



From lockdown to reopening:

Strategic considerations for
the resumption of activities in
Latin America and the Caribbean
within the framework of

Covid-19



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I. Introduction

THIS DOCUMENT RAISES A NUMBER OF CONCERNS TO TAKE INTO ACCOUNT WHENEVER ACTIVITIES ARE RESUMED AND THE LOCKDOWN PHASE, MOTIVATED BY THE NEED TO REDUCE THE SPREAD OF COVID-19, IS BEHIND US. FURTHERMORE, IT REVIEWS AN OFFICIAL SERIES OF OPENING MEASURES PROPOSED BY THINK TANKS AND OTHER INSTITUTIONS, AND DRAWS TOGETHER SOME LESSONS LEARNED FROM THE INITIAL EXPERIENCES OF COUNTRIES CURRENTLY UNDERTAKING THAT ROUTE. THE DOCUMENT ,THUS, AIMS TO GUIDE THE DECISION-MAKERS, IN LATIN AMERICA AND THE CARIBBEAN, IN THE DIFFICULT TASK OF DETERMINING WHEN AND HOW TO EASE RESTRICTIONS AND RESUME SOCIOECONOMIC ACTIVITIES.

The pandemic resulting from COVID-19 presents some alarming figures. As of May 5, 2020, there were over three and a half million confirmed cases around the world and nearly 254,000 deaths. Although the first confirmed cases in Latin America and the Caribbean were newly identified at the end of February, the growth rate has been exponential: by May 5, the countries of the region reported 269,188 confirmed cases (a figure that is fourteen times higher than that recorded at the beginning of April) and 14,967 fatalities, which represents a rate of 2.39% for every 100 inhabitants¹.

Before the relentless spread of the virus, most countries in the region imposed lockdown measures, but there is much heterogeneity with regard to time frames and the nature of such measures. Some countries, such as Mexico, Jamaica, Uruguay and Belize, did not introduce mandatory measures, but only recommendations of voluntary compliance. Other countries, such as Chile, Dominican Republic, Brazil and Guatemala, have decided to carry out localized isolations or hand over any decisions concerning the lockdown to local authorities, be they municipal or state. This suggests that various measures exist within these countries and even within the metropolitan areas. On the other hand, some countries began by recommending social distancing; however, as the number of infections increased, mandatory isolations were imposed, either at local or national level (e.g. Ecuador, Panama and Paraguay). Finally, another group of countries, including Perú and Haiti, applied mandatory nationwide isolation as their first and only measure. Approximately half of the countries have declared a total lockdown, whereas the other half have done so only partially². In all cases, quarantining has been extended beyond the original dates.

¹ To see the latest available data, you can consult [the section dedicated to COVID-19 on the Inter-American Development Bank website](#).

² *Partial* refers to isolation recommendations, whether local or national, and mandatory localized isolation (as in the case of Chile, where it is mandatory but by municipality). *Total* is mandatory isolation nationwide. In locations or countries where there are only recommendations for isolation, individuals are not subjected to any sanctions if they move around. By contrast, whenever the orders are mandatory, there are sanctions for anyone who violates the quarantine.

A region in lockdown

CHART 1: Lockdown measures in the region

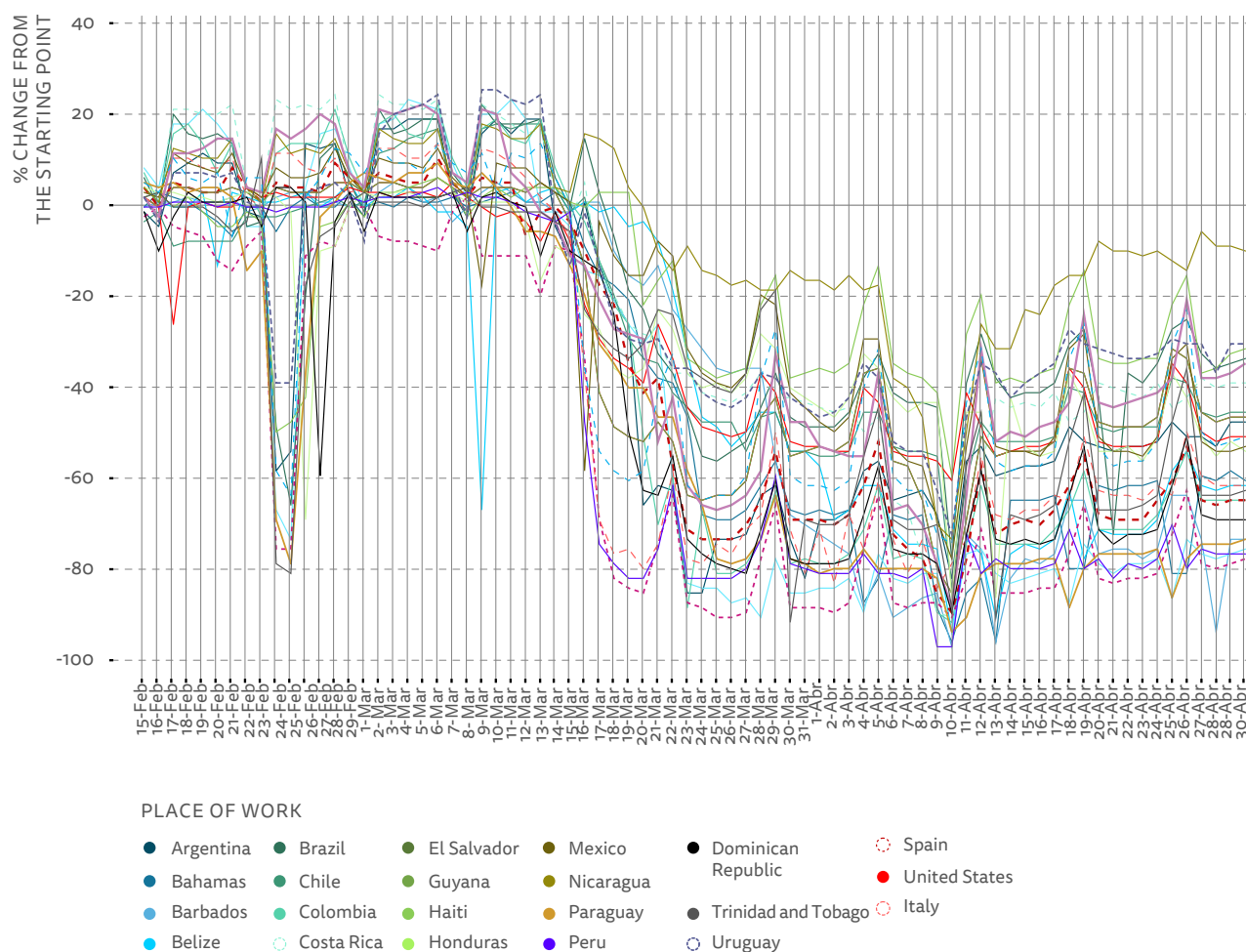
COUNTRY	DATE OF FIRST SOCIAL DISTANCING MEASURES	TYPE OF CURRENT ISOLATION	DATE OF TOTAL QUARANTINE	DATE OF FIRST CONFIRMED CASE OF COVID-19
ARGENTINA	14-Mar	Total	20-Mar	3-Mar
BAHAMAS	19-Mar	Total	24-Mar	16-Mar
BARBADOS	16-Mar	Partial		17-Mar
BELIZE	20-Mar	Partial		23-Mar
BOLIVIA	12-Mar	Total	22-Mar	11-Mar
BRAZIL	19-Mar	Partial		26-Feb
CHILE	15-Mar	Partial		3-Mar
COLOMBIA	12-Mar	Total	24-Mar	6-Mar
COSTA RICA	12-Mar	Partial		6-Mar
ECUADOR	11-Mar	Total	17-Mar	1-Mar
EL SALVADOR	11-Mar	Total	21-Mar	19-Mar
GUATEMALA	16-Mar	Partial		14-Mar
GUYANA	16-Mar	Partial		12-Mar
HAITI	19-Mar	Total	19-Mar	11-Mar
HONDURAS	12-Mar	Total	20-Mar	11-Mar
JAMAICA	13-Mar	Partial		11-Mar
MEXICO	20-Mar	Partial		28-Feb
NICARAGUA		None		19-Mar
PANAMA	16-Mar	Total	25-Mar	10-Mar
PARAGUAY	9-Mar	Total	20-Mar	8-Mar
PERU	15-Mar	Total	15-Mar	6-Mar
DOMINICAN REPUBLIC	16-Mar	Partial		1-Mar
SURINAME	14-Mar	Partial		14-Mar
TRINIDAD AND TOBAGO	13-Mar	Total	29-Mar	12-Mar
URUGUAY	13-Mar	Partial		14-Mar
VENEZUELA	12-Mar	Total	17-Mar	14-Mar

Source: own preparation based on newspapers and other online sources.

The lockdown measures have been effective in reducing people's mobility. This data confirm that movements of people to and from their place of work have decreased considerably in the region at the time measures were imposed. Other aspects, such as traveling on public transport or to parks, or the number of persons routinely traveling at least one kilometer a day, have also fallen³. Some countries, such as Bolivia, Ecuador and Peru, who implemented total lockdown measures, are recording reductions of up to 80% in movements of people. In other cases, such as in Haiti, there has been a much smaller reduction, despite having also declared a total lockdown.

Some countries are recording drops in mobility of over 80%

FIGURE 1: Change in mobility to the workplace



Source: Google Community Report, 2020.

There are signs that the lockdown measures have had a positive impact on reducing the incidence of recorded cases of COVID-19 and on the death rate. Many developed countries, including some of those hardest hit by the coronavirus, such as Italy and Spain, have exceeded the peak of the illness. Both the number of new cases (measured with a high error margin) and the number of deaths per day (a more accurate measurement) are definitely on the decline. Reductions in the number of fatalities in these countries are fairly widespread, most recently including France, Germany, United Kingdom and even the United States⁴. This is a clear sign that lockdown is working. After lockdown, the reproduction rate of the virus (R) in China, South Korea and most European countries is below 1. This is also reflected in the growing body of literature on the effects of the restrictions, which shows that these restrictions are slowing the spread of the disease and therefore helping to save lives⁵.

In Latin America and the Caribbean, the cycle of the disease began several weeks later than in Europe and the United States. In the developed countries, the first cases were confirmed in January (20th in the US, 22nd in France and 31st in Italy). In the region, the first confirmed case, in Brazil, corresponds to February 26. Partly due to this reason, and because the social distancing measures were initiated much earlier with respect to the appearance of the first cases, the number of deaths per capita per day in the countries of Latin America and the Caribbean have a lower order of magnitude than the European countries. However, on May 5, in several countries of the region, the number of deaths per capita continues to rise⁶. And, even in countries where the numbers of new cases and fatalities are beginning to decline, the transmission at community level in individual cities and regions continues to cause a considerable number of deaths and high levels of stress.

While mobility and the spread of the disease is declining because of lockdown, its effects on the world's economies are now being felt intensely. In the United States, more than 30 million people have lost their jobs in just six weeks, a figure not been seen since the Great Depression. According to the world economic outlook from the International Monetary Fund (IMF), growth at global level will be seriously affected, going from 2% in 2019 to -3% in 2020 with an average of -6% in the high-income economies and -5% for Latin America and the Caribbean as a whole. Likewise, according to estimates from the Inter-American Development Bank (IDB), COVID-19 can generate losses of up to 17 million formal jobs in the region, depending on the evolution of the pandemic and the mitigation measures adopted⁷. For this reason, as the number of COVID-19 deaths begins to decline, the question of when and how to relax the lockdown and social distancing measures becomes more relevant around the world.

4 To see this development, consult [Daily COVID-19 Deaths in Selected Developed Countries](#).

5 See, for example, Fang *et al.* (2020). "[Human Mobility Restrictions and the Spread of the Novel Coronavirus \(2019-nCoV\) in China for the case of China](#)".

6 To see the evolution of deaths per capita in Latin America, consult [Daily COVID-19 Deaths in Latin America](#).

7 For more information, consult Altamirano *et al.* (2020) "[How will COVID-19 impact employment?: Possible scenarios for Latin America and the Caribbean](#)". IDB



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II. A difficult decision under uncertainty

Exit from the lockdown due to the coronavirus will soon be the most momentous political decision taken by the governments of the countries in the region. These decisions not only involve the time of easing the restrictions, but also the form that this easing will take. There is a lot at stake. On the one hand, it is about saving lives; exiting from lockdown may have a high cost in terms of infections and deaths, especially if the tools used by countries to confront the illness are not expanded significantly. On the other hand, remaining in lockdown implies very significant economic costs which will hit the most economically vulnerable populations most severely. Hence, the decisions for exiting the lockdown represent a harsh balance between protecting life and looking after livelihoods.

These decisions that are so crucial must also be taken within a context of great uncertainty. With regard to the disease, it is known to be very contagious and that it is much more serious for the elderly. But the exact number of infected persons and rate of mortality is unknown. Whether or not infected persons acquire immunity to the illness, is not clear, nor has it been confirmed if this is permanent or temporary. There is no accurate picture of the level of herd immunity that has already been developed in the various countries. The lack of reliable diagnostic and serological testing implies that, where epidemiological issues are concerned, Governments will be flying almost without instruments.

When it comes to reopening, it is not known to what extent this will lead to a rapid recovery of employment or gross domestic product (GDP). Nor can the behavior of the population be predicted on reopening. The decision to open restaurants or cinemas is one thing, another is whether or not people will use them. As the herd immunity level is unknown, we cannot be clear on how much the infection rate will increase when restrictions are relaxed. These are all crucial issues that will only be discovered as the reopening process progresses. The key will be to set up information systems that will enable countries to find out, as quickly as possible, not just what is happening in different parts of the country, but also in other countries in the region and the world, and to ensure that these lessons are quickly incorporated into the decision-making processes on public policies regarding which parts of the economy should be opened, when they should be opened and when a step backwards is needed.

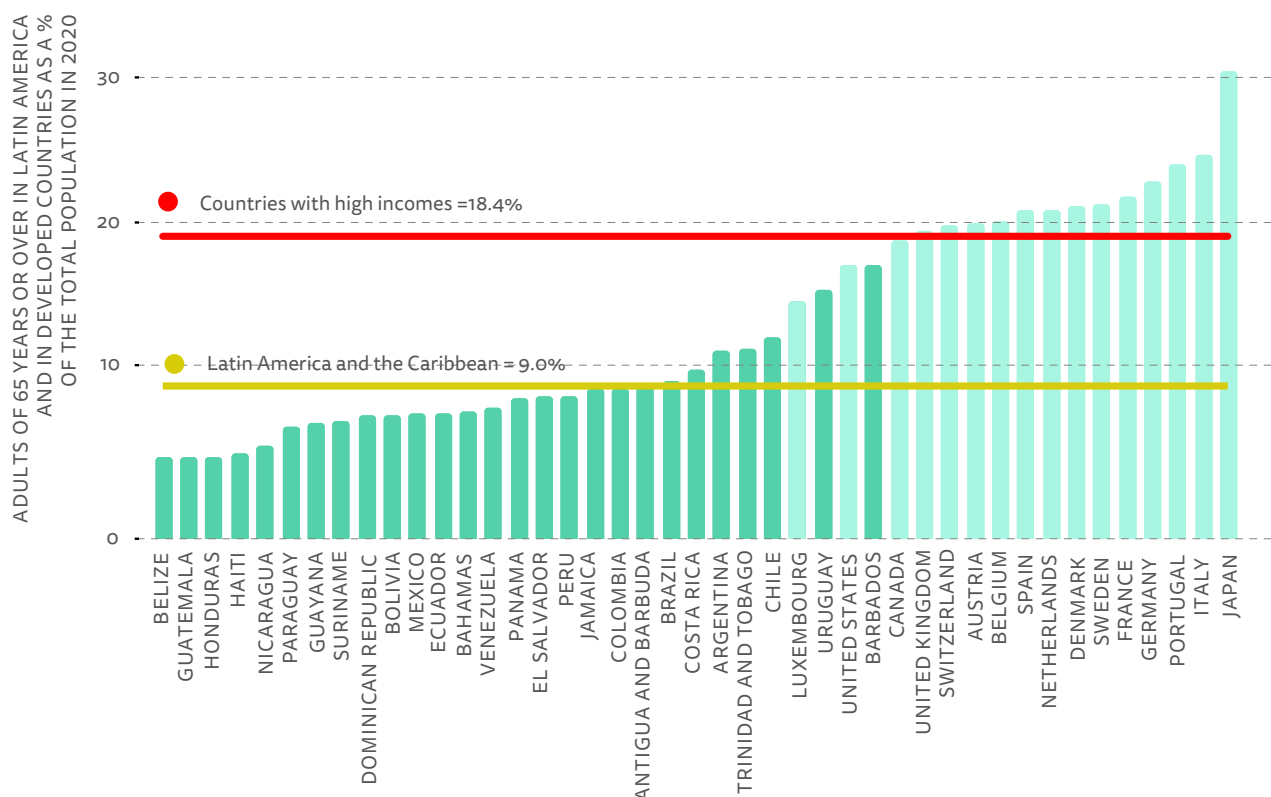
Many developed countries that are further ahead in the disease cycle are facing similar dilemmas. But the balance between protecting lives - continuing with social distancing measures - and reopening the economy - easing these measures - is not exactly the same thing for the developed countries as it is for those in the region. Some of these differences are related to the costs of suspending the lockdown due to the risk of loss of life; others, with the cost of keeping the economy shut down.

Below, we discuss the main aspects that differentiate Latin America and the Caribbean from the developed countries.

Latin America and the Caribbean have younger populations than those of the developed countries, although with large differences among the countries of the region. On average, the percentage of elderly people in the region is half (9%) that of the industrialized countries (18.4%). However, the difference between the country with the highest percentage of elderly people in the region (Barbados) and the one with a lowest percentage (Belize) is even greater (ten percentage points). For this reason, this consideration varies enormously between regions and countries.

The percentage of elderly people in Latin America and the Caribbean is half that of the developed countries.

FIGURE 2: Adults aged 65 or over in Latin America and the Caribbean, and in the developed countries



Source: United Nations.

The demographic structure of Latin America and the Caribbean reduces the cost of ending the lockdown due to the potential for loss of life compared with the more developed countries, because although there is uncertainty surrounding the mortality rates from COVID-19, there is no doubt the elderly are more affected. Reported data by Ferguson et al. (2020), based in China, confirm that these people have a higher probability of presenting severe symptoms requiring treatment in intensive care units and, ultimately, of dying (see Chart 2). According to these data, the mortality rate of those infected aged between 70 and 79 is thirty times greater than for those aged between 40 and 49, which, in turn, is nearly thirty times greater than for children and young people aged between 10 and 19. The differences in the requirements for intensive care beds are also very significant.

The mortality rate among those infected aged between 70 and 79 (5.1%) is thirty times greater than for those infected aged between 40 and 49.

