



## 3. H5N1 Avian Influenza

## Why in News?

• H<sub>5</sub>N<sub>1</sub> (subtype of avian influenza) been recently transmitted between mammals have raised concerns about its potential to cause a human pandemic.

## **Highlights**

- Scientists are investigating a potential spillover event after a mass mortality event that killed over 700 seals along the Caspian Sea coast where a H5N1 variant was detected in wild birds a few months ago.
- Avian influenza or bird flu refers to the disease caused by infection with avian influenza
  Type A viruses.
- Infrequently, the virus can infect mammals from birds, a phenomenon called spillover, and rarely can spread between mammals.
- H5N1, a subtype of avian influenza, has the potential to infect other mammals such as minks, ferrets, seals, domestic cats, and others through contact with infected birds, their faeces, or infected bird carcasses.
- Range from mild to severe influenza-like illnesses such as fever, cough, sore throat, muscle aches, nausea, abdominal pain, diarrhea, vomiting.
- People can also develop severe respiratory illness (e.g., difficulty breathing, pneumonia, acute respiratory distress, viral pneumonia) and altered mental status, seizures etc.
- In 2019, India has been declared free from Avian Influenza (H5N1), which has also been notified to the World Organization for Animal Health (OIE).
- However, in December 2020 and early 2021, outbreaks of avian influenza H5N1 and H5N8 were reported in poultry in 15 states in India.
- The widespread H5N1 outbreaks have substantial economic impact, resulting in significant losses to the poultry industry and threatening food and vaccine security, apart from raising animal welfare and environmental concerns