

COVID-19 WEEKLY EPIDEMIOLOGY BRIEF

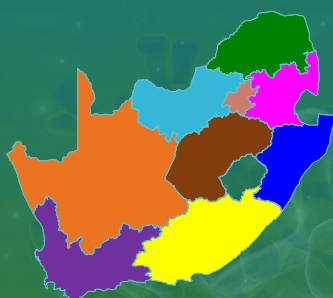


NATIONAL INSTITUTE FOR
COMMUNICABLE DISEASES

Division of the National Health Laboratory Service

SOUTH AFRICA WEEK 1 2021

CUMULATIVE DATA FROM



CASES

1 231 597
IN TOTAL

106 274
THIS WEEK

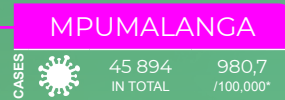
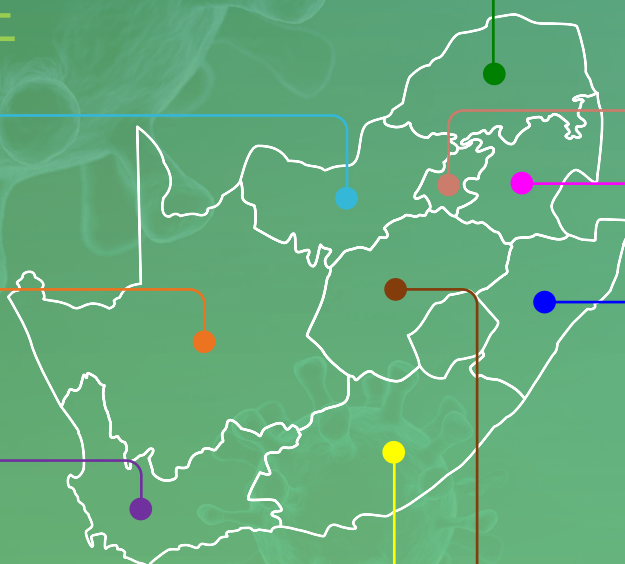
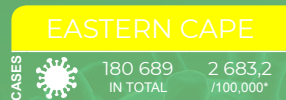


PERSONS

2 065,7
INCIDENCE RISK*

40
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 in South Africa. This report is based on data collected up to 9 January 2021 (week 1 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 9 January 2021, a total of 1 231 597 laboratory-confirmed COVID-19 cases had been detected in South Africa. Of these, 130 849 were cases reported since the last report (week 53 report). There was a 2.2% decrease in number of new cases detected in week 1 (106 274) compared to the number of new cases detected in week 53 (108 717), possibly related to delays in reporting.
- An additional 3 586 deaths were reported since the last report. The overall case-fatality ratio is 2.7% (33 163/1 231 597).
- In the past week, the Gauteng Province reported the highest proportion of the new cases detected (31 153/106 274, 29.3 %), followed by the KwaZulu-Natal Province (27 741/106 274, 26.1%), and the Western Cape Province (18 811/106 274, 17.7%).
- In the past week, six provinces, (Limpopo, Mpumalanga, Northern Cape, Gauteng, North West, and Free State) reported an increase in weekly incidence risk, compared to the previous week. The increase in weekly incidence risk ranged from 13.0 cases per 100 000 persons (11.4% increase) in the Limpopo Province to 38.7 cases per 100 000 persons (52.0% increase) in North West Province.
- In the past week, Western Cape Province reported the highest weekly incidence risk (268.5 cases per 100 000 persons) in week 1, followed by the KwaZulu-Natal Province (240.6 cases per 100 000 persons), and the Gauteng Province (201.1 cases per 100 000 persons), this is similar to the previous four weeks.
- From week 52 through week 1, six provinces (Western Cape, KwaZulu-Natal, Limpopo, Mpumalanga, North West, and Northern Cape) reported weekly incidence risks higher than those reported during the first wave peaks in different weeks.
- The increase in the number of cases in the Western Cape Province in recent weeks was driven by a resurgence in COVID-19 cases reported from all districts. Since week 53, all the districts in the Western Cape Province reported weekly incidence risks higher than those reported in the first wave peaks.
- The increase in the number of new cases and weekly incidence risk in KwaZulu-Natal Province in the past three weeks was largely driven by an increase in number of new cases in six districts (eThekwin, iLembe, Ugu, Harry Gwala, uMgungundlovu, and King Cetshwayo). Seven districts, eThekwin, iLembe, Harry Gwala, King Cetshwayo, Ugu, uMkhanyakude, and uThukela districts reported weekly incidence risks above those reported in the first wave peaks.
- The increase in number of new cases and weekly incidence risk in Gauteng Province is occurring in all districts, with the City of Tshwane Metro reporting the highest weekly incidence risk and exceeding the first wave peak.

INCIDENCE
RISK FOR
CURRENT WEEK

178,2

CASES PER
100 000
PERSONS

29,3%

OF CASES
REPORTED IN
GAUTENG IN
CURRENT WEEK

IN CURRENT
WEEK, THE
HIGHEST
WEEKLY
INCIDENCE
RISK WAS IN
CASES AGED 55-
59 YEARS (367,7
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 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, 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 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 9 January 2021, a total of 1 231 597 laboratory-confirmed COVID-19 cases were reported in South Africa (Figures 1 and 2). This is 130 849 more cases than the number reported in the last report (week 53). The number of new cases detected in week 1 (106 274) was lower than the number of new cases detected in week 53 (108 717), this represented a 2.2% decrease in the number of new cases compared to the previous week, possibly in part related to delays in reporting. In the past week, the Gauteng Province reported the highest number of new cases (31 153/106 274, 29.3 %), followed by the KwaZulu-Natal Province (27 741/106 274, 26.1 %), and the Western Cape Province (18 811/106 274, 17.7 %) (Table 1). Five provinces, Gauteng (333 842/1 231 597, 27.1%), KwaZulu-Natal (252 115/1 231 597, 20.5%), Western Cape (241 001/1 231 597, 19.6%), Eastern Cape (180 689/1 231 597, 14.7%), and Free State (66 760/1 231 597, 5.4%) continued to report the majority (1 074 407/1 231 597, 87.2%) 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 53 of 2020 to week 1 of 2021.

The cumulative incidence risk for the country increased from 1 887.4 cases per 100 000 persons in week 53 of 2020 to 2 065.7 cases per 100 000 persons in week 1 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 Western Cape Province reported the highest cumulative incidence risk (3 440.1 cases per 100

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000 persons), followed by the Eastern Cape Province (2 683.2 cases per 100 000), the Free State Province (2 279.4 cases per 100 000 persons), KwaZulu-Natal Province (2 186.3 cases per 100 000 persons), the Gauteng Province (2 155.5 cases per 100 000 persons), and the Northern Cape Province (2 138.6 cases per 100 000 persons). The other provinces continued to report cumulative incidence risk below 1 500 cases per 100 000 persons, with Limpopo Province reporting the lowest cumulative incidence risk (635.6 cases per 100 000 persons).

The Western Cape Province reported the highest weekly incidence risk (268.5 cases per 100 000 persons) in week 1, followed by the KwaZulu-Natal Province (240.6 cases per 100 000 persons), and the Gauteng Province (201.1 cases per 100 000 persons), this is similar to the previous four weeks. The weekly incidence risk in all the other provinces remained below 140 cases per 100 000 persons. In the past week, six provinces (Limpopo, Mpumalanga, Northern Cape, Gauteng, North West, and Free State) reported an increase in weekly incidence risk, compared to the previous week. The increase in weekly incidence risk ranged from 13.0 cases per 100 000 persons (11.4% increase) in the Limpopo Province to 38.7 cases per 100 000 persons (52.0% increase) in the North West Province (Figure 4). The Eastern Cape (16.3 cases per 100 000 persons, 15.7% decrease), the Western Cape (57.8 cases per 100 000 persons, 17.7% decrease), and the KwaZulu-Natal (68.5 cases per 100 000 persons, 22.2% decrease) provinces reported a decrease in weekly incidence risk, compared to the previous week. Some of the reductions in week 1 weekly incidence risk could be as a result of reporting delays.

Since the peak of weekly incidence risk experienced at different levels and weeks by the different provinces in July (Western Cape and Eastern Cape peaked earlier in week 27 and Northern Cape

peaked last in week 30), followed by a decline in number of cases in subsequent weeks, all provinces have reported increases in number of cases from week 43, exceeding the peak in the first wave in Western Cape, KwaZulu-Natal, North West, Northern Cape, Mpumalanga and Limpopo (Figure 3). Weekly number of new cases is now declining in the Eastern Cape Province. Some of these changes could be driven in part by changes in testing practices.

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 53 of 2020, the estimated doubling time of number of cases decreased in all provinces, KwaZulu-Natal Province (from 30.9 days to 26.3 days, 14.9% decrease), Gauteng Province (from 67.2 days to 49.7 days, 26.1% decrease), the Free State Province (from 255.6 days to 136.95 days, 46.5% decrease), Eastern Cape Province (from 109.5 days to 107.5 days, 1.9% decrease), and Western Cape Province (from 42.7 days to 40.6 days, 5.1% decrease) (Figure 5).

The case-fatality ratio (CFR) is 2.7% (33 163/1 231 597); an additional 3 586 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, 3 586 compared to 2 842. 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.

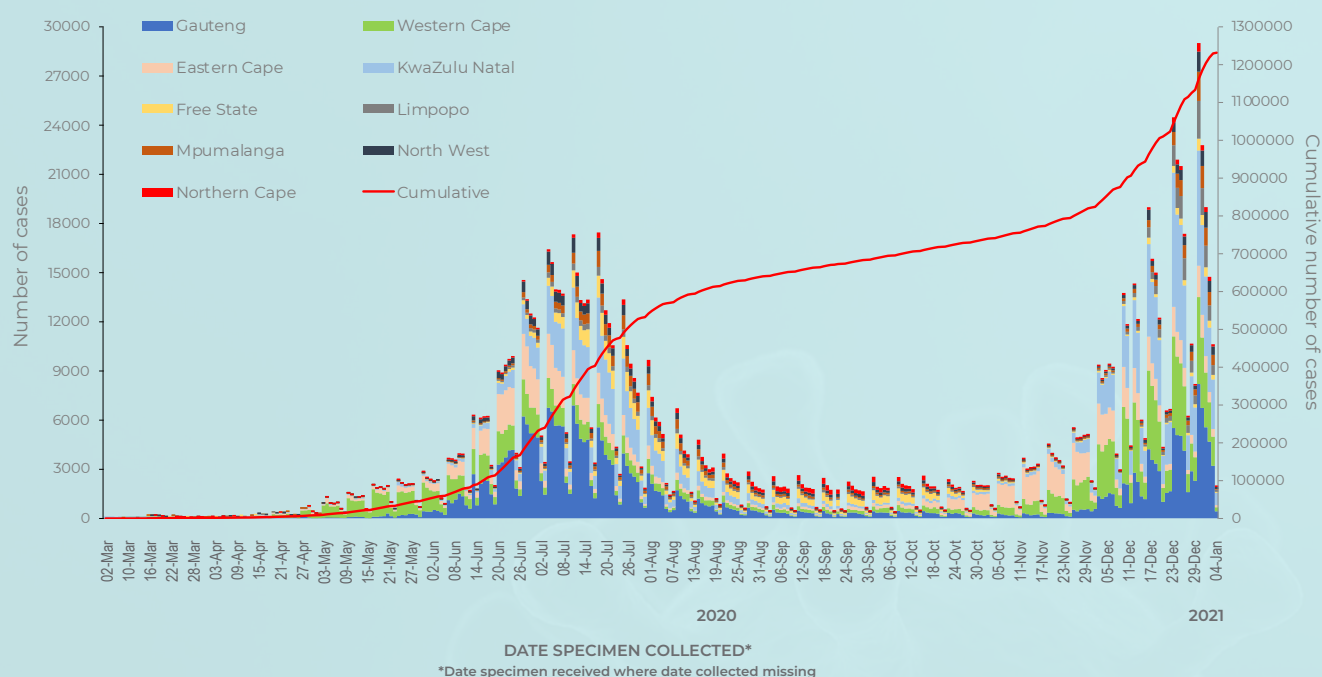


Figure 1. Number and cumulative number of laboratory-confirmed cases of COVID-19 by province and date of specimen collection, South Africa, 3 March 2020- 9 January 2021 (n=1 231 597)

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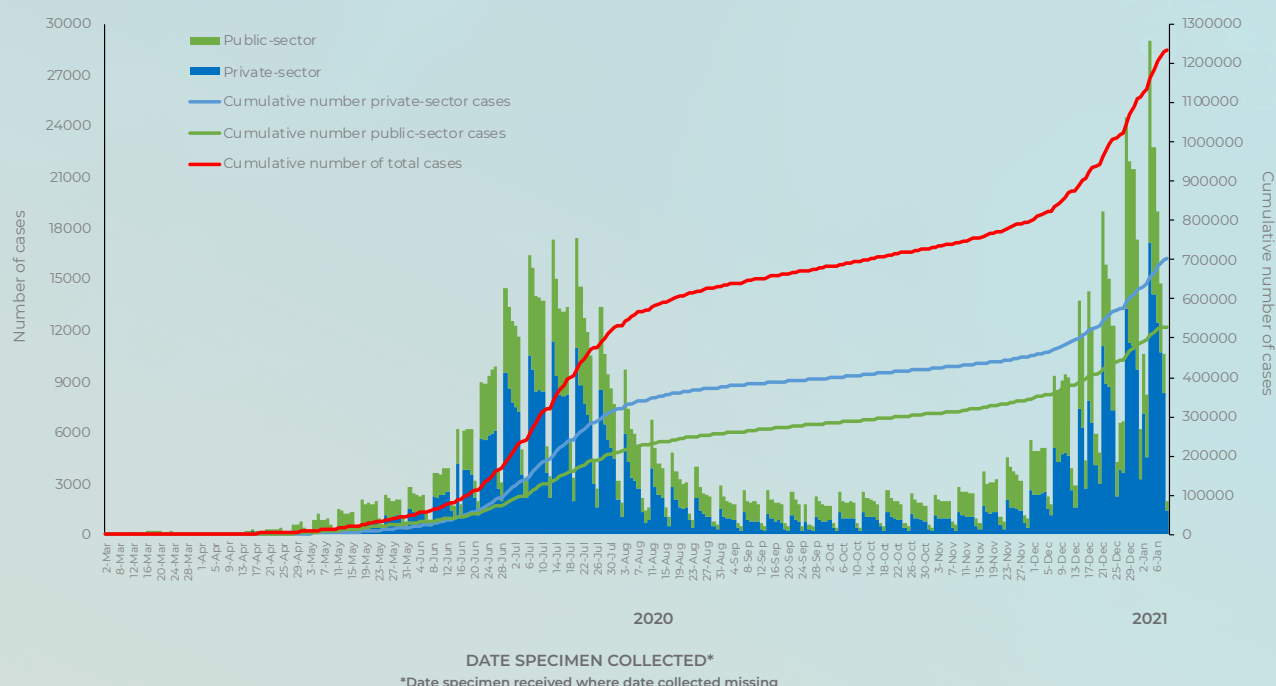


