

CRISIS MANAGEMENT AND DISASTER RESPONSE
CENTRE OF EXCELLENCE
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COVID-19

PART 18

(29 July – 11 August 2020)

This bi-weekly report represents a summary of open source information accumulated between 29 July and 11 August 2020, and was assembled on 14 August 2020. All views and opinions expressed are solely those of the authors, 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 authors do not bear responsibility for incomplete or incorrect data cited or referred to herein. The majority of reference materials used are retrieved from the official websites of the World Health Organisation (WHO), from the official websites of governmental institutions and agencies, including from online statistical databases and open data sources.

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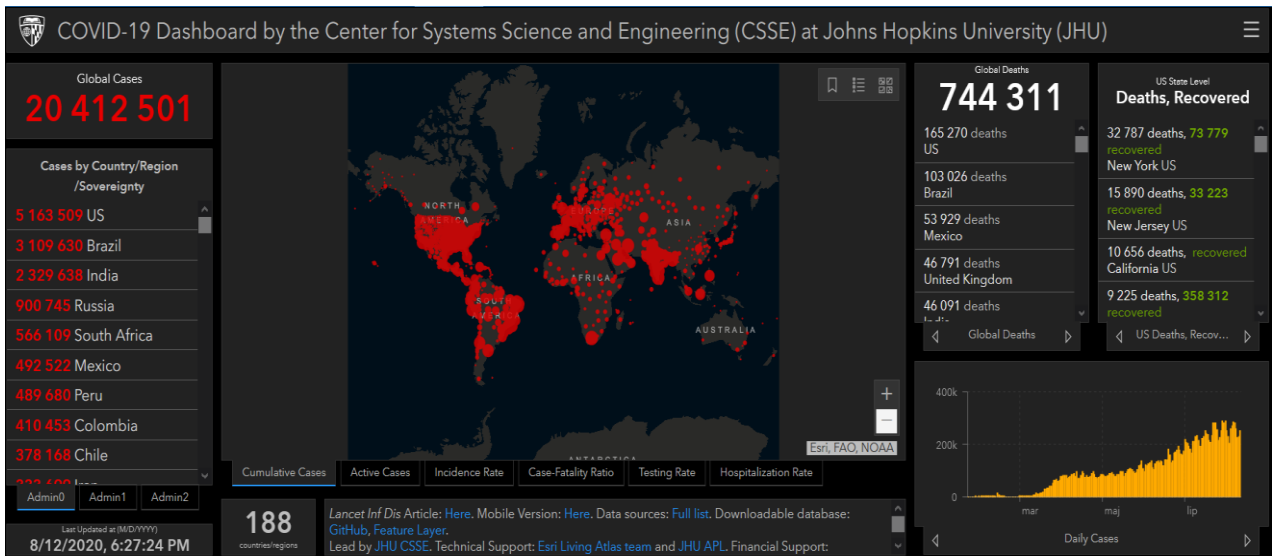
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REPORT BRIEF

The present report represents a bi-weekly (29 Jul – 11 Aug including) update on developments related to the spread of and response to the new corona virus pandemic. It examines the situation in some of the Worldometers top 10 countries as aforementioned period that have significant change in the situation. Additionally, the report presents developments in countries outside this ranking considered 1. essential for the analysis of the overall COVID-19 trend (i.e. Poland); 2. representing positive examples with respect to the management of the virus' transmission (i.e. South Korea) or 3. experiencing a notable increase in infection cases (i.e. France, India). Monitored are also the actions and responses of the North Atlantic Treaty Organisation (NATO). The report concludes on key observations and related general recommendations.

WORLD SITUATION

Worldwide COVID-19 cases crossed the 20-million mark globally during last two weeks, with US, Brazil, India, Russia and South Africa among the top five worst affected countries. Brazil reported a record number of daily new cases at 67,860. The total number of deaths due to the COVID-19 pandemic crossed the 700,000 mark with the US alone accounting for more than 165,000 deaths. However, in terms of fresh daily deaths, Brazil (1,322) nudged past the US (1,311). In daily new cases, India took the top slot with 56,626 cases. However, the US data is becoming increasingly dubious following the US administration's insistence on taking over some aspects of data reporting from the US CDC.



A big casualty of COVID-19 has been the education of children the world over. United Nations (UN) Secretary-General Antonio Gutierrez warned that the world was facing a “generational catastrophe” due to shutting down of schools. According to UN calculations, schools remained closed in around 160 countries in mid-July, impacting more than 1 billion students, with around 40 million missing pre-school. This is accentuating the digital divide where relatively affluent children can often use PCs, tablets or smartphones to reach online learning resources, but many in families with marginal incomes cannot.

From the COVID-created economy during last weeks, Teladoc Health announced on that it would buy chronic care provider Livongo Health in an \$18.5-billion deal, spurred by the boom in online medical care due to coronavirus. Sony reported a marginal 1.1% fall in profit for the June quarter, surprising markets and analysts. The company registered a profit of around \$2.15 billion riding the demand for its gaming products, which managed to

neutralize the impact of profit drop in other business segments. Another Japanese major, Nintendo, has reported an operating profit of \$1.37 billion for the June quarter on the soaring demand for its Switch device and popular title 'Animal Crossing: New Horizons'. On the other hand, Japan's Sharp reported 38% drop in its June-quarter operating profit at \$85.2 million, beating analyst estimates. The pandemic has affected its sales of electronic devices and office printers. COVID-19 seems to have shown the way forward to the newspaper industry. The New York Times' revenues from its digital business overtook that of the legacy print segment in the second quarter for the first time in its history.

RUSSIAN VACCINE

In a startling and confusing move, Russia claimed on 11 August it had approved the world's first COVID-19 vaccine, as the nation's Ministry of Health issued what's called a registration certificate for a vaccine candidate that has been tested in just 76 people. The certificate allows the vaccine, developed by the Gamaleya Research Institute of Epidemiology and Microbiology in Moscow, to be given to "a small number of citizens from vulnerable groups," including medical staff and the elderly, a Ministry of Health spokesperson tells ScienceInsider. But the certificate stipulates that the vaccine cannot be used widely until 1 January 2021, presumably after larger clinical trials have been completed.

Scientists around the world immediately denounced the certification as premature and inappropriate, as the Gamaleya vaccine has yet to complete a trial that convincingly shows it is safe and effective in a large group of people. Even some within Russia challenged the move.

Gamaleya has developed vaccines before, and Mikhail Murashko, the Russian minister of health, said in a government press release that the COVID-19 vaccine showed "high efficacy and safety" and there were no serious side effects. The same release suggested the vaccine would confer 2 years of immunity to SARS-CoV-2, the virus that causes COVID-19. That estimate is apparently based on vaccines Gamaleya has made with similar technology.

Russian President Vladimir Putin reportedly endorsed the use of the vaccine, which is dubbed "Sputnik V," saying it had "passed all necessary steps" and noting that one of his adult daughters had received it. (Putin has not clearly acknowledged his children in public, but he does sometimes refer to them; one is a medical doctor in Moscow.) Putin, who apparently made these comments at a government meeting, added, "I hope we can start a massive release of this vaccine soon."

The Russian registration certificate gives few details about the vaccine, which is being manufactured by Binnopharm in Zelenograd. The company says it can produce 1.5 million doses of the product per year and hopes to expand its manufacturing capacity. The vaccine consists of two shots that use different versions of adenoviruses, some of which cause the common cold, that Gamaleya researchers have engineered to carry the gene for the surface protein, or spike, of SARS-CoV-2. Apparently, the studies are comparing a single shot of adenovirus 26 with the spike gene to a scheme, known as prime-boost, that also gives a second dose 21 days later of a vaccine that contains the spike gene in adenovirus 5.

Some vaccine experts have raised concerns about COVID-19 vaccines that use adenovirus 5 in this way. In 2007, researchers stopped an HIV vaccine trial that used adenovirus 5 to shuttle in the gene for the surface protein of that virus after they found that it increased the likelihood of its transmission.

In 2017, Gamaleya received approval in Russia for a vaccine that also used the adenovirus 5 vector to deliver the surface protein gene from the virus that causes Ebola. Researchers there used a similar strategy for a vaccine for Middle East respiratory syndrome, a disease caused by a coronavirus like the one responsible for COVID-19. It is

still under development and has entered early stage clinical trials.

A website for Sputnik V says a phase III efficacy trial involving more than 2000 people will begin on 12 August in Russia, the United Arab Emirates, Saudi Arabia, Brazil, and Mexico. Mass production of the vaccine is slated to begin in September.¹

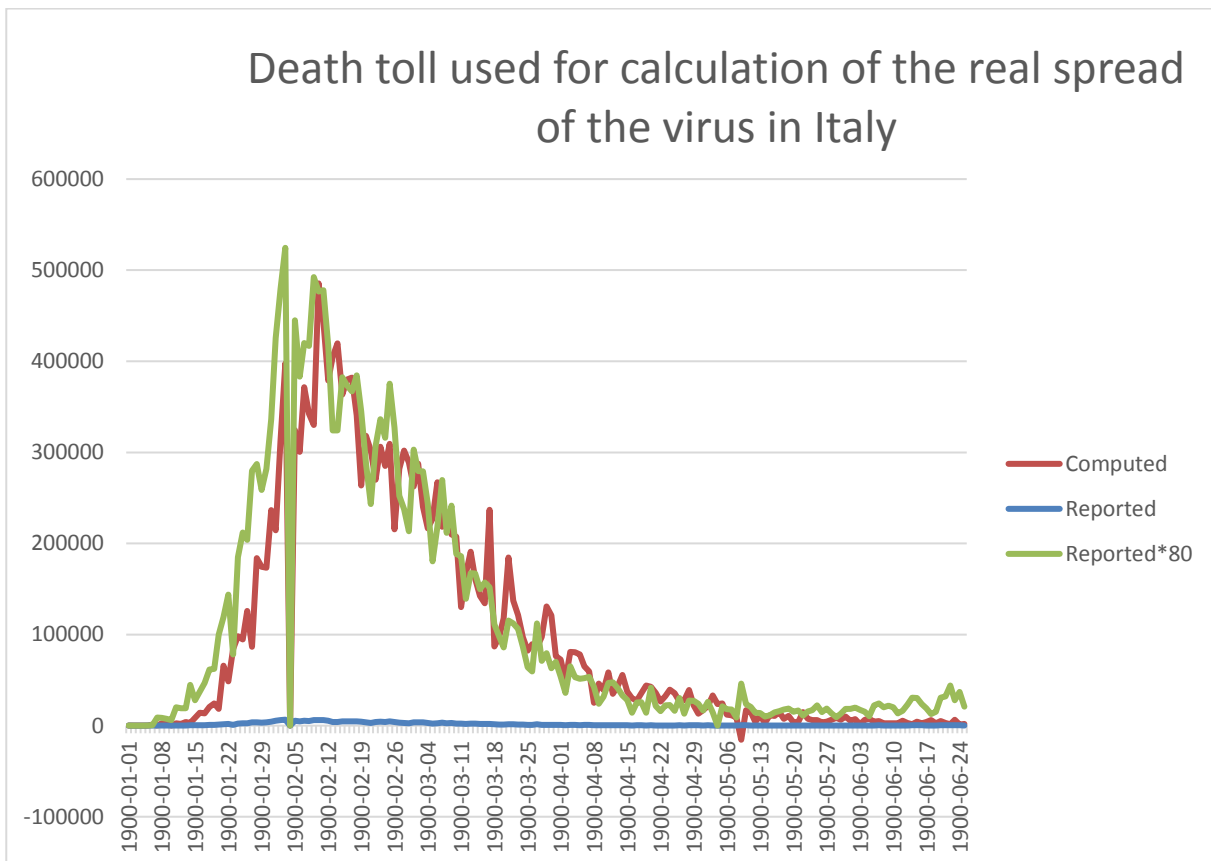
¹ <https://www.sciencemag.org/news/2020/08/russia-s-approval-covid-19-vaccine-less-meets-press-release>

CMDR COE ANALYSIS OF COVID-19 SPREAD ACCELERATION

CMDR COE continues the mathematical analyses based on the reported statistics and mathematical instruments.

