COVID-19 PROVINCIAL COMPARISON

Provincial comparison and scenario planning
COVID 19 Industry Working Group Presentation
02 February 2021

Strictly confidential; all information subject to revision

MINERALS COUNCIL
SOUTH AFRICA

HIGHLIGHTS

- South Africa has entered into the second wave of the pandemic. However, over January, daily cases at a national level and at a provincial level has steadily been declining with the Eastern Cape being the only province entering a post second wave period.

- Gauteng province has the highest number of cases, followed closely by KwaZulu Natal, Western Cape and Eastern Cape. These four provinces are responsible for over 80% of the national caseload.

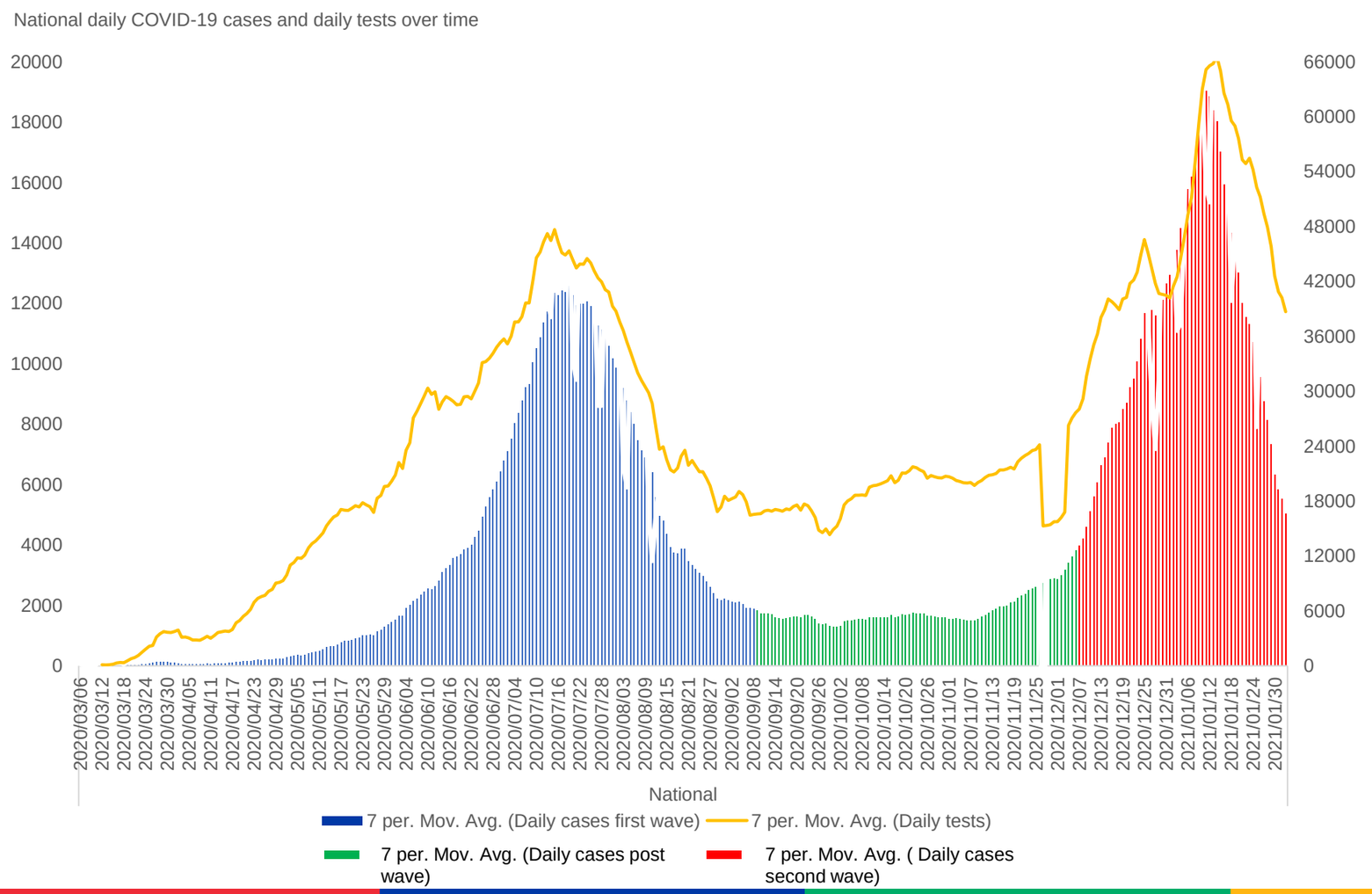
- Nationally, COVID-19 mining-related cases account for 2% of total caseload and slightly less than 1% of total fatalities.

- Platinum remains the most affected commodity sector, however, there has been a notable increase in cumulative cases in the gold and coal sectors over December 2020 and January 2021.

- Across multiple provinces, mining-related cases are concentrated in areas situated close to provincial borders implying an increased interprovincial transmission risk which may have been exacerbated by work-related as well as leisure-related traveling over the festive period.

MINERALS COUNCIL
SOUTH AFRICA

A SECOND WAVE OF COVID-19 CASES BEGAN IN THE BEGINNING OF DECEMBER. DAILY CASES IN THE SECOND PEAKED IN THE MIDDLE OF JANUARY AND HAVE BEEN STEADILY DECLINING.



