



Global HPAI Update & Are We Ready

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Veterinary Services (VS)

**United Egg Producers (UEP)
*Leadership By Egg Farmers For Egg Farmers***

January 24, 2022





Global HPAI Situation Update

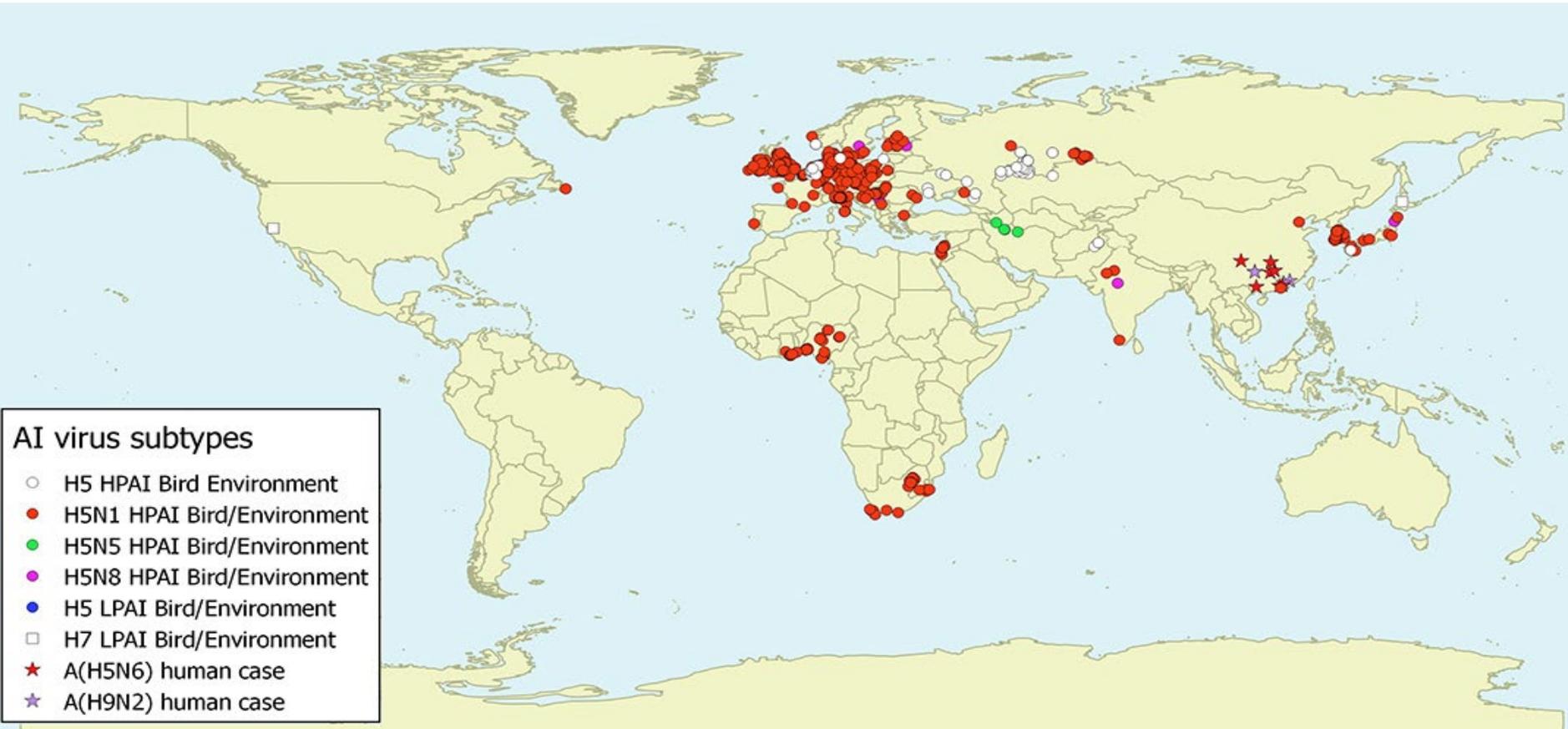
- Since January 2020, multiple strains of highly pathogenic avian influenza viruses have been detected globally in wild birds and poultry.
- The most significant events continue to be caused by the goose/Guangdong H5 HPAI viruses first reported in 1996, with the potential to infect humans, and continue to circulate today.
- These H5 HPAI viruses are distinct from typical H5 and H7 wild bird lineage low pathogenic strains, which have the potential to mutate to HPAI upon introduction into gallinaceous poultry such as chickens and turkeys.
- The goose/Guangdong H5 HPAI virus lineage has become endemic in poultry in some countries, has evolved into multiple genetically distinct clades, and is currently the only HPAI virus maintained largely along Eurasian migratory routes.
- Several waves of H5 HPAI intercontinental transmission have been documented with the most recent occurring in the fall of 2020 and continuing into early 2022.



Global HPAI Situation Update

- Most cases have been found in wild birds and some in captive birds. However, there have also been a few outbreaks in domesticated poultry flocks.
- The wild bird species that tested positive for Highly Pathogenic Avian Influenza (HPAI) virus in the epidemic season that began in October 2020 in Europe: the species identified are fifty-two (n=52), belonging to 12 Orders. Most of the species tested positive to HPAI virus belong to the order Anseriformes
- The H5N8 HPAI clade 2.3.4.4b virus has been confirmed both in Europe and in Asia, in Japan and South Korea.

