

**CRISIS MANAGEMENT AND DISASTER RESPONSE CENTRE OF
EXCELLENCE**

34a, Totleben Blvd, 1606 Sofia, Bulgaria



COVID-19

PART 13

(12 – 17 June 2020)

CMDR COE analyses of spread acceleration

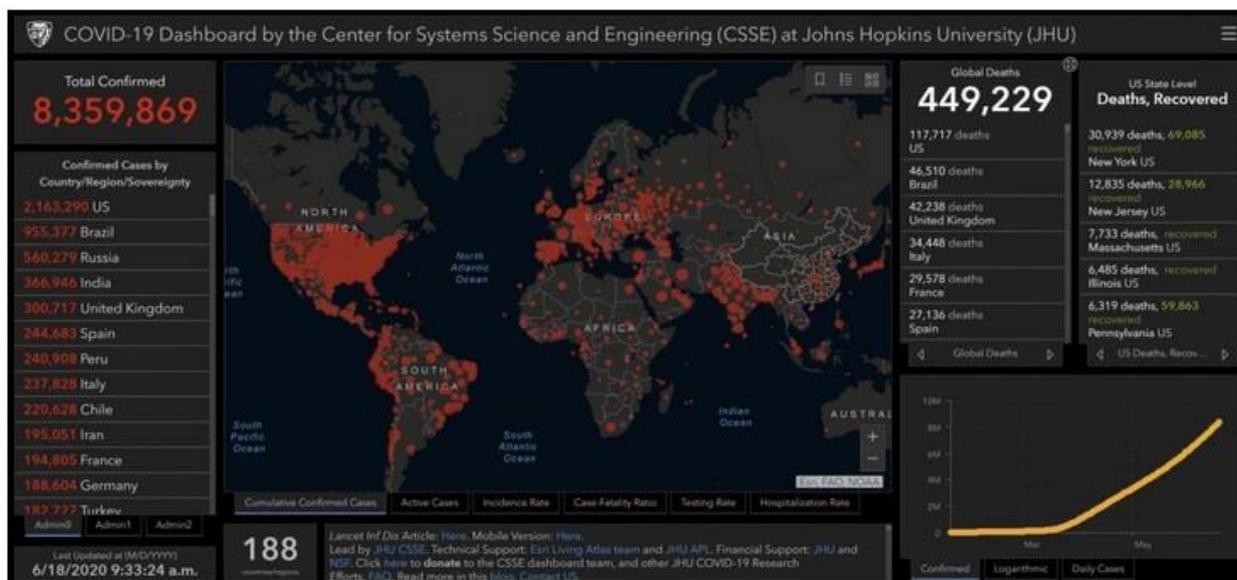
This report represents a summary of open source information, gathered up to and including 17 June 2020, and was assembled on 18 June 2020. All views and opinions expressed are solely those of the author, unless otherwise stated and do not necessarily represent the official position of the CMDR COE or any government and non- government organization 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 Organization, governmental pages, and online statistical databases.

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WEEKLY SUMMARY

China is trying to contain a flare up of new cases in Beijing – which has caused a partial tightening of restrictions in some areas of the city. This is raising concerns about the potential for a second wave of infections. However the first wave is still gathering pace in most of the world.



Source: Center for Systems Science and Engineering (CSSE) at Johns Hopkins University (JHU)

The total number of official cases has risen by almost exactly one million in the last week, with Brazil on course to surpass 1 million cases within a few days. This is very likely a gross underestimation of the actual situation in Brazil following President Bolsonaro's calamitous handling of the outbreak.

Beyond Brazil, which is now the new epicenter of the outbreak, we're seeing significant increases in cases in several states in the USA that had moved away from lockdowns around the middle of May. States seeing record daily increases in infections include Florida, Arizona, Texas, Oklahoma, Nevada and Oregon. After bringing its rate of infection growth down from its peak, the US has settled into a pattern of averaging over 20,000 new cases per day – while there are fluctuations on a day to day basis, taken over a period of seven days, the trend is flat.

India, which is also relaxing its lockdowns, is now seeing new cases moving higher, although the official statistics for India still look strange with reported daily new cases within a very tight range. This may simply be a function of the availability of testing, rather than a specific effort to manipulate the statistics, such as we have seen in Russia. But this notwithstanding, the trend in India is upward. This is also the case in neighbouring Pakistan and Bangladesh. Indonesia has also seen its highest level of new daily cases in the last few days.

Many politicians have contracted COVID-19 over the last few months – notably the UK prime minister, Boris Johnson. There are now several more senior politicians either with confirmed infections or self-isolating. These include the president of Argentina – a country that has seen several cases among politicians. The president of Honduras has been admitted to hospital with pneumonia linked to coronavirus. And in central Asia, the national leader of Kazakhstan has tested positive for the virus.

With infection levels continuing to climb in many markets around the world, should we therefore expect the imposition of new restrictions on movement and the closure of shops again? We currently think that this is unlikely. Countries have to balance the need to protect the public with the pressing economic reality that businesses cannot return to any kind of normalcy with lockdowns in place, crippling output and constraining wages or preventing people from earning at all. This is especially acute among informal workers that make up the majority of workforces in many emerging economies. The threat from malnutrition and other diseases of poverty is likely greater than from COVID-19 itself. The new normal may be having to live with COVID-19 as a constant threat, or frequent feature of the disease landscape of the world.

HAS THE CORONAVIRUS BURNED OUT?

Many researchers say that coronavirus is already burning out and kills less people, but we still need to be vigilant. Almost three months after the outbreak of pandemic in the UK, deaths and coronavirus infections are steadily declining, and so far there are only few signs of the arrival of the terrifying “second wave”.

Now, some researchers suggest that this coronavirus strain may follow the path of other pathogens, changing from a murderous intruder to a guest who lives in us peacefully. Preliminary evidence of this positive development comes from northern Italy, which has suffered the most on our continent.

At the end of May, Professor Matteo Bassetti, head of the infectious disease clinic at the San Martino Hospital in Genoa, said: “The strength of the virus, two months ago, is not the same as today”¹. Most patients in March and April had very severe respiratory failure, most of them died in the first days after being admitted to hospital. We don't see such patients today. It may be that the virus has lost its power.

This observation is supported by an analysis of local mortality rates by Professor Lamberto Manzoli, an epidemiologist at Ferrara University in northern Italy. The results suggest that from March to April, coronavirus mortality dropped by more than half in all ages. Professor Manzoli's article has not yet been published in any

¹ <https://metro.co.uk/2020/06/02/coronavirus-becoming-less-potent-doctors-believe-weakening-12790604/>

of the renowned scientific journals, and therefore has not been reviewed. However attention is paid now to local increase of infection in China (recently at the agricultural market in Beijing), but there is no widespread increase of infection. In France, Spain and Italy, which have already started a fairly normal life, both new infections and deaths remain low.

A decrease in mortality has also been reported in the United States. Lee Riley, Professor of Infectious Diseases at the University of California at Berkeley, points out that infection figures in New York are steadily falling.

Every time a virus passes from one person to another, mutations occur - says Professor Riley and adds that they can accumulate and the virulence of the virus may eventually decrease. It is in the nature of these viruses that they weaken after a while.

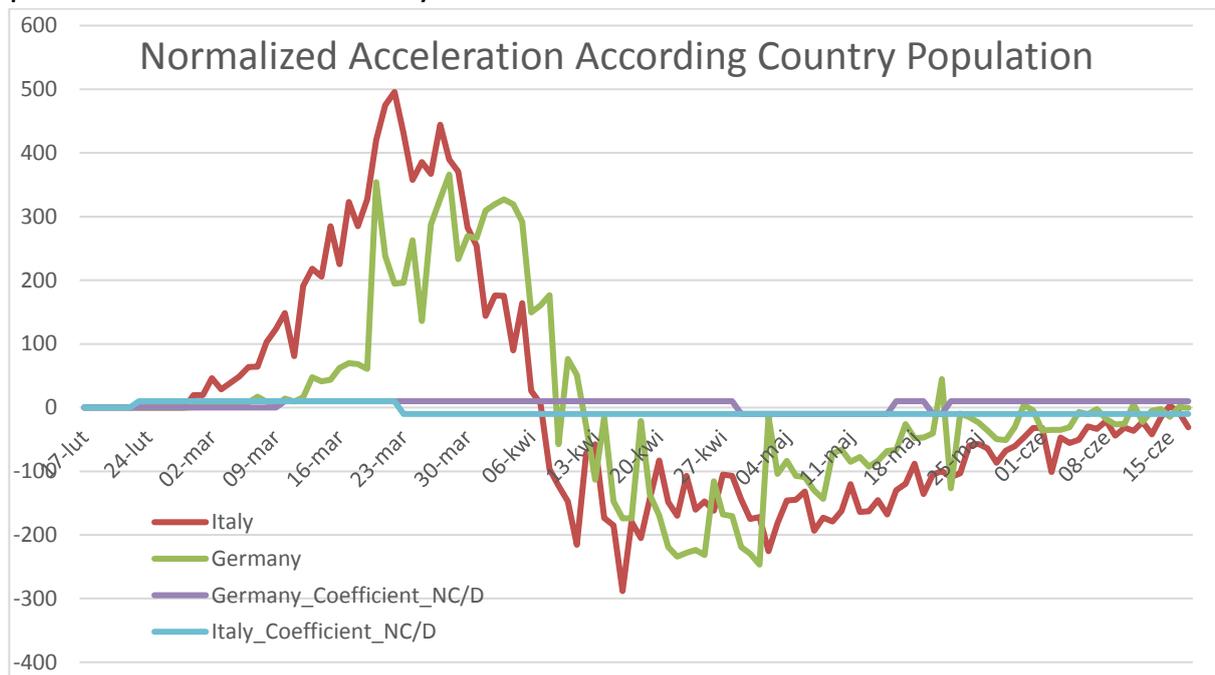
Researchers also points two other possible explanations for the decline in deaths. First of all, treatment has improved significantly, because doctors have gained experience in the fight against Covid-19. Professor Manzoli admits that clinical approach now seems to be more effective. At first, the patient has been waited until his condition worsened before he was given the medication and a respirator. Now they start earlier, he says. Secondly, the coronavirus could infect and kill the most vulnerable, while more resistant patients survived.

Oscar MacLean, bioinformatics at the University of Glasgow's Institute of Infections, Immunity and Inflammation, is of a different opinion². According to him, the genetics of the disease has not changed. We have not seen any evidence of widespread reduction in mortality. He adds: The golden rule is that viruses evolve over time to become less pathogenic, but this doesn't happen in a few months. It's a matter of years.

² <http://eprints.gla.ac.uk/214627/7/214627.pdf>

CMDR COE ANALYSIS OF COVID-19 SPREAD ACCELERATION

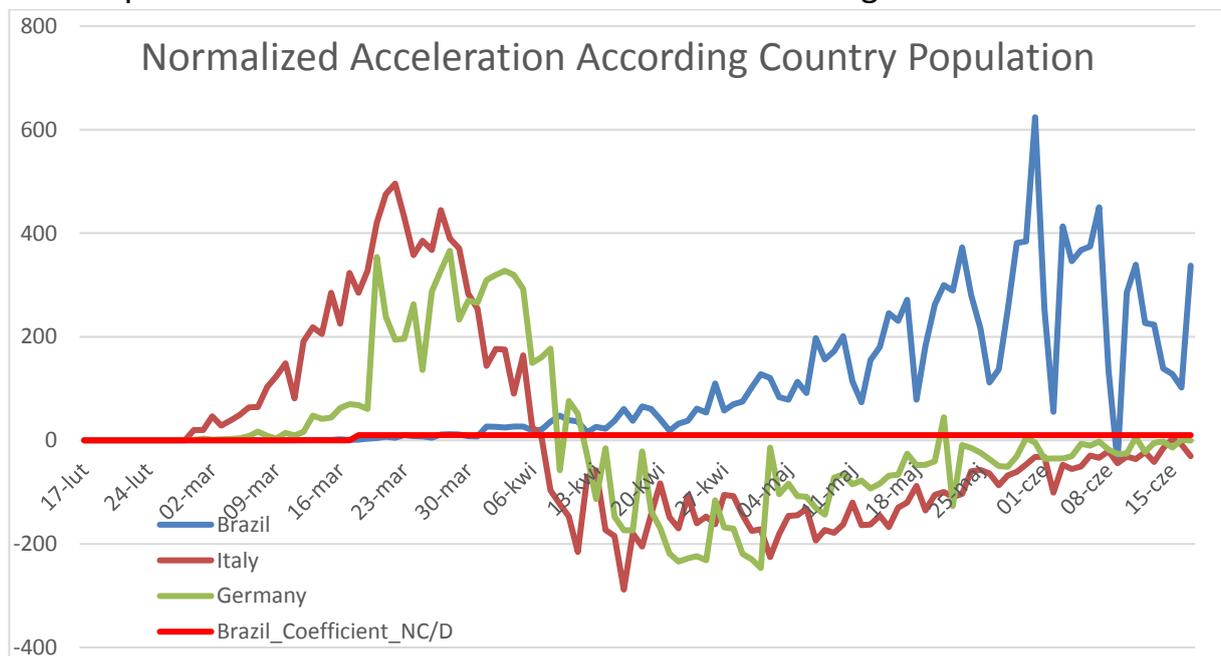
The CMDR COE continues to monitor data related to the COVID-19 crisis from a number of countries. In order to improve the analysis tools developed at the Centre, those countries with high dynamics are currently monitored and compared with forecast calculations of models developed on the basis of data mainly from Western European countries. The differences reported so far are mainly due to factors such as the average age of the population and ability of health systems to respond. These two factors mutually compensate as parameters of the mortality function.



