

# What Every Taxidermist Should Know About Chronic Wasting Disease (CWD)

## What is Chronic Wasting Disease?

CWD is a member of the TSE (Transmissible Spongiform Encephalopathy) family of diseases that includes BSE (Bovine Spongiform Encephalopathy) or Mad Cow Disease in cattle, CJD (Creutzfeldt-Jakob disease) in humans, and Scrapie in sheep and goats. It was first recognized in Colorado deer and elk in 1967. The specific cause of CWD is believed to be an abnormal prion (protein infectious particle) that is found in the brain, the nervous system several other tissues of infected animals. It causes death of brain cells, and on a microscopic level, holes appear in the brain tissue.

## What animals get CWD?

CWD has been diagnosed in members of the cervid family and has been found in white-tailed deer, mule deer, black-tailed deer and hybrids thereof, as well as elk and moose. **CWD has not been shown to be transmissible to humans or traditional livestock.** However, it is recommended that meat from CWD-positive animals not be consumed. It has been diagnosed in deer, elk and moose in 18 states and 2 Canadian provinces (see below for a current (8/10) list).

## How is CWD transmitted?

It is believed that CWD is transmitted through animal-to-animal contact and through soil or food sources contaminated with bodily excretions including saliva. Contaminated carcasses or high-risk carcass parts also may spread the disease indirectly through environmental contamination that can last for decades.

## What are the signs of CWD?

Animals infected with CWD show a general loss of body condition, most notably weight loss. Excessive drinking, urination, salivation and drooling are common in the later stages of the disease. Behavioral changes such as repetitive walking patterns, droopy ears, incoordination, a wide-based stance and listlessness may also result from CWD infection. Some animals lose their fear of humans and predators. The onset of these signs may not become evident for years. There is no known cure and this disease is always fatal. There are many look-alike diseases and many that can occur at the same time as CWD.

## What actions have been taken to prevent the spread of CWD?

The movement of high-risk carcass parts (brain, spinal cord, lymph tissues) is a documented avenue through which CWD could be spread from infected areas. Several states, including Pennsylvania, have developed

regulations to prohibit the importation of high-risk carcass parts from CWD endemic states. As of August 1, 2011, Pennsylvania's importation ban prohibits high-risk carcass parts from Colorado, Illinois, Kansas, Maryland (CWD Management Area), Michigan, Minnesota, Missouri, Montana, Nebraska, New Mexico, New York (Madison and Oneida Counties), North Dakota, Oklahoma, South Dakota, Utah, Virginia (CWD Containment Area), West Virginia (CWD Containment Area), Wisconsin, Wyoming and the Canadian provinces of Alberta and Saskatchewan. Pennsylvanians hunting in CWD-positive areas should get their animals tested and should leave high-risk carcass parts in the area where the animal was hunted.

**Specific carcass parts**, where the CWD prion (causative substance) concentrates are: head (including brain, tonsils, eyes and all lymph nodes); spinal cord and smaller nerves; spleen; upper canine teeth, if root structure is present; any object or article containing visible brain or spinal cord material; unfinished taxidermy mounts or brain-tanned hides.

Pennsylvania's high-risk carcass parts ban **does not limit the importation of**: meat, without the backbone; skull plate with attached antlers, if no visible brain or spinal cord material is present; tanned hide or raw hide with no visible brain or spinal cord material present; cape, if no visible brain or spinal cord material is present; upper canine teeth, if no root structure is present or finished taxidermy mounts.

### **What can you do as a taxidermist to prevent the spread of CWD?**

- a. Determine if the specimen presented to you is from a CWD-positive state or area.
- b. If from a CWD-positive state or area, and if no high-risk parts are present, ask if tissues were submitted for testing, and if test results are known. If high-risk parts are present, such as a whole head with cape and antlers or a whole carcass, contact your local PGC region office to report it. After receiving authorization from the PGC, the taxidermist may cape out the head and remove the antlers being careful to remove all visible brain and spinal cord material from the skull cap and cape.
- c. Wear latex or rubber gloves when working on specimens.
- d. Thoroughly clean hands and taxidermy tools with soap and water and then sanitize tools in a solution of 50 percent household chlorine bleach and 50 percent water for one hour.
- e. Proper disposal of carcass parts from states *where CWD has not occurred* includes delivery to a regulated landfill through the trash or in food waste dumpsters. CWD-positive or suspect waste should not be rendered, burned in burn barrels, deposited in bone piles or spread in areas where it can come in contact with other animals. Contact your local Game Commission region office to arrange pickup of potentially contaminated material.
- f. Do not allow animals to have access to your taxidermy area or taxidermy waste.