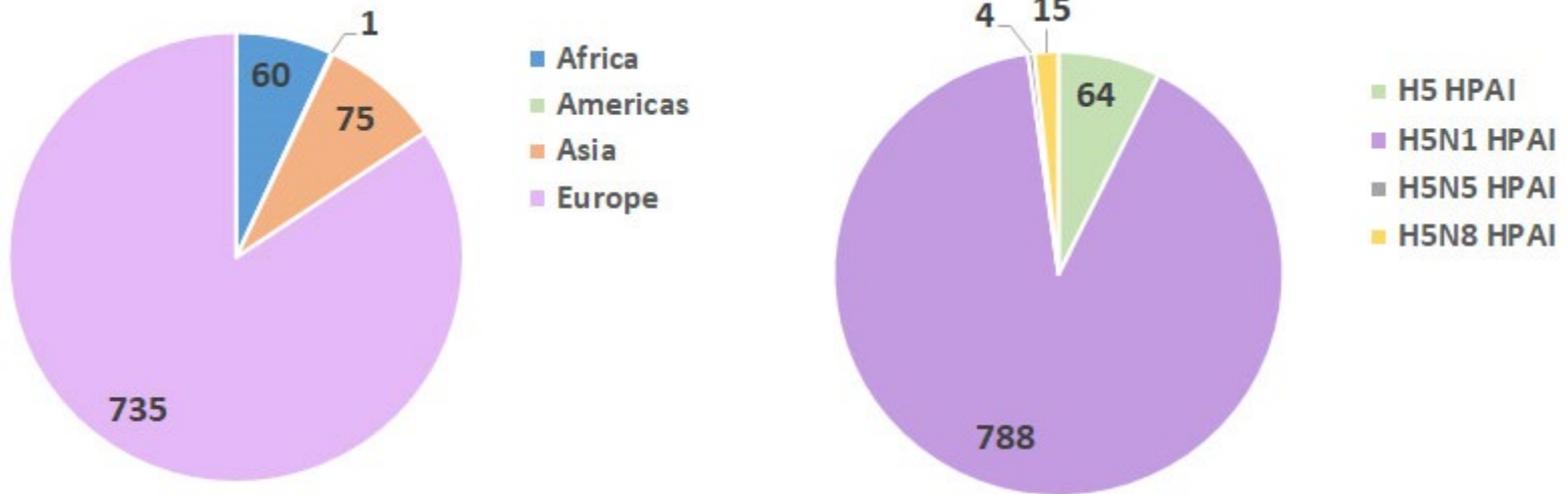
Global distribution of AIV with zoonotic potential* observed since October 01, 2021 (i.e., current wave)



Note: Symbols may overlap for events in similar geographic locations.

*includes H5Nx, H7Nx highly pathogenic avian influenza (HPAI) viruses and H5Nx, H6N1, H7Nx, H9N2, H10N7, H10N8 low pathogenic avian influenza (LPAI).

Distributions of HPAI events observed since October 01, 2021, by subtype (Left) and by region (Right)



HPAI outbreaks in animals officially reported since last update (November 24, 2021): **in total, 651 outbreaks** have been reported in four geographic regions (Africa, Americas, Asia, and Europe) caused H5 HPAI (44), H5N1 HPAI (594), H5N5 HPAI (4), and H5N8 HPAI (9)



H5N1 HPAI Outbreak in Migratory Cranes in the Hula Valley Bird Sanctuary in Israel



Photo: The Washington Post



H5N1 HPAI Outbreak in Migratory Cranes in the Hula Valley Bird Sanctuary in Israel

- Israel is a central stop along the route of many species of birds migrating from Europe and Asia to Africa, a convergence that raises the risk of HPAI spreading from wild birds to captive poultry populations in the country.
- Each year, about 500,000 cranes migrate through Israel, some 30,000 of which stayed to winter over there this year.
- The yearly stopover, often part of journeys lasting thousands of miles, draws the attention of bird enthusiasts, who travel to observe the large, long-legged and long-necked birds.
- [Israeli media outlets](#) reported that the mass culling of chickens has created a shortage of between 15 million and 20 million eggs a month. About [200 million eggs](#) are consumed monthly in Israel.
- HPAI is not common in cranes, but the Gs/GD lineage has been reported in cranes as recent as last year in Japan.



