

COVID in EEB1: current situation

Summary:

- In the second full week of the 21-22 school year, there have been thirty-two cases in EEB1 reported by the school management and P5 in Berkendael has been put on online learning. The situation is therefore extremely delicate and the medical service are working to find as many cases as possible to prevent the spread to other pupils and reduce the numbers of those quarantined.
- The majority of cases have been reported in the Primary years of Berkendael and in the Secondary years of Uccle. This large increase is likely to be associated with the greater contagiousness of the Delta variant combined with the lower level of mitigation measures compared with the last school year. The fact that there are fewer cases in Secondary suggest that vaccination and the use of masks may be hindering the spread of the virus there. Large increases in cases have also been reported in Belgian and specifically Brussels schools this week.
- The epidemiological situation in Brussels in the autumn is expected to be very challenging, due to the seasonality of the virus, the Delta variant, reopening of schools and workplaces, lifting of restrictions and low vaccination rates. The authorities are focusing on improving vaccination rates, with the hope that this will prevent hospitals from running out of capacity.
- In this context, the importance of vaccinating the eligible school population cannot be overemphasised. In Belgium vaccines are available from age 12 onwards. A high vaccination rate of these age-groups, along with school staff and parents, has the potential to make the school year 2021-2022 safer and less disruptive to the activity of the school. Approval of vaccination for the 5-12 age-group is expected later this year in the best case scenario.
- Mitigation measures in place in EEB1 have been scaled down and follow the bare legal minimum demanded by the Belgian authorities. However, the characteristics of EEB1 make it particularly vulnerable to COVID-19 outbreaks due to its size and high level of group mixing (buses, canteens, L2, L2 classes, etc.). In Primary school in particular there are few measures in place to mitigate the likelihood of outbreaks.
- The APEEE favours the application of a layered approach to mitigation that minimises the health risk to pupils as well as the disruption of their teaching. These measures could include best practice recommendations from the Belgian authorities as well as best practice from other European Schools (better ventilation and exploring the possibility regular rapid testing). This week EEB1 has reported that the proportion of pupils vaccinated will be made public soon, as suggested by the APEEE.

The current epidemiological situation in Belgium: Background

After a school year with successive COVID waves and school closures, by the beginning of the 2020-21 school year the majority of the Belgian population has been vaccinated. However, during the summer new information came to light, suggesting the pandemic is not over yet and that in this new phase schools will be under particularly strong pressure:

- Firstly, the Delta variant is now dominant in Belgium. It is more contagious and associated with greater risk of hospitalisation than the preceding dominant variant, Alpha.
- Second, current vaccines still protective versus severe outcomes and death, but Delta reduces greatly the protection provided by vaccines against transmission.

Therefore the vaccinated can transmit COVID to those not vaccinated (immunocompromised people, vaccine-hesitant population and children) to a greater extent than we expected in June. This increases the incentives for vaccination, but also means that the unvaccinated will be at greater risk of infection and it becomes more difficult for instance to protect children simply vaccinating parents.

Current government policy in Belgium is to vaccinate as high a proportion of the population as possible and then lift restrictions on all activities as far as possible. Due to this increase in contacts, over the autumn, a wave of cases is expected. The hope is that the impact of vaccination is sufficient to keep deaths low and preserve hospital system capacity. But it is also possible that the capacity will be overwhelmed and restrictions will have to be reimposed over the winter.

Brussels is particularly at risk, due to its low vaccination rates. Therefore there is a drive to increase vaccination rates in Brussels, and the generalised use of vaccination passports from October onwards, as well as retaining a wider requirement for mask use than the rest of the country.

In this generalised increase in cases, schools are expected to be heavily affected and a large proportion of cases is expected in children, as their vaccination rates are lower (and zero for those below 12 years old) and schools are an ideal environment for COVID. This expectation has been confirmed in their first weeks of the school year, as discussed below.

