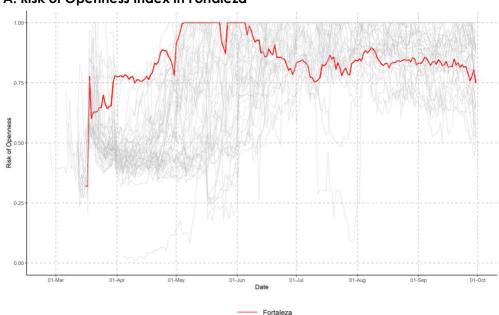


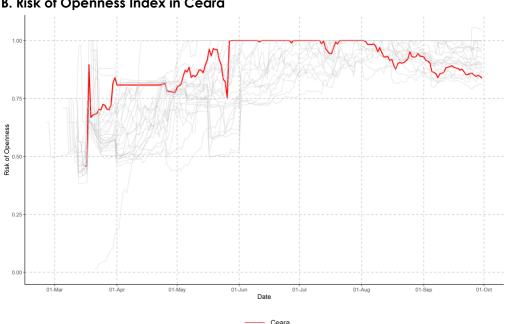
| Region | Fortaleza, Ceará |
|--------|--|
| Period | June to October 2020 |
| Author | Liene Baptista, Rodrigo Furst de Freitas Accetta, Maria Luciano and Beatriz Kira |

Figure CE.1 – Risk of Openness Index (RoOI)

A. Risk of Openness Index in Fortaleza



B. Risk of Openness Index in Ceará







State and city government responses

Figure 1 shows how the Risk of Openness (RoOI) went up in all states and cities over time and, despite a slight fall, RoOI remains very high in Fortaleza and Ceará.

Fortaleza has followed the state plan to resume economic activities, and incorporated the guidance in its municipal decrees. This plan has an initial transitional phase (lasting seven days) followed by four sequential phases (lasting 14 days each). Progression between phases only occurs if there is a reduction in hospitalizations, deaths, and hospital beds occupation compared to the previous stage. There is also the possibility of retreating to an earlier stage if the municipality cannot reduce the number of cases as expected, or there is evidence of the worsening of the epidemiological scenario.

The transition stage started on 1 June in all municipalities in the state of Ceará, representing the easing of restrictive social distancing measures (lockdown) in Fortaleza. This phase allowed some activities to resume, including the toal return of regular appointments by doctors and dentists, 31% of activities for civil construction (limited to 100 workers per construction site), and 30% in the productive sector. The governor also established strict safety protocols, including the mandatory availability of hand sanitiser to all customers and employees, the mandatory use of masks and protective equipment, the minimum social distance of 2 m, and sectorial protocols specific to each workplace.

On 8 June, Fortaleza passed to phase 1 of the reopening plan, which allowed some non-essential commercial activities (for example, florists and bookstores) to resume. The capital was the first municipality in Ceará to move to phase 2 of the plan on 22 June. Workplaces which were already operating, such as civil construction and the chemistry industry, could function at 100% of their capacity. Religious activities were allowed to function with 20% of their occupation. Also, restaurants were able to reopen with 40% of their total capacity. In phase 2, the government authorised some in-person activities in educational institutions (with a maximum occupation rate of 30%). Business in the services sector were encouraged to keep work from home arrangements, and to provide takeaway or delivery whenever possible. Physical activities were allowed if practiced in a private and open space. Commercial establishments for physical exercise (for example, gyms) remained closed.

On 4 July, Fortaleza reached phase 3 of the reopening plan. As established by the state, religious activities could operate at 50% of their capacity, and commercial establishments could reoperate with 100% of their capacity (including, for example, shopping centres and shops). On 20 July, Fortaleza reached phase 4, being the first city in the State to achieve this status. Restaurants were able to resume functioning until 11 pm; religious activities were allowed to open with 100% of their full capacity; cinemas and theatres with 30% of occupation rate; and physical activities in private establishments with up to 30% of its occupation rate. Interstate passenger transportation and car rental with driver (for example, Uber) also resumed. Bars remained closed, but beach huts were able to return with reduced working hours. Activities in clubs, gyms, event houses, movie theatres, and public and private education institutions remained suspended.





Schools' closure remained a controversial topic during the process of loosening distancing measures. From June to August, Fortaleza's government published municipal decrees that extended the prohibition of returning to in-person classes in public and private schools in the capital, following the state's plan, which required state schools to remain closed. Only on 12 July - when Fortaleza entered phase 3 of the plan - some higher education students were allowed to resume in person activities in undergraduate and graduate programs. However, those activities were required to follow security protocols, informational campaigns, the prohibition of events, and the notification of identified cases to health authorities to prevent the dissemination of the virus.

