

Government response to COVID-19 in the Czech Republic: February–July 2020

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Abstract

The Czech Republic initially managed the outbreak of the novel coronavirus remarkably, with relatively few cases and low death rate. Its public health response was characterized by swift implementation of public health measures driven by an implicit precautionary principle, but also chaotic communication of measures and a lack of transparency in justifying individual policies. June and July 2020 have seen a rise in COVID-19 cases linked to two regional clusters but later associated with community transmission, which exposed weaknesses in the country's test-trace-isolate system.

Key words: COVID-19, SARS-CoV-2, Czech Republic, Public Health Response

Słowa kluczowe: COVID-19, SARS-CoV-2, Republika Czeska, działania zdrowia publicznego

Introduction

The response of the Czech government stands out by its early adoption of a country-wide lockdown in addition to two measures that went against contemporaneous WHO recommendations: border closures and mandatory use of face masks by the general population. The government has published little formal evidence for these measures, following an implicit precautionary principle. The reaction of the Czech population has been supportive during the early months of the pandemic, although criticism has increased as summer months have seen growing clusters of infections that exposed weaknesses in the country's test-trace-isolate system. Despite growing numbers of cases in July, the rate of deaths and hospitalizations has remained relatively low: by August 2, Czechia has had a total of 384 deaths and 123 current hospitalizations, with a total of 4811 confirmed COVID-19 cases.

1. The authorities' first response to the pandemic and its regulation justification

Early response by the Czech government focused on eliminating potential sources of infection from abroad: the government banned all flights from China in early February

and imposed progressively stricter rules on Czech citizens and residents coming from Northern Italian regions. On February 27, Health Minister Adam Vojtech convened a meeting of the Central Epidemiological Committee [1], which concluded that there was no need to order universal testing of individuals returning from Italy (only those experiencing symptoms were advised to get tested) and that the capacity of the National Reference Laboratory, at 100 tests a day, was sufficient. The first three cases of coronavirus were confirmed on 1 March 2020.

On March 12, the Czech government declared a state of emergency [2], initially set by the law for 30 days (eventually prolonged until 17 May) [3]. A Central Crisis Team was created four days after the declaration of state of emergency and was headed by the deputy minister of health and epidemiologist, Roman Prymula, as opposed to the traditional leadership by the Interior Minister. Later, Prymula, who became as known in Czechia as the epidemiologist Christian Drosten in Germany, was replaced with the Interior Minister and tasked with heading a special COVID-19 team [4], tasked notably with the development of the new contact tracing system.

On April 23 [5], a Prague court ruled that the legal basis on which the government had been basing its measures had been unlawful and gave the government four

days for rectification. (The ruling argued that the limits to fundamental rights lockdown and shop closure measures were too great to be issued single-handedly by the Minister of Health [6] as a decree based on the Public Health Act, without allowing for parliamentary scrutiny. Instead, the court insisted they be re-issued by the government based on the Crisis Act. In fact, they had been initially issued under the Crisis Act mid-March but cancelled the original decrees and replaced with identical measures under the Public Health Act some days later. Crucially, under the Crisis Act fines are capped lower than under the Public Health Act and the government is potentially liable for damages [7]).

The Czech government has been notably lax in presenting scientific evidence to support individual measures. This is especially intriguing with the two measures that were not recommended by the WHO at the time of their implementation: border closures and mandatory facemasks (note that the WHO has since reversed [8] its advice on masks). Explanatory reports (similar to impact assessments) are not required for extraordinary measures or government ordinances passed during the state of emergency, and the government has, as a rule, not provided scientific evidence (e.g. modelling) to support its decisions on official websites or during press conferences, where it chiefly referred to measures taken by other countries (e.g. lockdowns) [9] and common sense (e.g. dedicated shopping hours for seniors) [10]. Unlike in neighbouring Slovakia, where the Institute for Health Policy published [11] their modelling including code online, the main source of epidemiological data were weekly press conferences [12]. First model and scenarios of infection progression by the health authorities were presented to the public in late May [13]; the Defence Minister mentioned that early modelling that helped raise alarm within the government came from “one man” who wished to remain anonymous [14]. No detailed assessment of potential policy options had been published during the first months of the pandemic. From mid-April on, a similar lack of evidence accompanied the announcement of easing of the measures. Lifting the requirement to wear masks was one of the few instances where authorities made passing references [15] to scientific evidence: namely that when wet due to sweating in warmer weather, facemasks become ineffective (though no studies supporting the claim were presented to the public).

