

Genomic surveillance of SARS-CoV-2 in Belgium

Report of the National Reference Laboratory (UZ Leuven & KU Leuven)

**Situation update – 9 of November 2021
(report 2021_53)**

Executive summary

61,460 Belgian sequences of SARS-CoV-2 are now publicly available on GISAID; compared to last week's report 700 sequences have been added.

762 sequences of positive SARS-CoV-2 samples collected between 25/10/2021 and 07/11/2021 have at this stage been analysed in the context of baseline surveillance. Among these, B.1.617.2 (*Delta*) and its sublineages represented 100% of the circulating strains. During the last 30 days, AY.43 was the only sublineage representing more than 10% of the circulating strains, and currently represents 43% of the circulating strains.

The genomic diversity of SARS-CoV-2 in Belgium is comparable with the situation described over the last 13 weeks.

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Previous reports can be downloaded using the following link:

<https://www.uzleuven.be/nl/laboratoriumgeneeskunde/genomic-surveillance-sars-cov-2-belgium>

1. Monitoring of VOCs in Belgium

While first identified on 6 April 2021 in Belgium, the B.1.617.2 Variant of Concern (Delta) is now the dominant lineage in the country, representing 100% of the baseline surveillance samples sequenced (see Figure 1).

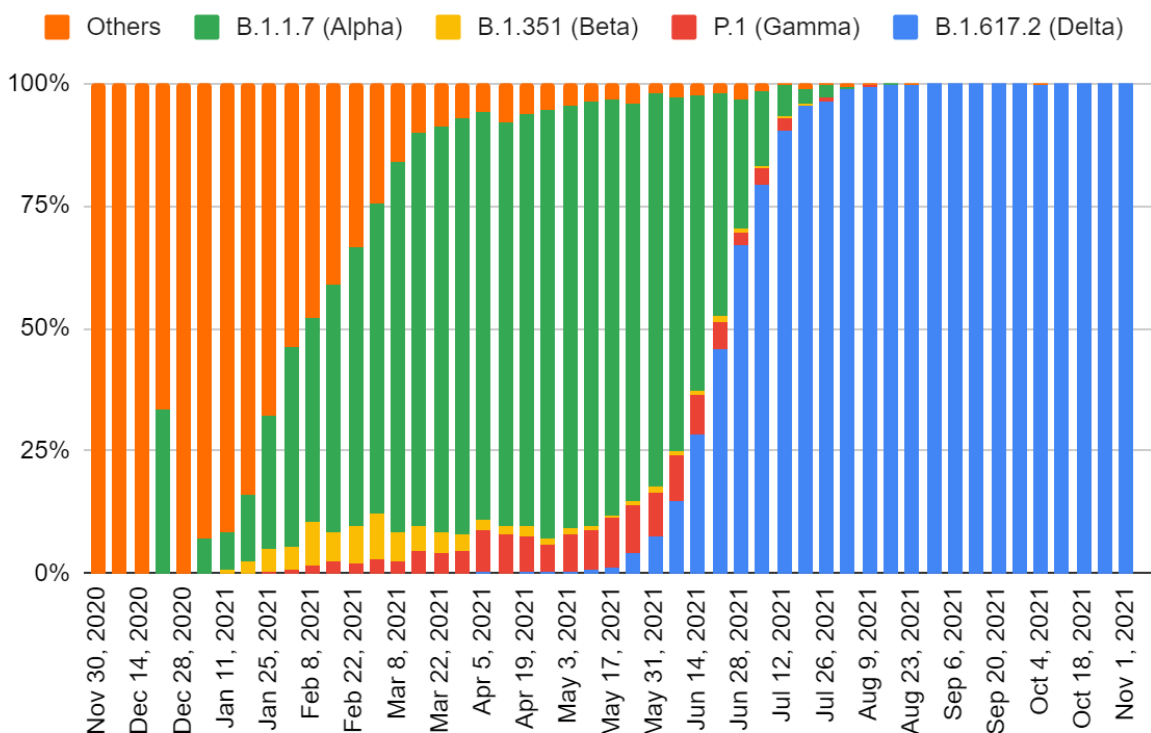


Figure 1: Weekly evolution of the frequency of variants of concern reported by the baseline surveillance network using a whole genome sequencing (WGS) approach.

