



COVID-19 Weekly Epidemiology Brief: Week ending 28 May 2022 (Week 21 of 2022)

Summary

Overview of report

Disease surveillance is a core function of the National Institute for Communicable Diseases (NICD), a division of the National Health Laboratory Service (NHLS). This report summarises data from a national laboratory-based surveillance system that is used to monitor the coronavirus disease 2019 (COVID-19) pandemic, caused by the SARS-CoV-2 virus, in South Africa. This report is based on data collected up to 28 May 2022 (week 21 of 2022). Note: Trends in numbers of new cases by province and age group may be affected by changes in testing practice and delays in testing of specimens and numbers are updated weekly as new data become available. The methods and data sources can be found at the end of the report.

Highlights

- As of 28 May 2022, a total of 3 953 967 laboratory-confirmed COVID-19 cases had been detected in South Africa. Of these, 24 095 were cases reported since the last report (week 20 of 2022). There was a 42.6% decrease in the number of new cases detected in week 21 of 2022 (21 301) compared to the number of new cases detected in week 20 of 2022 (37 127).
- In the past week, the Gauteng Province reported the highest number of cases detected (7 106/21 301, 33.4%), followed by the Western Cape Province (5 457/21 301, 25.6%), and Kwa-Zulu Natal Province (3 004/21 301, 14.1%), with other provinces reporting <10% each.
- In the past week, all nine provinces reported a decrease in weekly incidence risk, compared to the previous week. The decrease ranged from 0.8 cases per 100 000 persons (17.0% decrease) in Limpopo Province to 42.2 cases per 100 000 persons (41.8% decrease) in Northern Cape Province.
- In the past week, Western Cape Province reported the highest weekly incidence risk (76.7 cases per 100 000 persons), followed by Northern Cape Province (58.9 cases per 100 000 persons), Gauteng Province (44.9 cases per 100 000 persons) and Free State Province (41.8 cases per 100 000 persons). The other provinces reported weekly incidence below 40 cases per 100 000 persons.
- The highest weekly incidence risk among cases detected in week 21 of 2022 was reported in the ≥80-year age group (115.2 cases per 100 000 persons), and the lowest weekly incidence risk was in the 0-4-year age group (10.6 cases per 100 000 persons).

National and provincial trends of COVID-19 cases in South Africa

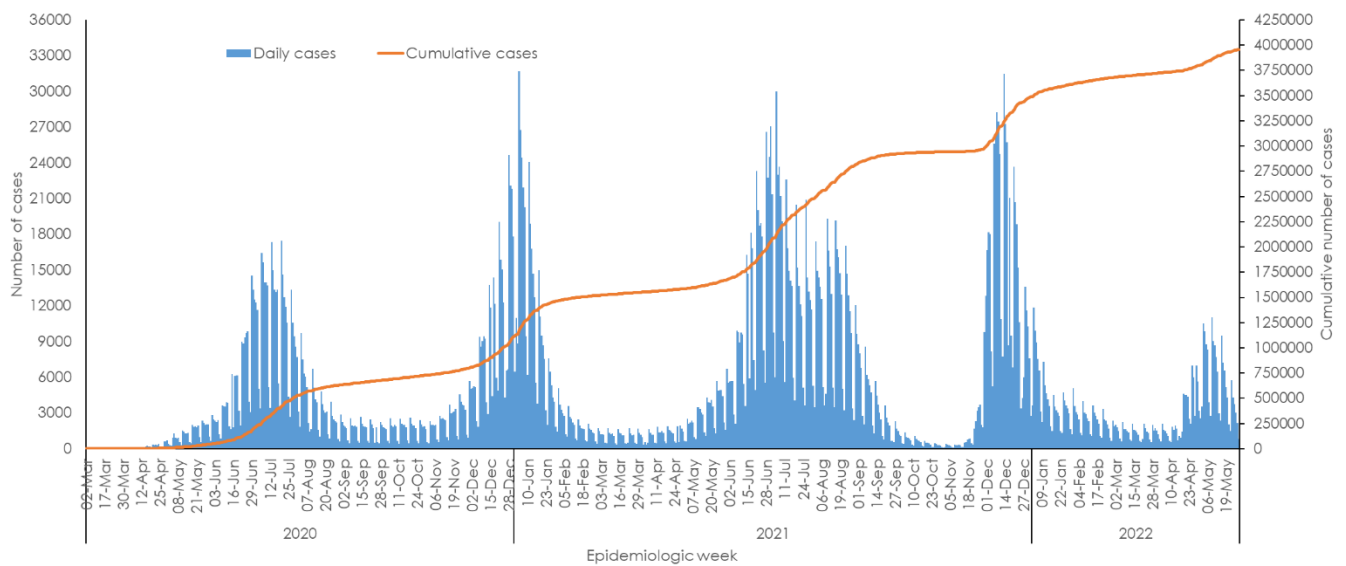


Figure 1. Number and cumulative number of laboratory-confirmed cases of COVID-19 by date of specimen collection, South Africa, 3 March 2020 – 28 May 2022 (n= 3 953 967)

Table 1. Number and cumulative/weekly incidence risk of laboratory-confirmed cases of COVID-19 and testing per 100 000 persons by province, South Africa, 3 March 2020 – 28 May (n = 3 953 967)

Province	Cumulative cases (n) (percentage, n/total cases in South Africa)	New cases ¹ detected in week 21 of 2022 (22-28 May), n (percentage ² , n/total)	Population in mid-2021 ³ , n	Cumulative incidence risk (cases per 100 000 persons)	Incidence risk of new cases detected in week 21 of 2022 (cases/100 000 persons)	Tests ⁴ per 100 000 persons, 22-28 May 2022
Eastern Cape	360 111 (9.1)	1 904 (8.9)	6 676 590	5 393.6	28.5	148.4
Free State	213 586 (5.4)	1 226 (5.8)	2 932 441	7 283.6	41.8	264.3
Gauteng	1 307 007 (33.1)	7 106 (33.4)	15 810 388	8 266.8	44.9	361.2
KwaZulu-Natal	710 113 (18.0)	3 004 (14.1)	11 513 575	6 167.6	26.1	221.4
Limpopo	158 277 (4.0)	234 (1.1)	5 926 724	2 670.6	3.9	38.6
Mpumalanga	199 739 (5.1)	762 (3.6)	4 743 584	4 210.7	16.1	132.5
North West	199 692 (5.1)	841 (3.9)	4 122 854	4 843.5	20.4	153.9
Northern Cape	113 856 (2.9)	767 (3.6)	1 303 047	8 737.7	58.9	252.1
Western Cape	691 586 (17.5)	5 457 (25.6)	7 113 776	9 721.8	76.7	277.4
Unknown						
Total	3 953 967	21 301	60 142 978	6 574.3	35.4	231.1

¹New cases refer to cases whose samples were collected or received in the current reporting week ²Percentage=n/total number of new cases (specimen collected or received in current reporting week) ³2021 Mid-year population Statistics South Africa ⁴Data on number of tests conducted sourced from COVID-19 weekly testing report of the same reporting week

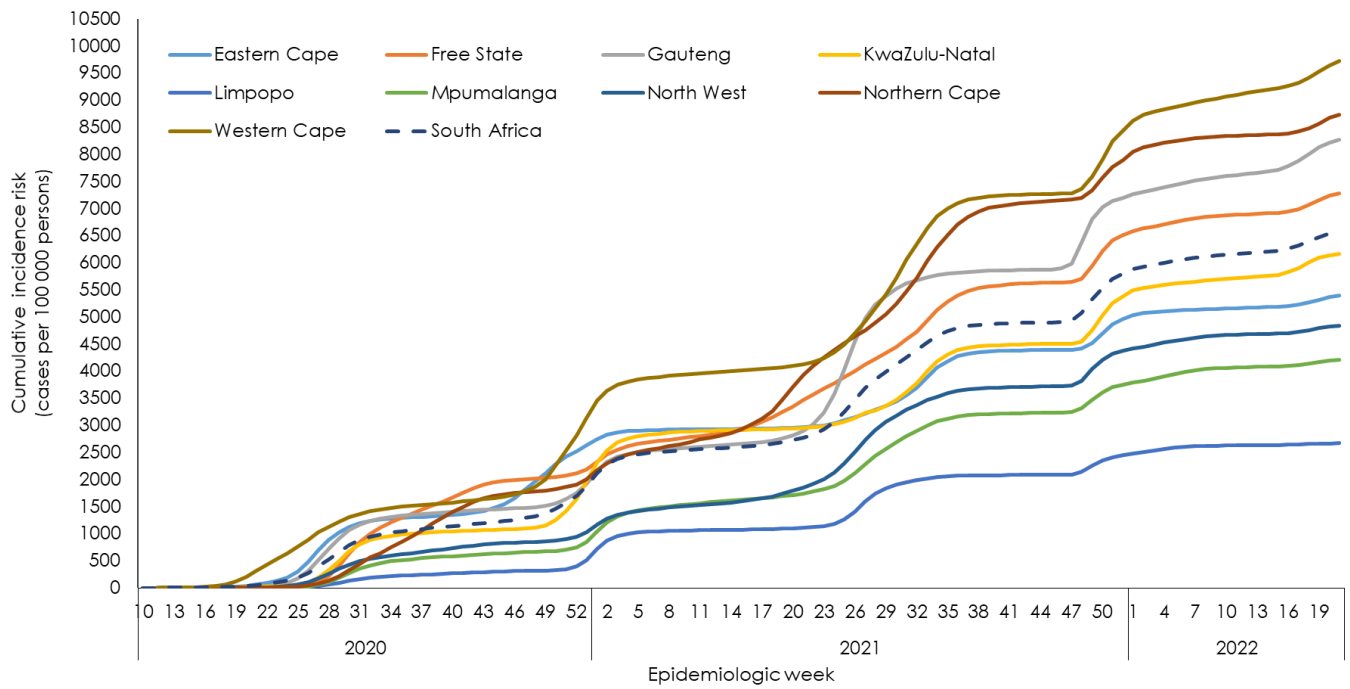


Figure 2: Cumulative incidence risk of laboratory-confirmed cases of COVID-19 by province and epidemiologic week South Africa 3 March 2020 – 28 May 2022 (n = 3 953 967)

