Status of Chronic Wasting Disease (CWD) and Wildlife Diseases

Report Required by KRS 150.740(6)

Kentucky Department of Fish and Wildlife Resources

November 1, 2025

The Kentucky Department of Fish and Wildlife Resources' mission is to conserve, protect and enhance Kentucky's fish and wildlife resources and provide outstanding opportunities for hunting, fishing, trapping, boating, shooting sports, wildlife viewing, and related activities.

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Purpose:

Kentucky Department of Fish and Wildlife Resources (KDFWR) investigates wildlife disease issues in a diversity of species across the Commonwealth. The following is a summary of a few of the major disease related health issues facing wildlife in Kentucky.

Definition and Statute:

Defined as "wildlife" in KRS 150.010, captive cervids are regulated by both KDFWR and KDA. Unlike traditional livestock, captive deer and elk are indistinguishable from wild deer and elk, and thus pose a unique disease risk to native wild herds. Minimization of this risk dictates the need for strict holding and transportation regulations and animal identification requirements.

KRS 150.740 requires both the KDFWR and the Kentucky Department of Agriculture (KDA) to issue reports to the Interim Joint Committee on Agriculture and Natural Resources regarding the status of Chronic Wasting Disease (CWD) in deer and elk (Family Cervidae). These reports may include the status of other animal diseases.

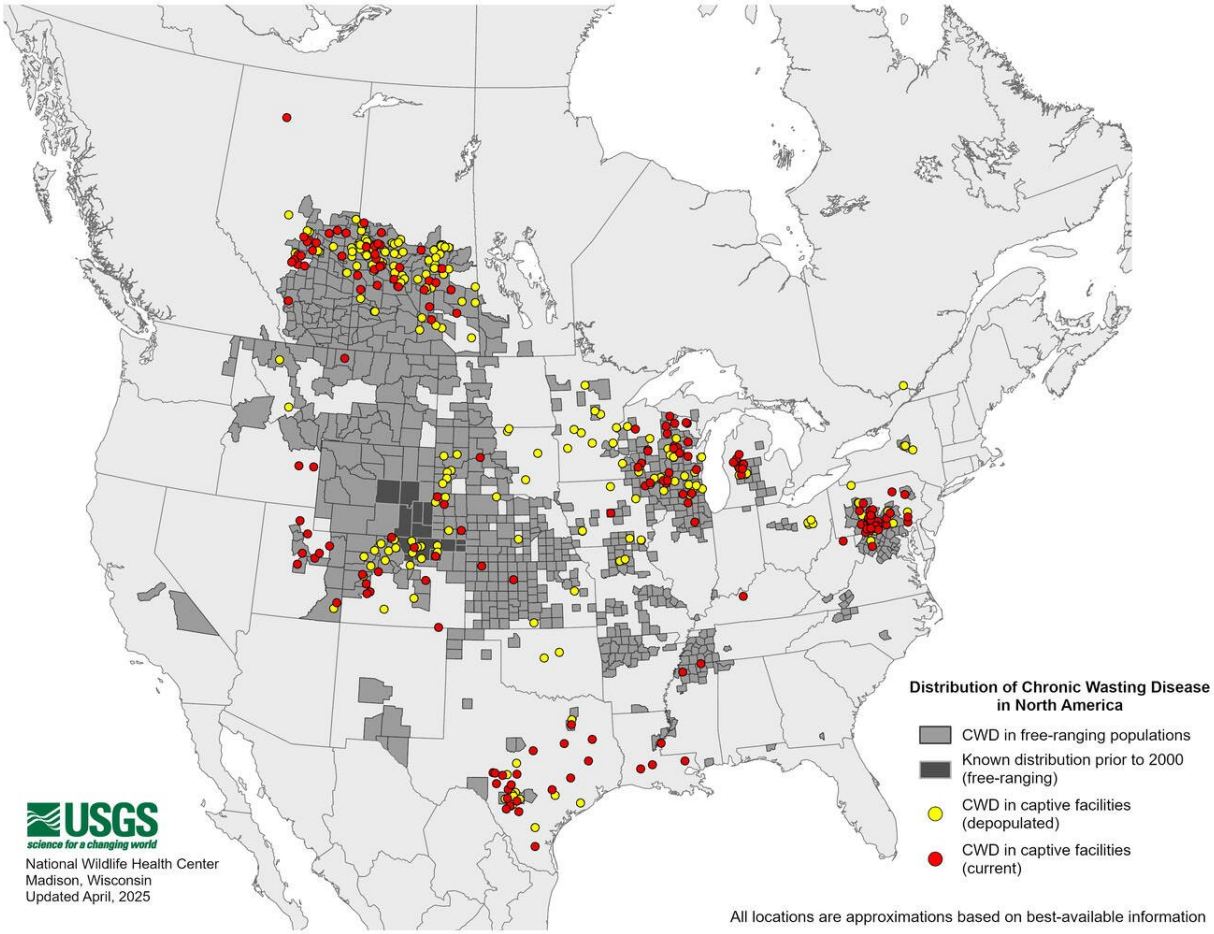
Notifiable Emerging Infectious Diseases

Chronic Wasting Disease (CWD)

Chronic wasting disease (CWD) is a neurologic disease of cervids related to bovine spongiform encephalopathy ("mad cow disease") in cattle and scrapie in sheep. The disease is caused by an infectious protein, called a prion, which is abnormally folded and can be transmitted through direct or indirect contact among cervids. The prion is extremely resistant to degradation, allowing them to persist on the landscape and serve as a source of environmental contamination. The disease causes a wasting syndrome in cervids and has been shown to cause population declines of white-tailed deer, elk, and mule deer in areas where the disease is endemic.

It is believed that risk of transmission to livestock and humans is low; however, because there is still a significant lack of data, the Centers for Disease Control and Prevention (CDC) does not recommend eating any CWD infected meat.

According to the USGS, as of October 2025, CWD has been detected in 36 U.S. states, including Kentucky, as well as in five Canadian provinces, affecting both free-ranging cervids and commercial captive cervid facilities.



