Identification of countries at risk for circulating VoCs

RAG 17/05/21

Background

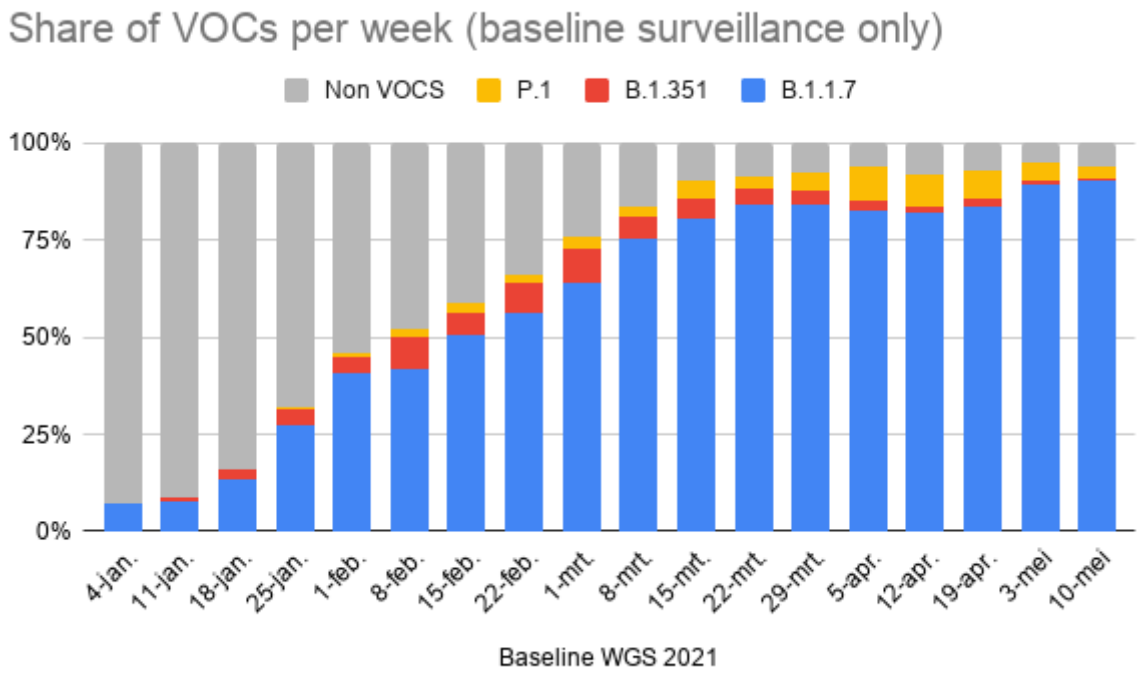
Travel has shown to be an important factor in the worldwide spread of COVID-19, both at the start of the epidemic and later on in the transmission of new emerging variants.

Now that Belgium is in the middle of the vaccination campaign, it is important to avoid as much as possible the introduction of new variants of concern (VoCs), and more specifically those presenting an escape mutation that may affect neutralization by some antibodies. A list of VoCs and variants of interst (VoI) and their possible properties regarding immune escape is available on the website of ECDC. ECDC recommendations on quarantine and testing of travelers in the light of VoCs are presented in Annex.

Recent information on the circulation of variants in Belgium can be found at the website of the NRC: https://www.uzleuven.be/nl/laboratoriumgeneeskunde/genomic-surveillance-sars-cov-2-belgium. Figure 1 shows the speed with which the UK variant has become the dominant strain in Belgium since the beginning of 2021. Recently, there is a concern about the increase in the proportion of P.1 (the Brazilian variant).

Figure 1: Share of VoC's circulating in Belgium as measured through baseline genomic surveillance

Source: National Reference Center (UZ Leuven/KU Leuven)



Restricting measures are in place regarding traveling, both for residents and non-residents. These measures come with exemptions for some travelers or situations. In the previous weeks, the OCC listed some countries/regions for which these exemptions are not valid for returning travelers. Currently, this list is: UK, South-Africa, South-America and India (https://www.info-coronavirus.be/nl/reizen/).
In addition, the RMG validated a list of countries for which the exception for individuals who were diagnosed with COVID-19 in the 90 days prior to return and thus don't need to be re-quarantined or retested, is not applied: Brazil, South Africa and India.

Since more VoCs will emerge, there is a need for one uniform list of countries or regions for which strict travel measures should apply in every situation, based on defined indicators and cut-offs. In order to have a uniform policy within Europe, the RAG proposes that once a system for risk assessment concerning travel and VoCs has been developed at the European level by the ECDC/EC, this system should be followed. This is already being done for travel advice within the EU based on the 14-day incidence and positivity ratio. In the meantime, the RAG proposes in this document a risk assessment to be used in Belgium.

