

COVID-19 WEEKLY EPIDEMIOLOGY BRIEF



NATIONAL INSTITUTE FOR
COMMUNICABLE DISEASES

Division of the National Health Laboratory Service

SOUTH AFRICA WEEK 4 2022

CUMULATIVE DATA FROM



CASES

3 603 856
IN TOTAL

19 771
THIS WEEK**

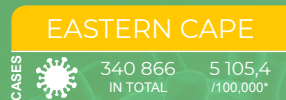
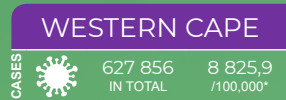


PERSONS

5 992,1
INCIDENCE RISK*

39
MEDIAN AGE

PROVINCES AT A GLANCE



* Incidence risk - cases per 100 000 persons
** based on samples collected/received in current reporting week

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 29 January 2022 (week 4 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. From week 2 of 2022, we changed from using 2020 mid-year population estimates to using 2021 mid-year estimates and this may result in some changes to previously reported figures. .

Highlights

- As of 29 January 2022, a total of 3 603 856 laboratory-confirmed COVID-19 cases had been detected in South Africa. Of these, 22 497 were cases reported since the last report (week 3 of 2022). There was a 0.2% increase in the number of new cases detected in week 4 of 2022 (19 771) compared to the number of new cases detected in week 3 of 2022 (19 731).
- In the past week, the Gauteng Province reported the highest number of cases detected (6 454/19 771, 32.6%), followed by the Western Cape (3 004/19 771, 15.2%) provinces, with other provinces reporting below 12% each.
- In the past week, five provinces (Free State, Gauteng, Limpopo, Mpumalanga, and North West) reported an increase in weekly incidence risk, compared to previous week. The increase in weekly incidence risk ranged from 3.7 cases per 100 000 persons (14.3% increase) in Limpopo Province to 18.3 cases per 100 000 persons (63.4% increase) in Mpumalanga Province. Some of the reduction could be due to delayed reporting.
- All the districts of the above five provinces reported an increase in weekly incidence in the past week, except the Capricorn District in Limpopo Province, which reported a decrease in weekly incidence risk, compared to week 3.
- In the past week, the Mpumalanga Province reported the highest weekly incidence risk (47.2 cases per 100 000 persons), followed by the Western Cape Province (42.2 cases per 100 000 persons), Free State Province (42.0 cases per 100 000 persons), and Gauteng Province (40.0 cases per 100 000 persons). The other provinces reported below 40 cases per 100 000 persons.
- The highest weekly incidence risk among cases detected in week 4 of 2022 was reported in the ≥80-year age group (62.3 cases per 100 000 persons), and the lowest weekly incidence risk was in the 0-4-year age group (15.0 cases per 100 000 persons).
- In the past week, the age groups 19-years and below reported an increase in weekly incidence risk, compared to the previous week. The increase ranged from 0.2 cases per 100 000 persons (1.1% increase) in the 0-4-year to 15.0 cases per 100 000 persons (56.6% increase) in the 10-14-year age groups. In the past week, incidence risk in individuals age >19 years decreased.

INCIDENCE
RISK FOR
CURRENT WEEK

32,9

CASES PER
100 000
PERSONS

32,6%

OF CASES
REPORTED IN
GAUTENG IN
CURRENT WEEK

IN CURRENT
WEEK, THE
HIGHEST
WEEKLY
INCIDENCE
RISK WAS IN
CASES AGED
80+ YEARS (62,3
CASES PER 100
000 PERSONS)

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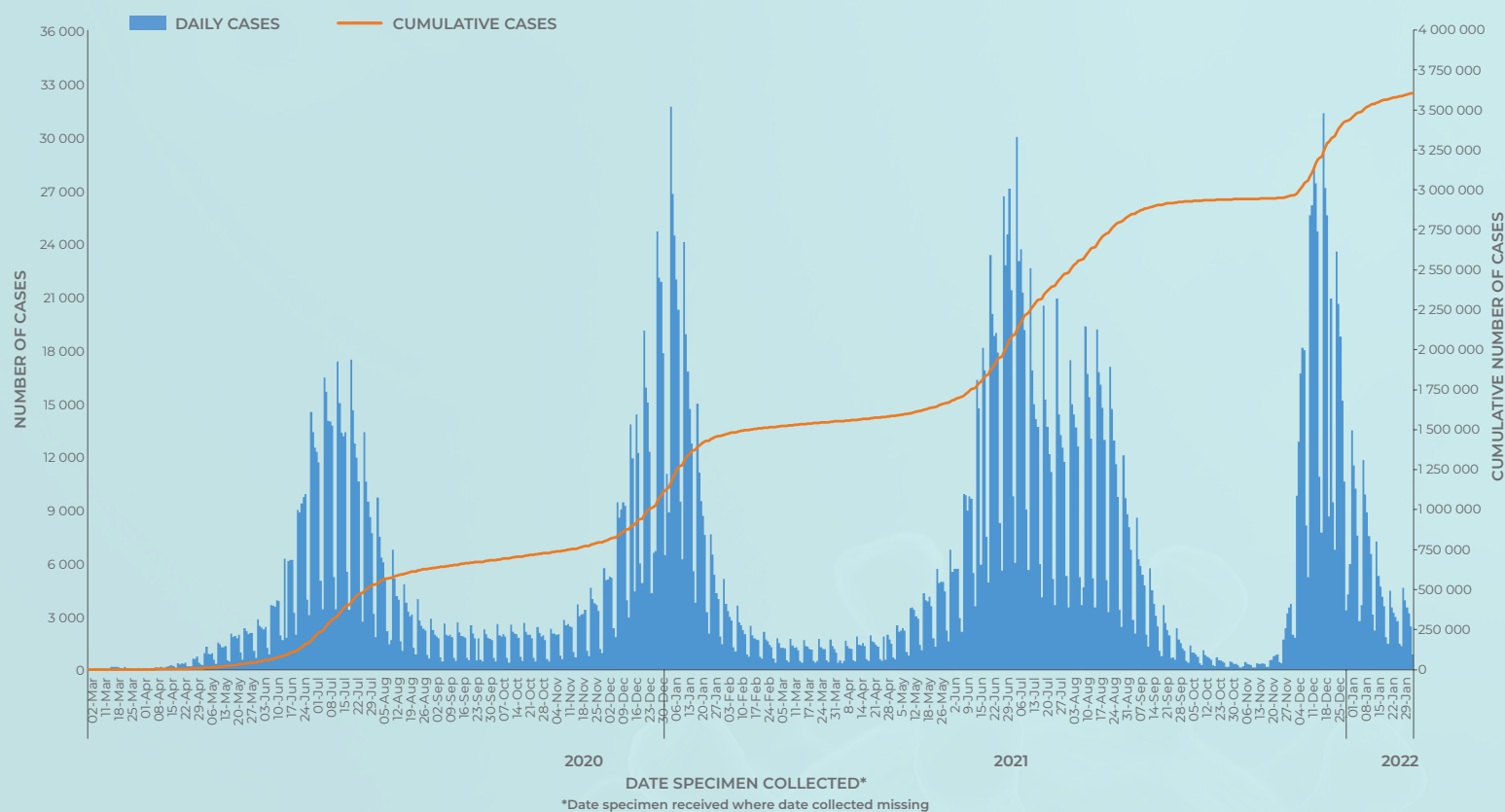


Figure 1. Number and cumulative number of laboratory-confirmed cases of COVID-19 by date of specimen collection, South Africa, 3 March 2020 – 29 January 2022 (n=3 603 856)

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 – 29 January 2022 (n = 3 603 856)

Province	Cumulative cases (n) (percentage, n/total cases in South Africa)	New cases ¹ detected in week 4 of 2022 (23-29 Jan), 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 4 of 2022 (cases/100 000 persons)	Tests ⁴ per 100 000 persons, 23-29 Jan 2022
Eastern Cape	340 866 (9.5)	907 (4.6)	6 676 590	5 105.4	13.6	182.9
Free State	196 679 (5.5)	1 231 (6.2)	2 932 441	6 707.0	42.0	429.1
Gauteng	1 167 714 (32.4)	6 454 (32.6)	15 810 388	7 385.7	40.8	485.4
KwaZulu-Natal	642 474 (17.8)	2 301 (11.6)	11 513 575	5 580.1	20.0	272.7
Limpopo	150 532 (4.2)	1 735 (8.8)	5 926 724	2 539.9	29.3	121.2
Mpumalanga	184 850 (5.1)	2 237 (11.3)	4 743 584	3 896.8	47.2	247.7
North West	185 924 (5.2)	1 460 (7.4)	4 122 854	4 509.6	35.4	279.5
Northern Cape	106 961 (3.0)	442 (2.2)	1 303 047	8 208.5	33.9	313.3
Western Cape	627 856 (17.4)	3 004 (15.2)	7 113 776	8 825.9	42.2	391.6
Unknown						
Total	3 603 856	19 771	60 142 978	5 992.1	32.9	324.8

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

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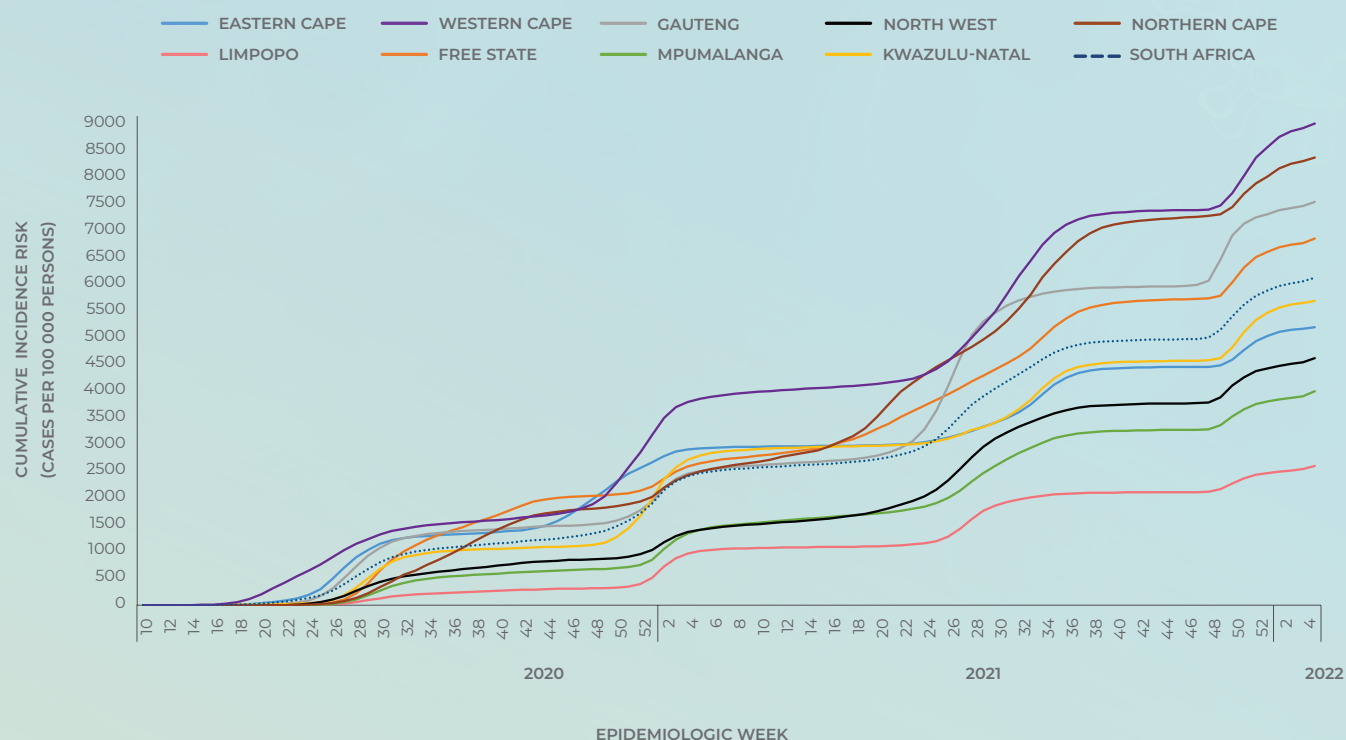


