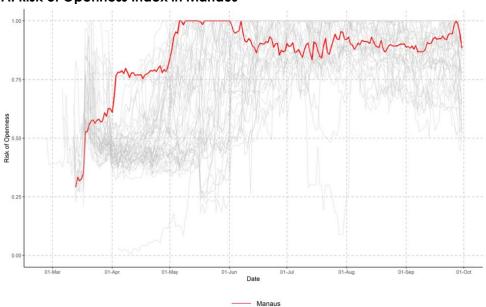




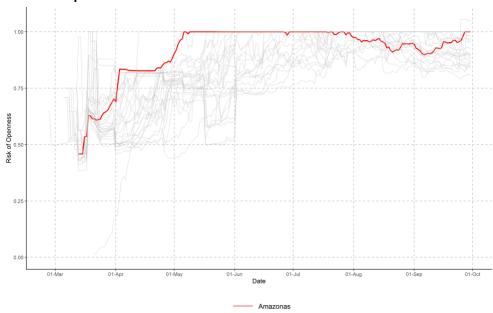
Region	Manaus, Amazonas
Period	June to October 2020
Author	Larissa Cristina Margarido, Rodrigo Furst de Freitas Accetta, Maria Luciano and Beatriz Kira

Figure AM.1 - Risk of Openness Index (RoOI)

A. Risk of Openness Index in Manaus



B. Risk of Openness Index in Amazonas



State and city government responses





Figure 1 shows how the Risk of Openness (RoOI) went up and remained very high in Manaus and Amazonas in the reported period, and was at the highest level in the state at the end of September.

Amazonas remains one of the Brazilian states most affected by the pandemic. Despite showing a significant improvement between June and August, moving towards a stabilization situation, it returned to an expressive increase in the moving average of cases and deaths in September. As of 30 September, the state had recorded 139,326 cases (confirmation rate of 3,362 cases per 100,000 inhabitants, the eighth-highest in the country) and 4,156 deaths (lethality rate of 100.28 deaths per 100,000 inhabitants, the fourth-highest of the country). The capital, Manaus, was responsible for about 36% of cases and 60% of deaths registered in Amazonas.

At the end of May, stating that the actions taken so far had allowed the rise of Covid-19 cases to be contained in the state and Manaus, the government of Amazonas opted for the establishment of a schedule for a gradual return to economic activities in the capital and other municipalities in the metropolitan region, provided that social distancing, personal hygiene, environmental sanitation, communication and monitoring measures are respected. The authorisation for the return of the operation of commercial establishments and non-essential services was divided into three phases, depending on the behaviour of the case curve in each municipality:

- (i) the first, in May, when it was estimated to confirm the peak and the stabilization of cases, provided for the maintenance of authorization only for essential activities;
- (ii) the second, in June, according to the maintenance of the capacity of ICU beds and contamination rate, provided for the gradual reopening of a first group of commercial establishments and services;
- (iii) the third, starting in July, also depending on the maintenance of bed capacity and contamination, provided for the gradual release of the remaining blocks of economic segments.

The second and third phases were organized in reopening cycles, of which we highlight:

- 1. From 1 June bodies and entities that are part of the State Executive Branch; churches and religious temples; stores (clothing, footwear, accessories, sporting, medical and home goods, pet shops, etc.); medical and dental offices; among others;
- 2. From 15 June local consumption in restaurants, cafes and bakeries; other stores and shops; offices; among others;
- 3. From 29 June parks and public spaces; hairdressers, barber shops and the like; gyms; retail businesses; among others;
- 4. From 6 July nurseries, schools and universities in the private school system; bars (in restaurant mode); floating restaurants; live performances by artists in restaurants, bars and orchestras;
- 5. From 16 July provision of intercity passenger waterway transport services;
- 6. From 27 July amusement parks, bowling alleys, playrooms and social events (respecting the maximum limit of 200 people);





- 7. From 1 August trade conventions and exhibition fairs (respecting the maximum limit of 500 people); fishing tourism; sports courts; dance schools; and cinemas, theatres, circuses and cultural spaces;
- 8. From 8 August public visitation of some conservation units;
- 9. From 10 August classroom activities of high school, within the scope of the state public school system;
- 10. From 30 September classroom activities of elementary education, within the scope of the state's public education network in the capital.