Elements to consider

- Non-essential travel to red zones is still strongly discouraged.
- A self-assessment will be put (back) in place for travelers to estimate the risk linked to their travel behavior with quarantine and testing exemption in case of low risk (decision by OCC). This means that travelers from a red zone can avoid quarantine and testing if they self-report a low risk, leading to an increased risk of import of variants, even within the EU. The RAG experts are concerned about this.
- ECDC publishes every Thursday a map with color codes by country based on 14 days incidence and positivity rate, to support the European Council recommendation on a coordinated approach to travel measures in the EU.
- Not every country/region in the world has a good functioning system of genomic surveillance, with sufficient available data. Especially in countries outside Europe and North America, there is a poor understanding of the circulating variants.
- Within the EU and EEA (European Economic Area) it is considered that genomic surveillance is adequate and the circulation of variants is overall comparable, with globally the same trends also for the epidemiological situation.
- When concentrating only on regions with known problems, the risk exists that VoCs enter via travelers from countries with insufficient data. This has been seen at the start of the epidemic, when focus was too much on travelers from regions in Italy with recognized high levels of transmission, resulting in import of the virus from other "safe" regions.
- VoCs that are already circulating at a high level in Belgium (> 20% for more than 1 month) should no longer be taken into account.
- Working with regions rather than countries is more feasible.
- This risk assessment can be adapted over time if needed, with the course of the epidemic and adaptations to EU guidelines.

Recommendations

- Instead of working with a "black-list" of countries/regions, it is easier to use the concept of a "safe-list", where exceptions on quarantine and testing procedures can be allowed for travelers.

- For **countries within the EU/EEA** (having good surveillance systems for cases and circulating variants), testing and quarantine is only recommended for travelers from a red or dark red zone. For the latter, exceptions that are decided upon (exceptions for essential travels, travelling <48h, professional travel, post-infection period, …) are allowed for countries having no VoC with potential or demonstrated immune escape representing >10% of the circulating strains. If no exceptions can be allowed, this should also be taken into account in the evaluation of the SAT score.
- For **countries outside the EU/EEA**, whether or not non-essential travel is allowed is defined at the European level. Currently, there is a "white list" with a threshold of the 14-day-cumulative incidence of <25/100,000, for countries with a sufficient surveillance system of infections. This threshold might be raised to 100/100,000 in the near future. For travelers entering Belgium **from any country on the white list**, there is no obligation for quarantine and testing (and thus no need to set criteria for allowing exceptions or not).
- For all the **other countries outside the EU/EEA**, exceptions on testing and quarantine can only be allowed for countries if :
  1) there is a sufficient genomic surveillance in place to allow detection of new VoCs. This will be evaluated by the RAG jointly with the NRC (see further) and will be updated on a monthly base;

  AND
  2) there is no VoC with potential or demonstrated immune escape representing >10% of the circulating strains, within a context of a 14 days cumulative incidence >100/100,000.

  Of note, other indicators such as a worrisome trend of the incidence or the test capacity can also be taken into consideration when evaluating the list by the RAG.
- The European Commission proposes to allow EU+ countries to use an "emergency brake", when a VoC is detected in a region/country (outside the EU), with temporary restrictions on all incoming travel from that area, but the decision is not taken yet. The RAG is in favour of a possible application also within the EU if the implementation of stricter control on quarantine and testing is not possible. The proposed threshold for this emergency brake in Belgium is a VoC with potential or demonstrated immune escape representing > 20% of the circulating strains and other worrying indicators during the last month (such as an increasing trend).
- If a traveler is diagnosed with COVID-19 coming from one of the countries outside the "safe-list", his/her high-risk contacts should go into quarantine, and the rule of "no exception" allowed also applies to them.

Operational aspects

- The list of VoCs that will be taken into consideration will be based on the list of VoCs with evidence of impact in immunity, as classified by the ECDC: https://www.ecdc.europa.eu/en/covid-19/variants-concern. But the risk assessment may also include VoIs with worrisome characteristics/mutations and a rapidly increasing spread.
- The list of countries with sufficient genomic surveillance will be updated once a month, based on international, readily available information in English. There will be no search done on national websites. Sources for follow-up of level of genomic surveillance worldwide include GISAID (absolute number of sequences downloaded per country available but not the proportion to cases, automation possible) and/or CovSpectrum (proportion of sequenced samples to cases available but no automation possible). The

proposed threshold for a sufficient genomic surveillance is having at least 1,000 strains available on GISAID for the last 3 months, and/or at least 1% of the cases sequenced (for countries with low incidence). However, this threshold still needs to be evaluated for feasibility and relevance.

- The list of countries will be discussed weekly during the evaluation of the RAG on the epidemiological situation.

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Annex: ECDC guidelines in quarantine and testing for travelers

The ECDC advices quarantine and testing for travelers in light of VoCs is available here: https://www.ecdc.europa.eu/sites/default/files/documents/Guidance-for-COVID-19-quarantine-and-testing-for%20travellers.pdf

At this stage of the pandemic, quarantine and testing can be considered for travelers coming from areas with a high level of viral community transmission with the presence of one or more VOCs, in order to delay the importation and spread of these VOCs in an area where they are not widely circulating. Quarantine and testing can also be considered for travelers coming from areas with a high level of SARS-CoV-2 community circulation, but where the extent of VOC circulation is unknown.