

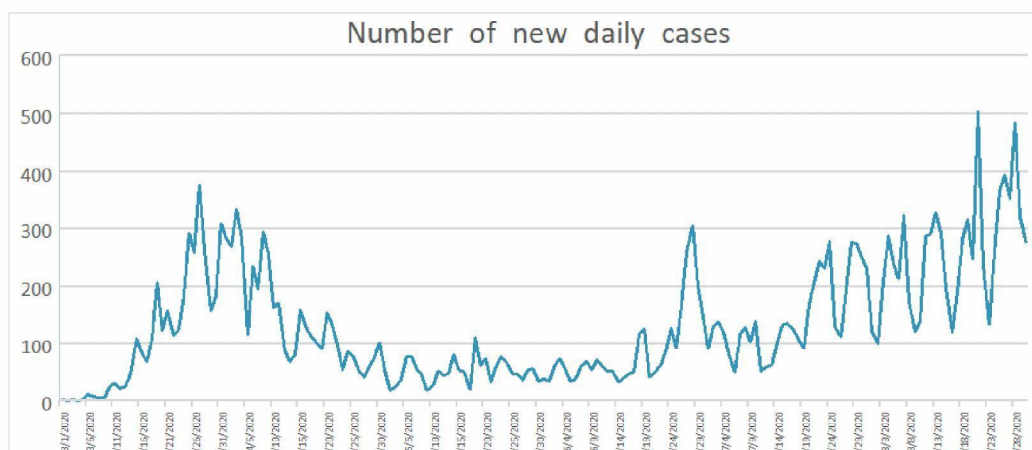
COVID-19: An overview of the epidemiological situation in the Czech Republic

31 August 2020

Current epidemiological situation

- **The overall epidemiological situation in the Czech Republic is characterized by local clusters / outbreaks. Currently, there is no community transmission detected in the country.**
- **As of August 31, the Czech Republic has registered total of 24 367 cases. At the moment 6 397 cases are active.**
- **The rise in numbers in recent weeks is due to increase in testing.**

The first case of infection by SARS-CoV-2 was detected on March 1. Since then the number of newly detected cases was steadily rising, reaching its peak by end of March. In April the Czech Republic witnessed a rapid decrease in cases thanks to the strict measures adopted by the government.



As rest of the EU, the Czech Republic has been facing rise in numbers of newly detected cases since beginning of summer. The increase has been a reaction to easing of the restrictions, however, majority of new cases has been detected due to increase of testing capacities. The situation is, nevertheless, currently stable throughout the country. Several outbreaks have been registered. All of them have been successfully and swiftly handled by measures taken on local level. There is no community transmission recorded in the Czech Republic. Due to current increase of testing, the Czech Republic has registered a record number of daily increase of cases – 505 new patients on 21 August, which is not unusual in comparison to the situation in other European countries that in many cases also report unprecedented high numbers of new cases.