From the beginning, CMDR COE emphasizes that the real distribution of the virus and the number of people having contact with it, is much higher than the reported.

The exact ratio between them is not computed still, but CMDR COE is close to solve the problem. One of the problems is the already noticed difference in the standards of reporting between different countries. The possible workaround is to use the death toll as indicator for the real spread of the virus.



On the graph are shown the reported number of new cases (blue line), the calculated number based on the death toll, and the multiplied number of the reported new cases for better compare and visualization.

The coefficient between the death toll and the new cases (real one, not reported) varies and should be found for each country.

Recently, experts from WHO reported that this coefficient is approximately 0,006. According the CMDR COE's calculations, this coefficient is 0,002-0,003 for the western affected countries. As absolute value the deviation is not so big, but in fact it means twice more as calculated real contacting the virus people.

The number having contact with the virus includes the people with positive test, people with minor symptoms or asymptomatic, and invulnerable people.

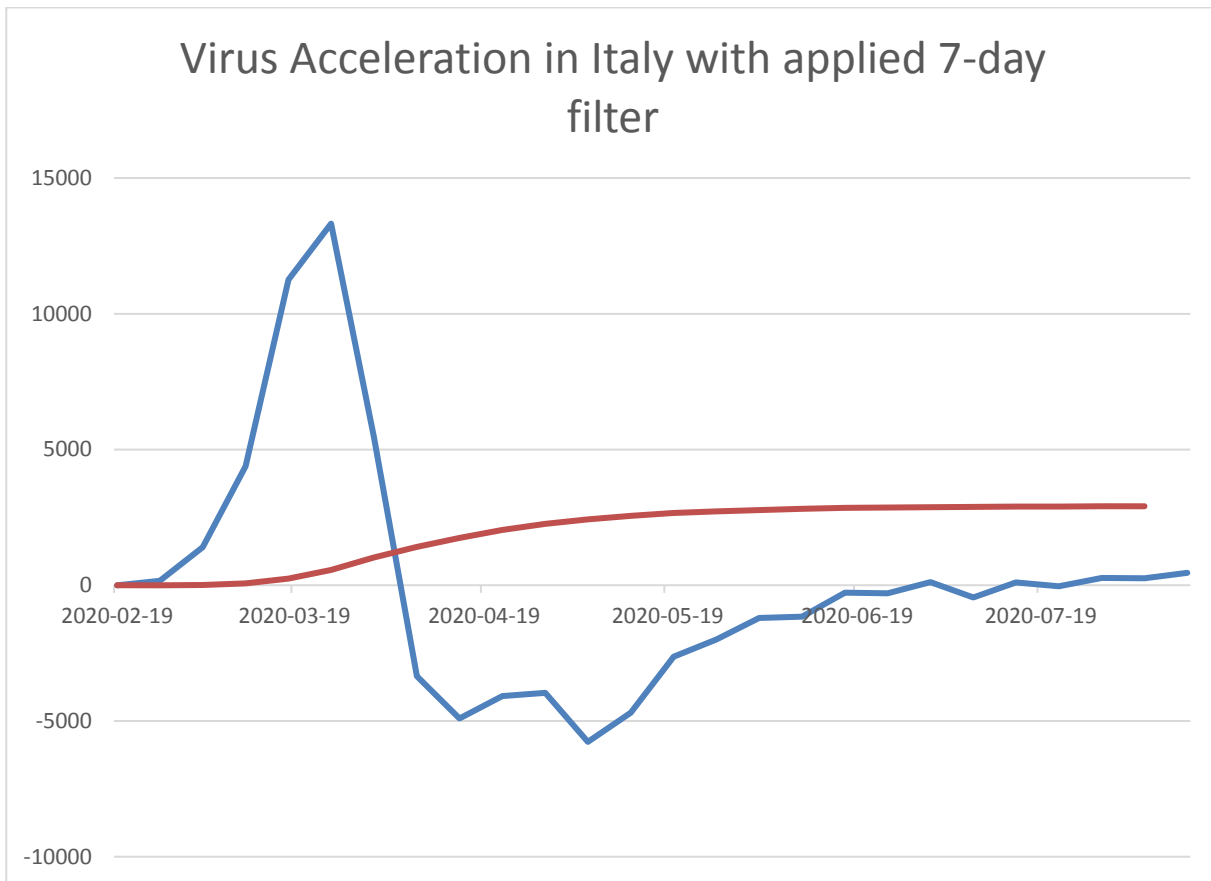
Back to the graph, it is obvious that the actual number of the covered people for Italy is almost 80 times higher than reported people with positive tests.

There is a time shift between the computed new cases number and the multiplied number of people with positive tests and it is because of the delay between the acceleration

of the new cases and the death toll. This time shift is 4-5 days.

The correlation and the time shift were noticed by CMDR COE more than month ago. The average time for the people with lethal end from the first contact with the virus to the death is longer – 16 days (it also varies) and the reason for such short time shift in reported cases is that most of the seriously affected people go to the hospital too late. It also confirms the theory for the virus distribution with scale much higher than reported positive test cases.

The computation of the number of the people having contact gives us the necessary data to compute the evolution of the crisis.



On the graph for the virus distribution acceleration in Italy is obvious that the break of the exponential spreading in the country occurs in the beginning of April. At this time the computed percentage of the people in the country having contact with the virus is approximately 14,16%. It means that achieving such ratio significantly reduce the acceleration of the virus spreading.

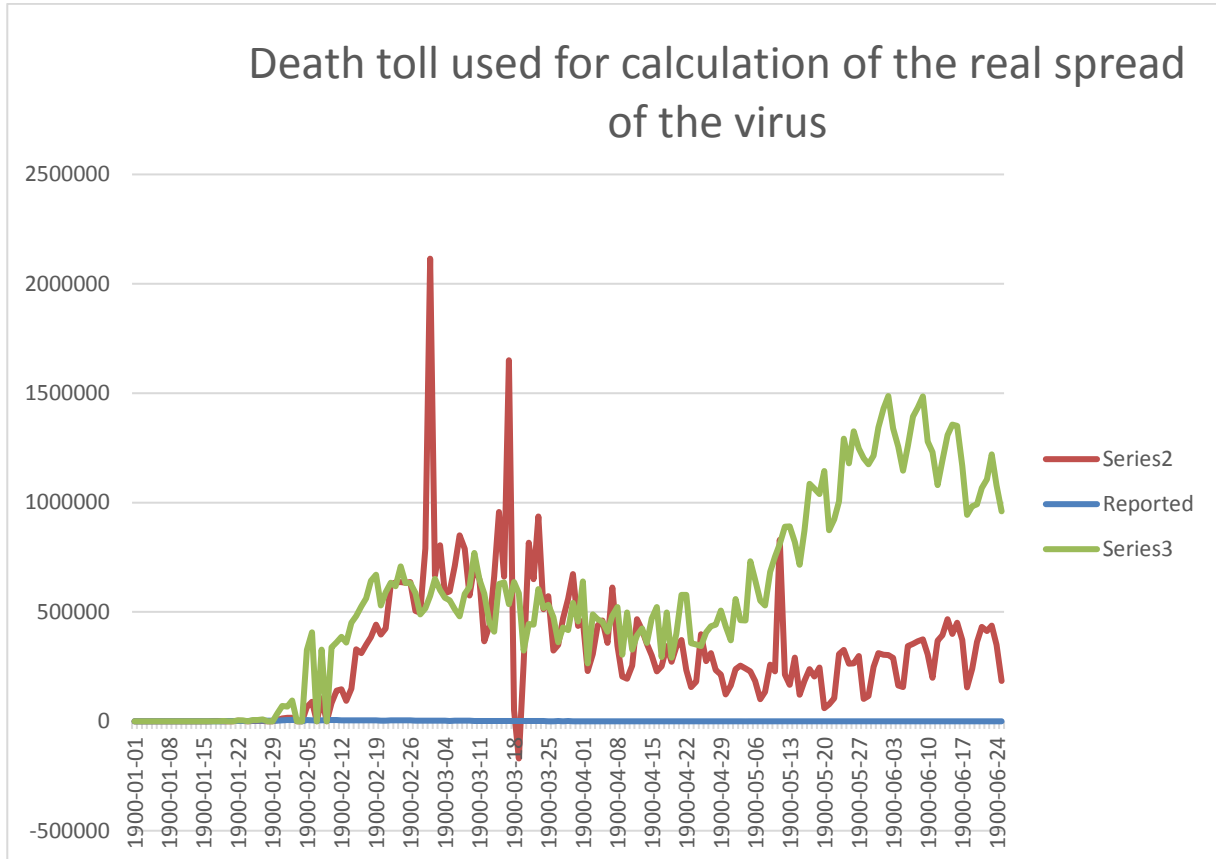
At the moment the covered number of people in Italy is approximately 30% of the whole population.

CMDR COE tries to proof the observed data with the mathematical theory related with the probability of sequential events. The idea is to find out how the sequential probability to transfer the virus to new person is reduced when the percentage of the non-tolerant reach specific value.

