

Epidemiological analysis of the first 1,000 cases of SARS-CoV-2 lineage BA.1 (B.1.1.529, Omicron) compared to co-circulating Delta, in Wales, United Kingdom

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Abstract

Background: The Omicron (lineage B.1.1.529) variant of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) was first reported in Wales, UK on 3rd December 2021. The aim of the study was to describe the first 1000 cases of the Omicron variant by demographic, vaccination status, travel and severe outcome status and compare this to contemporaneous cases of the Delta variant. **Methods:** Testing, typing and contact tracing data were collected by Public Health Wales and analysis undertaken by the Communicable Disease Surveillance Centre (CDSC). Risk ratios for demographic factors and symptoms were calculated comparing Omicron cases to Delta cases identified over the same time period. **Results:** By 14th December 2021, 1000 cases of the Omicron variant had been identified in Wales. Of the first 1000, just 3% of cases had a prior history of travel revealing rapid community transmission. A higher proportion of Omicron cases were identified in individuals aged 20-39 and most cases were double vaccinated (65.9%) or boosted (15.7%). Age adjusted analysis also revealed that Omicron cases were less likely to be hospitalised (0.4%) or report symptoms (60.8%). Specifically a significant reduction was observed in the proportion of Omicron cases reporting anosmia (8.9%). **Conclusion:** Key findings include a lower risk of anosmia and a reduced risk of hospitalisation in the first 1000 Omicron cases compared to co-circulating Delta cases. We also identify that existing measures for travel restrictions to control importations of new variants identified outside the UK did not prevent the rapid ingress of Omicron within Wales.

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