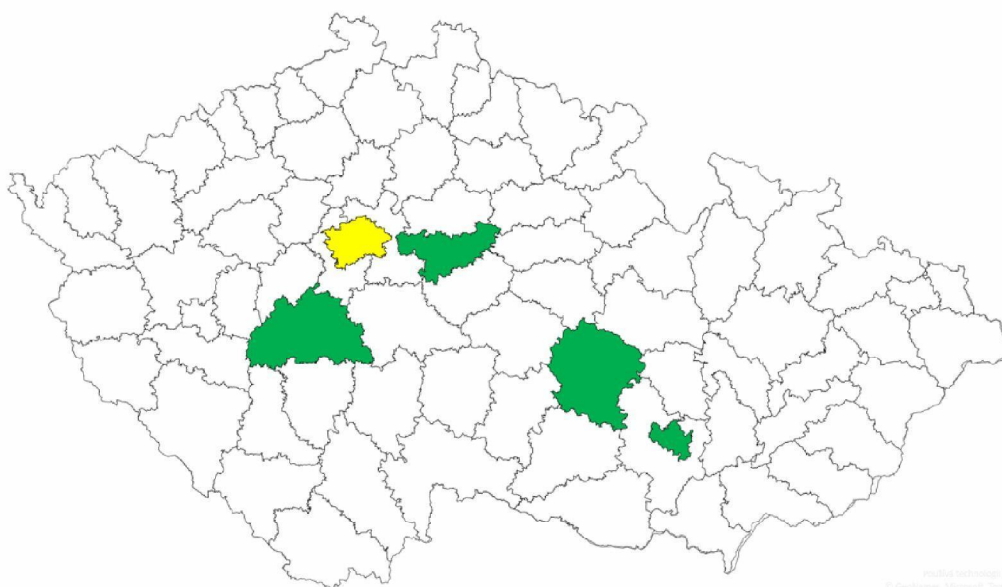
Alert system

Current epidemiological situation in the Czech Republic varies across the regions. A system that marks the individual districts according to the degree of COVID-19 contagion has been launched in the Czech Republic. The system is divided into four alert levels – white, green, yellow, and red, known as the “traffic light scheme”. The white means zero or negligible risk, the green indicates the incidence of contagion without community transmission, the yellow indicates incipient community transmission, and the red means rising or lasting community transmission in the district. Current situation is being updated regularly and is available online in English - <https://koronavirus.mzcr.cz/en/covid-19-risk-score-for-czech-districts/>

ALERT LEVEL	EPIDEMIOLOGICAL CRITERION	CHARACTERISTICS	EARLY WARNING LEVEL
0	ZERO OR NEGLIGIBLE RISK	<ul style="list-style-type: none"> Official expert sources (especially the World Health Organisation or European Centre for Disease Prevention and Control) inform about the fact that disease contagion has been reported abroad 	0
I	OCCURRENCE OF INFECTION IN CZ WITHOUT COMMUNITY TRANSMISSION	<ul style="list-style-type: none"> Sporadic cases occur Local clusters occur Local epidemics occur Combination occur: sporadic cases / local clusters / local epidemics 	1-3
II	INCIPIENT COMMUNITY TRANSMISSION IN CZ	<ul style="list-style-type: none"> Occasional cases with an unclear source of contagion, which start to spread in an as-yet-unaffected community – among persons who did not visit an affected area or were not in contact with a known source 	4-7
III	GROWING OR PERSISTING COMMUNITY TRANSMISSION IN CZ	<ul style="list-style-type: none"> Daily incidence of cases within community transmission has a consistent rising or persisting trend 	8-10

Alert levels are published primarily as information for citizens, as a system of early warning about the changing epidemiological situation. Twenty-five parameters, which are the result of the weekly summary of daily monitoring, are evaluated. The final decision about the alert level for the given area is the outcome of evaluation by epidemiologists and hygienists. Assessment of the community transmission risk, meaning the risk of the uncontrolled spread through the population during which a respective regional public health authority cannot determine a substantial share of the detected contagions, plays a considerable role in this expertise.

The districts in the Czech Republic are currently largely marked as zero or negligible risk. There is 1 district in yellow zone with low community spread and 4 districts in the green zone where there have been incidences of contagion without community spread in the Czech Republic. Prague is in the yellow zone and Kolín, Příbram, Žďár nad Sázavou and Brno are in the green zone. The alert system is to be updated every two weeks.

