Avian Influenza in a Wild Bird in South Carolina

Summary

On Friday, January 14, 2022, the United States Department of Agriculture (USDA) announced that a wild bird, an American wigeon, in Colleton County, South Carolina tested positive for highly pathogenic Eurasian H5 avian influenza (HPAI). The wild bird was harvested by a hunter and was tested as part of the USDA Wildlife Services (WS) National Wild Bird Avian Influenza Surveillance in Waterfowl program. On Tuesday, January 18, 2022, USDA released a second announcement that two additional wild birds – another in Colleton County, South Carolina and one in Hyde County, North Carolina – also tested positive for HPAI. All three wild birds have been determined to have H5N1 HPAI. These findings are not unexpected. The purpose of the waterfowl surveillance program is to detect wild birds infected with HPAI which can then be carried to new areas when they migrate. Wild birds can be infected with HPAI and show no signs of illness. It’s possible additional wild birds with HPAI may be reported in the coming weeks. The full USDA announcements can be viewed at https://www.aphis.usda.gov/aphis/newsroom/stakeholder-info/sa_by_date/sa-2022/hpai-sc and https://www.aphis.usda.gov/aphis/newsroom/stakeholder-info/sa_by_date/sa-2022/hpai-detections-sc-nc.

Clemson Livestock Poultry Health also released an announcement on Friday, January 14, 2022 in collaboration with the South Carolina Department of Natural Resources and South Carolina Department of Health and Environmental Control (DHEC) about the initial wild bird in SC with HPAI. Information about biosecurity on poultry farms was emphasized in addition to providing prevention information for hunters. The full announcement can be viewed at https://news.clemson.edu/avian-influenza-confirmed-in-south-carolina/.

Avian influenza refers to the disease caused by infection with avian influenza type A viruses. These viruses occur naturally among wild aquatic birds worldwide and can infect domestic poultry and other bird and animal species. Avian influenza viruses do not normally infect humans and the risk to the general public from HPAI H5N1 infections is considered to be low. However, sporadic human infections with avian influenza viruses have occurred and persons who have direct contact with wild birds may be at risk. The reported signs and symptoms of avian influenza A virus infections in humans have ranged from mild to severe and included conjunctivitis, influenza-like illness (e.g., fever, cough, sore throat, muscle aches) sometimes accompanied by nausea, abdominal pain, diarrhea, and vomiting, severe respiratory illness (e.g., shortness of breath, difficulty breathing, pneumonia, acute respiratory distress, viral pneumonia, respiratory failure), neurologic changes (altered mental status, seizures), and the involvement of other organ systems. The term highly pathogenic refers to the virus’ ability to cause disease in domestic
chickens and does not refer to disease severity in people. To date, there have been no human infections with HPAI H5N1 viruses reported in the United States.

Recommendations

- It is not recommended to routinely test patients with influenza-like illness for avian influenza. COVID-19 and seasonal influenza are currently circulating at high rates and are more likely to be the cause of illness in patients presenting with respiratory illness.

- Ask patients presenting with respiratory illness (or other potential symptoms of avian influenza as described above) about any potential contact with wild birds, including wild ducks, in the 10 days prior to illness onset.

- If a patient presenting with respiratory illness (or other potential symptoms of avian influenza as described above) had direct exposure to wild birds within the 10 days prior to their illness onset, please contact the Regional Public Health Office in the county where the patient resides (see contact information listed below) to discuss potential submission of clinical specimens to the DHEC Public Health Laboratory (PHL) to ensure testing is performed in the appropriate laboratory setting.

- Testing for novel influenza A viruses, including avian influenza H5, is available through the PHL.
  - Testing for avian influenza should occur in a Biosafety Level 3 laboratory. Therefore, if it’s determined that a patient should be tested for avian influenza, facilities should collect specimens for testing at PHL before testing other respiratory specimens in their facility to avoid potential laboratory exposures.
  - If a determination is made to test a patient for avian influenza after consultation with DHEC, collect two (2) nasopharyngeal swabs as soon as possible after symptom onset and place in separate vials with 1-3 mL of viral transport medium.
    - Additionally, for patients with lower respiratory tract illness, collect a lower respiratory specimen; sputum, endotracheal aspirate or bronchoalveolar lavage fluid are preferred specimen types. Place these specimens in viral transport medium.
    - If all specimens test negative, additional specimens may need to be collected to increase the potential for virus detection.
  - Swabs with a synthetic tip (e.g., polyester or Dacron) and an aluminum or plastic shaft must be used for specimen collection. Calcium alginate, swabs with cotton tips, or swabs with wooden shafts are not acceptable.
  - Refrigerate specimens after collection and ship on ice packs. If specimens are not able to be delivered to PHL within 72 hours after specimen collection, specimens must be frozen at -70°C and shipped on dry ice.
  - Ensure appropriate precautions are taken when patient samples are collected. Standard, contact, and airborne precautions are recommended for patient management and respiratory specimen collection.
  - Patients should be advised to isolate from others pending their test results.