CHART 2: Severity of the cases by age range

Age range	Percentage of symptomatic cases requiring hospitalization	Percentage of hospitalizations requiring intensive care	Mortality rate
0 to 9	0.1%	5.0%	0.002%
10 to 19	0.3%	5.0%	0.006%
20 to 29	1.2%	5.0%	0.03%
30 to 39	3.2%	5.0%	0.08%
40 to 49	4.9%	6.3%	0.15%
50 to 59	10.2%	12.2%	0.60%
60 to 69	16.6%	27.4%	2.2%
70 to 79	24.3%	43.2%	5.1%
80+	27.3%	70.9%	9.3%

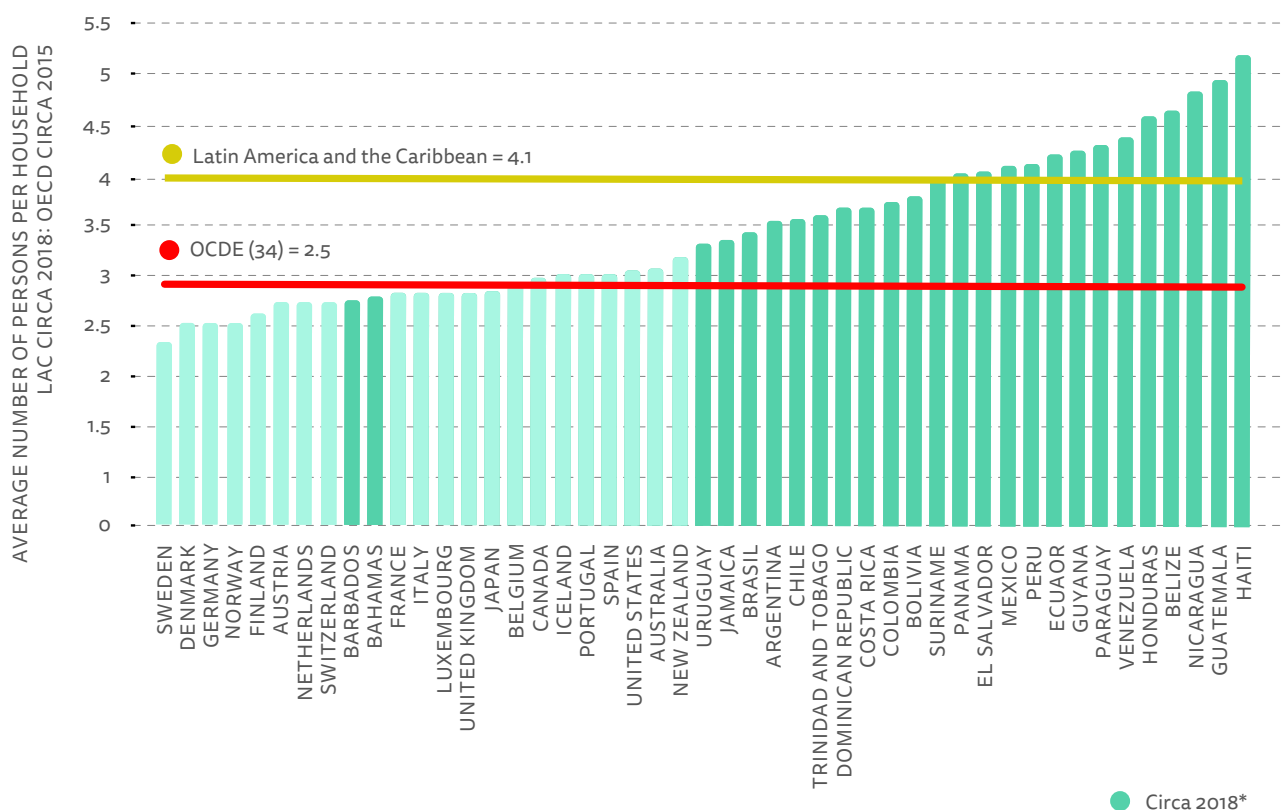
Source: Ferguson et al. (2020)

In countries with aging populations, such as Italy, where 23% of the population is over 65, exiting lockdown may lead to many more hospitalizations and deaths. Even though the mortality rate tables for Latin America and the Caribbean could differ to what is presented here, it is clear that, in countries with younger populations, the numbers of deaths and hospitalizations may be much lower, therefore the costs associated with exiting lockdown would also be lower. Conversely, there are some conditions that increase the costs of maintaining lockdown in Latin America and the Caribbean compared with the higher-income countries.

Poorer living conditions. The cost of remaining at home is much higher for persons living in housing with poor living conditions, forced to live together in a state of overcrowding, in a very small space with inadequate segregation. This is especially relevant in the slums of the region. Generally, the number of people living in a household is, on average, 25% more in Latin America and the Caribbean than the average for industrialized countries, with major differences within the region, ranging from 2.2 in Barbados to 4.7 in Haiti. In addition, the lockdown in the region has exacerbated violence against women, boys and girls. Since the adoption of this measure, the number of police report filings has risen alarmingly: 100% in Chile, 90% in Colombia, 60% in Mexico and 40% in Argentina, while feminicides have tripled in Colombia.

The number of persons per household is 25% higher in Latin America and the Caribbean than in the industrialized countries

FIGURE 3: Average number of persons per household



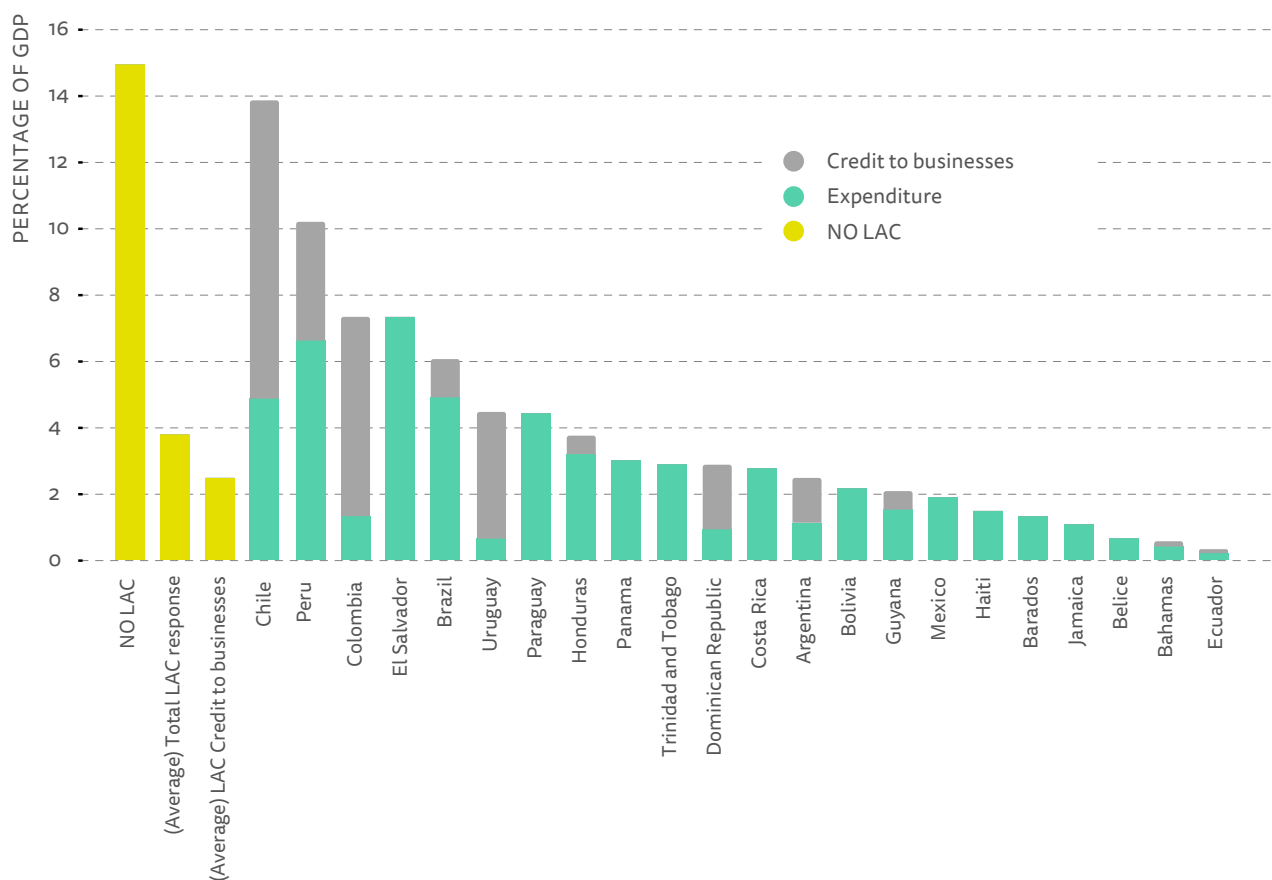
Source: Inter-American Development Bank: [Sociometro-IDB](#) (2018).

Impact of lower levels of unemployment protection systems and diminished capacity to respond with regard to policies for safeguarding jobs. Most of the high-income countries have unemployment insurance systems to protect workers who lose their jobs. However, in Latin America and the Caribbean, these mechanisms only exist in eight countries and, even in those, only a few are covered (Alaimo et al., 2015). The high rates of informality - higher than 50% - disregard these mechanisms for the majority of the workers and expose them to very precarious working situations, with incomes and jobs that are extremely vulnerable to shocks in the economic conditions, especially as strong a shock as the one caused by the coronavirus. Even for formal workers, the high job turnaround rate and the fact that most workers have contributed to insurance for only a few months or years, means that, on dismissal, they often don't receive it (Alaimo et al., 2015).

Additionally, in the current juncture, the fiscal constraints facing many countries have made it difficult for governments to commit themselves, in a decisive way, to safeguarding employment through subsidies or loans for companies, or by compensating those who lose their incomes or do not have incomes because they are unable to go to work. Most of the industrialized countries have announced measures during the lockdown whereby the State will finance part or all of the wages, with the aim of safeguarding employment and maintaining worker contracts with their companies. The investment this means in terms of GDP is extraordinary. The countries of the Organization for Economic Cooperation and Development (OECD) are planning to allocate more than 16% of GDP on average, to subsidies and guarantees. In the region, countries do not have enough resources to implement such policies with the same intensity. The investment announced for this purpose was in the order of 4% of GDP, which is a considerable effort, but far lower than that of the developed countries. In addition, the possibility of teleworking is much lower in the region than in the high-income countries and, because of this, less people have been able to keep their jobs and incomes. All the above is consistent with higher costs for the region to maintain the lockdown, not only with regard to lost income, but also the impact this has in terms of anxiety, depression and food security.

The ability of governments to protect jobs and incomes is four times greater, as a percentage of GDP, in higher-income countries.

FIGURE 4: Size of the policy responses announced as a percentage of GDP



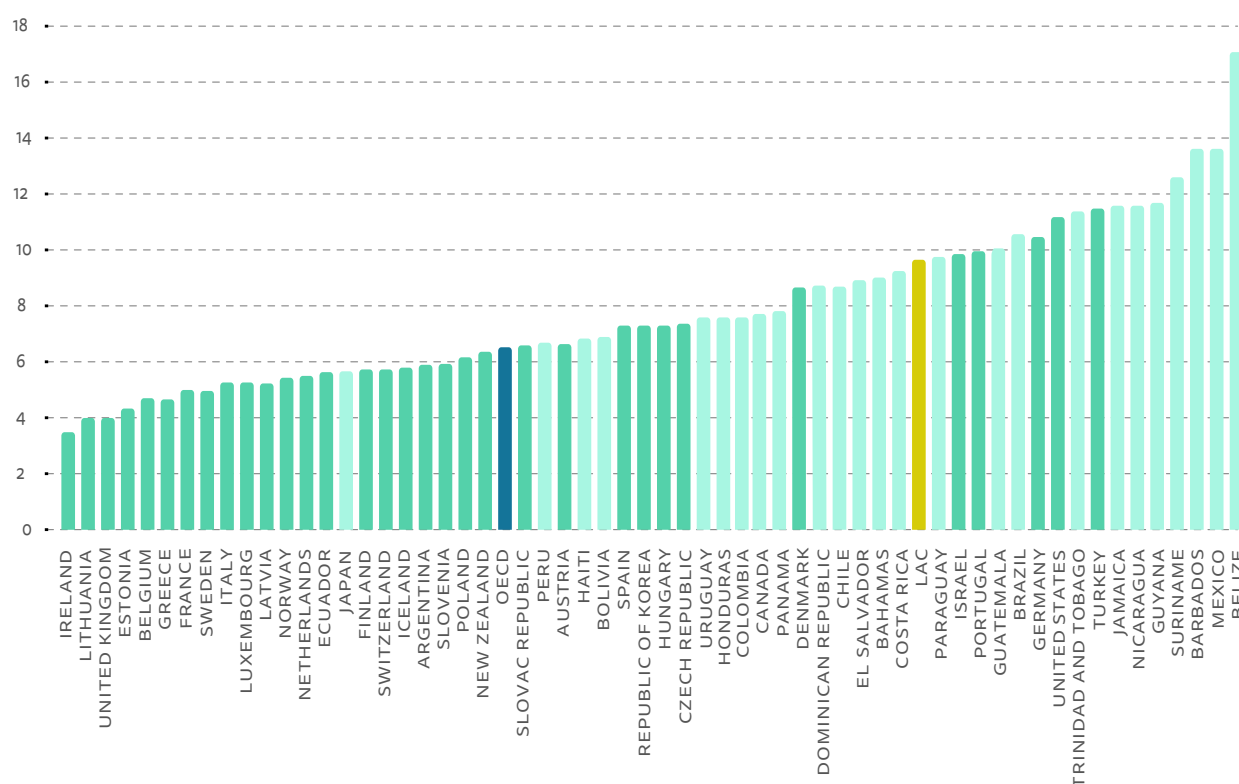
Source: Pineda, Pessino and Resteletti (2020).

Even though the arguments set out until now point to the fact that, in the region, the benefits of maintaining the lockdown (in terms of saving lives) are fewer and its costs (in terms of the economic impact) are greater, there are some considerations in direct conflict.

A greater prevalence of chronic illnesses. The risk of mortality due to COVID-19 increases considerably for populations with chronic illnesses such as diabetes, hypertension and other respiratory illnesses. For the same age groups, the population in Latin America and the Caribbean has a higher average incidence of these illnesses than in industrialized countries. In the latter, for example, the prevalence rate of diabetes is slightly higher than 6% while in Latin America and the Caribbean, it is around 10%, although this average varies from 5.5% in Ecuador to 17% in Belize.

The incidence of diabetes is 60% higher in Latin America and the Caribbean.

FIGURE 5: Prevalence of diabetes in 2019 (% of population aged between 20 and 79)



Source: [World Bank](#)

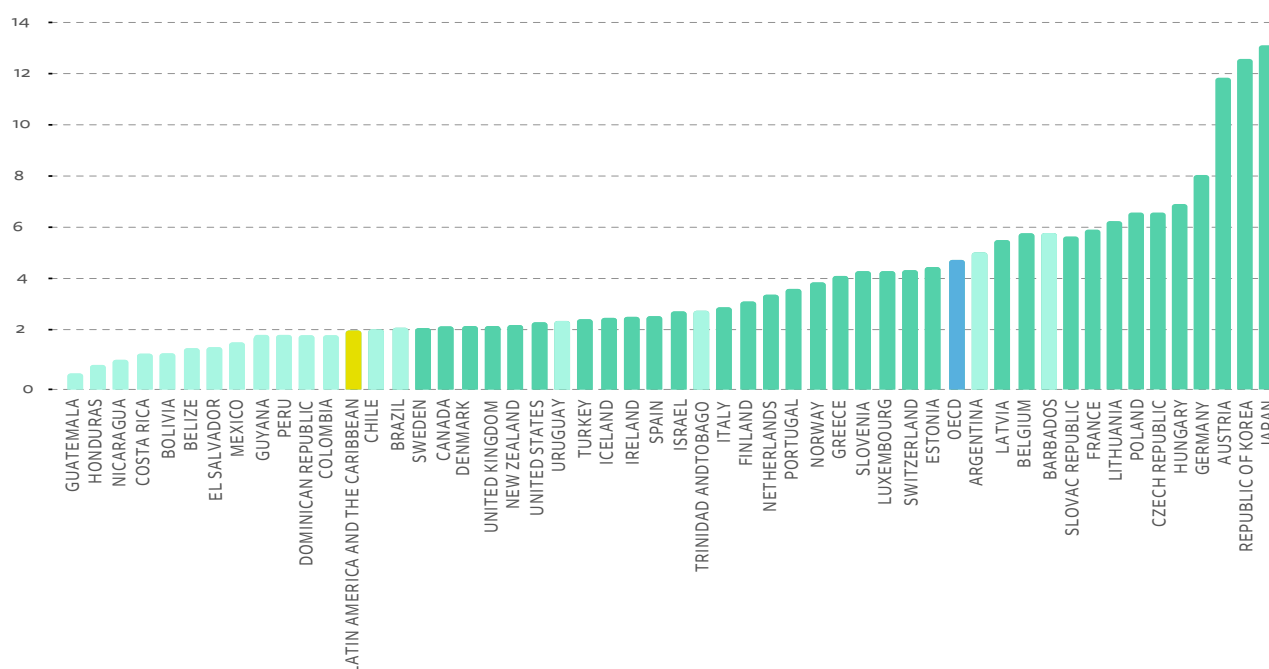
Lower hospital bed capacity. The countries of the region have a much more limited hospital bed capacity (including intensive care beds and ventilators) than the developed countries, which increases the risk of the health service becoming overwhelmed due to serious increases in the numbers of infected individuals similar to those of developed countries. On average, in Latin America and the Caribbean there are only two hospital beds per thousand inhabitants. Although this figure may vary substantially between countries, in all (except for Argentina) it is much lower than the average figure for OECD countries, at nearly five beds per thousand inhabitants. There are also important differences in the number of intensive care beds, although this data is only available in a limited number of countries of the region. Uruguay has the highest number of intensive care beds per 100,000 inhabitants (five beds), well below the number for countries like Italy and Spain (thirteen and ten, respectively). In spite of this, their healthcare systems have quickly become overwhelmed.

When the health service becomes saturated, the mortality rate among those seriously infected increases rapidly due to inadequate human resources, intensive care beds, ventilators and other critical supplies. This also limits the system's capacity for providing adequate treatment for people affected by other ailments and may result in additional deaths from preventable causes. Avoiding this congestion effect on the system is critical for reducing the number of deaths. Moreover, it must be understood that the treatment centers can also be focal points for transmission if they do not have adequate facilities for isolating infected persons or the necessary resources for protecting health and support workers. In fact, the justification of the lockdown measures is not so much about reducing the number of cases (which can prove very difficult) but to distribute them in good time to avoid overwhelming the hospital system in order to properly deal with those seriously infected.

The reduced capacity of the health system to assist the population may force countries of the region to maintain lockdown periods for longer than would be desirable from the point of view of economic costs, to prevent higher rates of mortality. For these reasons, the hospital bed and intensive care unit capacity is a particularly important restriction in the region. On the one hand, it is essential to expand capacity in order to ease this restriction and, on the other, to ensure that the number of cases is always kept below that threshold.

In the industrialized countries there are twice the number of hospital beds per capita compared with Latin America and the Caribbean.