The only state containment measures maintained were: the mandatory 14-day quarantine of all passengers, symptomatic or not, who landed at Eduardo Gomes International Airport or the Port of Manaus; monitoring of patients in home isolation using a cell phone application; and the rapid testing campaign for the detection of Covid-19 in health professionals, which was expanded to include professionals from the state's public school system, the Amazonas Environmental Protection Institute and the Manaus prison system.

The capital, in turn, opted for a more gradual easing plan. On 30 July, the mayor made mask wearing mandatory in all public and private spaces in the municipality – whose non-compliance entails the payment of a fine – and, until the end of September, the Manaus city government maintained the home office work regime for civil servants working for the city, as well as the temporary suspension of the granting of licenses and municipal authorizations for holding events.

According to the Oswaldo Cruz Foundation, even with the maintenance of public campaigns – state and municipal – for information and prevention, the easing of containment measures led to a decrease in population adherence to preventive measures, such as distance and social isolation, the use of masks and hand hygiene. In September, the number of cases, hospital admissions and deaths in the state were growing, especially in the capital.

On 29 September, under pressure to establish new restrictive measures, the government of Amazonas ruled out the possibility of lockdown orders, opting for less rigid measures. The state governor suspended, until 26 October, access to the beach areas for recreation, and the operation of spas, floating restaurants and bars; limited the opening hours of restaurants, snack bars and convenience stores; and prohibited the holding of events in clubs and concert halls (except for drive-in events), social events, commercial conventions and exhibition fairs.



Figure AM.2 – Accumulated number of deaths and deaths per capita for Amazonas and the eight other states surveyed

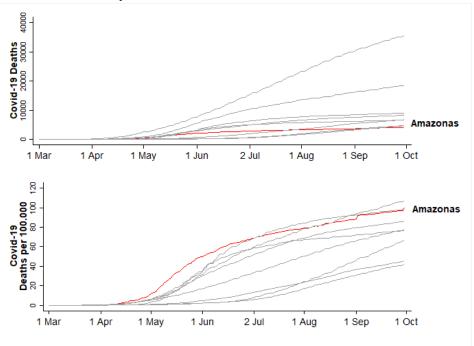
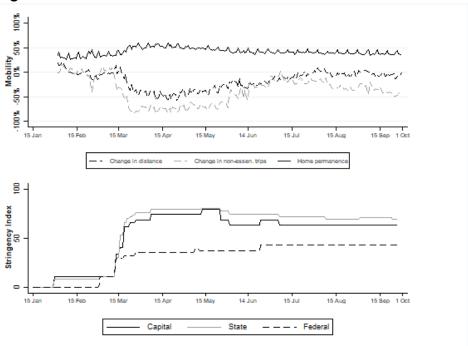


Figure AM.3 – Mobility indicators for Amazonas and the OxCGRT stringency index for different levels of government







Manaus Survey Results

Manaus has 2.2 million inhabitants, and 6% of the population is over 60 years of age. Its HDI is 0.737, making it the 16th most developed state capital (among 27 cities).

In Manaus, 17% of people stated that they had not left home during a fortnight between 22 April and 13 May, compared to 9% during a fortnight between 27 July and 2 October. Those who did on average left on 6 days during a fortnight between 22 April and 13 May, compared to 7.8 days during a fortnight between 27 July and 2 October. In the first round, the majority of all respondents (62%) left to go to the supermarket, pharmacy, bank, or for some other essential errand. Just under a third (30%) went out to work (compared to 66% who left home to go to work in February). In the second round, the majority of all respondents (74%) left to go to the supermarket, pharmacy, bank, or for some other essential errand. Almost half (46%) went out to work (compared to 64% who left home to go to work in February). People who ventured onto the street during this first period estimated that 75% of others were wearing masks, compared to 73% in the second period. Among all respondents, 24% reported at least one Covid-19 symptom during the week prior to the first interview, and 38% prior to the second. In addition, 7% in the first round said they had been tested at some point, compared to 22% in the second, while 3% and 1% in the first and second round, respectively, reported trying to get tested without success.

