Chronic Wasting Disease Frequently Asked Questions

Q. What is Chronic Wasting Disease and how do deer, elk and moose catch it?

A. Chronic wasting disease (CWD) is one type of a class of diseases called Transmissible Spongiform Encephalopathies (TSEs) that infects members of the deer family, including deer, elk, moose, and caribou. TSEs are caused by infectious, mis-folded prion proteins (not a virus, bacteria, or fungus) which cause normal prion proteins throughout a healthy animal’s body to mis-fold, resulting in organ damage and eventual death. These prions are found throughout bodily tissues and secretions and are shed into the environment before and after death. When other animals come in contact with the prions, either from infected animals or from contaminated environments, they can be infected. The disease is slow acting, degenerative, and always fatal. The name comes from the appearance of symptomatic animals, which get very skinny and sick-looking before they die.

Q. Where does CWD come from?

A. The origin of CWD is unknown. It was discovered in 1967 in mule deer at a research facility in Colorado. Shortly thereafter it was also found in captive mule deer and elk in Ontario, Colorado and Wyoming. By the 1990s, it was discovered in wild white-tailed and mule deer, elk and moose in Colorado and Wyoming and among captive animals in Saskatchewan, South Dakota, Montana and Oklahoma. By the early 2000s, CWD was found in the wild in Saskatchewan, Alberta, Illinois and Wisconsin. CWD has continued to spread. As of 2018, it has been found in captive or free-ranging herds in 26 states, three Canadian provinces, Norway, Finland and South Korea. CWD was found among wild deer in Montana in 2017.

Q. Is CWD found in Montana?

A. Yes. CWD was first found in the wild in October 2017. To date, CWD has been detected in Carbon, Liberty, Hill, Blaine, Phillips, Valley, Daniels, and Sheridan Counties. Currently, there are two CWD Management Zones listed below:

**Northern Montana CWD Management Zone** – Hunting Districts 400, 401, 600, 611, 640, 641 and 670 including the communities of Shelby, Havre, Malta, Glasgow, and others on the defined boundaries (map below).

**Southern Montana CWD Management Zone** – Hunting Districts 502 and 510, that portion of HD 520 east of Hwy 212, that portion of HD 575 north and east of Hwy 78, that portion of HD 590 south of Interstate 90, that portion of HD 704 south of Hwy 212, including the communities of Billings, Broadus, and others on the defined boundaries (map below).
Q. What is a CWD Management Zone?

A. A CWD Management Zone is one or more hunting districts, or portions of hunting districts, that contain an area where CWD was detected. To prevent the spread of CWD, the whole carcass, whole head, brain or spinal column from animals harvested in the CWD Management Zone are not allowed outside the boundaries unless the animal has tested negative for CWD. The boundaries of the Management Zone have been established so that hunters have access to game processors, taxidermists and landfills for processing and disposing of animals harvested in the CWD Management Zone. The spinal column may be left at the kill site on public lands and with landowner permission on private lands.

As new CWD positives are detected, FWP might expand CWD Management Zone boundaries which FWP will make known through news releases and on its website.

Carcass parts that may be taken out of the CWD Management Areas include:
- Meat that is cut and wrapped or meat that is boned out
- Quarters or other portions of meat with no part of the spinal column or head attached
- Hides with no heads attached
- Skull plates or antlers with no meat or tissue attached
- Skulls that have been boiled and cleaned to remove flesh and tissue
- Upper canine teeth
- Head, partial body or whole-body mounts prepared by a taxidermist

Q. Can I transport a deer, elk or moose carcass from another state into Montana?

A. No. It is unlawful to transport into Montana a whole carcass, whole head, brain or spinal column from white-tailed deer, mule deer, moose or elk from states or Canadian provinces that have experienced CWD. CWD-positive states and provinces include Arkansas, Colorado, Illinois, Iowa, Kansas, Maryland, Michigan, Minnesota, Mississippi, Missouri, Nebraska, New Mexico, New York, North Dakota, Ohio, Oklahoma, Pennsylvania, South Dakota, Tennessee, Texas, Utah, Virginia, West Virginia, Wisconsin, Wyoming, Alberta, Saskatchewan, and Quebec.

