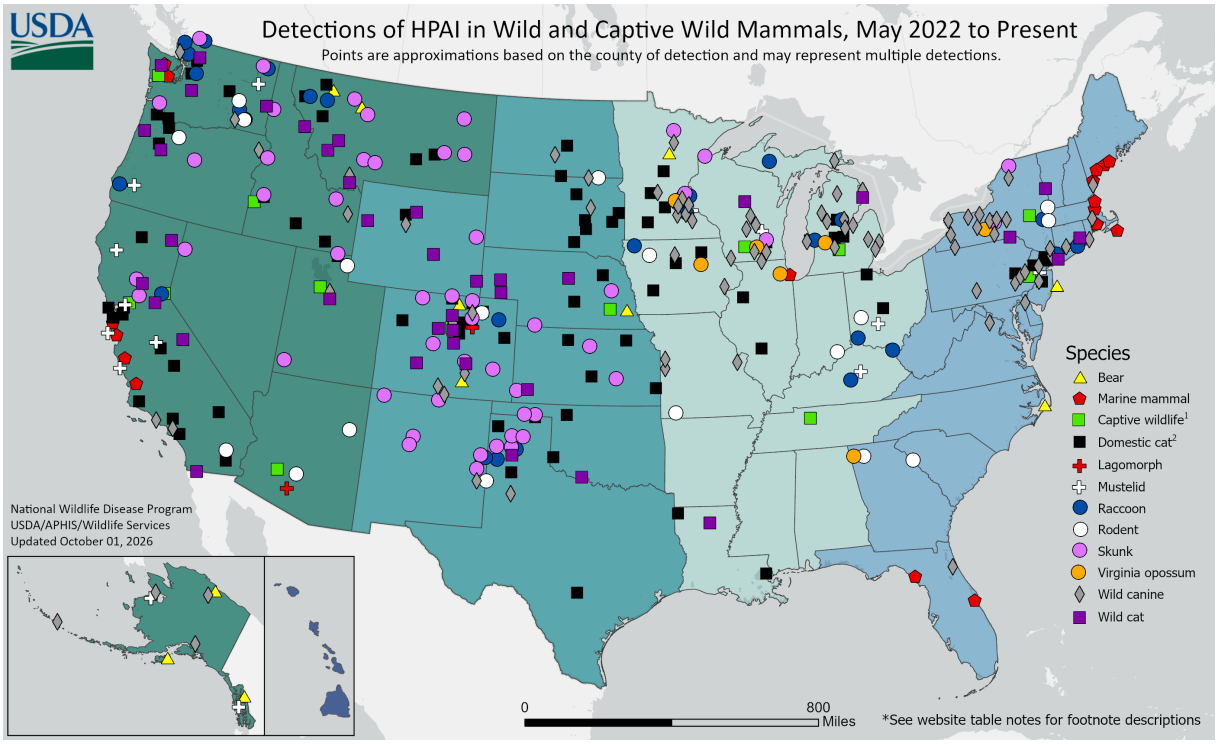
Detections of Highly Pathogenic Avian Influenza in Mammals

Last Modified:

Many species are potentially susceptible to highly pathogenic avian influenza (HPAI). In addition to birds and poultry, H5N1 viruses have been detected in some mammals (see list below). Infection may cause illness, including severe disease and death in some cases.

Data may be incomplete and additional detections will be added as information becomes available. For submitting agencies who notice data errors or omissions, please send an email with supporting documentation (laboratory report/accession number/data collection) to wslabresults@usda.gov.



Users may need to refresh the page to see the latest table data. To refresh the page, hold down the SHIFT key and click the Reload Page button in your browser.

Loading...

Table Notes

Date Detected: Indicates the date when a positive detection was obtained by RRT-PCR targeting the Eurasian lineage goose/Guangdong H5 clade 2.3.4.4b.

HPAI Strain:

EA = Eurasian; AM = North American; the EA H5 (2.3.4.4) viruses are highly pathogenic to poultry.

EA/AM: reassortant of H5 goose/Guangdong and North American wild bird lineage

Virus lineage, subtype, and pathotype per cleavage site analysis are determined from sequence data direct from the sample or virus isolate. An incomplete subtype indicates either (1) the specimen is pending virus isolation and/or sequencing results, or (2) the specimen was detected by the developmental H5 RRT PCR targeting the Eurasian lineage goose/Guangdong H5 clade 2.3.4.4b but could not be further characterized, often due to a low level of virus or viral RNA present in a given sample.

[1] To protect data confidentiality, the county and mapped locations of these detections represent the approximate location of the State capitol.

[2] September 3, 2024: Updated reporting to include all known feral and domestic cats (*Felis catus*) that tested positive for H5N1 at the National Veterinary Services Laboratories. Cats, as well as other scavenging or carnivorous species, are typically dead-end hosts for this avian influenza virus, meaning that, with rare exceptions such as transmission among family groups or where they roost together, they are not significantly involved in onward transmission. Due to the increased interest in cats associated with the HPAI dairy event, we are including all known positive influenza A H5N1 detections in the domestic cat species **prior to** March 1, 2024. These detections are also reported to the World Organisation for Animal Heath (WOAH) WAHIS system. For submitting agencies who notice data errors or omissions, please send an email with supporting documentation to wslabresults@usda.gov.

About Avian Influenza

Avian influenza is caused by influenza Type A virus (influenza A). Avian-origin influenza viruses are broadly categorized based on a combination of two groups of proteins on the surface of the influenza A virus: hemagglutinin or “H” proteins, of which there are 16 (H1–H16), and neuraminidase or “N” proteins, of which there are 9 (N1–N9). Many different combinations of “H” and “N” proteins are possible. Each combination is considered a different subtype, and related viruses within a subtype may be referred to as a lineage. Avian influenza viruses are classified as either “low pathogenic” or “highly pathogenic” based on their genetic features and the severity of the disease they cause in poultry. Most viruses are of low pathogenicity, meaning they cause no signs or only minor clinical signs of infection in poultry.

Related Links

- Avian Influenza
- Confirmations of HPAI in Commercial and Backyard Flocks
- Detections of HPAI in Wild Birds

Print