



Debunking

Myths on CWD

MYTH: CWD Can infect humans.

CWD is closely related to mad-cow disease, which was found to infect humans in 1996. However, since CWD first was discovered in 1967, there have been no known reports of CWD infecting humans.

While no link between CWD and human illness has been identified, the Centers for Disease Control and Prevention (CDC) and the World Health Organization (WHO) advise people to avoid exposure to CWD-infected meat.

The CDC states, “some animal studies suggest CWD poses a risk to certain types of non-human primates, like monkeys, that eat meat from CWD-infected animals or come in contact with brain or body fluids from infected deer or elk. These studies raise concerns that there may also be a risk to people.”

The Game Commission recommends hunters who harvest deer in Disease Management Areas (DMAs) take advantage of the free CWD-testing offered within the DMA. It’s important to note this is not a food safety test. Failure to find prions in the examined tissue does not indicate the harvested animal is CWD-free.

But the tests are valuable in identifying CWD-positive animals that should not be consumed.

MYTH: CWD has always been in Pennsylvania; the Game Commission just didn’t find it until recently.

While it is possible CWD has a longer history in Pennsylvania than is known, the distribution of CWD in other states, as well as in Pennsylvania, suggests otherwise.

Like a wildfire, CWD starts with a single spark, or single infected deer, and slowly grows outward radially into a fire. As this fire grows larger, it moves across the landscape, burning hottest near its core.

Similarly, CWD cases concentrate near the first infection and radiate outward as deer encounter one another.

Just like a wildfire, sparks can leap into new areas, starting fires nearby.

But new cases of CWD can leap much greater distances when people transport deer or deer carcasses from CWD-infected areas to uninfected areas.

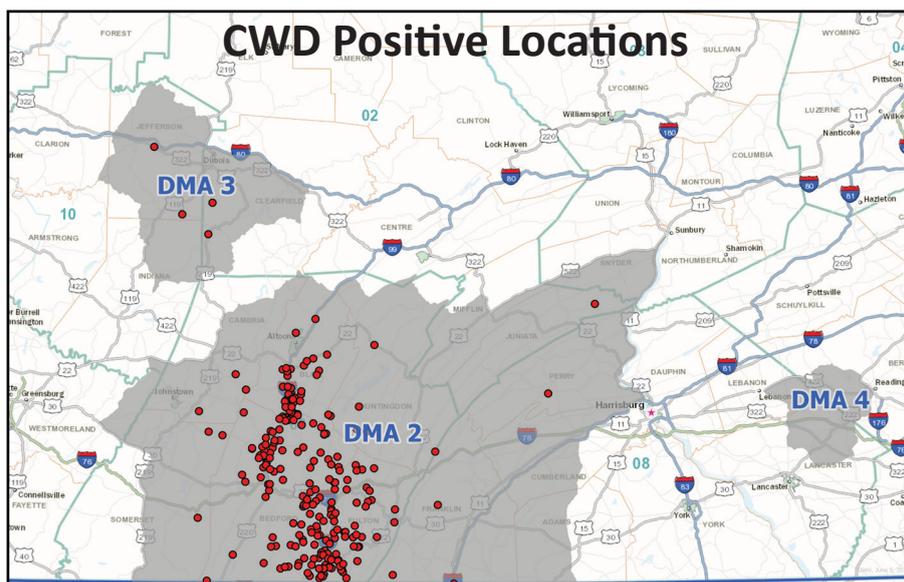
Take Pennsylvania for example. The Game Commission began monitoring CWD in 2002, but the disease wasn’t detected until 2012, first in captive deer, then in wild deer. Over 34,000 wild deer were tested prior to the first detection.

The first wild cases of CWD in Pennsylvania were detected in three deer in Bedford and Blair counties. Since then, CWD-positive wild deer have been detected in nine of Pennsylvania’s 67 counties.

However, over half of Pennsylvania’s wild positives have been detected in Bedford and Blair counties.

If CWD always was in Pennsylvania, we would expect more cases to be found statewide, not solely in isolated areas.

A similar pattern of infection appears in other states.