Recent Developments in Kentucky

- CWD was detected <2 miles from our border in Posey County, Indiana in February 2025. Henderson, Union, and Webster Counties added to the list of CWD Surveillance Zone (SZ) counties and associated regulations enacted.
- CWD was detected in a captive white-tailed deer facility in Breckinridge County, KY in October 2024. The facility was indemnified and depopulated in July of 2025. Eight additional positives were confirmed following testing of the depopulated herd. A total of nine positive animals were confirmed at this facility including the original index case. Seven of these animals were natural additions and two were previously imported from a decommissioned captive cervid facility in Monroe County, KY. Breckinridge, Hardin, and Meade Counties added to the list of CWD SZ counties and associated regulations enacted.
- CWD was detected in Kentucky for the first time in Ballard County in December of 2023. The index case was a 2.5-year-old hunter-harvested male that displayed normal behavior. Ballard County is adjacent to the existing CWD Surveillance Zone and was subsequently

added to the list of Surveillance Zone counties, along with Carlisle and McCracken Counties, in early 2024. CWD Surveillance Zone regulations were enacted in these counties at that time as well.

- As of 2025, CWD was detected in every bordering state of Kentucky. The nearest detections of CWD to Kentucky are 2 miles from Posey County, Indiana, 8 miles from Henry County, Tennessee (wild deer, 2021), 16 miles from Weakley County, Tennessee (wild deer), a suspect – not confirmed animal approximately 8 miles from Clairborne County, Tennessee (wild deer, 2022), 36 miles from Tazewell County, VA (wild deer), 65 miles from Perry County, Missouri (wild deer), 135 miles from Millersburg, Ohio (captive deer), 90 miles from Randolph County, Arkansas (wild deer), and 90 miles from Montgomery County, Virginia.

CWD Surveillance and Response

Multiple programs within the KDFWR's Wildlife Division contribute to the Surveillance and Management of CWD in wild cervids in Kentucky including the Wildlife Health, Deer, and Elk Programs. Statewide surveillance for the disease has been conducted on annual basis since 2002 resulting in over 70,000 wild deer and approximately 1,000 elk being tested for CWD.

Response Plan: Kentucky first created a **CWD Response Plan** for a CWD detection within the state or a CWD detection within proximity to Kentucky's border in 2002. The response plan went through a major revision in 2019 to establish a logical framework for managing CWD-related issues based on current understanding of the disease. This response plan outlines efforts to educate the public and prevent the occurrence of CWD within the state, as well as the planned response should a CWD-positive case be diagnosed in wild or captive cervids within Kentucky or within 30 miles of its borders. The Department works with Cornell University's Surveillance Optimization Project for Chronic Wasting Disease (SOP4CWD) to annually to re-evaluate and update KDFWR's surveillance plan. In 2025, the Response Plan was updated to incorporate monitoring and management sections that have been implemented since the disease has been detected in the state in both captive and wild deer.

Surveillance: Currently the Department oversees three CWD Surveillance Zone.

The West KY Surveillance Zone surrounding the Ballard County detected is in the second year of monitoring since the 2023-2024 season detection. This zone incorporates eight counties, the original five counties (Calloway, Fulton, Graves, Hickman, and Marshall) following the CWD detection 8 miles from the Kentucky border in TN and the addition of three new counties (Ballard,

Carlisle, and McCracken) due to the instate CWD detection Ballard County. The five original counties are still under CWD Surveillance Zone restrictions and incorporate into the larger West KY Surveillance Zone because of the continued detections of CWD in TN less than 30 miles from our border. During the first year of monitoring in the 2024-2025 season KDFWR conducted seven days of mandatory checking of deer during modern firearms season (i.e., all weekends plus first Monday) in all 8 SZ counties in that region. This resulted in a statistically significant sample size being collected from the Ballard County Management Zone and all county level sampling goals were met. The plan for the second year of monitoring during the 2025-2026 season is to utilize voluntary check stations rather than mandatory check stations at three locations in this CWD Surveillance Zone.

The second active CWD Surveillance Zone was established following the CWD captive cervid detection at a facility in Breckinridge County in October of 2024. The first year of monitoring was conducted in the 2024-2025 season and the second year of monitoring is planned for the 2025-2026 season. Since the original detection occurred after the start of the 2024-2025 season the department opted to not adjust deer seasons or regulations and conducted voluntary check stations at 3 commercial meat processors in the Breckinridge CWD Surveillance Zone. These efforts allowed the department to meet county surveillance goals primarily through the collection of hunter-harvested samples. However, the department did not meet the statistically significant sampling goals for the 5-mile radius Management Zone surrounding the known positive to confidently assess whether the disease had spilled over into wild deer surrounding the facility. The department will continue its efforts to utilize the Hunter's First approach to meet both county and Management Zone sampling goals for the Breckinridge Surveillance Zone in the 2025-2026 season.

The third active CWD Surveillance Zone was established in response to a CWD detection in a 2.5-year-old buck from Posey County, IN in February 2025. The KDFWR Commission voted in May 2025 to establish this three county CWD Surveillance Zone including Henderson, Union, and Webster Counties. In response, the KDFWR will conduct mandatory check stations for the first three days of modern firearms season in this newly formed SZ in the 2025-26 deer season. The 2025-2026 season will be the first year of monitoring following the detection in less than three miles from the Kentucky border.

The following regulations were in effect for these zones during the 2024-2025 season:

- a ban on baiting and feeding wildlife,
- a ban on the transportation of high-risk carcass parts,
- a ban on the rehabilitation of deer within a CWD Surveillance Zone

In May 2025, the KDFWR Commission charged the agency to use Commissioner Authorization pursuant to 301 KAR 3:040 to allow baiting with restrictions in CWD SZ counties for the 2025 -26 deer season to promote hunter opportunity and potentially increase harvest. The Commission opted for allowing broadcast feeders and prohibiting contact style feeders (e.g., troughs, funnels, gravity feeders, etc.). While baiting is permitted with these restrictions, it can lead to unnatural congregation of deer, increasing the risk of CWD transmission through saliva, urine, and feces from infected animals.