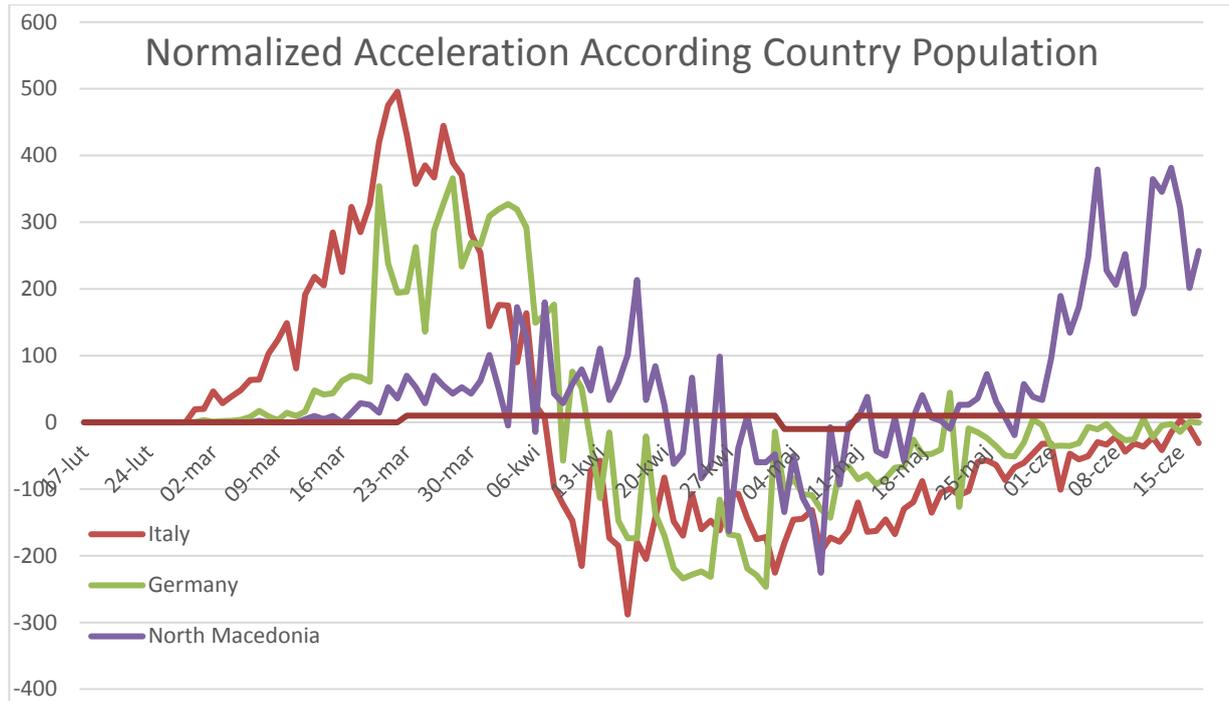
For comparison, functions of the normalized acceleration of infection spread for Germany and Italy have been added to the figure of the analyzed countries. These two countries have relatively similar models. Characteristic of Italy is the higher acceleration contributed to the rapid accumulation of a significant percentage of population in contact with the virus. The public health system there endured pressure as it was unable to respond adequately. Unfortunately, this has contributed to an increase in the number of victims due to the inability to provide maximum care to all critically cases. On the positive side, due to the high acceleration of spread, over 30% of the population came into contact with the virus (according to CMDR COE calculations). Many of these people were asymptomatic or asymptomatic. At present, the development of the crisis in Italy is severely limited in terms of the virus gaining again and moving to an exponential curve. Restoration of social contacts and especially travel abroad will not allow any quick disappearance of the virus. In current situation, calculations

show that the epidemic abatement for the country until the appearance of isolated and sporadic cases will take another 23 days. This period is calculated taking into account current dynamics, showing a slowdown in the decline of new infections.

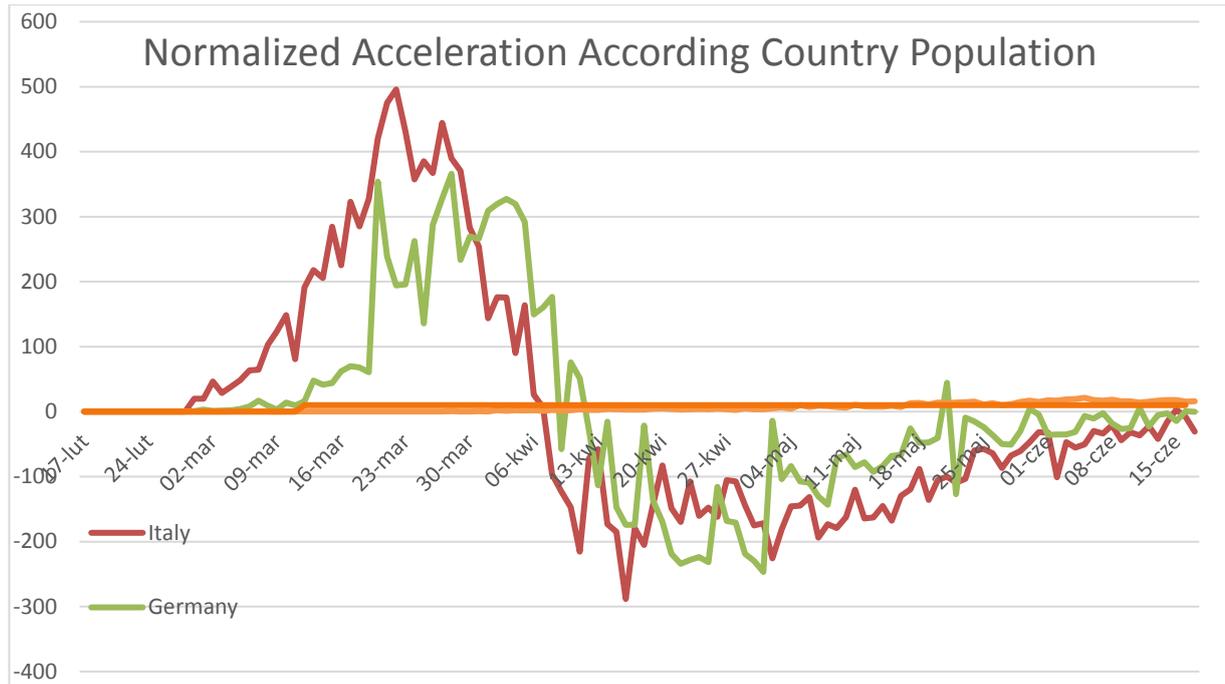
In Germany, the crisis was resolved more quickly and the health care system was not overloaded. This was one of the reasons for fewer victims of the virus. On the other hand, the country is currently in a much more vulnerable position than Italy. The lower percentage of people who have developed immunity is the reason we see alarming results from the calculations. The residual value of the acceleration of the infection is higher than that for Italy and there is no such rapid decline. We expect a positive value of the acceleration of the spread of the infection next week. It will largely determine the duration of the epidemic in the country. At the moment, the calculated one is significantly longer than the one for Italy. In support of this is the coefficient found by CMDR COE between new cases and victims for the day. It can be seen that for Italy this coefficient is already consistently low after passing the peak of acceleration. For Germany, there is a short period with a low coefficient and a return to a high value.



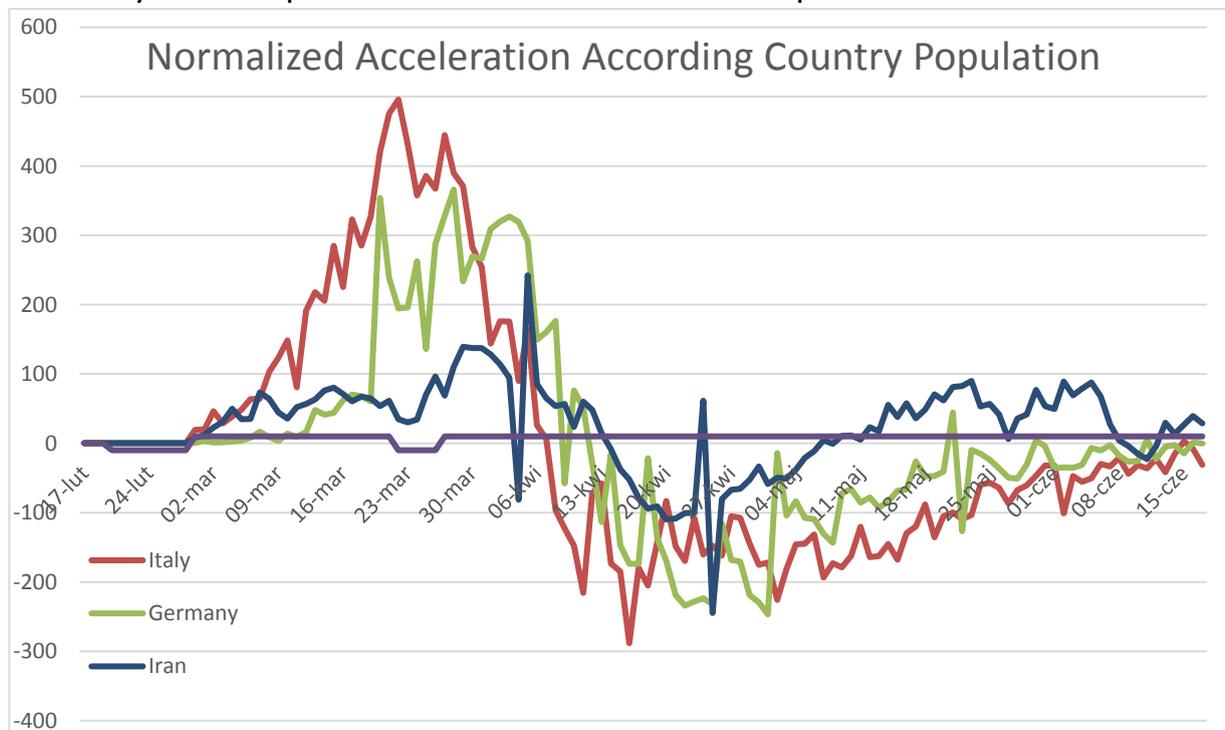
The above figure shows the function of normalized acceleration of the infection in Brazil. In its report two weeks ago, the CMDR COE predicted that symmetrical peaks in acceleration values around June 1 were most likely to be observed. This is later realized as statistics. We expect the refraction to occur around July 17, 2020. The rate for Brazil is so far only high and shows that the spread of the virus is only gaining momentum.



The figure of normalized acceleration of the spread of the infection for North Macedonia shows that it is already approaching the value reported in Germany. We expect the new refraction of the exponential increase to occur around July 3. Also, more than 210 new infections per day are likely to be reported during this period. The country's model is close to that of Germany and this is due to the restrictive measures and the motivation of the population to comply with them. It can be seen that the coefficient for North Macedonia “predicts” the appearance of a second peak. After a decrease for 4-5 days, it returns to high values. The short decline also shows that this is not a second wave, but a development of the crisis as a result of the early abolition of the imposed measures. Most of the countries affected no longer have the potential to maintain the restrictions due to the very negative effect on the economy. Restraining the spread of the virus has also not solved the problem so far due to the level of globalization. One such example is China. The country pays a high price in its struggle to limit and stop the virus in the country as much as possible.

