COVID-19 WEEKLY EPIDEMIOLOGY BRIEF

NATIONAL INSTITUTE FOR COMMUNICABLE DISEASES
Division of the National Health Laboratory Service

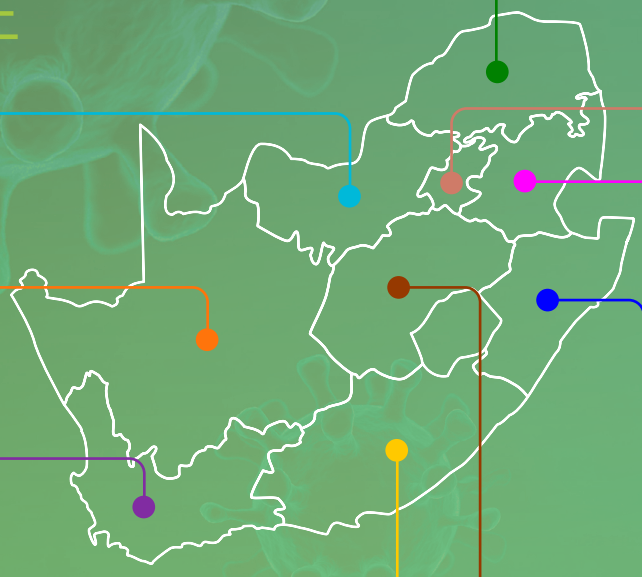
SOUTH AFRICA | WEEK **28** 2021

CUMULATIVE DATA FROM

03 MARCH 2020 — 17 JULY 2021

CASES	PERSONS
2 295 095 IN TOTAL	3 849,4 INCIDENCE RISK*
83 020 THIS WEEK**	40 MEDIAN AGE

PROVINCES AT A GLANCE



LIMPOPO
CASES: 101 960 IN TOTAL | 1 742,1 /100,000*

NORTH WEST
CASES: 117 530 IN TOTAL | 2 860,4 /100,000*

GAUTENG
CASES: 816 240 IN TOTAL | 5 270,1 /100,000*

NORTHERN CAPE
CASES: 63 416 IN TOTAL | 4 905,4 /100,000*

MPUMALANGA
CASES: 113 945 IN TOTAL | 2 434,8 /100,000*

WESTERN CAPE
CASES: 364 611 IN TOTAL | 5 204,5 /100,000*

KWAZULU-NATAL
CASES: 375 761 IN TOTAL | 3 258,5 /100,000*

EASTERN CAPE
CASES: 218 521 IN TOTAL | 3 245,0 /100,000*

FREE STATE
CASES: 123 111 IN TOTAL | 4 203,3 /100,000*

* **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 in South Africa. This report is based on data collected up to 17 July 2021 (week 28 of 2021). Note: COVID-19 is the name of the disease and SARS-CoV-2 is the name of the virus. 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. The numbers reported may change as more data become available.

Highlights

- As of 17 July 2021, a total of 2 295 095 laboratory-confirmed COVID-19 cases had been detected in South Africa. Of these, 99 496 were cases reported since the last report (week 27 of 2021). There was a 35.9% decrease in the number of new cases detected in week 28 of 2021 (83 020) compared to the number of new cases detected in week 27 of 2021 (129 443).
- An additional 3 477 deaths were reported since the last report. The overall case-fatality ratio is 3.0% (69 951/2 295 095).
- Similar to the previous few weeks, in the past week, the Gauteng Province reported the highest number of the new cases detected (35 495/83 020, 42.8%) followed by the Western Cape Province (14 833/83 020, 17.9%) and other provinces reported between 1.8% and 9.7% each.
- In the past week, all the provinces reported a decrease in weekly incidence risk, compared to the previous week. The decrease ranged from 7.3 cases per 100 000 persons (6.0% decrease) in the Northern Cape Province to 197.4 cases per 100 000 persons (46.3% decrease) in the Gauteng Province. Some of the reductions in weekly incidence risk maybe due to delayed reporting or decrease in testing.
- In the past week, the Gauteng Province reported the highest weekly incidence risk (229.2 cases per 100 000 persons), followed by the Western Cape Province (211.7 cases per 100 000 persons), the North West Province (162.3 cases per 100 000 persons), and the Limpopo Province (137.3 cases per 100 000 persons).

INCIDENCE RISK FOR CURRENT WEEK

139,2

CASES PER 100 000 PERSONS

42,8%

OF CASES REPORTED IN GAUTENG IN CURRENT WEEK

IN CURRENT WEEK, THE HIGHEST WEEKLY INCIDENCE RISK WAS IN CASES AGED 50-54 YEARS (305,3 CASES PER 100 000 PERSONS)

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 in 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 41 of 2020 onwards we used mid-year population estimates from Statistics South Africa for 2020 to calculate the incidence risk (cumulative or weekly incidence), expressed as cases per 100 000 persons. In historical 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. Aggregate data on the number of deaths by province were obtained from the Department of Health. 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 population. 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.

We estimated the time-varying (weekly) doubling time of the COVID-19 epidemic for the provinces with sufficient data and from weeks with sufficient number of cases and complete data (week 12 to the week before the current reporting period). The unit of analysis (epidemiological week) was defined from Sunday to the following Saturday. We first estimated the weekly growth rate of the epidemic by fitting a linear regression model to the logarithm of the daily cumulative number of laboratory-confirmed COVID-19 cases. We then estimated the doubling time for each week using the following formula log(2)/gr (where gr is the estimated weekly growth rate). An increase in the doubling time may suggest a slowing of transmission but this may also be affected by changes in testing strategy or care seeking. Until the week 29 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.

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

As of 17 July 2021, a total of 2 295 095 laboratory-confirmed COVID-19 cases were reported in South Africa (Figures 1 and 2). This is 99 496 more cases than the number reported in the last report (week 27 of 2021 report). The number of new cases detected in week 28 of 2021 (83 020) was lower than the number of new cases detected in week 27 of 2021 (129 443), this represented a 35.9% decrease in the number of new cases compared to the previous week. Similar to the previous few weeks, in the past week, the Gauteng Province reported the highest number of new cases (35 495/83 020, 42.8%) followed by Western Cape (14 833/83 020, 17.9%), and other provinces reported between 1.8% and 9.7% each (Table 1). Five provinces, Gauteng (816 240/2 295 095, 35.6%), KwaZulu-Natal (375 761/2 295 095, 16.4%), Western Cape (364 611/2 295 095, 15.9%), Eastern Cape (218 521/2 295 095, 9.5%), and Free State (123 111/2 295 095, 5.4%) continued to report the majority (1 898 244/2 295 095, 82.7%) of total COVID-19 cases in South Africa. In keeping with the data reported in the previous weeks, there was minimal change in percent contribution of cases in the different provinces from week 27 to week 28 of 2021.

The cumulative incidence risk for the country increased from 3 710.1 cases per 100 000 persons in week 27 of 2021 to 3 849.4 cases per 100 000 persons in week 28 of 2021. The cumulative incidence risk varied by province over time (Figure 3). This is partly explained by testing differences by province (Table 1). The Gauteng Province reported the highest cumulative incidence risk (5 270.1 cases per 100 000 persons), followed by the Western Cape Province (5 204.5 cases per

100 000 persons), the Northern Cape Province (4 905.4 cases per 100 000 persons), the Free State Province (4 203.3 cases per 100 000 persons), the KwaZulu-Natal Province (3 258.5 cases per 100 000 persons), and the Eastern Cape Province (3 245.0 cases per 100 000 persons). The other provinces continued to report cumulative incidence risk below 3 000 cases per 100 000 persons, with Limpopo Province reporting the lowest cumulative incidence risk (1 742.1 cases per 100 000 persons).

In the past week, the Gauteng Province reported the highest weekly incidence risk (229.2 cases per 100 000 persons), followed by the Western Cape Province (211.5 cases per 100 000 persons), the North West Province (162.3 cases per 100 000 persons), and the Limpopo Province (137.3 cases per 100 000 persons). In the past week, all the provinces reported a decrease in weekly incidence risk, compared to the previous week (Figure 4). The decrease ranged from 7.3 cases per 100 000 persons (6.0% decrease) in the Northern Cape Province to 197.4 cases per 100 000 persons (46.3% decrease) in the Gauteng Province. Some of the reductions in weekly incidence risk in the past week maybe due to delayed reporting. From week 19 of 2021 to week 26 of 2021, all provinces (various weeks) reported weekly incidence risk higher than that reported either in the first or second wave peak, except the Free State, Eastern Cape and KwaZulu-Natal provinces, which continued reporting weekly incidence below the first and second wave peaks.

Among the five provinces reporting the majority of cases in South Africa to date, doubling time of number of cases varied with time. In week 27 of 2021, the estimated doubling time of number of cases decreased in all provinces, except the Free State Province (from 146.2 days to 151.0 days, 3.3% increase) and Gauteng Province (from 35.5 days to 49.3 days, 38.7% increase), which reported an increase in the estimated doubling time. The estimated doubling time decreased in the Eastern Cape Province (from 214.0 days to 200.8 days, 6.2% decrease), KwaZulu-Natal Province (from 178.2 days to 148.7 days, 16.5% decrease), and the Western Cape Province (from 94.0 days to 91.2 days, 3.0% decrease) (Figure 5).
The case-fatality ratio (CFR) was 3.0% (69 951/2 295 095); an additional 3 477 deaths were reported since the last report. The number of deaths reported in the past week was higher than the number reported in the previous week, 3 477 deaths compared to 2 968 deaths. A CFR calculated in this way (number of deaths/number of diagnosed cases) is subject to numerous limitations. Because deaths are delayed in relation to cases, as case numbers decrease rapidly, the crude CFR may increase as a result of a more rapid reduction in the denominator compared to the numerator. The CFR may be an underestimate as deaths in hospital are more likely to be reported than deaths out of hospital. In addition, occurrence and reporting of deaths may be delayed to several weeks after case diagnoses.

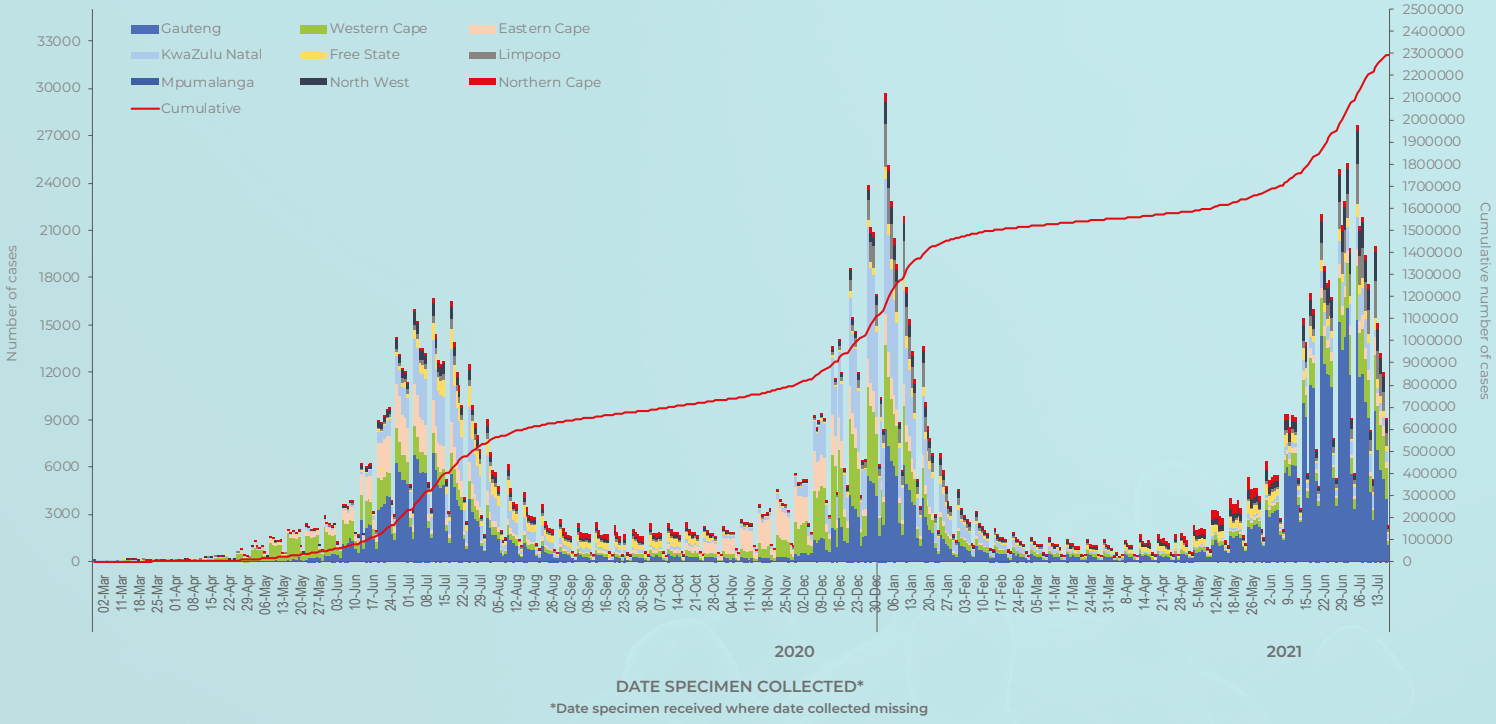


Figure 1. Number and cumulative number of laboratory-confirmed cases of COVID-19 by province and date of specimen collection, South Africa, 3 March 2020 –17 July 2021 (n=2 295 095)

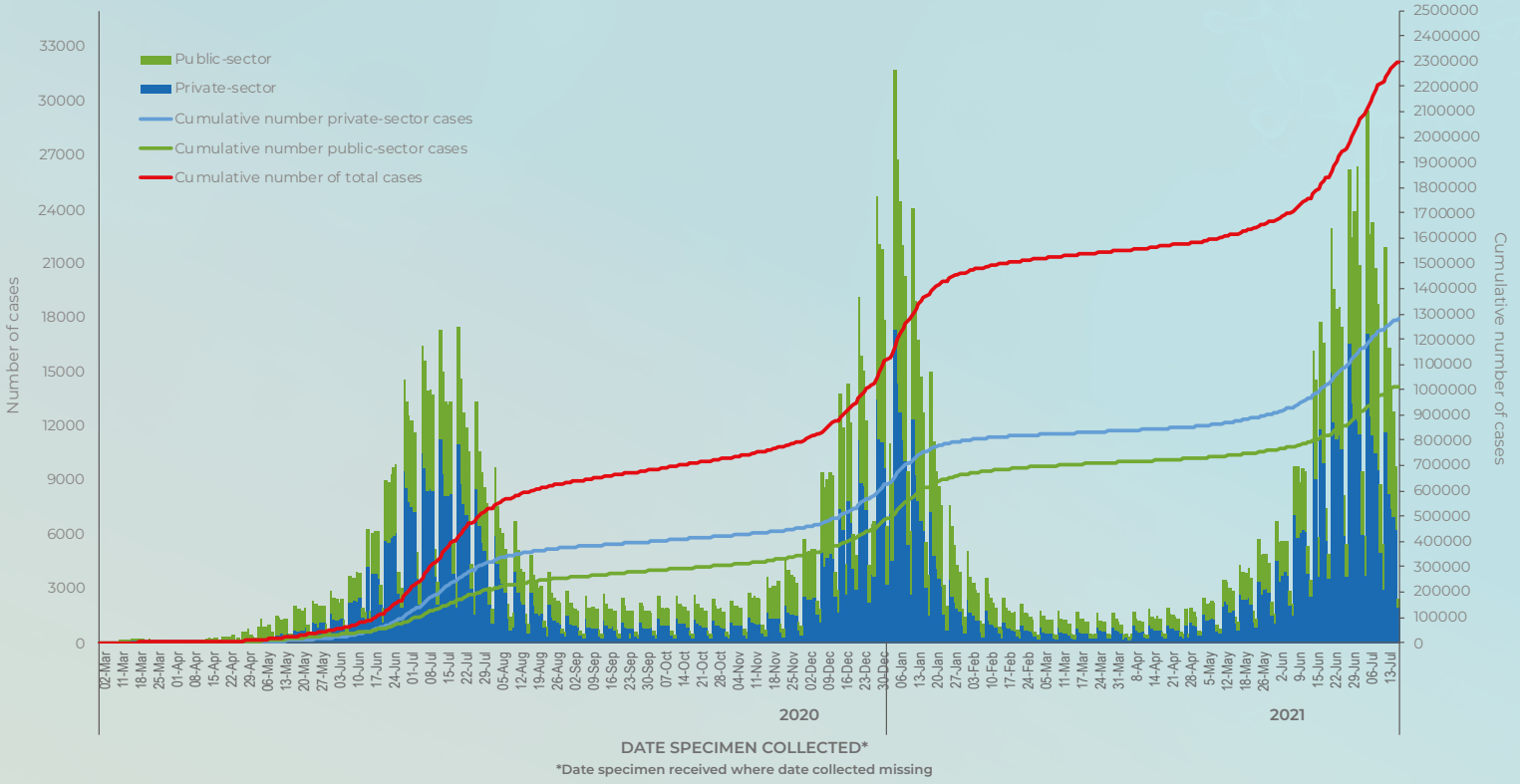


Figure 2. Number and cumulative number of laboratory-confirmed cases of COVID-19, by testing laboratory sector and date of specimen collection, South Africa, 10 March 2020 –17 July 2021 (n=2 295 095)

