Wisconsin fox kits test positive for highly pathogenic avian influenza
16 May 2022, by Maddie Arthur

The Wisconsin Department of Natural Resources confirmed in a news release on May 13 that several fox kits were infected with the currently circulating H5N1 strain of highly pathogenic avian influenza (HPAI).

It's likely the foxes contracted the virus after eating or coming into contact with infected birds in their natural environments.

This detection in wild red foxes is the first report of HPAI infections in mammals in the United States, though infections of fox kits have since been reported in Minnesota and Michigan. It was also detected in foxes in Ontario, Canada, earlier this month.

The virus was identified at the Wisconsin Veterinary Diagnostic Laboratory at the University of Wisconsin–Madison and confirmed by the National Veterinary Services Laboratories, a diagnostic testing lab in the USDA's Animal Plant and Health Inspection Service.

"Kits appear to develop severe clinical disease and die rapidly after infection, similar to what we are seeing in spillover events of this virus in other non-host species, such as domestic poultry and raptors (birds of prey, including hawks and eagles)," explains Betsy Elsmo, diagnostic pathologist at the WVDL and clinical diagnostic professor at the UW School of Veterinary Medicine.

After noticing an uptick in ill fox kits brought into the Dane County Humane Society (DCHS) Wildlife Center, staff submitted several deceased animals to the WVDL for additional testing.

The staff at WVDL ruled out the common causes of mortality in foxes and broadened their search for answers.

Previously, cases of HPAI in wild foxes had been detected in the Netherlands. Erin Lemley, a wildlife veterinary technician at the DCHS Wildlife Center, and Shawna Hawkins, a clinical instructor of zoological medicine at the School of Veterinary Medicine, reviewed the information and determined it matched what they were observing in the deceased animals.

The HPAI-positive kits were brought in to the DCHS Wildlife Center from multiple Wisconsin counties.

At this time, foxes do not appear to be spreading HPAI to other species, and no infected adult foxes have been reported. There have been no reported cases of spread to pets like cats and dogs.

"Current research indicates that strains of similar HPAI viruses may be able to infect domestic dogs, but there is no evidence that domestic dogs develop disease or are important in the transmission of this virus," Elsmo adds.

Humans remain at low risk for developing HPAI infection, however you should always refrain from approaching or handling sick or dead wildlife. If you come across ill or deceased wildlife, please visit the
Wisconsin Department of Natural Resources webpage for further guidelines and information.

The virus causing avian influenza is common in wild birds, and many species of waterfowl and shorebirds can harbor avian influenza viruses without showing symptoms of disease.

Less commonly, strains like the currently circulating H5N1 strain, can infect and cause disease in wild birds and other animals.

Provided by University of Wisconsin-Madison

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