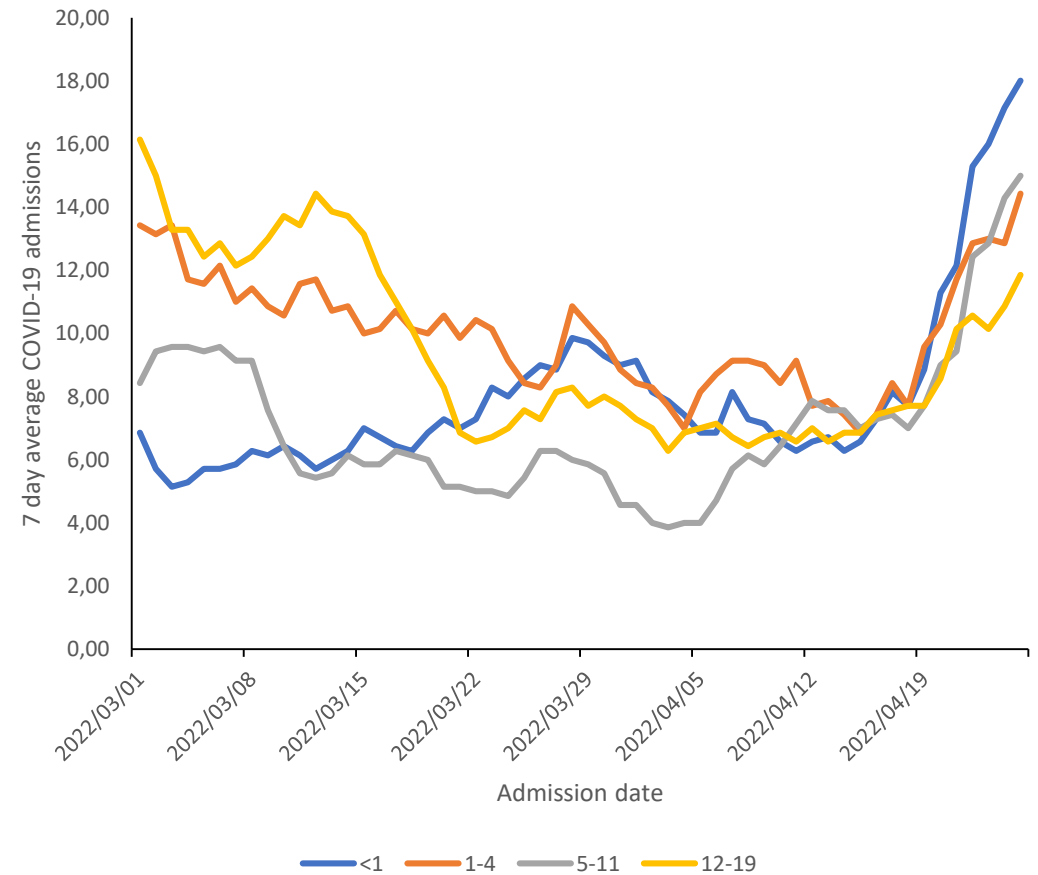
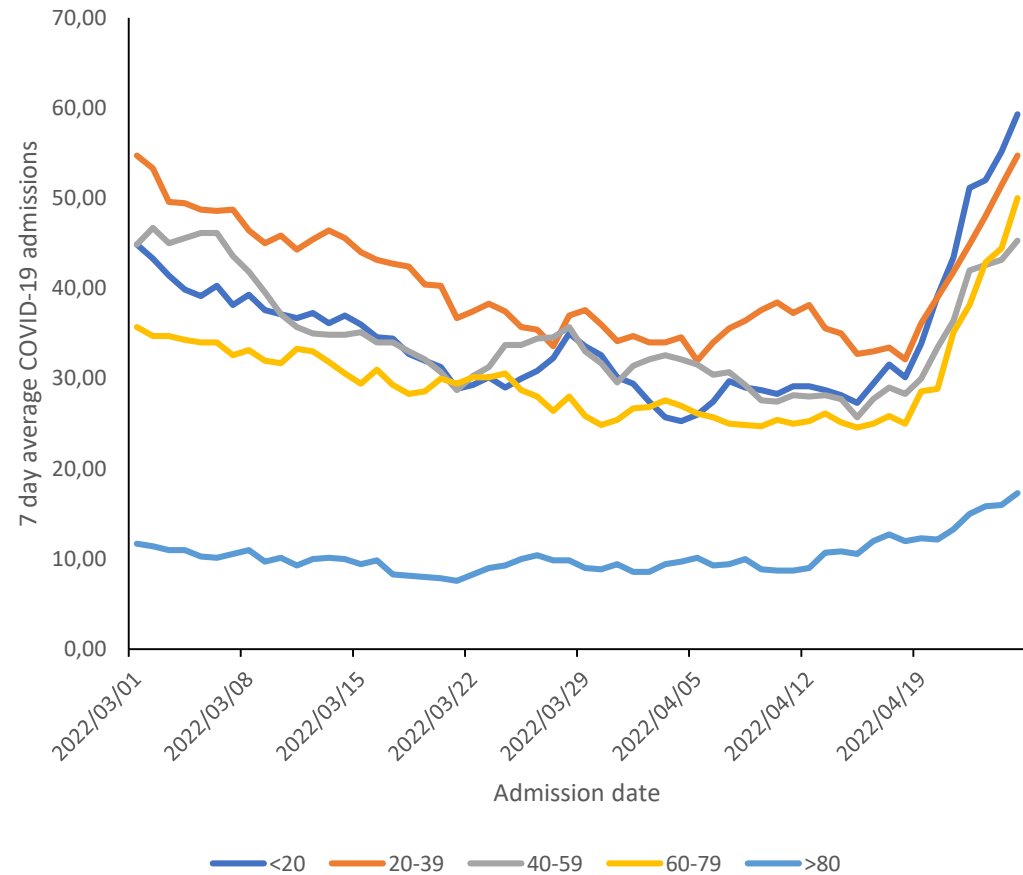
Number of reported COVID-19 deaths, by epidemiologic week and health sector (left) and province (right), South Africa, 5 March 2020-23 April 2022



Previous 14 days and current 14 days average COVID-19 admissions and deaths and percentage changes, South Africa, 26 March-23 April 2022

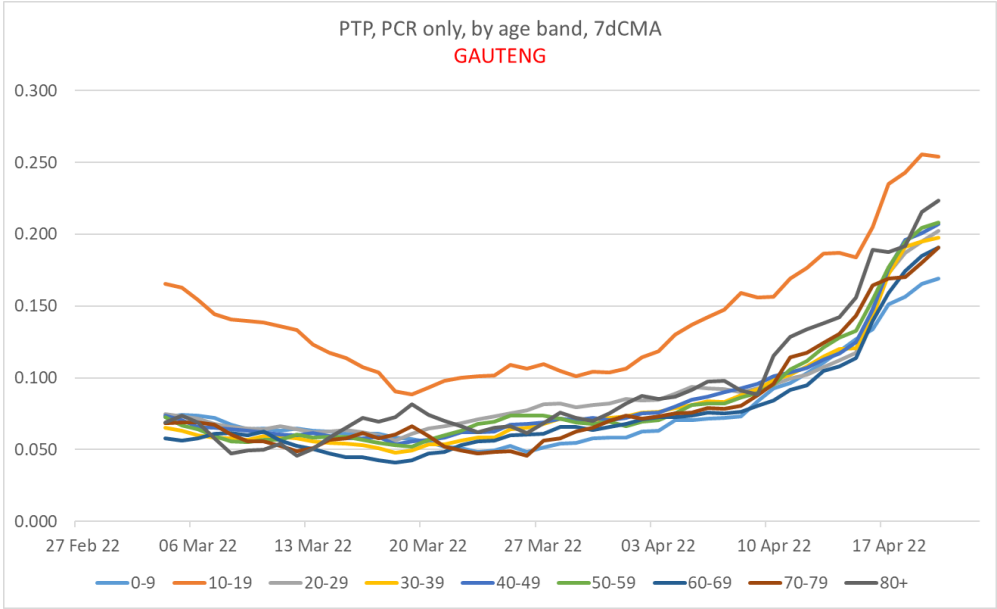
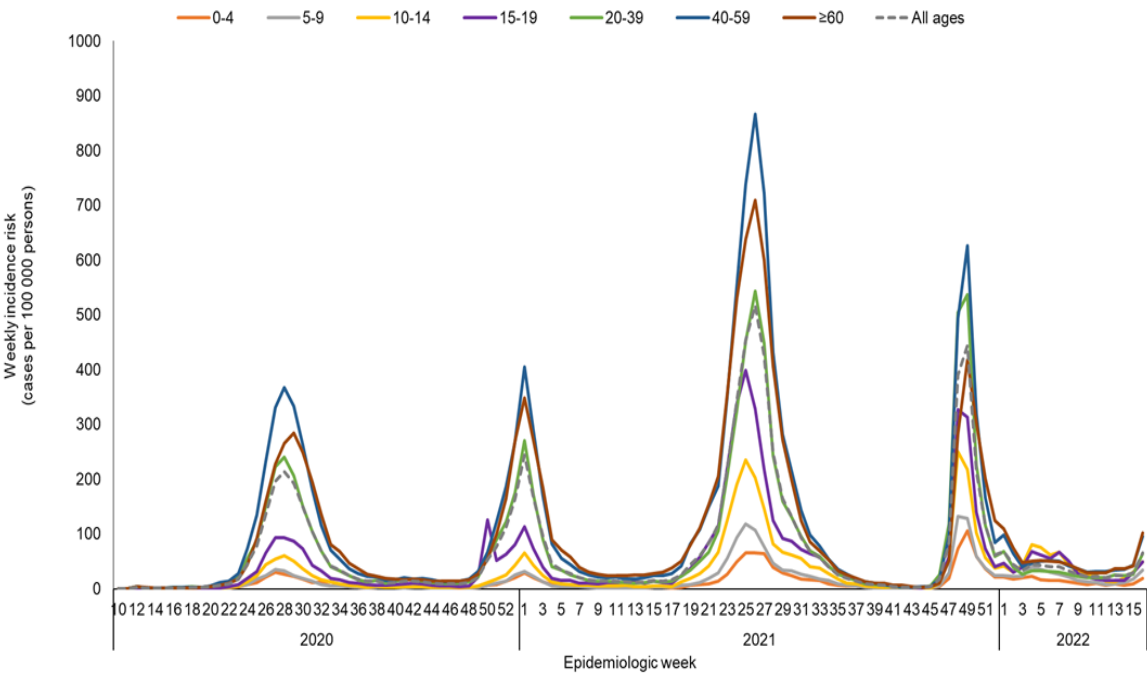
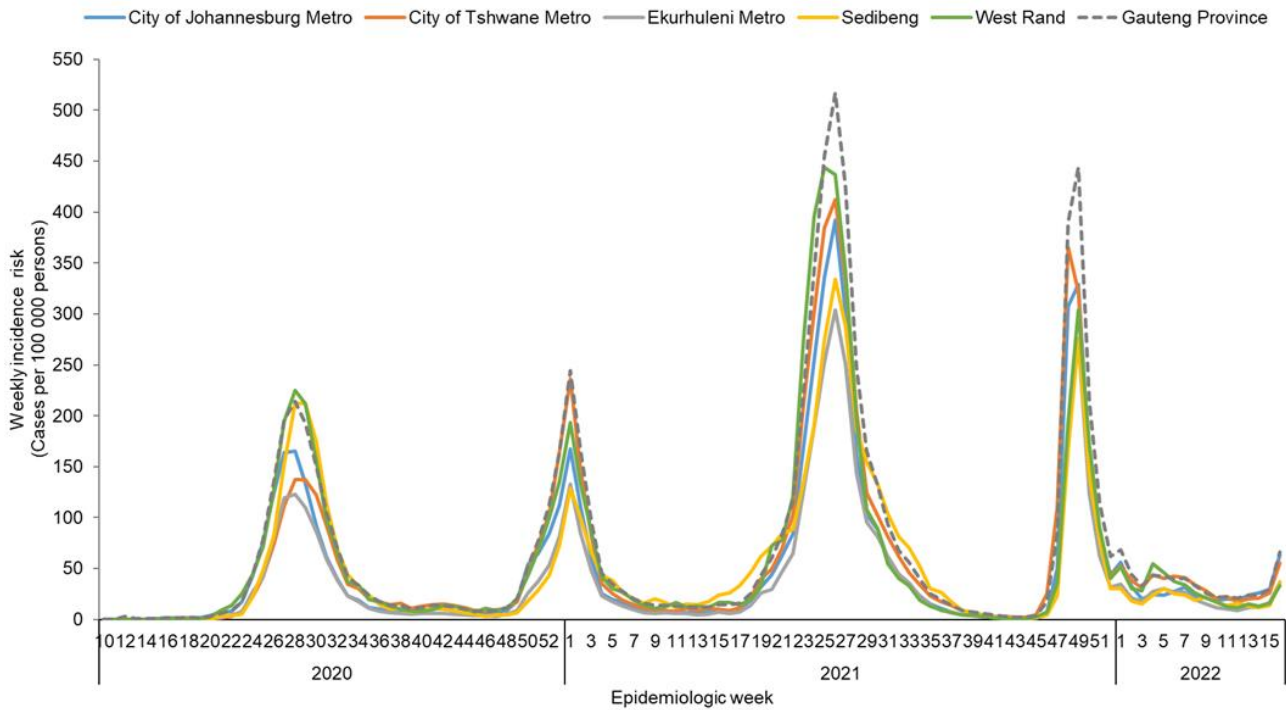
Province	Hospital admissions		Percentage change in admissions	Hospital deaths		Percentage change in deaths
	Previous 14 days admissions average	Current 14 days admissions average		Previous 14 days deaths average	Current 14 days deaths average	
Eastern Cape	5.00	3.79	-24.29	0.86	0.57	-33.33
Free State	4.93	6.14	24.64	0.36	0.43	20.00
Gauteng	47.14	54.57	15.76	2.86	2.29	-20.00
KwaZulu-Natal	26.07	28.79	10.41	1.00	1.57	57.14
Limpopo	2.14	2.43	13.33	0.21	0.36	66.67
Mpumalanga	4.57	3.93	-14.06	0.43	0.21	-50.00
North West	4.57	4.79	4.69	0.71	0.64	-10.00
Northern Cape	0.64	0.86	33.33	0.07	0.14	100.00
Western Cape	31.71	26.29	-17.12	1.79	1.86	4.00

Incidence risk of admissions per 100,000 by age group and epidemiologic week, South Africa, 1 March-25 April 2022



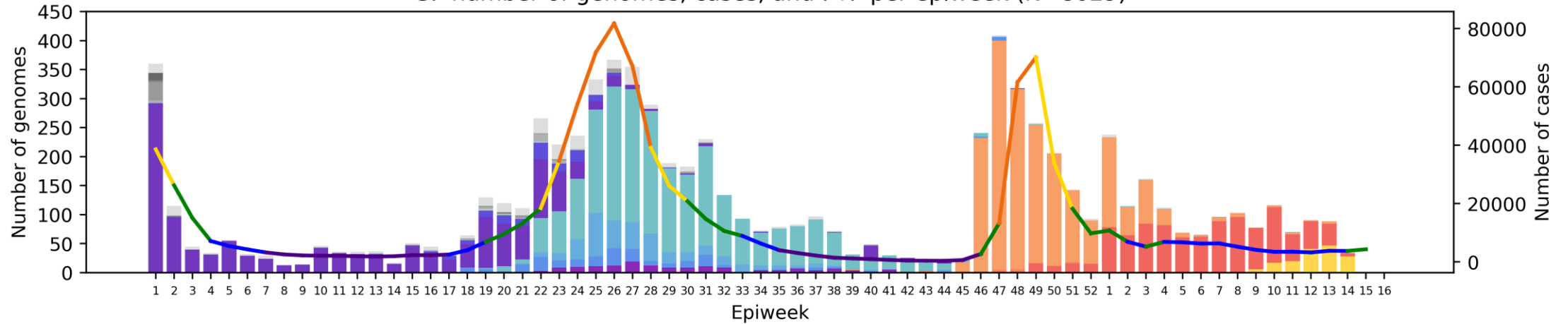
Provincial updates

Gauteng

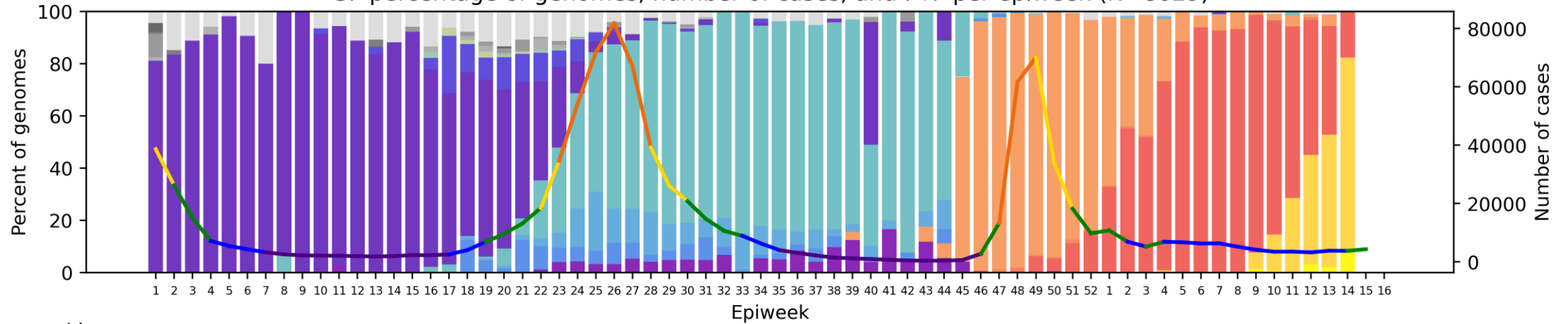


Gauteng Province, 2021-2022, n = 8029

GP number of genomes, cases, and PTP per epiweek (N=8029)



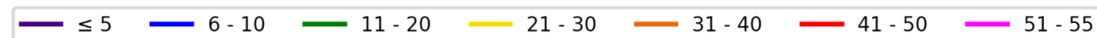
GP percentage of genomes, number of cases, and PTP per epiweek (N=8029)



