## CRISIS MANAGEMENT AND DISASTER RESPONSE CENTRE OF EXCELLENCE

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# COVID-19 PART 4 APPLYING MEASURES

(03 – 09 April 2020)

This report represents a summary of open source information, gathered up to and including 09 April 2020, and was assembled on 10 April 2020. All views and opinions expressed are solely those of the author, unless otherwise stated and do not necessarily represent the official position of the CMDR COE or any government and non- government organisation or other group. The author does not bear responsibility for incomplete or incorrect facts cited or referred to herein. The majority of reference materials include official documents published by the World Health Organisation, governmental pages, and online statistical databases.

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## ANALYSIS OF DEVELOPMENT OF THE COVID-19 AND MEASURES BY COUNTRIES

The psychological limit of one million people infected by the COVID19 was crossed last week. Europe and the United States are currently in a very complicated period as with the measures taken to combat the coronavirus spread are placed for the health and safety sake of population.

However, it is becoming increasingly clear that the social and economic consequences could cause very serious damage, probably more serious than those resulting from the virus itself. It is logical that the longer a country's economy remains closed, the greater the number of forced bankruptcies of small and medium-sized businesses. This, in turn, will lead to too much cost associated with their recovery in the next few years.

Isolation puts people's mental health at risk, cases of domestic violence are increasing, education and the prospects of millions of young people are being affected. Any lift of lockdown rules will be gradual.

On the one hand is the World Health Organization, which urges individual countries not to abolish restrictions early. On the other hand, it is logical to assume that this state of isolation cannot last forever.

This situation brings to the fore the question of how long lockdowns can last and how long the economies of the world will remain artificially blocked before causing irreversible consequences for businesses and leaving much of the population without a livelihood. Isolation puts people's mental health at risk, domestic violence increases, education and prospects affect millions of young people

The fact that worries people is the lack of plans or strategies for the immediate relief of measures, which is largely explained by the ambiguity and unpredictability of the problem.

In this context, the need arises for developing similar strategies by each EU Member States for the gradual lifting of a state of emergency, as the EU has already begun this process of rebuilding countries after dealing with the situation. States are expected to set strict rules for the safety and security of people, which will allow them to return to their jobs safely. Some governments have started work on this. Austria, Germany, France, Spain, Belgium and Finland are the countries that have set up expert committees to monitor the gradual relief of quarantine measures.

## Africa

Crown virus pandemic has also spread to Africa (Annex 10). On February 14, 2020 the first confirmed case of the continent is in Egypt, and the first

confirmed case in sub-Saharan Africa was in Nigeria. Most of the identified cases came from Europe and the US, not from China.

Concerns about the spread of COVID-19 in Africa are related to the fact **that many of the continent's health systems are inadequate, have problems such as lack of equipment, lack of funding, inadequate training of healthcare workers and ineffective data transmission.** There is concern that the pandemic could hardly be controlled in most countries, causing major health, social and economic problems.

It is suggested that handwashing and physical distancing can be challenging in some places in Africa. Quarantine as a measure is also very difficult to implement. Diseases such as malaria, HIV, tuberculosis and cholera can be exacerbated. The World Health Organization is helping many continents to set up COVID-19 testing laboratories.

Many preventive measures have been implemented in various countries in Africa, including travel restrictions, cancellations, cancellations, school closures and border closures. Experts say the Ebola experience has helped some countries prepare for COVID-19.

In some countries, panic events similar to events in Turkey (eating yogurt soap), Iran (alcohol poisoning) and China (excessive use of garlic, or burning of the insides) have been observed. A Lagos government official in Lagos has revealed that hospitals are accepting patients suffering from chloroquine poisoning, in which people overdose with the drug as a preventative measure against the crown virus. Excessive use of chloroquine is now endangering the lives of many in this country.

As of 6 April 2020, two sovereign African States have not yet reported a case of COVID-19: Comoros and Lesotho.

#### Australia

The rate of increase of cases in Australia has declined significantly over the last week. The increase in infected persons on a daily basis is in the range of 1-3% - compared to the peak of the increase 3 weeks ago, which was in the range of 20-25%.

What has made an impression over the past week is the large increase in the number of people cured. To date (April 9, 2020), the number of people cured of the infection is almost half the number of registered cases since the start of the epidemic. If the trend continues, it will be possible to talk about getting out of the epidemic in Australia. However, it is unclear the impact of the measures on social exclusion and whether eliminating them will not cause a further increase in cases.

The whole picture of the disease is also not clear. 300,000 tests are currently being done. Due to the obscurity of the manifestation of the symptoms of the disease, it is not clear how many residents are carriers and how many have gone

through the infection so far. This poses many unknowns to attempts to predict the further development of the disease.

### Austria

This is the country that has managed, in a very short time (similar to South Korea), to cross the peak of the disease and reduce the number of infected to relatively tolerable values. For the first time since the outbreak of the coronavirus pandemic, the number of cured in one day is higher than that of new cases (as of April 4, 2020). In regard of this, the government plans to start lifting some of the current measures. Shops with an area of less than 400 square meters are expected to reopen on April 14, subject to strict hygiene standards. After small retail outlets, it is expected that all other stores will open in the beginning of next month and the restaurants will reopen in mid-May. The ban on mass public displays will remain in force until at least the end of June. At the same time, the country is extending the requirement for wearing masks, making it mandatory for the population in shops and urban transport. However, the process of restoration to normal life will be monitored and analyzed continuously to prevent a second wave of coronavirus infection.

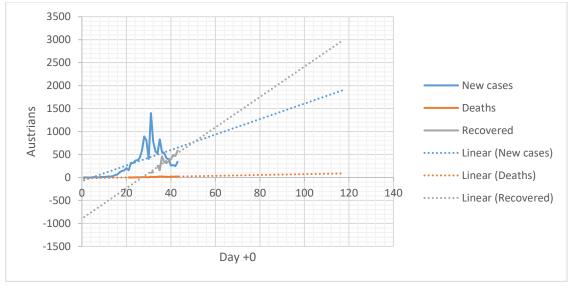


Figure 1 Linear distribution of morbidity, mortality and recovered in Austria

Due to the high need for short-term work support in the crisis, the government has increased the fund allocation for such from one to three billion euros. By April 3, 2020, one billion euro job applications had been approved. Coronavirus 'short-time work' has so far provided around 400,000 jobs in Austria. The high popularity shows that the newly designed model works and helps. Behind each of these numbers are people who are still employed by companies and are not registered as unemployed.

#### Belgium

In Belgium, there is a relatively unstable tendency to reduce the morbidity curve. Health authorities in the country believe that the COVID-19 epidemic is near control. The positive news stated the number of cured and discharged from hospital with improved health has exceeded the number of newly admitted patients. Strict restrictions on public life imposed by the federal government three weeks ago may continue until May 3, 2020. Citizens are advised to continue strict compliance with the measures for a few more weeks. The Belgian government has allocated 5 million euro for the development of a coronavirus vaccine.

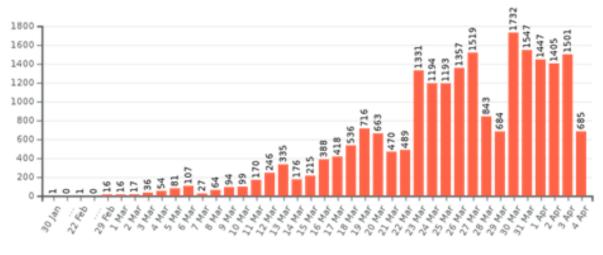


Figure 2 Total cases by days in Belgiem

## Brazil

A similar approach to the US one is observed in Brazil (Annex 8). Although they apper to be the fourth wave of propagation. The trend in Brazil is towards a sharp increase in the number of people infected in the last week. The measures taken are aimed at protecting against the collapse of the health system and the economy and stabilizing the business.

The situation to date shows the ineffectiveness of the measures. This is due to the initial underestimation of the situation and the delayed and reactive measures has lead to the uncontrolled spread of COVID 19 in the country. Researchers has mobilized to increase test availability in Brazil. The expectation is that with only a drop of blood the patient will be able to understand whether he has a coronavirus and at what stage; the idea is that the experiments are ready for the current wave of COVID-19 and the action has mobilized some of the major Brazilian universities. The Minister of Health states that their number will grow exponentially by the end of June.

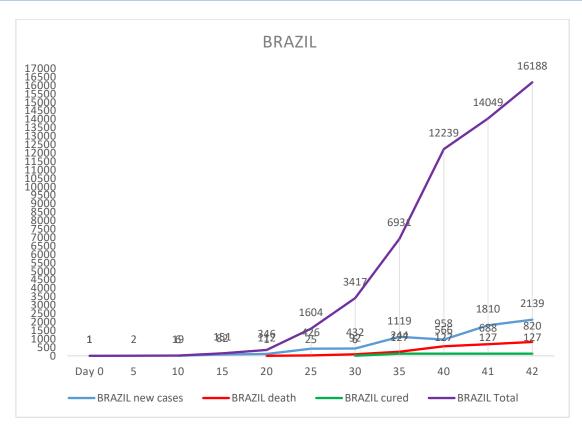


Figure 3 Accelerating the spread of infection in Brazil

#### China

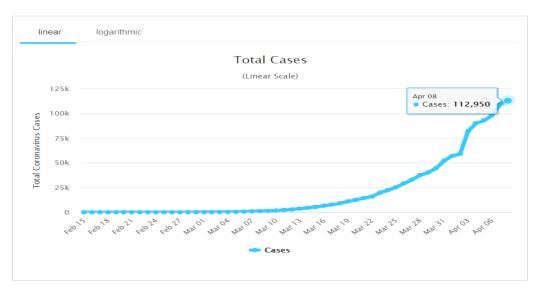
China's approach (Appendix 11) to dealing with COVID-19 can be defined as a strategy for limiting the spread (containment through suppression of COVID-19 transmission rate). A major trend over the past period **is the stabilization and recovery from the crisis of the spread of the virus.** 

The focus is on preventing the recurrence of high rates of spread caused by the bringing back of COVID-19 and from cases of a-symptomatic infected ones. Official data provided by the China Center for Disease Control (China CDC) has indicated a minimal number of registered local cases of infection and a general trend towards stabilization.

Moderate and gradual loosening of the strict measures of physical isolation and distance with maintaining high levels of personal hygiene and protection (eg wearing masks, washing hands, preventing clumps in tight confined spaces) are combined with a focus on accelerated economic and social recovery through targeted economic and financial incentives and support. A strong focus is placed on the development of the innovation and new technologies sector, as well as on research and development (especially in the medical field), training and training of qualified medical personnel.

#### France

Following the first case of COVID-19 in France (Annex 5) on 24 January 2020, the country has made great efforts to stop the spread of the virus. However, the general statistics so far show no sign of successfully overcoming the situation.



Total Coronavirus Cases in France

Figure 4 Total cases in France

According to the latest data from France, the overall mortality rate at the national level remains within the normal range after a mild flu season. However, in some regions, especially in the north-east of France, the overall mortality rate in the 65+ age group has already increased dramatically. The country has tightened its restrictions by announcing a ban on individual outdoor sports between 10 am and 7 pm, effective April 8. The move came just after a record daily COVID-19 mortality was reported earlier this week. In the last week, as an attempt to treat the disease, France has launched clinical trials involving the transfusion of coronavirus survivors into patients who have severe symptoms. The first results are expected to be available two to three weeks after the start of this treatment.

Since March, France has been following its own action plan to prevent and limit the spread of the virus. This action plan amounts to  $\notin$  45 billion and is divided into a set of specific and immediate government measures for companies that would encounter proven difficulties related to this health crisis when deploying in France. In addition, the French ministry of economy and finance has set up a working group on economic continuity to manage the impact on the French economy through a dayto-day decision-making process. A draft law permitting the implementation of these measures was presented at the Cabinet meeting on March 18, 2020. These support measures will be applied on a case-by-case basis, depending on the situation of each French company and in fact every French company affiliated to an international company. They may be reviewed in the light of the epidemic in the coming weeks.<sup>1</sup>

It is still difficult to say what the impact of these measures will be. The next few weeks will show whether the measures are sufficient. Since April 7, authorities have partially lifted the ban on street markets if they comply with a series of strict rules on social distance. But the overall assessment of the country's economic impact in the last week is not very positive. On April 6, French finance minister stated France is likely to see its worst post-war economic downturn this year, far exceeding the minus 2.2 percent drop in 2009 after the global financial crisis.<sup>2</sup> Two days later, the Bank of France claimed the French economy was in recession with a 6% decline in the first quarter of this year, the worst since 1945.<sup>3</sup>

Next few weeks will be very critical for the French economy, showing whether the implemented action plan and its measures bear the expected results.

## Germany

As of April 9, 2020, Germany (Annex 1) remains the fifth largest country in the number of confirmed cases of coronavirus (110,483), with a very low mortality rate (1.6%).

7,97% persons aged 80 years and older. The median age of cases is 49 years.

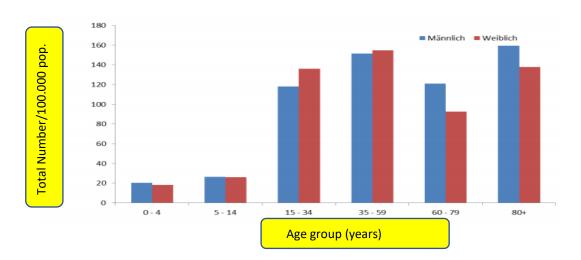


Figure 5 Electronically reported COVID-19-cases/100,000 population in Germany by age group and sex (n=66.930) for cases with information available (07/04/2020 12 AM)

<sup>&</sup>lt;sup>1</sup> <u>https://nl.ambafrance.org/COVID-19-French-government-measures-to-assist-companies-and-workers</u>

<sup>&</sup>lt;sup>2</sup> <u>https://www.france24.com/en/20200406-france-heading-for-wost-post-war-downturn-coronavirus-finance-minister-bruno-lemaire-warns</u>

<sup>&</sup>lt;sup>3</sup> https://www.france24.com/en/20200408-french-economy-drops-by-6-in-first-guarter-officially-in-recession

The new cases in Germany continue to increase, but the trend observed in the previous week is a steady decrease in the disease curve. There is a greater concentration of cases in the central and western provinces of the country.

Most of the plants in the largest European economy are still operating, supporting economic activity during the pandemic. This is also aided by the huge number of orders and rebuilding from China, which is thought to be already well out of the crisis.

To this end, the federal state is preparing a list of measures, including:

- mandatory wearing of masks in public places
- limited public activities;
- fast tracking of infectious;
- schools will open doors based on regional decisions;
- stringent border checks will be relaxed.

This will allow Germany to return to its normal rhythm after the quarantine measures expire on April 19, 2020. The proposals contained in the draft action plan were compiled by the Ministry of Defence that the measures should be sufficient to maintain the number of people infected by each person below 1, even with a gradual return to normal. In order to avoid the worst-case scenario, Germany should stop spreading the virus and reduce the infection rate (R0 - how many people can infect one person with the virus) to below 1 around Easter. The lockdown should then be lifted and the new cases should be prevented by mass testing and movement tracking through mobile phones. However, to accomplish this, mechanisms will have to be used to track more than 80% of people who have had contact with a coronavirus infected within 24 hours of diagnosis.

By this time, every week, the restriction measures taken cost about 1% of the country's GDP (about 40 billion euros).

## Greece

The number of infections, hospitalizations and deaths in Greece (Annex 3) is increasing but at a slow pace. It is assumed that the country has reached the peak of the infection curve and is currently seeing an uneven decline in morbidity on a daily basis. In this regard, the country is optimistic about the future and is ready with the first scenario to emerge from the 45-day crisis, with stores opening eventually by May 2. It is estimated that the country has already peaked and is heading towards stabilizing the situation<sup>4</sup> and complete lift round May 6, 2020.

<sup>&</sup>lt;sup>4</sup><u>https://www.zougla.gr/greece/article/stis-6-meou-i-oloklirosi-tou-kiklou-tis-epidimias</u>



Figure 6 Prognosis for morbidity in Greece

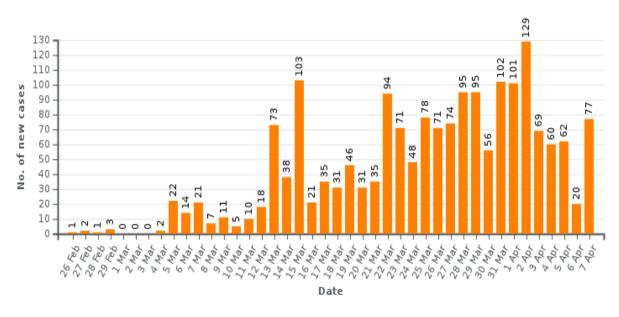


Figure 7 Total case of morbidity by days in Greece

The government has begun discussing steps to gradually lifting the quarantine in the country, but only on condition that the coronavirus epidemic is in significant recession with single-digit cases of disease and that the situation in hospitals is kept under control as it is now. A decisive factor in this decision is the state of the economy, which is unable to bear quarantine for more than two months, as business will collapse and create a new wave of unemployed, causing a financial collapse and the government unable to pay new ones. 800 euros to about 2 million with terminated employment contracts.

The government scenario envisages the gradual opening of factories with the normalization of the situation by the beginning of June. In particular: there will be shopping malls open but no shopping malls, which is scheduled for May 2. The government will also evaluate the first reactions of citizens who have been warned

to be careful as the virus will not be eliminated forever. After a week of observing people's behavior, the turn comes to the big companies that are currently operating with reduced capacity. After the first two weeks of May, and if the situation allows, schools, training centers and maybe even kindergartens will be opened. Schools will open and close within a few weeks so students can prepare for the matriculation exams. In the last week of May, the expectation is to continue the same scenario of normalizing public transport in order to stabilize the labor market, if conditions permit and people comply with the regime. At the same time, job routines in the country are expected to start to normalize.

#### Hungary

Prime Minister of Hungaru (Annex 13) Viktor Orbán has revealed details about the four avenues of defense against the coronavirus.

"There are four avenues of defense against the coronavirus in Hungary," PM Orbán began his address earlier today, adding that "these are military, police, healthcare and economic avenues."

Regarding the healthcare avenue of defense, the available healthcare personnel, in Hungary are 19,431 doctors, 4,312 trainee doctors and 690 senior medical students. Moreover, there are 105,000 healthcare professionals on standby.

Giving an account of Hungary's police capabilities, there are 70,275 police officers and 46,573 volunteers ready to be deployed. They will be complemented by a 43,980 strong military force.

"The most important thing to do now [regarding the economy] is to protect our jobs," PM Orbán said, because the following period "will be a difficult one", it will require additional personal effort from everyone.

"The more we cooperate, the more lives we can save," PM Orbán said in closing.

#### Italy

The situation in Italy (Annex 6) is still hard to encompass and define. Although the number of new cases and deaths is declining, the disease is far from over, and the health care system has long exceeded its capacity. The main reasons for this are:

- the poor organization of the assistance provided to the most deprived, and the lack of preparation for such an epidemic.

- the medics are not prepared and go without protective equipment. Many of them, in turn, become infected and must be quarantined. There is no one to replace them and as a result, they only consult their patients over the phone, which proves to be extremely inefficient.

- part of the doctors are exposed to psychological stress, seeing their colleagues become infected and some even die. In addition, the equipment at their

disposal is extremely inadequate. This group of doctors also stop tours and care for the most vulnerable.

The number of doctors who have died so far is around 120 people. Among them are retired doctors, whom the government called a month ago to help fight the coronavirus, which officially claimed 17,669 lives in Italy. In addition, 30 more nurses and other nursing staff also died from COVID-19.

However, compared to the previous period, there has been a decrease in the number of infected persons in the last week. Italy may gradually lift some of the restrictions introduced to end the COVID-19 infection from the end of April if the spread of the disease continues to slow. Prime Minister Giuseppe Conte has stated that sectors should be selected to resume their operations.

Five consecutive days (from 4 to 9 April, 2020) reduced the number of patients in intensive care units, and the number of deaths from April 8 is smaller than that of 07.04. This raises hopes that the situation is calming down, though new cases on April 8 were about 800 more than on April 7. Based on such one can conclude that still there is an uneven and irregular curve of infection and deaths in Italy.

On April 8, branches of Confindustria's employer lobbying group in the northern regions of Lombardy, Veneto, Piedmont and Emilia-Romagna, where 45% of all Italian production is concentrated, are calling on the government to draw up a "return card".

Italy introduced a quarantine on March 10, with the restrictions in place until April 13, but the government is expected to extend the measures by at least two more weeks.

The most important thing for Italy is that in the current development we expect a dramatic decline in the active cases in the coming days (a week and a little more).

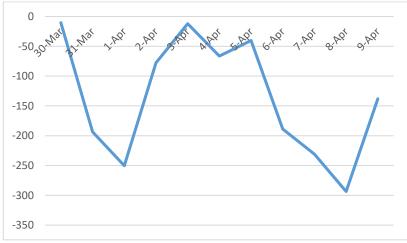


Figure 8 Increasing number but with negative acceleration

#### Japan

The negative tendency for an increase in the number of Corona virus infected last week has sharply worsened the situation in Japan. From 04/08/2020 a **state of emergency is in force in Tokyo, and more prefectures**, to stop the spread of the new wave of coronavirus.

The Prime Minister also announced an impressive financial plan to support the economy. The state of emergency will last for about a month and will give governors the power to call on people to stay home and businesses to stop work, but without imposing strict measures like those in other countries. As a whole, no sanctions are provided for people who violate the requirements and will rely more on social pressure and respect for the authorities for their compliance.

A government plan of 108 trillion yen (up to 915 billion euros) has been announced to address the effects of the pandemic on the world's third largest economy. The scale of the epidemic is not as large as in other countries, but the number of infections continues to increase, with particular concern about the spread of the virus in Tokyo. Up to 1200 cases have been registered in the capital to date.

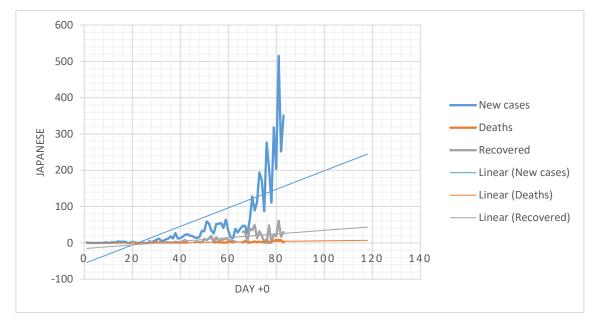
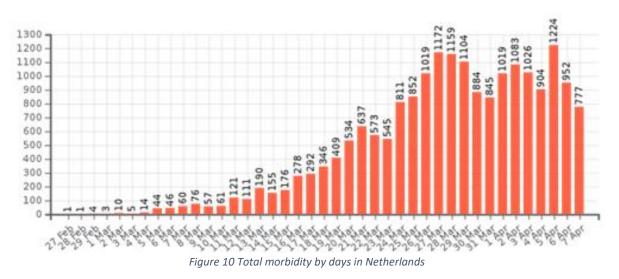


Figure 9 Linear distribution of morbidity, mortality and recovered in Japan

#### Netherlands

Measures towards the spread of coronavirus in the Netherlands have halved the rate of infection, but according to the government, they must remain in place to be truly effective. The measures taken are effective until April 28 with expectations from the government sources to assess what measures are needed in the period after that date.





The Netherlands National Institute for Public Health and Environment -RIVM has launched a large-scale study on how many people have antibodies to the new coronavirus. Invitations to the survey were sent to 6000 people from all over the country and across all age groups. In the coming months, antibodies in the blood will be measured in several rounds of testing. With the results, the Dutch institute aims to learn more about the spread of the virus and the development of "herd immunity" across all age groups. Anyone who has been in contact with the virus will generate antibodies. Measuring these antibodies in their blood reveals how many people in the Dutch population have been in contact with the virus.

The participants are people who have previously participated in the PIENTER study<sup>5</sup>. There nearly 8,000 people between the ages of 0 and 90 are being surveyed in 2016-2017 period. The institute collected blood samples from the people who participated in the study and gave permission to store their samples. Blood samples will be taken again for the study of this part of the population. The two blood samples will be compared, which will provide important information on the spread of the virus and the development of immunity of the population. The studies will cover the period before, during and after the outbreak of the new coronavirus.

#### Norway

Unlike Sweden, Norway introduced strict restrictions early. As early as March 12, the Norwegian government imposed measures to stop the spread of COVID-19. The country has closed its borders to foreigners. Norwegian nationals returning from abroad are compulsorily placed under a 14-day quarantine. Schools and kindergartens remain closed until Easter, as are churches, universities and other institutions. By the end of the week, the government in Oslo will have

<sup>&</sup>lt;sup>5</sup> PIENTER is a long-term study on the protection against infectious diseases among the Dutch population.

to take emergency measures and the need to extend them. As result by far the spread of the infection in the country is under control, with recent data showing that an infected person is currently transmitting the infection to an average of only 0.7 people. For comparison, before the introduction of quarantine, an infected person transmitted the virus to an average of 2.5 people. However, Norway will not yet lift its lockdowns.

## Poland

In Poland (Annex 2), the number of infected is still rising, but the rate of growth of the disease is relatively low, compared to other countries, with an average of 349 people infected per day in the last week. For the time being, the country maintains measures in place to combat the coronavirus, such as closing schools, banning the gathering of more than two people outdoors and imposing a quarantine, by virtue of it people are allowed to leave their homes only for imperative reasons. It is expected that the peak of the new coronavirus in the country will be reached this month. The government has received much criticism for its decision not to postpone the May 10 presidential election. To this end, the Polish authorities allowed citizens over the age of 60 and those under hospital or home quarantine to vote by mail.