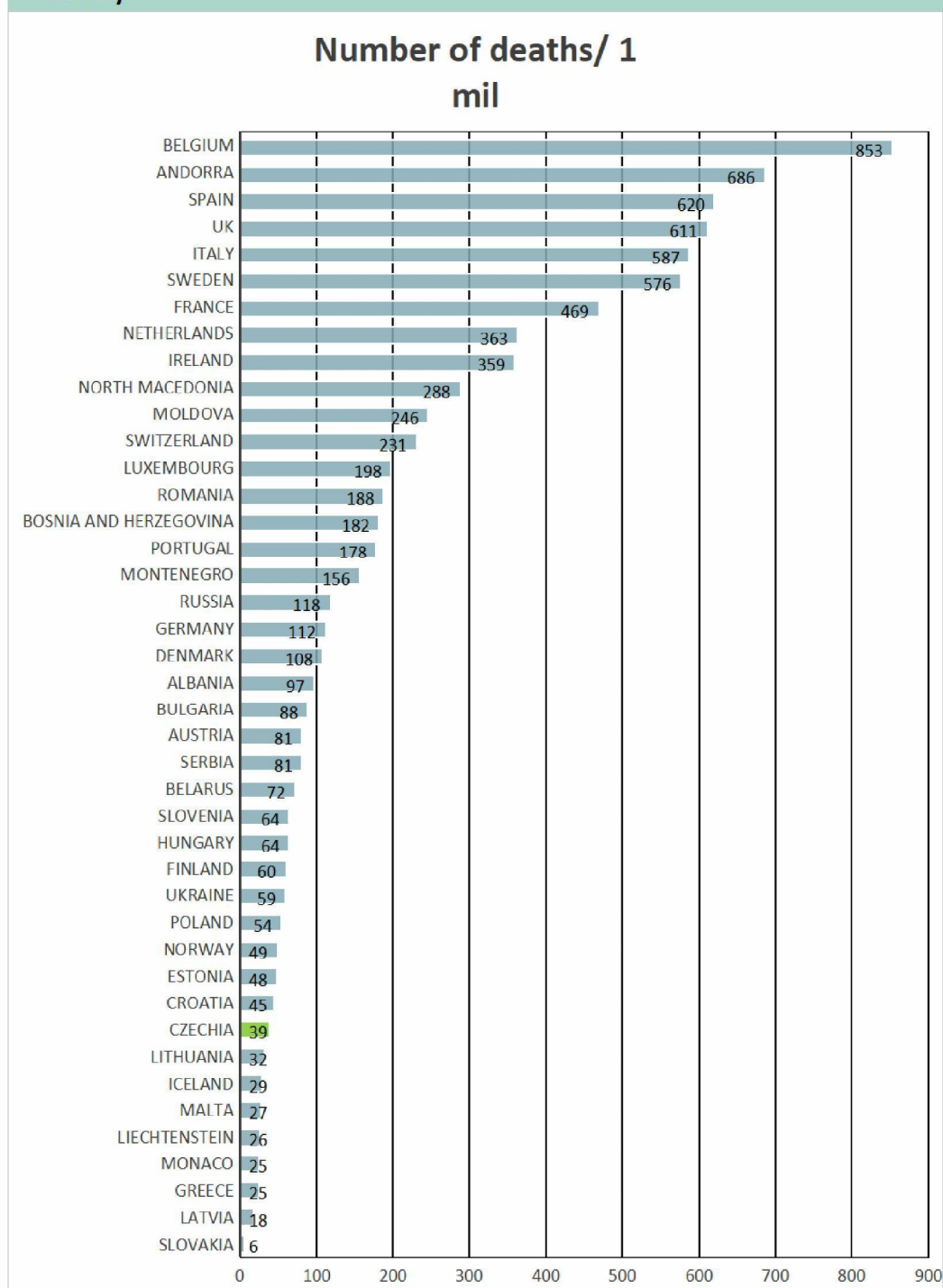


Prague The capital city shows the highest occurrence of COVID-19 among the Czech regions, with average daily incidence higher than 75 cases (ca 5,4/ 100 000 inhabitants). Current situation is showing signs of community transmission. Most cases are registered within young adults who predominantly are not showing any symptoms. Ca 10% of all diagnosed cases in the last week come from vulnerable groups of the population, which is an increase in comparison with previous periods. Nonetheless, there is no increase in the number of hospitalized patients requiring intensive care. However, there is an increase in cases with unknown source of the infection. The share of those cases is now around 30 %.

Kolín, Příbram, Žďár nad Sázavou and Brno The situation is very similar across all the regions. All of them registered a 50 % increase of new cases in comparison with last week, which suggests an increase of the reproductive number within given population. The daily incidence is 3-4 / 100 000 inhabitants. New cases are predominantly connected with mass / family events and place of work. However, sporadic cases with unknown source of the infection are reported. There is no spread within the vulnerable groups of the population and the situation in all mentioned regions is fully under control.