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 –17 July 2021 (n=2 295 095)

Province	Cumulative cases (n) (percentage, n/ total cases in South Africa)	New cases[1] detected in week 28 (11-17 July 2021), n (percentage[2], n/total)	Population in mid-2020[3], n	Cumulative incidence risk (cases per 100 000 persons)	Incidence risk of new cases detected in week 28 of 2021 (cases/100 000 persons)	Tests[4] per 100 000 persons, 11-17 July 2021
Eastern Cape	218 521 (9.5)	3 987 (4.8)	6 734 001	3 245.0	59.2	348.7
Free State	123 111 (5.4)	2 578 (3.1)	2 928 903	4 203.3	88.0	453.9
Gauteng	816 240 (35.6)	35 492 (42.8)	15 488 137	5 270.1	229.2	720.7
KwaZulu-Natal	375 761 (16.4)	3 860 (4.6)	11 531 628	3 258.5	33.5	207.3
Limpopo	101 960 (4.4)	8 037 (9.7)	5 852 553	1 742.1	137.3	313.0
Mpumalanga	113 945 (5.0)	6 088 (7.3)	4 679 786	2 434.8	130.1	383.7
North West	117 530 (5.1)	6 667 (8.0)	4 108 816	2 860.4	162.3	498.7
Northern Cape	63 416 (2.8)	1 478 (1.8)	1 292 786	4 905.4	114.3	536.7
Western Cape	364 611 (15.9)	14 833 (17.9)	7 005 741	5 204.5	211.7	794.6
Unknown						
Total	**2 295 095**	**83 020**	**59 622 350**	**3 849.4**	**139.2**	**489.2**

[1]New cases refer to cases whose samples were collected or received in the current reporting week; [2]Percentage=n/total number of new cases (specimen collected or received in current reporting week); [3]2020 Mid-year population Statistics South Africa [4]Data on number of tests conducted sourced from COVID-19 weekly testing report of the same reporting week

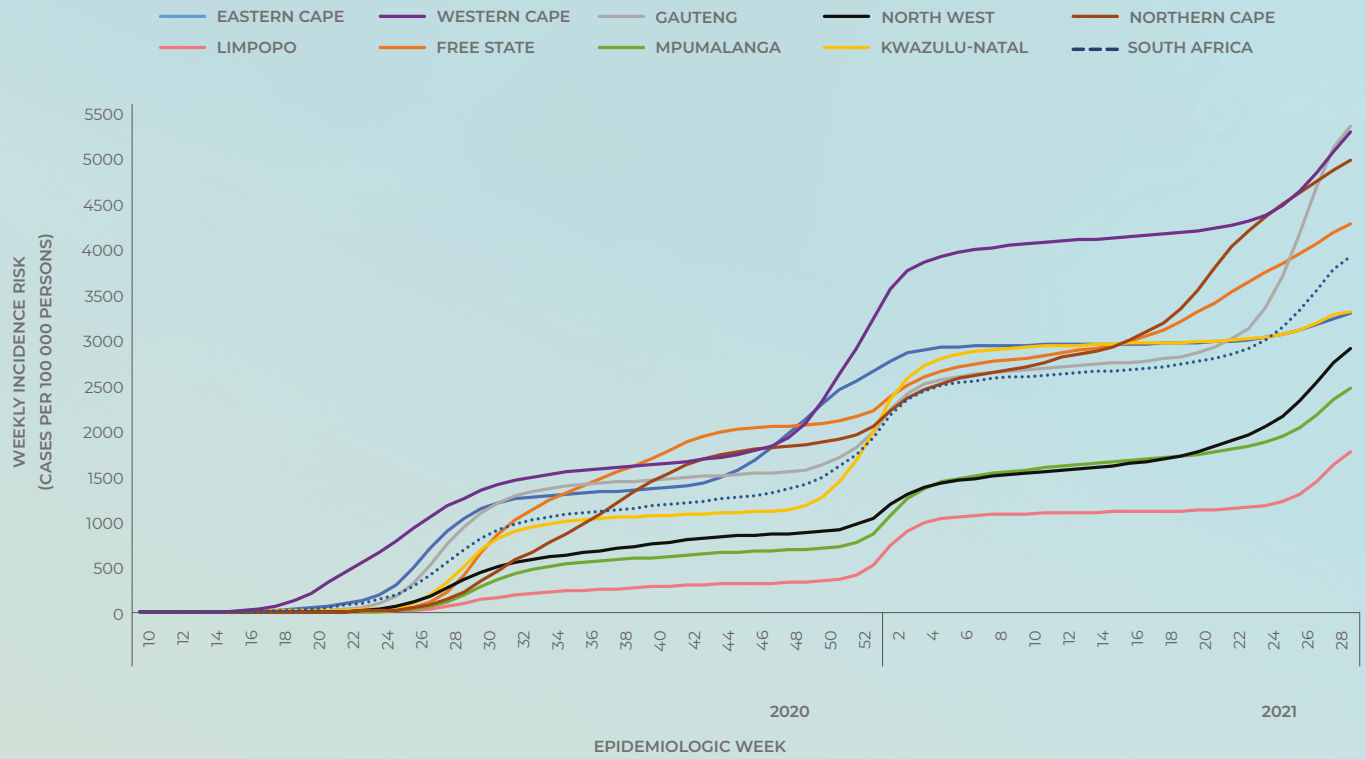


Figure 3. Cumulative incidence risk of laboratory-confirmed cases of COVID-19 by province and epidemiologic week, South Africa, 3 March 2020 –17 July 2021 (n=2 295 095)

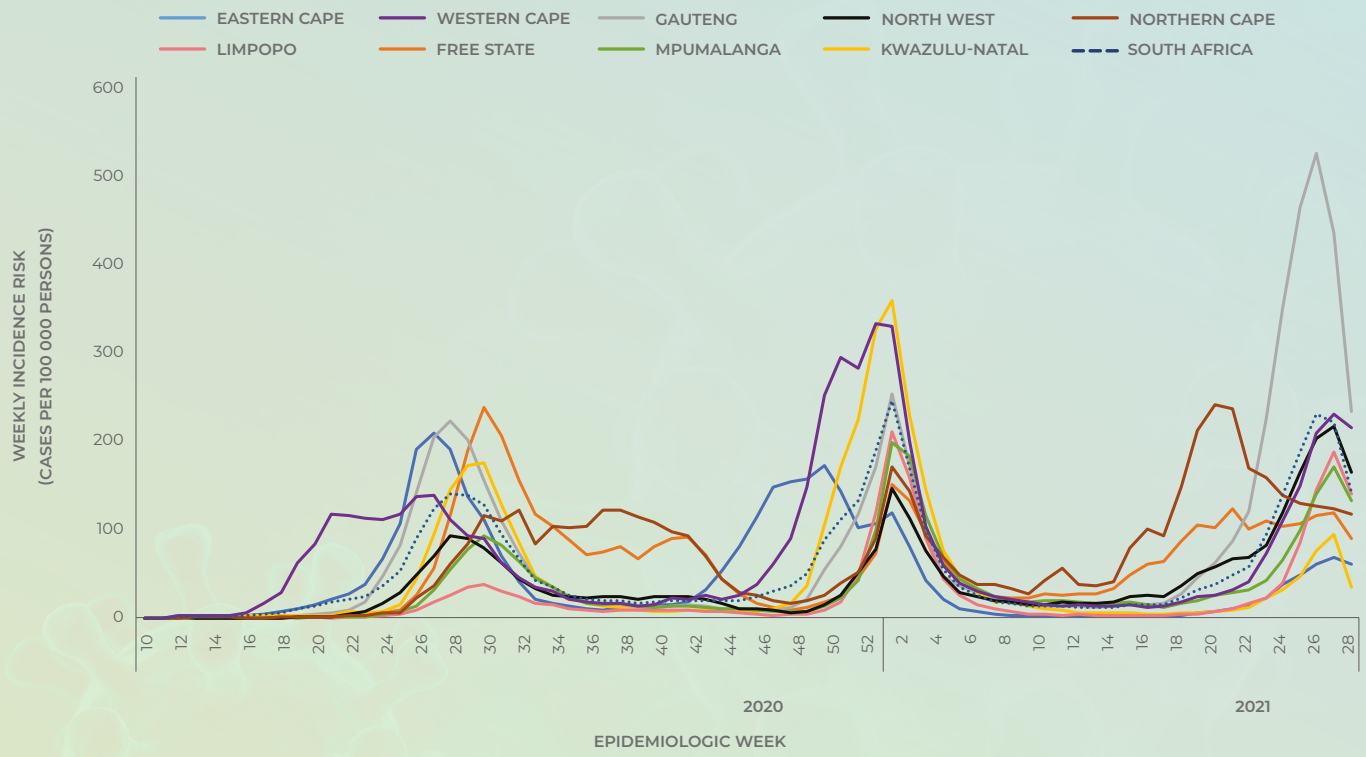


Figure 4. Weekly incidence risk of laboratory-confirmed cases of COVID-19 by province and epidemiologic week, South Africa, 3 March 2020 –17 July 2021 (n=2 295 095)

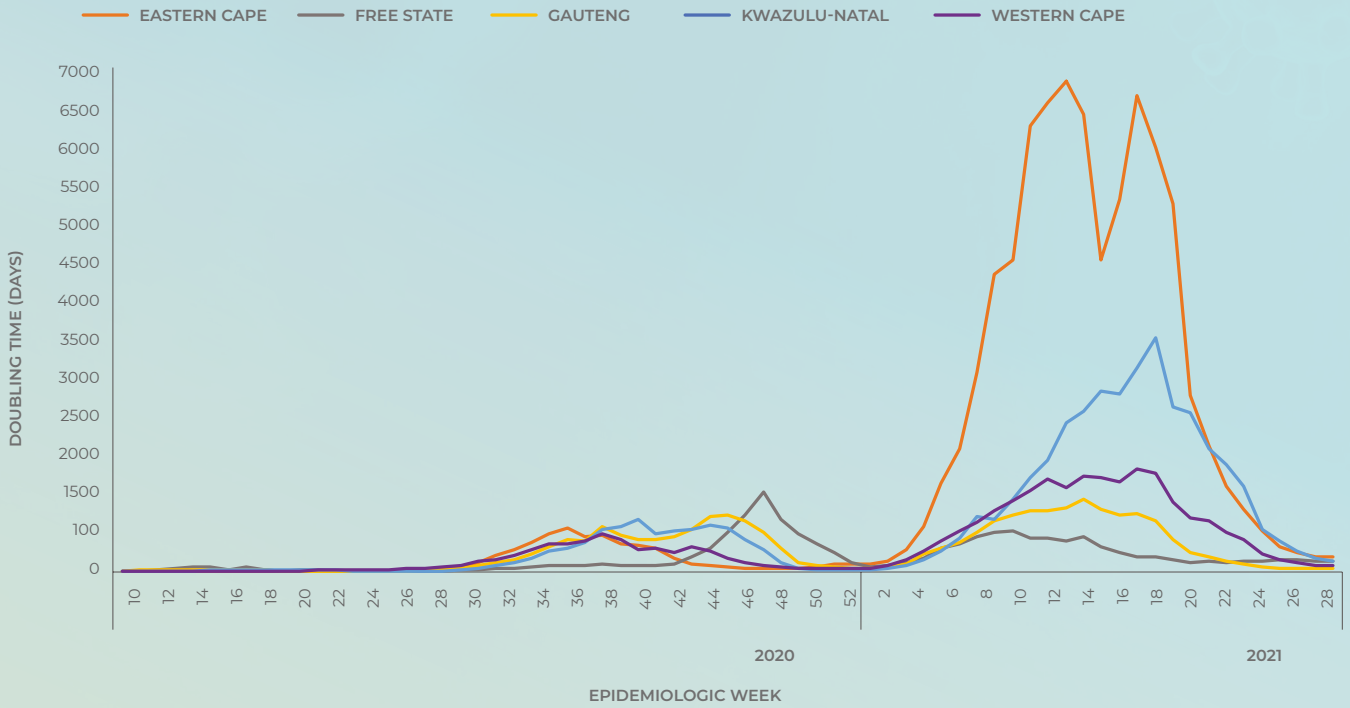


Figure 5. Doubling time of number of laboratory-confirmed cases of COVID-19 by province (for 5 provinces with the majority of cases) and epidemiologic week, South Africa, 23 March-2020 –10 July 2021 (n=2 211 988)

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

Cases of COVID-19 were reported across all age groups. The median age of COVID-19 cases in South Africa to date was 40 years with an interquartile range (IQR) of 29-53 years. The distribution of cases varied by age, with highest number of all cases to date in the 35-39-year (264 944/2 274 555, 11.6%) and 30-34-year (255 108/2 274 555, 11.2%) age groups (Figure 6). Similarly, among the cases reported in the past week, the highest number of cases was in the 35-39-year (9 942/82 094, 12.1%), and 30-34-year (9 187/82 094, 11.2%) age groups. The median age for cases reported in week 28 of 2021 was the same (40 years, IQR 30-52), as that of total cases (40 years). The highest cumulative incidence risk remained among cases aged 50-54 years (7 942.7 cases per 100 000 persons), followed by cases aged 55-59-year (7 647.0 cases per 100 000 persons) and cases aged ≥80 years (7 434.8 cases per 100 000 persons). The lowest cumulative incidence risk was reported in the younger age-groups, 476.6 cases per 100 000 persons and 644.2 cases per 100 000 persons in the 0-4-and 5-9-year age groups, respectively (Figure 7 and Table 2). The highest weekly incidence risk among cases detected in week 28 of 2021 was reported in cases 50-54 years (305.3 cases per 100 000 persons), followed by cases in the 55-59-year age group (303.4 cases per 100 000 persons), and the lowest weekly incidence risk was in the 0-4-year age group (19.7 cases per 100 000 persons) (Figure 8 and Table 2).

To date, the majority of COVID-19 cases reported were female 56.9% (1 293 609/2 272 343). This trend continued in the past week where 54.7% (44 962/82 265) of cases were female. The cumulative incidence risk has remained consistently higher among females (4 206.6 cases per 100 000 persons) than among males (3 333.4 cases per 100 000 persons) (Figure 9). The peak cumulative incidence risk was in the 50-54-year-age group (8 157.1 cases per 100 000 persons) for females, and in the ≥80-year-age group (7 933.1 cases per 100 000 persons) for males (Figure 10). In week 28 of 2021, the highest weekly incidence risk was in the 50-54-year age group for females (299.7 cases per 100 000 persons) and 55-59-year age group for males (321.4 cases per 100 000 persons). The higher prevalence and incidence risk among females compared to males could be explained by the fact that females are likely to be more represented in occupations, which put them in close proximity to others and thus exposing them to a higher risk of infection (e.g. teaching and health). This may also be partly explained by varying testing practices by age and sex (data not shown) and by different health seeking behaviour.