Key Insights

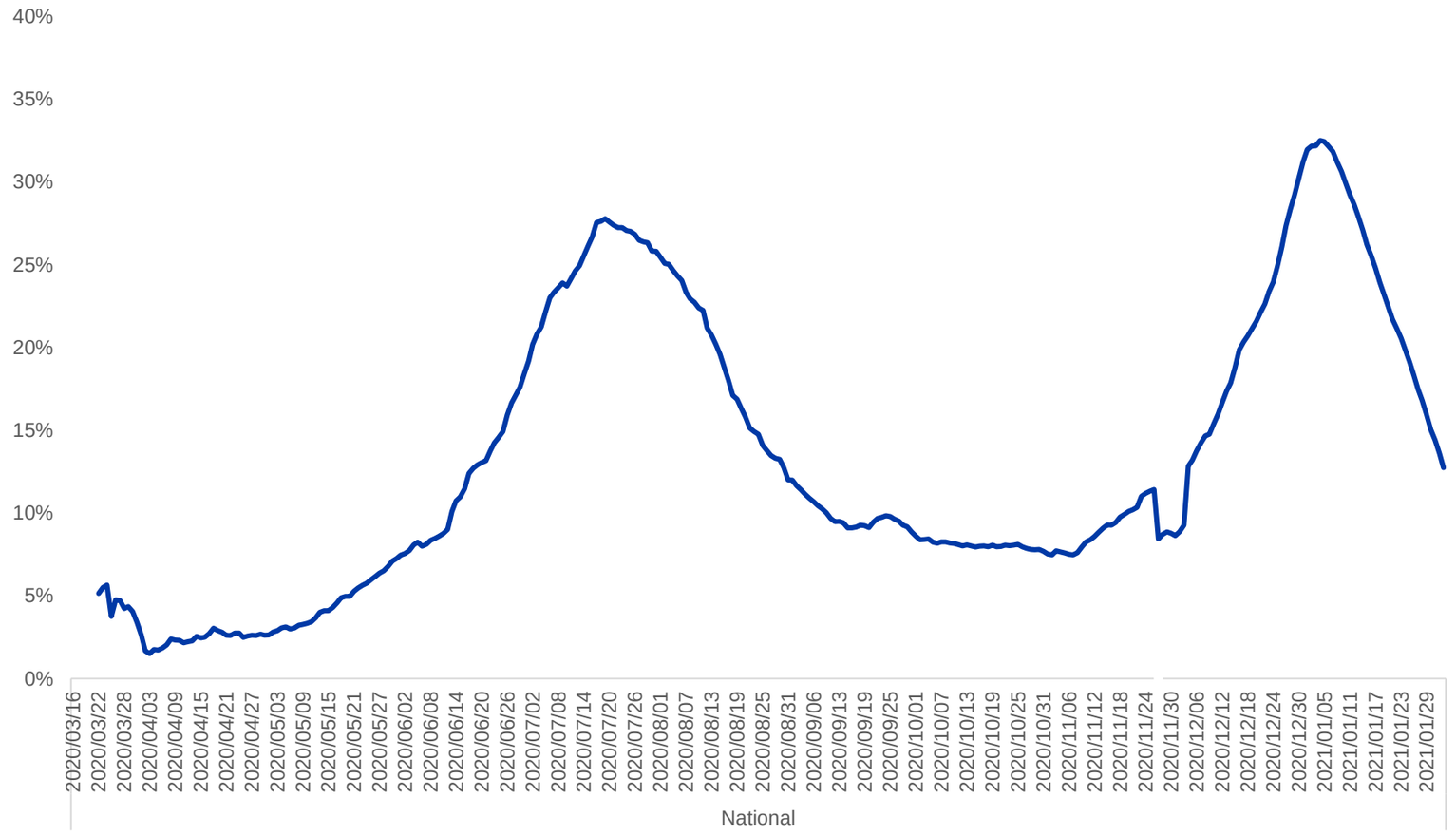
- During the first wave of the COVID-19 outbreak in South Africa, the 7-day moving average daily cases peaked at about 12,584 cases.
- The post first wave period began when the 7-day average daily cases declined to 15% of the July peak, (~1888 cases per day), with this threshold being reached on about 8th September.
- The end of the first wave continued until about 6 December, when the 7-day moving average was 3838 cases per day – over 30% of the maximum cases seen in the first wave, therefore qualifying the beginning of the second wave.
- On 11 January, the 7-day moving average daily cases was about 19,000 – the highest recorded in South Africa so far and the peak of the second wave.
- Currently, South Africa is still in its second wave, although cases have been decreasing since the middle of January.
- The end-of-wave (15% of previous peak daily cases) and second wave (30% of previous peak daily cases) thresholds are based on guidelines of the South African COVID-19 Modelling Consortium[1].

MINERALS COUNCIL SOUTH AFRICA

1. South African COVID-19 Modelling Consortium. (2020). SACMC Epidemic Explorer. [online] www.SACMCEpidemicExplorer.co.za

POSITIVITY RATES EXPERIENCED DURING THE CURRENT COVID-19 WAVE EXCEED THOSE EXPERIENCED DURING THE PREVIOUS WAVE. IN LINE WITH DAILY CASE TRENDS, POSITIVITY HAS BEEN ALSO DECLINED SINCE THE SECOND PEAK

National positivity over time



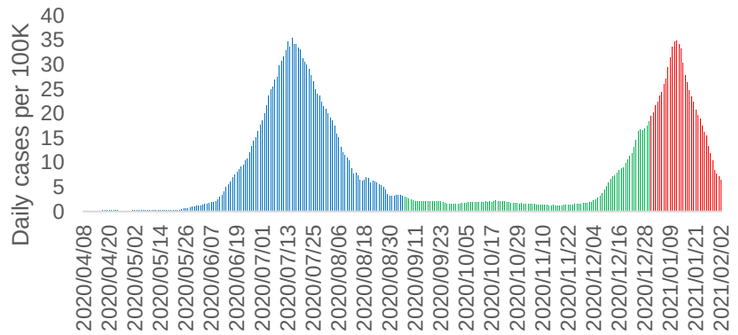
Key Insights

- As of 2 February, 8,329,691 tests have been conducted nationally.
- During the first wave, the national positivity rate peaked at about 30% before declining to about 6-7% in the post wave period. The average positivity rate over November was about 9%.
- During the second wave positivity rate has continued to increase and has eclipsed the peak rate of the previous wave, with a maximum positivity rate being 34% (on 4 January).
- In line with the daily cases, positivity rate has declined since the second wave peak, and was recorded as 9% as of 2 February

MINERALS COUNCIL SOUTH AFRICA

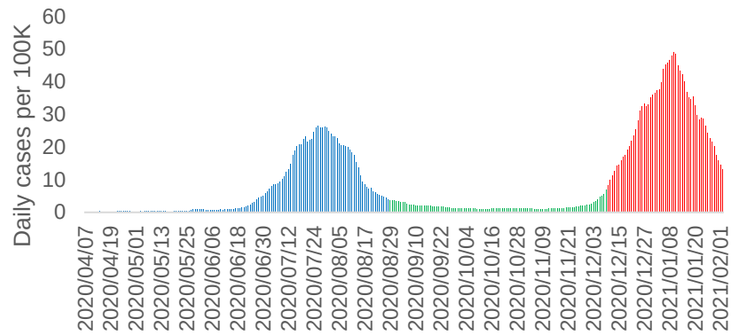
IN ALL PROVINCES, DAILY CASE INCIDENCE HAS DECLINED OVER JANUARY, HOWEVER ALL PROVINCES OTHER THAN THE EASTERN CAPE REMAIN IN THEIR SECOND WAVE

Gauteng total daily case incidence



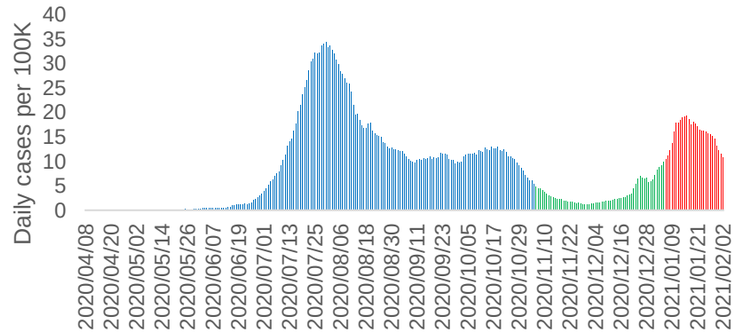
End of first wave	Date: 27/08/20	July Peak: ~36	Start of Second Wave	Date: 21/12/20	30%Peak: ~11

