



CHRONIC WASTING DISEASE

PREVENTION. SURVEILLANCE. MANAGEMENT.

Photo Credit: J. Dingel, PA Game Commission

What is Chronic Wasting Disease?

Chronic Wasting Disease (CWD) is a fatal brain disease that affects members of the deer family, including deer and elk. Similar diseases include mad cow disease and scrapie. CWD is caused by a misfolded protein called a prion. Prions accumulate in the brain creating holes that eventually lead to death.

THE FACTS ABOUT CWD

CWD is caused by a protein.

Prions are proteins found in most mammals. In the prion's normal form, they are not harmful to the body. When misfolded, however, prions become infectious and cause disease that results in the formation of tiny holes in the brain.

CWD is contagious.

Prions can be spread through animal-to-animal contact or indirectly through prion-contaminated environments. CWD-infected animals shed prions through bodily fluids including saliva, urine or feces, and once prions are in the environment, they can remain infectious for several years.

CWD-infected animals may or may not show signs of disease.

On average it takes 18-24 months for CWD-infected animals to show signs of disease.

CWD is a threat to

Pennsylvania's deer and elk populations.

Recent studies report a decline in white-tailed deer populations in areas with high CWD infection rates. CWD-infected deer are more likely to die annually than uninfected deer.

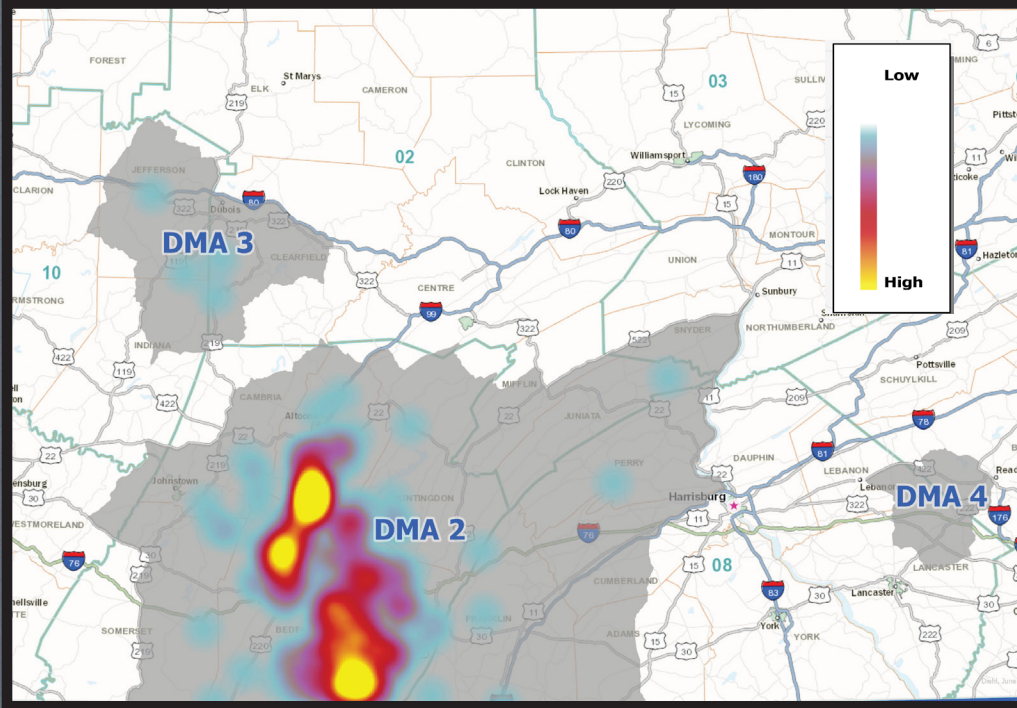
CWD spreads geographically and prevalence increases with time.

The first known case of CWD was detected in Colorado in 1967. Now CWD is found in 26 states and 4 Canadian provinces.

The Centers for Disease Control and Prevention recommends no one consume CWD-infected meat.