Figure 2. Cumulative incidence risk of laboratory-confirmed cases of COVID-19 by province and epidemiologic week South Africa 3 March 2020 – 29 January 2022 (n = 3 603 856)

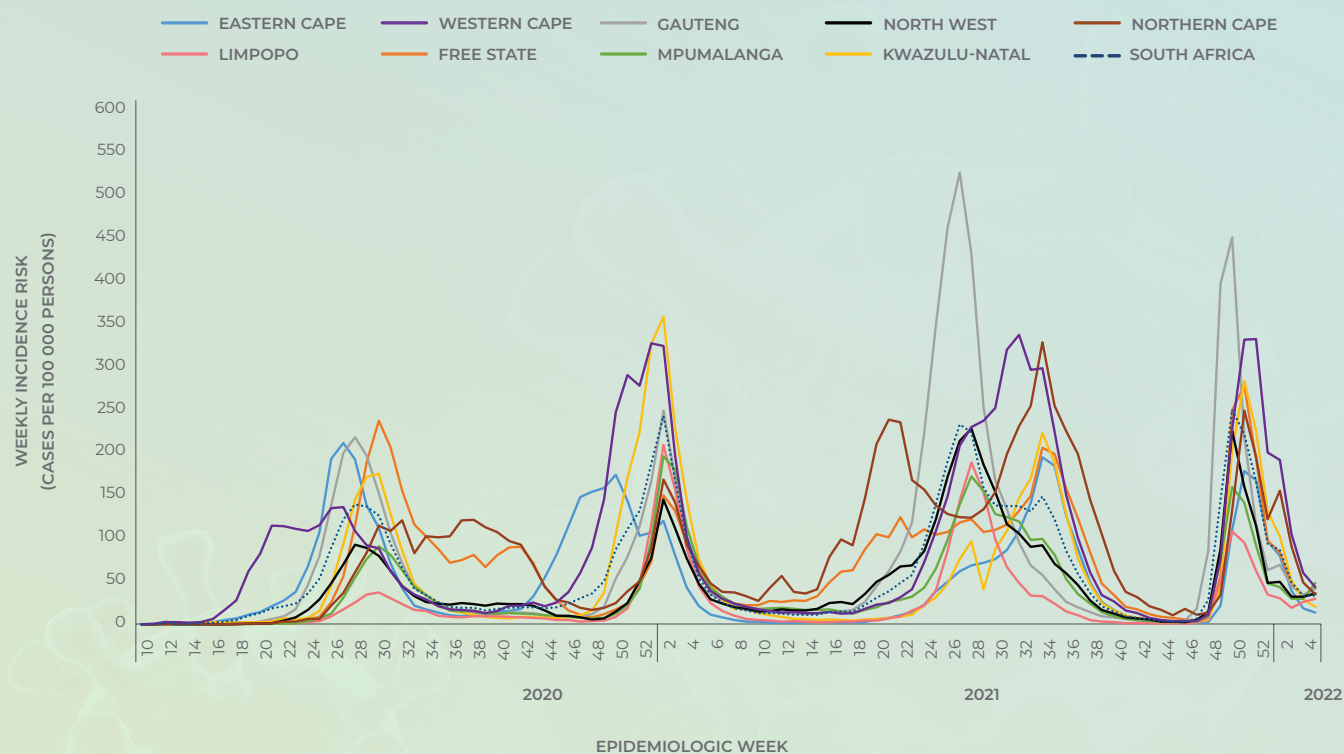


Figure 3. Weekly incidence risk of laboratory-confirmed cases of COVID-19 by province and epidemiologic week South Africa 3 March 2020 – 29 January 2022 (n = 3 603 856)

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

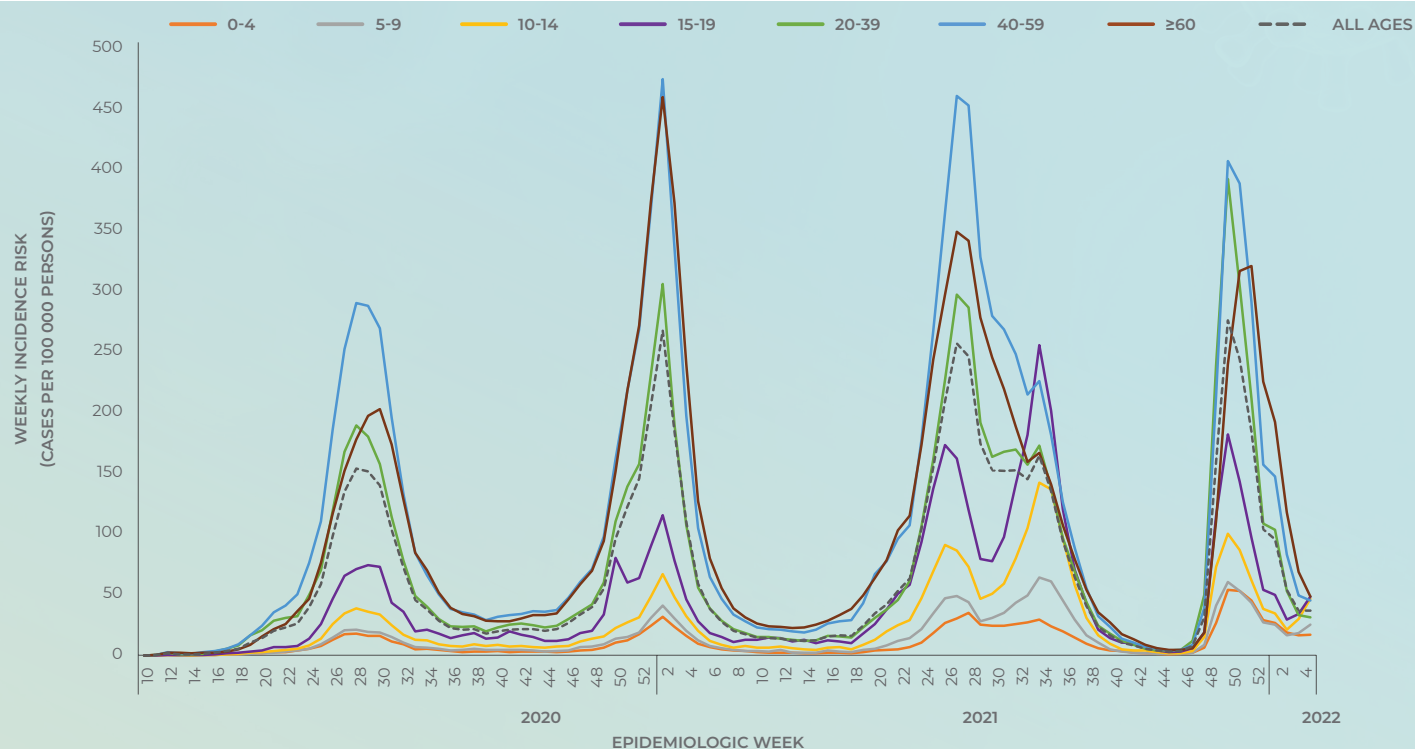


Figure 4. Weekly incidence risk of laboratory-confirmed cases of COVID-19 by age group in years and epidemiologic week South Africa 3 March 2020 – 29 January 2022 (n = 3 569 858, 33 998 missing age)

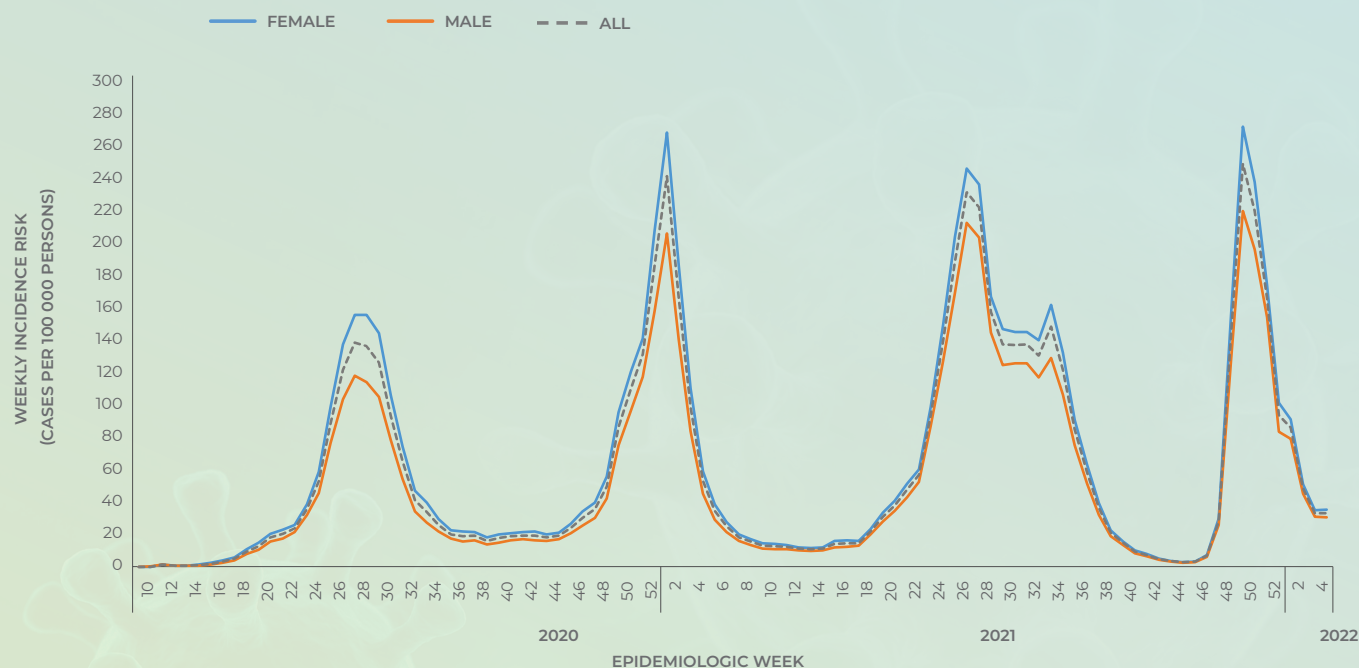


Figure 5. Weekly incidence risk of laboratory-confirmed cases of COVID-19 by sex and epidemiologic week South Africa 3 March 2020 – 29 January 2022 (n = 3 565 097, sex missing for 38 759)