H5 HPAI Detection in Newfoundland Province in Canada on the Avalon Peninsula

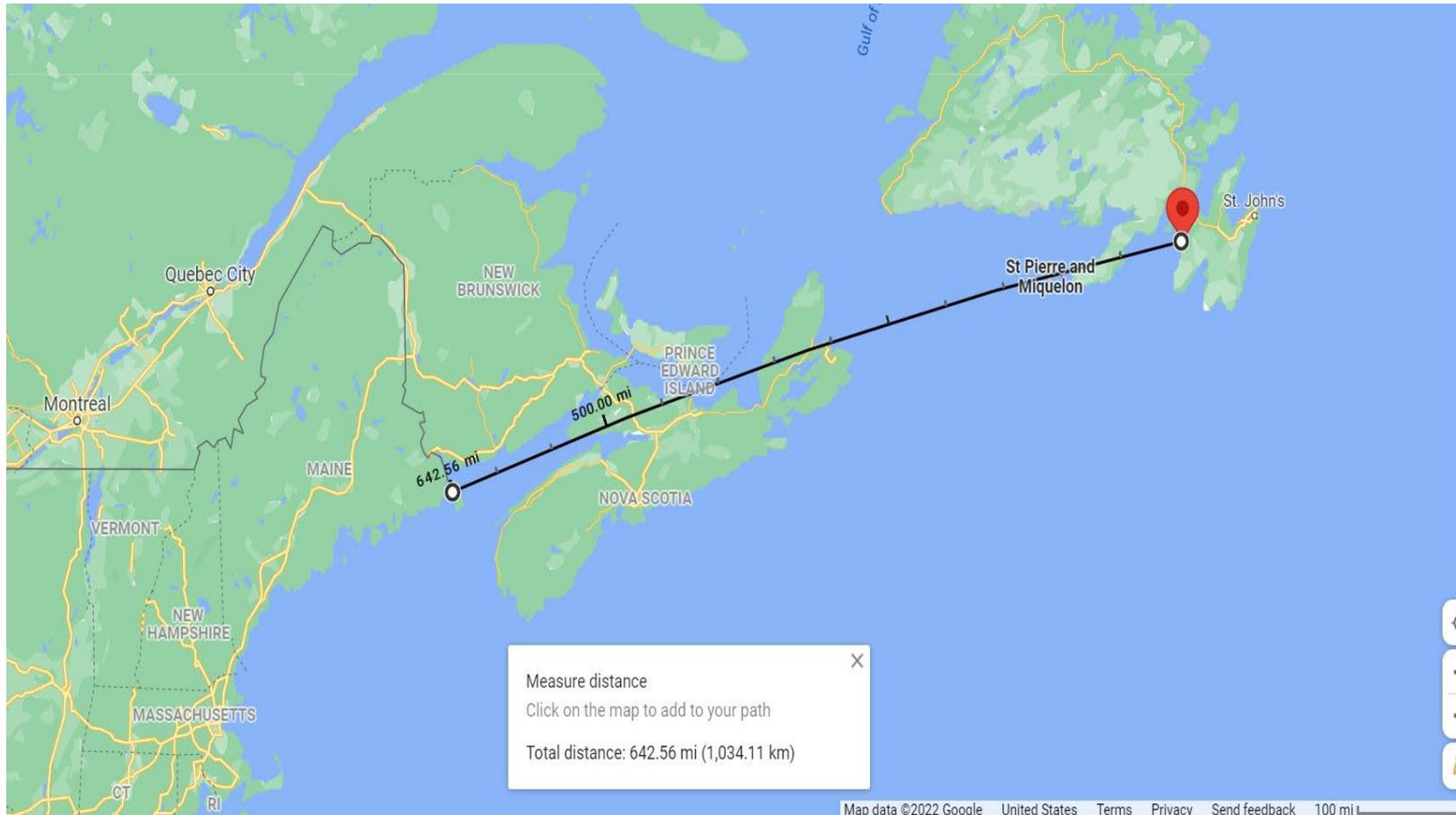


Photo: Dr. Bradley Keough – USDA AVIC -NE States



H5N1 HPAI Case in Canada

- **On December 20, 2021** – Canadian Food Inspection Agency's (CFIA) confirmed Highly Pathogenic Avian Influenza (HPAI) in a flock of mixed exhibition birds (**chicken, turkeys, emus, geese, ducks, guinea fowl and peafowl**) as well as multiple mammalian species in the province of Newfoundland
- **On January 9, 2022**, the Canadian Food Inspection Agency (CFIA) confirmed the presence of high pathogenic Avian Influenza (AI), subtype H5N1, at an additional farm in **the Avalon Peninsula on the island portion of Newfoundland and Labrador. This small flock farm does not produce birds for sale.**
- These detections are considered a non-poultry detection according to the OIE definition.
- Canada's animal health status as 'free from AI' remains in place. No trade restrictions are anticipated as a result of this detection.
- The virus is the same H5 subtype that continues to circulate in Europe and Asia



H5N1 HPAI Case in Canada

- The U.S. does not impose restrictions to movement unless originating in or transiting through affected zones
- Pet birds which import to the U.S. from Canada must have an **import permit and a health certificate**
- 30 days quarantine of pet if originating in or transiting thru a HPAI affected zone
- Notification to the general public posted on USDA website via Stakeholder Alert
- Notification to Canadian pet bird exporters of new US import requirements were posted on Canadian Food Inspection Agency's (CFIA) website



New England Avian Influenza Communications



	MAINE Capital: Augusta Area: 35,385 sq mi/91,646 km ² Population: 1,329,330 inh.
	NEW HAMPSHIRE Capital: Concord Area: 9,351 sq mi/24,217 km ²
	VERMONT Capital: Montpelier Area: 9,616 sq mi/24,923 km ²
	MASSACHUSETTS Capital: Boston Area: 10,555 sq mi/27,336 km ²
	CONNECTICUT Capital: Hartford Area: 5,543 sq mi/14,357 km ²
	RHODE ISLAND Capital: Providence Area: 1,214 sq mi/3,140 km ²

- The New England region is comprised of six small states
- Total area is slightly larger than the state of Washington

Courtesy: Dr. Bradley Keough – USDA AVIC -NE States



New England Avian Influenza Communications

Maine Outreach Efforts

- Communication with wildlife partners (state wildlife agency, as well as USDA WS regional office) about AI detections in domestic birds to stay informed about ongoing surveillance efforts.
- Monthly NESAASA calls include discussions on state and federal wildlife partners enhanced surveillance for avian influenzas and APMV-1 (Newcastle Disease Virus) in the wild bird population in the region
- DACF conducts surveillance in domestic poultry weekly at the Somerset Auction (no detections).
- Conducted outreach to commercial poultry partners through the Poultry Health Advisory Group (PHAC) via a virtual meeting and with regular email updates.
- Communicating to non-commercial poultry flocks through the NPIP program and created a special mailing documenting the Eurasian H5 detection in domestic birds



