

Research Report

COMMITTEE : HSC

ISSUE 1 : Prevent and mitigate the spread of the COVID-19

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INTRODUCTION

The year 2020 has been profoundly marked by a situation of global pandemic since the outbreak of the COVID-19 disease in December of 2019. This pandemic has been described as “the most challenging crisis” since the second world war by the UN secretary general, António Guterres, who issued a call for a global ceasefire.

The virus was first identified in Wuhan, China and has since resulted in an ongoing global pandemic. As of August 2020, more than 22,4 million cases have been reported in 188 different countries and have led to more than 800,000 reported deaths, according to the WHO. It has shown to spread rapidly amongst the population primarily via mouth and nose secretions.

In order to mitigate the spread of COVID-19, countries have implemented measures in an attempt to reduce cases such as travel restrictions, stay-at-home policies and even complete lockdowns of certain areas. Such restrictions have been necessary in order to reduce the pressure faced by hospitals. The coronavirus has therefore caused global social and economic disruption.

KEY WORDS

COVID-19 : COVID-19 is an infectious disease caused by a new strain of Coronavirus (SARS-CoV-2). The COVID-19 disease spreads primarily through contact with an infected person through mouth and nose secretions including small droplets produced when coughing, sneezing or talking. It can also spread through contact with infected surfaces or objects, and people then touching their eyes, nose, or mouth.

The disease causes respiratory illness with symptoms such as a cough, fever, fatigue, shortness of breath, and loss of smell and taste. Some people however develop acute respiratory distress syndrome (ARDS) or pneumonia. While these symptoms usually take one to fourteen days after contamination to appear, infected people are contagious even during their asymptomatic period.

On the other hand, a significant amount of people remain completely asymptomatic after contamination, which is especially the case in young people. Asymptomatic patients are believed to spread the virus equally to symptomatic patients as they still carry just as much of the virus. To better understand the role of transmission from infected people without symptoms, it is important to distinguish between transmission from people who are infected who never develop symptoms (asymptomatic transmission) and transmission from people who are infected but have not developed symptoms yet (pre-symptomatic transmission). The extent of truly asymptomatic infection in the community however remains unclear.

Recommended preventive measures include frequent hand washing, wearing a mask in public places, covering coughs, disinfecting surfaces, avoiding touching the face, social distancing and self-quarantine.

Pandemic : a pandemic is the outbreak of a disease that occurs over a wide geographical area and affects an exceptionally high proportion of the population. It occurs when a new virus emerges and spreads across the world while most people are not immune to it. Viruses that have caused pandemics in the past usually were originally animal viruses. The COVID-19 is a global scale pandemic.

WHO : the World Health Organization is a United Nations specialized agency of 194 member states. It was founded on April 7, 1948 and is responsible for international public health. The WHO Constitution states its main objective as the attainment by all peoples of the highest possible level of health. Since the beginning of the COVID-19 pandemic, the WHO has played a role of coordinating international response to the crisis.

Lockdown : A lockdown is an emergency protocol that usually prevents people from leaving their area of residence. The protocol can be initiated by governments to protect people from a threat or other external event. Such stay-at-home orders have been set in response to the global pandemic in a large number of countries in order to slow down the spread of the virus and reduce the pressure of hospitals.

Viral testing : a test is used to determine whether a person is a carrier of the virus at the time of the test by taking a nasal sample, with results generally available within 24h. It is the most reliable test and is recommended for screening.

Antibody testing : a test used to find out if a person has developed an immune reaction to the virus after a past infection through a blood test. Antibody testing determines whether you had COVID-19 in the past and now have antibodies against the virus.