This map shows the location of each wild deer that has tested positive for CWD in Pennsylvania as of June 2019.

MYTH: CWD is not a common disease in the U.S. and therefore is not a threat.

Out of the millions of deer that have been tested for CWD nationwide, less than 2 percent have tested positive.

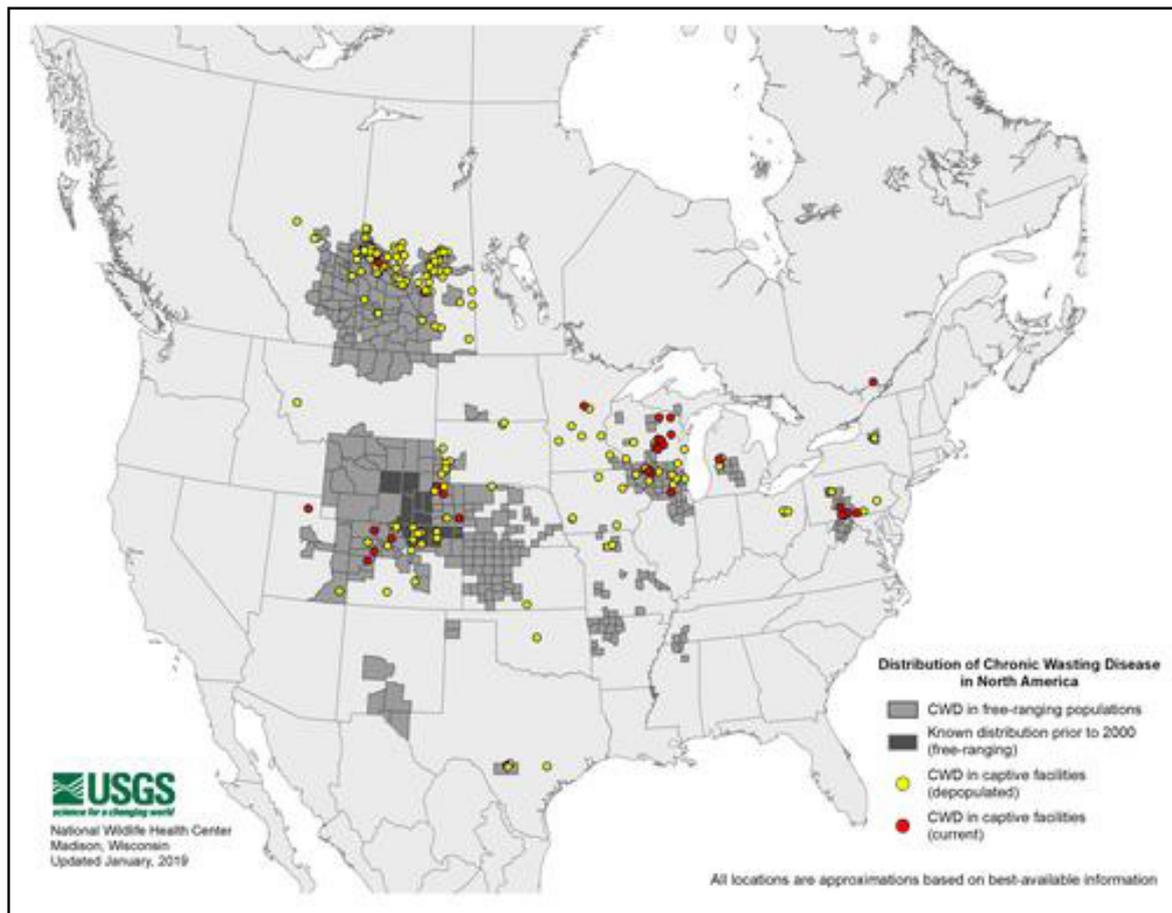
Many people use this statistic as grounds to justify a perception that CWD is not serious threat to the deer herd. But the statistic, while true, is misleading because CWD, like other diseases, does not evenly distribute itself across the nation, or even within states themselves.

