

H5N1: Bird flu

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Context:

Since 2020, a highly pathogenic type of bird flu, H5N1, has been spreading across the globe, posing an existential threat to birds and wildlife. The virus has infected birds in more than 80 countries (as of December 2023) and resulted in culling of millions of chickens and turkeys at commercial poultry farms. It also struck numerous species of wild birds.

Background:

The worrying sign, however, is the rapid spread of the flu — once largely confined to birds — among mammals. The infection has also infiltrated mainland Antarctica for the time in history.

About Bird flu:

1. The Bird flu, also known as avian flu, refers to an infectious viral illness that mainly infects and spreads among poultry and some wild birds.
2. There are different strains of bird flu virus, which have been circulating for a very long time among at least 100 bird species, including wild waterfowl, such as ducks and geese, without much harming them.
3. From time to time, a form of the flu virus jumps from wild birds to poultry farms, and replicates in cramped warehouses of farmed birds. It then quickly evolves into a highly pathogenic flu virus that causes a larger wave of illness and death than usual among birds.
4. The currently circulating type of H5N1 is one such highly pathogenic flu virus. It has descended from a virus that caused an outbreak on a goose farm in Guangdong, China, in 1996.
5. The new version of H5N1 first emerged in Europe in 2020 and then rapidly reached Europe, Africa, and Asia. By late 2021, it had spread to North America and in the fall of 2022, it appeared in South America. In February 2024, the virus stormed through mainland Antarctica.

How has H5N1 impacted animals across the world?

1. Apart from the farm birds, the virus has severely impacted wild birds.
2. Some wild birds, which are already on the verge of extinction, have also been hit. At least 21 of the endangered California condors have died from the virus in 2023 alone, which is nearly 6 per cent of the population of the roughly 330 birds that were believed to live in the wild as of the end of 2021.
3. The biggest concern is the spread of the virus among mammals, though. Outbreaks among foxes, pumas, skunks, and both black and brown bears in North America have been reported.
4. The worst affected are marine mammals. More than 20,000 sea lions and a handful of dolphins have died in Chile and Peru due to the infection.
5. Humans are also at risk but they rarely contract bird flu. Most of the cases of human infection

involve people who have come in contact with a large number of sick birds at poultry farms. This means that humans are likely to get infected when there is a huge viral load.

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