



# Community for Emerging and Zoonotic Diseases

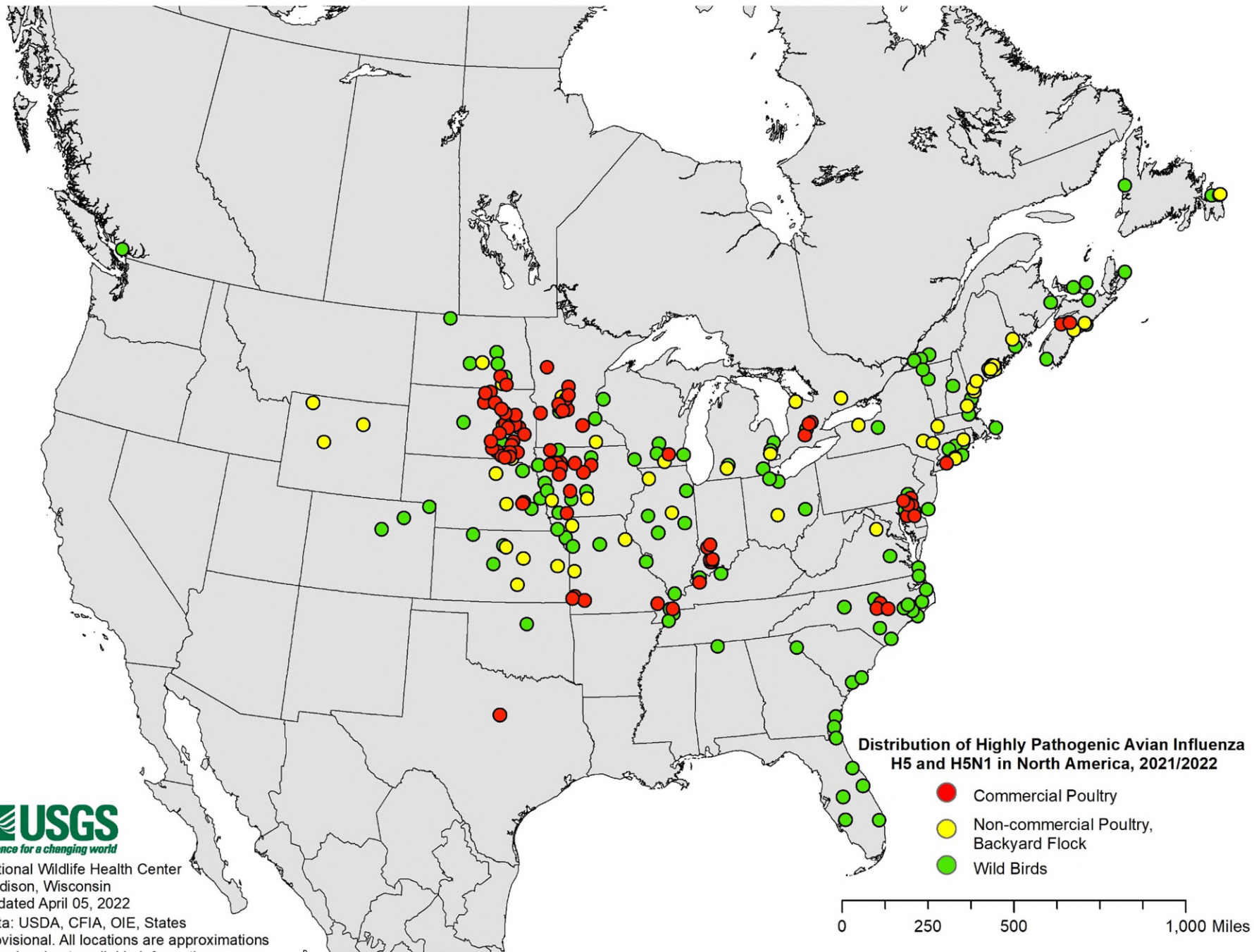
*Identifying emerging risks through collective intelligence*

CFIA One Health HPAI Meeting

7 April 2022

[www.cezd.ca](http://www.cezd.ca)

# USGS Map



National Wildlife Health Center  
Madison, Wisconsin  
Updated April 05, 2022  
Data: USDA, CFIA, OIE, States  
Provisional. All locations are approximations  
based on best available information.