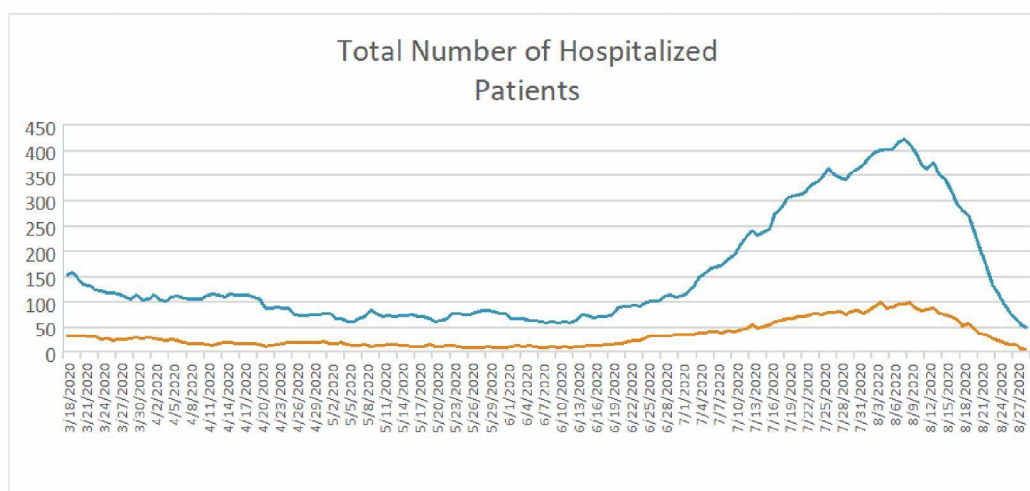
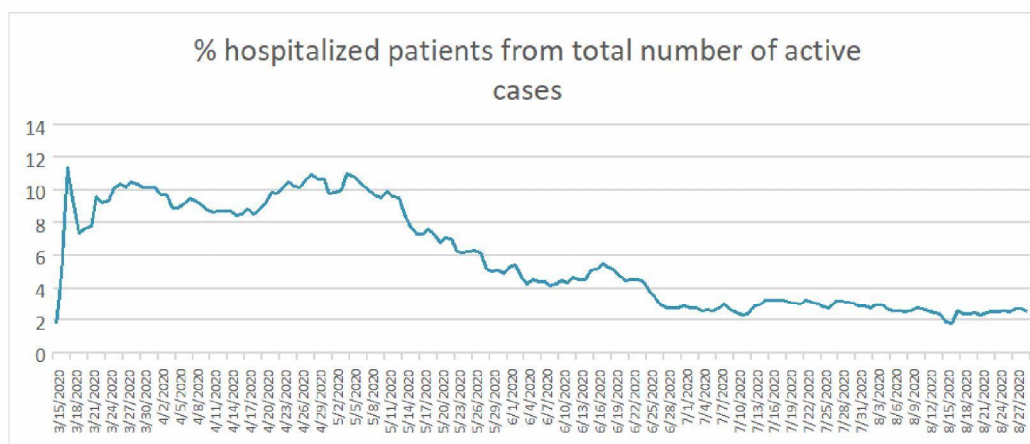
Mortality

- Mortality rate in the Czech Republic – 1,7% is one of the lowest among the EU countries.
- Number of hospitalized patients and their rate to active cases has been decreasing steadily.



The Czech Republic was able to organise quickly its health system to prepare for possibly larger number of hospitalized patients. We started to monitor free bed capacities in ICUs across the country in real time to be able to compensate for non-sufficient capacities in other regions if needed. Fortunately, this has never been the case. The number of patients in serious health condition has been decreasing steadily, not only in total numbers, but also in comparison to number of hospitalized patients.

As of August 31, **72 % of all confirmed cases recovered already**, while **fatality rate of 1,7% is among the lowest in the EU**, as is the hospitalization rate compared to number of active cases. **Only 2,5 % of active cases are hospitalized**. Only 0,51 % of all active cases are patients in ICUs.



