

Indicator	RAG*	Confidence	Assessment and rationale
Transmissibility between humans	Red	HIGH	<b>Transmissibility appears greater than wild type (first wave) SARS-CoV-2</b> There is an increased growth rate compared to B.1.1.7 in the current context. Secondary attack rates, including household secondary attack rates, are higher for B.1.617.2, but these are not yet corrected for vaccination status. There is early in vitro evidence suggestive of altered growth characteristics in biological model systems. The observed epidemiological growth rate and replacement of B.1.1.7 are unlikely to be due entirely to immune escape, given the improved understanding of antigenic change; it is likely that B.1.617.2 is more transmissible than B.1.1.7. The magnitude of the change in transmissibility remains uncertain.
Infection severity	Grey	Grey	<b>Insufficient information</b> Most cases are recent and there has been insufficient follow up time to allow an assessment of severity. Early warning signals are being monitored with no evidence of increases in hospitalisation in national data.
Immunity after natural infection	Yellow	LOW	<b>Experimental evidence of functional evasion of natural immunity</b> Pseudovirus and live virus neutralisation using convalescent sera from first wave and B.1.1.7 infections shows a modest reduction in neutralisation which may still be clinically relevant in individuals with low titres. There are small numbers of reinfections detected through national surveillance which would be expected with a prevalent variant. These are being further investigated. There is no signal of an increase in reinfections in individuals in a national healthcare worker cohort study (95% vaccinated); monitoring continues.
Vaccines	Red	MODERATE after dose 1 LOW after dose 2	<b>Evidence of reduced vaccine effectiveness</b> National vaccine effectiveness monitoring shows a reduction in vaccine effectiveness against symptomatic infection after 1 dose of vaccine for B.1.617.2 compared to B.1.1.7 (moderate confidence). Current data suggest this is an absolute reduction of approximately 20% after 1 dose. Vaccine effectiveness is higher and similar between variants after 2 doses with a possible small reduction for B.1.617.2 (low confidence). Although this is observational data subject to some biases, it holds true across several analytic approaches, is consistent with observed outbreaks, and is supported by pseudovirus and live virus neutralisation data. There are no data on whether prevention of transmission is affected. There are insufficient data on vaccine effectiveness against severe disease. Based on neutralisation data, vaccines are expected to remain effective against severe disease. Monitoring continues.
Overall assessment	Grey	Grey	B.1.617.2 has continued to replace B.1.1.7 but an increase in overall incidence has occurred in only a small number of areas. The observed high growth rate is most likely to be due to a combination of context and transmissibility. There may be a contribution from some degree of immune escape particularly relating to individuals who have had a single vaccine dose. The priority investigations are household secondary attack rate corrected for vaccination, characterisation of the generation time, viral load and period of infectivity, severity analyses, and continued reinfection and vaccine effectiveness monitoring.

The therapeutics risk assessment is under review for all variants and is not included.

\*refer to scale and confidence grading slide