

## **What is Chronic Wasting Disease? (CWD)**

Chronic wasting disease is a fatal disease of the central nervous system of mule deer, white-tailed deer, Rocky Mountain elk, and moose. CWD is a prion disease (not a bacteria or virus) caused by abnormal proteins that ultimately destroy brain tissue. This type of disease is known as a transmissible spongiform encephalopathy (TSE). This family of diseases includes bovine spongiform encephalopathy (“mad cow disease”), scrapie in sheep, and Creutzfeldt-Jacob Disease (CJD) in humans.

## **Does CWD exist in Ohio?**

Yes. On October 23, 2014 the Ohio Department of Agriculture and the Ohio Division of Wildlife confirmed the first case of CWD in Ohio in a captive deer herd in Holmes County. The source was an adult buck taken on a shooting preserve in Millersburg and tested as part of Ohio’s CWD monitoring program. Since 2002 the Division of Wildlife has conducted CWD surveillance throughout the state, testing more than 11,000 free-ranging deer. To date, there has yet to be a wild, free-ranging deer test positive for the disease in Ohio.

## **How can you tell if a deer has CWD?**

In early stages of infection, animals may not show any clinical signs of the disease. Except in the later stages of the disease, most deer with CWD do not appear sick, typically only displaying subtle behavioral changes. In fact, 94% of deer that tested positive for CWD in Illinois otherwise appeared healthy. As the disease advances, animals will begin to lose body condition and behavioral changes become much more pronounced. Animals will stagger, carry their heads and ears lowered, drool excessively, and show little if any fear of humans. Deer with late-stage CWD will often appear emaciated or “boney” – thus the name “wasting disease.” Unfortunately, most of these symptoms are not unique to CWD.

## **How is CWD spread?**

Research has shown that CWD may be transmitted through direct contact (animal-to-animal) and indirectly from the soil (or other surface) to the animal. Prions are shed through bodily fluids (saliva, excrement) and can remain viable in the soil for years. Since transmission can be facilitated via the movement of carcasses and animal parts, a number of states (including Ohio) have regulations on carcass transportation. Concentrating deer with feed/bait can increase the rate of disease spread throughout the population. Additionally, while the risk of disease transmission through the use of deer urine or other lures is currently unknown, hunters are discouraged from using these products.

## **How is CWD diagnosed?**

There are currently no live-animal tests for wild or captive cervids. Laboratory analysis of brain and lymphoid tissue is necessary to diagnose CWD. There is no vaccine and CWD is always fatal.

## **What should I do if I see a deer that shows CWD symptoms?**

As with any deer that appears sick, do not attempt to contact, disturb, kill, or remove the animal. Instead, please immediately contact your nearest Division of Wildlife District Office or county wildlife officer. We will then make arrangements to investigate the report. District Wildlife Offices are located in Columbus (614-644-3925), Findlay (419-424-5000), Akron (330-644-2293), Athens (740-589-9930), and Xenia (937-372-9261).

## **Can CWD infect livestock or other wildlife?**

There is no evidence that CWD can be naturally transmitted to livestock, pets, or other animals. Research has shown that cattle living amongst CWD-infected deer and elk showed no signs of disease, even after 10 years of exposure.

## **Is CWD dangerous to humans?**

There currently is no evidence that CWD can be transmitted to humans. Because some people in Europe contracted a variant of Creutzfeldt-Jakob disease after presumably eating beef contaminated with BSE prions (mad cow disease), some feared that humans could contract CWD, or similar disease, after eating venison from a CWD infected deer. Continued surveillance for similar diseases in humans has yet to reveal an instance where humans have contracted a related disease from butchering or eating meat from CWD infected animals. In fact, the rate of transmissible spongiform encephalopathy (TSE) diseases among humans in Wyoming and Colorado is *less* than the national average, despite the fact that CWD has been in these two states for almost 50 years. Further, research on primates and genetically-altered mice directly exposed to CWD prions have provided evidence that there is likely a species barrier that prevents humans from getting CWD. However, as a precautionary measure, public health officials recommend that human exposure to CWD be avoided as they continue to evaluate the potential risk, if any.

## **Is it still safe to eat venison from Ohio deer?**

There is no scientific evidence that CWD can be transmitted to humans by any means including consuming the meat of an infected animal. Since the prion that causes CWD accumulates in the brain, eyes, spinal cord, lymph nodes, tonsils and spleen, these tissues should be avoided.

Experts suggest that hunters take the following simple, common-sense precautions:

- Do not shoot or eat any animal that appears sick.
- Wear rubber gloves when field dressing carcasses.
- Bone out the meat from your animal, and avoid using a saw to cut through the brain or spinal cord.
- Minimize the handling of brain and spinal tissues.
- Wash hands and instruments thoroughly after field dressing is completed.

- Do not eat the parts that may contain prion proteins such as the brain, spinal cord, eyes, spleen, tonsils and lymph nodes. Normal field dressing practices, coupled with boning out of the meat, will remove most of these body parts.

## **What is the Division of Wildlife doing to prevent the spread of CWD in Ohio?**

Following the detection of CWD in a captive deer from a Holmes County shooting preserve in October 2014, the ODNR Division of Wildlife increased disease surveillance in the vicinity of the positive facility to determine if the disease is present in the wild herd. The ODNR Division of Wildlife is asking hunters to submit heads from adult deer that are harvested in the following Holmes County townships: Berlin, Hardy, Killbuck, Mechanic, Monroe, Prairie, Ripley, and Salt Creek. In addition to hunter harvested deer, wildlife employees will continue to collect samples from deer killed on the roadways as well as respond to any reports of deer that appear sick or are acting abnormal. Because the single CWD-positive deer came from a shooting preserve and the disease has not been confirmed in Ohio's free-ranging herd, more extreme disease management options (such as a restriction on feeding and baiting and increased deer harvest by paid sharpshooters) are not being implemented at this time. However, should the diseased be discovered in Ohio's free-ranging deer herd these and other measures aimed to limit the spread of the disease will be considered.

## **Can I have my deer tested for CWD?**

Yes. For a fee of \$33, the Animal Disease Diagnostic Lab (ADDL) at the Ohio Department of Agriculture (ODA) in Reynoldsburg can test your deer for you, provided that the deer is suitable for testing. Deer that have head wounds or are in advanced stages of decomposition will likely be unsuitable for testing. If you are considering having your deer tested, be sure to keep the head in a cool dry place until you can deliver it to the lab. Do not freeze the head. You are advised to make arrangements with the lab (614 728-6220) before dropping your deer