# US Domestic Detections

## [USDA list](#) of Affected Commercial and Backyard Flocks states with outbreaks reported

1 new state, 12 states with additional cases

Texas	4/02/2022	Commercial Upland Game
North Carolina	4/5/2022	Commercial Turkeys
	4/2/2022	Commercial Turkeys
	4/2/2022	Commercial Turkeys
	4/2/2022	Commercial Turkeys
	03/30/2022	Commercial Poultry
North Dakota	04/05/2022	Backyard Mixed Species
	04/04/2022	Commercial Turkeys
	04/02/2022	Commercial Turkeys
	04/01/2022	Commercial Turkeys
	03/31/2022	Backyard chickens
	03/30/2022	Backyard Mixed Species
Wyoming	04/05/2022	Backyard Mixed Species
	04/01/2022	Backyard Mixed Species
	03/30/2022	Backyard Mixed Species
	03/29/2022	Backyard Mixed Species
Illinois	3/31/2022	Backyard Mixed Species
	3/11/2022	Backyard Mixed Species
Wisconsin	4/01/2022	Backyard mixed species
	3/14/2022	Commercial Layer Chickens

Minnesota	4/5/2022	Commercial Poultry Processor
	4/5/2022	Commercial Turkeys
	4/5/2022	Commercial Turkeys
	4/5/2022	Commercial Turkeys
	4/5/2022	Commercial Turkeys
	4/5/2022	Commercial Turkeys
	4/4/2022	Commercial Turkeys
	4/4/2022	Commercial Turkeys
	4/3/2022	Commercial Turkeys
	4/3/2022	Commercial Turkeys
	4/3/2022	Commercial Turkeys
	4/3/2022	Commercial Turkeys
	4/3/2022	Commercial Turkeys
	4/3/2022	Commercial Turkeys
	4/1/2022	Commercial Turkeys
	3/31/2022	Backyard Mixed Species
	3/31/2022	Commercial Turkeys
3/31/2022	Backyard Mixed Species	
3/29/2022	Commercial Turkeys	
3/29/2022	Commercial Turkeys	
03/26/2022	Commercial Turkeys	
03/25/2022	Backyard Mixed Species	
03/25/2022	Commercial Turkeys	

# US Domestic Detections

## USDA list of Affected Commercial and Backyard Flocks states with outbreaks reported

South Dakota	4/5/2022	Commercial Turkeys	South Dakota	3/27/2022	Commercial Turkeys
	4/5/2022	Commercial Turkeys		3/27/2022	Commercial Turkeys
	4/5/2022	Commercial Turkeys		3/27/2022	Commercial Turkeys
	4/5/2022	Commercial Turkeys		3/26/2022	Backyard Mixed Species
	4/4/2022	Commercial Turkeys		3/25/2022	Commercial Turkeys
	4/2/2022	Commercial Turkeys		3/24/2022	Commercial Turkeys
	4/2/2022	Commercial Turkeys		3/23/2022	Commercial Turkeys
	4/1/2022	Commercial Turkey Breeder		3/23/2022	Commercial Layers
	4/1/2022	Commercial Turkeys		3/22/2022	Commercial Turkeys
	3/31/2022	Commercial Turkeys		3/22/2022	Commercial Turkeys
	3/30/2022	Commercial Turkeys		3/22/2022	Commercial Turkeys
	3/29/2022	Commercial Turkeys		3/20/2022	Commercial Turkeys
	3/29/2022	Commercial Turkeys		3/18/2022	Commercial Turkeys
	3/29/2022	Commercial Turkeys		3/18/2022	Commercial Turkeys
			3/11/2022	Commercial Turkeys	
			3/5/2022	Commercial Mixed Species	

# US Domestic Detections

## [USDA list](#) of Affected Commercial and Backyard Flocks – states with new detections

<b>Missouri</b>	<b>4/5/2022</b>	<b>Commercial Poultry</b>
	<b>4/1/2022</b>	<b>Commercial Turkeys</b>
	3/26/2022	Backyard mixed species
	3/15/2022	Backyard mixed species
	3/9/2022	Commercial Turkeys
	3/8/2022	Commercial Turkeys
	3/4/2022	Commercial Broiler Chickens
	3/4/2022	Backyard Mixed Species
<b>Iowa</b>	<b>4/5/2022</b>	<b>Commercial Turkeys</b>
	<b>4/3/2022</b>	<b>Commercial Layer Chicken Breeder</b>
	<b>4/2/2022</b>	<b>Commercial Turkey Supplier</b>
	<b>4/2/2022</b>	<b>Commercial Turkeys</b>
	<b>3/31/2022</b>	<b>Commercial Turkeys</b>
	<b>3/31/2022</b>	<b>Commercial Layer Chickens</b>
	<b>3/30/2022</b>	<b>Commercial Turkeys</b>
	3/28/2022	Commercial Turkeys
	3/28/2022	Commercial Layers
	3/25/2022	Commercial Pullets
	3/24/2022	Commercial Turkeys
	3/20/2022	Backyard mixed species
	3/17/2022	Commercial Layers
	3/9/2022	Commercial Layers
3/6/2022	Commercial Turkeys	
3/1/2022	Backyard Mixed Species	

