

Indicator	Red, amber or green status*	Confidence	Assessment and rationale
Transmissibility between humans	Red	Low	AY.4.2. continues to increase in prevalence slowly in England. There is an increased growth rate for AY.4.2. compared to other circulating variants in 2 separate models, and this is now consistent across regions of England. There is a small increase in secondary attack rate and in household transmission risk, though both these analyses have limitations as they are derived from routine testing and tracing data systems. There is also a slowly increasing prevalence and an increased growth rate for AY.4.2 in incoming travellers to the UK. However, there is as yet no other country reporting the same effect through domestic surveillance and there is some conflicting evidence from community survey data. Confidence in this finding therefore remains low.
Infection severity	Green	Low	There is no evidence of increased severity based on risk of hospitalisation or death. This is early data and iteration will be required.
Naturally acquired immunity		Low	Insufficient information
Vaccine-derived immunity	Green	Low	Two different analyses find a very similar overall vaccine effectiveness for AY.4.2 compared to other circulating Delta viruses in the population in England. This is also supported by the available neutralisation data. There may be a marginal reduction in effectiveness with Pfizer vaccine at longer intervals after 2 doses, however this effect if present is extremely small.
Overall assessment of level and nature of risk, and level of confidence			There is evidence that AY.4.2 has a small growth advantage. It is not clear whether this is related to transmissibility alone or whether there is any contribution from marginal changes in immune escape properties. It is possible that it is in a population subgroup rather than generalised and this requires further analyses. Priority analyses are growth studies in vitro, age-matched growth analyses, and analysis of reinfections.

* Refer to scale and confidence grading slide.