Is CWD transmissible to humans?

CWD has been known to occur in deer and elk in the United States for years. In spite of ongoing surveillance for similar disease syndromes in humans, there has never been an instance of people contracting the disease from butchering or eating meat from CWD-infected animals. A World Health Organization (WHO) panel of experts reviewed all the available information on CWD and concluded that there is no scientific evidence that CWD can infect humans. However, there is much that scientists still do not know about CWD, and we cannot state that transmission of CWD to humans is absolutely not possible. Information on precautions for handling and processing deer can be found at the following Illinois Department of Agriculture website:

www.agr.state.il.us/AnimalHW/cwd/processing.html

What should I do if I observe a deer that I suspect might have CWD?

Call your local IDNR office, the regional IDNR office (phone numbers and addresses included in this pamphlet), or the Springfield office at 217/782-6384. The IDNR will make every effort to collect samples from suspect deer for CWD testing.

Have any changes been made in Illinois hunting/wildlife regulations as a result of this disease?

Yes. There are rules in effect that regulate the importation of animal carcasses and parts of carcasses into Illinois to prevent CWD from being inadvertently brought into Illinois in a carcass, and perhaps disposed of improperly into the environment. The full text of the current rules that relate to hunting is provided.

Illinois CWD Regulations:

Section 635.30 Importation of Animal Carcasses and Parts

Importation of hunter-harvested deer and elk carcasses into Illinois is prohibited except for:

a) deboned meat; antlers, antlers attached to skull caps, hides, upper canine teeth (also known as “buglers”, “whistlers,” or “ivories”). Skull caps shall be cleaned of all brain and muscle tissue;

b) finished taxidermist mounts;

c) carcasses or parts of carcasses with the spinal column or head attached may be transported into the State only if they are submitted to a licensed meat processor or a licensed taxidermist for processing within 72 hours of entry; licensed meat processors and taxidermists shall dispose of inedible tissue not exempted in subsection (a) in a properly permitted landfill or with a renderer; and
d) tissues can be imported into the State for use by a diagnostic or research laboratory; and
e) carcasses or parts of carcasses may be transported into the State to a properly permitted facility, to be disposed of, as long as the transportation and disposal complies with all applicable Illinois and federal laws and regulations. Carcasses or parts of carcasses to be disposed of must be frozen when transported or stored.

Section 635.40 Feeding or Baiting of Wildlife

It shall be illegal to make available food, salt, mineral blocks or other products for ingestion by wild deer or other wildlife in areas where wild deer are present. Exempted from this Section are the following:

a) elevated bird/squirrel feeders providing seed, grain, fruit, worms or suet, for birds or squirrels located within 100 feet of a dwelling devoted to human occupancy;

b) incidental feeding of wildlife within active livestock operations;
c) feeding of wild animals, other than wild deer, by hand as long as a reasonable attempt is made to clean up unconsumed food;
d) feeders for wildlife other than deer such as long as deer are excluded from the feed in and around the feeder by fencing or other barriers;
e) standing crops planted and left standing as food plots for wildlife;
f) grain or other feed scattered or distributed solely as the result of normal agricultural, gardening, or soil stabilization practices;
g) standing, flooded, or manipulated natural vegetation or food/seed deposited by natural vegetation;
h) grain or other feed distributed or scattered solely as the result of manipulation of an agricultural crop or other feed on the land where grown, for purposes of dove hunting;
i) food material placed for capturing or killing of wildlife pursuant to 520 ILCS 5/2.37, 5/2.30 and 5/1.3;
j) scientific permits issued pursuant to 17 Ill. Adm. Code 520 that allow food to attract wildlife;
k) any other permits issued by the Department of Natural Resources that require attraction of wildlife for purposes of management, research or control.
There is currently no treatment or vaccination for Chronic Wasting Disease (CWD), a sickness that affects deer, elk, and moose. In an effort to separate fact from fiction, Illinois Department of Natural Resources biologists have compiled the information in this pamphlet so that Illinois’ landowners and hunters can make informed decisions about chronic wasting disease and participation in its management.

What is Chronic Wasting Disease?