<b>Maine</b>	<b>4/5/2022</b>	<b>Backyard mixed species</b>
	<b>3/30/2022</b>	<b>Backyard mixed species</b>
	<b>3/29/2022</b>	<b>Backyard mixed species</b>
	3/26/2022	Backyard mixed species
	3/22/2022	Backyard mixed species
	3/19/2022	Backyard mixed species
	3/19/2022	Backyard mixed species
	3/17/2022	Backyard mixed species
	3/14/2022	Backyard mixed species
	3/12/2022	Backyard mixed species
2/24/2022	Backyard pet chickens	
2/19/2022	Backyard mixed species birds	
<b>New York</b>	<b>4/5/2022</b>	<b>Backyard Chickens</b>
	3/25/2022	Backyard mixed species
	3/23/2022	Commercial upland game
	2/24/2022	Captive Wild Birds
	2/24/2022	Backyard Mixed Species
	2/19/2022	Backyard Pet Chickens
<b>Nebraska</b>	<b>4/5/2022</b>	<b>Backyard Mixed species</b>
	3/26/2022	Backyard Mixed Species
	3/24/2022	Commercial Broilers
	3/22/2022	Commercial Broilers
	3/15/2022	Backyard Mixed Species

# US Domestic Detections

## [USDA list](#) of Affected Commercial and Backyard Flocks new states with no new outbreaks reported (11)

Indiana	3/1/2022	Commercial Turkeys
	2/23/2022	Commercial Turkeys
	2/16/2022	Commercial Turkeys
	2/8/2022	Commercial Turkeys
	2/23/2022	Commercial Turkeys
	2/23/2022	Commercial Turkeys
Kentucky	2/15/2022	Commercial Turkeys
	2/12/2022	Commercial Broiler Chickens
Virginia	2/12/2022	Backyard Mixed Species Birds
Maryland	3/18/2022	Commercial Pullets
	3/10/2022	Commercial Layer Chickens
	3/8/2022	Commercial Broiler Chickens
	3/4/2022	Commercial Layer Chickens
New Hampshire	3/17/2022	Backyard Mixed Species
Connecticut	3/1/2022	Backyard Mixed Species
Michigan	2/23/2022	Backyard Flock

Delaware	3/17/2022	Commercial Broilers
	3/8/2022	Commercial Pullet Chickens
	2/22/2022	Commercial Poultry
Massachusetts	03/30/2022	Backyard Mixed Species
Ohio	03/30/2022	Backyard Chickens
Kansas	3/25/2022	Backyard Mixed Species
	3/18/2022	Backyard Mixed Species
	3/17/2022	Backyard Mixed Species
	3/11/2022	Backyard Mixed Species