The Minister of Health, together with Roman Prymula, public health experts from the Institute of Health Information and Statistics and occasionally other ministers or the Prime Minister, held regular press conferences roughly once a week during the first months of the pandemic.

2. Collection of information on infections, deaths and recovery cases: Institutions responsible

Several institutions are involved in collecting key data on COVID-19, including notably the Institute of Health Information and Statistics of the Czech Republic and

a structure of regional public health offices. Regarding new cases, on May 1, a system of “smart quarantine” [16], a variation on test & trace (which was piloted in early April and supposed to be functional by mid-April), was launched. Contact tracing is supported by an app (“eRouska” = eMask) [17] developed by civil society volunteers under the auspices of the Ministry of Health, and a collaboration with banks and mobile phone operators. Newly diagnosed patients have the right to refuse permission to use their data and do not have to install the app, but have a legal obligation (based on the Public Health Act) to share details of contagion with public health officers. About 500 contact tracers have been trained, including from the army.

3. Institutions making recommendations regarding prevention: forms, sanctions etc.

During the early months of the pandemic, the government and the ministry of health took most of the key decisions. A two-week self-quarantine was mandated for all residents (later also tourists) arriving from Italy on March 7. On March 10, the government closed down primary, secondary and tertiary schools and universities [18]; kindergartens were allowed to remain open, depending on the discretion of the provider (often municipalities, which were free to make their own decisions). All gatherings of more than 100 people were banned (this was later decreased to 30 [19] and eventually to two people [20], with exceptions for households and business relations).

On March 16, in an unprecedented step since 1989, the government limited freedom of movement within Czechia [21] except for: travel to and from work, medical care, necessary travel to family members, shopping for basic necessities, and individual walks in parks and nature. All shops except for drugstores, pharmacies, gas stations, grocery shops, and other essential services, were closed down.

On March 18, the government mandated the use of face coverings (“protective respiratory devices”) outside of one’s home.

Since the end of the state of emergency in May, contact tracing and the competence to take public health measures, including declaring lockdowns and imposing sanctions, has been passed back on regional public health offices, in accordance to the Public Health Act.

4. Societal trust and reaction to the government’s messages on an appropriate behavior during pandemics and isolation

During the early months of the pandemic, support of the population for government measures had been extremely high – in April, 76% of respondents in one poll see them as “adequate” [22] (and 16% as too lenient). After March 18 given the shortage of facemasks and respirators, the government [23] clarified that scarves or other cloth

were acceptable, and within hours the Czech population responded by sewing DIY cloth masks [24].

Apart from one prominent example of the President's advisor breaking quarantine (upon his return from China) by throwing a pig-slaughtering garden party, there have been no mediatized instances of the population refusing to comply with quarantine. There have also not been any in-person protests against the measures until late July, when about 2000 people protested against a ban on large events in Moravia-Silesia; the ban was declared by the regional public health office with immediate effect (de facto cancelling an ongoing music festival of significant economic importance for the region), following weeks of reassurance that the local cluster in a nearby coalmine was under control [25].

5. Testing and equipment

At the beginning of the “smart quarantine” (a vamped-up traditional test and trace system building on existing contact tracing capacities of regional public health authorities), maximum testing capacity was reportedly [26] 12 thousand tests per day. This included volunteering academic laboratories, which have since stopped COVID-19 testing due to lack of incoming samples [27].

Since February, Czechia has carried out a total of 513 979 PCR tests (including repeated tests). The highest daily numbers of tests came in mid-April and May, when about 7–8 thousand tests were done daily. Since June, the number of tests per day stabilized at around 4 thousand tests on weekdays and 1–2 thousand on weekends [28]. This has been clearly insufficient to manage renewed clusters of infection in July. Anecdotal reports suggest regional public health offices, which are responsible for contact tracing, are overwhelmed and cannot fulfill their role effectively.