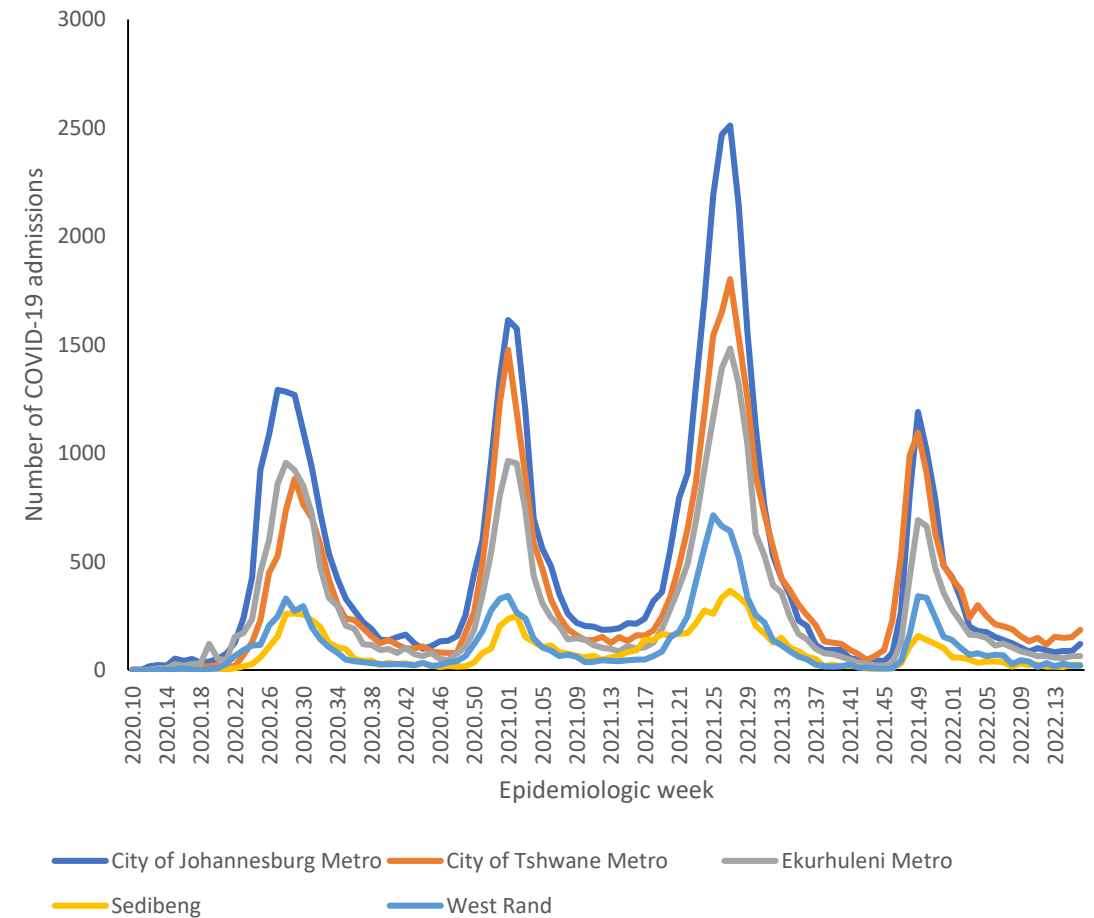
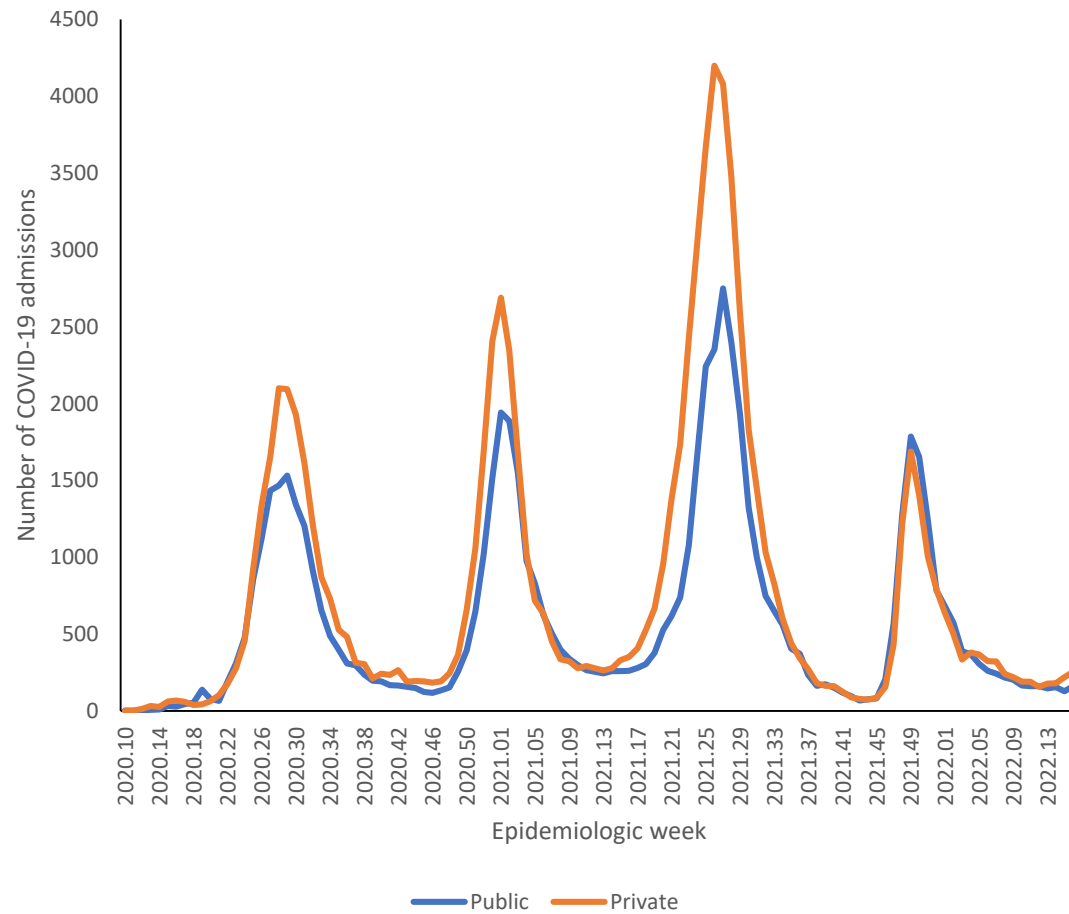
Clade key (bar graph)



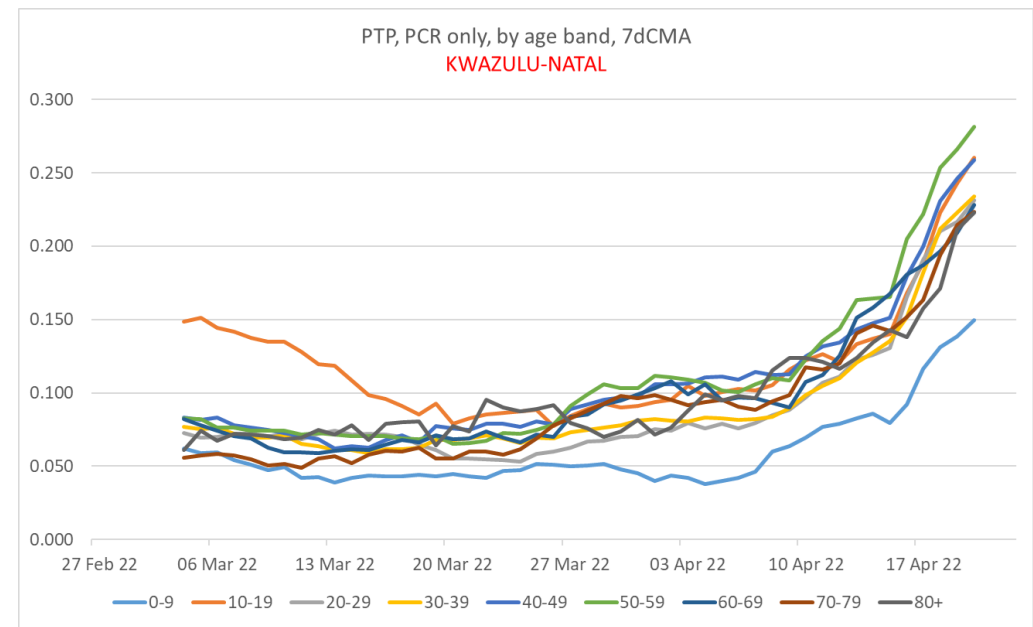
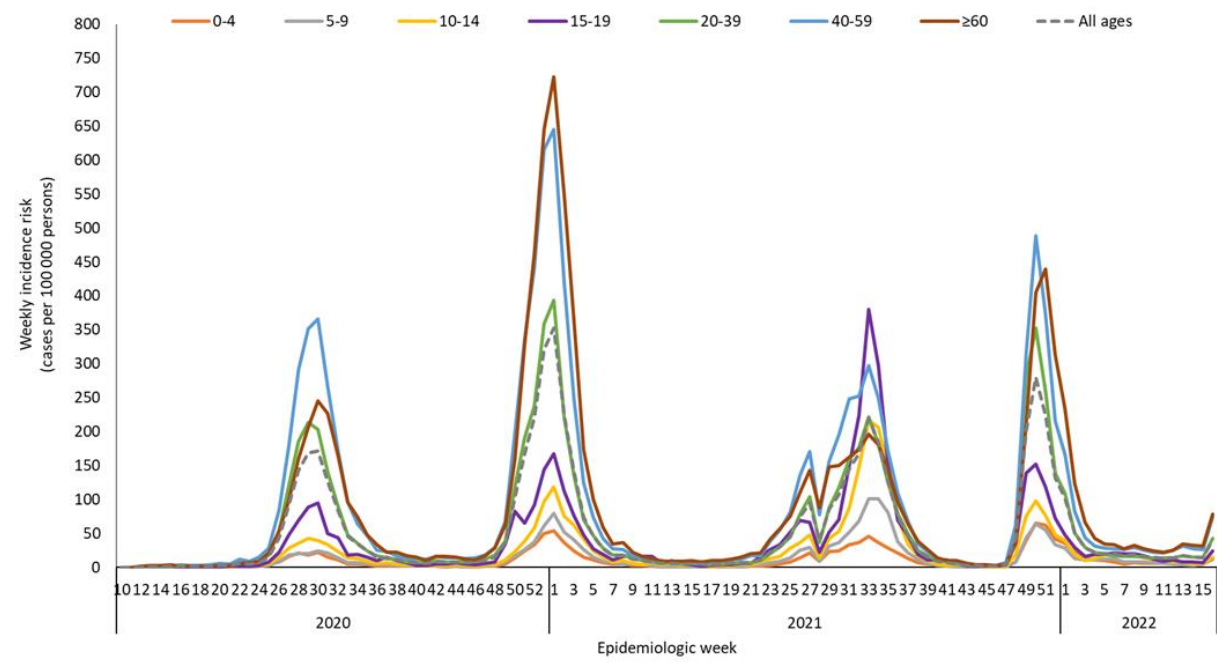
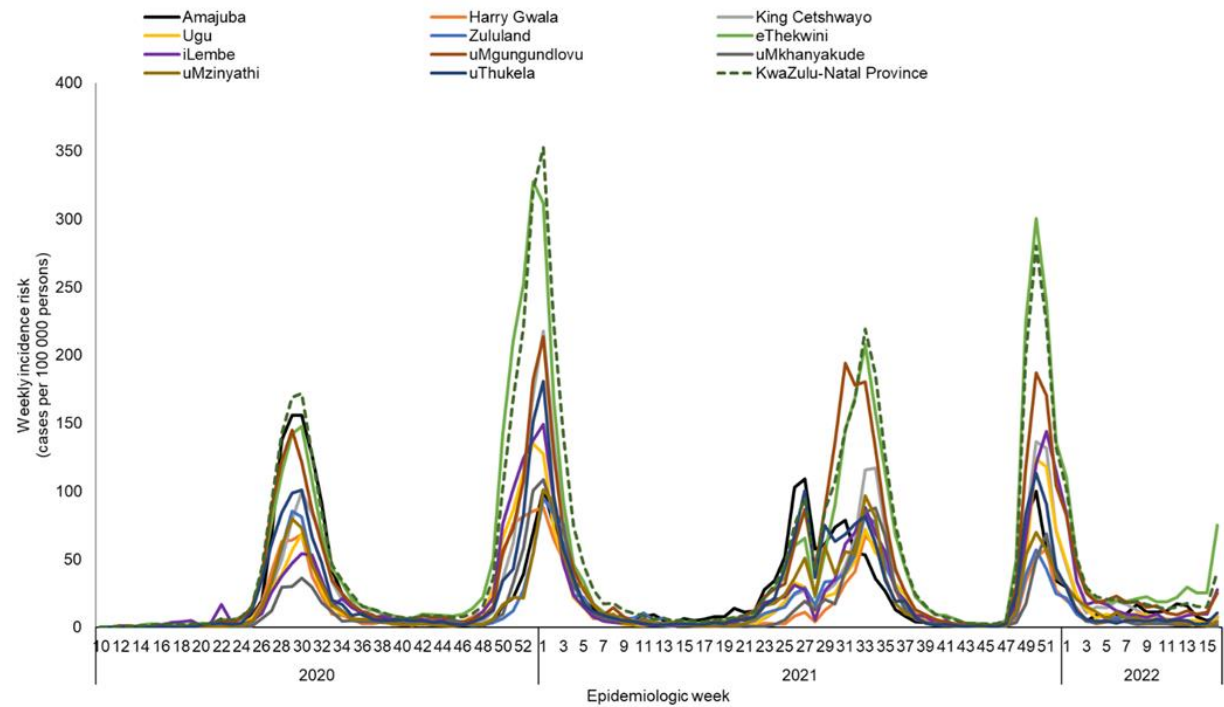
Weekly percentage testing positive key (line graph)



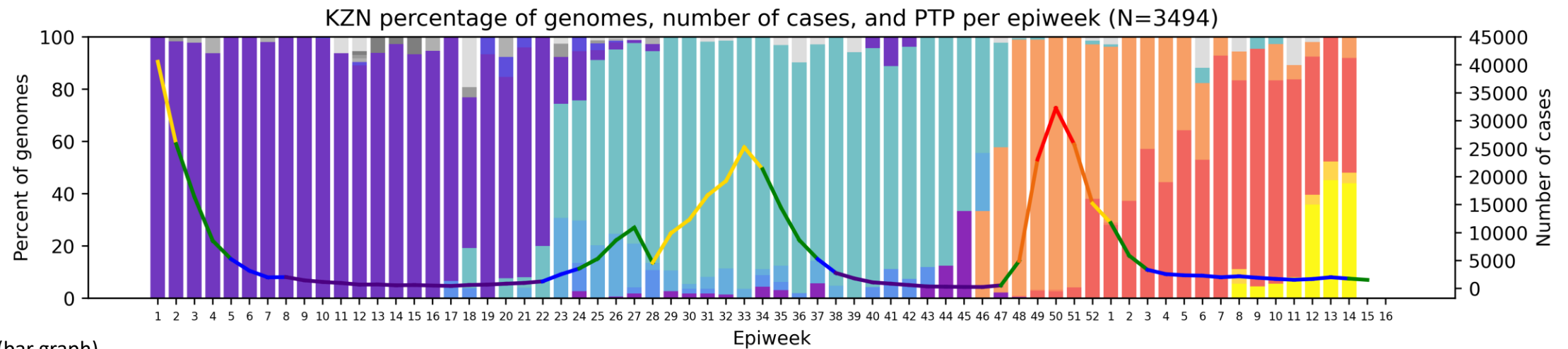
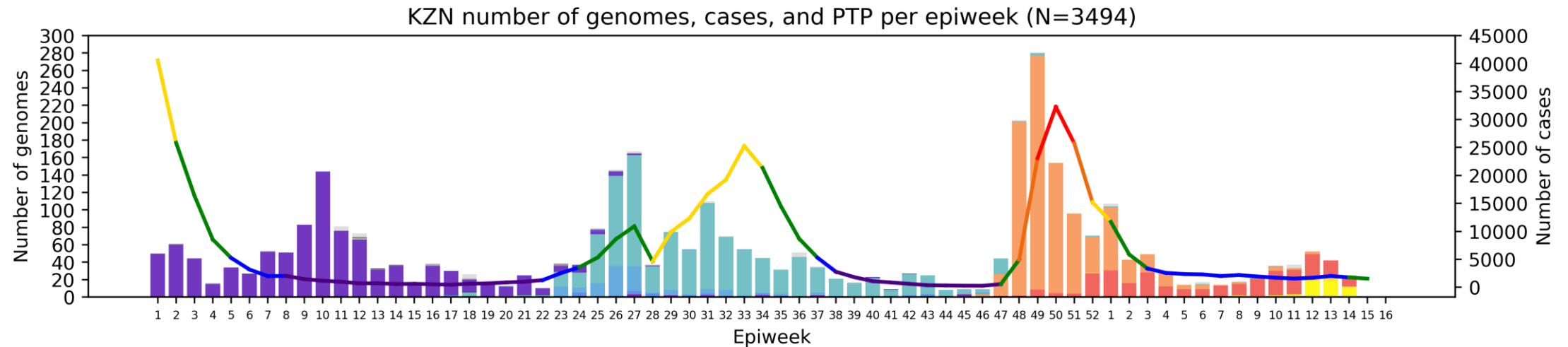
Number of reported COVID-19 admissions, by epidemiologic week and health sector (left) and province (right), Gauteng, 5 March 2020-23 April 2022



KwaZulu-Natal



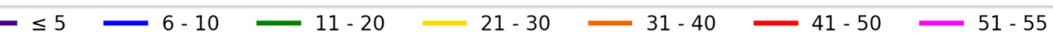
KwaZulu-Natal Province, 2021-2022, n = 3494



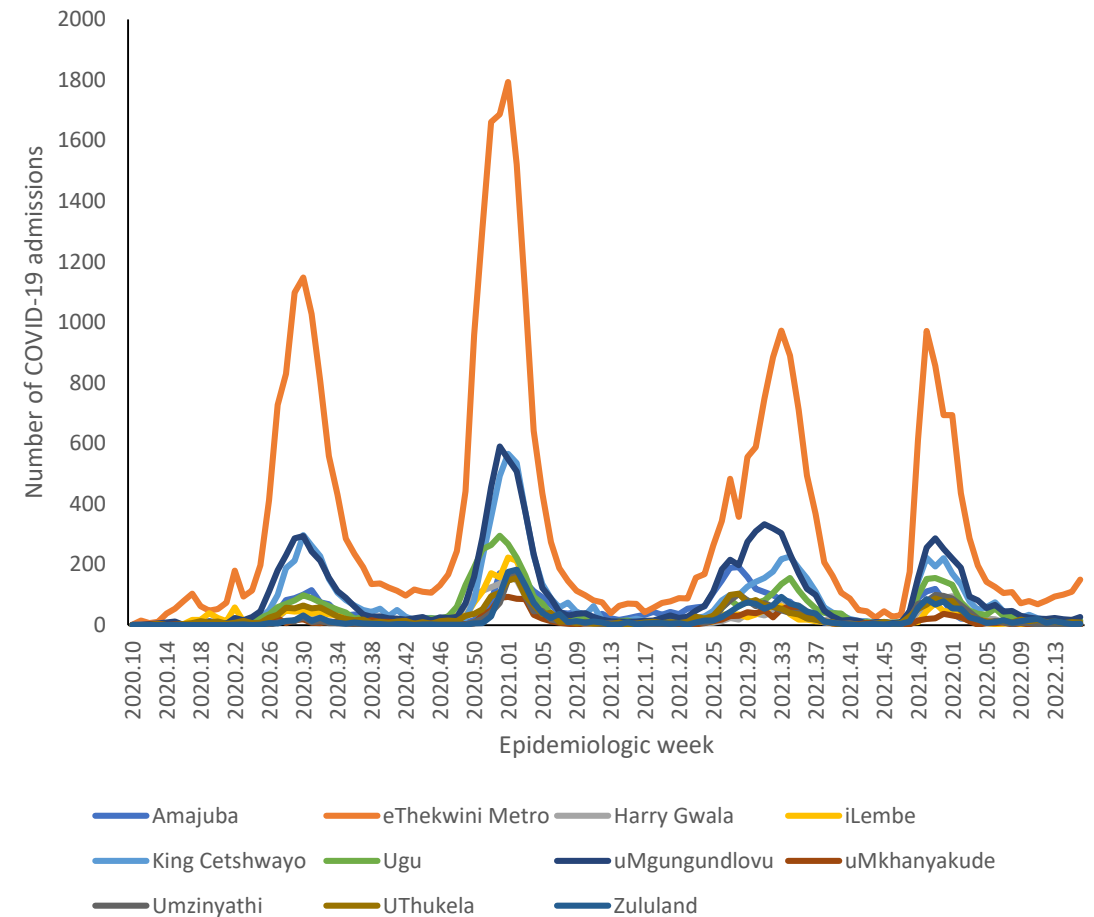
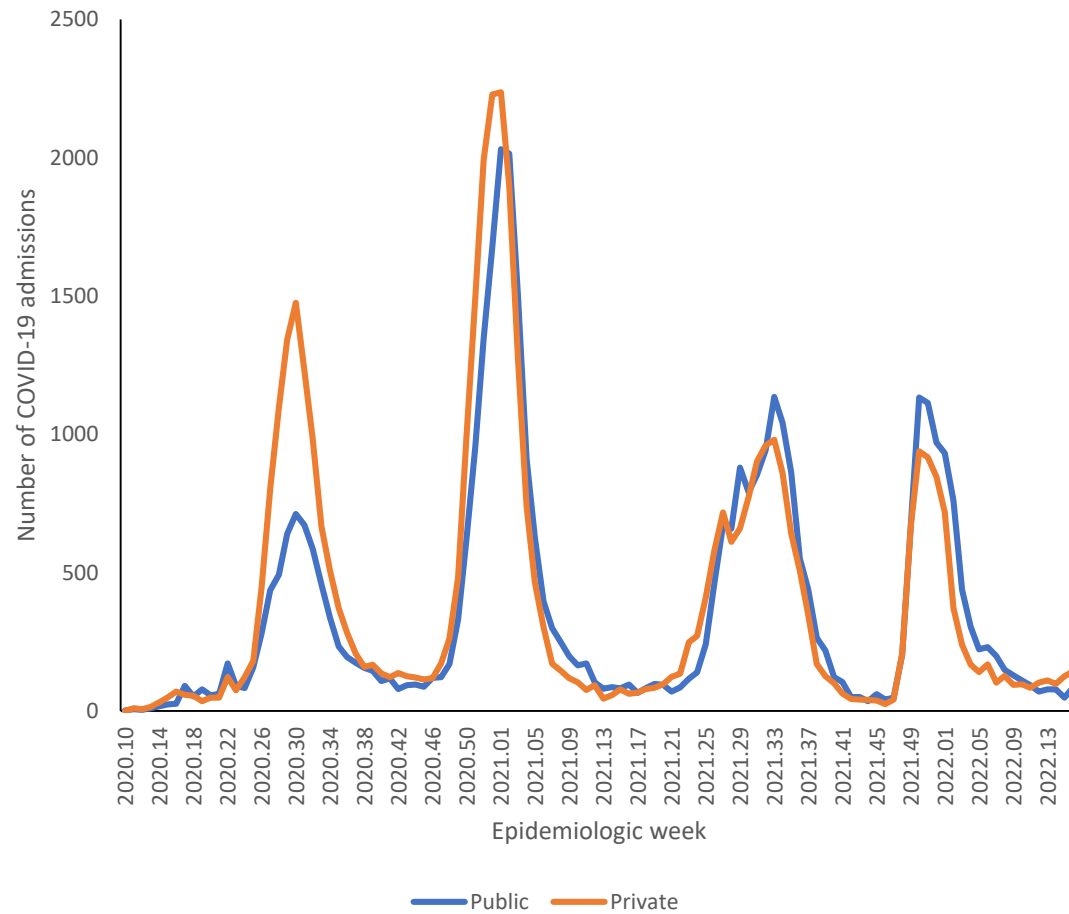
Clade key (bar graph)



