

COVID19 – THE PANDEMIC

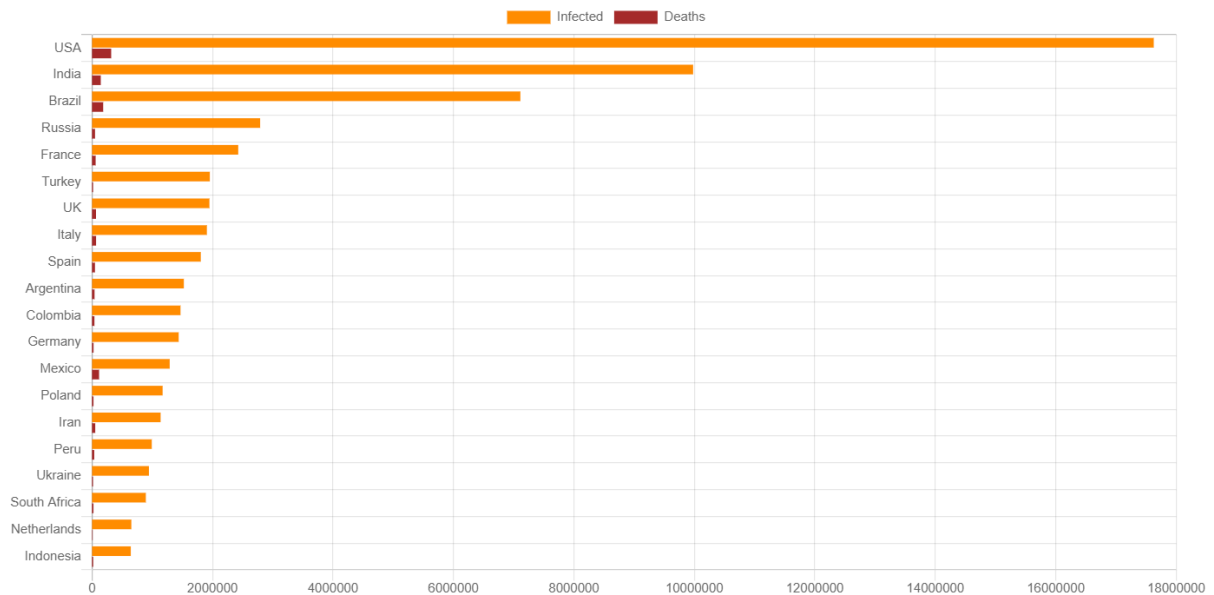
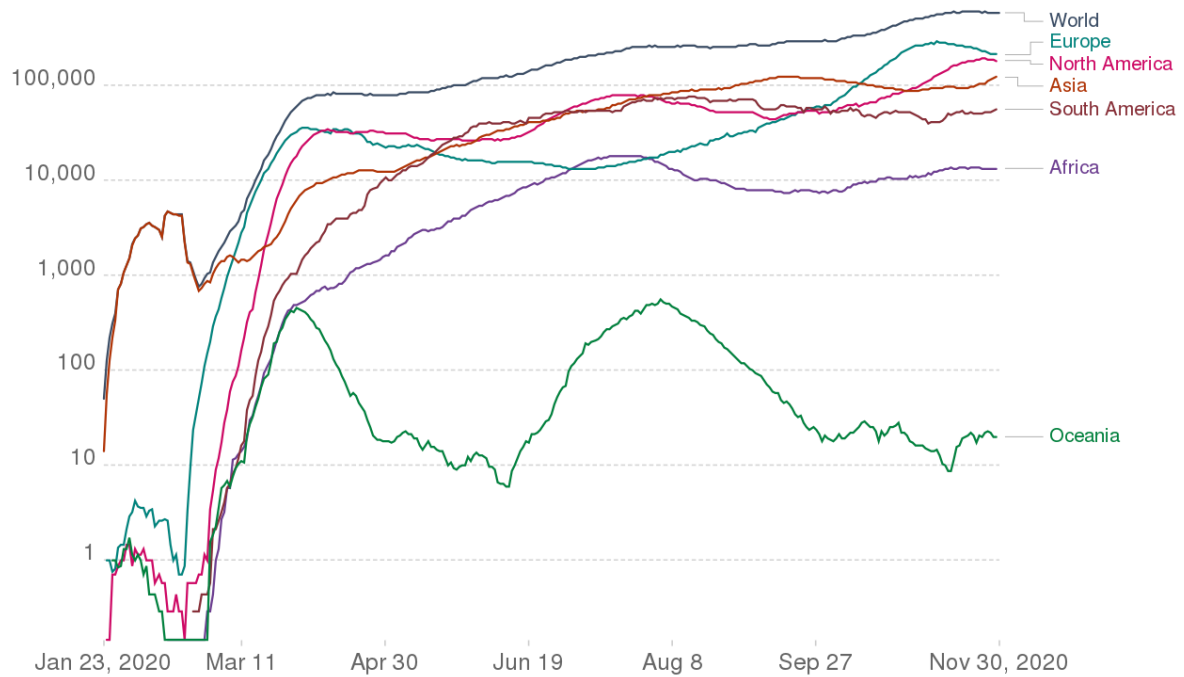
The COVID19 Pandemic also known as corona Virus disease of 2019 is caused by severe acute respiratory syndrome corona virus 2. This is also referred as SARS COV2 in medical domain. This was first identified in December 2019 in Wuhan, China. The world Health Organisation after much deliberations declared the outbreak as Public Health Emergency of International Concern in January 2020 and a pandemic in March 2020. As on 17th December 2020, more than 74.8 million cases have been confirmed, with more than 1.66 million deaths attributed to COVID19.

