

Response to the SARS-COV-2 (JN.1) variant of interest and impact on the NHSE IPC guidance.

22 December 2023 Version 1.0

The World Health Organization (WHO) designated SARS-CoV-2 JN.1 as a Variant of Interest (VOI) from the parent lineage BA.2.86 on 19 December 2023.¹ This was due to the rapid spread and increasing incidence of the virus globally. According to the report released by the WHO on 19 December 2023,¹ there is an anticipated increase in SARS-CoV-2 amid other viral and bacterial infections, which may exacerbate the burden of respiratory diseases particularly in countries approaching the winter season.¹ Globally, current population immunity generated by XBB.1.5 booster vaccination is expected to remain cross-reactive to the variant against symptomatic and severe disease, according to expert advice and available data.¹ The spread of JN.1 variant is unlikely to increase the burden on National health systems, as attributable health risks from JN.1 remain low from current evaluation and available evidence.¹

Previously, JN.1 was classified a variant of interest as part of the BA.2.86 sub lineages. Globally, the prevalence of JN.1 continues to increase rapidly and currently represents the vast majority of BA.2.86 descendant lineages². However, it is yet to be determined if the high transmissibility of JN.1 in humans, similar to the BA.2.86 (the parent lineage), is associated with enhanced fitness in primary human Nasal Epithelial Cells (hNECs) including other cell types and to what extent this is linked to non-spike mutations¹. In comparison to the BA.2.86, JN.1 carries immune evasion capabilities, significantly enhanced by the additional spike protein (L455S).² Currently, there is limited data to assess the risk of antibody escape across diverse settings and population.²

The WHO reported that as of 16 December 2023, a total of 7,344 genomic sequences of JN.1 had been reported from 41 countries.² In epidemiological week 48 (27 November to 3 December), JN.1 made up 27.1% of global sequences, a rapid increase from 3.3% in week

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44 (30 October to 5 November). The prevalence of JN.1 in the UK rose from 1.8% to 20.4% of sequenced isolates from week 44 (30 October to 5 November) to week 48 (27 November to 3 December). As of 19 December 2023, the United Kingdom is noted as one of the five countries reporting the largest proportion of JN.1 sequences (5.6% 422 sequences).²

22.12.2023

No change required to the extant NHSE IPC guidance.

NIPCT will continue to review the evidence/data published by international/national sources. If further communication to the system is required, it is likely that this will continue to emphasise local decision making, the importance of HCW vaccination and the measures required more widely for respiratory conditions during the winter season.

References

1. World Health Organisation. Tracking SARS-CoV-2 variants, 20 December 2023. Available at: [Tracking SARS-CoV-2 variants \(who.int\)](#).
2. World Health Organisation. JN.1 Initial Risk Evaluation, 20 December 2023. Available at [18122023 JN.1 IRE clean \(who.int\)](#).