FIGURE 6: Number of hospital beds per thousand inhabitants



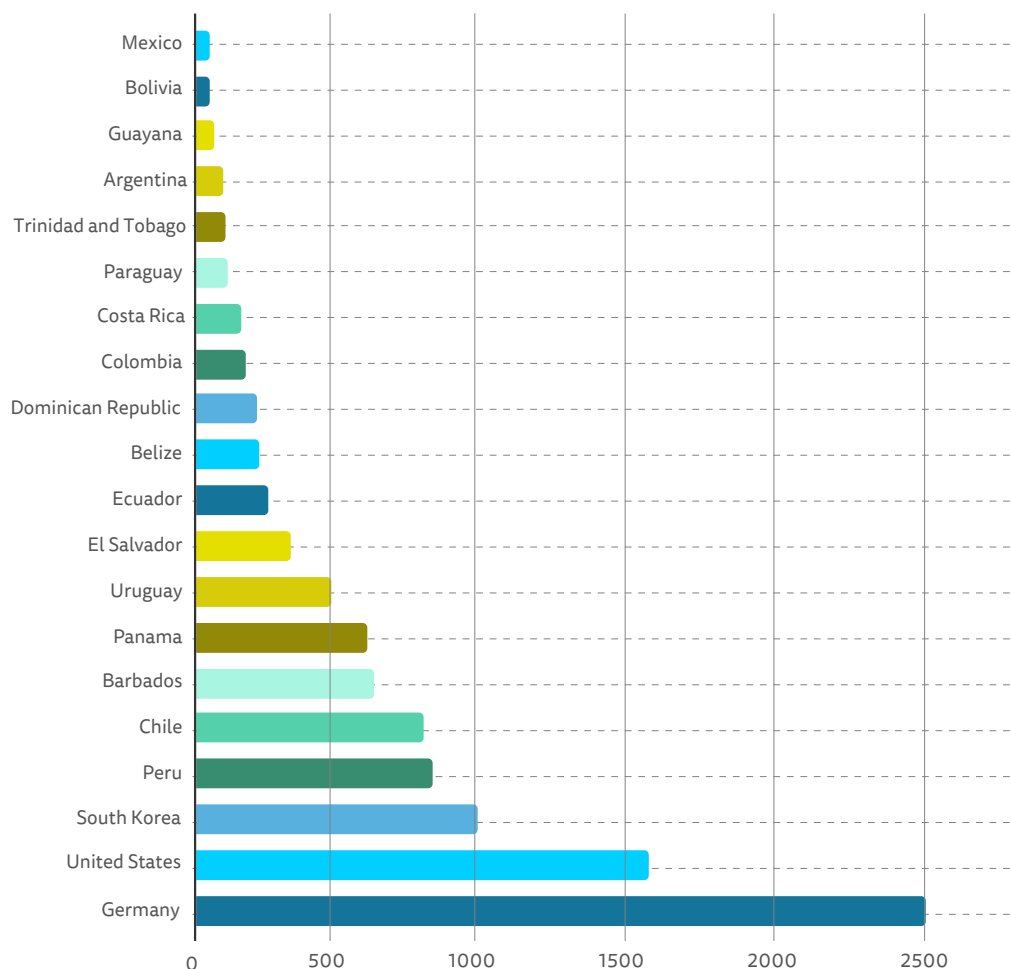
Source: OECD (2019).

Reduced availability of test instruments for managing the pandemic. One element that makes the decision on how and when to go from lockdown to reopening even more difficult is the context of great uncertainty upon which this decision must be made. As indicated previously, there is still not enough information available on the death rate, partly because there is no accurate information on the number of infections. Currently, only a percentage of those infected are registered as such, generally those who go to the hospitals. Many others develop the disease at home or in residential care homes for the elderly and are not diagnosed or added to the lists of cases. Neither do those infected who are asymptomatic appear in the official data, even though they can pass on the disease in the same way as those who are symptomatic. This makes control significantly more difficult. Furthermore, as there is no accurate data concerning the number of infections, it is not possible to calculate the level of herd immunity that has been developed in the different countries. This makes it difficult to make predictions on how much the infections will increase when restrictions are eased, or on the level of immunity acquired from recovering from the illness and for how long. These are all critical issues that will be discovered only as the process advances.

There is an additional factor that complicates the situation even more: diagnostic and serological tests - which can provide valuable information for responding to some of these questions and helping to manage the pandemic - have not been used in sufficient quantity in the high-income countries and even less in the countries of Latin America and the Caribbean.

The diagnostic tests, such as the PCR (Polymerase Chain Reaction), determines whether the patients are infected, gives them proper treatment and isolates them from the rest of the population. They are a fundamental instrument for epidemiological monitoring that the authorities can use to make decisions on reopening. The majority of countries lack sufficient numbers of these tests. Even developed countries, such as the United States, face heavy restrictions for carrying out these tests on all symptomatic patients, not only because of a lack of sophisticated equipment for analyzing the samples, but also because of a lack of supplies such as reagents or swabs, without which these tests cannot be administered in the required number. These limitations are even greater in the region, which has less equipment, does not produce many of the supplies required and has been relegated in the competition for importing them by high-income countries with more purchasing power. On April 30, Germany, one of the countries with a more ambitious testing strategy, carried out 3,000 tests for every 100,000 inhabitants. The United States has carried out around 1,900. South Korea, which initially used diagnostic testing on a massive scale, is now lagging behind, simply because it has managed to drastically reduce the number of infections. This success can largely be explained by the early use of testing. In Latin America and the Caribbean, the country carrying out most testing is Chile, with around 960 per 100,000 inhabitants, and many of the countries in the region are at much lower levels, as can be seen in the following figure. In fact, in a typical country of the region, the number of tests is around 364 for every 100,000 inhabitants.

FIGURE 7: PCR tests accumulated with results established (positive and negative) for every 100,000 inhabitants (as of April 30 2020)



Source: own preparation based on data from the Ministry of Health of each country.

Another problem associated with these tests is that they require full logistics management. In the region, the equipment needed for carrying them out has to be centralized in just a few laboratories, which means the results are not received for several days. This circumstance reduces their value as a diagnostic tool for treatment and affects the timely isolation of those infected. In this regard, some alternative tests emerged that are applied directly in clinics and other points-of-care, and which can be administered more quickly and easily; however, they are still not available in sufficient quantities, not even in high-income countries.

Immunity testing. These tests, also known as serological tests, serve a different purpose. They determine whether the person has been exposed to the virus in the past through the detection of antibodies developed by the immune system to combat the virus⁸.

These tests can be key for carrying out epidemiological monitoring of the illness and establishing how many persons have been exposed and are immune (assuming that exposure to the disease generates immunity, an area in which there is no consensus in the scientific community). This information is very relevant for decision-making on easing the restrictive measures and, if the tests become more reliable than what they currently are, it would allow us to identify the individuals who are no longer able to spread the virus (or be infected), and who, therefore, can return to their normal lives.

The serological tests are more simple, less costly and faster than the PCR tests but they take longer to develop, therefore they are only just starting to be used in developed countries and in the region. Some serological tests available on the market have had serious quality problems, a circumstance that will hopefully be reduced in the near future.

Opening under uncertainty

As indicated previously in this document, the lockdowns are having a drastic impact on economies. One survey from IDB, carried out in 17 countries in the region, shows that many Latin Americans have lost their jobs and other means of subsistence because of the pandemic (Bottan, Hoffmann and Vera-Cossio, unpublished). And the situation is much more serious in more vulnerable households. Among the survey respondents who had average incomes below the minimum wage before the crisis (which corresponds, approximately, to the lower 10%), 59% reported one member of the household lost their job due to the pandemic and 43% of those who had businesses have reported closing them. Those who were earning incomes of more than six minimum salaries (which approximately corresponds to the upper 10%) reported employment losses in 15% of households and business closures in 21% of them.

FIGURE 8: Percentage of households in which someone has lost their job or closed their business during the crisis.

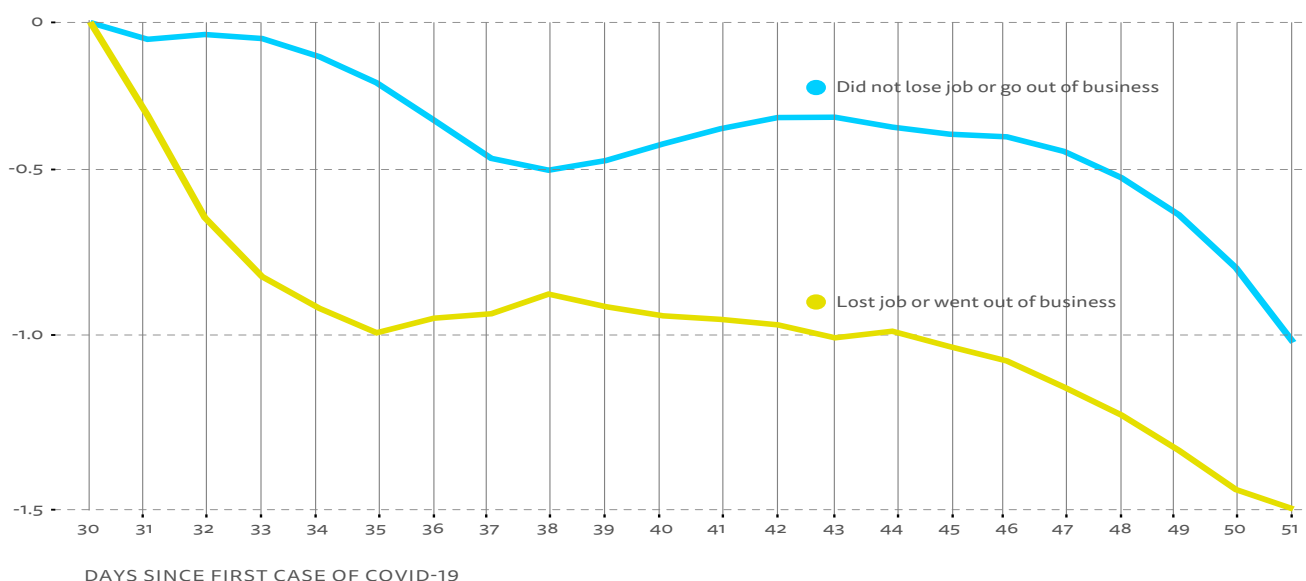


Source: Bottan, Hoffman and Vera-Cossio (unpublished).

⁸ For more information, consult Stein, E. (2020). [“Coronavirus: the logic of the serological tests”](#). IDB

In contrast with other high-income countries, the fiscal resources available are totally inadequate for dealing with the crisis. In this context, the pressures for reopening the economy are strong and comprehensible. Even if the majority of people respect government decisions in terms of the lockdowns, there are those who also warn against what is known as *fatigue behavior*. People are losing their patience. We can also see in Figure 9 that, as time goes by, the percentage of people who think that COVID-19 must be a government priority is falling. Impatience, naturally, is greater in those who have lost their livelihood.

FIGURE 9: Support COVID-19 must be the Government's priority



Source: Bottan, Hoffman and Vera-Cossio (2020).

In this context, it is not clear that the authorities want or expect to have all the tools they wish to have - sufficient numbers of diagnostic tests, serological tests, human and technical resources for tracing contacts, more hospital beds - before making the decision to reopen. Somehow or other, the question does not seem to be whether or not reopening will happen, but exactly when and how. How to do so intelligently, maximizing the impact on livelihoods while at the same time reducing loss of life?

It is clear that the solution does not have to be the same across the whole country. It can be started in less dense rural areas, where transmission of the disease is naturally lower, and in regions where the number of cases or deaths due to COVID-19 is limited and the current hospital bed capacity is sufficient to contain possible new outbreaks. It is also possible to start reopening sectors of the economy differentially, depending on their critical nature and the risk of infection they generate. The key is to add epidemic intelligence systems to enable lessons to be learned from the reopening experience as it progresses.

What happens when the schools and universities reopen? What happens when workers in certain sectors return to their jobs? What happens when restaurants, bars, theaters, cinemas and sporting events reopen? What is the impact of each of these decisions on the disease transmission? Naturally, it must be ensured that the lessons learned in various regions and sectors are used to adjust to the policies as the results are revealed, in line with what Sabel and Zeitlin (2012) call the *experimentalist governance* (see Box 1). This process of permanent adjustment must be understood by the population as a whole, so that they do not have false expectations. This is why good communication is crucial during the reopening process.

To feed into this decision-making process in times of reopening, it will be important to generate as much information as possible, increase testing capacity and use alternative mechanisms to generate information at an early stage - for example, on symptoms - both through the use of technology and the active involvement of community organizations. Centralized planning and coordination mechanisms must be produced - in the center of government - to make decisions rapidly with the information generated. Meanwhile, as much as possible must be learned from the experiences of other countries who are further ahead in the COVID-19 calendar than the countries of Latin America and the Caribbean. Anything that can be learned from other countries and the best way to prepare for reopening will be, precisely, the issues covered in the following sections.



III. Lessons from other countries




ONE WAY OF ANTICIPATING WHAT CAN HAPPEN IN LATIN AMERICA AND THE CARIBBEAN IS TO LOOK TOWARDS COUNTRIES THAT HAVE COME A LONG WAY IN THIS PANDEMIC. ON THE ONE HAND, THE COUNTRIES OF EAST ASIA, THE FIRST ONES TO CONFRONT THE PANDEMIC, HAVE IN SOME CASES MANAGED TO CONTAIN ITS ADVANCE. ON THE OTHER HAND, EUROPE AND THE UNITED STATES, WHERE MORE OR LESS RESTRICTIVE SOCIAL ISOLATION MEASURES WERE IMPLEMENTED, ARE EITHER PREPARING FOR THE EXIT, OR ARE TAKING THE FIRST STEPS TOWARDS EASING THE RESTRICTIONS. AS EXPLAINED IN THE PREVIOUS SECTION, THE DIFFERENCES BETWEEN THE REALITY OF THE DEVELOPED COUNTRIES AND THAT OF LATIN AMERICA AND THE CARIBBEAN MUST BE TAKEN INTO ACCOUNT. THIS IS A KEY ASPECT WHEN ANALYZING AND DETERMINING THE OPPORTUNITIES AND CONDITIONS FOR AN INTELLIGENT EXIT FROM THE LOCKDOWN MEASURES IMPOSED IN THE REGION.

Lessons from six East Asia countries.

One way of finding out what the future will be like after the lockdown period is to analyze the situation in the Asian countries that have gone through more stages in the containment of the pandemic. Cultural, technological and political differences aside, the experiences of China, South Korea, Japan, Singapore and Taiwan, as well as the Hong Kong territory, bring important lessons for the future of the region.

The importance of the massive use of testing and traceability of contacts. Hong Kong, Taiwan, Singapore and South Korea were able to keep the number of cases under control without implementing mandatory lockdown measures and without closing businesses or schools. They achieved this through the use of a massive testing strategy of all symptomatic persons and all their contacts. To do this, human teams are set up to interview all those persons who tested positive with the aim of identifying every person with whom they came in contact with during the fourteen previous days. Once these contacts are identified, they are isolated and closely monitored to prevent non-compliance with the quarantine. In South Korea, the teams responsible for this control are assisted by technology, which makes it easier to monitor the locations of people. This enables you to identify all persons who tested positive and those who were close to them (at a distance of less than two meters for more than half an hour) and isolate them. This technology was key in assisting the human teams once the number of infections started to rise sharply. In Singapore, however, where this type of technology was not massively used, the human teams were overwhelmed when the number of cases began to rise.

We cannot lower our guard. Until nearly a month ago, Hong Kong, South Korea, Singapore and Taiwan were mentioned as examples in the management and containment of the pandemic, without the need to impose restrictions. However, since then, both Hong Kong and Singapore have suffered a second wave of cases. In the case of Singapore, the number of cases recorded increased from 266 on March 17 2020 to 5,900 a month later. The spread originated from the return of migrant workers, who, in many cases, live in segregated dormitories with high levels of overcrowding. These conditions facilitated a very rapid spread of the virus. To contain this second wave, Singapore was obligated to issue very restrictive social isolation conditions. In the case of Hong Kong, the increase in cases was due to the return of residents who brought the virus from Europe and the United States. Another country that also recorded a second wave of cases was Japan. Since the first quarantine of three weeks, and encouraged by the rapid fall in new cases recorded, the governor of the island of Hokkaido, in the north of the country, permitted the reopening of businesses. This measure coincided with a holiday period, during which many tourists traveled from other parts of the country. In just three weeks, the number of cases had risen rapidly, after which the governor of the island was forced to declare a state of emergency for the second time.

Lessons from six East Asia countries.	
	Massive use of testing and traceability of contacts.
We cannot lower our guard.	
	Travel restrictions and quarantine for travelers
Good individual practices are key	
	Seminormality

The use of travel restrictions and quarantine for travelers. Based on the above experiences, the significance of travelers as transmitters of the virus is evident, whether from outside or within a country. In places like China and South Korea, the authorities have imposed mandatory diagnostic testing and quarantine on all travelers, which is especially relevant within a context of fewer social isolation restrictions.

Good individual practices are key. The majority of countries of East Asia quickly adopted individual behavioral guidelines in response to the virus, learned during the SARS outbreak, such as the use of masks, hand washing or social distancing between people⁹

⁹ The SARS coronavirus (SARS-COV) was identified in 2003 (SARS-COV). It appeared for the first time in the province of Guangdong, in China, from where it spread to 23 countries, with more than 8,000 recorded cases.

Seminormality after quarantine. China implemented a very strict quarantine in certain sectors of the population. After the progressive lifting of these measures at the end of March, economic activity is still far from normal. People continue to maintain social distancing. And, even though some businesses have reopened (while many others remain closed), the majority are in low demand.

The reopening of Europe and the United States: first steps

We can also learn lessons relevant to Latin America and the Caribbean from the analysis of a set of recommendations from international organizations on how to organize the reopening (*think tanks*) and from the governments of Europe and the United States¹⁰.

Recently, several European countries such as Germany, Denmark and the Czech Republic began to gradually lift the lockdown and social distancing measures in various stages in business that meet the eligibility criteria for opening (specific square footage, seating required, among other things). Regarding access to education, variations can also be observed; in some cases, preference will be given to primary and secondary school students about to graduate (Germany); in others, preference is given to children in day nurseries and primary schools (Denmark). In the majority of cases, the recommendations for the use of masks are maintained, especially in public spaces and transport, as well as the social distancing measures.

To what extent are the proposals and practices of the developed countries agreed? While the proposals and action plans for relaxing the quarantine measures have been developed from several different sources (official government plans, proposals from academics, scenarios established by think tanks, among others), there are aspects in which many of these agree. In general, they all establish epidemiological conditions, useful tools and instruments for reopening, considerations referring to specific population groups and emphasize good practices. It is important to highlight these similarities, given that they represent the pillars of possible strategies for coming out of the lockdown in Latin America and the Caribbean, regardless of the sector, industry or country.

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¹⁰ This revision included the following documents: "[Update of the strategy for dealing with COVID-19](#)", from the World Health Organization; "[European roadmap for lifting the lockdown measures adopted against the coronavirus](#)", drafted by the European Commission in cooperation with the President of the European Council; "[Guides for opening America](#)"; "[National Coronavirus Response. A ROAD MAP TO REOPENING from the American Enterprise Institute](#)"; Safra, E. J. (2020). "Mobilize and Transition". Center for Ethics, Harvard University. Also, Amitabh Chandra *et al.* (2020). "[A Detailed Plan for Getting Americans Back to Work](#)". *Harvard Business Review*. Also used Smit *et al.* (2020) "[Safeguarding our lives and our livelihoods](#)" y Zeke, E. (2020). "[We can safely restart the economy in June](#)".

CHART 3: Proposals and practices of developed countries

Epidemiological conditions	Tools and instruments	Groups Populations	Good practices
Sustained reduction of positive cases	Open and harmonized information systems	Isolation of high-risk individuals based on: <ul style="list-style-type: none"> ◀ Age ◀ Prior medical condition 	Physical distancing measures
Hospital bed capacity (beds in intensive care units)	Applications for monitoring infections and symptoms	Identify individuals with immunity	Use of masks Hand washing
Appropriate resources (masks, disinfectant, etc.)	Traceability systems for monitoring and mobilizing people		Limited seating in public spaces, offices, restaurants
Massive testing capacity: detection, monitoring and isolation	Tests to determine the infections and identify individuals with immunity		Use of virtual platforms for procedures, purchases, education, work, etc.

Epidemiological conditions and public health. All the proposals mention the epidemiological and public health conditions (or preconditions as they are known in many documents) that must be taken into account when deciding whether or not to relax isolation policies:

- ◀ The sustained reduction in positive cases of COVID-19 for a set amount of days. The number of days may differ between one proposal and another. However, the consensus is focused on the fact the infection rate must be continually reduced to be able to advance to the next stage.
- ◀ The hospital system must have enough capacity to care for all infected patients who are in a serious condition, taking the number of beds in the intensive care units for every 100,000 inhabitants as an indicator of how prepared the health system is. It is also necessary to have enough medical supplies that are suitable for caring for patients with COVID-19 in the event that, once lockdown is relaxed, there could be a new outbreak.
- ◀ The Government must have enough resources to assess transmission on a massive scale; carrying out tests and monitoring the infection network of every individual, has proved to be the main tool for controlling the pandemic. The more tests are conducted, the greater the likelihood of identifying, isolating and treating infected persons.