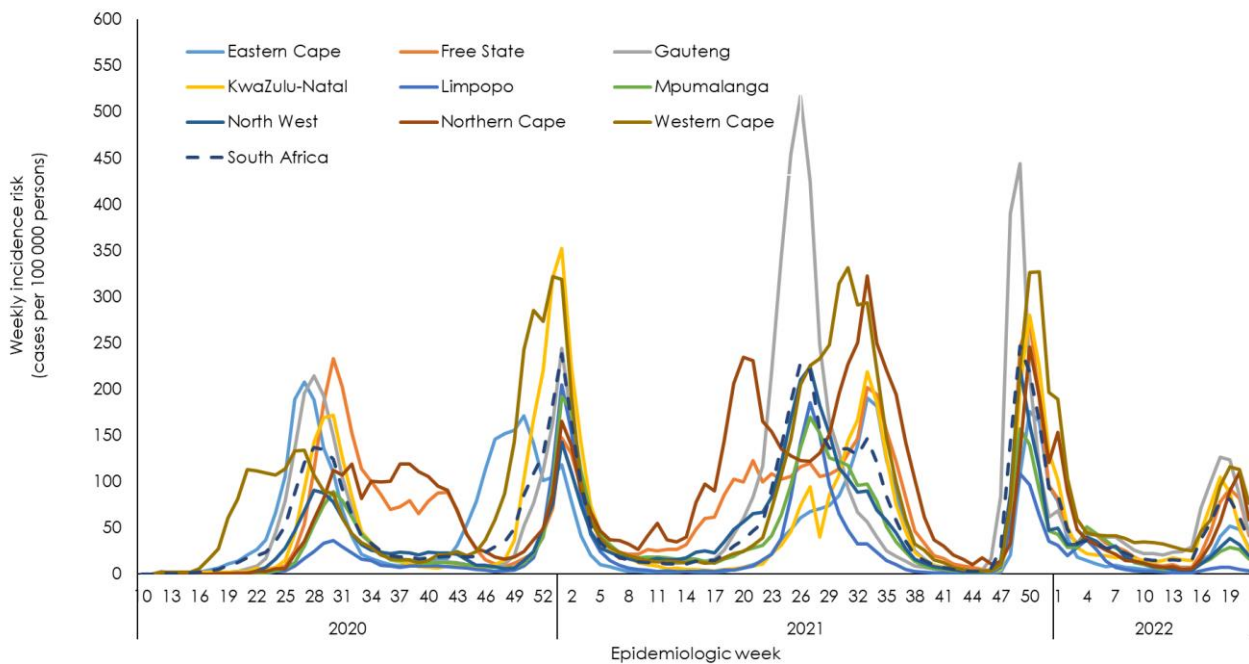


Figure 3: Weekly incidence risk of laboratory-confirmed cases of COVID-19 by province and epidemiologic week South Africa 3 March 2020 – 28 May 2022 (n = 3 953 967)

Characteristics of COVID-19 cases in South Africa by age and sex

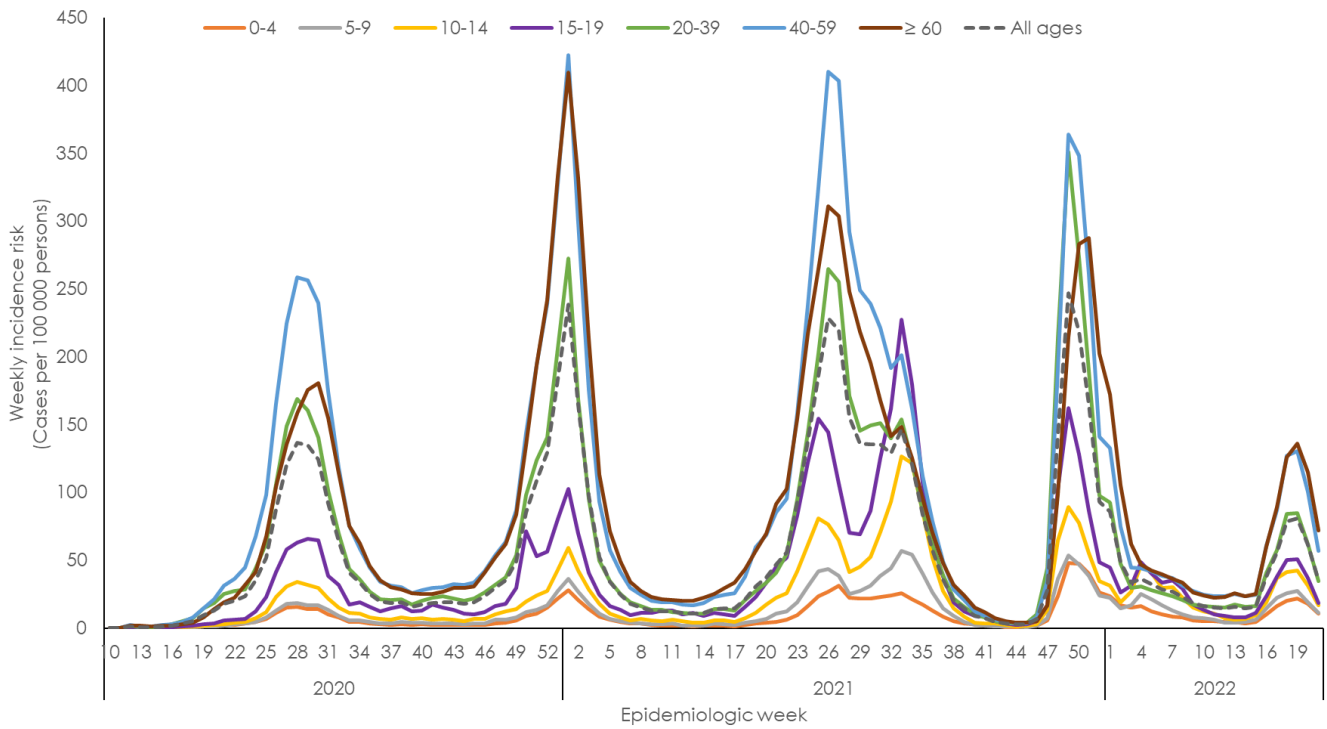


Figure 4: Weekly incidence risk of laboratory-confirmed cases of COVID-19 by age group in years and epidemiologic week South Africa 3 March 2020 – 28 May 2022 (n = 3 917 600, 36 367 missing age)

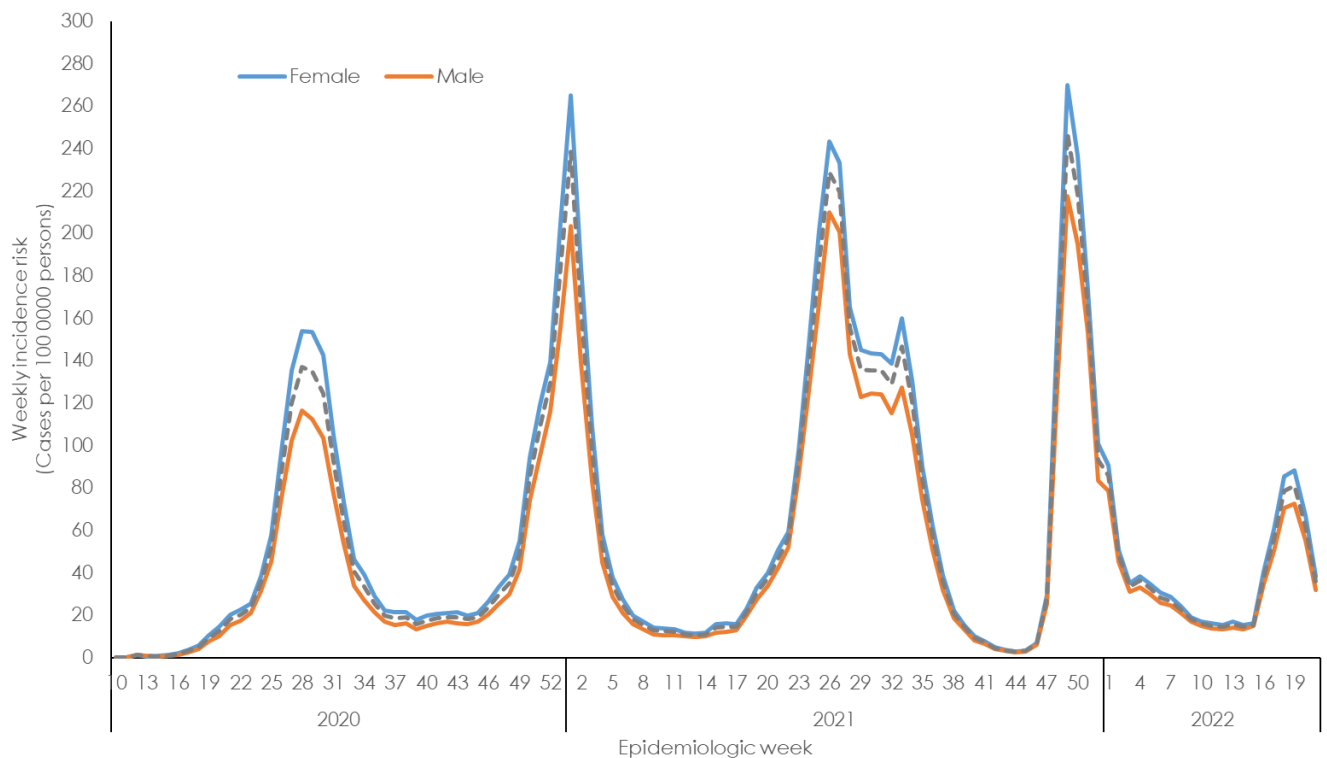


Figure 5. Weekly incidence risk of laboratory-confirmed cases of COVID-19 by sex and epidemiologic week South Africa 3 March 2020 – 28 May 2022 (n = 3 913 131, sex missing for 40 836)

Table 2. Number of laboratory-confirmed cases of COVID-19 and cumulative/weekly incidence risk by age group South Africa 3 March 2020 – 28 May 2022 n = 3 953 967, 36 367 missing age)