To date, CWD has been found in 26 states and three Canadian provinces, and prevalence varies within each state. As with most diseases, the prevalence in a given area increases with time. Areas in Wyoming and Colorado where CWD first was found report prevalence levels upward of 30 percent, while some counties in southern Colorado have yet to detect CWD.

CWD prevalence also varies within our own state, with the majority of CWD detections occurring in Disease Management Area (DMA) 2. CWD prevalence also varies within the DMAs themselves.

Studies show that deer populations with high prevalence of CWD have lower survival rates, resulting in annual population declines.

Even though CWD has a low prevalence nationwide, CWD should not be dismissed as insignificant. CWD always is fatal to the deer and elk it infects and, unfortunately, there is no cure or vaccine yet.



MYTH: Some deer are resistant to CWD.

All deer can become infected with CWD, however, recent studies show that certain genotypes can make a deer more or less susceptible to CWD.

Even those deer with the less-susceptible genotype are not immune to CWD, though they have been found to live months longer than other infected deer.

Unfortunately, this also means deer with the less-susceptible genotype can spread CWD for a longer period.

More research is needed to fully understand these genotypes and how they affect the spread of CWD.

MYTH: EHD is a bigger threat to our deer herd.

It is true that Epizootic Hemorrhagic Disease (EHD) can have significant impacts on deer populations locally where the disease hits. But CWD has the potential to reach farther and become a more-permanent problem.

EHD is a virus that is spread by tiny biting midges, or “no-see-ums.” Pennsylvania only has been impacted about once every five years, with outbreaks occurring over small areas during the summer. The midges then die off after the first hard frost.

Even though EHD quickly can kill large numbers of deer, it is not always fatal. Many deer that contract EHD survive and develop resistance to the disease. Even in those areas where EHD causes large deer die-offs, those local populations can rebound quickly.

One of the most dangerous things about CWD is that its effects are not easily visible.

Instead, CWD picks at a population, one deer at a time. Then, over time, the disease takes an increasing number of deer.

Due to its slow-moving nature, it can take years for CWD to begin negatively affecting deer populations. However, no matter how slow CWD moves, CWD always is fatal. Its effects are real.

CWD can be spread by deer-to-deer contact or indirectly through contaminated environments. And once in the environment, CWD can remain infectious for several years.

Because of this environmental contamination, once CWD is established in an area, it’s nearly impossible to eradicate and will continue to infect deer for years.

MYTH: CWD does not kill deer.

If you can’t see it, it doesn’t exist – right?

Despite decades of research on CWD, many people believe CWD isn’t a threat, simply because they can’t see it.

With the current low prevalence of CWD statewide, it’s unlikely for anyone to see CWD-positive deer displaying symptoms, let alone watch a CWD-positive deer die. Whether you can see CWD or not, CWD is a serious threat to Pennsylvania’s deer herd.

As CWD slowly progresses in the body, it creates holes in the brain, often causing infected deer to become more susceptible to other threats. Therefore, infected deer often die from causes like hunting, predation, or vehicle collisions, before outward signs of the disease are apparent.

Studies looking at the average survival rates of CWD-infected deer, show that deer can die solely from CWD. Not to mention that studies have found that CWD-infected deer are two to four times more likely to die annually than non-infected deer. And whether a CWD-infected deer dies directly from disease or it gets hit by a car first, CWD likely is contributing to that animals’ death.

As the number of deer with CWD increases, deer-population declines will follow, and as a result hunting opportunity could be reduced.



MYTH: There is nothing a state can do about CWD other than let nature take its course.

There is no evidence that shows CWD will dissipate naturally.

Unfortunately, options are limited when it comes to managing CWD. However, increased hunter harvest and targeted removals (culling) has proved effective in other states.

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 culling to reduce deer populations in the local area.

