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The Branch Hillsdale-St. Joseph Community Health Agency

An update on Avian Influenza (Bird Flu). Portions of this article take from BBC News Service and the CDC web site.

What is happening with that Bird flu we heard so much about last year?

China has sent three million doses of bird flu vaccine to western Qinghai province after migrating wild geese were found there killed by the virus. Poultry across the remote province had become the "target of a compulsory vaccination campaign", the state-run China Daily newspaper reported. In May of 2005 China ordered nationwide emergency measures to try to stop the spread of the disease. The virus has killed at least 53 people in South East Asia since late 2003. Tests confirmed that 178 geese found dead in Qinghai province had been infected with the H5N1 bird flu virus, China's official media reported. The agriculture ministry said the dead birds were found in early May on Bird Island, a research centre and wildfowl reserve popular with tourists on the shores of Lake Qinghai. Some are believed to have migrated from South East Asia, but officials did not give any details. China's most recent confirmed case of bird flu occurred last July in the east of the country, although there have been no cases in China of humans being infected with the virus.

The H5N1 strain of bird flu has been confirmed in eight South East Asian countries since 2003, including Vietnam, Thailand and Cambodia, where people have died from it. The World Health Organization has warned of the great potential threat should the virus develop the capacity to spread more easily between humans. An expert from China's national bird flu reference laboratory, Cui Shangjin, told the official Xinhua news agency that "people need not be too worried" as the controls introduced should be effective. The emergency measures include banning people from habitats of migratory birds, immunizing poultry raised near habitats and routes of migratory birds, and introducing quarantine measures in Qinghai.

The current outbreak of avian influenza A (H5N1) among poultry in Asia is an example of a bird flu outbreak that has caused human infections and deaths. In such situations, people should avoid contact with infected birds or contaminated surfaces, and should be careful when handling and cooking poultry.

Outbreaks of influenza H5N1 occurred among poultry in eight countries in Asia (Cambodia, China, Indonesia, Japan, Laos, South Korea, Thailand, and Vietnam) during late 2003 and early 2004. At that time, more than 100 million birds in the affected countries either died from the disease or were killed in order to try to control the outbreak. By March 2004, the outbreak was reported to be under control. Beginning in late June 2004, however, new deadly outbreaks of influenza H5N1 among poultry were reported by several countries in Asia (Cambodia, China, Indonesia, Malaysia, Thailand, and Vietnam). It is believed that these outbreaks are ongoing. Human infections of influenza A (H5N1) have been reported in Thailand, Vietnam and Cambodia.

Is it common for this type of virus to affect humans?

The H5N1 virus does not usually infect humans. In 1997, however, the first case of spread from a bird to a human was seen during an outbreak of bird flu in poultry in Hong Kong. The virus caused severe respiratory illness in 18 people, 6 of whom died. Since that time, there have been other cases of H5N1 infection among humans. Most recently, human cases of H5N1 infection have occurred in Thailand, Vietnam and Cambodia during large H5N1 outbreaks in poultry. The death rate for these reported cases has been about 50 percent. Most of these cases occurred from contact with infected poultry or contaminated surfaces; however, it is thought that a few cases of human-to-human spread of H5N1 have occurred. So far, spread of H5N1 virus from person to person has been rare and spread has not continued beyond one person. However, because all influenza viruses have the ability to change, scientists are concerned that the H5N1 virus could one day be able to infect humans and spread easily from one person to another. Because these viruses do not commonly infect humans, there is little or no immune protection against them in the human population. If the H5N1 virus were able to infect people and spread easily from person to person, an “influenza pandemic” (worldwide outbreak of disease) could begin. No one can predict when a pandemic might occur. However, experts from around the world are watching the H5N1 situation in Asia very closely and are preparing for the possibility that the virus may begin to spread more easily and widely from person to person.

How is infection with H5N1 virus in humans treated?

The H5N1 virus currently infecting birds in Asia that has caused human illness and death is resistant to amantadine and rimantadine, two antiviral medications commonly used for influenza. Two other antiviral medications, oseltamavir and zanamavir, would probably work to treat flu caused by the H5N1 virus, though studies still need to be done to prove that they work.

Is there a vaccine to protect humans from H5N1 virus?

There currently is no vaccine to protect humans against the H5N1 virus that is being seen in Asia. However, vaccine development efforts are under way. Research studies to test a vaccine to protect humans against H5N1 virus began in April 2005. (Researchers are also working on a vaccine against H9N2, another bird flu virus subtype.)

Stay tuned.