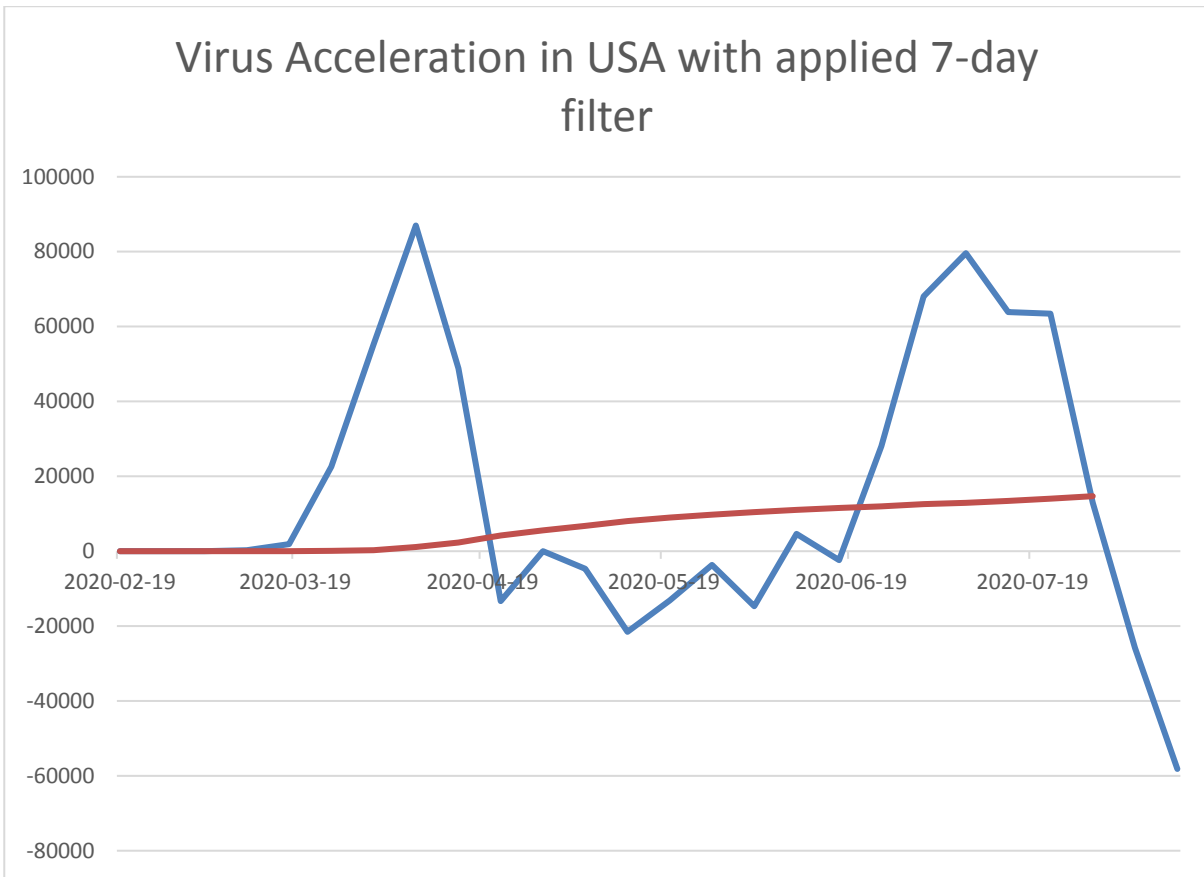
It is important to emphasize that the achieving 15% of immune population is not enough to stop the virus distribution. The spreading will continue and will be prolonged.

There is significant probability also the required percentage of the people having contact required to prevent the virus distribution to be reduced also. At the moment the estimations are about 70% of the population to have immunity in order to stop the virus. There is a chance according the latest observations and computations to correct the value in negative direction. Our corrected value at the moment is for 50% enough to stop the virus distribution.

The founded correlations are satisfactory confirmed with the data coming from USA.



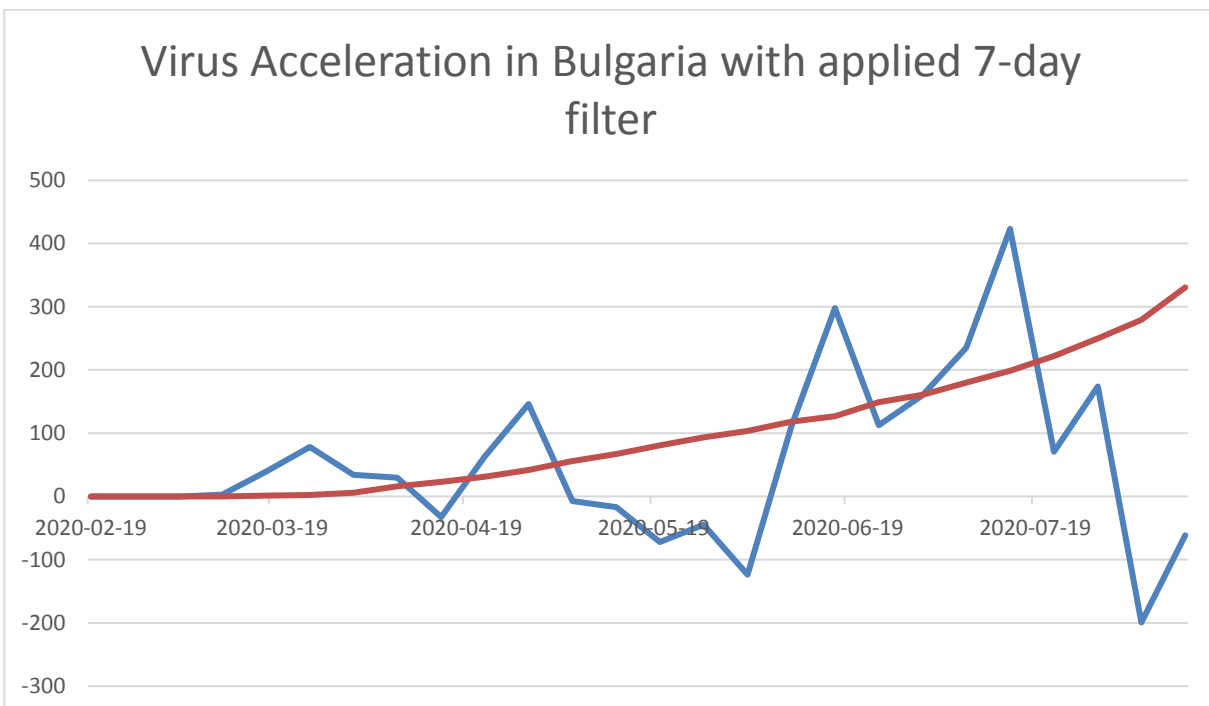
Again, as it was depicted on the Italy’s graph we have time shift between the multiplied reported new cases and calculated. But also in the second part of the graph there is a significant deviation. The reasons are two: the increased number of the performed tests and the reduced death toll because of the improved medical protocols. Such deviation we can find also at the end of the Italy’s graph. It just proves the concept and the mathematical model could be retuned adding another coefficient related with the time. Despite the fact, at the moment of acceleration break, the calculated percentage of the “covered” by the virus population is 15,03.



It was predicted as a date three weeks ago in the COE.

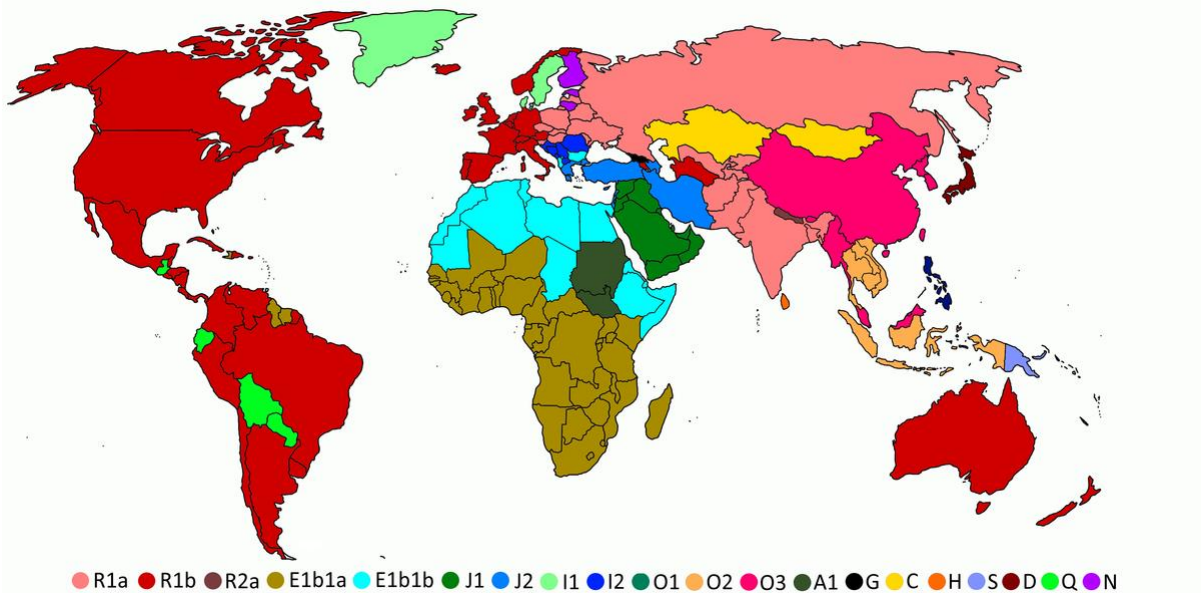
There are some important questions for the decision-makers. For how long we will be exposed to the virus's influence? What will be the curve of the spread velocity? How to avoid death toll?

It is obvious that without vaccine a significant number of the population will face the virus and the countries from the Western Europe will pay 0,2% death toll. But at same time the evolution in Eastern Europe and North Africa for example is different.



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On the graph we can see that another cycle is closed and it was forecasted by CMDR COE. Something more, in our previous report were depicted the fixed limits of the daily new cases and the period. What is very strange is the comparatively very small virus spread velocity. The calculated percentage of the “covered” by the virus population is just 3%. It means that Bulgaria should be in the phase of exponential spread, especially now when most of the limitations are lifted and the rest are not so strictly applied and followed.



This is a world map of the haplogropus. CMDR COE already noticed the phlegmatic spread of the virus in some parts of the world and in Bulgaria also and one of the possible reasons could be the genetically difference. The first researches in that direction are promising and CMDR COE will continue to work in that direction.

MONITORING

1. USA

The U.S. has passed another grim milestone in the coronavirus pandemic, Covid-19 cases in the U.S. crossed 5, 2 million, adding a million cases in just over two weeks. With one out of every 66 residents infected, the US leads the world in COVID-19 cases. Three states have passed their own milestones, with cases there surpassing a half-million: California (556,185 cases), Florida (526,577) and Texas (504,298). The coronavirus pandemic has had devastating health consequences in the United States, claiming the lives of more than 165,000 Americans, nearly a quarter of the world's total. Now, the Centres for Disease Control and Prevention (CDC) is forecasting that the death toll could reach 182,000 by the fourth week of August.

Long-standing systemic inequities have put Black, Indigenous, Latino and other non-white communities at an increased risk of becoming sick and dying from COVID-19. Nationwide, Black people are dying at 2.5 times the rate of white Americans, according to the Centres for Disease Control and Prevention (CDC). The reason for this according to Anthony Fauci, the nation's top infectious disease expert and director of the National Institute of Allergy and Infectious Diseases (NIAID) is not genetic, but due to years of lacking access to the right food and proper health care.

More than 97,000 children across the U.S. have tested positive for COVID-19 in just the last two weeks of July, according to a new report from American Academy of Paediatrics and the Children's Hospital Association, as the country debated the risks of reopening schools in the fall. That translates to a 40% increase in child cases over the two-week period, the report said. California, Florida and Arizona had the highest number of total child cases, with more than 20,000 each.