Figure 2. Number and cumulative number of laboratory-confirmed cases of COVID-19, by testing laboratory sector and date of specimen collection, South Africa, 3 March 2020- 9 January 2021 (n=1 231 597)

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 2020-9 January 2021 (n=1 231 597)

Province	Cumulative cases (n) (percentage, n/ total cases in South Africa)	New cases ¹ detected in week 1 (3-9 January 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 1 (cases/100 000 persons)	Tests ⁴ per 100 000 persons, 3-9 January 2021
Eastern Cape	180 689 (14.7)	5 886 (5.5)	6 734 001	2 683.2	87.4	389.0
Free State	66 760 (5.4)	2 871 (2.7)	2 928 903	2 279.4	98.0	374.5
Gauteng	333 842 (27.1)	31 153 (29.3)	15 488 137	2 155.5	201.1	666.8
KwaZulu-Natal	252 115 (20.5)	27 741 (26.1)	11 531 628	2 186.3	240.6	671.7
Limpopo	37 197 (3.0)	7 442 (7.0)	5 852 553	635.6	127.2	248.0
Mpumalanga	45 894 (3.7)	6 111 (5.8)	4 679 786	980.7	130.6	452.9
North West	46 451 (3.8)	4 647 (4.4)	4 108 816	1 130.5	113.1	206.1
Northern Cape	27 648 (2.2)	1 612 (1.5)	1 292 786	2 138.6	124.7	493.2
Western Cape	241 001 (19.6)	18 811 (17.7)	7 005 741	3 440.1	268.5	657.3
Unknown	0	0	0			
Total	1 231 597	106 274	59 622 350	2 065.7	178.2	527.5

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); ³2020 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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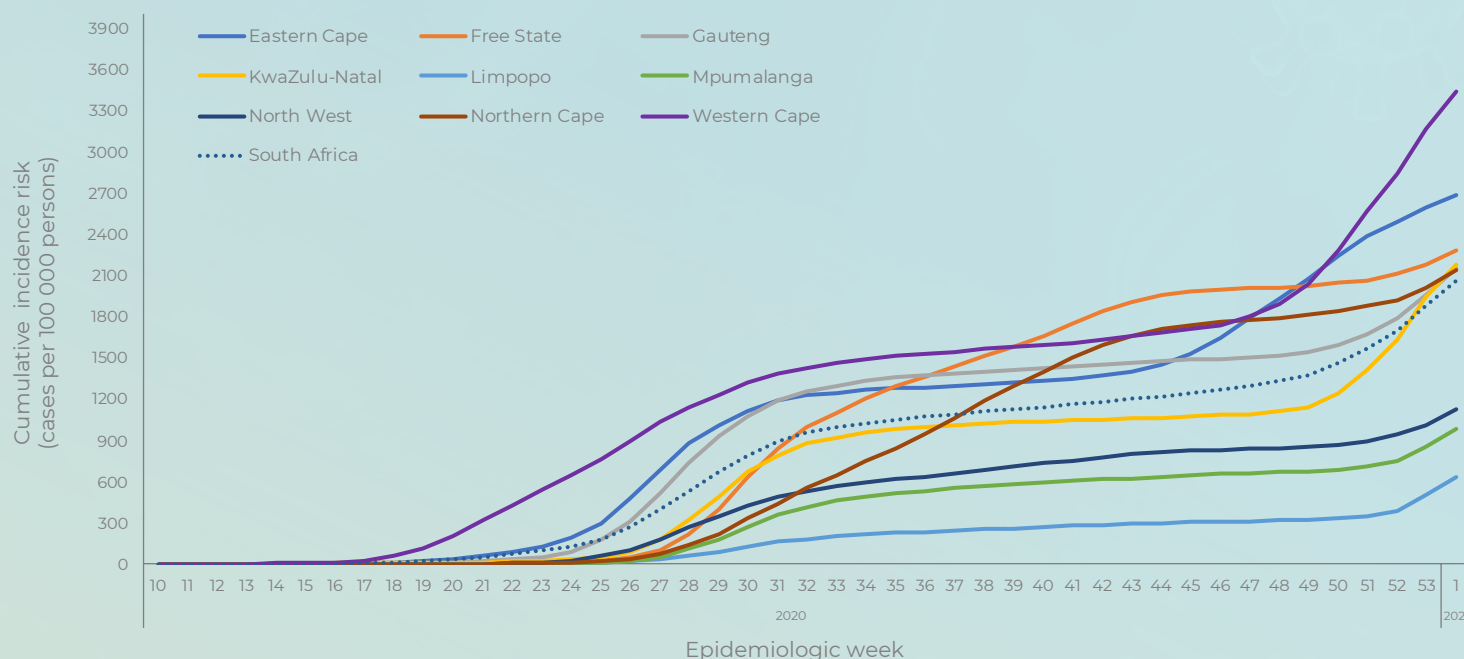


Figure 3. Cumulative incidence risk of laboratory-confirmed cases of COVID-19 by province and epidemiologic week, South Africa, 3 March 2020- 9 January 2021 (n= 1 231 597)

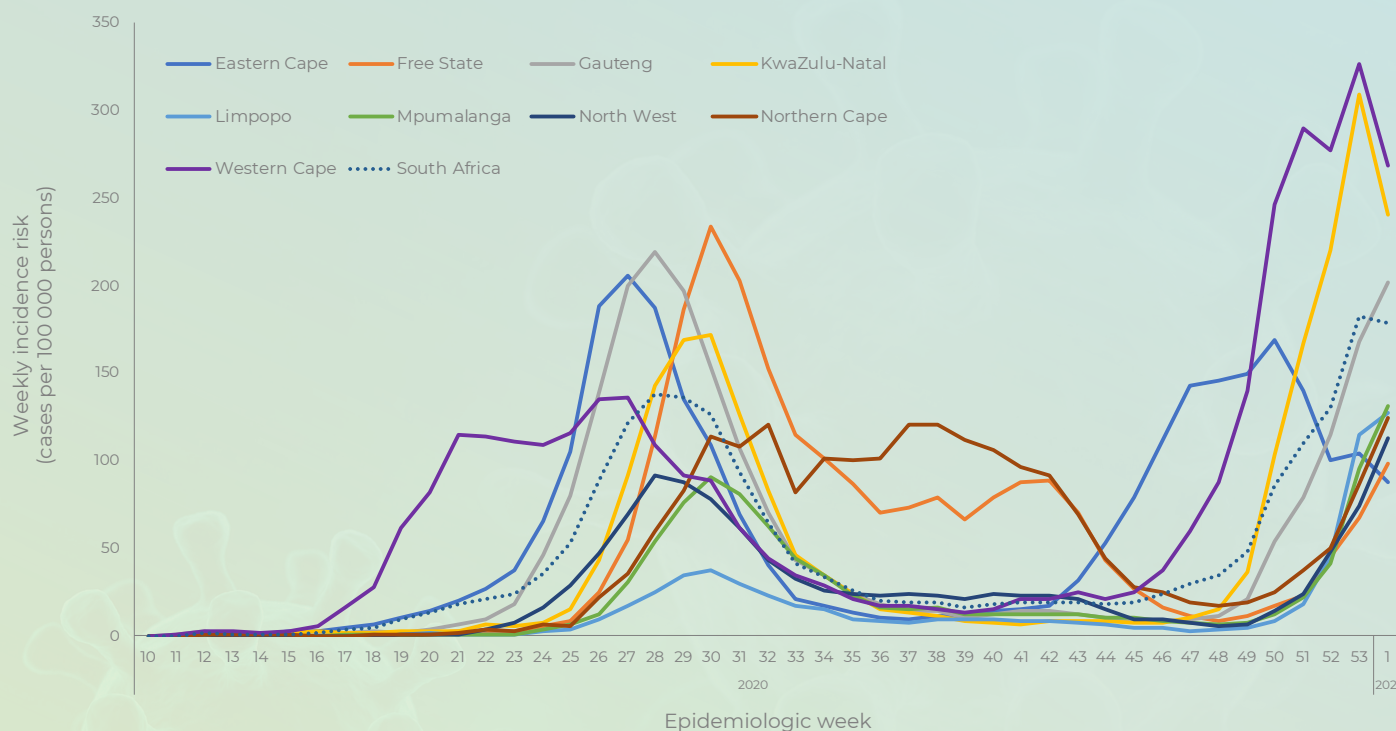


Figure 4. Weekly incidence risk of laboratory-confirmed cases of COVID-19 by province and epidemiologic week, South Africa, 3 March 2020- 9 January 2021 (n=1 231 597)

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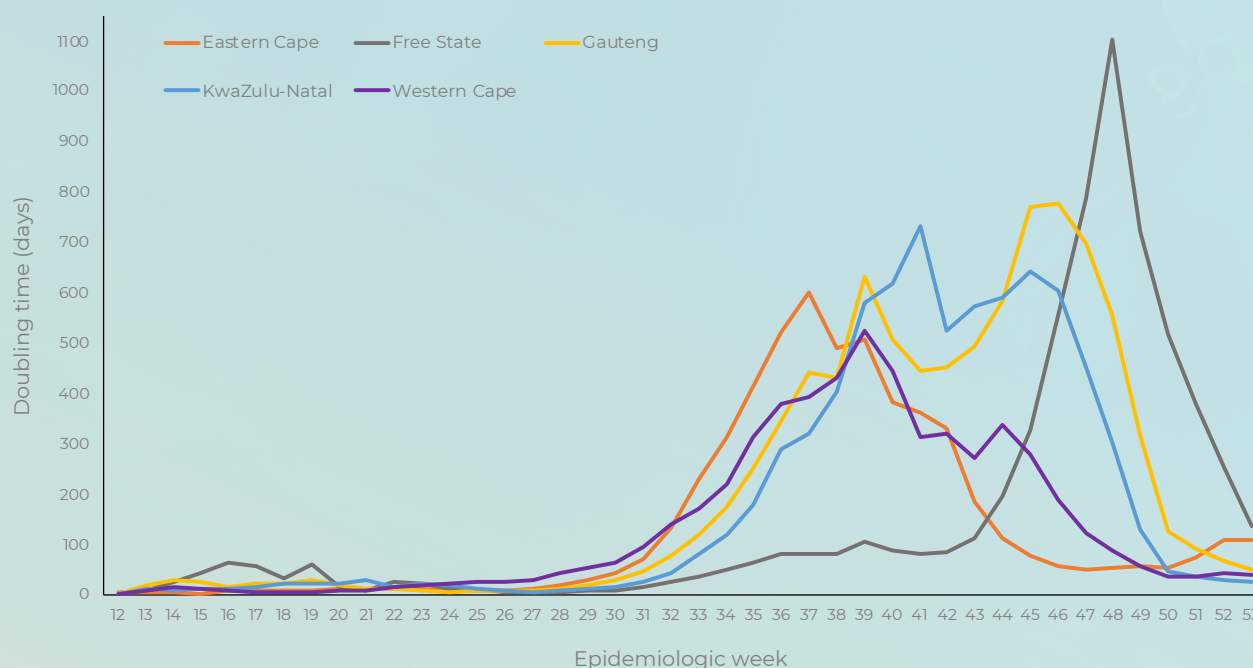


Figure 5. Doubling time of number of laboratory-confirmed cases of COVID-19 by province (for 5 provinces with the majority of cases) and epidemiologic week, South Africa, 23 March-2020- 2 January 2021 (n= 1 125 237)

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 (147 731/1 221 685, 12.1%) and 30-34-year (144 286/1 221 685, 11.8%) age groups (Figure 6). Similarly, among the cases reported in the past week, the highest number of cases was in the 35-39-year-age group (13 009/105 263, 12.4 %) followed by the 30-34-year age group (12 367/105 263, 11.7%). The median age for cases reported in week 1 was similar (41 years, IQR 30-54), to that of total cases (40 years). The highest cumulative incidence risk remained among cases aged 50-54 years (4 221.2 cases per 100 000 persons), followed by cases aged 55-59 years (4 113.5 cases per 100 000 persons) and 45-49 years (3 809.1 cases per 100 000 persons). The lowest cumulative incidence risk was reported in the younger age-groups, 244.2 cases per 100 000 persons and 300.4 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 1 of 2021 was reported in cases aged 55-59 years (367.7 cases per 100 000 persons), followed by cases in the 50-54-year-age group (359.6 cases per 100 000 persons) and the lowest weekly

incidence risk was in the 0-4-year age group (18.9 cases per 100 000 persons).

To date, the majority of COVID-19 cases reported were female 57.7% (703 840/1 219 784). This trend continued in the past week where 56.4% (59 366/105 300) of cases were female. The cumulative incidence risk has remained consistently higher among females (2 291.0 cases per 100 000 persons) than among males (1 758.6 cases per 100 000 persons) (Figure 8). The peak cumulative incidence risk was in the 50-54-year-age group (4 421.9 cases per 100 000 persons) for females, and in the 55-59 (3 995.2 cases per 100 000 persons) and ≥80-year-age group (3 964.9 cases per 100 000 persons) for males (Figure 9). In week 1, the highest weekly incidence risk for females was in the 50-54-year-age group (368.5 cases per 100 000 persons), and for males in the ≥80-year-age group (369.4 cases per 100 000 persons). The high prevalence and incidence risk among females 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.

