FAQs on Avian Influenza and “bird flu” for Georgians

What is avian influenza and “bird flu”?
Like humans, birds have naturally occurring influenza (flu) viruses. There are numerous types of avian influenza viruses that are carried by wild bird species throughout the world, but these viruses do not cause disease in these birds. Occasionally, some of these viruses can infect domestic birds such as poultry, but typically we do not see direct transmission of avian influenza viruses from birds to humans. “Bird flu” is a non-scientific term that refers to a specific virus (H5N1) that has been present in domestic birds in Asia since 1997. This particular virus has been associated with some human infections.

What kinds of birds does avian influenza infect?
Naturally occurring avian influenza viruses in wild birds are generally associated with waterfowl (ducks and geese), gulls, and some species of shore birds and typically do not cause illness in these birds. The viruses occasionally “jump” from these wild birds to domestic birds such as chickens, quail and turkeys. In some cases these viruses can cause severe disease in domestic birds, but in general this requires viral adaptations that occur over time in domestic bird populations. This is the case with the highly pathogenic H5N1 virus (“bird flu”) which has been circulating in domestic birds in Asia at least since 1997. Although this virus probably originated in wild birds, it has mutated and adapted to domestic poultry.

Do we have avian influenza viruses and “bird flu” in the United States?
Yes, avian influenza viruses are found in wild bird populations in North America and occasionally infect domestic poultry. For example, in 2004 outbreaks of avian influenza in US poultry occurred in the New England states and Texas, and were traced to birds from live bird markets. These outbreaks were not caused by the same "bird flu" virus (H5N1) that is currently circulating in Asia. The U.S. outbreaks were quickly contained and there was no impact on human health. To date, the H5N1 “bird flu” virus has not been detected in the U.S. or any country in the western hemisphere.

Do we have avian influenza viruses in Georgia?
Avian influenza viruses have occasionally been isolated from wild birds in Georgia, but we have not had any recent outbreaks in domestic poultry. Furthermore, Georgia does not have live bird markets like those associated with outbreaks in other states.

What is unique about the H5N1 virus currently circulating in Asia?
The H5N1 virus has been uniquely difficult to control in Southeast Asian poultry flocks. Despite the depopulation (euthanasia) of millions of domestic birds in affected countries, the virus continues to spread to other domestic birds. In addition, the H5N1 virus spreading among birds in Asia has caused illness among 117 people and resulted in 60 human deaths (as of October 10, 2005). The infection of humans with an H5 virus is rare; the influenza viruses that normally infect humans are H1 and H3 subtypes, specifically H1N1, H1N2, and H3N2. Another unique aspect of the H5N1 (“bird flu”) virus is that it has caused wild bird mortality. This is unprecedented, and it is not known whether these infections are from wild bird contact with infected poultry or if it is actually being transmitted by wild birds. Numerous studies are ongoing to help answer this question.

How have people gotten infected with the H5N1 virus?
Infected birds shed large numbers of virus in their saliva, nasal secretions and feces. Human illness has resulted from direct contact...
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with birds and their feces or with environments contaminated with infected bird feces. In areas that have had human illness with the H5N1 virus it is fairly common to have chickens roaming free and potentially contaminating the environment. Children who play in a contaminated environment have been at risk of infection. In addition, because families often depend upon these birds for income and sustenance, they often butcher sick birds and consume them. Hand butchering sick birds exposes people to high levels of the virus. Sustained human to human spread of the H5N1 virus has not occurred. All human cases of H5N1 infections have been restricted to Asia.

Does the virus travel easily from birds to humans?
No, the number of people that have become ill with bird flu is very small considering the size and duration of the outbreak among domestic birds and the large number of persons who have been exposed.

How is an avian influenza outbreak among birds different than an influenza pandemic?
An influenza outbreak among birds occurs when the virus causes serious illness or death and is spread from bird to bird. If the avian virus is contagious to people, then humans may inadvertently become infected due to exposure to sick birds. An influenza pandemic can occur when the avian virus infecting humans changes and then spreads easily from person to person. This results in an epidemic over a wide geographical area, usually over more than one continent, or a pandemic.