Age group (years)	Cumulative cases (n) (percentage n/total cases in South Africa)	New cases ¹ detected in week 21 of 2022 (22-28 May) n (percentage ² n/total)	Population in mid-2021 ³ n	Cumulative incidence risk (cases per 100 000 persons)	Incidence risk of new cases detected in week 21 of 2022 (cases/100 000 persons)
0-4	63 750 (1.6)	607 (2.9)	5 708 956	1 116.7	10.6
5-9	86 392 (2.2)	645 (3.0)	5 663 296	1 525.5	11.4
10-14	154 323 (3.9)	959 (4.5)	5 671 023	2 721.3	16.9
15-19	218 724 (5.6)	925 (4.4)	4 909 941	4 454.7	18.8
20-24	258 607 (6.6)	1 115 (5.3)	4 739 305	5 456.6	23.5
25-29	379 776 (9.7)	1 743 (8.2)	5 324 134	7 133.1	32.7
30-34	438 712 (11.2)	2 161 (10.2)	5 630 643	7 791.5	38.4
35-39	444 635 (11.3)	2 194 (10.4)	4 985 251	8 919.0	44.0
40-44	377 115 (9.6)	1 918 (9.1)	3 881 731	9 715.1	49.4
45-49	358 885 (9.2)	1 761 (8.3)	3 254 138	11 028.6	54.1
50-54	322 649 (8.2)	1 688 (8.0)	2 625 390	12 289.6	64.3
55-59	267 547 (6.8)	1 483 (7.0)	2 243 823	11 923.7	66.1
60-64	188 206 (4.8)	1 154 (5.5)	1 815 810	10 364.9	63.6
65-69	129 719 (3.3)	879 (4.2)	1 422 604	9 118.4	61.8
70-74	94 920 (2.4)	713 (3.4)	1 024 345	9 266.4	69.6
75-79	61 902 (1.6)	531 (2.5)	647 265	9 563.6	82.0
≥80	71 738 (1.8)	686 (3.2)	595 323	12 050.3	115.2
Unknown	36 367 (0.0)	139 (0.0)			
Total	3 953 967 (100.0)	21 301 (100.0)	60 142 978	6 574.3	35.4

¹New cases refer to cases whose samples were collected or received in the current reporting week ²Percentage=n/total number of new cases (specimen collected or received in current reporting week) ³2021 Mid-year population Statistics South Africa

Provincial trends of COVID-19 cases

Eastern Cape Province

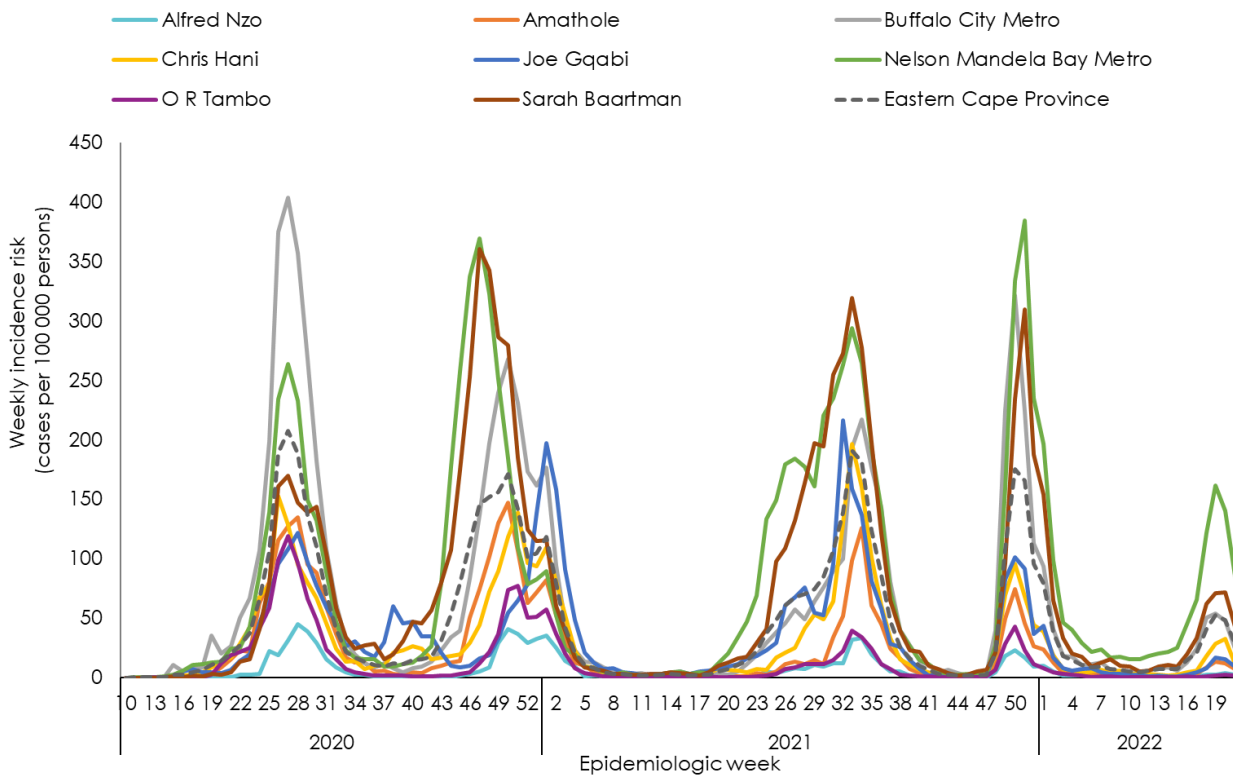


Figure 6: Weekly incidence risk of laboratory-confirmed cases of COVID-19 by district and epidemiologic week Eastern Cape Province 3 March 2020 – 28 May 2022 (n = 303 393, 56 718 missing district)

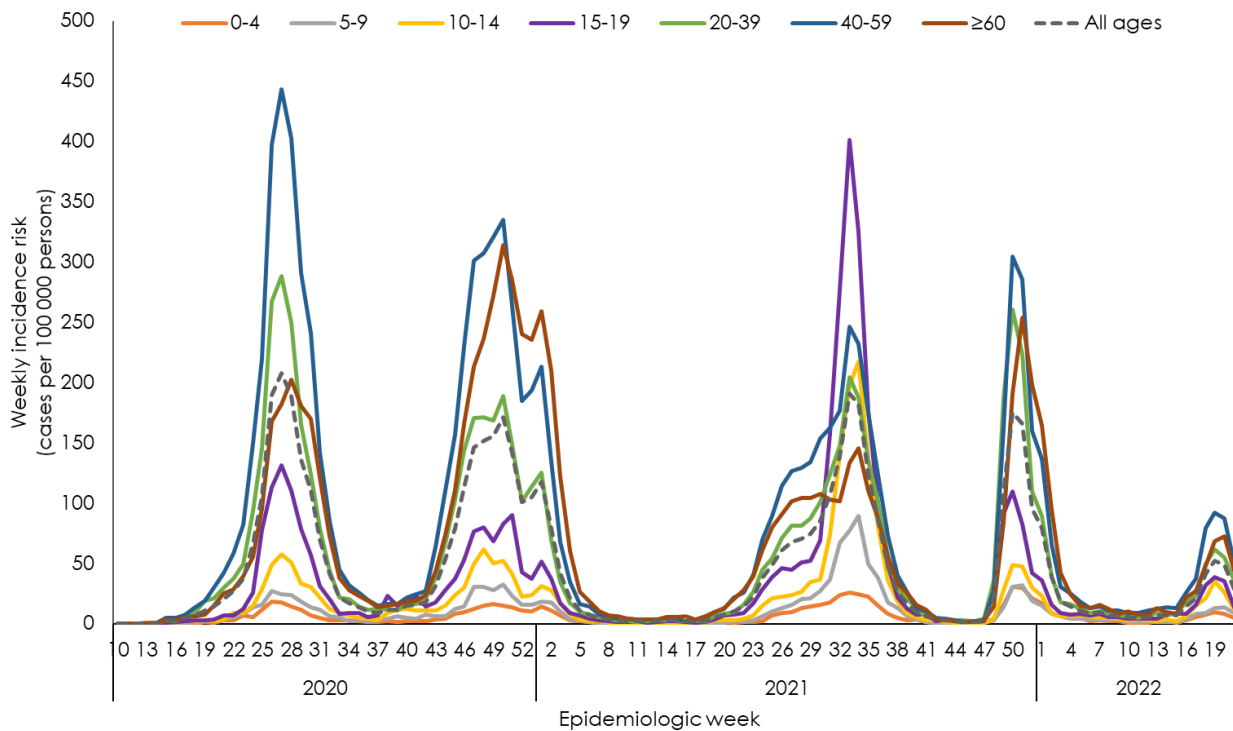


Figure 7: Weekly incidence risk of laboratory-confirmed cases of COVID-19 by age group in years and epidemiologic week Eastern Cape Province 3 March 2020 – 28 May 2022 (n = 356 390, 3 721 missing age)

Western Cape Province

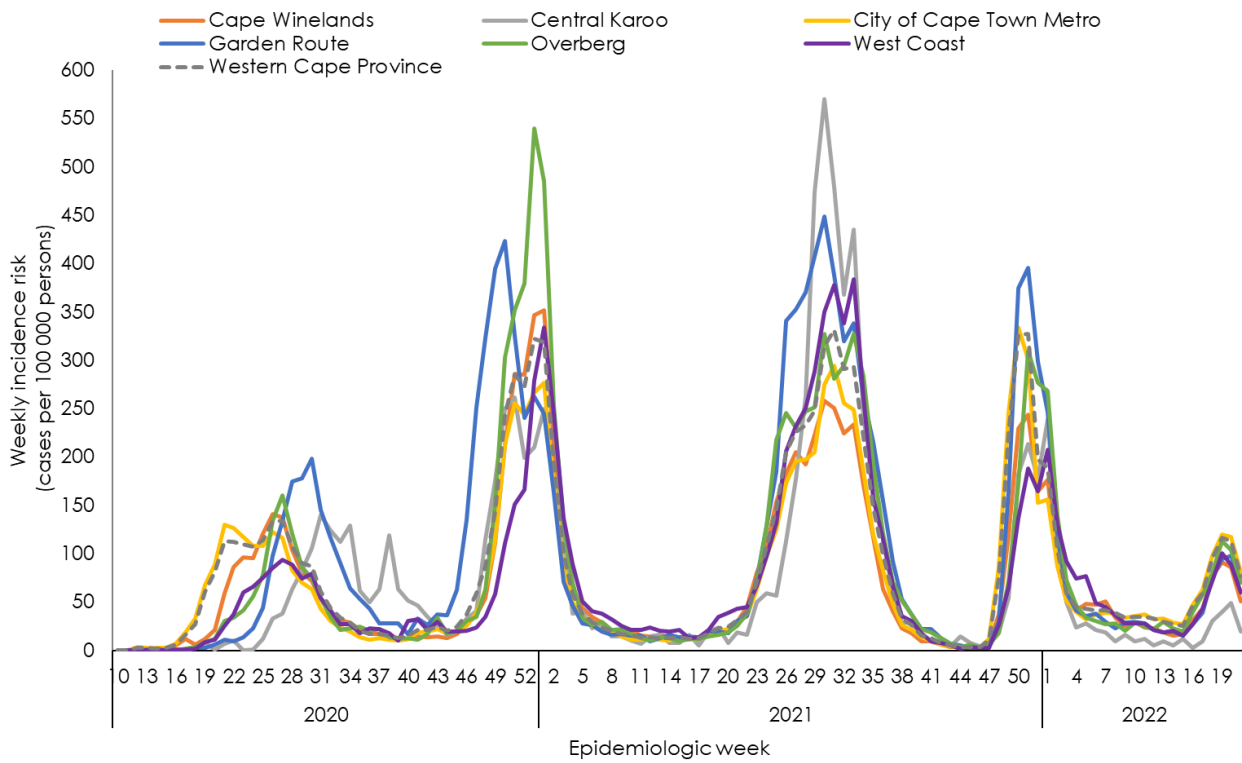


Figure 8: Weekly incidence risk of laboratory-confirmed cases of COVID-19 by district and epidemiologic week Western Cape Province 3 March 2020 – 28 May 2022 (n = 636 764, 54 822 missing district)

