

What is Chronic Wasting Disease?

Chronic wasting disease (CWD) is a disease affecting the brain of deer and elk. It is a type of “transmissible spongiform encephalopathy (TSE)”, so named because slices of affected brain look like a sponge under the microscope. A *prion*, a protein-like infectious particle, causes the disease. This is similar to the agent that causes bovine spongiform encephalopathy, or “mad-cow disease” in cattle.

Which species are affected?

CWD has been found in only three species: mule deer, white-tailed deer, and Rocky Mountain elk. At this point, it appears that cattle and domestic livestock are resistant to natural infection.

What are the symptoms of CWD?

Deer and elk with the disease show changes in behavior as well as loss of body condition. Elk tend to have a longer course of the illness. Sick animals may initially walk with a mildly uncoordinated, wide-based gait in a circular pattern. They may also suffer from head tremors. Often, they are seen near water sources and along riverbanks. They frequently appear fatigued, with their head and ears lowered. Affected animals eat less and less, leading to loss of body condition. Towards the end, they may be seen drinking water in excess, drooling and urinating frequently. *The disease is universally fatal.*

Where is this disease found?

States and Canadian provinces that have reported CWD in captive elk and deer populations, include: Alberta, Saskatchewan, Montana, South Dakota, Nebraska, Colorado, Kansas, and Oklahoma. The disease can become quite widespread in captive populations, in part because of the proximity of affected animals to healthy ones. There are also areas with reports of CWD-infected *wild* populations. These are located in Saskatchewan, southwestern Wisconsin, and a band extending into southeastern Wyoming, southwestern Nebraska, and northeastern Colorado.

Has CWD been reported in Iowa?

To date, no affected deer or elk have been found in Iowa. However, researchers are conducting ongoing surveillance in this state for CWD. They plan to test 200 road kill and 800 hunter-harvested deer for this disease.

Has CWD been found in people?

There is a prion disease found in people called Creutzfeldt-Jakob Disease (CJD). This appears to be unrelated to CWD. Most cases of CJD occur in people over age 55. CJD occurs randomly in the population, at a rate of one case per million people per year. A new form has been seen in Europe related to “mad cow” disease. There have been no cases of this form arising in the United States.

Three young individuals who had a history of hunting and/or eating venison developed CJD. However, mad-cow disease was ruled out. Researchers found no strong evidence that CWD caused their disease.

General recommendations:

Do not eat deer or elk that appear sick with the above symptoms, or deer found dead. If eating healthy deer, bone out the carcasses. Do not eat the brain, spinal cord, eyes, tonsils, spleen, or lymph nodes. If hunting in an area mentioned above with known CWD in the deer population, contact local wildlife authorities for further recommendations.