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Table 2. Number of laboratory-confirmed cases of COVID-19 and cumulative/weekly incidence risk by age group South Africa 3 March 2020 – 29 January 2022 n = 3 569 858, 33 998 missing age)

Age group (years)	Cumulative cases (n) (percentage, n/total cases in South Africa)	New cases ¹ detected in week 4 of 2022 (23-29 Jan), 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 4 of 2022 (cases/100 000 persons)
0-4	53 831 (1.5)	855 (4.4)	5 708 956	942.9	15.0
5-9	73 486 (2.1)	1 267 (6.5)	5 663 296	1 297.6	22.4
10-14	132 330 (3.7)	2 350 (12.0)	5 671 023	2 333.4	41.4
15-19	196 940 (5.5)	2 125 (10.8)	4 909 941	4 011.0	43.3
20-24	238 291 (6.7)	945 (4.8)	4 739 305	5 028.0	19.9
25-29	350 069 (9.8)	1 313 (6.7)	5 324 134	6 575.1	24.7
30-34	403 301 (11.3)	1 695 (8.6)	5 630 643	7 162.6	30.1
35-39	408 474 (11.4)	1 839 (9.4)	4 985 251	8 193.6	36.9
40-44	345 999 (9.7)	1 498 (7.6)	3 881 731	8 913.5	38.6
45-49	329 695 (9.2)	1 306 (6.7)	3 254 138	10 131.6	40.1
50-54	296 162 (8.3)	1 134 (5.8)	2 625 390	11 280.7	43.2
55-59	246 284 (6.9)	917 (4.7)	2 243 823	10 976.1	40.9
60-64	171 583 (4.8)	744 (3.8)	1 815 810	9 449.4	41.0
65-69	117 872 (3.3)	543 (2.8)	1 422 604	8 285.7	38.2
70-74	85 681 (2.4)	401 (2.0)	1 024 345	8 364.5	39.1
75-79	55 415 (1.6)	314 (1.6)	647 265	8 561.4	48.5
≥80	64 445 (1.8)	371 (1.9)	595 323	10 825.2	62.3
Unknown	33 998 (0.0)	154 (0.0)			
Total	3 603 856 (100.0)	19 771 (100.0)	60 142 978	5 992.1	32.9

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

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Provincial trends of COVID-19 cases

Eastern Cape Province

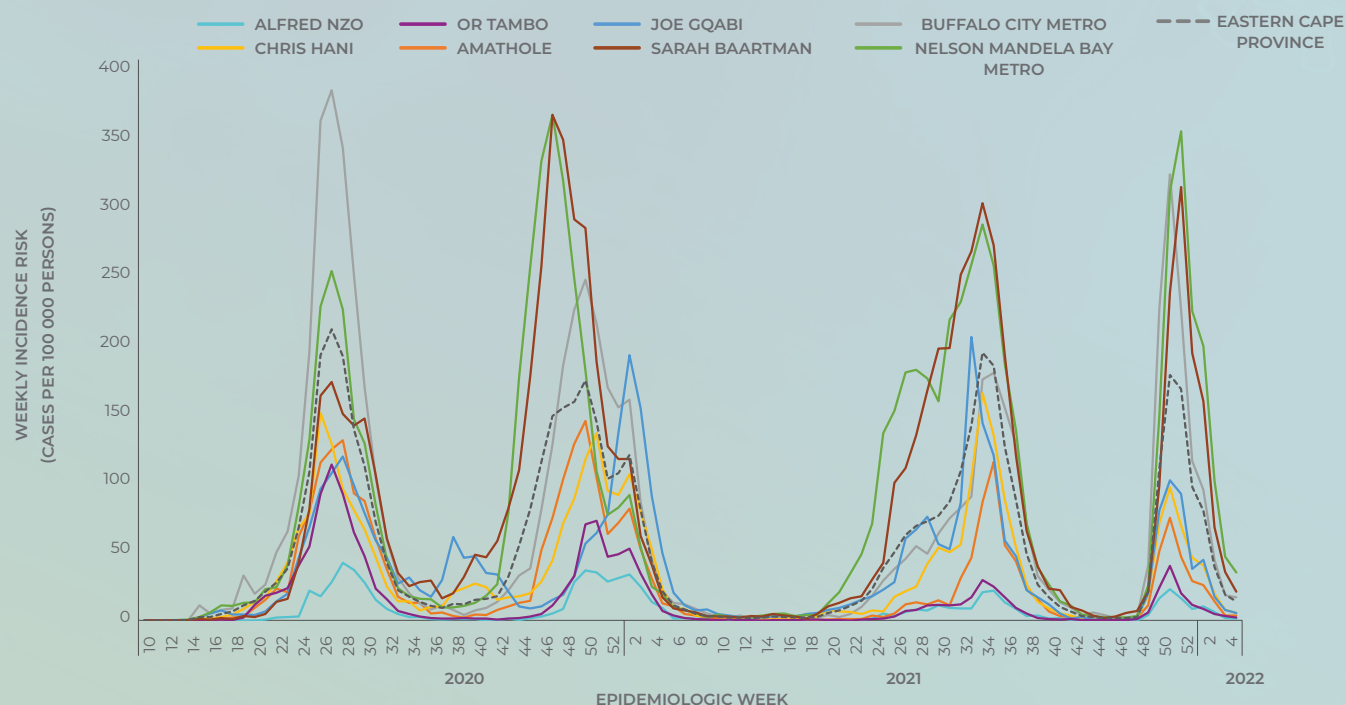


Figure 6. Weekly incidence risk of laboratory-confirmed cases of COVID-19 by district and epidemiologic week Eastern Cape Province 3 March 2020 – 29 January 2022 (n = 272 342, 68 524 missing district)

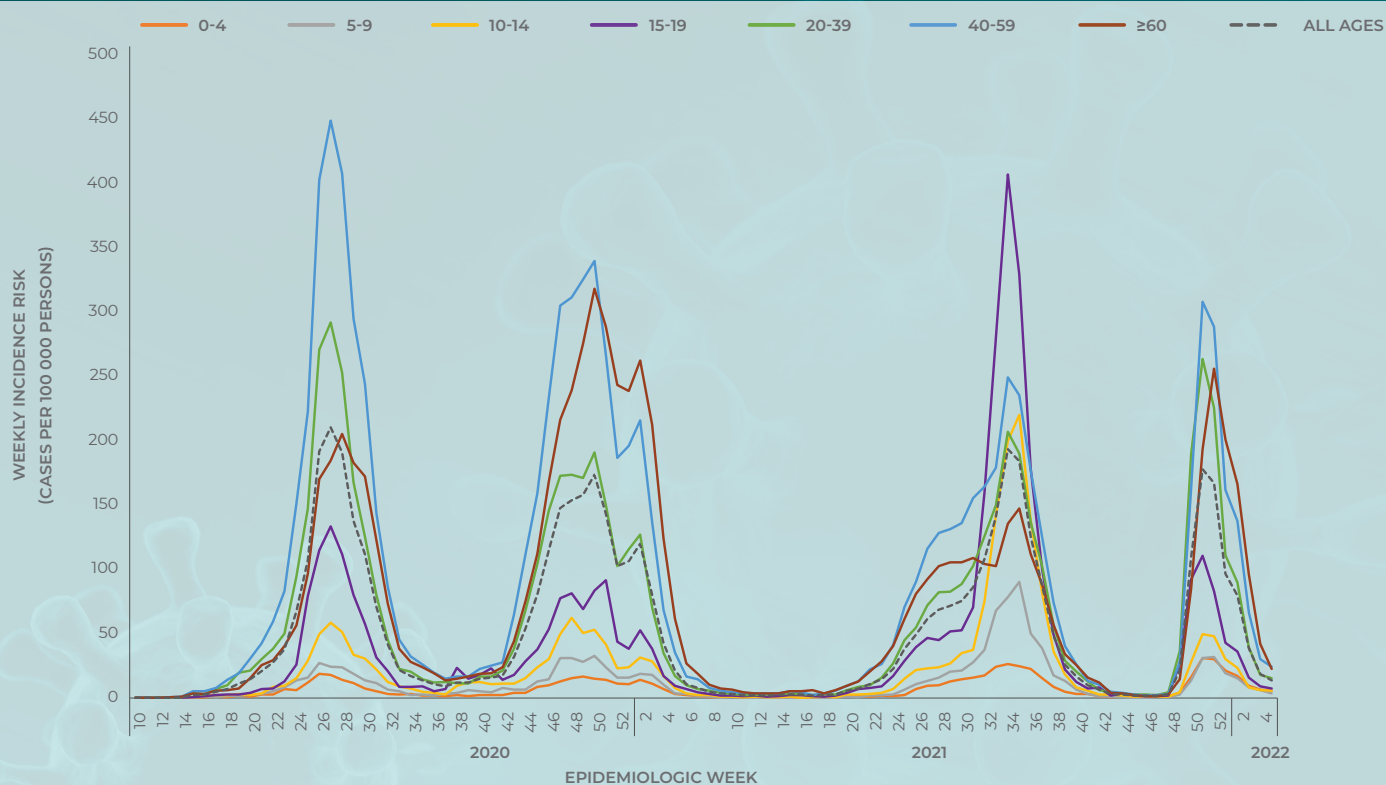


Figure 7. Weekly incidence risk of laboratory-confirmed cases of COVID-19 by age group in years and epidemiologic week Eastern Cape Province 3 March 2020 – 29 January 2022 (n = 340 866, 68 524 missing age)