KwaZulu-Natal total daily case incidence



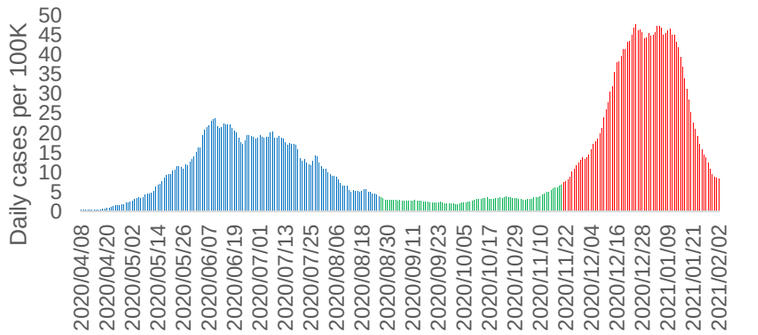
End of first wave	Date: 28/08/20	July Peak: ~26	Start of Second Wave	Date: 10/12/20	30% Peak: ~8

Free state total daily case incidence



End of first wave	Date: 06/11/20	July Peak: ~34	Start of Second Wave	Date: 06/01/21	30% Peak: ~10

Western Cape total daily case incidence



End of first wave	Date: 27/08/20	July Peak: ~24	Start of Second Wave	Date: 21/11/20	30% Peak: 7

Incidence rates are calculated using 7-day rolling average

Key Insights

- The second wave threshold (30% of the peak cases of the previous wave[1]) has been reached in all provinces in South Africa.
- A second wave occurred earliest in the Eastern Cape and Western Cape, beginning late November in both provinces.
- In all other provinces, the second wave appears to have occurred in late December and daily cases have continued to increase through January. However, from about the middle of January, daily cases have declined and the Eastern Cape has entered its post second wave period (daily cases are below 15% of the peak).
- As of 02 February, daily cases per 100K people is highest in KZN (~13), MP (~13) and FS(~11).
- The second wave threshold are based on guidelines of the SACMC[1].

7 per. Mov. Avg. (daily cases per 100K)

7 per. Mov. Avg. (daily cases per 100K post first wave)

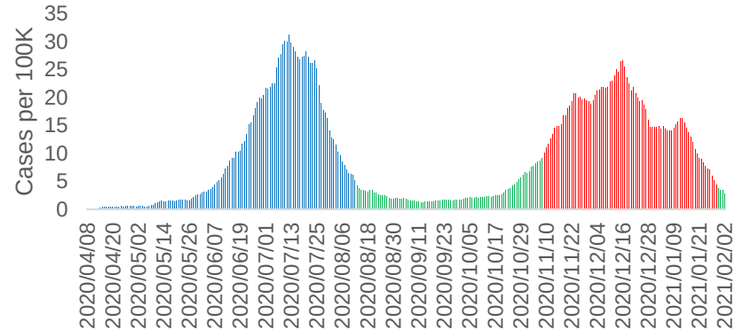
7 per. Mov. Avg. (daily cases per 100K second wave)

MINERALS COUNCIL SOUTH AFRICA

1. South African COVID-19 Modelling Consortium. (2020). SACMC Epidemic Explorer. [online] www.SACMCEpidemicExplorer.co.za

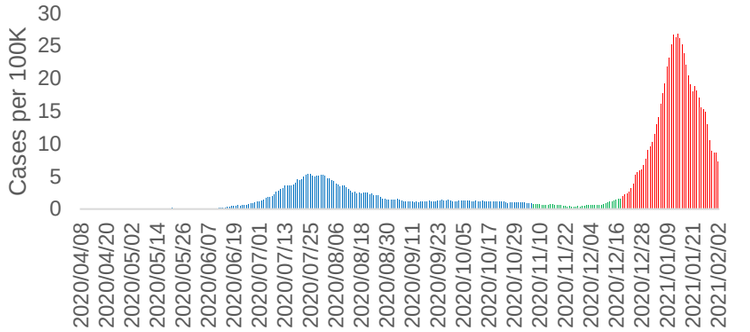
IN ALL PROVINCES, DAILY CASE INCIDENCE HAS DECLINED OVER JANUARY, HOWEVER ALL PROVINCES OTHER THAN THE EASTERN CAPE REMAIN IN THEIR SECOND WAVE

Eastern Cape total daily case incidence



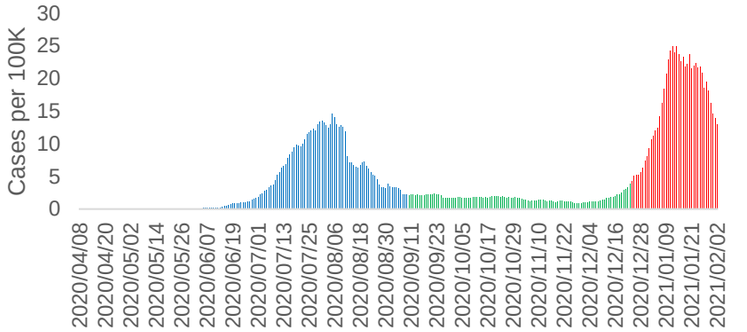
End of first wave	Date: 13/08/20	July Peak: ~31	End of second wave	Date: 30/01/20	Dec Peak: ~27

Limpopo total daily case incidence



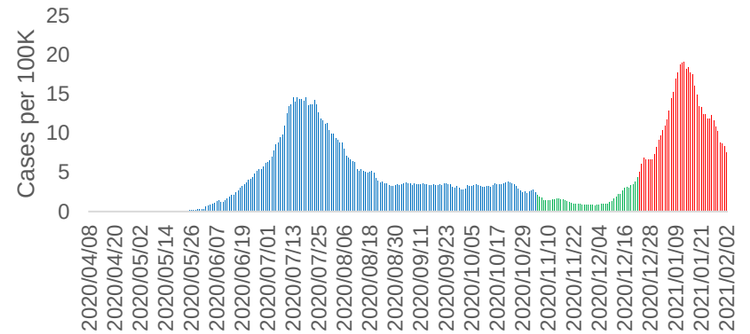
End of first wave	Date: 07/11/20	July Peak: ~5	Start of Second Wave	Date: 19/12/20	30% Peak: ~2

Mpumalanga total daily case incidence



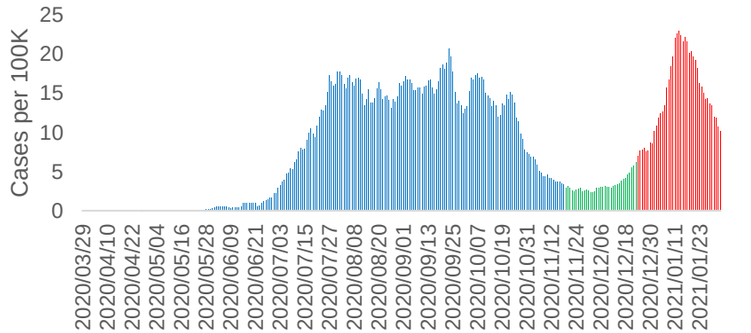
End of first wave	Date: 10/09/20	July Peak: ~15	Start of Second Wave	Date: 25/12/20	30% Peak: ~4

North West total daily case incidence



End of first wave	Date: 05/11/20	July Peak: ~15	Start of Second Wave	Date: 23/12/20	30% Peak: ~4

Northern Cape total daily case incidence



End of first wave	Date: 19/11/20	July Peak: ~21	Start of Second Wave	Date: 24/12/20	30% Peak: ~6

7 per. Mov. Avg. (daily cases per 100K)

7 per. Mov. Avg. (daily cases per 100K post first wave)

7 per. Mov. Avg. (daily cases per 100K second wave)

Key Insights

- As of 2 February, daily cases per 100K people are lower in provinces such as the Eastern Cape (~3), Gauteng (~6), and Limpopo (~7).