## Russia

The number of coronavirus infected in Russia has been steadily increasing over the past week, reaching 10,131 people (04/09/2020) in 81 regions of the country, with more than 70 percent of those infected in Moscow. The spread of the contagion in Russia is exponential in nature, evident from the acceleration values. The country is still in its early stages.

The government has introduced stringent measures, but their effect will largely depend on the personal motivation to comply with them. At such a rate of development, the peak is currently expected in about 20 days. Then the weather will warm up further and this can prevent the spreading according to the worst scenario.

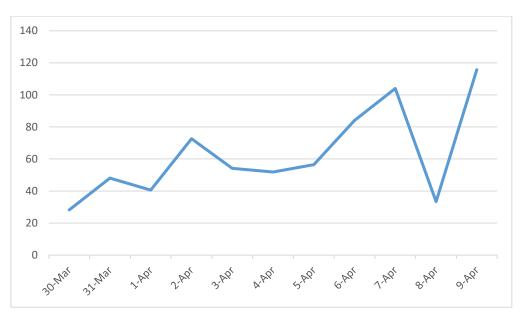


Figure 11 Accelerating the spread of infection in Russia

The coronavirus crisis has seriously affected the country's economy. At the end of March, the price of oil fell to its lowest level in 18 years. The most serious problem for the Russian economy is the depreciation of the ruble, which is a consequence of falling oil prices. The ruble is heavily devalued, and the Russians are expecting a significant rise in price of all goods.

Energy and metals demand has declined worldwide, and arms purchases are being delayed because of the coronavirus epidemic. Russia could export more cereals, but the government fears a shortage in the domestic market. As of April 1, restrictions and quotas have been imposed on exports of wheat, rye, maize and barley, which will remain in force for the first time in the next three months.

#### **Spain and Portugal**

Based on observations on Spain and Portugal, it is considered the social perception of an invisible threat presented widely. The tricky thing about treating and controlling a pandemic is that the symptomatic picture is like normal flu at first but later the difference between Covid-19 and seasonal flu remain huge. One of the mysteries about the virus so far is why in the two neighboring Iberian countries, the death rate is significantly different - 1 million people in 300 in Spain and 34 in Portugal. According to many scientific capacities, there are a number of reasons behind this difference, even assuming that it is somewhat a matter of how statistics are kept. In Spain, there has also been some decline and this has been seen as an encouraging signal that the epidemic is peaking and beginning to weaken - in three days (April 3-5) there has been a fall in deaths caused by coronavirus and the government has announced that the curve of the epidemic stabilized and began to

decline. In the following days, however, there was a rise again, albeit weakly in deaths and newly discovered cases.

However, the government of the Kingdom of Spain has announced that it will begin the first steps towards some relief from the country's stringent restrictive measures. It is also planned to extend the perimeter of the coronavirus to include screening for people without symptoms. This is due to the test production capacity in Spain itself, which reached up to 240,000 per week. Portugal has so far abstained and pursued its chosen policy of restricting and testing only infected and suspected clusters.

Both Iberian countries report that, in addition to mortality, the Covid 19 pandemic is a concern for societies with damage to daily life practices. The congestion of the health system and public security is alarming because of the huge commitment of resources in one direction only, without a clear idea of the time and the prospect of their recovery.

Both sides continue their state of emergency. Only guarantees are given that democratic rights and freedoms will be restored afterwards. Measures against direct and indirect damage to economies are indicated with the proviso that they are subject to change, since it is not yet clear how the fight against infection and the corresponding resource spent will be evaluated / re-evaluated. The resource spent is only said to be large, but how much no one is hired to specify.

## Sweden

Sweden is one of the countries that initially took a different approach and did not impose strict restrictions. However, the number of affected continues to increase: confirmed cases of the sick are already over 8400 people and the casualties are close to 700. By now Sweden was avoiding the bans and preferred to lead the battle with recommendations for citizens. Against this background, pressure on the government to change course is intensifying. A new crisis law is already under discussion that will give the government expanded powers to combat the pandemic. The government is pushing for the law to be adopted by April 10 at the latest. It will include restrictions on public transport and commerce. It is planned to close shopping malls, restaurants and other public places, which are now allowed to gather up to 50 people. If passed, it is expected to remain in force for the next three months. It is estimated that it will take so long for the country to deal with the worst.

### Taiwan

Taiwan's approach (Annex 12) is similar to that in China, except that the implementation of the adopted measures started at a much earlier stage. At present, the total number of infected people in the country is 380, the mortality

rate is below the percentage of the infected and far below the per capita rate, and the treated patients (80) are growing at a steady rate.

A major trend in recent days is the stabilization and recovery from the crisis of the spread of the virus. The focus is on preventing the resumption of high rates of spread caused by the re-introduction of COVID-19 and from cases of asymptomatic infected ones. There is a tightening of measures to curb mass events and promote compliance with personal hygiene and protection measures.

The gradual tightening of physical distance measures, as well as the country's stable fiscal position, lead to a (relatively) smoother economic downturn (compared to China). The country's high-tech profile contributes to the relatively smooth transition to a physically distant daily routine, mitigating the negative effects on society (social, mental, economic).

Established good practices, a functioning system for responding to an epidemic situation (eg the SARS epidemic in 2003) and extremely high confidence in the work of the institutions have facilitated the implementation of anti-epidemiological measures. The use of new technologies, including artificial intelligence for Big Data processing and analysis, enable Taiwan to successfully implement measures to identify and trace potentially infected ones, as well as follow-up and analysis measures.

## USA

The acceleration of the spread of infection in the United States is decreasing, which does not mean that there will be a sharp change in the rate of infection in the coming days. We expect this to happen in 4-5 days at the earliest, provided that no major metropolitan areas are seriously affected. Unfortunately, the CMDR COE death rate estimate for 24 hours turned out to be completely correct and reached 2000 in 24 hours.

The country is demonstrating its own crisis management approach. It is characterized by the decentralized identification and implementation of measures across states, which distinguishes the American approach to combating the spread of coronavirus from that in Europe and China. The reason is the differences in the moral and value systems. There is a low level of social discontent and tension at the moment. Although there has been a significant increase in the number of tests in recent days, the lack of a system for prioritizing them is considered a disadvantage.



Figure 12 Accelerating the spread of infection in the United States

#### NATO

As a politico-military alliance, NATO (Appendix 14) demonstrates the qualities of being adequate to the new threat. Through its actions, NATO supports the development of solidarity between its member and partner countries, showing its capabilities despite the difficulties. The Alliance's core activity is to maintain the readiness of military medical teams, ready to assist the Allied forces in carrying out their operations and missions. According to WHO recommendations, NATO military and political leadership is taking preventative measures at the headquarters of the organization to reduce the risk of spreading the disease.

A videoconference between the NATO Secretary General and member states' foreign ministers discussed how NATO's capabilities could be used more effectively to combat the virus. The readiness and ability of NATO forces to carry out their missions and military operations has been reaffirmed. At the meeting, SACEUR was designated to coordinate NATO's efforts to combat the pandemic and use of the Rapid Corridor for Military Air Supplies to transport assistance to those in need of COVID-19 combat.

A meeting has been scheduled between the Secretary General of NATO and member states' defense ministers to determine future concrete measures. In this regard, a meeting of the AST with the Centers of Competence for the next week is scheduled, in which it will be debated how the Centers respond and how can support the Alliance's efforts. Requests for international assistance to combat COVID-19 under the EADRCC have increased over the past week. Two more requests have been added to the current requests (Albania, Bosnia and Herzegovina, Spain, Italy, Moldova, Northern Macedonia and Montenegro), Georgia and Colombia. The increase in requests has not been much against the background of increased bilateral assistance over the last week:

- The UK has donated £ 71 million for vaccine and diagnostic testing to support WHO and other international humanitarian organizations. The country is donating £ 150 million to the IMF Trust Fund to help developing countries repay their current debt so they can focus their resources on countering the proliferation of Covid-19. The UK has participated in a campaign by the private company Unilever in a program to distribute over 20 million hygiene and cleaning products to Third World countries;
- - Germany continues to transport patients from Italy and France to its territory. German side sends tonnes of medicines and 50 respiratory beds to Spain;
- Slovenia, through the European Union Civil Protection Mechanism, has provided 100,000 medical masks and 100,000 protective masks to Northern Macedonia;
- Hungary, provided 100,000 protective masks and 5,000 space suits to Northern Macedonia;
- NATO Enhanced Forward Presence Battlegroup Lithuania (NATO eFP) provided medical staff from Germany, the Netherlands and Croatia to assist Lithuania's healthcare system.

## EU

The European Union's response to the COVID-19 epidemic focuses on four priorities:

- limiting the spread of the virus;
- ensuring the delivery of medical equipment;
- promoting research into treatments and vaccines;
- support for jobs, business and the economy.

To coordinate the response, the Council activates the EU Integrated Policy Response to the Crisis (IPCR), holding weekly roundtables gathering EU institutions, experts from EU agencies and representatives of the Member States concerned. The European Commission and the Council facilitate ongoing contact and coordination between the relevant national ministries. The President of the European Council holds video conferences with EU leaders. The European Center for Disease Control (ECDC) issues rapid risk assessments and epidemiological updates to the Union population.

Under the Union Civil Protection Mechanism, the EU:

- coordinates the deployment of medical teams in most affected areas;

- facilitates the search for additional protective equipment, especially medical masks;

- activates the Emergency Coordination Center to coordinate 24/7 support;

- has set up a new common European emergency medical equipment reserve, such as ventilators, protective masks and laboratory supplies, to assist EU countries in need.

The Union is supporting research into vaccines and treatment through the allocation of  $\notin$  140 million to research funds to develop treatments and vaccines for 18 funded research projects.

EU speeds up tracking and promotes COVID-19 research by mobilizing € 48.5 million for 18 vaccine and treatment projects through the EU Horizon 2020 research program and € 90 million public and private therapeutic and diagnostic tools through the Innovative Medicines Initiative (IMI).

The EU and its Member States are taking action to minimize the effects on the economy:

- EUR 37 billion from EU Structural Funds has already been redeployed to the Coronavirus Response Investment Initiative;

- EUR 37 billion from the EU budget to support health systems, small and medium-sized enterprises (SMEs) and labor markets through the Coronavirus Response Investment Initiative

- up to EUR 28 billion of structural funds for the period 2014-2020, which have not yet been allocated to projects, are eligible for crisis response
- up to EUR 800 million from the EU Solidarity Fund targeted at the most affected countries, thanks to the extension of the Public Health Crisis Fund

The European Commission has presented a proposal for temporary support for reducing the risk of unemployment in emergencies (SURE). It aims to help people keep their jobs during the crisis by providing Member States with loans of up to  $\notin$  100 billion to cover part of the costs associated with setting up or expanding national employment schemes in the short term.

## **Bulgaria**

The situation in Bulgaria has not changed much over the last week. The development of the spread of the infection still has great potential and containment is due to the measures taken. The number of infected persons remains significantly below the threshold of the health system. We also expect a faster increase in the number of recoveries, which will bring the figure of active cases closer to the CMDR COE estimates. Alarming is the fact that there is no specific treatment for COVID-19 yet, and the country remains threatened by a sharp rise in the number of patients with the removal of restrictions. The warm weather in recent days and the already established habits of the population for social distance will have a positive impact on the slowdown in the spread. It is

desirable to have clear declared conditions for switching to a relaxed regime and make them accessible to the general public and business.

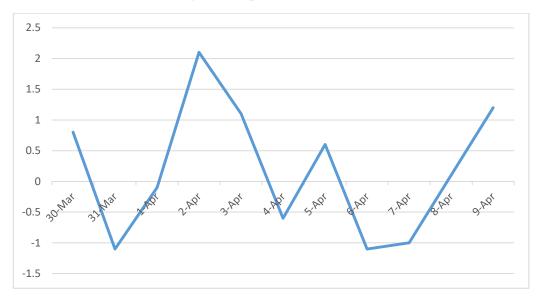


Figure 13 Accelerating the spread of infection in Bulgaria

#### **CONCLUSIONS:**

1. Despite the number of infected people around the world, and in Europe in particular, keeps increasing, the acceleration spread charts are very informative about what to expect in the upcoming days.

2. Measures taken by most European countries, and particularly those severely affected, are working. The value of the infection spread acceleration is negative. This is a result of the reduced rate of spread. The oblique section of the death toll curve begins. In the upcoming days, we are expecting a sharp drop in the number of casualties per day and a significant discharge on the health system.

3. Higher temperatures and solar radiation will make the spread of the virus even slower. Against this background, the announced plans to ease restrictive measures are logical. The best-case scenario is to return to normal social and productive life with respect for distance, high level of hygiene and control. This will help to control the propagation of the second wave.

4. Significant variations are observed in the ways cases are classified and data submitted to WHO by the countries. This is due to several factors: a different approach to diagnosis, a different assessment of critical cases, differences in the cause of death of a deceased infected person.

5. It is, however, clear that some of the countries in Europe have had developed a strategy for a situation of the kind. Some governments' aim is to obtain herd immunity, and this is to be done at a rate not exceeding the capacity of their health systems. For a long time, these countries allowed the spread to develop until it reached the required speed, and only then began to actively control over the process. Desired herd immunity is the solution to the problem with the virus. As it can be currently seen, this acquisition has a high price and being paid by the society.

6. In economic terms, the crisis, in addition to having a negative effect, will eventually have some positives. It will greatly help in restarting entire industries, bankrupting unstable companies and replacing them with new ones. Unfortunately, the process will be painful in the beginning and prolonged.

7. The spread of COVID-19 infection continues at a very high rate, with the only safe procedures at this stage being to comply with a number of measures, most notably physical proximity and social distancing. The critical elements for countries remain the response readiness and capacity before the crisis.

8. The trend in Central and Western Europe countries, with the exception of Sweden, is to continue to constrain the growing number of the sick and subsequently to cope with the crisis. Some countries (Austria, Greece, Norway) have openly stated intentions and strategies to gradually ease the measures adopted.

9. The trend is also maintained in Eastern European countries where a low level of the contagion curve is being sustained, which at this stage is related to the lack of tension on their health system.

10. Following the devastating impact on the United States, South American and North African countries are expected to be the next outbreaks of infection, which, combined with the low standard of living of much of the states, will lead to uncontrolled coronavirus infection. Lack of funding, inadequate training for healthcare professionals and ineffective data transmission will make it more difficult to control contamination in most African countries causing major health, social and economic problems. The advantage for these countries is that they have not been seriously affected by the coronavirus yet which enables them to take timely preventative measures. 11. The facilitated alleviation model taken by some Far East countries (Japan and Singapore) to deal with COVID-19 did not work and this required the countries to switch to announcing states of emergency for the major cities (Japan) or to adopt enhanced measures (Singapore) to curb proliferation of the coronavirus. This defines the physical proximity and partial social isolation of the population as the key measures needed to fight the infection in the next few months or until the disease has been fully addressed. It can be expected that the increase in the number of infected in these countries next week will further strengthen the measures taken.

12. Exiting the state of emergency and mitigation of measures is a matter of time and it is very important that countries to be well prepared for this phase of the fight against coronavirus. The focus is on issues such as: how to restart economies; how to make businesses work again; how to get people back to work?

13. Successful implementation of mitigation measures can only be effective if done on the basis of careful country-specific analysis, in close coordination and interaction with other countries in the region, and in particular with EU countries.

14. It is of the utmost importance to restore and stabilize Far East economies, especially in China, due to the fact that this will generate additional optimism and confidence for rest of the countries to successfully overcome the crisis. On the other hand, this will ease the dependence on the European market and bilateral trade related to key supplies of raw materials and spare parts.

15. Following the South Korean example, the contact tracing of infected people is expanded, including the use of smartphone applications and other forms of digital technology.

16. Drug discovery and rapid human testing continues at variable success. At this stage, it relies on existing, tested, and WHO approved medicines to partially support the treatment of patients. The prospect is to create quick tests that can be used at home.

17. There are increasing incidents of domestic violence as well as psychological trauma for people who are more sensitive to isolation and lack of freedom of movement.

18. South Korea, as a wealthy country, has been extremely supported by private businesses in its efforts to tackle the contagion. Large manufacturing concerns, encouraged by their desire to take care of their customers and fellow countrymen, provide both personal care for people as well as large sums of money, materials and facilities, which are also helpful to local authorities.

19. Again, the huge number of coronavirus tested in South Korea is striking. Mass testing is one of the pillars of the state in the fight against the spread of the virus as of 09.04 the total number of people tested is 494 711.

20. Despite optimistic results in reducing the number of infected and low mortality rates (2.1%), South Korean authorities are aware that the virus will still circulate for a long time. This provides an incentive to develop and apply even stricter rules for the detection and isolation of both patients and related persons, as well as the care of those who are already ill. In spite of the high discipline of the society, it seems that there are people who underestimate the danger and violate the introduced quarantine rules. It also shows the strong will of the authorities to prevent massive infestation by introducing more severe penalties for quarantine violators as of 05.04.

#### RECOMMENDATIONS

1. To continue strict compliance with the measures currently in place and strengthen the control by the relevant authorities for their compliance. Particular attention is to be paid to the upcoming Easter holidays.

2. To initiate the development of a strategy for gradually mitigating the measures adopted in the country after obtaining approval from the National Operations Headquarters. This involves setting strict security rules to allow us to keep the infection curve low.

3. To mitigate the measures gradually, sector by sector or on a regional basis, in parallel with analyzing the subsequent effects that may affect the rate of coronavirus spread. It is important to find a balance that will allow only those measures that are necessary to bring small and medium-sized businesses back to market. For this purpose, the research and mathematical model developed with the assistance of the Imperial Colleague COVID-19 Response Team of 30.03.2020 can be very successfully used.

4. In order to prevent the increase in unemployment and, in particular, to diminish this process as much as possible and reduce the burden on the state, it is important that certain rules are respected not only by small and medium-sized businesses but also by large enterprises. . The state may begin to allow the opening and return of businesses, but must increase control over measures compliance. A simple rule of thumb would play a key role in recovering the economy: you can work, but if you do not comply with the rules for distancing, hygiene, provision of disinfectants and protective work clothing, the facility will be closed. In monitoring compliance with the rules, military personnel can also be involved, who, with their presence alone, will respect the population. The key role is for the police to be in the streets, and the regional inspectors to the municipalities with specialized uniforms play a key role in controlling and imposing sanctions (initial note, financial until closure and revoke of the license). Currently, many large hypermarket chains do not yet have dispensers with disinfectants at the entrances. The shops themselves are also not organized to comply with hygiene regulations. People without protective equipment are allowed!

5. To form permanent hygiene habits among the population and business. Conducting an information campaign that the population will have to observe for a long time (next 1 - 2 years) wearing masks in public places, disinfection of public buildings, observing the physical proximity, etc. 6. The mitigation of the measures must also take into account many other additional factors, including the use of international experience of states that have already started this process and the follow-up of new cases, detecting contacts and their quarantining at national level.

7. To explore the options for tracing contacts of infected people, including the use of smartphone applications and other forms of digital technology. However, this must be in line with the requirements for the treatment of EU citizens' personal information.

8. Consideration and implementation of future economic measures should follow the development of the crisis, while remaining adequate to the evolving situation.

9. It is of the utmost importance to continue to strengthen health systems and social security networks while supporting the private sector and maintaining the financial stability and confidence of the population.

10. The population should be encouraged during the summer months to seek self-isolation in a family environment by using villas and country houses or remote urban areas. With the new mobile app and an Internet unitary information portal, it is easy for anyone to control.

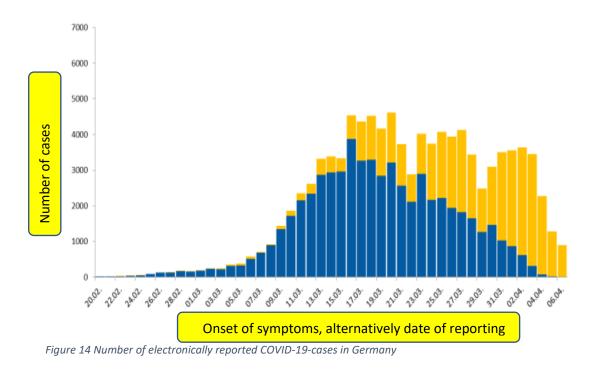
11. The focus on maintaining the health of people over 60, and especially the chronically ill is not to be shifted. The information campaign should focus on young people and make them responsible for isolating the elderly by providing essential goods and medicines. This way, they will self-discipline themselves in complying with the measures when they realize that they have their responsibility for the transmit the infection. Unfortunately, this message has not reached them yet.

12. In a state of emergency, the parking lots are almost empty and these are to be used for open markets. The parking lots have a large area, which allows for a greater proximity in setting the area. A mediator between the people who will offer agricultural goods and the parking lot owners may be the local authority/municipality. Trade facilitation measures may be granted but again if a subject to a strict control. (Annex 15)

#### Annex 1 CoV-19 in Germany

All 16 German federal states have reported cases of infection with the new coronavirus. As of **07 April 2020**, Germany has the fifth most coronavirus confirmed cases (**99,255**) worldwide but a **fatality rate** just **1.6** %. That gives Germany one of the lowest fatality rates in the world. For instance, the relative rates in Italy, Spain and USA and are **12.63%**, **9,89** % and **4.15** %, respectively. The average fatality rate worldwide is **5.62%**.

#### **COVID-19 STATISTICS IN GERMANY**



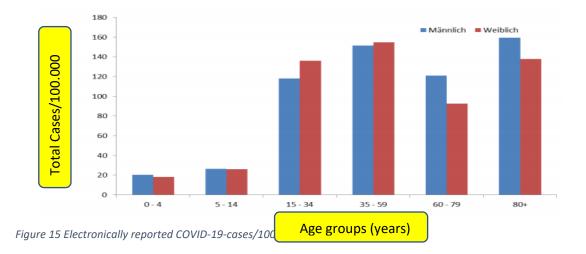
• Total coronavirus confirmed cases : **99,255** 

Number of electronically reported COVID-19-cases in Germany by date of symptom onset –blue- and alternatively by date of reporting-yellow- from 20/02/2020 (07/04/2020, 12:00 AM)

## • Demographic distribution of cases

Of reported cases, **50%** are **male** and **50%** are **female**. Among notified cases, there are **0.77%** children under 5 years of age, **1.96%** children aged 5 to

14 years, **69,97%** persons aged 15 to 59 years, **19,30%** aged 60 to 79 years and **7,97%** persons aged 80 years and older. The median age of cases is **49** years.



Electronically reported COVID-19-cases/100,000 population in Germany by age group and sex (n=66.930) for cases with information available (07/04/2020 12 AM)

- <u>Critical/Serious Condition</u> Total of **4,895** patients.
- <u>Recoveries</u>

An estimated **33,400 persons** have recovered from their COVID-19 infection. Cases were considered to have recovered if they had a known symptom onset on or before 18/03/2020, were not reported to have pneumonia or dyspnea, did not require hospitalisation or had already been discharged and did not die. Cases were included in the algorithm only if information on date of symptom onset, symptoms, hospitalisation status and vital status were available.

• <u>Fatalities</u>:

The **1,607** COVID-19-related deaths reported in Germany since 09/03/2020 concerned **63%** (1,012) men and **37%** (595) women. The median age was **82** years and the range 28 to 105 years. Of all <u>deaths</u>, **87%** (1395) were in persons **70 years or older**. Of all reported <u>cases</u> only **15%** were **70 years or older**. Reports on COVID-19 related outbreaks in nursing

Age groups (years)						
Sex	<60	60 - 69	70-79	80-89	>=90	
Male	60	101	290	459	102	
Female	14	36	105	304	133	

homes are increasing. In these outbreaks the case fatality is high. In some of these outbreaks, the number of deaths is relatively high

Table 1: Numbers of COVID-19-cases notified as having died by age group and sex (07/04/2020, 12:00 AM)

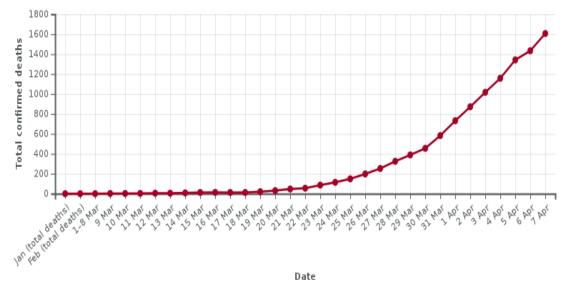


Figure 16 New Deaths per Day (07/04/2020, 18:00

## **Main Measures**

State measures to impose social distancing in the federal system of Germany, starting on 23 March 2020, and ongoing as of 07 April 2020:

- All German states have enacted **prohibition of assembly** of more than two people not from the same household, restrictions on various types of businesses, and other measures.
- Additionally, six states have enacted a **curfew**, with exceptions for the workforce, essential shopping, and various other activities.
- Additionally to the prohibition of assembly, two states have enacted an **entry ban** for non-residents (including German citizens from other states), with exceptions for the workforce.