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Western Cape Province

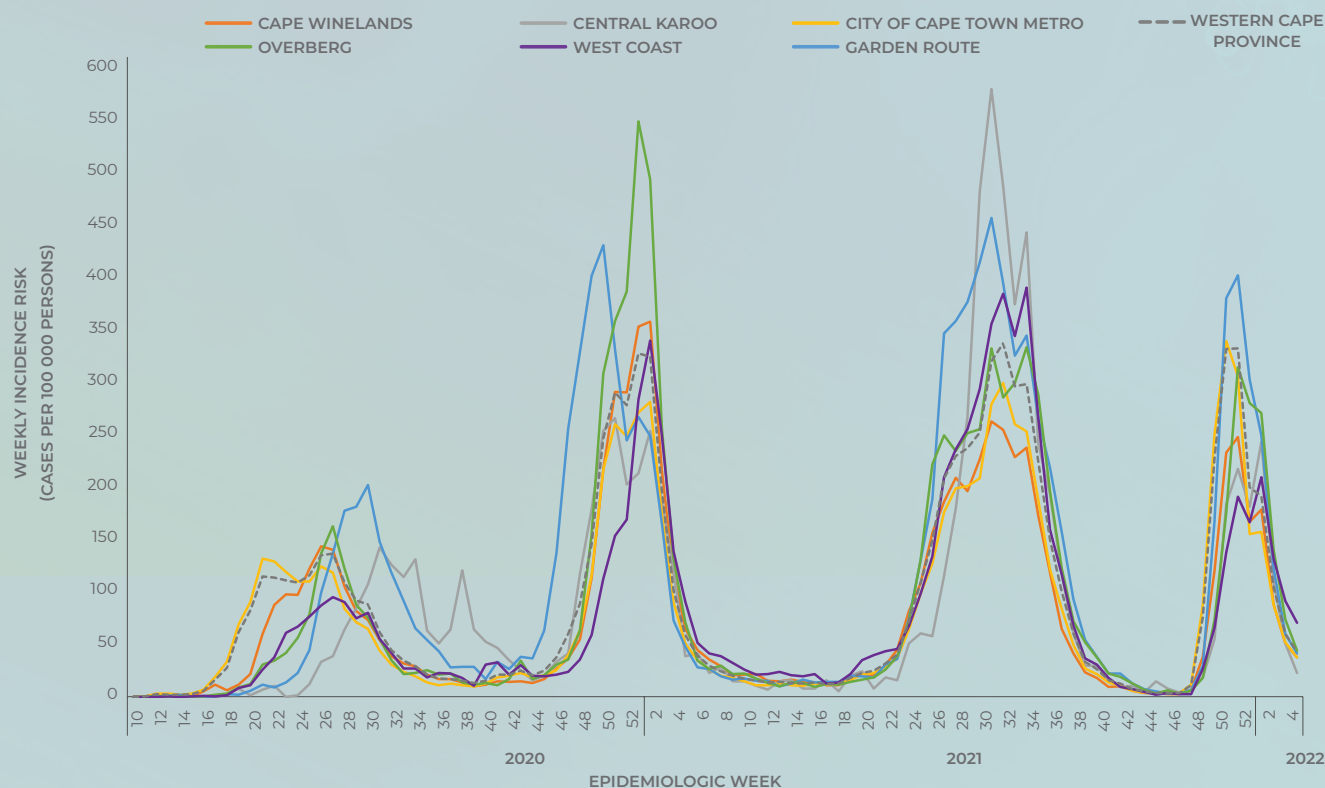


Figure 8. Weekly incidence risk of laboratory-confirmed cases of COVID-19 by district and epidemiologic week Western Cape Province 3 March 2020 – 29 January 2022 (n = 577 073, 50 783 missing district)

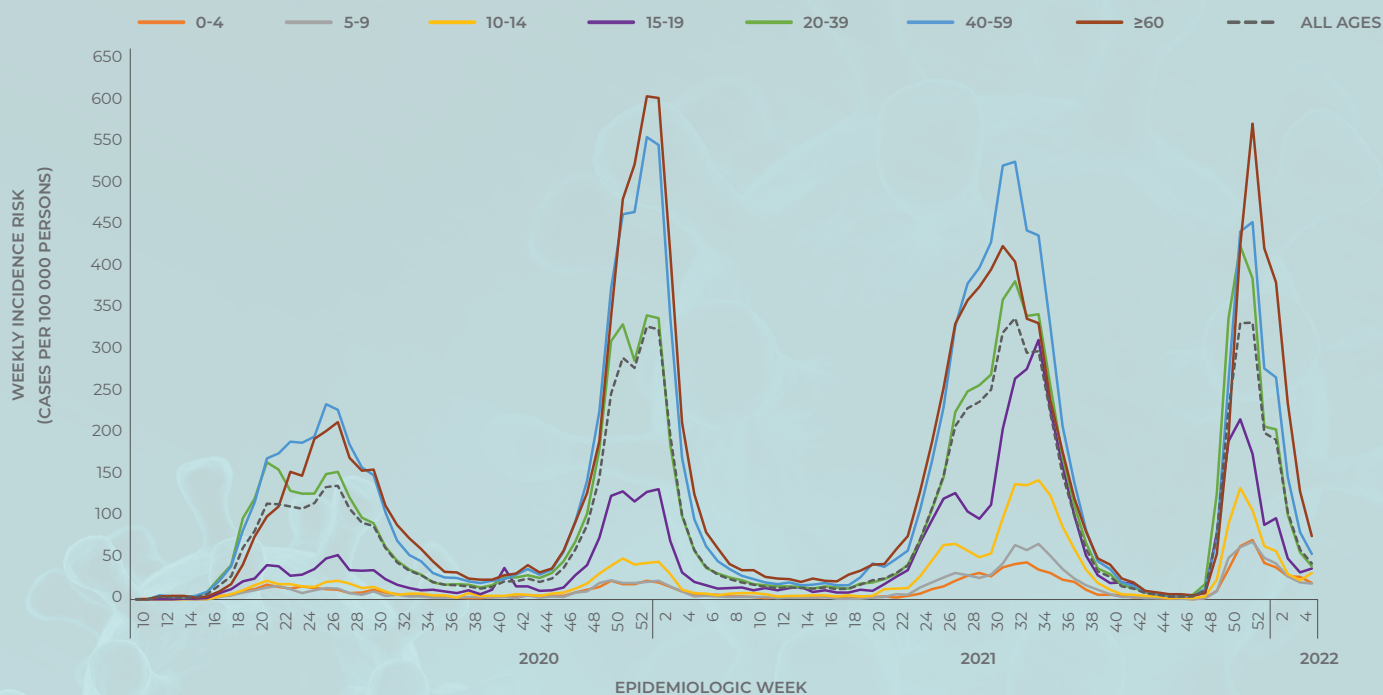


Figure 9. Weekly incidence risk of laboratory-confirmed cases of COVID-19 by age group in years and epidemiologic week Western Cape Province 3 March 2020 – 29 January 2022 (n = 627 856, 1 736 missing age)

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Gauteng Province

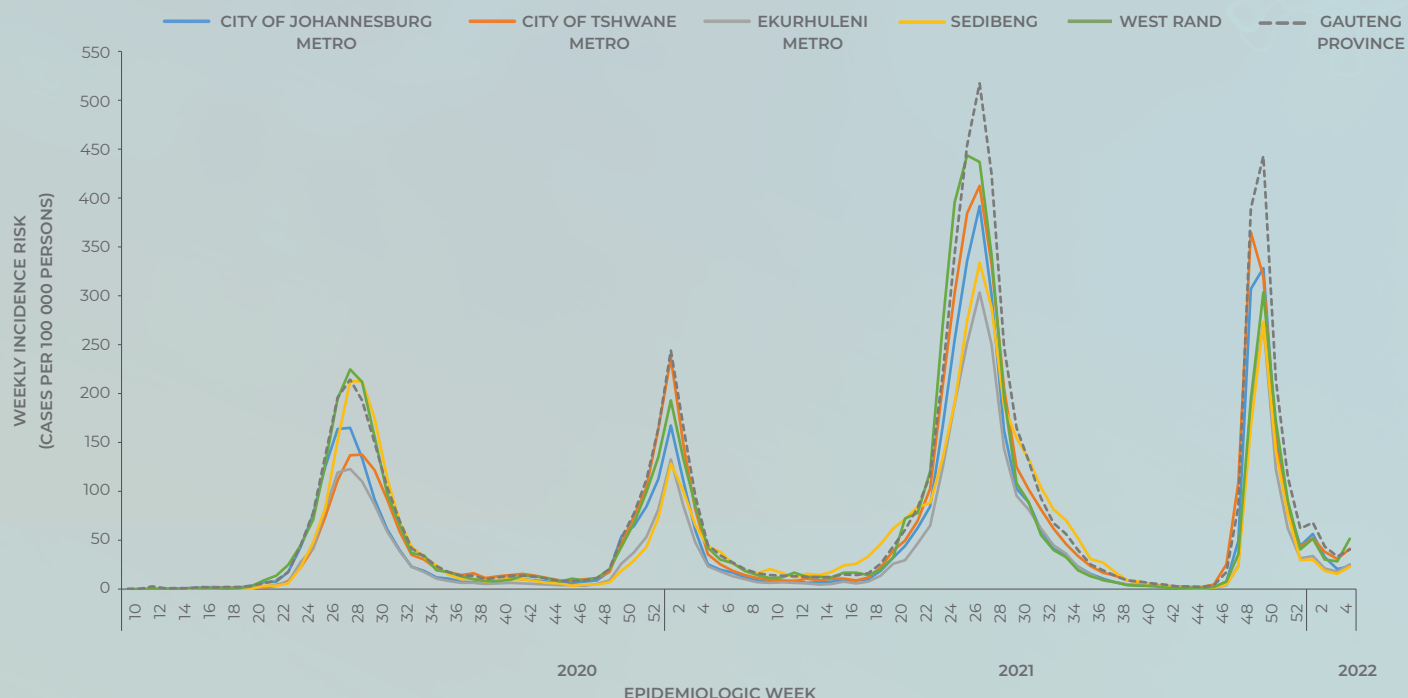


Figure 10. Weekly incidence risk of laboratory-confirmed cases of COVID-19 by district and epidemiologic week Gauteng Province 3 March 2020 – 29 January 2022 (n = 826 551, 341 163 missing district)