The most dangerous aspect of this disease is its symptoms. The symptoms vary from none to severe illness. It is highly variable. The cases are classified as symptomatic and asymptomatic based on the symptoms. Based on the severeness, it is classified as moderate and critical. The virus spreads mainly through the air when people are near each other. It leaves an infected person as they breathe, cough, sneeze or speak and enters another person via their mouth, nose or eyes. It might also spread via contaminated surfaces. People remain infectious for up to two weeks and can spread the virus even if they do not have symptoms.

Recommended preventive measures include social distancing, wearing a face mask in public, ventilation and air filtering, hand washing, covering one's mouth when sneezing or coughing, disinfecting surfaces and monitoring and self-isolation for people exposed or symptomatic. There are several COVID19 vaccines in development. Current treatments focus on addressing symptoms while work is underway to develop therapeutic drugs that inhibit the virus.

There are several COVID19 vaccines in development. Current treatments focus on addressing symptoms while work is underway to develop therapeutic drugs that inhibit the virus. Authorities worldwide have responded by implementing travel restrictions, lockdowns, workplace hazard controls and facility closures. Many places have also worked to increase testing capacity and trace contacts of the infected.

The epidemic curve of daily new cases of COVID19 (7 day rolling average) by continent as on 17th December 2020 is depicted below. Also, the number of deaths and infected of largely affected countries is depicted in the horizontal bar chart.



The pandemic has caused global social and economic disruption, including the largest global recession since the Great Depression. It has led to the postponement or cancellation of events, widespread supply shortages exacerbated by panic buying, agricultural disruption and

food shortages, and decreased emissions of pollutants and greenhouse gases. Educational institutions have been partially or fully closed. Misinformation has circulated through social media and mass media. There have been incidents of xenophobia and discrimination against Chinese people and against those perceived as being Chinese or as being from areas with high infection rates.

The Ministry of Health and Family welfare announced on the government's proposal for cold storage chains for the Covid-19 vaccine, as the Indian government prepares for a mega Covid-19 vaccination campaign in the coming months.