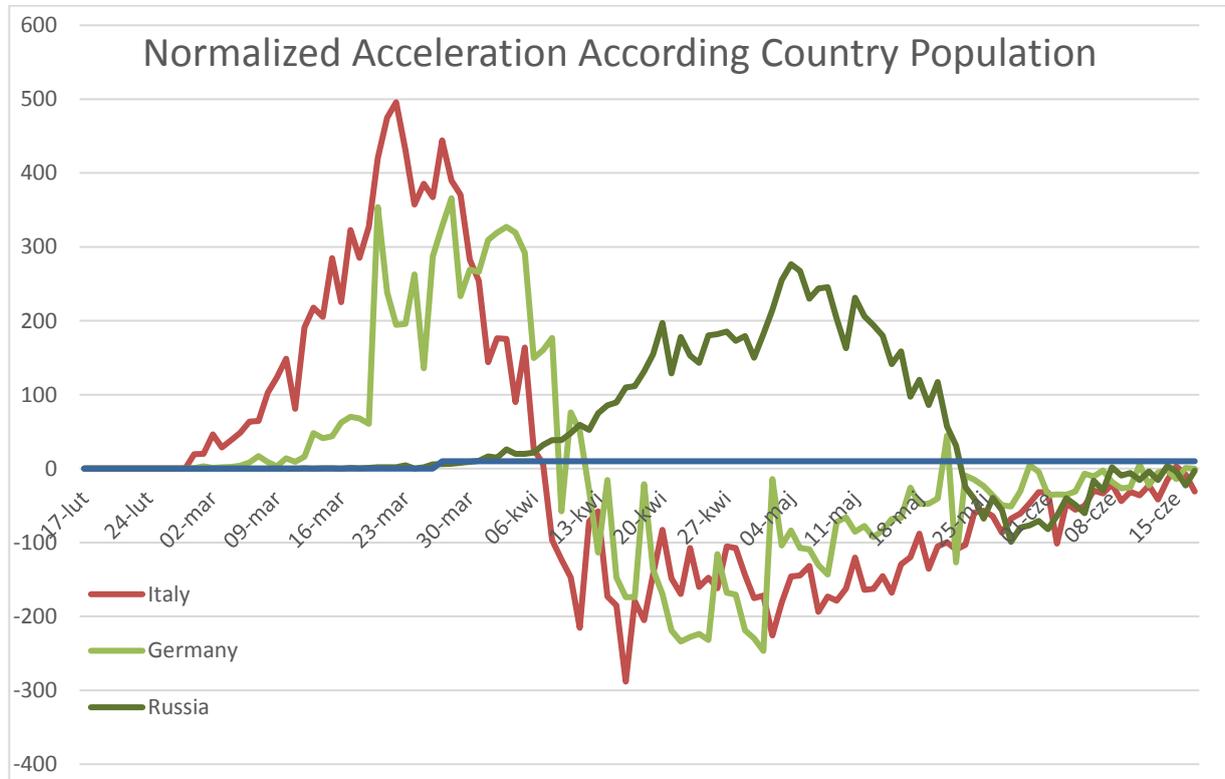


The normalized spread of infection in India is too low compared to that reported for Western Europe. CMDR COE's forecast for an increase in the number of newcomers over the past week has been confirmed. We expect the number of newly infected to increase by an average of 226 people a day next week. Due to the fact that only 6 percent of the country's population is over the age of 65, mortality is not expected to reach more than 5% of patients with the virus.

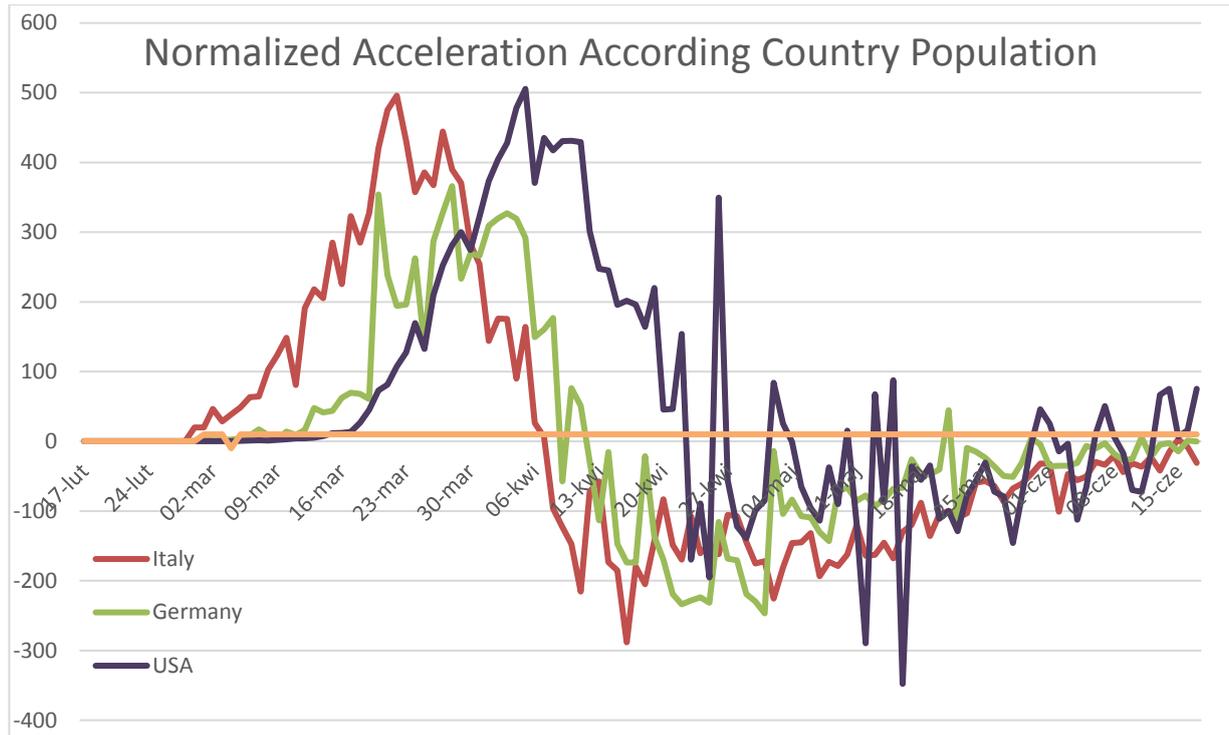


The analysis of the situation in Iran allows for the emergence of several successive peaks in the acceleration of the infection as observed so far. This is due to the fact

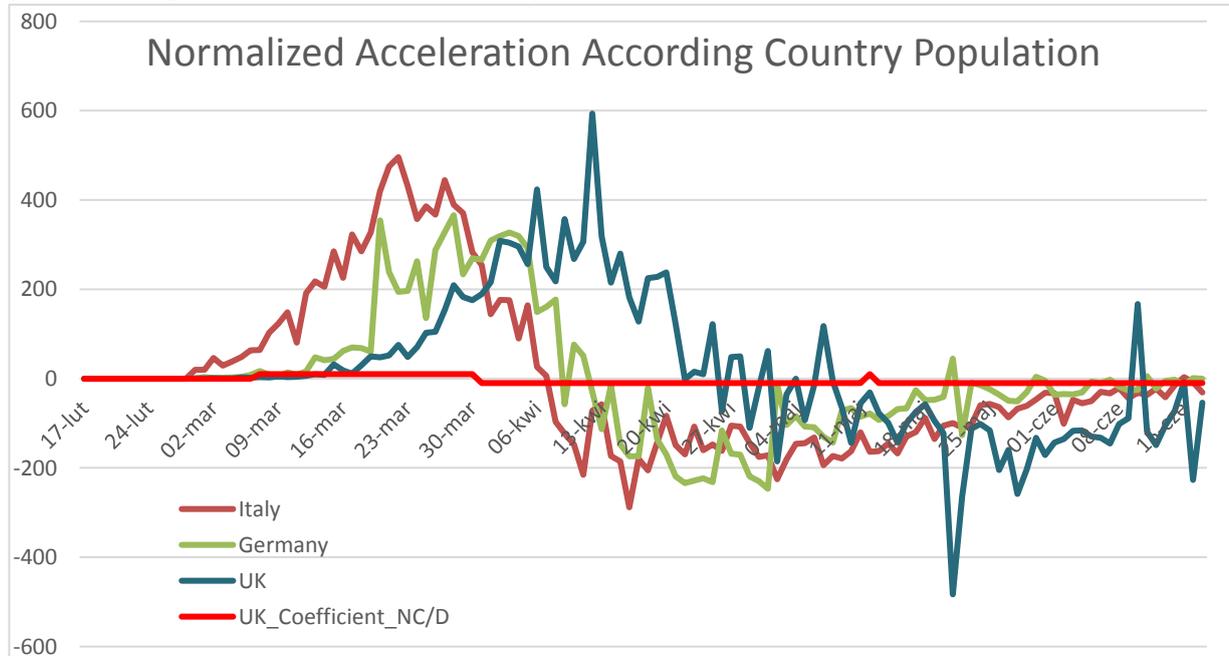
that they do not reach large enough values for the infection to develop. It is evident from the graph that they are many times lower than those reached in Germany and Italy. This puts Iran at risk for a long period of exposure to the virus.



A week ago, CMDR COE predicted a return to the acceleration of the spread of infection to positive values. Such a trend is still present and it is possible that this will happen as early as next week. This is despite strict and long-lasting restrictive measures. Unfortunately, easing the measures is not currently highly recommended. This should happen with a negative acceleration trend so as to achieve a low and constant propagation rate instead of a cyclic one with large peaks.

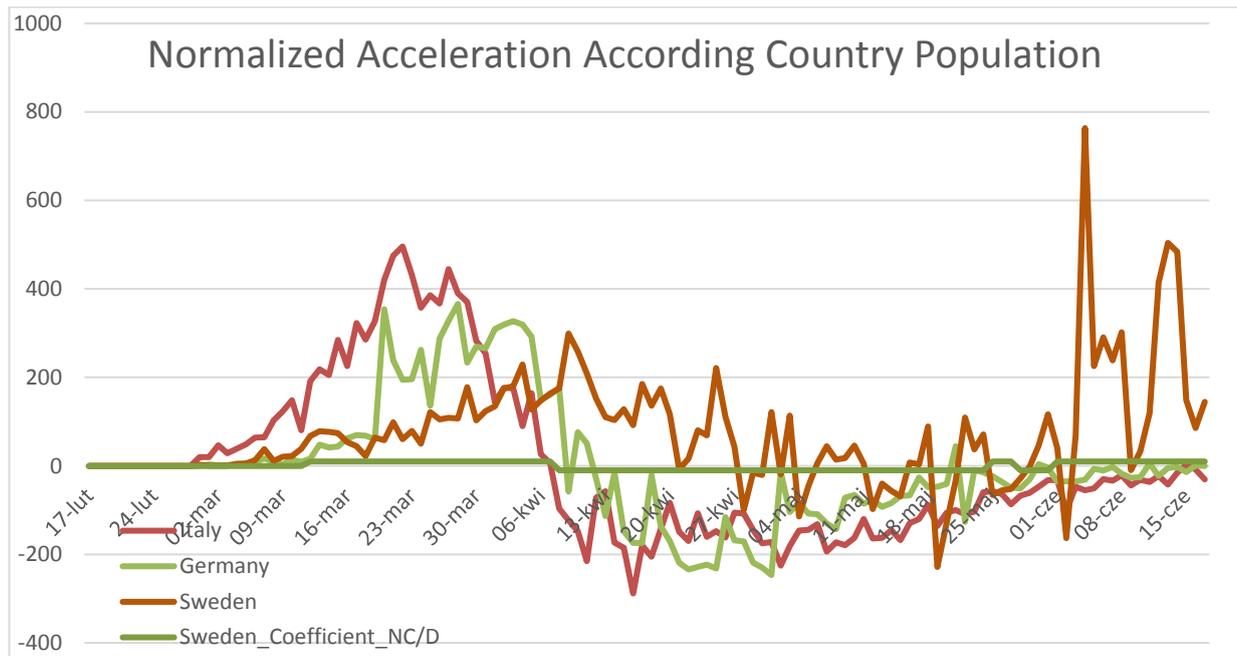


Currently, there is a weak positive trend in the development of normalized acceleration. This would not be so alarming if it had not been preceded by a very short period of negative values. It is quite possible that in the next week a short upward curve of the growth curve will be registered and more than 27,000 new infections will be reported per day. This is most likely due to the opening of many proceedings and the restart of suspended services.