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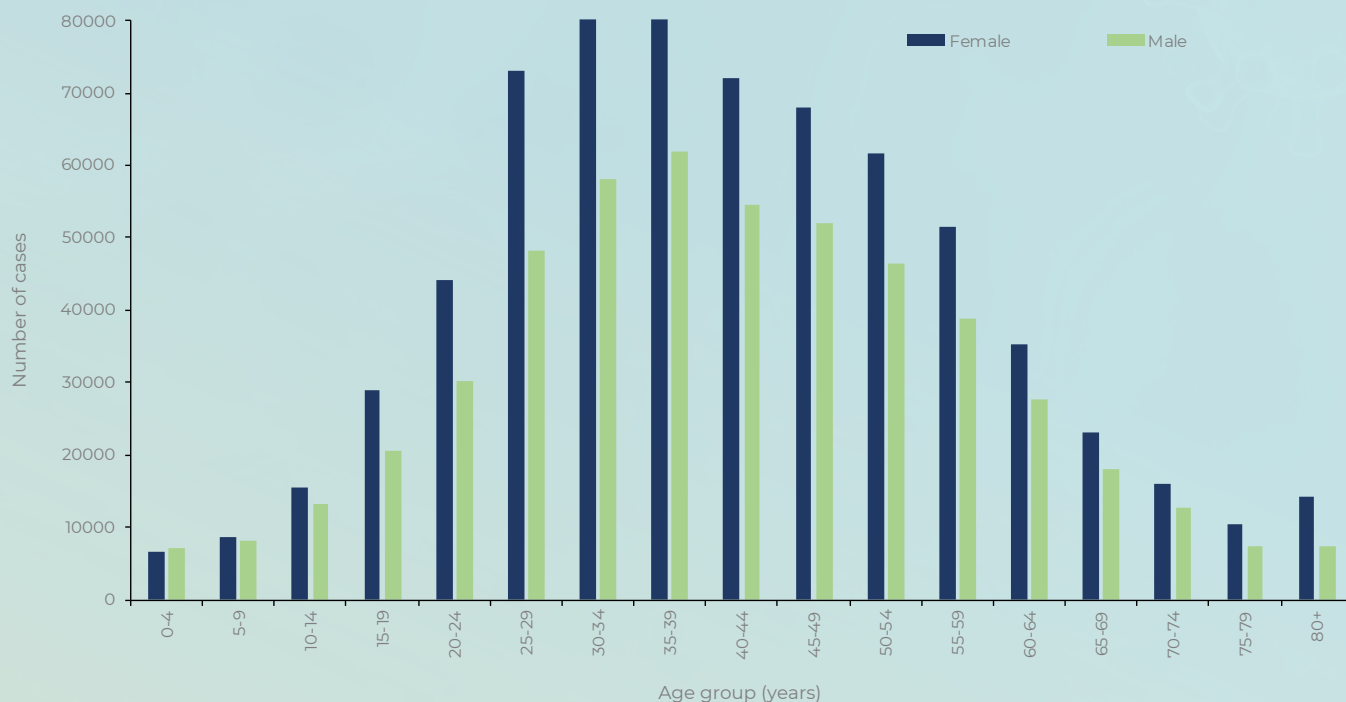


Figure 6. Number of laboratory-confirmed cases of COVID-19 by age group and sex, South Africa, 3 March 2020- 9 January 2021 (n = 1 210 853, sex/age missing for 20 744)

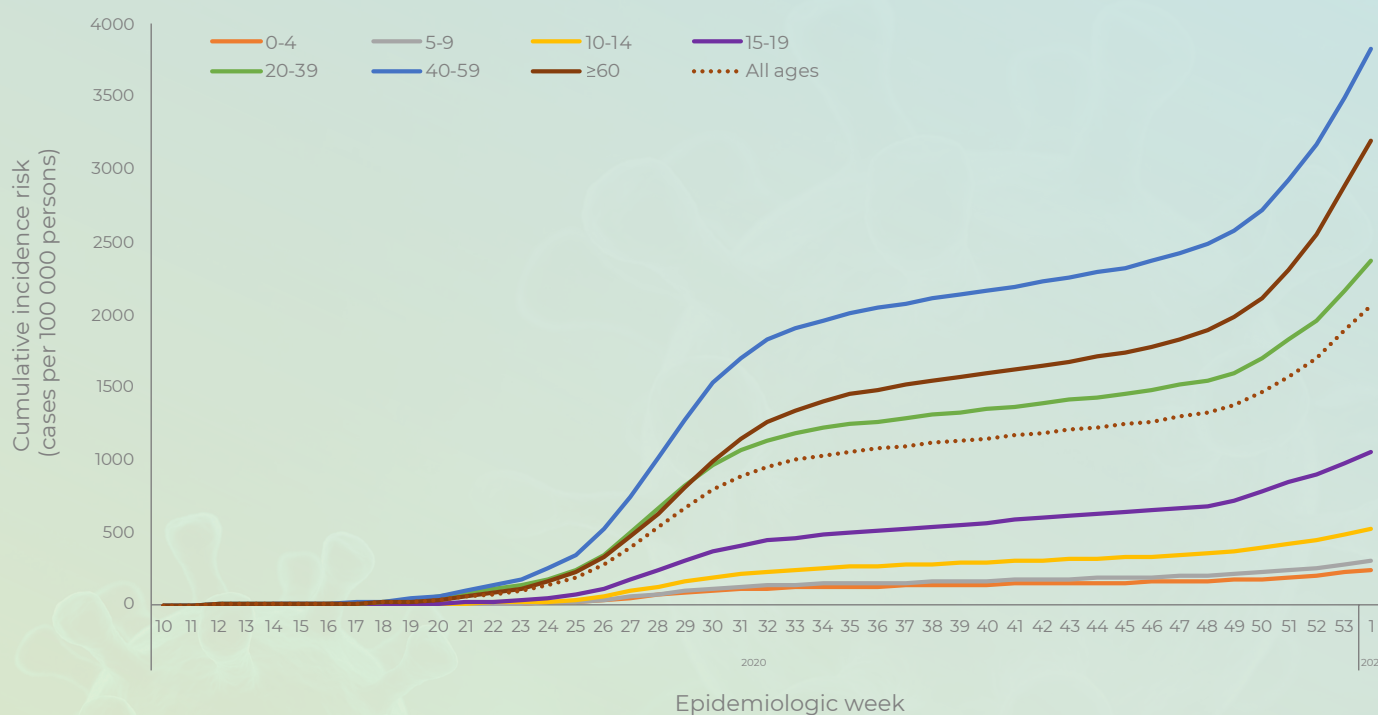


Figure 7. Cumulative incidence risk of laboratory-confirmed cases of COVID-19 by age group in years and epidemiologic week, South Africa, 3 March 2020-9 January 2021 (n= 1 221 685, 9 912 missing age)

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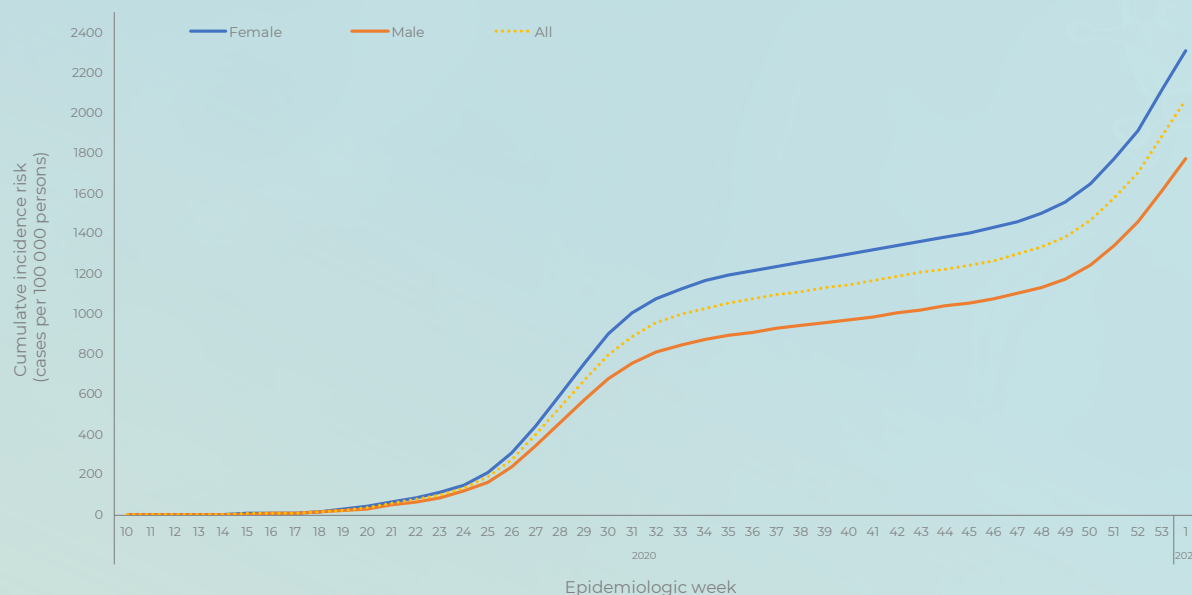


Figure 8. Cumulative incidence risk by sex and epidemiologic week, South Africa, 3 March 2020- 9 January 2021 (n= 1 219 784, sex missing for 11 813)

Table 2. Number of laboratory-confirmed cases of COVID-19 and cumulative/weekly incidence risk by age group, South Africa, 3 March 2020- 9 January 2021, n= 1 221 685, 9 912 missing age)

Age group (years)	Cumulative cases (n) (percentage, n/ total cases in South Africa)	New cases ¹ detected in week 1 (3-9 January 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 1 (cases/100 000 persons)
0-4	14 025 (1.1)	1 087 (1.0)	5743 450	244.2	18.9
5-9	17 171 (1.4)	1 292 (1.2)	5715 952	300.4	22.6
10-14	29 300 (2.4)	2 102 (2.0)	5591 553	524.0	37.6
15-19	50 393 (4.1)	3 515 (3.3)	4774 579	1 055.4	73.6
20-24	75 086 (6.1)	6 032 (5.7)	4823 367	1 556.7	125.1
25-29	122 392 (10.0)	10 070 (9.6)	5420 754	2 257.8	185.8
30-34	144 286 (11.8)	12 367 (11.7)	5641 750	2 557.5	219.2
35-39	147 731 (12.1)	13 009 (12.4)	4798 293	3 078.8	271.1
40-44	127 304 (10.4)	11 099 (10.5)	3733 942	3 409.4	297.2
45-49	120 736 (9.9)	10 396 (9.9)	3169 648	3 809.1	328.0
50-54	108 539 (8.9)	9 245 (8.8)	2571 263	4 221.2	359.6
55-59	90 963 (7.4)	8 132 (7.7)	2211 309	4 113.5	367.7
60-64	63 544 (5.2)	5 984 (5.7)	1796 316	3 537.5	333.1
65-69	41 403 (3.4)	4 120 (3.9)	1408 665	2 939.2	292.5
70-74	28 904 (2.4)	3 010 (2.9)	1007 174	2 869.8	298.9
75-79	18 079 (1.5)	1 851 (1.8)	637 062	2 837.9	290.6
≥80	21 829 (1.8)	1 952 (1.9)	577 273	3 781.4	338.1
Unknown	9 912	1 011			
Total	1 231 597	106 274	59 622 350	2 065.7	178.2

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); ³2020 Mid-year population Statistics South Africa

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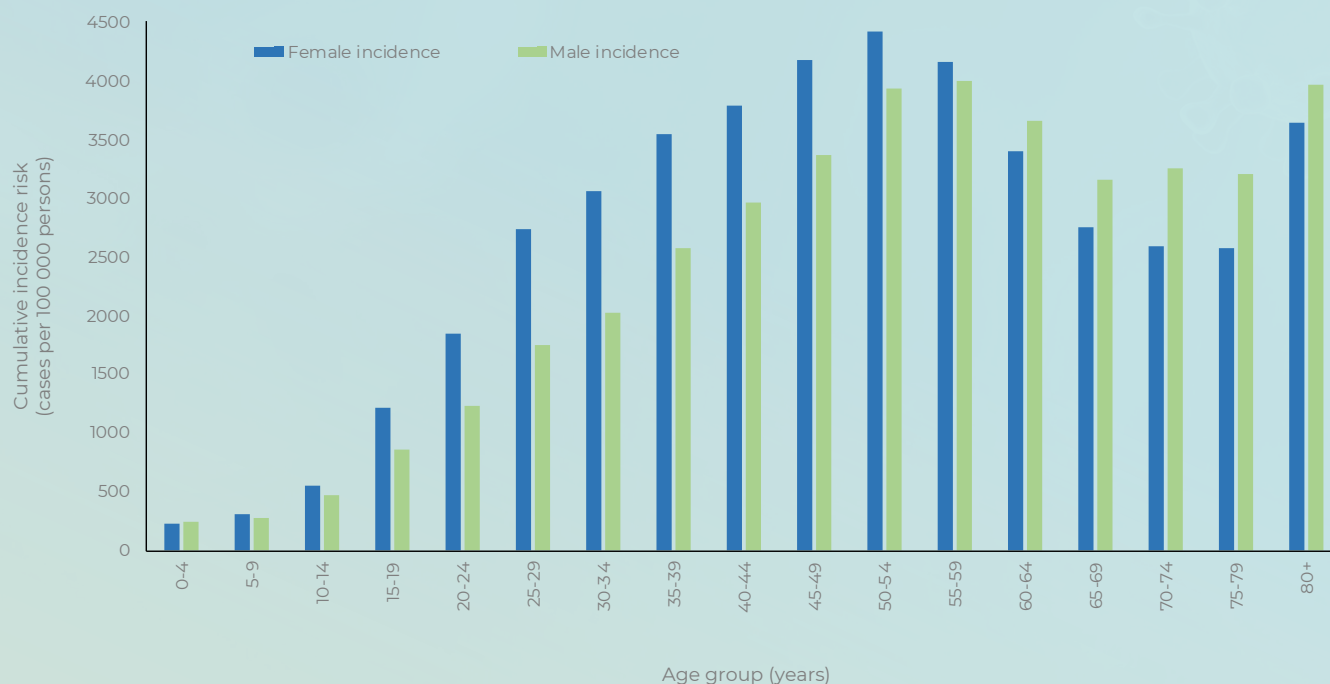


Figure 9. Cumulative incidence risk by age group and sex, South Africa, 3 March 2020- 9 January 2021 (n= 1 210 853, sex/age missing for 20 744)

Provincial trends of COVID-19 cases

In the past few weeks, the majority of provinces have reported an increase in the number of new cases and weekly incidence risks, except for the Eastern Cape where total numbers appear to be going down. Trends by district and age group for each province are presented below.

Eastern Cape Province

Of the 180 689 cases reported from the Eastern Cape Province, 160 771 (89.0 %) cases had allocation by district. The Nelson Mandela Bay Metro (45 626/160 771, 28.4%) followed by the Buffalo City Metro (29 386/160 771, 18.3%) contributed the majority of cases from the Eastern Cape. In week 1, the Joe Gqabi (135.1 cases per 100 000 person), followed by the Buffalo City (123.2 cases per 100 000 persons), the Chris Hani (111.0 cases per 100 000 persons), and the Sarah Baartman (102.9 cases per 100 000 persons) districts reported the highest weekly incidence risk. (Figure 10). The trend in weekly incidence

risk reported in recent weeks varied by district, with Nelson Mandela Bay and Sarah Baartman districts reporting the highest weekly incidence risks in week 47, Amathole District in week 50, and Joe Gqabi District in week 53, all at a higher level compared to the peaks in the first wave.