Q. What animal parts can be brought into Montana from another state?

A. Meat that is cut and wrapped or meat that has been separated from the bone; quarters or other portions of meat with no part of the spinal column or head attached; hides with no heads attached; skull plates or antlers with no meat or tissue attached; skulls that have been boiled and cleaned to remove all flesh and tissue; upper canine teeth; head, partial body, or whole-body mounts prepared by a taxidermist.
**Q. What is Montana doing to manage CWD?**

A. Where CWD is detected, FWP will develop a herd management plan that will aim to keep prevalence of the disease at ≤5% in the affected population. Potential management tools include increasing harvest, especially of antlered animals; targeted removal in limited areas around CWD detections; minimizing large groupings of deer by removing or fencing attractants and through hazing or dispersal hunts; and carcass transport restrictions. In addition, FWP has several preventive measures in place including transport restrictions of live deer, elk or moose and their carcasses from CWD-positive states; the 2000 voter initiative ban on game farms; historic management emphasizing opportunity; laws banning the feeding of wildlife; and recent legislation regulating the use and import of cervid urine lures from CWD-positive states.

**Q. Why is CWD management important?**

A. Without management, CWD will spread, increase in prevalence, and may cause population declines in deer and elk as it has in other states. FWP is committed to doing all it can to keep our wildlife healthy so that hunting continues for generations to come. FWP’s goal is to effectively manage the disease in wild populations and limit the prevalence and spread of CWD. There are no vaccines for CWD so management and prevention are critical to help prevent long-term population decline in infected herds, slow the decline of wildlife-related recreation opportunities, and control potential declines in property value.

**Q. How did CWD get to Montana?**

A. CWD infections along our northern and southern borders are likely the result of the natural spread of the disease from Alberta, Saskatchewan, and Wyoming to Montana. Alberta, Saskatchewan, and Wyoming have documented CWD-positive deer close to Montana’s border. CWD is also found in neighboring North and South Dakota.

**Q. Where is Montana looking for CWD?**

A. FWP has identified priority surveillance areas near states and provinces with CWD where we will be focusing our surveillance efforts (map below). These areas have been identified as those at highest risk of becoming infected through the natural spread of the disease. We will periodically update our priority surveillance areas as new information on CWD within the state becomes available. Since CWD could be spread through the inadvertent or illegal movement of a CWD-positive deer or elk carcass into the state, we also plan to periodically survey other areas of the state that fall outside of the high-priority surveillance zones.
Q. Can CWD be eradicated?

A. After decades of CWD management across the country, most agencies and researchers agree that CWD cannot be eradicated once it infects a herd. Other states have attempted eradication and set up unreasonable expectations with hunters and the public. Eradication is not the goal of FWP.

Q. Can humans be infected by CWD?

A. There is no known transmission of CWD to humans. However, The Centers for Disease Control and Prevention (CDC) recommends that hunters harvesting a deer, elk, or moose from an area where CWD is known to be present have their animal tested for CWD prior to consuming the meat, and to not consume the meat if the animal tests positive.

Some simple precautions should be taken when field dressing deer, particularly in CWD Management Zones:

- Wear rubber gloves and eye protection when field dressing your deer.
- Minimize the handling of brain and spinal tissues.
- Wash hands and instruments thoroughly after field dressing is completed.
- Avoid processing and consuming brain, spinal cord, eyes, spleen, tonsils and lymph nodes of harvested animals. (Normal field dressing coupled with boning out a carcass will essentially remove these parts.)

Q. How will CWD impact Montana’s deer and elk herds?

A. The short answer is we don’t know. If CWD infects enough animals, it will probably reduce the herd in the long term. Other states have seen deer populations decline when CWD infects 20 to 40 percent of a herd. In Wyoming, heavily-infected herds of mule deer declined 21 percent per year and whitetails declined by 10 percent. Colorado saw a 45 percent decline in infected mule deer herds over 20 years. Clearly, if left unchecked, CWD could result in large-scale population declines.

Because the distribution and intensity of CWD infections are variable across a broad landscape, the impacts across the landscape will also be variable. Keeping deer numbers down and dispersed, and reducing buck:doe ratios, may keep the prevalence low and manageable. Fish, Wildlife & Parks’ focus will be on managing CWD-infected areas for prevalence at 5 percent or lower and preventing spread. This may also mean keeping deer or elk numbers low.
Q. How do you test for CWD?

