## **Know More about Avian influenza**

Avian influenza refers to influenza A virus that are found in birds. While the majority of these viruses are harmless to humans, some of them are able to cause infections in humans. Avian influenza virus infection of humans still has limited abilities to cause inter-personal spread. But once a virus strain becomes easily transmissible between humans, a pandemic will be imminent.

Influenza A viruses are subtyped based on the combination of haemagglutinin and neuraminidase proteins on the surface of the virus. There are currently 16 different haemagglutinin and 9 neuraminidase types. Avian influenza viruses have three pathotypes: low, high and non- pathogenicity, based on their virulence in poultry populations. Most of the human infections are caused by highly pathogenic avian influenza viruses.

Birds suffering from avian influenza may present with decrease in egg production or a severe disease with brain and respiratory tract involvement. The comb may turn purple and diarrhoea is common. Mortality rate among birds can be as high as 80%. Avian influenza viruses can spread to humans through the birds' excreta and feathers to the eyes and mucous membranes. The patients may initially present with a flu-like illness, followed by high fever, pneumonia, multi-organ failure, and death.

Antiviral drugs might be effective for avian influenza if they are given early during the course of illness. The neuraminidase inhibitors (oseltamivir and zanamivir) are the most promising agents, while amantadine could still be used in some situations. There are currently no vaccines against any avian influenza viruses for human use.

To prevent avian influenza, the most important precaution is to minimize contact with poultry and their excreta. Wash the hands with soap and water after contact. Do not eat any raw poultry and poultry products including eggs. Poultry workers must use protective measures during work. Seek medical advice immediately if you have any respiratory symptoms.