Additionally, in May of 2025, the KDFWR Commission charged the agency to use Commissioner Authorization pursuant to 301 KAR 3:040 to create a special two-day, antlerless only firearms season in CWD SZ counties on September 27-28, 2025. A total of 576 deer were harvested across all fourteen CWD Surveillance Zone Counties during the 2025-2026 season. Effects all total harvest will be assessed at the end of the 2025-2026 season.

Pursuant to 301 KAR 2:095, Kentucky continues to enact a ban on the importation of all carcasses and carcass parts that have the head or spinal column attached. Currently hunters may only bring the following into Kentucky:

- Antlers
- Antlers that are attached to a clean skull plate
- A clean skull
- Clean upper canine teeth
- A finished taxidermy product
- The hide
- Deboned meat

CWD Testing: Statewide, the department continues to provide hunters with the opportunity to submit harvested deer heads or lymph nodes for CWD testing through CWD Sample Drop-off sites, a program initiated in September 2020. Currently, there are >80 sites distributed across the state to facilitate this testing. In addition, the department expanded a voluntary CWD Sample Mail-in Kit program to further enhance opportunities for hunters to test their harvest for CWD.

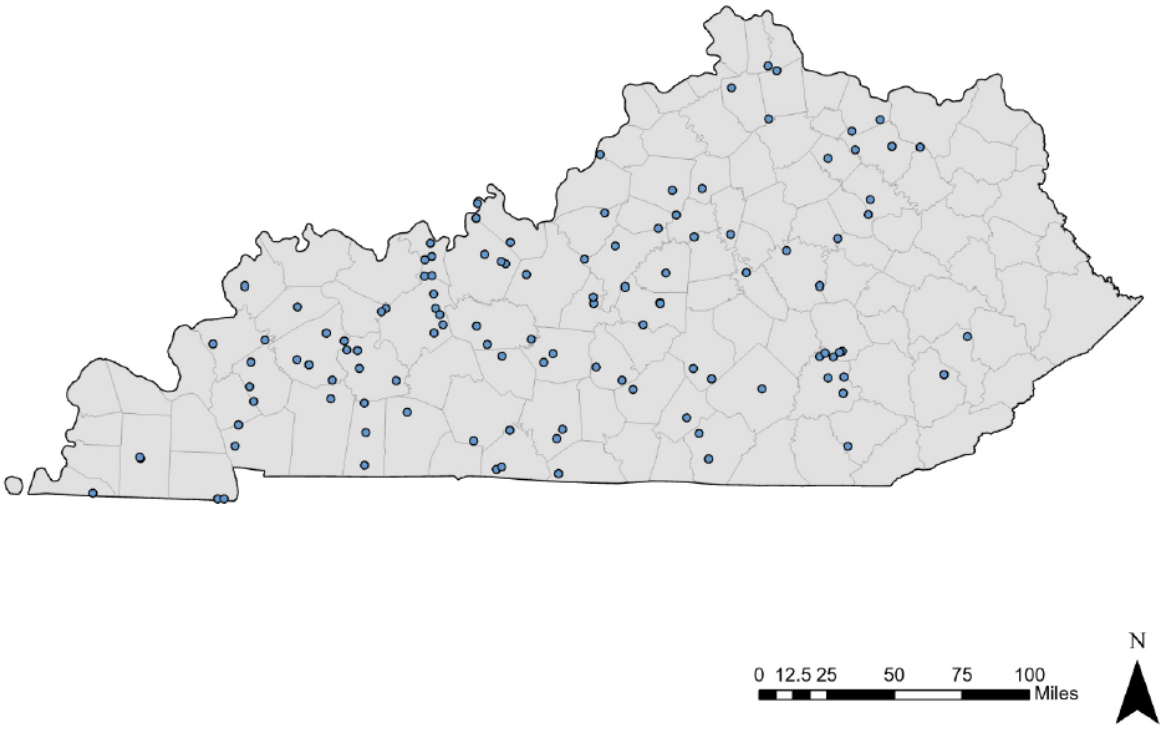
The KDFWR started a new initiative in 2024 called “Shoot for Samples.” In this program, hunters earn an entry for a door prize for each deer head they place in a Drop-off Site. The department received more than 600 samples via Drop-off Sites in 2024.

CWD and Captive Cervid Facilities

Across the U.S.

- The USDA reported 39 new CWD-positive captive cervid facilities across the United States (27 white-tailed deer and 12 elk) in Fiscal Year 2025 compared to 26 new CWD positive facilities in 2024. Of these, four herds were certified in the Federal Herd Certification Program (HCP), one was enrolled in the HCP but not certified, and thirty-four were not participants in the HCP. CWD detections in HCP herds is common and reported annually. These detections often lead to trace-outs, which can negatively impact facilities that may have received animals from positive facilities. The current statute prohibiting the importation of captive cervids from known CWD-positive states significantly reduces the risk of CWD introduction into Kentucky, especially since HCP program has failed to prevent CWD transmission among infected cervids.
- Current regulations enacted by the KDFWR and the KDA include a ban on the importation of live cervids from CWD-positive states. For the past 5-10 years, Indiana has been the only state from which Kentucky producers could source live cervids. However, with Indiana's detection of CWD in 2024, it can no longer serve as a source state. As a result, all captive cervids in Kentucky must come from other producers inside the state beginning in early 2024.
- KDA continues to require CWD testing of most captive cervids that die in the state of Kentucky.
- There are currently 106 active captive cervid facilities in Kentucky.

