

## **Avian influenza outbreak**

### **Why in news?**

After India declared itself free from avian influenza 3 months earlier, new cases of avian influenza subtypes have been reported now.

### **Where are the cases reported?**

- Four States — Rajasthan, Madhya Pradesh, Himachal Pradesh and Kerala - are the epicentres in this outbreak.
- In Haryana, Jharkhand & Gujarat, thousands of poultry birds have died but the cause of death is still unknown.
- The two subtypes (H5N1 & H5N8) have targeted different birds — crows in Rajasthan & Madhya Pradesh, migratory birds in Himachal Pradesh and poultry in Kerala.
- H5N1 has caused deaths of over 2,000 migratory birds in Himachal Pradesh.
- H5N8 led to the death of thousands of poultry in Kerala, hundreds of crows in Rajasthan and Madhya Pradesh.

### **How did the virus transmit?**

- Migratory birds have been largely responsible for long-distance transmission of the virus into India.
- It also spreads through local movement of residential birds and poultry.
- Movement of men and material from poultry farms too has been a cause for further spread.

### **What are the measures undertaken to control the outbreak?**

- On Wednesday over 69,000 birds, including ducks and chickens, were culled in Alappuzha & Kottayam as per India's 2015 National Avian Influenza Plan.
- Other States have been asked to be vigilant of any unusual deaths or disease outbreak signs amongst birds, particularly migratory ones.
- States have been asked to strengthen bio security of poultry farms, disinfection and proper disposal of dead birds.

### **How was the global outbreak?**

- As per European Food Safety Authority 561 avian influenza were reported in

15 European countries and the U.K between August-December.

- H5N1 and H5N8 were two of three subtypes found in Europe & it was predominantly found in wild birds, and a few in poultry and captive birds.
- Genetic analysis confirmed that spread from Asia to west-central Europe likely to cause persistent circulation of this virus strain in wild birds in Asia.

### **Does it transmit to humans?**

- Though avian influenza virus cross the species barrier and occasionally infecting humans, but human-to-human spread is reported rarely.
- Mutations of an avian influenza A virus and a human influenza A virus in a person can create a new influenza A virus.
- This can result in sustained transmission between humans thus increasing the risk of a pandemic influenza.
- Hence efforts should be taken to control the outbreaks & genome sequencing of virus samples helps in tracking the evolution of the virus.

**Source: The Hindu**