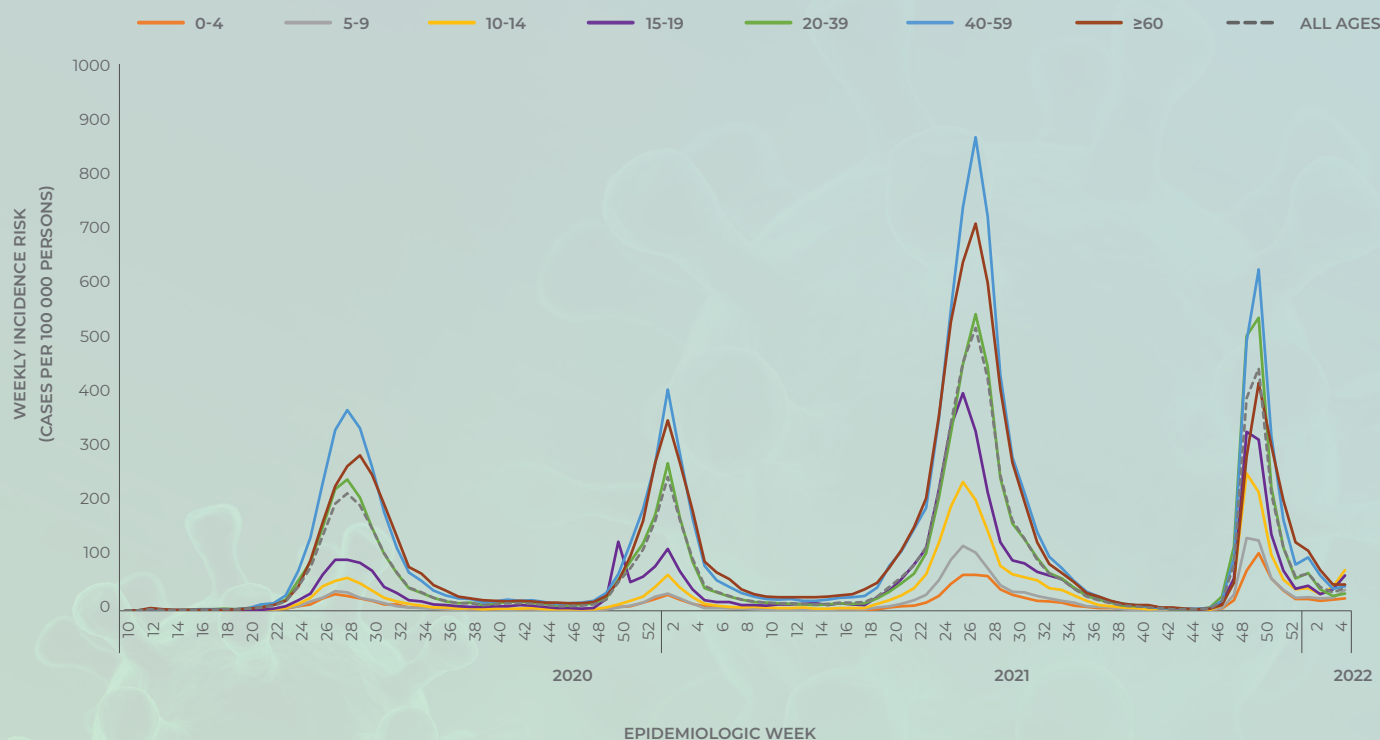


Figure 11. Weekly incidence risk of laboratory-confirmed cases of COVID-19 by age group in years and epidemiologic week Gauteng Province 3 March 2020 – 29 January 2022 (n = 1 167 714, 11 899 missing age)

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KwaZulu-Natal Province

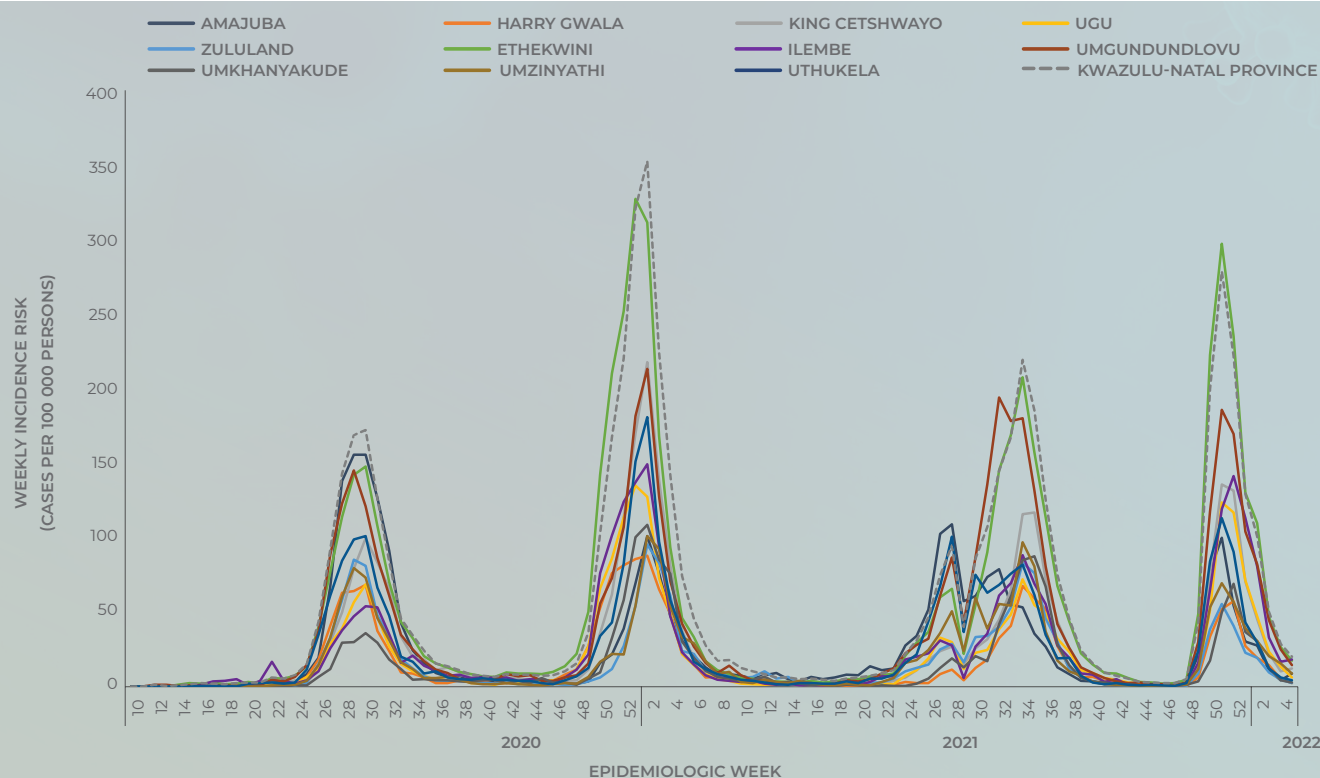


Figure 12. Weekly incidence risk of laboratory-confirmed cases of COVID-19 by district and epidemiologic week KwaZulu-Natal Province 3 March 2020 – 29 January 2022 (n = 392 374, 250 100 missing district)

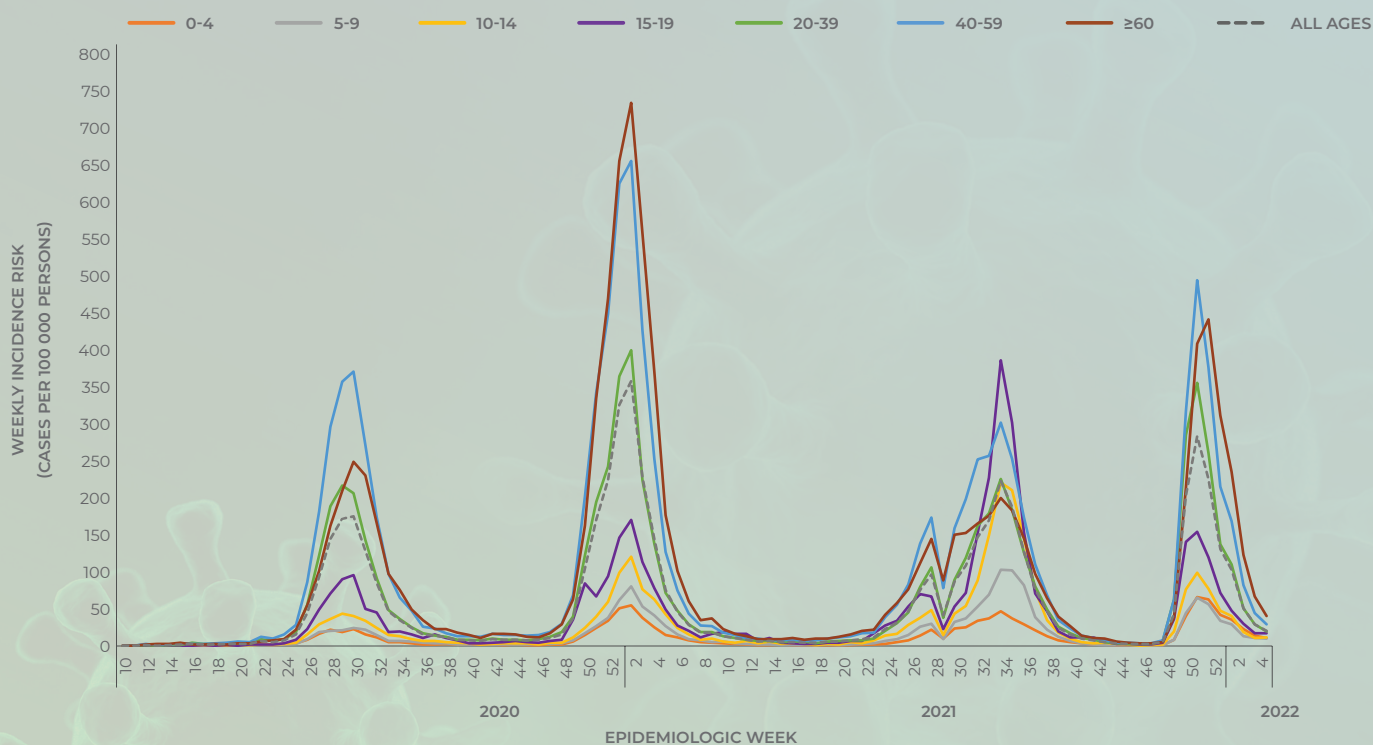


Figure 13. Weekly incidence risk of laboratory-confirmed cases of COVID-19 by age group in years and epidemiologic week KwaZulu-Natal Province 3 March 2020 – 29 January 2022 (n = 642 474, 8 237 missing age)

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Free State Province

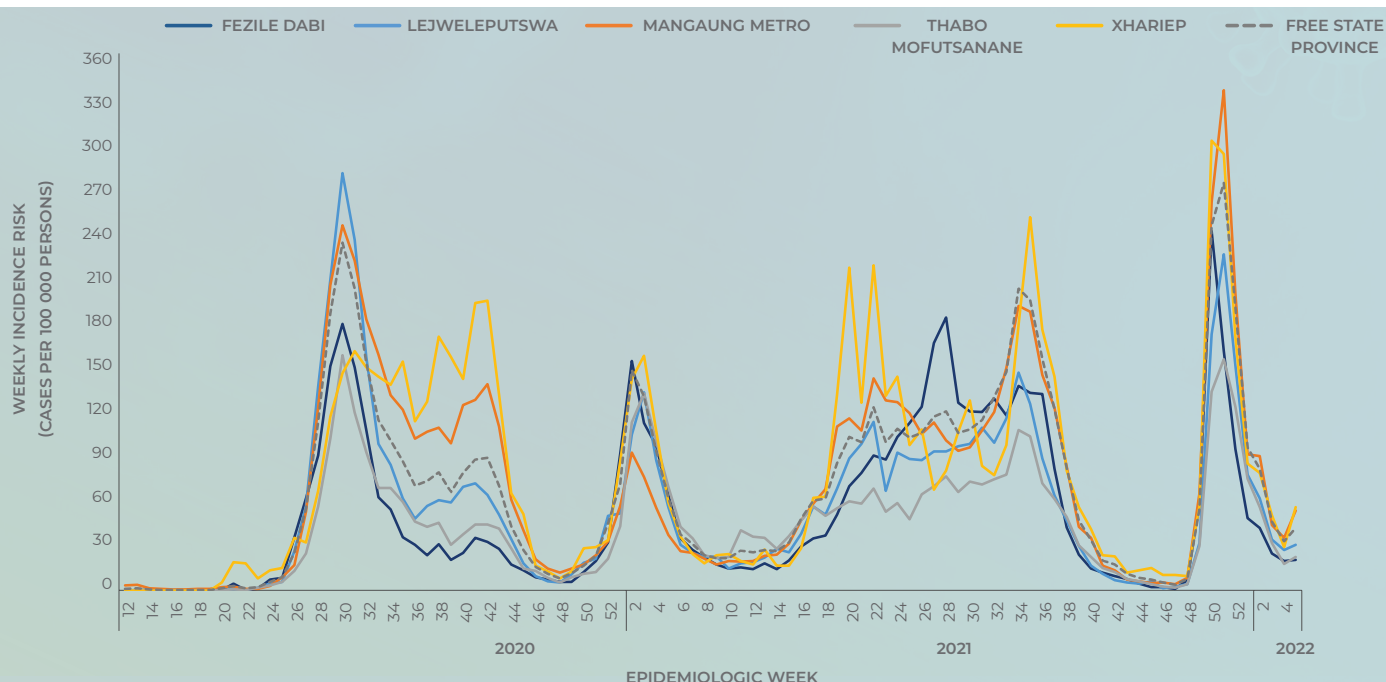


Figure 14. Weekly incidence risk of laboratory-confirmed cases of COVID-19 by district and epidemiologic week Free State Province 3 March 2020 – 29 January 2022 (n = 167 640, 29 039 missing district)