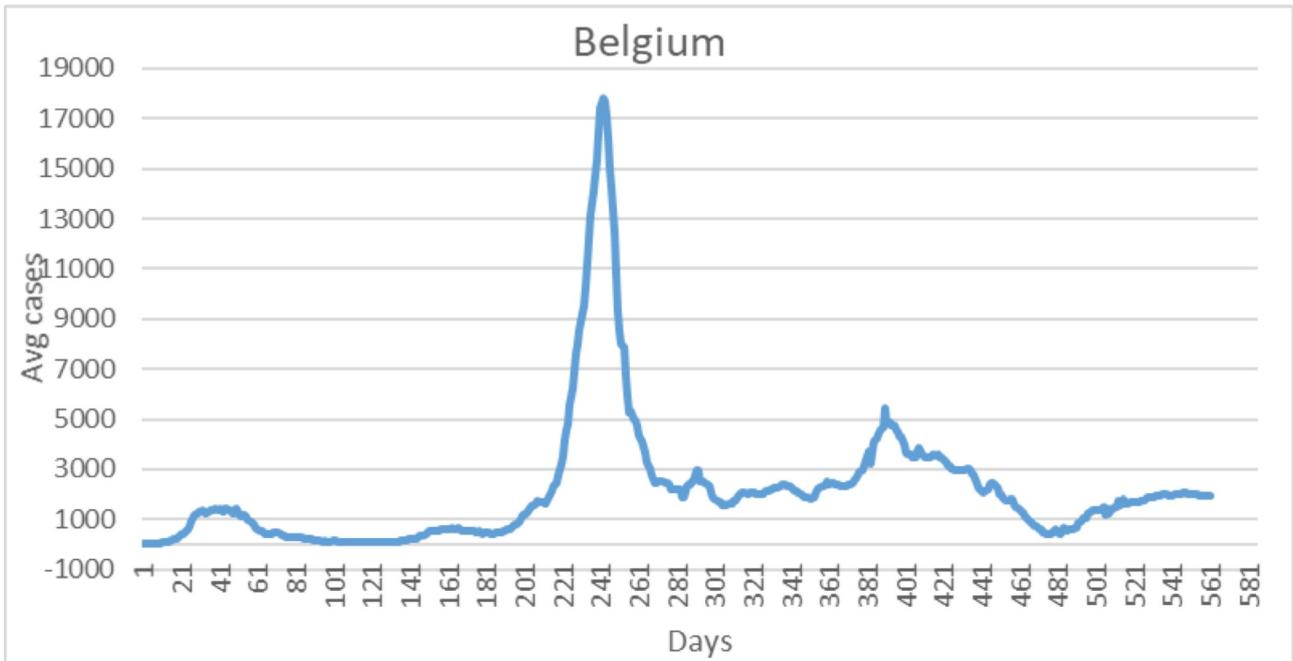
The current epidemiological situation in Belgium: Latest figures

Incidence in Belgium is currently 239 cases per 100,000 populations over two weeks (compared to 241 last week). Incidence in Brussels is at 561 (581 last week), more than double the national average. Cases have fallen gradually over the last weeks, but it is expected that the impact of the re-opening of schools and workplaces will lead to increases over the next few weeks.

For context, in the US, the Centre for Communicable Diseases describes as high-risk situations for schools any regions where the number of cases in the country over two weeks are above 200.