From 10 August, when Fortaleza entered phase 4 of the plan, the municipal government authorized the return of dance classes, music, and other similar activities, as long as they were taught in individual sessions without equipment share or physical contact, and always respecting social distancing. On 1 September, the municipal government allowed the return of private school activities with a focus on early childhood education, with a limit of 30% of maximum occupancy, and with option in-person attendance. From October 1st, in-person classes at all levels of education could resume their activities, with limited capacity depending on the school level: 50% for children's education in public and private schools, 35% for EJA (adult education), and 35% for elementary (1st to 9th grade) and high school.

Public events remained banned throughout the state of Ceará during June, July, August, and part of September to avoid intense crowding. Fortaleza maintained the ban on private events that could promote large groups of people. However, from 14 September, as the municipality entered phase 4, events with crowds of up to 100 people were allowed in spaces such as churches, hotels, buffets, clubs, and event's houses.

Public transport continued to circulate with security measures (related to user awareness, the mandatory use of masks, cleaning spaces, among others) between June and September. The limitation that resulted in 70% of the total bus fleet in regular operation continued in the municipality.

After the end of the restricted lockdown period and the gradual resumption of economic activities, the municipal government continued to emphasise the importance of staying at home, with a less restrictive and more recommendatory nature. Since 1 June, those outside their houses in Fortaleza must wear masks on public transportation, collective or individual, and communal spaces. On 10 June, a state law established the mandatory use of protective masks, homemade or industrial, in public spaces and public transport. Failure to respect the rules will lead to fines. Inside commercial establishments, it is the owners' responsibility to prevent that people not wearing a mask from entering. The owner can be subjected to fines they fail to adequately monitor customers and employees. Children under three years old, people with a disability, people with a medical condition can be exempt from the obligation of wearing mask.

The city of Fortaleza does not have specific testing policies at the municipal level. However, the state of Ceará initiated a research to test the population for antibodies, focusing on the capital city, considered epicentre of the disease in the state. The research is conducted in a partnership





between State Secretary of Health (SESA) and Municipal Secretary of Health (SMS), and the first wave of tests was conducted from 2 to 12 June. The second wave was between 25 June and 5 July, and it finished between 16 and 26 July. The state implemented social contact tracking measures, but not comprehensively.

Informational campaigns have been running since their creation in mid-April. However, due to the electoral law requirement, the city hall took down most of Fortaleza's official social media networks on 1 July, except for the leading website with updates on the pandemic. Finally, authorities considered it necessary to spread information highlighting the importance of maintaining precautionary measures to prevent that the resumption of economic activities lead to new peaks in the number of Covid-19 cases in Fortaleza.





Figure CE.3 – Accumulated number of deaths and deaths per capita for Ceará and the eight other states surveyed

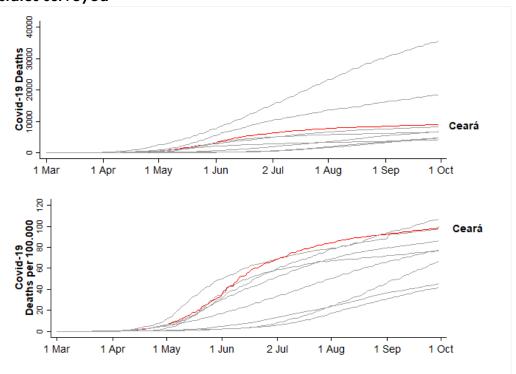
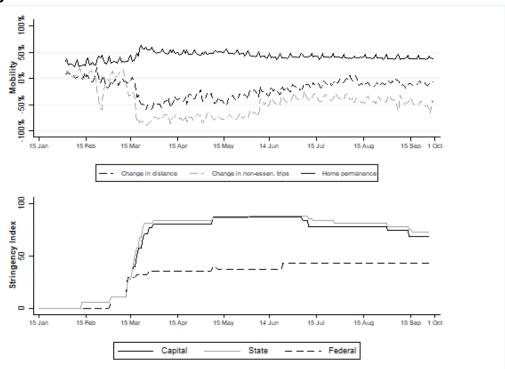


Figure CE.4 – Mobility indicators for Ceará and the OxCGRT stringency index for different levels of government







Fortaleza Survey Results

Fortaleza has 2.7 million inhabitants, with 10% of the population above 60 years of age. Its Human Development Index (HDI) is 0.754 according to the Brazilian Institute of Geography and Statistics (IBGE), making it the 18th most developed state capital out of 27.

Fortaleza registered about 13,500 confirmed cases of Covid-19 between 1 June 30 and September 30th, totalling 49,161 cases since the beginning of the pandemic. Altogether, 3,872 deaths were registered in the period, according data published by the municipal government. At the state level, Ceará confirmed 157,207 cases in the same period, 254.168 cases in 2020, with a total of 9.074 deaths.