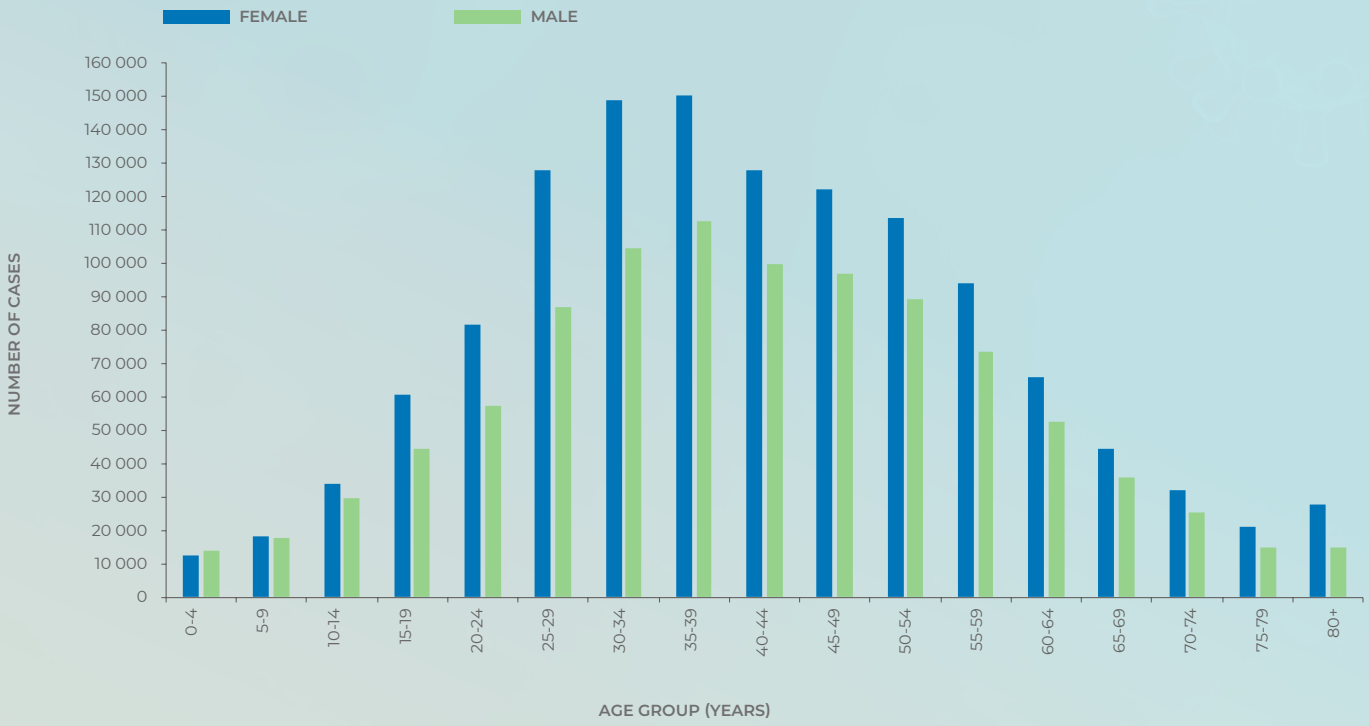


Figure 6. Number of laboratory-confirmed cases of COVID-19 by age group and sex, South Africa, 3 March 2020 –17 July 2021 (n=2 253 707, sex/age missing for 41 388)

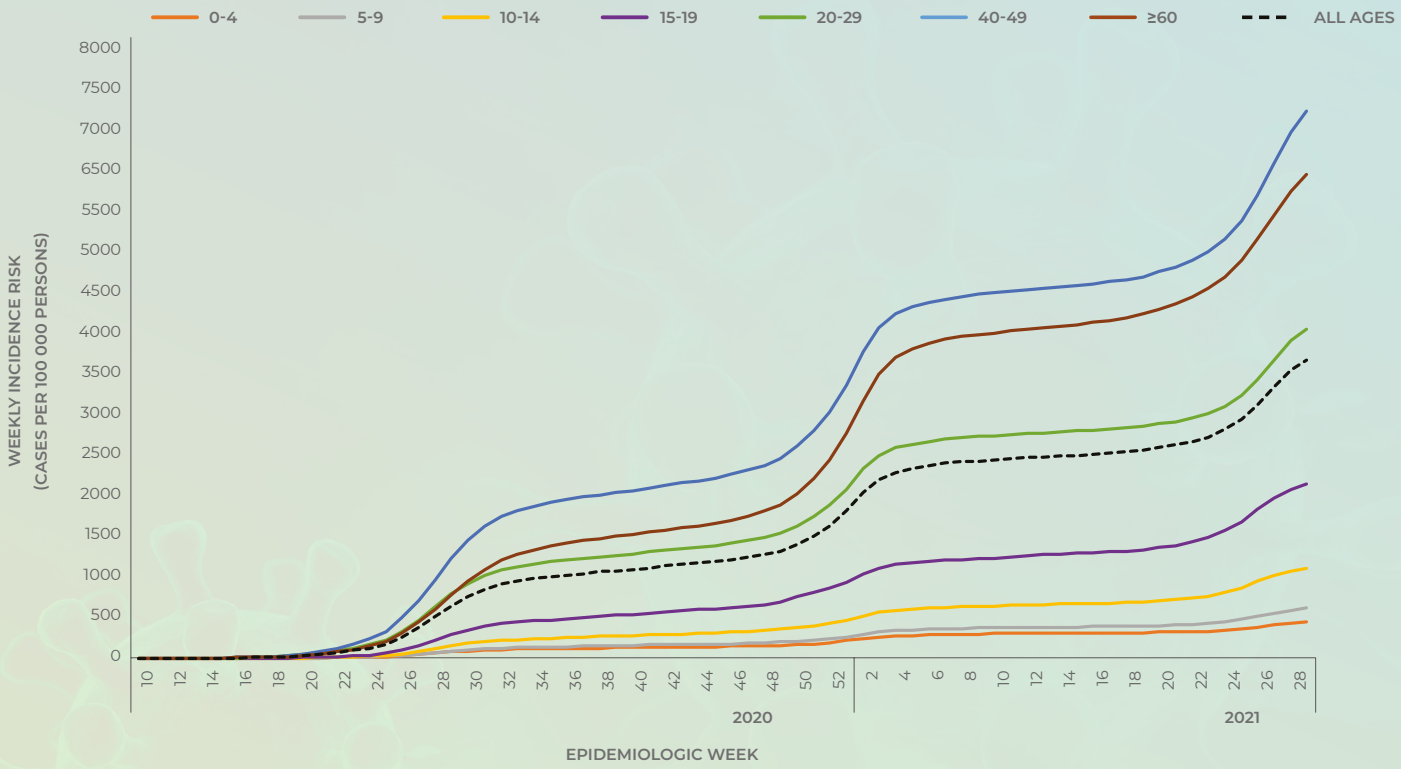


Figure 7. Cumulative incidence risk of laboratory-confirmed cases of COVID-19 by age group in years and epidemiologic week, South Africa, 3 March 2020-17 July 2021 (n=2 274 555, 20 540 missing age)

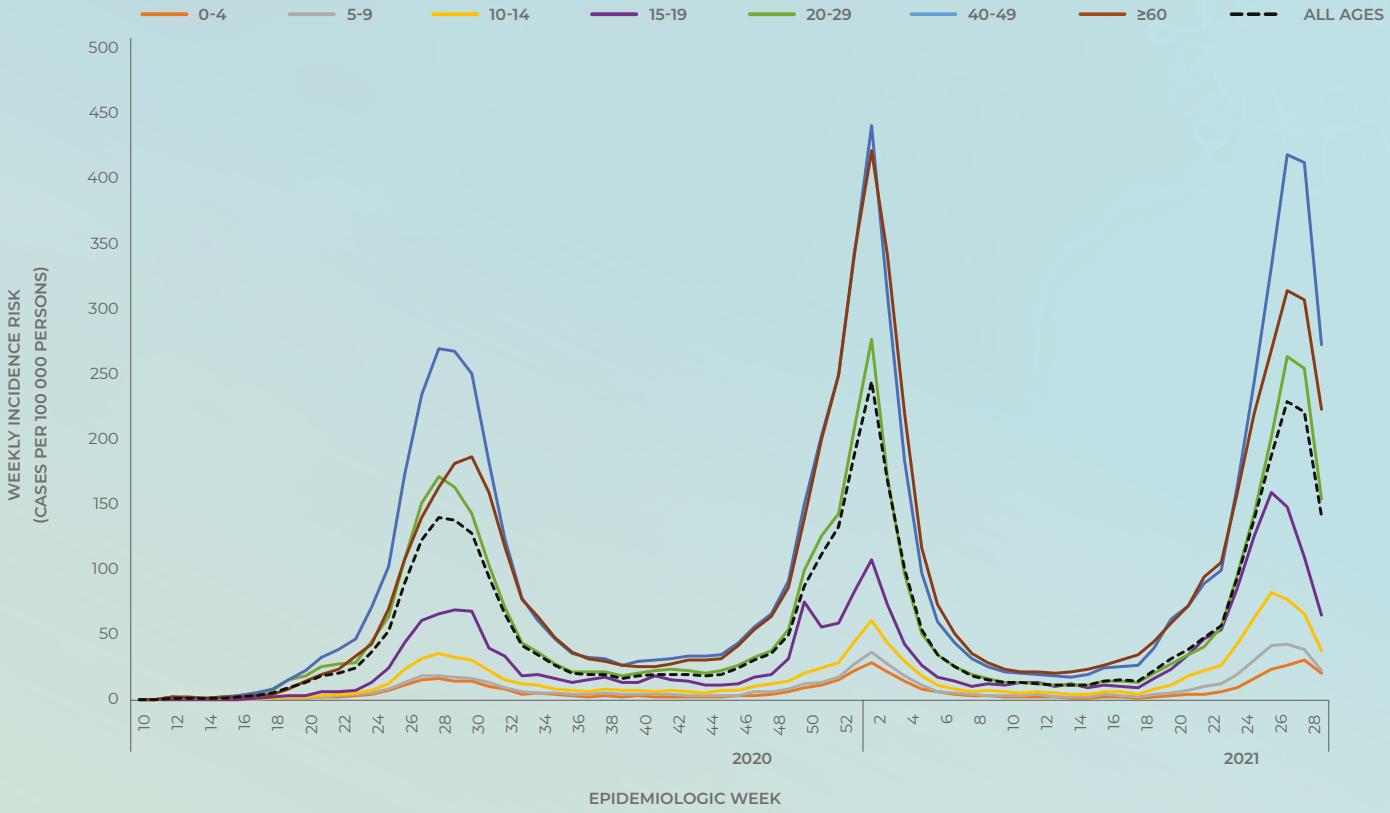


Figure 8. Weekly incidence risk of laboratory-confirmed cases of COVID-19 by age group in years and epidemiologic week, South Africa, 3 March 2020 -17 July 2021 (n=2 274 555, 20 540 missing age)

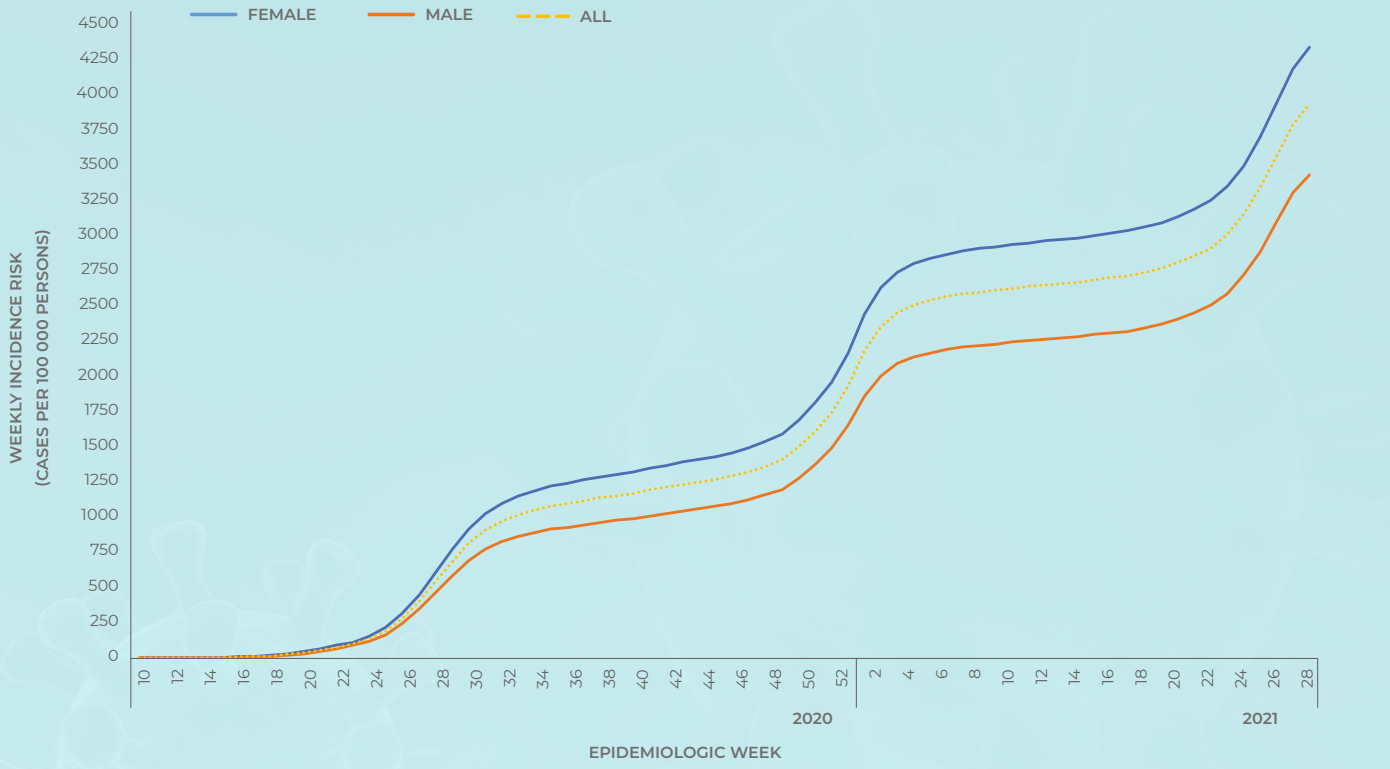


Figure 9. Cumulative incidence risk by sex and epidemiologic week, South Africa, 3 March 2020 –17 July 2021 (n=2 272 343, sex missing for 22 752)

Table 2. Number of laboratory-confirmed cases of COVID-19 and cumulative/weekly incidence risk by age group, South Africa, 3 March 2020 –17 July 2021, n=2 274 555, 20 540 missing age)

Age group (years)	Cumulative cases (n) (percentage, n/ total cases in South Africa)	New cases[1] detected in week 28 (11-17 July 2021), n (percentage[2], n/total)	Population in mid-2020[3], n	Cumulative incidence risk (cases per 100 000 persons)	Incidence risk of new cases detected in week 28 of 2021 (cases/100 000 persons)
0-4	27 373 (1.2)	1 129 (1.4)	5 743 450	476.6	19.7
5-9	36 825 (1.6)	1 270 (1.5)	5 715 952	644.2	22.2
10-14	65 231 (2.9)	2 066 (2.5)	5 591 553	1 166.6	36.9
15-19	106 885 (4.7)	3 052 (3.7)	4 774 579	2 238.6	63.9
20-24	140 568 (6.2)	4 834 (5.9)	4 823 367	2 914.3	100.2
25-29	216 291 (9.5)	7 379 (9.0)	5 420 754	3 990.1	136.1
30-34	255 108 (11.2)	9 187 (11.2)	5 641 750	4 521.8	162.8
35-39	264 944 (11.6)	9 942 (12.1)	4 798 293	5 521.6	207.2
40-44	229 393 (10.1)	8 395 (10.2)	3 733 942	6 143.5	224.8
45-49	220 672 (9.7)	8 372 (10.2)	3 169 648	6 962.0	264.1
50-54	204 227 (9.0)	7 851 (9.6)	2 571 263	7 942.7	305.3
55-59	169 098 (7.4)	6 710 (8.2)	2 211 309	7 647.0	303.4
60-64	119 444 (5.3)	4 052 (4.9)	1 796 316	6 649.4	225.6
65-69	80 756 (3.6)	2 699 (3.3)	1 408 665	5 732.8	191.6
70-74	57 948 (2.5)	2 051 (2.5)	1 007 174	5 753.5	203.6
75-79	36 873 (1.6)	1 438 (1.8)	637 062	5 788.0	225.7
≥80	42 919 (1.9)	1 667 (2.0)	577 273	7 434.8	288.8
Unknown	20 540	926			
Total	**2 295 095**	**83 020**	**59 622 350**	**3 849.4**	**139.2**

[1]New cases refer to cases whose samples were collected or received in the current reporting week; [2]Percentage=n/total number of new cases (specimen collected or received in current reporting week); [3]2020 Mid-year population Statistics South Africa