Chronic wasting disease (CWD) is a fatal neurological disease that belongs to a family of diseases known as transmissible spongiform encephalopathies (TSE’s). It is caused by an abnormal protein called a “prion.” Though it has certain similarities to other TSE’s, like bovine spongiform encephalopathy (Mad Cow Disease) or scrapie in sheep, it is a distinct disease apparently affecting only cervids (deer, elk and moose). CWD has certain similarities to other TSE’s, like bovine spongiform encephalopathy (Mad Cow Disease) or other news media coverage of CWD in Illinois.

Why should I be concerned about it?

For many years CWD was known to occur only in a small area of northern Colorado and southern Wyoming. However, the distribution of the disease has expanded into a number of other states and Canadian provinces. In February 2002, CWD was discovered in wild deer in southern Wisconsin. In November 2002, Illinois confirmed that a CWD-infected deer had been found near Roscoe in Boone County, near the Wisconsin border. To date, CWD has been confirmed in seven Illinois counties: Winnebago, Boone, McHenry, DeKalb, Ogle, LaSalle, and Stephenson. A cumulative total of 257 positive cases have been found since 2002 (Fig. 1). In Illinois, the disease is most common in eastern Winnebago, northwest DeKalb, west and central McHenry, and most of Boone County.

What are the 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. Signs of the disease include excessive salivation, loss of appetite, progressive weight loss, excessive thirst and urination, listlessness, teeth grinding, holding the head in a lowered position and drooping ears. Many of these signs can also be caused by other diseases. CWD is a slowly progressive disease; infected deer may not show signs of the disease for 18 or more months.

How is CWD transmitted?

Research has shown that CWD may be transmitted by various means. The disease can be passed by direct contact among animals in a herd, and through contact with or ingestion of infected bodily fluids (saliva, blood, and urine) and feces. Prions from decomposing infected carcasses and bodily waste may remain in certain soils for many years, so transmission by environmental contamination may also be possible. Thus, high deer population densities may create a favorable environment for disease transmission.

What is the IDNR doing about CWD in Illinois?

Illinois has conducted CWD surveillance of wild deer for several years. In this program, voluntary samples from hunter-harvested deer, suspect deer that exhibit CWD symptoms, roadkills, and deer culled by trained USDA Wildlife Services and IDNR biologists are submitted for testing by a federally-approved laboratory. During the fall 2001 firearm deer season, Illinois officials began systematically sampling hunter-harvested deer from around the state for CWD testing. Since then, this voluntary effort with cooperating hunters has resulted in over 33,000 deer tested and 115 positive samples.

The number of “suspect” animals submitted for testing has increased over the years, mostly because of increased public awareness of the disease. Since winter 2003, IDNR biologists have conducted yearly aerial surveillance surveys of deer populations and identify areas of wintering habitat with high deer concentrations to estimate deer numbers throughout the known CWD area. In cooperation with private landowners, IDNR biologists use this information to perform focused intensive winter sharpshooting operations in areas where CWD is most prevalent and deer concentrations are highest. This targeted approach has shown to be very effective in removing CWD-positive individuals. Voluntary sampling will continue during the hunting season throughout the state with emphasis on areas near known CWD cases and along the Illinois/Wisconsin border. Results will help determine if there are other areas of CWD and how to best manage the disease. Continued hunter participation and focused IDNR sharpshooting efforts with strong landowner cooperation are key to successful management of CWD in Illinois.

How is CWD diagnosed?

Brain samples and lymph nodes are collected from hunter-harvested or other suspect deer and are examined with a microscope using a special stain to identify the CWD prion. These samples must be from freshly killed deer which makes time very critical. Testing for CWD is conducted by federally-approved laboratories: there is no quick test that you or your meat processor can perform to ensure that your animal does not have CWD. Test results may not be available for as long as two months from submission due to the high number of samples received.

Illinois Deer Tested by Source (n=43,530)

CWD–positive Deer by Source (n=257)

Fig. 2 Number of samples and CWD-positive deer by source.

Through July 2009:

Hunter Harvest:

IDNR Sharpshooting:

Suspect Animals:

Other Sharpshooting:

Animals:

Suspect

Prions:

Animals:

Suspect

Prions:

Animals:

Suspect

Prions:

Animals:

Suspect

Prions: