

Avian Influenza

About Avian Influenza viruses and the HPAI H5N1 strain

11/23/05



Recently hunters and wildlife enthusiasts have been asking about avian influenza (AI), which is also referred to as "bird flu". Avian influenza viruses are relatively common in wild birds world-wide. However, one strain of avian influenza virus known as highly pathogenic avian influenza (HPAI H5N1) has affected birds and humans in Asia and recently has received considerable media attention. **HPAI H5N1 has NOT been detected anywhere in North America, including Colorado.** At present, the likelihood of HPAI H5N1 occurring in wild birds in Colorado is very low.

- "Bird flu" viruses have been isolated from over 100 species of wild birds world-wide. Specific strains are distinguished by their "H" and "N" subtypes. **None of the avian influenza viruses isolated from wild birds in North America have been associated with illness or death in any wild bird species, or in humans.**
- **Highly pathogenic avian influenza (HPAI) viruses are strains that cause high mortality in domestic poultry,** and are usually of the H5 and H7 subtypes.
- **Not all H5 and H7 subtypes are highly pathogenic.** In fact, there are even H5N1 strains that are not highly pathogenic.
- The **HPAI H5N1** strain of recent interest emerged in Asia and has persisted at least since 1997. It is established in domestic poultry flocks in Asia, primarily chickens and domestic ducks.
- In 1997, a human death resulting from HPAI H5N1 infection in Hong Kong was reported; since that time, over 100 human cases have been reported with approximately 60 fatalities. To date, all human cases of HPAI H5N1 have occurred in Asia, and almost all of these cases have been linked to sustained, direct contact with infected poultry.
- In 2002/2003, wild bird mortality in Hong Kong was attributed to infection with HPAI H5N1. Wild bird mortality associated with HPAI H5N1 has continued through 2005, and the current geographic distribution suggests possible movement of this virus via migratory birds on other continents.
- **There is no evidence to suggest that an HPAI H5N1 virus is present in Colorado, or anywhere else in North America.**

What is the Division of Wildlife doing about Avian Influenza?

In response to reports of the emerging HPAI H5N1 strain causing deaths in wild birds in Asia, including some migratory species, government agencies are stepping up their efforts to watch for the disease in wild birds in North America. The Colorado Division of Wildlife will be working with other state and federal wildlife management and animal health agencies as a cooperator in more expansive surveillance efforts planned for improving our understanding about avian influenza viruses in North America.

In addition to surveys specifically targeting avian influenza viruses, **the Colorado Division of Wildlife routinely responds to and investigates unusual cases of mortality and disease outbreaks in**

wild birds and mammals statewide. To report die-offs in wildlife anywhere in Colorado, please contact your local Colorado Division of Wildlife Service Center.

- **Hunters can view results of national surveillance at the following website:**
<http://wildlifedisease.nbio.gov/ai/>

What do hunters need to know about avian influenza?

Based on advice from public health officials, hunters should not be overly concerned about HPAI H5N1 at the present time. As always, however, hunters should take common sense precautions for proper hygiene when handling and preparing game bird carcasses, just as recommended for all game handling. These basic precautions are recommended:

- Do not handle birds that are obviously sick or birds found dead. **Report die-offs in wildlife anywhere in Colorado to your local** Colorado Division of Wildlife Service Center.
- Keep your game cool, clean, and dry.
- Do not eat, drink, or smoke while dressing game.
- Use rubber or disposable gloves when cleaning game.
- Wash your hands with soap and water or alcohol wipes after dressing game.
- Clean all tools and surfaces immediately afterward; use hot soapy water then disinfect with a 10% chlorine bleach solution.
- Cook game meat thoroughly (155-165 degrees Fahrenheit) to kill disease organisms and parasites. Do not eat any raw portions of wild game.

Websites

The websites below provide more details as well as additional links to sites with information about avian influenza viruses and HPAI H5N1:

Avian Influenza in Wild Birds

- US Fish & Wildlife Service
<http://www.fws.gov/migratorybirds/issues/AvianFlu/WBAvianFlu.htm>
- Alaska Science Center/USGS
http://www.alaska.usgs.gov/science/biology/wandering_wildlife/
- National Wildlife Health Center/USGS
http://www.nwhc.usgs.gov/disease_information/avian_influenza/index.jsp
- Southeastern Cooperative Wildlife Disease Study, University of Georgia
<http://www.uga.edu/scwds/avianinfluenzainformation.html>

Information for Hunters

- Alaska Dept of Fish and Game
http://www.adfg.state.ak.us/news/avian_bulletin_9-30-05.pdf

Public Health Information

- Colorado Department of Public Health and Environment
<http://www.cdphe.state.co.us/dc/influenza/avian/>
- Centers for Disease Control and Prevention
<http://www.cdc.gov/flu/avian/gen-info/facts.htm>