

FACTS ABOUT AVIAN FLU AND H5N1

WHAT IS AVIAN INFLUENZA?

- ▲ Avian influenza refers to a large group of viruses that primarily affect birds
 - Low pathogenic strains cause mild disease in birds, high pathogenic strains are deadly to birds
- ▲ Most avian influenza viruses do not affect humans

WHAT IS AVIAN INFLUENZA H5N1?

- ▲ A strain of avian influenza first isolated in 1997 in Southeast Asia
- ▲ A highly pathogenic strain can kill poultry in less than 48 hours
 - Low pathogenic strains also exist
- ▲ Migratory birds may spread the virus

HAS H5N1 SPREAD TO HUMANS?

- ▲ Human infections primarily involve close contact between people and sick poultry and their feces
- ▲ Human-to-human cases are rare
- ▲ In humans, H5N1 causes sudden and severe respiratory disease
- ▲ The number of confirmed human infections is low, but the mortality rate is high
 - WHO reported 249 confirmed cases and 146 confirmed deaths as of September 25, 2006. For current data see: www.who.int/csr/disease/avian_influenza/en/index.html

WHAT IS A PANDEMIC?

- ▲ An epidemic that occurs on a global scale when there is no immunity to a new virus
- ▲ Influenza pandemics are rare but recurring; occurrences in 1918, 1957, and 1968
- ▲ If H5N1 mutates to a virus form that is easily spread human-to-human, a pandemic could begin

HOW DO VIRUSES MUTATE?

- ▲ Viruses mutate naturally, as a survival mechanism
- ▲ Since viruses are genetically simple, the mutation process is easier
- ▲ Mutation likeliest in one of two ways:
 - A host (person or pig) is infected with both a common human flu strain and a virulent avian flu strain
 - Viruses combine and mutate in the lung of host
 - New virus created that can pass from human to human
 - Multiple point mutations in birds
 - Many mutations occur within birds from a single virus
 - After several mutations, the virus may acquire the ability to infect humans and then pass from human to human

Source: World Health Organization