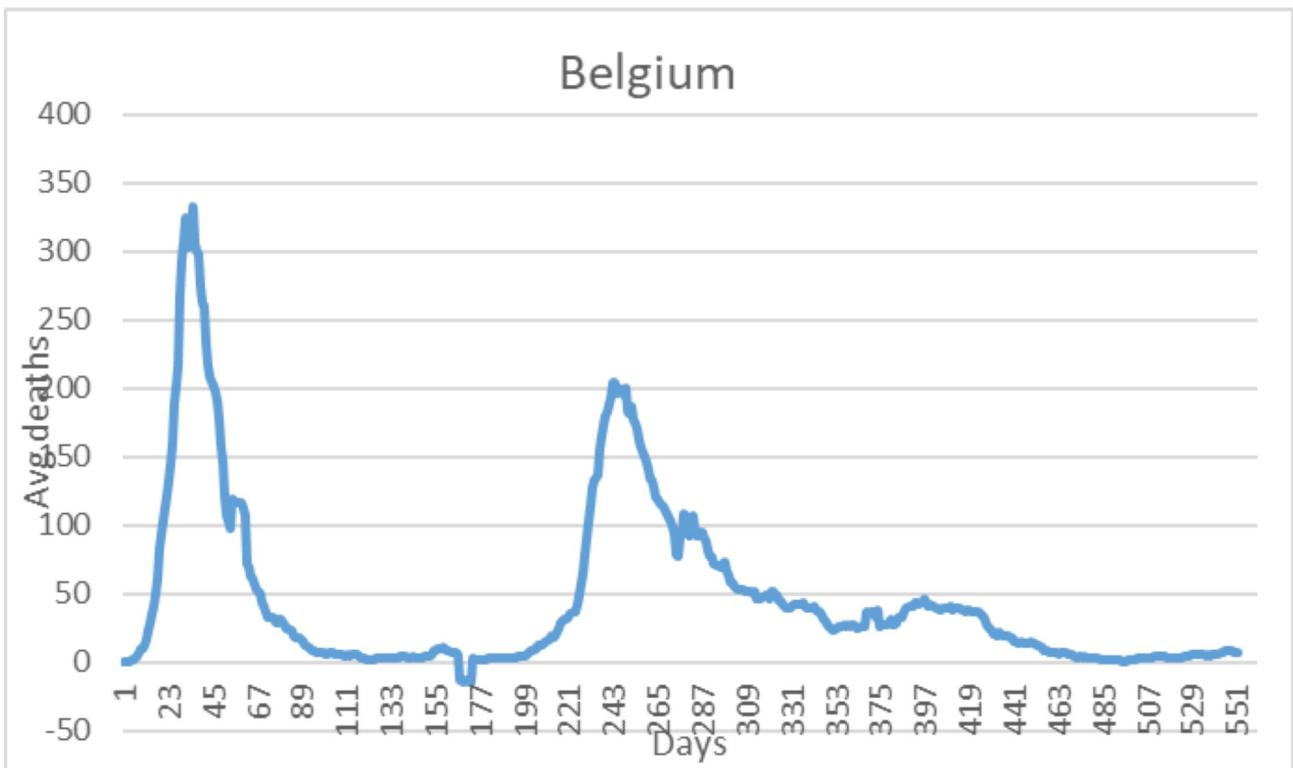
The current positivity rate (number of cases divided by the number of tests performed) is currently 4.9%, (last week 5.1%) above the WHO recommended level of 5%. In Brussels this rate has now fallen to 6.7% (last week 7.2%), well above the WHO threshold. This suggests that there is not enough testing to capture all the cases in the population.

