



PHE Briefing Note: VERSION 2

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Event New variant SARS-CoV-2 version 2

Notified by PHE Incident Director

Authorised by Susan Hopkins, Peter Kelly

Contact PHE.NICC34@phe.gov.uk

PHE NIERP Level: National – Enhanced response

Incident Lead Meera Chand

Background and Interpretation

PHE has recently identified a new variant of SARS-CoV-2 during investigations of outbreaks in southern England. The variant is designated VUI-202012/01 (the first Variant Under Investigation in December 2020).

By 13 December, greater than 1,000 cases with this variant had been identified, predominantly in the South and East of England, although more recent cases are increasingly being identified in the East Midlands. As the proportion of cases sequenced is quite low, usually between 5 and 10%, this is likely to mean that there are many more cases of the variant which have not been sequenced. Further analysis and investigations are ongoing to understand the characteristics and therefore potential impact of this variant.

This variant includes a mutation in the sequence that codes for the 'spike' (or S) protein. Based on modelling of the spread of this variant, this variant may be more transmissible than wild-type SARS-COV-2. Further investigations are underway. There is insufficient information to know whether there are any other biological changes in the virus as yet and urgent studies are being undertaken. The existence of the variant is unlikely to affect vaccine efficacy, but further laboratory studies will determine this in the coming weeks.

Information received from laboratories suggests that the variant may impact on the performance of some assays which have an S gene target. This has occurred in the context of multi-target assays so is unlikely to have led to false negative results. A further briefing note will be provided directly to laboratories with more details. The performance of lateral flow devices with regards to this variant is also being investigated.



Viral genomic sequencing is undertaken as public health surveillance and is not reported routinely to individuals. Should cases of the new variant be identified, there is no change to the isolation requirements, infection prevention and control, personal protective equipment or other public health measures. The main measures of reducing contacts, physical distance, hand hygiene, face masks in enclosed or crowded places and good ventilation remain the primary control measures.

An enhanced incident was declared on 11/12/20 to coordinate rapid investigations.

Implications for PHE Centres

PHE Centres may receive questions from partners and members of the public. FAQs will be shared to support public health teams. There is no change to public health measures should new cases of the variant be identified.

Implications for PHE sites and services

Laboratories will receive a separate briefing note from Virology Cell containing a detailed update on diagnostics

Actions for PHE Regions

Disseminate this note to Directors of Public Health and local NHS Trusts