OVERVIEW

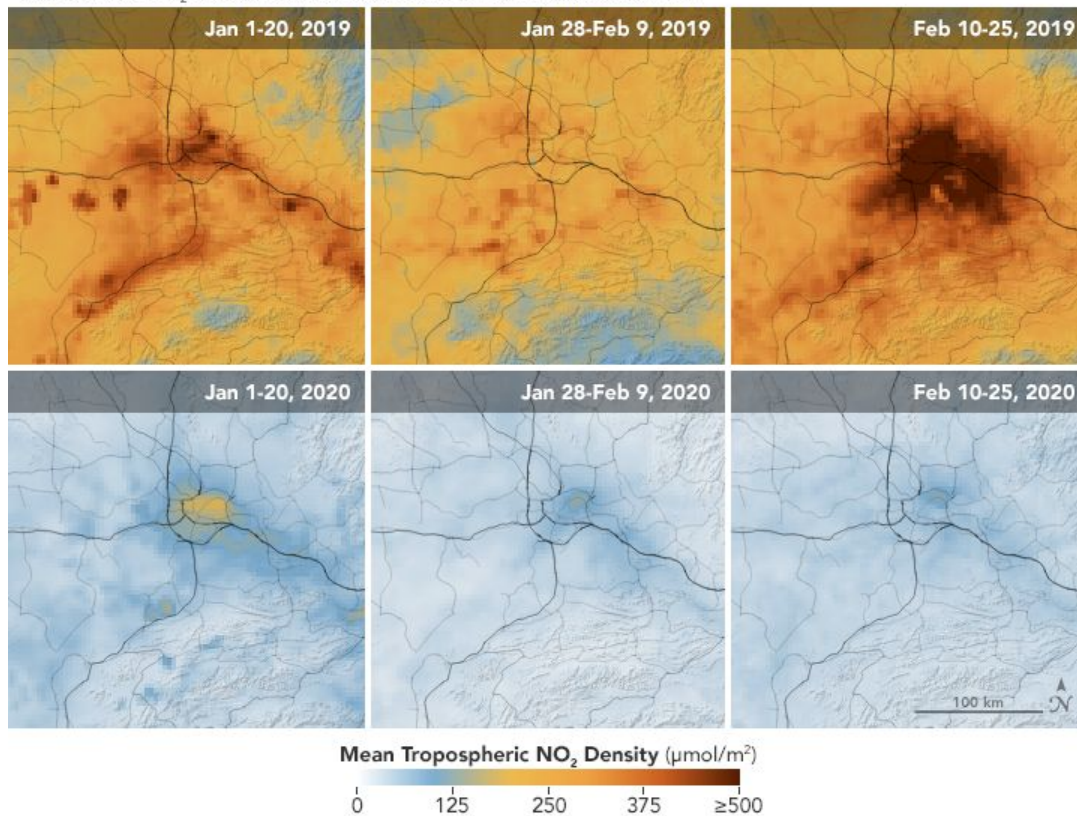
The COVID-19 pandemic has had an impact on all aspects of society.

ENVIRONMENT

The worldwide disruption caused by the pandemic has resulted in numerous impacts on the environment and the climate. The considerable decline in travel and industry has resulted in various regions experiencing a decline in air pollution. The reduction in mobility of people has been shown to largely reduce carbon emissions. For instance, in mainland China, lockdowns alongside other measures resulted in a 25% reduction in carbon emissions and 50% reduction in nitrogen oxides emissions.

Pollutant Drops in Wuhan—and Does not Rebound

Unlike 2019, NO₂ levels in 2020 did not rise after the Chinese New Year.



On the other hand, the pandemic has also provided cover for illegal polluting activities such as deforestation or poaching of wildlife. It has been the case for the Amazon rainforest. This was observed in Brazil, where satellite imagery showed deforestation of the Amazon rainforest surging by over 50 per cent compared to baseline levels.

The pandemic is also believed to be a factor of increased waste, especially in the medical sector, as a result of increased medical activity. It was stated that for the period when the outbreak peaked in Wuhan, an average of 240 tons of medical waste was produced daily in hospitals and this value was 6 times higher than normal value. Also, plastic-based single use medical masks used worldwide are an environmental problem creating significant waste.

ECONOMY

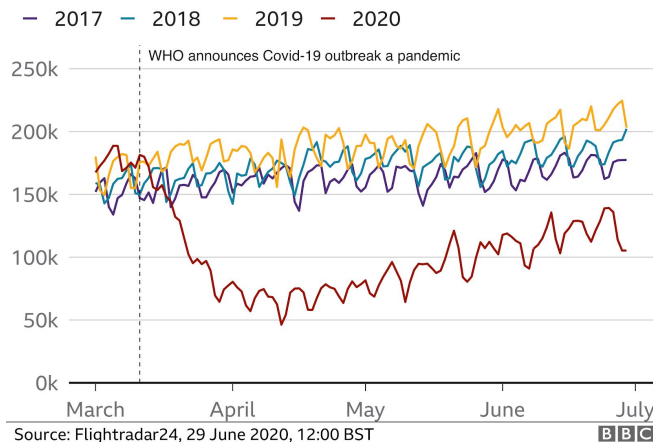
According to the World Trade Organization (WTO), the coronavirus could reduce world trade by up to a third. It has suggested that the recession caused by the COVID-19 pandemic could have a more devastating effect on trade than the financial crisis of 2007-2008 did.