## **National Pandemic Plan**

Germany has a common National Pandemic Plan, which describes the responsibilities and measures of the health care system actors in case of a huge epidemic. Epidemic control is executed both by the federal authorities such as Robert Koch Institute and by the German states. The German states have their own epidemic plans. In early March, the national plan was extended for the handling of the ongoing coronavirus pandemic. Four major targets are included in this plan:

- Reduce morbidity and mortality
- Ensure treatment of infected persons
- Upkeep of essential public services
- Short and accurate information for decision-makers, media and public

## ASSESMENT

At the global and the national (Germany) level, the situation is very dynamic and must be taken seriously. Severe and fatal courses occur in some cases. The number of cases, hospitalisations and fatalities in Germany continues to increase. The risk to the health of the German population is assessed overall as **high**, but as **very high** for risk groups. The probability of serious disease progression increases with increasing age and existing previous illnesses. The risk varies from region to region. The burden on the health care system depends on geographical and age distribution of cases, health care capacity and initiation of containment measures (isolation, quarantine, social distancing etc.), and may be very high in some geographical regions.

#### Annex 2 CoV-19 in Poland

Sources:

- Ministry of Health Republic of Poland, <u>https://www.gov.pl/web/zdrowie</u>
- Worldometer coronavirus, https://www.worldometers.info
- Arcgis Company Online, https://www.arcgis.com/index.html

## **Case numbers in Poland**

- The 2020 coronavirus pandemic was confirmed to have spread to Poland 4th of March transmitted by patient "0" who came from Germany, recovered on 17th MAR.
- Current case status

## Total Cases – 4848

**Total New - +435** 

Total Deaths – 129

New Deaths - +22

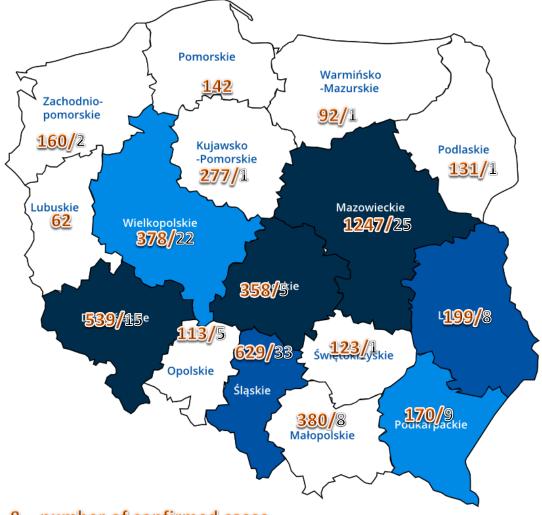
Total Recovered – 191

Active Cases – 4528

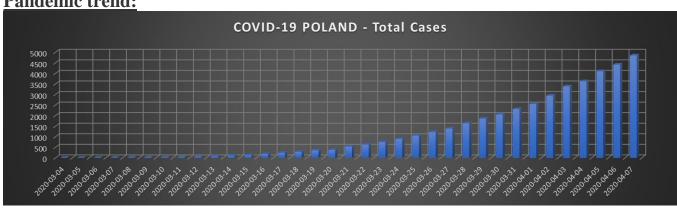
Serious – 50

Cases / 1M – 128

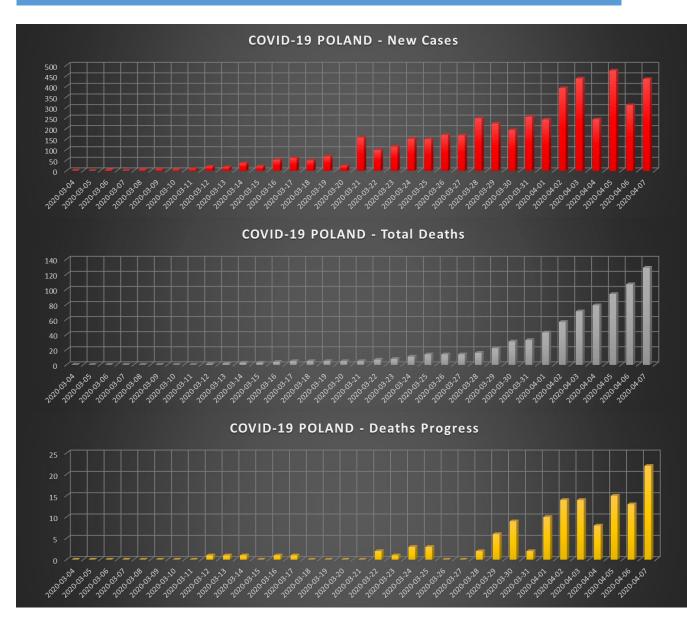
Hospitalized – 2476 In Home Quarantine – 148 130 (- 16 242) Under Epidemiological Supervision – 36 391 (- 2766) Reported to Quarantine after Returning from Abroad: 64 521 (- 7 234)



- 8 = number of confirmed cases
- 2 number of deaths



## **Pandemic trend:**



## **Measures Taken by Polish Government:**

## 12 MAR 2020

**1.** From 12 March till 25 March 2020 functioning of schools, universities and all day care places is suspended.

## 14 MAR 2020

2. From 14 March 2020 government introduced new regulations and declared state of emergency epidemic.

## 15 MAR 2020

**3.** From 15 March 2020 until further notice all international railway transport is suspended.

- 4. From 15 March 2020 until further notice all Polish Citizens coming back from abroad are obliged to:
  - pass to border police its personal data especially home address or where he/she is going to stay;
  - phone number;
  - conduct obligatory 14 days quarantine
- 5. Those who broke quarantine obligation can be fined with 5000 PLN (1200 EUR) or even imprisoned;
- 6. Export of following items is forbidden:
  - *safety goggles;*
  - overalls type TYVEK;
  - masks type FFP2/FFP3;
  - surgical masks;
  - *shoe covers;*
  - latex gloves;
  - *nitrile gloves;*
  - hand, surface and room disinfectants
- 7. Periodically restricted work time of restaurants, bars and food business unless is proceeded in take away or home delivery method;
- 8. Temporary closed cinemas, theaters, museums, public libraries, exhibitions, congresses, conferences, meetings;
- 9. All activities connected with sport & recreation are temporary closed;
- **10.** Commercial facilities with sales area above 2000m2 which are selling textile and clothing products, shoes and leather products, furniture and lighting equipment, radio and television equipment or household appliances, writing and bookselling articles are temporary closed.
- 11. Organizing of shows or gatherings with more than 50 people is prohibited.
- 12. From 15 March till 24 March 2020 temporarily restored border control with Republic of Germany, Czech Republic, Republic of Slovakia and republic of Lithuania. The same restriction is applicable to all airports and seaports.
- **13.** 14th border crossing points are temporary closed with Russia, Belarus and Ukraine.
- 14. On all other border crossing points at the entry direction traffic is limited for:
  - polish citizens;
  - foreigners who are spouses or children of polish citizens
  - foreigners holding a Card of Poles
  - heads of diplomatic missions and consular staff and members of their families
  - foreigners who have the right of permanent or temporary residence on the territory of the Republic of Poland.
  - foreigners who run a means of transport used to transport goods.
- **15.** From 15 March 2020 till 24 March 2020 it is ban on landing at Polish airports of international flights carrying passengers except flights carrying Polish

citizens returning to the territory of the Republic of Poland by chartered planes commissioned by the Prime Minister.

#### 18 MAR 2020

**16.** Government introduced so called "*Anti-crisis shield*" which is directed to mitigate economic consequences of pandemic and includes: security of employment, financing of enterprises, healthcare, strengthening the financial system, public investment program.

#### 19 MAR 2020

17. It was announced by President that new application for mobile phones called "Home Quarantine" is available. It was prepared by Ministry of Digitalization and can be downloaded from App Store or Google Play Store. The program allows you to confirm the place where you are, basic health assessment and direct reporting of danger. It also makes it easier to supply the most-needed items to people who cannot do this themselves. Link - https://www.gov.pl/web/koronawirus/kwarantanna-domowa

#### 23 MAR 2020

- **18.** Government decided to prolong closing of all schools and universities till Catholic Eastern Holiday, mean till 13 APR 2020.
- **19.** Penalty fine for not complying with quarantine rules was raised up to 30000 PLN (6600 EUR or 13000 BGN).

#### 24 MAR 2020

- **20.** The Government forbade free movement until 11 APR except travel to work, volunteering in fighting with COVID-19, dealing with matters necessary for everyday life. In the bus can be only as many people as half of the number of seats. Total ban for any assembly exception only for close family. During holy mass only 5 people can be present (excluding priest and acolytes).
- **21.** Private companies which poses 3d printers started producing googles and protection masks for hospitals.
- 22. Scientists from Polish Institute of Science constructed device "Ventil" which unable to connect two patients to one respiratory in the same time <u>https://biotechnologia.pl/technologie/jeden-respirator-do-wentylacji-dwoch-pacjentow-wynalazek-naukowcow-pan,19522</u>

#### 25 MAR 2020

23. The Government decided to prolong restriction connected to movement over borders till 13 APR 2020, also put more restrictions to people permanently crossing borders for work (from now they will also go for 14 days quarantine).

# 26 MAR 2020

24. Polish parliament changed internal regulations and decided to continue work in distributed mode, enabling envoys to vote online.

# 31 MAR 2020

25. New restrictions were introduced, starting from 1 APR till next two weeks:

- limited number of persons in the shops 3 per 1 cash point
- limited number of persons in post offices 2 per desk
- from 10:00 a.m. till 12:00 a.m. shop are opened only for people 65+
- all people must do their shopping wearing latex glows
- markets with construction materials will be closed during weekends
- between walking people 2m distance must be kept
- children and teenagers bellow 18, can't be outside their homes without parents or grown people supervision
- parks, boulevards, see and lakes beaches are closed for public
- hotels, hairdressers and cosmetic saloons will be closed
- in all working places 1,5m distance must be preserved and necessary disinfection equipment provided
- 26. Medical supplies to combat COVID-19 have arrived from China to Poland. As part of the Chinese humanitarian aid that has reached Poland, the transport included 10,000 certified COVID-19 test kits, 20,000 N95 masks, 5,000 protective suits, medical gloves and other protective gear necessary to fight the new coronavirus pandemic. The chief of Polish diplomacy thanked his Chinese counterpart for the support.

# 1 APR 2020

- **27.** Mobile application called "Home Quarantine" is mandatory from now for all who were directed to stay at home for quarantine.
- **28.** Ministry of National Education announced that local authorities can apply for additional subventions for electronic equipment allowing distributed learning for school children. Entire program can reach 186 million PLN.
- **29.** Sales of medicaments "Arechin" & "Plaquenil" is rationed. Contains chloroquine, which has been used for 70 years, mainly for the treatment of malaria and rheumatoid arthritis. Can be used for adjunctive therapy for SARS-CoV-2 infections based on clinical data published so far.

# 2 APR 2020

**30.** Ministry of Regional Founds and Development informed that they started new concurs with granted 200 million PLN for research & development works supporting the fight against the spread of coronavirus.

# 3 APR 2020

**31.** Ministry of Digitalization informed that 2000 teachers will be able to use broadband internet provided by UPC Poland as a way to help those conducting remote lessons.

#### 6 APR 2020

**32.** Ministry of Foreign Affairs informed that after three weeks, on Sunday, April 5, the #Fly to Home campaign came to an end. As part of this operation, LOT Polish Airlines carried out 388 special charter flights, when 55,000 people safely returned to the country.

## Measures Taken by Polish MOD:

#### 13 MAR 2020

- 1. Recruiting procedures for new soldiers were suspended.
- 2. Military planes transported polish citizens from Wuhan.
- **3.** 27 residential and 3 medical containers were deployed to Wrocław and 3 residential containers on the border with Czech Republic.
- **4.** All duty travels of military personnel and civilian employees are suspended till further notice.

## *14 MAR 2020*

- **5.** 1000 soldiers from Territorial Defense started to support Border Police by patrolling 67 border crossing points.
- **6.** 1100 soldiers from Territorial Defense who has first aid training are under stand by to support Ministry of Health.
- 7. In each Administrative District Military Task Forces are established equipped with dozens of sanitary vehicles and microbuses, 10 disinfectant task teams, mobile medical teams and ready to support doctors, nurses and paramedics, container field hospital in Wroclaw equipped with 100 beds intended for quarantine and providing assistance to those in need, a building in Wrocław equipped with 200 quarantine beds.
- **8.** 14 military hospitals and 5 preventive medicine centers on standby.
- **9.** Center for Diagnostics and Combating Biological Hazards in Puławy in readiness to conduct 350 tests per day.

#### 16 MAR 2020

**10.** Minister of Defense took decision to engage cadets from Military Universities with scope of activities including delivery of food and medicine for the needy, including those in quarantine.

#### *17 MAR 2020*

- **11.** Soldiers from 10<sup>th</sup> Logistic Brigade delivered respirators to infective hospital in Starachowice.
- **12.** As of 17 MAR 2400 soldiers are engaged on entire territory of Poland and they are using 490 pieces of equipment.

## 18 MAR 2020

- **13.** Mobile biological recognition laboratory prepared by the Polish Army began to work. It is able to perform up to 120 coronavirus tests per day.
- **14.** Territorial Defense Forces started 24/7 special phone line for psychological help for people under quarantine.

#### 19 MAR 2020

**15.** Minister of Defense decided to assign military forces to help police in order to ensure security and public order, in total 2600 soldiers.

#### 20 MAR 2020

**16.** As of today 2700 soldiers are engaged to help Police, Border Police and health care system.

#### 23 MAR 2020

- **17.** More than 5000 soldier already engaged in support of Police, Border Police and health care system. Around 545 pieces of equipment are used.
- **18.** From today Army started blood donation campaign.

## 25 MAR 2020

**19.** As of today 5235 soldiers are engaged to help Police, Border Police and health care system. Around 836 pieces of equipment are used.

## 01 APR 2020

- **20.** 6350 soldiers already engage in support to fight against coronavirus and more than 834 pieces of equipment are used.
- **21.** Municipalities' parks, forests and squares are patrolled by Military Police.

#### 06 APR 2020

**22.** 8400 soldiers mostly from Territorial Defense Forces are already engaged in support to fight against coronavirus and more than 1068 pieces of equipment are used.

## 07 APR 2020

**23.** 8957 soldiers mostly from Territorial Defense Forces are already engaged in support to fight against coronavirus and more than 1275 pieces of equipment are used.

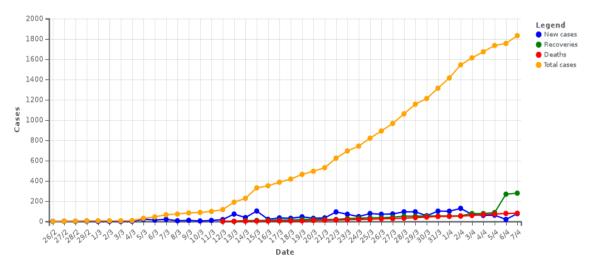
#### **CONCLUSIONS:**

- ✓ number of infected people is still growing, however disease growth rate is relatively low, comparing to other countries, an average of infected is 349 people a day during last week ( the top 5 with highest noted recently is USA [30296], France[11059], Spain[5267], Germany[4288] and Turkey[3892]);
- ✓ the most affected administration districts are: Mazowieckie, Śląskie and Dolnośląskie;
- ✓ number of tests done so far is 92 215 / 6700 during last day;
- $\checkmark$  reported number of people cured from coronavirus so far 191
- ✓ 136 people died so far (79 men and 57 women), average age of died person is 72 years, the youngest person who died was 32 years old women. The reason for the woman's death was "COVID-19 infection with severe pneumonia, respiratory failure and multiple organ failure." "The patient is burdened with concomitant diseases (giant obesity, type 2 diabetes, hypertension, depression syndrome). Because of the huge obesity, the patient is disqualified from ECMO therapy.

#### Annex 3 CoV-19 in Greece

As of **07 April 2020**, Greece has announced **1,832** coronavirus confirmed cases with a fatality rate just **4.42 %** (81 deaths/ 1,832 confirmed cases). That gives Greece a relatively low fatality rate considering that countries with better health system such as Italy and Spain experience **12.63%** and **9,89 %** respectively. The average fatality rate worldwide is **5.62%**.

# **COVID-19 STATISTICS IN GREECE**



• Total coronavirus confirmed cases : 1,832

Figure 17 Numbers of confirmed COVID-19-cases in Greece (07/04/2020, 18:00) in Greece

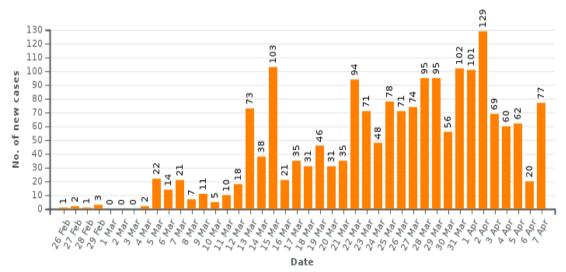


Figure 18 Daily New Cases (07/04/2020, 18:00) in Greece

## Demographic distribution of cases

- Of reported cases, **55% are male** and **45% are female**
- Among notified cases, there 2,8% are children up 17 years of age, 31,2 % persons aged 18 to 39 years, 45 % aged 40 to 59 years and 21% persons aged 60 years and older.

Age	0-17	18-39	40-64	>65
Male	2,5%	28,1%	46,7%	22,6%
Female	3,3%	33,1%	44%	19,7%
Total	2,8%	31,2%	45%	21%

Table 1: Percentage of COVID-19-cases by age group and sex (07/04/2020, 12:00 AM)

# <u>Critical/Serious Condition</u>

Total of 90 patients are intubated. From them 71 (79%) are men and 19 (21%) are women, while 72 % have some underlying disease or over 70 years .

Their mean age is **66** years.

# • <u>Recoveries</u>

269 persons have recovered from their COVID-19 infection.

# • <u>Fatalities</u>:

The **81** COVID-19-related deaths reported in Germany concerned **56** (**69%**) men and **25** (**31**%) women. Their mean age was **74** years while **84%** had some underlying disease or they were over **70** years.

Age	0-17	18-39	40-64	>65
Male	0%	1,8%	31,6%	66,7%
Female	0%	0 %	9,1%	90,9%
Total	0 %	1,3%	25,3 %	73,4 %

Table 2: Percentage of COVID-19-cases notified as having died by age group and sex (07/04/2020, 12:00 AM)

#### COVID 19 - PART 2

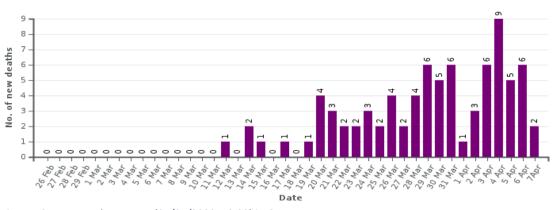


Figure 19 New Deaths per Day (07/04/2020, 18:00) in Greece

# Measures

As of 07 April 2020, the following measures have been taken:

- On **9 March**, all school trips banned, all sports games were to be played with no fans attending and all school championships were cancelled.
- On 9 March, temporary suspension of all flights to and from Northen Italy. On 14 March, the suspension extended to all passenger flights to and from Italy, excluding cargo and sanitary ones.
- On **10 March**, all educational institutions closed **until 10 April**. A special purpose leave introduced for working parents.
- **On 12 March**, closure of all theatres, courthouses, cinemas, gyms, playgrounds and clubs.
- On 13 March, nationwide closure of all shopping centres, cafes, restaurants, bars, museums and archaeological sites and food outlets, excluding supermarkets, pharmacies and food outlets that offer take-away and delivery only.
- On 14 March, all organised beaches and ski resorts closed.
- **On 16 March**, the Church agreed to suspend services in all areas of religious worship of any religion or dogma, effectively suspending Sunday divine Liturgies for that period too.
- On **16 March**, two villages in Western Macedonia quarantined. The quarantine lasted until 06 April 2020.
- On **16 March**, Greece closed its borders with Albania and North Macedonia, deciding to suspend all road, sea and air links with these countries, while only permitting the transportation of goods and the entry of Greek nationals and residents. The suspension of ferry services to and from Italy air links to Spain, as well as the prohibition of all cruise ships and sailboats docking in Greek ports also decided. The same day it was

announced that a 14-day home restriction will be mandatory for those who enter the country.

- On **18 March**, Greece and the other EU member states decided to close their external borders to all non-EU nationals. In Greece, the entry of citizens of countries from outside the European Union is only permitted for a condition that relates exclusively to an emergency or family matter. All private pleasure boats from abroad also banned from entering the country.
- On **18 March**, movement restrictions pertaining to migrant camps. Compulsory temperature checking, all visits to the camps whether by individuals or organisations were suspended,
- On **18 March**, a ban on public gatherings of 10 or more people announced. The fine on violators set to 1,000 euro fine. On **19 March**, all Greek citizens returning from abroad are subjected to mandatory surveillance and isolation for at least 14 days.
- On **19 March**, closure of all hotels across the country, from midnight on March 22 and until the end of April. Only hotels that accommodate personnel that guard the border will continue to operate, as well as three hotels in Athens and Thessaloniki and one hotel per regional region remains open.
- On **21 March**, only permanent residents and supply trucks allowed to travel to the Greek islands
- On 22 March, all parks, recreation areas and marinas were also closed
- On 23 March, ban on all nonessential transport and movement across the country, **until 27 April**. Movement is permitted only for a prescribed set of reasons. It includes moving to or from the workplace during normal business hours, shopping for food or medicine, visiting a doctor or assisting a person in need of help, exercising individually or in pairs or walking a pet, attending a ceremony (wedding, baptism, funeral etc.), and cases of divorced parents moving to ensure communication with their children. People returning to their permanent places of residence will also be exempt. Members of the government and parliament as well as all Health, Civil Protection, Law Enforcement and Armed Forces personnel are excluded from the measure.
- On **23 March**, daytime public transport services will be limited, although ensuring sufficient service during business hours. Journeys by car are only permitted for the specific exemptions, and the driver may only have one passenger in the vehicle.
- On 23 March, suspended all passenger flights from the UK as well as all sea, rail and road connections with Turkey, with an exception for Greek citizens and those who have residence permits or whose main residence is in Greece, as well as trucks and ships that transport goods.

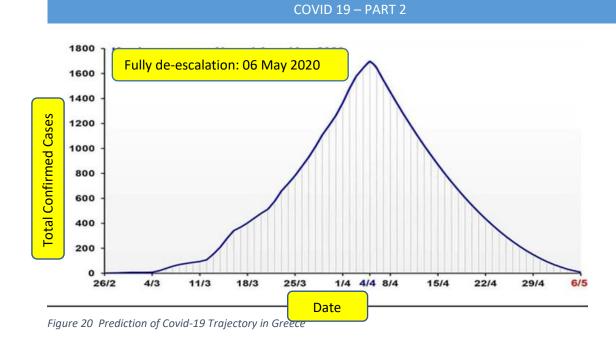
• On **31 March**, additional restrictive measures for a duration of 14 days in 6 the municipalities and villages. A night curfew imposed from 8:00 p.m. until 8:00 a.m. Only close relatives can attend a funeral and pet owners allowed to walk their pet for up to 15 minutes and near their house only.

#### **Economic measures taken**

- On 18 March, announced a package of measures to support the economy, businesses and employees. The measures include the suspension, for four months, of tax and social security obligations of corporations ordered to close by the state decree, with the sole condition that they do not dismiss any workers. This measure covers about 220,000 businesses and 600,000 employees. The measures also include an €800 stipend as well as a fourmonth suspension of payment of March taxes on employees of businesses the activity of which was suspended and on freelance professionals who work in sectors affected by the pandemic. The reduction of VAT tax from 24% to 6% on pharmaceutical products such as gloves, masks and antiseptics was also announced.
- Inclusion of Greece in an emergency assets purchases' program of 750 billion euros launched by the European Central Bank. The 3.5% primary surplus target for Greece is no longer in effect, according to a Eurogroup decision.
- On 19 March, announced the revision of the State Budged in order to allocate more than 10 billion euros in support of the economy. The suspension of tax and social security obligations of corporations and the number of beneficiaries of the €800 stipend extended to include all businesses harmed by the pandemic, all freelancers and self-employed workers and the majority of private sector workers. The state will also cover the cost of beneficiaries' insurance, pension, and health payments. The Easter bonus will be paid in full to all employees and announced a special bonus for health and civil protection workers.

#### **ASSESMENT**

At the global and the national (Greece) level, the situation is very dynamic and must be taken seriously. Severe and fatal courses occur in some cases. The number of cases, hospitalisations and fatalities in Greece continues to increase but in a **slow pace**. The risk to the health of the Greek population is assessed overall as **high**, but as **very high** for risk groups. The probability of serious disease progression increases with increasing age and existing previous illnesses.

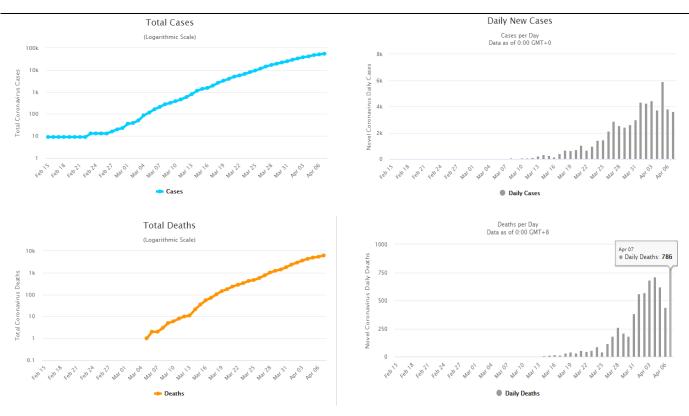


# (Source: <u>https://www.zougla.gr/greece/article/stis-6-meou-i-oloklirosi-tou-kiklou-tis-epidimias</u>)

#### Annex 4 CoV-19 in UK

## Disclaimer

This paper is built upon open-source information, which was gathered (up until 01 APR 2020) and adapted from media and official governmental websites listed in the reference section. All views and opinions expressed herein, unless otherwise stated, are solely those of the authors and in no way should be considered representing the official position of the CMDR COE or of any other governmental or non-governmental organization or group.