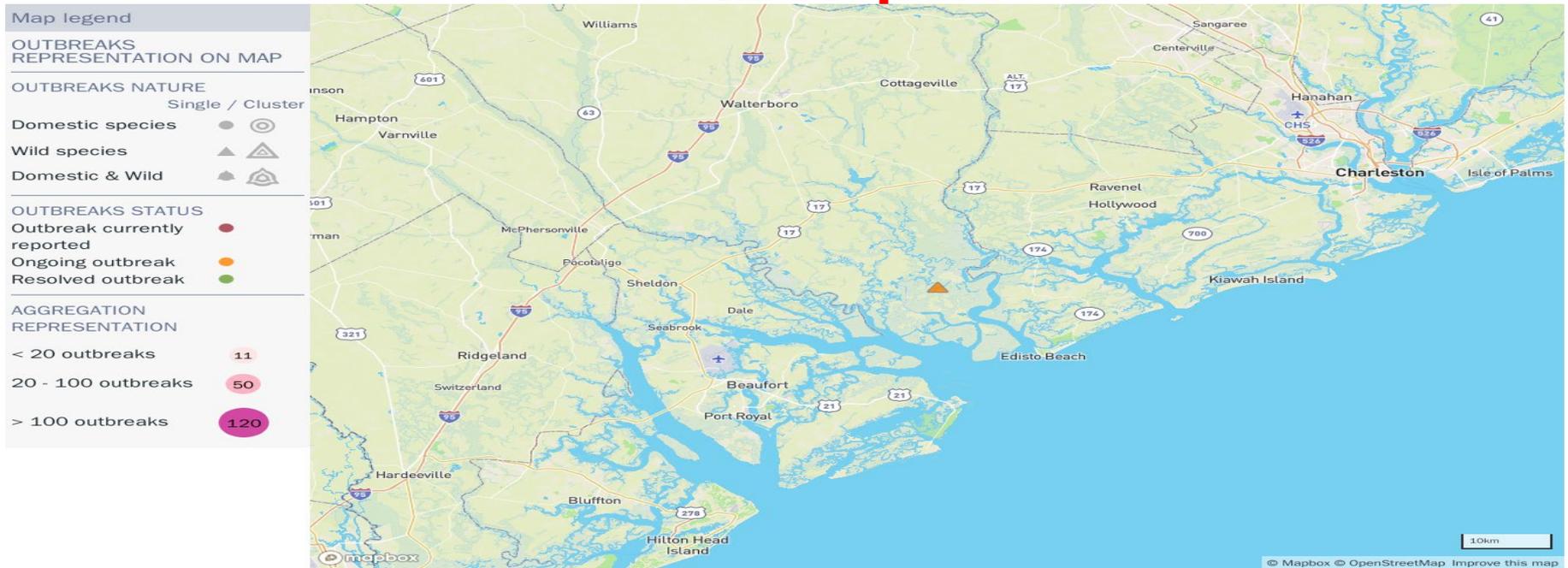
USDA Confirms Highly Pathogenic Avian Influenza in a Wild Bird in South Carolina and North Carolina

- **On January 13, 2022**, the National Veterinary Services Laboratories (NVSL) confirmed goose/Guangdong lineage H5 highly pathogenic avian influenza (HPAI) by partial sequencing of the HA gene from a sample collected as part of the APHIS Wildlife Services Avian Influenza Surveillance in wild birds.
- APHIS WS collected the sample on December 30, 2021, from a hunter harvested **American wigeon in Colleton County, South Carolina**.
- The Clemson Veterinary Diagnostic Center (a member of the National Animal Health Laboratory Network) initially tested the sample and forwarded the non-negative H5 sample to NVSL for confirmation.
- This is the first detection of HPAI in the United States in wild birds since the last detection of H5 2.3.4.4c from a wild bird sample from Alaska in 2016.
- APHIS reported this finding to the World Organization for Animal Health (1/14/2022 at 3:40 PM EST)



USDA Confirms Highly Pathogenic Avian Influenza in a Wild Bird in South Carolina

OIE Report



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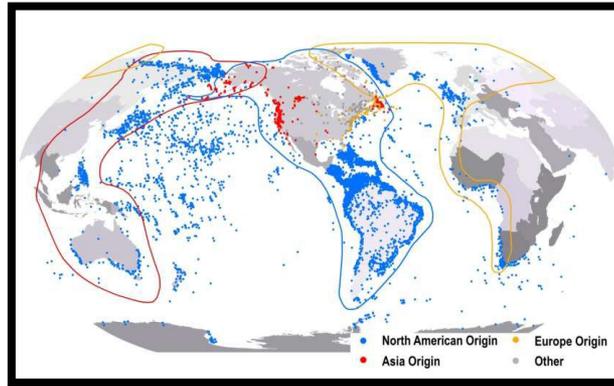