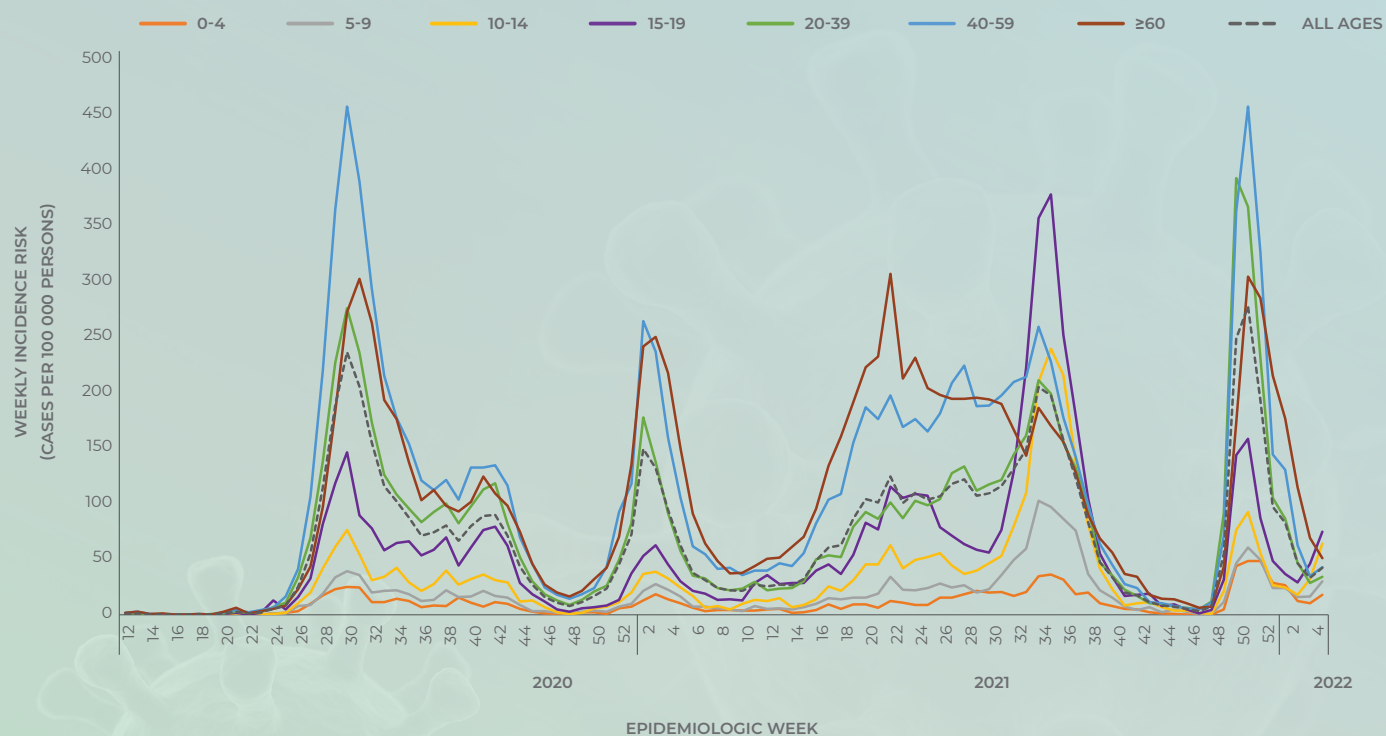


Figure 15. Weekly incidence risk of laboratory-confirmed cases of COVID-19 by age group in years and epidemiologic week Free State Province 3 March 2020 – 29 January 2022 (n = 195 890, 789 missing age)

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Limpopo Province

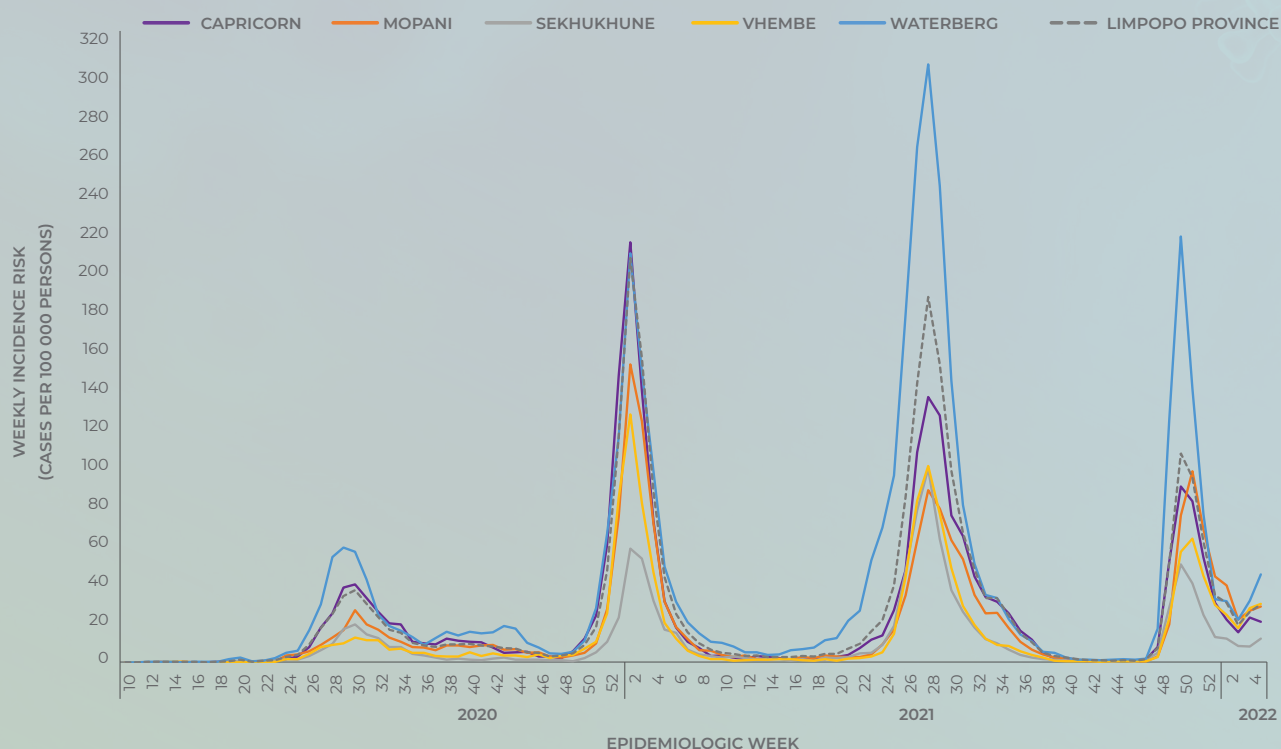


Figure 16. Weekly incidence risk of laboratory-confirmed cases of COVID-19 by district and epidemiologic week Limpopo Province 3 March 2020 – 29 January 2022 (n = 111 046, 39 486 missing district)

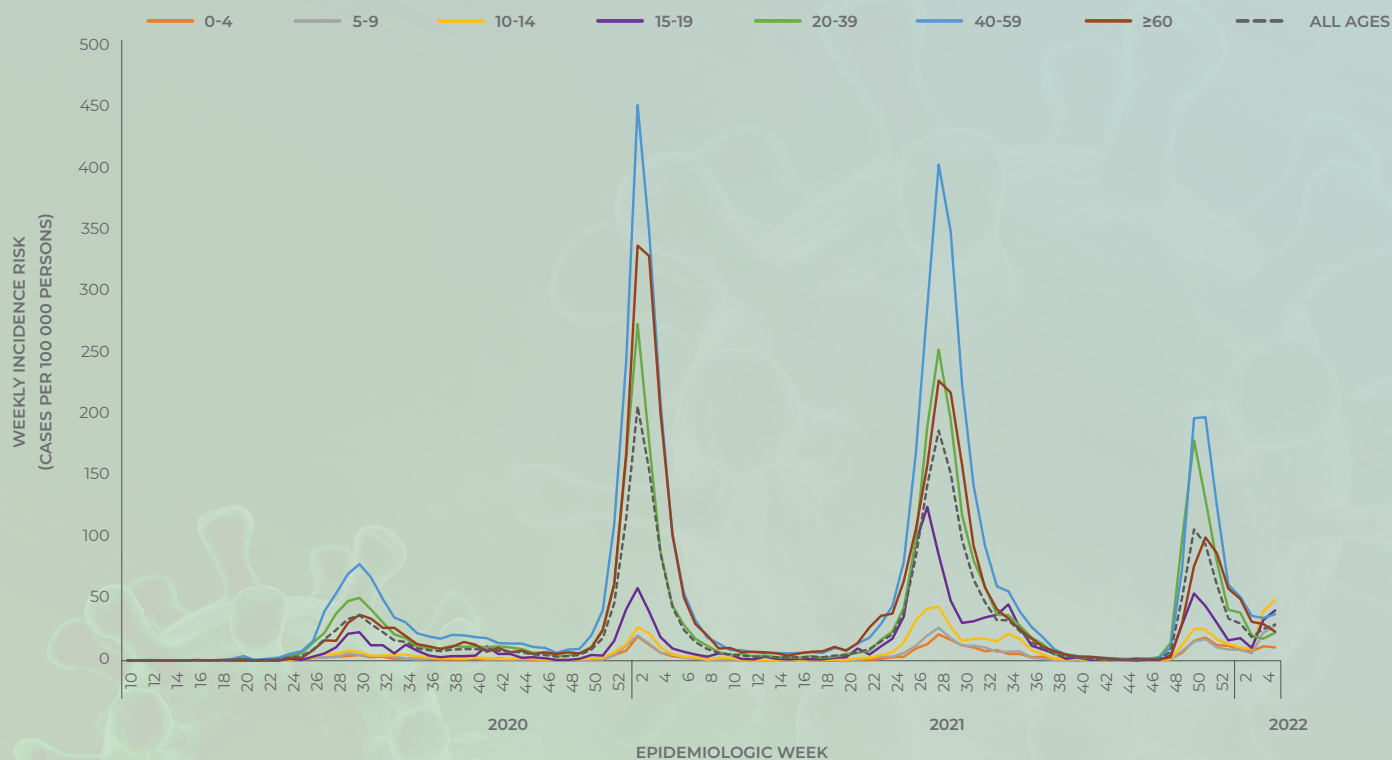


Figure 17. Weekly incidence risk of laboratory-confirmed cases of COVID-19 by age group in years and epidemiologic week Limpopo Province 3 March 2020 – 29 January 2022 (n = 149 823, 709 missing age)