# **COVID-19 TESTING & SURVEILLANCE**

As of 9am on 8 April, 282,074 tests have concluded across the UK, with 14,682 tests carried out on 7 April. Some individuals are tested more than once for clinical reasons.

232,708 people have been tested, of whom 60,773 tested positive. Today's figure for test data does not include Charing Cross and Southampton due to a data processing delay. The tests concluded figure excludes data from Northern Ireland.

As of 5pm on 7 April, of those hospitalised in the UK who tested positive for coronavirus, 7,097 have died.

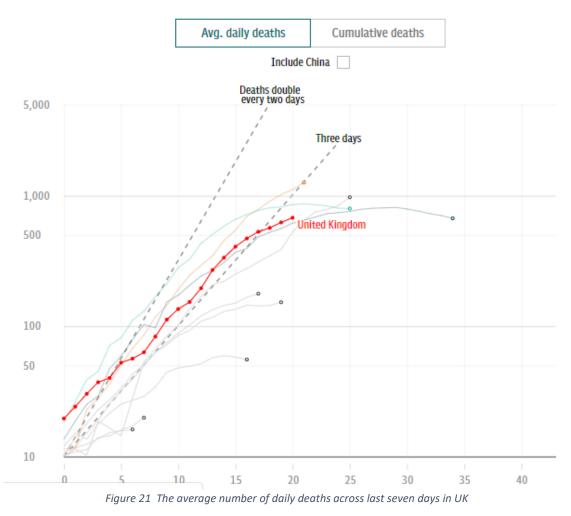
	Tests	People tested	Positive	Deaths
Daily	14,682	12,959	5,492	938
Total	282,074	232,708	60,733	7,097

The figures on deaths relate in almost all cases to patients who have died in hospital and who have tested positive for COVID-19. Slight differences in reporting in devolved administrations may mean that they include a small number of deaths outside hospital.

These figures do not include deaths outside hospital, such as those in care homes, except as indicated above. This approach allows us to compile deaths data on a daily basis using up-to-date figures. The data includes confirmed cases reported as at 5pm the previous day. The amount of time between occurrence of death and reporting in these figures may vary slightly and in some cases could be a few days, so figures at 5pm may not include all deaths for that day.

The UK is yet to see its rate of growth slow significantly since going into lockdown on March 23 ('Day 9' on the United Kingdom line).

#### COVID 19 – PART 2



#### The average number of daily deaths across last seven days (logarithmic scale\*)

(DATA FROM PUBLIC HEALTH ENGLAND AT 21:00 UTC 1 APR 2020)

## HOW UK IS FIGHTING COVID-19

#### **Healthcare Measures**

- $\checkmark$  Stay at home. People can leave the houses only for:
  - o shopping for basic necessities, for example food and medicine
  - o one form of exercise a day, for example a run, walk, or cycle
  - any medical need, including to donate blood, avoid or escape risk of injury or harm
  - providing care or assistance to a vulnerable person, providing emergency assistance
  - travelling to work or to carry out voluntary services, where it's not possible to do these from home

- attending the funeral of a member of your household, or a close family member (or in some circumstances, a friend)
- fulfilling legal obligations, such as attending court, satisfying bail requirements or participating in legal proceedings
- accessing critical public services including childcare or education, social services, or victim support
- allowing children of separated parents to move between both households
- moving house where reasonably necessary
- ✓ Do not meet others, even friends or family. All "unnecessary" visits to friends and relatives in care homes should cease
- ✓ Use the NHS "where we really need to" in order to reduce the burden on workers by getting advice on the NHS website, where possible
- ✓ If one person in any household has a persistent cough or fever, everyone living there must stay at home for 14 days. Get an isolation note from 111 coronavirus service to send to the employer as proof for the need to stay off work. No need to get a note from a GP.
- ✓ Only critical workers (Health and social care, Education and childcare, Key public services, Local and national government, Food and other necessary goods, Public safety and national security, Transport and Utilities, communication and financial services) can still take their children to school or childcare
- ✓ UK government said it has reached the lab capacity to do about 12,000 tests, but so far just over 8,000 people are being tested a day. Testing is key to tackling coronavirus and the UK hopes to increase the number of people tested to 25,000 a day in the coming weeks. So far more than 152K people have been tested for the virus in the UK. The intention is to get from thousands to hundreds of thousands within the coming weeks however staff in contact with the sickest patients would be tested first.
- ✓ People who should be "particularly stringent" in minimising their social contact are:
  - People over the age of 70
  - Other adults who would normally be advised to have the flu vaccine (such as those with chronic diseases)
  - Pregnant women

Enforcement of the healthcare measure restrictions:

- ✓ The police have been given powers to make sure people follow the measures.
- ✓ Police were told to use "judgement and common sense" in swiftly updated guidance, following reports of heavy handedness including the use of checkpoints and drones to enforce physical distancing.
- ✓ The guidance says that "the police will act with discretion and common sense in applying these measures".
- ✓ If you leave your home or gather in public for any reason other than those allowed, the police may instruct you to go home or disperse. They may also instruct you to stop your children from also breaking the rules. They also have the power to take you home or arrest you.
- ✓ If the police believe you have broken rules, or if you refuse to follow their instructions, they may issue you with a fine of £60 (reduced to £30 if paid within 14 days). If it's the second time you've received a fine, the amount will increase to £120 and double on each further repeat offence.
- ✓ Local authorities (such as trading standards officers) will be monitoring local businesses to make sure they also follow the rules. Those that don't comply will face the threat of fines, and of being closed down.

#### economic & SOCIAL Measures

- ✓ Support to millions of self-employed individuals through the Selfemployment Income Support Scheme
  - Direct cash grant of 80% of their profits, up to £2,500 per month for at least 3 months. Cleaners, plumbers, electricians, musicians, hairdressers and many other self-employed people who are eligible for the new scheme will be able to apply directly for the taxable grant, using a simple online form, with the cash being paid directly into people's bank account. The income support scheme, which is being designed from scratch, will cover the three months to May. Grants will be paid in a single lump sum instalment covering all 3 months, and will start to be paid at the beginning of June.
- ✓ Statutory Sick Pay (SSP)
  - You can get £94.25 per week Statutory Sick Pay (SSP) if you're too ill to work. It's paid by your employer for up to 28 weeks. If you cannot work while you are self-isolating because of coronavirus (COVID-19), you could get SSP for every day you're in isolation. You must self-isolate for at least 4 days to be eligible.

- Proof of Sickness. If you have COVID-19 or are advised to stay at home, you can get an 'isolation note' by visiting NHS 111 online, rather than visiting a doctor. For COVID-19 cases this replaces the usual need to provide a 'fit note' (sometimes called a 'sick note') after 7 days of sickness absence.
- ✓ Universal Credit
  - Universal Credit is a payment to help with your living costs. It's paid monthly - or twice a month for some people in Scotland. You may be able to get it if you're on a low income or out of work. Universal Credit is replacing the following benefits:
    - Child Tax Credit
    - Housing Benefit
    - Income Support
    - income-based Jobseeker's Allowance (JSA)
    - income-related Employment and Support Allowance (ESA)
    - Working Tax Credit
- ✓ Employment and Support Allowance (ESA)
  - You can apply for Employment and Support Allowance (ESA) if you have a disability or health condition that affects how much you can work. ESA gives you:
    - money to help with living costs if you're unable to work
    - support to get back into work if you're able to
    - You can apply for ESA if you're employed, self-employed or unemployed.
- ✓ Furloughed workers
  - If you and your employer both agree, your employer might be able to keep you on the payroll if they're unable to operate or have no work for you to do because of coronavirus (COVID-19). This is known as being 'on furlough'.
    - You could get paid 80% of your wages, up to a monthly cap of £2,500.
    - If your salary is reduced as a result of these changes, you may be eligible for support through the welfare system, including Universal Credit.
- ✓ Lay-offs and short-time working
  - Your employer can ask you to stay at home or take unpaid leave if there's not enough work for you.

- A lay-off is if you're off work for at least 1 working day. Short-time working is when your hours are cut.
- There's no limit for how long you can be laid off or put on shorttime. You could apply for redundancy and claim redundancy pay if it's been:
  - 4 weeks in a row
  - 6 weeks in a 13-week period
- You should get your full pay unless your contract allows unpaid or reduced pay lay-offs. If you're unpaid, you're entitled to guarantee pay during lay off or short-time working. The maximum you can get is £29 a day for 5 days in any 3-month period - so a maximum of £145.
  - If you usually earn less than £29 a day you'll get your normal daily rate.
  - If you work part-time, your entitlement is worked out proportionally.
- ✓ If you cannot pay because of coronavirus (COVID-19) your tax bill on time
  - You can delay (defer) any VAT payments due between 20 March 2020 and 30 June 2020.
- ✓ Businesses will start benefiting from £22 billion in the form of business rates relief. And grants of up to £25,000 which are being paid into the bank accounts of the smallest high street firms.
- ✓ Local authorities have received more than £12 billion for grants to small businesses.
  - In response to the Coronavirus, Covid-19, the Government announced there would be support for small businesses, and businesses in the retail, hospitality and leisure sectors.
  - This support will take the form of two grant funding schemes, the Small Business Grant Fund and the Retail, Hospitality and Leisure Grant Fund.
  - The schemes will be delivered by Local Authorities if you are eligible, your Local Authority will be in touch with you to arrange payment.
- ✓ High street banks are working really hard to support the UK through this period, including through mortgage holidays and increased credit facilities.
- ✓ Loans for businesses are also being issued through the Coronavirus Business Interruption Loan Scheme since it came into operation last week.

✓ To stimulate the economy, the Bank of England cut interest rates from 0.75 to 0.25 percent. On 19 March, the interest rate was again cut this time to 0.10% – the lowest rate in the bank's 325-year existence.

# **Other Measures**

- ✓ The Government intending to test all HNS personnel but shortage of chemical reagents. Health Secretary Matt Hancock announced a "five pillar" plan for testing people for the virus, with the aim of conducting 100,000 tests a day by the end of April.
- ✓ The First Minister of Wales, confirmed the Welsh Government would extend the lockdown beyond the initial three-week period for Wales.

# WHICH MEASURES COULD BE APPLIED EFFECTIVELY IN EU, NATO AND BULGARIA?

EU

All EU institutions (European Parliament, European Council, Council of the EU, European Commission), based on EU principles and values, should take immediate political and financial steps and measures to keep the Union together, providing solidarity support the countries with biggest COVID-19 impact. States should not be left alone to cope with the crisis on their own as nationalist parties with chauvinists and xenophobic inclinations after BREXIT are sneaking around more than ever.

# NATO

NATO Nations should immediately start to prepare, train and exercise their field medical capabilities. Currently NATO is providing strategic airlift support to the requesting Allies. This could be also envisioned for the field medical capabilities.

# BULGARIA

Currently measures in force in Bulgaria are either the same or even more restrictive than the ones in UK from Monday, 16-March. However, there are few points, which could be considered:

• BGR Government should examine the broad fiscal and monetary policies introduced by UK Government. Broad consensus should exists on the need to support households and businesses, through unemployment benefits, credit support, and direct transfers. Likewise, a substantial share of economists agree that higher public debt burdens should not be a concern in the process of supporting the economy.

- In the conditions of almost full lockdown, digitalization and integration of all National (Law Enforcement, Medical, Tax Revenue, Transport, etc.) and Local Systems and Services would facilitate people to receive the respective services. In addition it would support National and Local Authorities' endeavor in enforcement of the restrictions on quarantined people.
- Application of faster laboratory tests for testing large number of people not only these with heavy symptomatic. Genetic tests could be applied only if the feast test is positive. This will enable understanding the actual scope of the pandemic. Mass testing is the key to transition out of the lockdown and the capacity for daily testing in BGR should be drastically increased to the level of the other European states.
- Those with the most serious health conditions such as heart disease, diabetes, or asthma should be shielded from social contact for 12 weeks.

## Other interesting facts and observations

- A new study by the University of Oxford concludes that COVID-19 may already have existed in the UK since January 2020 and that half of the population may already be immunised, with most people experiencing no or only mild symptoms. This would mean that ONLY ONE IN A THOUSAND PEOPLE would need to be hospitalised for COVID-19.
- The UK has removed COVID-19 from the official list of High Consquence Infectious Diseases (HCID), stating that mortality rates are "low overall"
- A model from Imperial College London predicted between 250,000 and 500,000 deaths in the UK "from" COVID-19, but the authors of the study have now conceded that many of these deaths would not be in addition to, but rather part of the normal annual mortality rate, which in the UK is about 600,000 people per year. In other words, excess mortality would remain low.

#### REFERENCES

- 1. <u>https://www.gov.uk/</u>
- 2. https://www.theguardian.com/
- 3. <u>https://www.bbc.com/</u>
- 4. https://www.worldometers.info/coronavirus/country/uk/
- 5. https://en.wikipedia.org/wiki/2020 coronavirus pandemic in the United Kingdom
- 6. <u>https://news.yahoo.com/oxford-study-suggests-millions-people-221100162.html</u>

#### COVID 19 – PART 2

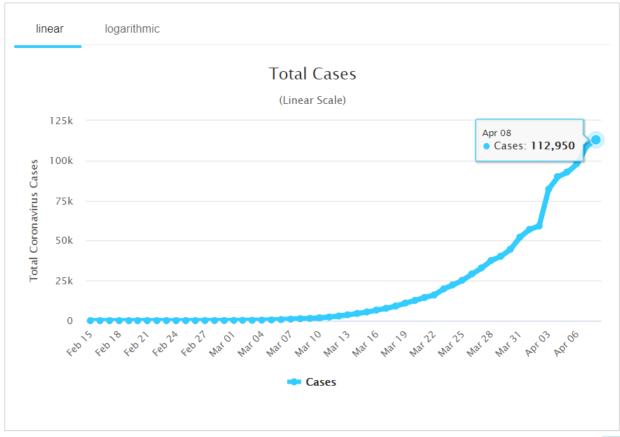
#### Annex 5 CoV-19 in France

#### Analysis of the spread of COVID-19 and types of measures – precautionary and management, taken by France (4 – 9 APRIL 2020)

4 APRIL	9 APRIL
Total Cases – 89,953	Total Cases – 117,749
New Cases – 7,788	New Cases – 4,799
Active Cases – 66,955	Active Cases – 82,333
Total Deaths – 7,560	Total Deaths – 12,210
New Deaths – 1,053	New Deaths $-1,341$
Total Recoveries – 15,438	Total Recoveries – 23,206
New Recoveries – 1,430	New Recoveries – 1,952

Since its first COVID-19 case in France (and in Europe too) on 24 January 2020, the country had put a lot of efforts to stop the spread of the virus. But the overall statistics so far does not show signs of successful overcome of the situation. The graphic below validates this statement.

# Total Coronavirus Cases in France



#### Figure 22 Total COV-19 Cases in France

On April 3 the French Government reported 17,827 additional cases and 532 additional deaths from nursing homes that had not been reported previously. Since then there are two different statistics regarding the number of cases in the country – one which includes and one which does not include cases outside of the hospitals. On the WorldOMeter official web page the provided statistics for France are including those additional cases and thus can be considered as more reliable.<sup>6</sup> On another hand, at present, the statistics about the total number of cases at the official web page of the French Government and Wikipedia, does not include the additional cases presented in the statistic graphics. But there is separate information in Wikipedia regarding the number of confirmed or suspected cases in retirement homes – 30,902.<sup>7</sup> The number, when summed up with the other official cases (82,048), gives the sum of 112,950 as it is in the first resource.

According to the latest data from France, overall mortality at the national level remains within the normal range after a mild influenza season. However, in some regions, particularly in the north-east of France, overall mortality in the over-65 age group has already risen sharply in connection with COVID-19. France has become the fourth country to register more than 10,000 deaths due to coronavirus, as the statistics from 7 April show. On Tuesday (7 April), as France entered its fourth week of lockdown, Paris toughened the confinement rules, announcing a ban on individual outdoor sports between the hours of 10:00 am and 07:00 pm starting Wednesday (8 April). The move came just after Health Minister Olivier Veran announced Monday a record daily coronavirus death toll of 833 people in 24 hours.<sup>8</sup>

**During the last week France has begun clinical trials involving transfusions of blood plasma from coronavirus survivors into patients who have severe symptoms in a bid to treat the illness.** Plasma, the fluid in blood teeming with antibodies post-illness, has already proven effective in small studies to treat infectious diseases including Ebola and SARS. The French trials are to start on Tuesday (7 April), according to a joint statement from the Paris hospital authority AP-HP, the national medical research institute INSERM, and the national blood service EFS. The trials will involve 60 patients in Paris hospitals, half of whom will receive the plasma from the persons who have recovered. It said the first results could be known two to three weeks after the trials. The US Food and Drug Administration has already authorised physicians to experiment with the strategy to fight the coronavirus. Tests are also being done in China.<sup>9</sup> The expected results are to be very positive.

<sup>&</sup>lt;sup>6</sup> <u>https://www.worldometers.info/coronavirus/country/france/</u>

<sup>&</sup>lt;sup>7</sup> https://www.gouvernement.fr/info-coronavirus

https://en.wikipedia.org/wiki/2020\_coronavirus\_pandemic\_in\_France

<sup>&</sup>lt;sup>8</sup> https://www.france24.com/en/20200407-paris-bans-daytime-jogging-in-bid-to-slow-spread-of-coronavirus

<sup>&</sup>lt;sup>9</sup> https://www.france24.com/en/20200407-france-begins-clinical-trials-of-coronavirus-blood-plasma-treatment

So far, France has declared it's lockdown to continue until 15 April. But on 8 April president Emmanuel Macron announced that the lockdown will be extended. On Monday, 13 April, Macron will make an official announcement regarding that matter.

Since March France is following its own Action Plan in order to prevent and limit the circulation of the virus. This action plan amounts to 45 bn EUR and is divided into a set of concrete and immediate government measures for companies that would encounter proven difficulties linked to this health crisis in the deployment of their activity in France. The Ministry of Economy and Finance has furthermore created an economic continuity task force to manage the impact on the French economy, through a daily decision-making process. A draft law allowing the implementation of these measures has been presented during the Cabinet Council meeting of 18 March 2020. These support measures will be applied on a case-bycase basis according to the situation of each French company and de facto of each French subsidiary of an international company. They may be revised according to the evolution of the epidemic in the coming weeks.<sup>10</sup> It is still hard to say what the effect of those measures is. The next few weeks will show whether the measures are enough. Since 7 April the authorities have partially lifted a ban on street markets if they abide by a series of strict social distancing rules. But the overall assessment of the impact on the economy in the country for the last week is not very positive. On 6 April the French finance minister Bruna Lemaire said that France will likely see its worst post-war economic downturn this year, far surpassing the minus 2.2 percent slump seen in 2009 after the global financial crisis.<sup>11</sup> Two days after that the Bank of France stated that French economy enters recession with 6% drop in first quarter of this year, its worst since 1945.<sup>12</sup>

On 4 April the French Ministry of the Armed Forces announced that it will fund a COVID-19 screening test project by, up to 1 million euros. Two days later started a vast screening operation for the most vulnerable people, with priority on the elderly, the most vulnerable disabled people and the professionals who accompany them in institutions.<sup>13</sup>

Also, France is officially working on a 'Stop Covid' contact-tracing app. France's health minister Olivier Véran and digital minister Cédric O have officially announced that the French government is working on a smartphone app to slow the spread of COVID-19. The government is putting a stamp of approval on the Pan-European Privacy-Preserving Proximity Tracing (PEPP-PT)<sup>14</sup> project but remains cautious about what to expect from an app. But the usage of mobile apps to track the coronavirus is a sensitive issue in Europe. Dozens of nonprofit

<sup>&</sup>lt;sup>10</sup> https://nl.ambafrance.org/COVID-19-French-government-measures-to-assist-companies-and-workers

<sup>&</sup>lt;sup>11</sup> <u>https://www.france24.com/en/20200406-france-heading-for-wost-post-war-downturn-coronavirus-finance-minister-bruno-lemaire-warns</u>

<sup>&</sup>lt;sup>12</sup> <u>https://www.france24.com/en/20200408-french-economy-drops-by-6-in-first-quarter-officially-in-recession</u>

<sup>&</sup>lt;sup>13</sup> <u>https://www.gouvernement.fr/info-coronavirus</u>

<sup>&</sup>lt;sup>14</sup> <u>https://www.pepp-pt.org/</u>

organizations have written a common statement urging governments to respect human rights. They fear that governments could use this opportunity to enforce far-reaching surveillance measures that don't comply with the regulatory framework and that remain in place after the coronavirus crisis. The European Commission reminded governments that they should implement "appropriate safeguards" as EU citizens are not going to trust contact-tracing apps if they don't treat personal information appropriately. That's probably why the government is preventively trying to reassure people before releasing the Stop Covid app. According to a statement, the Ministry for the Digital Sector says that it is working with the Health Ministry, the Justice Ministry and the Ministry of Higher Education, Research and Innovation to coordinate tech-based initiatives. In addition to the app that is currently in the works, the French government has rolled out an official website<sup>15</sup> to inform people, is encouraging telemedicine services to treat patients (such as Covidom<sup>16</sup> from public hospitals in Paris), is mining aggregated data from telecom companies to understand how people move around the country and is leveraging machine learning on big data to forecast the coronavirus outbreak.<sup>17</sup>

The next few weeks will be very critical for the French economy, showing whether the Action Plan and the measures in it are giving the expected fruits

<sup>&</sup>lt;sup>15</sup> <u>https://maladiecoronavirus.fr/</u>

<sup>&</sup>lt;sup>16</sup> <u>https://www.aphp.fr/actualite/covidom-une-solution-de-telesuivi-domicile-pour-les-patients-porteurs-ou-</u> <u>suspectes-covid</u>

<sup>&</sup>lt;sup>17</sup> <u>https://techcrunch.com/2020/04/08/france-is-officially-working-on-stop-covid-contact-tracing-app/</u>

Annex 6 CoV-19 in Italy

# <u>Analysis of the spread of COVID-19 and types of measures – precautionary</u> <u>and managerial - taken by Italy</u>

## 1. <u>Coronavirus in Italy – outbreak, measures and impact</u>.

## 1.1. Outbreak.

Italy, a member state of the European Union and a popular tourist destination, joined the list of coronavirus-affected countries on **30 January** when *two COVID-19 positive cases* were reported in Chinese tourists.

At the beginning of February, Italy had only a few identified Covid-19 cases. By **February 23**, Italian officials reported <u>76 confirmed cases</u> to the World Health Organization. On **25 February**, that <u>number grew to 229</u>. The case and death toll rose exponentially from there while people with the virus who had come from Italy were identified in countries as far and wide as Nigeria, Switzerland, and Brazil.

Now, Italy has the highest number of reported Covid-19 cases and deaths outside China: more than <u>15,000 and 1,000</u>, respectively, as of **March 13**. Those figures are greater than that of two other coronavirus hot zones — Iran and South Korea. And that is why the focus of the Covid-19 pandemic has now shifted to Europe.

"Europe has now become the epicenter with more reported cases and deaths than the rest of the world combined, apart from China," said World Health Organization director general Dr. Tedros Adhanom Ghebreyesus on 13 March. "Europe is also reporting more cases each day than China at the height of its epidemic", he added.

# 1.2. Measures.

# **1.2.1.**First Measures.

By 25<sup>th</sup> of February, the rapid rise in coronavirus cases — both within the country and among travelers — was so concerning, a joint <u>WHO and European</u> <u>Center for Disease Prevention and Control mission</u> went to Italy to figure out what was going on. Authorities, meanwhile, scrambled to impose <u>severe</u> <u>measures</u> to try to stop the virus. In the country's north, sporting, religious, and cultural events were canceled along with university classes. Anyone who

tried to enter or leave the areas in Lombardy where the outbreak was occurring faced fines. The severity of the response rivaled only that of China.

In an effort to slow the spread of infection, the Italian government on **9 March** announced an *extraordinary measure* for a Western democracy — one that has not been tried in modern times at the country level: *The entire peninsula was put under quarantine orders until at least April 3*. Some 60 million Italians were asked to stay home. The response escalated even further. The *government effectively stopped movement* across the country, <u>asking people</u> to leave home only for essential work and necessities, like food. All public gatherings and meeting places — theaters, gyms, ski resorts, clubs, schools, sporting events, even weddings and funerals — were also shut down.

On **11 March**, Prime Minister Giuseppe Conte added *new coronavirus* restrictions, ordering most businesses — except grocery stores and pharmacies — closed.

The **major reason for the extreme response**: Cases in Italy escalated fast and the coronavirus overwhelmed the country's health system, particularly in the north. More than 80 percent of the hospital beds in Lombardy, the hardest-hit province, are being occupied by coronavirus patients, according to <u>Bloomberg</u>. Intensive care units are overloaded while <u>elective</u> surgeries have been canceled in the process to free up beds. Stories abound on <u>social media</u> about doctors struggling to meet their patients' needs.

