

About the virus

The highly pathogenic avian influenza (HPAI) strains can cause illness and mortality among birds and people approaching 100%. There are no known natural reservoirs of HPAI. There is no concrete proof yet that waterbirds infected with such a highly pathogenic strain can survive, have the ability to migrate and be capable of transmitting the virus to other birds, poultry animals or humans.

Avian influenza or bird flu is an infectious group of diseases caused by the influenza virus, which belongs to the Orthomyxoviridae family. Three types of influenza viruses, A, B and C are known, but so far only influenza A viruses have been isolated from domestic and wild bird species, which are the natural reservoirs of these viruses. Influenza A viruses are further divided into subtypes determined by hemagglutination (H) and neuraminidase (N) antigens. To date, nine subtypes of H and fifteen subtypes of N antigen have been identified. While there are strains of this virus which are not virulent and do not kill the birds, some forms of the virus are highly pathogenic.

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The Avian influenza virus does not normally infect species other than birds, but strains have been recorded infrequently in a range of other animal species, including pig, tiger, and whale.

The Avian influenza virus does not normally infect humans. However, these viruses have the tendency to mutate and may occasionally spread to other animals and to humans. In particular, there have been cases of humans becoming infected with certain highly pathogenic subtypes of the avian flu virus due to direct contact with or consumption of diseased birds.

The influenza virus occurs naturally in wild birds, although most strains are not virulent. However, H5N1, has been found in one or very few individuals of at least 11 species of wild birds in Asia since 2003, including Peregrine Falcon *Falco peregrinus*, Grey Heron *Ardea cinerea*, Little Egret *Egretta garzetta*, Openbilled Stork *Anastomus oscitans*, Barheaded Goose *Anser indicus*, Mallard *Anas platyrhynchos*, Ruddy Shelduck *Tadorna ferruginea*, Great black-headed Gull *Larus ichthyaetus*, Brown-headed Gull *Larus brunnicephalus*, Magpie *Pica pica* and Jungle Crow *Corvus macrorhynchos*.