CHRONIC WASTING DISEASE

IMPORTANT: CWD was first detected in North Carolina in 2022. For an updated list of affected counties visit ncwildlife.org/cwd.

About the Disease

Chronic Wasting Disease (CWD) is a transmissible spongiform encephalopathy (TSE) disease that effects deer, elk, moose, and reindeer/caribou, and is considered the most important disease threatening North American members of the deer family. The source of the disease is an abnormal prion (a form of protein) that collects in the animal's brain cells and other tissues. These prions gradually build in the brain, causing brain cells to die. CWD is thought to be spread by animal-to-animal contact as well as contact with contaminated soils and plants. CWD prions have been detected in urine, feces, blood and saliva of infected deer well before showing outward signs of disease. CWD prions may persist in the environment for years, potentially decades, and remain infectious to susceptible animals. Once infected, it can take over 16 months for clinical signs to develop, and individuals appear healthy for most of the infection period. Due to the neurological effects of the disease, deer in the final stages of the CWD may exhibit several signs including: **weight loss, listlessness and lack of coordination, drooling, drinking lots of water and increased urination.** There is no cure for the disease and infected animals eventually die.

Suspicious Deer

If you see a deer or elk exhibiting signs of disease or find a deer where cause of death is not obvious, contact your local District Biologist (ncwildlife.org/WMBiologists) or the Wildlife Resources Commission (WRC) Wildlife Helpline at 866-318-2401 or 919-707-4011. Similarly, if you have harvested a deer that was showing signs of disease, leave the animal at the site of the kill and contact the WRC. Biologists may collect tissue samples necessary for CWD and other disease testing.

Impacts of CWD to the Deer Herd and Deer Hunting

While CWD has not been detected in North Carolina, experience from CWD positive states and population modelling suggest both short-term and long-term impacts to North Carolina's deer herd and hunting if CWD becomes established.

- Most deer population models predict notable declines or localized extinction over a period of 50-200 years following CWD introduction.
- Surveys have shown that up to 49% of hunters would stop hunting deer and elk if the prevalence of CWD increased.
- Several states have experienced declines in hunting license sales after the discovery of CWD. Significant declines in hunting license sales or a marked reduction in hunting effort has the potential to impact the state's ability to manage the disease in addition to having a significant impact to the economy.



Impacts to Human Health

According to the Centers for Disease Control, to date there have been no reported cases of CWD infection in people. While there is no scientific evidence that CWD can infect humans, some animal studies suggest CWD poses a risk to certain types of non-human primates. Since 1997, the World Health Organization has recommended that it is important to keep the agents of all known prion diseases from entering the human food chain. For more information on precautions for processing and handling deer, visit ncwildlife.org/cwd.



What is the N.C. Wildlife Resources Commission doing to Protect our State's Wild Deer?

Efforts to protect the state's wild deer and elk herds focuses on robust monitoring for early detection of CWD and limiting exposure of our wild deer and environments to the infectious prion disease agent. Early detection is critical in being able to effectively manage the disease. The WRC has been testing for CWD since 1999 in both deer that show signs of any disease and through coordinated statewide surveillance. Past statewide surveillance efforts occurred in 2003, 2008 and 2013, and since 1999 over 11,000 samples have been tested. Currently, statewide surveillance occurs each year based on 5-year sampling goals. Samples collected come from a variety of sources including road-kills, voluntary hunter submissions and those supplied from cooperating taxidermists and meat processors.

Efforts to minimize the risk of CWD being introduced into North Carolina have included a review and update to rules related to deer carcasses imported by out-of-state hunters, and close coordination with the North Carolina Department of Agriculture (NCDA) regarding management of farmed cervids. Finally, both the WRC and NCDA have adopted integrated CWD response plans that will guide agency response actions if CWD is detected in the state.

To view the WRC Chronic Wasting Disease Response Plan, rules related to CWD, and updates on surveillance and the current number of samples the Wildlife Resources Commission has collected, please visit our website (ncwildlife. org/cwd).

Still have questions about Chronic Wasting Disease? Please visit our website, ncwildlife.org, or visit the CWD Alliance, cwd-info.org.





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