# **1.2.2.**Nationwide measures.

On 1 March, the Council of Ministers approved a decree to organise the containment of the outbreak. In the decree, the Italian national territory was divided into three areas:

*A red zone* (composed of the municipalities of Bertonico, Casalpusterlengo, Castelgerundo, Castiglione D'Adda, Codogno, Fombio, Maleo, San Fiorano, Somaglia and Terranova dei Passerini in Lombardy, and the municipality of Vò in Veneto), where the whole population is in quarantine.

*A yellow zone* (composed of the regions of Lombardy, Veneto and Emilia-Romagna), where social and sport events are suspended and schools, theatres, clubs and cinemas are closed.

The rest of the national territory, where safety and prevention measures are advertised in public places and special sanitizations are performed on means of public transport. Montage of notices on shops in Bologna declaring their temporary closure, or requiring people to stay at least one meter apart.

On 4 March, the Italian government imposed the shutdown of all schools and universities nationwide for two weeks as the country reached 100 deaths from the outbreak. The same day, the government ruled that all sporting events in Italy would be played behind closed doors until 3 April.

On 5 March, when the newly appointed Emilia-Romagna regional minister of health, Raffale Donini, tested positive for COVID-19, Governor Stefano Bonaccini appointed Sergio Venturi as commissioner for the emergency. Venturi was the regional minister of health until February 2020.

In the night between 7 and 8 March, the government approved a decree to lock down Lombardy and 14 other provinces in Veneto, Emilia-Romagna, Piedmont and Marche, involving more than 16 million people. The decree "absolutely avoided any movement into and out of the areas" and, like the previous one, it provided sanctions of up to three months in prison for those who violated the lockdown. It was possible to move into and out of the areas only for emergencies or "proven working needs", which must be authorized by the prefect. The decree also established the closure of all gyms, swimming pools, spas and wellness centers. Shopping centers had to be closed on weekends, while other commercial activities could remain open if a distance of one meter between customers could be guaranteed. The decree imposed the closure of museums, cultural centers and ski resorts in the lockdown areas and the closure of cinemas, theatres, pubs, dance schools, game rooms, betting rooms and bingo halls, discos and similar places in the entire country. Civil and religious ceremonies, including funeral ceremonies, were suspended. All organized events were also suspended, as well as events in public or private places, including those of a cultural, recreational, sporting and religious nature, even if held in closed places. This measure was described as the largest lockdown in the history of Europe, as well as the most aggressive response taken in any region beyond China, and paralyzed the wealthiest parts of the country as Italy attempted to constrain the rapid spread of the disease.

Riots broke out in many penitentiaries throughout Italy after the government in the 8 March decree imposed restrictions on conjugal visits. Nine prisoners died in Modena and three in Rieti, while 76 detainees escaped from Foggia's penitentiary. Two prison agents were assaulted and kidnapped in Pavia. On 9 March in Bologna, detainees took control of the Dozza penitentiary, forcing personnel to exit the building. On 11 March, two prisoners were found dead in Bologna's penitentiary.

On 9 March, the government announced that all sporting events in Italy would be cancelled until at least 3 April, but the ban does not include Italian clubs or national teams participating in international competitions. In the evening, Conte announced in a press conference that all measures previously applied only in the so-called "red zones" had been extended to the whole country, putting approximately 60 million people in lockdown. Conte later proceeded to officially sign the new executive decree.

Queue in front of a supermarket after the introduction of social distancing rules

On 11 March, the government allocated 25 billion euros for the emergency. In the evening, Conte announced a tightening of the lockdown, with all commercial and retail businesses except those providing essential services, like grocery shops and pharmacies, closed down. He also appointed Domenico Arcuri as Delegated Commissioner for the Emergency. Arcuri will cooperate with Commissioner Angelo Borrelli with the aim of strengthening the distribution of intensive care equipment.

On 19 March, the Army was deployed to the city of Bergamo, the worst hit Italian city by the coronavirus, as the local authorities can no longer process the number of dead residents. The city's mayor Giorgio Gori said the true number of dead could be much higher than reported. Army trucks transported bodies to crematoriums in several other cities, as cemeteries in the city were full. On the following day, the Army was called in to assist the police forces in enforcing the lockdown.

On 20 March, the Ministry of Health ordered tighter regulations on free movement. The new measures banned open-air sports and running, except individually and in close proximity of one's residence. Parks, playgrounds and public green were closed down. Furthermore, movement across the country was further restricted, by banning "any movement towards a residence different from the main one", including holiday homes, during weekends and holidays.

On 21 March, Conte announced further restrictions within the nationwide lockdown, by halting all non-essential production, industries and businesses

in Italy, following the rise in the number of new cases and deaths in the previous days. This measure had also been strongly asked for by multiple institutions, including trade unions, mayors, and regional presidents, as well as medical professionals, but was initially opposed by the industrialists.

On 24 March, in a live-streamed press conference, Conte announced a new decree approved by the Council of Ministers. The decree imposed higher fines for the violation of the restrictive measures, and a regulation of the relationship between government and Parliament during the emergency. It included also the possibility of reducing or suspending public and private transport, and gave the regional governments power to impose additional restrictive regulations in their Regions for a maximum of seven days before being confirmed by national decree.

On 1 April, the government extended the period of lockdown until 13 April, with health minister Speranza saying that the restrictive measures had begun to yield the first positive results.

On 6 April, the government announced a new economic stimulus plan, consisting of  $\notin$ 200 billion of state-guaranteed loans to companies and additional  $\notin$ 200 billion of guarantees to support exports.

On 7 April, after more than a month of suspension, the Italian Basketball Federation officially ended the 2019–20 LBA season, without assigning the title.

On 8 April, a government's decree closed all Italian ports until 31 July, stating that they do not ensure the necessary requirements for the classification and definition of "safe place", established by the Hamburg Rules on maritime search and rescue."

# **1.2.3.**Local measures

On 15 March, President of Campania Vincenzo De Luca imposed a strict quarantine on Ariano Irpino, in the province of Avellino, and four other municipalities in the province of Salerno, Atena Lucana, Caggiano, Polla, and Sala Consilina.

On 16 March, President of Emilia-Romagna Stefano Bonaccini imposed a strengthened quarantine on the municipality of Medicina, near Bologna, since

it had developed an intense outbreak. People were not allowed to enter or exit the town for any reason.

#### 1.3. Impact.

Hidden behind the official Covid-19 numbers is a much broader health crisis, rapidly accumulating across the country. Even greater than the official coronavirus toll may be the collateral damage wrought by an overstretched health system: the pregnant women and babies, cancer and HIV patients, and children in need of vaccines who are now less likely to get the health care they need.

"Most health systems are pretty streamlined and so an excessive increase in patients rapidly strains resources," said Richard Neher, a University of Basel researcher who has been <u>modeling</u> how Covid-19 could stress hospital demand. "If you react too late, you're in trouble."

"What is very clear," Neher added: "Without a drastic reduction in transmission of the virus, health systems will be overwhelmed."

In a public letter, Italian doctors had a similar warning for the world: "We are seeing a high percentage of positive cases being admitted to our intensive care units (ICUs), in the range of 10 per cent of all positive patients.

"We wish to convey a strong message: Get ready!" Italy, they warn, is more of a harbinger of what is to come around the world than a unique hot zone.

In other words, Italy's situation today could be any country's situation tomorrow. Lombardy — one of the wealthiest regions in Europe — shows how an outbreak, almost overnight, can spiral into a full-fledged crisis when officials do not prepare and react too slowly. And that surge, many believe, is coming to the US and other countries in Europe very soon.

2. <u>Reasons.</u>

It is not clear why Italy's Covid-19 outbreak spiraled so quickly relative to other European countries, but there are several competing theories.

<u>One theory is that</u> an *aggressive testing campaign centered in wealthy Lombardy has inflated the problem* at a time when other countries have lagged in detecting cases. Relatedly, the government started looking for the virus too late. Matteo Renzi, a former Italian prime minister, pointed out that the virus had been spreading in Italy for 10 days before health officials realized. So Italy was forced into reaction mode — something other countries should avoid, Renzi told the <u>New York Times</u>. "Today the red zone is Italy," he warned. In 10 days, Madrid, Paris, and Berlin may be in the same situation.

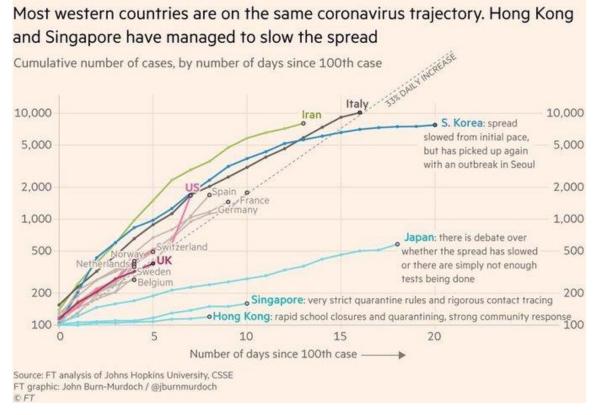


Figure 23 Cumulative number of cases by number of days since 100th case in Italy

## Statistics as of 12 March 2020

**Another theory** is that intense spread of the virus in the hospital system, before doctors realized there was a problem, may have amplified the outbreak. Some 10 percent of medical workers in Lombardy have been infected, according to a **March 3** <u>Washington Post</u> report, and health workers account for 5 percent of those infected in the country. (Bolstering this explanation: The <u>WHO-ECDC joint mission</u> report suggests Italy should work on its infection prevention and control measures in hospitals.)

There is also speculation about whether <u>Italy's burden is particularly</u> <u>severe</u> because of the country's aging population. Covid-19 is known to hit <u>older adults particularly hard</u>. That, along with the fast rise in confirmed cases, has tested the limits of the health system.

2.1. What other countries need to know.

"While <u>Italy's economy</u> is already in a nosedive, we do not yet know the extent of the damage stemming from the country's overwhelmed health system. We can expect, however, it will be significant", says Lawrence Gostin, the director of the O'Neill Institute for National and Global Health Law at Georgetown University. "What we've learned from all past outbreaks is that when you have a stressed health system, many more people die of other diseases than they do of the actual outbreak disease."

During the Ebola epidemic of 2014-'16, for example, people living in the <u>countries at the center of the outbreak failed to have their basic medical</u> <u>needs met</u>. In the ongoing Ebola outbreak in the Democratic Republic of Congo, interruptions in routine vaccinations helped spark a <u>massive measles</u> <u>outbreak</u>. In China's Covid-19 epidemic, numerous stories have already emerged about <u>cancer patients awaiting treatments</u> who were turned away, and <u>HIV patients</u> who ran short on their drugs. That is not to mention the economic and psychological toll outbreaks can have.

So what should other countries do now to prevent this kind of collateral damage?

**First**, health officials need to find ways to flatten the epidemic curve of the outbreak. And this starts with <u>social distancing measures</u>, like canceling mass public gatherings, encouraging employees to work from home, and even shutting schools and universities, if necessary.

"What's dangerous about an outbreak is when everyone gets the disease at the same time and a health system can't react," explained <u>Steven Hoffman</u>, the director of York University's Global Strategy Lab. "The whole goal of social distancing measures is to decrease the epidemic's peak" and take that pressure off the health system.

In Italy, those measures were not implemented proactively — only as a desperate countermeasure after health officials started to see coronavirus cases climb. And other countries that haven't yet recorded a spike in cases have time to be proactive.

Besides slowing transmission of the virus, though, there are many other things health officials should be doing right now to prepare for a surge. And they go far beyond <u>the basics</u>, such as **making sure hospital beds and intensive care units are freed up** to meet patient demand, that **health professionals have access to personal protective equipment (including masks)**, and that **there are enough ventilators to support the 10 percent of the potential Covid-19 patients who will need help breathing to stay alive**.

In <u>China</u>, a vast effort to test and identify people with the virus, trace all their contacts, and quarantine the potentially exposed was key to tamping

down the epidemic there, according to Bruce Aylward, the director of a <u>World Health Organization</u> mission to China. Chinese officials also reduced barriers to people seeking Covid-19 tests by offering them for free, and in some cases, sent health professionals into people's homes to swab potentially infected individuals for the virus.

Last but not least, **China enhanced its digital health care capacity** to keep people from showing up at pharmacies, clinics, and hospitals, Aylward explained:

Normally a prescription in China cannot last for more than a month. But they increased it to three months to make sure people didn't run out (when they had to close a lot of their hospitals). Another thing: **Prescriptions could be done online** and through WeChat (instead of requiring a doctor appointment). And they set up a **delivery system for medications** for affected populations.

"This kind of approach is long overdue in America, even outside of a pandemic threat", said Tom Frieden, the former director of the Centers for Disease Control and Prevention. "There are over 100 million Americans with chronic conditions and people need to be on their medications for diabetes, seizure disorder, and high blood pressure. That care needs to not get interrupted. And that means states and the federal government should be looking at how to deliver services to patients online right now", he added.

"Another even more basic step is **making sure patients know when to show up in clinics**, <u>when to get tested</u>, and when to stay home", said Jennifer Nuzzo, an infectious disease expert and senior scholar at the Johns Hopkins Center for Health Security.

3. Conclusion.

In theory, Italy is in a better position than many other countries to react to the current outbreak. However, an aggressive approach needs to be taken with patients who are critically ill with SARS-CoV-2, often including ventilatory support. The system's capacity to respond to changing circumstances has been under enormous pressure, at least in the Lombardy region, where two clusters have already emerged since Feb 21. It could be predicted that if the exponential trend continues for the next few days, more than 2500 hospital beds for patients in intensive care units will be needed in only 1 week to treat ARDS caused by SARS-CoV-2-pneumonia in Italy. In the meantime, the government is preparing to pass legislation that will enable the health service to hire 20 000 more doctors and nurses and to provide 5000 more ventilators to Italian hospitals. These measures are a step in the right direction, but the model shows

that they need to be implemented urgently, in a matter of days. Otherwise, a substantial number of unnecessary deaths will become inevitable. Intensive care specialists are already considering denying life-saving care to the sickest and giving priority to those patients most likely to survive when deciding who to provide ventilation to. This attitude has already been criticized by the current President of the Italian Comitato di Bioetica who, in a recent declaration to lay press stated that the Constitution recognizes the right of every individual to receive all necessary health care. They might not recognize that the reality is that intensive care wards are overflowing with patients and that COVID-19 is not a benign disease. Italian doctors and nurses are modern heroes in an unexpected war against a difficult enemy. In the near future, they will have no choice. They will have to follow the same rules that health-care workers are left with in conflict and disaster zones.

The present analysis could help political leaders and health authorities to move as quickly as they can to ensure that there are enough resources, including personnel, hospital beds, and intensive care facilities, for what is going to happen in the next few days and weeks. Finally, this analysis tends to suggest that measures to reduce transmission should certainly be implemented, as Italian government did on March 9, by inhibiting people's movement and social activities, unless strictly required. Rather than revising the Schengen visa-free zone, the most effective way to contain this viral outbreak in European countries is probably to avoid close contact at the individual level and social meetings in each country.

# Annex 7 CoV-19 in Turkey

# **Case numbers in Turkey**

On 9 April, 28,578 new tests were performed, 4,056 new cases were detected and 96 new deaths occurred. With these figures; the total number of tests increased to 276,338, the total number of cases to 42,282, and the total number of deaths to 908.

#### **Current case status**

Total Cases – <b>42,082</b>
Total New - <b>4056</b>
Total Deaths – 908
New Deaths - <mark>96</mark>
Total Recovered – 2142
Active Cases – 39232
Serious – 1552

# **Pandemic trend:**

Even though the government imposed restricted measures, COVID 19 will continues to spread in the most crowded provinces.

#### COVID 19 – PART 2

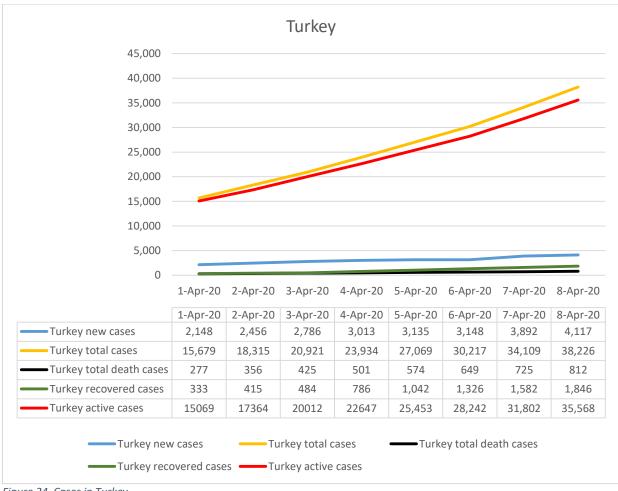


Figure 24 Cases in Turkey

## Measures Taken by Turkish Government:

https://en.wikipedia.org/wiki/2020\_coronavirus\_pandemic\_in\_Turkey

1. On 1 April 2020, Minister confirmed that the total number of cases increased to 15,679 and the death toll reached 277. At that time, 106,799 tests were performed. In fact, in all 81 provinces were confirmed cases and in 39 provinces deaths. The province with the highest number of cases and deaths was Istanbul with 8,852 cases and 117 deaths. It was followed by İzmir with 853 cases and 18 deaths, and Ankara with 712 cases and 7 deaths. It means that COVID 19 spread quickly in crowded areas, and imposed measure "social distancing", plays a significant role in response to the pandemic.

2. On 2 April 2020, 18,757 new tests were performed, adding 2,456 new cases detected and 79 further deaths occurred. The total number of tests increased to

125,556, the total number of confirmed cases to 18,135, and the total number of deaths to 356.

3. On 3 April 2020, confirmed cases increased to 20,921 and the total number of deaths to 425. It was announced, patients in intensive care who had at least one additional disease and asthma was the major risk for patients with COVID-19.

4. On 4 April 2020, confirmed cases increased to 23,934 and the total number of deaths to 501. The number of tests has increased to 19,664.

5. On 5 April 2020, confirmed cases increased to 27,069. Out of the confirmed cases, 1,381 people were receiving treatment in intensive care units, 935 of which also received respiratory support.

6. On 6 April 2020, confirmed cases increased to 30,217 and the total number of deaths to 649. Tests become 21,400 in the past 24 hours.

7. On 7 April 2020, the total number of cases increased to 34,109 and the death toll reached 725. The total number of tests performed as of 7 April was 222,868.

8. On 8 April 2020, 4,117 new cases were reported, and 87 people lost their lives.

9. On 9 April, 28,578 new tests were performed, 4,056 new cases were detected and 96 new deaths occurred.

The Medical association have recognized the urgency of the following 7 measures to effectively combat the COVID-19 outbreak:

- Work must be stopped urgently during the epidemic in all jobs, except for those producing essential, compulsory and urgent goods and services.
- During the epidemic, layoffs should be prohibited, small tradesmen should be supported, employees should be given paid leave, and unemployed unemployment benefits should be paid for the unemployed.
- Consumer, housing and vehicle loans, credit card debt and electricity, water, natural gas and communication bills should be postponed during the epidemic risk without interest.

- In this process, private health institutions should be brought under public control, citizens' access to health services should be completely free of charge, without exception and preconditions.
- Strict discipline should be applied in coordination in combating the epidemic, and scientific approach and information sharing should be open and transparent. A scientific-pervasive and equitable process should be dominated in COVID-19 Tests, which became the criterion of trust, and the results are explained quickly.
- All deficiencies, especially protective equipment in all compulsory jobs, especially physicians, healthcare and municipal employees, should be eliminated, confidence should be given that there would be no disruption, and everyone working in these jobs should be tested regularly.
- Considered as disadvantaged groups during epidemic periods; Actual and legal regulations that will protect their lives and health should be implemented for the poor, immigrants and detainees/convicts who have no income and accumulation.

In this period, COVID 19 spread quickly in crowded areas, consequently, imposed measure "social distancing", plays a significant role in response to the pandemic. Confirmed cases increased in parallel with performed tests. The figures given by the Ministry of Health were based on confirmed cases and did not include suspected/possible cases.

#### Annex 8 CoV-19 in Brazil

How has the virus spread in the country - total cases (profiles of infected – Patient 0), deaths, recovered, cases per 1M, age, sex, religion, social status differentials, cities division, trends18.

- **Patient 0** The coronavirus pandemic was confirmed to have spread to Brazil on 25 February 2020, after a 61-year-old man from São Paulo who had returned from Lombardy, Italy tested positive for the virus.
- **Total number of infected, deaths, new cases and recovered** are presented on the graph below

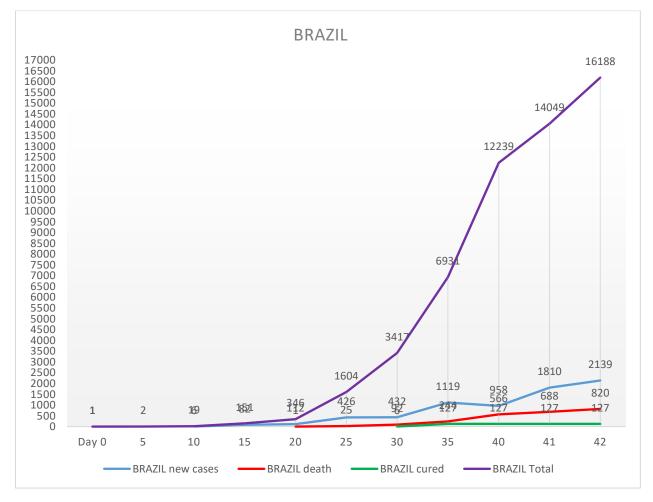


Figure 25 Cases in Brazil

- Cases per 1M 76
- Sex, religion, social status differentials N/A
- Current number of cases by state<sup>19</sup>

<sup>&</sup>lt;sup>18</sup> https://www.worldometers.info/coronavirus/

<sup>&</sup>lt;sup>19</sup> https://en.wikipedia.org/wiki/2020\_coronavirus\_pandemic\_in\_Brazil

# COVID 19 – PART 2

State	<b>Confirmed Cases</b>	<b>Confirmed Deaths</b>
<u>Acre</u>	50	1
🔚 <u>Amapá</u>	48	2
Amazonas	636	23
Nará	138	5
Rondônia	18	1
Moraima	42	1
Market Tocantins	19	0
Alagoas	32	2
Bahia	456	12
• <u>Ceará</u>	1051	31
Maranhão	172	4
Paraíba	36	4
Pernambuco	352	34
Piauí	28	4
Rio Grande do Norte	254	8
Ergipe Sergipe	36	4
<b>Espírito Santo</b>	209	6
Minas Gerais	559	11
Rio de Janeiro	1,688	89
≝ <u>São Paulo</u>	5,682	371
Distrito Federal	492	12
E Goiás	133	5
Mato Grosso	78	1
Mato Grosso do Sul	80	2
<b>№</b> <u>Paraná</u>	503	15
Prio Grande do Sul	508	8
Santa Catarina	417	11
<u>Brazil</u> ■	16 188	820

• **Trends** – The number of new cases increases exponentially

What kind of measures have been taken – initial stage; escalation, peak (if reached) and de-escalation<sup>20</sup>;

## • Initial Stage:

- January 28, the Ministry of Health (Ministério da Saúde) raised the emergency alert to level 2 of 3, considering an "imminent threat" for Brazil, as a suspected case was being investigated in Belo Horizonte, Minas Gerais.
- January 29, the Ministry announced it was investigating two other suspected cases, in Porto Alegre and Curitiba. No further information was given about the patients in Porto Alegre and Curitiba. However, it was informed that the Belo Horizonte patient was a student that had recently visited Wuhan, China, point of origin of the outbreak.
- February 3, the Minister of Health Luiz Henrique Mandetta said that the Brazilian government would declare a Public Health Emergency of International Concern, even without confirmed cases in the country. He also said the government would assist on the return of Brazilians from Wuhan.
- February 4, the Ministry confirmed that around 30 Brazilians were in Wuhan, and that they would return to the country on 8 February. It was also announced that they would be quarantined for 18 days in Anápolis, Goiás.
- February 5, the Brazilian government sent two planes to evacuate 34 Brazilians from Wuhan. They and the flight crew were quarantined at a Brazilian Air Force base in Anápolis, and discharged, along with the doctors and health professionals who had contact with them, on 23 February, four days earlier than predicted, as routine tests repeatedly showed negative results for COVID-19.
- February 25, the first case of COVID-19 in Brazil and in South America, was reported by the Health Department of São Paulo.
- Escalation
- February 29, a second case was confirmed in the country.
- March 13 the first patient of COVID-19 in the country recovered.
- March 17 the first coronavirus-related death was confirmed in the country. Later that day, the Ministry of Health reported 291 confirmed cases in the country.
- March 20, the health departments of the Brazilian states had reported almost a thousand confirmed cases. COVID-19 cases were confirmed in 23 states (of 26) and the Federal District.