The majority of cases from the Eastern Cape Province were in the 40-59-year old age group (65 806/ 178 895, 36.8%), followed by the 20-39-year age group (62 462/178 895, 34.9%). In the past week, the ≥60-year age group (190.8 cases per 100 000 persons), followed by 40-59-year age group (169.7 cases per 100 000 persons), and 20-39-year age group (92.1 cases per 100 000 persons), reported the highest weekly incidence risk. The weekly incidence risk in all other age groups was below 40 cases per 100 000 persons. In the past week, all age groups reported a decrease in weekly incidence risk, compared to week 53 (Figure 11). From week 50, ≥60-year-age group reported a higher weekly incidence risk compared to the peak in the first wave in week 28, whereas the other age groups continued reporting weekly incidence risks below those reported in the first wave.

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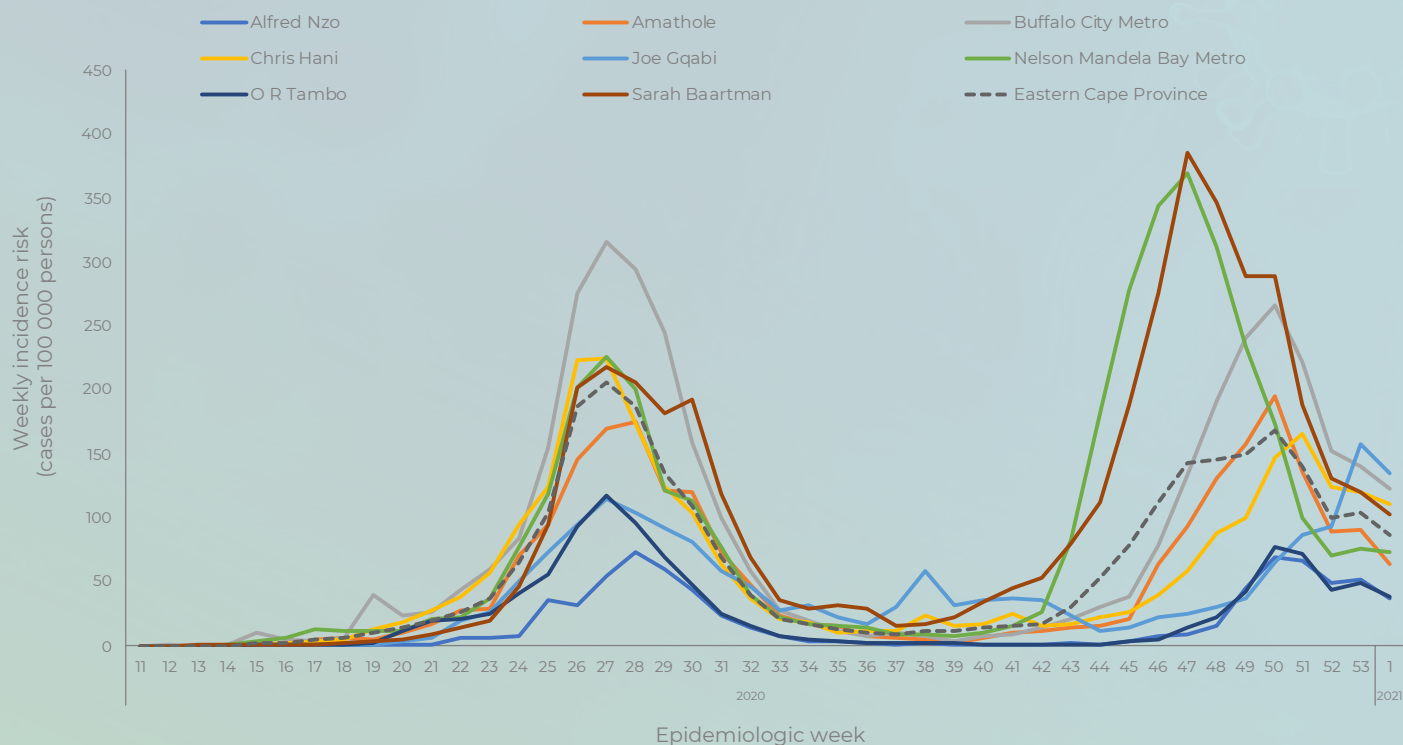


Figure 10. Weekly incidence risk of laboratory-confirmed cases of COVID-19 by district and epidemiologic week, Eastern Cape Province, 3 March 2020- 9 January 2021 (n= 160 771, 19 918 missing district)

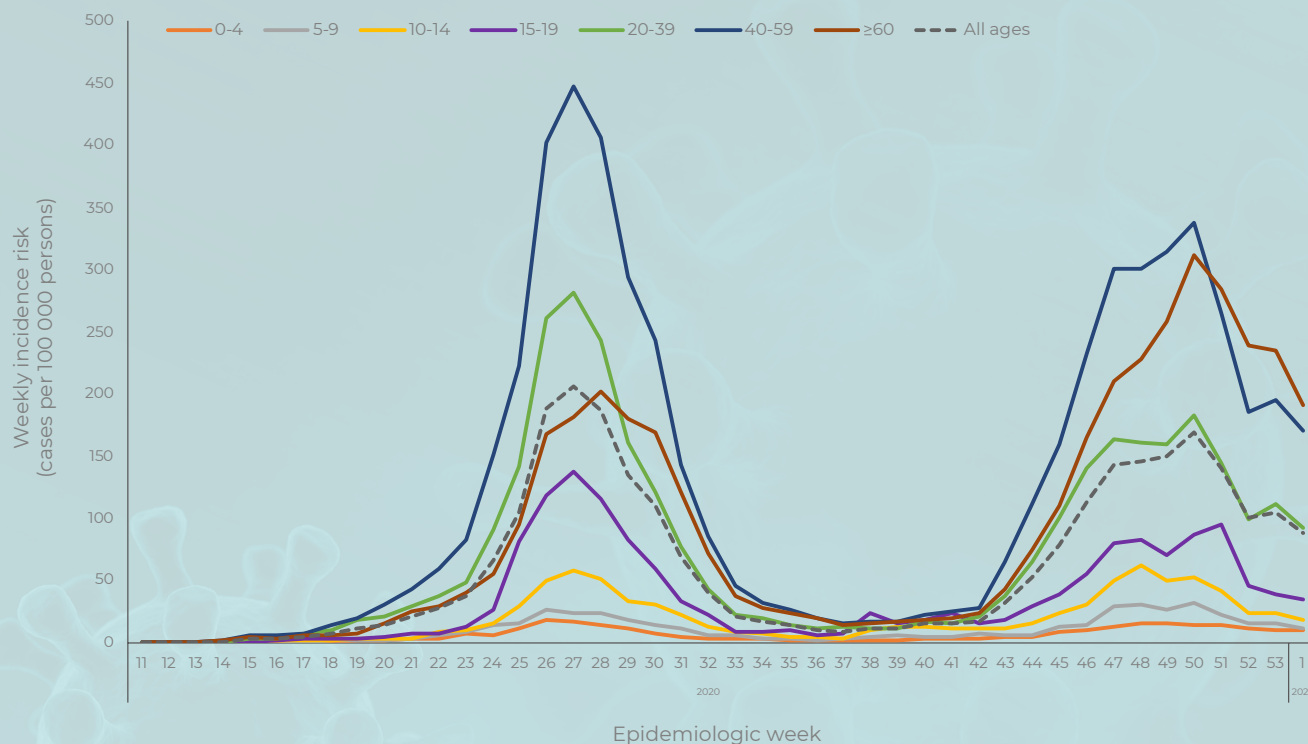


Figure 11. Weekly incidence risk of laboratory-confirmed cases of COVID-19 by age group in years and epidemiologic week, Eastern Cape Province, 3 March 2020 – 9 January 2021 (n= 178 895, 1 794 missing age)

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Western Cape Province

Of the 241 001 cases reported from the Western Cape Province, 223 993 (92.9%) of cases had allocation by district. The City of Cape Town District (150 076/223 993, 67.0%) followed by the Garden Route District (26 530/223 993, 11.8%), and the Cape Winelands District (26 319/223 993, 11.8%) contributed the majority of cases, all other districts contributed <10% each. In the past week, the highest weekly incidence risk was reported by the Overberg (387.5 cases per 100 000 persons), followed by the Cape Winelands (270.1 cases per 100 000 persons), City of Cape Town (253.2 cases per 100 000 persons), West Coast (248.5 cases per 100 000 persons), and Garden Route (231.1 cases per 100 000 persons) districts (Figure 12). The increasing trend in weekly incidence risk reported from the different districts in recent weeks varied by district, with all the districts reporting the highest weekly incidence risks from week 50 to week 53, higher than the peaks in the first wave. Case numbers

are going down in Garden route since the peak in week 50 following the steep increase in cases which started in week 45.

The majority of cases from the Western Cape Province were in the 20-39-year old age group (97 131/240 145, 40.4%), followed by the 40-59-year age group (89 462/240 145, 37.3%). In the past week, the ≥60-year age group (503.9 cases per 100 000 persons), followed by 40-59-year age group (454.4 cases per 100 000 persons), 20-39-year age group (277.4 cases per 100 000 persons), and 15-19-year-age group (113.4 cases per 100 000 persons) reported the highest weekly incidence risk. The weekly incidence risk in all other age groups remained below 40 cases per 100 000 persons. In the past week, all age groups reported a decrease in weekly incidence risk, compared to week 53, possibly related to reporting delays (Figure 13). From week 51 to week 53, all age groups reported the highest weekly incidence risks compared to the peaks in the first wave in different weeks.

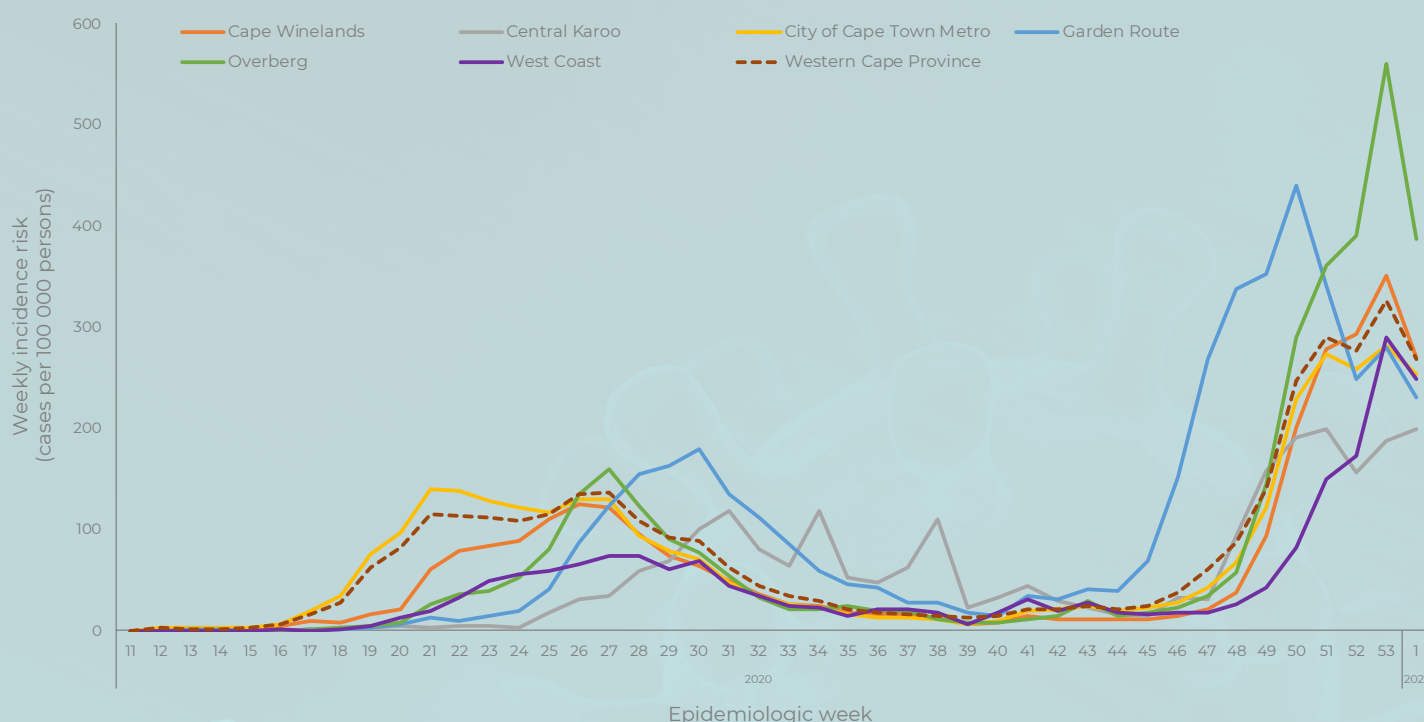


Figure 12. Weekly incidence risk of laboratory-confirmed cases of COVID-19 by district and epidemiologic week, Western Cape Province, 3 March 2020– 9 January 2021 (n= 223 993, 17 008 missing district)

COVID-19 WEEKLY EPIDEMIOLOGY BRIEF

WEEK 1 2021

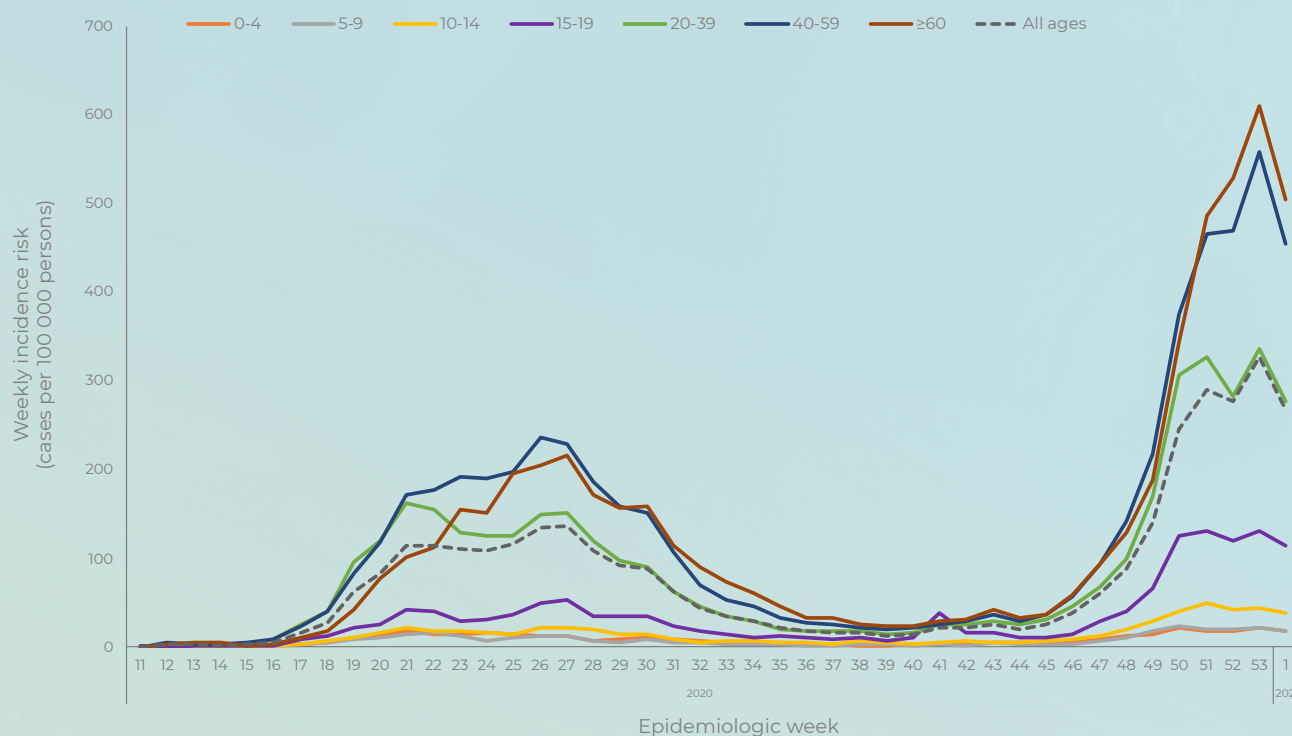


Figure 13. Weekly incidence risk of laboratory-confirmed cases of COVID-19 by age group in years and epidemiologic week, Western Cape Province, 3 March 2020- 9 January 2021 (n= 240 145, 856 missing age)