The pandemic has affected businesses globally, and the current situation is believed to trigger a critical financial crisis. Measures to prevent the spread of the virus have severed the flow of goods and people, stalled economies, and are in the process of delivering a global recession, affecting certain industries more than others. The COVID-19 pandemic has led to disruptions in supply chains, significant fall in demand of numerous industries and has impacted the stock market. Unemployment has also reached an all-time high.

Tourism is one of the worst affected sectors due to travel bans and shutdown of public places including tourist attractions. Numerous airlines have cancelled flights due to lower demand, and British regional airline Flybe collapsed. Other industries that are linked to travel will also be impacted. Oil prices are especially affected, as people do not move much and don't consume as much oil, resulting in an enormous price drop. On Monday, 20 April, the price of West Texas Intermediate (WTI) went negative and fell to a record low (minus \$37.63 a barrel). Prices are still very low but a slow increase can be observed.

Flights picking up again

Number of total daily flights



Oil price in 2020

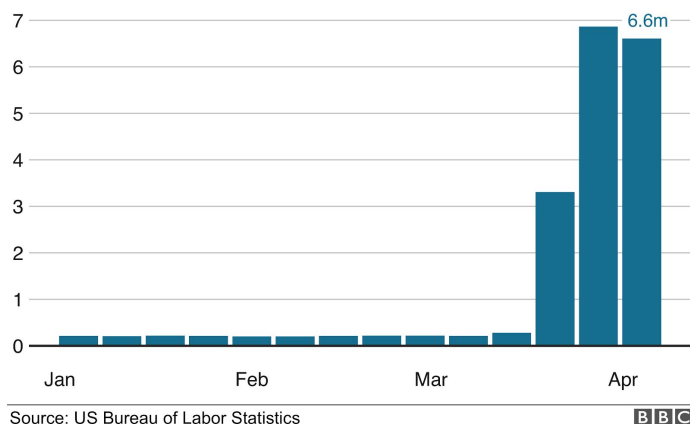
Brent crude, US dollars per barrel



Hundreds of millions of jobs could be lost globally. More than 40 million Americans lost their jobs and filed unemployment insurance claims. As a result, it has been estimated by Lloyd's of London that the global insurance industry will absorb losses of US\$204 billion, exceeding the losses from the 2017 Atlantic Hurricane season and 9/11, suggesting the COVID-19 pandemic will likely go down in history as the costliest disaster ever in human history.

US jobless claims at record high

Weekly total of unemployment claims in 2020



SOCIETY

The COVID-19 pandemic has not only led to increased pressure on hospital and healthcare systems but has impacted numerous aspects of society.

With the closure of schools, the educational system worldwide has been affected by the crisis. Universities, colleges and schools have been temporarily closed in nearly all countries in an attempt to mitigate the spread of COVID-19. According to UNICEF (United Nations International Children’s Education Fund) monitoring, 106 countries are implementing nationwide closure of schools and 55 are implementing local closures, impacting about 98.6 percent of the world’s student population. It has been estimated that 1.725 billion learners have been affected by the pandemic. As a result, exams have been cancelled all over the world. Cambridge International Examinations (CIE) announced on March 23rd the cancellation of exams including Cambridge IGCSEs and A levels. This has happened in nearly every country’s educational system but also for the International Baccalaureate exams. Closure of schools has impacted students, teachers and families leading to economic and societal consequences. Along with the implementation of digital learning, it has unravelled social and economic issues including digital divide, student debt, and access to housing, internet and childcare. The impact was more severe for disadvantaged children and their families, causing interrupted learning, compromised nutrition, childcare problems, and consequent economic cost to families who could not work. In response to school closures, UNESCO (United National Education, Scientific and Cultural Organization) recommended the use of distance learning programmes and open educational applications and platforms that schools and teachers can use to reach learners remotely and limit the disruption of education.

