**Headline**: Delta for dummies: Explaining SA's latest COVID variant

**Blurb**: The Delta variant, first identified in India, has been detected across several provinces in South Africa. This incredibly transmissible form of the virus is expected to soon dominate the country's new infections amidst the third wave. Here's what we know so far.

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A new variant has started to dominate South Africa's COVID-19 epidemic.

The variant called Delta was first identified in India where it drove a devastating second wave of SARS-CoV-2 infections.

By June, the Delta variant had spread to 85 countries.

It was detected among travellers in South Africa at the beginning of May.

But since then, the Delta variant has spread in communities and has been detected in five provinces.

This is the most transmissible version of the virus so far, meaning it is able to spread much more efficiently from person to person than other variants.

The concern is that this variant will drive a surge in infections during South Africa's third wave, as has been seen in Gauteng.

**What do we know about the Delta variant?**

1. **It spreads very quickly and efficiently**

It is estimated that the Delta variant is 30% to 60% more transmissible when compared to other variants.

This allows it to quickly overtake other versions of the virus spreading in a country and cause a steep rise in new cases.

2. **It's going to increase pressure on hospitals**

It's too early to tell if the virus itself can cause more severe disease.

Regardless of if the variant is causing more severe disease, it's likely to increase pressure on hospitals.

The high number of cases caused by the Delta variant will in turn drive an increase in hospitalisations.

An overburdened healthcare system could result in more deaths because of a reduced capacity to care for patients.

3. **You can get re-infected with the Delta variant**

People who were previously infected with the Beta variant can still get sick with the Delta variant.

The Beta variant has been the dominant form of the virus in the country since December and drove South Africa's second wave.

Until now, the belief has been that the Beta variant should provide enough protection to prevent people from getting re-infected by other variants.

But it seems that there are limitations to how this protection applies to the Delta variant.

The differences in the structure of the two variants is likely the cause of this reduced protection.

4. **It's still too early to tell what this means for vaccines**

There is limited information available on what the Delta variant means for vaccines.

There is early evidence to suggest the variant could reduce vaccine efficacy.

Data from cases in England showed that the effectiveness of both the Pfizer and AstraZeneca jabs had been lowered after one dose from 51.1% to 33.5%.

But after a second shot, the decline in efficacy was smaller.

People fully vaccinated with the AstraZeneca jab saw a reduction in efficacy from 66.1% to 59.8%.

Those completely immunised with the Pfizer shots saw a drop from 93.4% to 87.9%.

This shows that with two-dose vaccines, after receiving both shots, people seem to have enough protection against the Delta variant.

The effectiveness of a one-dose vaccine such as Johnson & Johnson against the Delta variant has not yet been determined.

There are however early indications that the J&J jab could potentially work against the Delta variant.