<sup>&</sup>lt;sup>20</sup> https://en.wikipedia.org/wiki/2020\_coronavirus\_pandemic\_in\_Brazil

- March 21, the local government of the State of São Paulo declares a statewide quarantine starting on 24 March. The measure determined the closure of all commerce and non-essential services from that date until April 7. All Brazilian states reports at least one confirmed case of COVID-19, with the last being Roraima.
- March 26, a month after the first case of coronavirus (causing COVID-19 disease) in Brazil, confirmed on 26 February, the Ministry of Health reports 2,915 infected and 77 deaths.
- March 28, Brazil totals more than 100 confirmed deaths from COVID-19. The Ministry of Health reported on Saturday (28) that Brazil has so far registered 114 deaths and 3,904 confirmed cases of coronavirus. The mortality of COVID-19 in the country is 2.9%, according to the balance released by the folder. The survey also points out that, in the country, men die more from coronavirus than women—61.4% (H) against 38.6% (M). Approximately 90% of deaths are people over 60 years of age. In 84% of deaths, patients had at least one risk factor. The most common, according to the Ministry, is heart disease, followed by diabetes and pneumopathy.
- Preventive measures
- On 17 March, Brazilian authorities partially closed their border with Venezuela. Health Minister Luiz Henrique Mandetta had urged closure of the border due to Venezuela's collapsing health system.
- On 18 March, Rio de Janeiro and five other municipalities—São Gonçalo, Guapimirim, Niterói, Nova Iguaçu, and Mesquita—in the state of Rio de Janeiro have declared an emergency state to help contain the coronavirus. Declared emergency situations in the area of public health.
- The following day, the government of Rio Grande do Sul declared a public calamity situation. Among the measures adopted are the prohibition of interstate travel and the restriction of items purchased in the markets.
- On 20 March, it was the government of Rio Grande do Norte that declared a public calamity situation. Government declarations about the disease on the Palácio do Planalto. Government of Rio Grande do Norte decrees public calamity because of the coronavirus. The measure becomes effective on Friday (20), after being published in the Official Gazette of the State.
- On 21 March, In SP, cases of coronavirus rise almost 40% in two hours. Deaths also increased in the period. Cities in the Campinas region declared an emergency situation due to the pandemic of the new coronavirus. In addition to the metropolis, Hortolândia, Holambra, Indaiatuba, Itapira, Jaguariúna, Mogi Guaçu, Mogi Mirim, Paulínia, Sumaré and Águas de Lindoia issued decrees with special measures to contain the progress of

COVID-19 cases. Valinhos and Vinhedo determined a state of public calamity. Americana is in a state of attention.

## • Peak – has not been reached yet.

## Scientific research and forecast<sup>21</sup>

On 19 March, **Scientists predict up to 2 million deaths in Brazil** in the worst scenario without measures to contain the virus. They point out that a policy of social distancing is one of the most effective measures without a vaccine.

On 20 March, experts from Italy warned that the Coronavirus growth curve in Brazil would repeat that of European countries. Observatory with physicists from University of São Paulo USP, Unicamp, Unesp, UnB, UFABC, Berkley (US) and Oldenburg (Germany) shows that the number of infected people, considering data from March 19, had been doubling every 54 hours, and that the case total would exceed 3,000 on the 24th.

On 21 March, researchers are mobilizing to increase test availability in Brazil. The expectation is that with just a drop of blood from the patient it will be possible to know if he has the new coronavirus and at what stage; the idea is that experiments are ready for the current wave of COVID-19 and action mobilizes some of the main Brazilian universities. The Health Minister has said the numbers will increase exponentially until the end of June.

## Rationales behind specific measures taken and effectiveness analysis.

Measures taken have been focused on the health system collapse protection and economy and business stabilization.

The situation, as today, shows ineffectiveness of measures.

The situation underestimate initially and late and reactive measures result in a not controlled COVID 19 spread in Brazil huge numbers of infected people and deaths.

Future projections – peak, de-escalation, stabilization, normalization – N/A.

<sup>&</sup>lt;sup>21</sup> https://en.wikipedia.org/wiki/2020\_coronavirus\_pandemic\_in\_Brazil

#### Annex 9 CoV-19 in South Korea

#### **1. SOUTH KOREA – characteristics:**

- 1.1. Area: 100 295 km<sup>2</sup> (<u>107th place</u>);
- 1.2. Population 51,71 million (28th place):
  - 1.2.1. 25,83 million men;
  - 1.2.2. 25,87 million women;
  - 1.2.3. 14,12% above 65 years
  - 1.2.4. 82 % city population;
- 1.3. Density: 507/km2 (<u>на 23th</u> place);
- 1.4. Capital City: Seoul, population 25 million;
- 1.5. GDP 2020 \$2,418 billion (14th place);
- 1.6. Life expectnacy: 82,8 years (9th place):
  - 1.6.1. 80,5 years in the men;
  - 1.6.2. 86,4 years in the women.
- 1.7. Meterorology on 20 JAN (the first COVID-19 case): +1 / +8 C

#### 2. Crisis development in South Korea

#### 2.1. South Korea on the doorstep of COVID-19

COVID-19 is not the first infectious disease with an epidemic risk facing South Korea. In 2015, another coronavirus, Middle Eastern Respiratory Syndrome (MERS), broke out in the country. Emergency quarantine measures were then imposed and a new law to control infectious diseases subsequently came into force, which increased the country's capacity to cope with future epidemics. The law allows all epidemiologic health services to require data from mobile operators for the location of confirmed infected people, which is compared with data from public video surveillance systems and credit card statements. In this way, it is possible to quickly identify the public places visited by the infected and to track all their contacts.

For years, South Korea has been systematically investing in high numbers of hospital beds for infectious diseases. In the epicenter of the contagion -Degu, the beds are quickly running out, and it is more for the quarantine places than those for intensive care, and there are no deficits in the beds for severe cases.

As soon as Chinese scientists first published the genetic structure of the new virus, four pharmaceutical South Korean's companies began developing test kits, all long before the country had its first outbreak. The first case of a coronavirus infected in South Korea is from 20 JAN. 7 days later another four have already been infected when the government holds a formal meeting with representatives of pharmaceutical companies in the country. The goal was quickly development of infection detection tests. Only a week later, the first test developed is already available. Thanks to the facilitated procedure for approving new diagnostic tests (procedure written in the new law after MERS), South Korea has a total of seven types of approved coronavirus tests, most of which are manufactured by private laboratories and purchased by the state.

#### 2.2. South Korea's fight with COVID-19

The experience that can be drawn from the actions of the authorities in South Korea against the spread of COVID-19 can be described as a combination of:

- Early mass testing and care by the Government;
- High transparent institutions' activities;
- Early information campaign and high public awareness;
- Efficient use of new technology;
- Supporting the business.

#### 2.2.1. Early mass testing and care by the Government

#### COVID 19 - PART 2

Within weeks of the outbreak of the epidemic in China, the newly developed COVID-19 test kits, which show results in only six hours, were urgently approved by the government and made available to clinics. South Korea's strategy was to perform as many tests as possible as early as possible, reaching 15,000 tests a day. Early detection allows for early treatment, and widespread testing means that mild or asymptomatic cases are more likely to be identified, which increases the total number of cases so that the proportion of dying decreases.

The state covers almost everything: the cost of testing for suspected, and the confirmed cases - the full cost of treatment, although most hospitals are private. Thus, most cases of the disease are caught at a relatively early stage, which partly explains the much lower mortality than the world average. Patients with mild symptoms stay at home, receiving financial compensation based on their income, as well as a package of vital products - food, soap, disinfectants and more. The rich healthcare system also allows for very good conditions for patients under quarantine who are treated in sanatoriums compared to "Five star hotels".

A state's decree prohibits the export of local mask production. The state purchases them from the producers and sells them at a reduced price to the citizens. They have rights to two masks (N-95) per week – had been given by a scheme that prevents queues.

Testing fees are \$ 134, but are free for people connected with confirmed cases - or those who test positive, which encourages population participation in measures.

#### 2.2.2. High transparent institutions' activities

The South Korean government has won public participation in anti-virus measures and activities through transparency and timely and accurate information. Details of the movement of confirmed anonymous patients are uploaded on state and municipal websites and shared through the news. The places that infected patients had visited - restaurants, pubs, parks - are published. In this way, the public is additionally aware of how to minimize the risks of infection. And the public places visited by the COVID-19 infected people are closed for two days for complete disinfection, as is done on every subway train after each complete route.

#### 2.2.3. Early information campaign and high public awareness

The main measures in the country are aimed at raising public awareness of the ways in which the infection is transmitted. With the first patients discovered, a massive information campaign is being launched about the measures that anyone can take to minimize the risk to themselves and others - compliance with the socalled Social distance and personal hygiene.

In addition, Koreans adhere to a very rigorous masking discipline built in previous epidemics in Asia (MERS, SARS) over the last 20 years. More over, most public buildings and stores do not allow people without mask entrance. And without formal quarantine, the establishments and the streets become empty - everyone orders food from vendors and tries not to go out unless necessary. This leads to quiet streets and half-empty shops and restaurants.

#### 2.2.4. Efficient use of new technology

The government approach is - massive and innovative tests combined with the widespread use of mobile applications and social networks.

In South Korea, anyone can find out where the infected people were and avoid these places. This is done through special mobile applications. An automatic notification system has been introduced (the phone rings in a noticeable way, regardless of its settings), which is activated through people's smartphones when they approach an area where there has been a recent confirmed infection. The state also sends messages to anyone who owns a smartphone, urging them to avoid gathering large groups, keeping distance, regularly disinfecting homes and ventilating. The automatic messages on mobile phones are also added timely information on the places where new infections are located, and the routes of the infected available with link.

With another installed mobile application, authorities monitor the movement of infected people.

#### 2.2.5. Supporting the business.

South Korea's measures to support business were immediate, very fast and decisive. The additional \$ 1 billion budget voted on has been set up to support small and medium businesses. The aid takes the form of almost interest-free or low-interest loans, as well as special support for payment of wages. The government also deferred state claims.

Commercial and trade activities in South Korea has not been completely ceased, and some non-supply-related operations are operating under near normal conditions. People respect the most important thing - the requirement for social distance. Many of the employees work from home and the services are the most affected.

#### **3.** Government activities.

The first confirmed case of a coronavirus in the country is on 01/20/2020. The infected woman is 35-year-old Chinese who traveled from Wuhan (China) to the airport near Seoul (South Korea). She was isolated for treatment. Using the experience so far in combating the epidemic, the government has used strict rules to track affiliates, along with mass testing. The government measures are indicated effective until the middle of February, when the so-called PATIENT-31 didn't follow the isolation guidelines and participates in a public liturgy at a church in Degu.

After that the large percentage of those infected in South Korea are associated with 2 major clusters - the aforementioned church and a nearby hospital in the city. The measures imposed in the country are in line with the recommendations of the World Health Organization concerning social distance and hygiene requirements:

- In Seoul (9,7 million population) public spaces were closed on 21FEB, when the infected people were just 150 across the country.
- 3.2. Cancelled all major sports events very soon after discovering the first major eruption of the disease in country.
- 3.3. Banning large gathering.
- 3.4. Involvement of the army in support of state efforts in control and disinfection activities.
- 3.5. Mandatory disinfection after the end of working hours in places with higher attendance.
- 3.6. Mandatory wearing of face masks, with access to public transport and entry into business buildings denied with no mask on.
- 3.7. Thermal cameras are installed at key locations and entrances of business buildings to monitor the temperature of people.
- 3.8. Kindergartens, schools and universities are closed.

The measures, coupled with mass testing, high self-awareness and human responsibility, and yet not a total ban on street traffic and city blocking, make South Korea one of the best in the fight against the virus.

#### 4. Actions of large business.

Continued efforts by the authorities to curb the spread of the disease in South Korea have made the country an example of successfully managing the spread of the pandemic. Mass testing and the use of innovative mobile applications are one of the reasons for the successful fight against the infection, but on the other hand, the high awareness of the

people, their discipline and belief in state measures contribute to the success.

Economically speaking, the country is one of the world leaders in electronics (Samsung and LG) and automobiles (Hyundai and KIA). During the pandemic, the management of the company remains flexible in its approach and provides the necessary conditions for continuous work, in compliance with state guidelines for disinfection, isolation, restriction of business trips, encouragement to work from home. However, Samsung and LG closed their production in countries outside South Korea, and this was in compliance with the restrictions imposed by the respective countries (Russia, China, Brazil, India, USA, etc.) where the factories are located. Automotive production was largely influenced by China's source of raw materials, which cut off supplies.

After Samsung reported infected workers, management announced that it would temporarily relocate smartphone production from South Korea to Vietnam. Over the last decade, the tech giant moved much of its smartphone production to Vietnam, where it makes more than 50% of its phones, and so far has had virtually no production disruptions. At the same time, following a confirmed case of an infected employee, LG has temporarily shut down production at one of its workplace disinfection plants.

Despite difficult times and financial constraints, Samsung made a \$ 29 million donations to the Government. Despite money this includes face masks and breathing aids. The company has donated some tablets to educational institutions to provide to children for closed schools. The company has provided its training center to medical authorities to be used as a care center. Samsung's engineers worked on refining the process of developing and manufacturing masks in South Korea. As a consequence, such a South Korean company doubles its daily output. Samsung has created teams of people (Samsung COVID-19 task force) that keep track of current pandemic information and provide it to employees, as well as tips for preventing and limiting infection. Samsung aslo provided a warranty extension for their products, with an expired warranty during the emergency and the company's services were unavailable.

An official update on the government's anti-virus activities is posted on the official Hyundai website. A new way of testing for coronavirus is presented. These are mobile teams equipped and deployed at designated locations on major roads. The idea is that anyone who wants can go with their own car without getting out of it to be sampled and within a few hours to be informed of the result. This avoids the inconvenience of going to the lab, wasting time and causing stress, while avoiding many people in one place.

Hyundai executives say they are opening two rehabilitation centers for COVID-19 patients in South Korea. And in the hardest hit areas of the country, together with the National disaster management association, they provide protective care and resources. Free sanitation for cars, public places, and buses are provided.

A special financial program has been prepared whereby clients of the company can receive interest-free loans, compensation for payment upon dismissal, as well as exemption from payment of non-installments when buying a car for leasing.

#### **Conclussions**:

South Korea, as a wealthy country, has been greatly assisted by private business in its efforts to tackle the contagion. Large manufacturing concerns, encouraged by their desire to take care of their customers, provide both personal care for people as well as large sums of money, materials and buildings, which are also helpful to local authorities.

#### COVID 19 – PART 2

Again, the huge number of coronavirus tested is impressive. Mass testing is one of the pillars of the state in the fight against the spread of the virus as of 09.04. the total number of people tested is: 494 711.

Despite optimistic results in reducing the number of infected and low mortality rates (2.1%), the authorities are aware that the virus will circulate for a long time. This provides an incentive to develop and apply even rigid rules for the detection and isolation of both patients and related persons, as well as the care of those who are already ill.

In spite of the high discipline of the society, it seems that there are people who underestimate the danger and violate the rules for quarantine. It also shows the strong will of the authorities to prevent massive gontagion by introducing more severe penalties for quarantine violators as of 05.04.

#### 5. Regulation of public markets in the cities.

Information boards are placed at the entrance indicating:

- That anyone with a cough or fever is with denied access;

- Observance of 2 meters distance is obligatory;

- Sneezing should be done in a handkerchief or napkin, after which the hands must be disinfected;

- It is forbidden to play music, which prevents people from gathering in one place;

- Hand shaking is forbidden, as is any physical contact that can be avoided;

- Promote home shopping through a designated website/mobile application;

- Customers are encouraged to come with a written list of desired purchases, which saves time and allows more customers to visit the market;

- It is encouraged to come in the afternoon to distribute people throughout the working day.

- Sampling (from vegetables / fruits) is prohibited.

Sellers from the market when they come to work are checked for symptoms.

The shoping cabins/tables are 2 meters away. Plexiglass or nylon insulation is applied if possible.

Toilets are disinfected on schedule.

The total area of the market is calculated based on the total number of visitors at the same time. Excess is not allowed. This is easily adjustable via number plates. It is only logged in with an available plate or when a customer exits, after disinfection it is given to the next customer.

A time is set for only older people to have access to the market. Approximately 2 o'clock in the morning.

# 6. Additional information to illustrate the development of the pandemic in South Korea.

6.1. The graphs show how effective it is to curb the spread of the disease by using modern technologies and informing the public in a timely manner.

The figure shows two graphs that describe the number of new daily cases, as well as those recovered after treatment. On the left you can see the specific actions of South Korean authorities in their fight against COVID-

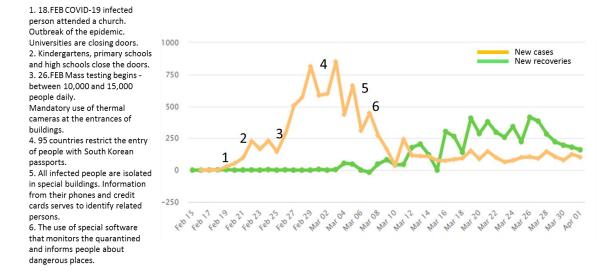


Figure 26 Number of new daily cases and recovered in South Korea

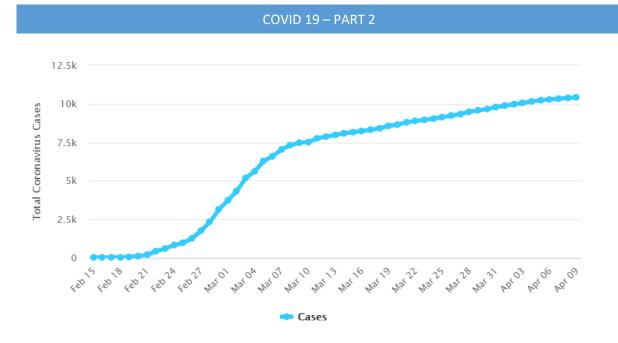


Figure 27 Total Coronavirus Cases in South Korea

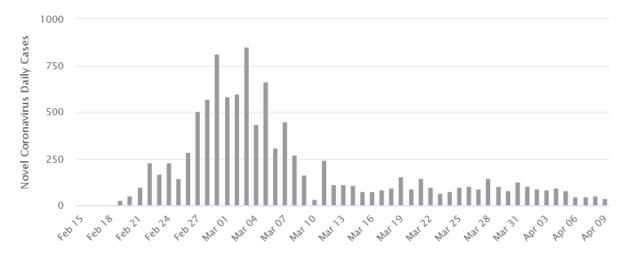


Figure 28 Daily New Cases in South Korea.

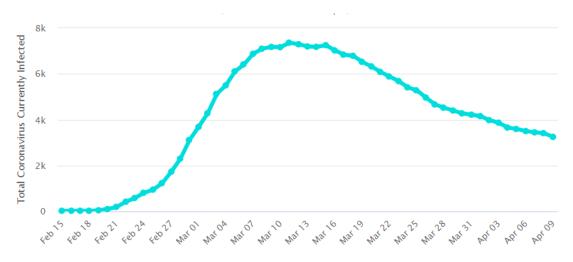


Figure 29 Active Cases in South Korea.

Classification		Cases		Fatal cases		
		Number	(%)	Number	(%)	<b>Rate (%)</b>
All		10,284	(100)	186	(100)	1.81
Sex	Male	4,118	(40.04)	98	(52.69)	2.38
Sex	Female	6,166	(59.96)	88	(47.31)	1.43
	Above 80	465	(4.52)	92	(49.46)	19.78
Age	70–79	686	(6.67)	52	(27.96)	7.58
	60–69	1,294	(12.58)	26	(13.98)	2.01
	50–59	1,906	(18.53)	13	(6.99)	0.68
	40–49	1,375	(13.37)	2	(1.08)	0.15
	30–39	1,086	(10.56)	1	(0.54)	0.09
	20–29	2,804	(27.27)	0	(0.00)	-
	10–19	542	(5.27)	0	(0.00)	-
	0–9	126	(1.23)	0	(0.00)	-

## 6.6. Details of infected by age and gender: 06 APR 2020.

## SOME CONCLUSSIONS:

It is difficult to expect that comparable measures with those in South Korea can be implemented in Bulgaria. With equal proportions in terms of early detection and prevention, 15,000 tests per day in South Korea are equivalent to 2,000 tests per day in Bulgaria to meet their early detection standard.

The smaller number of people tested means that the infected are detected much later - when they have already infected others. For a month and a half in BG people were not tested if they had no symptoms and the idea was that "the test would be negative". Given that more than 2/3 of all tested positive are symptom-free, starting mass testing is critical to limiting the infection.

## Annex 10 CoV-19 in Africa

Location	Cases	Deaths	Recoveries
<b>≥</b> South Africa	1,686	12	95
Algeria	1,423	173	90
Egypt	1,322	85	259
Morocco	1,120	80	81
Cameroon	658	9	17
Tunisia	596	22	5
Burkina Faso	364	18	108
<b>Réunion</b>	349	0	40
Ivory Coast	323	3	37
<b><u>Niger</u></b>	253	10	26
Mauritius	244	7	7
■ ■ <u>Nigeria</u>	238	5	35
Senegal	226	2	92
<b></b> <u>Ghana</u>	214	5	31
Mayotte	164	2	15
<b>Mathebra Democratic Republic of the Congo</b>	161	18	5
Kenya	158	6	4
<b>Guinea</b>	128	0	5
<u>Rwanda</u>	105	0	4
<mark>≥ Djibouti</mark>	90	0	9
Madagascar	82	0	2
E Togo	58	3	22
<u>Uganda</u>	52	0	0
<b>Republic of the Congo</b>	45	5	2
Mali	47	5	9
<b>Ethiopia</b>	44	2	4
<b>Zambia</b>	39	1	1

## Confirmed cases by country and territory in AFRICA

## COVID 19 – PART 2

Location	Cases	Deaths	Recoveries
<b>Eritrea</b>	31	0	0
Benin	26	1	5
Gabon	24	1	1
Zanzania	24	1	3
Libya	19	1	1
<b>Guinea-Bissau</b>	18	0	0
Angola Angola	16	2	2
Equatorial Guinea	16	0	1
Mamibia Namibia	16	0	3
Liberia	14	3	3
E Sudan	12	2	2
<b>Z</b> <u>Seychelles</u>	11	0	0
<b>Eswatini</b>	10	0	4
Mozambique	10	0	1
<u> Zimbabwe</u>	10	1	1
Chad	9	0	0
<b>T</b> <u>Central African Republic</u>	8	0	0
Cape Verde	7	1	0
★ <u>Somalia</u>	7	0	1
<u>Botswana</u>	6	1	0
Mauritania	6	1	2
<u>Sierra Leone</u>	6	0	0
Malawi	5	0	0
Gambia	4	1	2
<b>E São Tomé and Príncipe</b>	4	0	0
X Burundi	3	0	0
E South Sudan	1	0	0
Total	9,576	478	930

Algeria

Първият случай в страната беше потвърден на 25 февруари. На сутринта на 2 март Алжир потвърди два нови случая на корона вирус, жена и дъщеря й. На 3 март Алжир съобщи за още два случая на корона вирус. Двата нови случая са от едно и също семейство, баща и дъщеря, които живеят във Франция.

На 4 март Министерството на здравеопазването регистрира 4 нови потвърдени случая на корона вирус, всички от едно и също семейство, което доведе общия брой до 12 потвърдени случая.

## Angola

На 21 март бяха потвърдени първите два случая в страната. В сила от 20 март, всички анголски граници са затворени за 15 дни.

## Benin

На 16 март бе потвърдено първият случай в страната.

## Botswana

На 30 март бяха потвърдени първите три случая в Ботсвана.

## **Burkina Faso**

На 9 март в Буркина Фасо бяха съобщени първите два случая в страната.

На 13 март бе потвърдено и трети - лице, което имало пряк контакт с първите две лица.

Към 14 март 2020 г. в страната са потвърдени 7 случая. Пет от новите потвърдени случаи са имали пряк контакт с първите два случая. Единият е английски гражданин, нает в златна мина в страната, който се върнал от Ливърпул на 10 март, преминавайки през Ванкувър и Париж.

## Burundi

На 31 март бяха потвърдени първите два случая в страната.

## Cameroon

На 6 март първият случай беше потвърден.

## **Cape Verde**

На 20 март бе потвърден първият случай в страната, 62-годишен от Обединеното кралство.

## **Central African Republic**

На 14 март е потвърден първият случай в страната.

## Chad

На 19 март е потвърден първият случай в страната.

## **Democratic Republic of the Congo**

На 10 март е докладван първият случай в страната.

## **Republic of the Congo**

Първият случай е бил обявен на 14 март, 50-годишен мъж, който се е завърнал в Република Конго от Франция.

## Djibouti

На 18 март бе потвърден първият случай в Джибути. **Egypt** 

Здравното министерство на Египет обяви първия случай в страната на 14 февруари. На 6 март египетското здравно министерство и СЗО потвърдиха 12 нови случая на корона вирусна инфекция. Заразените са били сред египетския персонал на борда на круизния кораб по Нил MS River Anuket. На 7 март 2020 г. здравните власти обявиха, че 45 души на борда са тествани положително и че корабът е поставен в карантина.

## **Equatorial Guinea**

На 14 март е потвърден първият случай в страната. **Eritrea** 

На 20 март е потвърден първият случай в Еритрея.

## Eswatini

На 14 март е потвърден първият случай в страната. **Еthiopia** 

Първият случай в страната беше обявен на 13 март, японец, пристигнал в страната на 4 март от Буркина Фасо. Три допълнителни случая на вируса бяха съобщени на 15 март. Трите лица бяли в тесен контакт с лицето, за което се съобщава, че е заразено от вируса на 13 март. Оттогава още осем потвърдени случая са докладвани от здравното министерство пред обществеността, което е общо 12. Като цяло се потвърждават двадесет и девет случая от 1 април 2020 г. На 3 април 2020 г. поради направените допълнителни тестове са открити шест допълнителни случая, стигайки тридесет и пет. Правителството взема строги мерки, за да потушат понататъшното разпространение на този смъртоносен вирус. Сред шестте идентифицирани случая наскоро имало лица без история на пътуванията, което го прави тревожно за обществеността.

