How Chronic Wasting Disease Affects Deer Hunting

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If you are a white-tailed deer, mule deer, elk, moose or caribou enthusiast, odds are you are familiar with chronic wasting disease, or CWD. CWD is a disease of the central nervous system caused by abnormal proteins called “prions.” These prions are shed by infected animals through feces, urine and saliva, and the prions can survive for many years in the soil.

COMMON SIGNS OF CWD IN DEER
The disease attacks the brains of affected animals, causing them to become emaciated, display abnormal behavior, lose coordination and eventually die. CWD is a slowly progressive disease. Signs of the disease include:

- Progressive weight loss
- Teeth grinding
- Excessive salivation
- Holding the head in a lowered position
- Other signs are loss of appetite, listlessness, excessive thirst and urination, and drooping ears.

Source: Illinois Department of Natural Resources

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Additionally, plant material that deer consume can be contaminated on their surfaces and by root uptake. There is no known practical way to kill the prions.

Infected animals may not show symptoms for several years. However, the brain eventually degenerates and infected animals will appear sick, emaciated and lethargic, and will start to drool and stumble. CWD is always fatal. In areas heavily impacted by CWD, there have been serious implications to wildlife management agencies and hunters.

CWD IS MONITORED BY STATE
Most states monitor for the presence of CWD by testing harvested deer. Presently, CWD occurs in 24 states and three Canadian provinces.

It is important that hunters comply with monitoring and testing guidelines within their states, not only to detect the presence of CWD but also to decide if they want to consume the meat they harvest. CWD is similar to bovine spongiform encephalopathy (BSE), commonly known as mad cow disease, but is not thought to be contagious to humans. In 2017, the Alliance for Public Wildlife (http://apwildlife.org/publications) estimated that 7,000 to 15,000 CWD-infected animals are consumed by hunters and their families every year.

Hunters who pursue deer in multiple states should comply with each state’s laws pertaining to testing and transportation. The CWD Alliance (http://cwd-info.org) lists regulations pertaining to CWD in each state.

IMPLICATIONS OF CWD
Beyond consumption of infected meat, several implications of CWD can affect routine hunting and population management.

1. Baiting and Supplemental Feeding
For instance, Indiana banned baiting of deer completely, and Michigan recently passed laws banning supplemental feeding of deer in a 16-county CWD management zone. This means that feeding corn or protein in feeders as well as mineral supplementation is strictly prohibited. Baiting is legal in the remainder of Michigan between Sept. 15 and Jan. 1 if the bait is dispersed over at least a 10-foot-by-10-foot area.

In the Southern Great Plains, CWD has been found in wild and captive deer in Kansas and Texas but only in captive elk in Oklahoma. These three states have not banned baiting.

For a closer look at white-tailed deer harvest numbers, see “White-Tailed Deer Facts, Finding and Numbers,” by Stephen Webb, Ph.D., in the October 2018 issue of Noble News and Views.
at www.noble.org/white-tailed-deer-facts. Baiting attracts and concentrates other animals, most notably wild pigs. The possibility of other animals contracting CWD is thought to be very low. However, a recent study published in the *Journal of Virology* found that naturally exposed pigs might possibly act as a reservoir of CWD infectivity (Moore 2017).

A ban on baiting can have negative impacts on hunters who rely on feeders to harvest or observe deer as well as population surveys that utilize feeders to obtain photos. However, banning baiting in areas where CWD has been detected may be necessary to reduce animal-to-animal contact in hopes of minimizing disease spread.

2. Scent Use
Deer hunters often spray urine-based scents in their hunting areas to attract deer. These scents are usually derived from captive female deer in estrus. Urine collected on game farms is usually done over grated drain systems and is not treated to kill any infectious diseases in order to protect the urine's scent characteristics. Because urine can transmit CWD, some states have banned use of urine-based scents.

3. Transportation of Live Deer and Deer Parts
Hunters are also affected in some states by laws to prevent CWD from entering their borders or to reduce the disease’s spread within their borders. Most notably, many states have banned transportation of live deer or deer parts within the state or across state lines.

Hunters are more affected by transportation of deer parts whereas deer farmers are affected by live transportation regulations. The ban on transporting deer parts may influence where hunters choose to hunt. The days of taking whole deer home from another state or even just from one side of a county to another may be a thing of the past. Some states only allow deboned meat, antlers, skulls cleaned of all brain and muscle tissue, cleaned hides, or finished taxidermy mounts to be imported.

The take-home message here is that, in order to reduce the spread of CWD, some states require hunters to process their deer carcasses and eliminate any spinal column or brain tissue before transporting within state or across state lines in order to reduce the spread of CWD. Similar to baiting, this is probably a good practice for hunters to employ whether they are hunting in a state with CWD or not. Where not required by law, it may be a good practice for hunters to begin processing their deer and disposing non-consumable portions at or near the harvest site.

HUNTING IN CWD-INFECTED AREAS

Intense deer harvest in areas or zones where CWD has been detected is often implemented by state wildlife agencies to reduce deer-to-deer contact and slow the spread of CWD. This may be achieved in several ways, including sharp-shooting, creating special seasons or bonus tag systems, and enlisting landowner assistance.

Hunters in these areas will see a drastic reduction in deer densities and a corresponding drop in deer sightings, potentially making their hunts less enjoyable. This can negatively affect license sales, which are important to state wildlife agencies, as well as hunter expenses on lodging, food, gas, sporting goods and other hunting-related services. Landowners in these areas may be negatively affected if they lease deer hunting rights for additional income or hunt deer for their own pleasure. Property values may also be negatively affected by the presence of CWD and reduced deer densities.

Another measure implemented by some states with CWD is removing antler restrictions that protected younger bucks. Older bucks have the highest prevalence of CWD, so it is thought that a younger age structure of bucks may contribute to reducing the spread of CWD. This conflicts with landowners and hunter cooperatives who manage bucks in their deer herds. While it does not eliminate deer hunting, it is a detriment to hunters who enjoy trophy antlers with their meat.

HOW HUNTERS CAN HELP

Hunters can help reduce the spread of CWD in infected areas by eliminating practices that encourage deer-to-deer contact and doing their part by participating in state-organized deer population reduction plans.

With the spread and increased prevalence of CWD, it may be time for all states, deer farmers and hunters to consider voluntary or mandatory elimination of transporting live deer, baiting, and using urine-based scents to prevent or reduce the spread of CWD.

An ounce of prevention is worth a pound of cure.