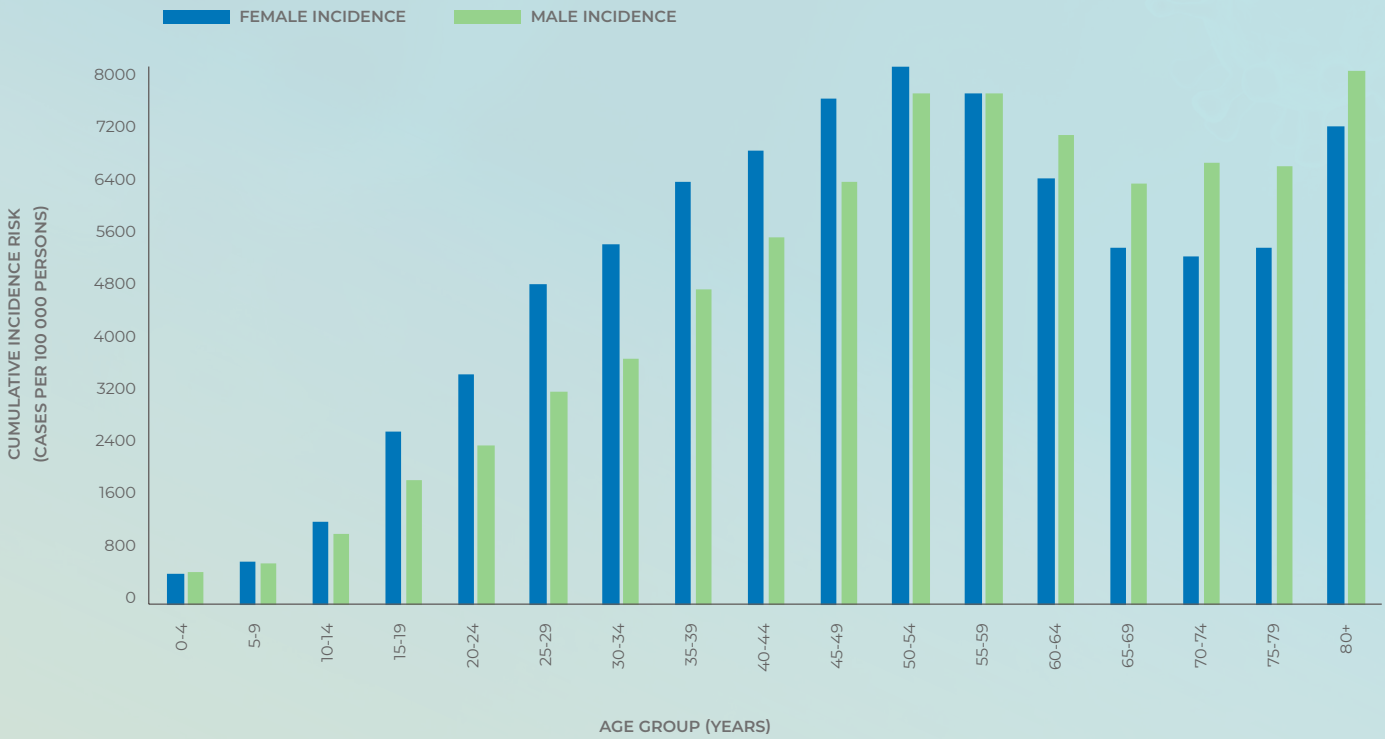


Figure 10. Cumulative risk by age group and sex, South Africa, 3 March 2020 –17 July 2021 (n=2 253 707, sex/age missing for 41 388)

Provincial trends of COVID-19 cases

Following the decline in the number of new cases since week 2 of 2021, from week 10 of 2021 to date several provinces have reported an increase in weekly incidence risk which varied by province and week. In week 18 of 2021, all provinces reported an increase in weekly incidence. Whereas in week 28 of 2021 all provinces reported a decrease in weekly incidence risk, compared to the previous week. Some of the reductions in weekly incidence risk may be due to delayed reporting or reduction in testing. Changes in trends by district and age group for each province are presented below.

Eastern Cape Province

Of the 218 521 cases reported from the Eastern Cape Province, 195 181 (89.3%) cases had allocation by district. Eastern Cape Province has been experiencing a steady increase in weekly incidence risk from week 18 to week 27 of 2021. The increase in the Eastern Cape Province is mainly driven by Nelson Mandela Bay Metro and Sarah Baartman District, which have been reporting a higher weekly incidence from week 20 of 2021 to date, compared to other districts. In the past week, all the districts reported a decrease in weekly incidence risk, except the OR Tambo (2.7 cases per 100 000 persons, 37.3% increase) and Chris Hani (3.4 cases per 100 000 persons, 9.5% increase) districts, which reported an increase in weekly incidence risk, compared to the previous week (Figure 11). The decrease ranged from 0.4 cases per 100 000 persons (3.7% decrease) in the Alfred Nzo District to 30.9 cases per 100 000 persons (16.9% decrease) in the Nelson Mandela Bay Metro.

In the past week, all the age groups reported a decrease in weekly incidence risk, except the 5-9-year age group, which reported an increase in weekly incidence risk (1.3 cases per 100 000 persons, 8.9% increase), compared to the previous week (Figure 12). The decrease ranged from 0.4 cases per 100 000 persons (4.5% decrease) in the 0-4-year to 13.4 cases per 100 000 persons (10.5% decrease) in the 40-59-year age groups.

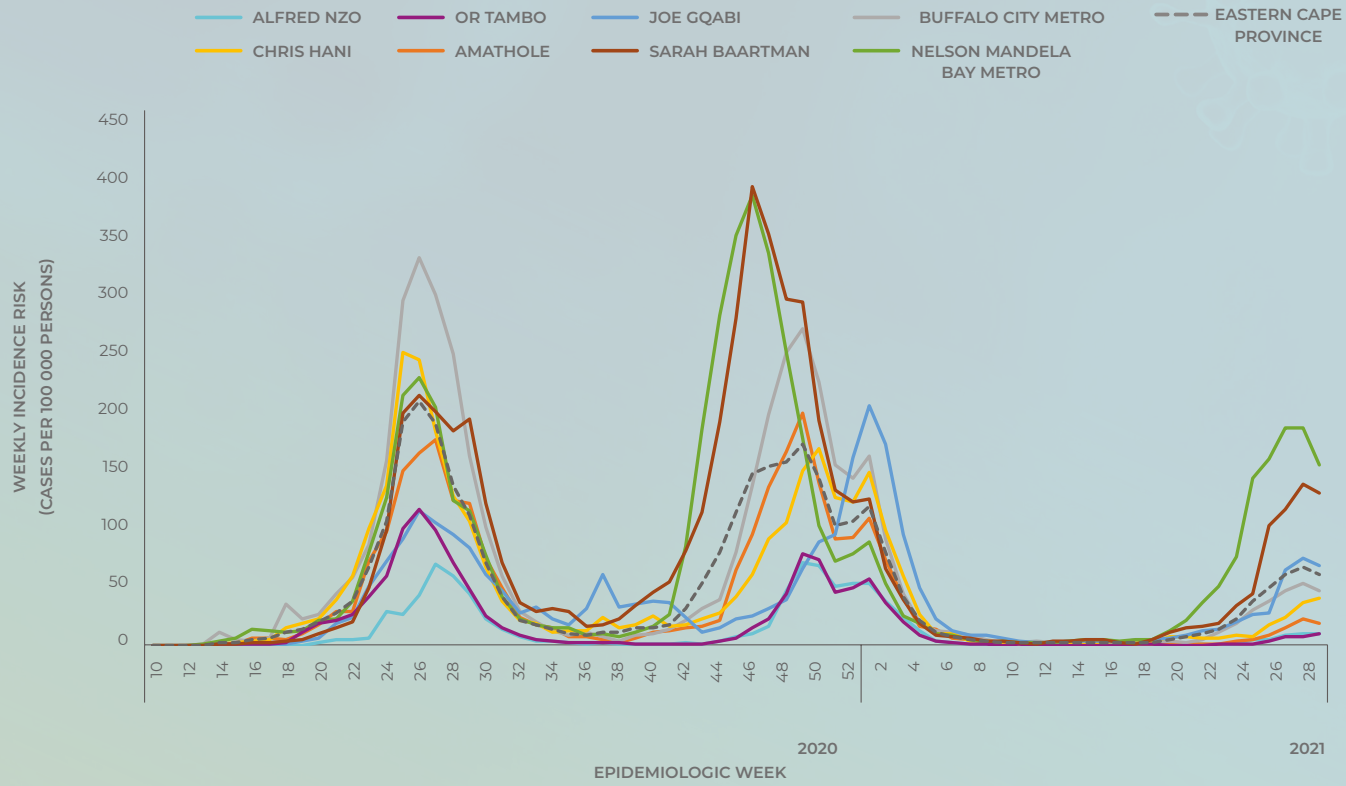


Figure 11. Weekly incidence risk of laboratory-confirmed cases of COVID-19 by district and epidemiologic week, Eastern Cape Province, 3 March 2020 –17 July 2021 (n=195 181, 23 340 missing district)

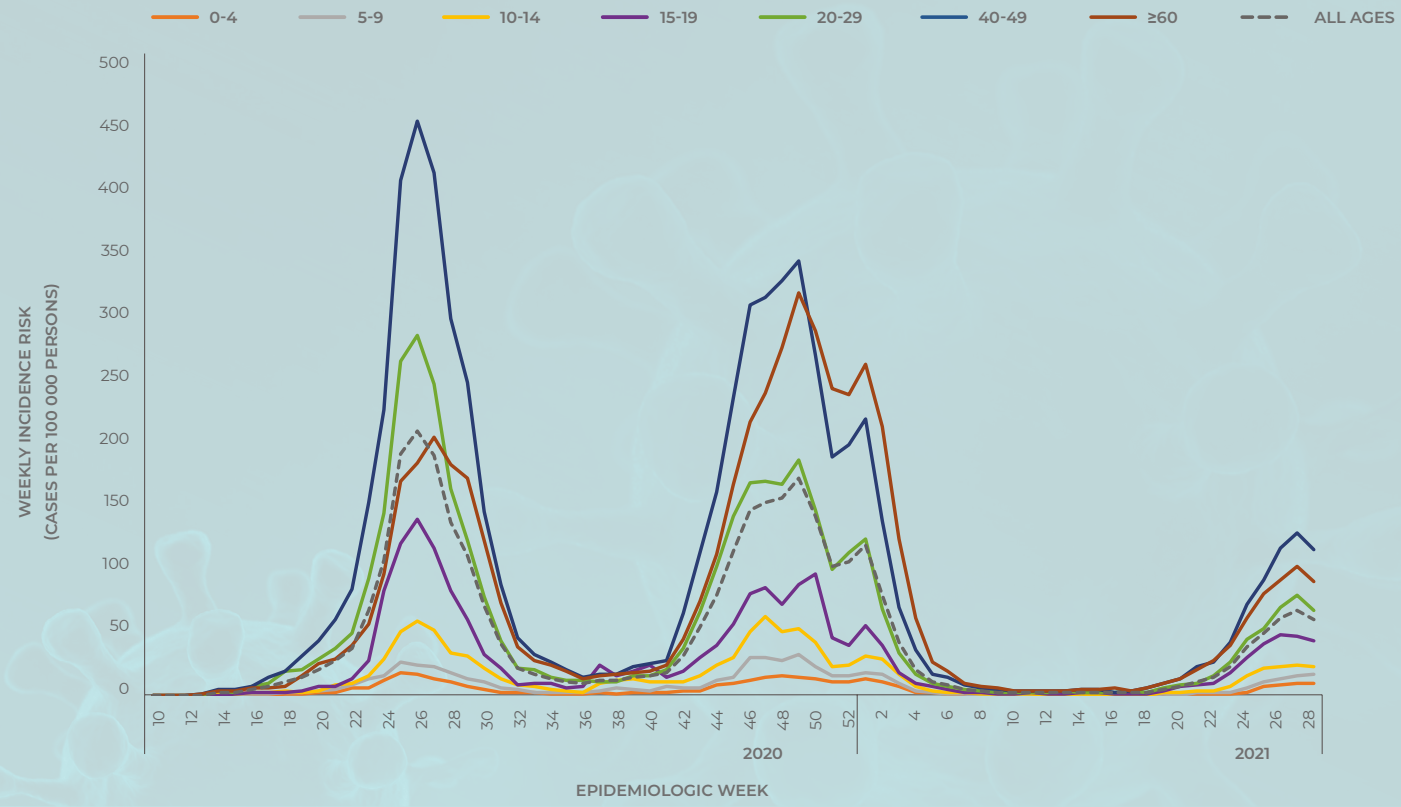


Figure 12. Weekly incidence risk of laboratory-confirmed cases of COVID-19 by age group in years and epidemiologic week, Eastern Cape Province, 3 March 2020 –17 July 2021 (n=216 302, 2 219 missing age)

Western Cape Province

Of the 364 611 cases reported from the Western Cape Province, 345 710 (94.8%) cases had allocation by district. In week 28 of 2021, all the districts reported a decrease in weekly incidence risk, except the West Coast (5.2 cases per 100 000 persons, 2.4% increase) and the Central Karoo (59.9 cases per 100 000 persons, 50.6% increase) districts, which reported an increase in weekly incidence risk, compared to the previous week (Figure 13). From week 26 of 2021 to date, all the districts reported weekly incidence risk higher than that reported in the first wave peak, except the Central Karoo District, which continued to report weekly incidence below the first wave peak.

In the past week, all the age groups reported a decrease in weekly incidence risk, except the 0-4-year age group, which reported an increase in weekly incidence risk (1.6 cases per 100 000 persons, 5.8% increase), compared to the previous week (Figure 14). From week 26 of 2021 to date, all the age groups reported weekly incidence risk higher than that reported in the first wave peak.

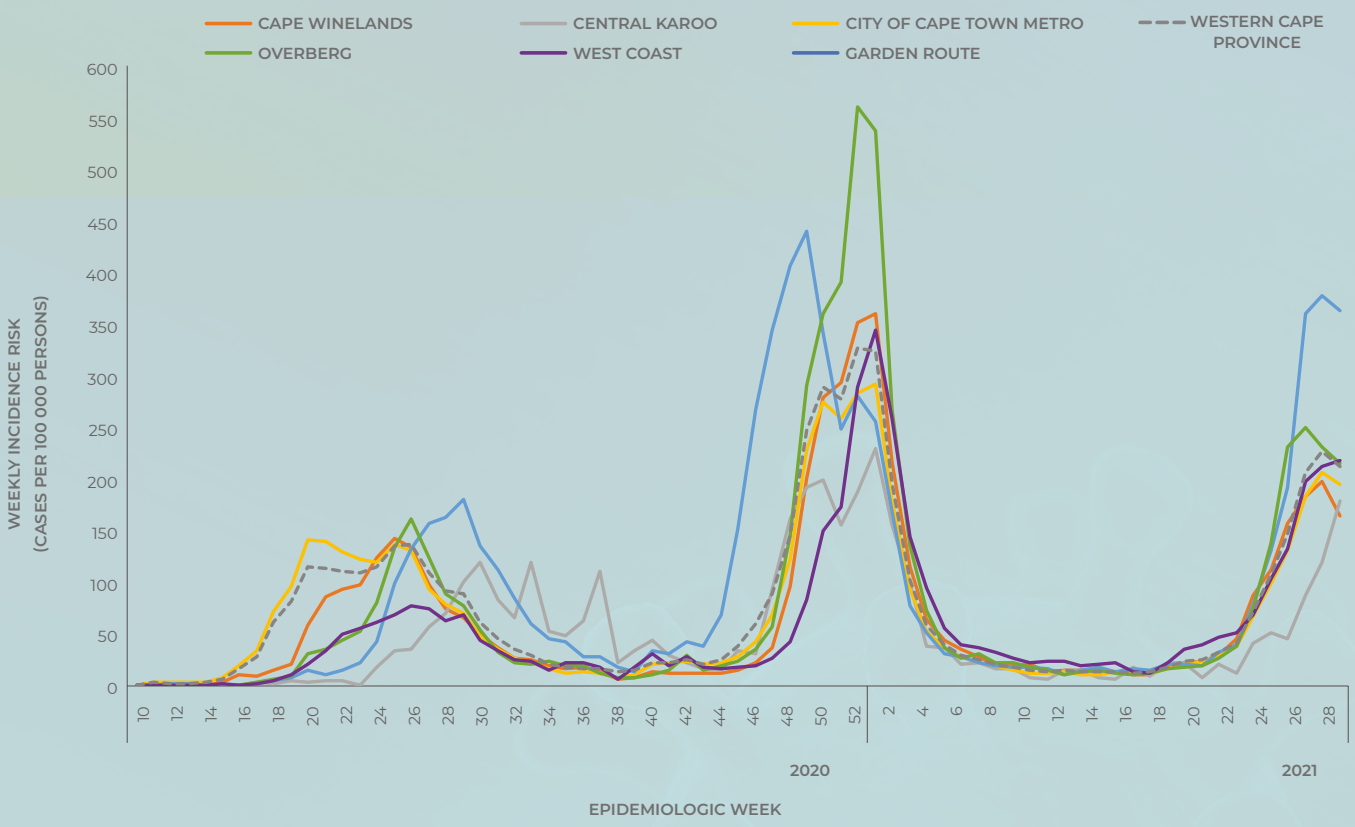


Figure 13. Weekly incidence risk of laboratory-confirmed cases of COVID-19 by district and epidemiologic week, Western Cape Province, 3 March 2020 –17 July 2021 (n=345 710, 18 901 missing district)

