

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 dominant in 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 substantial 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. There are extensive changes to the receptor binding domain, although the predicted very high receptor binding affinity has not been borne out in laboratory assessments. Early data suggests changes in cell entry and increased replication in upper airway 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</p> <p>Neutralisation data, real world vaccine effectiveness against symptomatic disease, and reinfection rate all confirm substantial immune evasion properties. There is insufficient data to make an assessment of vaccine effectiveness against severe disease for Omicron compared to Delta. There is preliminary evidence that the waning of vaccine effectiveness against symptomatic infection occurs more rapidly with Omicron than Delta. This is visible, as expected, with increasing time after dose 2 and can also be seen after the booster dose from 10 weeks onwards. However, vaccine effectiveness against severe disease is more likely to be sustained, especially after a booster dose.</p>
Infection severity	Green	Low	<p>Reduction in the relative risk of hospitalisation but NO data on severity in hospital or death</p> <p>Three UK analyses support a moderate reduction in the relative risk of hospitalisation for a person detected as a case of Omicron, compared to Delta. This is also consistent with data from South Africa. These analyses are preliminary because of the small numbers of Omicron cases currently in hospital and the limited spread of Omicron into older age groups as yet. There is insufficient data to comment on severity of illness once in hospital or mortality.</p> <p>Available data suggests that the observed reduction in risk in the UK is likely to be partly a reduction in intrinsic severity of the virus and partly to protection provided by prior infection. We cannot confidently quantify the relative contributions of these 2 factors at present. Even at the reduced hospitalisation risk observed, the combined growth advantage and immune evasion properties of Omicron have the potential to lead to very high numbers of admissions to hospital.</p>

* Refer to scale and confidence grading slide.