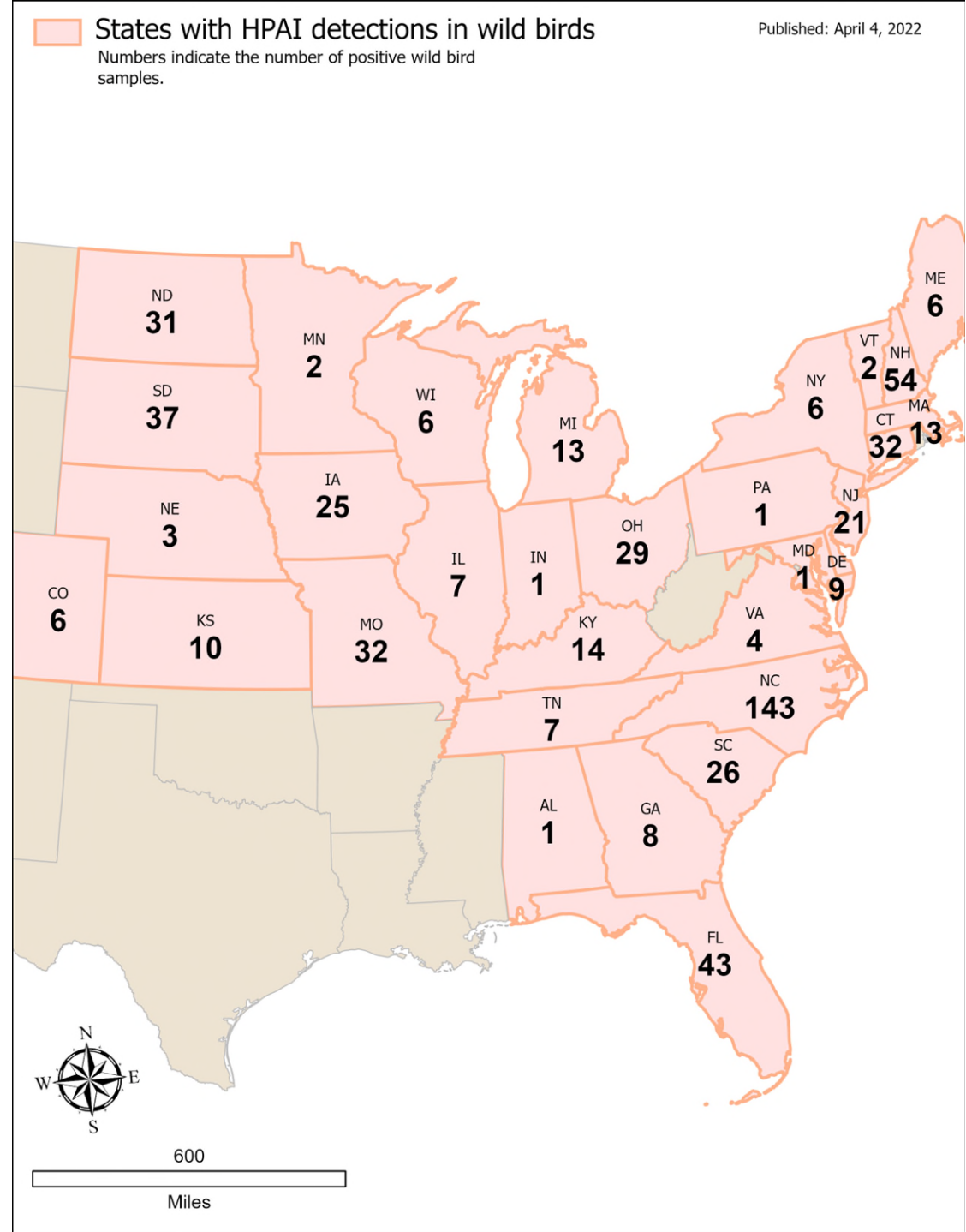
# US Wild Bird H5N1 Avian Influenza

- [US Wild Bird Information](#)

New States include:

- Vermont
  - Now all border states as far west as North Dakota have had detections
- Numbers of new detections particularly high in North Dakota (30) and South Dakota (21)

[Live bird migration map](#)

