

## EDITORIAL

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### Avian Flu Pandemic Threat: Why is Ethiopia considered at risk

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Many zoonotic diseases have affected human beings with serious impact. Among those pandemic flu originated from birds have caused millions of human deaths at different times. The so called Spanish flu that caused about 50 million people worldwide in 1918-19 is the most devastating. That pandemic was refereed as “Hidar Beshita” in Ethiopia, which by causing many thousands of deaths had frightened the population and ever since the period is commemorated around the country by burning rubbish.

Under normal conditions people are affected by human influenza virus, which often is not life threatening. However, if animal influenza virus or influenza virus containing genes from animal influenza virus spread among human population the effect could be devastating with high mortality rates. It is this situation that is threatening the world now.

Epidemiological evidences in the last two years from around the world, particularly from Asia, suggest an imminent threat to another avian influenza pandemic that can spread at unprecedented speed due to availability of fast transportation system and high density population movement around the world, which may give rise to what could be the “21<sup>st</sup> century” pandemic.

The current concern of influenza pandemic is associated with the circulation of influenza A (subtype H5N1) virus among birds earlier in Asia and now believed to have come down to Europe and Africa. Although many of the prerequisites for influenza pandemic manifested in some places the

virus still has not yet established itself in human population.

Although birds are commonly affected by influenza A virus they often suffer from mild illness. However, the variant of the virus known as ‘highly pathogenic avian influenza’ (HPAI) can cause a rapidly fatal illness. The subtype H5N1 virus that is threatening to cause a similar type of human influenza pandemic in humans belongs to this group of influenza viruses that cause severe form of influenza among the bird population.

The natural reservoir of avian influenza viruses are birds, especially migratory waterfowl. Domestic poultry are particularly susceptible to cross infection. Close contact with live infected poultry was responsible for human infection in many countries. Genetic studies have also shown that the virus can directly spread from birds to humans.

Based on past experience, it is forecasted that once the influenza orginated from birds start human-to-human transmission it can affect up to a quarter of the world population and can rapidly spread around the world in less than three months. This threath can be averted mainly by early detection of infection among believed to be birds and poultry and then culling the infected batches.

Ethiopia is at the fore front of the flu pandemic for many reasons. Many millions of birds that possibly carry the virus migrate from affected areas of Europe and Asia to East Africa and believed to reach lakes and wetland found in the rift valley of Ethiopia beginning November 2005. That potentially increased the risk of spread into the chicken population. As almost

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every household in rural areas of the country practice

backyard poultry and commonly live with their poultry in the same house or in an attachment where there is no barrier the potential for becoming in contact with infected poultry droppings and corpses, which are major sources of infection, is very high.

The conditions described above clearly indicate that there is a danger that Ethiopia would be one of the countries to be affected by the pandemic, if it occurs. It is also clear that once the pandemic establishes itself in the country the impact would be severe for many reasons. To begin with the health system would not have capacity to deal with the level of devastation the pandemic could potentially cause. Even detection of the pandemic at an early stage would be a serious challenge hampering early action. Thus, it is absolutely important to sensitize and build capacity for early detection of the pandemic in all concerned political, administrative and professional bodies to initiate well coordinated responses if the pandemic occurs.

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