Tools and instruments. It is necessary for governments to have the necessary tools to evaluate their lockdown exit strategy. These tools include:

- ◀ Accurate, specific and timely information. Governments need systems to allow them to harmonize and communicate the information so that it can be put to maximum use and decisions can be made in real time, considering the current situation of each region, sector or state.
- ◀ In the same vein, there should be mechanisms in place, not just to provide follow-up to patients who have tested positive in a diagnostic test for COVID-19 and their contact group, but also to people showing symptoms and who pose a potential risk to other individuals. These system can rely on technology solutions, such as mobile applications, or limit monitoring to more rudimentary methods, such as telephone calls, interviews, among other things.

Population groups. The distinction must be made between various population groups in order to safeguard the health of the most vulnerable people. Generally, this categorization is determined according to two criteria: age and medical condition. People with pre-existing diseases, as well as those who have an immune system that is compromised due to their advanced age are more likely to contract the virus and need hospitalization. While there are many proposals that vary in terms of which measures apply to each one of these groups, all coincide with the need to consider their differences to be able to act in their best interest.

On the other hand, people who have recovered from the virus, as well as those with proven immunity - assuming it is found that previous infection confers immunity - must be considered eligible to resume their working activities, especially if those activities include providing care and support to the most vulnerable groups.

Good practices. Finally, the analysis of the proposals mentioned sheds light on a set of good practices to mitigate the risk of infection once the economy begins to ease the lockdown measures:

- ◀ Social distancing is key in all areas where there could be contact between individuals. This includes public spaces, supermarkets, offices, construction sites, restaurants, bars and gymnasiums, among others.
- ◀ With the aim of establishing measures to support the maintenance of adequate physical or social distancing, the proposals also set out the need to restrict the capacities for people in all the above areas.
- ◀ By the same token, common hygiene and disease prevention standards must be obeyed: use of masks, frequent washing or disinfection of hands, and minimizing contact with surfaces and items.
- ◀ Lastly, it is advisable that all services or interactions that could be conducted remotely are supported on virtual platforms to operate in this mode: telecare, teleworking, online education, telemedicine, procedures, purchases, payments, etc.

Areas where there is no agreement. In spite of the many points of agreement between the different proposals for gradually easing the lockdown, there are areas where these proposals do not offer explicit criteria. These are areas where the political, cultural, social and institutional standards of each country hinder decision-making, with less of a consensus on the practical and functional criteria for their establishment.

Population groups. The first one is related to the population groups who could come out of lockdown and, on the flip side, those who must remain in isolation for a longer term. Within this area, we can identify the following points of tension:

- ◀ **Groups at-risk:** The majority of the proposals recommend that people belonging to risk-groups remain in isolation for a longer period of time. Generally, included within these groups are elderly adults and individuals with pre-existing medical conditions.
- ◀ **Senior citizens.** The mortality data due to COVID-19 clearly indicate that senior citizens have a higher risk of death from contracting the virus¹¹. However, there is no linearity between the age and the risk of death due to COVID-19 as pre-existing medical conditions also affect this probability and these are more frequent the older the individual is. These are the reasons why no explicit suggestion on what the minimum age should be in order to remain in isolation. In some countries, the senior adult has been equated to those persons who are in retirement age (over the age of 60 or 65 years), but this is an extremely varied group in terms of age range, pre-existing health conditions and risk of death due to COVID-19.
- ◀ **Pre-existing medical conditions.** The proposals specify that people with pre-existing medical conditions must remain in isolation, but do not state what these medical conditions are. It is assumed that this will apply to individuals with cardiovascular problems, diabetes, chronic respiratory illnesses, hypertension and cancer, which are the most prevalent pathologies among those dying from COVID-19¹². However, the scientific research into the risk factors is developing daily. For example, having asthma (chronic respiratory illness) was originally considered a high-risk factor, but several recent studies suggest that it is no longer within the first ten co-morbidities¹³.

Despite the fact that some behavioral factors, such as smoking, may considerably increase vulnerability to COVID-19¹⁴, no proposal has explained if these factors are included within the definition of groups at-risk. China's and New York's data indicates that the risk of dying from COVID-19 is between 1.65 to 1.77 times higher for men than for women, despite the infection rate being similar¹⁵. However, no proposal identifies gender as a factor in the definition of groups at-risk as they do with senior citizens.

11 For example, the mortality rate due to COVID-19 in South Korea is 1.8% among individuals between the age of 60 and 69, 6.3% among those aged from 70 to 79 and 13% for those over the age of 80. In Italy, the same age groups showed mortality rates of 3.5%, 12.8% and 20.2% respectively. However, these calculations do not allow separation between the percentage of senior adults who had pre-existing health conditions. For more information, consult "[Coronavirus Pandemic: COVID-19](#)".

12 For more information, consult Roser M. *et al.* (2020). "[Coronavirus Pandemic: COVID-19](#)".

13 For more information, consult Hakim, D. (2020). "[Asthma Is Absent Among Top Covid-19 Risk Factors, Early Data Shows](#)".

14 For more information, consult Lenung J. M. *et al.* (2020). "[ACE-2 Expression in the Small Airway Epithelia of Smokers and COPD Patients: Implications for COVID-19](#)".

15 For more information, consult Rossman, J. (2020). "[Coronavirus: the puzzle of why the risk of death is greater for men and for the elderly](#)".

Regional/zonal infection levels. Many proposals include measures for relaxing or coming out of lockdown in certain areas of the country where there are no reported cases of infection or where the infection rate shows a downward trend. However, establishing measures of this nature means reaching internal agreements with various actors on the people's mobility. This geographic focus suggests that anyone living in locations or zones declared as "free" from COVID-19 could move around internally without any restrictions, but the entry and exit of persons from these areas should be very strictly controlled, which effectively creates internal borders inside the countries. The control capability and possible constitutional questioning makes the practical implementation of this type of proposal difficult.

- ◀ **Immunity.** Some proposals suggest that the easing of lockdown restriction should be applied first to people who are not susceptible to contract or pass on the disease. Some even talk about granting certificates or passports for immunity to COVID-19 which would allow free movement and the return to work for those who obtain one, as was debated in countries like Germany, Italy or Chile. Although this idea seems attractive, granting certificates for immunity is riddled with medical, ethical and practical dilemmas. Firstly, it is not yet known whether persons who contract COVID-19 and then recover will have long-term immunity¹⁶. Secondly, a measure of this kind would require a massive capacity in order to carry out serological tests in high-quality laboratories. Thirdly, the issue of immunity certificates could motivate certain individuals to contract the illness for the sole purpose of obtaining a certificate or to encourage black markets for certificates. It could also open up legal fronts due to discrimination¹⁷.
- ◀ **Conditions for coexistence.** In some cases, the possibility is often considered that multi-generational households or wherever a high-risk individual lives continue with strict isolation measures. This would imply that the youngest people or people with no medical conditions who reside in these households continue under isolation. In other cases, overcrowded dwellings would indicate a greater need for flexibility. Both situations require very detailed information on each one of the households, which is rarely available to the authorities who impose and control these measures.
- ◀ **Alternative work shifts.** Finally, some proposals suggest the use of alternative work shifts. This means allowing the return to work while granting schedules in order to do it. In spite of the attractiveness of this idea, there are many practical limitations, implying not only the establishment and strict compliance with shifts in every workplace, but also the formation of any coordinating body to prevent multiple companies and sectors from using similar time slots and generating crowds in public spaces.

Economic sectors. The second area in which there is no consensus is related to the criteria for prioritizing the reopening of the various economic sectors. From an economic perspective, there are several considerations when assessing the strategic contribution of each sector. Some proposals indicate the need to first reopen those sectors which have a greater relative contribution to local or national GDP. Others suggest prioritizing those which mainly involve labor and which may help with a speedy recovery of the job market. Furthermore, other proposals suggest prioritizing those sectors in which there is a reduced risk of infection, which are highly automated or have a large capacity for operating virtually.

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¹⁶ For more information, consult ["Can people get COVID-19 twice?"](#).

¹⁷ For more information, consult Greely, H. (2020). ["Covid-19 'immunity certificates': practical and ethical conundrums"](#).

Despite this diversity in the criteria for prioritizing the reopening of various economic activities declared as “non-essential”, at the time the lockdown measures were imposed in practice, it was observed that many of the decisions for reopening taken until now were based on criteria that was not necessarily objective. On the contrary, on many occasions, these were in response to the level of influence of the business associations and unions, and also unwritten cultural and social preferences. For example, some countries have already permitted the reopening of commercial premises of a certain size, although there is no consensus on what is the minimum space to restrict capacity and reduce crowds (for example, in Austria it is 400 m², while in Germany it is 800 m²). In other countries, premises providing personal services have reopened, such as hairdressers and barbers, but no other type of small business¹⁸.

In conclusion, the majority of the proposals for gradually coming out of lockdown take into account strictly technical considerations and criteria, but they also give very little detail on these gray areas where there is less agreement and in which there are usually very influential social, cultural and political patterns. In any case, it is worth mentioning that, in Latin America and the Caribbean, there are less proposals for transition or gradual easing, both officially and in research centers, which help guide the next steps for the countries of the region. However, those observed (in countries like Argentina, Barbados or Costa Rica) show measures for a gradual easing which is aligned with the good practices and recommendations mentioned in the preceding paragraphs.

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18 For more information, consult the World Economic Forum website. [“These European countries are starting to lift their coronavirus lockdowns”](#).



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IV. What do we do now and in the coming months to contain and manage the pandemic?

The lockdown is aimed at flattening the curve, or in other words, reducing the growth rate of the contagion until the number of cases is below the limit of what the health system can manage without collapsing. However, there is consensus on the insufficiency of this measure for eradicating this virus. It is only useful for containing it at manageable levels. For that purpose, unless the time of lockdown is used to change the conditions within the country for confronting the virus, the number of cases will quickly go back up again after the resumption of activities. In this regard, it is essential, in the immediate term and over the next few months, to invest in the containment of the pandemic and ensure that reopening occurs in the best possible conditions. This requires reinforcement to a greater or lesser degree depending on the situation of each country, the coordination and strategic management; improving the equipment and the protocols (adjusted for medium-income countries) to deal with the most serious cases; protecting health staff; expanding epidemic intelligence; incorporating technology; reinforcing communication with and participation of the community, and facilitating the provision of key medical supplies.

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Strengthen coordination and strategic management

The exit from lockdown involves many decisions and complex actions, including the definition of criteria for the opening up of zones and activities, and of communication strategies involving the community. This also means having the ability to track and control new outbreaks. Furthermore, given that these functions are found in many sectors and levels of government, it is essential to devise a strategy for tracing back the operational silos of the public sector, as well as engaging the participation of citizens and the private sector¹⁹.

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¹⁹ These elements are set out in the "[Recommendation on the Governance of Critical Risks](#)", document drafted by the OECD in 2015, as well as in the "[Sendai Framework for Disaster Risk Reduction 2015-2030](#)", drafted by the UN in 2015.

The experience confirms the implementation of a clear exit strategy and a strategic management plan, based on a governance structure, coordination arrangements and monitoring of the strategy adopted, evidence-based information, and reliable communication.

To establish a governance structure. In the majority of countries, both inside and outside the region, the strategic management of the COVID-19 crisis is in the hands of the Center of Government (CoG). Led by the Office of the President, the CoG includes the Health, Social Protection and Internal Security sectors at the core of its traditional structure (which may include the Ministry of Finance and Planning) to deal with the crisis. The organization of the Center of Government for the strategic management of exiting the lockdown could be a practice that shows good results: the use of a satellite structure, in which the sectoral and multi-sectoral teams are organized around the CoG. These teams are composed of authorities and experts from sectors whose activities must be reactivated: labor, production, education, among others²⁰. The CoG is responsible for approving the Selective Exit Strategy (SES) from the lockdown, which defines the epidemiological conditions and the triggers that will allow the exit of authorized sectors²¹, and orders the preparation of business plans²²; the approval of the regulatory framework that sustains the SES, and the implementation of coordination arrangements, both horizontal (with government sectors) and vertical (with sub-national governments) which define the roles, responsibilities, protocols and routines for implementing the SES, in addition to the generation of data and information, monitoring and communication strategies.

Sectoral teams (satellite structure) and sub-national governments have the tasks of certifying fulfillment of the conditions for initiating the phases of the SES: leading the gradual implementation of this strategy; producing data, reports and expert analysis that report on the criteria for initiating the phases of the SES, as well as the monitoring of their implementation; adapting and implementing, at local level, communication strategies and strategies for engaging with communities for promoting and monitoring the measures preventing the spread of infection.

Managing the coordination. One of the tools most used by the CoG for organizing the coordination of the government's priorities is the road to compliance methodology²³. Its use makes it possible to establish the order, the opportunity and the responsibilities for the execution of the processes and actions that set out the selective exit strategy, as well as the mechanisms for its monitoring. It also makes it possible to identify and remove any obstacles affecting the execution of the SES, while at the same time supporting the sectors and the sub-national governments in its implementation.

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20 This satellite structure model can be seen in the CoG organization against COVID-19 of South Korea (*Central Disaster Safety Countermeasures Headquarters*, headed by the Prime Minister), as was also seen in the organization adopted by the Liberian Government to address the ebola epidemic in 2014. For more information, consult the [Building State Capability](#) blog, which contains several studies demonstrating the use of this scheme)

21 The economic activities could be selected from a database on the economic sectors (contribution to employment and GDP), the nature of the activities (area of the facilities and other conditions that allow the implementation of alternatives to social distancing through interaction with users), among other things.

22 The selective exit strategy must answer the following questions: What are the epidemiological criteria, and other relevant criteria for determining the exit, increasing, reducing or stopping its rhythm? What are the priority sectors for exit and which ones pose a higher risk of an outbreak? Will some services remain closed and based on what criteria? Will services be put in place to support individuals and companies during the exit period?

23 Various governments of Latin America and the Caribbean have launched, with the support of the IDB, methods for routes to compliance through their (*delivery units*) in order to move forward on government priorities.

The Center of Government must also include, in its coordination mechanisms with the sub-national governments: standards for the alignment of sub-national programs and expenditure for the implementation of SES, particularly those linked to transfers where the national government has discretion; framework for tax incentives to encourage sub-national governments to contribute with their programs and resources to the interventions of the SES; and standards and models with regulatory flexibility - which the sub-national governments can adopt - to facilitate the reactivation of the companies, which includes the affirmative administrative silence with subsequent audits, automatic renewal and reductions of requirements for licenses, permits and authorizations.

Managing the data. Another coordination function of the Center of Government is the establishment of production routines for information that specifies the sequence, frequency and responsibilities (sectoral and sub-national) for the production of information on the governmental priorities. In the case of the implementation of the SES, this could be used to determine the beginning of the phases of the strategy and may include a potential restoration of the restrictions if the conditions worsen in the future, and to prepare the assessments regarding the impact of its implementation (especially the epidemiological impact), which would allow necessary adjustments to be made deftly (see Box 1)²⁴. In addition, the CDG defines the protocols for analyzing the data and for the artificial intelligence that governs the systematic, periodic production of information on the behavioral tendencies of the citizens, which can be used to draw up behavioral economics interventions, e.g., to improve compliance with the social distancing measures; and citizen perceptions that are useful for developing communication strategies with the citizens²⁵.

BOX 1: A perspective of experimentalist governance for exiting the lockdown

As argued previously, the exit from lockdown is a decision that must be taken in a context of great uncertainty with respect to the impact the various measures to ease restrictions may have on economic recovery, but also on the spread of the disease. Furthermore, it is clear that, within any one country, the regional realities may be very different. The optimum policy for a low intensity rural area, with just a few confirmed cases, may be very different from the policy for a highly populated area with a substantial number of cases. The various regions may also have different socio-economic and cultural idiosyncrasies, whereby one-size fits all solutions may be unsuitable. This backdrop of high uncertainty on the one hand, and common problems under different realities on the other, is precisely the kind of thing that gives relevance to the concept of experimentalist governance of Sabel and Zeitlin (2012), and which, according to these authors, is "a machine to learn from diversity".

What does experimentalist governance consist of? It is a recursive process, in which interim objectives are established, which are then reviewed based on the learning that emerges from the application of different approaches for resolving the same problem within different contexts. It is particularly relevant in cases where there are different levels of government involved in the decision-making, or one main one, and several agents who participate at local level in providing the same service.

24 The information must contain geo-referenced data, administrative records and representative surveys that include symptoms, tests, infections, treatment and discharges at health centers, as well as the deployment of opening.

25 "[Ebola: A behavior-driven Crisis](#)" describes the use of behavioral change strategies used in the ebola epidemic in Liberia. These strategies used surveys and messaging via SMS, radio, television and pamphlets, as well as training the community leaders. This produced positive changes in individual behavior.

It consists of four key elements: Firstly, the overall objectives to be achieved and the metrics for measuring the achievement of these objectives are established provisionally, possibly jointly, among local and central actors, in consultation with the various relevant interest groups (stakeholders). Against the backdrop of the exit from the pandemic, the overall objective would be a gradual but safe return to normality; the metrics could be a rise in the number of people with symptoms, the rate of infection, or the ratio between the numbers of critical infections and the bed capacity of local hospitals to care for them; and the stakeholders would include key players in the medical and scientific community, particularly in countries such as Latin America and the Caribbean, as well as local organizations with close links to the community.

Secondly, the local authorities, who know the circumstances of their jurisdictions in detail, have the discretion to pursue these objectives however they see fit. Thirdly, as a condition of this autonomy, they must transparently report exactly what they are doing and why, and what are the results obtained in terms of the agreed metrics and other relevant indicators. They must be subject to the scrutiny of their peers and to having their results compared with others who took different decisions to achieve the same objectives, so that there is a joint learning experience. If the results are not good, the local authorities must show how they will adjust their decisions based on what was learned from the experience of others. And, fourthly, the objectives themselves and measurement metrics are reviewed regularly and adjusted if necessary. The cycle is repeated on a recurring basis²⁶.

In this scheme, the central level, in addition to setting the objectives and the metrics for measuring and monitoring the results at local level, makes key resources available - diagnostic tests for measuring results, tracking equipment and technology for monitoring the pandemic, protocols for the safe reopening of businesses, etc. - and becomes the center of operations (hub) where the information is shared on what does and doesn't work.

The experimentalist governance differs markedly from other more hierarchical styles of governance, which may become more suitable in situations where the uncertainty over the policy objectives, and the best way of achieving these objectives, is low. In that case, it may make sense that the main one (or the central level) gives more accurate instructions to the agent (or local government) on what must be done and how to do it. In an uncertain, changing world, the provisions set by the central authorities quickly become obsolete. And, while the central authority may adjust its policies, it does not have the benefit of "the machine learning from diversity" provided by the experimentalist governance.

In the experimentalist governance, however, the underlying assumption here is that better ways for achieving the objectives, and sometimes the objectives themselves, are not well known beforehand and discovered as this iterative process of learning and adjustment progresses. In the context of reopening after the lockdown, what is the best way to progressively open up the economy? Should governments open the schools to allow parents to return to work? Or keep the schools closed, but open bars and restaurants? What course of action has the least impact on the rate of infection? Which one best protects senior citizens? Which has the most impact on the revival of employment? We must find out more about it.

Should governments in the region adopt Sabel and Zeitlin's experimentalist governance model? Not necessarily. It is possible that there are different models - some more centralized, others more decentralized - that may work in different contexts. However, regardless of the model chosen, it must include profound learning mechanisms that should also inform public policy decisions on reopening. Thus, the various countries will be able to adopt different models. Nonetheless, given the stakes involved, no country can afford the luxury of not learning.

²⁶ One method related to learning, also based on local knowledge, experimentation, iteration and adjustment of policies, is the Problem Driven Iterative Adaptation of Andrews, Pritchett and Woolcock (2012).

Managing communication. The Center of Government directs the communication strategy with the citizens. The aim is to give continuity, coherence, transparency and credibility to messages from the government (which must be based on sound information, uniform, regular and systematic)²⁷. Communication must include information on the evolution of COVID-19 and the selective exit strategy, government action and the expected contributions from people and their communities. It must take into account the geographical and cultural context, and the views and feelings of the most vulnerable population groups.

