

## **Avian Influenza Update -- Facts for Consumers**

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### **January 22, 2007: Update on Avian Flu and 4-H Embryology Projects.**

The highly pathogenic strain of Avian Flu is still present in the Asian poultry market place. Cases have been reported in the past 6 months in the countries of Indonesia, China, Azerbaijan and Egypt. Number of human cases of avian influenza worldwide totaled 114 in 2006 with the concentration in Asia, the Middle East and parts of Africa. Not all of the human cases resulted in mortality. Spread of AI has been primarily between backyard flocks and their workers/owners, not through commercial poultry flocks. Commercial flocks are able to employ biosecurity measures to prevent the rapid spread of AI more readily than backyard flocks in these countries. Vaccines are currently being developed for both chickens and humans and are being tested for chickens in China.

On the home front, monitoring for AI in commercial and backyard flocks has been stepped up through federal funding and local state programs. Testing of migratory fowl for AI has also been a focus since migratory birds are a potential way for AI to enter the United States. All hens producing hatching eggs for the commercial poultry industry should be part of a current AI testing program. Eggs you purchase from embryology will come from tested AI-free flocks. Since the highly pathogenic form of AI has not come to the U.S. in the past 3 years while it has existed primarily in Asia, it is highly unlikely to be here in the very near future. If it does come to the U.S., the poultry industries' aggressive testing program will identify it quickly and will quarantine infected flocks.

As your students start their embryology projects, it is important to alleviate their fears of Bird Flu and to not associate a risk for bird flu with conducting their projects. There are a number of good resource websites if teachers would like to do more research on this topic. A good one is: <http://www.avianinfluenza.info/> which addresses mostly consumer issues about how bird flu affects the poultry products we eat.

If anything new develops on the risk of AI in U.S. poultry flocks, the county extension offices will be immediately notified by the State Extension Poultry Specialist. In the meantime, you may all feel safe and hopefully well-informed to conduct and enjoy the science of embryology.

### **\*\*\*\*Earlier Update\*\*\*\***

Avian Influenza (AI), bird flu, is a virus that can affect a number of species of animals, primarily wild birds and poultry. There are two types of AI in poultry: low pathogenic avian influenza (LPAI) and highly pathogenic avian influenza (HPAI). The type of AI in the news lately is a HPAI strain H5N1. This particular strain causes high mortality in the flocks it infects and can be seriously harmful to humans contracting it while working with sick poultry. Fortunately, this strain has not reached North or South America and seems to be concentrated in Asia with some spread to Europe, the Middle East and Africa. The likelihood of this strain of AI making it to the United States is not strong but a remote possibility does exist.

The U.S. poultry industry and USDA government agencies have taken proactive steps to protect our poultry and egg food source from AI. Some of those measures include:

- 1) Wild Bird Surveillance: The federal government is sampling migratory birds to provide early warning of any appearance of HPAI in North America.
- 2) Strict biosecurity measures for commercial poultry farms. Protection of commercial flocks producing eggs and poultry meat from contact with wild birds.

3) Commercial poultry industry flock testing for avian influenza before products are marketed. If a flock is tested positive for AI, further tests are conducted to determine if the AI is H5N1/H7. If it were to be positive, these flocks would be immediately euthanized and product will not enter the market place.

4) Food Safety: AI virus is killed by cooking poultry (chicken, turkey, duck, eggs, etc.) to 165 degrees Fahrenheit. Infected product will not enter the food chain with the precautions being taken by the commercial poultry industry.

5) Wild game (duck, goose) obtained by hunters should be handled carefully when processing them at home. Clean hands, utensils and surfaces with hot soapy water before and after processing. A sanitizing solution of 1 teaspoon chlorine bleach per gallon of water is recommended for sanitizing food surfaces and utensils after cleaning with hot soapy water and rinsing. Wild game should be cooked to 165 degrees to destroy any pathogen or AI virus, if present. If home processing one's own domestic birds, the same precautions exist.

The population most susceptible to bird flu, are the workers on farms where the disease is present. Most of the human cases in Asia have occurred with small flocks where sanitation procedures were lacking. The evidence for human to human transmission of HPAI is also not concrete.

In summary, the U.S. poultry industry and USDA are taking rational, scientific precautions to keep HPAI out of our food supply. The likelihood of an AI pandemic in North America is at a minimum risk level at this time.