Photo Credit: J. Dingel, PA Game Commission

CWD IN PENNSYLVANIA



History

CWD was first detected in a captive deer facility in Adams County in 2012. Shortly after, three wild positives were detected in Bedford and Blair counties. As a result, Disease Management Areas (DMA) 1 and 2 were created. Within DMAs specific regulations apply to prevent the spread of CWD.

Status of CWD

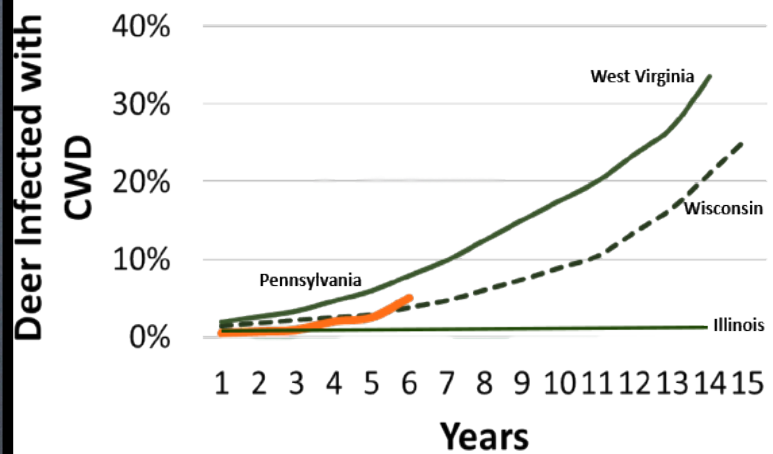
Since CWD was first detected in Pennsylvania in 2012, CWD has been confirmed in the following counties: Adams, Bedford, Blair, Cambria, Clearfield, Franklin, Fulton, Huntingdon, Jefferson, Juniata, Lancaster, Perry, and Somerset. As of May 2019, a total of 250 wild deer have tested positive for CWD in the state. Over 90 percent of these positives were detected in Bedford, Blair, or Fulton counties (see map above).

The graph demonstrates the effectiveness of CWD-management strategies in other states.

Illinois, which uses hunter harvest and targeted removal of deer to manage CWD, has maintained a low infection rate of CWD in its deer herd – about 2 percent. In contrast, Wisconsin, which abandoned targeted removal in the wake of public pressure, and West Virginia, which has relied exclusively on hunter harvest for CWD management, have seen infection rates skyrocket. More than six years after CWD first was detected in Pennsylvania, the infection rate is climbing (orange line). The success

Illinois has achieved through a management strategy that includes targeted removal provides optimism that Pennsylvania can maintain a low CWD infection rate, while continuing to limit the disease's spread and protect as much of the state's deer herd as possible from CWD.