Business plans should include the identification of the most vulnerable, high-risk groups. The drawing up of response plans aimed at these populations should include civil society and organizations that represent them.

What could be improved to treat the worst cases

For the time being, countries should invest in increasing their infrastructure, equipment and supplies required to treat the outbreak of critical and serious cases due to COVID-19. At the time of easing the restrictions, the number of cases is expected to increase and hospitals of the region will need all the essential supplies to deal with new increases in demand. Due to the nature of COVID-19, this really means having intensive care beds and ventilators, physical spaces organized for isolating infected patients, equipment and supplies for diagnostic testing, personal protection (e.g. Masks) and specific medicines.

Increasing the capacity of the health care system for treating severe cases in low-resource settings requires ingenuity and experimentation. Accordingly, the countries are trying to innovate in the manufacture of personal protective equipment (reorganizing manufacturers of other industries to produce masks, coats and plastic glasses) and in the decontamination and reuse of equipment. For example, local production of alcohol and soap for hygiene is a low-technology resource of great importance both for hospital and non-hospital use. There has also been innovation with regard to the physical modification of spaces, such as the use of tents in parking lots and sports stadiums or the reassignment of rooms and the installation of plastic sheets. Countries are also experimenting with the management of ventilators as a joint resource that can be sent to areas with high concentrations of cases (Stein, 2020), with the use of anesthetic equipment when the ventilators are not available²⁸, enabling and reassigning medical staff or recruiting people so that they can carry out routine tasks in order to allow highly trained personnel to concentrate on the most serious cases. They are also experimenting with new protocols to treat patients who do not require sophisticated equipment²⁹. All these innovations occur within a context of emergency that prevents proper evaluation of their effectiveness.

Protect health care personnel

Increasing the capacity of the health system will not be enough unless it has an adequate work force. Protecting workers in the sector requires training, protective equipment and physical modifications to the hospital infrastructure. The experts indicate that medical staff trained to work with infectious illnesses are less likely to become infected with COVID-19 than the staff reassigned to treat these cases, which shows the importance of proper training.

²⁷ South Korea has put in place transparency measures on information regarding the development of cases of infection, so that citizens will know which areas to avoid. For more information, consult "[Coronavirus Disease-19, Republic of Korea](#)".

²⁸ This is only mentioned as an example of the medical literature in which we can see that the doctors are faced with ethical dilemmas regarding treatments and have to adapt instruments that are not ideal in order to care for their patients. For more information, consult Aranda, F. *et al.* (2020) "[Recommendations for managing patients with COVID-19 with therapeutic indication of mechanical ventilation which are eventually connected to anesthesia machines](#)".

²⁹ As an example, there are doctors who are encouraging the use of *proning*, which means lying patients face down, which would seem to reduce the possibilities of requiring ventilators. For more information, consult Gattinoni, L. *et al.* "[Covid-19 Does Not Lead to a 'Typical' Acute Respiratory Distress Syndrome](#)".

Throughout the crisis, health system workers are at greater risk of infection and stress related to the pandemic than the majority of the other sectors. That's why the measures adopted to protect workers during the first phase of the pandemic will be required indefinitely. This includes, as a minimum, providing all medical staff with proper training; having enough personal protective equipment; establishing timetables that allow them rest and recuperation; access to sanitary products like soap, alcohol and disinfectants, and having a clean, tidy and well administered workplace. If health workers show symptoms of infection, they should be given priority testing and treatment in order to prevent further spread.

Furthermore, health workers who are in the front line in the fight against the pandemic should have protection tools for their mental health (see Box 2). Health professionals are dealing with the same social changes and emotional stresses facing everybody else, but, at the same time, they are exposed to a greater risk of infection, heavy workloads, numerous moral dilemmas and a practice environment that is progressing rapidly and which differs greatly to other sectors (Gold, 2020).

Another aspect to take into account is that the majority of health workers are women. In Latin America and the Caribbean, 55% of doctors and 80% of nurses are female. This means that women are more exposed to the risks of infection and the emotional cost of work-related stress. In addition, women in the health sector are facing additional challenges due to the gender roles: in their homes, they usually have a heavier burden of domestic chores, looking after children and the elderly, which have increased in the context of the health crisis, therefore there is an additional element of stress.

BOX 2: Mental health of medical staff

Studies conducted during the SARS epidemic show that lockdown had a severe impact on the mental health of health workers, who were experiencing acute stress disorders, depression, alcohol abuse and post-traumatic stress symptoms, even three years after the epidemic (Brooks *et al.*, 2020; Chen *et al.*, 2013). Preliminary research into the coronavirus in China shows high rates of mental health disorders, including depression, anxiety, insomnia and distress. These rates are much higher in nursing staff, women and workers on the front line of care (Lai *et al.*, 2020).

Effective approaches to support the health team should focus on their specific sources of anxiety and fear: access to adequate personal protective equipment, being exposed to COVID-19 at work and bringing the infection home to their family; not having quick access to testing when developing COVID-19 symptoms and the concomitant fear of spreading the infection in the workplace; uncertainty over whether their organization will support them or attend to their personal and family needs if they develop the infection; access to child care during an increase in working hours and the closure of schools; support for their personal and family needs as working hours and demands increase (nutrition, hydration, accommodation, transport); being able to provide competent medical care if the individual carries out their duties in a new area (for example, nursing staff who, coming from other areas, go to work in the intensive care unit); and the lack of access to up-to-date information and communication (Shanafelt *et al.*, 2020).

Measures to protect the mental health of these workers must be comprehensive and multifaceted (Adams *et al.*, 2020). They must include the tools to support the health organizations in providing these services. In this regard, based on current experiences, there is more guidance on implementing preventive measures (stress reduction, complete care and educational materials), measures at the right time (hotlines, support in the event of a crisis) and treatment (telepsychiatry for treatment and medication if necessary) (Zhang *et al.*, 2020).

BOX 3: Guidelines from the World Health Organization concerning the issues covered in this note

Issue	Guideline
Monitoring COVID-19	https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/surveillance-and-case-definitions
National laboratories	https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/laboratory-guidance
Essential health services	https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/maintaining-essential-health-services-and-systems
Health workers	https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/health-workers https://www.who.int/docs/default-source/coronaviruse/who-rights-roles-respon-hw-covid-19.pdf?sfvrsn=bcabd401_0
Infection, prevention and control	https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/infection-prevention-and-control
Crucial preparations and response actions to COVID-19	https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/critical-preparedness-readiness-and-response-actions-for-COVID-19
National coordination and planning	https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/country-readiness
Communication of risks and community involvement	https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/risk-communication-and-community-engagement
Safe handling of corpses	https://apps.who.int/iris/bitstream/handle/10665/331538/WHO-COVID-19-LPC_DBMgmt-2020.1-eng.pdf

Expanding the epidemic intelligence: more information and analysis to guide public policies

As indicated previously, the systems for finding, testing, treating and isolating infected cases have been the cornerstone for addressing all epidemics over the past hundred years and are the foundation of success of a number of countries in East Asia for containing the COVID-19 pandemic. Traditionally, this is carried out by teams of people organized into an epidemiological intelligence network and does not require sophisticated technology. It is essential to acknowledge that organizing themselves to carry out these tasks is the basis for any monitoring and control system of the illness. In other words, expanding this capacity, assigning more trained people to carry out this function is key to being able to carry out monitoring of the contacts of all confirmed cases.

On the other hand, there are instruments for the diagnosis and monitoring of COVID-19, but, for several reasons, they are not being used as required. Diagnosis is the most important information for decision-making, both for the treatment of individuals and for public policies. At the level of the individual, diagnosis is key for the management of patients once they become ill and for isolating people who had contact with an infected person. On the social level, the results of the diagnosis give the government the information it requires to make policy decisions on closures and social distancing. At this time, the efforts of the countries are being focused on conducting molecular PCR diagnostics tests to detect the presence of the virus and identify whether a person is infected. The tests are being used more often, but they are still insufficient. Similarly, access to the antibody tests has also been increasing, but their numbers are far from enough. For this reason, diagnostic capability is a key priority in the coming weeks. It will be necessary, for this purpose, to increase the internal production capacity and purchase supplies and tests in international markets (see also the last paragraph in this section concerning this point). Similarly, gathering evidence randomly on the incidence level of the virus on the population would make it possible to have better data on who has already been infected and the real mortality rate of the virus in the region.

In the absence of sufficient evidence, it is also necessary to consider the use of supplementary methods to facilitate diagnosis and new tools for tracking and collecting data. This may include symptomatic tracking and checking (*screening*) in cases of fever, cough, breathing difficulties, as well as questions on the possibility of having been in contact with infected persons. Furthermore, new tools can be considered for automating the tracking, which are already being used in some countries of Asia and this is described in more detail in the following subsection.

Incorporating technology for the day after

The pandemic has underlined the role of digital tools and the potential for digital transformation to detect, prevent, respond to and recover from public health emergencies. The technology may largely facilitate the work required, both for controlling the pandemic and for supporting the decisions for exiting the lockdown. However, it is important that the technological option is adjusted to the country's health services. Too much confidence in technological capabilities could lead to misinformed decisions being taken with respect to the development, financing and subsequent deployment of unproven solutions that could have undesirable consequences for society³⁰.

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30 One of the most controversial cases is that of the company Theranos, which gave assurances that it had designed a domestic device for making an analysis with a single drop of blood and no needles. Although the majority of the companies go through three cycles in the creation of prototypes before putting the product to market, this company took orders based on a first, unproven model. Thanks to the enthusiasm generated by the technology, Theranos reached 9 billion dollars in value before launching its product on the market. After several investigations, the company and its founder were sued for the medical risk to which the company had exposed the patients.

In a few months, the pandemic has prompted a wide variety of technological innovations for dealing with the crisis. Among the tools for conducting epidemiological intelligence are four sub-groups:

Evaluation and identification of cases. In this sub-group we find the self-diagnosis applications or information that, although not as accurate as a traditional test, may help to identify the clear-cut cases and prevent them from saturating the health systems. Many countries have call centers to manage this process that could centralize these efforts with multichannel solutions to be able to manage the flows of patients. This is also key in identifying potential cases in entrance ports in international and national borders.

Surveillance based on events. These are systems that can help identify cases and track contacts. It is important to note that these types of applications serve as a support and not as a replacement of the traditional methods based on existing monitoring and interview systems. There are several free solutions, such as Go.Data (from the World Health Organization), to optimize this process and prevent delays through the use of paper. Likewise, once the pandemic is at the transmission stage at community level, it is important for countries to monitor COVID-19 through existing surveillance systems for the acute respiratory infection (SARI) and flu-like illnesses (ILI)³¹.

The tracking of contacts applications operate using GPS or *bluetooth* to keep a local record on the cell phone of each individual from the areas a person visits (GPS) or the significant contacts who have (measuring if a cell phone was at least two meters from another for at least thirty minutes). The main difference between both technologies is the level of accuracy, given that the *bluetooth* technology is much more accurate than GPS. One example of the GPS application is the Israel tool, launched on March 22 (Hamagen). With regard to the use of *bluetooth* technology, one example is that of Singapore, which launched TraceTogether on March 20. This alternative means there is no need for a central control to receive all the data and, for that matter, individual privacy is protected. In spite of the fact that *bluetooth* is superior technology, there are many factors that can distort its measurements, including where on the body the cell phone is held or the barriers between one telephone and another. Recently, Apple and Google have worked together on a contacts tracking platform which also uses *bluetooth* technology, and would make the system available to millions of users around the world.

These applications have some significant restrictions. One essential factor for its efficacy is that the country has to have high adoption levels of smartphones for it to work, in addition to it carrying out a high number of tests in order to be able to tell with certainty who has the virus in the first place. Beyond the technology, the main challenges to the deployment of these applications are the limits on privacy³². For all that, the discussion of its feasibility, use and adoption is still intense.

Monitoring of cases. This sub-group includes the technology for carrying out tracking and monitoring of the onset of symptoms in those cases suspected of infection and which are under quarantine. However, in order to carry out this kind of tracking, a means of recording these cases and referring them to whoever should carry out the monitoring is required beforehand. So, the tracking technology can consist, simply, of telephone calls. Solutions have also been used based on triangulating the phone signal and GPS for monitoring fulfillment of the quarantine. These tools, even though they are for determining whether the isolation measures have been broken, may present some problems with accuracy and, in countries where they have been put into practice, were supplemented by people who were monitoring the quarantine cases or by more invasive technology, such as the use of electronic bracelets.

31 The WHO has guides available for this purpose on its website. "[Coronavirus disease \(COVID-19\) technical guidance: Surveillance and case definitions](#)".

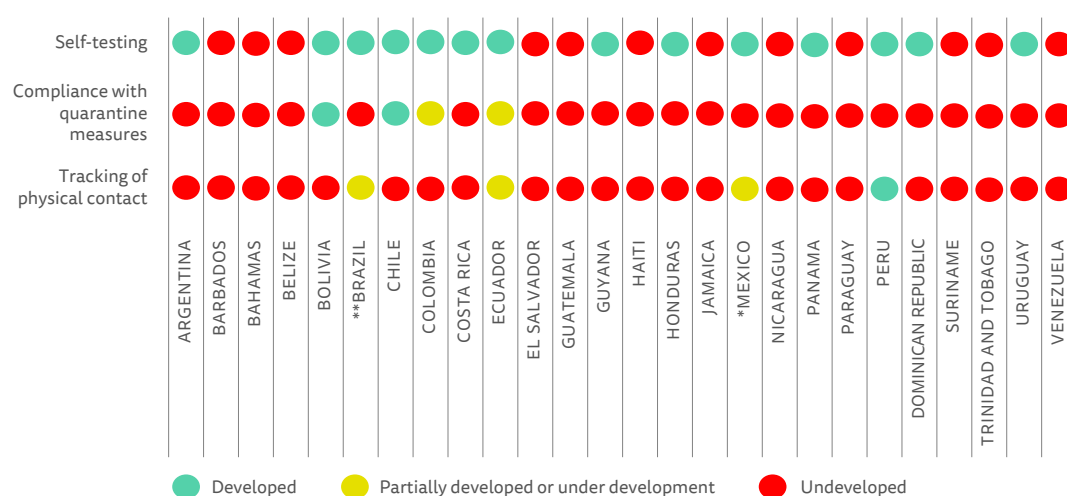
32 Access to the location data of individuals depends on the current laws in each country or region. See the [case of the USA](#).

Monitoring at population level. We have seen many applications that use aggregated and anonymous data to monitor the movements of the population, from the movement patterns of cell phones, such as Google Mobility Maps, with the aim of determining whether certain geographical areas are respecting the social isolation recommendations.

In Latin America and the Caribbean, the majority of countries began by developing *chatbots* or self-testing systems to help citizens and receive information on their symptoms. The main argument in favor of this technology is that it allows early monitoring of outbreaks within a context of low-capacity testing (while easing congestion of the emergency hotlines and health posts). We have found, however, that this tool can give mixed and varied results *chatbots* give different results to similar symptoms.

Other technologies being adopted in the region are those which enable monitoring of compliance with the quarantine from aggregated data of cell phones or traffic information, through monitoring how often a phone changes the cellular telephone antenna to which it is connected. These technologies send alerts whenever a person breaks quarantine and, in some cases, there are heavy fines for the offenders. More recently, in various countries they are now discussing applications that allow tracking of physical contacts. The hoped-for effect is to be able to identify a sick person, and anyone who has been in contact with that person, in order to preventively isolate them.

FIGURE 10. Mapping of technologies developed in Latin America and the Caribbean (on May 1, 2020)



*Only in the State of Jalisco

**Only in the State of Santa Catarina

Many of the necessary decisions have more to do with the way the algorithms are coordinated with decisions on public health than with technical specifics.

Source: prepared by the authors from information on each country.

Past experiences of emergencies and of countries that have already begun their transition process provide several important lessons surrounding the use of the technologies described in this section. Firstly, they show that the technological potential is always greater whenever there is an ecosystem that is interoperable and allows action to be taken on the information derived from these tools. Secondly, humans are always needed in the process for calibrating and analyzing the information, and also in the review of the most complicated cases. Thirdly, it is necessary to have high levels of adoption of these technologies. The expected threshold indicates that, for a solution to have impact, more than 60% of the population must make use of it. Lastly, it is essential to assess the quality of the data being used to contain or

report on the effects of COVID-19. The absence of sufficient quality data may have a negative effect on the credibility and trust in the technology and its promoters who, in this case, are the Governments. Finally, it is necessary to indicate which telemedicine tools for the management of citizens' health are strengthened and expanded thanks to the lockdown measures.

In summary, the technologies can accelerate and multiply the efforts of people and the institutions responsible for monitoring and interpreting the data on the pandemic, but they cannot replace them. For example, they can help track, alert and isolate people who may have been exposed to the infection, and therefore dramatically increase the speed with which they can be contacted, reducing the risk of exposure and contagion of the individuals responsible for this. However, people are still essential for interpreting results, communicating to the community and ensuring compliance with the regulations of the quarantine and isolation. It is also essential to have sufficient numbers of tests to identify the cases of infection.

BOX 4: The use of tracking technology for containing the pandemic in some Asian countries.

The case of South Korea is the subject of study due to its success when controlling the spread of the pandemic. The Government had used different technologies to prevent and control the spread, but the basis of its success was its ability to deal with COVID-19 testing on a massive scale, in conjunction with an ability for rigorous monitoring of those infected and those in quarantine through tracking, via GPS, to identify anyone not complying with the isolation.

Several Asian countries are drawing on the use of high technology tracking bracelets to complement the cell phone applications for monitoring positive cases. In the case of South Korea, the use of this tool resulted from the fact that some people were leaving their cell phone at home so as not to generate alerts. Even though the application is optional, the bracelet is mandatory. Similarly, in Hong Kong, more than 20,000 travelers arriving in the country received bracelets that the Government had acquired to monitor the movements of people during lockdown. Others are using aggregated data from cell phones or traffic information to check that people are practicing social distancing.

The countries can supplement the tracking methods with traditional technologies such as replacing fact sheets with public health monitoring systems. Essentially, it would be a web form for compiling cases used in other illnesses such as HIV and tuberculosis, among others. Call centers are also used to make contact with cases identified and then enter them into a system. The process takes time, but has proved successful in different contexts. For example, China gathered 1,875 teams of five persons for the task of interviewing and communicating with people who had had contact with each confirmed case, with which they managed to find 85% of the cases (Bingqin and Sen, 2020).

Strengthening communication and the participation of the community, supporting them in the behavioral sciences

Community participation and communication are essential for reducing the transmission of the infection and providing all the other health measures. Clear and coherent messages from the authorities instill confidence, generate solidarity and mobilize individuals and communities to adhere to the measures required for slowing the spread of COVID-19.

The gradual lifting of the lockdown measures will occur within a context that is not ideal for preventing future contagions: testing is still limited, the infrastructure of the health sector is inadequate, the economic conditions of countries and individuals are complex, and many appear tired of being enclosed (in many cases under crowded conditions) and without the ability to generate revenue. While vaccines and effective treatments against the virus

are being developed, the success of this stage will require that adherence to the personal hygiene and social distancing recommendations being implemented is maintained.³³

Society has had a period of practice to convert these recommendations into habits and some of them will be new mental models that will be transferred to the new normality. Governments can make use of this [practical guide](#) in order to consolidate these behaviors by using the tools of behavioral economics, in such a way that they are not abandoned, as people return to their jobs and students to their places of study. However, with the reopening of the economies, new guidelines must be communicated in order to stop the spread. Among them:

- ◀ using cleaning products more intensively in communal/public areas;
- ◀ complying with the capacity limits in factories, stadiums, restaurants, public transport, etc.;
- ◀ working remotely, in shifts and atypical working hours;
- ◀ adopting new technologies to make it easier to identify cases of COVID-19;
- ◀ sharing relevant private information (symptoms, contacts) so that the authorities can inform their policy decisions.