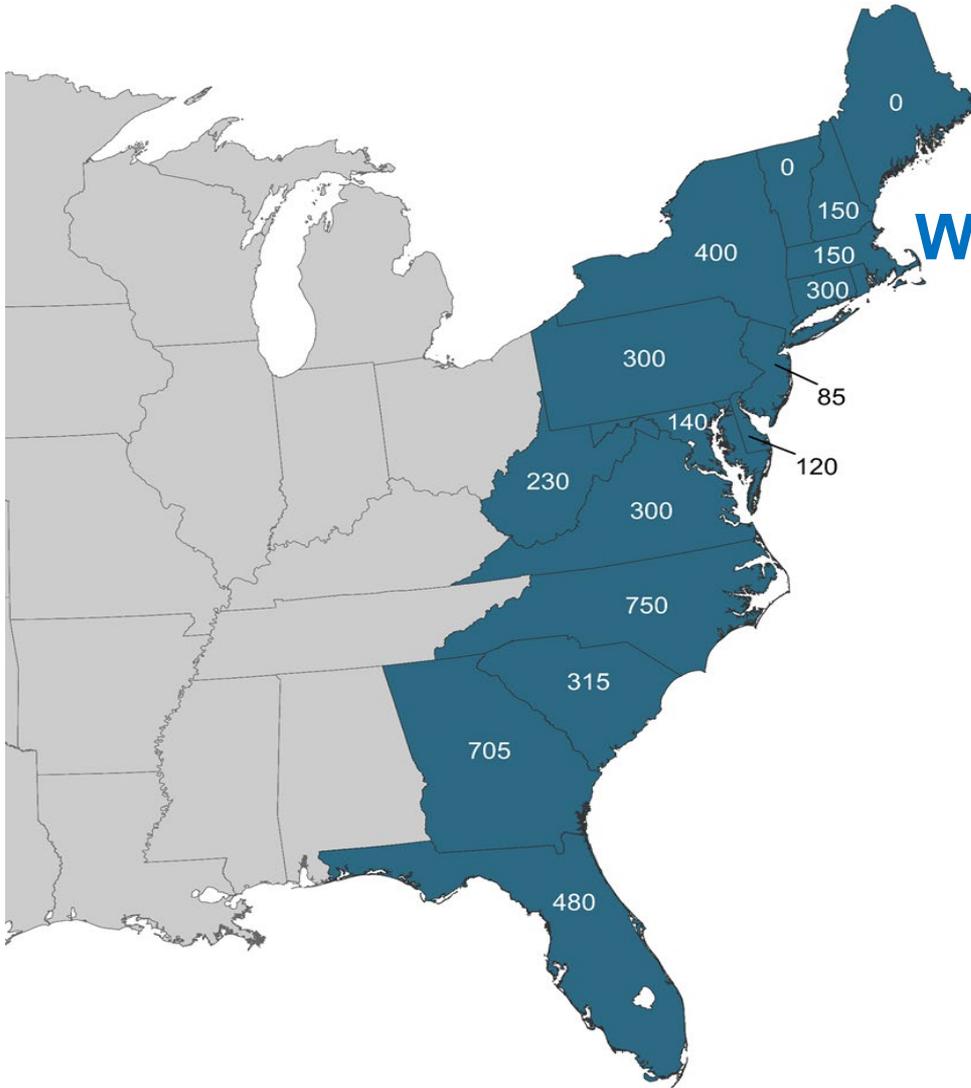
USDA Confirms Highly Pathogenic Avian Influenza in a Wild Bird in South Carolina and North Carolina

- **On January 16**, APHIS confirmed HPAI H5N1 in a **blue-winged teal duck also in Colleton County, South Carolina** as well as a **northern shoveler duck from Hyde County, North Carolina**.
- APHIS' wild bird surveillance testing continues, and APHIS will report additional results as they become available.
- **The World Organization for Animal Health (OIE) code states that the detection of HPAI in birds other than poultry does not change a country's HPAI-free status. Therefore, no country should place additional restrictions on U.S. exports in reaction to the new detections.**
- APHIS provided an initial press release on the South Carolina finding on January 14 and will update the APHIS website with these new wild-bird detections and in any additional states, as needed.



Wild Bird Surveillance





Winter Surveillance Overview

January – March 2022

- **14** states
- Target: **4425**
- Total collected to date: **863**
 - **19.5%** of target
 - H5 Positive: **6.5%**
(LPAI)
 - H7 Positive: **1.3%**
(LPAI)

Courtesy - Dr. Julianna Lench, National Coordinator for the National Wildlife Disease program - USDA, WS.



Current Action Plan

- Focus on winter surveillance
- Other surveillance opportunities
 - Gulls, raptors, geese
 - Agency removals
- Alert State Directors and Wildlife Disease Biologists
- Morbidity/mortality investigations

Courtesy - Dr. Julianna Lench, National Coordinator for the National Wildlife Disease program – USDA, WS.



Partnerships

- WS alongside VS
- Department of Interior
- Interagency Steering Committee for Avian Influenza in Wild Migratory Birds
- Canadian partners



Courtesy - Dr. Julianna Lench, National Coordinator for the National Wildlife Disease program - USDA, WS.



Courtesy - Dr. Julianna Lench, National Coordinator for the National Wildlife Disease program – USDA, WS.

Are We Ready?

- Please Review your Initial State Response and Containment Plan (ISRCP)

- Please Review Guidance Documents 8602 and 8603 which have been updated.
 - The updates include the policies and procedures for response and communications implemented since 2015 as well as links to all the documents needed during a response to request indemnity and compensation.

 - New tables to determine FMV of birds and eggs



Are We Ready?



United States
Department of
Agriculture

HPAI Response
HPAI New State Checklist
July 12, 2017

Please note: These procedures may be revised as the situation continues to change.

IS THERE A PRESUMPTIVE CASE OF HPAI?

- Reference the [H5/H7 Avian Influenza Case Definition](#) if needed.
- Communicate with the Assistant Director and/or District Director, or designee(s), in your VS SPRS District immediately.
- If duplicate samples were collected, ensure you have the tracking information of the sample sent to NVSL; if a sample will be forwarded from a NAHLN laboratory, check on its status and obtain tracking information. If samples still need to be shipped, discuss speed/transport options with your District Director immediately.
 - ◆ For a presumptive positive case of HPAI, APHIS and State response activities begin when the presumptive positive case definition is met; NVSL confirmation is needed for OIE and trade notifications.
- Immediately confer about depopulation with the company/producer involved and appropriate State and APHIS officials (including appropriate method, required equipment and personnel, and other logistics).
 - ◆ APHIS reviews *any* decision by State or industry to use ventilation shutdown. These decisions must involve APHIS and can occur immediately by phone, so that a joint State-APHIS-industry decision can be reached to meet the 24-hour depopulation goal.
- Discuss disposal options of carcasses and other materials (including appropriate method, required equipment and personnel, applicable regulations, etc.).
- Get premises loaded into EMRS2, if your State does not have pre-loaded premises data (loading prior to an incident is strongly preferred, more information is [here](#)).
- NAHLN laboratories need to begin electronic messaging of results immediately, if not already doing so.
- Anyone submitting diagnostic samples *must* ensure that samples have accurate premises ID numbers on samples *and* on sample submission forms.

THEN, REVIEW POLICY GUIDANCE DOCUMENTS FOR RESPONSE...