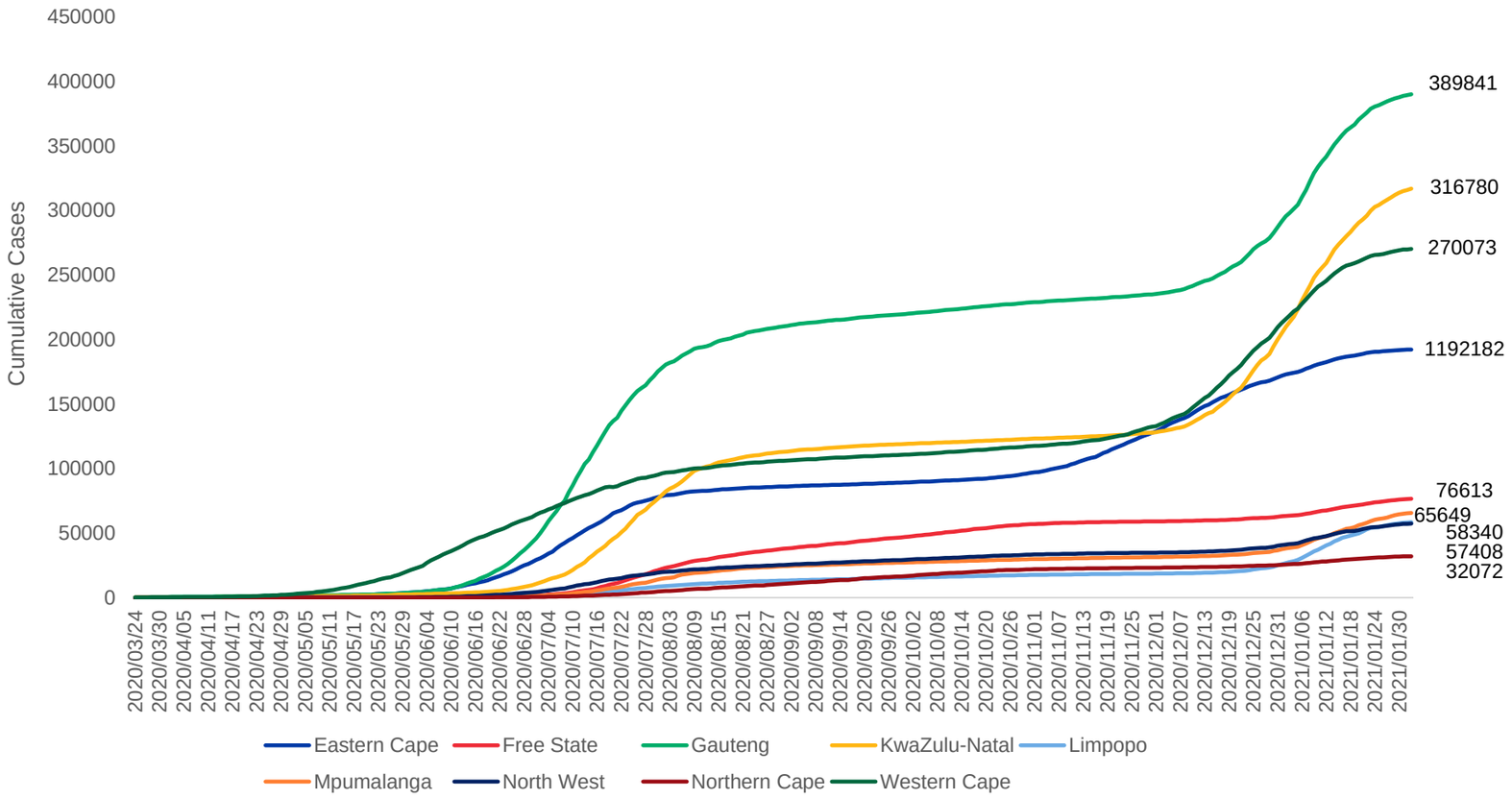
Incidence rates are calculated using 7-day rolling average

MINERALS COUNCIL SOUTH AFRICA

1. South African COVID-19 Modelling Consortium. (2020). SACMC Epidemic Explorer. [online] www.SACMCEpidemicExplorer.co.za

GAUTENG, KWAZULU NATAL AND WESTERN CAPE STILL HAVE THE HIGHEST CUMULATIVE CASELOAD RESPECTIVELY

Cumulative COVID-19 cases, multiple provinces



Key Insights

- As of 2 January, there is a total of 1,458,958 diagnosed cases of COVID-19 across South Africa.
- Gauteng (27%), KwaZulu-Natal (22%), Western Cape (19%) and Eastern Cape (13%) currently make up over 80% of all cumulative cases.
- All other provinces have maintained a relatively steady cumulative caseload, although, Mpumalanga can be seen overtaking the North West and Limpopo towards the end of January.
- However, when accounting for provincial population, the Western Cape (~3553 cases per 100K people), Eastern Cape (~2705 cases per 100K people) and the Free State (2332 cases per 100K people) have the most severe outbreaks.

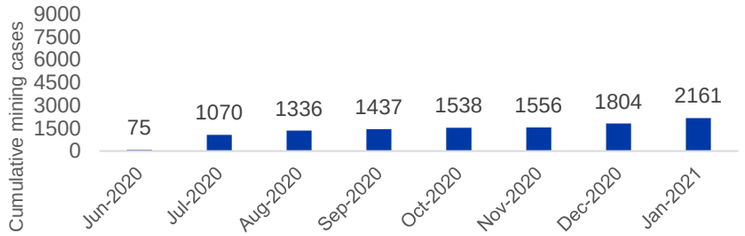
MINERALS COUNCIL SOUTH AFRICA

IN MOST PROVINCES, THERE WAS AN UPSWING IN MINING-RELATED CUMULATIVE IN CASES AND IN DECEMBER 2020 AND IN JANUARY 2021

Free State

Free State monthly mining case trends over time

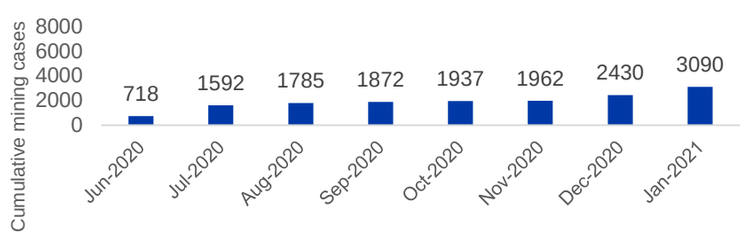
	Jun-2020	Jul-2020	Aug-2020	Sep-2020	Oct-2020	Nov-2020	Dec-2020	Jan-2021
% increase cumulative:		(1327%)	(25%)	(8%)	(7%)	(1%)	(16%)	(20%)
New cases:	73	995	266	101	101	18	248	357