To comply with these and other recommendations, citizens will have the difficult task of overcoming profound behavioral biases and barriers that guide their decisions, and which, regrettably, are accentuated under conditions of stress, fatigue and uncertainty (Kahneman and Tversky, 2020). Below are some examples of communications reported by behavioral sciences to promote these guidelines³⁴:

CHART 4: Examples of informed communications to promote certain behaviors after the lockdown

New post-lockdown guidelines	Behavioral design
Using cleaning products in communal/public locations	Placing disinfectant gel at the doors of public transport and adding a visible message reminding the customer: "Disinfect before entering #Don'tForgetTheCoronavirus"
Complying with the capacity limits in factories, stadiums, restaurants, public transport, etc.	Text messaging or telephone call campaigns targeting entrepreneurs, in which the principle of trust is used to remind of the guidelines and the consequences of breaking them: "[Name], don't risk losing your business. Ensure that your customers keep two meters apart".

³³ These measures include frequently hand washing for twenty seconds; maintaining social distancing between people; using masks, mouth covers and other items that can reduce the transmission of the virus; keeping touched surfaces clean; coughing into the elbow and isolating whenever there is a possibility that someone has acquired the virus.

³⁴ For a complete guide of actions to prevent infections using the tools of behavioral economics, consult [Behavioral economics can help combat the coronavirus](#).

Work remotely wherever possible	Companies may offer micro-incentives to encourage employees to work from home (telecommuting). For example, a competition in which the prize is a voucher for Netflix or for an online bookstore, or a donation to a preferred charitable organization chosen by the worker.
Adopting new technologies or communication to make it easier to identify positive cases of COVID-19	<p>Massive information campaigns in which the Government and the companies agree to use the information clearly (for example, on the symptoms) for public health objectives, countering the idea that the information can be used against the individual.</p> <p>Good economic behavioral practices recommend not mentioning the possibility of the misuse of the data in these messages, not even to contradict it. Any mention of it may strengthen the belief in its veracity, in spite of the fact that the objective is the opposite.</p> <p>A commercial advertisement can be made with celebrities, using these technologies/applications to transmit the message that this is a desired and accepted social behavior.</p> <p>Messages can become viral with the following tags #MyDataSavesLives, #MyDataToFightCOVID19.</p> <p>The personalized messages through WhatsApp may increase the perception of trust when increasing the proximity between the sender and recipient of the message. For example:</p> <p>"Hello, [name of the recipient], is calling you [name of sender], volunteer of [organization]. Did you know that technology saves lives? In order to emerge from this crisis, we need your participation".</p>

Of course, the messages and the behavioral designs can only be used in the proper context. To reduce the spread, it is necessary that these messages are accompanied by investments (for example, an increase in the availability of public transport or the cleaning elements), with regulations (different treatment schedules) and with the variation in prices and tariffs in accordance with the different factors (imports that change with regard to the transportation charge or higher salaries for those available to work on-call in order to align the behaviors with the needs of the fight against the pandemic).

Similarly, the technologies (for example, the applications that use artificial intelligence to determine whether the virus is present basen on the symptoms or those that use *bluetooth* to track contacts) have to provide accurate information to generate habits. The high rates of false positives (which indicate a high probability of infection where there is none or infected contacts who never existed) erode confidence in these applications and, therefore, their use.

Communication during exit from lockdown will be a complex matter. The information and the messages will change over time, some will become obsolete and it will be important to avoid giving outdated, incomplete or false information to society. Clear communication must be made not only of what is known about the topic, but also about anything that may be uncertain, such as the time taken to develop the vaccine or the impact of the climate on the spread. Doing this allows the information to be rectified without losing public trust (Lewandowsky *et al.*, 2012).

In places where quarantine is extended or where it is necessary to reintroduce it, it is possible that social tension will increase. Some differences that may arise within the regions or segments of the population introduce an extra layer of complexity, given that different messages are required for different groups. The key is that the campaigns are maintained, but adapted to the changing circumstances, as the good and bad news about the disease is filtered, and people's risk perceptions change. In the same way that the companies adapt their advertisements to new fashion trends and the politicians reform their advertisements in order to adapt them to public opinion, in the fight against the pandemic, the authorities should be alert to the beliefs and perceptions, and modify, as a consequence, the information, the message and the method of communication (Martínez Villarreal *et al.*, 2020).

In the end, the communication and the design of preventive and response measures must take into account the geographical and cultural context of the different populations, such as, for example, indigenous peoples, for those that require strategies that respond to their reality. It should also include special care for the groups with special needs, for example, people with disabilities, who have particular care needs that may be altered by the lockdown and social distancing measures. Not only is it important to design strategies that respond to the needs and the reality of these groups, but also appropriate and effective campaigns and strategies for communicating them. The involvement of leaders of the civil societies of these groups in the design of these strategies is key not only to making them relevant, but also for the different groups to adopt them and assume ownership of them. It is important to take into account the perceptions and sensitivities of the latter and ensure work through the appropriate community networks.

Facilitating the provision of key medical supplies

Foreign trade represents a critical channel for achieving the provisioning of medical equipment and supplies. In accordance with the World Trade Organization (WTO), in the year 2019 alone, 597 billion dollars worth of medical supplies and products were traded around the world. With the spread of the pandemic, invoices were generated in international trade and, as a consequence, the countries of the region are now faced with the enormous challenge of stocking up on much needed medical supplies for confronting the pandemic and reducing risks during reopening.

The latter is due, on the one hand, to an accelerated increase in international demand for these medical supplies and equipment that has generated a shortage in the international market. Similarly, countries have imposed restrictions on the exports and other barriers of a regulatory nature that limit the supply of these goods on a global scale. This particularly affects Latin America and the Caribbean, as the region is highly dependent on the international market, importing around 70% of its medical supplies and equipment from the United States, China and Europe (INTAL-BID, 2020). These, in turn, along with another 88 countries (including at least eight in the region: Argentina, Brazil, Colombia, Costa Rica, Ecuador, El Salvador, Honduras and Paraguay) (INTAL-BID, 2020), have imposed some kind of restrictive measure on the export of medical equipment and products over the last few weeks, such as respirators, masks, disinfectants and medicines, among other things (ITC, 2020). Although these measures are announced as temporary, permitted under international trade regulations as situations of medical shortages within the national territories, they generate enormous distortions in the international market that profoundly affect poor and vulnerable countries, and also tend to generate a retaliatory culture at a time when international, regional and multilateral cooperation is more essential than ever.

In relation to the diagnostic tests, the countries of Latin America and the Caribbean are not, for the most part, producers nor do they have the specialized technology or the patent rights needed to produce them internally, depending entirely, in the short term at least, on the supplies the producer countries decide to give them. Although by this time only India



and China³⁵ have imposed restrictions on their exports, national demand of these products in the United States, Europe, China and South Korea, the main producer countries of the diagnostic tests, make it so that the supply of these goods to the international market is highly restricted, preventing the countries of the region from expanding their capacity to test the population on a massive scale, which would mitigate the risks of reopening.

While it is true that several countries of the region have adopted measures to eliminate or reduce tariffs on critical medical supplies and other trade facilitation measures, the constraints described previously and the additional barriers that persist in the region, of a tariff and non-tariff-based nature, affect the supply of goods that are essential for managing the pandemic. For example, in many cases, the national health regulations do not permit recognition of quality certificates from other markets such as the European market and the procedures to obtain quality health certifications tend to be cumbersome and slow.

To deal with the situation, some public policy recommendations are presented below concerning foreign trade and integration, whose objectives are to maintain the supply of key products for dealing with the pandemic and organizing the reopening of the economy:

Strengthening and deepening the regional integration initiatives (Mercosur, Alianza del Pacífico, SICA, CAN, CARICOM, PROSUR) and the rapprochement between these trade blocs to make collective and coordinated decisions, particularly for reaching cooperation agreements that strengthen regional networks of medical supplies and food; to make joint public purchases of medical supplies within the framework of the Pan American Health Organization (PAHO), especially for diagnostic supplies and for health personnel; to move forward with agreements for acknowledging quality certifications, both at regional and global level, and to promote agreements with the developed countries to access the patent rights for diagnostic testing, medicines and other goods that will allow them to develop local and regional production of these goods.

To continue with the tariff and non-tariff barriers to imports of products, supplies, medical services and the agricultural sector for strengthening the health systems and guaranteeing supplies to the production chains³⁶.

Remove restrictions on the export of medical products, supplies and services that are not absolutely essential, and reduce their temporary nature.

Implement trade facilitation measures to speed up the dispatch of goods and ensure safe and efficient controls from the national authorities at border crossing points. Acceleration of the implementation of the Single Window Interface for Trade (SWIFT); the improvement of coordinated border management; increasing and prioritizing the certification of importing and exporting companies, customs agents, warehouses and other economic operators under the Authorized Economic Operator (AEO) to promote safe and expedited control procedures; and the implementation of health safety protocols for staff involved in foreign trading operations, as well as the development of contingency plans with customs and other public administration bodies involved in managing foreign trade.

Stimulate local production. Over and above facilitating the import of essential supplies in order to deal with the pandemic, a lot could be done by the countries to develop production of these supplies within the region in very little time. There are many success stories in the region showing the route that must be followed. One common element in the majority of successful cases is the capacity for coordination between different actors, both public and private, who have not always worked in a coordinated way. On the public side, this involves the Health and Science, Technology and Innovation authorities. On the private side, actors of the *startup* and scientific community, who can generate prototypes and other solutions

³⁵ Recently, China prohibited the export of any tests not authorized for sale in the domestic market, affecting the supply and immediate availability of these tests at global level.

³⁶ The tariffs in Latin America and the Caribbean are much higher than the world average, varying between 5% and 15%. The non-tariff barriers amount to 90% of these items. These measures would help reduce the costs of these products that are fundamental for managing the crisis.

necessary for combating the virus, as well as manufacturing companies able to produce them on a large scale. It also includes the medical community, both public and private. Instead of making a long list of the kind of political, productive development, entrepreneurship and scientific-technological initiatives that could be generated to solve the shortages in supply problem, we have chosen to present some examples to illustrate what we can achieve (see boxes 5 and 6).

BOX 5: A breathing space for Chile

Like almost everywhere in the world, Chile has had serious concerns over the shortfall in the number of mechanical respirators to deal with the peak of the pandemic. In a context where producer countries curbed exports, different groups began to develop respirators using free designs or own designs. Meanwhile, how do you ensure that the respirators comply with the user requirements and those of critical-care medical staff? How do we ensure that the users have access to the different prototypes to choose the best solutions? How do we ensure that they can be produced in Chile on a sufficient scale?

In this context, the IDB, along with the Ministry of Science and Technology and the SOFOFA (Chile's most important manufacturer's association) convened at Social Lab, a specialized institution in innovation competition platforms. Together, they launched a challenge: to produce mechanical respirators in Chile at very short notice. One week later, they had received thirty-five proposals with different degrees of progress.

A group of evaluators and mentors was formed, made up of intensive care doctors, engineers with experience in the development of equipment and manufacturing specialists, with the aim of evaluating the proposals in accordance with three criteria: their medical viability (do they meet the requirements of the intensive care doctors?), engineering (can they be produced with parts and pieces available on Chilean soil?) and manufacturing (can the industry develop them in large quantities and economically after modifying its production processes?). After a round of feedback for the teams, during which the evaluators raised the need for adjustments, the proposals were organized using an additional set of requirements identified by the Chilean Society of Intensive Medicine. Three weeks after the call for applicants, the first five proposals were found in clinical trials. The Production Development Corporation (CORFO), which joined the effort, and SOFOFA, both had resources to fund the increases in respirators to overcome this stage.

BOX 6: Diagnostic test supplies and equipment in Uruguay

Uruguay is another excellent example of the links between the public sector, the private sector and the scientific and medical communities in order to generate solutions to the problems managing the pandemic. Like many countries in the region, Uruguay did not have diagnostic tests in sufficient quantity. Facing the difficulty in importing them, on March 18, the National Agency for Investigation and Innovation (ANII), with the support of the IDB, launched an appeal for the design and production of 10,000 PCR diagnostic kits for COVID-19 in the country, in very ambitious deadlines. A consortium was formed between the University of the Republic (UDELAR), the Pasteur Institute of Montevideo and the biotechnological company ATGen, and by March 27, an agreement had been signed with the Ministry of Public Health (MSP).

Given a laboratory method for detecting COVID-19 (which, in this case, was also developed in Uruguay), a kit containing the reagents required for carrying out that test, and the instructions needed to carry it out. By standardizing the testing processes, the use of this equipment enables the expansion of the network of laboratories capable of carrying out the tests. On April 30, scarcely one month after the signing of the agreement, the participants in the consortium delivered the first 10,000 kits to the Ministry of Health, which placed Uruguay among the leading countries capable of per capita testing in the region. On the date of publication of this document, there were already resources available from FOCEN (the Mercosur Structural Convergence Fund) to finance 50,000 more kits.

Of course, the testing capacity does not just depend on the availability of kits and PCR equipment. For example, the samples taken for the test must be relocated using a viral transport medium, which is a liquid medium that enables the sample to be kept stable, arriving in perfect condition at the laboratory so that the PCR equipment can detect the virus if it is present. This viral transport medium was imported and was not available. In response to this problem, the Chemistry Faculty of UDELAR developed a viral transport medium that was manufactured in a Uruguayan biotechnology laboratory: Aravanlabs. This lab has now set up agreements for export to Argentina, Brazil and Chile. Uruguay is also making progress in the development of its own swabs, which, for now, have been produced in 3D printers in consultation with the Otorhinolaryngology Company in Uruguay, but the possibility of producing them for injection is being explored in order to be able to expand production.

These are not isolated examples. There are similar initiatives in other countries in the region, such as Argentina, Brazil or Colombia. In all successful cases, the links between the public and private sector, the scientific community, the entrepreneurs and the companies who can scale up these solutions has been vital. These examples also show the importance of investing in science, technology and innovation, in developing an entrepreneurial ecosystem and having adequate productive development policies, so that problems can be dealt with quickly in crisis situations and the current one.³⁷

³⁷ For a more complete treatment of the role of productive development policies, science and technology and entrepreneurship in the context of Covid-19, consult "Responses to covid-19 from science, innovation and productive development".



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V. Managing key areas to prevent transmission

The associated challenges are huge, on the one hand, to flatten the curve - which would reduce the growth rate of infections and deaths - and, on the other, to minimize the risks involved in lowering the guard with selective exits that permit the deployment of everyday life and the economy.

In this regard, one of the biggest challenges is dealing with several fronts at the same time and with limited resources of all kinds, with the risk that, by leaving certain windows partially open, this will facilitate the spread of infection and the re-escalation of the curve. In other words, the effort of a country could be eroded by some specific weaknesses.

Among these potential fronts, three key areas stand out due to their importance in people's lives and the level of social interaction they assume. These are public transport, educational centers and work. This is why, when efforts are being made to contain and manage the pandemic, it will be essential to keep up the need to achieve, on the one hand, the safe transport of persons, solving the forms of movement to essential jobs and to any activities that are open; on the other, managing the gradual and safe opening of the educational centers so that children and young people can continue their education and their parents can go back to work and, ultimately, generate the safest possible conditions that will reduce the risk of spread in working environments.

Safe transport of people during the pandemic

In a region where a large number of people do not have their own vehicle, it is essential to take steps to ensure that the population can move around without the risk of contagion. In the absence of adequate precautions, transport presents a high risk for spreading the virus among workers and users. One recent study, for example, shows the leading role of public transport in the spread of the coronavirus in New York City (Harris, 2020).

In this regard, the authorities are faced with the challenge of defining and monitoring strict health protocols to minimize this risk, as well as taking some strategic considerations into account for the selective exit from the lockdown. Safety measures for reducing the risk of spreading the disease on public transport include:

Protecting public transport workers. One of the main tasks consists of empowering drivers of the country's fleet of motor vehicles, buses, taxis and shared mobility services, test them for COVID-19 and provide them with personal protective equipment. It is also recommended to install devices to isolate the driver from the passengers, as well as disinfect the transport units as frequently as possible and the daily sterilization of stations and terminals.

Avoid congestion at entrances. Access to the systems must be controlled by reducing overcrowding and the number of standing passengers, lines with greater spacing and the establishment of random temperature control points for the passengers, although, in some cases, such as in trunk corridors, the control points themselves become risky. In these cases, the access controls to corridors must be increased, putting in place control points, firstly in the access routes to the latter to prevent congestion on platforms, cycle routes and roads for private cars in these corridors. The build up of crowds at the entrances to stations and terminals must also be reduced.

Avoiding congestion in trains and buses. Another way of complying with the social distancing measures and preventing congestion in the transport systems consists of maintaining a generous supply of the latter. On the side of demand, use of transport during peak times should be discouraged, working with the journey generators so that they operate with a flexible timetable and improve availability in the least-used timetables. This management of demand must be made proactively with the associations of each industry or service and the large companies. In addition, it must be coordinated with the different levels of national and sub-national government (cities, states, provinces, departments). It also contributes to this objective to promote the modal shift, encouraging the walks, the use of bicycles and the authorization of the lanes of the road infrastructure to sustainable mode of individual transport. In the same way for public transport, these modes must also have spacing controls when dealing with high priority corridors in the cities.

The spacing, temperature and cleaning controls will be able to benefit from the development of specialized technological applications for monitoring each potential crowd point in the transport chain. The monitoring costs are high and the technology can play a significant role in the sustainability of these measures in a sector which, even before the pandemic, was experiencing a financial sustainability problem that was significantly aggravated by this situation.

Managing the opening of education centers

The reopening of education centers faces huge challenges. On the one hand, there is evidence to suggest that children would be "super spreaders", even though they are usually asymptomatic³⁸. Moreover, it is essential to consider that children have difficulties maintaining social distancing and that, as described below, many live with senior adults in their homes. On the other hand, keeping the schools closed reduces the possibility of parents returning to work. The school calendar is another important variable to consider. For the twelve countries of the region whose systems operate between September and June, the outbreak of the pandemic occurred at the end of the calendar year, whereas, in the sixteen operating between March and December, classes had not yet started. For this

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38 However, other studies appearing in April suggest there is a much lower level of infection in children than was originally thought. For more information, consult Lavezzo, E. *et al.* (2020). "[Suppression of COVID-19 outbreak in the municipality of Vo, Italy](#)" and Gudbjartsson, D. F. (2020). "[Spread of SARS-CoV-2 in the Icelandic Population](#)".

reason, the reopening of schools must take into account those conditions intrinsically suited to the school environment, including their repercussions in other areas of the economy and society.

There are three factors associated with the school environment to consider regarding the safe reopening of education centers, once the social distancing measures have been eased: the health concerns; the grouping criteria of students and teachers; and the teaching strategies and learning support services.

Health aspects

To ensure an adequate educational infrastructure. It is important to have fast mapping of the basic infrastructural needs in order to check their operating conditions following the closure, such as breakages, shortages due to possible thefts, status of the ventilation and provision of drinking water. In addition to deep cleaning and disinfection, this will lead to quick repairs to ensure hygiene conditions, improving the supply of safe drinking water, availability of toilets and implementation of spaces for hand washing at the entrances to schools.

Establishing new hygiene and safety protocols. Once reopened, the education centers must include in their operation new personal hygiene items and cleaning products. In addition, the mode of operation of the centers must be redefined: their capacity due to new student numbers per classroom, availability of toilets and classrooms, the use of common areas, routines for preparation and delivery of school meals and the definition of cleaning protocols. All of this must be accompanied by the training of teaching and administrative staff on cleaning, healthiness, psychosocial care for families and social distancing, and the delivery of information to the students and their families on the new COVID-19 prevention protocols.

Preventing risks during the mobility. A key issue is school transport, in addition to preventive measures to ensure their use to minimize risks. The frequency and conditions of their use will also have an impact on student access to the education facilities. The general measures relating to mobility described earlier must also be applied.