Gauteng Province

Of the 333 842 cases reported from the Gauteng Province, 295 386 (88.5%) had allocation by district. The City of Johannesburg Metro (116 358/295 386, 39.4%), followed by the City of Tshwane Metro (77 076/295 386, 26.1%), and the Ekurhuleni Metro (61339/295 386, 20.8%) contributed the majority of cases, all other districts contributed below 15% each. In week 1, the City of Tshwane (243.7 cases per 100 000 persons), followed by the West Rand District (170.7 cases per 100 000 persons), and the City of Johannesburg Metro (159.7 cases per 100 000 persons) reported the highest weekly incidence risk. All the districts reported an increase in number of new cases and weekly incidence risk from week 48 to date. The increase in numbers and incidence risk

reported recently from all the districts remained below that reported during the first peak, except the City of Tshwane which reported a higher weekly incidence in week 53 and week 1 compared the first wave peak in week 29 (Figure 14).

The majority of cases from Gauteng Province were in the 20-39-year-age group (127 289/295 044, 43.1%), followed by 40-59-year-age group (107 512/295 044, 36.4%). Similar to the previous four weeks, in the past week, all age groups reported an increase in weekly incidence risk, compared to the previous week (Figure 15).

COVID-19 WEEKLY EPIDEMIOLOGY BRIEF

WEEK 1 2021

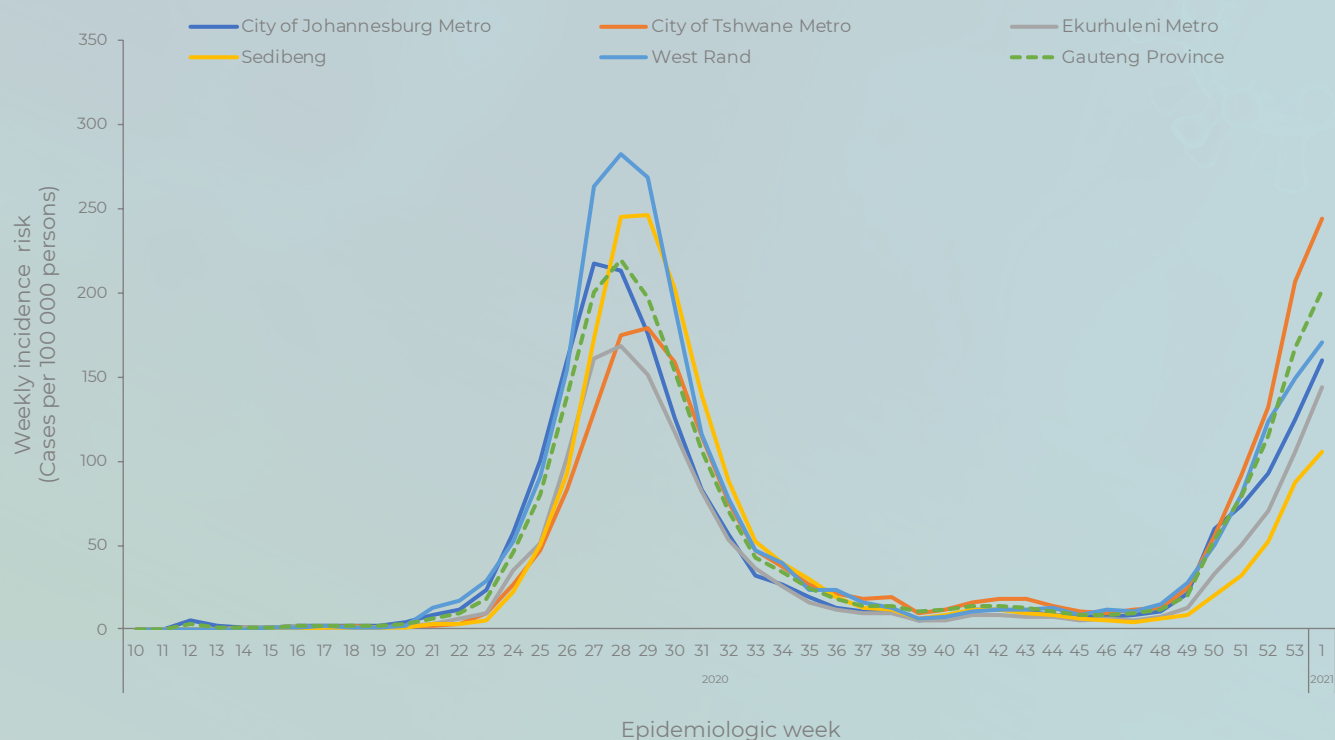


Figure 14. Weekly incidence risk of laboratory-confirmed cases of COVID-19 by district and epidemiologic week, Gauteng Province, 3 March 2020- 9 January 2021 (n= 295 386, 38 456 missing district)

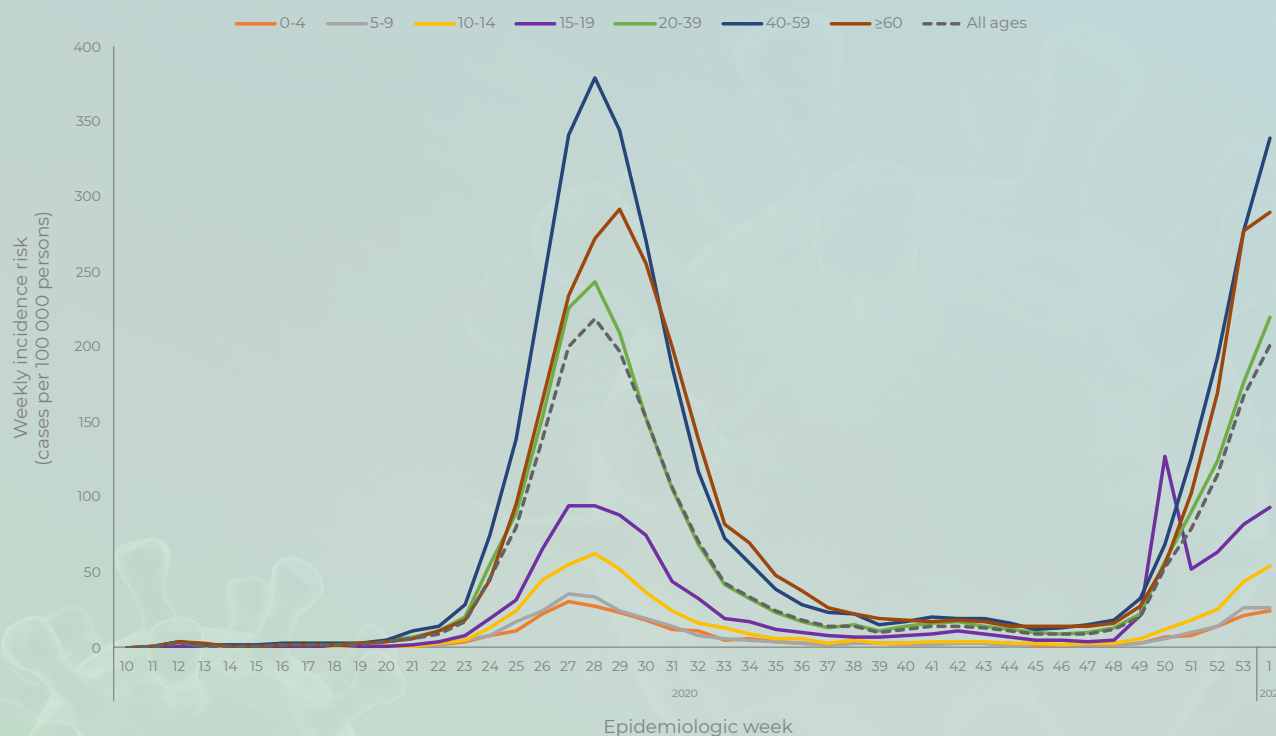


Figure 15. Weekly incidence risk of laboratory-confirmed cases of COVID-19 by age group in years and epidemiologic week, Gauteng Province, 3 March 2020- 9 January 2021 (n= 330 408, 3 434 missing age)

COVID-19 WEEKLY EPIDEMIOLOGY BRIEF

WEEK 1 2021

KwaZulu-Natal Province

Of the 252 115 cases reported from KwaZulu-Natal Province, 194 710 (77.2%) had allocation by district. The eThekweni Metro (102 188/194 710, 52.5%) followed by uMgungundlovu Metro (20 584/194 710, 10.8%) contributed the majority of cases. In week 1, eThekweni Metro (299.8 cases per 100 000 persons), followed by King Cetshwayo (194.5 cases per 100 000 persons), uMgungundlovu (171.2 cases per 100 000 persons), Ugu (131.3 cases per 100 000 persons), iLembe (120.7 cases per 100 000 persons), and Harry Gwala (103.1 cases per 100 000 persons) districts reported the highest weekly incidence risk. In the past week, all districts reported a decrease in weekly incidence risk, except Amajuba District which reported an increase in weekly incidence risk, compared to week 1. The decreases in week 1 are possibly due to reporting delays.

Following the decline in number of cases after the first wave, an increasing trend in weekly incidence risk which varied by districts, has been reported since week 48. During this period all districts reported weekly incidence risks higher than those reported in the first

peaks; eThekweni Metro (300.4 vs 165.8 cases per 100 000 persons), iLembe District (150.2 cases vs 96.2 per 100 000 persons), Harry Gwala District (132.9 vs. 85.2 cases per 100 000 persons), King Cetshwayo (170.1 vs 121.9 cases per 100 000 persons), Ugu (148.7 vs 107.0 cases per 100 000 persons), uThukela (99.0 vs 94.5 cases per 100 000 persons), and uMkhanyakude (63.8 vs 61.7 cases per 100 000 persons), uThukela (152.3 vs 94.5 cases per 100 000 persons), uMzinyathi (94.8 vs 94.3 cases per 100 000 persons), and Zululand (101.2 vs 99.9 cases per 100 000 persons), except Amajuba District which continued to report weekly incidence risk below the first wave peaks (Figure 16).

The majority of cases from KwaZulu-Natal Province were in the 20-39-year-age group (98 232/249 899, 39.3%), followed by 40-59-year-age group (88 464/249 899, 35.4%). In week 52 to week 53, all age groups reported weekly incidence risks higher than those reported in the first wave peaks. In the past week, all age groups reported a decrease in weekly incidence risk, compared to the previous week (Figure 17).

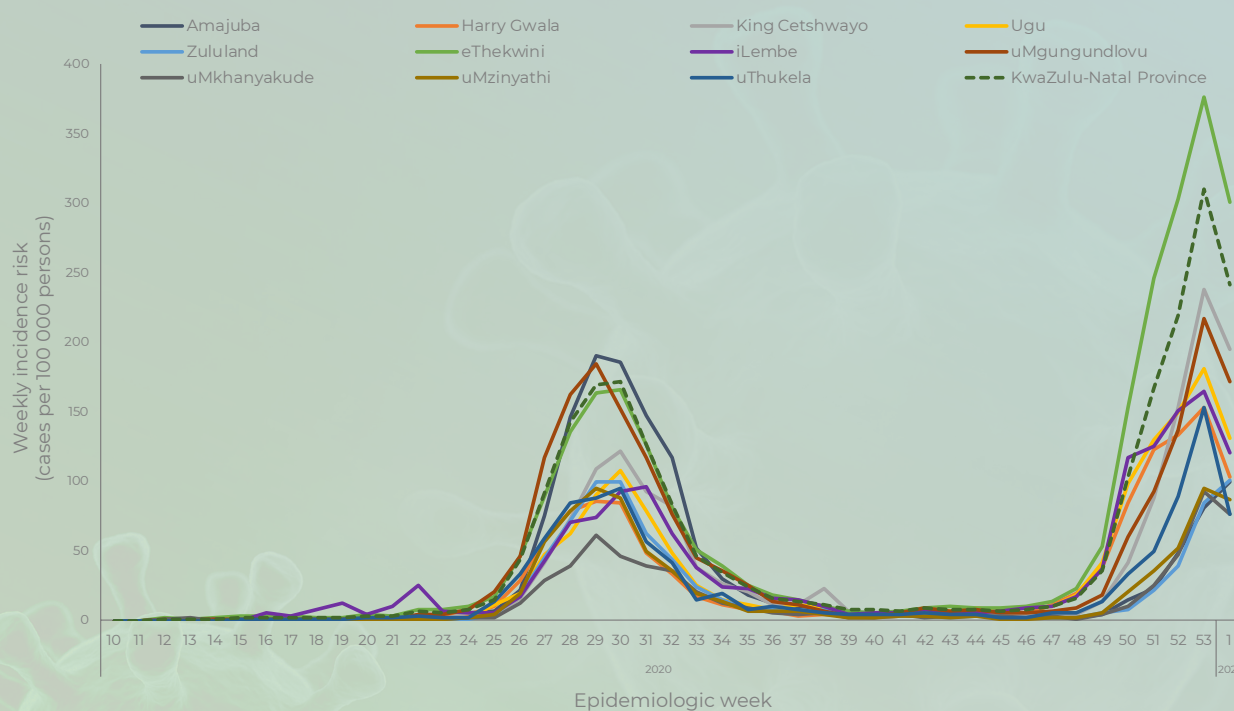


Figure 16. Weekly incidence risk of laboratory-confirmed cases of COVID-19 by district and epidemiologic week, KwaZulu-Natal Province, 3 March 2020- 9 January 2021 (n= 194 710, 57 405 missing district)