Gauteng

Gauteng monthly mining case trends over time

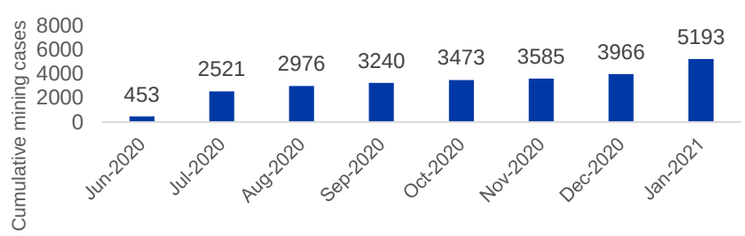
	Jun-2020	Jul-2020	Aug-2020	Sep-2020	Oct-2020	Nov-2020	Dec-2020	Jan-2021
% increase cumulative:		(122%)	(12%)	(5%)	(3%)	(1%)	(24%)	(27%)
New cases:	441	874	193	87	65	25	468	660



Limpopo

Limpopo monthly mining case trends over time

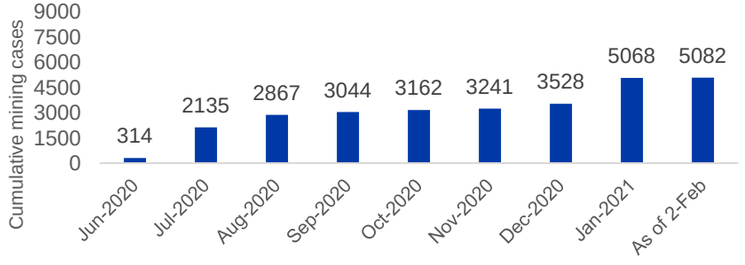
	Jun-2020	Jul-2020	Aug-2020	Sep-2020	Oct-2020	Nov-2020	Dec-2020	Jan-2021
% increase cumulative:		(457%)	(18%)	(9%)	(7%)	(3%)	(11%)	(31%)
New cases:	370	2068	455	264	233	112	381	1227



Mpumalanga

Mpumalanga monthly mining case trends over time

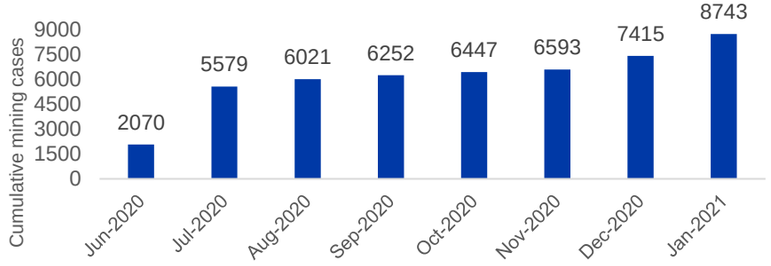
	Jun-2020	Jul-2020	Aug-2020	Sep-2020	Oct-2020	Nov-2020	Dec-2020	Jan-2021	As of 2-Feb
% increase cumulative:		(580%)	(34%)	(6%)	(4%)	(2%)	(9%)	(44%)	(0%)
New cases:	271	1821	732	177	118	79	287	1540	14



North West

North West monthly mining case trends over time

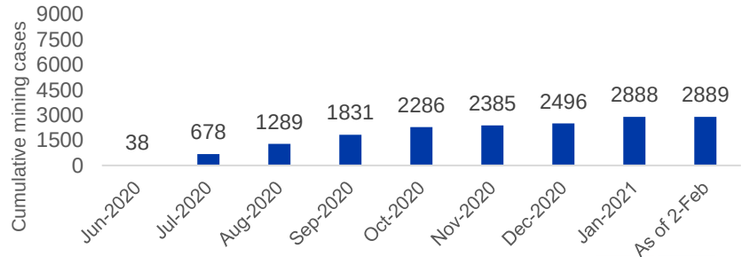
	Jun-2020	Jul-2020	Aug-2020	Sep-2020	Oct-2020	Nov-2020	Dec-2020	Jan-2021
% change cumulative:		(170%)	(8%)	(4%)	(3%)	(2%)	(12%)	(18%)
New cases:	1883	3509	442	231	195	146	822	1328



Northern Cape

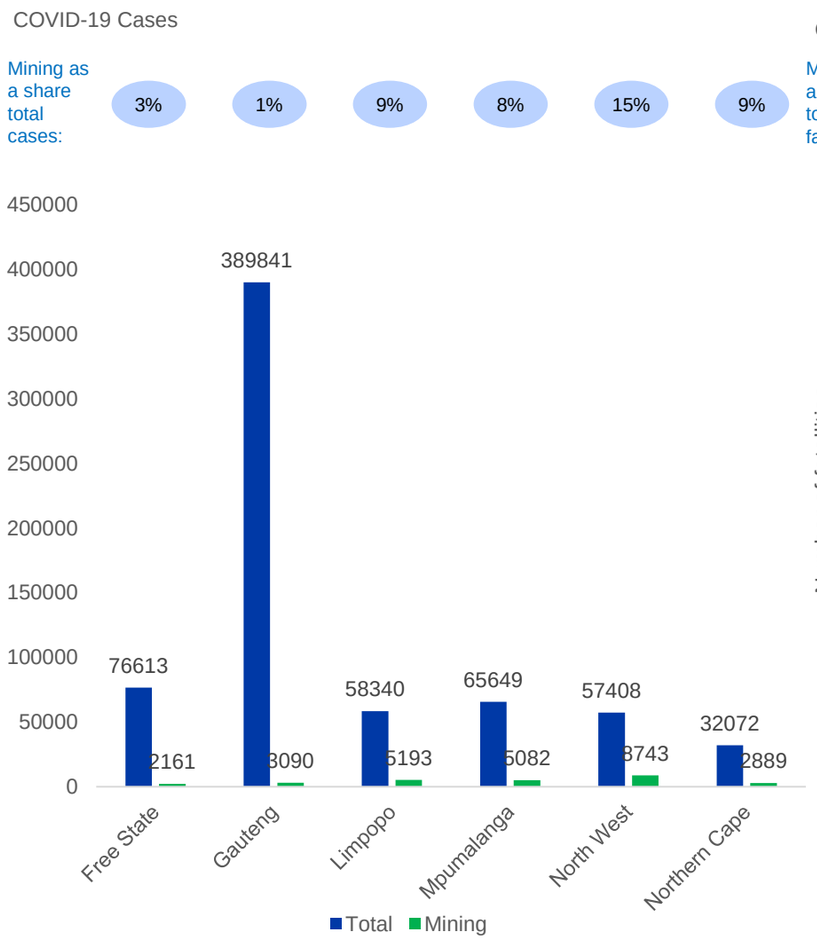
Northern Cape monthly mining case trends over time