What is the risk of the H5N1 virus currently circulating in Asia to cause a worldwide pandemic?
Flu viruses are constantly changing over time. The H5N1 virus could become a pandemic strain in one of two ways: 1) it could exchange genetic material from a human flu virus and acquire the ability to easily transmit between people; or 2) it could mutate over time and adapt to human cells. This second process would likely happen over the course of several years.

How is H5N1 spreading in Asia?
The H5N1 virus is spread between birds through contact between an uninfected bird and an infected bird’s saliva, nasal secretions, or feces. The movement of infected poultry, contaminated poultry equipment, or people with virus-contaminated clothing or shoes results in the international movement of the H5N1 virus. Historically, the movement of poultry-adapted avian influenza strains does not involve wild birds. Recently, there has been some evidence that migratory waterfowl may have spread the Asian H5N1 “bird flu” virus to domestic poultry across national borders, but the mechanism of this spread is not yet fully understood and it is unknown if this virus will remain in wild bird populations once they are infected.

What is the risk of H5N1 arriving in Georgia?
The risk of H5N1 infection among birds in Georgia is very low. No poultry or poultry products from countries affected with avian influenza are legally allowed to enter the U.S. In addition, there is no overlap of migratory pathways between any wild birds in Georgia and Asia. Travelers from affected countries could possibly introduce the virus to the United States through inadvertent or intentional movement of the H5N1 virus or infected birds.

If I see a dead bird in Georgia, is it likely to have bird flu?
There is surveillance for avian influenza among shorebirds, waterfowl, and poultry in the Southeast and Georgia, and this will detect

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the “bird flu” virus if present. Other wild birds such as songbirds, crows, or sparrows are not generally infected with avian influenza viruses, so it is not beneficial to include them in a surveillance program. Plans to expand wild bird disease surveillance across the U.S. are underway.

What can I do to protect myself from bird flu?
Travelers to affected countries are advised to avoid poultry farms and live bird markets during their visit. In addition, wild waterfowl or waterfowl showing signs of disease should be avoided in these countries. Although birds in Georgia are unlikely to be infected with bird flu, it is always a good idea to avoid contact with birds showing signs of disease. People who raise waterfowl or poultry should immediately report any suspicious disease in their birds to their flock supervisor or veterinarian. Those with pet birds, such as parrots, cockatiels, love birds or budgies should not worry about their pets getting “bird flu” if they have not been out of the country or in contact with birds from other countries.

Will the human seasonal influenza virus vaccine protect me against bird flu?
No, the human influenza vaccine currently available does not protect against bird flu viruses. Clinical trials are underway now for a human vaccine to protect against the “bird flu”.

Should I be stockpiling Tamiflu® or other antivirals to protect myself against bird flu or pandemic influenza?
No, it is not recommended that citizens stockpile antiviral drugs to protect against “bird flu” or pandemic influenza. The antivirals have limited usefulness in the prevention of flu, and the virus is capable of becoming resistant over time. Stockpiling Tamiflu® or other antiviral medications will also reduce already-limited supplies for the elderly and others at high risk for contracting seasonal influenza. Consequently, Tamiflu® and related drugs should only be administered under the guidance of a health care provider.

How is Georgia preparing for bird flu and a potential pandemic?
The Georgia Department of Human Resources, Division of Public Health and the Georgia Department of Agriculture are taking part in a number of prevention and preparedness activities, which include:

- The Georgia Poultry Laboratory assists with routine surveillance for H5 or H7 viruses in Georgia poultry
- Providers throughout the State of Georgia participate in the U.S. Influenza Sentinel Provider Surveillance Network
- Georgia is in the final stages of developing action plans for both Highly Pathogenic Avian Influenza and Pandemic Influenza. These plans provide the framework for state and local activities in the event of an outbreak in Georgia.
- Table top exercises including several state agencies and local public health have been conducted to evaluate Georgia’s preparedness for a bird flu outbreak
- Laboratory capacity to detect novel flu subtypes among humans is being expanded in Georgia
- An inhome hospital care plan is in under development. This plan will limit the opportunity for spread of a pandemic virus among persons seeking health care.

For more FAQs on bird flu in animals and humans:
http://www.cdc.gov/flu/avian/

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