A. The standard test is to look at an animal’s retropharyngeal lymph nodes or brainstem for evidence of CWD. These samples can only be collected from dead animals and are submitted to a certified CWD-testing diagnostic laboratory. Unfortunately, there are no non-invasive CWD tests for live animals. For research purposes, rectal or tonsil biopsies from live animals will work, but these tests are less sensitive and require capture, anesthesia and minor surgery, making them impractical for widespread surveillance.

Q. How long will it take for me to find out if my deer has CWD?

A. If your animal is sampled by FWP staff at a check station or regional office during the general surveillance season or during a special hunt, results will be posted online (fwp.mt.gov/cwd) within three weeks. We recommend obtaining results before consuming meat from deer killed within a CWD Management Zone. If your harvested deer is found to be positive, you can dispose of the meat appropriately at a landfill and FWP may provide you with a new license.

Q. How can you tell if an animal has CWD?

A. Animals with CWD cannot be diagnosed based on clinical signs because they are unspecific and mild at the beginning of the disease. Diagnosis is therefore made by testing tissues from the central nervous system and lymph nodes. Symptoms of infected animals can include emaciation, excessive salivation, lack of muscle coordination, difficulty swallowing, excessive thirst and excessive urination. Clinically ill animals may have an exaggerated wide posture, may stagger and carry the head and ears lowered, and are often found consuming large amounts of water. However, these symptoms don’t appear until the terminal stage of the disease. It is important to remember that infected animals may not have symptoms but can still be shedding infectious prions. All CWD-positive deer sampled in 2018 appeared outwardly normal and healthy.

Q. What happens if I shoot a sick deer?

A. This circumstance will be handled on a case-by-case basis. In the past, FWP has provided new licenses for people who have harvested sick animals that were inedible. However, since circumstances vary, we do not have a blanket policy. Guidelines from the Centers for Disease Control and Prevention advise that if you hunt in a CWD-positive area, have your deer, elk, or moose tested before consuming the meat. If it tests positive, dispose of the meat in a landfill. If you have harvested an animal that appears sick, contact your local FWP office.
Q. What is a Special CWD Hunt?

A. A Special CWD Hunt may be initiated following the detection of CWD outside of existing CWD Management Zones. This hunt may be held during the following hunting season and will be designed to sample enough harvested animals to determine the prevalence and spatial distribution of the disease. Special rules and regulations will apply. Additional Special CWD Hunt B Licenses may be made available to accomplish the desired harvest level. All animals harvested during a special hunt must be brought to FWP Special CWD Hunt check stations for sampling and to be tagged with a tag reading “MTFWP CWD TEST” and a unique identification number. To prevent spread of the disease, new CWD Management Zone boundaries may be defined, and brain and spinal column material of animals taken during a Special CWD Hunt will not be allowed out of the Management Zone boundaries. The Special CWD Hunt will end when enough deer are sampled to precisely measure the prevalence and spatial distribution of the disease, which is estimated to be between 150-400 animals.

Q. Why should ranchers and farmers care about CWD?

A. FWP uses hunters as a key tool to help ranchers, farmers and other landowners manage the impact of wildlife on their property and to their crops and livestock. If CWD were to increase in prevalence, FWP anticipates some localized decline in hunting interest. Additionally, in many parts of the state, property values are tied to existing recreational values. Hunting and wildlife viewing are key components. If CWD was left unmanaged and prevalence were to increase uncontrolled, it may impact property values. Recent research has shown that plants, including plants used for livestock food, can uptake CWD prions from the soil. If continued research shows that animals can catch CWD by eating infected plants, it could have huge repercussions on the agricultural industry. Concerns nationally and internationally about CWD transmission through feed has led many states and other countries to restrict the sale of such products from CWD-positive areas. It is already the case that deer and elk protein (mostly from game farms) from CWD areas cannot be used in livestock feed.

Q. Why should business owners care about CWD?

A. In Montana, outfitting and hunting make significant contributions to local economies. Across the state, deer, elk and antelope hunting brings in about $400 million. This includes hotels, restaurants and gas stations in big and small communities. We anticipate the possibility that CWD may initially slow interest in deer hunting in the affected area. Effective management will require participation from hunters and support from communities.
2019 CWD Management Zones

To prevent the spread of CWD within Montana, the whole carcass, whole head or spinal column from any deer, elk, or moose harvested within a CWD Management Zone may not be removed from that Management Zone unless the animal has tested negative for CWD.

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