Culture has also been impacted by the COVID-19 crisis as the arts and cultural heritage sector has been one of the most affected industries by the crisis. Museums, libraries, performance venues, and other cultural institutions have been indefinitely closed with their exhibitions, events and performances cancelled or postponed. Major celebrations and holidays have been cancelled all around the world, as it has been the case of Holy week observances in Rome and Chinese new year. The pandemic has also caused major disruption in the sporting calendar with

the cancellation or postponement of events including the 2019–20 UEFA Champions League, 2019–20 Premier League, UEFA Euro 2020, 2019–20 NBA season, and 2019–20 NHL season.

Another societal issue caused by the pandemic has been xenophobia and racism. Since the outbreak of COVID-19, prejudices have been documented all around the world towards people of Chinese and East Asian descent. Chinese people and other Asians in the United Kingdom and United States have reported increasing levels of racist abuse and assaults. U.S. president Donald Trump has been criticised for racist and anti-China remarks, as he referred to the coronavirus as the "Chinese Virus" and "Kung Flu".

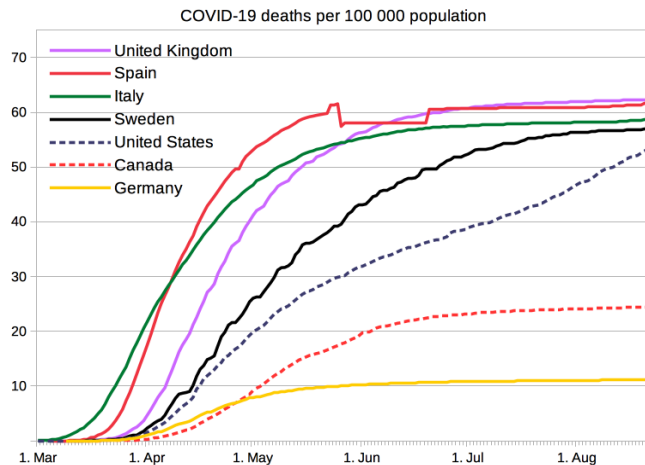
GOVERNMENT

The pandemic has affected the political systems of multiple countries, causing suspensions of legislative activities and rescheduling of elections in order to prevent the spread of the virus. The measures taken to combat the pandemic are part of an unusually large expansion of government power. Advocates of small government worry that the state will be reluctant to give up that power once the crisis is over, as has often been the case historically.

Many governments have been criticized when it comes to their handling of the pandemic. It has been the case of the Chinese government who is believed to have intentionally under-reported its number of coronavirus cases. The Italian government criticized the European Union's lack of solidarity after Italy has been gravely affected by the virus.

Some countries have passed emergency legislation in response to the pandemic and concerns have been expressed that it could allow governments to strengthen their grip on power.