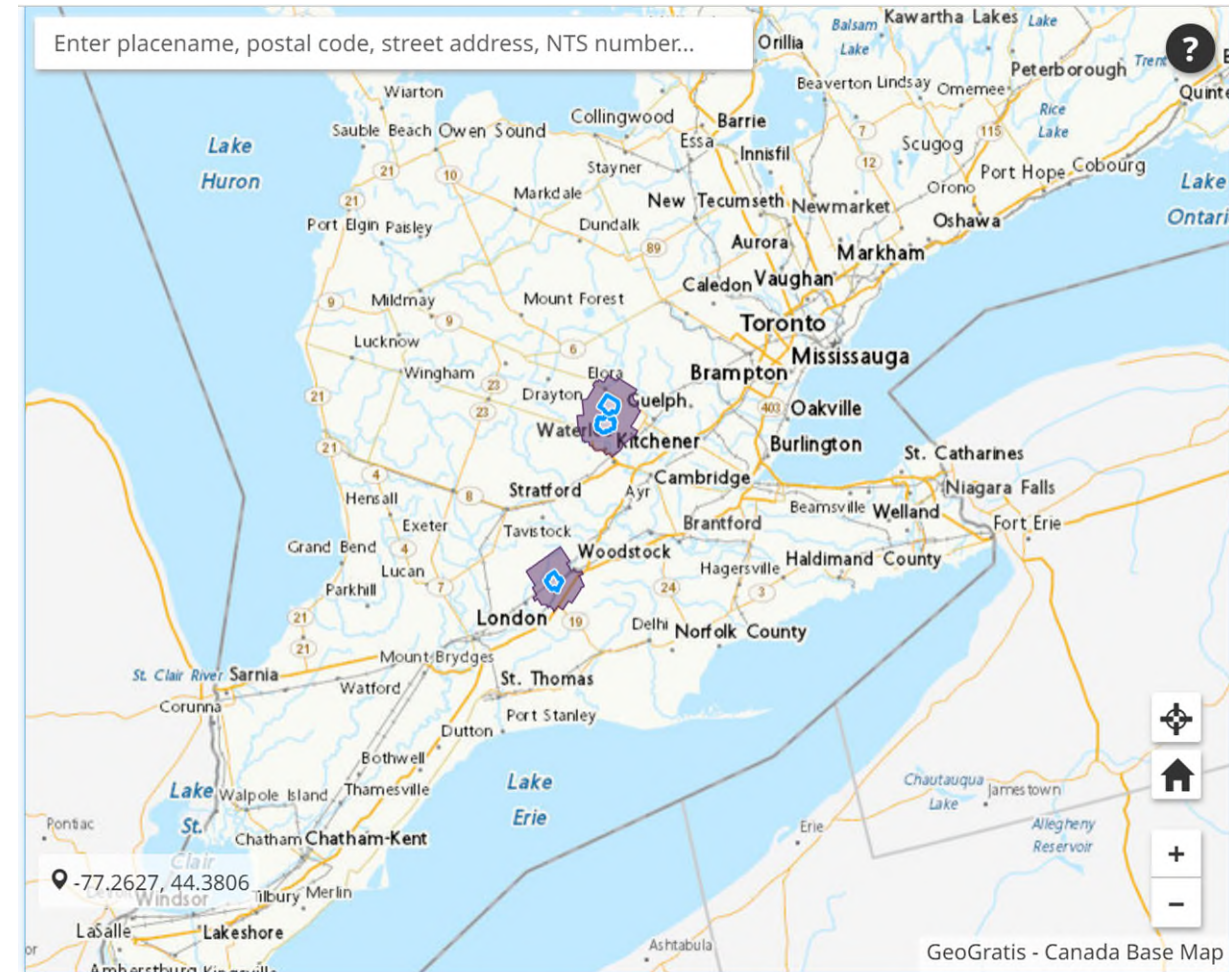


# Domestic Detections Since last Meeting

## Canadian Detections in Domestic Birds

Ontario	04/04/2022	Poultry Flock
	04/02/2022	Backyard Flock
	03/31/2022	Backyard Flock
	03/30/2022	Turkeys
	03/28/2022	Commercial Turkeys
	03/27/2022	Breeder Turkeys
Nova Scotia	03/15/2022	Backyard Flock
	02/11/2022	Backyard Flock
	02/03/2022	Commercial Flock
	02/01/2022	Backyard Flock
Newfoundland and Labrador	01/09/2022	Backyard Flock
	12/20/2022	Mixed exhibition flock

**3 high risk premises awaiting results in Ontario (Markham, Blenheim, South Glengarry)**



April 6 – 3 Infected Zones, 2 Primary Control Zones 8



# Wild Bird H5N1 Avian Influenza

- [Canadian Wild Bird Information](#)  
New Provinces with confirmed cases
  - **Quebec**
  - Ontario
  - British Columbia
  - PEI
  - Nova Scotia
  - Newfoundland and Labrador
  - New Brunswick



# Scientific Findings/Reports

- ECDC Report – Dec 2021 -Mar 15 2022
  - 2652 HPAI (H5) detections
    - 1030 in Poultry
    - 1489 in Wild Birds (62 species)
    - 133 in Captive Birds
  - 6 additional reports of cases in mammals:
    - Red Fox
    - Eurasian Otter
    - Lynx
    - Polecat
    - Ferret

“The viruses characterized to date **retain a preference for avian-type receptors**; mutations associated with mammalian adaptation have only been sporadically identified in the analysed viruses from avian species, but they are frequently acquired upon transmission to mammals”

“The risk to the general public of human transmission due to avian influenza viruses of the currently circulating clade 2.3.4.4b in Europe is assessed as **low** and to people occupationally or otherwise HPAI virus exposed **low to moderate.** “

# Scientific Findings/Reports

[HIGHLY PATHOGENIC AVIAN INFLUENZA VIRUS \(H5N8\) OUTBREAK IN A WILD BIRD RESCUE CENTER, THE NETHERLANDS: CONSEQUENCES AND RECOMMENDATIONS \(bioone.org\)](#)

Recommendations and experience may be helpful.