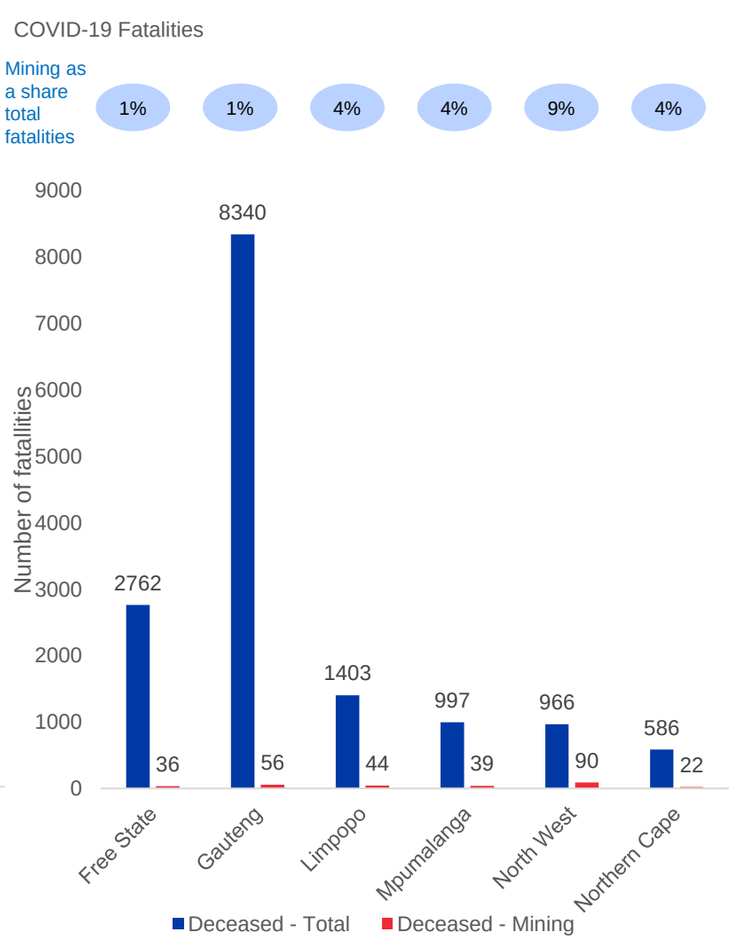
	Jun-2020	Jul-2020	Aug-2020	Sep-2020	Oct-2020	Nov-2020	Dec-2020	Jan-2021	As of 2-Feb
% change cumulative:		(1684%)	(90%)	(42%)	(25%)	(4%)	(5%)	(16%)	(0%)
New cases:	35	640	611	542	455	99	111	392	1



MINERALS COUNCIL SOUTH AFRICA

IN PROVINCES WITH HIGH LEVELS OF MINING ACTIVITY, MINING CASES MAKE UP A HIGH PROPORTION OF COMMUNITY CASES





Key Insights

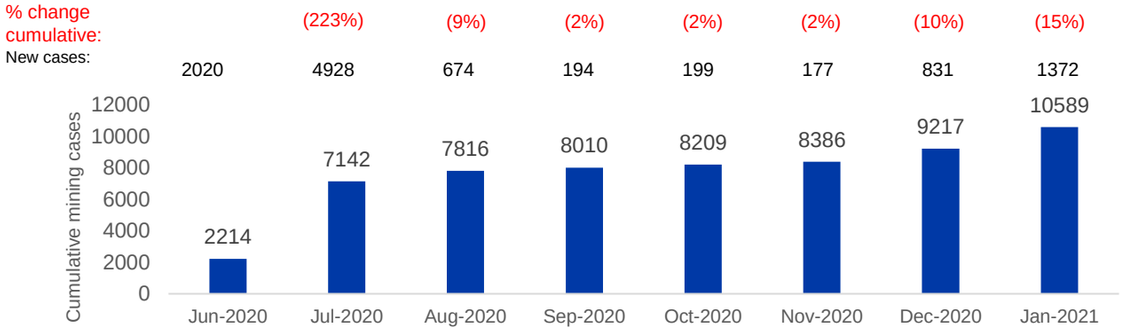
- While Gauteng, KwaZulu-Natal and Western Cape have recorded the highest level of COVID-19 cases, North West, Limpopo and Mpumalanga contain have the most mining cases, even when factoring in provincial workforce numbers.
- Mining makes up a relatively large proportion of community COVID-19 cases when comparing community and mining-related cases in Limpopo (9%), North West (15%) and the Northern Cape (9%),
- Furthermore, in these provinces, mining-related COVID-19 fatalities make up a relatively large proportion of the total fatalities – in North West, 9% of COVID-19 fatalities are mining-related while 4% of fatalities in Limpopo, Mpumalanga and Northern Cape are mining-related.

