

H5N1 avian influenza

July 22, 2021

In news- On July 21, an 11-year-old boy died of H5N1 avian influenza in Delhi, which is the first recorded death due to the bird flu in India this year.

About Avian influenza/ Bird flu-

- It is a disease caused by **avian influenza Type A viruses** found naturally in wild birds worldwide.
- The virus can **infect domestic poultry** including chickens, ducks, turkeys and there have been reports of H5N1 infection among pigs, cats, and even tigers in Thailand.
- Avian Influenza type A viruses are classified based on two **proteins** on their surfaces – **Hemagglutinin(HA) and Neuraminidase(NA)**.
- There are about **18 HA subtypes and 11 NA subtypes**.
- There have been reports of avian and swine influenza infections in humans including A(H1N1), A(H1N2), A(H5N1), A(H7N9), etc...
- The **first report of human H5N1 infection was in 1997** and currently, over 700 human cases of Asian Highly Pathogenic Avian Influenza A (HPAI) H5N1 virus have been reported to the World Health Organisation from 16 countries.
- The infection is deadly as it has a high **mortality rate of about 60%**.
- The most common route of virus transmission is **direct contact** – when a person comes in close contact with infected birds, either dead or alive.
- The flu spreads from the saliva, mucus and faeces of the infected birds.
- Humans can also be affected if they come in **contact with contaminated surfaces or air near the infected poultry**.
- The transmission of the virus from birds to humans is

rare and **sustained human-to-human transmission has not yet been established.**

- There is no sufficient evidence suggesting the spread of the virus through properly cooked meat.
- Signs and symptoms include fever, cough, sore throat, muscle aches, nausea, abdominal pain, diarrhea, vomiting, Severe respiratory illness and Neurological changes.
- **Children and adults below 40 were seen to be the most affected** and mortality was high in 10-19 years olds.