A new worrying trend in the USA is that in some states hospitals are almost at full capacity. At least 45 hospitals in Florida have zero ICU beds available and 34 hospitals have 10% or less ICU capacity available, according to data from the Agency for Health Care Administration.

The U.S. death toll from COVID-19 fell 16% to about 7,200 people last week, the first decline in deaths after four weeks of increases. The country posted more than 376,000 new COVID-19 cases for the week ended August 9, or an average of roughly 53,000 per day. New cases have now fallen for three straight weeks, though the United States still accounts for a quarter of the global total of 20 million cases.

Last week's decline in new cases came largely from recent hot spots. For instance, new cases in Arizona fell by more than 48% in the last week, and on Aug. 9 the state reported fewer than 1,000 cases for the first time since June 29.

The rate of community spread in Florida, California and Tennessee remained high, but they all reported fewer cases than in the previous week.

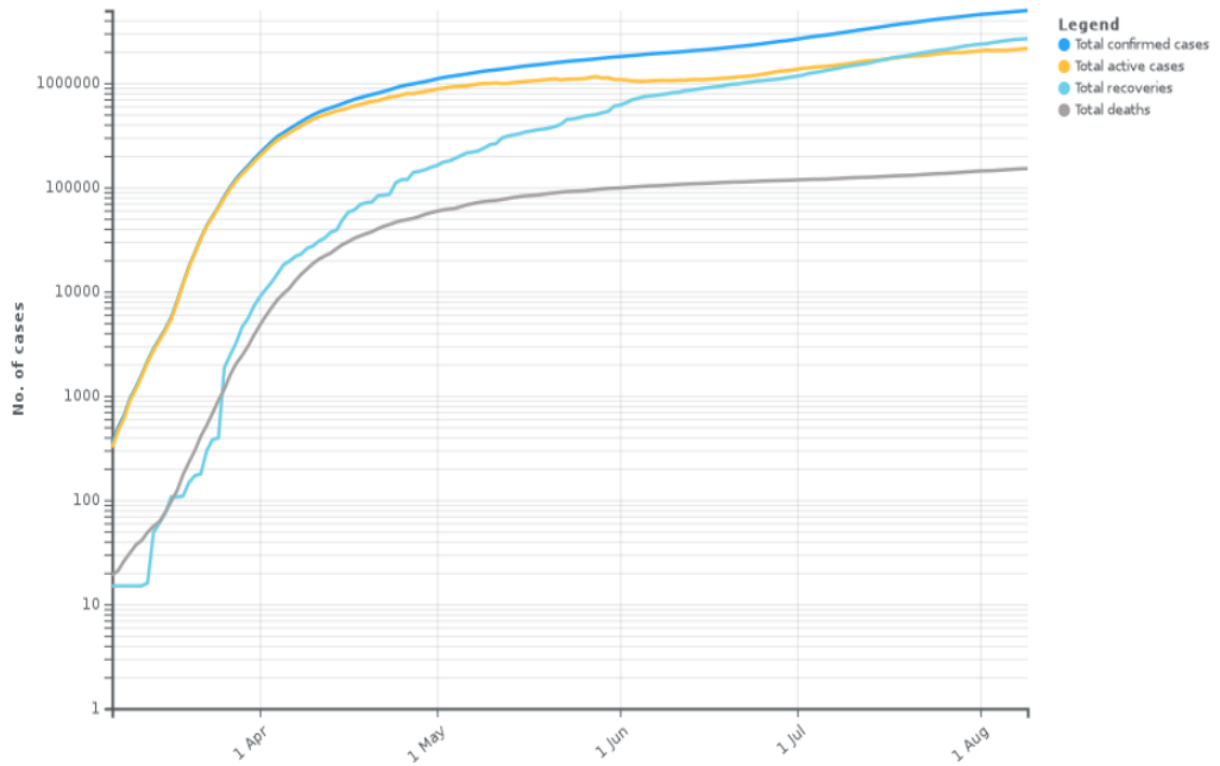
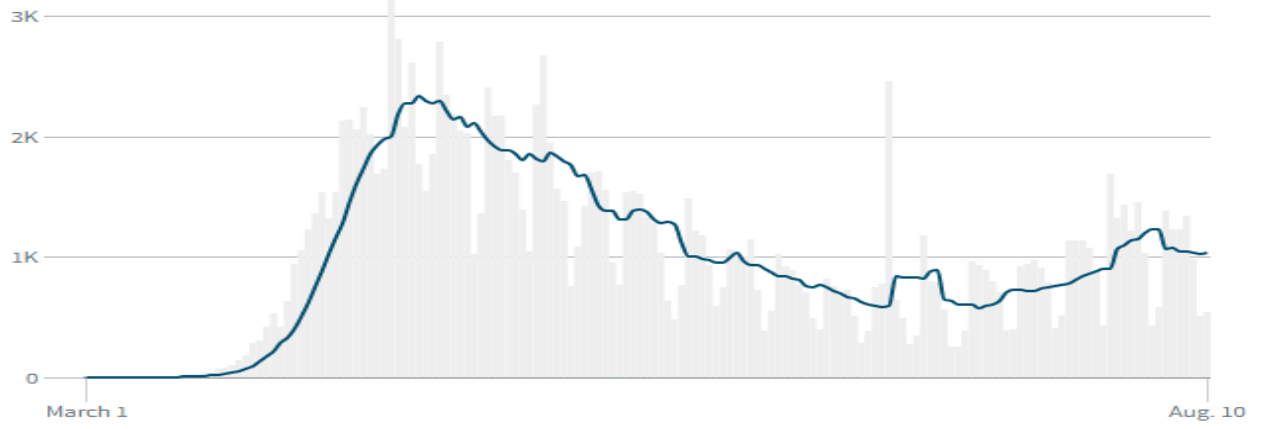
Nationally, the share of all tests that came back positive for the novel coronavirus held steady at 8%, according to data from The COVID Tracking Project. Only 15 states reported a positive rate under 5%, which is the threshold that the World Health Organization considers concerning because it suggests there are more cases in the community that have not yet been uncovered.

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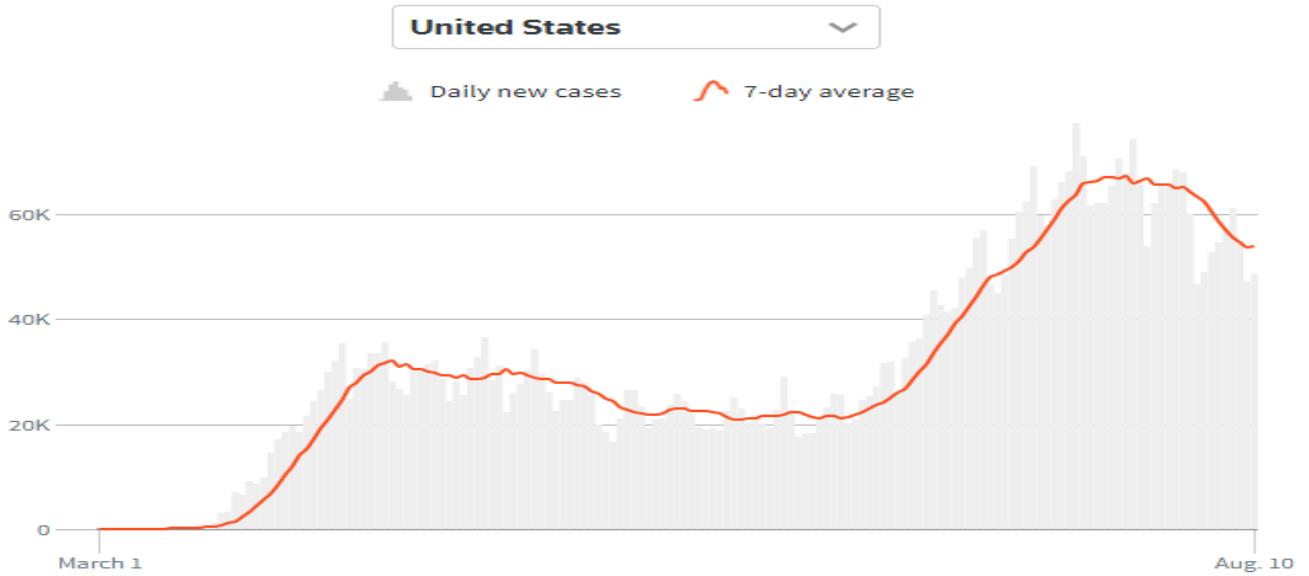
Daily reported deaths

United States

Daily new deaths 7-day average



Daily reported cases



The US is still leading the world in terms of seven-day average mortality and total number of dead and there appears to be little evidence of a flattening of the curve, despite more states now introducing new lockdown measures and enforcing the wearing of masks in public.

2. India

On August 10, India reported 62,064 coronavirus cases, taking its total to 2 215 074, according to data from the Union Health Ministry. Therefore, the day of August 10 marks the fourth consecutive day when new cases have increased by over 60,000.

With 1007 fatalities in the last 24 hours, the overall death toll touched 44,386.

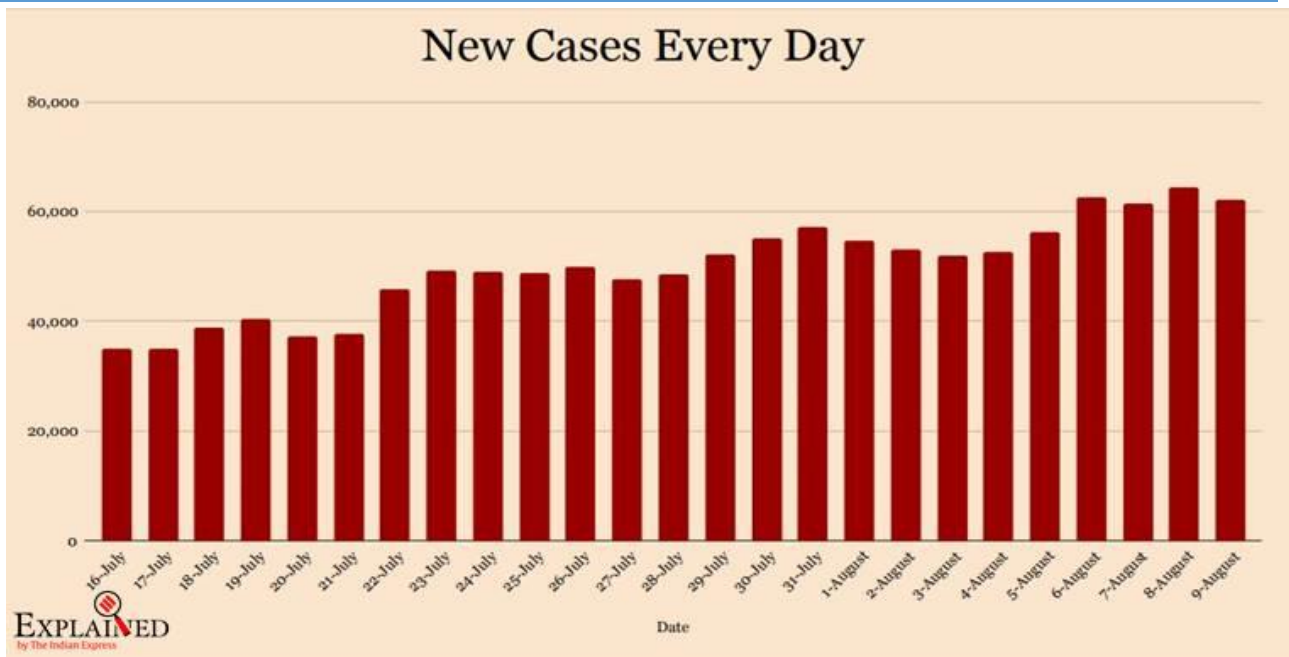
As many as 1 535 743 people have recovered from the disease, with at least 54,589 people recuperating in the last 24 hours.