Weekly percentage testing positive key (line graph)

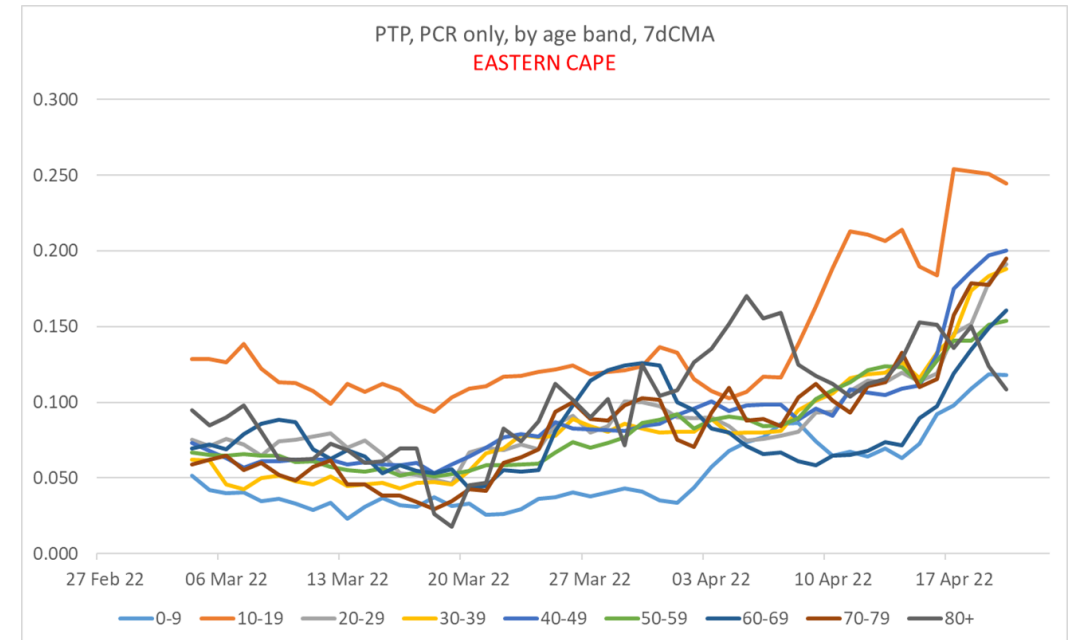
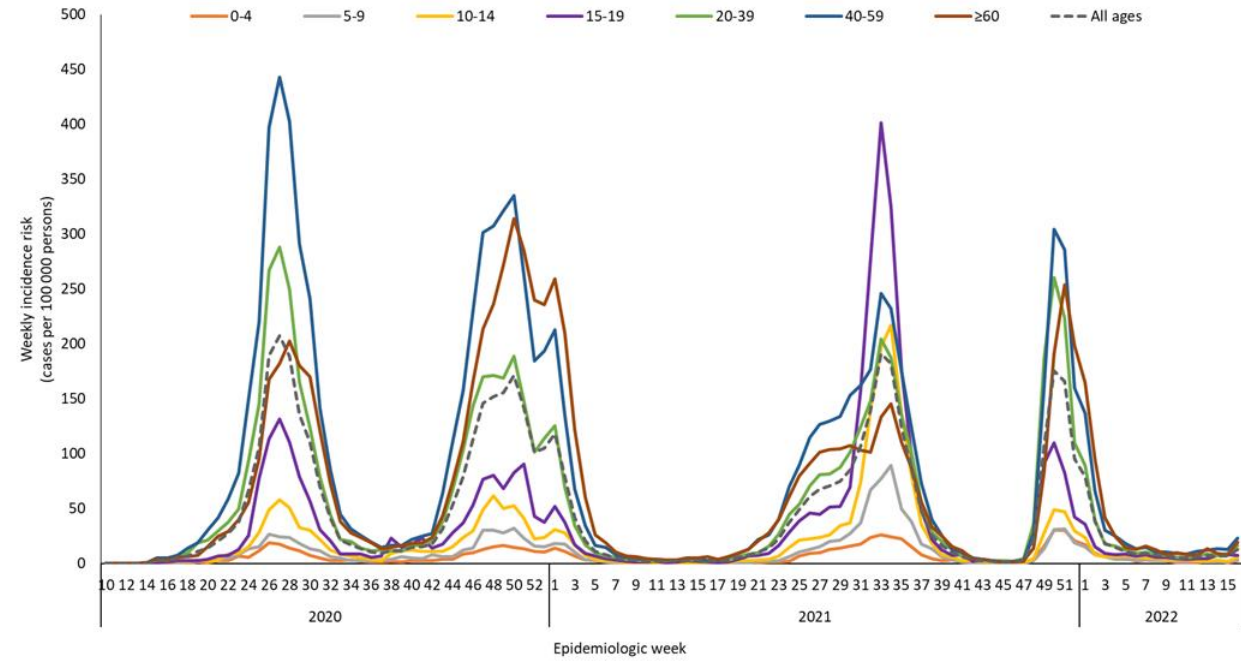
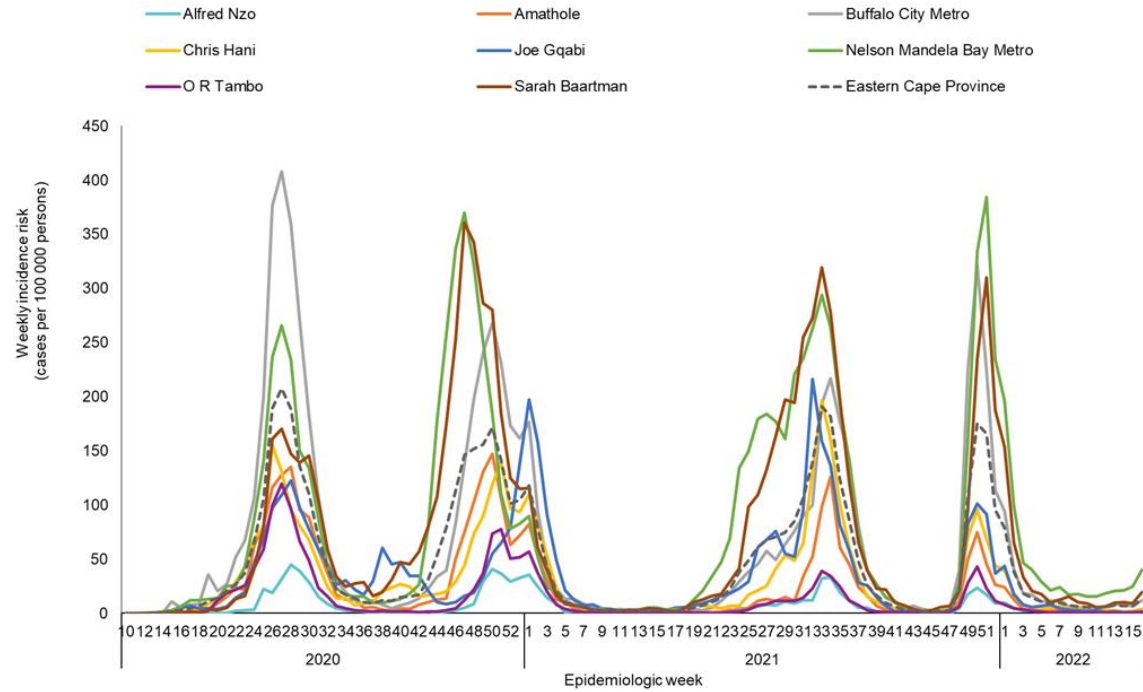


Number of reported COVID-19 admissions, by epidemiologic week and health sector (left) and province (right), Kwazulu-Natal, 5 March 2020-23 April 2022



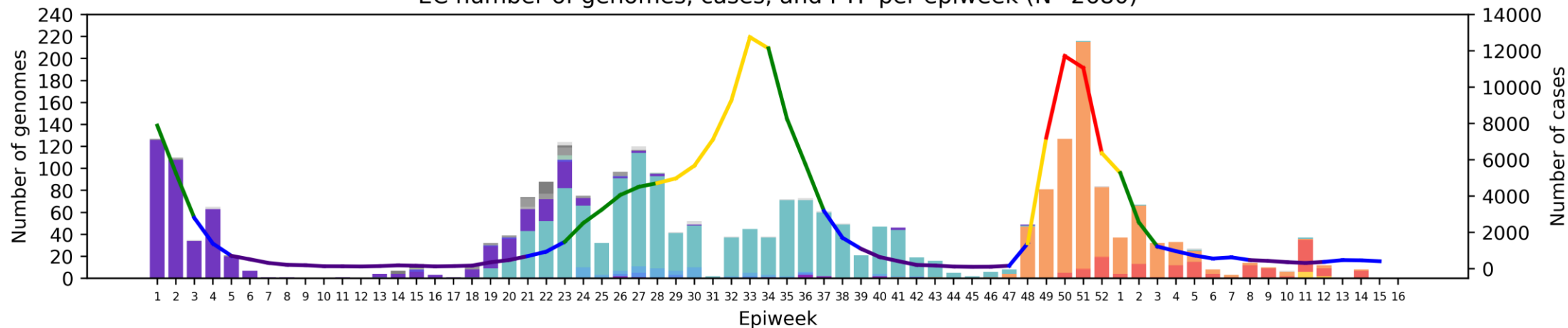
- Increase in admission in private sector and eThekweni district

Eastern Cape

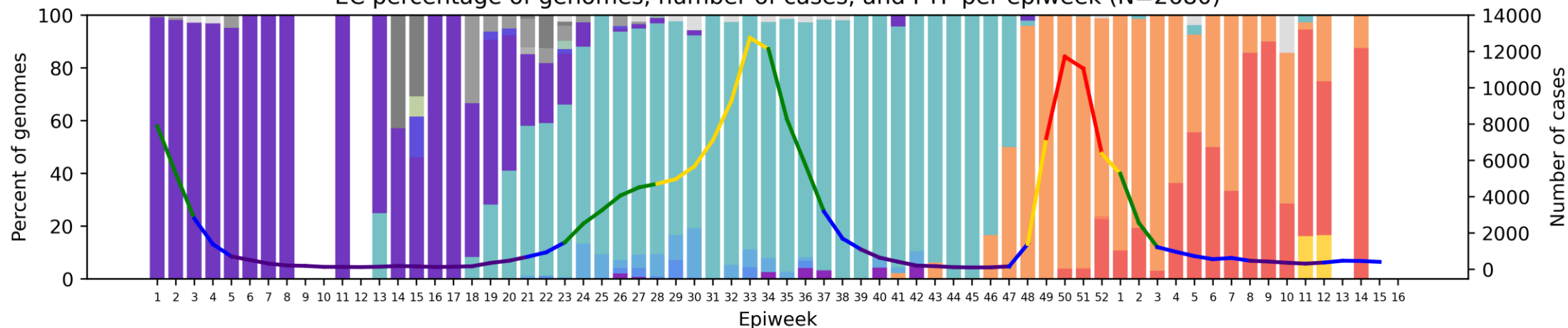


Eastern Cape Province, 2021-2022, n = 2680

EC number of genomes, cases, and PTP per epiweek (N=2680)



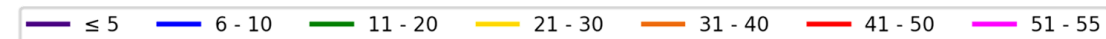
EC percentage of genomes, number of cases, and PTP per epiweek (N=2680)



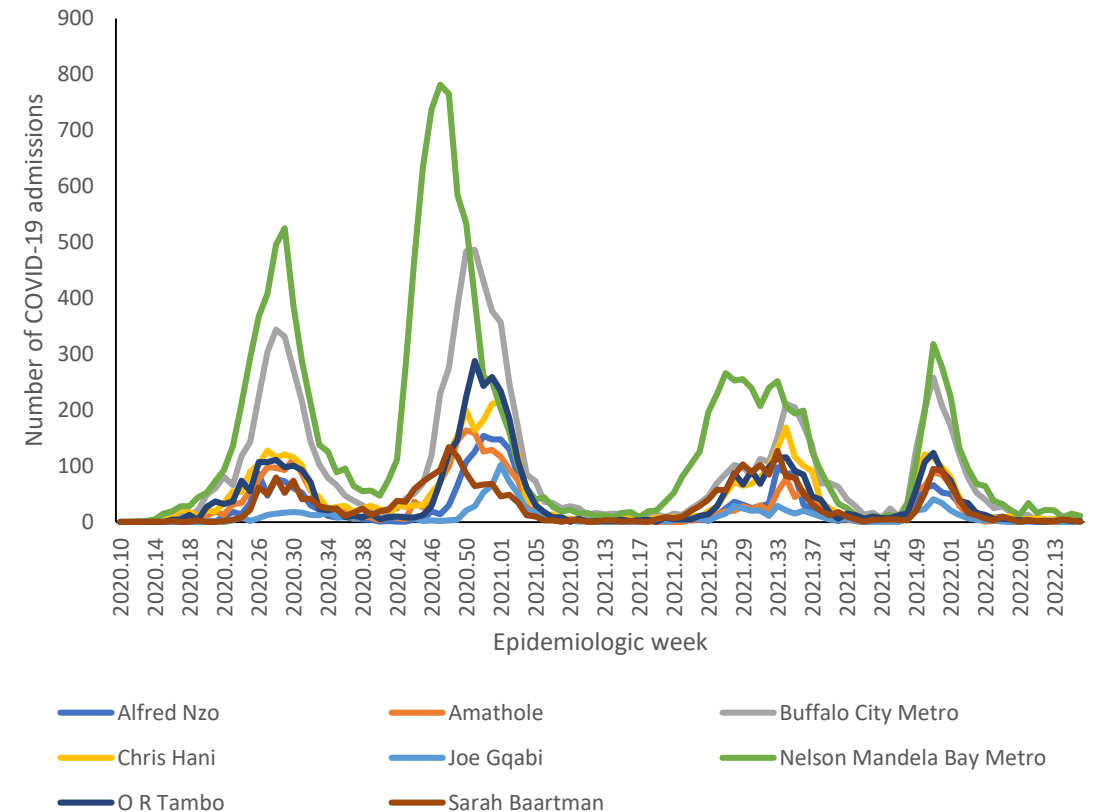
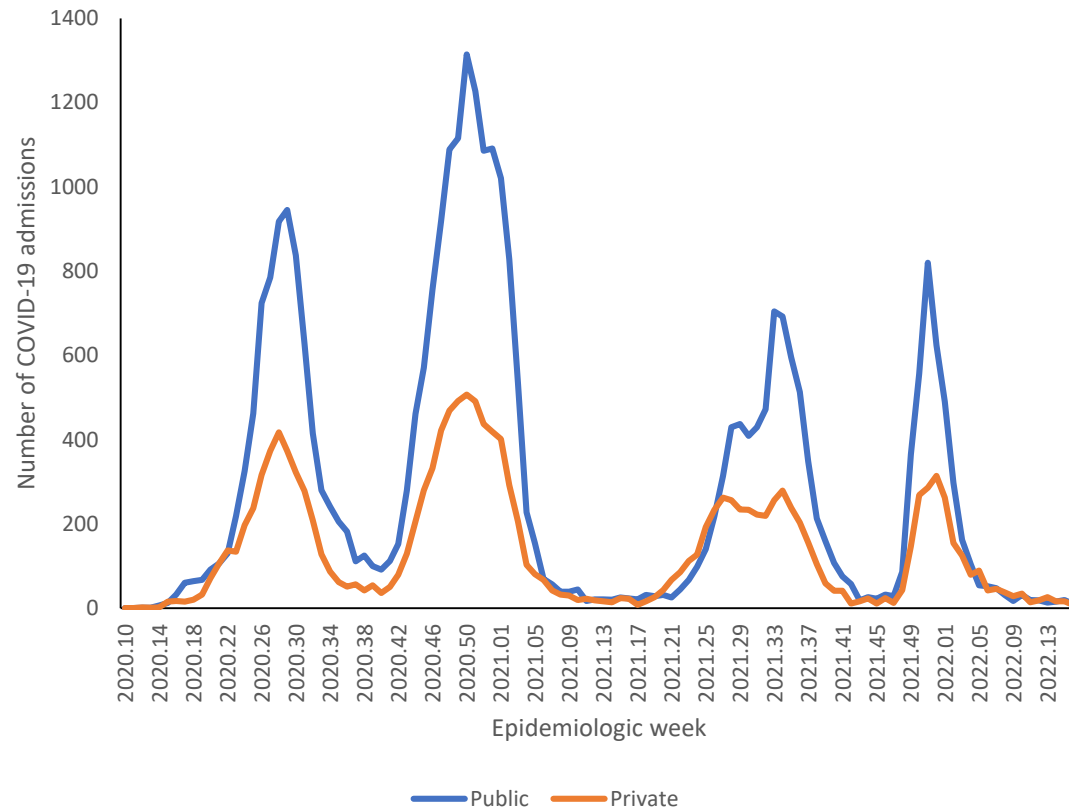
Clade key (bar graph)