На 4 април са докладвани три допълнителни случая на вируса. На 5 април са съобщени още пет положителни случая на вируса. Три от тях са етиопци. Другите двама са граждани на Либия и Еритрея. Към 5 април 2020 г. има общо 44 случая

#### Gabon

Първият случай в страната беше обявен на 12 март, 27-годишен габонец, който се завърнал в Габон от Франция, 4 дни преди потвърждаването на корона вируса.

## Gambia

Гамбия съобщи за първия си случай на коронавирус от 20-годишна жена, която се завърнала от Обединеното кралство на 17 март.

## Ghana

Гана докладва първите си два случая на 12 март. Двата случая са хора, които се връщат в страната от Норвегия и Турция. На 11 март министърът на финансите Кен Офори-Ата предостави финансов потенциал от 100 милиона долара, за да планира подготовкатаза реакция на корона вирус в Гана. Още 17 случая бяха потвърдени към 17 март. На 19 март здравният министър на страницата си в Туитър писа, че са потвърдени още два случая за една нощ, с което общият брой потвърдени случаи е девет (9). Министърът на здравеопазването каза, че и двата случая са от чужбина. Следобед потвърдените случаи се увеличиха от 9 на 11 след тест на 58-годишна ганайска жена, която е жител на Кумаси, се върнала от Обединеното кралство преди няколко седмици и друг пациент, 61-годишен жител на Кумаси, който показал симптоми на новия корона вирус и също бил тестван положителен. До 20 март Гана е записала пет нови случая на COVID 19, от които 3 не показват история на пътуванията, докато другите 2 се връщат от Париж, Франция и Амстердам, като общия брой потвърдени случаи достига 16.

## Guinea

На 13 март Гвинея потвърди първия си случай, служител на делегацията на Европейския съюз в Гвинея.

## Guinea-Bissau

На 25 март Гвинея-Бисау потвърди първите си два случая на COVID-19, служител в Конго и индийски гражданин.

## **Ivory Coast**

На 11 март бе потвърден първият случай в страната.

## Kenya

На 12 март 2020 г. президентът Ухуру Муйгай потвърди първия случай в Кения. На 15 март 2020 г. президентът насочи мерки за ограничаване на COVID-19.

Здравният министър Мутахи Кагве забрани всички събирания, включително религиозни събирания, на същата дата. Всички полети бяха забранени в сила в сряда, 25 март.

## Liberia

На 16 март е потвърден първият случай в Либерия. **Libya** 

На 17 март, за да предотврати разпространението на вируса, признатото от ООН правителство на Националното споразумение затвори границите на страната, спря полетите за три седмици и забрани на чуждите граждани да влизат в страната; училища, кафенета, джамии и обществени събирания също са затворени. На 24 март бе потвърден първият случай в Либия.

## Madagascar

На 20 март трите първи случая бяха потвърдени в Мадагаскар. Всички били жени.

## Malawi

На 2 април трите първи случая бяха потвърдени в Малави.

## Mali

На 25 март двата първи случая са потвърдени в Мали. **Mauritania** 

На 13 март бе потвърден първият случай в страната. **Mauritius** 

На 19 март бяха потвърдени първите три случая в страната. **Могоссо** 

На 2 март страната регистрира първия си случай на COVID-19. Марокански гражданин, пребиваващ в Италия, завърнал се в Мароко. **Mozambique** 

# На 22 март първият случай е потвърден.

Namibia

На 14 март бяха потвърдени първите два случая в страната. Всички държавни и частни училища също са затворени за месец, а събиранията са ограничени до по-малко от 50 души. Това включи и празненствата за 30-годишнината от независимостта на Намибия, които се провеждат на 21 март. Библиотеките, музеите и художествените галерии също бяха затворени. На 17 март президентът Наде Geingob обяви извънредно положение като правно основание за ограничаване на основните права, напр. свободно да се движат и събират хора, гарантирано от Конституцията. До 25 март 2020 г. общият брой на случаите достигна седем, от които един се смята, че е локално заразен. За 27 март бе обявено 21-дневно блокиране на регионите Еронго и Хомас, като междурегионалните пътувания са забранени, с изключение на градове Окаханджа и Рехобот. За същия период заседанията на парламента бяха прекратени, а баровете и пазарите бяха затворени.

## Niger

Нигер потвърди първия си случай на 19 март 2020 г. Nigeria

На 27 февруари Нигерия потвърди първия си случай - първият случай на корона вирус в Субсахарска Африка. Италиански гражданин, който работи в Нигерия, се завърнал на 25 февруари от Милано, Италия през международното летище.

На 21 март 2020 г. Федералното министерство на здравеопазването, Нигерия потвърди десет (10) нови случая на COVID-19 в Нигерия. Съобщава се, че три (3) нови случая във Федералната столица и седем (7) нови случая в щат Лагос. Това довежда общия брой потвърдени случаи в Нигерия до двадесет и две (22).

Всичките десет (10) нови случая са граждани на Нигерия. Девет (9) от тях имат история на пътуванията до Обединеното кралство, Испания, Холандия, Канада и Франция. Те се завърнали в страната през последната седмица. Десетият случай е близък контакт на предварително потвърден случай. Междувременно на 18 март 2020 г. Федерална република Нигерия преустанови издаването на виза при пристигане на пътници от страни с над 1000 случая. Известието за ограничение е публикувано три (3) дни преди броят на случаите на COVID-19 да се повиши до десет (10).Федералното правителство на Нигерия възложи на институциите да се изключат за 30 дни като мерки за блокиране и забрани за ограничаване на разпространението на COVID-19. Той също забрани публичните събирания. Държавното правителство на Лагос поиска училищата да закрият и забрани публичните събирания.

Във всеки град на Нигерия има много напрежение, тъй като студентите се връщат в различните си домове от страх да не се заразят с COVID-19.

## Rwanda

На 14 март е потвърден първият случай в страната.

## São Tomé and Príncipe

На 6 април бяха потвърдени първите четири случая в страната. **Senegal** 

На 2 март бе потвърден първият случай в страната. **Seychelles** 

Сейшелите съобщиха за първите си два случая на 14 март. Двата случая са хора, които са били в контакт с хора в Италия, който е тестван положително.

## Sierra Leone

На 16 март правителството забрани на държавните служители да пътуват в чужбина и призова гражданите да избягват пътуванията в чужбина. Въведени са карантинни мерки за всички посетители, пристигащи от страни с повече от 50 случая. Публичните събирания на повече от 100 души също бяха забранени. На 24 март президентът Джулиус Маада Био обяви "извънредно положение", за да се справи с потенциалната епидемия.

Президентът на Сиера Леоне потвърди първия случай на корона вирус в страната на 31 март, човек, който пътува от Франция на 16 март и оттогава е в изолация.

#### Somalia

На 16 март е потвърден първият случай в Сомалия. Здравното министерство на Сомалия съобщи, че сомалийски гражданин се връща у дома от Китай. **Somaliland** 

На 31 март бяха потвърдени първите два случая в Сомалиленд. Двата случая са гражданин на Сомалиленд и китайски гражданин. South Africa

На 5 март бе обявено първото потвърден случай, завръщащ се от Италия. На 15 март 2020 г. Южна Африка обяви национално състояние на бедствие. На 23 март 2020 г. президентът Кирил Рамафоса издаде заповед за извънредно положение с продължителност 21 дни от 26 март 2020 г.

### Sudan

Първият случай в страната беше обявен на 13 март, мъж, който почина в Хартум на 12 март. Той посетил Обединените арабски емирства през първата седмица на март. По-късно беше разкрито, че мъжът е починал заради малария, а не Covid-19.

## South Sudan

На 5 април е потвърден първият случай. **Тапzania** 

На 16 март първият случай е потвърден.

Togo

На 6 март бе потвърден първият случай в страната.

## Tunisia

На 2 март бе потвърден първият случай в страната.

## Uganda

На 20 март бе потвърден първият случай в Уганда.

#### Zambia

Замбия докладва за първите си два случая на COVID-19 на 18 март. Пациентите са двойка, пътувала до Франция на почивка. Трети случай е регистриран на 22 март. Пациентът е мъж, пътувал до Пакистан. От 17 март правителството закри всички учебни заведения и въведе някои ограничения за пътуване в чужбина.

#### Zimbabwe

Преди да има потвърдени случаи в страната, президентът Емерсън Мнангагва обяви извънредно положение в страната, като въведе ограничения за пътуване и забрани големи събития.

Първият му случай дойде от мъж от жител на Виктория Фолс, който пътува от Обединеното кралство през Южна Африка на 15 март.

#### Annex 11 CoV-19 in China

#### Note

Poor health status and polluted environment (environmental degradation), particularly air quality (i.e. smog levels in big cities) reportedly increase the negative effects of COVID-19. Improved environmental management and healthcare systems would prove sound preventive measures for any future pandemics and therefore should become a short-to long-term priority for governments worldwide. Climate change efforts should also be ramped up with a view to ensuring long-term solutions for increased overall human security. The latter, as the dominant focus on people-centred actions in response to COVID-19 shows, should be further explored particularly in light of governmental approaches to future crisis management of any kind with specific attention to societal resilience.

Political narrative across the globe revolves around "war" rhetoric, thereafter supposing a war-like operational organisation, for instance, China "established a quasi-wartime work mechanism led by the country's top leader"<sup>22</sup>, but little has been mentioned about the role of the military in the "fight" against COVID-19. Specific attention should be paid on the role the military could have within overall COVID-19 efforts - direct and indirect, minding specific requirements within areas such as CIMIC and the protection of civilians (PoC).

Post-outbreak analysis should focus on sex-disaggregated data (age, sex, social (gender) and economic (occupation) status, ethnicity, religion, etc.) to create a comprehensive and inclusive understanding of the development path of the virus for and in different social contexts, which to then serve to inform targeted and tailored actions and measures.

The following presents an update on measures taken by PR China and RC Taiwan in managing the outbreak of COVID-19. Information has been assembled on 9 April 2020 and gathered from open sources, mostly official country sources, within the period 2 Apr - 8 Apr.

The following does not necessarily represent any official CMDR COE, or any other organisation or group, official position.

#### China

## **Overall strategy**

<sup>22</sup> Source: https://www.chinadaily.com.cn/a/202004/07/WS5e8bbf2da3101282172849d0\_4.html

## **CONTAINMENT** – suppression of virus transmission rate.

Critical point: preparedness and capacity and capability-building before the occurrence of a crisis. Swift (centralized) decision-making leveraging a strong national public health systems and a highly developed technology sector.

## Trend

**Stabilisation and recovery** – focus on (virus) *carriers* from abroad and *asymptomatic* cases as possibly rebounding to an outbreak. Massive testing of asymptomatic cases as of beginning of April. Recording mostly imported cases, with few indigenous ones; respectively slowly and gradually loosening internal measures, tightening travels to and out of the country to prevent a rebound.

## Socio-economic impact of COVID-19

Restrictive measures commensurate with China's strategy of curbing the spread of the virus through containment have led significant economic slowdown: 1. Drop in domestic demand and hence, supply (decrease in volume of production) and 2. Drop in foreign demand (decrease in export – largest trade partners not buying themselves fighting COVID-19). Interdependency and massive outsourcing of production to the country, has had wide spread international repercussions, i.e. shortages of raw materials as well as ready goods.

## Measures

Special attention on ever strengthening cross-sectoral information sharing and regular discussion and assessment of the epidemic trends with clear terms of reference for stakeholder involved in the coordination.<sup>23</sup> Measures applied in clusters, here-below an update on measures which have reportedly enabled the realisation of China's strategy for tackling COVID-19:

## a. Potential treatment.

i. Convalescent plasma collected from patients who have recovered from COVID-19 reportedly contains antibodies that are effective in combating the virus<sup>24</sup>. About 200 to 300 millilitres of pure plasma are drawn from a single donor. Plasma donated from recovered patients "is in short supply and involves a complicated processing

<sup>&</sup>lt;sup>23</sup> Source: Protocol for Prevention and Control of COVID-19 (Ed..6), China CDC

<sup>&</sup>lt;sup>24</sup> US Food and Drug Administration (FDA) notes that ""[a]Ithough promising, convalescent plasma has not yet been shown to be safe and effective as a treatment for COVID-19. Therefore, it is important to study the safety and efficacy of COVID-19 convalescent plasma in clinical trials. Source: https://www.fda.gov/vaccines-bloodbiologics/investigational-new-drug-ind-or-device-exemption-ide-process-cber/recommendations-investigationalcovid-19-convalescent-plasma

procedure and high costs, its use is mainly limited to the treatment of severe patients"<sup>25</sup>.

- ii. **Traditional Chinese Medicine (TCM).** Reportedly "[t]raditional Chinese medicine has [...] played a big role in the prevention and treatment of COVID-19."<sup>26</sup> The vast majority of confirmed patients in China have been treated with TCM.
- b. Science and Technology<sup>27</sup>.
  - i. China places utmost importance on technological innovation, which has proven effective in managing and coping with COVID-19. Therefore, the country has emphasised its intention to strengthen the development of cutting-edge technologies (advanced computing, broadband core software. communications. block-chain. optoelectronics, micro/nano electronics, artificial intelligence and new materials) and new formats of industries<sup>28</sup>. Quarantine and epidemic control have highlighted the utility of digital products in the fields of remote office, videoconferences, online education, online museums and digital entertainment. In addition, big data and artificial intelligence have been put to use by the government and all walks of life, for instance, many Chinese research institutes and enterprises applied artificial intelligence technology and products in epidemic analysis, body temperature measurement, virus testing and auxiliary (AI) diagnosis and treatment (including intelligent robots).
  - ii. In an attempt to collate and systematise knowledge on COVID-19, China developed a resource centre (2019 Novel Coronavirus Resource Centre) at the Academy of Sciences, which to pool all genome sequence data and related information about the novel coronavirus and to provide open access to information for all researchers and health workers around the world<sup>29</sup>.
  - iii. China launched a mobile inflatable biosafety laboratory in Shenzhen, Guangdong province, to test samples of the novel coronavirus<sup>30</sup>. The laboratory is capable of testing from 5,000 to 10,000 samples / day and can serve as an emergency solution for countries with no biosafety labs. The lab has a modular layout and air-supported structure, which makes it suitable for unfolding at almost any location (can be carried by an aircraft). It's compressible, packable,

<sup>26</sup> Ibid.

<sup>&</sup>lt;sup>25</sup> Source : https://covid-19.chinadaily.com.cn/a/202003/19/WS5e72e741a3101282172806a4\_3.html

<sup>&</sup>lt;sup>27</sup> Source: https://www.chinadaily.com.cn/a/202004/05/WS5e89195ea310128217284739.html

<sup>&</sup>lt;sup>28</sup> Chinese Ministry of Science and Technology (MOST) will provide guidance and support for new businesses and new models that have shown great potential in the epidemic prevention and control, with a focus on new health industries, sci-tech services, smart cities, modern logistics and education services. Ibid.

<sup>&</sup>lt;sup>29</sup> Source : https://www.chinadaily.com.cn/a/202004/03/WS5e86985aa31012821728426f.html

<sup>&</sup>lt;sup>30</sup> Source : https://covid-19.chinadaily.com.cn/a/202004/07/WS5e8c61e9a310aeaeeed50913.html

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and uses green materials. Conforming to global biosafety requirements and industry standards, the lab features five functional areas — sample collection, sample reception, reagent preparation, sample preparation and sample amplification area — the company said. The equipment includes automatic nucleic acid test instruments, antibody detection, a gene sequencer and other novel coronavirus detection equipment.

- iv. A School of Public Health aiming at boosting talent training and scientific research and also further enhance China's capabilities in public health management was established by the Tsinghua University and China Vanke Co<sup>31</sup>. The school enrols postgraduate students in four research fields preventative medicine, comprehensive healthcare, big data in healthcare, and public health policy and management. In the next five to 10 years, the school will provide support for China's epidemic control, vaccine development and decisive think-tanks related to major public health policymaking.
- c. Economy. China is promoting consumption, expanding effective investment, and advancing the transformation of development patterns. A focus is placed on sectors, such as retail, catering, education, culture and sports. Importantly, targeted investment is channelled into infrastructure, for instance improving facilities and services like parks, green spaces and the expansion of 5G coverage. Financial support is also provided to local enterprises, specifically to advance R&D and innovation<sup>32</sup>.
  - i. **E-commerce** is also in the focus of authorities. In addition to its 59 existing, China will set up 46 new integrated pilot zones for cross-border e-commerce<sup>33</sup>. In combination with measures and policies to boost commerce, such as exemption of value added and excise taxes on retail exports will support the recovery and future prosperity of firms located in these zones. In addition, cities hosting the zones are considered for inclusion in a pilot programme on retail imports via cross-border e-commerce and companies will be supported in the joint building and sharing of overseas warehouses<sup>34</sup>.

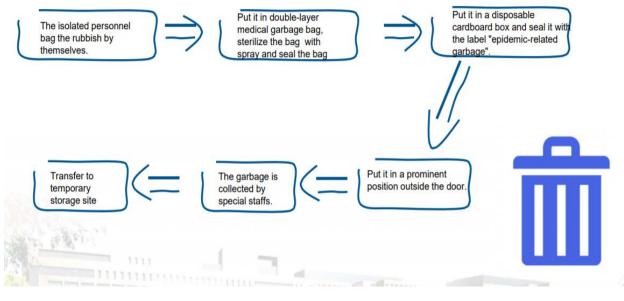
<sup>32</sup> Source: https://www.chinadaily.com.cn/a/202004/08/WS5e8dc101a310e232631a4c90.html

<sup>&</sup>lt;sup>31</sup> Source : https://www.chinadaily.com.cn/a/202004/03/WS5e86a14fa3101282172842e6.html

<sup>&</sup>lt;sup>33</sup> Source : https://www.chinadaily.com.cn/a/202004/08/WS5e8d31bda310aeaeeed50b1f.html

- ii. In an effort to support the recovery of the global supply chain, major ports in coastal areas of China have restored their operations to roughly pre-COVID-19 level<sup>35</sup>.
- **d. Waste management.** China created a sound waste-management organisation with a special treatment of biologic waste (figure below).





*Source: China CDC: http://www.chinacdc.cn/en/COVID19/202004/P020200403532998573742.pdf* 

- e. Legal framework and institutional reform. Following up on lessonslearned and weaknesses exposed during the outbreak of COVID-19, China has set on improving public health legislation and law revisions to guard against major public health risks<sup>36</sup>. Enhancing law-based governance capacity in public health is seen through the perspective of centralized and unified leadership of the CPC Central Committee and a people-centred approach<sup>37</sup>. What is envisaged is a coordinated mechanism for legislation and law revision and a special task group, which to review the implementation of relevant laws and emphasise push for scientific and effective legislation and revisions.
- f. **Social specificities.** Emphasis on traditional Chinese culture characterised as "collectivism" and social discipline<sup>38</sup>.

37 Ibid.

<sup>&</sup>lt;sup>35</sup> Source : https://www.chinadaily.com.cn/a/202004/08/WS5e8d0776a310aeaeeed509a6.html

<sup>&</sup>lt;sup>36</sup> Source : https://www.chinadaily.com.cn/a/202003/27/WS5e7da6f2a310128217282893.html

<sup>&</sup>lt;sup>38</sup> Source: https://www.chinadaily.com.cn/a/202004/07/WS5e8bbf2da3101282172849d0\_4.html

g. **Cyber defence<sup>39</sup>**. The situation caused by COVID-19 pandemic has reportedly increased instances of cybercrime. In this respect, China is stepping up efforts to punish cybercrime, particularly linked to COVID-19 that violate individual privacy, endanger data security and hamper epidemic prevention and control efforts.

## h. International cooperation<sup>40</sup>.

i. Sharing of data and lessons-learned, and ensuring humanitarian support - face masks, testing kits and protective suits; ventilators and protective equipment for urgent overseas orders.

 <sup>&</sup>lt;sup>39</sup> Source: https://www.chinadaily.com.cn/a/202004/08/WS5e8d900da310aeaeeed50d3b.html
 <sup>40</sup> Information (timeline) on China's international reaction and activities available here: http://en.nhc.gov.cn/2020-04/06/c\_78840.htm

#### Annex 12 COV-19 in Taiwan

#### **Overall strategy**

**CONTAINMENT** – **suppression of virus transmission rate.** Focus on coordination and interagency cooperation – communication. Leveraging a strong national public health systems and a highly developed technology sector. Less strict measure of physical distancing as compared to China of a recommended character, including for mass gatherings. Stable fiscal position. Sustaining a high degree of trust in governmental institutions through, for instance, transparent and timely risk communication.

### Trend

**Stabilisation and recovery** – focus on (virus) *carriers* from abroad and *asymptomatic* cases as possibly rebounding to an outbreak. Recording mostly imported cases, with few indigenous ones; increasing the restrictiveness of measures (i.e. public gatherings and school attendance). A tendency for stricter distancing measures and bans on mass gatherings.

The Central Epidemic Command Center (CECC) main strategies<sup>41</sup>:

- a. Expanding testing capacity: A national testing network has been established to improve Taiwan's testing capacity. The strategy allows the maximum testing capacity per day to reach 3,800<sup>42</sup> specimens, and COVID-19 testing to be conducted in different areas to reduce wait time for test results;
- b. **Community surveillance**: A community specimen surveillance program and protocols of different levels of care for patients have been implemented to enhance community surveillance network.
- c. **Expanding hospital capacity**: Phased (4 phases) plans for healthcare preparedness in the designated emergency response hospitals and wards;
- d. **Inventory of clinical beds**: Health agencies constantly keep track of available beds for severe cases of COVID-19.
- e. **Requisitioning facilities:** to increase the number of designated sites for group quarantine.
- f. **Patient diversion and transfers:** ward segregation and transport of COVID-19 patients have been made to ensure appropriate care is given to patients.

<sup>&</sup>lt;sup>41</sup> Source: https://www.cdc.gov.tw/En/Bulletin/Detail/pOahsDWblKw6KMVDsPed9Q?typeid=158

<sup>&</sup>lt;sup>42</sup> Previously – 1 300 per day (see earlier analysis: 20200327-COVID-19- Case study –TAIWAN), hence observing a more than three-fold increase in capacity.

# Socio-economic impact of COVID-19

Restrictive measures gradually tightening: phase one: less restrictive measure focus on case detection, contact tracing and quarantine – reliance on public understanding of the situation. Phase two – risk of rebounding after containment of transmission rate achieved – more restrictive measures – including ban on public gatherings. Slowdown in economy and production, less than in the case of China and potentially due to the less restrictive (and gradually tightening) measures for distancing, the stable fiscal position of the country and its well-developed tech sector.

# Measures

Measures applied in clusters, here-below some examples of measures which have reportedly enabled the realisation of Taiwan's strategy for tackling COVID-19:

# g. Social distancing measures

- i. LINE Bot system, called Disease Containment Expert, was officially launched and aims to track people in home quarantine<sup>43</sup>. The Chinese Central Epidemic Command Centre (CECC) added a new function to the current SMS reporting mechanism, allowing those in home quarantine/isolation to report their health status via SMS. With the Line Bot system, those in home quarantine can **voluntarily** report their health status to the disease prevention staff every day and obtain information concerning disease prevention. In addition to information on disease prevention and health status reporting, the system also sends home quarantine related details and notes to users two days before the end of the home quarantine period to remind them to conduct **an additional 7-day period of self-health management**.
- People using the public transport have to wear face masks all the time and undergo temperature checks before entering a bus or MRT station. Those who refuse to wear face masks on public transport after being advised to do so will be fined up to NT\$ 15,000<sup>44</sup>.

paragraph:

 <sup>&</sup>lt;sup>43</sup> Source for the entire
 https://www.cdc.gov.tw/En/Bulletin/Detail/iytwk\_ZYsmcRBzXHFY8YjA?typeid=158
 <sup>44</sup> Source : https://www.cdc.gov.tw/En/Bulletin/Detail/uDGeGTLghnuLbzTV\_i6SJA?typeid=158

- iii. Inbound travellers subject to home quarantine are prohibited from traveling to offshore islands by plane or boat. The CECC urged residents of offshore islands to undergo home quarantine and related measures on the main island of Taiwan<sup>45</sup>.
- iv. Effective period of the ban on traveller transits through Taiwan has been extended, from the original ending date April 7 to April 30. Beginning April 3, all inbound travellers who have had a fever or respiratory symptoms in the past 14 days will be required to have their specimens collected for COVID-19 testing at the airport or hospital, and take designated transport vehicles to a designated location for home quarantine as instructed<sup>46</sup>.

# Conclusions

Against the backdrop of PR China and RC Taiwan's examples, the following should be considered, relative to national capacity and capability at present, recommendations for the Republic of Bulgaria (both immediate and longer term):

- 1. containment through suppression of COVID-19 transmission rate increased testing (investment in tests and equipment (laboratories) including training of medical staff) and improved early detection of suspected cases (including case investigation and contact tracing);
- 2. further de-centralising testing, i.e. more (qualified) laboratories (including qualified and skilled medical staff) in different parts of the country to minimise time for results and to minimise the burden placed on medical personnel;
- 3. strict isolation and health status monitoring increased attention to asymptomatic people believed to be contagious, but more research is needed to understand the length of the contagion period as well as the strength and pathway of transmission
- 4. examine plasma transfusion therapy, which has been already approved for treatment in special cases both in China<sup>47</sup> and the US<sup>48</sup>;

<sup>&</sup>lt;sup>45</sup> Source: <u>https://www.cdc.gov.tw/En/Bulletin/Detail/wX8RXYe3ImYRgHFCGpKbgg?typeid=158</u>

Noteworthy, the fine is applied in a situation where there appears to be no legal measure requiring but rather a very strong recommendation.