7-day average of new daily COVID-19 cases until 8th September



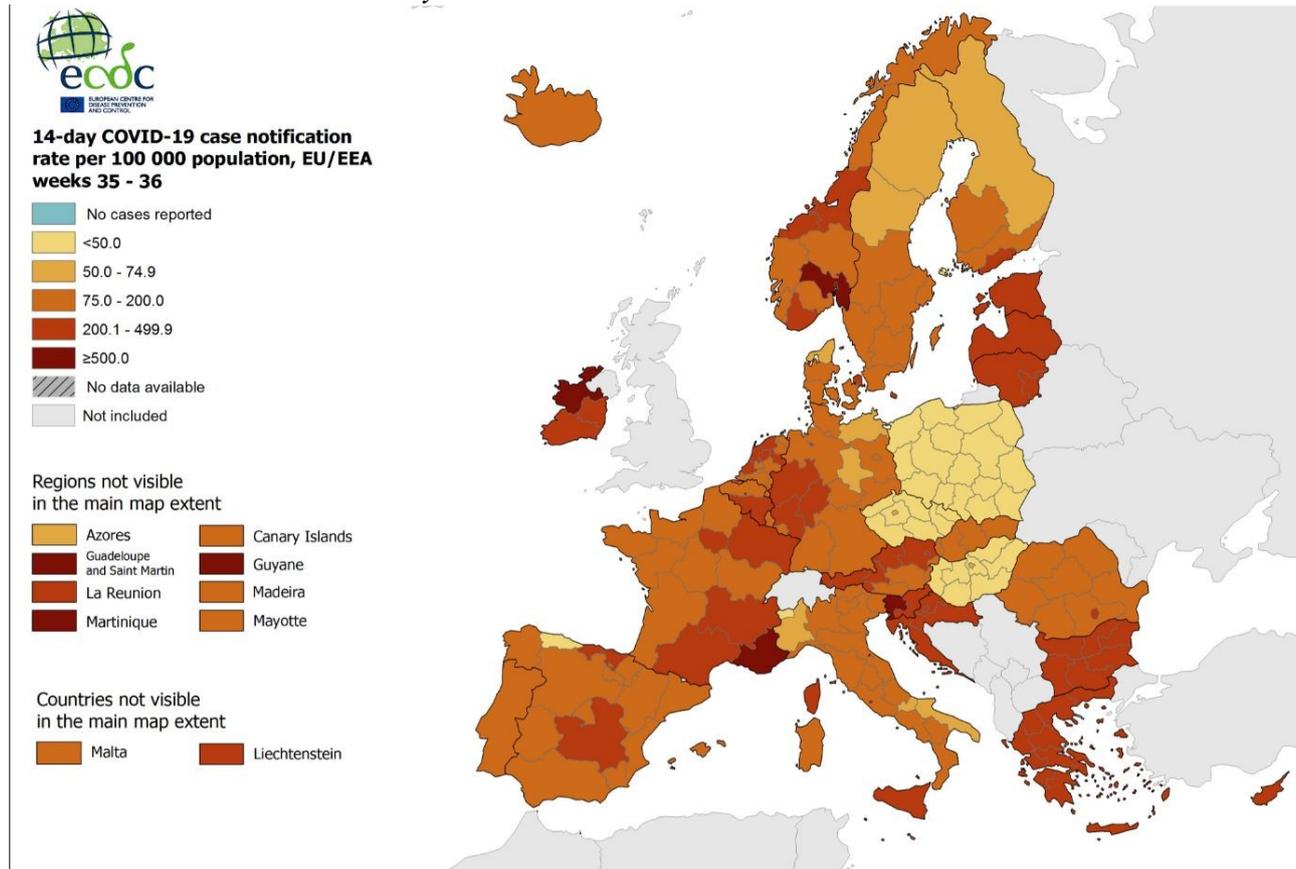
Source: Our World in Data

7-day average of new daily COVID-19 deaths until 8th September



Source: Our world in data

Latest COVID risk assessment by the ECDC



Source: ECDC

Vaccination

Increasing vaccination rates reduce the impact of the new variant, by reducing its contagiousness (slowing growth in cases) and its severity (weakening the link between cases and hospitalisations/fatalities). In Belgium vaccination is currently available for the whole population of age 12 and above.

While children are at lower risk from COVID-19 than adults, it is not negligible. In children, around 1 in 100 cases result in hospitalisation and around 7 in 100 cases result in long-term symptoms including brain fog, weakness, loss of smell and cardiomyopathy. As the risk of infection in Brussels schools is expected by the authorities to be very high this autumn, vaccination has the potential to be extremely beneficial for this age-group as well.

The trials for a vaccine (with a lower dosage) for the 12 to 5 age group have been finalised after an extension to ensure their safety. It is therefore expected that vaccine manufacturers will file for approval with the EMA. If further approved by the Belgian authorities, the vaccinations could begin as soon as the fourth quarter of this year. This could potentially lead to a very different situation for the school as a whole.

While vaccination status is a very important parameter of the vulnerability of the school to outbreaks, it is currently known what proportion of eligible pupils have been vaccinated. EEB1 management have announced this week that they will soon share this data with parents, which they are collecting on a voluntary basis from pupils and their families.