Captive Cervid Facilities in Kentucky



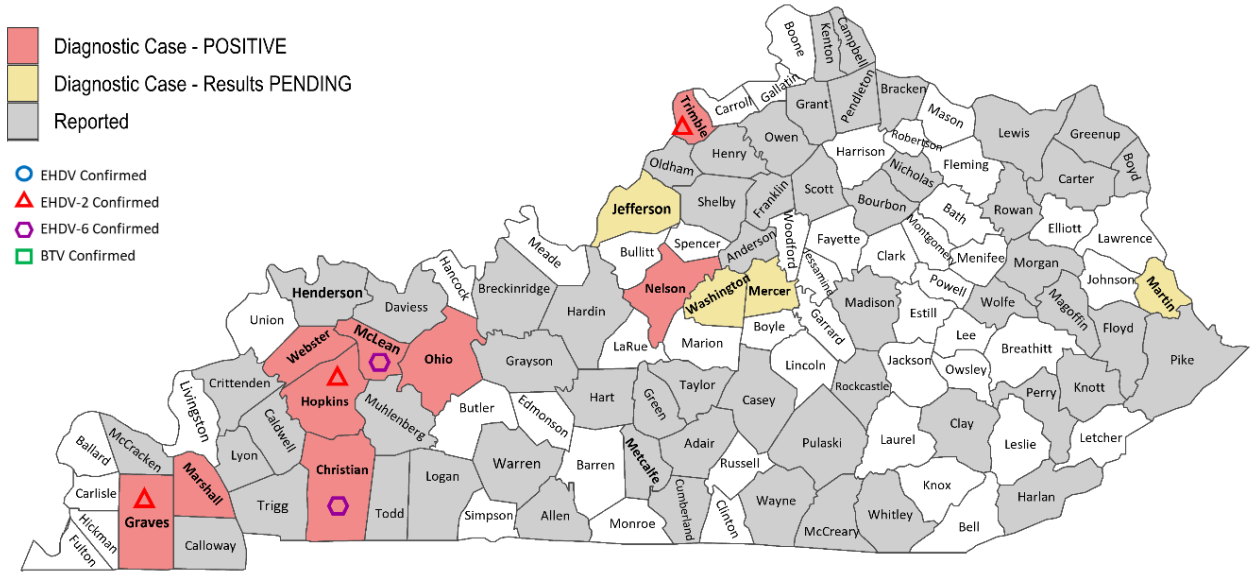
Hemorrhagic Disease (HD)

In 2024, KDFWR received approximately 200 suspicious hemorrhagic disease reports from the agency's online sick/dead deer reporting form and calls to regional staff. About 250 deer were reported as sick or dead within these reports. Between July and December 2024, 26 samples were collected from white-tailed deer and submitted to SCWDS for diagnostics. Of these, 11 samples tested positive across 11 different counties. Epizootic Hemorrhagic Disease Virus 2 (EHDV-2) was identified in samples from eight deer and EHDV-6 was isolated from 2 deer and one sample was unable to be serotyped. Online Reports of EHD suspects were received from across the state representing over 50% of the counties, however, the majority of confirmed cases detections were in western and central counties. In July 2025, KDFWR Wildlife Health Program confirmed the first case of Hemorrhagic Disease in the state. The outbreak currently going on in 2025 is substantially more severe than 2024. Currently there are over 750 reports representing approximately 1,500 deer which is on par with the outbreak observed in 2019. The severity of this outbreak is consistent with the typical epidemiologic pattern we observe here in

the Commonwealth, where every five to seven years Kentucky experiences a larger than normal outbreak of Hemorrhagic Disease.

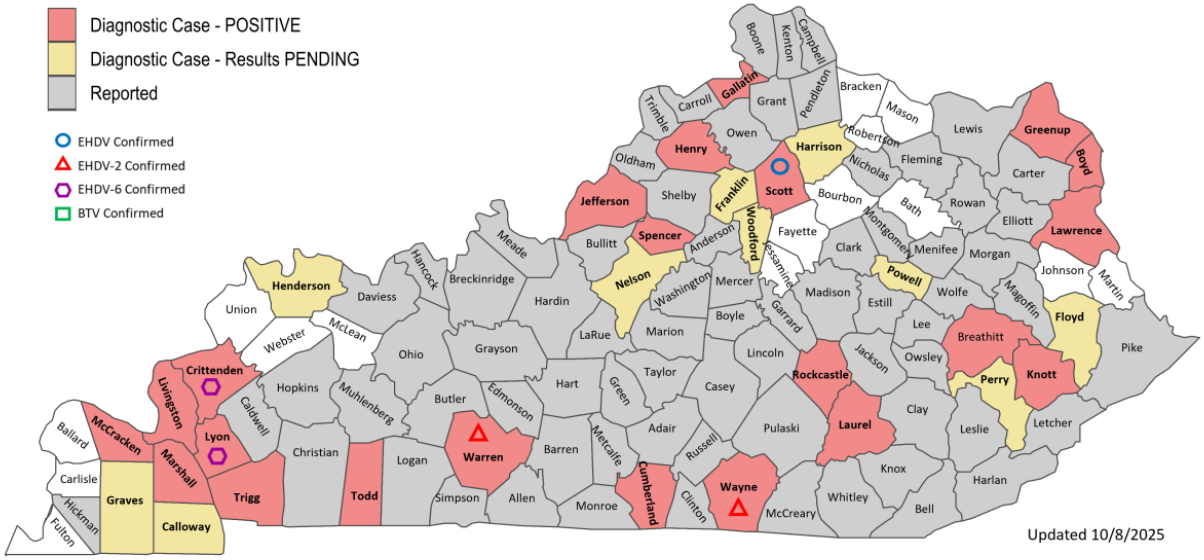
Hemorrhagic Disease in KY White-tailed Deer – 2024