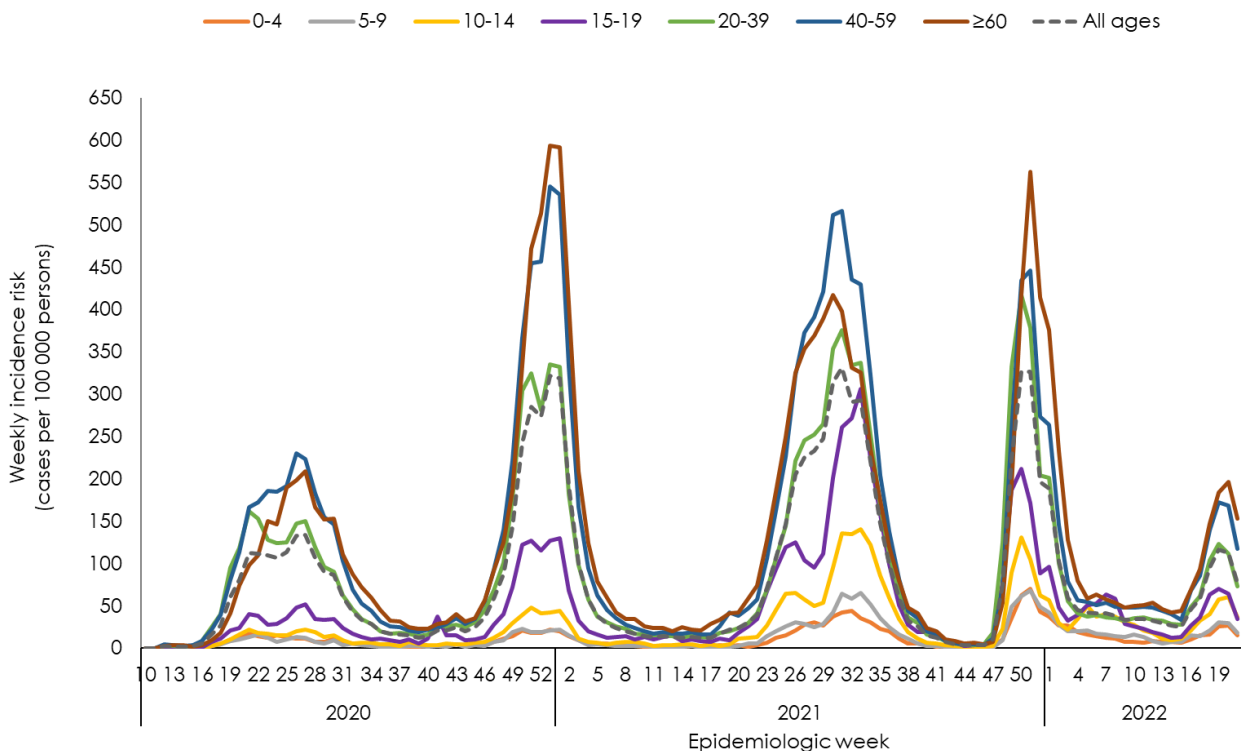


Figure 9: Weekly incidence risk of laboratory-confirmed cases of COVID-19 by age group in years and epidemiologic week Western Cape Province 3 March 2020 – 28 May 2022 (n = 689 789, 1 797 missing age)

Gauteng Province

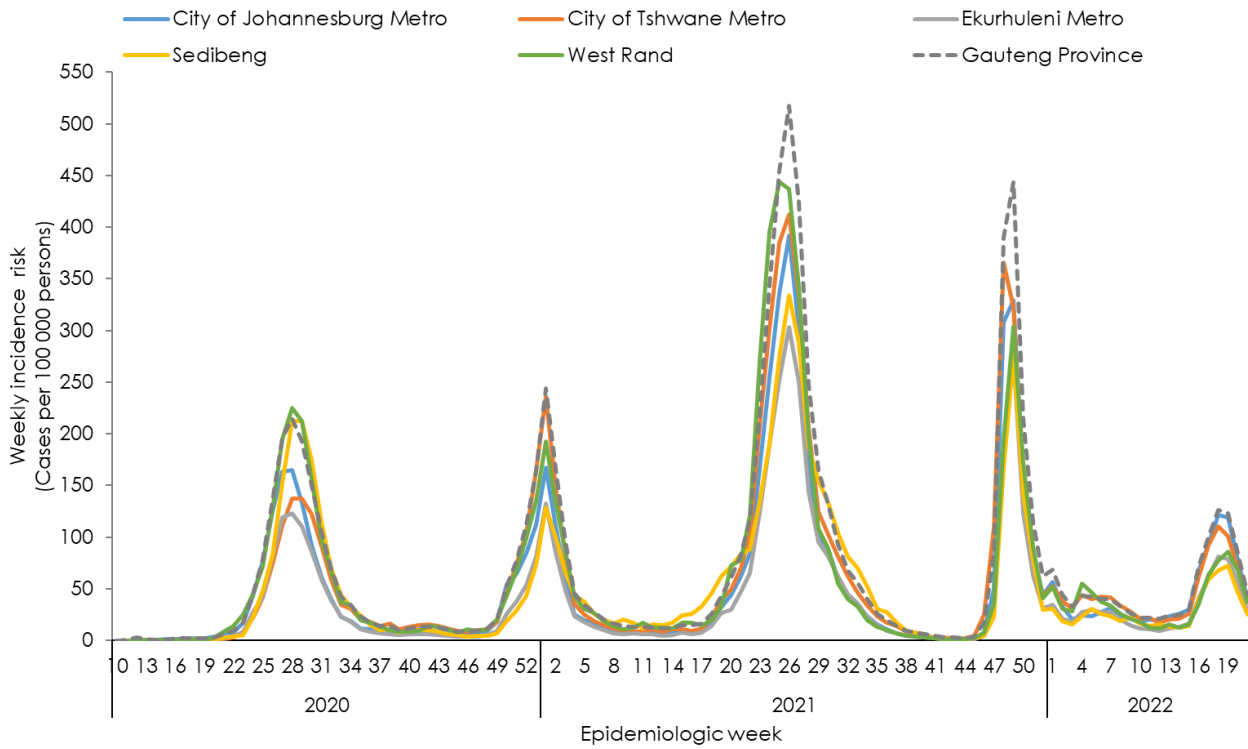


Figure 10: Weekly incidence risk of laboratory-confirmed cases of COVID-19 by district and epidemiologic week Gauteng Province 3 March 2020 – 28 May 2022 (n = 937 277, 369 730 missing district)

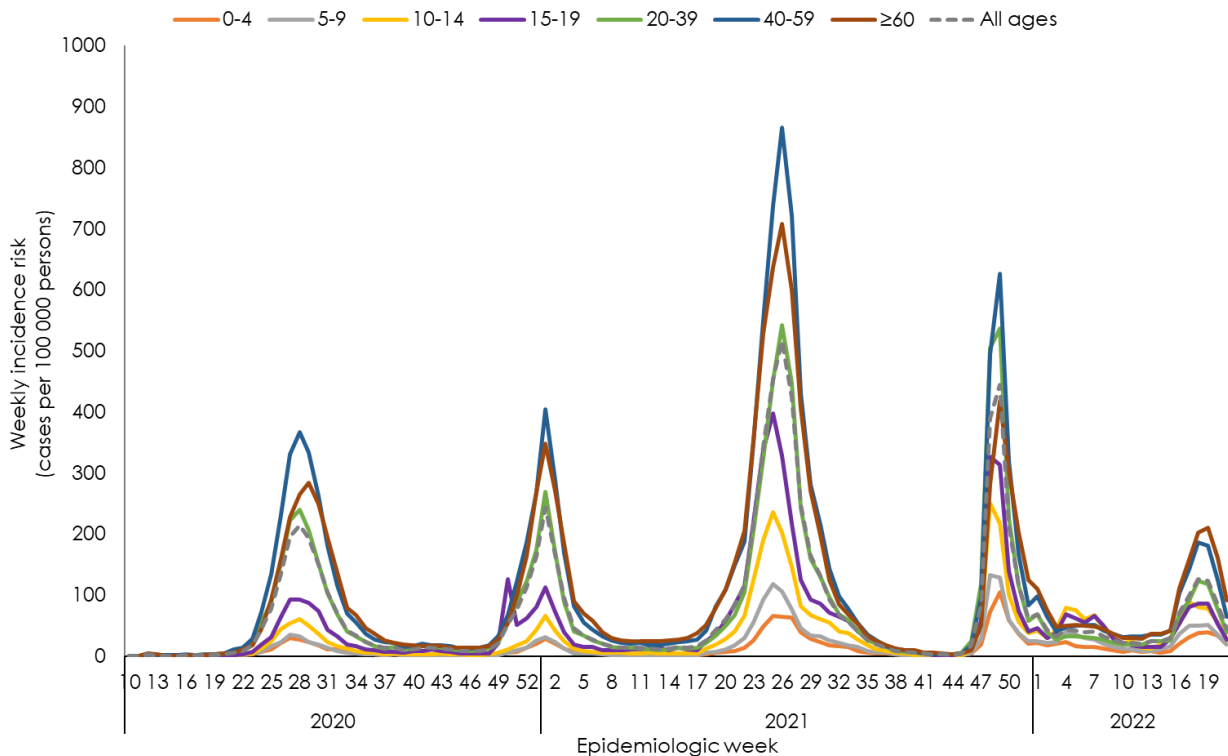


Figure 11: Weekly incidence risk of laboratory-confirmed cases of COVID-19 by age group in years and epidemiologic week Gauteng Province 3 March 2020 – 28 May 2022 (n = 1 294 066, 12 941 missing age)

