

UK COVID-19 Risk Assessment Methodology for Inbound International Travel

International Travel Corridors have been created to allow people to travel to the UK from specified countries, territories or islands without having to self-isolate on arrival.

Ministerial decisions on International Travel Corridors are informed by risk assessments provided by the Joint Biosecurity Centre (JBC), working closely with Public Health England (PHE), using a methodology endorsed by the four Chief Medical Officers (CMO) of the UK.

Risk assessments focus on the public health risk posed by incoming travellers to the UK population. The JBC and PHE monitor information from over 250 countries, territories and islands daily to inform these risk assessments.

Weekly incidence rate per 100,000 population, test positivity, imported cases and rates of change are key indicators used to identify specific countries/territories that may be considered for an increase or decrease in risk rating. These countries/territories are subject to deep dives.

Deep dives bring together a broader number of quantitative and qualitative indicators in order to make a more complete assessment of the risk posed, taking into account data limitations and biases. Deep dive indicators include:

- An estimate of the proportion of the population that is currently infected (this is known as 'point prevalence');
- Weekly case incidence rate and population size of the country, territory or island;
- Trends in incidence, deaths, hospitalisations and intensive care admissions;
- Information on laboratory capacity; testing and contact tracing strategies; and test positivity rates;
- COVID-19 cases detected in the UK with recent travel history ('imported infections');
- Qualitative information related to the reliability of reported data and the maturity of public health systems;
- Public health measures in place and the enforcement of, and adherence to, those measures;
- Variations of the above metrics within countries/territories and information on disease clusters.

Risk assessment takes a relative and dynamic approach: countries/territories with a similar or better COVID-19 risk assessment than the UK, based on the above indicators, are considered for travel corridors. The rationale for this is that the impact of travel restrictions is expected to be greatest when UK case rates are relatively low. As UK case rates rise, the contribution of imported cases to the UK public health position becomes less significant.

The assessment accounts for geographical variation in indicators across the UK. This is because, while the impact of imported infections to areas with very high case rates could be small, the same would not be true for areas of the UK with lower case rates. The JBC's risk assessments therefore compare indicators in overseas countries/territories to

the corresponding indicators for the bottom third (the lower tertile) of UK nations/regions ranked by case rates. A country or territory will only be considered for a reduction in risk rating once its key indicators, taking into account both the level and growth rate of indicators, have fallen below those for the bottom third (the lower tertile) of UK nations/regions for at least 14 days (one COVID-19 incubation period).

[Travellers from countries/territories can also be rated as a high risk to UK public health when their indicators are below those for the UK, but they exceed a maximum absolute threshold. This maximum absolute threshold identifies countries/territories as very high risk irrelevant of the UK situation, where the health system of a country/territory could be overwhelmed and where there would be significant transmission risk on return journeys to the UK. Its calibration also takes into account the domestic context.]

The methodology for assessing risk to inform International Travel Corridors will evolve to reflect the changing pattern of the COVID-19 epidemic and as the JBC incorporates new scientific insights, new data sources, and new analyses that become available. It is subject to quarterly review (as a minimum) by the JBC Technical Board, chaired on a rotating basis by the four UK CMOs.

Commented [MD1]: Wording subject to CMOs feedback on maximum absolute threshold paper at Technical Board on Monday 1st November.