Updated: 2/26/2025



Hemorrhagic Disease in KY White-tailed Deer

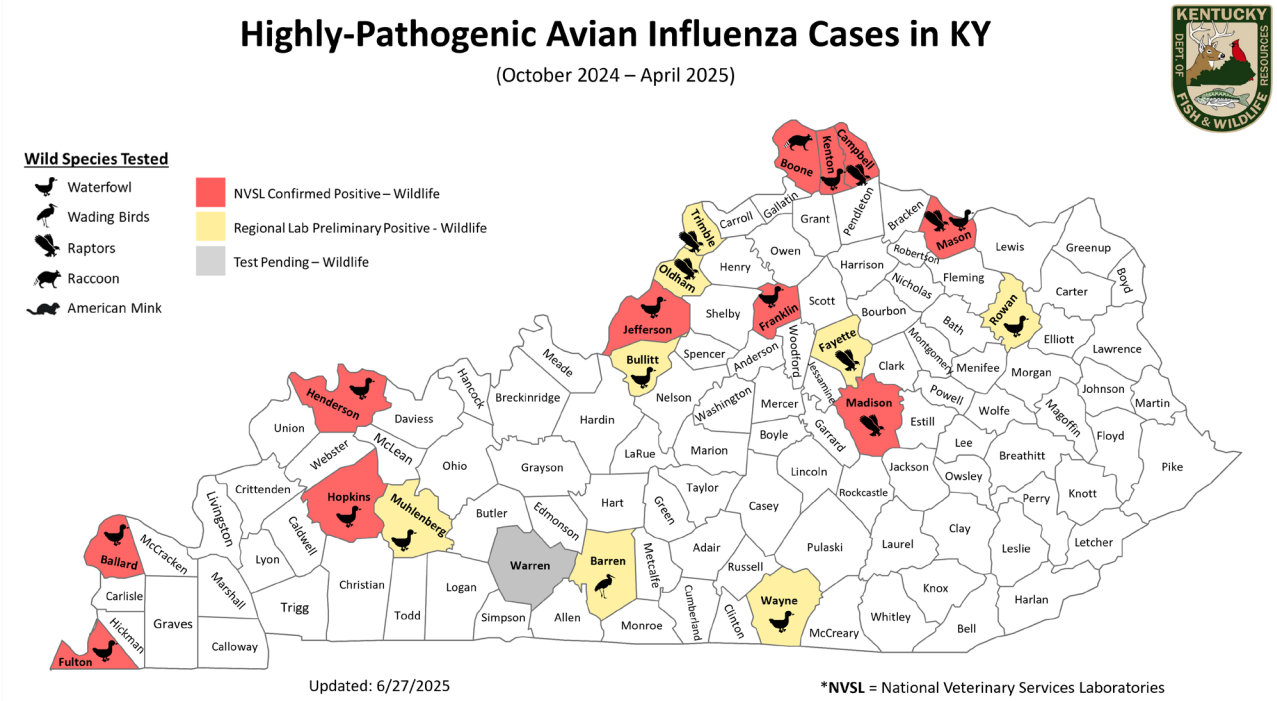
June 2025 – October 7, 2025



Highly Pathogenic Avian Influenza (HPAI)

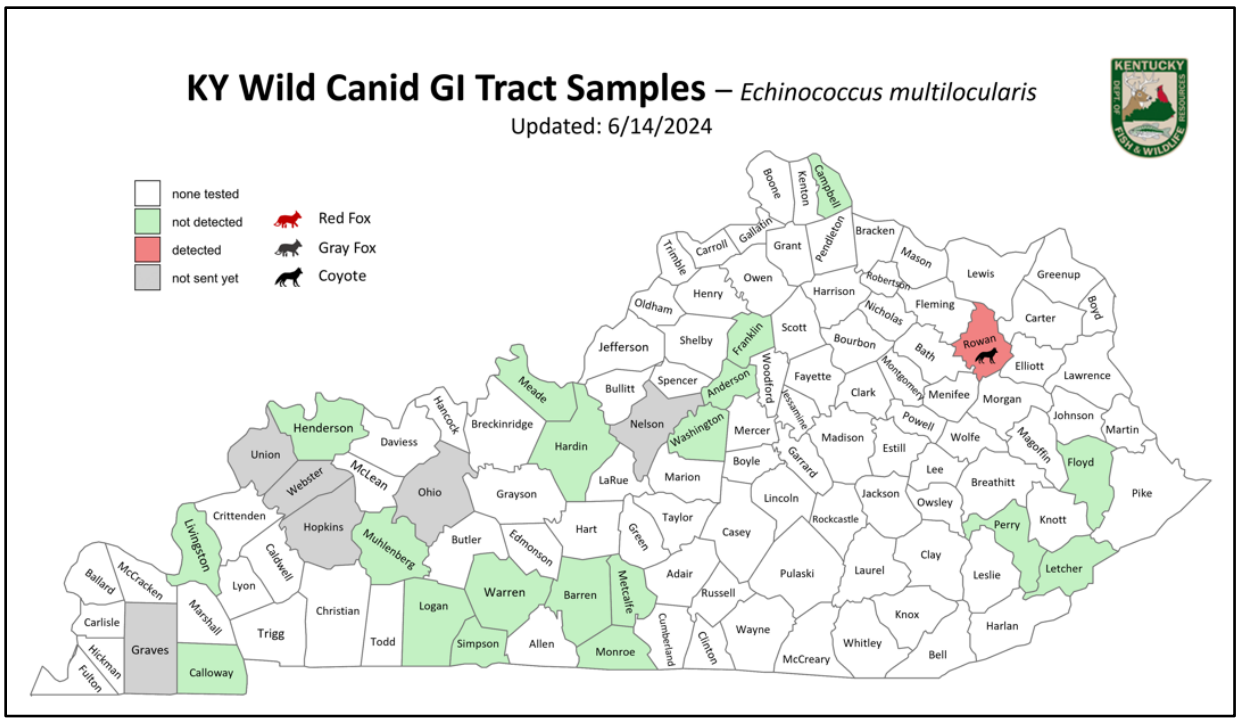
KDFWR's Wildlife Health Program has continued to actively surveil and monitor for highly pathogenic avian influenza (HPAI) in wildlife since the initial detection of a Eurasian lineage goose/Guangdong H5 clade 2.3.4.4b in the Atlantic Flyway in January of 2022. In February of 2022, highly pathogenic avian influenza (HPAI) was detected in 2 snow geese from Ballard County. The Wildlife Health Program has been tracking detections annually within the Commonwealth since 2022. Annual detections of the HPAI Eurasian lineage goose/Guangdong H5 clade 2.3.4.4b across North America in wildlife species strongly indicates the disease has become endemic in North America. There are strong seasonal patterns to these detections due to their association with waterfowl migratory patterns.