CWD Infection Rate By State

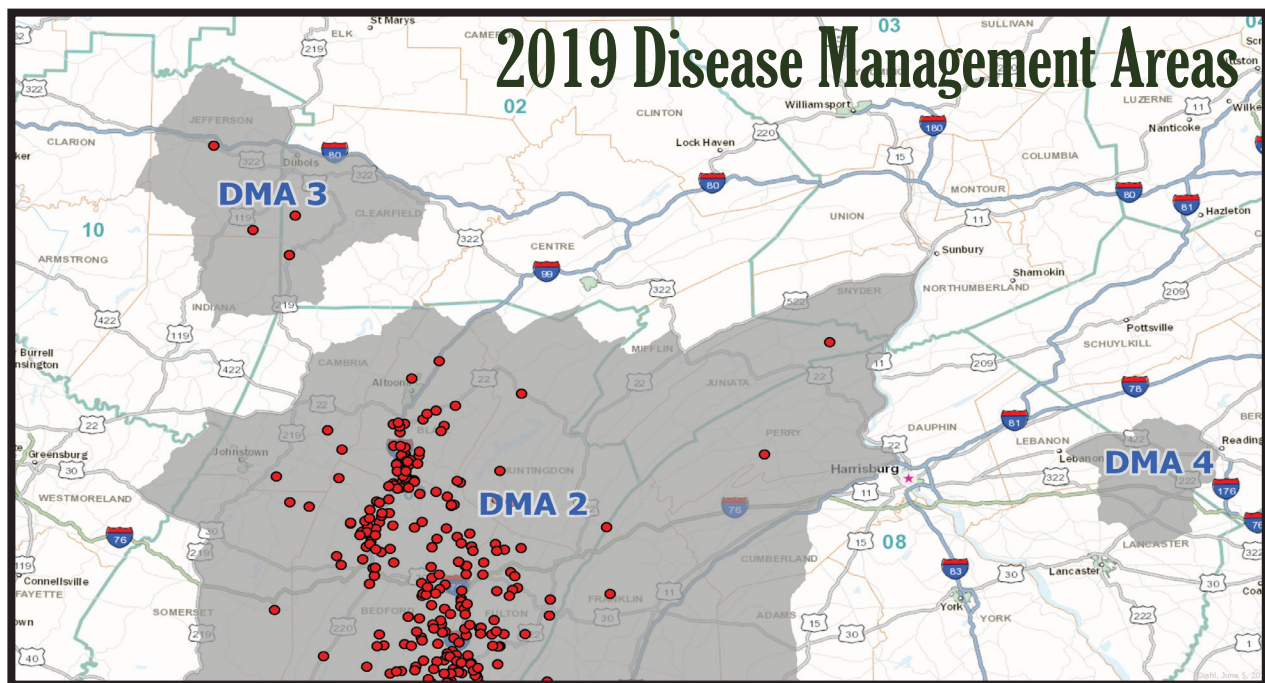




What does Pennsylvania

I. PREVENTION

When a new CWD-positive deer or elk is detected a Disease Management Area (DMA) is expanded or established. Within DMAs certain regulations apply to prevent the spread of CWD. Currently, there are three active DMAs in the state.



Map of DMAs as of June 2019. For a current map of DMAs please go to www.pgc.pa.gov.

Within Disease Management Areas it is unlawful to:

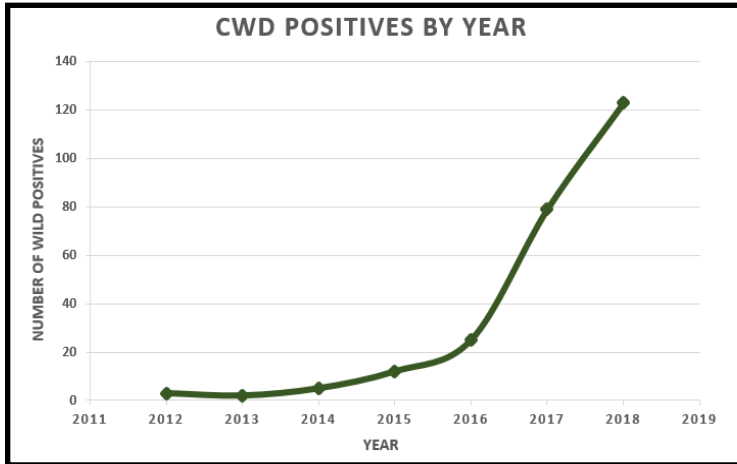
- Remove or export high-risk cervid parts
- Use or possess natural urine-based attractants
- Feed wild deer or elk
- Rehabilitate wild cervids

High-risk Parts Can't Be Imported

To help prevent the spread of CWD, the Game Commission has banned the importation of high-risk cervid parts from states and provinces where CWD has been detected, as well as Pennsylvania's own Disease Management Areas (DMAs). High-risk parts include the head (more specifically the brain, eyes, tonsils, and lymph nodes), spinal cord, and spleen.

What Pennsylvania does to control CWD?