Monitoring the health of staff and students. Coordination with local health authorities must be ongoing and, to do this, an emergency committee must be set up to ensure an agile link. Initially, identification of students and staff affected by COVID-19 or at risk will be essential, and special measures assessed to reduce their exposure, preventing their temporary replacement. Similarly, strategies must be defined to monitor the health condition of students, teachers and administrative staff, and to check their temperature before entering the education facility, with protocols in place for the quick referral of possible positive cases to the health systems. For that purpose, equipment such as thermometers, masks, first aid kits, among other things, must be provided.

Criteria for assistance and regrouping of students

The reopening must be carried out gradually, with a low density of students during the initial period. Outside the region, China opened some education centers with gradual schemes for the admission of students (Patranobis, 2020). Denmark and Norway are planning to reopen gradually for students from the first to fifth grades, in the first instance, and for entry level in the second³⁹. Germany reduced its social distancing measures and is moving towards reopening education centers, starting with older pupils or those who have to take exams. Spain decided to end the school year and reopen centers in September. Uruguay gradually opened rural schools according to their health requirements, as well as the age and place of residence of the teachers. There are a variety of criteria and issues to consider.

Gradually, depending on educational level. The initial and primary cycle represent the predominant part of the total enrollment (56%) and is the group requiring greater family support for distance learning. A gradual opening in this cycle will allow parents to reintegrate into the labor market on a par with their children going back to school. However, the youngest children are considered super spreaders and also find it most difficult to maintain social distancing. Students in secondary and tertiary education, in turn, are the ones most at risk of leaving school, although they have greater capacity and independence for continuing with distance learning.

Gradually, by geographical area. Mapping must identify safe areas through which reopening can begin. For example, of low density, with a sustainable supply of safe drinking water and which require very little public transport mobility. Areas with major difficulties can also be prioritized to provide distance learning (with no connection to the internet or without electricity) and which meet the above described conditions. Likewise, the reopening strategies must be especially careful with education centers located in peri-urban areas with high population densities and poor health conditions.

Gradually, depending on student density. Everything suggests that the recovery of classroom or face-to-face activities will be gradual, combining distance learning strategies with shorter school days, in order to guarantee a certain social distancing and preventing crowds. At first, special timetables can be considered for the different student years or cycles throughout the week, reserving some of the time for deep cleaning of the education centers.

Educational, teaching and learning support criteria

Students' achievements will not only fail to reach expectations, but will also be very varied depending on the solution applied⁴⁰, previous educational trajectory and pre-existing gaps in learning within the different socio-economic groups. This will emphasize the inequalities in learning and in the conclusion of cycles by income quintile⁴¹. This is why you would need actions to try to reduce these gaps, such as academic screening; differentiated strategies for adapting and prioritizing the curriculum, the school year and timetable within the context of each region; the equalization and acceleration of learning through the development of similar resources and online; flexible arrangements for the three basic areas (language, mathematics and sciences) at all levels; review the promotional schemes and progress for this year, and manage prospective increase in demand from families for public education, given the shock from the crisis on family finances. Tutoring programs can be set up with instructional materials for tutors and students. This can be achieved by reorganizing the educational plan in educational centers or in districts, or by creating a voluntary program with retired or trainee teachers to provide support to the student groups that require it. Support for teachers with online training programs and mixed face-to-face and distance learning will be fundamental. Focus can be given to detecting learning difficulties and problems, classroom management and intervention for leveling out learning.

Lastly, when considering the implications for the rest of the economy and society of opening education centers during the pandemic, it is key to take into account that, as mentioned previously, a high percentage of children in the region live with senior citizens. Therefore, those categories in which children receive priority in order to assist the school with its aim of narrowing the learning gaps or helping parents to return to work, a large percentage of senior citizens could be exposed to the virus. In the region, on average, one in every ten families with children under the age of 14 live with an adult over 60. These figures are very similar to those in the countryside and city, and vary from 4.4% in Uruguay, to nearly 15% in Honduras. Equally, nearly one in every 10 families with boys under the age of 14 live with adults over 60, with figures ranging from 6.2% in Uruguay to nearly 14% in Honduras. This is why it is recommended to help these families so that they can continue their education remotely or organize a safe place of residence for senior citizens.

⁴⁰ Except for digital solutions, the remaining alternatives for educational continuity have few appropriate monitoring mechanisms.

⁴¹ 51% of students of the fifth quintile complete their secondary education with minimum learning standards and 14% do not complete it, compared with 7% of the 56% of the first quintile, respectively (Ramírez and Viteri, 2020).

In the region, one in every 10 families with children under the age of 14 or between 14 and 24 live with at least one senior adult over 60

CHART 5: Percentage of children living with senior adults in Latin America and the Caribbean

Country	Percentage of households with children up to the age of 14 who live with senior adults aged 60 or more	Percentage of households with children of 14 to 24 years of age who live with senior adults aged 60 or more
Bolivia	5.8%	6.8%
Brazil	5.1%	6.4%
Chile	7.9%	9.4%
Colombia	8.5%	7.9%
Costa Rica	6.7%	8.0%
Dominican Rep.	7.7%	7.4%
Ecuador	9.1%	9.0%
Guatemala	11.9%	12.3%
Guyana	10.0%	10.0%
Honduras	15.1%	13.7%
Mexico	8.8%	8.1%
Panama	10.1%	10.0%
Peru	11.7%	11.0%
Paraguay	11.0%	10.4%
El Salvador	10.9%	12.6%
Uruguay	4.4%	6.2%
Regional average	9.6%	9.6%

Source: own preparation taken from household surveys in the region.

Define guidelines for the safe execution of activities in working environments

Countries must define a set of guidelines for the safe execution of activities carried out in different working environments within the context of the pandemic, whether public or private, enclosed or open, both during the present times of social distancing and during the gradual, selective opening process.

Depending on the location of the business activity, these guidelines could be defined in three sections: teleworking, working in offices or similar environments, and working outside of offices (field work).

As a practical guide, included in Annex 2 is a selection of basic measures in good practices identified by institutions such as the World Health Organization, the International Labor Organization and the World Customs Organization, among others, as well as measures implemented in several countries inside and outside the region.

Expand teleworking. Insofar as the majority of countries of the region still find themselves in the upward phase of the infections curve, the first recommendation is that of maximizing remote or teleworking, as this substantially reduces the risks of infection and the demand on public transport. Similarly, the need to stop the spread of infection while there is still no vaccine or effective treatment, forces us to continue with the practice of teleworking during the next, selective opening phase, in cases in which it is possible to do so.

Establish measures to achieve safe working in offices and enclosed environments. For development of activities that will mainly be carried out in enclosed environments, such as offices, supermarkets or processing plants, among others, it will be essential to include health and hygiene considerations to prevent infection when carrying them out. For example, some will mean limiting interactions between staff, the capacity in rooms, the distance between workers and disinfection protocols, among other things. For a detailed list of the guidelines, see Annex 1.

Establish measures for safe working in open environments. For occupations whose main tasks are mainly undertaken out of offices, such as field work connected with water, sewerage, solid waste, energy, mining or oil fields, farms and agricultural properties, as well as installations and systems operating services, it will be also be necessary to adopt a set of practices⁴², such as prioritizing activities on sites with less congestion, and restructuring oncoming and outgoing shifts, introducing safety and hygiene protocols and increasing the number of installations related to these issues.

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42 Note that, given the specifications of many of the activities relating to the water, energy, food, building infrastructure and tourism sectors, they are considered in a specific way for each sector in Annex 2.



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VI. Ensuring the continuity of essential activities during the lockdown and the selective exit process

In addition to hygiene and safety-related guidelines adopted in the previous section relating to hygiene and safety practices in the workplace to reduce infection, due account has to be taken of a set of additional considerations to ensure the continuity of essential activities, such as Public Administration, food safety, the water and energy services, building infrastructure, freight transport, and to recover from tourist-related activities during the lockdown and selective exit stages.

Ensuring continuity of the services of Public Administration through digital government

The Public Administration is primarily responsible for the design, implementation and monitoring of public policy, ensuring continuity of public services, including those directed at the most vulnerable populations within the context of the pandemic, and for progressing towards economic reactivation.

The Public Administration is one of the main employers in countries of the region: on average, it is the source of 12% of total employment in Latin America and the Caribbean, ranging between 3% and 25% depending on the country (BID-OCDE, 2020). For this reason, it has a fundamental role as a reference to the rest of the labor market and is powerful in its own right for reactivating the economy. On the other hand, this high volume of people and the usually limited physical space in public offices may also constitute a potential increase in the risk of infections. That's why the exit from lockdown of this labor force must be gradual, taking all necessary measures to enhance its role of providing public services and reactivating the economy, while reducing the risks and focal point of contagion.

The selective exit strategy from the lockdown from the Public Administration depends on its ability to continue executing the majority of its functions through teleworking and the provision of services online. This means the possibility of digitally managing reception processes, sending, review, approval and signing of both internal documents (interaction inside the Public Administration) and external (interaction with citizens and companies).

While it is true that many countries of Latin America and the Caribbean do not have common platforms or services which has allowed other countries to adapt to teleworking without having to sacrifice the provision of public services, it is possible to work in three priority areas to quickly migrate the key services to the virtual environment or reduce the need for officials to have to transfer to their offices to carry out paper-based processes.

Implement a digital processes manager. The objective of this system is to be able to design and implement a process or procedure (internal or for individuals and companies) digitally, so that, both the applicants to the service and the public officials who process it can do so remotely and without having to interact physically or move to their office. One example of this platform is the DigiGob, a process manager based on open source and which can be implemented in a cloud environment, therefore the countries do not need to have a high level of technological infrastructure. The putting into practice of a tool of this kind may take only a few days and, potentially, could save on movements and situations with a high risk of infection for citizens and public officials.

Complementing with support tools for multi-channel strategies. Such tools are directed to segments of the population with difficult access to digital tools:

- ▶ **Support for personalized service.** To prevent crowds in public spaces, the existence of an appointment management system, as well as the digitization of the sections (using, for example, the digital process manager already mentioned) can help.
- ▶ **Support for telephone assistance.** The implementation of interactive voice response systems (IVR) or customer services (*call centers*) with telephone operators, it is possible to help ease congestion in public spaces and provide support for managing services without the need for physical movement.

Narrowing gaps in digital enablers. Even though the tools described above could be implemented relatively quickly, they require enabling elements which must also be considered. The governments of the region must ensure these elements from now on. The main enablers are:

- ▶ **Technology services.** The country must have an infrastructure with transversal services for processing online (data centers with redundant connectivity, digital identification service, digital signature, registration procedures, payment gateways, etc.). In addition, those countries which now have procedural management systems must ensure that it is possible to conduct them entirely online.
- ▶ **Institutionalism.** Beyond the Center of Government, the country must have the institutional capacity to implement, migrate or maintain the electronic services. Similarly, it must have a cybersecurity strategy for guaranteeing service availability and the integrity and security of the transactions generated. Finally, it will be essential to have officials trained and qualified to carry out these procedures electronically.
- ▶ **Legal and regulatory framework.** To be able to carry out procedures in cloud services, legislation is required relating to the validity of the identification and the electronic signature. In some cases, and in exceptional circumstances, consideration could be given to accepting a double-factor identification as a manifestation of will (when there is no electronic signature with certificates or when the public do not have an advanced signature). Depending on the solution implemented, specific legislation on carrying out processes outside of national territory or for the acknowledgment of electronic signature certificates issued abroad could be necessary. Finally, existing legislation should also be reviewed with regard to data protection and the mitigation measures of any possible

infringement that could occur during this period. For any processes and procedures that will be provided online, it must be ensured that there are regulations that permit them to be carried out remotely, especially those that are reproducing existing processes that were traditionally carried out on paper and physically.

- ◀ **Connectivity.** It is important to find out the state of access to connectivity services of public offices and those officials in their homes in order to be able to plan the exit strategy. This being the case, measures should be considered to support greater and better connectivity for officials so that they can perform their duties remotely. Likewise, it will be necessary to find connectivity solutions for vulnerable social groups, those who must come on an urgent basis with health and economic support measures.

Finally, it is advisable to consider the following measures relating to the public officials⁴³:

- ◀ Delegate, in the highest authorities of each institution, the preparation of plans for the gradual return to the offices, which take into account the levels of geographical infection, differential risk to groups of individuals and other specific factors of each institution;
- ◀ Prioritize, initially, on-site work only for those employees in charge of policies, procedures and services considered priority, and then continue expanding it within the agreed time in accordance with the results.

Ensuring food safety

The lockdown due to the coronavirus occurred at a time when many agricultural producers in the region had already sown their crops, therefore agricultural production has not experienced major impacts thus far. However, the future availability of food depends on the liquidity of the producers, who will be affected in many cases. For example, in some countries, not all of what is produced is being sold, either due to lack of demand or transport problems. Moreover, rural, non-agricultural employment has fallen due to the lockdown measures, and also because of the decline in remittances from abroad. Therefore, there is a possibility that there will be a reduction in food supply over the medium-term as a consequence of the current measures.

In order to deal with the challenges that the countries are beginning to face in the area of food safety, in maintaining availability, access, food use and stability, the following public policy recommendations must be taken into account:

Ensure transport and distribution of food applying the good biosafety practices mentioned previously in the subsections on trade and transport. However, attention should be given to the increase in costs that this represents, as well as the capacity of the Governments to monitor compliance with these measures.

Reducing the presence of persons in urban areas to the maximum (which have been most affected by the coronavirus) in rural areas so that the producers do not become infected. Ideally, the countries should create COVID-19-free areas in rural communities that have remained unaffected. To do this, these areas need to be isolated, with regular testing of the majority of their inhabitants. In other words, a sanitary barrier should be set up in the rural sector to protect farmers as strategic assets of the economy.

Identifying short circuits so that producers in a territory can supply consumers in the same territory. This would ensure that products or persons of other territories would not be reached, and would also guarantee the supply and consumption of food locally.

Providing liquidity before planting to keep production and the future food supply stable.

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⁴³ These measures supplement those of a general nature for working in offices that are shown in Annex 1.

Maintaining food safety standards that were current before the pandemic in order to reduce the likelihood of an emergency due to an outbreak related to foodborne illness (fbi). This could create an additional burden for the health system at national level (for example, cholera epidemics).

Listed in Annex 2 are some specific recommendations for the different stages in the value chain.

Ensuring water and energy services

This sector is one of those which, owing to its tough challenges, has continued operating since the outbreak of the pandemic and the guidelines presented are to be considered as we progress to the selective opening phase of the economy.

Although the COVID-19 pandemic has affected all economic activity, the water and energy services were particularly affected, not only because of their obligations and the need to continue providing a reliable and safe service, but also due to the expected reduction of their income, mainly due to the deferred payment of the invoices by the most vulnerable users and the significant reductions in energy demands, especially due to industrial and commercial activity (home use increased, but did not compensate the drops in revenue). Although these services did not stop during the initial phase of the pandemic, in the second phase, the following strategic considerations should be taken into account:

Electronic payment. During the first phase of the pandemic, many companies enabled electronic systems for the payment of invoices. In many countries, deferred payments were ordered on the invoices, and cuts to the service for non-payment were stopped for the most vulnerable populations. In others, charges for users on low-incomes were stopped or the reading of meters on their premises suspended. For the next phase, it will be necessary to begin improvements and modernization of the business systems (reading, billing and payment) with the aim of achieving full digitization of these systems. For that purpose, companies must check the current state of their business systems beforehand, establish their hardware and software requirements, and estimate the costs and implementation periods.

Reactivation of maintenance. During the initial phase, several predictive, preventive and even corrective maintenance activities were suspended or reduced. During the next phase, companies should begin preparing a set of activities required to resume the maintenance of the entire infrastructure in order to achieve adequate technical standards. To do this, companies are required to prepare technical specifications, purchase orders and identify suppliers for the immediate large-scale acquisition of spares, equipment, tools and materials. Also, during the emergency, many manufacturers and suppliers of equipment (national and foreign) reduced their production and therefore the companies in the sector were required to update their lists of suppliers to replace their usual suppliers in the light of delays or cancellations of orders. Inasmuch as they had spare parts, tools and materials, they should move the maintenance work forward, starting with the most critical areas.

Planning. During this state of transition, it will also be important to analyze any possible changes in the pattern of medium-term demand, such as greater consumption of residential customers and reduced demand from the production sector. In the production sector, it is possible to register differences according to the area of activity. So, for example, recovery in some activities such as tourism, air transport and entertainment will be delayed, while others, such as supermarkets, will register an increase in activity. These variations in consumption call for a review of the investment plans during this phase.

Financial planning. Undoubtedly, predictions of the financial states of companies will also be affected by the emergency. In this stage of the transition, it will be necessary to carry out a detailed check of the assumptions used, particularly the expected income; the accounts receivable; the operating costs; the levels of debt incurred before the emergency, those anticipated due to debts acquired during the first phase and new borrowings to exit the crisis, and new investment plans that arise to reach the reopening phase.

Maintaining continuity of building infrastructure

Quarantine measures have arrived at a time of drastic reductions in the pace of public works and, in some cases, their closure. This has had a direct and negative impact on employment and the economy, due to the huge weight of public spending on infrastructure. According to ECLAC (2018), the construction sector represents more than 6% of the GDP of Latin America and the Caribbean and, according to the ILO (2018), there is a total of 263 million workers, of which about 140 million (53%) do not have a formal contract. 7.4% of the labor force in the region is engaged in the construction sector, 4% of which consists of women. This means that approximately 19.5 million households are at risk of feeling the effects of the lack of income as a result of the paralysis in construction.

The countries of Latin America and the Caribbean are facing the pressure of keeping open, or reopening, infrastructure projects in an environment in which the pandemic is not under control, the restrictions of lockdown persist in some sectors of the population and there are no restrictions on the mobility both nationally and internationally. In fact, of the twenty-six countries of Latin America and the Caribbean that form part of the IDB, 31% did not close down public infrastructure works due to COVID-19 (Argentina, Brazil, Chile, Costa Rica, Jamaica, Mexico, Nicaragua and Paraguay). As of April 13, Uruguay and Colombia reactivated it. As the pandemic is still not under control, special measures are required to protect the active labor force, which is approximately 8.7 million, as well as to support companies in the production chain of the construction sector so that they do not disappear.

In addition to the strict compliance with health protocols to reduce infections among the workers and the general population, there are some strategic considerations that the countries must take into account:

Impacts on project deadlines and costs. The disruption of works, or restrictions which are implemented on those works still ongoing, will demand a readjustment of the construction activities, work schedules and progress, and the launch of strategies to mitigate the impacts on deadlines and costs.

Payment chain and employment protection. The need arises to protect the industry's payment and supply chains (construction firms, consultancies, quarrying and mining, equipment, supplies, services, etc) so that workers remain on the payroll and escape liquidation.

Exchange of experiences. As this is a new and unknown problem, the countries may have more questions than answers on the subject of how to deal with the challenge. For this reason, the strategies have to be constructed collectively for the safe return of the workers to the site, drawing on the experiences of the countries in the region that did not close them and those who have recently opened. Furthermore, what is happening and what is being done in other parts of the world should also be taken into consideration. In Annex 2 there are specific guidelines for development of construction activities during the pandemic.

Ensuring continuity of cargo transport

Transport systems are essential for ensuring the supply of medicines, health equipment and supplies during the pandemic. In fact, a key process for being able to find such products in supermarkets and online retailers is road transport. Conscious of the supply chains for the provision of essential food, cleaning and health products, governments have exempted cargo transport from traffic bans.

With regard to freight transport and its logistics, the following policies and measures for its continuity are highlighted:

Ensuring regional coordination. It is important to create regional committees for logistics coordination which articulate permanently the actions undertaken by the countries. This coordination is key to establishing the guidelines and regional regulations for integrating trade which ensures the movement of long distance and urban freight transport, with the aim of reducing, as much as possible, quarantine requirements for the crewmembers of vessels and road transport operators, as well as time delays at border crossings.