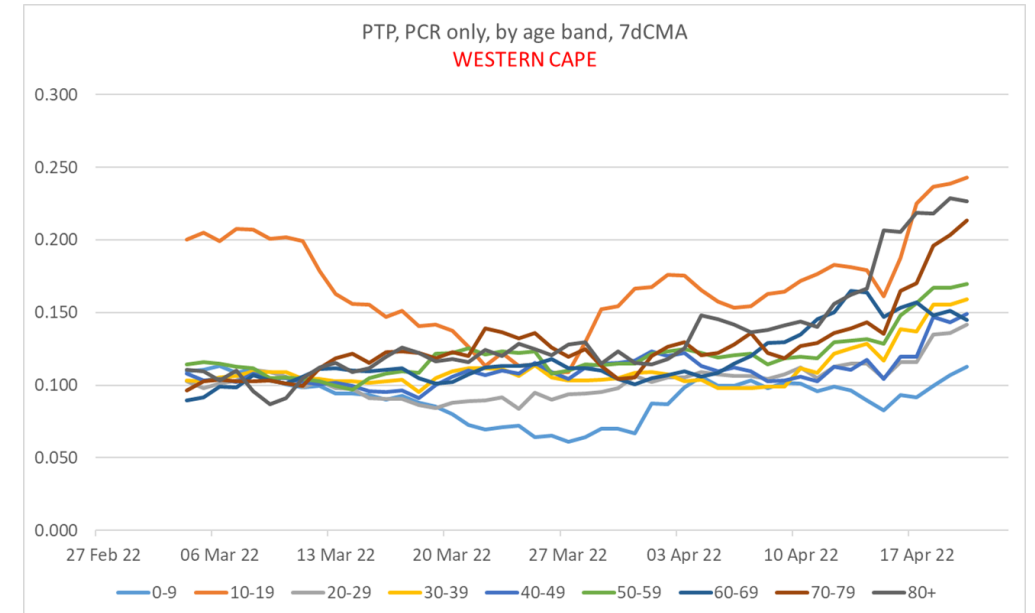
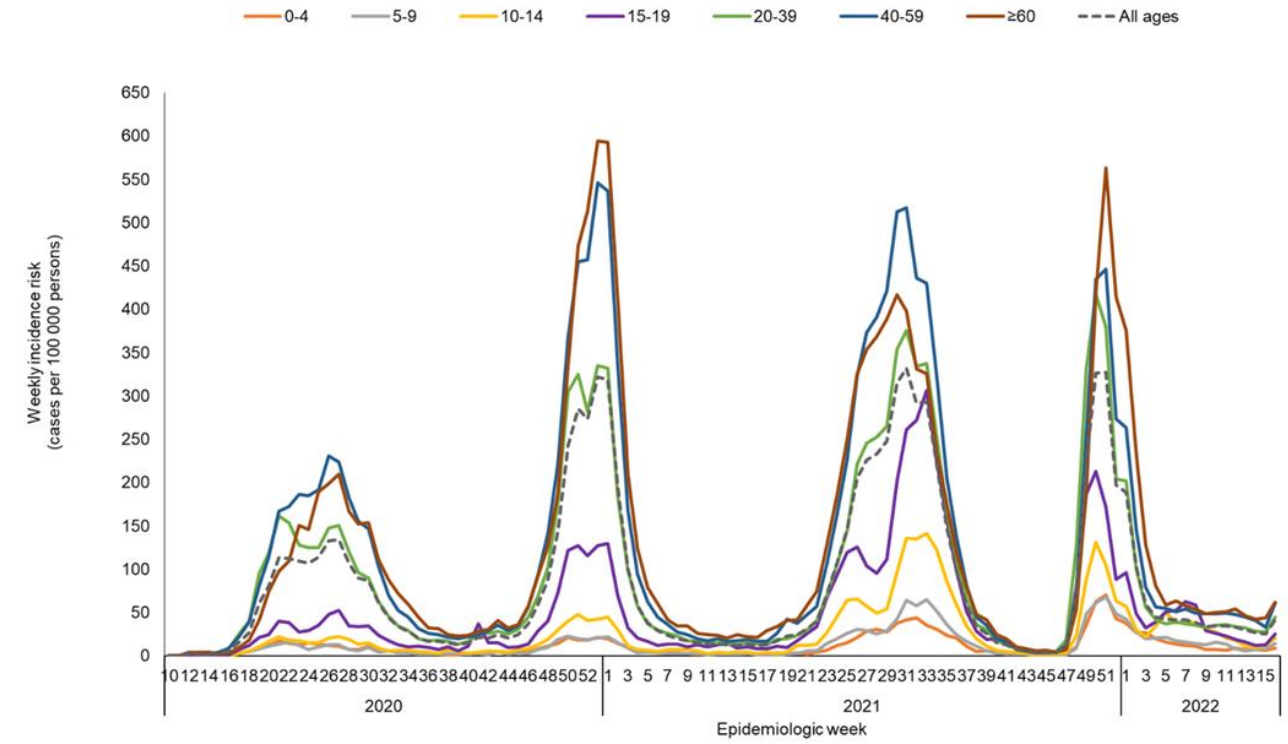
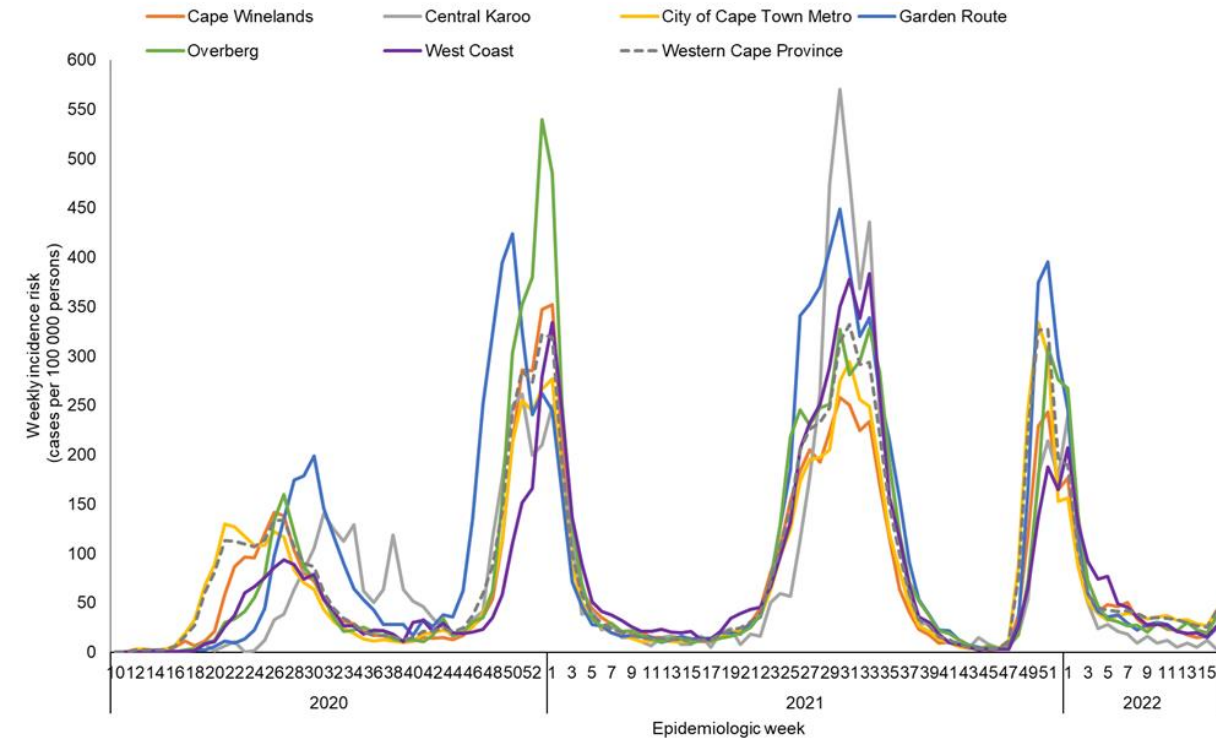
Weekly percentage testing positive key (line graph)



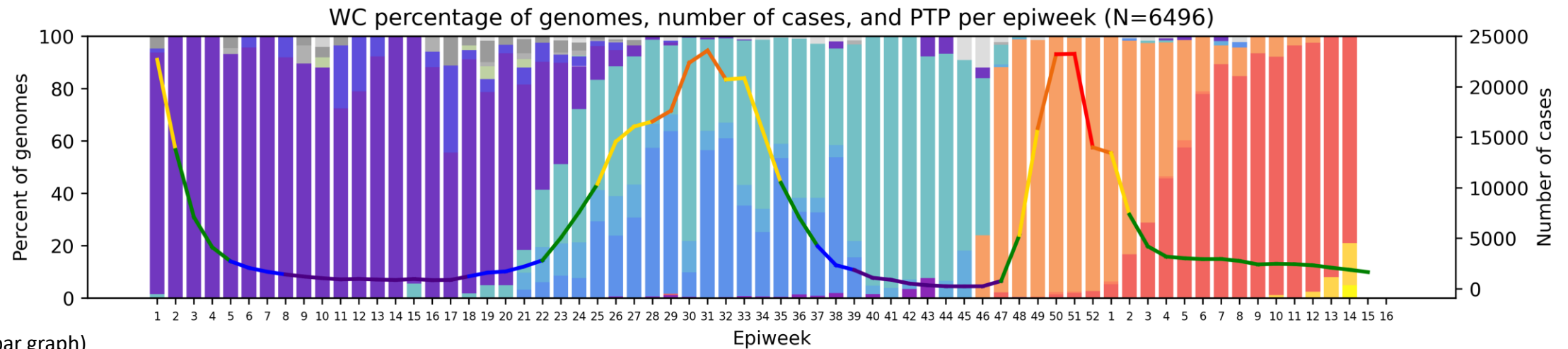
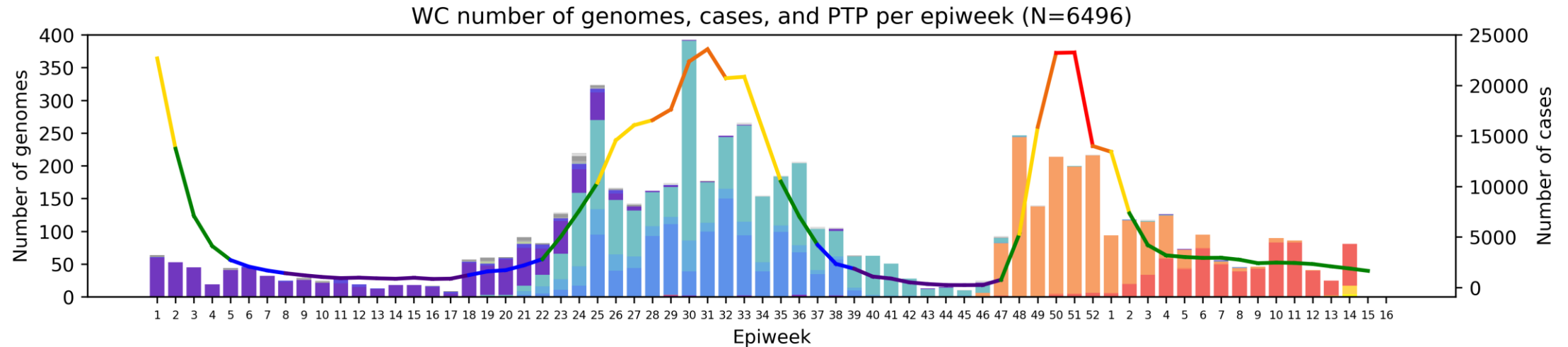
Number of reported COVID-19 admissions, by epidemiologic week and health sector (left) and province (right), Eastern Cape, 5 March 2020-23 April 2022



Western Cape



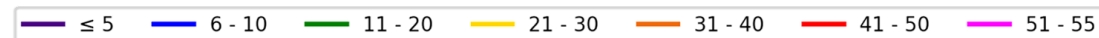
Western Cape Province, 2021-2022, n = 6496



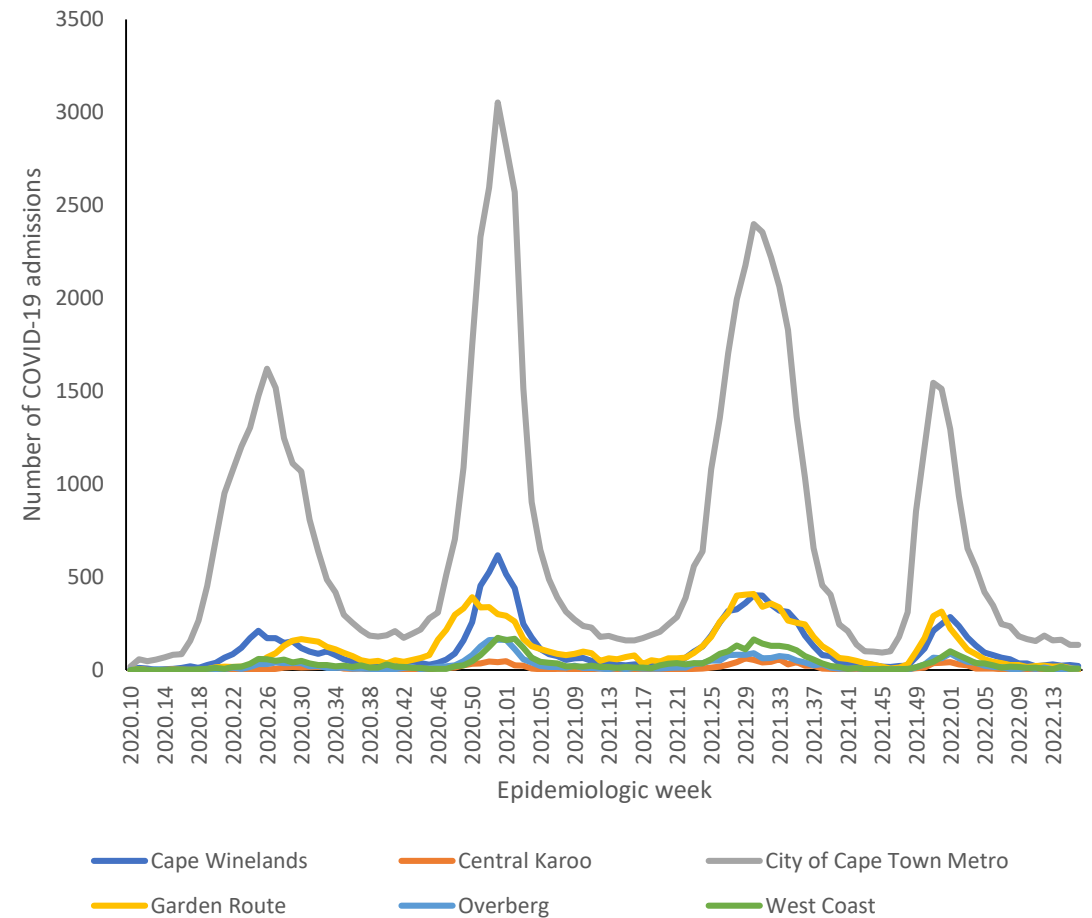
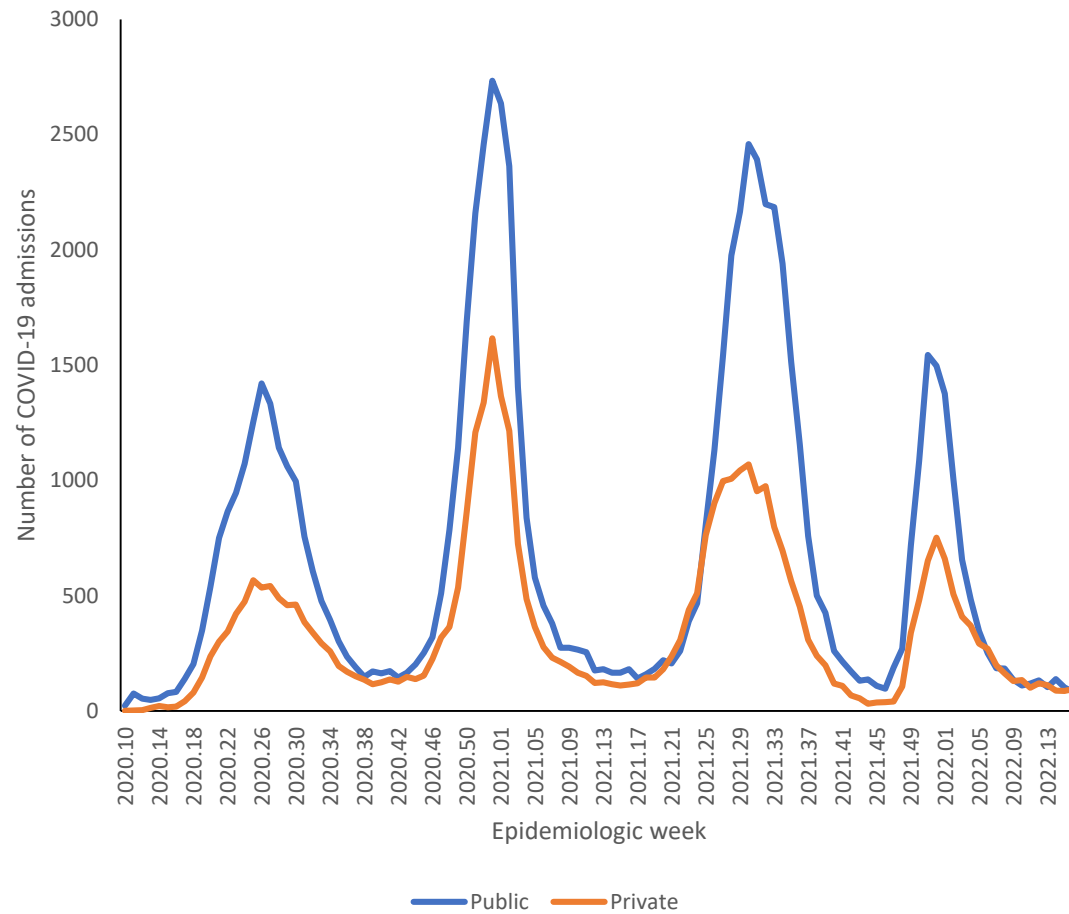
Clade key (bar graph)



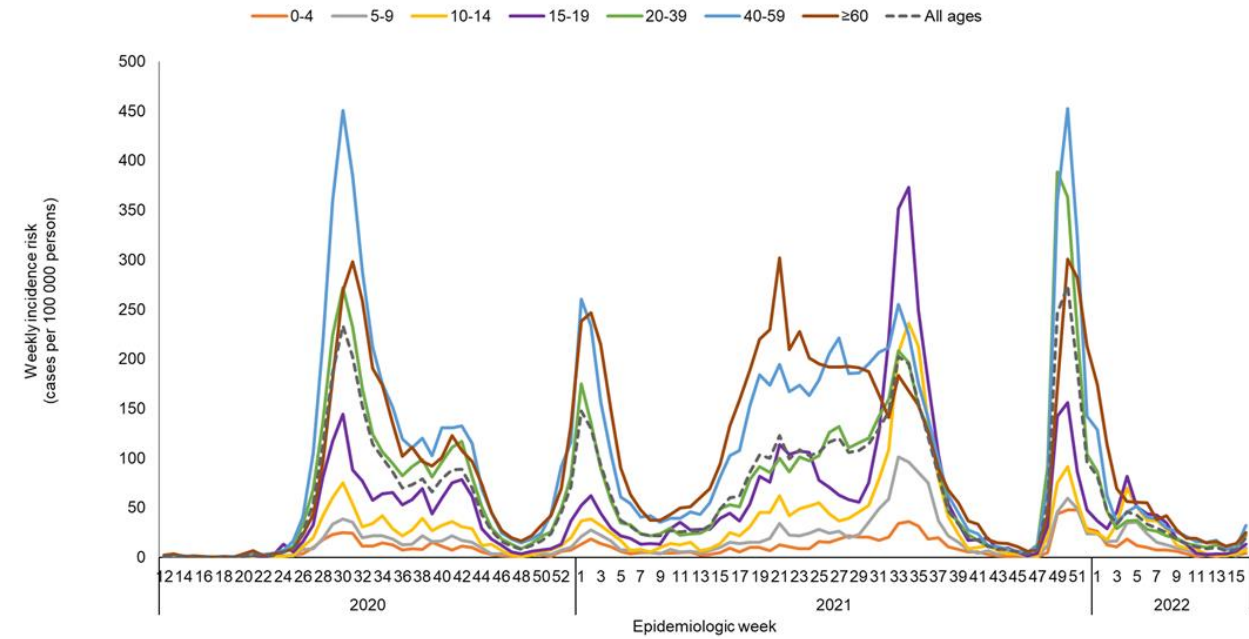
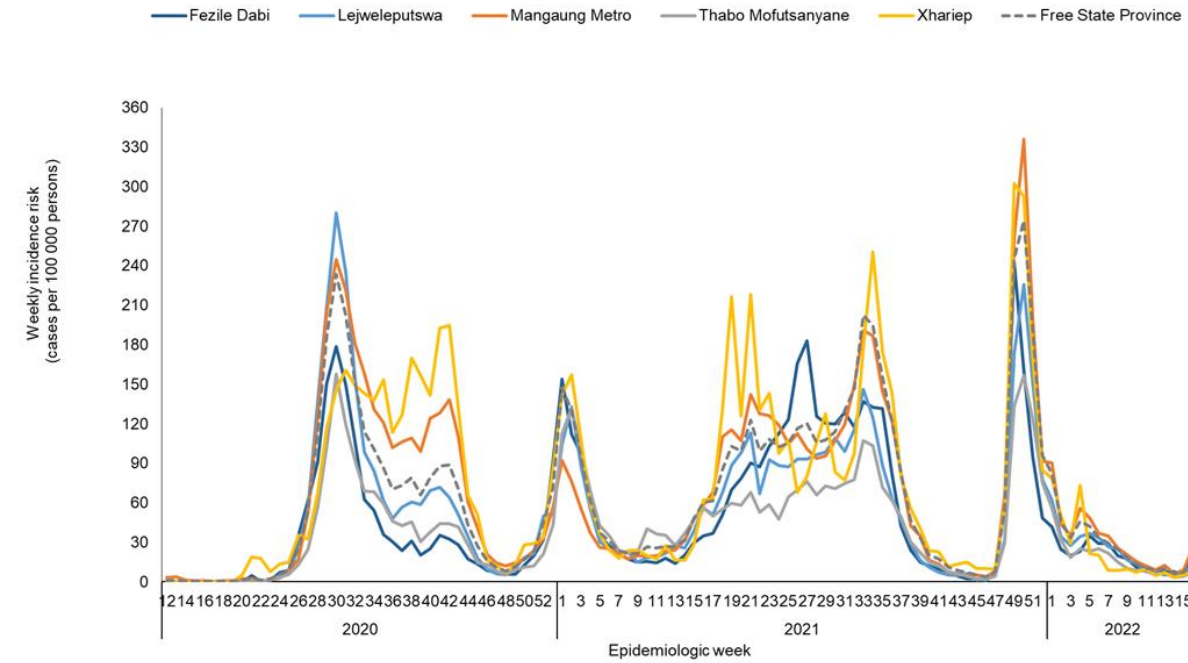
Weekly percentage testing positive key (line graph)