II. DETECTION



**The graph above only include positive cases detected in Pennsylvania's wild deer. No positive cases detected in captive facilities are included.*

The Game Commission began monitoring for CWD in 1998, more than 10 years prior to the state's first CWD detection. As of 2018, over 79,000 deer have been tested for CWD in Pennsylvania. The goals of detection efforts are to monitor CWD in DMAs as well as detect new cases of CWD outside of DMAs.

Detection efforts include sampling: road-killed deer or elk found in DMAs, hunter-harvested deer or elk, escaped captive deer or elk, deer or elk showing clinical signs of disease.

III. MANAGEMENT

Hunters are provided the first opportunity to harvest deer through DMAP permits.

Within DMAs, DMAP (Deer Management Assistance Program) areas are established where increased hunter harvest is desired. Hunters can apply for DMAP permits to harvest additional antlerless deer during any established deer season, including the antlered-only season. DMAP permits can be used only within the unit for which they're issued. Hunters can obtain up to two DMAP permits for each unit. Each permit can be used to harvest one antlerless deer. Hunters can purchase DMAP permits at any issuing agent or at www.pa.wildlifelicenses.com.

To help detection efforts, hunters can submit harvested deer heads in Game Commission provided head-collection containers for free CWD testing. These samples help the Game Commission determine the infection rate and spatial distribution of CWD. In areas where hunter-harvested deer are not sufficient to provide an accurate estimate of disease infection rate and spatial distribution, the Game Commission will strive to reach the number of samples required through targeted removals.



Hunters Are the First Line



Doing nothing to manage CWD will only allow the disease to get worse.

Currently, no evidence exists that suggests CWD will dissipate naturally over time. With no known cure, options to manage CWD are limited. However, where success has occurred, wildlife agencies used a combination of increased hunter-harvest and targeted removals to reduce deer populations.

Reducing deer populations around known CWD detections can slow the spread of CWD.

Reducing the number of deer in an area reduces deer-to-deer contact and as a result slows transmission of CWD. Reducing deer populations also minimizes the accumulation of prions in the local environment, which reduces the chances of healthy deer picking up prions from the environment.

New York detected two wild cases of CWD in 2005, just after CWD was detected at a nearby captive deer facility. Within weeks, deer managers used a combination of hunter harvest and targeted removals to reduce deer populations in the local area. No more CWD cases have been found in the state since. New York's success story, along with experiences from other states, provides hope that increased hunter harvest and targeted removals, if conducted quickly and effectively after CWD is detected in a new area, can be used to combat CWD.

We need your help!

Hunters are an integral component to manage CWD in Pennsylvania. While the Game Commission is responsible for managing CWD among free-ranging deer and elk, it is the public who ultimately will determine the disease's fate. Hunters can help stop the spread of CWD by harvesting additional antlerless deer through Deer Management Assistance Program (DMAP) permits. Landowners can help by providing land access within DMAP areas.

e of Defense Against CWD

Review Pennsylvania's 2020 Draft Response Plan for CWD

The Game Commission, in collaboration with other state agencies, non-profit organizations, and universities has drafted a response plan for CWD. Management actions proposed in this draft response plan mimic actions taken in other states, like Illinois, and strive to control the CWD infection rate and slow the spread across Pennsylvania. This draft response plan proposes options to increase hunter harvest around CWD positive areas.

Proposed options include:

- Extended hunting season

- Increased antlerless and antlered tag allocations

- Removal of antler point restrictions

If the number of deer harvested by hunters within Disease Management Areas is not sufficient to provide an adequate sample of deer to estimate the local infection rate or spatial distribution, the Game Commission may strive to reach sample objectives as needed through localized targeted removals (i.e. sharpshooting).

Studies examining hunter attitudes toward current and potential management strategies for CWD in other states have shown that doing nothing to manage CWD is unacceptable. However, management strategies to control CWD have proven to be controversial in other states. Over the next year, the Game Commission would like your input on the draft 2020 response plan.

To provide comment on the 2020 proposal for CWD management please go to:

www.pgc.pa.gov

TOGETHER WE CAN CONTROL CWD



For more information go to:

www.pgc.pa.gov

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