Secretary Rajesh Bhushan of the Ministry of Health said that for the Covid-19 vaccine storage, 29000 cold chain points, 240 walk-in coolers, 70 walk-in freezers, 45000 ice-lined refrigerators, 41000 deep freezers, and 300 solar refrigerators will be used. "All necessary resources of vaccination are done delivering to the states," he said.

In addition, training modules have also been finalized for medical officers, cold chain handlers, vaccinator officers, alternative vaccinator officers, ASHA coordinators, supervisors, data managers, etc. Physical training has begun, as well as training on virtual/online platforms. Completed National and State Preparation of Trainers (ToTs) workshops.

Bhushan while speaking to a press briefing, added, "Adverse events following immunization is a critical issue. When we undertake a universal immunization program, which has been done for decades, then some adverse effects are seen in children and pregnant women after vaccination."

Bhushan additionally added, "We can't deny chances of an adverse event when COVID-19 vaccination begins. In the countries where immunization has already begun, especially in the UK, adverse events took place on the very first day. So, it is essential that states and UTs prepare for this too."

The development comes just days after the Centre in the coming months launched its vast Covid-19 vaccination campaign stating that everyone will get the vaccine.

The Union Minister of State for Health and Family Welfare Ashwini Kumar Choubey said that only 100 people will receive the Covid-19 vaccine initially. But ultimately everyone will receive the injection.

He said, "We are going to start the process of sending necessary equipment for storage and handling of coronavirus vaccine to states. For now, only 100 people will receive the vaccine at a booth per day. Eventually, everyone will get the vaccine."

One of the guidelines released by the Centre for the COVID-19 inoculation drive is to vaccinate 100-200 people for every session every day, track them for 30 minutes after administering the shots for any adverse event, and allow only one recipient at a time.

The COVID Vaccine Intelligence Network (Co-WIN) framework, a digital platform will monitor enrolled beneficiaries of vaccines and anti-coronavirus vaccines on a real-time basis. This is according to the guidance recently released to states.

COVID-19 cases and deaths are declining in India, which is very reassuring, but centre cautioned against any laxity, saying an overwhelming proportion of the country's population is still "very susceptible" to the virus and the situation may escalate unexpectedly.

While there is an increasing trend in COVID-19 cases and deaths globally, particularly in the US and Europe, and the situation in the world is becoming worrisome, in contrast, the scene in India is satisfying as the cases and deaths are declining, VK Paul, member (health) at NITI Aayog said at a press conference.

"Mortality is declining and it is well below 400 per day. Cases have come down to almost 22,000. This is the kind of number we all experienced in July. So that is very reassuring. As a nation, we seem to be now doing very well," he said.

"We are saving lives. But remember, this cannot be taken for granted. An overwhelming proportion of our population is still very very susceptible to the virus. And the situation can escalate unexpectedly," Mr Paul said while cautioning against any laxity.

He further said the reassuring thing is that people are saying the R_0 , which represents the number of new infections estimated to stem from a single case, has come below one which means the pandemic is shrinking.

"So, we should be happy about that, but cautiously happy," he said.

Noting Delhi has made progress, he said, "We congratulate the government of Delhi as also all the other governments who have done so well in contributing towards such a significant control (in cases) in recent times."

Mr Paul, however, expressed concern over the COVID-19 situation in some states like Uttarakhand, Nagaland and Himachal Pradesh and stated all efforts to control the spread are being made in collaboration with these governments.

Union Health Secretary Rajesh Bhushan said that more than 15.55 crore tests have been conducted so far for detection of coronavirus infection in the country, and the cumulative positivity rate has come down to 6.37, while the average daily positivity rate during last week was 3.00 per cent.

Required:

1. Using the continental chart, interpret and discuss the reasons for the variations in the COVID cases.
2. Frame an approximate Bivariate frequency table from the horizontal bar charts showing the corona virus cases in each of the countries largely affected.
3. Interpret both the graphs and comment on the countries corona virus cases and its contribution towards the overall continental cases.

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Source: **COVID19 Pandemic** - *Wikipedia*