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CWD Frequently Asked Questions

IMPORTANT: As of March 31, 2022, CWD was detected in North Carolina in a deer in Yadkin County.

What is Chronic Wasting Disease?

Chronic wasting disease (CWD) is a transmissible spongiform encephalopathy in cervids (including white-tailed and mule deer, as well as elk, moose, and reindeer/caribou). CWD is characterized by the accumulation of prions in brain cells that eventually burst, leaving microscopic empty spaces in the brain and giving it a "spongy" appearance. Related diseases include: scrapie in sheep and goats; bovine spongiform encephalopathy, or "mad cow disease" in cattle; transmissible mink encephalopathy; and Creutzfeldt-Jakob disease in humans. CWD can be transmitted directly through animal-to-animal contact as well as indirectly through contaminated soil, plants, and other materials. It can take over 18 months after exposure for an infected animal to develop clinical signs of disease and can appear completely healthy during that time. Once an animal starts showing signs of the disease, it will steadily lose body weight and eventually die. There is currently no vaccine, treatment, or cure for CWD.

To date, CWD has been primarily found in white-tailed deer, elk, mule deer, moose, and reindeer/caribou in North America. The susceptibility of exotic cervids and other wildlife species is currently unknown.

What are the signs of CWD?

Deer with CWD can appear healthy for 18 months or more before they begin to show signs of disease. During that time, they can spread CWD to other animals and to the environment.

- Isolation from other animals.
- Listlessness or showing little or no interest in their surroundings.
- Lack of coordination.
- Frequent lowering of the head.
- Blank facial expressions.
- Walking in set patterns.
- Drooling and grinding of teeth.
- Drinking lots of water and increased urination.
- Low weight.

Other deer diseases may present with similar signs. Only a laboratory test can confirm the presence of CWD. Currently, the only USDA-approved test for CWD is a microscopic examination of the brain and lymph node tissue, which must be acquired after death; there is no reliable live animal test for CWD.

Where is CWD found in North America?

Visit this page to see distribution of CWD in North America:
https://www.usgs.gov/media/images/distribution-chronic-wasting-disease-north-america-0

Why is the NCWRC testing for CWD?

Protecting the state's deer and elk from the harmful impacts of CWD relies on early detection and limiting the exposure of our wildlife and landscapes to the infectious prions that cause the disease. As other states have learned, early detection is critical in being able to effectively manage the disease.

CWD has the potential to greatly impact North Carolina's deer and elk populations and the tradition of deer hunting in our state. Robust testing is our most powerful tool to identify CWD wherever it occurs on the landscape and to effectively manage its spread.

How long has the NCWRC been testing for CWD?

The NCWRC has been testing for CWD since 1999 in deer that show signs of any disease and through coordinated statewide surveillance. Past statewide surveillance efforts occurred in 2003, 2008 and 2013. Since 1999, over 15,000 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 vehicle-kills, voluntary hunter submissions and those supplied from cooperating taxidermists and meat processors.

What should I do if I see a sick deer?

If you see or have harvested a deer exhibiting signs of disease, leave the animal at the site of the kill and call your local District Biologist (ncwildlife.org/WMDistrictContacts) or the NC Wildlife Helpline at 1-866-318-2401.

What precautions can I take for handling, processing and disposing of deer in NC?

The precautions below should be followed when handling any wild game and help to minimize the risk of exposure and transmission of diseases or foodborne illness.

- Do not eat any parts from a deer that appears sick.
- Do not eat the eyes, brain, tongue, spinal cord, spleen, tonsils or lymph nodes of any deer.
- If hunting in an area where CWD has been confirmed, have your harvested animal tested for CWD and avoid consuming meat from any animal testing positive.

Field Dressing and Home Processing

- Wear rubber or latex gloves at all times.
- Use only knives or utensils selected for the purpose of field dressing and processing. Do not use these utensils for eating.
- Minimize contact with the brain, spinal cord, spleen and lymph nodes as you work.
- Whenever possible, field dress deer in the same location they were harvested. If field dressing in a location other than where the deer was harvested, bury the organs or dispose of them at a landfill to prevent deer or scavengers from coming into contact with potentially infected parts.
- Do not cut through the spinal column except to remove the head. Use a knife designated only for this purpose and ensure that it is thoroughly disinfected after each use.
- Bone out the meat and remove all fat and connective tissue. This will also remove any lymph nodes.
- All damaged meat near and around the wound channel should be removed and discarded. If using lead ammo, fragments can travel up to 18 inches depending on bullet type. These fragments can be a potential health problem for pregnant women and children.
- Dispose of any unused deer parts, especially if they were transported away from the site of harvest, either by burial or at a landfill. This will prevent deer or scavengers from coming into contact with potentially infected parts. Never transport deer parts and then dispose of them on the ground, roadside, or in a waterway.
- Process each deer separately, then store each deer's meat in its own labeled containers.
- Thoroughly clean and sanitize equipment and work areas with a 50/50 solution of bleach and water after processing, allowing equipment to soak for 5 minutes.