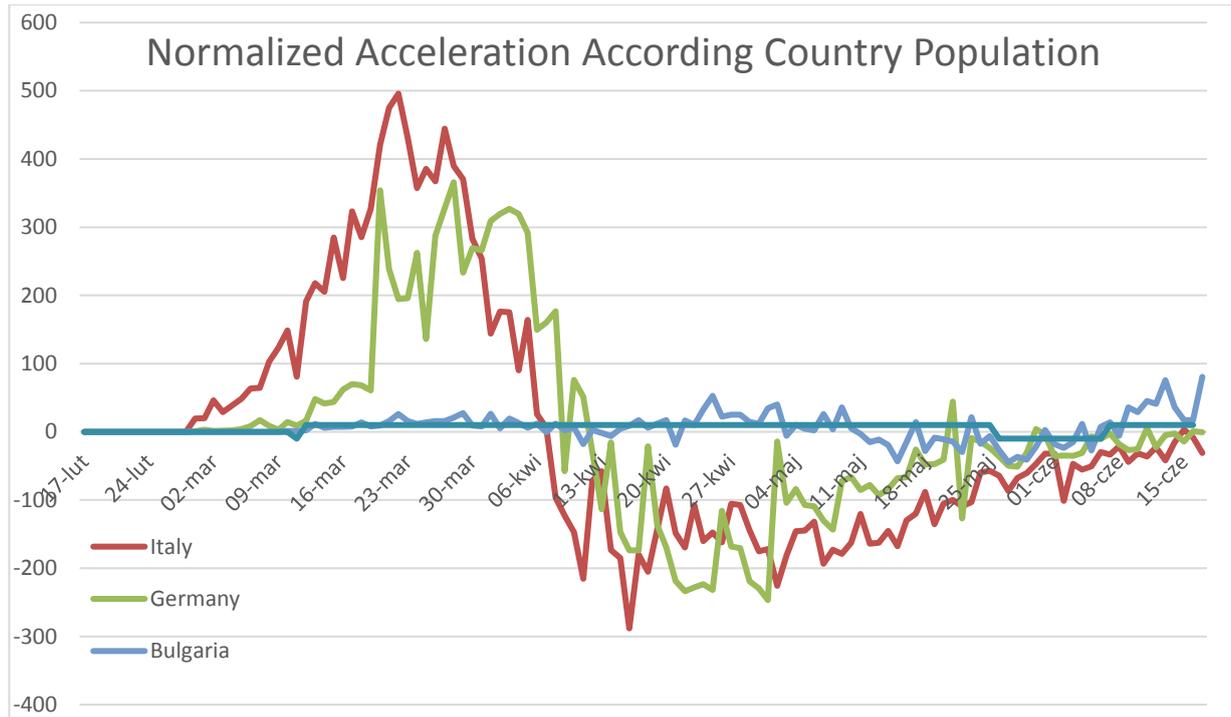


During the preparation of previous analysis for the situation in the United Kingdom, a positive peak of the normalized acceleration was observed. However,

CMDR COE predicts that it will be temporary and we expect “a return” to negative values next week and an average reduction in the number of new infections." This was registered last week. The coefficient for the country is also indicative, which has low values and also shows a trend to reduce the rate of infection. The actual percentage of the population that has been in contact with the virus is already high and notably short and not very large value peaks are possible in certain circumstances.



The peculiarities of culture and mentality in Sweden prevented a rapid spread of infection and this led to a collapse in the strategy of their crisis management. Given the developments so far, it follows that even weak restrictive measures such as preventing mass events should not have been imposed. In this way, the plan for a rapid development of collective immunity would be realized. Instead, a smooth continuous positive acceleration curve is observed. The last two weeks have seen a new peak of acceleration, which according to the CMDR COE will be shorter.



The acceleration of infection spread in Bulgaria remains low compared to Italy and Germany, despite relatively higher numbers of newly reported. In its previous analysis, CMDR COE predicted a reversal of the then observed trend within 3-4 days and this was fully confirmed later. A new peak is currently being formed. It is also worrying that the coefficient for the country is also high and shows a trend towards an increase in the number of newly infected. Withdraw of more restrictive measures, such as visits to clubs and restaurants, may further accelerate the spread. Given the low susceptibility to the virus observed so far, this should not cause a wave that the public health system cannot cope with. In such circumstances, the big challenge will be to impose effective procedures in hospitals, making them stable and resistant to the threat. Otherwise the units that have to react should be affected. There are several possible options for development of the crisis in the country. One of them is a sharp acceleration of the infection, similar to Italy, followed by a gradual decline in the number of new infections. This is unlikely. Another option is a gradual acceleration to half the levels reported in Germany and Italy and a subsequent gradual decline. The third option is to maintain the current low dynamics.

COUNTRIES & REGIONS ADDITIONAL OVERVIEW

1. AFRICA.

The COVID-19 outbreak continues to evolve in the WHO African Region, with the numbers of new cases and deaths rapidly increasing, albeit at a disproportionate rate in some countries. Many governments are gradually easing their lockdown restrictions, including the reopening of businesses and the gradual reopening of schools; however, restrictions on border crossings and flight operations largely remain in effect. Countries must continue with strong implementation of public health measures in order to slow down this rapid growth in cases. The cornerstone of the response in every country is to find, isolate, test and care for every case, and to trace and quarantine every contact. Additionally, communities need to adhere to physical distancing, with good personal hygiene practices and cough etiquette.

Seychelles, Equatorial Guinea, Lesotho and Mauritius have reported zero new confirmed COVID-19 cases in the past 70, 26, and 15 and 12 days, respectively and therefore did not record any new cases this reporting period. Eritrea reported 24 new confirmed cases after eight days of zero reporting. From 10 to 16 June 2020, an additional deaths 25% increase were reported from 31 countries: South Africa reported the highest number of 463 new deaths in this reporting period. Of concern, health workers have been significantly affected by COVID-19, with 5 255 (28%) health workers being infected in 36 counties since the beginning of the outbreak. Overall, South Africa has been the most affected, with 2 084 health workers infected, followed by Nigeria (812), Cameroon (325), Ghana (227), Niger (184), Guinea-Bissau (152), Senegal (141), Sierra Leone (139), Guinea (134) and Democratic Republic of the Congo (131).

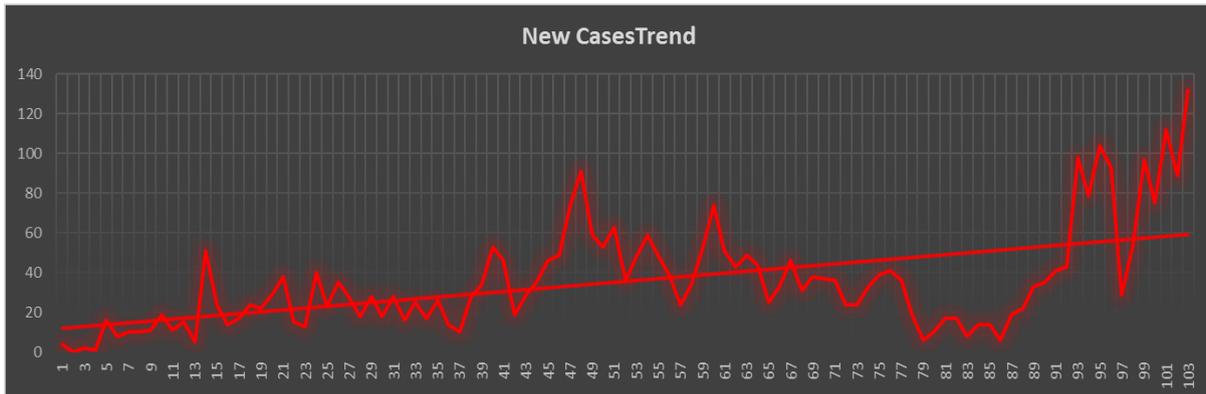
To date, kits to carry out over 120 000 COVID-19 tests have been delivered to countries, and further shipments are planned. Cumulatively countries in the region have carried out more than 1.5 million tests. Laboratory testing in many countries has now been decentralized from the capital cities. Ghana, Kenya, Ethiopia, South Africa and Nigeria all have multiple laboratories performing testing.

Now there are no evidences how easing the lockdown will affect the rate of spread disease, so population must stay vigilant – follow hygiene rules and observe distance.

2. BULGARIA

Newly confirmed COVID-19 cases reported by the state on June 18 have brought the national total number to over 3,600 cases and 190 deaths. Over 1,900 people have since recovered, which is more than 47% of the remaining confirmed cases. More than 120,000 people have been tested.

However during passing week 588 new cases were reported with two highest picks on Tuesday 16th JUN and Thursday 18th JUN.



Minister of Health Kiril Ananiev informed that state of epidemic is extended till the end of June. The extension is not related to aggravating the normal life of the Bulgarian, but we will closely monitor the processes, and if necessary, appropriate measures will be taken, "he said.

The measures that remain in force are in three main directions - temporary restriction of the entry of third-country nationals into Bulgaria, with the exception for - Montenegro, Bosnia and Herzegovina and Serbia. Borders are scheduled to be open for third countries as early as July 1.

The second direction is related to anti-epidemic measures - distance, hand hygiene, disinfection and wearing masks. It is highly recommended to wear masks in closed public places, but it will not be mandatory. The only mandatory thing is to wear them in public transport, where there is no distance.

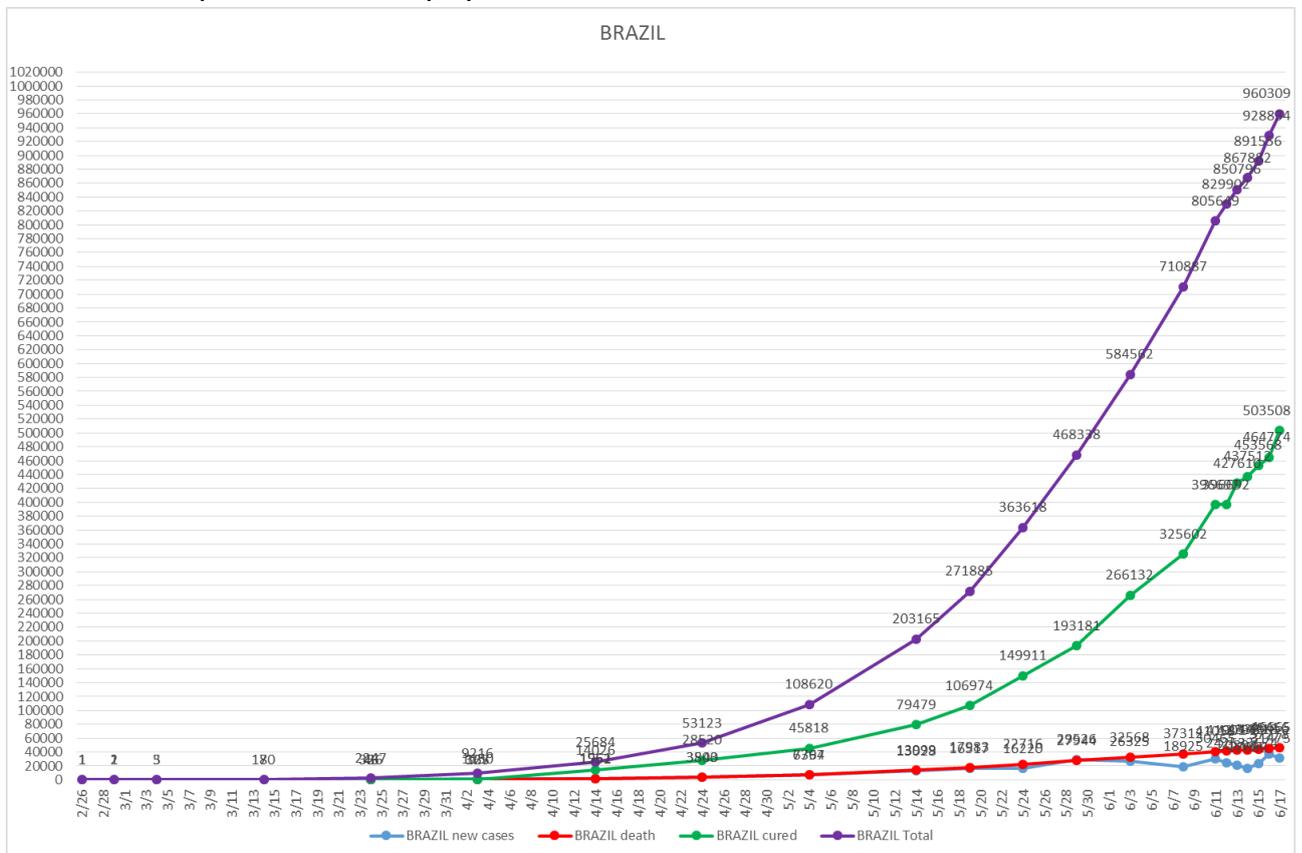
Thirdly, these are the measures that introduce a temporary restriction on mass events, and the new thing that will come into force is that it will allow indoor capacity to be not 30% of the hall, but 50%.