COVID-19 WEEKLY EPIDEMIOLOGY BRIEF

WEEK 1 2021

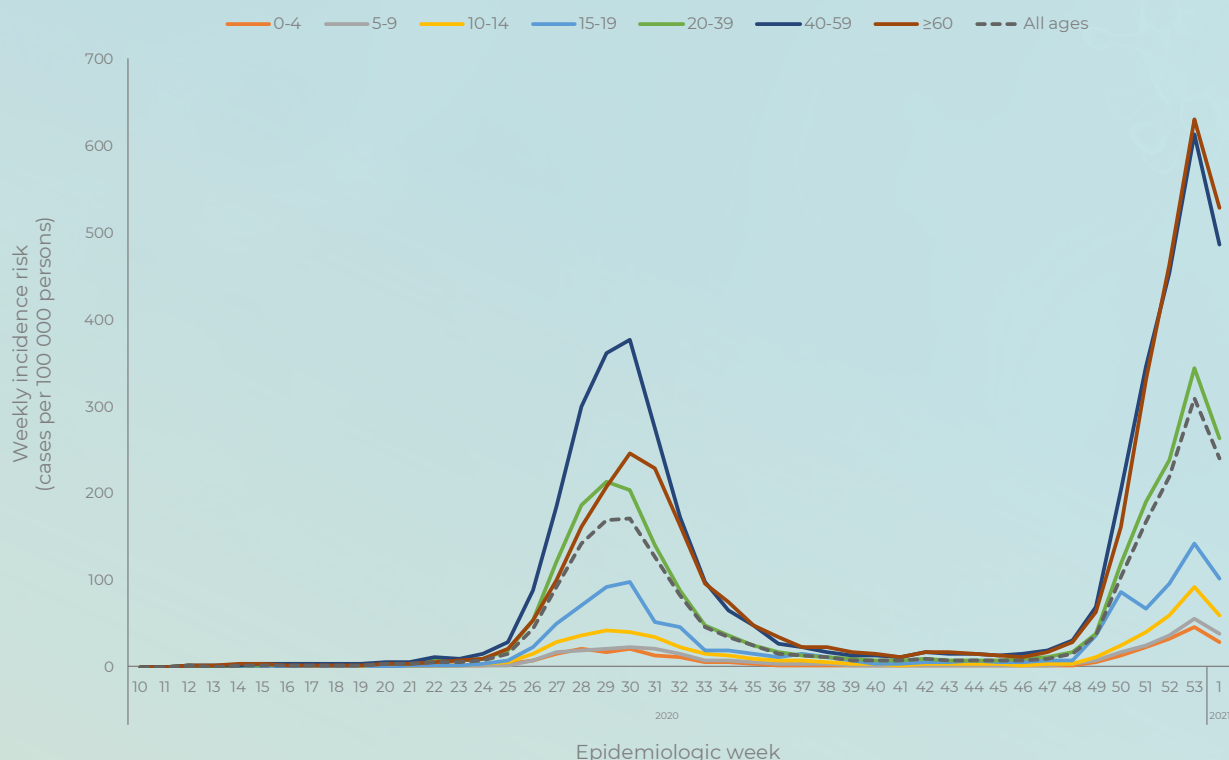


Figure 17. Weekly incidence risk of laboratory-confirmed cases of COVID-19 by age group in years and epidemiologic week, KwaZulu-Natal Province, 3 March 2020- 9 January 2021 (n= 249 899, 2 216 missing age)

Free State Province

Of the 66 760 cases reported from the Free State Province, 61 222 (91.7%) had allocation by district. The Mangaung Metro (24 389/61 222, 39.8%), followed by the Lejweleputswa (14 693/ 61 222, 24.0%), and the Thabo Mofutsanyane (10 975/61 222, 17.9%) districts contributed the majority of cases, all other districts contributed below 15% each. In week 1, the Fezile Dabi District (112.9 cases per 100 000 persons), followed by the Xhariep District (87.3 cases per 100 000 persons) and Mangaung Metro (82.9 cases per 100 000 persons) reported the highest weekly incidence risk. All the districts reported an increase in number of new cases and weekly

incidence risk from week 50 to date. The increase in numbers and incidence risk reported recently from all the districts remained below that reported during the first peak (Figure 18).

The majority of cases from the Free State Province were in the 20-39-year-age group (25 642/66 571, 38.5%), followed by 40-59-year-age group (23 949/66 571, 36.0%). In the past week, all age groups reported an increase in weekly incidence risk, compared to the previous week (Figure 19).

COVID-19 WEEKLY EPIDEMIOLOGY BRIEF

WEEK 1 2021

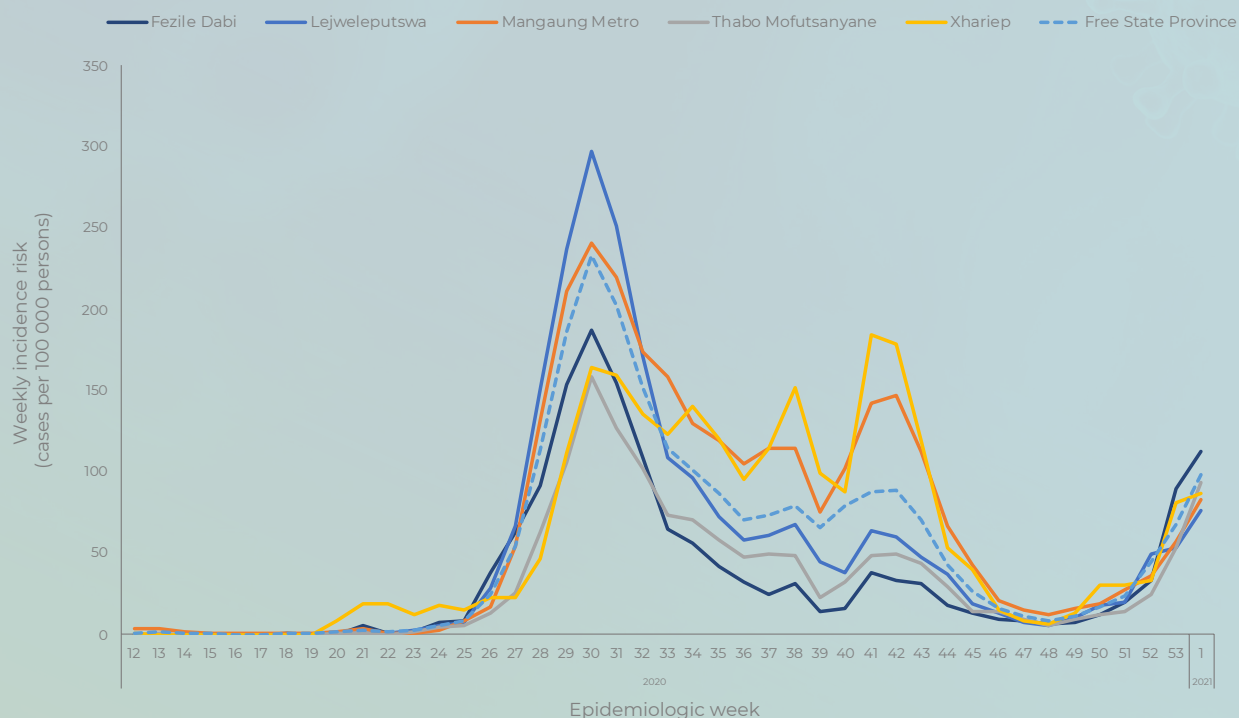


Figure 18. Weekly incidence risk of laboratory-confirmed cases of COVID-19 by district and epidemiologic week, Free State Province, 3 March 2020- 9 January 2021 (n= 61 222, 5 538 missing district)

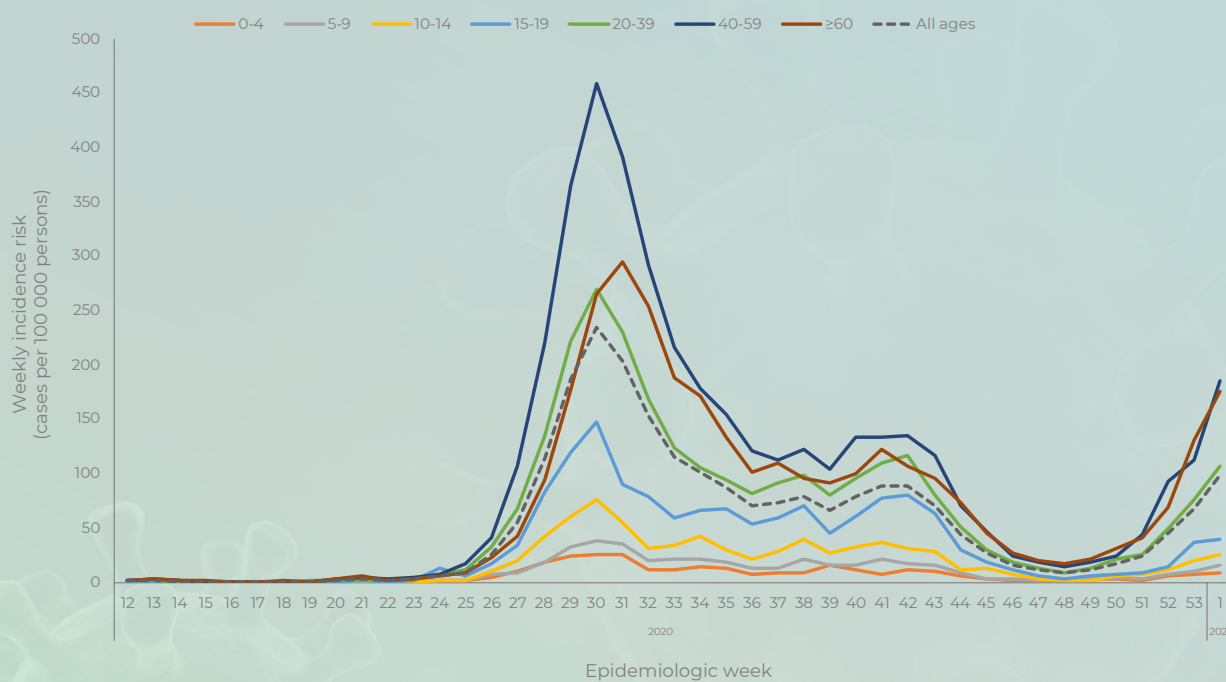


Figure 19. Weekly incidence risk of laboratory-confirmed cases of COVID-19 by age group in years and epidemiologic week, Free State Province, 3 March 2020- 9 January 2021 (n= 66 571, 189 missing age)

COVID-19 WEEKLY EPIDEMIOLOGY BRIEF

WEEK 1 2021

Limpopo Province

Of the 37 197 cases reported from the Limpopo Province, 33 489 (90.0%) had allocation by district. The Capricorn (11 453/33 489, 34.2%), followed by the Waterberg (6 432/33 489, 19.2%), and the Vhembe (6 158/33 489, 18.4%) districts contributed the majority of cases, all other districts contributed below 18% each. In week 1, the Capricorn (183.1 cases per 100 000 persons), followed by the Waterberg (145.1 cases per 100 000 persons), and the Vhembe (110.6 cases per 100 000 persons) districts reported the highest weekly incidence risk. All the districts reported a gradual increase in number of new cases and weekly incidence risk from week 49 to week 50, then sharp increase from week 51 to date, except the Vhembe district which showed a decrease in week 1. The weekly incidence risk reported in week 53 exceeds those

reported in the first peak in the Vhembe District (66.7 vs 15.0 cases per 100 000 persons), Capricorn District (124.5 vs 47.3 cases per 100 000 persons), Waterberg (83.3 vs 60.2 cases per 100 000 persons), Mopani (49.5 vs 28.7 cases per 100 000 persons), and Sekhukhune District (40.3 vs 33.0 cases per 100 000 persons) in week 1 (Figure 20).

The majority of cases from Limpopo Province were in the 20-39-year-age group (14 909/37 055, 40.2 %), followed by 40-59-year-age group (14 526/37 055, 39.2%). In the past week, all age groups reported an increase in weekly incidence risk, except 15-19-year age group which reported a decrease in weekly incidence risk, compared to the previous week (Figure 21). In week 53, all age groups reported weekly incidence risks higher than those reported during the first peaks in week 30 (Figure 21).

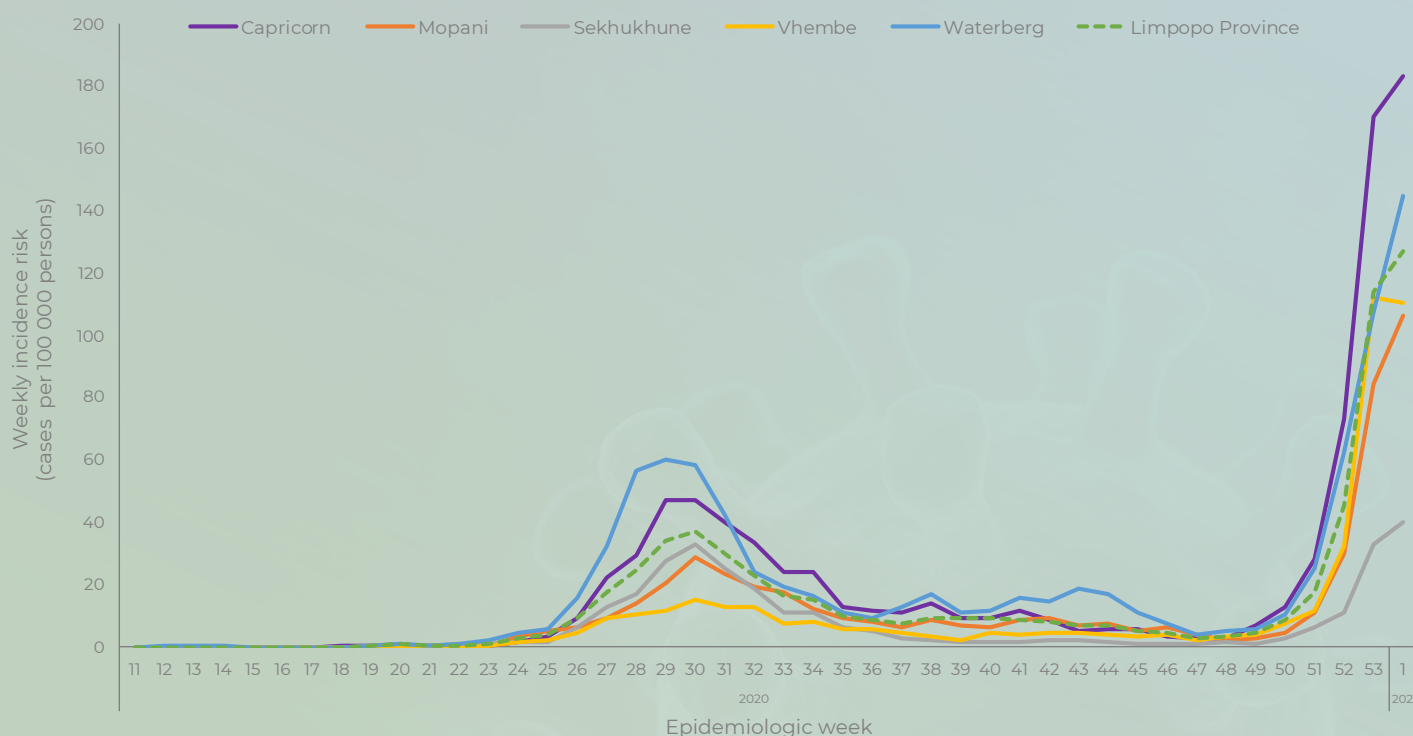


Figure 20. Weekly incidence risk of laboratory-confirmed cases of COVID-19 by district and epidemiologic week, Limpopo Province, 3 March 2020- 9 January 2021 (n= 33 489, 3 708 missing district)

