



H5N1 Bird Flu

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Why in News?

[H5N1 bird flu](#), a highly pathogenic virus, has been spreading globally, posing a significant threat to birds and wildlife.

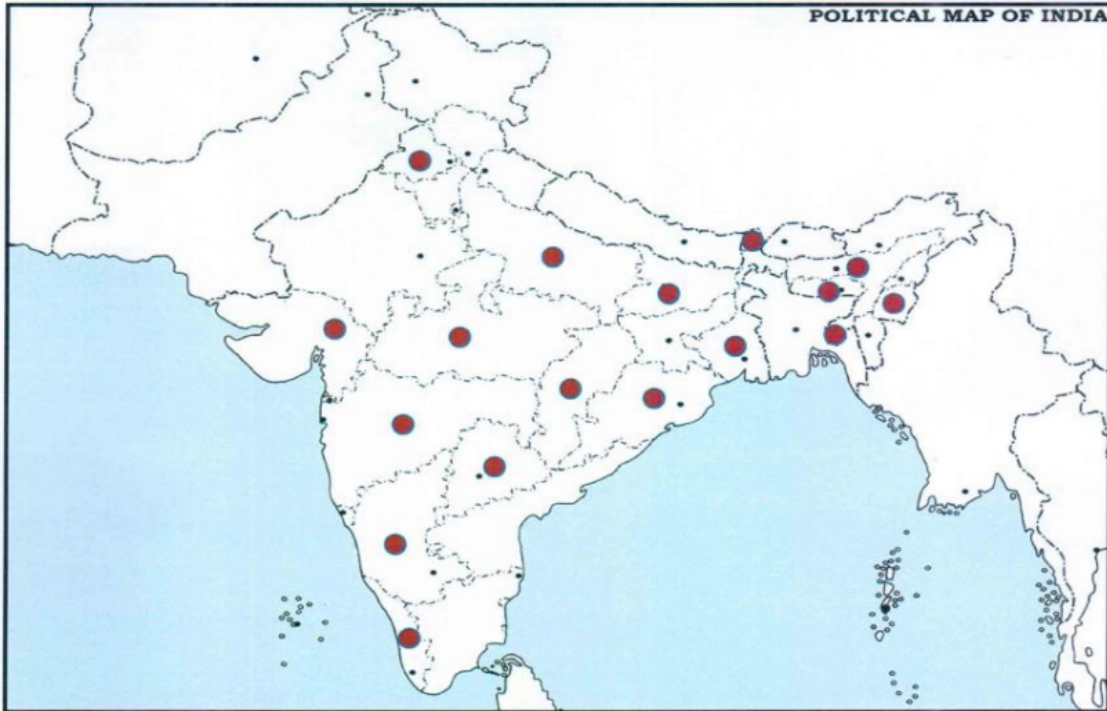
What is H5B1 Bird Flu?

▪ Background:

- **Avian influenza A(H5N1) or H5B1 Bird Flu** is a highly pathogenic virus that primarily circulates among birds but can infect mammals.
- H5N1 originated from a virus outbreak in China in 1996 and rapidly evolved into a highly pathogenic strain.
- Since 2020, it has spread across **Europe, Africa, Asia, North America, South America, and even mainland Antarctica.**
- India experienced the first H5N1 outbreak in the State of Maharashtra and Gujarat in 2015.

▪ Impact on Animals:

- Wild birds, including endangered species like **California condors**, have been severely affected by H5N1.
- The main species affected used to be chicken.
- Marine mammals, such as **sea lions and dolphins**, have suffered mass deaths in regions like Chile and Peru.
- Mammals like **foxes, pumas, bears in North America**, and farmed minks in Spain and Finland, have also been infected.



The map highlights the States where highly pathogenic avian influenza H5N1 outbreaks in poultry were reported (Feb 2006-April 2015).

▪ **Human Risk and Spread Factors:**

- While rare, humans can contract bird flu, primarily through contact with infected birds.
- Climate change may exacerbate the spread of the virus, altering bird behaviour and increasing interactions between bird species.

▪ **World Health Organization (WHO) Risk Assessment:**

- While the virus does not easily infect humans, sporadic cases continue to occur, mainly linked to poultry exposure.
- **Human-to-human transmission remains rare**, but the potential for further cases exists, particularly in regions where the **virus is endemic in poultry**.
- WHO assesses the overall risk to the general population as low but emphasises the importance of surveillance and risk management.

