

## **Ebola: Global Health Emergency**

<u>World Health Organization</u> has announced the Ebola outbreak in the **Democratic Republic of Congo** (a country in Central Africa) as the global health emergency.

- WHO defines a global emergency as an "extraordinary event" which constitutes a risk to other countries and requires a coordinated international response.
- A declaration of a global health emergency brings greater international attention and aid (both financial and technical) but should not be used to stigmatise or penalise the people by imposing travel or trade restrictions as those restrictions actually restrict the flow of goods and health care workers into affected countries and turn counter-productive.
- It can be noted that recently, the World Health Organisation (WHO) has released a list of <u>"Ten</u>
  threats to global health in 2019" which also included Ebola.

## **Ebola Outbreak**

- The 2014–2016 outbreak in **West Africa** was the largest Ebola outbreak since the virus was first discovered in 1976.
- The outbreak started in Guinea and then moved across land borders to Sierra Leone and Liberia.
- The current 2018-2019 outbreak in the **Eastern Democratic Republic of Congo** is highly complex.

## **Ebola Virus Disease**

- **Ebola virus disease,** formerly known as **Ebola haemorrhagic fever,** is transmitted to people from wild animals and spreads in the human population through human to human transmission.
- Transmission: Fruit bats of the Pteropodidae family are natural Ebola virus hosts.
  - Animal to human transmission: Ebola is introduced into the human population through close contact with the blood, secretions, organs or other bodily fluids of infected animals such as fruit bats, chimpanzees, gorillas, monkeys, forest antelope or porcupines found ill or dead or in the rainforest.
  - Human-to-human transmission: Ebola spreads via direct contact (through broken skin or mucous membranes) with:
    - Blood or body fluids of a person who is sick with or has died from Ebola.
    - **Objects** that have been contaminated with **body fluids** (like blood, feces, vomit) from a person sick with Ebola or the body of a person who died from Ebola
- **Symptoms:** symptoms of Ebola can be sudden and include:
  - Fever
  - Fatigue
  - Muscle pain
  - Headache
  - Sore throat

- Vomiting
- Diarrhoea
- Symptoms of impaired kidney and liver function
- In some cases, both internal and external bleeding
- Diagnosis: It can be difficult to clinically distinguish Ebola from other infectious diseases such as malaria, typhoid fever, and meningitis but confirmation that symptoms are caused by Ebola virus infection are made using the following diagnostic methods:
  - **ELISA** (antibody-capture enzyme-linked immunosorbent assay)
  - **Antigen-capture** detection tests
  - **Serum** neutralization test
  - Reverse transcriptase polymerase chain reaction (RT-PCR) assay
  - Electron **microscopy**
  - **Virus isolation** by cell culture.