There are about 634,945 active cases of coronavirus in the country. The recovery rate now stands at 69.33 % while the case fatality rate has dropped to about 2 per cent, according to the ministry of health in India.²

The number of novel coronavirus related deaths in India crossed 1,000-mark on August 9, though, once again it was the result of adding unreported data from the previous one week. State of Maharashtra reported 390 deaths on Sunday but said 260 of these were from the previous two days and the remaining were unreported from last one week.

Though the number of deaths has been rising steadily, as a proportion of total number of confirmed cases (also called Case Fatality Ratio, or CFR), it has continued to decline, and has dipped to 2 per cent now.

² <https://www.mohfw.gov.in/>



One main reason for the rise in the number of cases is the rapid increase in testing.

The deaths that are reported daily often present an erroneous picture due to the aggregation of data from previous days. One data clean-up exercise in the middle of June had resulted in the daily death count jumping to over 2,000. Smaller aggregations, like the one in State of Maharashtra, happen routinely in several states. This month, between 700 and 800 deaths are being reported every day.

The Case Fatality Ratio, however, presents a more consistent picture. The Case Fatality Ratio has been falling steadily over the last two months, and is at historic lows right now. This is because the number of new cases of novel Coronavirus infections being detected every day far outpaces the growth in deaths.

So far, over 44,000 people are reported to have died in India due to the disease, the fifth-highest death toll in the world. But the CFR in India is well below the global average of 3.7 per cent. India ranks much lower when deaths per million population is considered. Globally, there have been 94 deaths per million population due to the disease until now. In India, this number is just 32, with at least 90 other countries registering more deaths per million population.³

³ <https://www.mohfw.gov.in/>

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SATE	TOTAL POSITIVE	NEW CASES	TOTAL RECOVERIES	DEATHS
<i>Maharashtra</i>	515,332	12,248	351,710	17,757
<i>Tamil Nadu</i>	296,901	5,994	238,638	4,927
<i>Andhra Pradesh</i>	227,860	10,820	138,712	2,036
<i>Karnataka</i>	178,087	5,985	93,908	3,206
<i>Delhi</i>	145,427	1,300	130,587	4,111
<i>Uttar Pradesh</i>	122,609	4,571	72,650	2,069
<i>West Bengal</i>	95,554	2,939	67,120	2,059
<i>Telangana</i>	80,751	1,256	57,586	637
<i>Bihar</i>	79,720	3,934	51,315	429
<i>Gujarat</i>	71,064	1,078	52,827	2,629

Similarly, while India has the third-largest number of confirmed cases in the world, and is now contributing more infections than any other country for the last 2 weeks, there are 91 countries, which have higher cases per million population. India has just over 1,600 infections per million population, while the global average is 2,569.

The actual number of cases, in the states as well as in the country as a whole, and the growth rates also present seemingly conflicting pictures. While the detections of new cases every day is reaching higher and higher numbers, the growth rates in most states, including Andhra Pradesh, is on the decline. If the growth rate was increasing, or even if it was steady, many more number of cases would have been discovered.

One main reason for the rise in the number of cases is the rapid increase in testing. So far, more than 24.5 million have been tested as only three other countries, China (over 90 million), the United States (over 65 million) and Russia (over 30 million), have tested more. India had begun testing in March, with an initial capacity of just a few hundred tests per day. The target now is to reach one million tests per day in end of August.

3. France

On 12 August 2020 France recorded its highest number of daily coronavirus infections in more than two months - more than 2500 new infections.

With more than 30,000 deaths, France has the third-highest death toll in Europe, behind the UK and Italy.

New coronavirus infections have nearly doubled in France in recent weeks as Prime Minister Jean Castex warned that the country had been going "the wrong way" for two weeks.

About 25 new clusters are identified every day compared to five three weeks ago.⁴

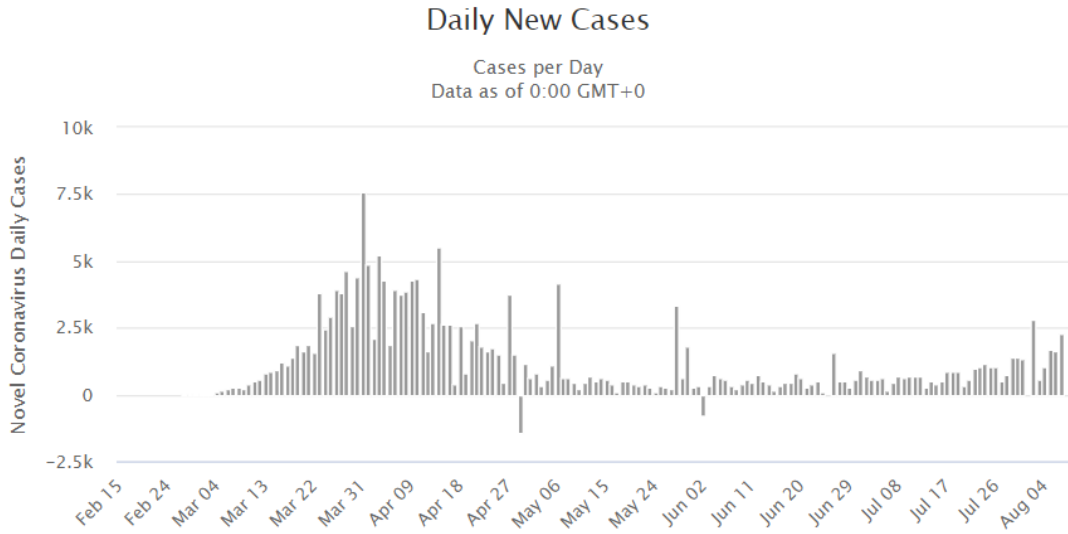
The city of Toulouse has introduced new rules requiring face masks in its busiest streets, with Paris and a number of other cities expected to follow suit.

France is not the only European nation to witness a resurgence in cases since lockdown

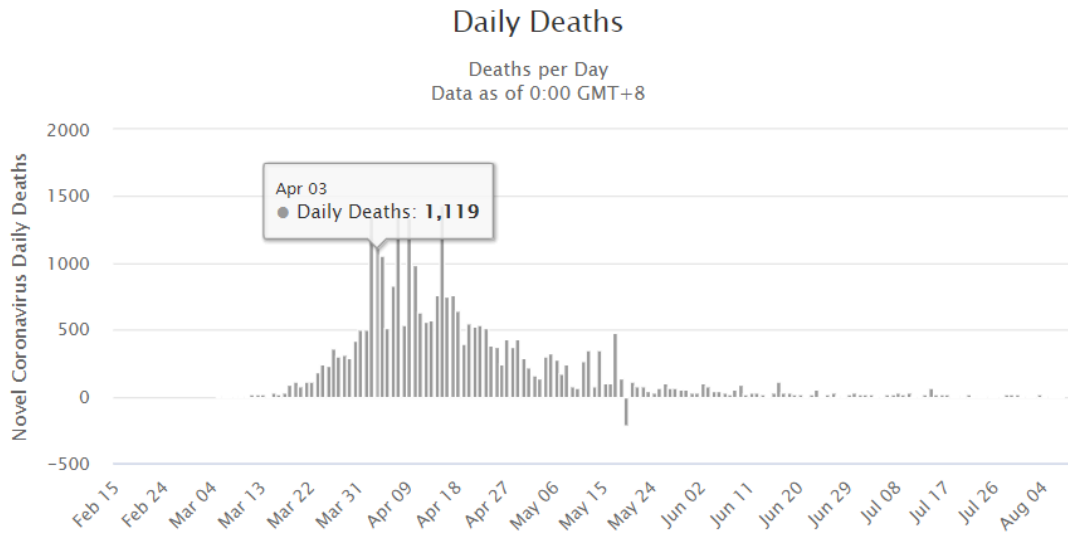
⁴ <https://www.bbc.com/news/world-europe-53745481>

measures were eased.

Although the big rise of the new infections the number of new deaths for the last two weeks is relatively low.