Current COVID-19 mitigation measures in EEB1

Compared to the end of the last school year, COVID-19 measures have been relaxed, with the re-opening of the Primary and Secondary canteens and périscolaire activities in the school. Masks still have to be worn by Secondary students due to the difficult situation in Brussels. The same ventilation protocol continues to operate, with continuously open windows but no systematic use of CO2 meters to monitor air quality is sufficient to reduce the risk of contagion. Whereas quick tests were purchased in the school year 20-21, they have not been used and there are no plans to do so.

Against best practice recommendations from the European Centre for Disease Control¹, the Belgian authorities' new protocols for contact tracing in school have also been relaxed and they are less likely to detect cases early before they spread within the school. Primary school pupils will be considered low-risk contacts and not tested or quarantined if there is one case in their class (they will be quarantined only if there are two or more and it is judged that transmission occurred in the classroom). Secondary students will also be considered low-risk contacts as long as masking and distancing are kept. In contrast, the ECDC recommends that all these pupils should be treated as high risk contacts and would have to get tested and quarantined if the test was positive.

On the positive side, the extension of vaccination down to the 12-year old age-group means that pupils from S2 onwards will be better protected than in the past. However, it is as yet unclear what proportion of the school population is vaccinated.

Overall, the measures in place in EEB1 at the beginning of the 2021-2022 school year appear to follow the bare legal minimum demanded by the Belgian authorities. However, the characteristics of EEB1 make it particularly vulnerable to COVID-19 outbreaks due to its size, group mixing (buses, canteens, L2, L2 classes, etc.) and difficulties to track infections appropriately. In Primary school in particular there are very few measures to mitigate the likelihood of outbreaks.

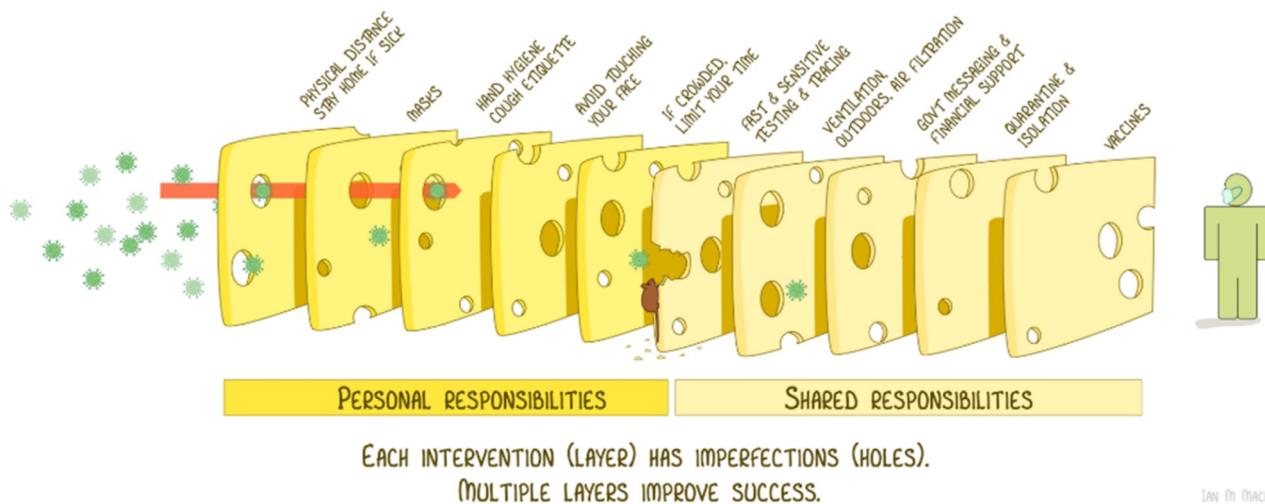
Due to this, the APEEE favours the application of a layered approach to mitigation that minimises the health risk to pupils as well as the disruption of their teaching. A layered approach to risk reduction consists in applying several mitigation measures at the same time to reduce overall risk. Although each individual measure may be considered imperfect on its own, applied together they can produce an effective reduction in risk. Australian virologist Ian Mackay has produced the graphic below to illustrate this approach.