MINERALS COUNCIL SOUTH AFRICA

IN THE LARGE MINING COMMODITY SECTORS, CUMULATIVE MINING CASES INCREASED BY A LARGER RATE IN DECEMBER

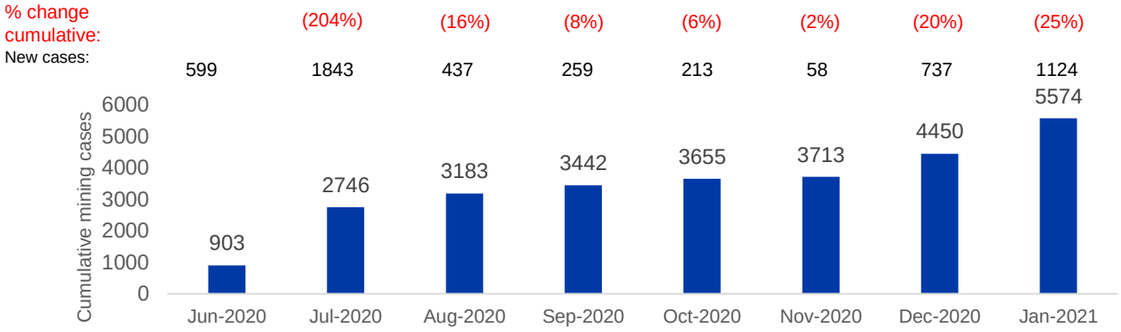
Platinum

Platinum monthly mining case trends over time



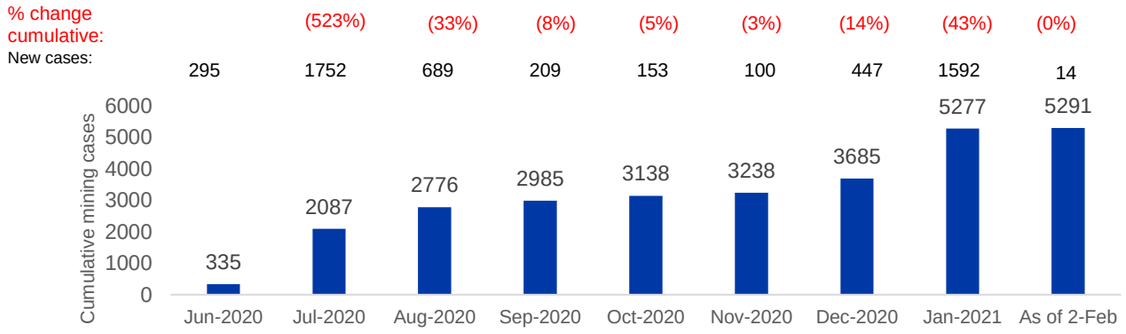
Gold

Gold monthly mining case trends over time



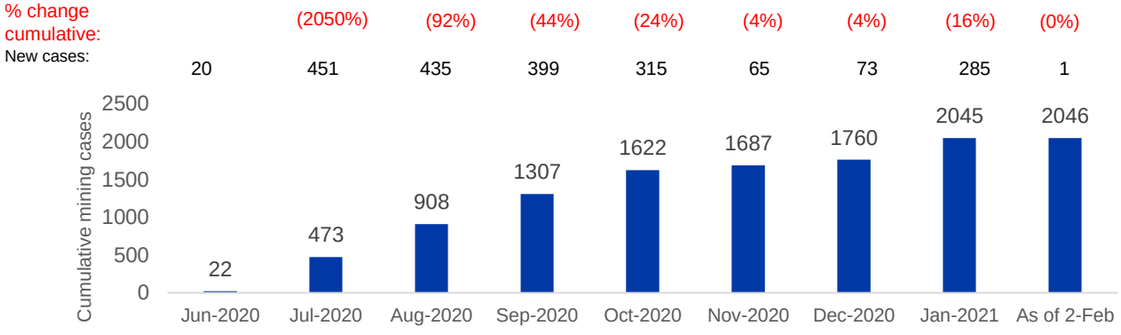
Coal

Coal monthly mining case trends over time



Iron Ore

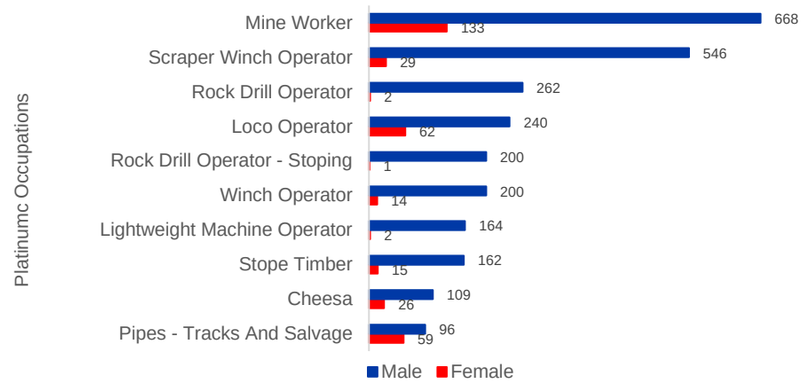
Iron ore monthly mining case trends over time

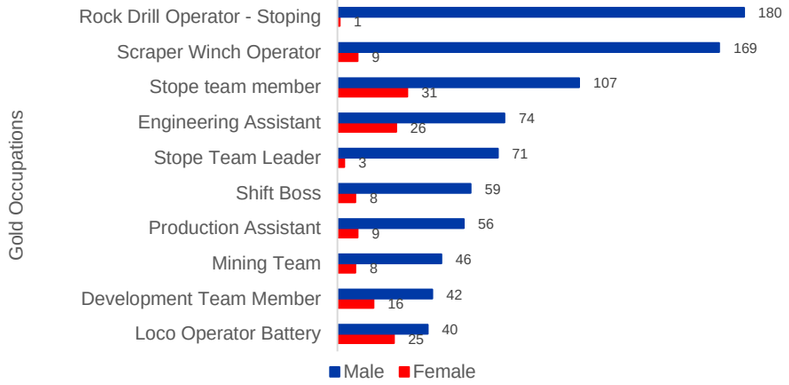


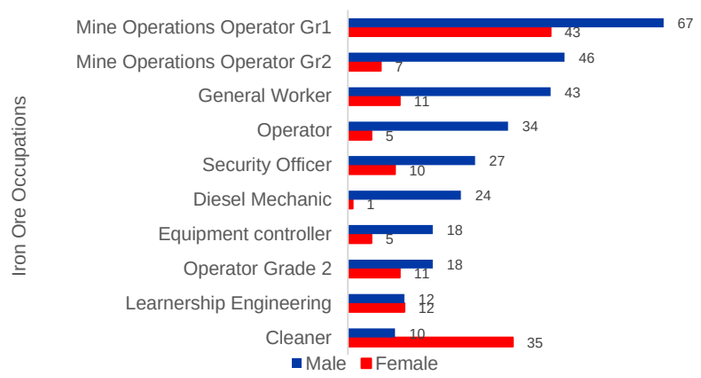
MINERALS COUNCIL SOUTH AFRICA

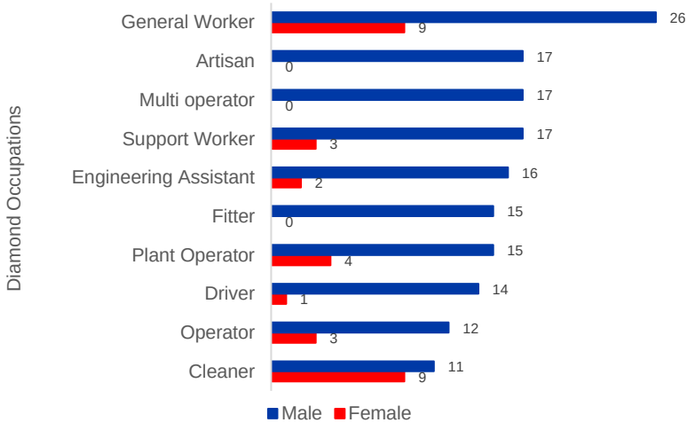
OCCUPATIONAL ANALYSIS, PER COMMODITY (GENDER BREAKDOWN)

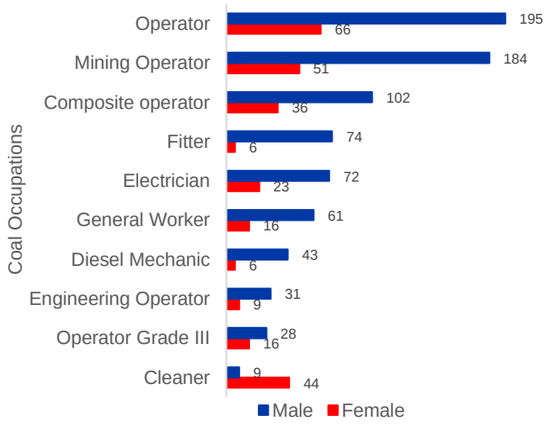
Top 10 most affected occupations, gender breakdown

