

927 confirmed coronavirus cases in South Africa – Business

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South Africa has seen yet another substantial increase in confirmed coronavirus cases in the country, with the total now at 927 – up from 709 cases reported on Wednesday.

President Ramaphosa made the announcement in an evening address, hours before the country heads into lockdown for the next 21 days.

There have been no reported deaths, however the numbers are up 31% from last reporting – and addition of around 218 new infections.

It must be noted that the sharp rise in confirmed cases this past week have coincided with a sharp rise in testing for the virus as well. As testing is expected to increase during the lockdown period, the number of confirmed cases is also anticipated to climb.

For the period of lockdown: every person is confined to his or her place of residence, unless strictly for the purpose of performing an essential service, obtaining an essential good or service, collecting a social grant, or seeking emergency, life saving, or chronic medical attention.

Movement means entering or leaving a place of residence or, in the case of people not ordinarily resident in the Republic, their place of temporary residence while in the Republic.

The lockdown will commence from 23h59 on Thursday 26 March, and is expected to continue for 21 days until 16 April 2020.

While trying to project the spread of the virus on the South African population is very difficult, Momentum Investments has tried to illustrate the potential trajectory of the virus without intervention, and why the robust steps taken by the government are necessary and compliance by each citizen is essential.

“The most important number is the loss of life,” said Rowan Burger – Momentum Investments strategist. Scientists are still trying to work out what the probability of death is. It is easy to know how many have passed. However, how many were infected is more difficult to establish, he said.

Globally, there have been 492,250 reported cases, with 22,180 deaths. 119,732 people have recovered, but 350,338 cases remain active, with 17,769 in serious or critical condition.

Burger said that because South Africa is still in the early stages of the spread of the virus, with no fatalities reported to date, it makes the projection of the impact more difficult. “We must assume that, in our country where there is a higher HIV, tuberculosis and diabetes existence, the mortality rates are likely to be higher.”

It is estimated for each tested infected person, there are nine others, who have mild symptoms or who have the virus, are able to transmit it but are unaware of this.

“This is because the virus takes up to 14 days for the symptoms to present themselves. Of importance with this number is how many people you unknowingly interact with,” said Burger.

Using the sample base reported on 23 March of 402 reported cases, it is implied that the true number of infections at this date is about 4,000 (with over 900 cases meaning over 9,000 possible in reality), said Botha. “However, to keep the numbers manageable, let’s deal with only the reported cases, bearing in mind we could multiply these by 10.”

The next key metric is the rate at which infections grow. It seems that the average response has let the number of infected double every three days. “This means that in a month, the infection rate will double roughly 10 times. ($2^{10} = 1024$). Let’s keep the number at 1,000 to keep the maths easier.”

“This implies we will have 400,000 infected in a month’s time (with a large number still in incubation),” said Botha.

From preliminary experience, roughly 15% to 20% of those infected need hospitalisation. That implies 60,000 additional hospital beds are needed.

“On the assumption that our hospitals can treat those infected needing attention, the mortality rate is somewhere between 1% and 2%. This implies 8,000 deaths from those infected in the coming months (assuming we are on the higher bound of mortality). The mortality in Wuhan was 4%, due to close living conditions,” said Botha.

“This sharp increase in infections will become limited, as we may run out of persons to infect. It also assumes that we take no steps to slow the infection rate. Over time, it is predicted that 60% to 70% of the population may get infected.

“In a population of 60 million, this would be 36 million infected and 720,000 deaths. This is a truly staggering number. This estimation seems very unlikely, as certainly behaviour must change.

“But every three days the problem doubles. We don’t have the population density to reach these levels of infection and, consequently, in most worse-case scenarios, the estimation is around 200,000 deaths.”

This is exactly why government is taking draconian steps to try to curb the spread of the virus, said Botha.