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Mpumalanga Province

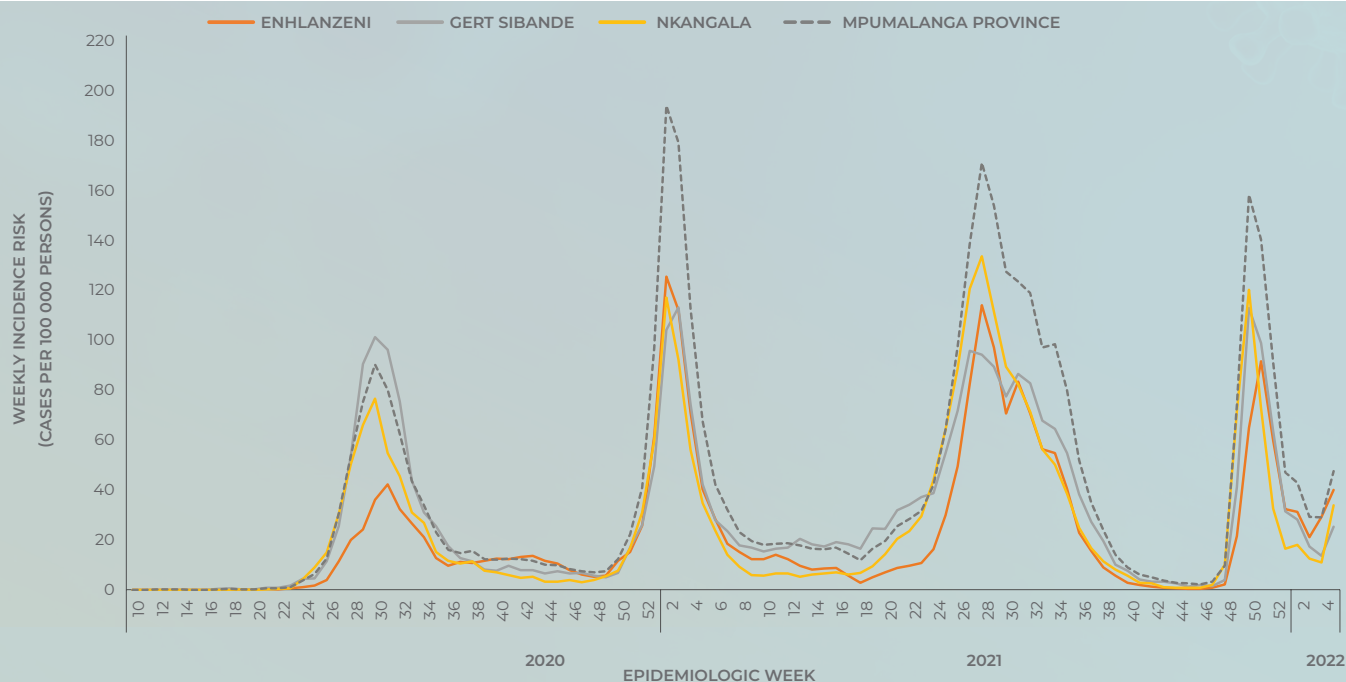


Figure 18. Weekly incidence risk of laboratory-confirmed cases of COVID-19 by district and epidemiologic week Mpumalanga Province 3 March 2020 – 29 January 2022 (n = 119 989, 64 861 missing district)

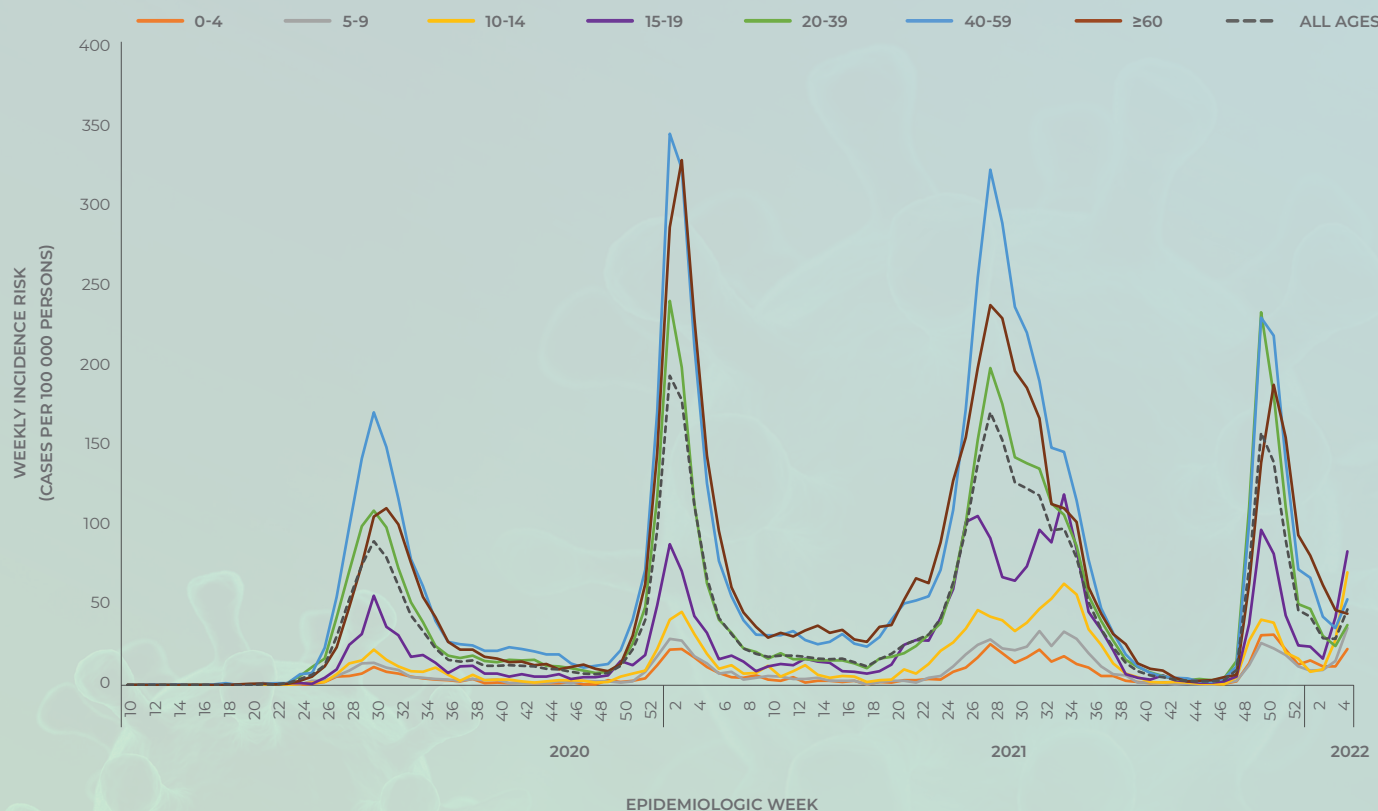


Figure 19. Weekly incidence risk of laboratory-confirmed cases of COVID-19 by age group and epidemiologic week Mpumalanga Province 3 March 2020 – 29 January 2022 (n = 180 957, 3 893 missing age)

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North West Province

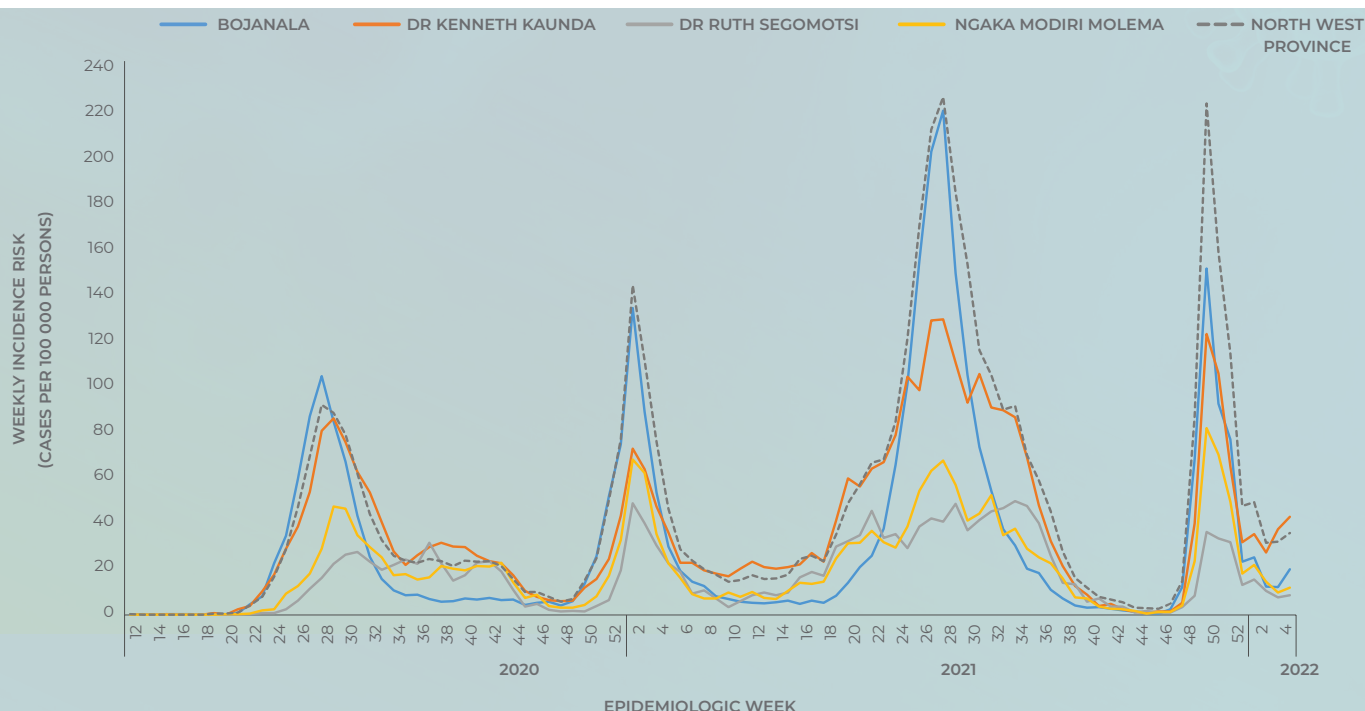


Figure 20. Weekly incidence risk of laboratory-confirmed cases of COVID-19 by district and epidemiologic week North West Province 3 March 2020 – 29 January 2022 (n = 114 107, 71 817 missing district)