The survey results show that 17% of the respondents in Fortaleza did not leave their homes in a two-week period between 22 April and 13 May, while this number went up to 27% in a two-week period between 13 July and 18 September. Those who did venture out did so on average on 4.7 days in the first period, and 7.1 days in the second period. Three quarters of respondents left home to access essential services, such as going to the supermarket, pharmacy or to the bank between 22 April and 13 May, compared to 56% between 13 July and 18 September. Eighteen percent of respondents went out to work during the first period (compared to 66% who did in February), and 32% during the second period (compared to 57% who did in February). Those who went out estimated that 81% of people were wearing masks on the street in both rounds. Only 4% of respondents had ever been tested for the virus in the first period, while this number reached 17% in the second period. Additionally, 2.5% declared having tried to access a test without success in the first round, compared to none in the second period. To put these percentages in context, 14% of respondents in Fortaleza reported having had symptoms in the first round, compared to 28% in the second.

In the first round, almost half of people in Fortaleza said that they used public transport in February (47%), and 13% stated that they had used it in the two weeks prior to the interview, which took place between 6 and 27 May. Reduced public transport services prevented 16% of respondents from going about their intended activities. In the second round, 41% of people in Fortaleza said that they used public transport in February, and 24% stated that they had used it in the two weeks prior to interview, which took place between 27 July and 2 October. Reduced public transport services prevented 15% of respondents from going about their intended activities.

Levels of knowledge about the symptoms of Covid-19 and about the meaning and practices of self-isolation were similar in Fortaleza to average survey responses across the nine urban populations. Residents of Fortaleza scored on average 82 and 81 out of 100 for 'knowledge of symptoms' in the first and second round, respectively, and 46 and 44 out of 100 for 'knowledge about self-isolation' in the first and second round, respectively (see the main paper for an explanation of these scores).

When respondents were asked where they get most of their information about Covid-19, the majority said TV news shows (52% and 68% in the first and second round, respectively). Newspapers





and newspapers websites were the second most common source (24% and 13% in the first and second round, respectively). In the first round, out of the 69% of respondents who had seen campaigns from the government, 80% saw them on the TV, 35% in newspapers. Most of these people (75%) said they had seen campaigns from the state government, while 33% saw campaigns from the federal government, and 30% saw them from the city government. In the second round, out of the 70% of respondents who had seen campaigns from the government, 87% saw them on the TV, 16% in newspapers. Most of these people (80%) said they had seen campaigns from the state government, while 30% saw campaigns from the city government, and 24% saw them from the federal government.

In Fortaleza, only 23% of people interviewed between 6 and 27 May believed that the public health system in their region was well prepared (13%) or very well prepared (10%) to handle Covid-19, and 87% of people were either worried (11%) or very worried (76%) that hospital equipment, beds, or doctors, would not meeting demand.

A large majority (82%) of people in Fortaleza perceive Covid-19 to be much more serious than a common flu. This is true for both survey rounds. Approval of the current public measures to fight the spread of the disease was high between 6 and 27 May, with 56% considering the response to be adequate, while 27% of people of the opinion that the measures are insufficiently stringent, and 17% believing them to be too stringent. Approval of the current public measures achieved higher rates between 27 July and 2 October, with 66% considering the response to be adequate, while 26% of people of the opinion that the measures are insufficiently stringent, and 8% believing them to be too stringent. Most people think government response policies will be lifted gradually: only 23% said they expected them to be lifted in one go in the first round. On average, respondents estimated the time until these policies are completely removed to be 4.9 and 7.6 months in the first and second round, respectively.



Figure CE.5 – Social distancing, knowledge and testing in Fortaleza

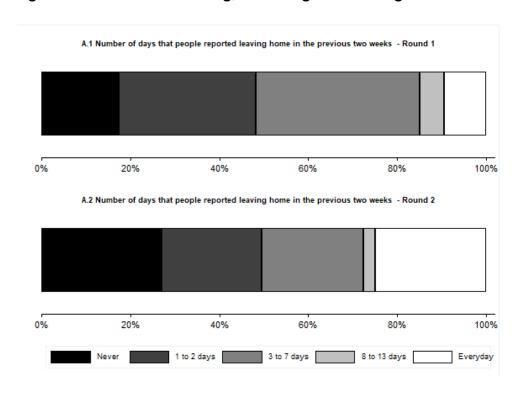
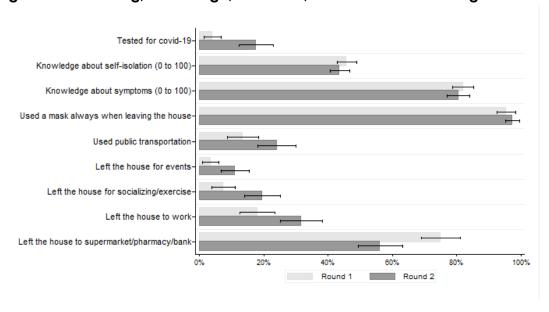


Figure CE.6 – Testing, knowledge, mask use, and reasons for leaving home



Data available at: https://github.com/OxCGRT/Brazil-covid-policy