The Delta variant is currently subdivided in numerous sublineages, namely: AY.1, AY.2, AY.3, AY.3.1, AY.4, AY.4.1, AY.4.2, AY.4.3, AY.4.4, AY.4.5, AY.5, AY.5.1, AY.5.2, AY.5.3, AY.5.4, AY.6, AY.7, AY.7.1, AY.7.2, AY.8, AY.9, AY.9.1, AY.9.2, AY.9.2.1, AY.10, AY.11, AY.12, AY.13, AY.14, AY.15, AY.16, AY.16.1, AY.17, AY.18, AY.19, AY.20, AY.21, AY.22, AY.23, AY.23.1, AY.24, AY.25, AY.26, AY.27, AY.28, AY.29, AY.29.1, AY.30, AY.31, AY.32, AY.33, AY.34, AY.34.1, AY.35, AY.36, AY.37, AY.38, AY.39, AY.39.1, AY.39.1.1, AY.39.2, AY.40, AY.41, AY.42, AY.43, AY.44, AY.45, AY.46, AY.46.1, AY.46.2, AY.46.3, AY.46.4, AY.46.5, AY.46.6, AY.47, AY.48, AY.49, AY.50, AY.51, AY.52, AY.53, AY.54, AY.55, AY.56, AY.57, AY.58, AY.59, AY.60, AY.61, AY.62, AY.63, AY.64, AY.65, AY.66, AY.67, AY.68, AY.69, AY.70, AY.71, AY.72, AY.73, AY.74, AY.75, AY.75.1, AY.76, AY.77, AY.78, AY.79, AY.80, AY.81, AY.82, AY.83, AY.84, AY.85, AY.86, AY.87, AY.88, AY.89, AY.90, AY.91, AY.91.1, AY.92, AY.93, AY.94, AY.95, AY.96, AY.97, AY.98, AY.98.1, AY.99, AY.99.1, AY.99.2, AY.100, AY.101, AY.102, AY.103, AY.104, AY.105, AY.106, AY.107, AY.108, AY.109, AY.110, AY.111, AY.112, AY.113, AY.114, AY.115, AY.116, AY.116.1 and AY.117.

Among the sublineages described, only AY.43 represents more than 10% of the circulating strains. The previously mentioned AY.4.2 and AY.5.2 did not significantly evolve in proportions during the last weeks.

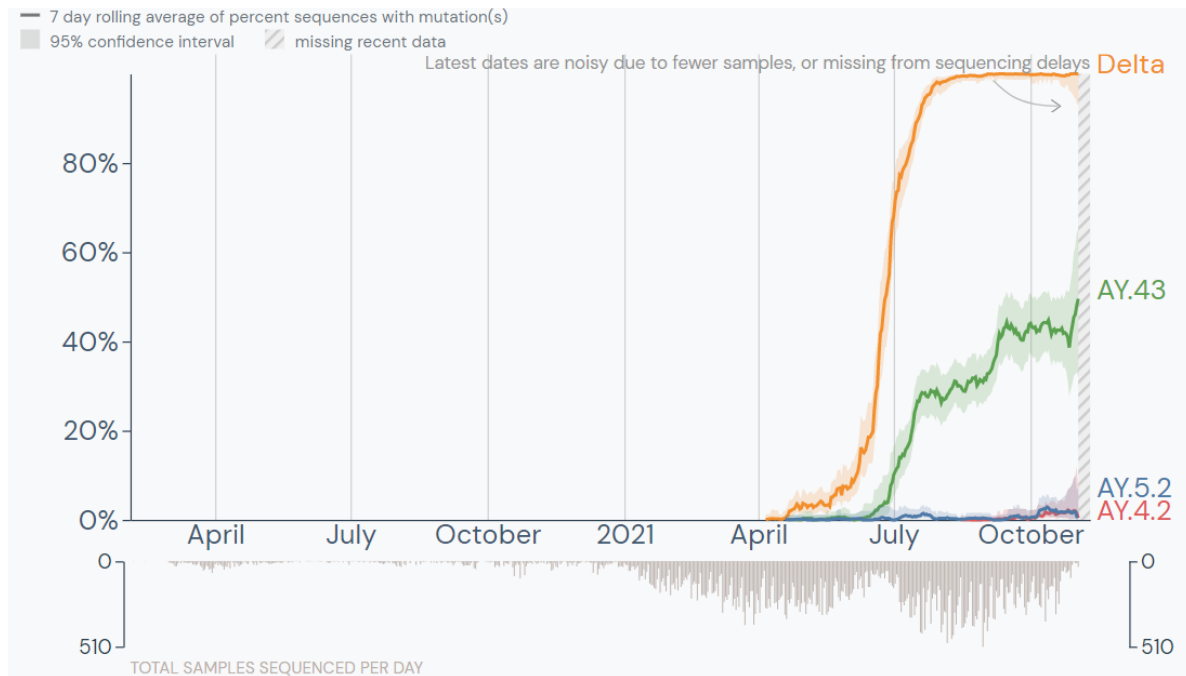


Figure 2: Evolution of the proportion of selected lineages and sublineages during the last months in Belgium.