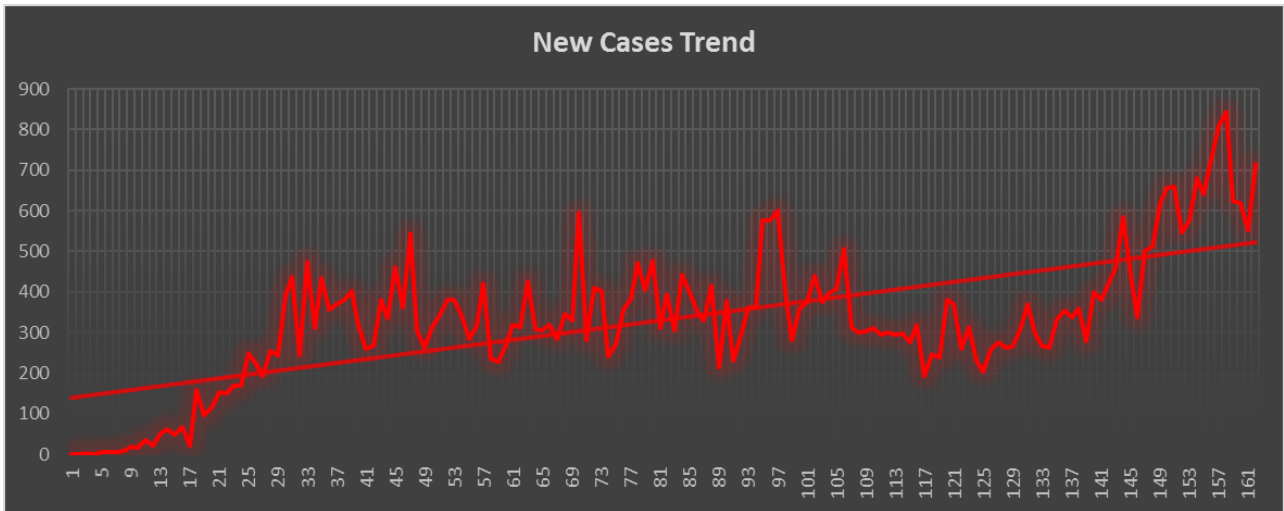
Daily New Deaths in France



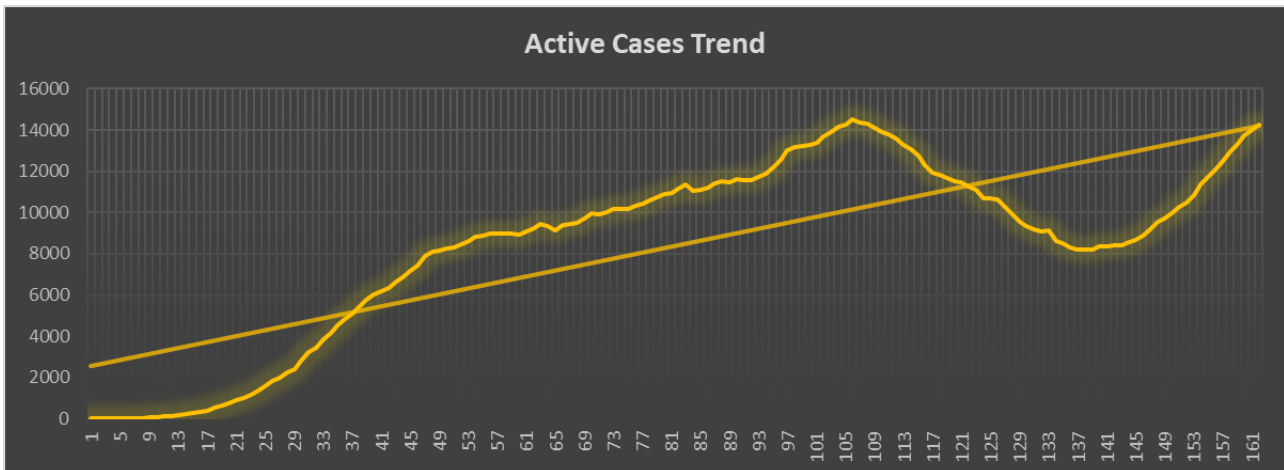
4. Poland

From the beginning of pandemic number of infected people has grown and reached 53 676 (+ 9 260), disease trend rate raised comparing to previous period and is above linear trend line. Currently average number of infected is 661 (recently 407) people a day during last two weeks, which placed Poland on 9th place in Europe and 35th on the world.

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Number of active cases trend line started to grow from mid of July and continue during last two weeks. This could be the effect of gathering people during election, easing restrictions and locally placed outbreaks mostly in big factories and among sezonal workers.



Number of tests done so far is 2 257 525 / +100 500 from the last report. Reported number of people cured from coronavirus so far – 37 611 / +4 421 from last report. 1 830 (+136) people died so far (963 men and 867 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	19	39	111	339	517	803
0%	0%	0%	1%	2%	6%	19%	28%	44%

The number of infected people rose from the beginning of the epidemic on March 4 to June 17 - there were 14,494 of them then. Then it fell by 6,300 until July 19. to 8188 and the situation seemed to be under control. However, the trend has reversed and the number of infected people has grown by 3.5 thousand. up to the level of 11,712 people.

The trend reversal is probably the result of:

- lifting subsequent bans restricting social contacts;
- an increase in the (partly false) sense of security and careless behavior of citizens;
- summer activity of Polish women and Poles;
- perhaps also the elections on June 28 and July 12, in which 19.4 million and 20.6 million citizens respectively took part.

The irresponsible statements of the authorities about masks, probably also played significant role.

The increase in the number of cases is to some extent the result of more tests (the more we test, the more we detect). However, in the second half of July and at the beginning of August the number of tests increased only slightly. In the first half of July, there were an average of 22.6 thousand of them per day, in the second half - 23.9 thousand, and in the first 4 days of August slightly more - 26.1 thousand. On last Wednesday, it was announced that more were performed - 33.6 thousand tests, the third result in the history of the epidemic.

It is worth to recall that in terms of the number of tests per million inhabitants, Poland (62.7 thousand) is still in the European tail (only France, Bulgaria, Hungary and Croatia are behind us).

On August 6, Minister of Health Lukasz Szumowski announced the introduction of additional restrictions, which entered into force on Saturday, August 8. The new regulations apply to 19 counties. Counties were divided by the Ministry of Health into "red" and "yellow". Where the greatest rigor is introduced, there will be an obligation to wear masks everywhere - also in public spaces. The representative of the Ministry of Health, Wojciech Andrusiewicz, announced that the database of counties with additional restrictions would be updated every week.

5. Mexico

To date Mexico has 498 380 cases of infected people with COVID-19 of which 54 666 have died. The number of recovered people is 336 635.

The rise of the new infections is about 1.4% per day for the last two weeks.

Mexico now ranks as the nation with the third highest number of COVID-19 cases, behind the United States and Brazil in America and the seventh place in the world.

When it comes to deaths per 1000,000 inhabitants, Mexico is 13th worldwide, based on official data and on 59 place for number of infections per 1000,000 inhabitants.

Health authorities although have acknowledged that the real number of infections is likely higher.

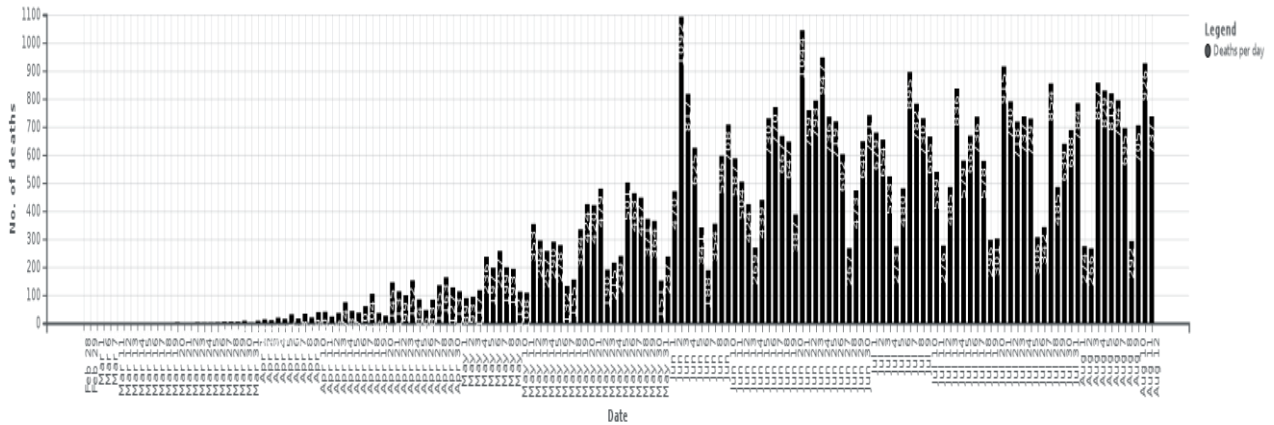
Assistant Health Secretary Hugo Lopez-Gatell said that "this is going to be a prolonged pandemic" as the virus spreads rapidly across the region.⁵

Some states and municipalities have implemented additional restrictions on public gatherings, transportation, business operations, and government operations if health conditions warrant and/or developed separate stoplight systems from those at the federal level. Several states and municipalities have imposed curfews and movement restrictions on non-essential activities and have required citizens to wear masks when outside their homes. In some areas, officials may issue fines and/or arrest and detain individuals found to be in violation of stay at home orders.

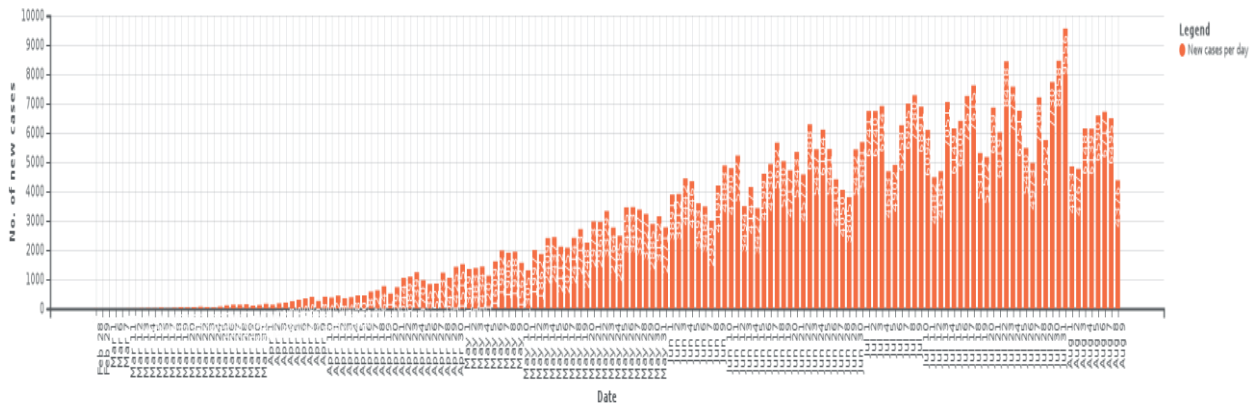
On the graph showing the numbers of death per day we can see that there is no peak and the death counting is going steady around 800-900 per day.

⁵ http://www.xinhuanet.com/english/2020-08/10/c_139278526.htm

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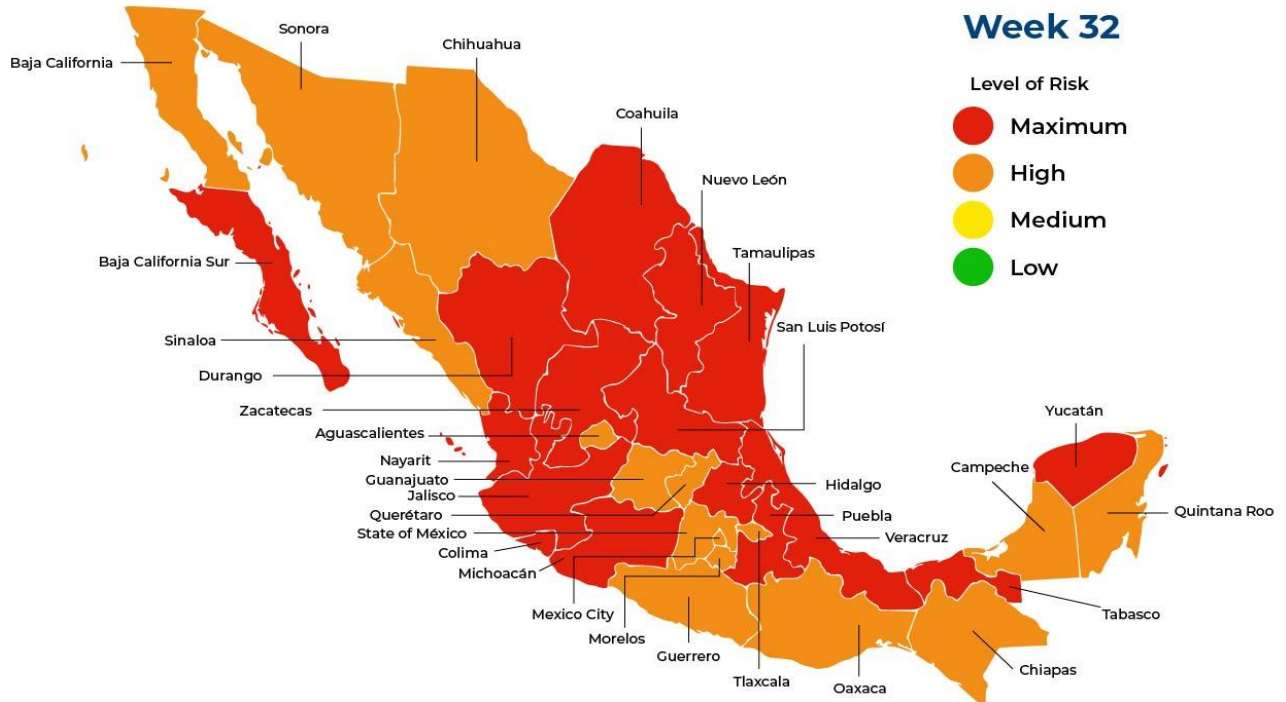
As for the situation with the infections on the graph we can see that there is a slight incline down of the number of new cases per day for the last few days. Although it is still too early to say that the peak has been reached.