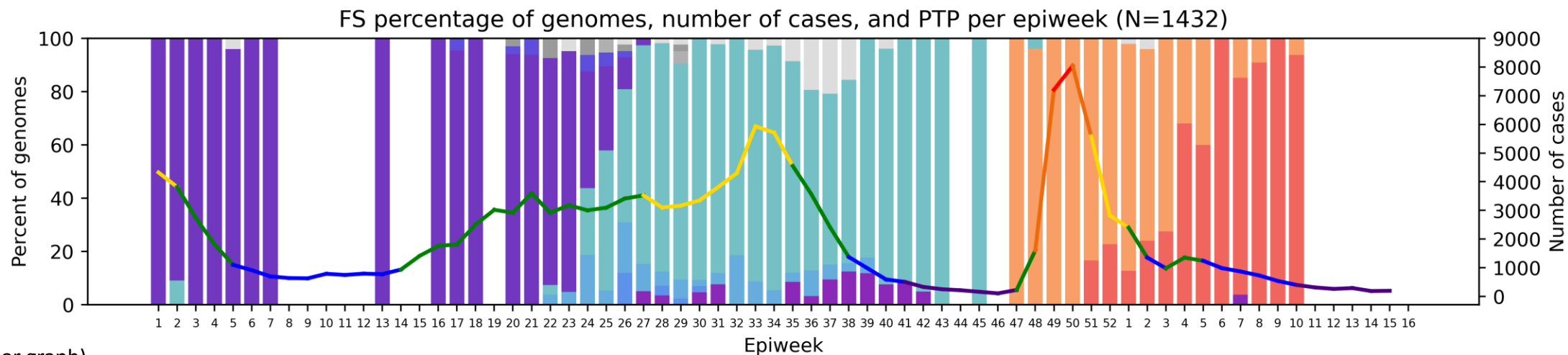
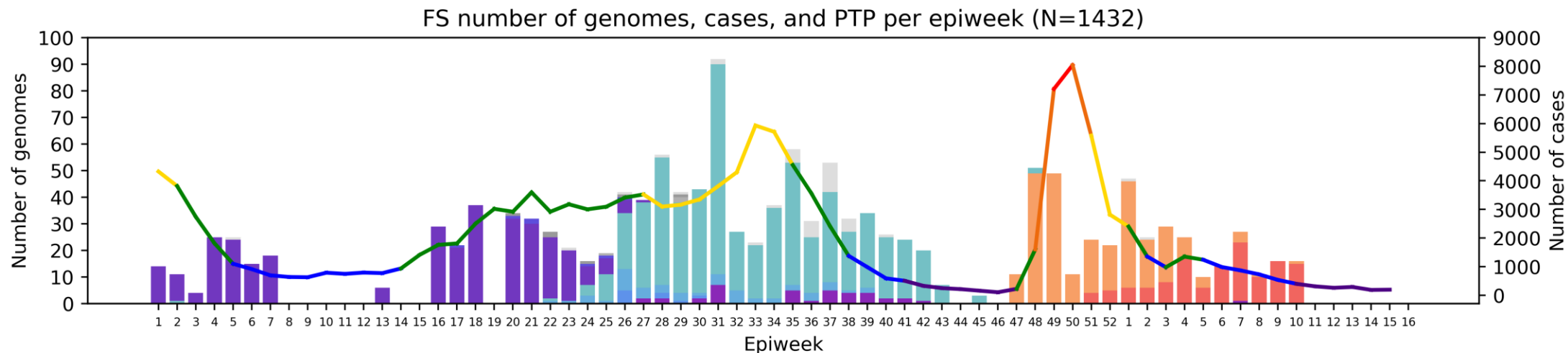
Number of reported COVID-19 admissions, by epidemiologic week and health sector (left) and province (right), Western Cape, 5 March 2020-23 April 2022



Free State



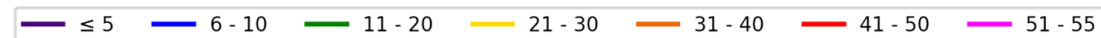
Free State Province, 2021-2022, n = 1432



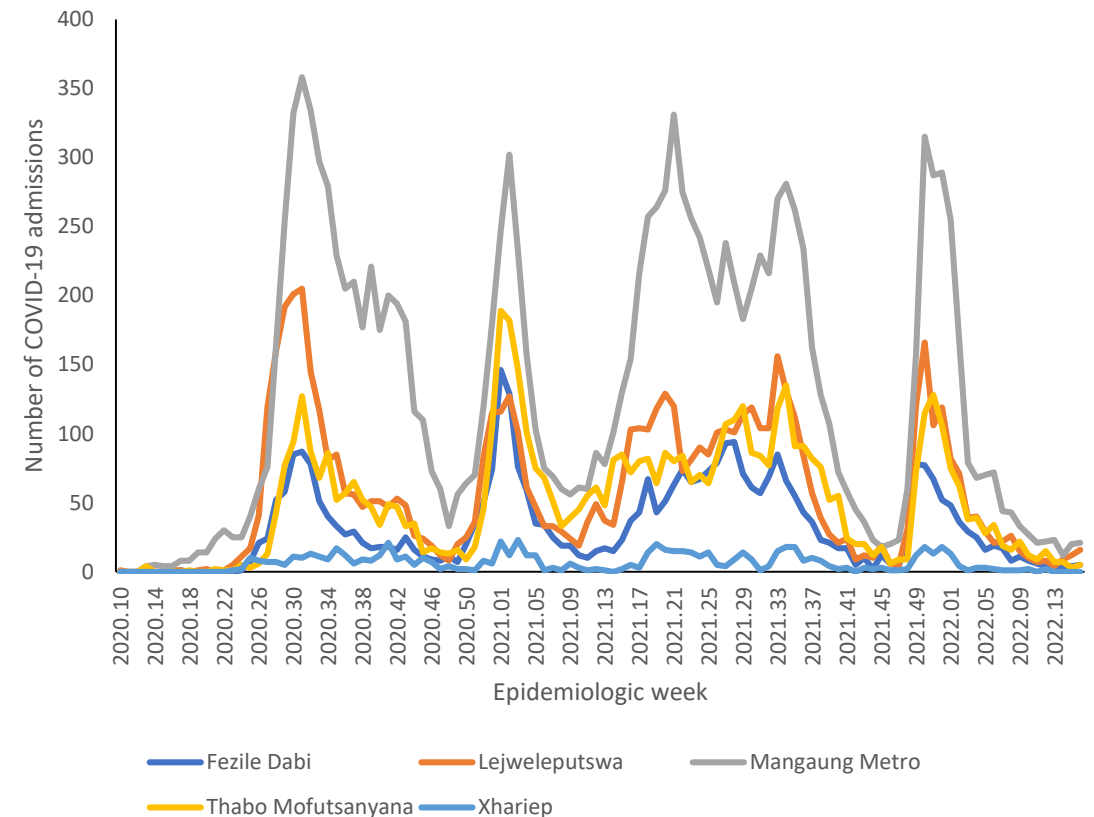
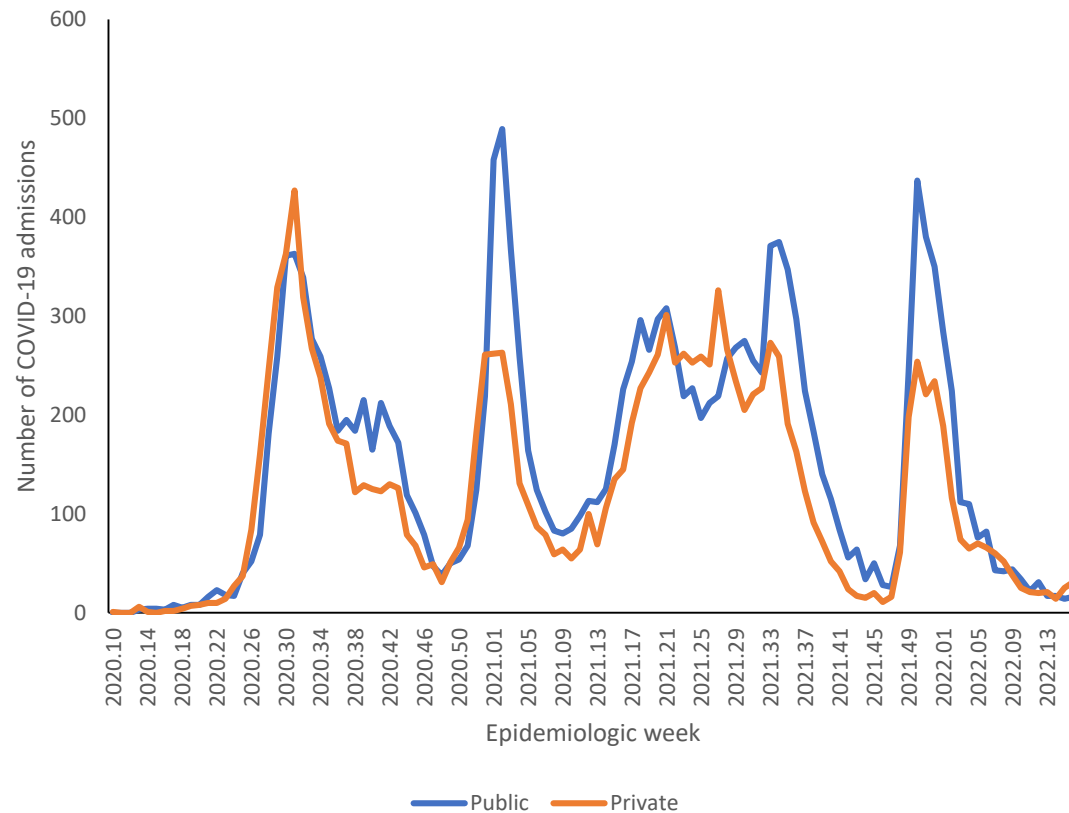
Clade key (bar graph)



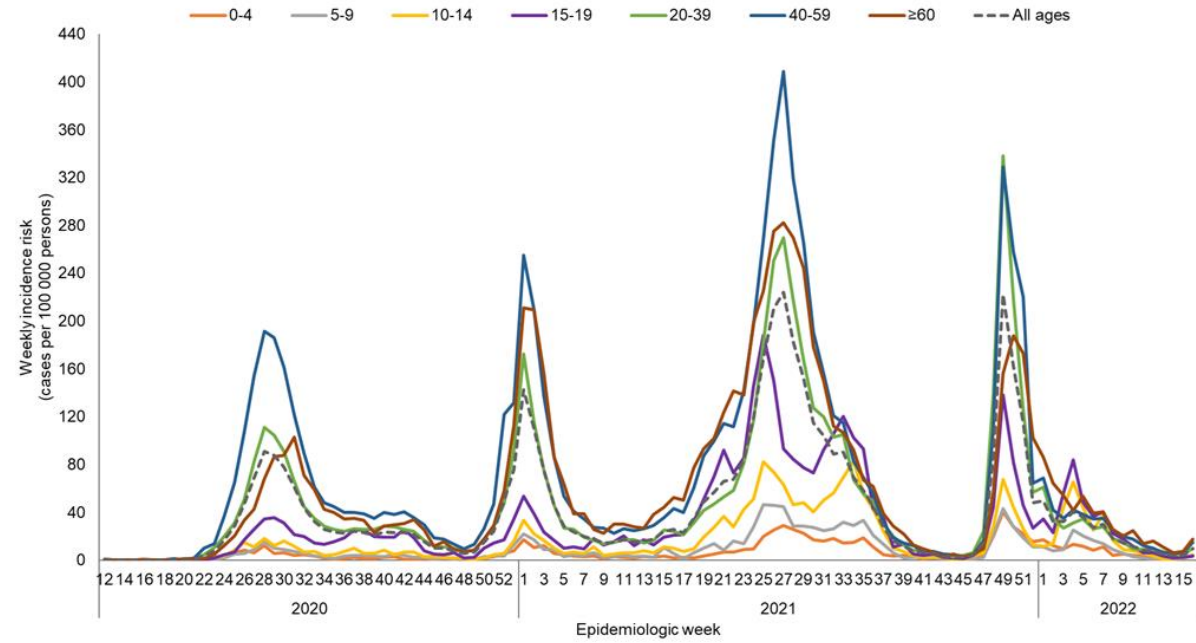
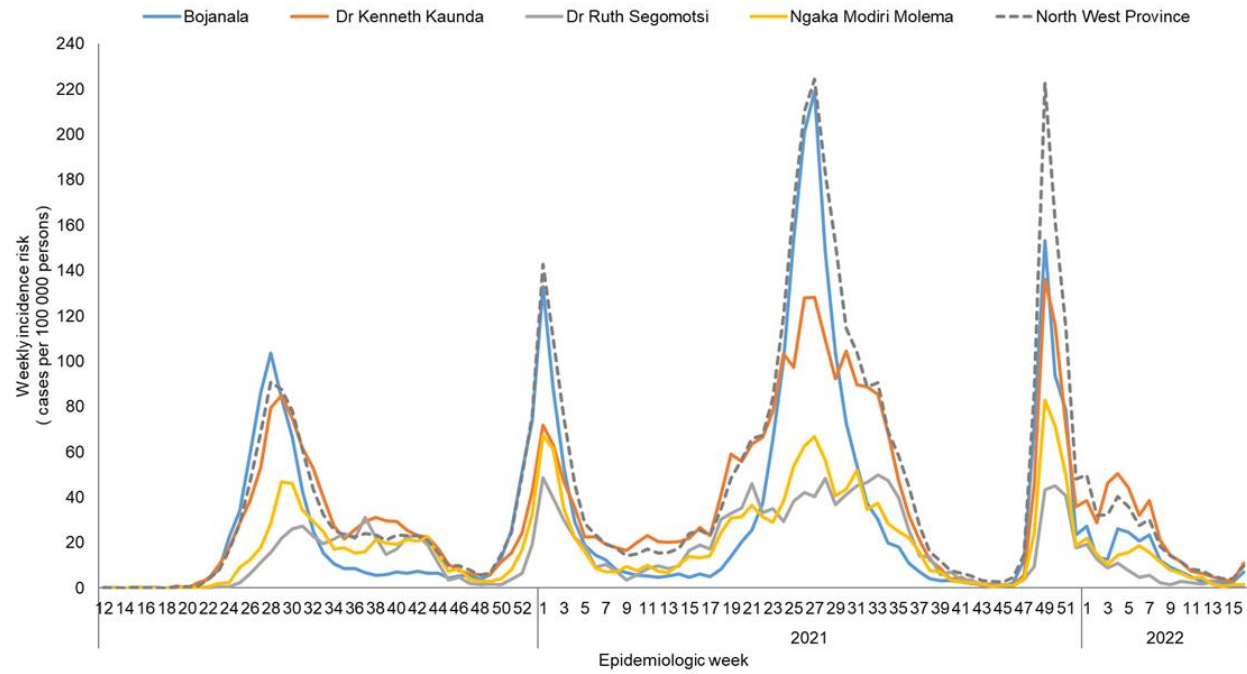
Weekly percentage testing positive key (line graph)



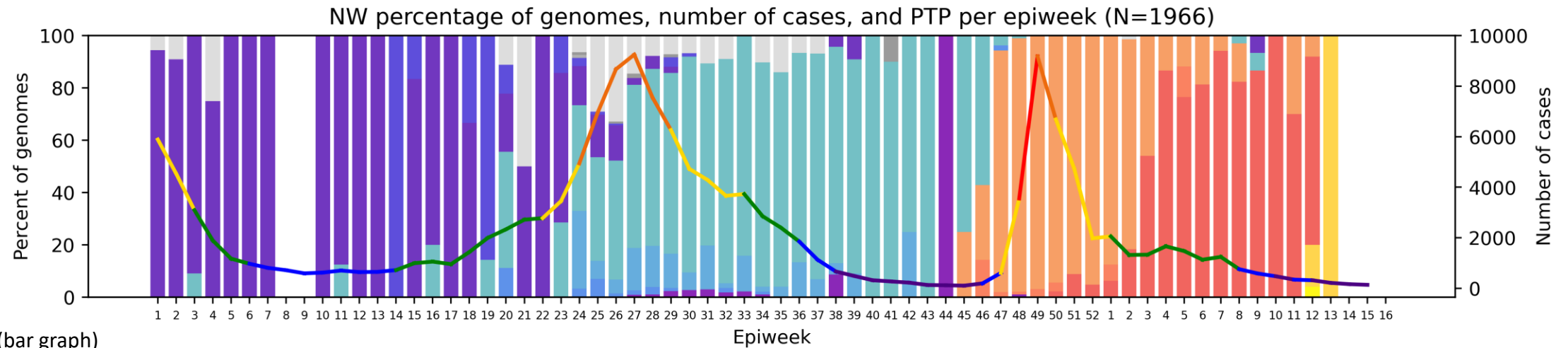
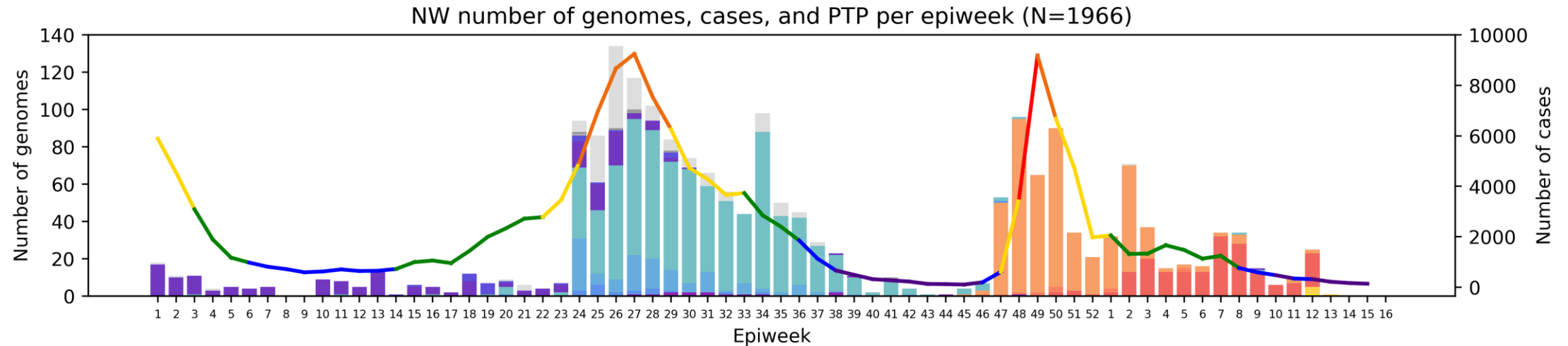
Number of reported COVID-19 admissions, by epidemiologic week and health sector (left) and province (right), Free State, 5 March 2020-23 April 2022