Minister Ananiev also announced that they will continue to monitor the outbreaks very closely in order to take appropriate measures.

3. BRAZIL

The coronavirus pandemic was confirmed to have spread to Brazil on February 25, 2020 after a 61-year-old man from São Paulo, who returned from Lombardy, Italy, tested positive. The total number of infected, deaths, new cases and recoveries is as follows:

- Infected – 960 309
- Coronavirus deaths – 46 665 (4.9 %)
- New cases for the last 24 hours as of 17.06.2020 – 31 475
- Recovered after illness – 503 508 (52 %)
- Cases per 1 M of the population – 4 519



The number of new cases is growing exponentially and uncontrollably at the moment. To date, there are no indications of a peak or approaching a peak in the coronavirus spread in Brazil. No changes in already established measures. The situation to date shows the ineffectiveness of the measures. The negative tendencies continue.

4. CANADA

Newly confirmed COVID-19 cases reported by the provinces on June 17 have brought the national total to over 99,000 cases and more than 8,213 deaths. Over 61,000 people have since recovered, more than 50 per cent of the remaining confirmed cases. More than 2.2 million people have been tested.

Examining the number of deaths, more than half of the fatalities are in Quebec and the vast majority of all deaths stem from outbreaks in long-term care homes. The most affected age group is those over the age of 80 years (1 082 cases per 100,000 population), followed by those aged 40-49 years (308 cases per 100,000 population).

The Atlantic Provinces reported no new cases or deaths on June 14. Nova Scotia marked five days in a row with no new cases, while New Brunswick saw no new cases for the first time in seven days. Newfoundland and Labrador has two active cases left.

COVID-19 has caused significant changes and adaptation in Canada's food system. That is why the Government of Canada launched the \$50 million Surplus Food Rescue Programs on June 12. The Surplus Food Rescue Program is an initiative which will help to support Canada's food system, food processors, and food producers, and distributors to help ensure food availability for all Canadians.

Another government initiative was the creation of a \$ 77.5 million Emergency Processing Fund (EPF) as part of the Canadian government's actions to support Canadians and businesses facing difficulties as a result of COVID-19 on June 12.

The Government of Canada has agreed to contribute 7.5 M Canadian dollars (about USD\$5.3 million) to the Pan American Health Organization (PAHO) for the response to COVID-19 in 23 countries of the Americas, June 11.

5. CHILE.

As of 10 pm on Friday 13th JUN, over eight million people in Chile will be subject to quarantine. The following areas are to be added to those cities that will remain in quarantine: the urban part of Pozo Almonte in the Tarapacá region; the municipalities of Valparaíso, Viña del Mar and Peñaflores; the urban parts of Melipilla, Curacaví, Til Til and San José de Maipo in the Metropolitan Region. New cordons sanitaires will be implemented in Pirque and Alto Bío Bío.

The Health Ministry added that quarantine will remain in effect for the following municipalities: Iquique, Alto Hospicio, Calama, San Antonio, Puente Alto, San Bernardo, Buin, Lampa, Colina, Padre Hurtado and the 38 municipalities in

Santiago.

CONFIRMED CASES OF COVID-19 IN CHILE



REGION	TOTAL CASES	NEW CASES	CASES WITH SYMPTOMS	CASES WITHOUT SYMPTOMS	DECEASED
ARICA Y PARINACOTA	1,139	30	30	0	11
TARAPACÁ	4,258	113	90	23	58
ANTOFAGASTA	4,556	270	244	26	72
ATACAMA	484	36	23	13	0
COQUIMBO	1,676	120	96	24	10
VALPARAÍSO	7,012	254	230	24	126
METROPOLITANA	144,280	3,882	3,596	286	2,913
O'HIGGINS	2,012	85	77	8	35
MAULE	3,091	94	84	10	23
ÑUBLE	1,832	54	49	5	22
BÍO BÍO	3,460	59	38	21	19
ARAUCANÍA	2,728	53	48	5	36
LOS RÍOS	529	32	18	14	9
LOS LAGOS	1,168	27	24	3	13
AYSÉN	26	2	2	0	0
MAGALLANES	1,185	32	11	21	15
TOTAL	179,436	5,143	4,660	483	3,362

“Given the evolution in the number of people infected, we have decided, in conjunction with the COVID-19 committee led by the President of Chile, to implement these new restrictive measures in order to contain and mitigate the spread of the disease and avoid the number of infected people increasing,” explained Health Minister Jaime Mañalich.

Crime Prevention Undersecretary Katherine Martorell explained that Valparaiso and Viña del Mar will be subject to quarantine until June 16. She confirmed that the supply chains are guaranteed and called for people to avoid crowding in order to prevent the development of focal points for spreading the coronavirus. She stated that "we will not hesitate, not even for a second, to pursue and enforce compliance with these sanitary regulations. The signal is clear: we must comply with these measures because this challenge depends on each and every one of us."

Undersecretary Martorell added that nationwide the Carabineros (uniformed police) have been doing some 40,000 checks every day. She reminded the public that the fines for failing to comply with health regulations can be up to 50 million Chilean pesos (US 63,000).

She added that there are people who have failed to comply with the measures implemented by the Government on 16 occasions to date. The Undersecretary emphasized that "all the people who do not comply with these measures are committing a crime that is subject to imprisonment as well as fines."

6. DENMARK

From June 15, tourists from Germany, Norway and Iceland are allowed to travel to Denmark but must show documentation of a valid hotel booking on their arrival.

According to the health minister, Magnus Heunicke, Denmark currently has three new 'mini' coronavirus outbreaks in various parts of the country. One of those stems from a confirmed case involving a person who was among the 15,000 people who took part in the Black Lives Matter demonstration in Copenhagen on June 7. The government urges anyone who took part in the event to get tested, whether they show symptoms or not because it is not known whether the person was infected at the march or was infectious at that time of the event. Another case concerns an outbreak in north Jutland in Hjørring Municipality, which has seen the most new coronavirus cases out of any municipality over the past week. The final outbreak case involves a passenger plane that arrived at Copenhagen from Pakistan on June 6. Six people on that flight have subsequently tested positive.

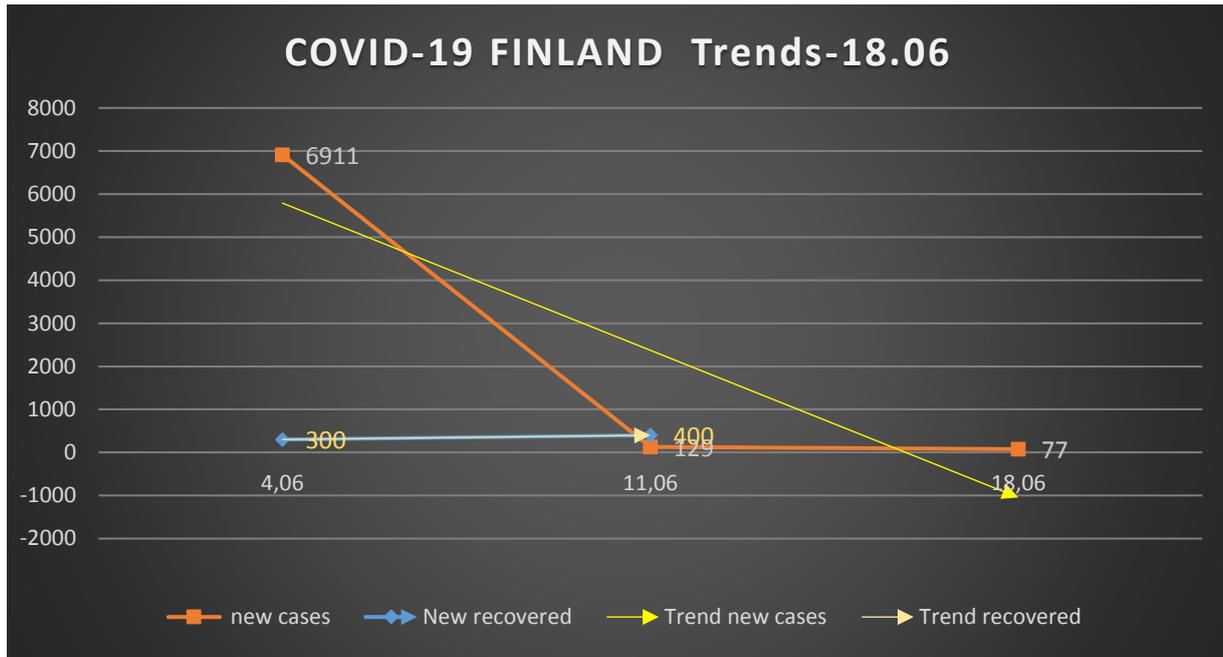
It is highly likely the Danes can rest assured that the authorities are monitoring the situation closely and are ready to do what is necessary due to the fact that citizens of many nations are still not permitted to enter Denmark, which imposed one of the earliest and strictest lockdowns in Europe.

This is a reminder that the epidemic is not over and remains present in our society. Based on a recent survey it could be assumed is likely that a majority of Danes believe that the current gathering limit of 50 people should extend to demonstrations.

7. FINLAND

The government revealed it will ease the restrictions by lifting internal border controls for certain modes of transport, including flights and regular ferry services, for six nearby countries: Denmark, Estonia, Iceland, Latvia, Lithuania and Norway. The decision took effect on Monday, 15 June.

Internal border controls will contrastively remain in place for travel between Finland and other Schengen countries, including Sweden, until 14 July. Although the controls will remain in place, return traffic, work-related travel and other necessary travel will be allowed at the borders.



Controls will similarly remain in place on the external border with Russia. People arriving from other than the six aforementioned countries will continue to be instructed to self-quarantine for 14 days and notified of the various hygiene, social distancing and treatment instructions in place in Finland. Moving between a place of residence and employment, as well as to take care of necessary chores, will remain allowed during the self-monitored quarantine. Although the border controls will remain in place, the government reminded that everyone has the right to leave Finland.

The Finnish government yesterday also announced it has clarified its decision to allow the organization of large public events as of 1 July. Events held in enclosed outdoor spaces will continue to have a maximum limit of 500 attendees until 31 July. The limit, however, can be exceeded in certain cases, such as events organized at outdoor venues with several sections or demarcated areas that enable the organizer to place the attendees in separate areas each with a capacity of no more than 500.

It is certain the Fins are trying to prevent the spread of the coronavirus epidemic by complying with travel recommendations and hygiene instructions. A particular attention to the epidemiological situation in Sweden is imposed, because it “unfortunately” continues to preclude the government from lifting the restrictions on travel from Sweden. This decision wasn’t made lightly but out of absolute necessity. Sweden is a very important neighbor and partner country for Finland. Finnish and Swedish citizens also have close ties. The government is monitoring the situation continuously and will lift the restrictions as soon as that’s possible in light of the epidemiological situation. Right now, the government’s primary responsibility is to protect Finland’s residents from the spread of the

coronavirus.

8. GREECE.

As of 17 June, in total, 3,203 COVID-19 cases and 187 deaths (fatality rate of 5,8 %) due to COVID-19 have been reported. 1,374 persons are estimated to have recovered and 11 patients are critical/serious Condition. In comparison Belgium with a population size similar to Greece has reported 60.244 confirmed cases and 9,675 deaths (fatality rate of 16,1 %).