KwaZulu-Natal Province

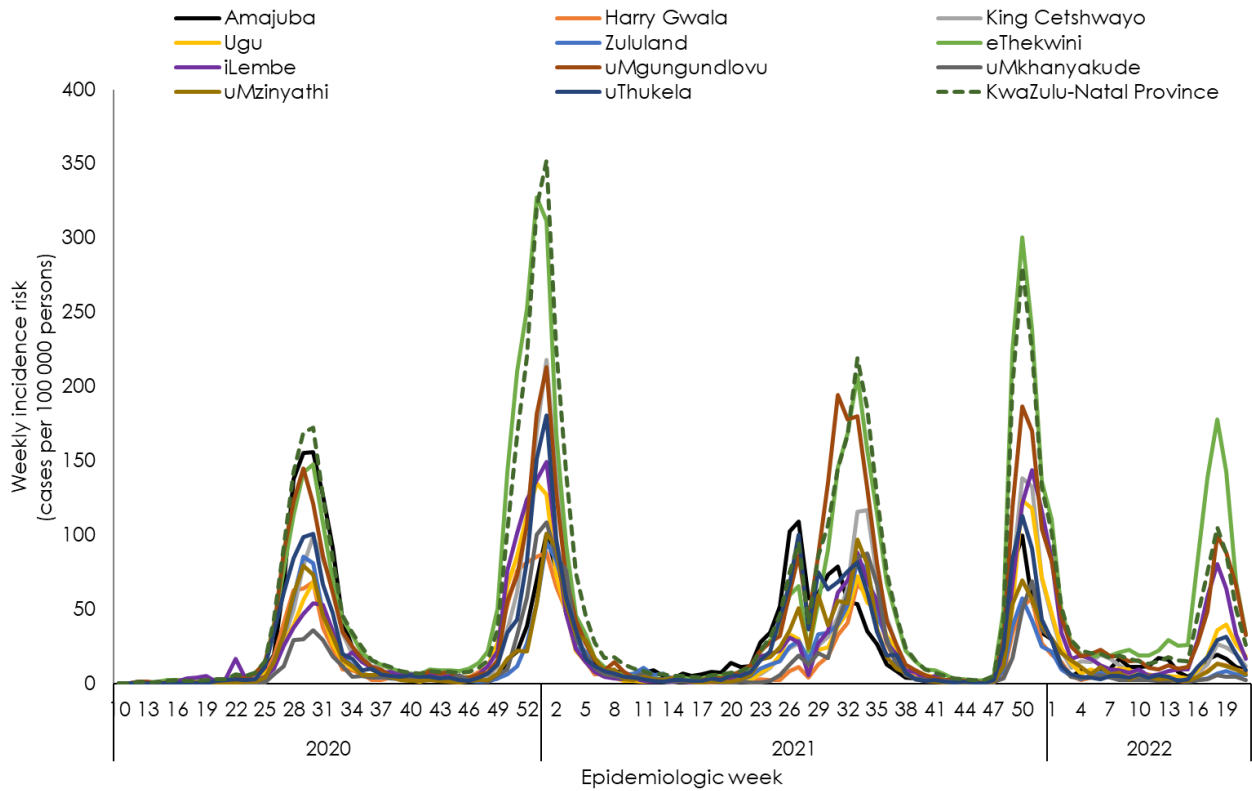


Figure 12: Weekly incidence risk of laboratory-confirmed cases of COVID-19 by district and epidemiologic week KwaZulu-Natal Province 3 March 2020 – 28 May 2022 (n = 446 155, 263 958 missing district)

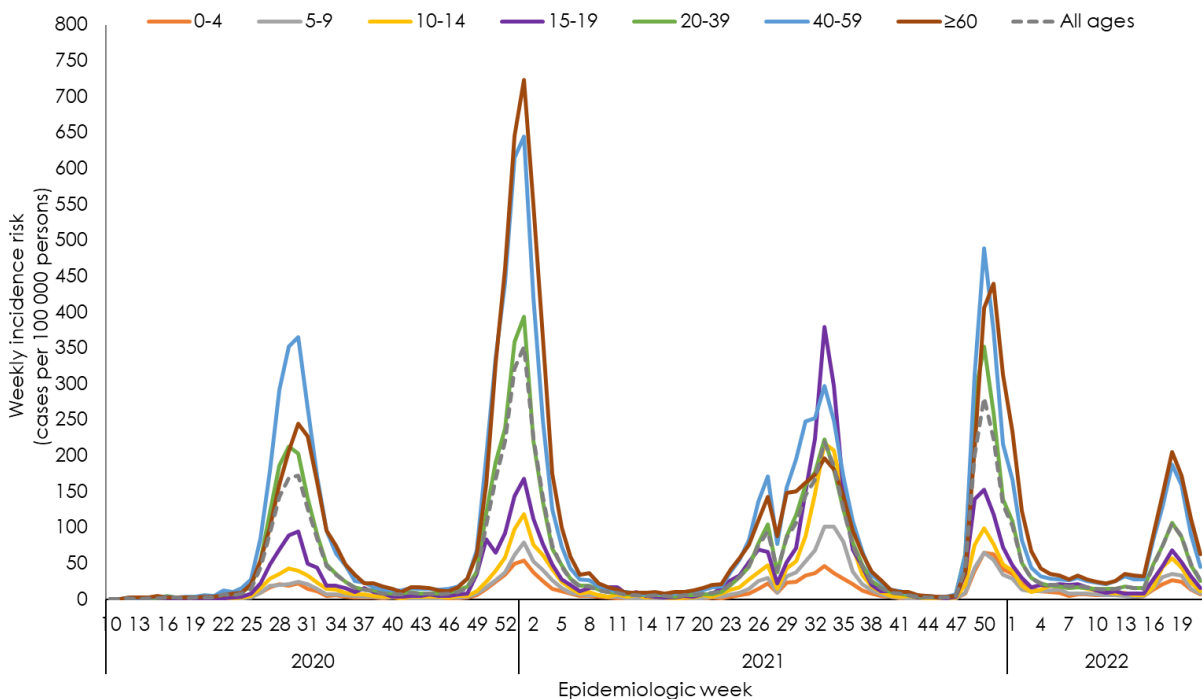


Figure 13: Weekly incidence risk of laboratory-confirmed cases of COVID-19 by age group in years and epidemiologic week KwaZulu-Natal Province 3 March 2020 – 28 May 2022 (n = 701 203, 8 910 missing age)

Free State Province

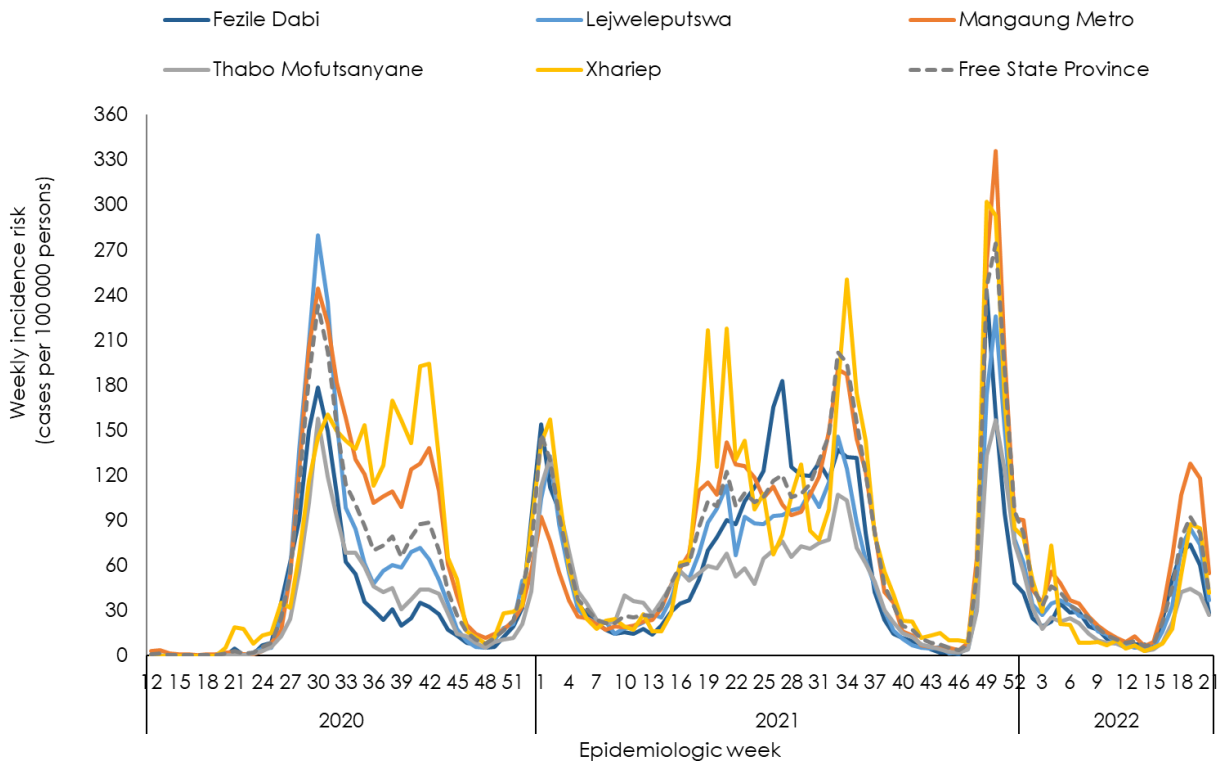


Figure 14: Weekly incidence risk of laboratory-confirmed cases of COVID-19 by district and epidemiologic week Free State Province 3 March 2020 – 28 May 2022 (n = 183 009, 30 577 missing district)