North West



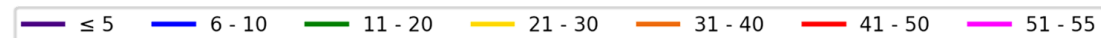
North West Province, 2021, n = 1966



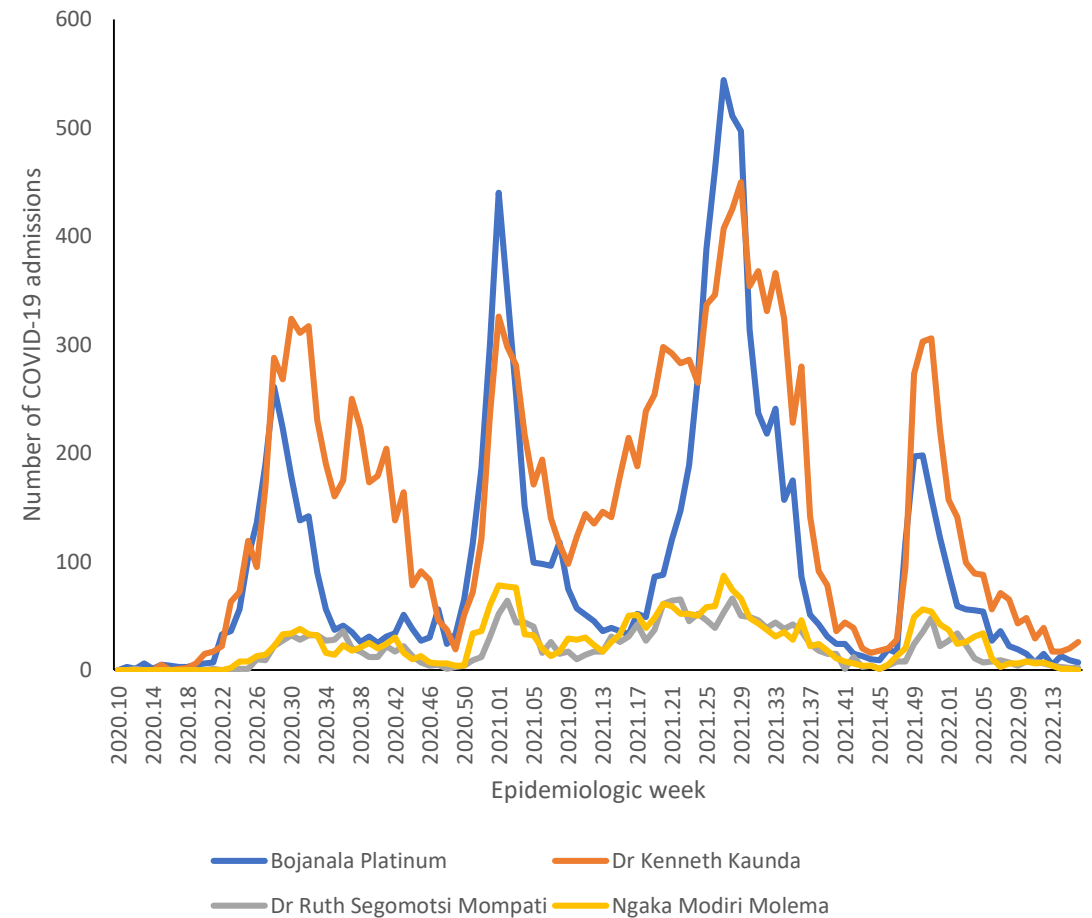
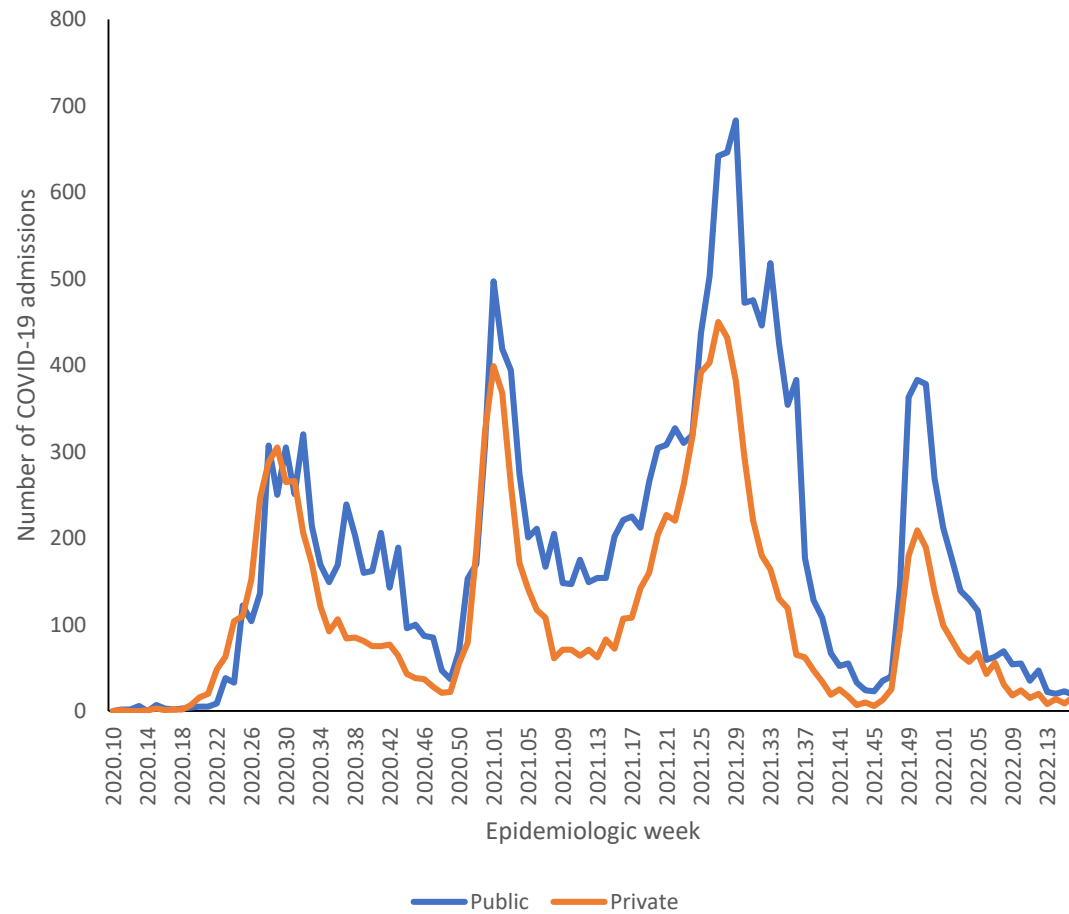
Clade key (bar graph)



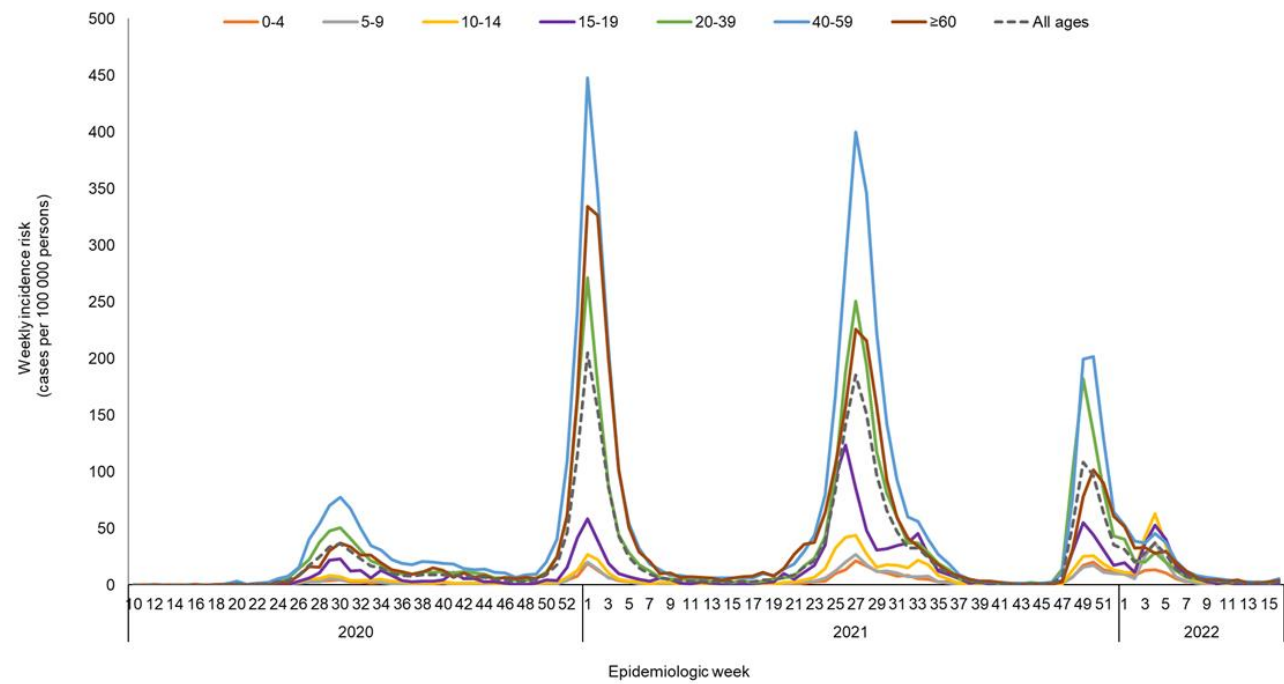
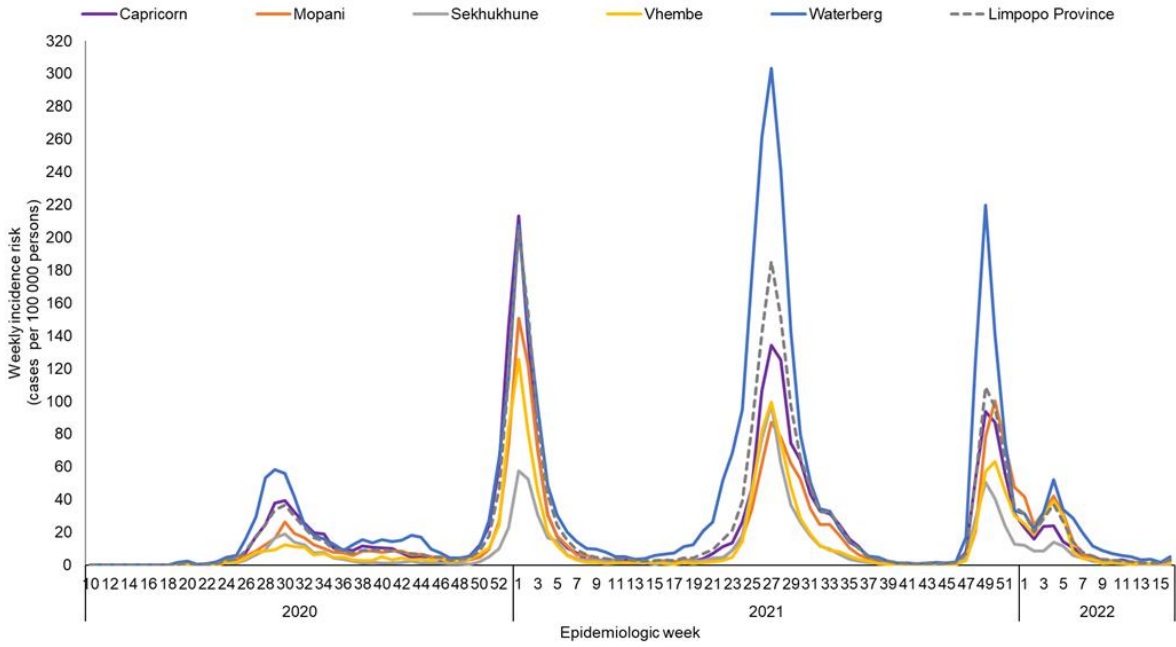
Weekly percentage testing positive key (line graph)



Number of reported COVID-19 admissions, by epidemiologic week and health sector (left) and province (right), North West, 5 March 2020-23 April 2022

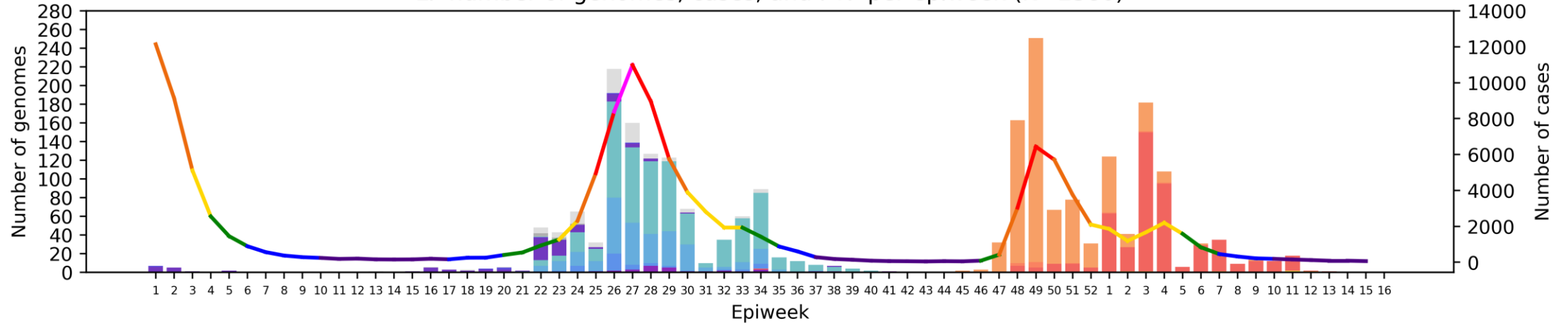


Limpopo

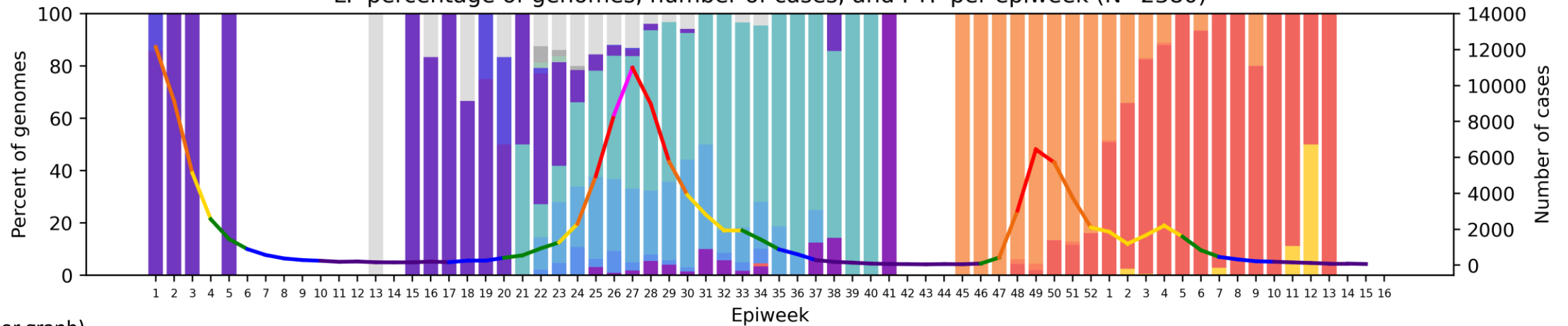


Limpopo Province, 2021-2022, n = 2380

LP number of genomes, cases, and PTP per epiweek (N=2380)



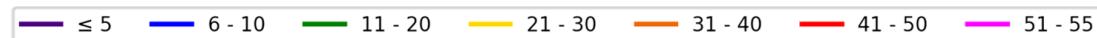
LP percentage of genomes, number of cases, and PTP per epiweek (N=2380)



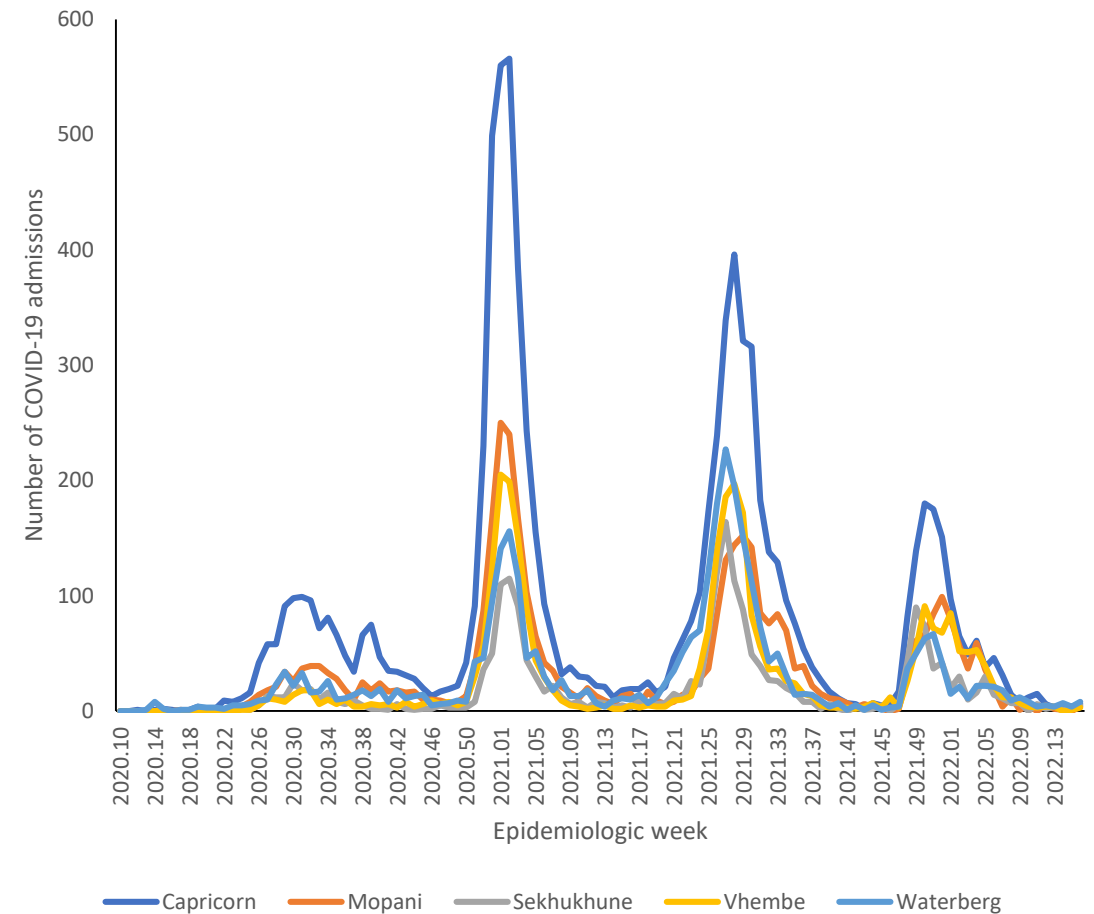
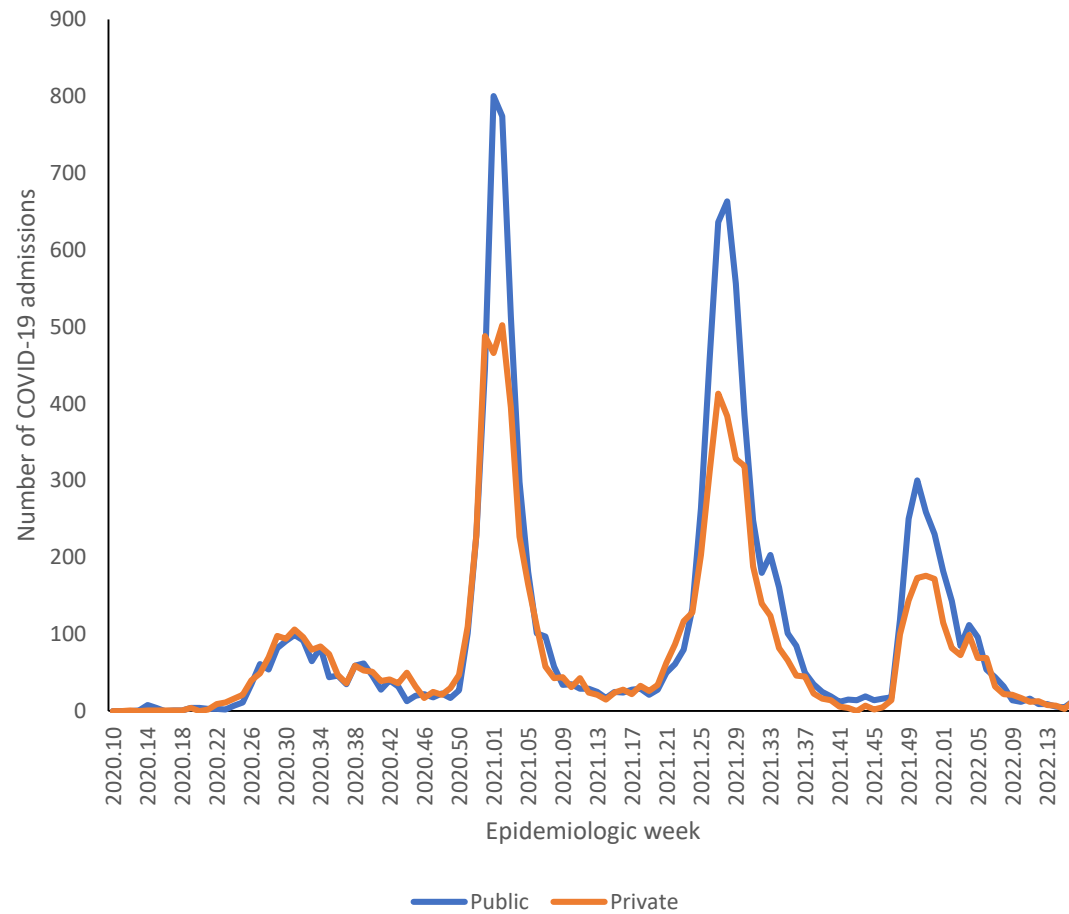
Clade key (bar graph)