▪ **Preventive Measures and Recommendations:**

- WHO advises the public to avoid high-risk environments like live animal markets and practise good hand hygiene.
- Prompt reporting of sick animals and avoiding consumption of sick poultry are recommended.
- Individuals exposed to infected birds or environments should seek medical care promptly.

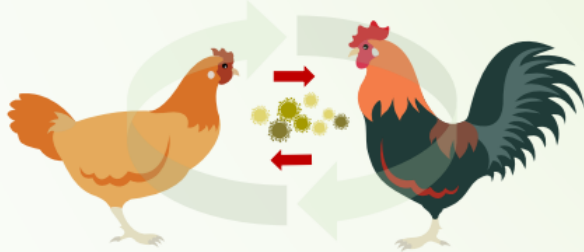
About Bird Flu



WHAT IS BIRD FLU?

Bird flu is an infectious disease in birds caused by avian influenza type A viruses. It may cause mild to severe illness or sudden death in birds. Domestic poultry like chickens are particularly vulnerable.

Avian influenza viruses do not usually infect humans but may sometimes be transmitted to humans who have contact with infected poultry and their secretions and faeces, or contact with contaminated surfaces.



HOW DOES BIRD FLU SPREAD BETWEEN BIRDS?

- Direct contact with nasal and respiratory secretions from infected birds
- Direct contact with infected bird faeces
- Contamination of feed and water
- Contact with contaminated equipment and humans

KEEPING PET BIRDS SAFE

- Keep your pet birds away from wild birds and their droppings.
- Use a bird-proof cage or enclosure with fine wire mesh netting preferably with a roof over the aviary.
- Separate all new birds from existing ones for at least 21 days to monitor for signs of illness.
- Adopt hygiene practices such as washing hands thoroughly with soap after handling birds and their cage(s).
- Do not bring birds back to Singapore without a valid import permit from NParks/Animal & Veterinary Service.

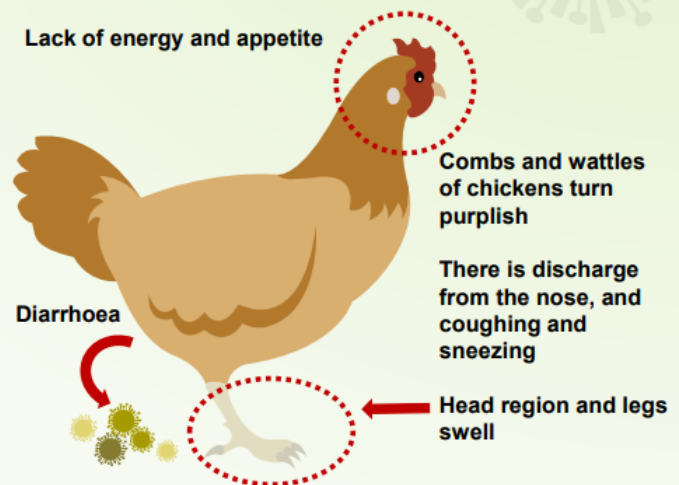
WHAT IF MY PET BIRD FALLS SICK OR DIES?

- Immediately bring your sick bird to see a vet.
- Keep it away from healthy birds.
- Wash and disinfect the cage regularly while wearing a mask and gloves.
- Wear a mask and gloves when disposing of dead birds. Place the bodies in a plastic bag tightly sealed with a rubber band or cable tie.
- Adopt hygiene practices such as washing hands thoroughly with soap and water after handling the bird and its cage.



SIGNS IN INFECTED BIRDS

Lack of energy and appetite



Combs and wattles of chickens turn purplish

There is discharge from the nose, and coughing and sneezing

Head region and legs swell

IS IT SAFE FOR ME TO COME INTO CONTACT WITH FREE-ROAMING CHICKENS IN SINGAPORE?

- As a precaution, please avoid touching or feeding free-roaming chickens.
- If you come into contact with free-roaming chickens, you should practise good hygiene habits and wash your hands thoroughly with soap and water.

UPSC Civil Services Examination, Previous Year Question (PYQ)

Prelims

Q. H1N1 virus is sometimes mentioned in the news with reference to which one of the following diseases? (2015)

- (a) AIDS
- (b) Bird flu
- (c) Dengue
- (d) Swine flu

Ans: (d)

Q. Which of the following statements is/are correct? Viruses can infect (2016)

1. bacteria
2. fungi
3. plants

Select the correct answer using the code given below:

- (a) 1 and 2 only
- (b) 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

Ans: (d)

PDF Reference URL: <https://www.drishtiias.com/printpdf/h5n1-bird-flu>