According to the adopted by the authorities traffic light status the picture in Mexico for the period 3-16 August 2020 is shown on the bellow picture.⁶

⁶ <https://www.natlawreview.com/article/mexico-s-covid-19-traffic-light-monitoring-system-news-august-3-16-2020>

August 3–16, 2020
Phase 3



6. South Korea

To date, South Korea has 14626 infected people, 305 death cases and 13658 have been recovered from COVID-19.

KCDC announced that all 113 severe/critical patients in 34 hospitals who submitted their requests have been supplied with Remdesivir, specially imported for COVID-19 treatment.

Remdesivir is an experimental medicine that does not have established safety or efficacy for the treatment of any condition. It is an investigational nucleotide analogue with broad-spectrum antiviral activity – it is not approved anywhere globally for any use. Remdesivir has demonstrated in vitro and in vivo activity in animal models against the viral pathogens MERS and SARS, which are also coronaviruses and are structurally similar to COVID-19. The limited preclinical data on remdesivir in MERS and SARS indicate that remdesivir may have potential activity against COVID-19.

South Korea is in a period of heavy rains. 3000 people were evacuated. This circumstances worsening the situation and Government released additional instructions concerning curbing spreading of COVID-19 in this rains and flood situation.

KCDC analysed the last two weeks' COVID-19 response situation and risk factors:

COVID-19 – PART 18

	12 July – 25 July	26 July – 8 August
Average daily new imported confirmed cases	31.4	21.4
Average daily new local (domestic) confirmed cases	19.9	12.1
Seoul metropolitan area	15.4	10.2
Clusters (new) ¹⁾	10	6
Percentage of cases with uncertain route of transmission (under investigation)	6.4% (46/719)	8.5% (40/470)
Percentage of cases managed under infectious disease prevention and control system ²⁾	Under 80%	Over 80%
Percentage of new confirmed cases, aged 20-39	17.7%	19.1%
Percentage of new confirmed cases, aged 40-59	31%	35.1%
Percentage of new confirmed cases, aged 60 and above	48.5%	44.3%

1) Based on the date cases were reported

2) Percentage of cases managed under infectious disease prevention and control system: percentage of new cases that tested positive while under home quarantine

* Figures may change based on findings from ongoing local epidemiological investigation efforts

FIGURE 1
Active Cases

(Number of Infected People)

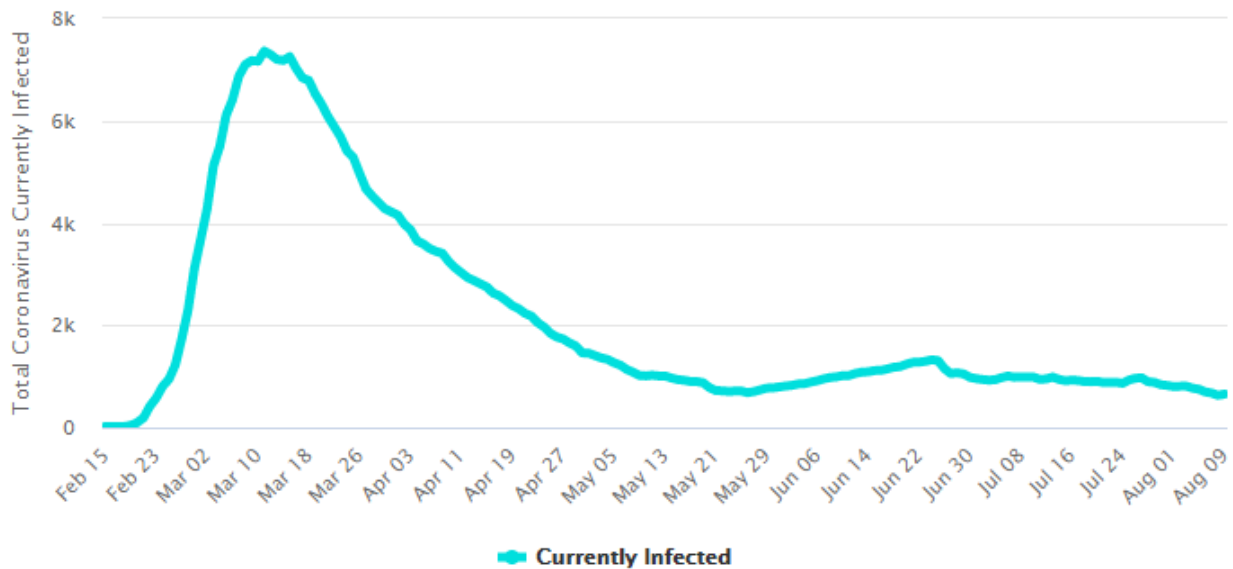


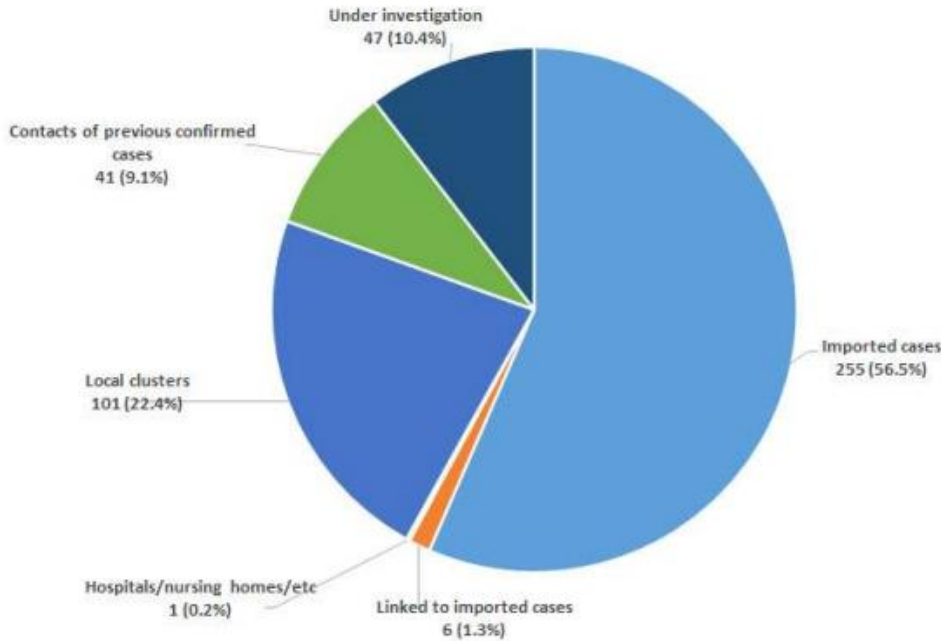
FIGURE 2

[Overall case and test status, as of 0:00, 9 August (cumulative since 3 January 2020)]

Period (since 3 Jan)	Total	Tested positive (PCR)				Testing in progress	Tested negative (PCR)
		Confirmed	Discharged from isolation	Under isolation	Deceased		
As of 0:00 8 August (Sat)	1,620,514	14,562	13,629	629	304	16,105	1,589,847
As of 0:00 9 August (Sun)	1,624,650	14,598	13,642	651	305	16,803	1,593,249
Difference	(+)4,136	(+)36	(+)13	(+)22	(+)1	(+)698	(+)3,402

FIGURE 3

NEW CASES (LAST 2 WEEKS) BY CHAIN OF TRANSMISSION



South Korean experience demonstrate the very proactive approach of the authorities finding new ways curbing virus' spread and threatening infected people. In most of the cases they give an example of many countries and serves as pioneer. The positive effect is proved by the few daily new positive cases – between 20 and 40 for the last 2 weeks.

The analysis made by KCDC for the last month the high effectiveness of the quarantines measures (more than 80% of new cases are diagnosed in quarantined patients). The problem that exists is the very active way of life of the younger people is a prerequisite for increasing of the infection transmission.

The active cases in AUGUST steadily stay under 1000, which is entirely in the ability of their Health system to cope with them.

7. Japan⁷

The number of Covid-19 coronavirus cases in Japan is continuing to increase for the

⁷ <https://www.japantimes.co.jp/news/2020/08/08/national/japan-hospitals-emergency/>

last several days. No additional measures had been taken, just a recommendation to reduce the spread.

The new thing from Japan is that the government team on combating the novel coronavirus has proposed hospital bed occupancy as a key indicator that should be monitored to judge the need for issuing another state of emergency.