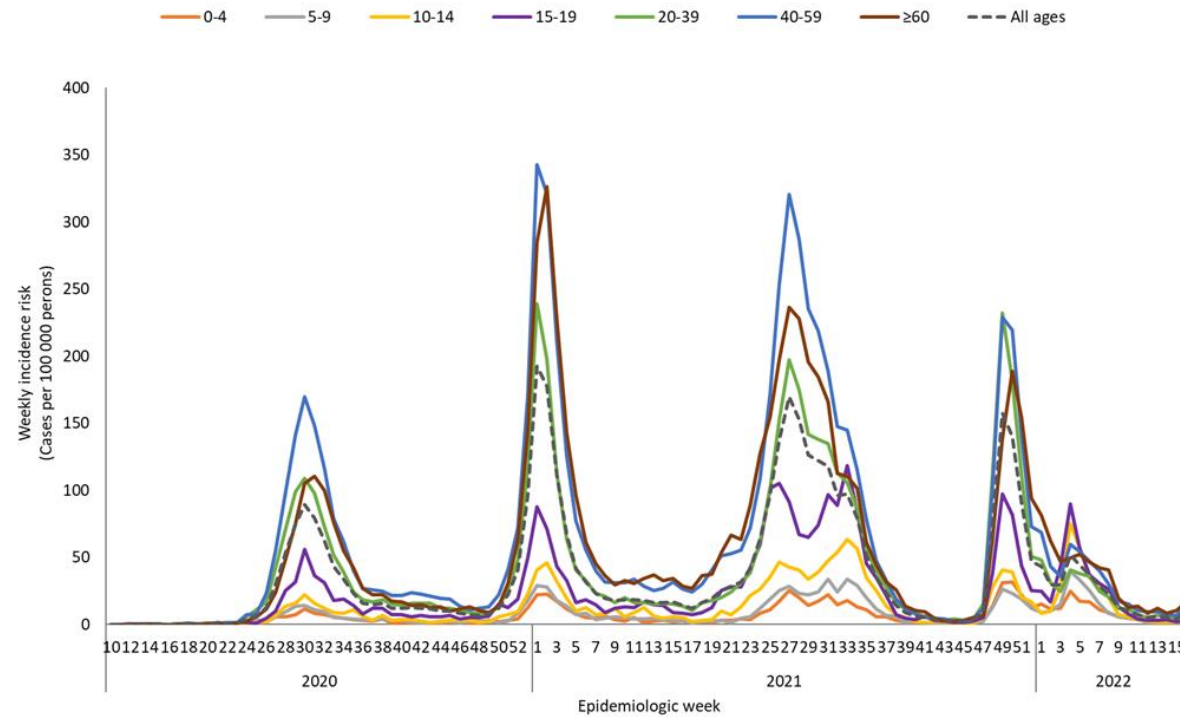
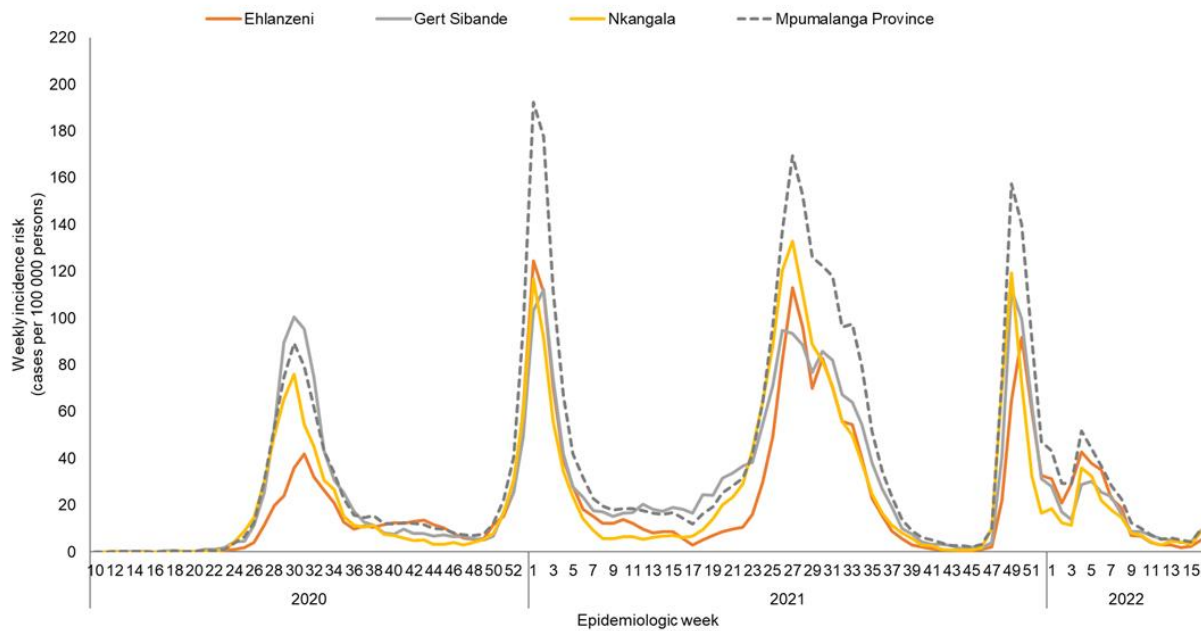
Weekly percentage testing positive key (line graph)



Number of reported COVID-19 admissions, by epidemiologic week and health sector, Limpopo, 5 March 2020-23 April 2022

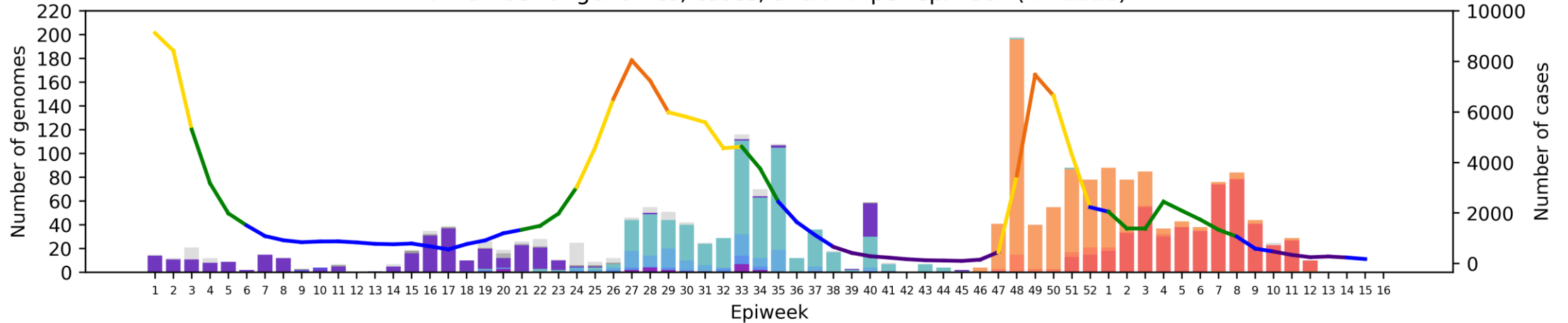


Mpumalanga

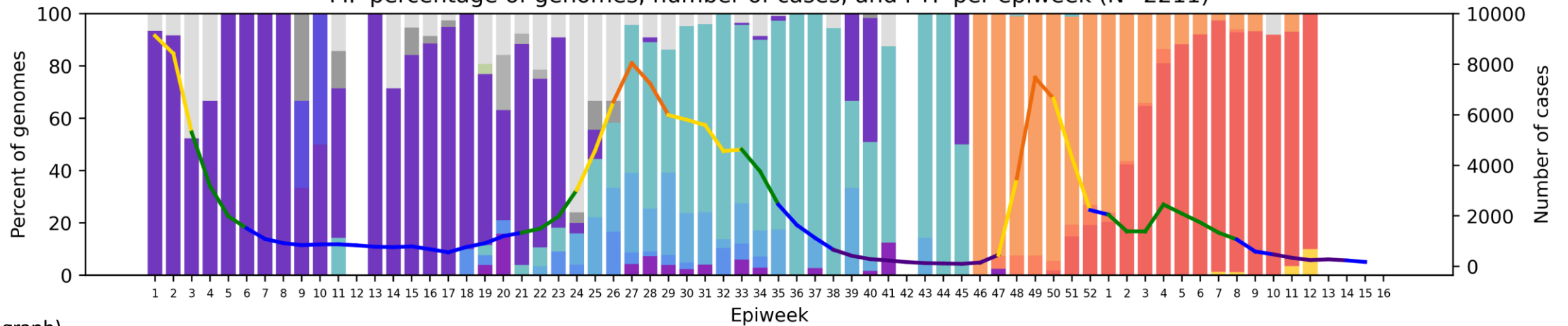


Mpumalanga Province, 2021-2022, n = 2211

MP number of genomes, cases, and PTP per epiweek (N=2211)



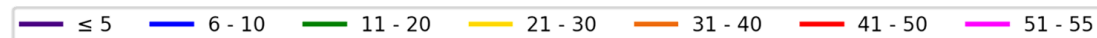
MP percentage of genomes, number of cases, and PTP per epiweek (N=2211)



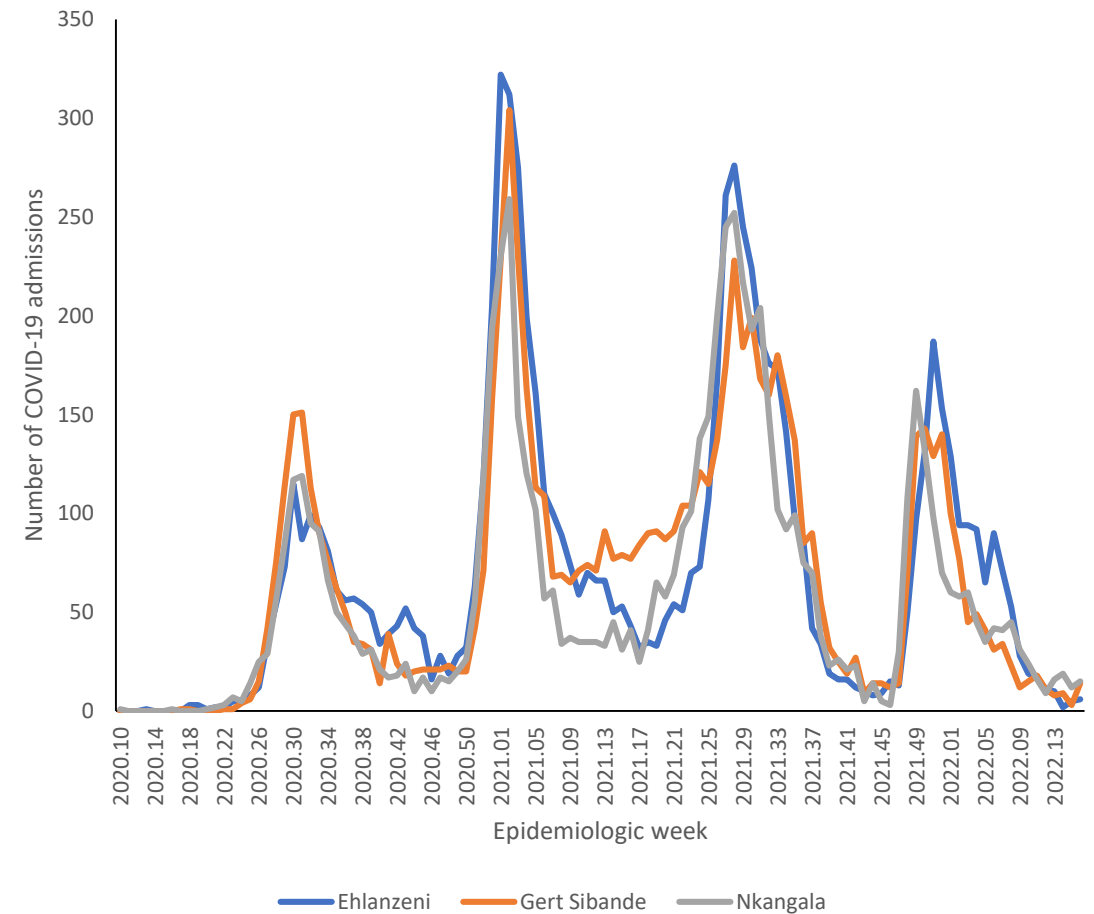
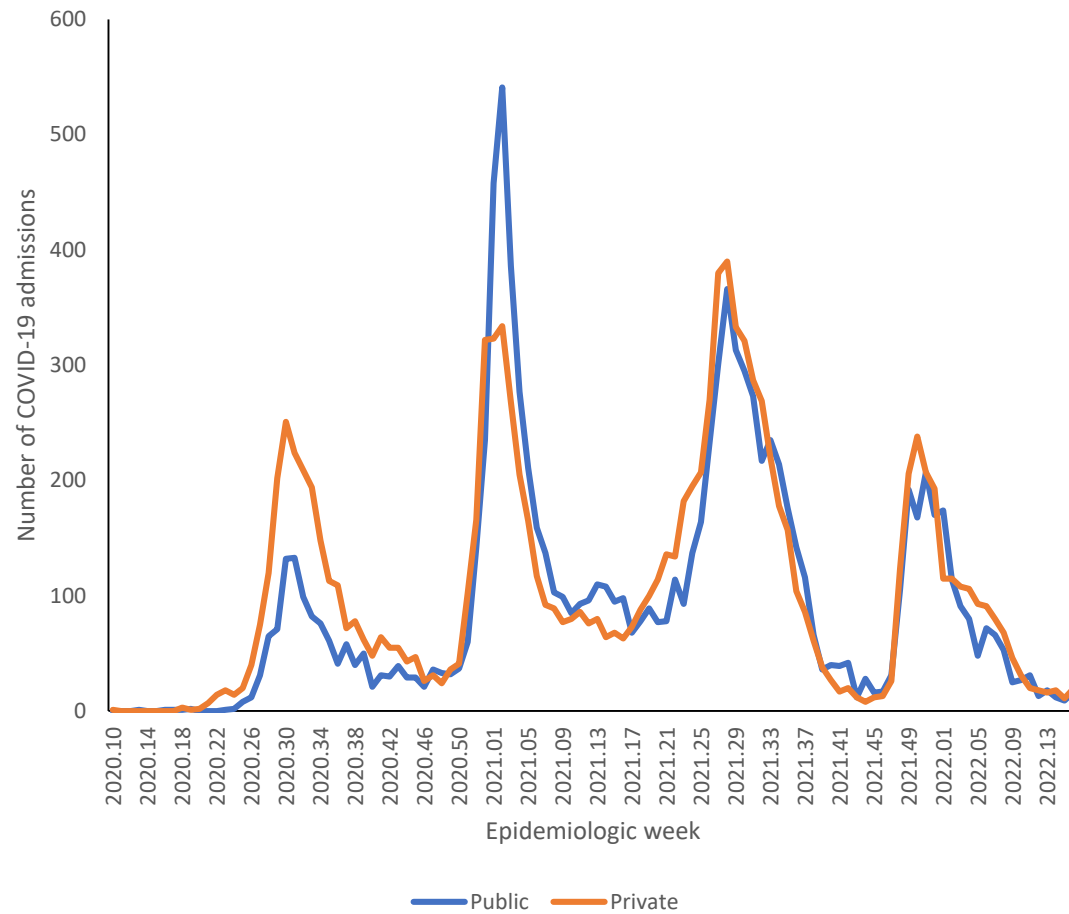
Clade key (bar graph)



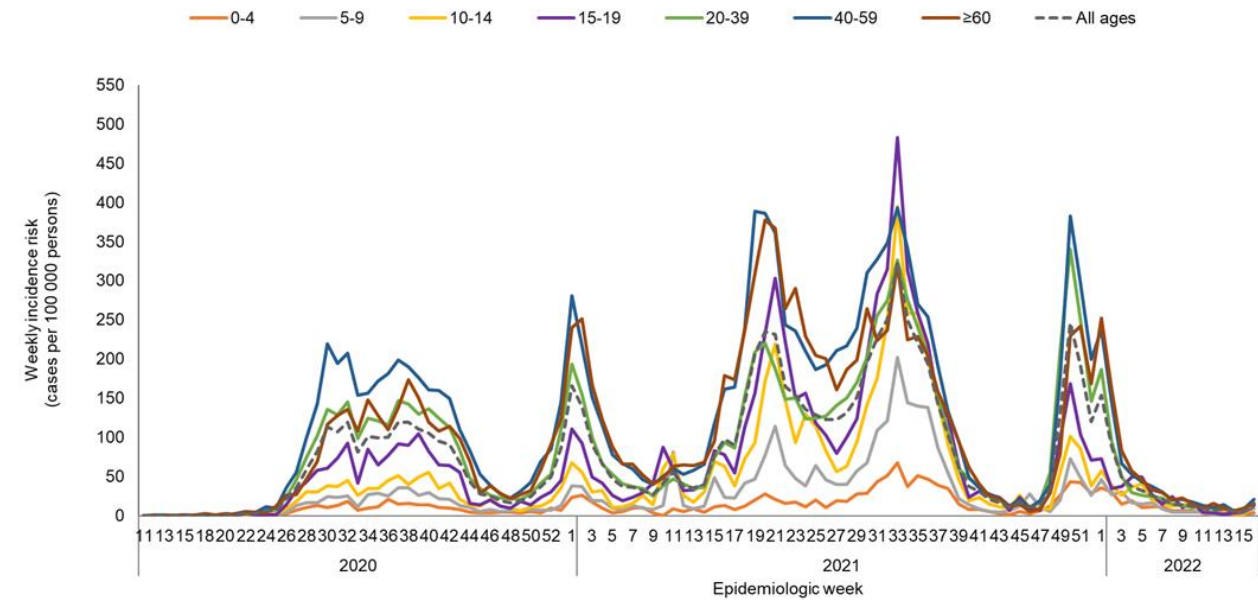
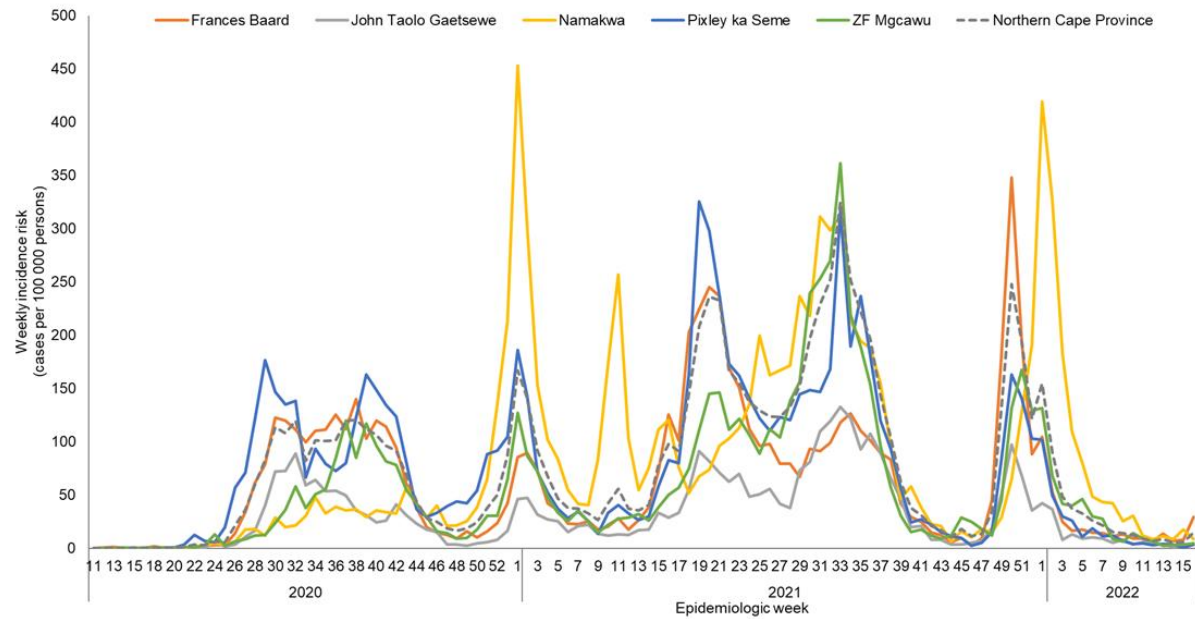
Weekly percentage testing positive key (line graph)