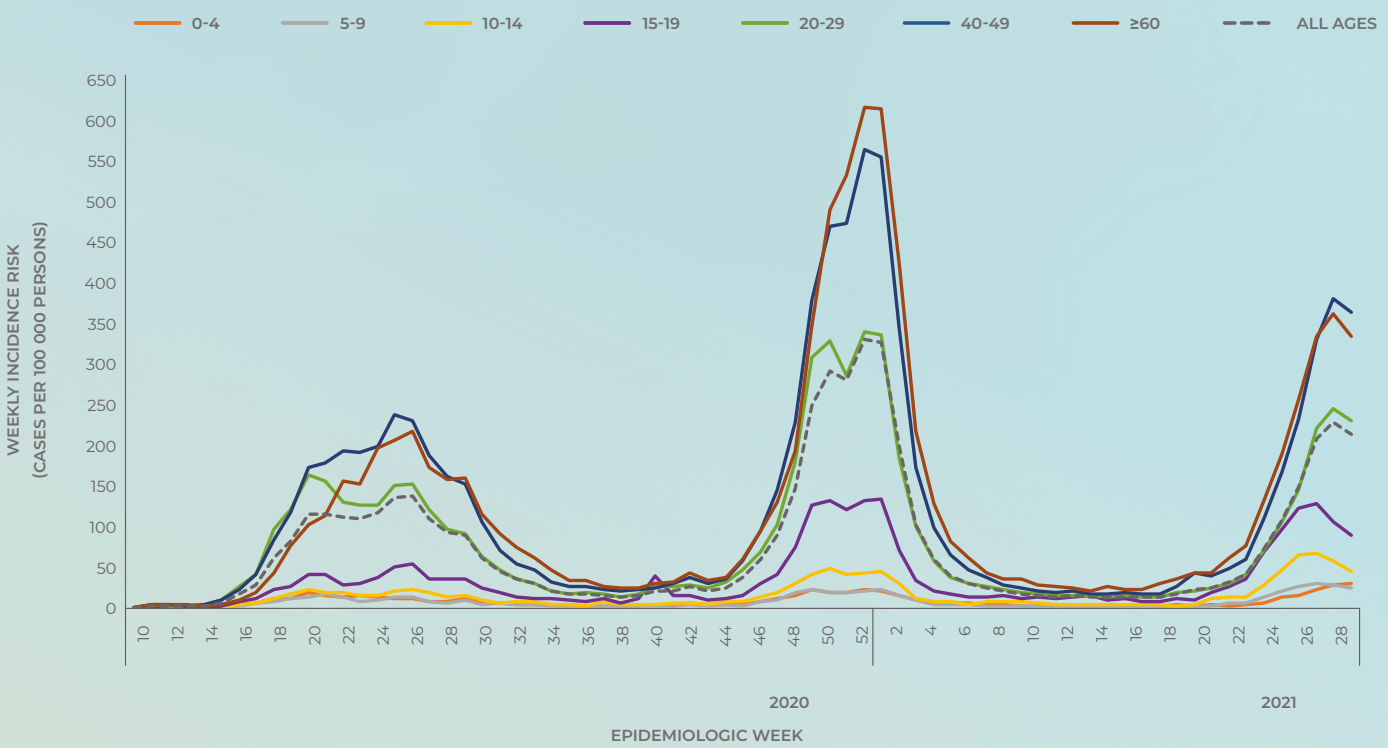


Figure 14. Weekly incidence risk of laboratory-confirmed cases of COVID-19 by age group in years and epidemiologic week, Western Cape Province, 3 March 2020 –17 July 2021 (n=363 465, 1 146 missing age)

Gauteng Province

Of the 816 240 cases reported from the Gauteng Province, 701 600 (86.0%) had allocation by district. The Gauteng Province has been reporting a sustained steady increase in weekly incidence from week 18 to week 26 of 2021. In the past week, all the districts reported a decrease in weekly incidence risk, compared to the previous week (Figure 15). The decrease ranged from 133.9 cases per 100 000 persons (40.8% decrease) in the Sedibeng District to 180.1 cases per 100 000 persons (50.9% decrease) in the City of Johannesburg Metro. Some of the decrease in weekly incidence risk maybe due to delayed reporting. From week 25 to week 27 of 2021, all the districts reported weekly incidence risk higher than that reported in the first and second wave peaks.

From week 18 to week 24 of 2021, the weekly incidence risk among the 15-19-year age group was higher (range 24.3 to 334.9 cases per 100 1000 persons) than that reported among the 20-39-year age group (range 22.4 -322.8 cases per 100 000 persons). In the past week, all the age groups reported a decrease in weekly incidence risk, compared to the previous week (Figure 16). The decrease ranged from 26.5 cases per 100 000 persons (41.9% decrease) in the 0-4-year to 328.3 cases per 100 000 persons (44.9% decrease) in the 40-59-year age groups. From week 24 to week 27 of 2021, all the age groups reported weekly incidence risk higher than that reported in the first and second wave peaks.

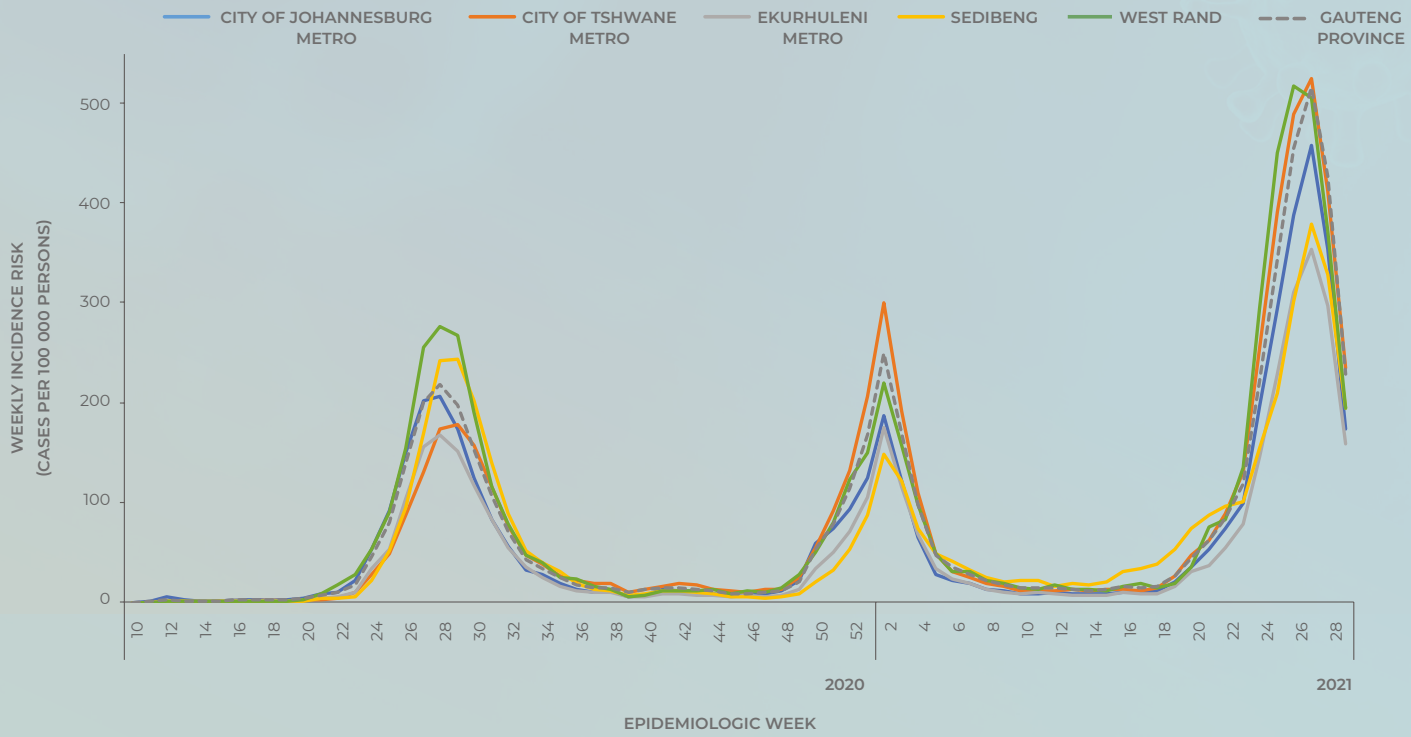


Figure 15. Weekly incidence risk of laboratory-confirmed cases of COVID-19 by district and epidemiologic week, Gauteng Province, 3 March 2020 –17 July 2021 (n=701 600, 114 640 missing district)

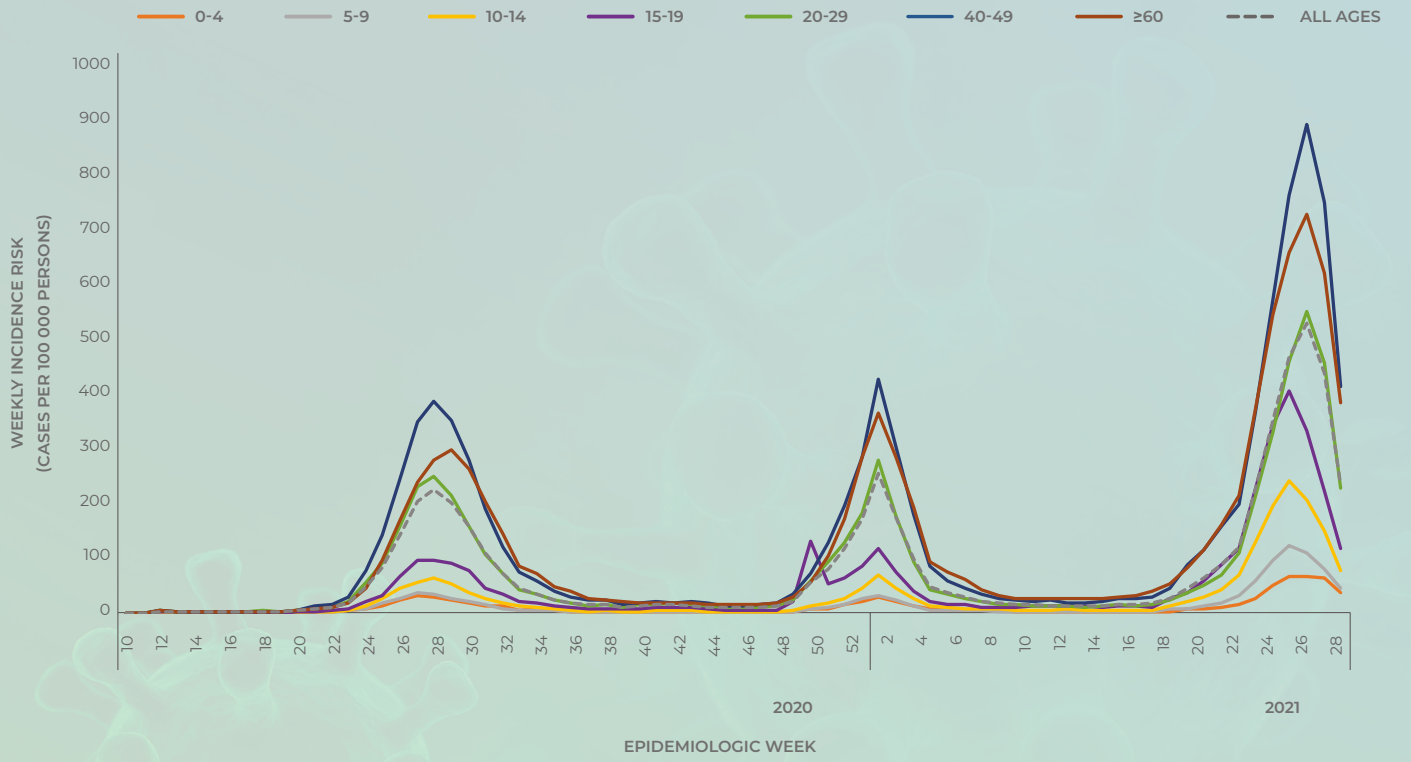


Figure 16. Weekly incidence risk of laboratory-confirmed cases of COVID-19 by age group in years and epidemiologic week, Gauteng Province, 3 March 2020 -17 July 2021 (n=808 268, 7 972 missing age)

KwaZulu-Natal Province

Of the 375 761 cases reported from the KwaZulu-Natal Province, 281 335 (74.9%) had allocation by district. The KwaZulu-Natal Province has been reporting a steady increase in weekly incidence risk from week 18 to week 27 of 2021. In the past week, all the districts reported a decrease in weekly incidence risk, compared to the previous week (Figure 17). The decrease ranged from 6.1 cases per 100 000 persons (47.7% decrease) in the uMkhanyakude to 95.8 cases per 100 000 persons (68.8% decrease) in the uThukela districts.

From week 22 to week 25 of 2021, the weekly incidence risk among the 15-19-year age group was higher (range 17.1 to 53.7 cases per 100 1000 persons) than that reported among the 20-39-year age group (range 10.0 -44.6 cases per 100 000 persons). In week 28 of 2021, all the age groups reported a decrease in weekly incidence risk, compared to the previous week (Figure 18). The decrease ranged from 12.4 cases per 100 000 persons (61.8% decrease) in the 0-4-year to 106.4 cases per 100 000 persons (61.6% increase) in the 40-59-year age groups.

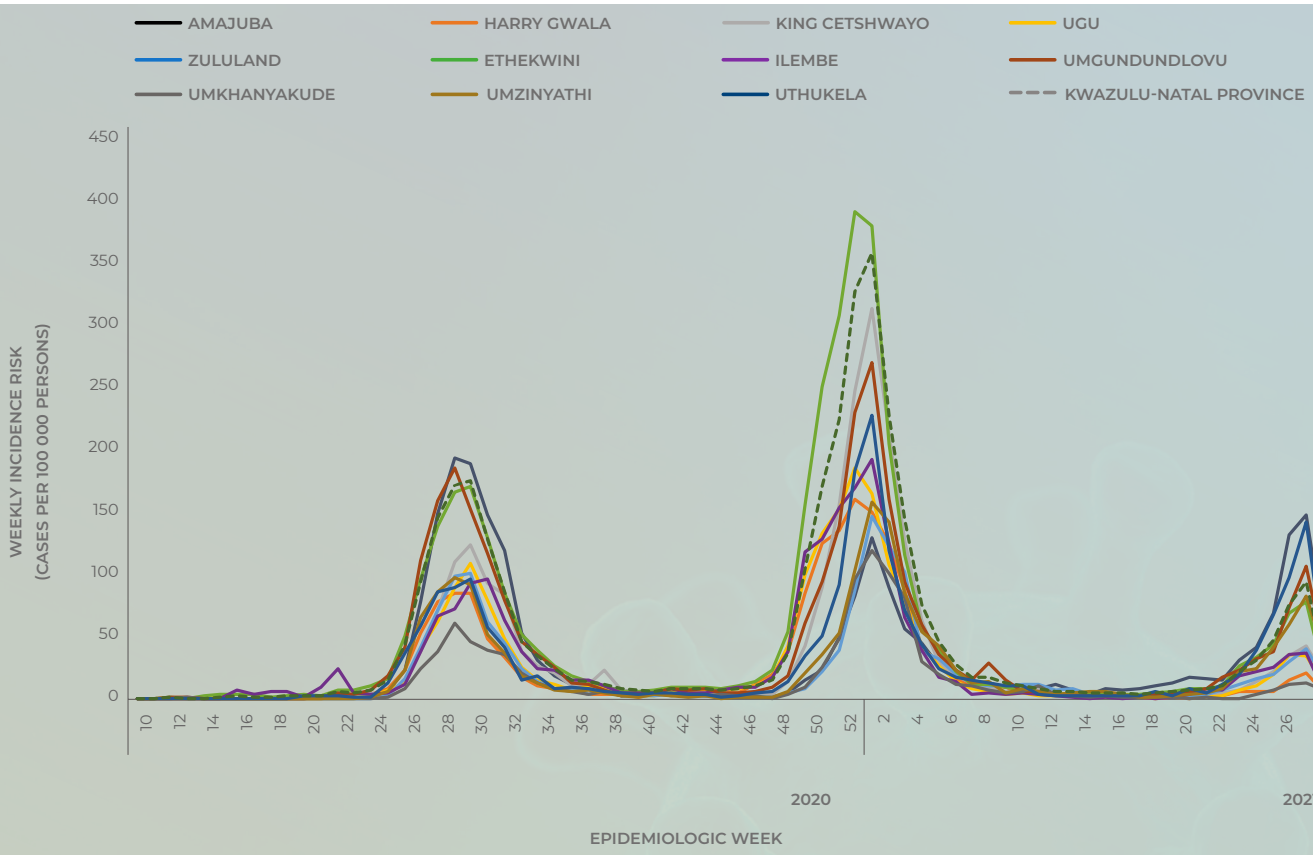


Figure 17. Weekly incidence risk of laboratory-confirmed cases of COVID-19 by district and epidemiologic week, KwaZulu-Natal Province, 3 March 2020 –17 July 2021 (n=281 335, 94 426 missing district)