With the ongoing threat of HPAI, unaffected States should prepare for an Infected Premises in their State. States should be aware of these procedures, processes, and information. If at any time you have a request for relevant documents or guidance available, please ask!



Are We Ready?

- Communication & Coordination**
 - ◆ State Public Affairs, APHIS Legislative and Public Affairs, APHIS Trade Staff, & industry should coordinate timing and content for **ANY** public announcements and bilateral trade notifications.
 - ◆ Calls between relevant parties, including but not limited to appropriate APHIS officials, company officials, and affected States, should begin *immediately*. More communication is almost always better in an outbreak.

- Appraisal and Indemnity Procedures**
 - ◆ Please start with the quick 1-page [Overview of Finance and Administration Procedures](#).
 - ◆ The Appraisal and Indemnity Request Forms for both poultry owners and growers are the first documents that must be signed in order to commence depopulation activities.
 - [Appraisal and Indemnity Request Form Appendix A1: Poultry Owner](#)
 - [Appraisal and Indemnity Request Form Appendix A2: Poultry Grower](#)
 - ◆ Ensure that all information for the VS 1-23 is collected as soon as possible.

- Depopulation**
 - ◆ Rapid depopulation and euthanasia is needed to control virus spread.
 - The goal is to depopulate within 24 hours after HPAI detection on a premises.
 - ◆ Refer to the following policy guidance: [Stamping-Out & Depopulation Policy & Ventilation Shutdown Evidence and Policy](#).

- 3D Activities/NVS Support**
 - ◆ To contact the NVS and/or request resources, please email NVS@aphis.usda.gov.
 - ◆ Disposal procedures must be effective and appropriate.
 - For composting, review [Mortality Composting Protocol for AI Infected Flocks](#).
 - For landfilling, refer to the [Landfill Disposal Guidance](#) document.
 - ◆ Cleaning and disinfection (virus elimination) of all areas must be conducted.
 - Please review [Cleaning & Disinfection Basics \(Virus Elimination\)](#).

- Zones and Premises**
 - ◆ A Control Area needs to be established around the HPAI Infected Premises; refer to the [Ready Reference Guide—Overview of Zones](#).

- Surveillance & Epidemiology**
 - ◆ Use the [Initial Contact Epi Report](#) to quickly gather the most critical information about premises.
 - ◆ Review [Avian Sample Collection for Influenza A and Newcastle Disease](#).

Are We Ready?

- ◆ Immediately initiate surveillance activities to detect disease; guidance for HPAI is found in [Surveillance of Backyard Flocks Around Infected Premises](#) & [Surveillance Sampling Commercial Premises in Control Area](#).
- ◆ Rapidly follow up on any sick bird calls.

Movement Control and Permitting

- ◆ For an overview on movement control and guidance on moving into, within, and out of a Control Area, see [Movement Control](#).
- ◆ The Secure Food Supply plans provide permitting guidance (www.securepoultrysupply.com).
- ◆ For permitting, see an [Overview of the HPAI Control Area Permitting Process](#); the EMRS2 Customer Permit Gateway can be used for permit requests— an [Overview of the EMRS2 Gateway](#) document is also available.

Biosecurity

- ◆ Rapidly implement increased biosecurity measures on any infected premises; responders also need to observe strict biosecurity procedures to prevent virus spread.
 - Many biosecurity resources are available from <http://www.poultrybiosecurity.org/>

More Information

- ◆ Guidance on [PPE Recommendations for HPAI Responders](#) is available.
- ◆ The FAD PReP website will be updated with any new HPAI response and policy guidance during the outbreak; HPAI is linked at the top and in the sidebar.
 - <http://www.aphis.usda.gov/fadprep>
- ◆ [APHIS HPAI Website](#)
- ◆ [USDA HPAI Website](#)

Where to Find the New Documents

- All the Guidance Documents, Appendices and Templates will be available on the Public USDA AI page here:
- <https://www.aphis.usda.gov/.../avian/avian-influenza/ai-guidance-documents>
- Just Google: [USDA Avian Influenza Guidance Documents](#)



