Dr Marieke Brauer, Clinical Virologist

No. 25

COVID-19 Delta Variant

SUMMARY

The Delta SARS-CoV-2 variant was first detected in India in October 2020, and has since spread to 85 countries globally. As a result of its enhanced transmissibility, it has rapidly become the dominant strain in many countries. On 26 June 2021, it was announced that the Delta variant is becoming increasingly prevalent in South Africa, and has been shown to eclipse other variants in most provinces.

Characteristics and implications of the Delta variant

CHARACTERISTICS	DELTA VARIANT	
Transmissibility	30 to 60% more transmissible than other variants.	
Severity of illness	Preliminary reports suggest that the risk for hospitalisation may be increased, but this is not confirmed.	
Clinical presentation	Preliminary reports suggest that the initial symptoms associated with the Delta variant may be headache, followed by sore throat, a runny nose and fever. Cough and loss of smell seem to be less prevalent than with other variants.	
Susceptibility	Preliminary data suggests that the prevalence in children and young adults might be higher than that recorded with other variants.	
Risk of reinfection	There may be reduced neutralisation by antibodies in convalescent serum, including persons who recovered from infection with the Beta variant, i.e. possible risk of reinfection.	
Impact on diagnostic testing	None reported to date.	
Impact on vaccine efficacy/ effectiveness	There may be a reduction in the level of protection that vaccines will provide against the Delta variant, but vaccinated persons who develop breakthrough infection will likely be protected against severe disease.	
	Currently there is only limited evidence available for two of the vaccines in terms of effectiveness against symptomatic disease:	
		One dose – 33% (vs. 49% against Alpha variant) Two doses – 88% (vs. 93% against Alpha variant)
		One dose – 33% (vs. 51% against Alpha variant) Two doses – 60% (vs. 66% against Alpha variant)
	Both vaccines reduce the likelihood of hospitalisation:	
		One dose – 71% (vs. 76% against Alpha variant) Two doses – 92% (vs. 86% against Alpha variant)
		One dose – 94% (vs. 83% against Alpha variant) Two doses – 96% (vs. 94% against Alpha variant)
	Johnson & Johnson announced that their vaccine generated strong, persistent activity against the Delta variant. Results are expected to be published soon.	

We would like to reassure our clients that the current testing platforms that are used for SARS-CoV-2 RT-PCR tests will still be able to detect the Delta variant. Unfortunately, these routine assays are not able to distinguish between variants.