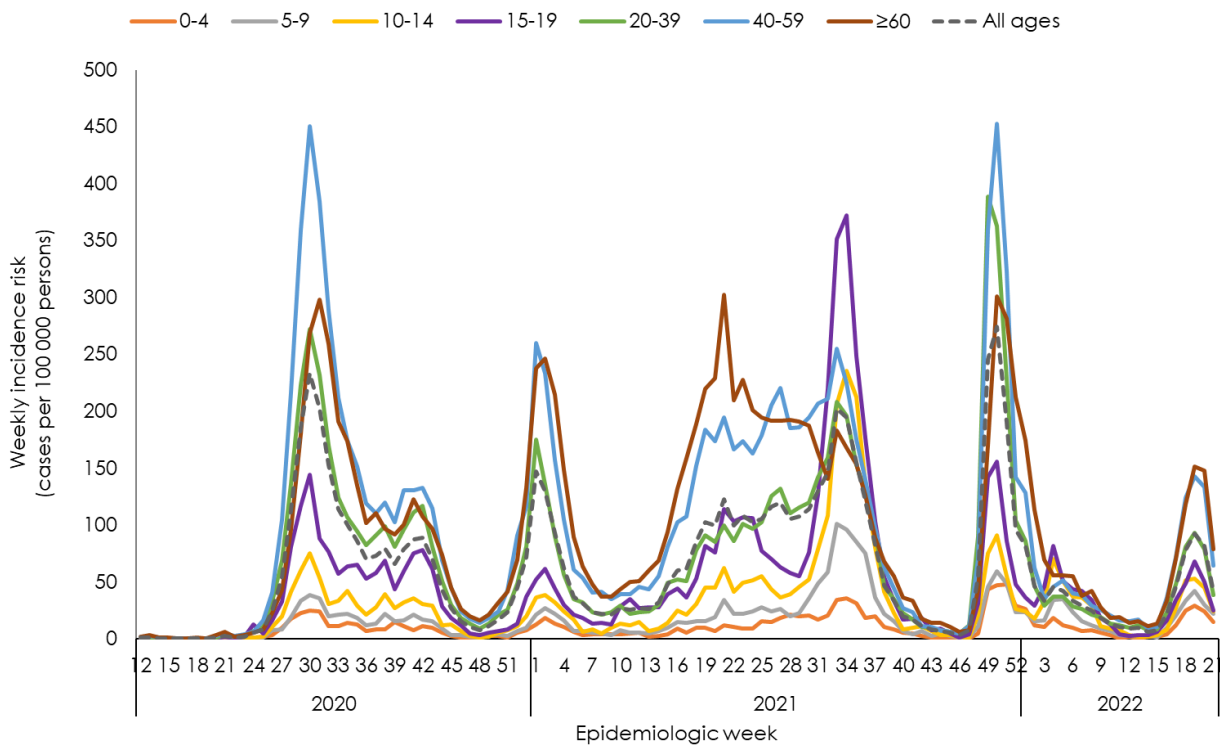


Figure 15: Weekly incidence risk of laboratory-confirmed cases of COVID-19 by age group in years and epidemiologic week Free State Province 3 March 2020 – 28 May 2022 (n = 212 731, 855 missing age)

Limpopo Province

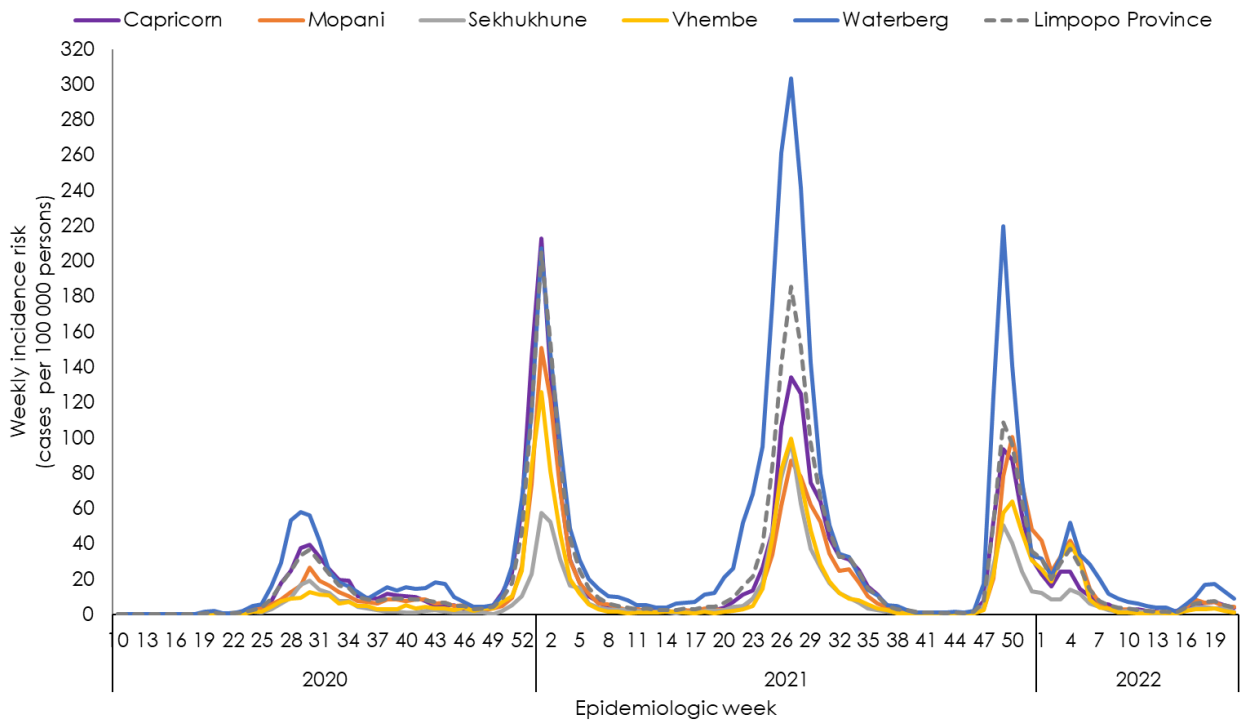


Figure 16: Weekly incidence risk of laboratory-confirmed cases of COVID-19 by district and epidemiologic week Limpopo Province 3 March 2020 – 28 May 2022 (n = 118 013, 40 264 missing district)

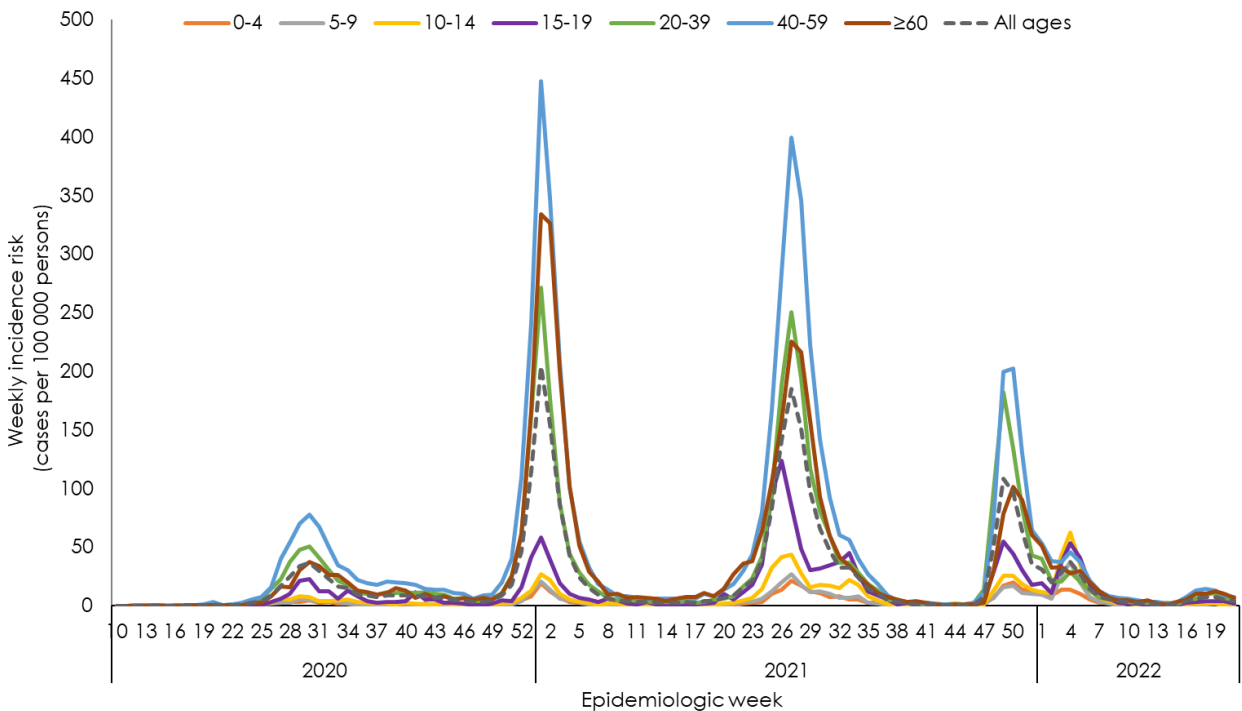


Figure 17: Weekly incidence risk of laboratory-confirmed cases of COVID-19 by age group in years and epidemiologic week Limpopo Province 3 March 2020 – 28 May 2022 (n = 157 562, 715 missing age)