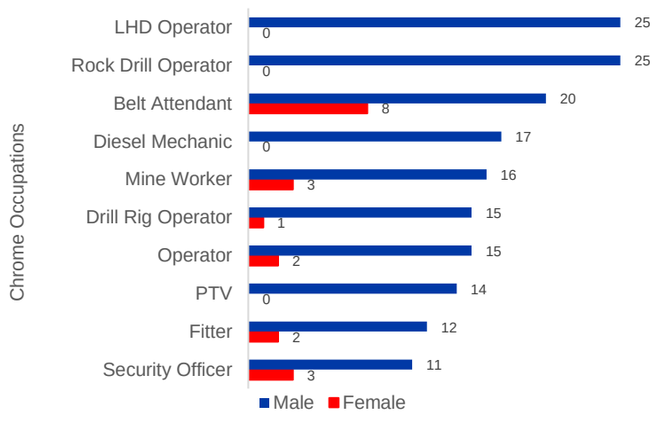








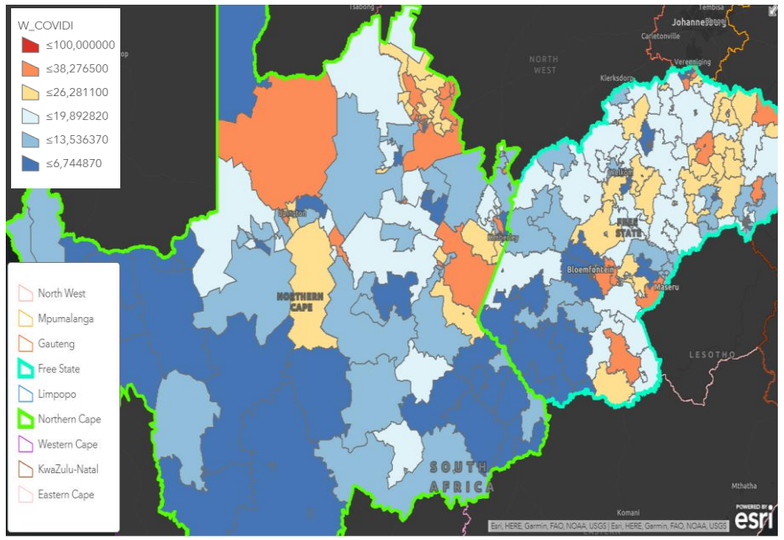




MINERALS COUNCIL SOUTH AFRICA

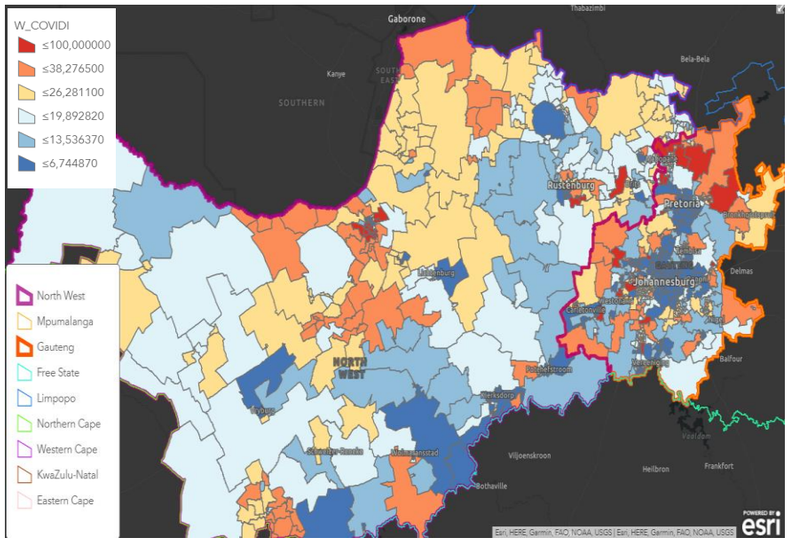
CLUSTERS OF MINING-RELATED CASES HAVE BEEN OBSERVED IN AREAS THAT ARE CLOSE IN PROXIMITY TO VULNERABLE AREAS AND PROVINCIAL BORDERS

Border between Northern Cape and Free State



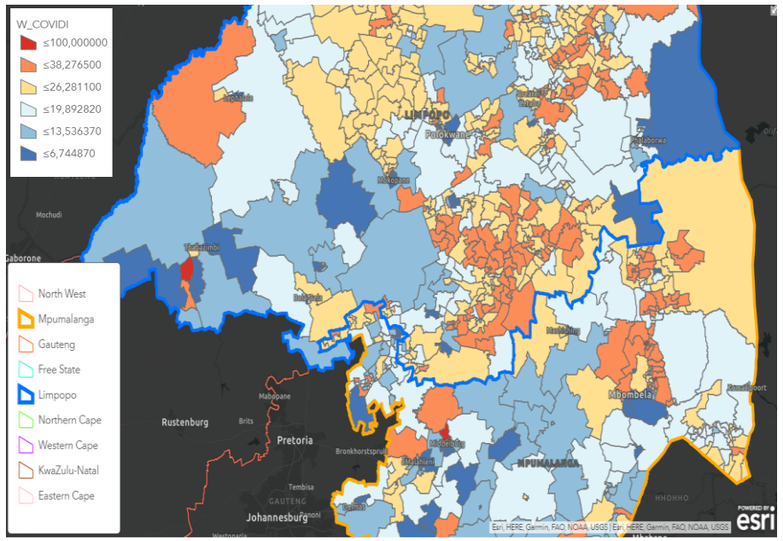
- Most communities bordering the Northern Cape and Free State show a relatively low interprovincial transmission risk. However, multiple wards in the Siyacuma and Sol Plaatjie local municipality indicate high transmission risks.

Border between North West and Gauteng



- Along the provincial border between North West and Gauteng there is a notably high risk of transmission in areas such as Brits and Rustenburg which can be attributed to employees who live outside the province yet commute daily for employment in the mines.

Border between Mpumalanga and Limpopo



- Areas in the Greater Tubatse/Fetakgome and Elias Motsaoledi local municipalities are highly susceptible to transmission risks due to their levels of informality of living and access to public services. Furthermore, transmission risks along the border of Mpumalanga and Limpopo region are exacerbated by interprovincial travelling by workforce or tourists.

MINERALS COUNCIL SOUTH AFRICA

FURTHER INSIGHTS AND ANALYSIS

- In a majority of provinces with relatively high levels of mining activity, mining cases continue to follow national trends.
- Provincial and district cumulative caseloads as well as transmission rates have slowed down since the end of January indicating that we have moved passed the peak of the second wave.
- All analyses can be enhanced through stratified testing data, which can be used in conjunction with case data to determine COVID-19 transmission risk in terms of positivity rate.
- Various indicators are important in determining COVID-19 related risks. Demographic and geographic breakdowns of the mining workforce enable better definitions of the risks faced by mining workers, which can inform future risk management and mitigation.
- Although cases are steadily decreasing, it is critical to not become complacent and continued vigilance and reinforcement of prevention measures for behaviour change – mask wearing, personal protection, social distancing and minimising non-essential contact remain essential to manage transmission.

MINERALS COUNCIL
SOUTH AFRICA

Impala Platinum

THANK YOU

T +27 11 498 7100 **E** info@mineralscouncil.org.za **W** www.mineralscouncil.org.za

5 Hollard Street, Johannesburg, 2001, PO Box 61809, Marshalltown 2107

MINERALS COUNCIL
SOUTH AFRICA