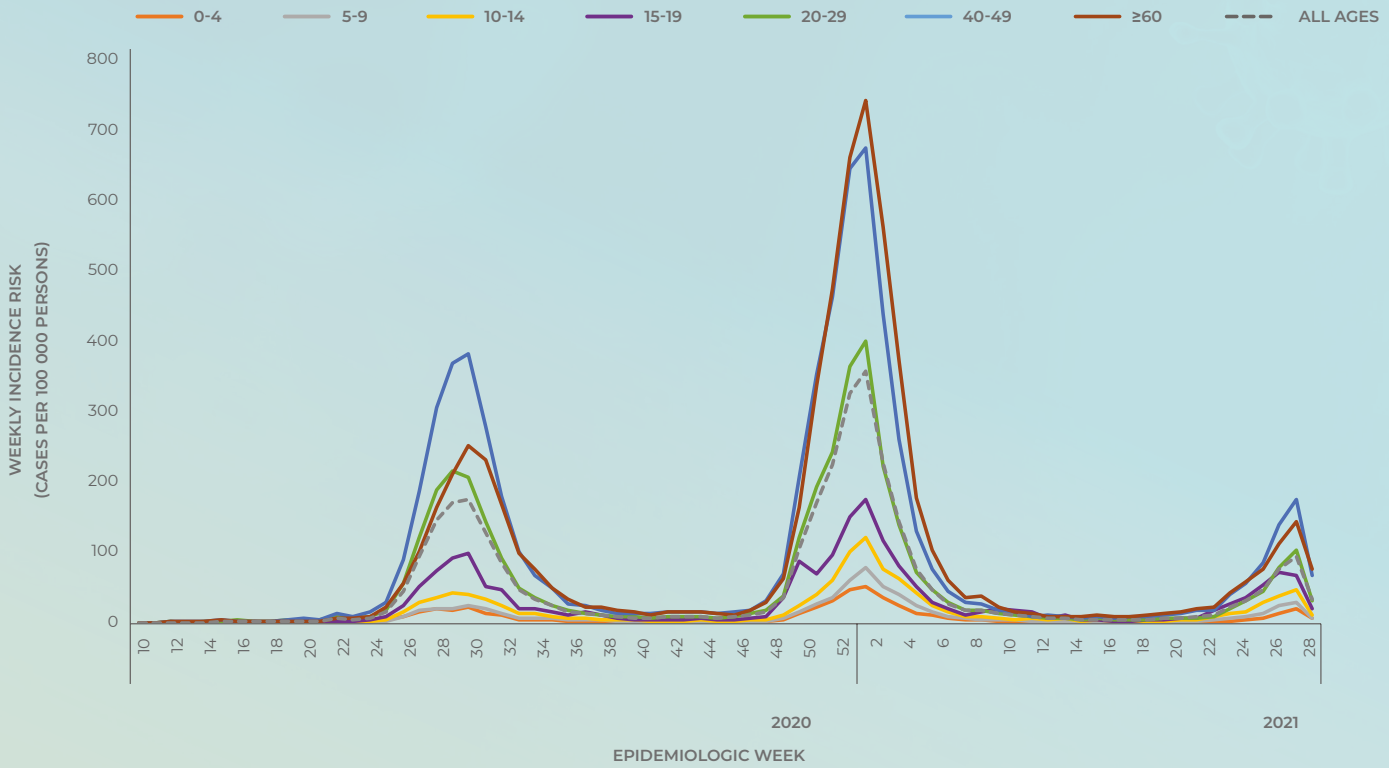


Figure 18. Weekly incidence risk of laboratory-confirmed cases of COVID-19 by age group in years and epidemiologic week, KwaZulu-Natal Province, 3 March 2020 –17 July 2021 (n=371 680, 4 081 missing age)

Free State Province

Of the 123 111 cases reported from the Free State Province, 113 289 (92.0%) had allocation by district. In the past week, all the districts reported a decrease in weekly incidence risk, except the Xhariep District, which reported an increase in weekly incidence risk (13.9 cases per 100 000 persons, 20.9% increase), compared to the previous week (Figure 19). The decrease ranged from 13.1 cases per 100 000 persons (12.4% decrease) in the Mangaung Metro to 64.1 cases per 100 000 persons (36.8% decrease) in the Fezile Dabi District. Some of the reductions in weekly incidence risk in the past week maybe due to delayed reporting. The weekly incidence risk reported in the Xhariep District in week 19 of 2021 was higher than that reported in the peak of both first and second waves (current peak 197.8 vs 183.9 and 147.6 cases per 100 000 persons in wave 1 and wave 2, respectively). The weekly incidence reported in Mangaung Metro from week 21 to week 27 of 2021 (current peak 154.9 cases per 100 000 persons) was higher than that reported in the second wave peak (103.3 cases per 100 000 persons).

From week 21 to week 24 of 2021, the incidence risk in the 15-19 year-age group was higher (range 106.0-115.2) than that reported for the 20-39 year age group (range 84.9-99.2 cases per 100 000 persons). In the past week, all the age groups reported a decrease in weekly incidence risk, compared to the previous week (Figure 20). The decrease ranged from 2.6 cases per 100 000 persons (14.3% decrease) in the 0-4-year to 55.4 cases per 100 000 persons (25.7% decrease) in the 40-59-year age groups. The weekly incidence risk reported by ≥60-year age group in week 21 of 2021 was higher than that reported in the second wave peak (293.1 vs 243.4 cases per 100 000 persons), and the weekly incidence risk reported by 15-19-year age group in week 21 of 2021 to week 25 of 2021 was higher than that reported in the second wave peak (current peak 115.2 vs 63.4 cases per 100 000 persons).

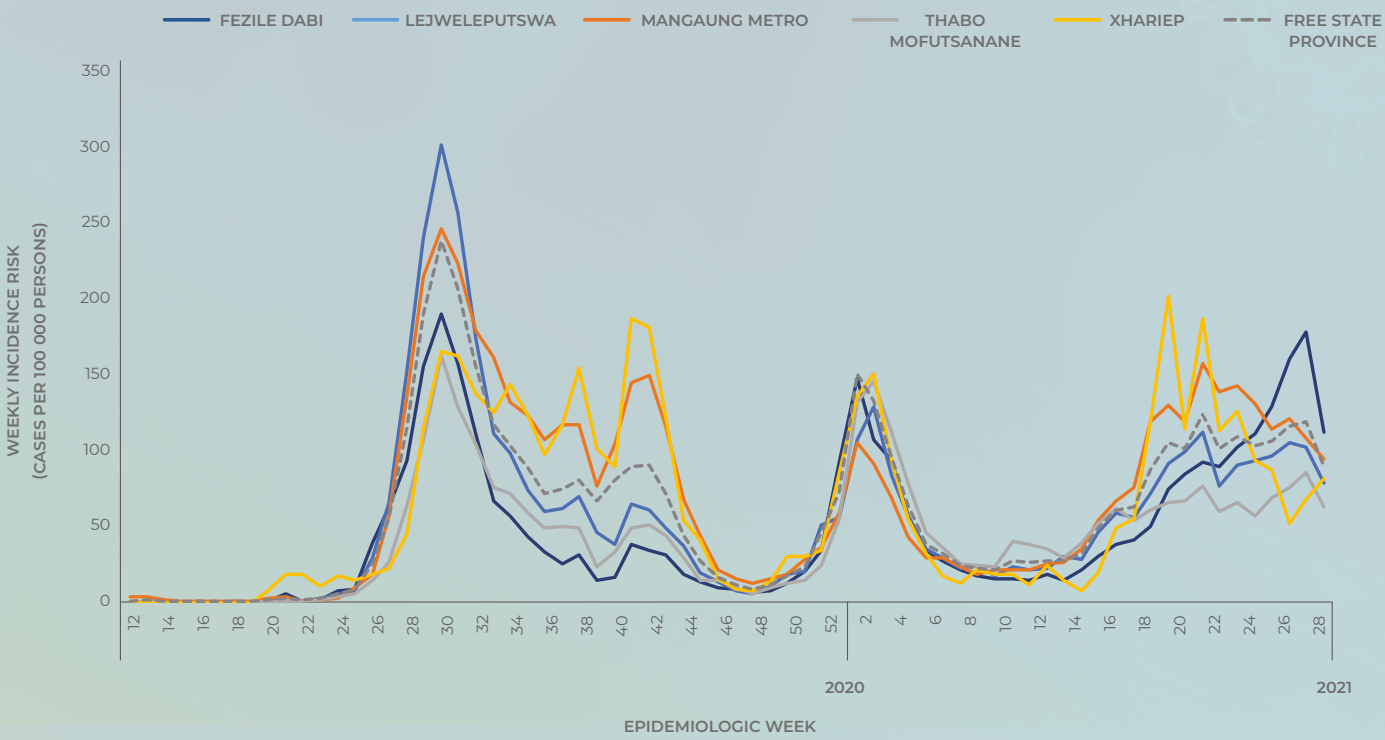


Figure 19. Weekly incidence risk of laboratory-confirmed cases of COVID-19 by district and epidemiologic week, Free State Province, 3 March 2020–17 July 2021 (n=113 289, 9 822 missing district)

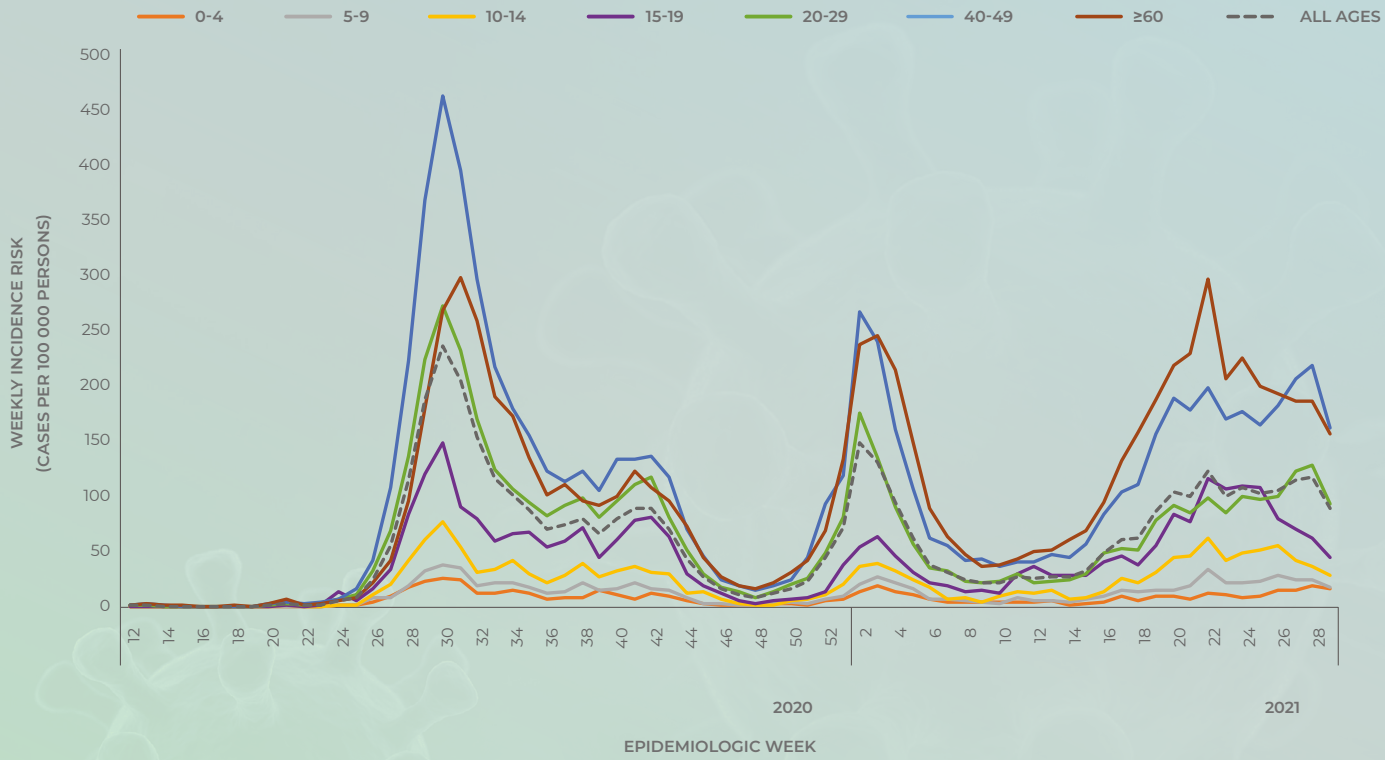


Figure 20. Weekly incidence risk of laboratory-confirmed cases of COVID-19 by age group in years and epidemiologic week, Free State Province, 3 March 2020–17 July 2021 (n=122 594, 517 missing age)

Limpopo Province

Of the 101 960 cases reported from the Limpopo Province, 88 156 (86.5%) had allocation by district. In the past week, all the districts reported a decrease in weekly incidence risk, compared to the previous week (Figure 21). The decrease ranged from 15.7 cases per 100 000 persons (14.2% decrease) in the Mopani to 84.3 cases per 100 000 persons (27.3% decrease) in the Waterberg districts. The Waterberg District has been driving the increase in number of new cases in the Limpopo Province since week 18 of 2021 to date. From week 25 to date, all the districts reported weekly incidence risk higher than that reported in the first wave peak.

In the past week, all the age groups reported a decrease in weekly incidence risk, compared to the previous week (Figure 22). The decrease ranged from 5.7 cases per 100 000 persons (26.1% decrease) in the 0-4-year to 83.5 cases per 100 000 persons (20.6% decrease) in the 40-59-year age groups. From week 25 of 2021 to date, all the age groups reported weekly incidence risk higher than that reported in the first wave peak.