COVID-19 WEEKLY EPIDEMIOLOGY BRIEF

WEEK 1 2021

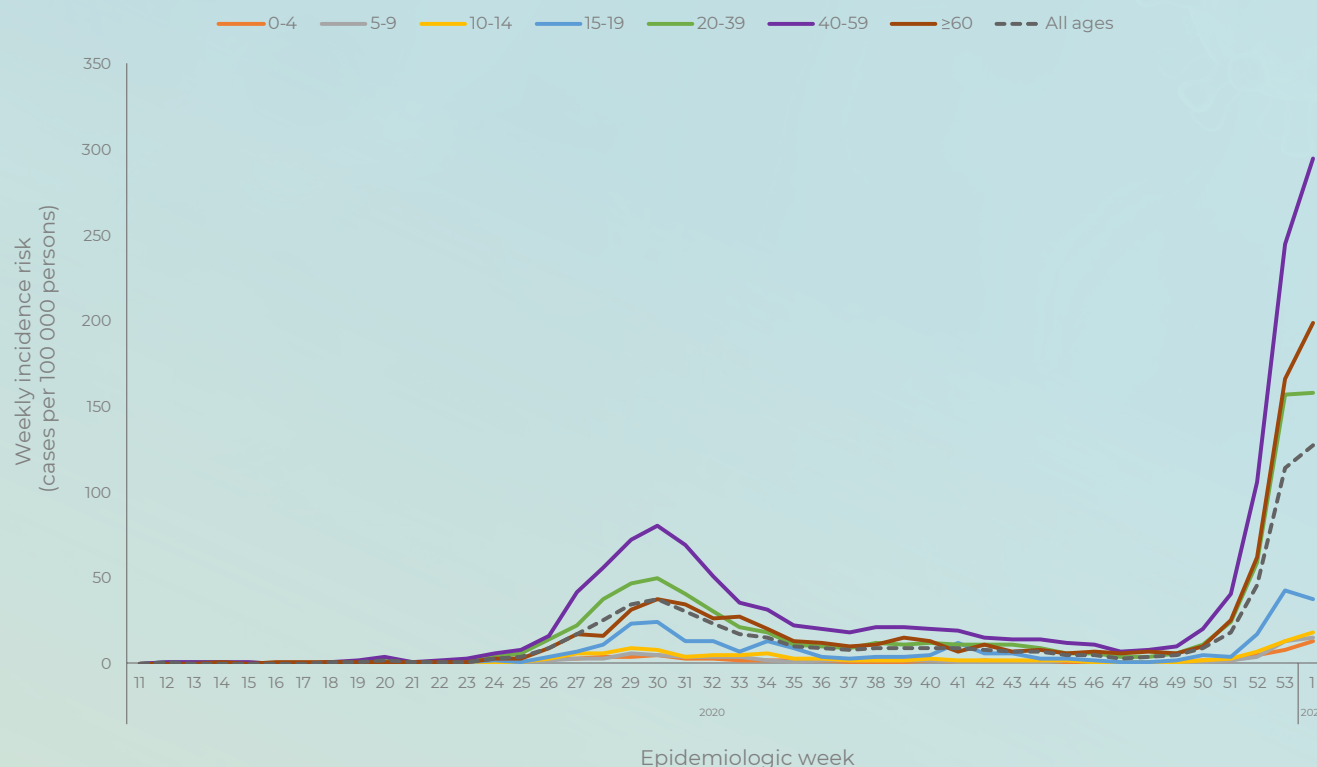


Figure 21. Weekly incidence risk of laboratory-confirmed cases of COVID-19 by age group in years and epidemiologic week, Limpopo Province, 3 March 2020- 9 January 2021 (n= 37 055, 142 missing age)

Mpumalanga Province

Of the 45 894 cases reported from the Mpumalanga Province, 39 644 (86.4 %) had allocation by district. All the districts contributed similar number of cases, Ehlanzeni (14 679/39 644, 37.0%), Nkangala (13 884/39 644, 35.0%) and the Gert Sibande (11 081/39 644, 28.0%) districts. In week 1, the Ehlanzeni District (112.4 cases per 100 000 persons), followed by the Nkangala District (111.8 cases per 100 000 persons) reported the highest weekly incidence risk. All the districts reported an increase in number of new cases and weekly incidence risk from week 50 to date. The increase in numbers and incidence risk reported recently from all the districts was higher than that reported during the first peak, except the Gert Sibande District which continued to report weekly incidence risk below the first wave peak (Figure 22).

The majority of cases from Mpumalanga Province were in the 20-39-year-age group (19 750/45 308, 43.6%), followed by 40-59-year-age group (16 241/45 308, 35.8%). In the past week, all age groups reported an increase in weekly incidence risk, except 5-9-year age group and 10-14-year-age group which reported a decrease in weekly incidence risk, compared to the previous week (Figure 23). In week 1, all age groups reported weekly incidence risks higher than those reported in the first wave peaks, except 10-14-year-age and 15-19-year-age groups which continued to report weekly incidence risk below the first wave peaks.

COVID-19 WEEKLY EPIDEMIOLOGY BRIEF

WEEK 1 2021

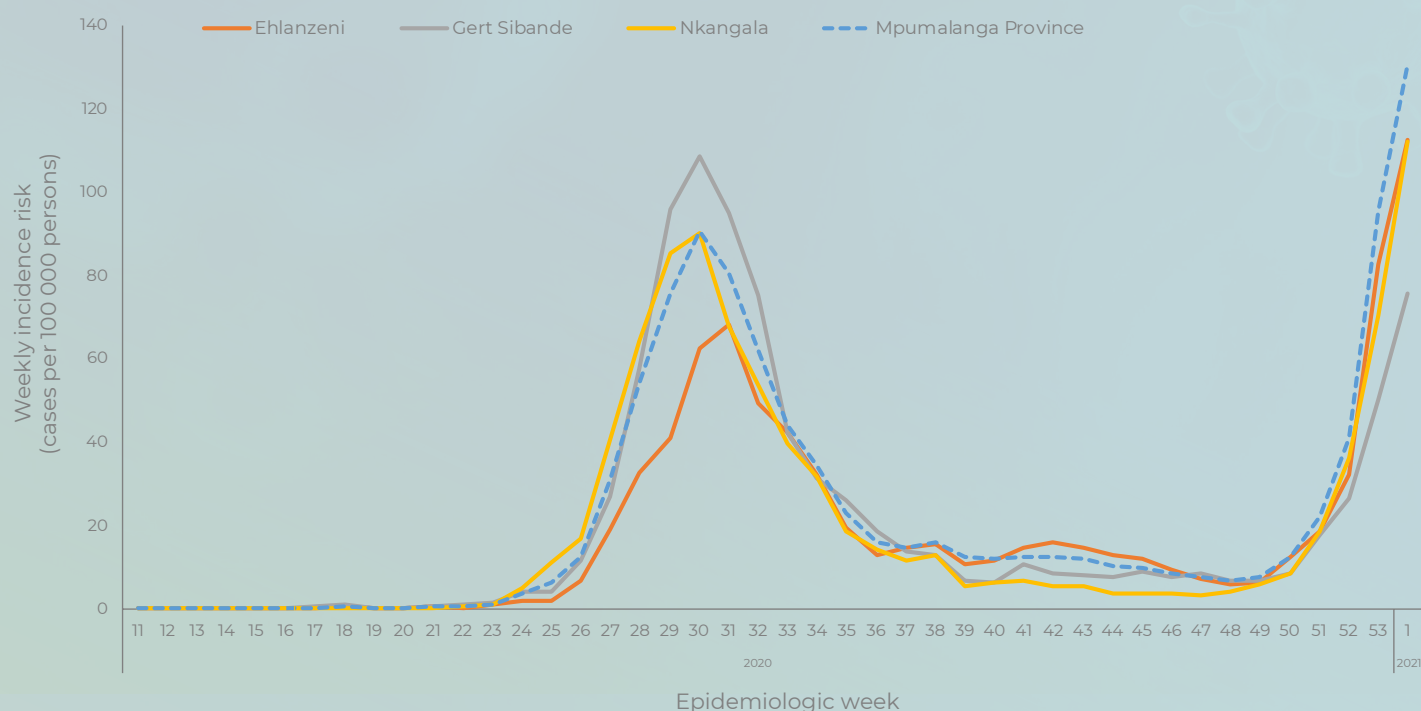


Figure 22. Weekly incidence risk of laboratory-confirmed cases of COVID-19 by district and epidemiologic week, Mpumalanga Province, 3 March 2020- 9 January 2021 (n= 39 644, 6 250 missing district)

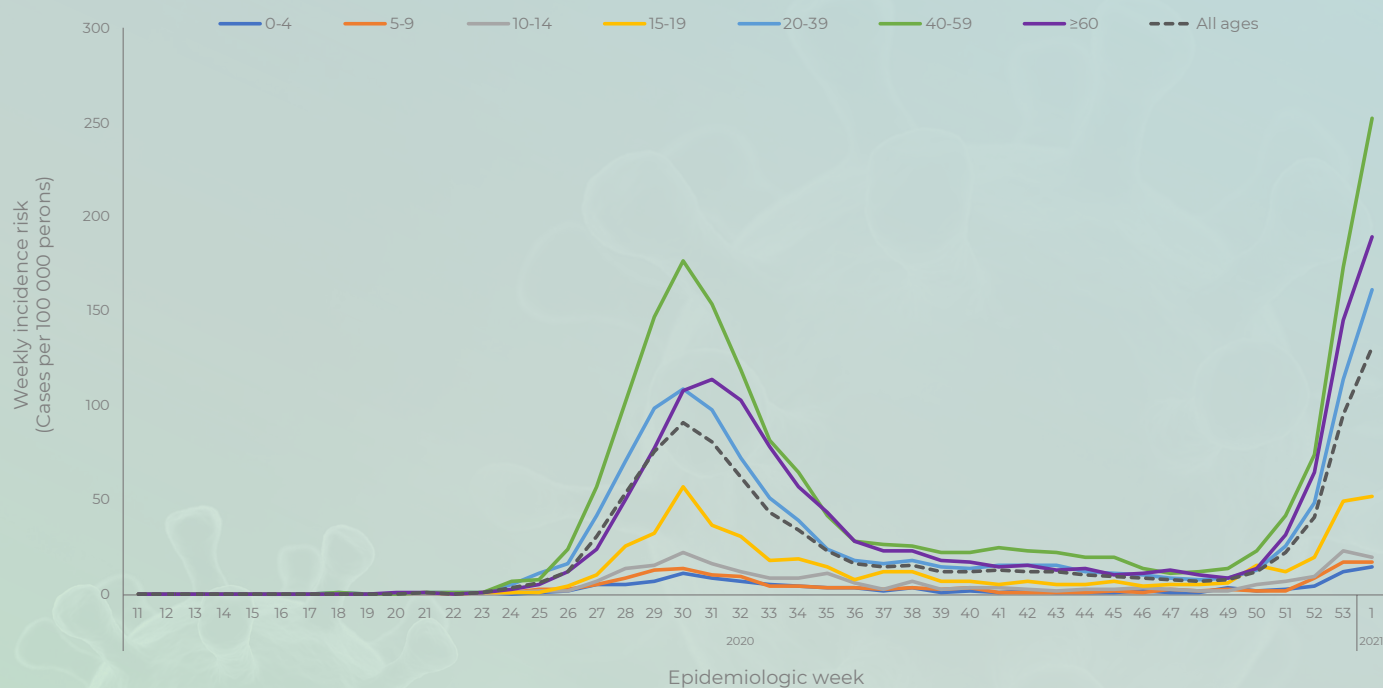


Figure 23. Weekly incidence risk of laboratory-confirmed cases of COVID-19 by age group and epidemiologic week, Mpumalanga Province, 3 March 2020- 9 January 2021 (n= 45 308, 586 missing age)

COVID-19 WEEKLY EPIDEMIOLOGY BRIEF

WEEK 1 2021

North West Province

Of the 46 451 cases reported from the North West Province, 39 111 (84.2 %) had allocation by district. The Bojanala Platinum District (19 466/39 111, 49.8 %), followed by the Dr Kenneth Kaunda District (10 087/39 111, 25.8 %) contributed the majority of cases, all other districts contributed below 20% each. In week 1, the Bojanala Platinum District (138.1 cases per 100 000 persons) reported the highest weekly incidence risk. All the districts reported a gradual increase in number of new cases and weekly incidence risk from week 50 to date, with Bojanala Platinum District showing a sharp increase in week 51 to date. The increase in numbers and incidence risk reported recently from all the districts remained below that reported during the first peak, except the Bojanala District which in week 1 reported weekly incidence risk higher than that reported in the

first wave peak (Figure 24).

The majority of cases from North West Province were in the 40-59-year-age group (19 267/46 003, 41.9%), followed by 20-39-year-age group (17 833/46 003, 38.8%). In the past week, 40-59-year-age group (213.9 cases per 100 000 persons), followed by ≥60-year-age group (150.5 cases per 100 000 persons), and 20-39-year-age group (139.7 cases per 100 000 persons) reported the highest weekly incidence risk, and other age groups reported below 40 cases per 100 000 persons. In the past week, all age groups reported an increase in weekly incidence risk, compared to the previous week. In week1, all age groups reported weekly incidence risk higher than those reported in the first wave peaks, except the 0-4-year-age and 5-9-year-age groups which continued to report weekly incidence risk below the first wave peak (Figure 25).