Eating Venison

Never eat meat from a deer that looks sick. Never eat a deer's:

Brain.
Tongue.
Tonsils.
Eyes.
Spinal cord.
Spleen.
Lymph nodes.

To be sure you've removed all of the parts listed above:
Gut the deer.
Remove the head.
Cut meat from the bone with a knife; don't cut through bones.
Remove all fat, membranes and tendons from the meat.

Proper Disposal of Deer Harvested in North Carolina

CWD spreads between animals through saliva, urine and feces, either through direct contact or indirectly through environmental contamination, especially in the soil. CWD prions can remain active in the soil for a very long time, even through harsh weather and fire. Soil that has come into contact with contaminated deer parts or fluids can cause CWD in deer for many years – even decades.

Taking precautions that reduce the movement of potentially infected deer parts or fluids around the landscape is crucial to managing the spread of CWD. For more information, read "Disposal of Deer Harvested within North Carolina," which can be downloaded at ncwildlife.org/CWD.

What precautions can I take if hunting outside of North Carolina?

If you are hunting in a state or province where CWD has been confirmed, public health and wildlife officials recommend taking the following precautions when pursuing and/or handling deer, elk, moose or reindeer/caribou:

- Do NOT shoot, handle or consume any animal that is acting abnormally or appears to be sick.
- Wear latex or rubber gloves when field dressing.
- Bone out the meat and follow the disposal regulations of the state you're hunting in (Note: don't saw through bone and avoid cutting through the brain or spinal cord unless removing the head, in which case, use a knife designated for this purpose).
- Minimize the handling of the brain and spinal cord (backbone).
- Wash hands, boots and instruments thoroughly after field dressing is completed.
- If you have your deer, elk, moose or reindeer commercially processed, request that your animal is processed individually and without meat from other animals.
- If you plan to bring any deer, elk, moose, or reindeer parts back to North Carolina, read North Carolina Rules for Importation of Deer Carcasses and Carcass parts, which can be found at ncwildlife.org/CWD.

What if I am hunting outside of North Carolina?

Anyone returning or transporting a deer, elk, moose or reindeer/caribou from any state, Canadian province or foreign country outside of North Carolina must follow the processing and packaging regulations, which allow the importation of:

- Meat that has been boned out such that no pieces or fragments of bone remain;
- Caped hides with no part of the skull or spinal column attached;
- Antlers, antlers attached to cleaned skull plates, or cleaned skulls free from meat or brain tissue;
- Cleaned lower jawbone(s) with teeth or cleaned teeth; or
- Finished taxidermy products and tanned hides.

For more information read North Carolina Rules for Importation of Deer Carcasses and Carcass parts, which can be found at ncwildlife.org/CWD.

Should I eat the meat of potentially diseased deer?

The Centers for Disease Control states that to date, there have been no reported cases of CWD infection in people. However, some animal studies suggest CWD poses a risk to certain types of non-human primates. The CDC states it is important to keep the agents of all known prion diseases (also including mad cow disease and scrapie in sheep) from entering the human food chain.

For optimal safety, the NCWRC recommends people do NOT eat:

- Meat from a deer that looks sick
- Any of the following organs: brain, eyes, spinal cord, spleen, tonsils and lymph nodes*.
- Any meat from an animal that tests positive for the disease.

*Normal field dressing coupled with boning out a carcass will remove most (if not all) of these body parts. Cutting away all fatty tissue will remove remaining lymph nodes.

Can CWD prions be destroyed?

The abnormal proteins, or prions, that cause CWD are very robust and are not easily destroyed. Prions can be frozen for extended periods of time and still be capable of causing CWD. Extremely high temperatures must be sustained for several hours to destroy a prion. Prions cannot be "killed" with typical sanitizing chemicals but may be manually removed with disinfectant and scrubbing. Hunters should wear gloves and use designated tools/utensils to cut or handle high-risk parts such as the spinal cord, brain and other nervous system tissue. These tools/utensils should not be used to process meat intended for consumption and should be thoroughly sanitized between uses.

Once CWD prions have contaminated the ground in an area, they can remain active and capable of causing CWD for years – even decades. For this reason, taking precautions that prevent CWD from spreading to an area is crucial.