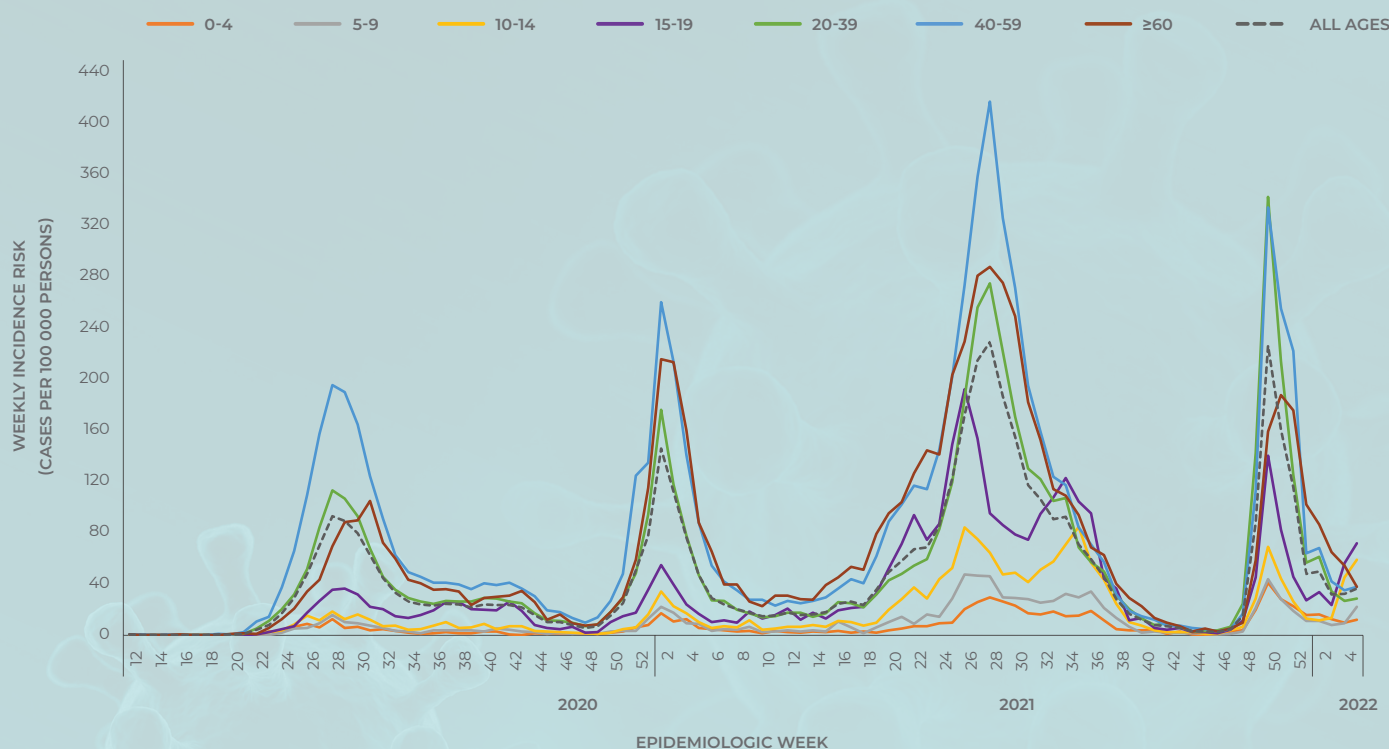


Figure 21. Weekly incidence risk of laboratory-confirmed cases of COVID-19 by age group in years and epidemiologic week North West Province 3 March 2020 – 29 January 2022 (n = 183 519, 2 405 missing age)

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Northern Cape Province

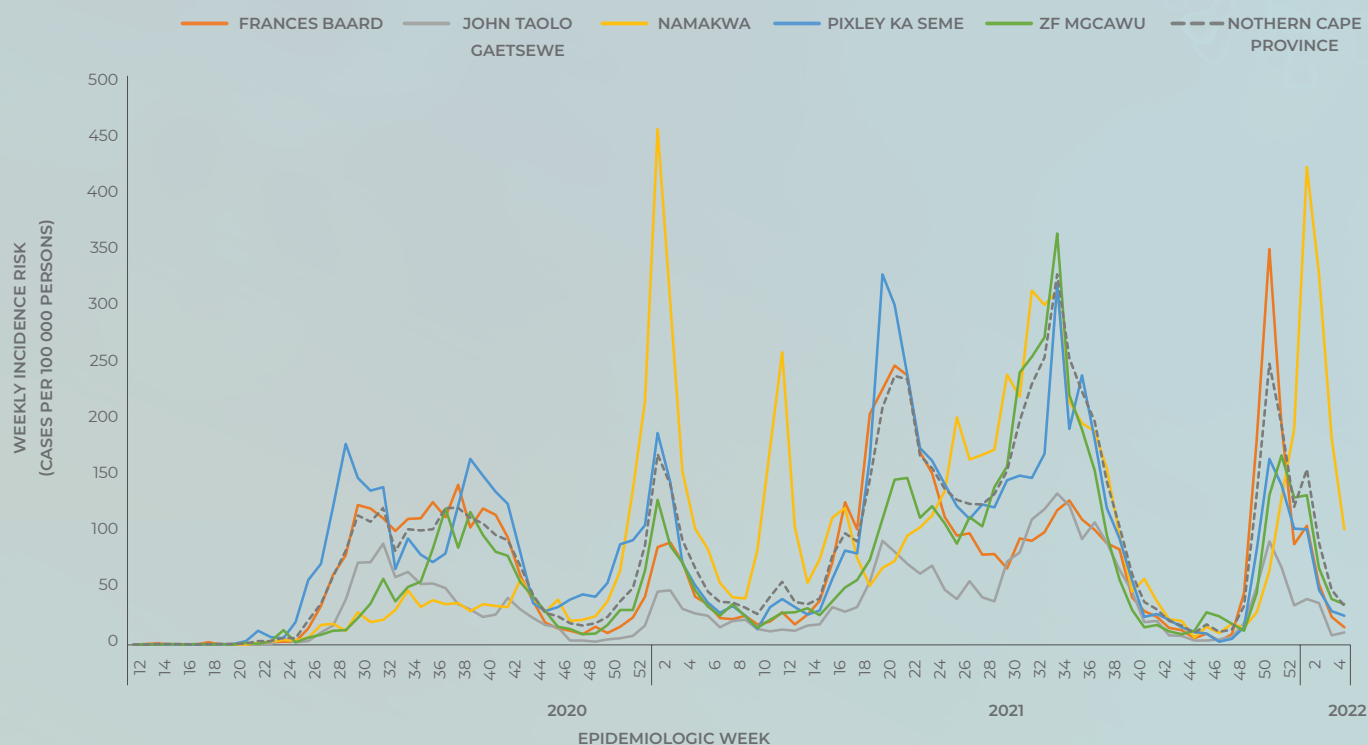


Figure 22. Weekly incidence risk of laboratory-confirmed cases of COVID-19 by district and epidemiologic week Northern Cape Province 3 March 2020 – 29 January 2022 (n = 81 745, 25 216 missing district)

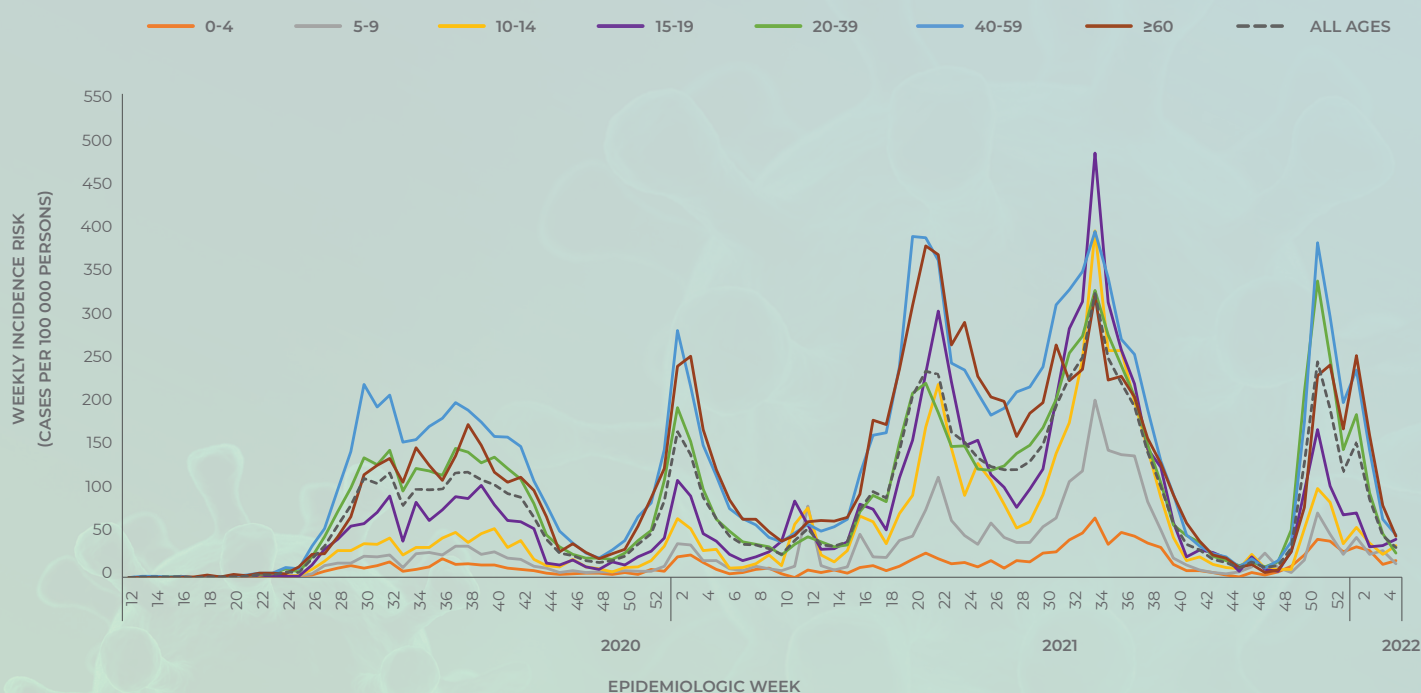


Figure 23 Weekly incidence risk of laboratory-confirmed cases of COVID-19 by age group in years and epidemiologic week Northern Cape Province 3 March 2020 – 29 January 2022 (n = 106 257, 704 missing age)

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..