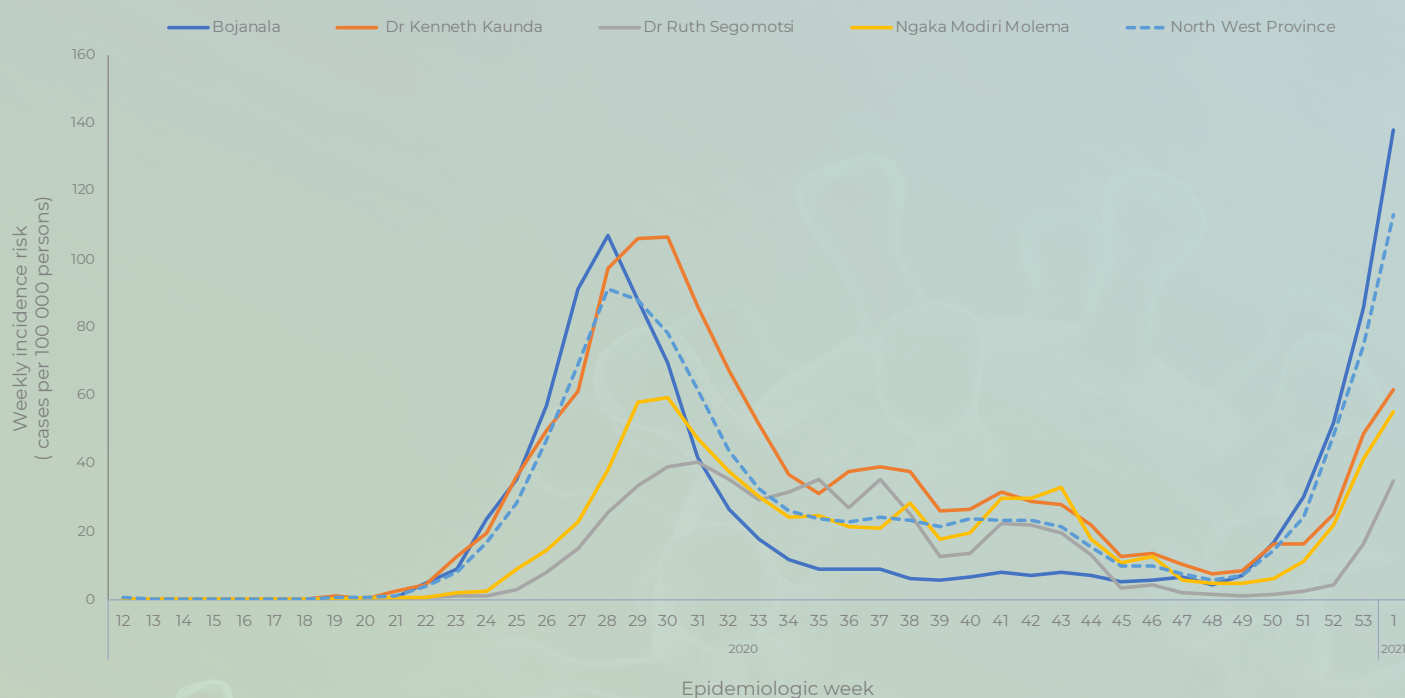


Figure 24. Weekly incidence risk of laboratory-confirmed cases of COVID-19 by district and epidemiologic week, North West Province, 3 March 2020- 9 January 2021 (n= 39 111, 7 340 missing district)

COVID-19 WEEKLY EPIDEMIOLOGY BRIEF

WEEK 1 2021

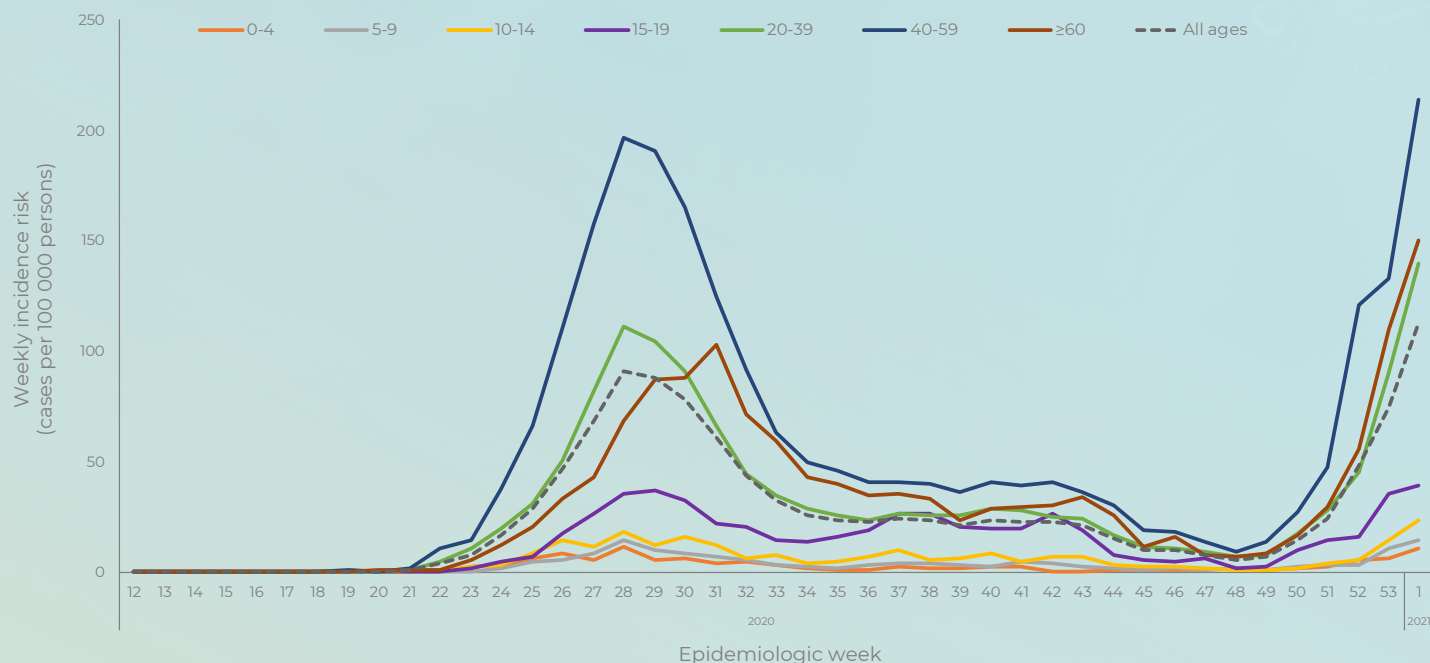


Figure 25. Weekly incidence risk of laboratory-confirmed cases of COVID-19 by age group in years and epidemiologic week, North West Province, 3 March 2020- 9 January 2021 (n= 46 003, 448 missing age)

Northern Cape Province

Of the 27 648 cases reported from the Northern Cape Province, 23 323 (84.4%) had allocation by district. The Frances Baard (8 477/23 323, 36.4 %), followed by the Pixley ka Seme (6 081/23 323, 26.1%) district contributed the majority of cases, all other districts contributed below 20% each. In week 1, the Namakwa (313.1 cases per 100 000 persons), followed by Pixley ka Seme (159.8 cases per 100 000 persons) districts reported the highest weekly incidence risk. All the districts reported a gradual increase in number of new cases and weekly incidence risk from week 50 to date, with the Namakwa District showing a sharp increase from week 51 to date.

The increase in numbers and incidence risk reported recently from all the districts remained below that reported during the first peak, except the Namakwa District which in week 1 reported a weekly incidence risk higher than that reported during the first peak (313.1 vs 62.3 cases per 100 000 persons) (Figure 26).

The majority of cases from Northern Cape Province were in the 20-39-year-age group (10 794/27 401, 39.4%), followed by 40-59-year-age group (9 439/27 401, 34.4%). In the past week, all age groups reported an increase in weekly incidence risk. In week 1, ≥60-year-age-group reported the weekly incidence risk higher than that reported in the first wave peak (Figure 27).

COVID-19 WEEKLY EPIDEMIOLOGY BRIEF

WEEK 1 2021

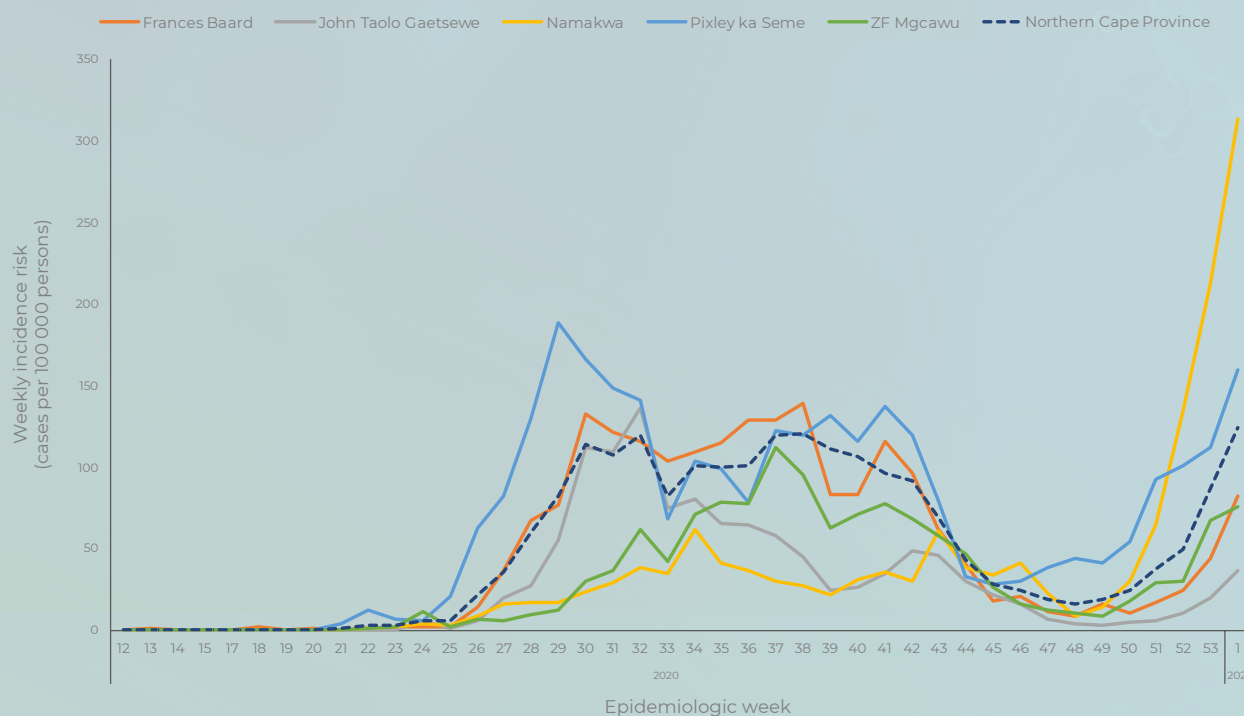


Figure 26. Weekly incidence risk of laboratory-confirmed cases of COVID-19 by district and epidemiologic week, Northern Cape Province, 3 March 2020- 9 January 2021 (n= 23 323, 4 325 missing district)

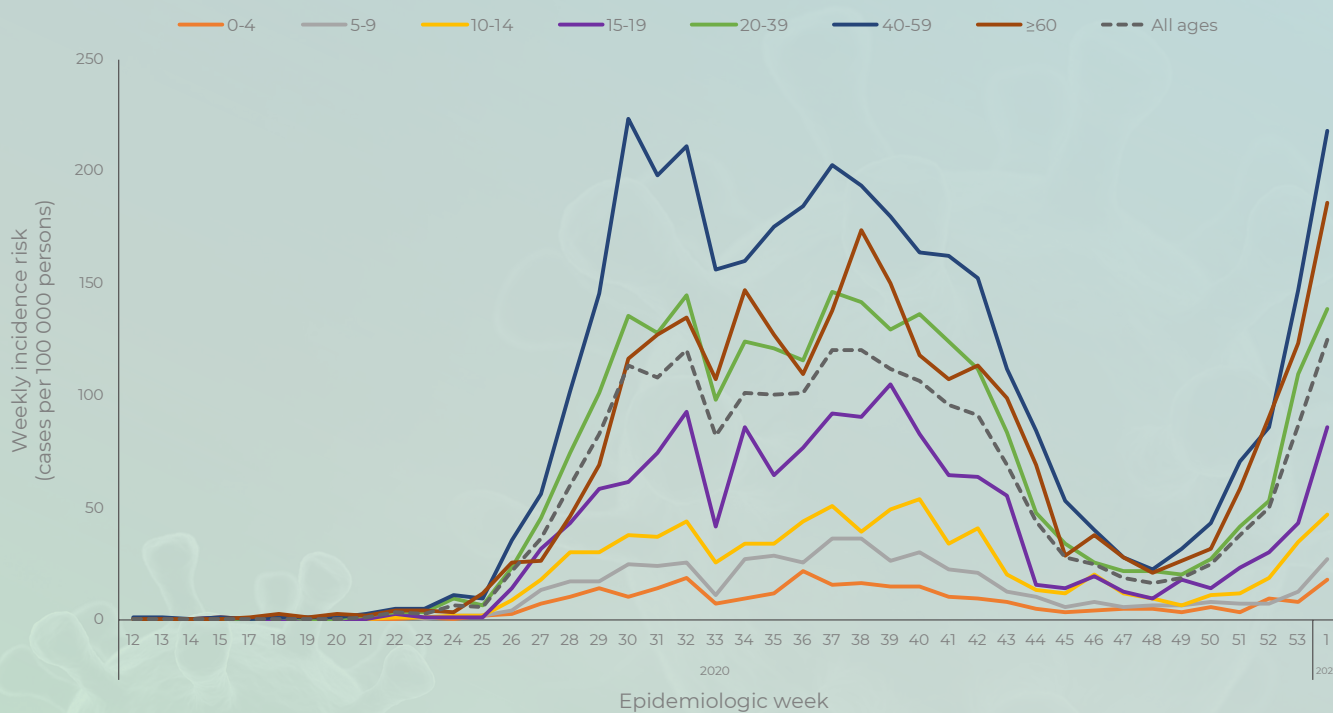


Figure 27. Weekly incidence risk of laboratory-confirmed cases of COVID-19 by age group in years and epidemiologic week, Northern Cape Province, 3 March 2020- 9 January 2021 (n= 27 401, 247 missing age)

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, 1231597 cases, including 33163 deaths have been reported. In the past four weeks increases in number of cases have been noted from all provinces except the Eastern Cape Province (where numbers appear to be going down) and the Western Cape Province (where trends may be related to delays in reporting). Travel during the festive season could result in changes in trends reported in different provinces during this period. Interprovincial travel at the current time where increases in cases are observed in several provinces could potentially increase the spread of COVID-19. It is important that during the festive season, people ensure to maintain measures to prevent the spread of COVID-19. These measures include limiting the number and size of social gatherings, meeting people outdoors or in well-ventilated spaces, consistent and correct use of masks, proper hand hygiene and physical distancing.