6. Lockdown and its implementation

During April and May, the Czech government repeatedly brought forward easing of the anti-COVID-19 measures, frequently and chaotically changing its sequencing and specific rules. Eventually, most measures were relaxed sooner than according to the first plans. As with the initial introduction of the measures, the government did not provide detailed reasoning regarding its decisions and would typically not refer to scientific evidence.

On April 17, the government announced a first plan [29] of lockdown relaxation timeline [30], which was presented by the government as gradual and cautious. It respected 14-day distance between stages of opening up to allow for evaluation of the epidemiological situation, starting on April 20 and stretching until June 8. First were to open small shops under 200 sqm; among the last were theatres and galleries (one of the biggest debates was about hairdressers, originally set to open on May 25).

On Easter (10–13 April), DIY, home improvement, and garden centres opened and masses reportedly visited, which was later described as a “spontaneous lockdown relaxation” [31] and an experiment in epidemiology cru-

cial for the government to evaluate before easing measures further.

On April 20, university students in their final year were allowed to enter university with a cap of 5 people per group. Farmers' markets, car dealerships, artisan shops, and outdoor training spaces for professionals opened; weddings were allowed (max 10 people).

Later that day, the Minister of Health announced the lifting of ban on freedom of movement, including on travel abroad, and precipitated the opening of shops. Public assembly of 10 people maximum and masses (of 15 people maximum) were allowed.

According to the new plan [32], all shops under 2,500 sqm (except in shopping malls) opened on April 27, although trying on clothes was banned; universities allowed consultations involving 5 people maximum, libraries and driving schools opened, and fitness centres opened without the use of changing rooms and showers.

Subsequent stages of this plan were brought forward further on April 30. The current exit plan schedule is as follows [33]:

- In late April/May, schools partially reopen:
 - May 11: pupils of 9th grades (15 year olds) and all high school students may go to school, with a cap of 15 students per class (the initial plan [34] foresaw only final year of high school), and universities open for all students (max 15 people) [35],
 - May 25: primary schools open; attendance will not be mandatory and class size will be capped at 15 pupils.
- May 11: more rules will be relaxed:
 - cultural or social events and weddings below 100 people are allowed, with physical distancing,
 - trying on clothes in shops will be allowed,
 - shopping malls and shops above 2,500 sqm open,
 - terraces of cafes and restaurants, as well as castles, will open (not indoor spaces),
 - hairdressers, manicures, rehabilitations, massages, museums and galleries will open.
- From May 25 hotels, restaurants, tattoo parlours and other businesses may open (though the government says “subject to satisfactory epidemiological situation”), and from June 1 final exams in arts high schools will be considered (also TBC) [36].

Finally, rules on the mandatory wear of facemasks have progressively relaxed. From May 25, facemasks were no longer mandatory outdoors; from July 1st, facemasks will only be mandatory in certain indoor public spaces, such as theatres, in localities with high transmission rates (e.g. currently in Prague and in Karvina, Silesia) [37].

Conclusions

The Czech Republic managed the first months of the COVID-19 outbreak remarkably well, due to a combination of luck in terms of timing compared to core European countries (i.e. first cases were identified only in March) and a swift and comprehensive implementation of public health measures, including general lockdown

and mandatory wear of facemasks. It has, however, not been transparent in justifying its decisions, has published little data and scientific evidence for the basis of its decisions, and its communication has repeatedly been chaotic, with frequent reversals of course. During the first months of the pandemic, policy measures seemed driven by an implicit precautionary principle and as such were well accepted by the population and civil society. Nevertheless, as time progressed, the lockdown eased and new

cases emerged, the population increasingly questioned authorities' decisions, most recently exemplified by the 2000-strong demonstration against a miscommunicated large event ban of a regional public health office in July 2020. The June-July rise in infection rates, originally due to two isolated clusters (in a coalmine and a nightclub), exposed weaknesses of the contact tracing and testing system, which is a worrying development going into autumn.

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