Importance of Biosecurity

Site Awareness

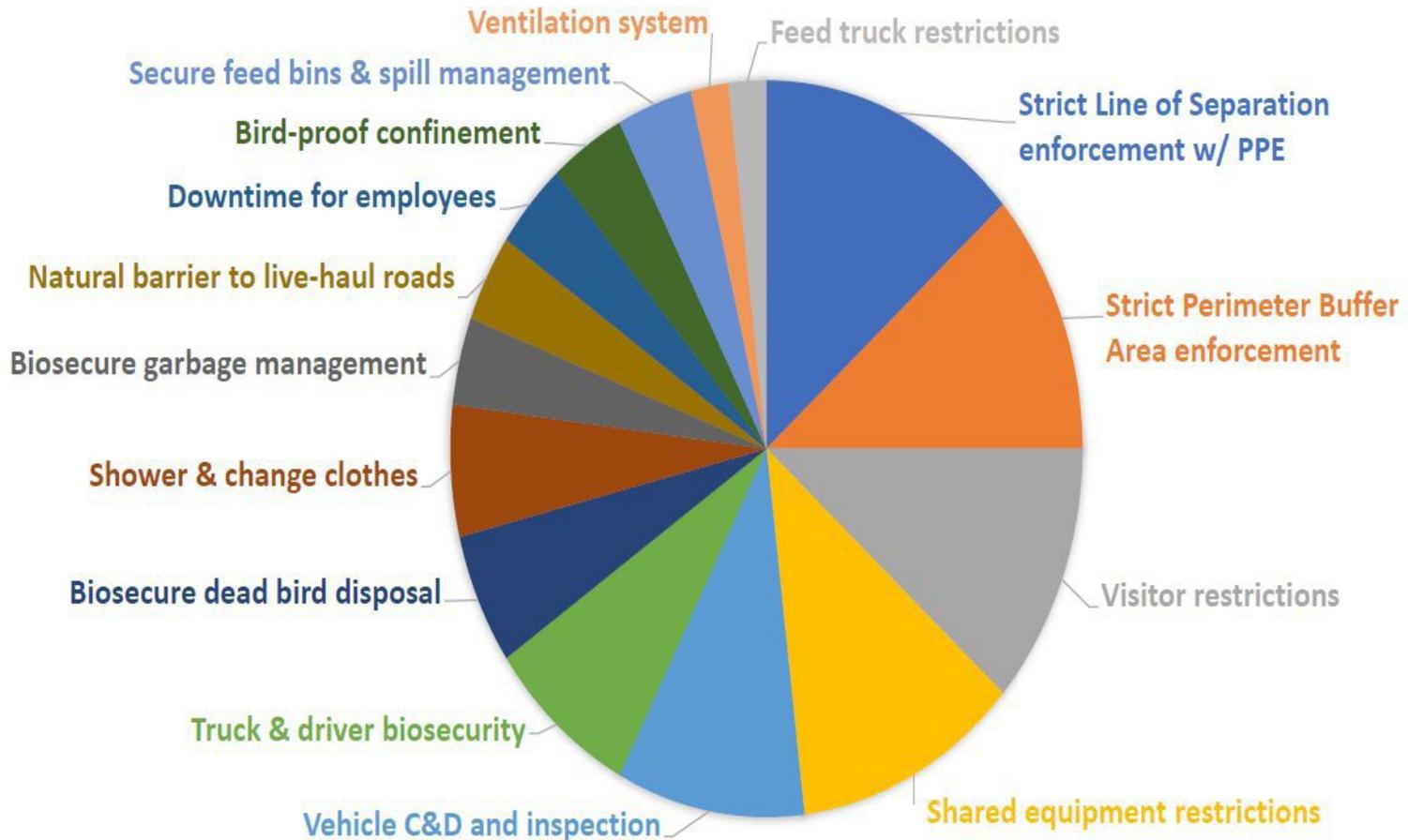


- Previous outbreaks reveal vulnerabilities
- Strict enforcement of:
 - Line of Separation (LOS)
 - Perimeter Buffer Area (PBA)
 - Shared equipment restrictions
 - Visitor restrictions





What can producers do to enhance biosecurity?



What Should A Producer Be Doing Now

Know and look for the warning signs of infectious bird disease: HPAI

- Swollen head, Cyanotic Comb and Wattles
- Hemorrhages on Legs, footpads and feet
- Soft- or thin-shelled eggs; Misshapen eggs
- Sudden increase in bird deaths in your flock





What Should A Hunter Be Doing Now

- Since wild birds can be infected with these viruses without appearing sick, people should minimize direct contact with wild birds by using gloves.

- **If you hunt, take routine precautions:**
 - Don't harvest, handle, or eat wild birds that are obviously sick or found dead.
 - Dress your game birds in the field whenever possible to prevent any potential disease spread.
 - Wear rubber gloves while cleaning game or cleaning bird feeders.
 - Do not eat, drink, smoke, or rub your eyes while handling wild birds.
 - Wash your hands with soap and water after cleaning game, and change clothing before having any contact with healthy domestic poultry and birds.

Biosecurity information is available

at: https://www.aphis.usda.gov/publications/animal_health/2015/fsc_hpai_hunters.pdf.



Biosecurity

- The entrance to the poultry area should have a solid floor that is easy to clean and disinfect, such as a concrete pad.
- Do not provide water to your birds from ponds or other outdoor open water sources.
- Dedicate a pair of shoes or boots to your poultry area. Change your shoes before entering the bird enclosure.
- Hunters who also work with poultry should wash their vehicles, shower, and change clothes before returning to a farm.



Biosecurity

- Scan the environment around the poultry enclosure for wild waterfowl droppings frequently and remove them promptly.
- Pay close attention to entryways and other areas where people, vehicles, and equipment move.
- Use the buddy system to help each other follow biosecurity measures properly, every time.
- Have someone who isn't involved in the day-to-day operation of your farm to review your plan, watch biosecurity practices in action, and provide suggestions from improvements from their fresh perspective.



Biosecurity

- Anyone involved with poultry production from the small backyard to the large commercial producer should review their biosecurity activities to assure the health of their birds.
- APHIS has materials about biosecurity, including videos, checklists, and a toolkit available at <https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/animal-disease-information/avian/defend-the-flock-program/df-resources/df-resources>



Biosecurity

- A team effort and a shared responsibility
- Like “life insurance” Hope you have it when you need it
- An ongoing process and must be always followed
- Practical guidelines must involve all workers
- Biosecurity is an investment, not an expense!
- There is no ‘one size fits all’ solution for biosecurity.
- Every effort should be made to prevent the first index case through improved biosecurity

- USDA is urging the poultry industry, including backyard bird owners, to step up their biosecurity practices as East Asia, Africa, Europe and now Canada report cases of a highly pathogenic Avian influenza.