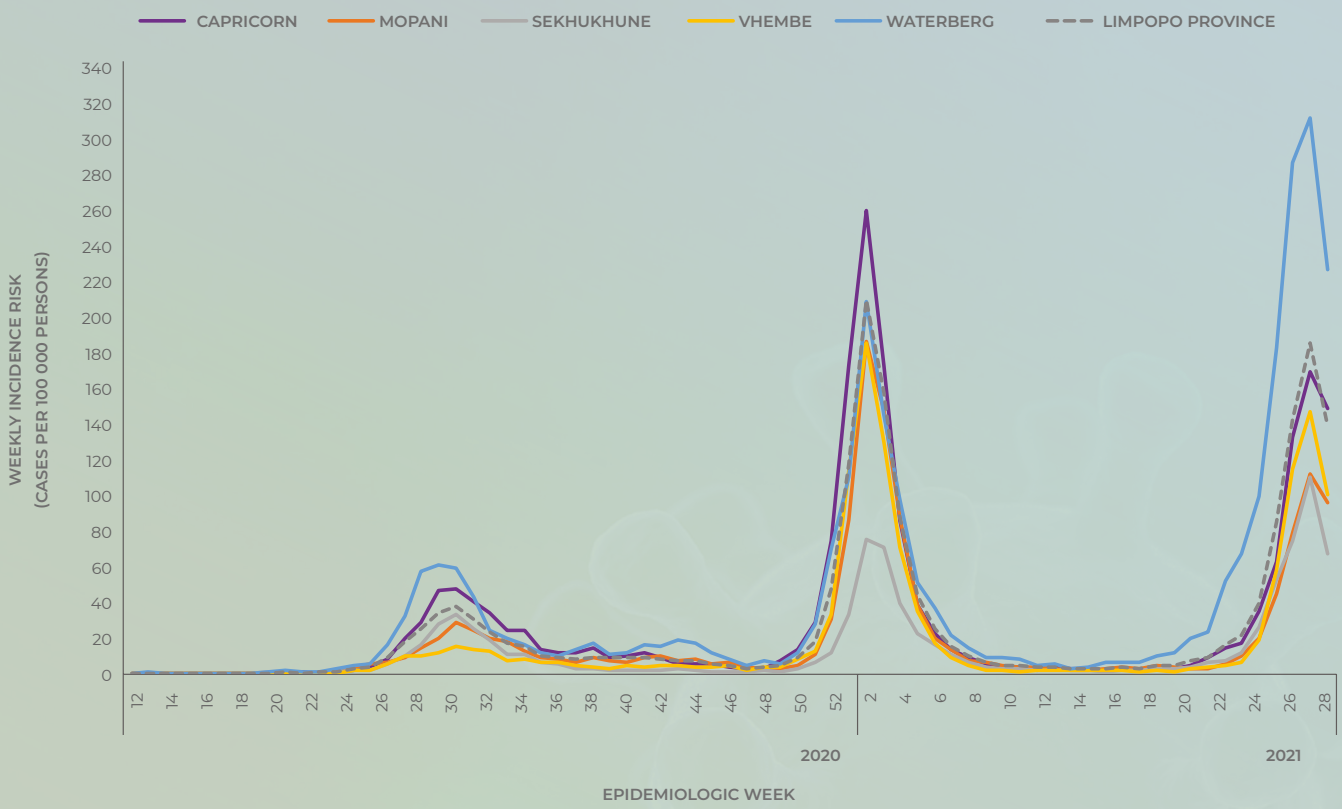


Figure 21. Weekly incidence risk of laboratory-confirmed cases of COVID-19 by district and epidemiologic week, Limpopo Province, 3 March 2020 –17 July 2021 (n=88 156, 13 804 missing district)

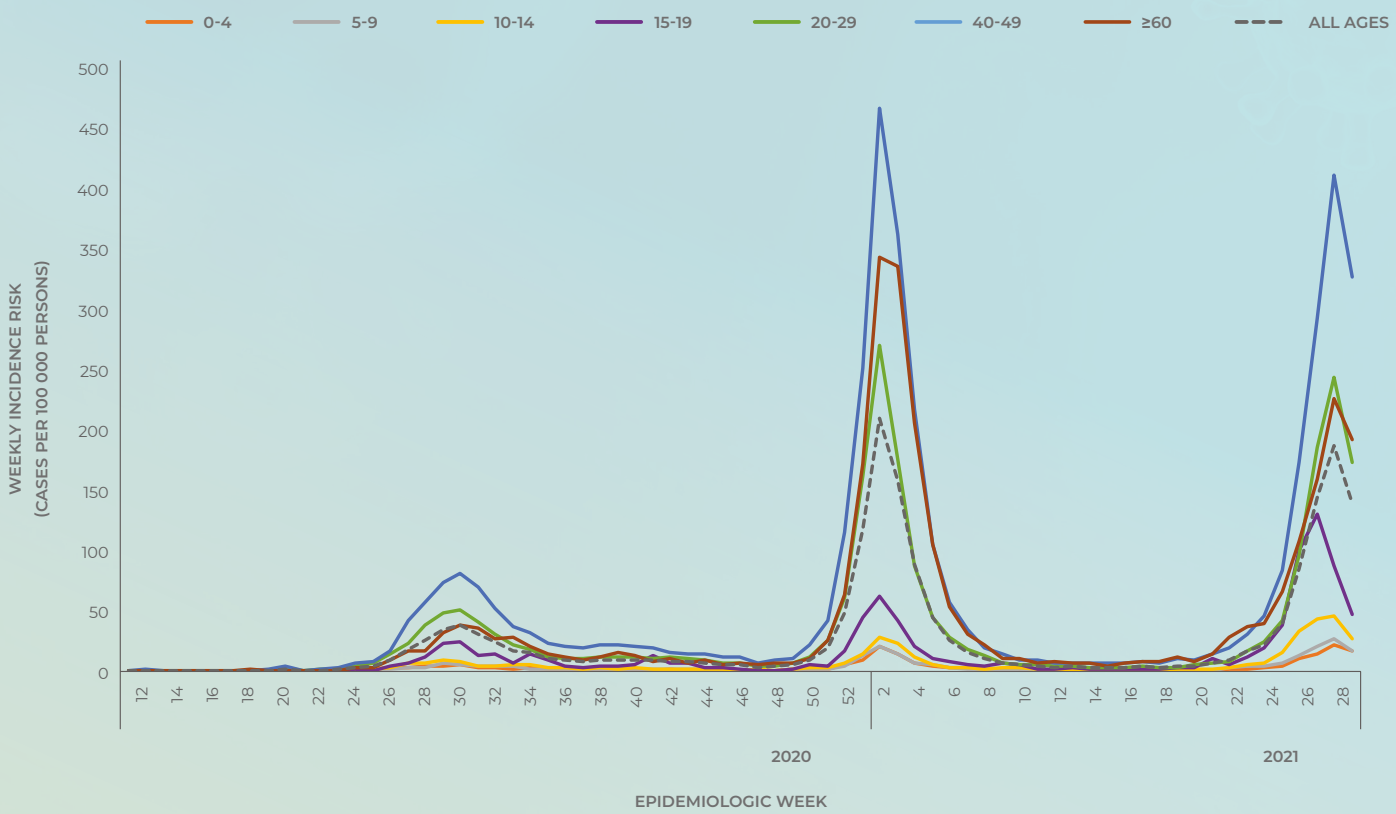


Figure 22. Weekly incidence risk of laboratory-confirmed cases of COVID-19 by age group in years and epidemiologic week, Limpopo Province, 3 March 2020 –17 July 2021 (n=101 429, 531 missing age)

Mpumalanga Province

Of the 113 945 cases reported from the Mpumalanga Province, 91 026 (79.9%) had allocation by district. The Mpumalanga Province has reported a sustained increase in weekly incidence risk from week 18 to week 27 of 2021. In the past week, all the districts reported a decrease in weekly incidence risk, compared to the previous week (Figure 24). The decrease ranged from 13.7 cases per 100 000 persons (14.3% decrease) in the Gert Sibande to 39.5 cases per 100 000 persons (26.4% decrease) in the Nkangala districts.

From week 20 to week 25 of 2021, in some weeks the weekly incidence risk among the 15-19-year age group was higher (range 24.8 to 102.6 cases per 100 000 persons) than that reported among the 20-39-year age group (range 19.3 -99.2 cases per 100 000 persons). In the past week, all the age groups reported a decrease in weekly incidence risk, compared to the previous week (Figure 23). The decrease ranged from 7.6 cases per 100 000 persons (28.7% decrease) in the 5-9-year to 68.2 cases per 100 000 persons (21.0% decrease) in the 40-59-year age groups. From week 26 to date, all the age groups reported weekly incidence risk higher than that reported in the first wave peak.

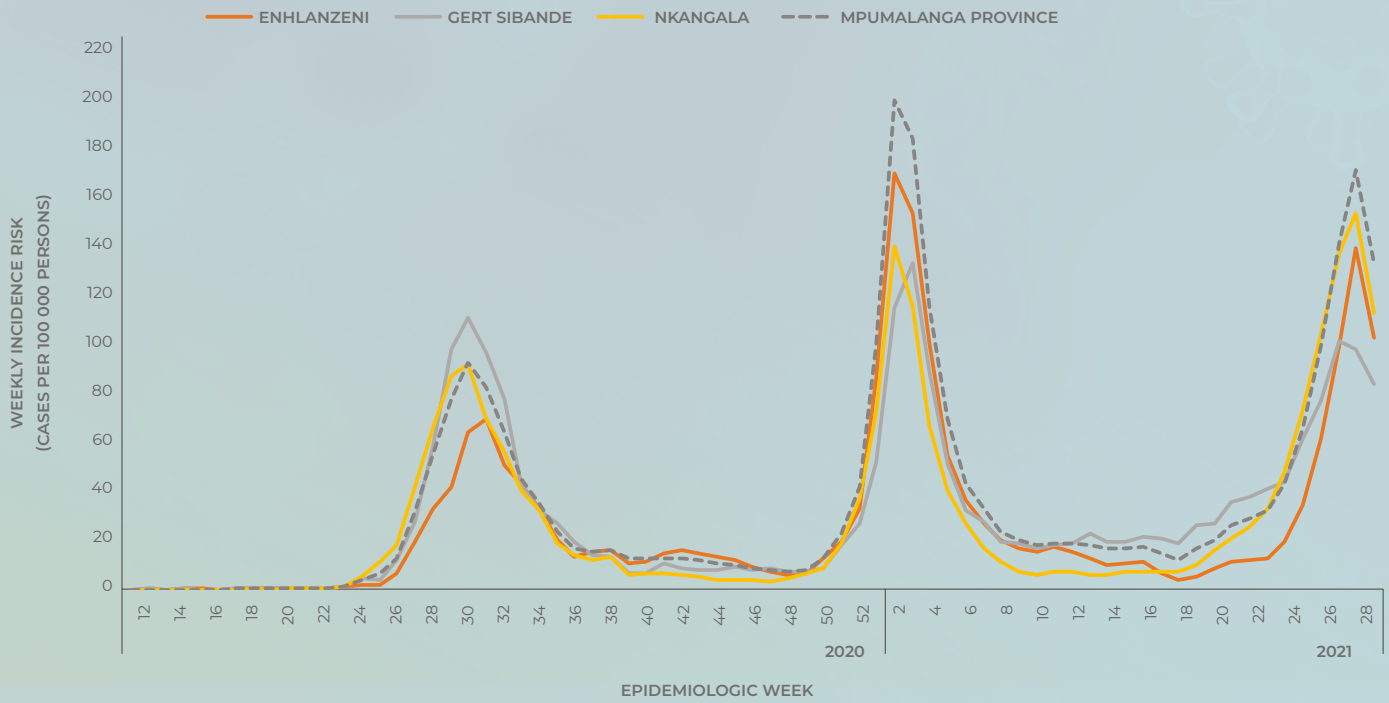


Figure 23. Weekly incidence risk of laboratory-confirmed cases of COVID-19 by district and epidemiologic week, Mpumalanga Province, 3 March 2020 -17 July 2021 (n=91 026, 22 919 missing district)

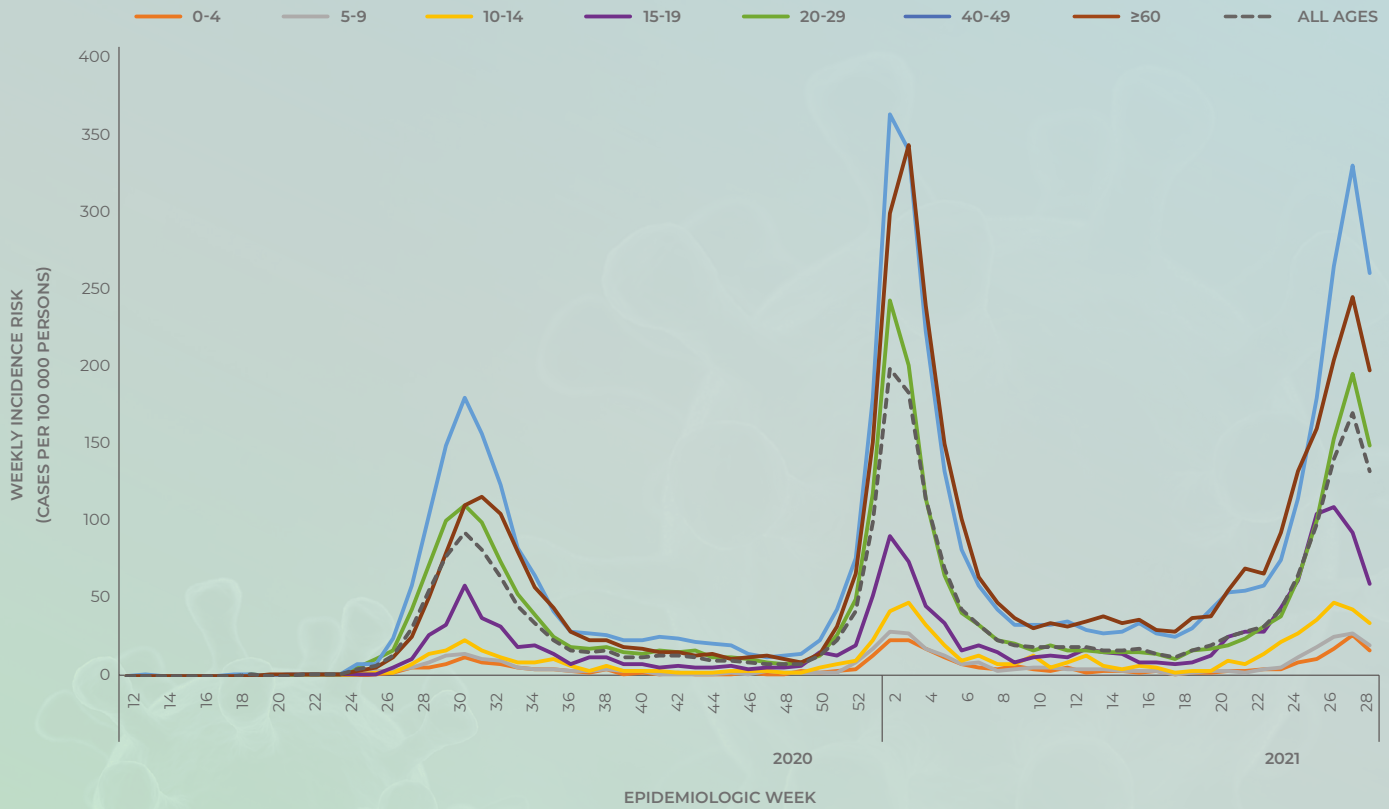


Figure 24. Weekly incidence risk of laboratory-confirmed cases of COVID-19 by age group and epidemiologic week, Mpumalanga Province, 3 March 2020-17 July 2021 (n=111 804, 2 141 missing age)

North West Province

Of the 117 530 cases reported from the North West Province, 95 516 (81.3%) had allocation by district. The North West Province showed an increase from week 15 to week 27 of 2021. In the past week, all the districts reported a decrease in weekly incidence risk, except the Dr Ruth Segomotsi District, which reported an increase in weekly incidence risk (7.0 cases per 100 000 persons, 19.4% increase), compared to the previous week (Figure 25). In the past week, all the districts reported weekly incidence risk higher than that reported in the first wave peak.

From week 18 to week 25 of 2021, the weekly incidence risk among the 15-19-year age group was higher (range 33.3 to186.4 cases per 100 000 persons) than that reported among the 20-39-year age group (range 30.9 -172.9 cases per 100 000). In the past week, all the age groups reported a decrease in weekly incidence risk, compared to the previous week (Figure 26). From week 26 to week 27 of 2021, all the age groups reported weekly incidence risk higher than that reported in the first and second wave peaks.

