

Indicator	Red, amber or green status*	Confidence level	Assessment and rationale
Growth advantage	Red	High	<p>Omicron is displaying a growth advantage over Delta</p> <p>This assessment is based on analysis of UK data showing increased household transmission risk, increased secondary attack rates and substantially increased growth rates compared to Delta. Omicron continues to increase as a proportion of UK cases and is now predominant in some regions of England. This growth advantage is also apparent in other countries with equivalent surveillance. The observed growth advantage may be due to immune evasion or transmissibility. Although we now have high confidence in a component of immune evasion, the very high growth rate and laboratory findings suggest that an increase in transmissibility may also be contributing.</p>
Transmissibility	Amber	Low	<p>Omicron is at least as transmissible as Delta</p> <p>Increased transmissibility compared to Delta is biologically plausible with the presence of furin cleavage site and nucleocapsid changes associated in vitro with advantages for replication, as well as extensive changes to the RBD. Structural modelling suggests that the mutations present may increase human ACE2 binding affinity to a much greater extent than that seen for any other variant. Early laboratory data suggest more efficient cell entry and replication in bronchial cells in vitro. However, there is no clear epidemiological demonstration of transmissibility as distinct from other contributors to growth advantage.</p>
Immune evasion (including natural and vaccine derived immunity)	Red	High	<p>Omicron displays a reduction in immune protection against infection (NO data regarding severe disease)</p> <p>This assessment is now based on neutralisation data from multiple laboratories, assessment of real world vaccine effectiveness in the UK and an observed increase in the risk of reinfection with Omicron. There are insufficient data to make any assessment of protection against severe disease.</p>
Infection severity			<p>Insufficient data</p> <p>There are insufficient data to fully assess severity, which is expected in the early period of emergence of a new variant. However, on the data available in the UK, there is no signal that supports a difference in the intrinsic virulence of the Omicron virus compared to Delta.</p>

A separate report will be published concerning impact on therapeutics in due course.

* Refer to scale and confidence grading slide.