MAIN INTERNATIONAL ACTORS



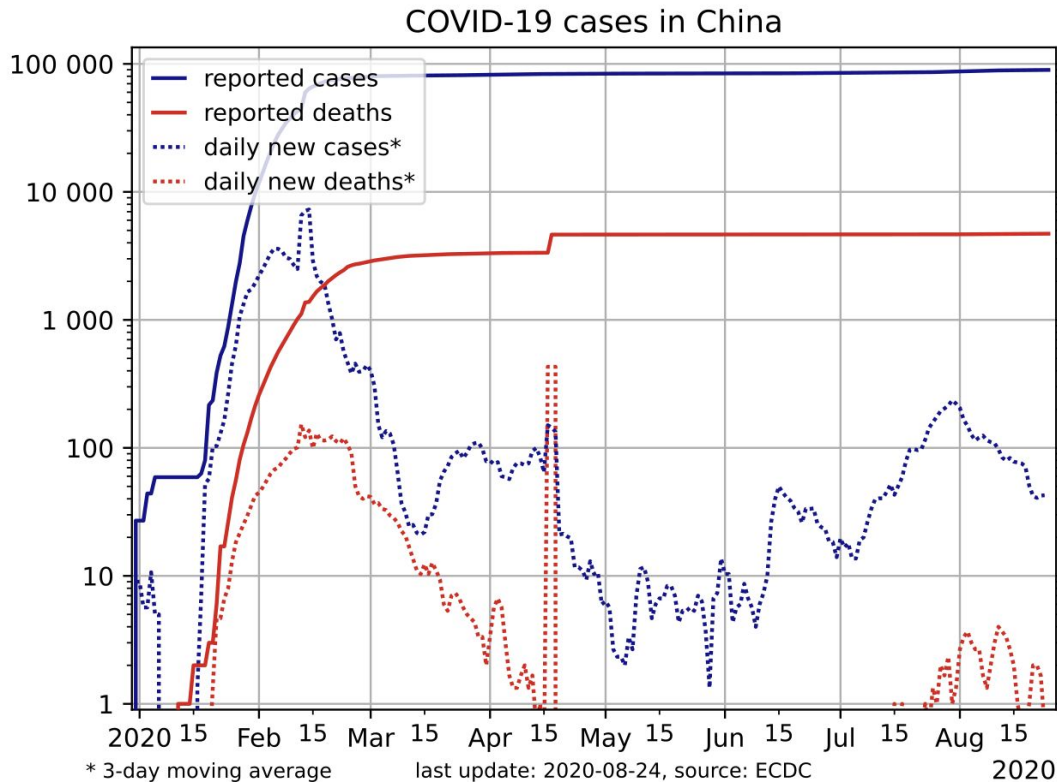
CHINA

The first case of COVID-19 disease was reported in Wuhan, in the Hubei province, where the initial suspected pneumonia cases have been discovered. China has however been heavily

criticized for their early management of the crisis. The Chinese government may have censored discussions about the outbreak since the beginning of its spread, and condemned doctors who tried to warn against the virus such as Dr. Li Wenliang.

However, the situation was later tackled more seriously. On 25 January 2020, Chinese Communist Party General Secretary Xi Jinping warned about a "grave situation" facing China. Chinese New Year celebrations were cancelled in many Chinese cities, passengers across the country have been checked for their temperature and transport services have been suspended. By 29 January, all Hubei cities were quarantined and curfew laws have been adopted in several mainland cities such as Huanggang and Wenzhou. In February 2020, the region faced a huge shortage of masks and other protective gear despite itself being the world's manufacturing hub of such products. Other countries therefore donated medical supplies to help China deal with the epidemic.

In the immediate days following the quarantine of Wuhan, China introduced a package of measures to address the domestic outbreak. To alleviate strains on an overloaded health system in Hubei, the Chinese government expanded its medical infrastructure by building new hospitals and deploying medical staff from across the country. The measures put in place that include travel restrictions and quarantine across China significantly helped flatten the increase of cases as shown in the graph below.



UNITED STATES OF AMERICA

The United States is amongst the most severely hit countries and has seen a vast and rapid increase in cases. As of August 2020, 170,000 of the world's 800,000 deaths from COVID-19 occurred in the U.S. The first confirmed local transmission was recorded in January and the first reported death in February. On August 9, the U.S. passed five million COVID-19 cases.

On 31 January 2020, the US announced that it will close its borders to all foreign citizens who have been to China within 14 days of their arrival on US territory. On 11 March 2020, as identified cases of COVID-19 increase in Europe, US President Trump further announced that all travelers from European countries will not be allowed entry. Following this, The US closed the border with Canada for everyone except essential travelers.

The initial U.S. response to the virus was otherwise slow, in terms of preparing healthcare and testing for the virus, despite President Trump claiming the outbreak was under control. Later state responses to the outbreak have included cancellation of large-scale gatherings, stay-at-home orders and closure of schools.

President Donald Trump has however expressed a desire to re-open the economy, remove distancing measures, and close immigration in late April to try and mitigate the impacts of the virus on the financial success of the nation.

President Trump also took the decision that the U.S. sends a letter officially notifying the United Nations that it is leaving the World Health Organization on July 6, 2020 and will be effective on July 6, 2021. Trump has repeatedly criticized the WHO for their slow response to the pandemic and for their close relation with China.

WHO

The World Health Organization has spearheaded international response to the coronavirus crisis. The WHO has remained a crucial source of public information about prevention and symptoms despite being criticized for delayed actions. The most relevant international legal framework is the WHO's International Health Regulations (IHR). The IHR aims to "prevent, protect against, control and provide a public health response to the international spread of disease". The WHO releases daily situation reports and holds press conferences for updating the media about the pandemic. They have also shipped more than two million items of personal protective equipment and one million diagnostic test kits to over 120 countries.