Mpumalanga Province

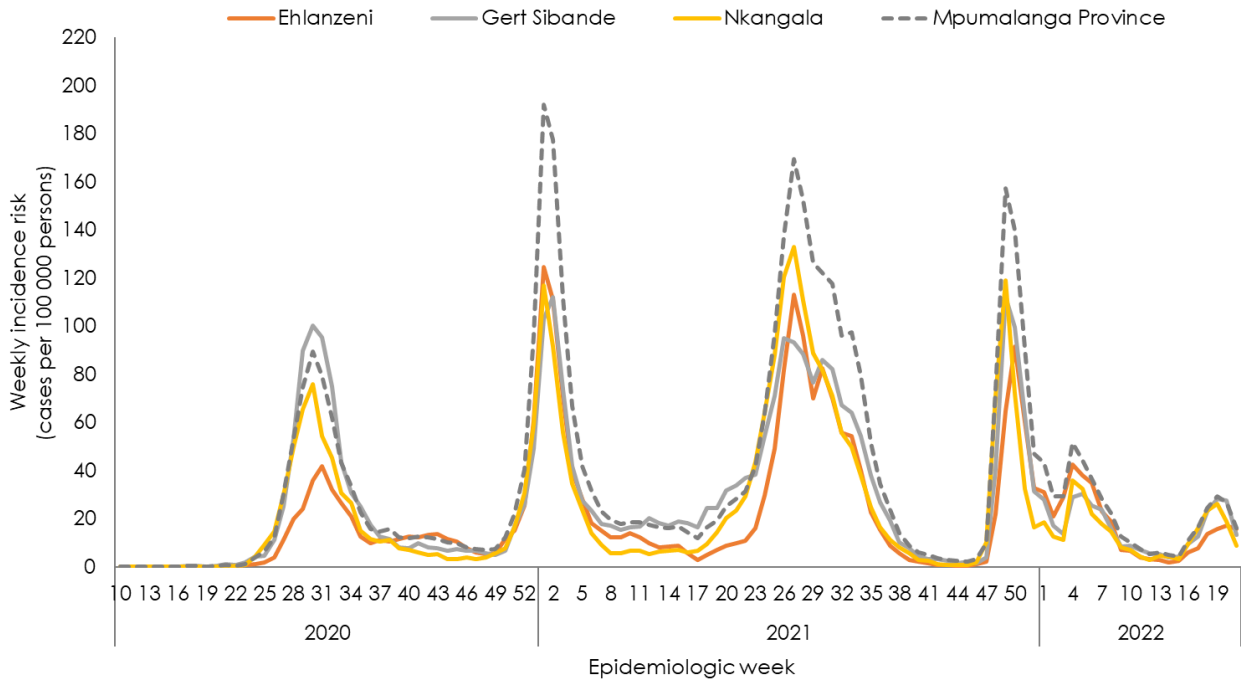


Figure 18: Weekly incidence risk of laboratory-confirmed cases of COVID-19 by district and epidemiologic week Mpumalanga Province 3 March 2020 – 28 May 2022 (n = 131 192, 68 547 missing district)

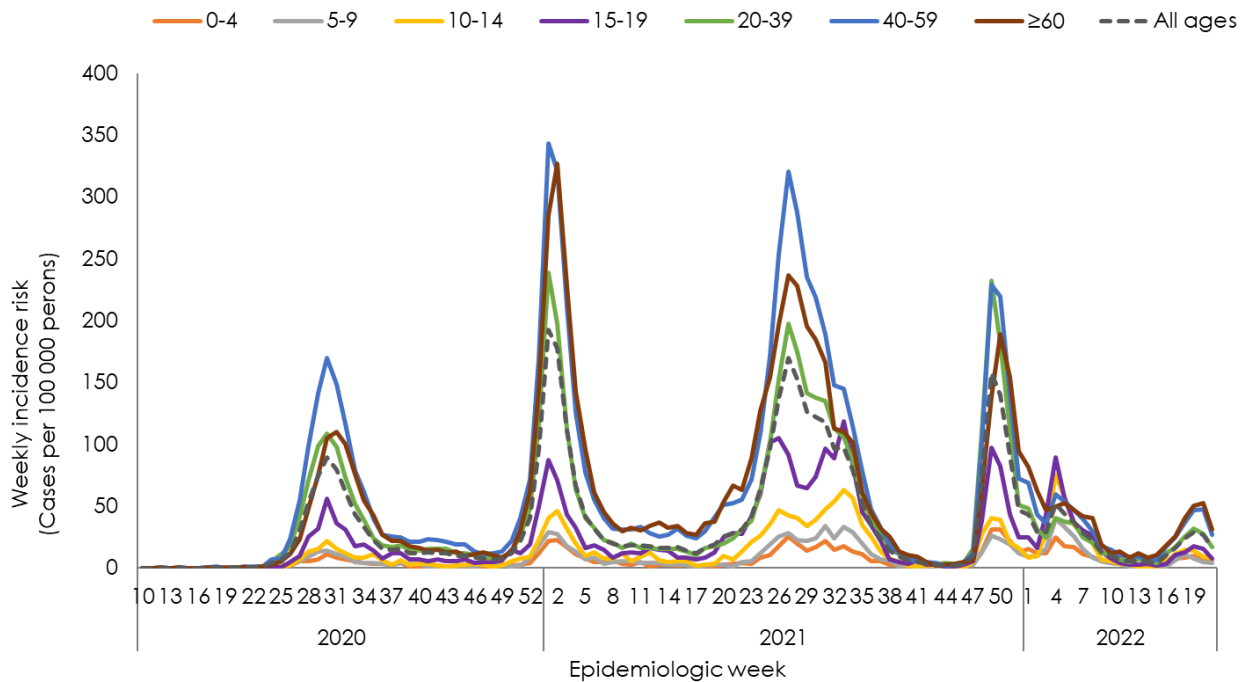


Figure 19: Weekly incidence risk of laboratory-confirmed cases of COVID-19 by age group and epidemiologic week Mpumalanga Province 3 March 2020 – 28 May 2022 (n = 195 584, 4 155 missing age)

North West Province

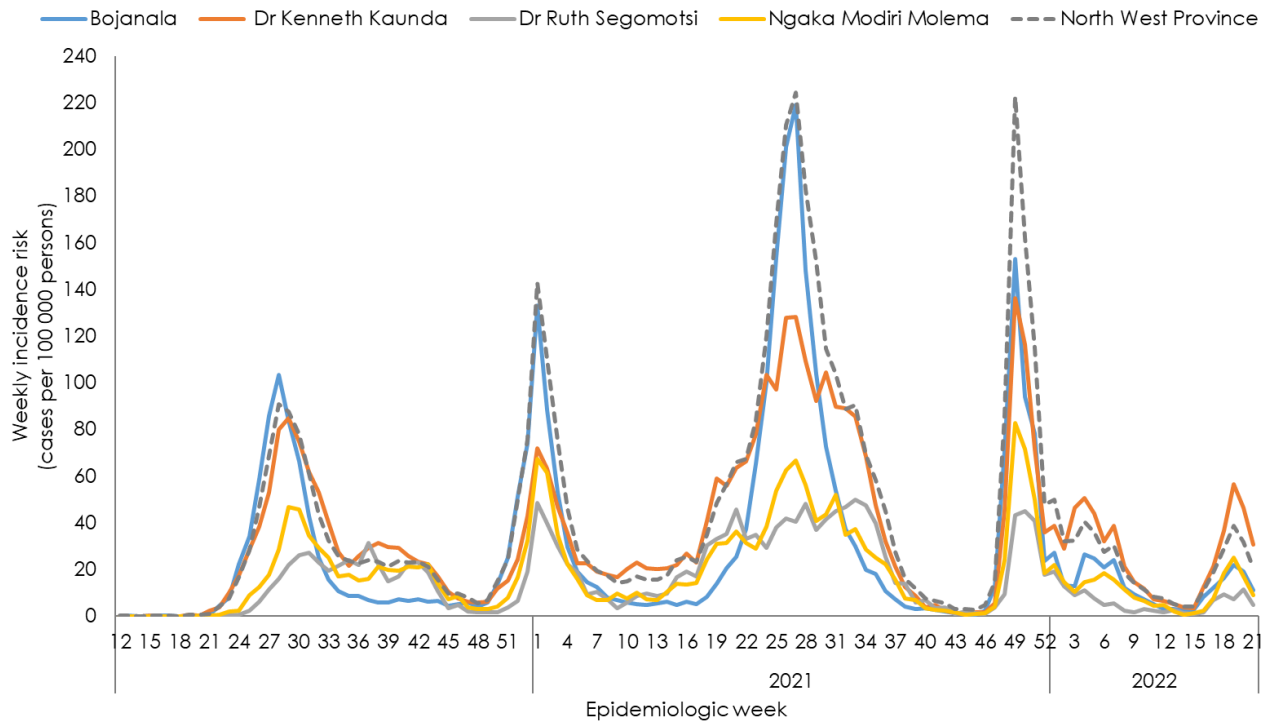


Figure 20: Weekly incidence risk of laboratory-confirmed cases of COVID-19 by district and epidemiologic week North West Province 3 March 2020 – 28 May 2022 (n = 199 692, 75 133 missing district)

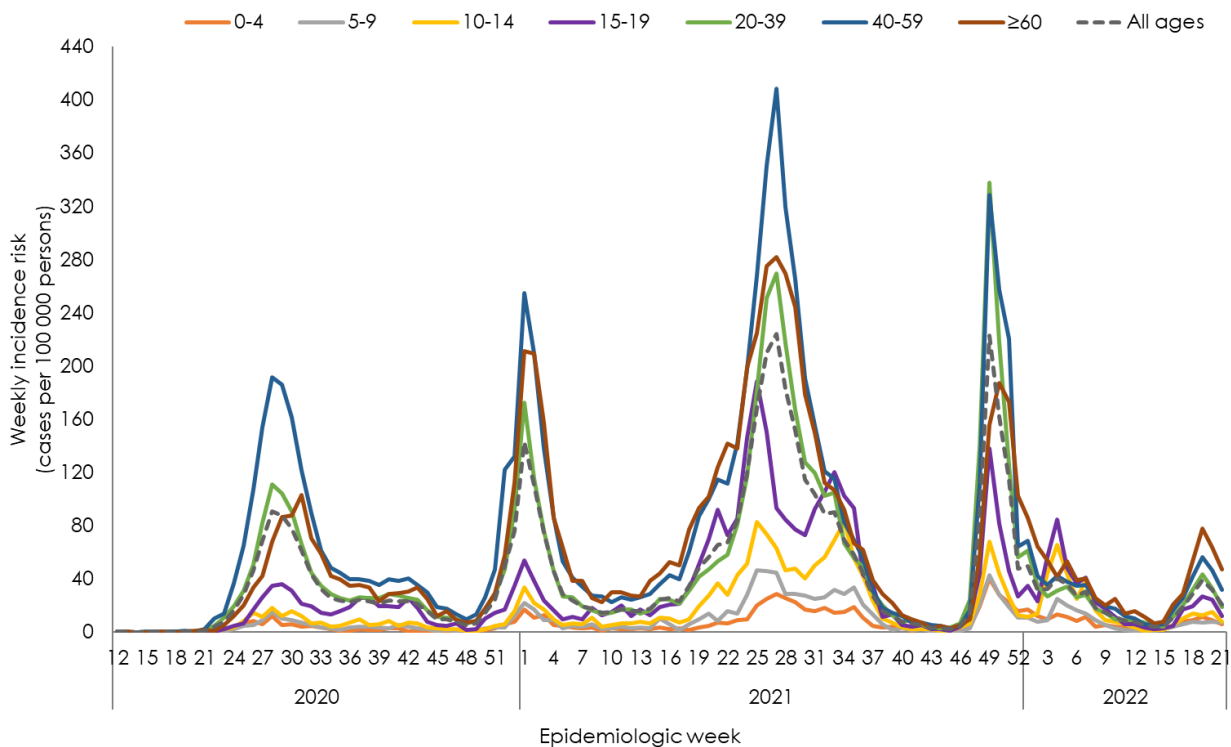


Figure 21: Weekly incidence risk of laboratory-confirmed cases of COVID-19 by age group in years and epidemiologic week North West Province 3 March 2020 – 28 May 2022 (n = 197 152, 2 540 missing age)