<sup>&</sup>lt;sup>46</sup> Source: Taiwan CDC Press Release.

 <sup>&</sup>lt;sup>47</sup> Plasma transfusion therapy has been used to treat critically ill patients infected with the novel coronavirus in China. Source: https://covid-19.chinadaily.com.cn/a/202003/19/WS5e72e741a3101282172806a4\_3.html
 <sup>48</sup> The FDA has not approved general administration of this method for treatment but has created a Single Patient Emergency IND option to facilitate "access to COVID-19 convalescent plasma for use in patients with serious or immediately life-threatening COVID-19 infections". Source: https://www.fda.gov/vaccines-bloodbiologics/investigational-new-drug-ind-or-device-exemption-ide-process-cber/recommendations-investigationalcovid-19-convalescent-plasma

- 5. examine alternative methods of treatment (general health improvement) as per the example of the Traditional Chinese Medicine;
- 6. focus on developing the technological sector and all related sub-sectors to cover all walks of the social sphere, specifically governmental services (egovernment);
- 7. close examination of underlying structural issues within the society which might exacerbate discriminatory practices in times of crises. Specific measures applied to certain groups of the society should be based on a risk assessment, and avoid stereotypical perceptions of any group, and should seek to alleviate risk by ensuring adequate protection eliminating any concern about possible implicit and explicit discrimination<sup>4950</sup>.
- 8. strengthening scientific research to provide scientific evidence to optimize prevention and control strategies – investment<sup>51</sup>;
- 9. improvement and strengthening of the psychological and psychosocial assistance and social services, particularly for guarantined persons and frontline workers in epidemic prevention and control, including traffic police and community workers;
- 10.targeted education and social activism actions to reinstate and strengthen collective consciousness and solidarity in the society;
- 11. hot lines to address increased domestic issues due to the isolation particularly responding to a reportedly general increase in domestic violence<sup>52</sup>.

<sup>49</sup> Apart from one complete lockdown - the town of Bansko was up until recently under a general quarantine, thus far there has been information only about isolated Roma neighborhoods in different cities across Bulgaria as a COVID-19 transmission. measure to prevent See for instance (in Bulgarian): https://www.bnr.bg/plovdiv/post/101252897/romskata-mahala-v-peshtera-ot-utre-s-rejim-na-vhod-izhodite and https://www.mediapool.bg/reditsa-obshtini-postaviha-romski-kvartali-pod-blokada-zaradi-koronavirusa-obnovenanews304842.html

<sup>50</sup> Institutionalised discriminatory practices are particularly harmful with regards to societal biases towards certain (minority) groups. Shortcomings in integration policies and programmes become sharply manifested in times of crises.

<sup>&</sup>lt;sup>51</sup> Avenues for further research provided in *The Case for China and recommendations for the Republic of Bulgaria* (18 Mar 2020) and COVID-19 Response – Case Study Taiwan (27 Mar 2020). <sup>52</sup> Council of Europe Commissioner for Human Rights, Dunja Mijatović, report on the visit to Bulgaria she carried

out in November 2019. Available (in Bulgarian) here: https://rm.coe.int/16809e0d03

Annex 13 COV-19 in Hungary Status: April 13, 20:00 GMT

Sources:

- National Health Security Center
  <u>http://abouthungary.hu/news-in-brief/coronavirus-heres-the-latest/</u>
- Worldometer coronavirus, <u>https://www.worldometers.info</u>

# **Case numbers in Hungary**

The Government of Hungary launched its official webpage and official Facebook page about the novel coronavirus, both on 4 March 2020. The first two known cases were students from Iran, who were studying in Hungary. One of them was enrolled at the Pharmacy Faculty of Semmelweis University. The other person studied at the Szent István University in Gödöllő, who after returning from Iran, went to a self-declared quarantine.

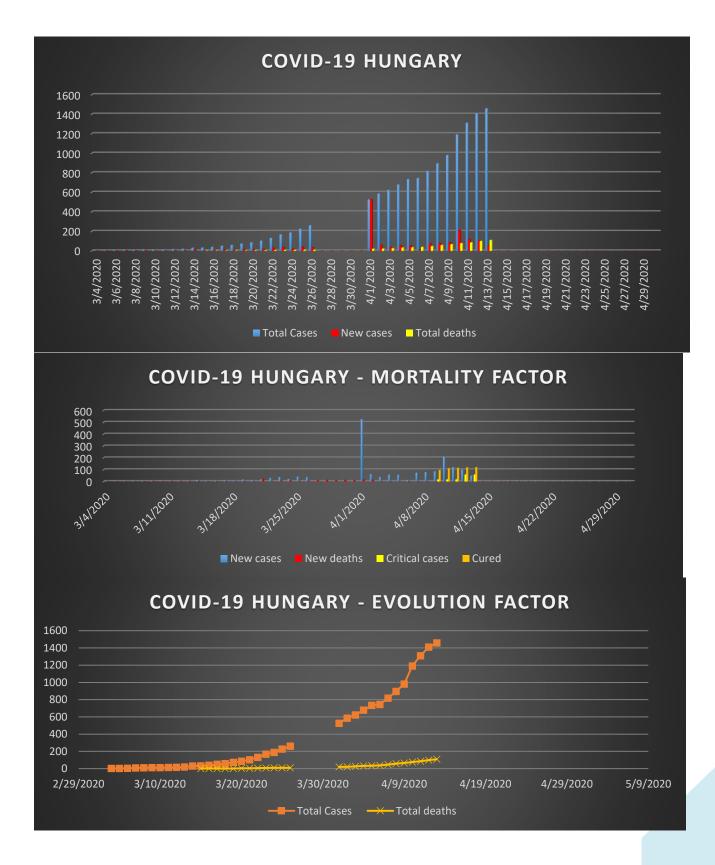
Both of them were transported to Saint Ladislaus Hospital. They had mild symptoms. They arrived back in Hungary on 26 and 28 February.

Current case status

Total Cases – 1418 Total New - 407 Total Deaths – 17 New Deaths - 4 Total Recovered – 10 Active Cases – 1391 Serious – 56

Cases / 1M – 256

# Pandemic trend:



# Measures Taken by the Hungarian Government:

https://en.wikipedia.org/wiki/2020\_coronavirus\_pandemic\_in\_Hungary

- Travel and entry restrictions:
  - > 6 March, Hungary suspended the issuance of visas to Iranian citizens;
  - > 9 March, restrictions began to emerge on air traffic from Northern Italy
  - 11 March, Hungary barred entry into the country by foreign nationals via China, Iran, Italy and South Korea. Hungarian citizens would still be allowed to return, but would be required to undergo 14 days of selfisolation upon return
  - 13 March, Israel was added after two Hungarian cases were tied to travel to the country.
  - > 16 March, Hungary restricted entry into the country to citizens only.
- 7 March, national ceremonies marking the anniversary of the Hungarian Revolution on 15 March were cancelled. A job fair planned to be held between 18 and 19 March at the University of Technology and Economics was also postponed.
- 8 March visiting someone in a hospital or in any social institution which provides long-term stay has been prohibited.
- 11 March State of emergency for 15 days. Public gatherings in an enclosed space with more than 100 people were prohibited, sporting events that could attract more than 500 spectators must be held behind closed doors, and foreign exchange programs were suspended. Universities were ordered to suspend in-person classes and switch to online courses.
- 13 March, Elementary and high schools were closed effective 16 March.
- 13 March, the frequency of disinfection on Budapest public transport vehicles has increased, and the rule about using only the first door for boarding has been suspended, to decrease crowding.
- The National Ambulance Service has provided more ambulances across the country to make easier the handling of increasing patients;
- 16 March, Budapest Zoo and Botanical Garden as well as every thermal baths will remain closed till further notice.
- 16 March there was a decision made about suspension of the championship, suspending all matches.
- 16 March, cancellation of all events, and banning restaurants and cafes from operating beyond 3 p.m. Only grocery stores and pharmacies would be allowed to remain open past this time. In addition, it was announced that the country would allow entry to Hungarian citizens only;
- 17 March the Surgeon General announced that the National Safety Laboratory of National Health Security Center had successfully isolated COVID-19 from a Hungarian patient's sample, which it could use for researching vaccines from a Hungarian patient's sample, to be used for the researches and production of new vaccine in Hungary.
- 18 March decisions were as follow:
  - All due payments are suspended which are caused by loans to persons and companies. It is valid for capital and interest payment as well. This is in force up to the end of the year.

- Short-term loans for companies are prolonged up to 30 June.
- Loans delivered from 19 March may have a maximum 5% above the Hungarian National Bank's interest rate.
- Government remits subsidiaries which should have to paid based on the number of employees on the fields of tourism, catering, leisure, sport, culture and personal taxi services. Employees working in these sectors do not have to pay a pension subsidiary and the fee for receiving the benefits of the health sector is the minimum fee declared in the act.
- Taxi drivers subject to the Kata tax system are exempt from tax until 30 June.
- Rental contracts which are in connection with the above listed sectors may not be abrogated, rental fees may not be increased.
- Contribution to the development of tourism (a kind of tax) is suspended until 30 June.
- > Labour rules will be more flexible, to make agreements between employers and employees easier.
- 19 March, Andrea Bártfai-Mager Minister without portfolio, responsible for National Wealth and the team led by her prepared and accepted recommendations which were the basis of economic decisions published next day.
- 30 March **State of emergency** indefinite and allowed Prime Minister Orbán to rule by decree

Prime Minister Viktor Orbán has revealed details about the four avenues of defense against the coronavirus.

"There are four avenues of defense against the coronavirus in Hungary," PM Orbán began his address earlier today, adding that "these are military, police, healthcare and economic avenues."

Regarding the healthcare avenue of defense, the available healthcare personnel, in Hungary are 19,431 doctors, 4,312 trainee doctors and 690 senior medical students. Moreover, there are 105,000 healthcare professionals on stand-by.

Giving an account of Hungary's police capabilities, there are 70,275 police officers and 46,573 volunteers ready to be deployed. They will be complemented by a 43,980 strong military force.

"The most important thing to do now [regarding the economy] is to protect our jobs," PM Orbán said, because the following period "will be a difficult one", it will require additional personal effort from everyone.

"The more we cooperate, the more lives we can save," PM Orbán said in closing.

# Annex 14 NATO and COVID-19

1. As a political-military alliance, NATO is demonstrating that it is adequate for the new challage. Through its actions, NATO supports the development of solidarity between its member and partner countries, showing its ability to grow despite the difficulties and constraints (adopting North Macedonia).

2. NATO with the Euro-Atlantic Disaster Response Coordination Centre (EADRCC), stands ready to assist in the coordination of any offers being considered in support of the stricken nations. At this moment, 5 Allied and 5 partner nations have requested international assistance through the EADRCC. In chronological order of requesting, these are: Ukraine, Spain, Montenegro, Italy, Albania, The Republic of North Macedonia, The Republic of Moldova, Bosnia and Herzegovina, Georgia and Colombia.

Briefly the major requests for assistance until now are as follows:

N⁰	Date	Activity	Conclusion/Proposal
<u>№</u> 1.	Date 06.03.	The organization's website reports that NATO, along with other international organizations, is closely monitoring the spread of the disease. NATO also supports the World Health Organization's (WHO) leadership role, as well as its outreach activities and guidance to countries on combating the virus. NATO's core activity is to maintain the readiness of military medical teams, ready to assist the Allies in carrying out their operations and missions.	Conclusion/ProposalTill 06.04. The Ministry of Defense website(www.mod.bg) does not have any information on the current pandemic situation. The same is to websites of other ministries (Tourism, Ministry Of Regional Development and Public Works, etc.).The website of the Ministry of Interior and the Ministry of Transport has a button / link through which visitors can obtain information about the current state of the crisis.Could be placed a link to the Ministry of Health website (or other source with more detailed information) on www.mod.bg, to keep up-to-date information.
		According to WHO recommendations, NATO military and political leadership is taking preventative measures at the headquarters of the organization to reduce the risk of spreading the disease. The measures include: - Travel limitation; - Work from home as a means of social isolation; - Restricting access of groups to NATO HQ in Brussels. - Detailed information covering all aspects of the disease and its spread is published on	

№	Date	Activity	Conclusion/Proposal
		the NATO's website: www.nato.int.	
2.	09.03.	The web-site reports an infected NATO staff member who is showing symptoms of COVID-19 after traveling to northern Italy. Measures have been taken to inform the contact persons.	
3.	11.03.	WHO Announces World Pandemic Due to Threat of CORONAVIRUS	
4.	18.03.	A meeting of the North Atlantic Council was held. Coronavirus has been identified as a worldwide threat. The measures that the Alliance and the parties must take to limit the infection are discussed. The willingness of NATO forces to continue their missions and missions is expressed. NATO's European Commander (SACEUR) has declared that the capabilities of its forces are affected by the new virus and NATO continues to perform its tasks: Air policing, maritime deployments, multinational combat groups in the Alliance's eastern flank, and operations in Afghanistan and Kosovo.	
5.	19.03.	The Secretary-General of NATO, in presenting his Annual Report for 2019 (for the first time by VTC), emphasized the Alliance's readiness for action in response to the spread of the COVID-19 pandemic. He states that the forces are fulfilling their missions. NATO is monitoring the crisis, consulting and taking all necessary measures to safeguard the security of its allies (1 billion people).	

№	Date	Activity	Conclusion/Proposal
		The Secretary-General seizes the opportunity to thank NATO partners for their swift action in combating the virus.	
6.	19.03. 23.03. 31.03.	Сzech Republic and Slovakia use Strategic Airlift International Solution (SALIS *) AN-124 to transport medical equipment from China to the Czech Republic and Slovakia in connection with the fight against COVID-19. *SALIS is managed by the NATO Support Procurement Agency и в нея участват 9 държави (Belgium, Czech Republic, France, Germany, Hungary, Norway, Poland, Slovakia and Slovenia)	
7.	23.03.	Ukraine makes a formal request for assistance to the EADRCC.	
8.	24.03.	Spain makes a formal request for assistance to the EADRCC.	
9.	24- 26.03.	The NATO Secretary General conducts a series of consultations with NATO foreign ministers as well as with partner countries. Also with the EU foreign minister. The subject of the consultations are: a global pandemic, NATO's willingness to assist in combating the virus and reducing its effects. Video conference was organized with the foreign ministers of the Member States on 02.04.	
10.	26.03.	Italy makes a formal request for assistance to the EADRCC.	

№	Date	Activity	Conclusion/Proposal
		Montenegro has formally requested assistance from the EADRCC.	
11.	27.03.	North Macedonia has announced the use of NATO's Next-Generation Incident Command System (NICS *) to coordinate its national response to the COVID-19 crisis and to provide the public with up-to- date information on the pandemic and national action. The article states that NCIS enables all institutions in the country including the Red	The Macedonian Crisis Management Center updates website: http://nicspublic.cuk.gov.mk/index.php/pocetna?l ang=mk Everybody can keep track of the current status and development of the pandemic – new cases, quarantined, dangerous areas, actions by the authorities. At the moment (04.04.), the Republic of Bulgaria
	country, including the Red Cross, to coordinate their actions. *The NICS system is part of the NATO Science for Peace and Security (SPS) project "Advanced Regional Civil Emergency Coordination Pilot" (ARCECP), a collaboration between the Massachusetts Institute of Technology Lincoln Laboratory (MIT LL), the United States Department of Homeland Security (DHS) Science and Technology Directorate (S&T) and the nations of Bosnia and Herzegovina, Croatia, North Macedonia and Montenegro.	At the moment (o no n), the Republic of Dalgariadoes not have such capabilities.The National Assembly in September 2019adopted the National Security Status Report for2018. The document states that in 2020 it isnecessary to create a Register of all criticalinfrastructure of the country, improvecommunication between institutions andfoundation of National Crisis ManagementCenter.	
		Republic of Bulgaria, adopted by decision of the National Assembly of 14.03.2018, states: Art. 79. Other long-term priorities for national security are:	
		Maceaonia ana Monienegro.	• regulating the rules and mechanisms for coordinating the various sectoral policies and actions of the National Security System Offices with the actions of civil organizations and businesses in practical counteraction to national security risks and threats, as well as in crises of various nature, through drafting and adopting a new <u>Crisis Management Law.</u>
12.	27.03.	Albania makes a formal request for assistance to the EADRCC.	
13.	29.03.	A second plane lands in Romania as a responding effort against the threat of a	

№	Date	Activity	Conclusion/Proposal
		coronavirus, loaded with 100,000 protective suits sent from South Korea. The costumes were purchased by the Romanian government. This is the second delivery. The first one arrived on 26.03. The air transport used - C-17 aircraft is from the squadron in PAPA - Hungary. 10 NATO and 2 partner countries share 3 such planes together (sharing flying hours and maintenance costs). This use of aircraft is the first use of shared capabilities as part of the Strategic Airlift Capability managed by the NATO Support and Procurement Agency in an emergency situation.	
14.	29.03.	Spain's C-130 transports 10,000 protective suits to Spain donated by the Czech Republic. The aid is the result of a formal request for assistance from the EADRCC.	
15.	30.03.	A truck delivers a donation of 10,000 protective suits to Milan (Italy). The aid is the result of a formal request for assistance from the EADRCC.	
16.	30.03.	Formal request from North Macedonia to the EADRCC for the receipt of safety suits, goggles and face masks.	
17.	31.03.	NATO (NATO Support and Procurement Agency) is assisting Luxembourg with the provision and deployment of a field hospital ( $1200 \text{ m}^2 / 200$ beds) to increase the country's bedside in response to the growing epidemic.	The purchased Hangar Manufacturing Production Line ("UBM Complete Production Line for Metal Structures") in 2010 from the Ministry of Defense could be used, following China's example, to build premises to room patients temporarily. From the words of the Chief of Defense (Gen. Botsev - 12.2019) it is clear that the machine can

№	Date	Activity	Conclusion/Proposal
		The aid is the result of a formal request for assistance from the EADRCC.	build very quickly, it can cover the walls with insulation, it can any type of construction, not only the halls, but also the meeting rooms with offices.
			The necessary facilities (including newly donated ones) for treatment / maintenance can be deployed in new built premises.
			Partner/Neughbour countries also could be assisted.
18.	01.04.	Italy, Czech Republic collaborate with private Sector Companies and Scientific Organizations in 3D Printing Required to produce face masks for intensive care.	
19.	01.04.	TurkishA-400Mtransportsassistanceprotectiveequipment,disinfectantand 450,000 masks)providedfree toItalyandSpain.	
20.	01.04.	Moldova makes a formal request for assistance to the EADRCC.	
21.	02.04.	Video conferencing between NATO Secretary General and Member States' foreign ministers is held. One of the points discussed is how NATO's capabilities can be used more effectively in the fight against the virus. The readiness and ability of NATO forces to carry out their missions and military operations has been reaffirmed. At the meeting, SACEUR was directed to coordinate NATO's efforts to combat the pandemic and use of the rapid corridor for military air supplies in transporting assistance to those	CIS technologies to coordinate their work, which support the meetings. Now, for example, an article might come out about how the new Chief of Defense coordinates his work with subordinate, national contingent commanders, etc. by VTC. Better yet,it could be made from CMDR COE, following all the WHO's requirements for distance and disinfection.

N⁰	Date	Activity	Conclusion/Proposal
		in need of combatting COVID- 19. The role of NATO in crisis management, as well as NATO's contribution through logistics, transport and medical activities is highlighted. A meeting has been scheduled between the Secretary General and member states' defense ministers to determine future concrete measures.	
22.	02.02.	Bosnia and Herzegovina makes a formal request for assistance to the EADRCC.	
23.	03.04.	2 German's aircrafts transport medical equipment to Spain, donated by the German government.	
24.	04.04.	Georgia makes a formal request for assistance to the EADRCC.	
Th	The information is taken from <u>www.nato.int</u> concerning NATO activities during the pandemic		

# Annex 15 Help to the local trade markets.

# 1. Jakarta, Indonesia.

The municipality that manages urban markets provides a mobile application that helps customers connect with sellers from those markets. The idea is that store / stall owners do not pay for a site / advertisement, and in this app they offer the product / service for free. The customer contacts the seller directly, and they agree on the delivery.

At the same time, the markets are not closed, at the entrance are placed thermal camera and disinfectants, access is with masks and gloves.

There is an information plate stating all the measures to be followed in the market area as well as the alternative way to shop online.

# 2. Chicago, USA.

Buyers connect with sellers through an online platform, there is an opportunity both to deliver the goods and to be picked up by the buyer from a specific place.

Two locations are defined, which are the entrance and exit of the respective market. This allows you to move quickly in one direction and prevent people from crowding.

# 3. California, USA.

Information plates are placed at the entrance indicating:

- that anyone with a cough or fever is denied access;

- 2 meters distance is obligatory;

- Sneezing should be done in a handkerchief or napkin, after which the hands must be disinfected;

- It is forbidden to play music, which prevents people from gathering in one place;

- Handshaking is forbidden, as is any physical contact that can be avoided;

- Promote home shopping through a designated site / app;

- Customers are encouraged to come with a list of desired purchases, which saves time and allows more customers to visit the market;

- It is encouraged to come in the afternoon to distribute people throughout the day. You do not need to come in the morning with the market opening, and the observation shows that exactly in the morning most people come;

- Sampling (from vegetables / fruits) is prohibited.

Sellers from the market when they come to work are checked for symptoms by an specialy designated responsible staff.

The cabins / tables are 2 meters away. Plexiglass / nylon insulation could be applied.

Toilets are disinfected on schedule.

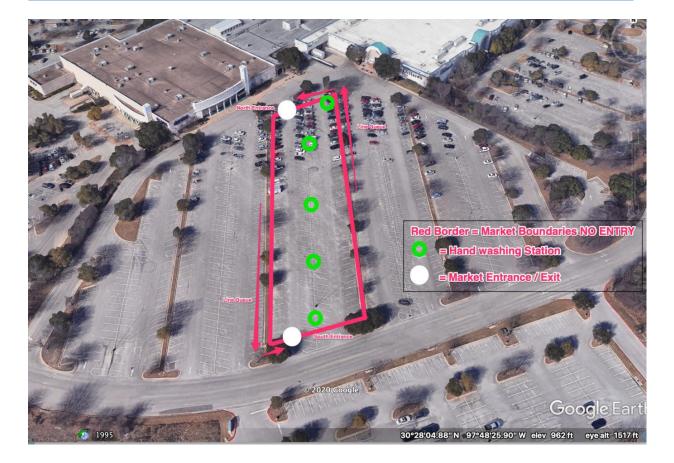
The total number of visitors is calculated based of the total area of the market. Excess is not allowed. This is easily adjustable via number plates. Entrance is allowed with an available plate or when a customer exits, after disinfection it is given to the next customer.

A time approximately 2 hours in the morning is set for only older people to have access to the market.



4. Market place - example.

Figure 30 Exemplary scheme for organization of trade



The last picture shows that the market uses the parking lot of a large supermarket. In a state of emergency, these types of parking lots are almost empty and these conditions should be used for this type of markets. The parking lots have a large area, which allows for a greater distance in the organization of the area. The the local authority / municipality could be a mediator between the people who will offer agricultural produce and the parking lot owners.

Economically speaking, the country is one of the world leaders in electronics (Samsung and LG) and automobiles (Hyundai and KIA). During the pandemic, the management of the company remains flexible in its approach and provides the necessary conditions for continuous work, in compliance with state guidelines for disinfection, isolation, restriction of business trips, encouragement to work from home. However, Samsung and LG closed their production in countries outside South Korea, and this was in compliance with the restrictions imposed by the respective countries (Russia, China, Brazil, India, USA, etc.) where the factories are located. Automotive production was largely influenced by China's source of raw materials, which cut off supplies.

After Samsung reported infected workers, management announced that it would temporarily relocate smartphone production from South Korea to Vietnam. Over the last decade, the tech giant moved much of its smartphone production to Vietnam, where it makes more than 50% of its phones, and so far has had virtually no production disruptions. At the same time, following a confirmed case of an infected employee, LG has temporarily shut down production at one of its workplace disinfection plants.

Despite difficult times and financial constraints, Samsung made a \$ 29 million donations to the Government. Despite money this includes face masks and breathing aids. The company has donated some tablets to educational institutions to provide to children for closed schools. The company has provided its training center to medical authorities to be used as a care center. Samsung's engineers worked on refining the process of developing and manufacturing masks in South Korea. As a consequence, such a South Korean company doubles its daily output.

Samsung has created teams of people (Samsung COVID-19 task force) that keep track of current pandemic information and provide it to employees, as well as tips for preventing and limiting infection.

Samsung aslo provided a warranty extension for their products, with an expired warranty during the emergency and the company's services were unavailable.

An official update on the government's anti-virus activities is posted on the official Hyundai website. A new way of testing for coronavirus is presented. These are mobile teams equipped and deployed at designated locations on major roads. The idea is that anyone who wants can go with their own car without getting out of it to be sampled and within a few hours to be informed of the result. This avoids the inconvenience of going to the lab, wasting time and causing stress, while avoiding many people in one place.

Hyundai executives say they are opening two rehabilitation centers for COVID-19 patients in South Korea. And in the hardest hit areas of the country, together with the National disaster management association, they provide protective care and resources. Free sanitation for cars, public places, and buses are provided.

A special financial program has been prepared whereby clients of the company can receive interest-free loans, compensation for payment upon dismissal, as well as exemption from payment of non-installments when buying a car for leasing.