

PHE statement on Variant of Concern and new Variant Under Investigation

The New and Emerging Respiratory Virus Threats Advisory Group (NERVTAG) has named one additional SARS-CoV-2 Variant Under Investigation and one additional Variant of Concern.

Over 4,000 SARS-CoV-2 variants have been identified across the globe. Most of these are not of concern. The UK's world-leading genomic sequencing programme continues to closely monitor these variants as they arise and develop.

VUI202102/01 is characterised by the presence of the E484K spike protein mutation and a small number of other mutations. It is derived from lineage A.23, which is seen internationally, but the E484K additional mutation on this lineage has only been seen within the UK. It was first identified by Public Health England (PHE) on 10 January, while investigating a cluster of 5 cases linked to members of staff from a hospital in Liverpool. So far, 55 cases of this variant have been found.

VOC202102/02 is a specific cluster characterised by the presence of the E484K spike protein mutation on the VOC202012/01 SARS-CoV-2 B.1.1.7 variant that was first detected in the UK at the end of 2020. Through genomic sequencing and enhanced contact tracing, PHE have so far identified 21 cases of VOC202102/02 across the UK, predominantly centred upon an outbreak in the South West of England.

The E484K mutation is present on Variant of Concern first detected in South Africa (VOC-202012/02), as well as a number of other variants sequenced globally. Although there is currently no evidence this mutation alone causes more severe illness or greater transmissibility, it is reported to result in weaker neutralisation by antibodies in laboratory experiments.

Dr Susan Hopkins, COVID-19 Strategic Response Director at PHE, said:

While we expect that the vaccines will still prevent severe illness and deaths, we are taking public health action on clusters of variants with E484K to reduce the risk of spread in our population.

We will be implementing the necessary public health action to mitigate the spread of these variants and will continue to monitor them closely.

It remains absolutely vital that people continue to stay at home where possible, and follow the guidance on face coverings, social distancing and hand hygiene.

Background

The new Variant of Concern VOC202102/02 has been designated a variant of concern as it has arisen as a result of a mutation on the Variant of Concern VOC202012/01, and retains the characteristics that led to its parent variant being designated a VOC originally with an additional mutation E484K.