

Chronic Wasting Disease

Chronic Wasting Disease (CWD) is a contagious neurological disease affecting deer, elk and moose. Prions are the infectious agents that cause CWD. It causes a characteristic spongy degeneration of the brains of infected animals resulting in emaciation, abnormal behavior, loss of bodily functions and death. Deer with CWD do not always look sick. CWD belongs to a group of diseases known as transmissible spongiform encephalopathies (TSEs). Within this family of diseases, there are several other variants that affect domestic animals, including scrapie, which has been identified in domestic sheep and goats for more than 200 years, and bovine spongiform encephalopathy (BSE) in cattle.

Deer can transmit CWD to each other through saliva, urine and feces. Prions are robust organisms that are difficult to destroy. They can be frozen and thawed, and still remain infectious. To date, there is no strong evidence for the occurrence of CWD in people, and it is not known if people can get infected with CWD prions. Animal studies suggest CWD poses a risk to some types of non-human primates like monkeys. These recent studies raise concerns that there may also be a risk to people and suggest it is important to prevent human exposure to CWD.

Deer Processors

General recommendations for all deer processors:

- Line trash receptacles with non-porous, single-use liners that can be sealed or enclosed.
- Minimize material in wastewater drains by removing and disposing of solids and other carcass debris from work surfaces, equipment, and personal protective equipment (PPE).
- Wear latex or rubber gloves when handling meat.
- Bone out the meat from deer. Don't saw through bone, and avoid cutting through the brain or spinal cord (backbone).
- Minimize the handling of brain and spinal tissues.
- Prompt removal of tissue from and washing of contaminated surfaces and equipment helps to prevent prions from drying and sticking to surfaces.
- Immediately clean workspaces, including washing all processing equipment and surfaces with soap and hot water and sanitizing instruments and other materials. Use appropriate sanitizers and concentrations as part of the cleaning process. After cleaning, equipment and surfaces should be clean to sight and touch.
- To minimize the risk of an infected deer contaminating other deer meat, it is recommended that each deer is processed individually. If mixing of deer is a common practice for your operation, customers should be informed so they can make a decision regarding consumption.

General recommendations for deer processors that have processed an animal that is a confirmed CWD positive in their facility (in addition to general recommendations for all deer processors):

- Properly contain carcass waste in double-lined trash bags and dispose of in acceptable landfill.
- Properly contain disposable clothing and equipment in double-lined trash bags and dispose of in landfill.
- Thoroughly wash non-disposable PPE prior to removal from contaminated site.
- Process each deer individually.
- Wash all processing equipment and surfaces often throughout the day with soap and hot water while processing. This helps remove tissue and other debris, prevent prions from drying and sticking to surfaces, and minimize the chance of spreading CWD prions. Use appropriate sanitizers and concentrations as part of the cleaning process. After cleaning, equipment and surfaces should be clean to sight and touch.
- If you are a meat processor enrolled in the Missouri Meat and Poultry Inspection Program, administered through the Missouri Department of Agriculture, and continue to use standard operating protocols for sanitization for amenable species while processing deer, no additional cleaning procedures would be necessary if a CWD positive animal was processed at your facility. For more information on these requirements, view the [Specified Risk Material Control](#) document on the [USDA Food Safety and Inspection Service](#) webpage.

Chronic Wasting Disease (continued)

Hunters

General CWD recommendations for hunters:

- Do not handle or consume any deer that is acting abnormally or appears to be sick.
- Contact the Missouri Department of Conservation if you see or harvest a deer that appears sick.
- Wear latex or rubber gloves when field dressing your deer.
- Bone out the meat from your deer. Don't saw through bone, and avoid cutting through the brain or spinal cord (backbone).
- Do not use household knives or other kitchen utensils for field dressing.
- Minimize the handling of brain and spinal tissues.
- Avoid consuming brain, spinal cord, eyes, spleen, tonsils and lymph nodes of harvested animals. (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.)
- In areas where CWD is known to be present, the Centers for Disease Control and Prevention recommends hunters strongly consider having their harvested deer tested before eating the meat.
- If the deer tests positive for CWD, do not eat the meat from that animal, and do not eat meat from deer that look sick or are found dead (road kill).
- Testing of deer prior to processing is mandatory for certain counties in the CWD Management Zone on specified dates. Voluntary testing at no charge for hunters may also be available. For details, see www.mdc.mo.gov/cwd.
- For a fee, CWD testing is also available through the State-Federal Cooperative Veterinary Diagnostic Laboratory in Springfield, MO (417-895-6861) or University of Missouri Veterinary Medicine Diagnostic Laboratory in Columbia, MO (573-882-6811).
- If you have your deer commercially processed, request that your deer is processed individually, without meat from other animals being added to meat from your deer.

Questions?



For **human health questions**, contact Missouri Department of Health and Senior Services at (573) 526-4780.



For **hunters with deer health questions**, contact Missouri Department of Conservation at (573) 815-7900.



For **meat processors with deer health questions**, contact Missouri Department of Agriculture at (573) 751-3377.

EO/AA employers: Services provided on a nondiscriminatory basis. Individuals who are deaf, hard-of-hearing, or have a speech disability can dial 711 or 1-800-735-2966.

More Information

- **Centers for Disease Control and Prevention:** cdc.gov/prions/cwd/index.html
- **Chronic Wasting Disease Alliance:** cwg-info.org/index.php
- **National Wildlife Health Center:** <https://www.usgs.gov/centers/nwhc/science/chronic-wasting-disease>
- **Missouri Department of Conservation:** mdc.mo.gov/cwd
- **Missouri Department of Agriculture:** agriculture.mo.gov/animals/health/