Over the past 7 days (from 11 to 17 June) in total 135 new cases of covid-19 and 4 new deaths have been recorded. Most of the new cases are coming from a specific region. Two weeks ago (from 03 May to 10 June) the numbers were 131 new cases and 4 new deaths respectively. As of 17 June, each disease carrier infects significantly less than 1 other person.

Intensive care unit (ICU) cases, considered a good indicator of where a country stands on the curve, appear to have peaked on 5 April at 93 patients and have been gradually declining ever since. Till then, the numbers of hospitalized in ICUs declined to 11.

On 11 June, Greek authorities ordered a village near the city of Xanthi, in northeast Greece, into quarantine after a spike in the number of coronavirus cases there.

On 14 June the Greek Prime Minister Kyriakos Mitsotakis through an interview to CNN from Santorini Island, analysed the preparation of the country for the opening of tourism without discounts on health protection. Mr. Mitsotakis described the government's choices, which restrained the spread of the coronavirus. He underlined that "Greece is one of the few countries that managed to have such a low incidence of cases".

The 15th June signaled the transition from the sixth stage of phase 2 (easing the lockdown restrictions) to the 7th stage of phase 2. The main goal of this stage is to safely return to a semblance of "normalcy".

On 15 June, reopened gyms, museums, rest entertainment premises and hotels operating during the season.

Greece base almost 20% of its total GDP on tourism. There are a lot of concerns and debates about what is going to happen taking into consideration the decade-long economic crisis, which struck the country. Starting mid-June, Greece has opened its borders to mass tourism in stages, hoping its success in containing the COVID-19 pandemic will attract visitors from abroad. Similarly, on 15 June, hotels operating during the season reopened. Other Greek airports are due to open on July 1. It is expected to bring as many as 10 million travelers from several countries. The first wave of travelers is due to fly in from 29 countries with low

rates of COVID-19 infection. A rough estimate shows that about 10% of those incoming travelers will be carriers, and of them, as many as 700 will show symptoms and require treatment.

Greece took strict but necessary measures timely. The first measures were taken just one day after the first confirmed case and quite before the first death. Actions such as the lockdown and fully-quarantine vulnerable towns and villages have protected the national health system and eliminated the number of deaths. The lockdown was imposed much earlier than in most countries in the western world while Greeks reacted to the lockdown with full compliance. According to Greek special covid-19 Committee the toll rate in the country will be approximately 13,685 if the measures had not taken timely. The key to further success remains the individual responsibility and disciplined alongside collective maturity”.

The use of face mask usage is mandatory in all means of public transport, taxi and health premises. Highly recommended into supermarkets and stores.

According to recent surveys, Greeks are concerned about the impact of the coronavirus on public health and the economy, while also skeptical about the causes and repercussions of the pandemic. In addition they perceive the health measures, which damaged the economy, were “definitely” or “maybe” necessary. On the other hand, most of them are against a fresh lockdown in the case of a second wave in the autumn. Greeks are also nervous over their government’s decision to allow hundreds of thousands of travelers from Europe and further afield to arrive into the country without facing compulsory Covid-19 testing and quarantine.

The likelihood of serious local disease spread still exists in close structures such as refugee and Roma camps but also there a lot of concerns on that regarding travelers coming from abroad.

The overall situation is assessed as positive and optimistic. However, can quickly get out of hand continued vigilance is vital.

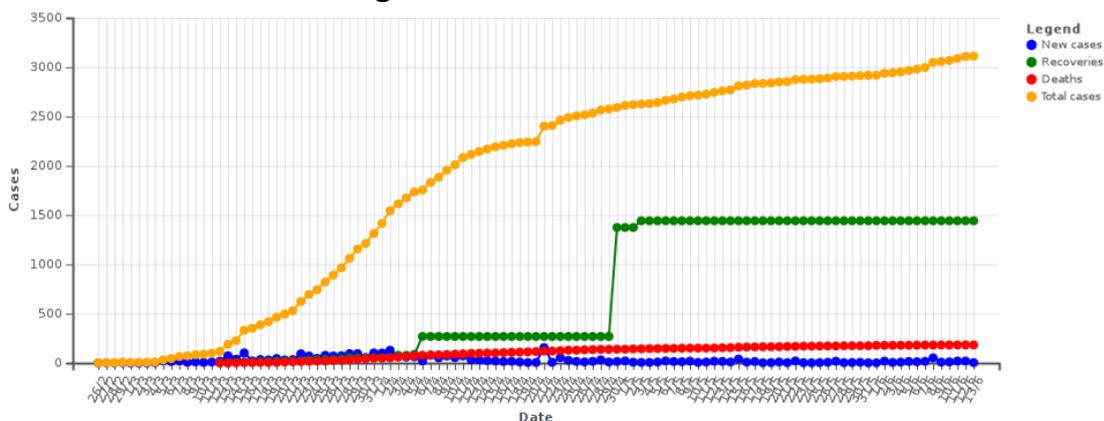


Figure: COVID-19 total confirmed cases, deaths, recoveries in Greece (17/06/2020 18:00 AM)

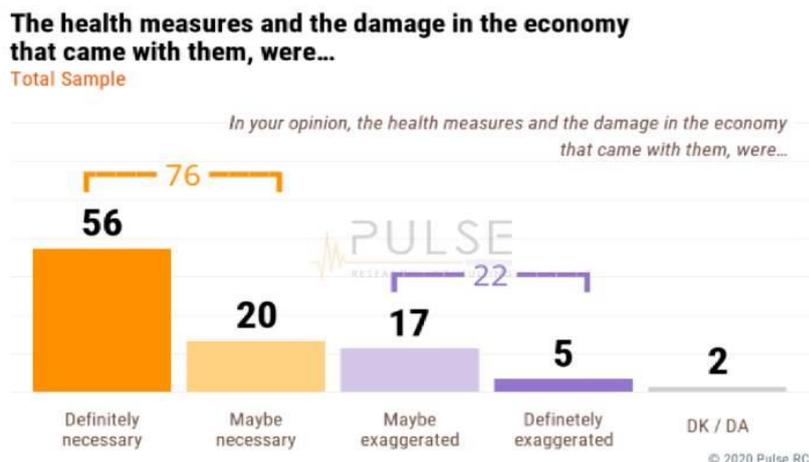


Figure: Greek Public Opinion perception regarding the health measures and the damage in the economy (17/06/2020 18:00 AM)

9. MEXICO

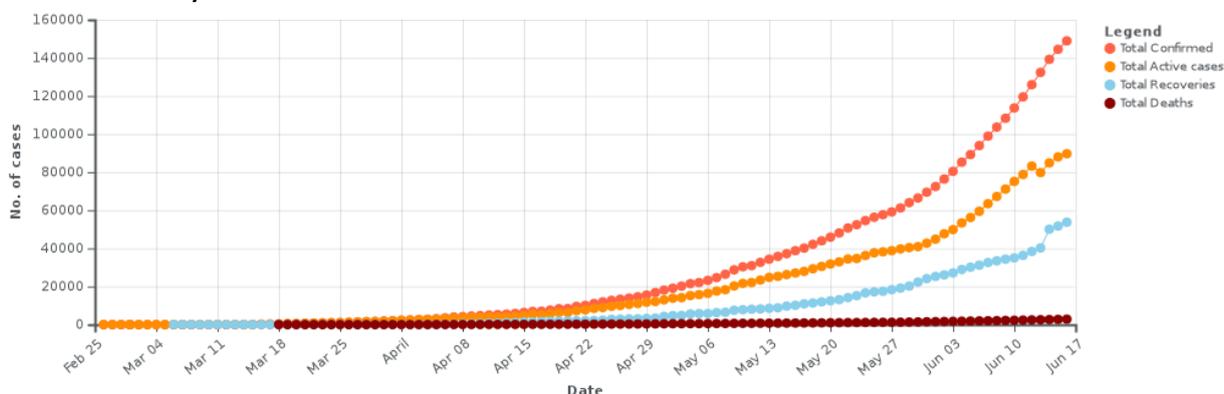
Mexico has started removing some restrictions imposed to stem the spread of Covid-19, though deaths and new cases continue to rise in one of Latin America's worst-hit countries. In Mexico City, factories reopened on Tuesday under strict sanitary rules a day after travel curbs were lifted. In the state of Baja California Sur - popular with tourists - some hotels and restaurants also resumed activities. Mexico has confirmed more than 150,000 infections and about 18,000 deaths. However, the true numbers are thought to be much higher because of insufficient testing. The country has Latin America's second-highest death toll - after Brazil - and the region's third-highest total of cases, after Brazil and Chile, according to Johns Hopkins University, which is tracking the disease globally. Under a phased reopening announced by Mexico City's authorities, about 340,000 factory workers returned to their jobs on Tuesday. Small shops will be able to reopen on Thursday while professional services and some other workers are allowed go back from Friday. Street markets and the historic city center could be allowed to reopen next week if conditions were deemed appropriate, authorities said. Churches and restaurants would also be able to resume activities at a reduced capacity. President Andrés Manuel López Obrador is eager to restart the economy, and his government announced a phased plan to lift restrictions. But critics say he was slow to impose the measures and now has been too quick to lift them. Most of the economy was stopped from 23 March but some industries that were declared key to the functioning of the nation were exempt from the restrictions. Between March and May, more than one million jobs were

lost across the country, according to official numbers. The impact of the measures, however, is thought to be much worse as Mexico has high numbers of people in the informal economy. Tourism is a key sector in the Mexican economy and, in April, the country registered only 86,000 foreign visitors, down from 2.8 million the same month last year, according to official data. On Monday, beaches reopened in Baja California Sur, home to the popular twin resorts of Los Cabos. Hotels and restaurants can only operate at 30% capacity, and people are being urged to follow social-distancing measures.

10. PAKISTAN.

With over 160,000 COVID-19 cases, Pakistan has passed the official count in neighboring China, the country first hit by the novel coronavirus. Officially projected figures suggest positive cases in Pakistan could reach 250,000 by end of June. Yet thanks to the government’s contradictory public messaging, a majority of Pakistanis still haven’t registered the danger.

The pandemic, if it continues to be underplayed by the government, may pose a formidable challenge for Prime Minister Imran Khan’s leadership — along with causing a serious health crisis in a country of 220 million people with a weak healthcare system.



It has been 113 days since Pakistan registered its first coronavirus case. But the government has yet to come out with a unified statement and an orderly policy to inform, educate, and protect the masses. Instead, the public tends to follow dangerously fatalist and superstitious approaches rather than paying heed to science and health experts.

A section of society, mostly under the influence of religious propagandists, believe that COVID-19 is a conspiracy hatched by non-Muslims to keep believers from worshiping at mosques and following their religion. Similar misinformation surrounds the polio virus; propaganda that the polio vaccine is a ploy to make “Muslim men infertile” is one of the major reasons that polio still exists in Pakistan.

Even among those who accept the existence of coronavirus, some are under the

impression that the virus can not touch Muslims. There is a narrative that the disease is God's wrath against the "infidels" for their "immorality." This section of the society, again under influence from religious propaganda, believes that Muslims are immune to COVID-19 because they wash their hands and faces five times a day while performing ablution before each prayer.

Yet another section of the society — mostly those coming from rural backgrounds and the lower middle class — presumes that reporting their symptoms to a hospital or a health worker means certain death. They believe that the government is trying to show more fatalities in order to collect money from international aid agencies and donor countries.

This is a rapidly spreading conspiracy theory with unclear origins. The most obvious reason for the spread of this conspiracy theory is the government's unclear and ambiguous public messaging. The public disbelief has its roots in the government's unclear statements from the very beginning. Pakistan's central leadership, instead of chalking out a unified strategy, tried to score political mileage by coming out with the usual bravado.

One of the first public messages was an Urdu language phrase that translates as "fight instead of fearing coronavirus." This provided enough ground for the



common people to respond frivolously to the deadly virus. Prime Minister Khan's speeches downplaying the nature of the menace, and his government's flip-flopping announcements — a lockdown, a smart lockdown and finally no lockdown, all without flattening the COVID-19 curve — further deepened the disbelief among the people.

The prime minister's statements partly reflect his personal views about the global pandemic and partly emanate from his contempt for his political rivals. When the government of Sindh, the only province run by the opposition Pakistan People's Party (PPP), started amassing praise in the local and international media for its strict COVID-19 measures while Khan's central government was still dragging its feet on imposing a lockdown, Khan was quoted as saying that it was the "elites who locked down the country."

