

ALERT LEVELS IN THE FIELD OF PUBLIC HEALTH PROTECTION

Alert levels in the field of public health protection determine the scope of key anti-epidemic measures which are essential to limit the outbreak and further spread of COVID-19, based on defined levels of disease transmission caused by the novel coronavirus called SARS-CoV-2. Anti-epidemic measures are divided into activities and procedures applicable to natural persons and legal entities and also concern activities and procedures within the Czech Republic readiness and response system to the threat of the epidemic spread of COVID-19.

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 Combinations 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

List of abbreviations used

BRK – Regional Security Council; BRS – National Security Council; KEK – Regional Epidemiology Committee; KHS – Regional Public Health Authority; MoH – Ministry of Health; PPE – personal protective equipment; OOVZ – public health protection authority; PLDD – general practitioner for children and youths; POC – emergency operations center for public health; ÚEK – Central Epidemiological Committee (based on the statute of the Committee for solving the occurrence of serious infectious diseases in CZ); ÚKŠ – Central Crisis Taskforce

STATISTICAL INDICATORS GENERATING EARLY WARNING LEVELS FOR EVALUATING THE RISK LEVEL OF A COVID-19 EPIDEMIC

The early warning levels are an auxiliary scale which serves to quantify the level of risk on the scale of 0 to 10. The individual risk categories are thus linked to precise criteria, which enable a detailed assessment of the degree of risk of a specific situation. The indicators specified below are gradated within the epidemiological risk categories and are intended for the weekly summarised evaluation of a given geographical area. In addition to this evaluation, the daily monitoring of trends with detailed scoring of the risk levels is also defined. The preferred geographical unit for evaluation is the district, but the evaluation can be applied to the territory of several adjacent districts, regions or the entire Czech Republic.

ALERT LEVEL	EPIDEMIOLOGICAL CRITERION	STATISTICAL INDICATORS FOR EARLY WARNING LEVELS	EARLY WARNING LEVEL
0	ZERO OR NEGLIGIBLE RISK	<ul style="list-style-type: none"> Zero or very rare occurrence of disease in the evaluated area of the Czech Republic: max. weekly detection of 5 newly diagnosed patients per day, sporadic, mutually unrelated cases 	0
I	OCCURRENCE OF INFECTION IN CZ WITHOUT COMMUNITY TRANSMISSION	<p>Defining indicator:</p> <ul style="list-style-type: none"> Occurrence of sporadic cases of disease, local outbreaks or epidemic incidents of known origin without community transmission / 1 point <p>Other statistically relevant factors that increase risk:</p> <ul style="list-style-type: none"> Cumulative number of newly diagnosed patients with COVID-19 in the given area in the past 7 days exceeds 25/100,000 inhabitants / 1 point Average daily increase in the number of positive cases in the past 7 days is 50% higher compared to the average of the previous 7 days / 1 point 	1–3
II	INCIPIENT COMMUNITY TRANSMISSION IN CZ	<p>Defining indicator:</p> <ul style="list-style-type: none"> High dispersed occurrence of contagion in the evaluated area or new outbreaks with the risk of community transmission with a rising number of new patients / 4 points <p>Other statistically relevant factors that increase risk:</p> <ul style="list-style-type: none"> Cumulative number of newly diagnosed patients with COVID-19 in the given area in the past 7 days exceeds 25/100,000 inhabitants / 1 point Average daily increase in the number of positive cases in the past 7 days is 50% higher compared to the average of the previous 7 days / 1 point Continuously rising statistically-relevant trend or statistically-relevant escalation of the trend pursuant to an internationally recognised algorithm (The Early Aberration Reporting System, EARS-C3) (1 point) 	4–7
III	GROWING OR PERSISTING COMMUNITY TRANSMISSION IN CZ	<p>Defining indicator:</p> <ul style="list-style-type: none"> Rising risk of community transmission related to a statistically-relevant escalation of trends with the risk of impacting vulnerable population groups / 8 points <p>Other statistically relevant factors that increase risk:</p> <ul style="list-style-type: none"> Cumulative number of newly diagnosed patients with COVID-19 in the given area in the past 7 days exceeds 25/100,000 inhabitants / 1 point Rising number of positive cases aged 65+ in the past 7 years by more than 50% compared to the previous 7 days or the number of those hospitalised with COVID-19 exceeded 2% of the total number of currently positive cases minimally once in the past 7 days / (1 point) 	8–10

**ALERT LEVELS IN THE FIELD OF PUBLIC HEALTH PROTECTION - PHASES OF ACTIVITY OF PUBLIC HEALTH PROTECTION AUTHORITIES
IN CONNECTION TO THE EPIDEMIC SPREADING OF INFECTIOUS DISEASES**