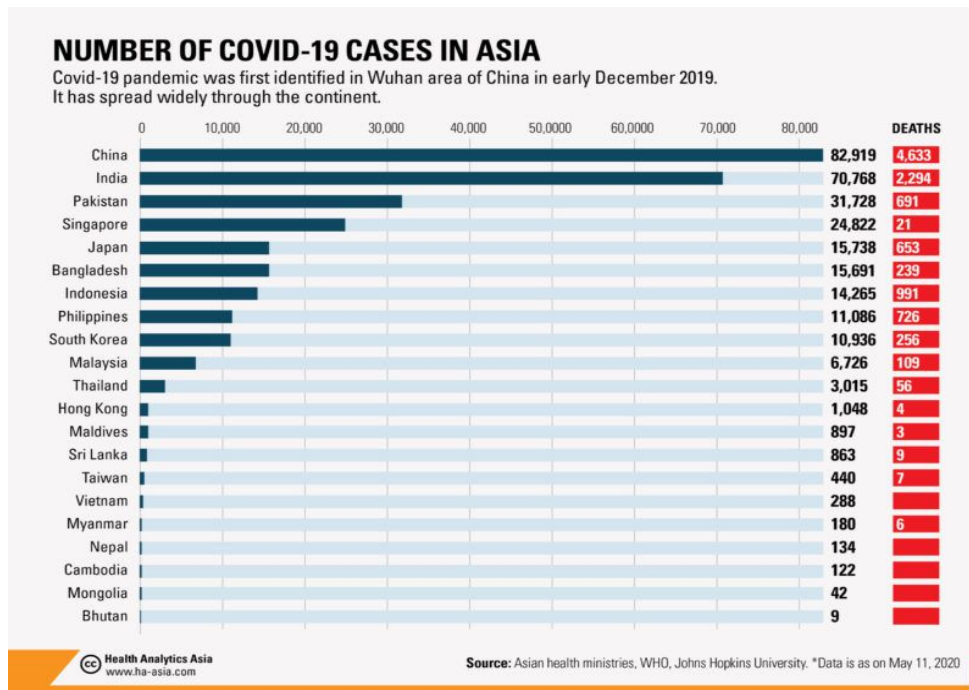
ITALY

Italy, one of most hard-hit regions in Europe, imposed similar restrictions as China's quarantine measures during the peak of the COVID-19 outbreak in Wuhan. Much like China, Italy also closed all non-essential factories and strictly enforced limitations on human mobility, starting initially with the Cologno region and later expanding the scope to the entire country. The outbreak of the virus has severely pressured the Italian healthcare system and damaged the Italian economy. The virus was first confirmed to have spread to Italy on 31 January 2020, when two Chinese tourists in Rome tested positive for the virus and the Italian government immediately suspended all flights to and from China and declared a state of emergency. By March, the virus had largely spread to all regions of Italy which had one of the world's highest number of active cases during the peak of the pandemic. Italy has a total of 35,458 deaths due to COVID-19.

TAIWAN

The pandemic has had a much smaller impact in Taiwan than in most other industrialised countries, with a total of seven deaths as of August 2020. Taiwan's handling of the outbreak has received international praise for its effectiveness in quarantining people. As of 17 August, 168,216 tests had been conducted in Taiwan, with the vast majority not confirming a COVID-19 diagnosis. However, the WHO has not recognized Taiwan's effectiveness of mitigating the spread of the virus as they have listed it as part of China. As a result, multiple countries including Italy, Vietnam and the Philippines briefly banned flights from Taiwan in January and February, despite the disease not having reached the epidemic status in Taiwan at the time.

Although Taiwan is excluded from the World Health Organization due to opposition from China, and therefore has limited access to shared scientific information and data, the country's response has been lauded in international press. Despite its proximity to China and large human flows, Taiwan has recorded the lowest incidence rate per capita – around 1 in every 500,000 people. Success factors cited have included the fact that the country's vice president, Chen Chien-jen, is an epidemiologist who had obtained a doctoral degree at the Johns Hopkins Bloomberg School of Public Health and the lessons learnt from the SARS epidemic in 2003, which hit Taiwan hard. Infrastructures, data analytics, policies aimed at keeping healthcare affordable and extensive educational outreach were put in place following the SARS outbreak. Taiwan's action plan included 124 discrete actions and coordination to be implemented in the first instance including travel bans, quarantines, surveillance steps and social distancing, and has proven itself to be highly effective.