Digitization of procedures. Accelerating the simplification and digitization of procedures and sectoral legislation for coordination of times (both of traffic and loading and unloading) will help to comply with the social distancing measures.

Protecting cargo workers. Implementing simplified procedures and control infrastructure for checking freight transport of essential goods, including disinfection measures for the vehicle and health monitoring of the hauler. For long distance haulers, it is also important to ensure rest areas and toilets due to the closure of gas stations, hotels and restaurants during the lockdown.

Guaranteeing the proper functioning of border crossings

Maintaining proper functioning of land border crossings, ports and airports is extremely important to ensure that the supply chains keep operating, thereby preventing the trading system from collapsing and maintaining national production levels in critical sectors of the economy. Accordingly, it is essential that the customs coordinate their efforts efficiently with other entities who carry out border management operating under the coordinated border management model. Similarly, it is essential that they adopt and strengthen the sanitary protocols required to carry out a control task and trade facilitation quickly and safely. Specifically, the following measures are highlighted:

Streamlined, digital processes and cutting-edge technology. It is essential to simplify the load flow processes and to have cutting-edge technology for non-intrusive inspections that facilitate the shipments of medical equipment without undermining the customs border control, with automated systems and online payment methods, using reliable companies such as the AEO (with Authorized Economic Operator certification) for the import of critical materials and for their transport and distribution.

Protection, training and coordination. It is important to train and provide personal protective medical equipment to customs professionals at ports, airports and border crossings to speed up the entry of goods, protecting their health and preventing these points from becoming a focal point for the spread of the pandemic. As far as health protocols are concerned, it is recommended that they are also signed and adopted according to common standards between neighboring countries and that they include the provision of personal protective equipment and measures to guarantee social distancing by haulers, shipping carriers, traders in the area and other agents.

Passenger handling. With reference to the flow of passengers at the borders, it is equally advisable to simplify the processes in order to avoid crowding, establishing temperature control points and implementing an ongoing disinfection protocol for baggage scanners of the migrant population in the area.

Recovering tourism

Although it can be argued that tourism is not an essential activity, the crisis brought about by this pandemic has been devastating to this sector. According to estimates from the World Tourism Organization⁴⁴, arrivals of international tourists will fall by 30% in 2020 compared with the previous year. Likewise, domestic tourism is also being impacted heavily following the implementation of lockdown measures in the region.

The current and constantly changing situation does not make projections in order to understand how and when demand for the services provided by this sector will recover. This is due to the fact that reactivation of the demand for tourism will not only depend on the reopening of the borders and the easing of certain lockdown measures, it will also depend on an increased sense of security when the time comes for the potential tourist to travel, among other things.

It is important to highlight that the almost complete paralysis of the tourist industry has led to the shutdown of companies and job losses, factors that change the business fabric available at tourist destinations. Consequently, in the same way that it is important to generate the conditions so that the sector is prepared for a selective exit from lockdown and can safely get back on track, it is also necessary to think strategically about recovery, including medium and long-term actions, as well as planning for future crises.

To do this, in addition to applying the guidelines established in the previous section to prevent the spread of the illness during the development of activities, it is possible to establish a set of guidelines for air or maritime transport, car rentals, the operation of hotels and accommodations, the operation of tourist spots and the management of demand, which are described in Annex 2.

44 For more information, consult the presentation [“COVID-19 - a global insight on travel and tourism impacts”](#).

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Conclusions

The chance to learn from the successful or unsuccessful experiences of the countries that have already traveled a long way in terms of controlling and managing the pandemic, gives a considerable advantage to Latin America and the Caribbean when dealing with this crisis and establishing the conditions for the safest possible exit from the lockdown. On a practical level, across all sources, the region is a generous source of knowledge for assimilating and adding to knowledge already developed with its own resources. So, the detailed analysis of the management of the pandemic in different countries, added to the deep knowledge of Latin America and the Caribbean held by the IDB, highlights the need to strengthen the coordination and strategic management for linking up the different tiers and levels of government, economic sectors and social agents; investing in improving the infrastructure, equipment and health supplies, and to facilitate their provision; protecting the physical and mental health of all health workers on the front line of battle against the virus; expanding the epidemiological intelligence and carrying out more diagnostic tests, both on symptomatic persons and their contacts, as well as enhancing the tracking of the contacts of registered cases, isolating those who test positive for COVID-19. For that purpose, it will be key to incorporate technology that helps accelerate this process and, in this way, reduce the number of infections, not forgetting that to control the pandemic will equally require a change in people's behavior, which will in turn necessitate efficient communication strategies that can benefit from the lessons of behavioral economics.

In addition to keeping the number of recorded cases at a manageable level, during the reopening, it will be essential to ensure that the resumption of activities will not mean new sources of infection. In this regard, three areas will be of special interest due to their centrality in our lives and the degree of proximity and exchange with other human beings they entail: public transport, schooling and work. In all of them, new operations protocols must be guaranteed to reduce human contact and ensure low levels of infection. Furthermore, the selective opening will require that governments take decisions concerning which sectors and activities will return, progressively, to operate, and the international review indicates there are no prescriptions for this. The different countries have prioritized various sectors, depending on their strategic importance, the concentration of people which involves their normal performance or level of influence in their political decisions. In each of these sectors, including Public Administration as a key entity for the normal operation of a country, will need to ensure that the activities are carried out safely and that the operation is maintained even during the current periods of complexity and those that lie ahead. In the Public Administration, for example, the latter will force it to step up, as much as possible, the use of electronic procedures.

The countries of Latin America and the Caribbean are managed with strong fiscal restraints. For this reason, care must be taken not only of the effectiveness, but also the efficiency with which the public resources are used. Achieving this balance between what is urgent, what is needed and what is possible presents another challenge to consider.

On the other hand, even though the international experiences are extremely useful for Governments of Latin America and the Caribbean in taking strategic decisions on when and in what conditions the selective reopening should be initiated, the peculiarities of the region should also be properly considered, as emphasized in this document. Among the main features that will affect, essentially, the taking of these decisions in the region, we find, on the one hand, that age structure is a positive feature, given that there is a large number of young people and, on the other, a major prevalence of chronic illnesses, a reduced capacity of hospital beds and mass testing, (and also of governments at the time of protecting employment and the incomes of the most severely affected), as well as a larger percentage of the population in the informal employment sector.

In the coming weeks and months, the countries of the region must be ready to experiment, learn and rapidly adjust their decisions according to what has been learned. In this context of great difficulty, the IDB will seek to remain as a transmitter and accelerator of this learning.



APPENDIX

ANNEX 1 Guidelines for the safe continuity of business

General guidelines for the work environment. Guidelines are defined for three distinct areas:

1.1. Teleworking

1. Develop plans for teleworking for the next three to six months.
2. Define the people, and their duties, who can or should work remotely.
3. Create incentives and work metrics per product for the activities that can be remote.
4. Develop working protocols.
5. Have the bandwidth needed to properly carry out telework activities.
6. Have a space dedicated for teleworking.
7. Train staff to exercise caution in the presence of infectious diseases, both in the home and in areas selected for working and for outdoor activities. Things to consider: time management, use of information technology, reconciliation between work and family, among other things.
8. Encourage remote meetings: to do this, videoconferencing tools should be used, which may include Zoom, Skype, Teams, Hangout, Webex and WhatsApp.
9. Ensure effective coordination of activities and tasks. In this area, there are multiple tools, such as shared calendars and specific task managers, such as Trello, Slack and others.
10. Facilitate file management. There are multiple tasks, from the collective creation of documents (using tools like Google Docs) to shared storage (Dropbox, Google Drive, iCloud).



1.2 Working in enclosed offices or areas

The following considerations are highlighted:

1. Confirm alignment and resolve the coherence and continuity of the protocols of labor flexibility and sanitation in the workplace in accordance with the current labor law and insurance schemes against occupational risks.
2. Record the entry and exit of staff in stages, with preventive distancing of at least two meters. The use of a card system instead of digital fingerprinting, in which case it should have a disinfection device, following entries and exits, with a mandatory hand washing or disinfection sign.
3. Train staff to exercise caution in the presence of infectious diseases.
4. Limit interaction between office staff and staff visiting or working in external sites.
5. Establish the distancing (two meters) in the workplace and in communal areas, among others, and abolish any meetings of more than fifteen persons.
6. Maintain temperatures in office spaces between 23 and 26 °C.
7. Establish daily ventilation protocols and, as far as possible, after each meeting (five to ten minutes before the next use of any common space).
8. Disinfect common work areas and provide hygiene stations and kits.
9. Establish a registration, monitoring and tracking protocol for people with symptoms or infected.
10. Take random temperature samples of staff.
11. Segregate selective exits into stages, by population groups with least exposure to risk (those under the age of 40 and with no medical history, for example).
12. Enforce the permanent wearing of masks in communal areas.
13. Establish communication channels with the health authorities.
14. Prioritize transport of staff in vehicles of low occupancy.

In addition to these considerations are the preventive measures after work activity to prevent transmissions to families and other persons related to the workers, especially with regard to hygiene, such as the use of protective masks, disinfection, washing of hands and body hygiene before coming in contact with family.

1.3 Working in open areas

It is suggested that the following considerations are taken into account:

1. Rotate staff, reducing operational staff to the minimum viable.
2. Perform only corrective maintenance on the services, where feasible.
3. Prioritize activities in sites with lower agglomeration.
4. Restructure the working shifts and define entry, exit and circulation routes for staff in the facilities in order to limit contact between persons from different shifts.
5. Record entries and exits of staff in stages, with preventive distancing of at least two meters. The use of a card system instead of digital fingerprinting, in which case it should have a disinfection device, following entries and exits, with a mandatory hand washing or disinfection sign.

6. Put in place staff entry, exit, distancing and circulation protocols on the premises, in order to limit contact between people in the workplace.
7. Implement strict hygiene protocols and provide safety equipment, especially masks and gloves, to all service operators.
8. Increase the number of hygiene and disinfection facilities, with solutions eliminate the risk of infection in all workplaces.
9. Wash uniforms and equipment at temperatures no lower than 60 °C.
10. Mandate the permanent wearing of masks in communal areas.
11. Provide personal protective equipment to inspection, maintenance, supervisory and work teams involving the movement of staff.
12. Provide disinfection solutions in all vehicles.
13. Provide temperature measuring equipment and take random temperatures of workers in the field.
14. Define monitoring and tracking protocols for those persons suspected or confirmed as being infected.
15. Reinforce the protective clothing, health protection and transport schemes for traveling to work.
16. Redefine and communicate the procedures for the reception of materials from suppliers and delivery of products to customers.
17. Implement, in the tender documents, requirements for the provision of protective equipment for any persons working in difficult areas.
18. Extend the exceptions to the mobility restrictions for suppliers of materials, equipment and services.
19. Define communication protocols with the users or communities close to the service operations.
20. Avoid interaction between field staff and the surrounding communities as much as possible.
21. Boost digital payments to reduce contact with external agents.
22. Guarantee availability or access to a medical health team for daily monitoring of staff symptoms and identify cases with risky symptomatology.
23. Establish alternate service timetables for the community or in high-risk areas.

Each of these general guidelines applies to different sectors and stages in the value chain. The annex below gives detailed recommendations for individual economic sectors.

ANNEX 2 Specific guidelines for some sectors

This section presents strategic and specific guidelines (vertical) for one-off sectors of the economy, selected for their importance and urgency in the fight against the pandemic and which, in many cases, will continue operating, as well as for those whose selective reopening is expected whenever the health crisis is under greater control.

2.1 Agri-food sector

To ensure that the agri-food system continues operating with no disruptions, the following specific recommendations are presented for the different stages of the value chain.

In farms and farmlands:

1. Separate workers so that they do not come into contact when carrying out harvesting and weighing work.
2. Extend the harvesting times and organize workers into shifts.
3. Prepare the housing facilities for workers such that they allow social distancing.
4. Require frequent hand washing with water and soap, ensuring that soap is provided and prohibiting the sharing of towels.
5. Clean and disinfect common areas.
6. If the workers are expected to move to the farms, transport should be provided for each shift.

In the management of wineries and the transport of agricultural and food products

1. Segment the activities in the wine cellars, separating the areas that are in contact with the external environment (for example, the reception of goods and shipment) from the rest of the areas (for example, storage, selection and fulfillment of orders).
2. Use adequate protective masks and disposable gloves.
3. Place dividing elements (for example, tape and dividing barriers) to separate people making deliveries from those who are receiving products or documents.
4. Limit the number of drivers who can enter a winery and mark waiting areas to ensure distancing.
5. As far as possible, organize the staff into separate and non-alterable shifts.
6. Check the body temperature of the workers at the start of each shift.
7. Prohibit the exchange of tools during the shifts and disinfect working areas and tools during each shift.
8. Require hand washing with antibacterial products before and after each shift, and also whenever there is any change of activity and after each contact, providing relevant dispensers.
9. Avoid any unnecessary activity in the immediate term (for example, inventory checks, cleaning by external staff, non-essential projects, meetings for updating of staff), unless these activities are for managing the current emergency.

In food processing or production plants

1. Take the temperature and assess whether employees have any symptoms before starting work.
2. Wear mask and gloves.
3. Disinfect and clean all work spaces and equipment.
4. Identify and implement operational changes to increase distancing between the employees, acknowledging that in some plants it will not be possible.
5. Maintain effective hygiene practices, such as frequent hand washing with water and soap.

In wholesale markets and retail outlets selling agricultural products

1. Limit the number of customers entering the markets.
2. Require the wearing of gloves and masks by all traders, as well as appropriate clothing.
3. Create areas for washing the products and ensure the safety of the food products.
4. Supervise and strictly regulate wholesale and retail markets of fresh produce.
5. Redesign physical spaces in wholesale and retail markets to improve circulation, as well as health and hygiene practices.

In supermarkets and shops selling food

1. Take the temperature and check for any symptoms in employees before starting work.
2. Wear mask and gloves.
3. Disinfect and clean all work spaces and equipment (frequently disinfect trolleys, handles and surfaces that are touched repeatedly by employees and customers). Clean and disinfect floors and countertops.
4. Emphasize the importance of frequent and effective hand washing, using soap or hand disinfectant, especially before touching unpackaged or prepared food.
5. Assist the customers in maintaining social distancing and do not operate self-service food outlets which require the common usage of utensils.
6. Ease regulations to help with food distribution, which may be removed whenever there is more progress in containing the pandemic.

2.2 Building infrastructure

As specific considerations for the continuity and safety of the building infrastructure sector, we can highlight the following:

1. Develop schemes for virtual appointments and scheduling for as many of the services as possible that can be provided remotely.
2. Implement appliances (cameras, temperature sensors, sensors for counting individuals entering and exiting an area) which will enable ongoing and remote monitoring of compliance with the health protection measures provided to the workers.

3. Divide into working teams by floors and limit the numbers within the fixed groups to a maximum of fifteen persons.
4. Ensure there are hygiene facilities separated by floor and gender.
5. Provide instructions on how to make emergency personal protective equipment in the light of shortages of basic supplies.
6. Prioritize payments and communication via digital channels with the suppliers of materials and services.
7. Reduce teams of auditors, architecture, among others, with staggered visits.

2.3 Tourism

Focused on supply (businesses and companies)

In addition to the general recommendations relating to teleworking and working in offices that apply to many of the companies of the sector and their employees, the following specific updates in each stage of the value chain will be relevant:

Air transport

1. Apply the recommendations of the previous section for the safe operation of airports, aircraft and to look after the health of the staff (aircrew and airport workers).
2. Follow the guidelines of the Airports Council International (ACI) and the International Air Transport Association (IATA).
3. Take temperature measurements of the passengers.
4. Increase the spacing between the customer service points in the *check-in* zones to allow social distancing between passengers.
5. Modify *check-in* and boarding practices to avoid the need for staff to come in contact with boarding passes, through the use of the electronic *check-in* and portable scanners, for example.

Maritime transport of a tourist nature

1. Carry out tests (*screening*) of passengers before they embark.
2. Provide passengers with general information on COVID-19, as well as preventive measures of the vessel.
3. Request contact information of all passengers and crew members before disembarking, and keep it on board for at least one month prior to landing.
4. Train the crew to improve their ability to recognize the signs and symptoms of COVID-19, as well as the procedures that must be followed if a passenger or crew member shows symptoms.
5. Clean and disinfect the whole of the vessel frequently, especially when embarking new passengers.

Land transport group and individual (rental cars)

1. Extend the hygiene measures of vehicles after each rental or journey, using products recommended by the health organizations, paying particular attention to the vehicle interior and any points that require more on the part of the customers and users.
2. Sanitize *shuttle* and *van* transport vehicles with recommended products.
3. Reduce the maximum number of persons allowed on each journey in buses and shuttle vehicles.
4. Use *self check-in* terminals or kiosks when collecting and returning vehicles, reducing any face-to-face contact.

Hotels and tourist accommodation

1. Extend the cleaning and hygiene measures in the rooms and in common use areas, following the recommendations of the health authorities.
2. Use the rooms on a rotating basis, restricting access to the rooms used in the previous twenty-four hours. A similar recommendation is to extend to temporary rental houses.
3. Train, qualify and equip workers so that they are protected and prepared to identify and manage cases of infection.
4. Require the use of basic protective equipment (e.g. Masks) between staff.
5. Establish protocols on how to deal with cases where customers show symptoms.
6. Increase the use of technology in customer service, such as self check-in, (*check-in online*), etc.
7. Restrict areas of free movement of people in properties, shutting down or adjusting the hours of operation and access to common areas such as gymnasiums, business centers, swimming pools, etc.
8. Avoid the use of buffets in restaurants, opting for *a la carte* options and preferably room service.
9. Include signposting to remind both the employees and the customers of the need for frequent hand washing with soap and water.
10. Adopt protocols for carrying out tests (*screening*) of customers before registration, following the instructions of the World Health Organization (*WHO*) for correlative sectors.
11. Keep windows and doors open as much as possible.
12. Establish good practices for using elevators and always restrict their use wherever possible, encouraging the use of stairs.
13. Remove any decorations or fabric items from surfaces if they are not essential and hinder sanitization.
14. Adapt contracts for the provision of services to the requirements for cancellation for reasons relating to new waves of the pandemic.

Tourist attractions

1. Extend the cleaning and hygiene measures in spaces, following the recommendations of the health authorities.
2. Promote the wearing of masks by visitors.
3. Control the entry of visitors, establishing limitations to entry that will allow safe use of the spaces and preventing crowds.
4. Measure the temperature of visitors when they enter the premises.
5. Establish gradual reopening plans, informing the visiting public of the restrictions in order to prevent crowding and excessive demand. Particular care must be taken with the use of promotions and free admissions, which may boost visits at the time of reopening.
6. Maintain proper air circulation wherever possible.
7. To begin with, prioritize the reopening of outdoor spaces, such as natural parks.
8. Adjust restaurant services, if they exist, to the recommendations of the World Health Organization.

Tour guide agencies and similar services

1. Extend the cleaning and hygiene measures in physical spaces, vehicles and equipment, following the recommendations of the health authorities. In this regard, it is important that the protocols include cleaning after each use of the equipment, vehicles, etc.
2. Use of individual protective equipment by the guides.
3. Prioritize small groups of customers in each tour.

Focused on demand (consumers)

1. Strengthen communication on the need to consult the travel and traffic restrictions imposed by each country, province or city before traveling.
2. Reinforce, with the traveling public, the need to follow the recommendations of the World Health Organization (WHO) relating to personal hygiene, social distancing, coughing etiquette and food care.
3. Reinforce, with the general public, the need to pay attention to the cancellation policies and alterations to the purchases of travel and related services.
4. Establish clear communication strategies with the public on when it is safe to travel again, following the directives set by WHO and the health departments of each country.
5. Check the number of non-resident people entering holiday destinations near large cities, respecting the load capacities set by the local health facilities.



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