ALERT LEVEL	EPIDEMIOLOGICAL CRITERION	PROCEDURES AND ACTIVITIES OF PUBLIC HEALTH PROTECTION AUTHORITIES	EARLY WARNING LEVEL
0	ZERO OR NEGLIGIBLE RISK	<ul style="list-style-type: none"> Define measures at borders and entrance points to the Czech Republic Consider travel restrictions MoH POC conducts routine activities 	0
I	OCCURRENCE OF INFECTION IN CZ WITHOUT COMMUNITY TRANSMISSION	<ul style="list-style-type: none"> The public health protection authority will recommend the use of suitable PPE and replenishment of virucidal disinfectant supplies Non-stop monitoring of how the situation develops through the public health emergency operation centre (POC) of the MoH Activate the MoH crisis taskforce Convene a meeting of the Central Epidemiological Committee (ÚEK) and Regional Epidemiological Committees (KEK) Prepare references for the meeting of the National Security Council (BRS) and Regional Security Councils (BRK) Activate information telephone lines Activate the backbone network of testing sites and laboratories Consider the need to activate the Czech Army based on risk evaluation 	1–3
II	INCIPIENT COMMUNITY TRANSMISSION	<ul style="list-style-type: none"> Propose the activation of regional crisis taskforces Activate triage, reprofile beds at inpatient healthcare facilities, reserve staff to care for COVID positive patients Activate the national intensive care dispatching and activities of regional intensive care coordinators Increase the capacity of testing sites and laboratories using the backbone network Regularly inform healthcare service providers Ensure remote communication with suspected patients via OOVZ and healthcare services providers Conduct daily analyses and risk evaluation via MOC MoH Issue general measures on the level of the KHS or MoH Request the issuing of a government resolution to deploy the forces and resources of the Czech Army in the Czech Republic 	4–7
III	GROWING OR PERSISTING COMMUNITY TRANSMISSION IN CZ	<ul style="list-style-type: none"> Propose the activation of the Central Crisis Taskforce (ÚKŠ) and its permanent workgroups Regularly monitor the capacity of testing sites and laboratory examinations Monitor the indicators of staff, bed and device capacities of intensive care units and total bed capacity at regular intervals Issue a ÚEK resolution recommending that the government declare a state of emergency, including the proposal of crisis measures in healthcare Issue, regularly evaluate and update extraordinary measures of OOVZ Monitor the indicators of staff, bed and device capacities of intensive care units and total bed capacity at regular intervals Prepare a system to potentially restrict planned healthcare Prepare backup procedures to increase intensive care capacity 	8–10

In all alert levels, it is necessary to regularly inform the public and professional public about the development of the epidemiological situation

**ALERT LEVELS IN THE FIELD OF PUBLIC HEALTH PROTECTION - ANTI-EPIDEMIC MEASURES FOR NATURAL PERSONS AND LEGAL ENTITIES
IN CONNECTION TO THE SPREADING OF INFECTIOUS DISEASES**

ALERT LEVEL	EPIDEMIOLOGICAL CRITERION	ANTI-EPIDEMIC MEASURES FOR NATURAL PERSONS AND LEGAL ENTITIES	EARLY WARNING LEVEL
0	Zero or negligible risk	<ul style="list-style-type: none"> Possible restrictive measures at entrance points in the Czech Republic or abroad Potential restriction of international forwarding Potential restriction of travel to/from abroad Possible repatriation of persons located outside of the Czech Republic 	0
I	Incidence of contagion in the Czech Republic without community transmission	<ul style="list-style-type: none"> Avoid contact with people who have disease symptoms Wash hands regularly with soap and water for 20 seconds Cough and sneeze in a tissue, dispose of it/wash it after use; cough and sneeze into the forearm if a tissue is unavailable Avoid touching the eyes, nose and mouth Ensure all the necessary vaccines including seasonal flu vaccine on time In the case of symptoms of acute respiratory illness, stay at home and avoid contact with family members, and contact the general practitioner or other attending physician to obtain instructions for further steps <p>Recommendations for risk groups:</p> <ul style="list-style-type: none"> Maintain distance from strangers, restrict visits to locations with a higher concentration of people in one place Consider using protection of the nose and mouth (e.g. face mask) <p>Recommendations for providers of healthcare and social services:</p> <ul style="list-style-type: none"> Change the system for visits, introduce organisational and anti-epidemic measures Monitor the supply of personal protective equipment and replenish supplies of essential materials (disinfectant, pharmaceuticals and medical suppliers) Examine persons with symptoms of acute respiratory infection for the presence of SARS-CoV-2 pursuant to the recommended algorithm 	1–3
II	Incipient community transmission in CZ	<p>Measures as per level 0, I plus:</p> <ul style="list-style-type: none"> Ensure sufficient virucidal hand disinfectant Ensure the disinfection of objects and surfaces with virucidal disinfectant Wear nose and mouth protection (face mask) in public transit, at large events, at the facilities of healthcare and social service providers and in closed public premises (e.g. shopping centers) Limit the number of participants at large events Limit the opening hours of public dining facilities Limit the visitor capacity and define distances between individual visitors Strengthen diagnostic and testing capacities Start preventive testing among risk groups and critical national infrastructure Based on the scope of the epidemic, possibly activate backup laboratories and testing sites through the ČŘT <p>Recommendations for the public</p> <ul style="list-style-type: none"> Monitor current information about the development of the epidemiological situation, including adopted measures from trusted sources, such as the Ministry of Health (MoH), National Institute of Public Health, regional public health authorities (KHS), hospitals and health institutions Voluntary downloading of auxiliary mobile applications for tracking <p>Recommendations for providers of healthcare and social services:</p> <ul style="list-style-type: none"> Limit visits Prepare to reserve beds for isolation and therapy, staff and material, technical capacities, organisational reservation of staff <p>Recommendations for employers</p> <ul style="list-style-type: none"> Ensure virucidal disinfectant and regular sanitation of surfaces, in particular in common areas Ensure availability of personal protective equipment Define a system for the assembly and joint activities of employees (meetings, collective dining), define a system of business trips and receiving foreign guests Define work arrangements as possible (home office, meetings via video conferences) 	4–7
III	Growing or persisting community transmission in CZ	<p>Measures as per level 0, I, II plus:</p> <ul style="list-style-type: none"> Avoid close contact with others Limit going outside to the essential minimum, especially to areas with active transmission of the disease Use personal protective equipment Ensure the availability of basic food, water, medicines, or other necessary supplies for about 14 days Limit the assembly or larger groups of people including the organisation of religious, sports and other community events. Limit the operation of preschool and school facilities and other hobby and educational activities and define a limited system of teaching (e.g. remotely) Prepare for potential limited access to services 	8–10