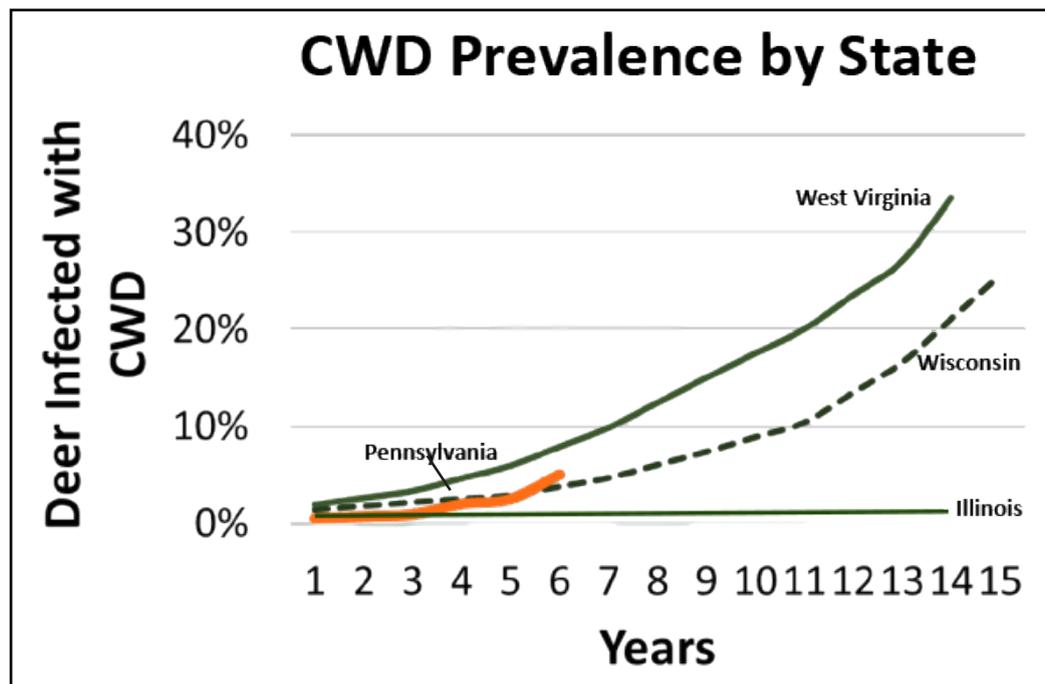
No more CWD cases have been found in the state since.

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.

Illinois also began culling efforts in 2003, soon after CWD was detected in the state. Illinois has been able to hold CWD at bay, maintaining a low CWD prevalence, using increased hunter harvest and targeted removals around known CWD-positives. Wisconsin also detected CWD in 2002 and utilized hunter harvest and targeted removals of deer in 2003, but due to public pushback, targeted removal efforts ended in 2007. CWD has spread and increased in the state since, with some areas showing 50 percent of adult bucks being infected.

While reducing deer populations often is opposed by hunters and wildlife enthusiasts who enjoy seeing large numbers of deer, it is currently the best management strategy known to slow the spread of CWD.

The question is would you rather reduce deer numbers in hopes of managing CWD or do nothing and watch CWD spread?



Graph shows how different management actions can impact CWD prevalence overtime.
Disclaimer: Graph compares CWD prevalence only in CWD-positive areas in each state, not CWD prevalence state-wide.

MYTH: The Game Commission plans on killing all the deer to manage CWD.

With no known cure for CWD, options to manage the disease are limited.

To date, reducing local deer populations is the only management strategy that has shown any success at stabilizing or reducing CWD prevalence. Reducing deer numbers around new CWD detections lowers disease transmission through reduced deer contact and reduces the number of prions shed onto the environment.

The Game Commission wants hunters to have the first opportunity to harvest deer as a means to manage CWD. While the management actions proposed in the 2020 draft CWD Response Plan increase hunter opportunities to harvest deer in CWD-positive areas, the objective is not to remove all the deer from these areas.

Illinois has utilized similar management strategies--proposed in the 2020 draft CWD Response Plan--to control CWD for over 16 years. Despite increased hunting opportunities and targeted removals, the number of deer harvested by hunters has not dropped drastically. With hunters harvesting 159,550 deer during the 2002-2003 hunting season and 151,709 deer during the 2018-2019 hunting season.

For more information call 1-833-infocwd or email infocwd.pa.gov