

# Climate Change and Pandemic

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# Climate Change and Covid 19

**Epidemic** – widespread occurrence of an infectious disease in a community in a short span of time e.g cholera, flu, scabies etc.

**Pandemic** – an epidemic occurring worldwide or over a very wide area crossing international boundaries affecting large numbers of people – COVID 19 (Coronavirus)

24 August – COVID 19 count **worldwide is 23.4 million**, deaths – 809,000

**India – 3.11 million, deaths – 57,542** (3<sup>rd</sup> spot in the world) after USA and Brazil.

# Climate change and transmission of Covid 19

- There is no direct evidence to show that CC will influence spread of Covid 19
- However, it is well known that animals (big and small) will move with the rise in temperatures to cooler places and **come in contact with other species** that they normally would not and that can potentially lead to **transmission of pathogens (virus and bacteria)** to new hosts
- **Risk of pandemics** will increase with deforestation and animals coming in contact with other animals and humans will increase the transmission of virus.

# Air Pollution and COVID 19 risks

- As Covid 19 affects upper **respiratory system**, with increasing air pollution the transmission is faster
- Poor air quality, congested places (slums and low income groups) – risk is higher
- **Pathogens (virus and bacteria)** appear with changing climate change impacts – temperature and rainfall patterns
- **Green House Gas emissions** have to be controlled to prevent risk of infectious diseases – limit the temp to 1.5 degree celsius

# Rise of infectious diseases

- Large scale dependency on **nature for food – animals and plants** have led to loss of habitats for many other animals and they now live in close proximity to human habitation
- Large concentration of animals live in close contact with humans making it easier for **pathogen transmission**
- **Imbalance in nature** caused due to climate change – animals, plants and humans
- Any imbalance will lead to new pathogens to **emerge and spread** to all living beings

# How to prevent future pandemics?

- Make the central, state and local agencies to support **public health and science**
- More **funding for research** and early response to outbreaks
- Stop **illegal trading of wildlife**
- Stop and prevent **deforestation the root cause of climate change** to slow animal migration that can spread infectious disease spread.
- Rethink **practices of animal husbandry** – not to raise animals concentrated in one place – that will increase the spread of pathogens from animals to humans

## Cont'd

- Reducing **air pollution by not burning fossil fuels** like oil, coal and natural gas – prevents respiratory diseases
- Reduce **CHG by using green energy**
- See that **human population are not obese, diabetic** and do not suffer from heart conditions as they are more prone to get the virus that can lead to fatalities
- Increase **spending on low carbon** technologies