Avian Influenza

Background Avian Influenza, or bird flu, is caused by type A influenza viruses that occur naturally among birds and poultry. There are many different subtypes of type A influenza viruses. Currently, the avian influenza virus of concern is H5N1 subtype and is highly contagious within domestic bird and poultry populations.

Infected birds shed influenza virus in their saliva, nasal secretions, and feces. As a result, domesticated birds and poultry may become infected through direct contact with infected fecal material or through contact with surfaces (such as dirt or cages) or materials (such as water or feed) that have been contaminated with the virus.

Human Risk There is concern that the H5N1 virus will adapt over time to infect and spread person-person, potentially causing a pandemic (a global disease outbreak). A flu pandemic occurs when a new influenza virus emerges for which people have little or no immunity and for which there is no vaccine. The disease spreads easily, causes serious illness, and can move around the world in a very short time.

To date, most cases of human infection can be traced to close contact with infected poultry, such as domesticated chicken, ducks, and turkeys. According to the World Health Organization, a recent cluster of cases within an Indonesian family involved "close and prolonged exposure" to another infected person, suggesting person-to-person transmission. However, such transmission is thought to have occurred in only a very few cases, and did not continue beyond the victim's immediate contact.

The United States Centers for Disease Control and Prevention and the World Health Organization are monitoring and detecting influenza activity worldwide for the emergence of possible pandemic strains of influenza virus. The H5N1 virus has not yet appeared in the US. Should in appear in the US, it does not automatically mean there is a pandemic. Health officials consider the risk to Americans from the current H5N1 avian influenza outbreak to be low unless they travel to the countries most heavily infected.

Avian Risk Should the H5N1 strain reach the US, the animals most at risk would be poultry raised outdoors (such as free-range grower's farm, a backyard farm, or in an outdoor coop in an urban environment) who might be exposed to droppings from migratory birds carrying the virus.

Precautions for Animals and Humans Poultry owners should try to keep birds such as chickens, ducks and turkeys in a screened area and restrict visits from owners of birds with any illness. Keep pet birds indoors and don't allow contact with other birds.

In Asia, tigers and leopards have been infected with the virus. In Europe, a stone marten (a weasel-type mammal) and domesticated cats have become ill after consuming infected birds. Although cats are susceptible to the virus, it is unlikely that they would act as a reservoir for transmitting the virus to others. Keeping companion pets inside when possible and keeping an eye on what they might be consuming outside is their best

protection. Talk to your veterinarian if you are concerned about your pet and its potential risk from this virus.

The avian influenza virus is destroyed by heat, so it is safe to eat thoroughly cooked (to 165 degrees F) poultry and eggs. Clean food preparation surfaces with hot, soapy water to eliminate any residue after use. Wash your hands frequently and use waterless alcohol-based hand gels when soap and water is not available.

Treatments Currently, there is no commercially available vaccine for either human or pets, but research and development are underway in both areas. Antiviral drugs and supportive care would likely be the first line of treatment for humans.