Northern Cape Province

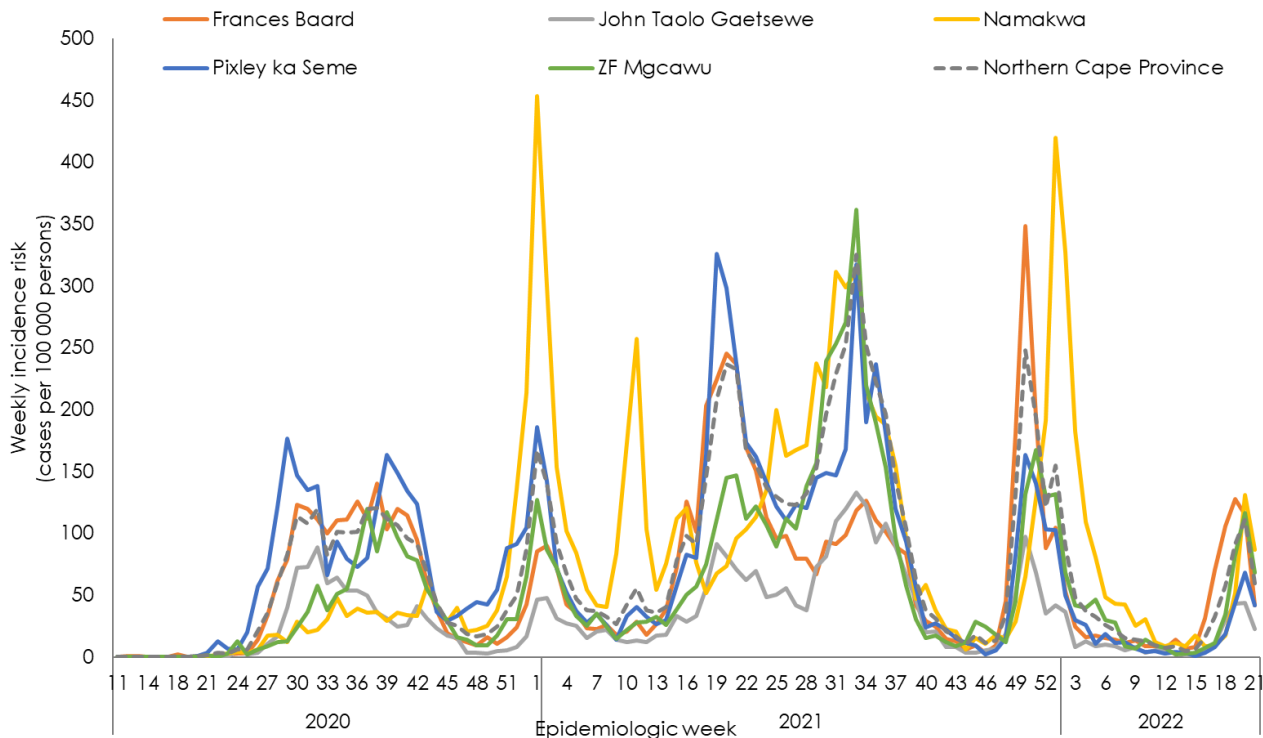


Figure 22: Weekly incidence risk of laboratory-confirmed cases of COVID-19 by district and epidemiologic week Northern Cape Province 3 March 2020 – 28 May 2022 (n = 87 619, 26 237 missing district)

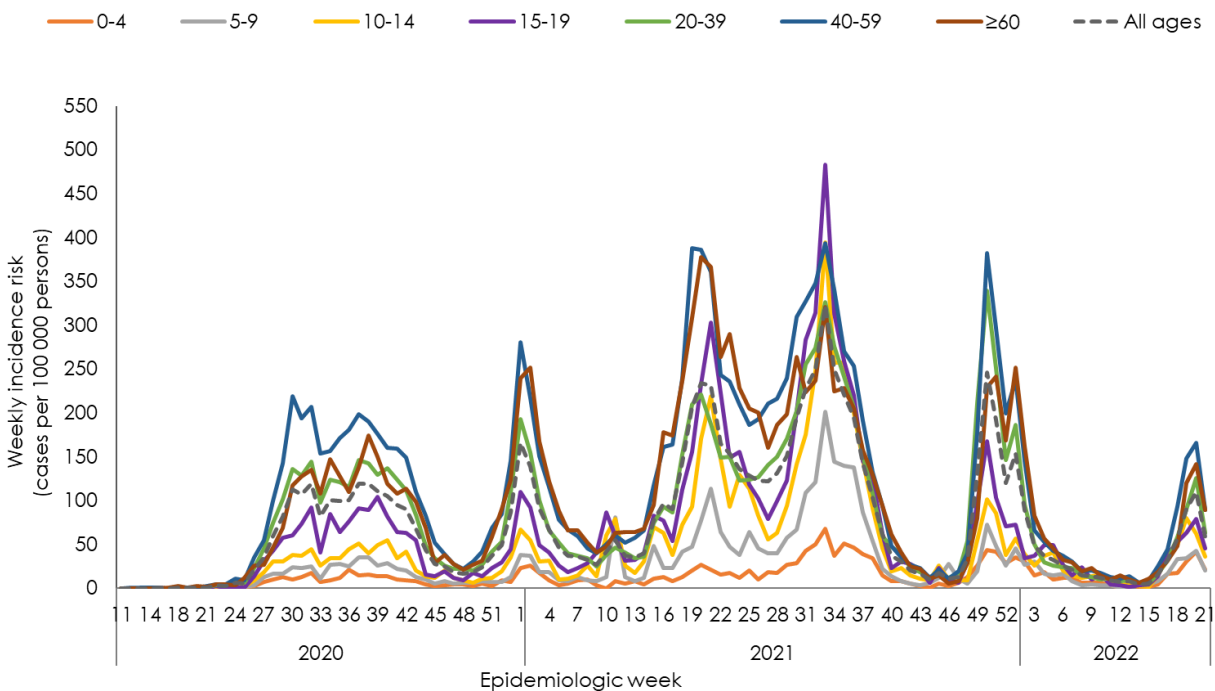


Figure 23: Weekly incidence risk of laboratory-confirmed cases of COVID-19 by age group in years and epidemiologic week Northern Cape Province 3 March 2020 – 28 May 2022 (n = 113 123, 733 missing age)

Methods

Testing for SARS-CoV-2 began on 28 January 2020 at the NICD and after the first case was confirmed in early March 2020, testing was expanded to a larger network of private and NHLS laboratories. Respiratory specimens were submitted from persons under investigation (PUI). Initially, tested individuals were those who had travelled to countries with COVID-19 transmission but the PUI definition was changed over time. Community symptom screening and referral for PCR testing was implemented in April 2020 but the strategy was changed to a more targeted approach in May 2020. Community screening was largely discontinued and testing efforts then focussed on areas identified as hot spots and on investigating clusters. Contacts of cases were traced and tested if symptomatic. In some provinces and certain circumstances (e.g. closed settings, workplaces), asymptomatic contacts were tested. In recent weeks, testing has been prioritised for healthcare workers and hospitalised patients. Laboratories used any one of several in-house and commercial PCR assays to test for the presence of SARS-CoV-2 RNA. Testing for SARS-CoV-2 using rapid antigen-based tests was implemented during November 2020. We excluded specimens collected outside South Africa. Date of specimen receipt in the laboratory was used when date of specimen collection was missing. A case of COVID-19 was defined as any person, resident in South Africa, with a single positive SARS-CoV-2 PCR or antigen test. For reports published from week 2 of 2022 onwards, we used 2021 mid-year population estimates to calculate incidence risk (cumulative and weekly incidence). For historical reports published from week 41 of 2020 to week 1 of 2022, 2020 mid-year population estimates were used, and reports published from epidemiologic week 10 (during the start of COVID-19 epidemic in South Africa) to week 40 of 2020, 2019 mid-year population estimates were used. Data on number of tests conducted in the past week as reported in the simultaneously-published COVID-19 weekly testing report was used to calculate tests conducted per 100 000 persons. Data on province and district allocation was based on geocoding algorithm using in order of priority (i) completeness of patient data, (ii) submitting doctor's address, (iii) registering doctor's address and as final option, (iv) the guarantor's address data. The geocoding algorithm used the most complete data for assigning data on province and district where adequate information was provided on the lab request form at the time of sample collection. Data on district allocation may lag resulting in number of cases in recent weeks missing district allocation. Prevalence and incidence risk by districts should be interpreted with caution.

Until the week 29 of 2020 report, new cases were defined as all cases reported since the last report, irrespective of when the sample was collected. Subsequent to the week 29 of 2020 report, new cases are now defined as cases detected in the past epidemiologic week based on date of sample collection or sample receipt. It is therefore possible for numbers reported as new cases for the current reporting week not to tally with total additional cases reported since the last report. This will be the case when there was a delay in reporting of cases.

Limitations

This report is based on laboratory-based surveillance of laboratory-confirmed cases. The number of reported cases is heavily dependent on testing practices. Although trends over time and comparisons by geographic area are presented in this report, changes in testing practices over time or differences by region may partially explain the results. Differences in health-seeking behaviour by age group and sex could also contribute to the observed differences in case numbers between groups. Delays in reporting may result in incomplete data for recent weeks, leading to an apparent reduction in number of cases. Changes in testing strategy during the different times of the epidemic may also affect the number of cases reported, leading to a decrease in number of positive cases if testing is only conducted for severe cases or certain risk groups.