

Carcass Disposal Practices to Manage Chronic Wasting Disease

John M. Tomeček

Assistant Professor and Extension Wildlife Specialist,
 Texas A&M AgriLife Extension Service

The most important practice for managing Chronic Wasting Disease is to prevent the movement of prions (which cause CWD) to new areas. Because carcasses can be a source of this disease causing material on the landscape, it is critical to create a barrier between infectious tissues and susceptible species. Prions do not degrade with time, so the barrier must be as effective and long-lasting as possible.

Carcasses from areas with CWD should **never** be disposed of on the landscape in non-CWD areas.

Carcass disposal practices

It is essential to dispose of carcasses in way that limits exposure of susceptible species to prions and prevents the movement of infectious materials to other areas. The following are practices that the public can use to safely dispose of carcasses.

1. On-site disposal

a. Burying

One practical method is to bury the carcass at the kill site. Burial should be deep enough to prevent scavengers from digging up the carcass and removing it. Many recommend a hole that is at least 6 feet deep. Some use shallower pits, and then cover carcass parts with ready-mix concrete or stone fill. In either case, the barrier should be sufficient to minimize exposing the soil surface to carcass parts.

A single trench can be used throughout a hunting season. After carcass parts are deposited, a layer of soil may be laid over the parts to limit

scavenger exposure. At the end of hunting season, the trench should be filled in completely.

b. Landscape disposal

If burial is not possible, you can dispose of carcass parts on the landscape. This should be done as close to the kill site as possible without removing infectious tissues from the site. Although it does not help prevent future infections on that location, it minimizes the chance of moving CWD to areas it has not previously inhabited.

2. Off-site disposal

a. Landfill or trash service

The preferred off-site disposal location is an approved landfill. Using this location typically involves transporting the carcass to the landfill, or depositing it in an approved trash service's container. Carcass parts are then buried deep in the earth—this should create a permanent barrier against future infection. It is essential that the landfill or trash service be approved and willing to accept carcass parts from hunters. The Texas Commission on Environmental Quality (TCEQ) maintains a list of in-state facilities that are permitted to accept carcass parts.

b. Incineration or chemical digestion

Though incineration or chemical digestion are the optimal methods, the needed facilities are usually found only at research facilities or laboratories and may not be available to private citizens.

- 1) Incineration requires temperatures in excess of 2000 °F, which is typically achieved in a crematorium. Pasture incineration is unlikely to expose the entire carcass to adequate sustained temperatures. Pasture incineration is also problematic because residual ash must also be disposed of properly.
- 2) Chemical digestion is a method used by research facilities and diagnostic laboratories to safely dispose of infectious tissues by using high concentrations of sodium hydroxide. The equipment required for this method is expensive and the required permits are difficult to obtain. If you think you can conduct either of these methods privately, consult with a regulatory official to be certain you are in compliance with state and federal laws.

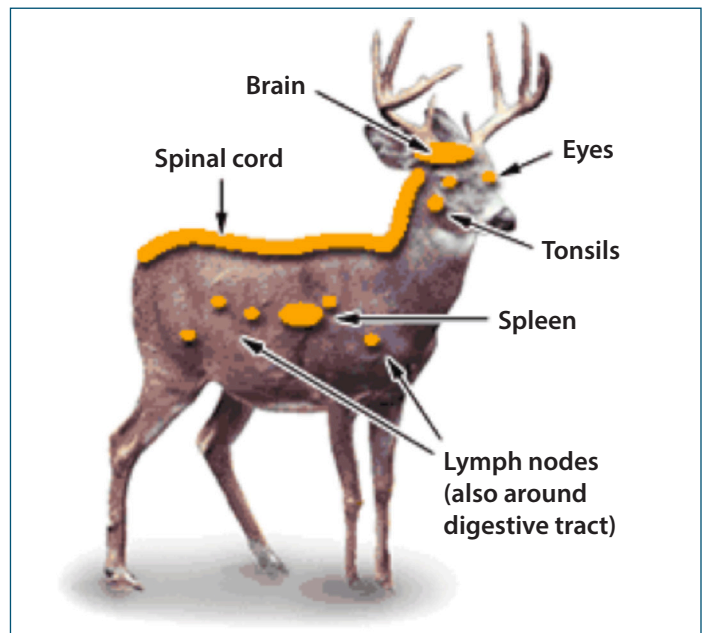
Proper carcass handling

Although there is no proven susceptibility of humans to CWD, deer sometimes carry other diseases that can be spread to humans. You need to observe the safety precautions listed below when processing your own wild game.

- Cover all open wounds.
- Wear latex or rubber gloves when processing game.
- Keep mouth and nose covered.
- After processing, disinfect tools with 2 parts household chlorine bleach to 3 parts water solution. Rinse well with water.
- For CWD concerns, debone and remove all nervous system tissues (Diagram 1).
 - Use separate instruments to cut meat, and bone and/or nervous system tissue.

If you do not process your own carcass, consider asking your processor to process your animal individually.

Remember, state regulations determine when and to what degree carcasses may be processed. These instructions are designed to limit the spread of CWD—you should always follow local game laws as well.



1. Diagram of tissues to be removed and safely disposed.

Image Courtesy of Utah Division of Wildlife Resources

If you see a sick deer

Any wild animal that appears ill or behaves abnormally should be reported to your local Texas Parks and Wildlife Department biologist or game warden. Although it may not be CWD, it could be the symptoms of an outbreak of some other disease, such as anthrax or blue tongue. Hunters' observations in the field are the most important resource for managing diseases of Texas wildlife.

Resources

Texas Parks and Wildlife Department

<http://tpwd.texas.gov/huntwild/wild/diseases/cwd/>
(512) 389-4800

Texas Animal Health Commission

http://tahc.state.tx.us/animal_health/cwd/cwd.html
1-800-550-8242

Texas Veterinary Medicine Diagnostic Laboratory

<http://tvmidl.tamu.edu>

Chronic Wasting Disease Alliance

<http://cwg-info.org>

Texas A&M AgriLife Extension: Wildlife Unit

<http://wildlife.tamu.edu>

Texas A&M AgriLife Extension provides equal opportunities in its programs and employment to all persons, regardless of race, color, sex, religion, national origin, disability, age, genetic information, veteran status, sexual orientation, or gender identity.

TPWD receives funds from the U.S. Fish and Wildlife Service. TPWD prohibits discrimination on the basis of race, color, religion, national origin, disability, age, and gender, pursuant to state and federal law. To request an accommodation or obtain information in an alternative format, please contact TPWD on a Text Telephone (TDD) at (512) 389-8915 or by Relay Texas at 7-1-1 or (800) 735-2989. If you believe you have been discriminated against by TPWD, please contact TPWD or the U.S. Fish and Wildlife Service, Office for Diversity and Workforce Management, 5275 Leesburg Pike, Falls Church, VA 22041.