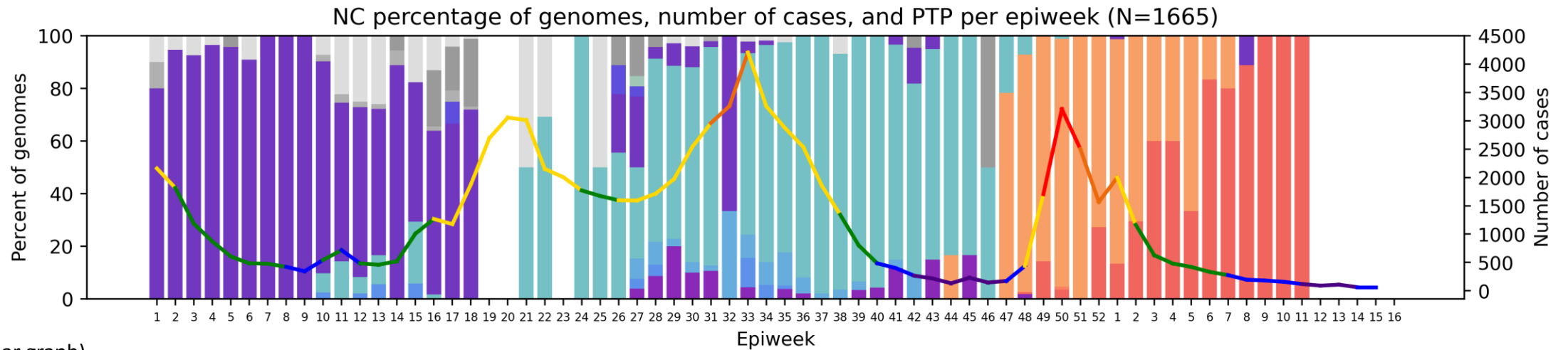
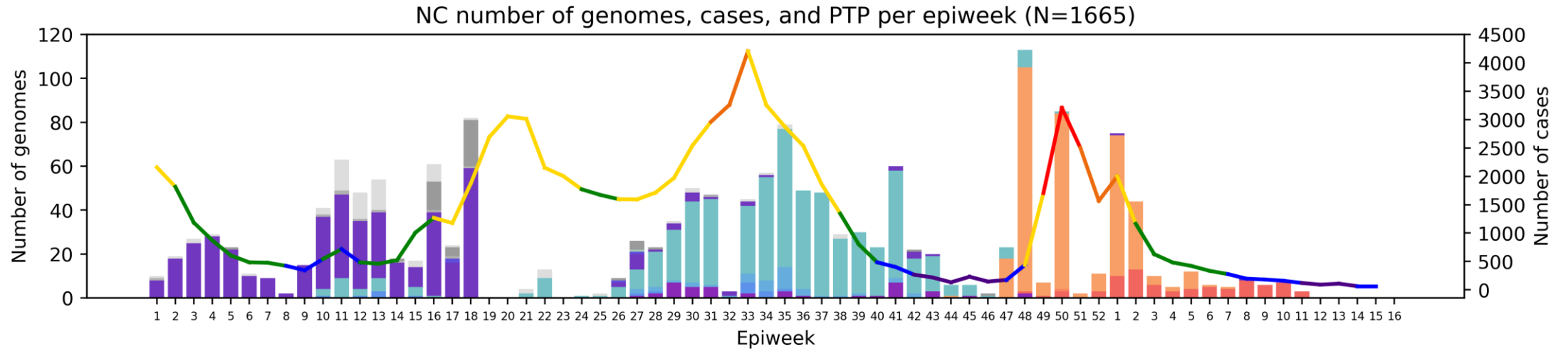
Number of reported COVID-19 admissions, by epidemiologic week and health sector (left) and province (right), Mpumalanga, 5 March 2020-23 April 2022



Northern Cape



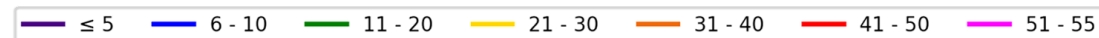
Northern Cape Province, 2021-2022, n = 1665



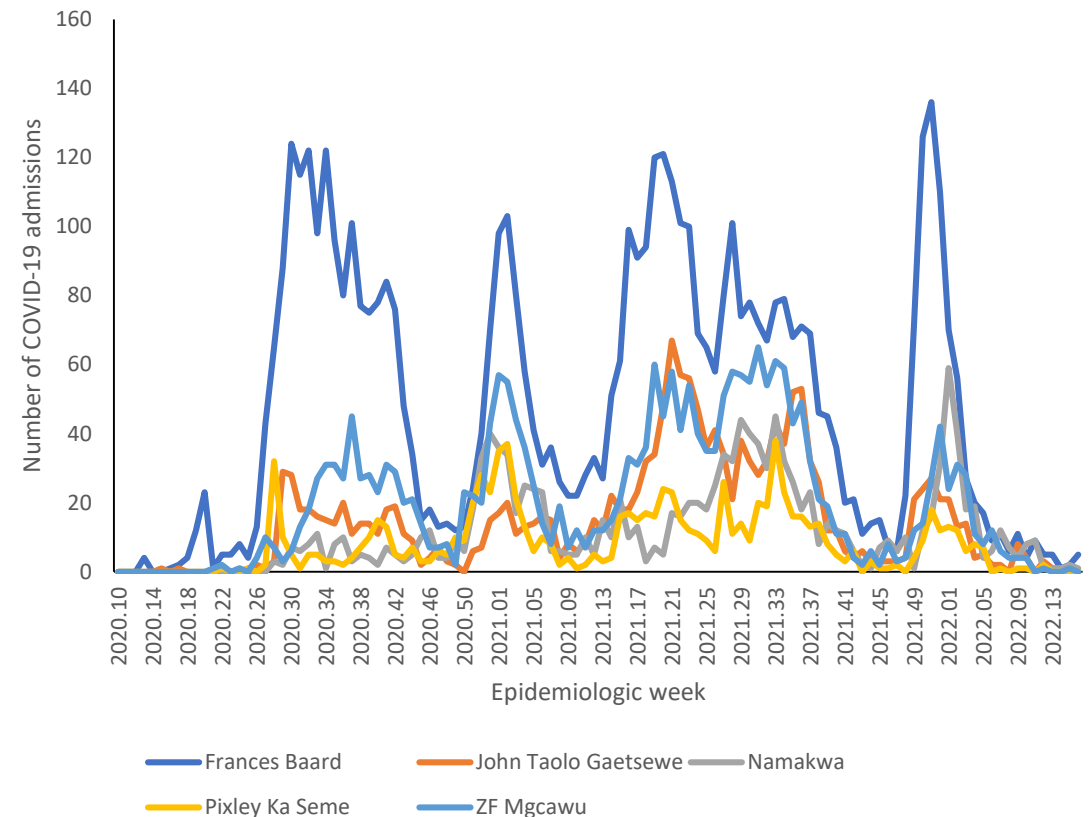
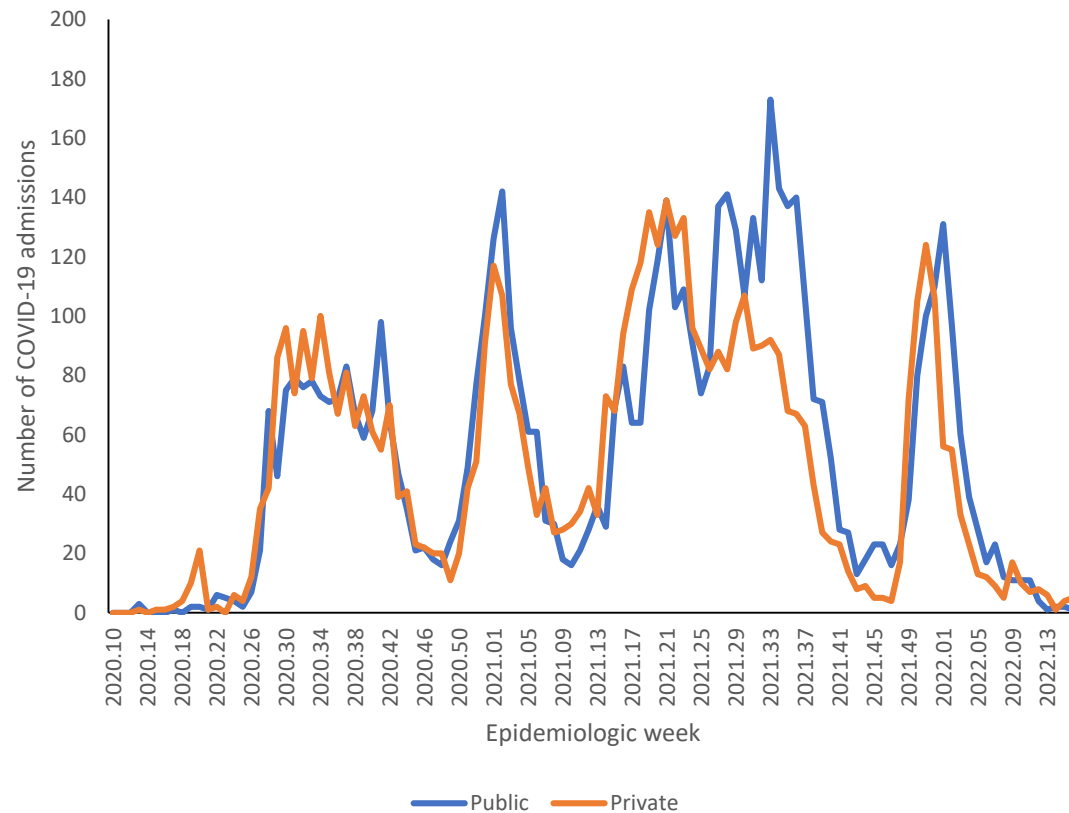
Clade key (bar graph)



Weekly percentage testing positive key (line graph)



Number of reported COVID-19 admissions, by epidemiologic week and health sector (left) and province (right), Northern Cape, 5 March 2020-23 April 2022

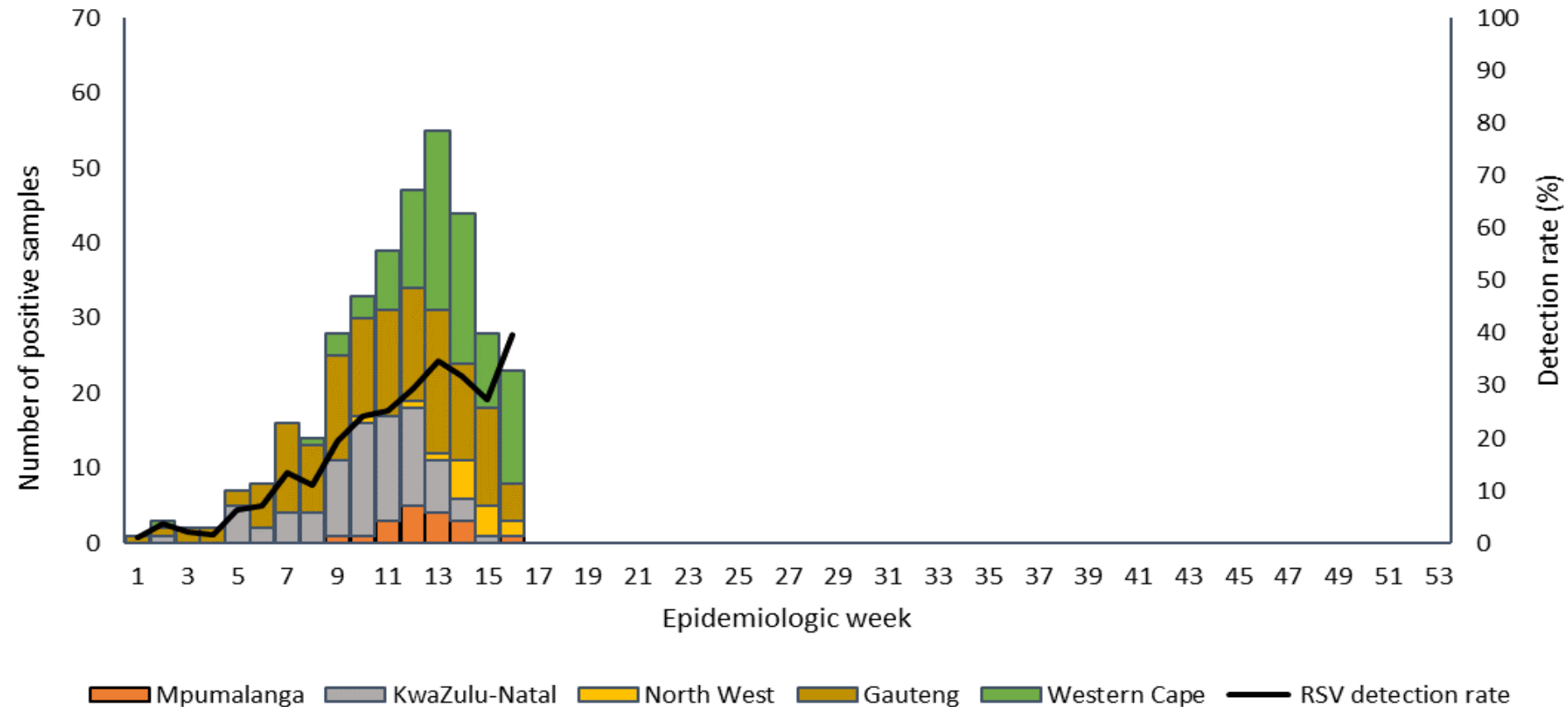


Other respiratory viruses

Surveillance for severe respiratory illness - RSV

- Total number (all cases) tested for RSV=1890, detection rate 19% (350/1890)
- RSV activity for is currently moderate as determined by Moving Epidemic Method (<5 years)

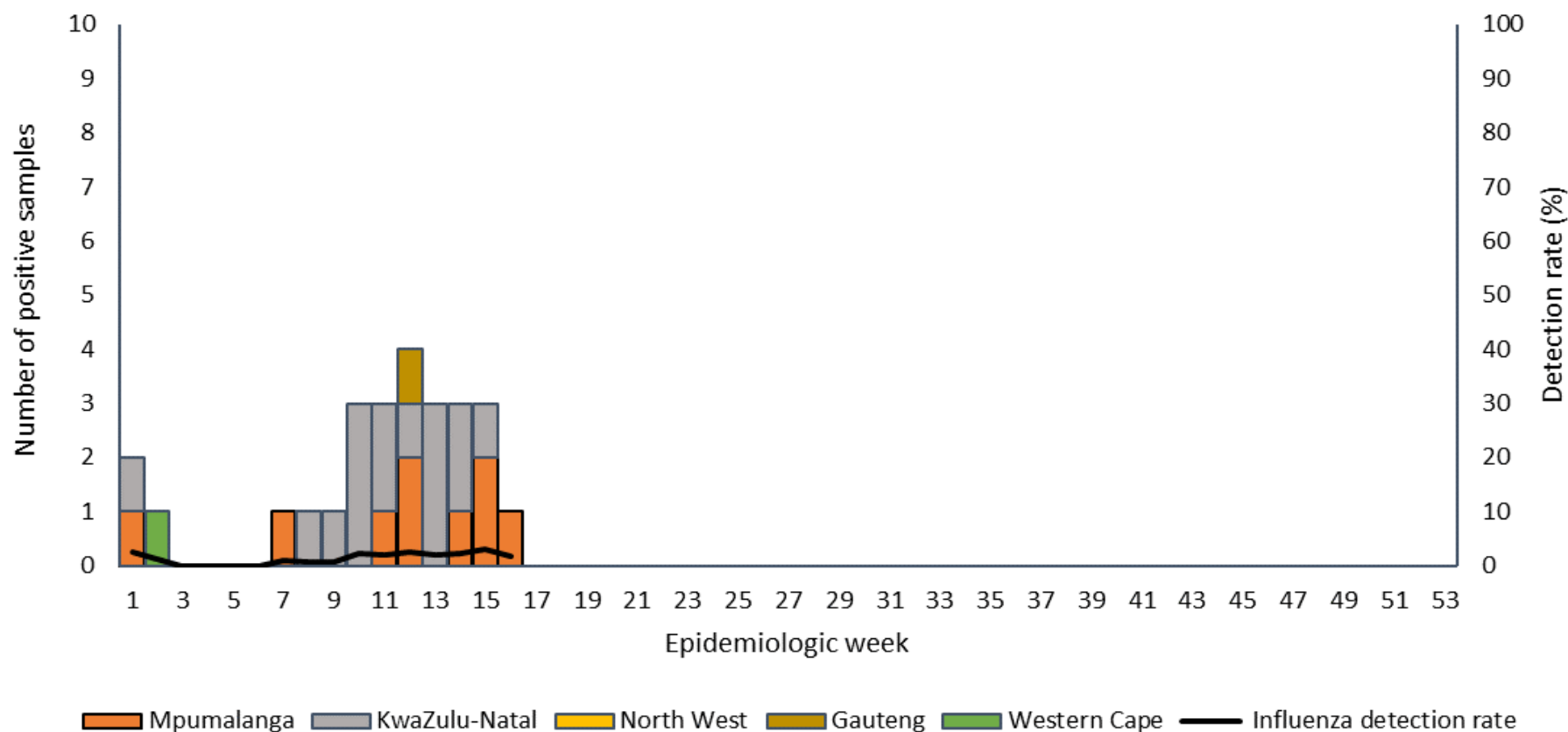
Figure 3: Number of samples (all cases) positive for RSV by epidemiologic week and surveillance site, pneumonia surveillance, 03Jan2022 – 24April2022, n=350



Surveillance for severe respiratory illness - Influenza

- Total number tested for influenza=1890, detection rate 1% (26/1890)
- Flu activity is currently below threshold as determined by Moving Epidemic Method

Figure 5: Number of samples positive for influenza by epidemiologic week and surveillance site, pneumonia surveillance, 03Jan2022 – 24April2022, n=26



Summary

- Global – case numbers decreasing in all regions but some cities seeing increases
- South Africa - increasing cases, incidence, percent testing positive and hospitalisation compared to previous week
- Small increase in number of tests conducted and testing rate
- Provinces:
 - Percent testing positive: highest in GP, KZN, EC, WC but others also showing increases
 - Gauteng reported highest weekly incidence risk, followed by Western Cape and KwaZulu-Natal
- Age:
 - Incidence increasing in all age groups but highest in the ≥ 80 -year age group 10-19 years
 - Increases in the percentage testing positive was observed across all age groups and was highest in the 10-14 years age group
 - Incidence of admissions increasing in younger age group
- Omicron dominates 2022 sequencing data at >98% of genomes
 - Two additional Omicron sub lineages (BA.4 and BA.5) have recently been designated by Pangolin
 - BA.4 and BA.5 increased in prevalence in March (16%), and appear to be increasing in April (44%)
 - Slightly different patterns in provinces
 - Low frequency of previously circulating variants such as Delta still detected in recent data

Actions

- Genomic surveillance: monitor for new VOC and Omicron sub-lineages
- Vaccination – increase coverage younger age groups, boost older ages
- Monitor hospitalisations: no indication that new sub-lineages have increased severity significantly

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SA COVID Modeling Consortium



NDOH IMT epi team

DATCOV team NICD



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