At the outset of the outbreak in December 2019, Khan's government remained unresponsive as the novel coronavirus started taking its toll in China, Pakistan's northeastern neighbor and close economic and political partner.

Later, dozens of returning Shiite pilgrims were quarantined at the Pakistan-Iran border in Balochistan when the virus was first detected in February 2020 among those returning from visits to the shrines in Iran. Many of the returnees, however,

were released without a proper health check.

In March, the government of Punjab province allowed a congregation of devout Muslims, the Tablighis, in the city of Lahore. Over 100,000 people attended from across Pakistan, alongside devotees from around 40 countries. Both the Shiite pilgrims who returned from Iran and the Tablighis later turned out to become the main agents of spreading the virus to other cities.

Health experts across Pakistan are the only segment ringing alarm bells about the threat and have been asking for a strict lockdown. But their voice was often drowned out by official confusion, the economic woes of the business community, and calls from clerics asking believers to return to mosques for congregational prayers.

In the month of May, as doctors were issuing passionate appeals to the government and the public to pay heed to their warning calls, prominent religious scholars gathered to tell believers that the lockdown does not apply to mosques. It was the latter who prevailed.

Khan, in his June 5 televised address to his so-called Corona Relief Tiger Force volunteers, said that “it is important to ensure people follow the SOPs [standard operating procedures, referring to precautionary measures] because we can’t go back to lockdown; this country cannot afford it.” A few days later, on June 8, Pakistan recorded more than 4,500 coronavirus positive cases for a third straight day, raising the threat of an exponential growth in the number of cases.

Days before Khan’s speech, an official report of Pakistan’s Punjab government had suggested that “no workplace and residential area of any town is disease-free” in the city of Lahore. The same report estimated that total cases in the city at over 670,000.

Pakistan now has the 15th highest number of coronavirus cases in the world, but the government’s public messaging and decision making have yet to assume a clear direction.

11. PERU.

Peru topped 240,000 total cases of coronavirus on Wednesday (Jun 17), surpassing hard-hit Italy, government data showed, even as the pace of infections has begun to moderate in the South American nation. Peru moved quickly to lock down its citizens as the pandemic took hold in early March. But cases nonetheless exploded in May, reaching a peak of more than 8,000 per day late in the month. More than 7,000 Peruvians have died from the disease, the government reported. Peru has the second highest number of confirmed cases of COVID-19 in Latin America, behind Brazil, and the seventh highest globally.

The Americas have become the epicenter of the global coronavirus outbreak, logging nearly 4 million infections and 204,000 deaths. Peru, Chile and

Brazil have been particularly hard hit in recent weeks.

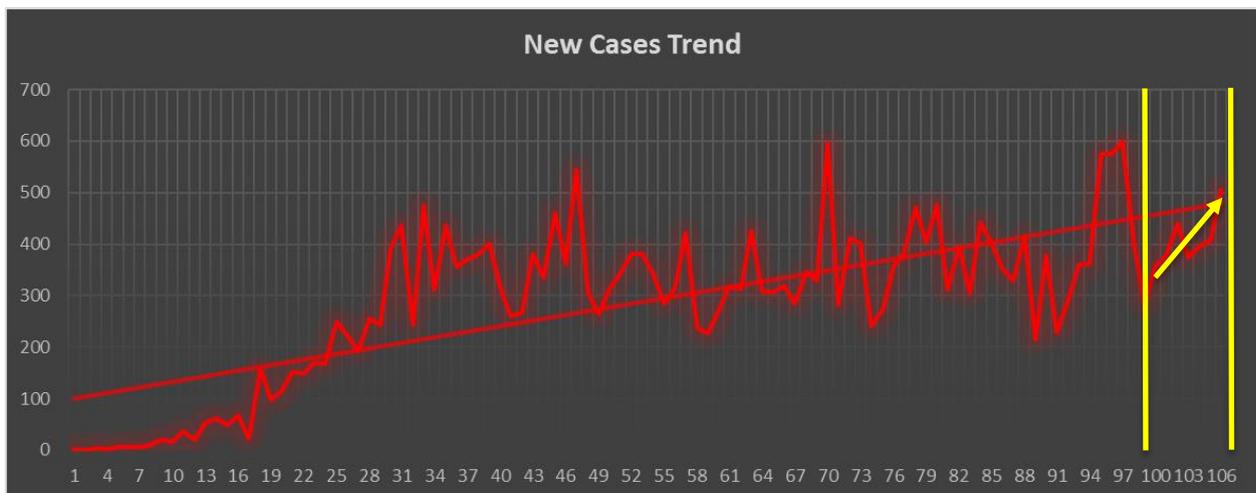
Peru was one of the first in the region to impose a lockdown to stop the spread of coronavirus, and the police and the army were deployed to enforce it. But experts say this and other measures have not worked properly because large numbers of people disrespect them. Thousands of street vendors were evicted in the capital, Lima, while reports said social-distancing rules had been largely ignored in rural areas.

Peru's government has extended a national lockdown through Jun 30, as infections continue to increase in some regions. The country reported 3,752 new infections on Wednesday, down by more than half since their peak on May 31. Peru's economy sank by more than 40% year-on-year in April, it's worst-ever percentage drop in output, amid a lockdown imposed to curb Covid-19. Mining dropped sharply in the country - one of the world's largest producers of copper, gold and silver. President Martín Vizcarra called it the "most serious crisis in our history".

Mining represents 60% of the country's exports, and production was drastically scaled back because of the Covid-19 restrictions. Full operation was allowed to resume in May, and economists believe some recovery is expected in the next few months.

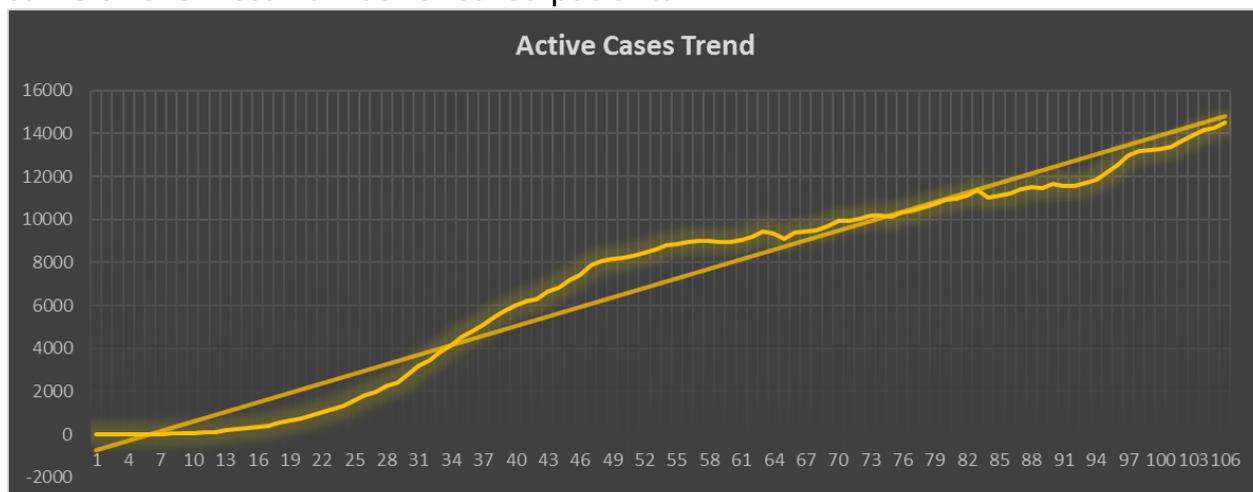
12. POLAND.

From the beginning of pandemic number of infected people is still growing and reached 30 701 (+ 2 859), disease trend rate raised during last week and is now above linear trend line. Currently average number of infected is 408 (recently 451) people a day during last week, which placed Poland on 10th place in Europe and 40th on the world.



Active cases trend line went up from last report and is very close to linear trend. This is due grown number of new cases comparing to previous period and

same or even less number of cured patients.

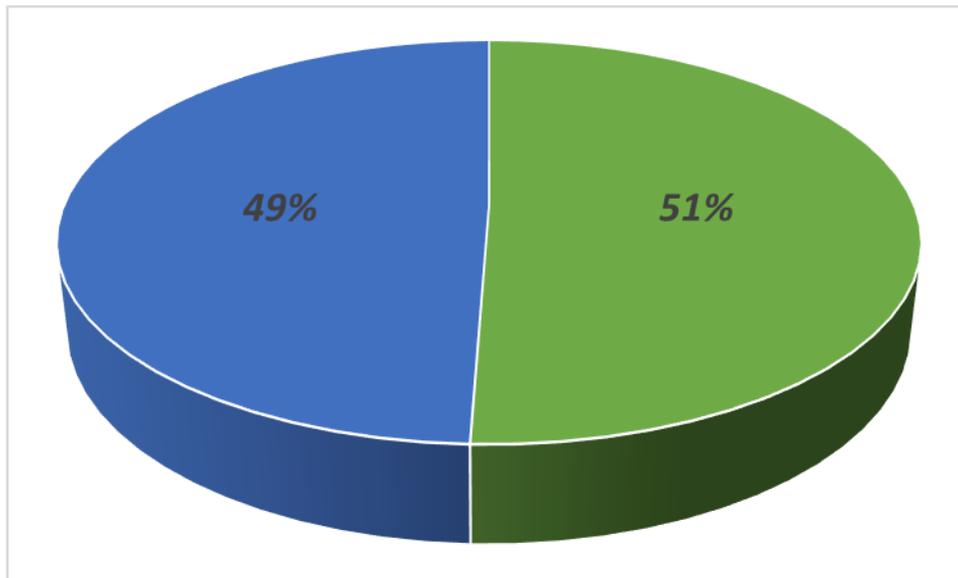


Number of tests done so far is 1 221 133 / +111 224 from last report;

Reported number of people cured from coronavirus so far – 14 921 / +1 510 from last report. 1 286 (+80) people died so far (657 men and 629 women), average age of died person is 76 years, the youngest persons who died was 18th years young man who died on 24th APR in Kędzierzyn Koźle Hospital. The patient had cerebral palsy and epilepsy. On 14th MAY also 18th year old women passed away in Regional Hospital in Radom. Local epidemic institution informed that she had coronavirus and comorbidities, but not informed which specific once.

Age structure of died people in Poland

0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80+
0	2	0	14	32	74	251	352	561
0%	0%	0%	1%	2%	6%	20%	27%	44%

Gender structure of died people in Poland

Silesia District continue to be the most affected region in Poland with almost 11 500 confirmed cases that is 37% of all cases in Poland now. Still the main source of infection are coalmines located in this area where virus is transfer among miners and their families.

Number of new cases is still on high level, however number of people hospitalized is dropping down, in contrary number of people being on quaranteene is growing. This means that majority of people positvely diagnosed for COVID-19, undergoing throuth disease in mild way and there is no need to hospitalize them.

13. RUSSIA.

In Russia, the officially registered newly infected with COVID-19 as of June 17 were 7 843 people. According to the Russian Operational Headquarters for combating with the spread of the infection.

For the first time since May 1, there are less than 8 000 newly infected in Russia. The daily growth of the newly infected as of June 17 in relative numbers is 1.4% compared to 1.5% on June 16. A total of 553 301 people have been officially registered since the beginning of the epidemic in Russia.

As of June 17 194 people had died, bringing the total number of COVID-19 victims to 7 478 since the start of the epidemic in the country. According to the headquarters, the dead make up 1.35 percent of all those infected in Russia.

The number of active infected in the Russian Federation has decreased to 241 481 people. Among the newly infected 2 494 people (31.8%) have no symptoms.

The number of cured patients is 10,036 people, bringing the total number of recovered patients to 304 342 people. According to the headquarters, the number of recovered people amounts to 55% of the total number of coronavirus infected in the Russian Federation.

1 065 newly infected people have been registered in Moscow, the lowest number since April 11. The daily growth of newly infected people in the capital dropped to 0.5%. 1 416 newly infected people were registered in Moscow on 16 June.

14. SAUDI ARABIA

Saudi Arabia called on people to comply with health measures to prevent the spread of the coronavirus on Sunday, as its daily tally of cases rose above 4,000 for the first time.