¹ <https://www.ecdc.europa.eu/en/publications-data/children-and-school-settings-covid-19-transmission>

The Swiss cheese respiratory virus pandemic defence (Ian Mackay)

THE SWISS CHEESE RESPIRATORY VIRUS PANDEMIC DEFENCE

RECOGNISING THAT NO SINGLE INTERVENTION IS PERFECT AT PREVENTING SPREAD



These measures could include best practice recommendations from the Belgian authorities as well as best practice from other European Schools:

- For instance, a ventilation risk assessment could be performed (as recommended in FWB circulars 8077, 8212, and 82131) to include all school spaces. The school could also implement in full the Belgian authorities' ventilation plan for workspaces², including wide use of CO2 meters to monitor success and HEPA filters wherever natural ventilation is insufficient to achieve good air quality.
- Data on vaccination students currently being collected by the school medical service for contact tracing purposes (as communicated to parents on the 3rd of September 2021) could be used to report average vaccination rates in order to assess the risk profile of the school (in full compliance with GDPR rules). This has now been confirmed by the school and data will be published soon.
- The possibility of rapid testing of pupils could be explored, looking in particular at the experience of the European Schools in Germany. Rapid testing should only be undertaken after the voluntary agreement of pupils' families.

² The main requirements are explained here: <https://www.info-coronavirus.be/fr/ventilation/> The practical guide to achieve good ventilation explaining in detail the steps to be taken is available here: https://emploi.belgique.be/sites/default/files/content/documents/Coronavirus/Plan_ventilation.pdf

The current epidemiological situation in the school

Epidemiological situation in EEB1 as of 18th of September 2021

EEB1	EEBI POSITIVE CASES TO DATE							EEB1 ECDC threshold	Belgian VL Schools	Belgian VL Schools
	MAT+PRI+SEC	MAT	PRI	SEC	WEEK TOTAL	Weekly cases per 100,000	14-day cases per 100,000		Weekly cases per 100,000	14-day cases per 100,000
	personnel	pupil	pupil	pupil						
6-10 Sept	0	1	1	0	2	40	NA	NA	148	NA
10-17 Sept	2	0	20	10	32	646	687	>500	NA	NA
Cumulative Total	2	1	21	10	34					

Data based on school communications to parents, also compiled here <http://www.uccleparents.org/apeee/prises-de-position/covid-19/?lang=en>

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The majority of cases have been reported in the Primary years of Berkendael and in the Secondary years of Uccle. This large increase with respect to the preceding week is a cause for concern and is likely to be associated with the greater contagiousness of the delta variant combined with the lower level of mitigation measures compared with the last school year. The fact that there are fewer cases in Secondary suggest that vaccination and the use of masks may be hindering the spread of the virus there.

Cases in Belgian Flemish schools have not been published yet for this week, but already had a relatively high incidence of 148 cases per 100,000 per week. While the cases for Belgian French-speaking schools will not be published until

The increase in cases has led to a corresponding increase in quarantines, with 305 pupils and 3 members of personnel in quarantine. 13 classes (including L2 groups) and 1 bus are currently closed. The whole of P5 in Berkendael has been put on online learning.

Quarantine situation in EEB1 as of 10th of September 2021

EEB1	EEBI pupils and staff in quarantine							WEEK TOTAL
	MAT+PRI+SE C	MAT+PRI+SE C	MAT+PRI+SE C	MAT	PRI	SEC		
	Classes	Buses	personnel	pupil	pupil	pupil		
6-10 Sept	0	0	2	3	3	10	18	
10-17 Sept	13	1	1	3	176	110	290	
Cumulative	13	1	3	6	179	120	308	

Data based on school communications to parents, also compiled here <http://www.uccleparents.org/apeee/prises-de-position/covid-19/?lang=en>