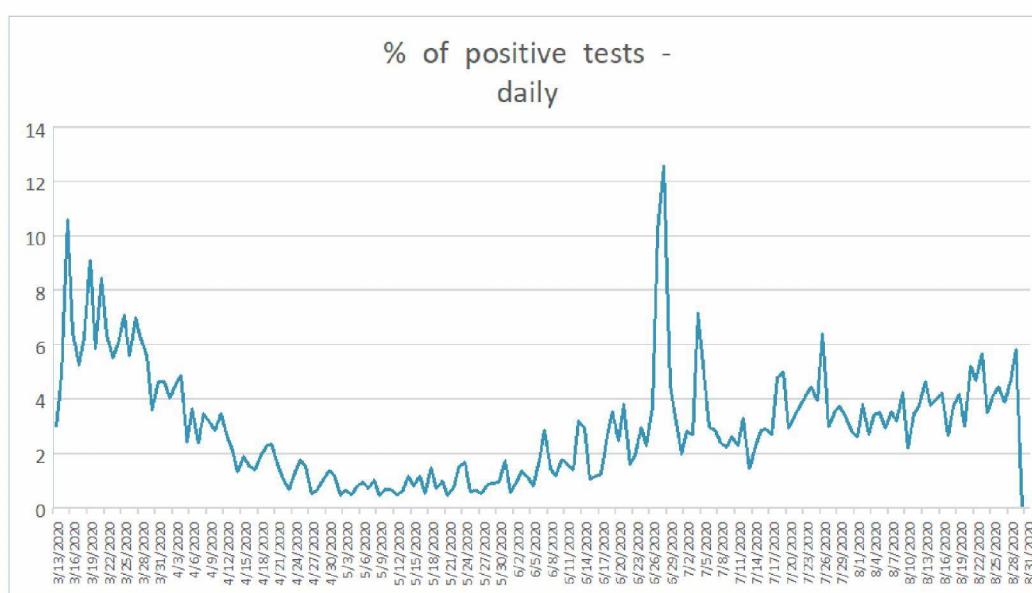
Nearly 70% of the deceased are patients over 75 years old, **Over 90% of the deceased were patients older than 65 years.**

Testing

- High number of tests in various population groups mean relatively low number of positive tests.
- Testing is done mainly in local clusters.

Number of tests being carried out in the Czech Republic is closely connected to the course of the epidemics. It was rising steadily in the beginning, reaching approx. 10 thousand tests a day at the peak. We have witnessed decrease in testing as adopted measures slowed down the progress of epidemics significantly.

Currently, the number of tests is once again increasing. Massive testing is being carried out at local clusters to prevent their possible spread. As such, the **rate of covid-19 positive patients to number of tests is only about 4 – 5 %**, whereas at the beginning of the epidemics as much as 15% of those tested were COVID-19 positive.



Testing of a much wider population segment allows us not only to limit local outbreaks but also to detect many mild and asymptomatic cases.

For all the above-mentioned reasons, **testing is crucial, though it is true that countries that test more, appear to be in a more serious situation**. The truth is that insufficient testing renders the image incomplete, as it also means under-detection of cases, allowing for the emergence of uncontrolled transmission chains. A less stringent testing strategy may result in greater risk of infection. In other words, a low rate of new infections may give a false sense of security and peace of mind about the real epidemiological situation in a country.

Prevention

General measures have been abolished during last months. Restrictive measures are currently being adopted only in local clusters. Ban on mass events of more than 1000 people is valid for the whole country, as well as compulsory face masks on events of over 100 (indoors) or 500 (outdoors) people. Recommendations for voluntary use of face masks and social distancing are still valid.

The Ministry of Health is monitoring the current situation very closely and is ready to take steps on national level, should the situation worsen. We, however, believe that the majority of any future measures should be locally based according to the alert system mentioned above.

Detailed description of individual degrees and interconnected measures can be found here <https://koronavirus.mzcr.cz/wp-content/uploads/2020/08/Alert-levels-in-the-field-of-public-health-protection.pdf>