Summary of U.S. HPAI Response Process

Figure 16. A Guide to Help You Understand the Response Process

USDA United States Department of Agriculture

Highly Pathogenic Avian Influenza A Guide To Help You Understand the Response Process

- 1 Detect**
You see unusual signs of illness or sudden deaths in your flock. You report it to your private or State veterinarian. Samples are taken and tested. You find out your flock is positive for HPAI.
- 2 Quarantine**
USDA and State personnel come to your farm. We assign you a caseworker, who will be your main point of contact onsite, answer your questions, and guide you through the needed paperwork. We will also place your operation under quarantine, meaning only authorized workers are allowed in and out, and movement restrictions for poultry, poultry products, and equipment go into effect. We contact neighboring poultry farms and start testing their birds to see if they've been affected, too.
- 3 Appraise**
We work with you to create a flock inventory. This lists how many birds you have, what species they are, their age, and other key details that will help us give you 100 percent of fair market value for your birds.
- 4 Depopulate**
Infected flocks are depopulated as quickly as possible—ideally within 24 hours of the first HPAI detection—to get rid of the virus.
- 5 Compensate**
You receive your first indemnity payment early on in the response process. We also pay you a standard amount for virus elimination activities (cleanup work).
- 6 Manage Disposal**
USDA will help you dispose of the dead birds safely. Disposal methods include composting, burial, incineration, rendering, or landfilling. The options you'll have depend on several things: what type of farm you have, the specific conditions there, State and local laws, and what you prefer.
- 7 Eliminate Virus**
The next step is to wipe out all traces of the virus at your property. To kill the virus, thoroughly clean and disinfect the barn, equipment, and all affected areas of your farm. You can do this work yourself or hire contractors to handle it.
- 8 Test**
As soon as you're ready, let your caseworker know you're finished with cleanup. Your site must then stay empty for at least 21 days. During this time, we'll return to collect and test environmental samples. We need to confirm that your property is completely virus-free.
- 9 Restock**
Once USDA and the State both approve, you can restock your facilities and start production again. State officials will release your farm from quarantine after all required testing and waiting periods are done.
- 10 Maintain Biosecurity**
After restocking, you'll need to continue maintaining the highest biosecurity standards to keep the virus from coming back. For biosecurity tips, go to www.aphis.usda.gov/publications and download the factsheet "Prevent Avian Influenza at Your Farm."

How Long Does the Process Take?
Ideally, this entire process could be completed as soon as 60–120 days. However, the timeframe varies depending on many things (for example, flock size, depopulation and disposal methods used, test results, farm's location). We're committed to restoring production as fast as we can while also protecting poultry health.

Questions?
Talk with your caseworker or the State or Federal officials responding to the disease event in your area.

For general information and contacts, visit:
www.usda.gov/avian_influenza.html
www.aphis.usda.gov/fadprep

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Animal and Plant Health Inspection Service • APHIS-91-05-005 • Issued September 2015



For More Information

- **VE rates for cage birds**
 - https://www.aphis.usda.gov/animal_health/downloads/animal_diseases/ai/hpai-elimination-flat-rate-laying-birds.pdf
- **VE rates for floor raised birds**
 - https://www.aphis.usda.gov/animal_health/downloads/animal_diseases/ai/hpai-virus-elimination-sqft-flat-rate.pdf
 - https://www.aphis.usda.gov/animal_health/downloads/usda-commercial-indemnity-table-2021.pdf
- [USDA APHIS | All APHIS Stakeholder Announcements](#)
- [USDA APHIS | Avian Health](#)



For More Information

- [Influenza A \(H5\) - United Kingdom of Great Britain and Northern Ireland \(who.int\)](#)
- [Detection of high pathogenic avian influenza \(H5N1\) in Newfoundland and Labrador 2021 - Canadian Food Inspection Agency \(canada.ca\)](#)
- [OIE-WAHIS – World Animal Health Information System](#)
- [WHISPers \(usgs.gov\)](#) - Wildlife Health Information Sharing Partnership - event reporting system
- <https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/emergency-management/hpai/fadprep-hpai>
- <https://zahp.org/category/disease/hpai/> -(zoo - Dr. Yvonne Nadler is best contact for ZAHP (Zoo & Aquarium all Hazard Partnership) materials, they receive support from Animal Care
- <https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/sa-epidemiology-animalhealth-ceah/producer-indemnity-comp>



For More Information



National Poultry Improvement Plan

- Home
- NPIP Approved Rapid Assays for Salmonella
- NPIP Participants by State/Territory
- APHIS Home
- APHIS Poultry Team Contacts
- NPIP Database

Upcoming NPIP Official Workshops ▾

NPIP Program Standards ▾

2019 Program Standards - Standards A-E

2019 Program Standards - Standards F-Compartmentalization

Audit Form - Biosecurity Principles

Annual Summary Report - Fillable

Biosecurity Principles and Audit Guidelines 2017-2020

Authorized Signers for VS Form 9-3

Official State Agencies



Poultry Disease Information

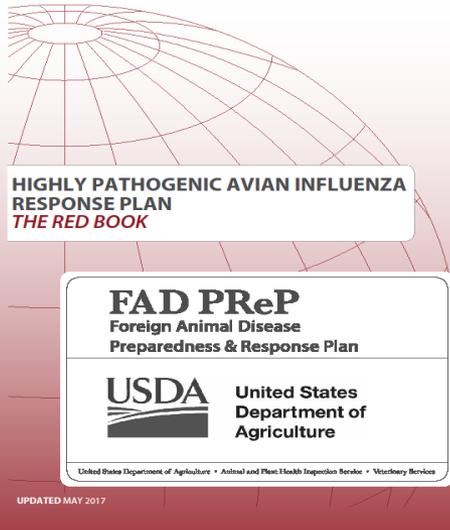
The National Poultry Improvement Plan was established in the early 1930's to provide a cooperative industry, state, and federal program through which new diagnostic technology can be effectively applied to the improvement of poultry and poultry products throughout the country. The development of the NPIP was



For More Information



SPS
SECURE
POULTRY SUPPLY

**HIGHLY PATHOGENIC AVIAN INFLUENZA
RESPONSE PLAN**
THE RED BOOK

FAD PReP
Foreign Animal Disease
Preparedness & Response Plan

USDA United States
Department of
Agriculture

United States Department of Agriculture • Animal and Plant Health Inspection Service • Veterinary Services

UPDATED MAY 2017



Produced in Compliance with United Egg
Producers' Animal Husbandry Guidelines

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Let's Keep Our Poultry Healthy Together