The Saudi Arabian health ministry reported 4,919 new coronavirus cases to bring the total to 141,234, with 1091 deaths, the highest among the six Gulf Arab states. Saudi Arabia, which has a population of some 30 million, allowed employees to return to offices, commercial centers to reopen and prayers at mosques to resume in a three phase plan which began last month. Saudi authorities re-imposed curfew hours in the Red Sea port city of Jeddah on June 5 and suspended work at offices for two weeks as the number of infections there increased. The Saudi capital Riyadh recorded the biggest spike in the last 24 hours, with 1,735 more infections, followed by Jeddah and the holy city of Mecca with more than 300 each. A curfew is due to end by June 21.

The value of Saudi Arabia's oil exports plunged by 21.9% year on year in the first quarter to \$40 billion, corresponding to a decline of about \$11 billion, official data showed on Sunday. Brent crude prices fell more than 60% in the first quarter hurt by the coronavirus pandemic and an oil price war between Saudi Arabia and Russia following the collapse in March of talks on further production cuts. The decline in oil exports was the main reason behind a 20.7% decline in the value of overall merchandise exports in the first quarter. Non-oil exports, including chemicals and plastics, fell by 16.5%. China was the main destination for Saudi exports in Q1, followed by Japan and India. China was also the main origin for Saudi imports.

15. SOUTH AFRICA

At least 40,000 people could die with coronavirus in South Africa by the end of the year, scientists have warned. The projections were made by a group of academics and health experts advising the government. They assume tough lockdown restrictions will be eased from June, as President Cyril Ramaphosa has announced. The curbs - which were introduced in March and include a ban on tobacco and alcohol sales - have been credited with slowing the spread of the virus. The country of 57 million people has recorded just 80,412 cases of Covid-19 and 1674 deaths linked to the disease so far. Spain, by comparison, has reported about 291,000 cases and almost 28,000 deaths for a population of only

47 million.

But the projections by the South African Covid-19 Modelling Consortium - set up to help government planning over the outbreak - says the country could experience a sharp rise in cases and deaths over the coming months. The report was released during a meeting with Health Minister Dr Zweli Mkhize following criticism of the government's perceived lack of transparency. Under an "optimistic scenario", by late August the number of active cases could reach almost 100,000, before declining. The cumulative number of deaths by November would be 40,000. Under a "pessimistic scenario" the number of active cases could peak around at 120,000 in August, and a total of 45,000 would die by November. The report also suggests there could be 1.2 million Covid-19 cases in total, and intensive care units could be overwhelmed within weeks. The government itself is not speaking with one voice. This month President Cyril Ramaphosa said lockdown regulations would be eased from "level 4" to "level 3" to allow schools to reopen and more people to return to work. But Health Minister Zweli Mkhize seems reluctant, and has said that according to the World Health Organization, South Africa is not yet ready for level 3 because infections continue to rise every day. It's a balancing act for the government, which has to take the issues of food security, job losses and the economy into consideration. Some scientists have called on the government to fast-track lockdown restrictions to level 2, claiming the current ones have little or no effect on the spread of coronavirus.

16. USA

The US COVID-19 cases have surged past two million, according to data compiled by the Maryland-based Johns Hopkins University. The country has so far registered 2,212,607 coronavirus infections including nearly 119,000 deaths and more than 903,000 recoveries. At least 30,943 of those COVID-19 deaths occurred in New York, 12,778 in New Jersey, 7,624 in Massachusetts, 6,310 in Pennsylvania, 6,308 in Illinois and 5,089 related deaths reported in California.

Two studies published in a British scientific journal found that lockdown measures in the U.S. helped to prevent approximately 60 million infections in the U.S. and about 3.1 million deaths in Europe.

Though the number of new deaths has been curving downward, the virus continues to circulate widely within the United States. As states move to partly reopen their economies, thousands of new cases are still being identified each day and true normalcy remains a distant vision.

American life has been fundamentally reordered because of the virus. Concerts, parades and baseball games have been called off. Unemployment claims have spiked. And in some states that reopened early, case levels have surged anew.

The coronavirus has left no state unscathed. But its impact has been wildly

uneven. In New York and New Jersey, the two hardest-hit states, more than half a million people have had the coronavirus. In some sparsely populated Western states, including Alaska and Montana, there are fewer than 1,000 patients. And in a handful of remote counties, there has been nary a positive test.

Dr. Anthony Fauci, the US's top infectious-disease expert, warned that the country's coronavirus outbreak is still in its first wave, as some states recorded their highest-ever single day new cases as they ease restrictions.

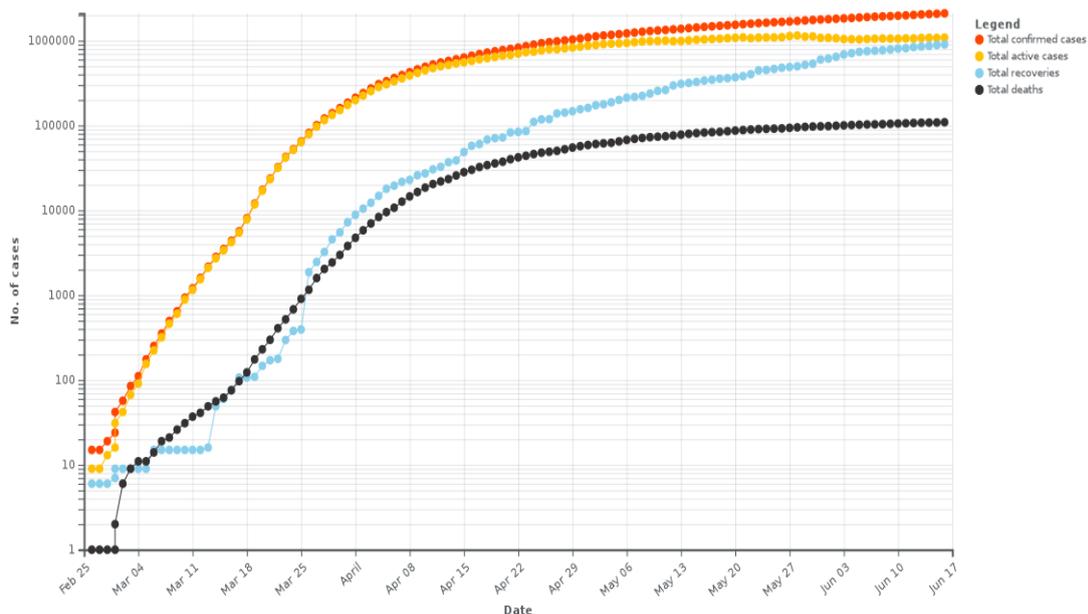
Here's how states are trending in new cases from one week to the next:

- 21 states are seeing upward trends in newly reported cases from one week to the next.
- 8 states are seeing steady numbers of newly reported cases: Connecticut, Indiana, Maine, Mississippi, Ohio, South Dakota, Utah and Washington.
- 21 states are seeing a downward trend.
- One state, Vermont, has seen a decrease of at least 50%.

A vaccine against COVID-19 developed by US biotech firm Moderna will enter the third and final stage of its clinical trial in July with 30,000 participants, the manufacturer has announced.

Another 1.54 million workers in the United States applied for unemployment benefits last week, according to a statement from the Department of Labor, bringing the total from mid-March to 44.2 million.

Nationally, levels of influenza-like illness (ILI) and COVID-19-like illness (CLI) continue to decline or remain stable at low levels. The percentage of specimens testing positive for SARS-CoV-2, the virus that causes COVID-19, increased slightly from last week. Mortality attributed to COVID-19 also decreased compared to last week but remains elevated above baseline and may increase as additional death certificates are processed.



The death toll in the US continues to surge. The US continues to lead worldwide cases and deaths from the virus. As of June 17, 2020, the U.S. had the most confirmed active cases and deaths in the world, and its death rate was 330 per million people, the ninth-highest rate globally.

17. EUROPEAN UNION

15 June 2020 - 'Re-open EU' – a new web platform launched to safely resume free movement and tourism in the EU

The European Commission has launched 'Re-open EU', a web platform that contains essential information for a safe relaunch of free movement and tourism across Europe, so that you confidently can enjoy your upcoming holidays. The platform will provide real-time information on borders, travel restrictions, public health and safety measures such as physical distancing or the use of facemasks, as well as other practical information for travelers. Re-open EU is available in the 24 official EU languages. Use and bookmark Re-open EU on desktop and mobile.

10 June 2020 – EU steps up action to fight coronavirus disinformation

The European Commission and the High Representative are stepping up the fight against coronavirus disinformation by proposing a way forward in a Joint Communication. It sets out the immediate response and concrete actions that can quickly be set in motion to counter the massive wave of false or misleading information, including attempts by foreign actors to influence EU citizens and debates. At the same time, the EU will continue to ensure the freedom of expression and support media the independent reporting of which is so crucial during the coronavirus pandemic. The proposed actions will feed into future EU work on disinformation, notably the European Democracy Action Plan and the Digital Services Act.

18. NATO

NATO defense ministers will discuss an action plan this week in the event of a possible second wave of the COVID-19 pandemic. This was announced by the Secretary General of the Pact Jens Stoltenberg, quoted by BTA.

He clarified that so far the Alliance's forces have completed nearly 350 flights to supply hundreds of tons of aids to combat the new disease around the world, deployed hundreds of field hospitals and provided transportation for sick people. According to him, about half a million servicemen took part in these activities.

At the forthcoming virtual two-day meeting, ministers will discuss needs to ensure better resilience of transport, telecommunications and energy systems in the pact countries. They will also discuss the possibilities for additional protection of the Internet and supply chains against external encroachments, as well as the

acquisition of property by foreign countries in NATO countries.

NATO Secretary General Jens Stoltenberg stated also that the Alliance is preparing for the 2nd wave of the pandemic. Especially he said that an operation plan is prepared, which will enable NATO to provide support in an even better coordinated way. In additionally NATO setting up a stockpile with equipment, IOT be available when needed and a relevant trust fund is setting up, to enhance from the financing perspective the Alliances efforts.

CONCLUSIONS:

1. During last week number of new cases grown almost 1 million, however this is 39% lower than during previous period. More than 33 000 new deaths were recorded, which indicates 45% drop down comparing to recent week.
2. Recently top ten countries with highest new cases are: USA, Brazil, India, Russia, Pakistan, Mexico, Saudi Arabia, Chile, Bangladesh and Peru.
3. China raised concerns about the potential for a second wave of infections and Bejin to be now the epicenter spot for infection, while new cases were reported after 57 days without locally-transmitted case.
4. Indian officials have re-imposed a lockdown in the southern city of Chennai (formerly Madras) and three neighboring districts where only essential services and neighborhood grocery shops will be permitted to function under the 12-day lockdown.
5. 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. However in Bulgaria number of new cases raised 16% comparing to previous period and now average is 84 cases per day, therefore state of epidemic is prolonged until the end of June.
6. Beyond Brazil, which is now the new epicenter of the outbreak, we're seeing significant increases in cases in several states in the USA that had moved away from lockdowns around the middle of May.
7. Polish Government claims that situation is under control and introducing new easing measures like re-opening international flights which is in contrary to statistic data showing growing of new cases and deaths.
8. Greece is seeing the overall situation as quite positive and optimistic and is looking forward to open tourist activities, especially having in mind the decade-long economic crisis, that struck the country, and it should be taken as a very serious warning of the opening of the upcoming tourist season in the country.
9. NATO wasn't enough prepared for this pandemic and under the light of a second wave of COVID 19 infection, actions are already taken IOT provide in both Political and Military domains, realistic and flexible operations plans and

directives (for example better organization and coordination of the available airlift capabilities of the Alliance thought out member states).

10. The negative effect of the pandemic in the Nations GDP, might also force the majority of the Allies to be extremely reluctant to assign their limited financial budget to upgrade national defense capabilities and maintain costly procurement programs, according to NATO obligations. As an outcome the Alliance will have to find “smart” ways to adjust defense capability requirements towards traditional security threats (nuclear, conventional, cyber and hybrid) and new challenges that arise from climate change, pandemics and mass migration.

11. NATO’s response to the COVID 19 pandemic thus far has shown that the Alliance can play a positive supporting role in helping not only the member states, to respond to health emergencies. Across the Alliance, more than half a million troops have supported the response to date, setting up almost 100 field hospitals and airlifting hundreds of tons of critical supplies around the world. The lessons learned until now, of COVID-19 also cites that pandemics pose a risk to the health and safety of service members and their families, while posing a challenge to maintaining the desirable level of military readiness.