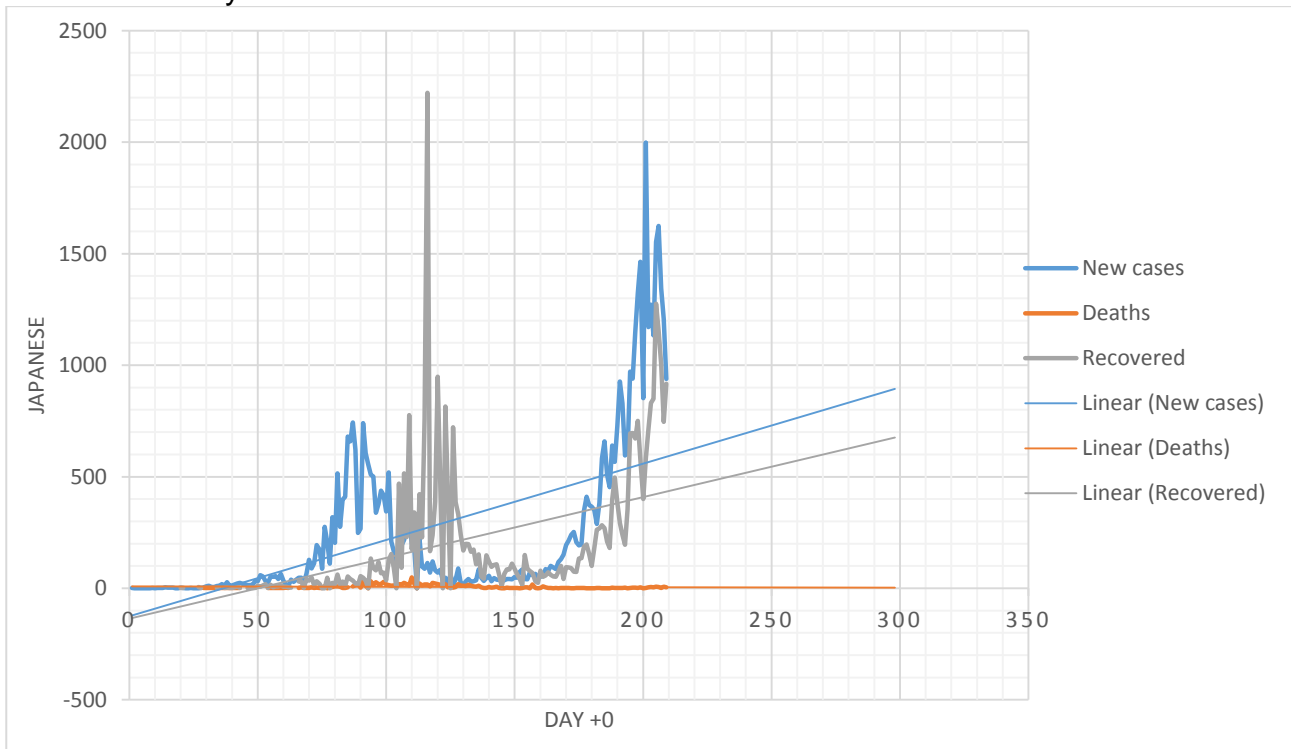
The subcommittee of a government specialist panel on Friday proposed categorizing the severity of the COVID-19 pandemic into four stages.

It laid out six indicators for use by the central and prefectural governments to determine that the epidemic is in stage 3 or higher. Stage 4, the worst of the four, would theoretically require a state of emergency declaration by the central government.

The six indicators are scarcity of hospital beds, number of patients and other virus carriers, rate of positive results in (PCR) tests, number of newly confirmed infections, comparisons between the current and previous weeks and proportion of coronavirus cases for which infection routes are unknown.

The state of the epidemic should be assessed as stage 4 if indicators reach certain levels, including 50 percent for the occupancy rate of hospital beds that can be secured for infected people.

The thresholds should be 10 percent for the rate of positive PCR test results, 25 per 100,000 (one hundred thousand) people for the number of hospitalized patients and carriers staying at designated hotels or their own homes, and 25 per 100,000 people for the weekly number of newly confirmed infections.



The country has 48 928 registered patients, of which 33 975 are cured, 1052 died and 13 901 active cases.

8. Austria

The Austrian government on 7 Aug launched a four-color coronavirus "traffic-light" system to help avoid a second wave of the pandemic.

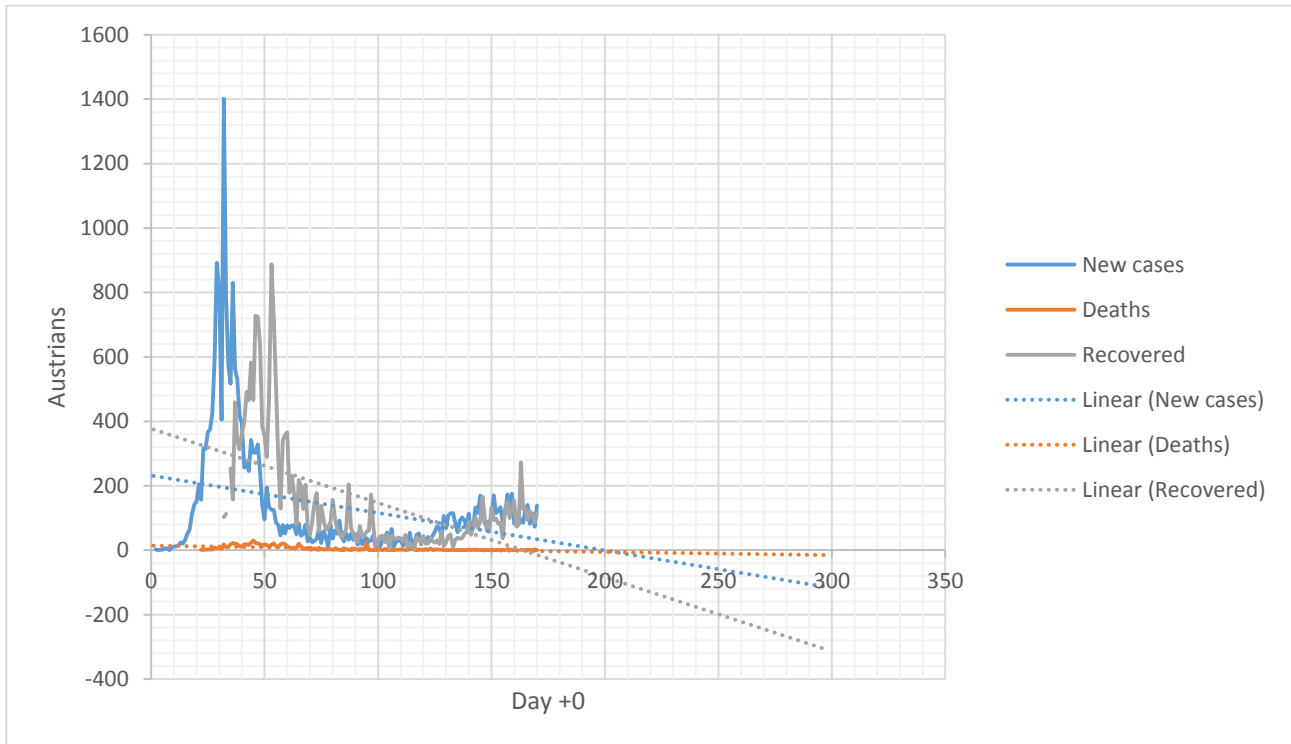
The system is intended to increase public health awareness and thus prevent a second wave in autumn, especially in view of the upcoming start of school.

The colours green (low risk), yellow (medium risk), orange (high risk) and red (acute situation) will be used to indicate epidemiological situations down to the district level.

The colours will pivot on indicators such as the seven-day case numbers, hospital

occupancy, traceability of infection chains and the number of tests in the region.

The first meeting of the commission will take place next week, when test operations will start. At the beginning of September, the first traffic lights should be in real operation.



On the graph, we can clearly analyse Austria's situation and trends in the fight against the virus. We have a pandemic peak, a gradual decrease in the number of infected and increasing number of cured. The country has 22.245 registered patients, of which 20.123 are cured, 723 died and 1399 active cases.

9. NATO

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, seven (7) allied and nine (9) partner nations have requested international assistance through the EADRCC. In chronological order of requesting, these are: Ukraine, Spain, Montenegro, Albania, The Republic of North Macedonia, The Republic of Moldova, Bosnia and Herzegovina, Georgia, Colombia, Slovenia, Afghanistan, Mongolia, Bulgaria, Tunisia and Iraq. Recently the United Nations Office for the Coordination of Humanitarian Affairs (UN OCHA), requested international assistance through EADRCC. To date thirteen (13) requests for International assistance are active right now, since Spain, Italy, Bulgaria, Montenegro and Slovenia have retrieved their respected requests. It is proven that the majority of Member States are difficult to react, since each of them needs the same materials and equipment. In addition, the Republic of Moldova issued a second request for international assistance.

Since last week, Poland, Denmark, USA, Germany, U.K. and Turkey, contributed to the fight against COVID 19, by donating to Partner Nations either money or medical equipment.

An overview of the outstanding requests for International assistance up today can be found here:

https://www.nato.int/nato_static_fl2014/assets/pdf/2020/5/pdf/2005-EADRCC-COVID-19_overview.pdf.

In brief until now, NATO contributes to the fight against pandemic as follows:

- More than 350 flights transporting medical personnel,
- 100 field hospitals built,

- 45.000 treatment beds provided,
- 14.000 military medical professionals deployed to assist in civilian hospitals,
- 500.000 troops around the alliance helped respond,
- 6.000 defence scientists work to improve virus detection and decontamination,
- 13 allies received assistance from NSPA,
- 24/7 support from NATO EADRCC, to facilitate medical and financial assistance to 16 NATO and Partner Nations (more than 300 ventilators, more than 10.000lts of disinfectant and more than 2 million masks, were donated).

On Sunday 26th of July 2020, in response to a request for COVID-19 relief aid from Iraq to NATO's Euro-Atlantic Disaster Response Coordination Centre (EADRCC), Spain handed over critical medical supplies to Iraqi authorities. The aid consignment consisted of essential medical equipment, including oxygen masks, personal protective gloves, protective gowns and N95 face masks, as well as disinfectants, sprayer pumps and medicines.

CONCLUSIONS:

1. 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).

2. 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 defence capabilities and maintain costly procurement programmes, according to NATO obligations. As an outcome, the Alliance will have to find "smart" ways to adjust defence capability requirements towards traditional security threats (nuclear, conventional, cyber and hybrid) and new challenges that arise from climate change, pandemics and mass migration.

3. 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.

4. This pandemic crisis it is a unique opportunity to enhance further the solidarity between the alliance and the cooperation and coordination with other organizations such as EU and UN. NATO should demonstrate coherence and support in the current crisis by putting in place political and military measures, to ensure the long-term health of the alliance.

5. NATO took under serious consideration the Alliance scientific community (a network of more than 6.000 experts and scientists), in the decision making process, regarding the proper understanding of virus/pandemic dynamics and the resilience building for the armed forces and local societies.

6. NATO pays significant attention to counter any disinformation and fake news from any state or non-state actor, especially during the pandemic period when the risk of harming the Alliance and the relevant communities is higher by undermining vital public health messages. It is obvious that the common strategy should be updated accordingly in order to be able coordinate efficiently all the key players in the information domain (international organizations, national and local governments, private companies, civil society and independent media).

7. A balance has to be found between the safety measures and the education requirements. Shifting from residential to online learning will affect the families from the poor regions who cannot afford the necessary equipment and the societies has to find a solution to the problem.

8. A new but expected problem that occurred in USA is that in some states hospitals are at full capacity and there are not free beds in Intensive Care Units. Having that in mind all countries, including those that have seemingly passed peaks, should ensure that their health care systems are adequately resourced and sponsored.

9. It seems that a second wave of COVID-19 already started across Europe.

10. Some of the countries are resuming the lockdown measures.

11. It is important to follow the development of the situation with the vaccine that is announced by Russia.

12. In the reported period the top ten countries with highest numbers of new cases are: Mexico, Bolivia, India, Pakistan, Belgium, Israel, Uzbekistan, Kyrgystan, Kazakhstan, and Ukraine