Reduced public transport services prevented 16% of people from going about what they intended during a fortnight between 22 April and 13 May, compared to 18% during a fortnight between 27 July and 2 October. Twenty-two percent of people said they had used public transport during the previous fortnight between 22 April and 13 May, and 39% between 27 July and 2 October; 55% and 47% in the first and second round, respectively, said they had used it in February.

Respondents in Manaus scored 79 and 75 out of 100 in the first and second round, respectively, on average, for levels of knowledge about the symptoms of Covid-19, while the average score for knowledge about the meaning and practices of self-isolation was 40 and 41 out of 100 in the first and second round, respectively (see the results section of the main paper for an explanation of these scores).

For the majority of population in Manaus, the main source of information about Covid-19 is TV news shows (65% and 67% of respondents named these as their primary information source in the first and second round, respectively), followed by newspapers and newspapers websites (15% and 12% in the first and second round, respectively). Public information campaigns reached 57% and 72% of citizens in the first and second round, respectively. In the first round, among those who report having seen these, 82% had seen them on TV, 28% had seen them on Facebook or Twitter, 22% had seen them in newspapers, 19% on WhatsApp, and 16% had seen them on blogs. Fifty-four percent of people who reported seeing a public information campaign said they had seen one from the state government. In the second round, among those who report having seen these, 89% had seen them on TV, 33% had seen them on Facebook or Twitter, 22% had seen them in newspapers, 26% on WhatsApp, and 12% had seen them on blogs. Sixty-seven percent of people who reported seeing a public information campaign said they had seen one from the state government.





In Manaus, in the first round of the survey, only a fifth of people believe that the public health system is either well prepared (9%) or very well prepared (11%) for the outbreak, meanwhile 91% said they were either worried (19%) or very worried (72%) about there being insufficient medical equipment, hospital beds, or doctors in their region. Approximately 40% of first-round respondents in Manaus reported reductions in income, and a little over a quarter of the population (27%) experienced a cut of half or more in their income. Five percent of the population said that their income had reduced to zero. In the second round, 32% of people reported reductions in income, and a little over a fifth of the population (21%) experienced a cut of half or more in their income. One percent of the population said that their income had reduced to zero.

The inhabitants of Manaus take Covid-19 seriously: 81% and 82% in the first and second round, respectively, said that they believe it is more serious than a common flu. A little under half of respondents (46% and 48% in the first and second round, respectively) assessed government response policies to be adequate. Similar proportions (46% and 43% in the first and second round, respectively) said they think the response has been less stringent than necessary. Only 8% in both rounds considered these policies to be too strict.

In the first round, on average, people in Manaus estimated that lifting all government response measures would take 5.4 months, considerably more than the average expectation of 4.6 months across the nine cities surveyed. In the second round, the estimated period went up to 8.3 months, considerably more than the average expectation of 7.5 months across the nine cities surveyed. Of those respondents in the first round, just over a quarter (28%) expected the restrictions will be removed all at once.





Figure AM.4 – Social distancing, knowledge and testing in Manaus

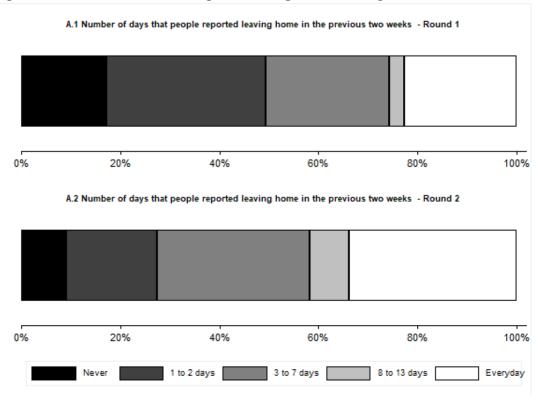
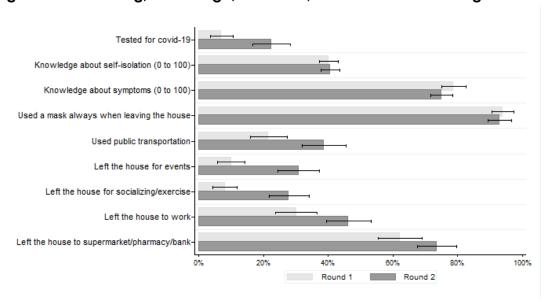


Figure AM.5 – Testing, knowledge, mask use, and reasons for leaving home



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