- Prevention information for hunters and others who have direct contact with wild birds includes using gloves when handling wild birds, dressing game birds in the field whenever possible, washing hands with soap and water after contact with wild birds, and changing clothing before having any contact with healthy domestic poultry and birds. More information can be found at https://www.aphis.usda.gov/publications/animal_health/2015/fsc_hpai_hunters.pdf.
Resources for Additional Information

USDA Announcement of HPAI in a Wild Bird from South Carolina – January 14, 2022

Clemson University Livestock Poultry Health Announcement of Avian Influenza in South Carolina – January 14, 2022
https://news.clemson.edu/avian-influenza-confirmed-in-south-carolina/

USDA Announcement of Additional HPAI Findings in Wild Birds – January 18, 2022

Centers for Disease Control and Prevention (CDC) General Avian Influenza Information
https://www.cdc.gov/flu/avianflu/index.htm

CDC Avian Influenza Current Situation Summary

CDC Interim Guidance for Testing, Specimen Collection, and Processing for Patients with Suspected Infection with Novel Influenza A Viruses with Potential to Cause Severe Disease
https://www.cdc.gov/flu/avianflu/severe-potential.htm

USDA Fact Sheet: Guidance for Hunters – Protect Yourself and Your Birds from Avian Influenza

DHEC contact information for reportable diseases and reporting requirements

Reporting of Avian Influenza is consistent with South Carolina Law requiring the reporting of diseases and conditions to your state or local public health department. (State Law # 44-29-10 and Regulation # 61-20) as per the DHEC 2022 List of Reportable Conditions available at:

Federal HIPAA legislation allows disclosure of protected health information, without consent of the individual, to public health authorities to collect and receive such information for the purpose of preventing or controlling disease. (HIPAA 45 CFR §164.512).
### Regional Public Health Offices – 2022

Mail or call reports to the Epidemiology Office in each Public Health Region

#### MAIL TO:

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<thead>
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<th>Lowcountry</th>
<th>Midlands</th>
<th>Pee Dee</th>
<th>Upstate</th>
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</table>
| 4050 Bridge View Drive, Suite 600  
N. Charleston, SC 29405  
Fax: (843) 953-0051 | 2000 Hampton Street  
Columbia, SC 29204  
Fax: (803) 576-2993 | 1931 Industrial Park Road  
Conway, SC 29526  
Fax: (843) 915-6506 | 200 University Ridge  
Greenville, SC 29602  
Fax: (864) 282-4373 |

#### CALL TO:

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| Allendale, Bamberg, Beaufort, Berkeley, Calhoun, Charleston, Colleton, Dorchester, Hampton, Jasper, Orangeburg  
Office: (843) 441-1091  
Nights/Weekends: (843) 441-1091 | Aiken, Barnwell, Chester, Edgefield, Fairfield, Kershaw, Lancaster, Lexington, Newberry, Richland, Saluda, York  
Office: (888) 801-1046  
Nights/Weekends: (888) 801-1046 | Clarendon, Chesterfield, Darlington, Dillon, Florence, Georgetown, Horry, Lee, Marion, Marlboro, Sumter, Williamsburg  
Office: (843) 915-8886  
Nights/Weekends: (843) 409-0695 | Abbeville, Anderson, Cherokee, Greenville, Greenwood, Laurens, McCormick, Oconee, Pickens, Spartanburg, Union  
Office: (864) 372-3133  
Nights/Weekends: (864) 423-6648 |

For information on reportable conditions, see [https://www.scdhec.gov/ReportableConditions](https://www.scdhec.gov/ReportableConditions)

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DHEC Bureau of Communicable Disease Prevention & Control  
Division of Acute Disease Epidemiology  
2100 Bull St ∙ Columbia, SC 29201  
Phone: (803) 898-0861 ∙ Fax: (803) 898-0897  
Nights / Weekends: 1-888-847-0902

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Categories of Health Alert messages:

- **Health Alert**: Conveys the highest level of importance; warrants immediate action or attention.
- **Health Advisory**: Provides important information for a specific incident or situation; may not require immediate action.
- **Health Update**: Provides updated information regarding an incident or situation; unlikely to require immediate action.
- **Info Service**: Provides general information that is not necessarily considered to be of an emergent nature.