Following the initial detection, KDFWR's Wildlife Health Program opened a public reporting system and has continued to maintain this reporting system. Reports of mortalities in waterfowl, bald eagles, raptors, avian scavengers, and mammals has improved the agency's ability to detect cases of HPAI in birds and mammals. From October 2024 through the Spring of 2025, 14 counties have had initial detections of HPAI at a regional lab and been sent to NVSL for confirmation. Detected cases of HPAI in wild birds have been found in various avian species in Kentucky, including the Canada Goose, Snow Goose, Green-winged Teal, Mallard, Sandhill Crane, Great Horned Owl, and American Gadwall. Additionally, there has been one mammal detection from a raccoon in Boone County. Compared to previous years, Kentucky documented a total of 26 wild bird detections and no mammalian cases in 2022 and 5 wild bird detections and 3 mammalian cases in 2023. Of the wild bird detections in Kentucky, there have been 5 raptors including two bald eagles and three hawks since the initial detection in 2022. As of October 2025, two black vulture die-offs attributed to HPAI in Scott and Boone county have been confirmed.



Echinococcosis

The Wildlife Health and Furbearer Programs are collaborating with the University of Georgia's Southeastern Cooperative Wildlife Disease Study to investigate the prevalence and distribution of a zoonotic tapeworm, *Echinococcus* spp. There are two species *Echinococcus multilocularis* and *E. granulosus* reported in North America. Both have significant implications for human, domestic animal, and wildlife health. KDFWR's Wildlife Health Program is issued a Wildlife Health Alert to highlight the detection of the parasite *E. multilocularis* in Rowan County. This marks the first known instance of *E. multilocularis* in Kentucky. This is a zoonotic tapeworm that can infected humans through accidental ingestion of *E. multilocularis* eggs present in the feces or on the fur of wild and domestic canines, or in contaminated food and water. Infections of *E. multilocularis* in people can lead to alveolar echinococcosis, a severe and potentially life-threatening disease if left untreated. The Wildlife Health Program has collected gastrointestinal tracts from 53 coyotes, 14 red foxes and 2 gray foxes and are actively seeking carcasses from Rowan and the surrounding counties in 2024.



Foreign Animal Disease

Rabbit Hemorrhagic Disease Virus (RHDV-2)

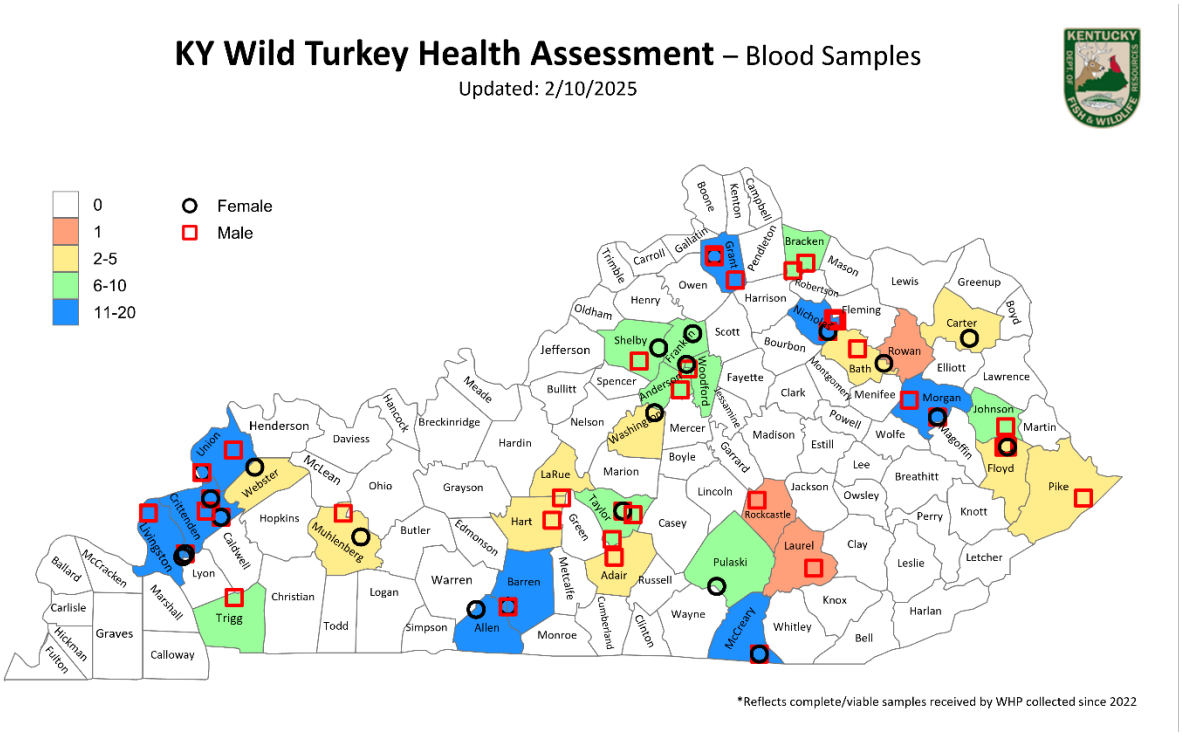
The Wildlife Health Program continues to use online reporting to identify suspicious mortality in wild rabbits. There has been no RHDV-2 detection in wild rabbits in Kentucky. In 2022, Kentucky passed regulations prohibiting the importation of live wild rabbits and carcasses in response to the threat of RHDV-2. The goal of these regulations is to minimize the risk of introducing the disease through the importation of wild rabbits. Unfortunately, domestic rabbits remain unregulated in Kentucky and still pose a significant risk to wild rabbit populations. The Wildlife Health Program has continued to monitor for suspicious rabbit mortalities since this foreign animal disease was detected in two domestic rabbits from Jefferson County in December of 2021. An epidemiological investigation was conducted for the domestic rabbit case, but the source of the introduction was not determined. KDFWR completed a survey of the area within a 5-mile buffer around the index case looking for sick or dead rabbits and requested the public's assistance with reporting any suspicious rabbit mortalities. No additional positive animals were identified. KDFWR has developed an online public reporting survey for sick and dead mesomammals to make reporting suspicious rabbit mortalities more accessible.