TIMELINE

31 December 2019

Wuhan Municipal Health Commission, China, reported a cluster of cases of pneumonia in Wuhan, Hubei Province.

1 January 2020

The WHO had set up the IMST (Incident Management Support Team) across the three levels of the organization: headquarters, regional headquarters and country level, putting the organization on an emergency footing for dealing with the outbreak.

7 January 2020

The Chinese health authorities confirmed that the cluster was caused by a novel, infectious coronavirus.

2 February 2020

The U.S. enacted travel restrictions to and from China. Additional travel restrictions were placed on foreign nationals who had traveled within the past 14 days in certain countries, with exceptions for families and residents. Americans returning from those regions underwent health screenings and a 14-day quarantine.

13 January 2020

Officials confirm a case of COVID-19 in Thailand, the first recorded case outside of China.

30 January 2020

The WHO declares the COVID-19 outbreak a public health emergency of international concern (PHEIC). This is the 6th time WHO has declared a PHEIC since the International Health Regulations (IHR) came into force in 2005. WHO's situation report for 30 January reported 7818 total confirmed cases worldwide, with the majority of these in China, and 82 cases reported in 18 countries outside China. WHO gave a risk assessment of very high for China, and high at the global level.

11 March 2020

The WHO declares the Covid-19 outbreak a pandemic.
US President Trump closes border with Europe as cases significantly increase.

4 April 2020

WHO reported that over 1 million cases of COVID-19 had been confirmed worldwide, a more than tenfold increase in less than a month.

13 June 2020

China is faced with a second wave of COVID-19 cases as WHO reported that Chinese authorities had provided information on a cluster of cases in Beijing.

RELEVANT UN TREATIES AND EVENTS

20 April 2020

The UN General Assembly adopted a resolution entitled 'International cooperation to ensure global access to medicines, vaccines and medical equipment to face COVID-19'. The resolution "acknowledges the crucial leading role played by the World Health Organization" with regard to "coordinating the global response to control and contain the spread" of COVID-19. It also requested "close collaboration" with WHO by the UN Secretary-General.

1 July 2020

The UN Security Council (UNSC) adopted resolution 2532 in response to United Nations Secretary-General António Manuel de Oliveira Guterres' 'Appeal for Global Ceasefire' of Monday, 23 March, 2020, and, as the first global ceasefire, is part of the United Nations' response to the COVID-19 pandemic. The resolution demands "a general and immediate cessation of hostilities in all situations on its agenda"; calls for all parties engaged in armed conflicts to "engage immediately in a durable humanitarian pause for at least 90 consecutive days"; requests that the UN Secretary-General accelerates the international response to the coronavirus pandemic; requests that the Secretary-General regularly updates the UNSC; requests that the Secretary-General instructs peace-keeping operations to provide support and maintain continuity of operations; acknowledges the critical role of women in COVID-19 response efforts and the severe effect on the vulnerable, and decides to maintain oversight.

POSSIBLE SOLUTIONS

In order to limit the spread of the virus, a solution is to educate people about preventive measures to adopt in their day-to-day life. The World Health Organisation has recommended a list of preventive measures. These are the following: washing hands frequently with soap and water or an anti-bacterial gel; maintaining a minimum distance of one metre between individuals; avoiding touching the face; covering mouth and nose when sneezing or coughing; staying at home in case of symptoms; refraining from smoking or other activities that weaken the lungs; and practicing social distancing by avoiding unnecessary travel and staying away from large gatherings of people.

Another solution which has been put in place by many governments during the peak of the pandemic is lockdown. This method has proven itself to be successful when it comes to mitigating the spread of the virus. Some countries only adopted quarantine measures in their most affected cities or regions whereas other countries have undergone a national lockdown. This has been effective for handling the pressure put on healthcare systems and therefore allowing contaminated patients to heal properly. While lockdowns prevent the spread of the virus effectively, they have negative impacts on the economy and society.

Screening, containment and mitigation are also a solution to limit the spread of COVID-19. This includes testing the population in order to identify cases rapidly, even if they have not developed symptoms yet. Confirmed cases can therefore be self-isolated in order to prevent contaminating

other people. Screening can also include measures such as taking people's temperature in public places.

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