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FACT SHEET

Practical Solutions for a Complex World

AG/Poultry/2005-01

# Facts About Avian Influenza, or "Bird Flu"

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Because of the recent news coverage of the avian influenza epidemic in Asia, a few facts about avian influenza, or "bird flu," are presented here for general information. Health officials are worried because the bird flu, or H5 avian influenza, has now crossed species barriers and has infected humans. A few deaths have resulted, fueling concern that if avian influenza could propagate among human beings, there could be a worldwide outbreak (pandemic). Recently health officials have speculated this potentially could occur.

## "Bird flu" is only one type of influenza that potentially could infect humans

Three genera of *Influenzavirus* are human pathogens: Types A, B, and C.

Only Type A influenza viruses infect avian species. If a Type A influenza infects birds, it is known as "avian influenza;" if it infects pigs, it is "swine influenza," etc.

There are 15 known "H" subtypes of Type A influenza – all of which can potentially infect birds. If any of these subtypes infect birds, it is generically referred to as "avian influenza." However, two of these subtypes – H5 and H7 – have historically been of great concern to the poultry industry because once introduced into a flock of chickens or turkeys, they have a predisposition to mutate and cause high mortality in poultry. Until recently, subtypes H5 and H7 have not been known to cause clinical signs and disease in human beings. In Southeast Asia, an H5 subtype has jumped the species barrier and infected humans. There have been at least 42 to 45 deaths recorded with this outbreak.

Because of the unique situation in Asia, the media has made the terms "avian influenza" and "bird flu" synonymous with this H5 outbreak.

#### Most cases of avian influenza infection in humans have occurred because of close contact with birds—most likely domestic or semi-domestic waterfowl

An H5 pandemic would require easy and sustained transmission of the virus from human to human, being capable of causing sickness in an otherwise healthy human population worldwide. So far, this hasn't occurred. Even though there have been a few probable cases of human-tohuman transmission, the infection has not sustained itself by spreading to others.

Introduction of the various subtypes of avian influenza into the U.S. has historically occurred through migratory waterfowl. Poultry raised with access to the outside have then come in contact with virus. Live bird markets have kept the viruses in circulation.

March 2005

Type A influenza virus mutates and jumps species barriers via a "mixing vat," usually consisting of an intimate and often prolonged swine/avian/human interaction

An example is the 1968 Hong Kong Flu, which had parts of influenza viruses from birds and humans that re-assorted in swine; the new virus then adapted itself to cause disease in human beings.

### **IMPORTANT!**

USDA-inspected poultry available in stores is absolutely not a threat in transmitting influenza virus. Influenza virus is easily deactivated through the processing procedure and with heat (such as canned meat).

Currently in the U.S., avian influenza is exceedingly more important as an economic threat to the poultry industry than as a health threat to the human population.

Our industry and government have an efficient method of dealing with H5 and H7 avian influenza, and it would be extremely unlikely that a situation would occur here that is now occurring in Asia.

Here in Utah, we are protecting the poultry industry by beginning an Avian Influenza Surveillance and Response Plan, administered through the Utah Department of Agriculture and Food in conjunction with USDA-APHIS-VS. Under the Plan, commercial poultry-producers routinely test for the presence of any kind of avian influenza in their flocks, thereby allowing quick detection and response should our poultry become infected.

The U.S., among other countries, is currently considering having a limited quantity of H5 vaccine in reserve in case the avian influenza in Asia becomes a problem in the human population,

Main public concern is for individuals working in Asia that might have close contact with live birds there.

We need to be aware of the avian influenza in Asia, but this is not a panic situation, as might be reported in the media. Some people have seemed to speculate a "worse-case scenario," and that is what we are most likely to hear through the media.

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This publication is issued in furtherance of Cooperative Extension work. Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Jack M. Payne, Vice President and Director, Cooperative Extension Service, Utah State University.