Species-Specific Disease Concerns

Turkey and Oncogenic Viruses

Prior to 2019 there was very little disease monitoring and surveillance done in wild turkeys. The Wildlife Health Program is interested in understanding the impact Lymphoproliferative disease virus (LPDV) and Reticuloendotheliosis virus (REV) may be having on turkey populations as these two viruses can cause tumor formation in turkeys. To gain a better understanding of the impact these diseases are having on wild turkeys in Kentucky, KDFWR's Commission approved a three-year turkey banding and survival project with a health assessment component.

For the health assessment portion of this project, the plan is to sample 100 birds from 3 geographically distinct regions of KY over a three-year period. Multiple biological samples will be collected for pathogen screening. The pathogens of interest include lymphoproliferative disease virus (LPDV), reticuloendotheliosis virus (REV), Avian Influenza, West Nile Virus (WNV), Mycoplasma, Borellia spp., T. gondii, and various Hemoparasites. This surveillance data, in combination with mortality data will be used to supplement wild turkey mortality investigations which are less common and develop baseline disease information including prevalence and distribution for the wild turkey population in the state. Kentucky is in the final year of collecting samples and are on track meet the sample target of 300 birds compromised of approximately 50:50 male to female ratio.



Bats and White-nose Syndrome (WNS)

White-nose syndrome (WNS) is a devastating disease that has resulted in unprecedented mortality in cave bats, more than six million lost. The fungus, Pseudogymnoascus destructans (Pd), grows on exposed parts (e.g., nose, wings, ears) of hibernating bats becoming an irritant that causes bats to wake up repeatedly and subsequently burn up the fat reserves necessary to survive the winter. First discovered in New York in 2007, the disease has spread to over 40 U.S. States and nine Canadian provinces. WNS was first identified in Kentucky on 4/1/2011 at Cool Springs Cave, in Trigg County. To date, WNS has been documented at 120 sites in 27 counties and just the fungus Pd (i.e., no symptomatic bats) has been identified on bats in two additional caves (see map.) Due to Pd's longevity within the state, Kentucky is now designated within the WNS Endemic Management Area. Endemic states are represented by those where Pd has been widespread for multiple years, and the fungus is presumed present in most or all hibernacula (White-nose Syndrome Disease Management Working Group 2020).

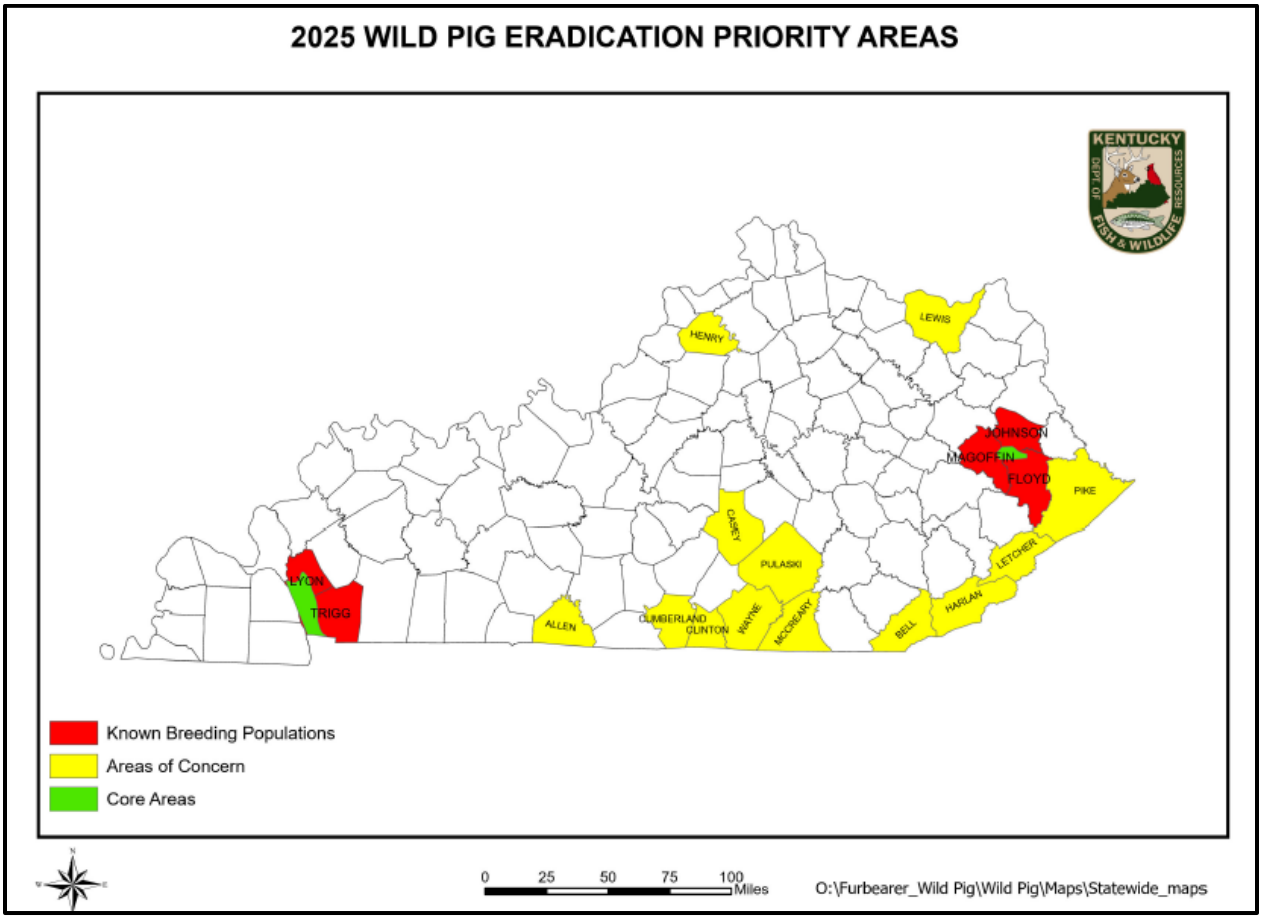
In general, declines have stabilized since WNS was first detected in Kentucky. Tricolored bats (Perimyotis subflavus), little brown bats (Myotis lucifugus), and northern long-eared bats (Myotis septentrionalis) have experienced the most significant declines. A formal analysis is pending but estimates for those three species are likely to be well over 50% with upper estimates over 80%. Indiana bat (Myotis sodalis) populations have experienced some declines but not to the extent the other three species listed above have. Some caves, including a few on Pine Mountain and one at Mammoth Cave National Park have experienced significant declines (as much as 90%). Certain cave populations are starting exhibit small increases in tricolored and little brown bats. KDFWR conducts hibernacula surveys annually to monitor bat populations. Surveyors document any visible sign of WNS observed on hibernating bats. KDFWR participated in a study in 2024 to collect swabs on cave walls for an external research project assessing fungal load in regions of the U.S. and Canada where WNS is well established. Visible signs of the fungus have been sparse over the past five years of cave surveys and many of the caves surveyed bi-annually have observed few to no visible diagnostic signs on bats. This appears to be a common trend amongst states in which WNS has been established for a significant length of time.