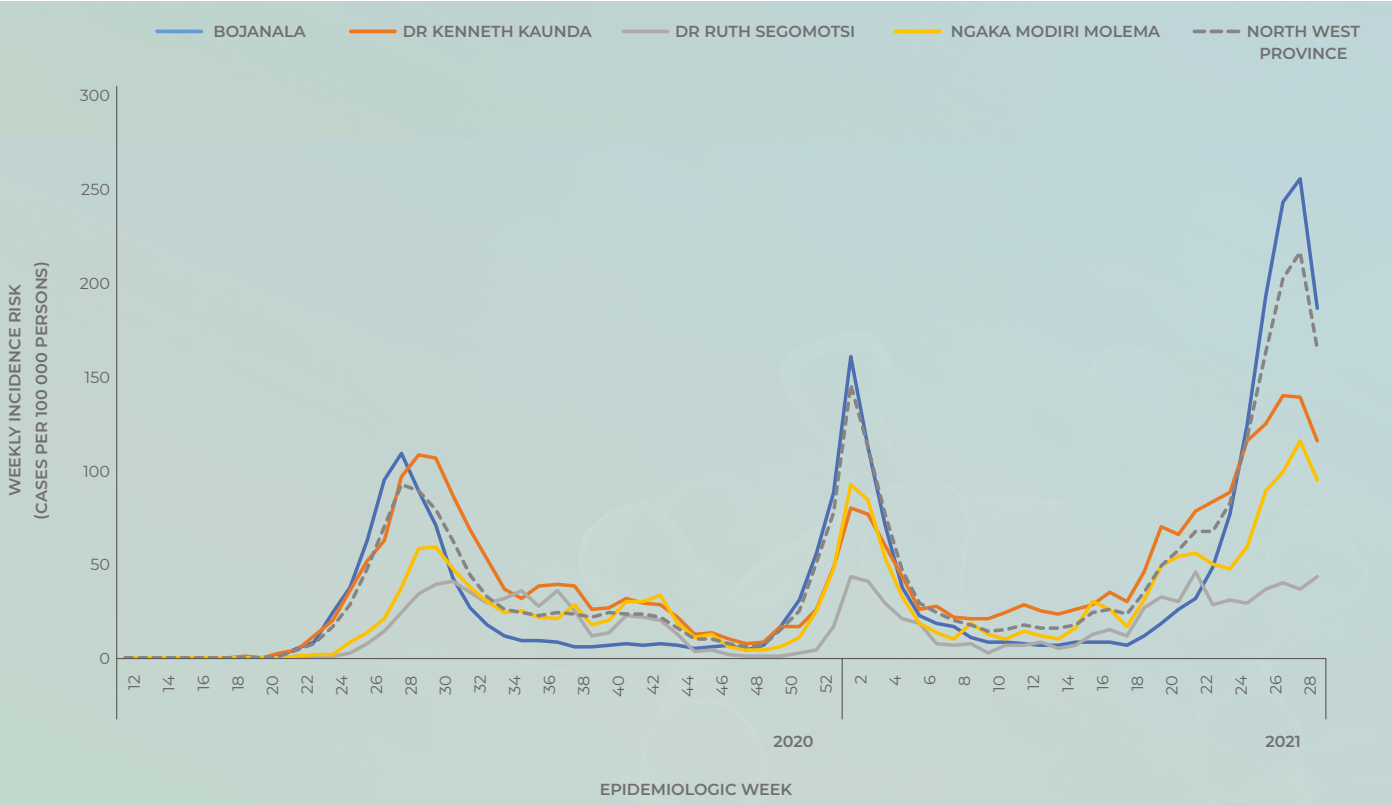


Figure 25. Weekly incidence risk of laboratory-confirmed cases of COVID-19 by district and epidemiologic week, North West Province, 3 March 2020 -17 July 2021 (n=95 516, 22 014 missing district)

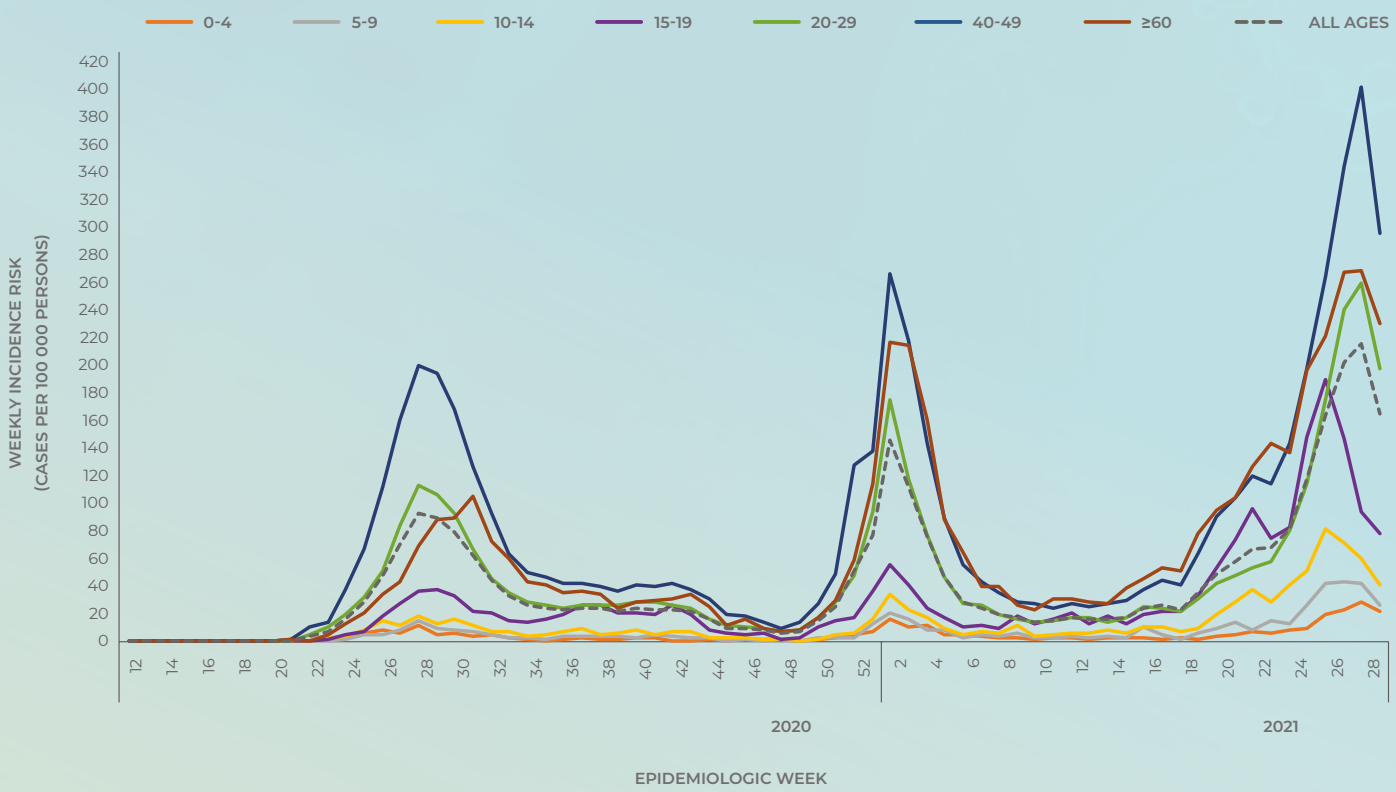


Figure 26. Weekly incidence risk of laboratory-confirmed cases of COVID-19 by age group in years and epidemiologic week, North West Province, 3 March 2020 –17 July 2021 (n=116 079, 1 451 missing age)

Northern Cape Province

Of the 63 416 cases reported from the Northern Cape Province, 53 614 (84.5%) had allocation by district. Following a sustained increase in weekly incidence since week 14 of 2021, Northern Cape Province reported a decrease in weekly incidence from week 21 of 2021 to date. In the past week, all the districts reported a decrease in weekly incidence risk, except the Frances Baard (4.3 cases per 100 000 persons, 5.2% increase) and the ZF Mgcawu (8.6 cases per 100 000 persons, 8.2% increase), which reported an increase in weekly incidence risk, compared to the previous week (Figure 27). The decrease ranged from 5.2 cases per 100 000 persons (4.2% decrease) in the Namakwa to 7.6 cases per 100 000 persons (5.6% decrease) in the Pixley ka Seme districts. From week 16 of 2021 (in various weeks) to week 22 of 2021, all the districts reported weekly incidence risk higher than that reported either in the first or second waves peaks.

From week 20 to week 24 of 2021, the weekly incidence risk among the 15-19-year age group was higher (range 151.4 to 302.7 cases per 100 000 persons) than that reported among the 20-39-year age group (range 121.8 -220.0 cases per 100 000). In the past week, all the age groups reported a decrease in weekly incidence risk, except the 15-19-year age group, which reported an increase in weekly incidence risk (11.3 cases per 100 000 persons, 14.3% increase), compared to the previous week (Figure 28). From week 19 of 2021 to week 22 of 2021, all the age groups reported weekly incidence risk higher than that reported either in the first or second wave peaks.

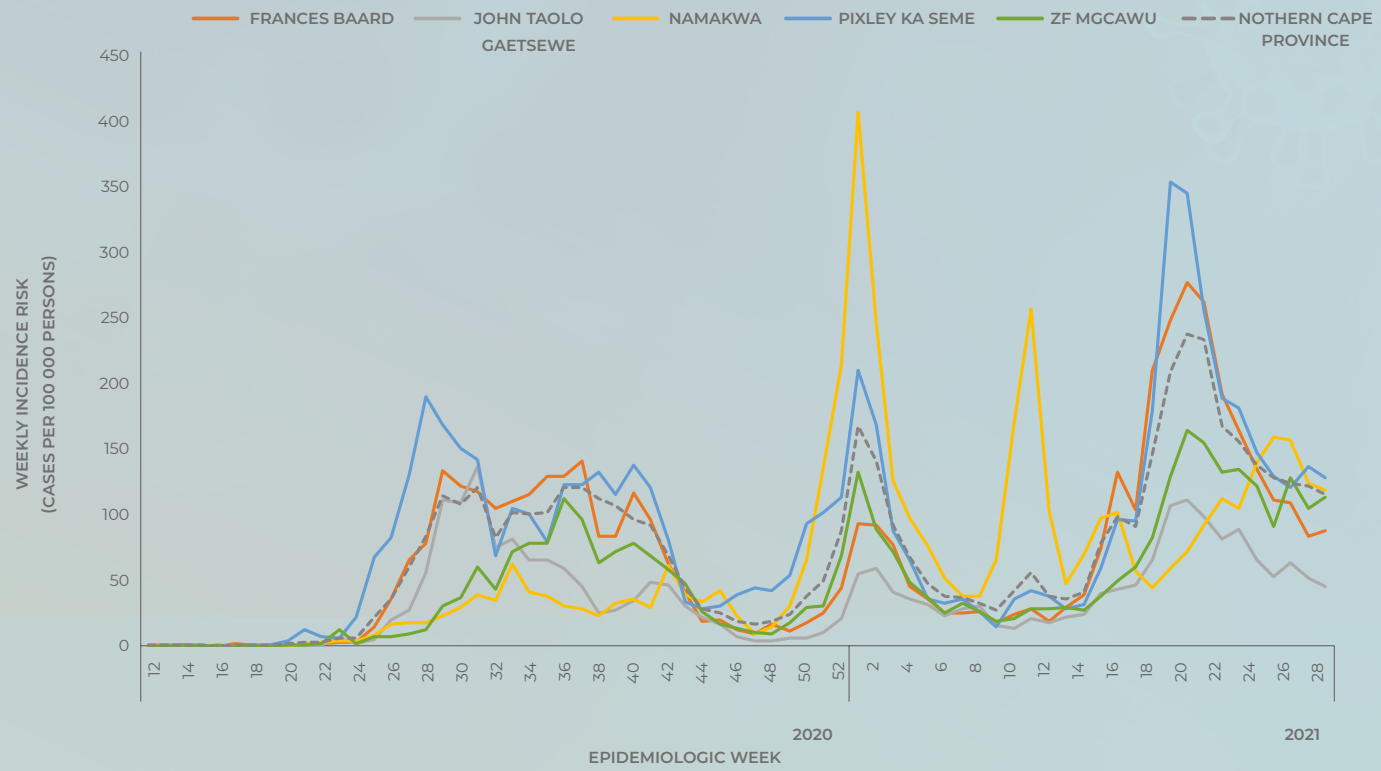


Figure 27. Weekly incidence risk of laboratory-confirmed cases of COVID-19 by district and epidemiologic week, Northern Cape Province, 3 March 2020-17 July 2021 (n=53 614, 9 802 missing district)

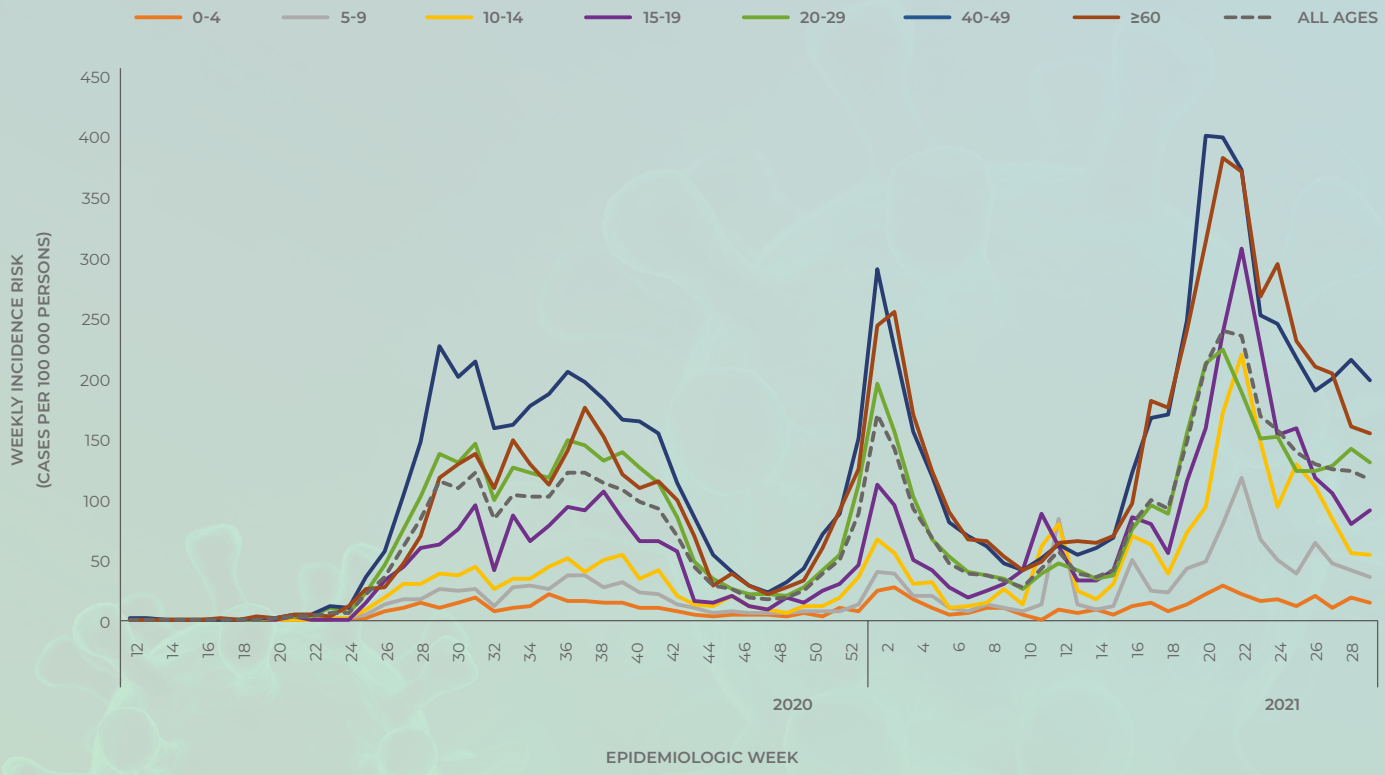


Figure 28. Weekly incidence risk of laboratory-confirmed cases of COVID-19 by age group in years and epidemiologic week, Northern Cape Province, 3 March 2020 –17 July 2021 (n=62 934, 482 missing age)

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. The crude CFR reported here is subject to numerous limitations: it is likely to be an underestimation as reporting of deaths may be delayed and deaths which occurred outside health facilities may be missed. Differences in health-seeking behaviour by age group and sex could also contribute to observed differences in case numbers between groups. The reported doubling time estimates are affected by the number of tests conducted; if fewer tests are performed, this will also increase the doubling time estimate. Delays in reporting may result in incomplete data for recent weeks, leading to an apparent reduction in number of cases.

Conclusions

To date, 2 295 095 cases, including 69 951 deaths have been reported. The recent increases have varied by province with several provinces reporting a sustained increase in weekly incidence risk for ≥8 weeks. Gauteng Province, is driving the current wave of increase in number of cases, reporting the highest number of new cases detected in the country in the past six weeks. However, in the past week all the provinces reported a decrease in number of new cases. The Nelson Mandela Metro and Sarah Baartman District in the Eastern Cape Province, Waterberg District in Limpopo Province and Bojanala and Dr Kenneth Kaunda districts in North West Province are driving the increase in number of new cases and weekly incidence risk in their respective provinces. Some of the reduction shown by other provinces and districts in the past week maybe due to delayed reporting or decrease in testing. The national demographic trends have remained unchanged in this reporting period, children aged <10 years had the lowest incidence risk and individuals aged 40-59 years had the highest incidence. However, from week 18 to week 25 of 2021, higher weekly incidence risks among cases aged 15-19 years compared to cases aged 20-39-year were reported for some weeks in Limpopo, North West, Gauteng, Free State and KwaZulu-Natal provinces. Ongoing monitoring of case numbers is important in order to identify changes in trends to inform public health response. In addition, number of confirmed cases diagnosed on antigen tests maybe underestimated as they are used in a number of different settings and results may not be fully reported.