Wild Pig Eradication and Disease Concerns

Wild pigs are an invasive species that pose serious threats to native wildlife and their habitats throughout the Commonwealth. Wild pigs outcompete, displace, and prey upon many native wildlife species. Much to the dismay of our sportsmen and women, white-tailed deer and turkey leave the area when pigs are present. Wild pigs cause severe ecological damage and significantly affect sensitive ecosystems, forest regeneration, and riparian areas. Wild pig rooting alters

aquatic communities by degrading water quality and physically damaging native plants, providing a competitive advantage to exotic plants. Pigs also serve as common vectors for a myriad of diseases that are transmissible to wildlife, livestock, and humans, including pseudorabies, swine brucellosis, and bovine tuberculosis.

The Kentucky Department of Fish and Wildlife Resources in partnership with USDA Wildlife Services has made great strides in wild pig eradication over the last few years. Wild pig numbers are at the lowest level in the last decade. All breeding populations of pigs in KY have been significantly reduced. In 2025, there were no detections of Swine Brucellosis (n=64). Similarly, in 2025, there were no detections of pseudorabies (n=64). There were no detections in the two previous years as well. To enhance the success of the current eradication program, 301 KAR 3:030 was amended to prohibit the take of wild pigs. This amendment will improve eradication efforts by prohibiting hunting activities which promote wild pig dispersal compared to agency trapping methods that reduce population sizes and discourage spread to new areas. Private landowners still have the right to protect their property from damage by wild pigs under statutory authority (KRS 150.170, Section 7).



Other

Canine Distemper in Wildlife

Canine Distemper is a virus that can infect a variety of wildlife and cause neurologic symptoms. Because these symptoms can mimic rabies and Kentucky has an Enhanced Rabies Surveillance Zone for the raccoon variant of rabies it is extremely important to follow-up on these suspect cases. Additionally, there is concern that canine distemper may be contributing to population declines in gray foxes which are highly susceptible to this virus. It is important to identify comorbidities or co-infections to understand how this virus may be impacting wildlife populations. In Fiscal Year 2024, the Wildlife Health Program began confirmed a total of 15 cases of canine distemper infections from 14 counties including from 1 mink, 2 striped skunks, and 12 raccoons. Traditionally, canine distemper outbreaks are in late winter and early spring, however, in recent years we have consistently got detections throughout the year.

In addition to the neurologic mammal reports KDFWR receives, a significant number of neurologic raccoons and other mammals are submitted to the KY Department of Public Health every year due to human exposure. However, if these samples come back negative for rabies, no additional diagnostics are pursued by Public Health. To further investigate these rabies negative cases of neurologic mammals, we have partnered with Public Health to collect these tissues for CDV testing. To date, we have collected and tested 70 samples from Public Health, of which 44.3% where positive for CDV. Approximately 50% of the raccoon, coyote, and fox tissues submitted were positive for CDV. Compared to only a third of the skunk samples submitted were positive for CDV.

Tick Surveillance

Kentucky initiated an ongoing statewide tick surveillance program in 2015 in partnership with SCWDS in response to the expansion of several tick vector species into Kentucky. Additionally, KDFWR has partnered with the KY Department of Public Health to continue long-term surveillance of tick populations in Kentucky. The Asian longhorned tick was initially recovered from an elk in Martin County in July 2018. However, an older Asian longhorned tick detection was confirmed from a Floyd County black bear in June 2017. In 2020, the first report of HL in a domestic species was reported from a bull in Metcalfe County and then from a dead emaciated cow in Boone County, KY. One tick was recovered from a human in Madison County, KY. In the summer of 2021, two ticks were collected from elk calves in Perry and Breathitt counties. A novel pathogen, *Theileria orientalis* ikeda, which is not native to North America and is associated with the Asian Longhorned tick was recently detected in cattle in Fleming and Hart counties. This pathogen was likely introduced with this non-native tick and has significant health impacts for cattle. 2025 was the second year of an ongoing tick surveillance project

collecting ticks from 5 of KDFWR's wildlife management areas (WMAs) for species identification and pathogen testing. This project will contribute to surveillance for the Asian Longhorned tick as well as KDFWR staff guidance on tick-borne disease.