

# Diseases of Wisconsin Furbearers



This brochure describes some of the common diseases and signs of disease that are present in Wisconsin furbearers. It also discusses the risks of disease transmission to humans or domestic animals from diseased furbearers. Since a variety of wildlife diseases can be zoonotic, or transmitted between animals and humans, also included are tips on what you can do to protect yourself and domestic animals.



## Tyzzler's Disease (*Clostridium piliforme*)

Tyzzler's disease is a bacterial infection that is seen in muskrats and cottontail rabbits. It is not a disease risk for humans. Animals are usually found dead in good physical condition, as animals can get sick and die within a few hours after infection. Overpopulation, limited food resources, and other stress factors may contribute to outbreaks of this disease. Animals with Tyzzler's disease have blood engorged organs, but only laboratory testing can confirm this infection. Signs of Tyzzler's disease mimic those of tularemia, so it is important to confirm which disease is affecting the furbearer.

The Wisconsin DNR values receiving reports of diseased or dead furbearers. Collecting these reports allows us to better understand health and disease factors for these important Wisconsin species. To learn about wildlife diseases and to find out how to report observations of sick or dead wildlife, visit [dnr.wi.gov](http://dnr.wi.gov) keyword "wildlife health".



Information on the Wisconsin Trappers Association can be found at "[www.wistrap.org](http://www.wistrap.org)". Please contact them for membership or additional information.



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## Non-Zoonotic Diseases of Wisconsin Furbearers

### Canine Distemper Virus (CDV)

Canine distemper virus affects mainly raccoon and gray fox populations, but can also infect other carnivores. CDV can be transmitted to domestic dogs, but is not a risk to humans. Infected animals appear lethargic and may show no fear of humans, wander aimlessly, have respiratory signs, discharge from the eyes, or nervous system signs such as convulsions and chewing fits. Contact a Wildlife Biologist if you see signs of CDV as they mimic those of rabies, so it is important to confirm which disease is affecting the furbearer.

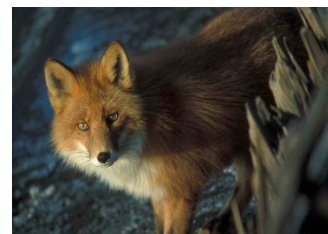
The virus does not live long outside the diseased animal, and is destroyed by most soaps and disinfectants, including bleach.

### Canine Parvovirus (CPV)

This highly contagious viral disease affects fox, wolf, coyote, and raccoons, and is most severe in young animals. Canine Parvovirus can be transmitted to domestic dogs, but is not a risk to people. CPV causes intestinal bleeding, severe diarrhea, and dehydration which may result in death.

The virus is shed through the feces, and persists in the environment.

A 10% bleach solution inactivates the virus. Any traps or cages used for CPV susceptible animals should be bleached before reuse.



## Tularemia

(*Francisella tularensis*)

Tularemia is also known as "rabbit fever." This bacterial disease is most frequently found in Wisconsin rabbits, muskrat, or beaver. An infected animal will generally be in good physical condition, but have an enlarged spleen or liver covered with small white spots.

Since this disease can be transmitted to humans, trappers should take precautions. Always wear gloves when skinning or processing these animals. The most common symptoms for humans are a slow-healing skin sore or ulcer and swollen lymph nodes. Less frequently, people will feel ill very suddenly, have a high fever, chills, headache, and be fatigued. Consult a doctor if you have these signs and a history of possible exposure. Tularemia can only be diagnosed with laboratory testing. With prompt antibiotic treatment, few cases of tularemia are fatal.



## Sarcoptic Mange

(*Sarcoptes scabiei*)

Mange is caused by a microscopic mite, and in Wisconsin most commonly occurs in coyote, red fox, and wolf. This type of mange may also be transmitted to domestic dogs. Mange-affected animals lose hair and develop thick, scaly skin. Keep in mind, mange is not the only thing that causes hair loss, but take precautions if you see signs of hair loss.

Wildlife infected can die of starvation, dehydration, or hypothermia during the winter. Sarcoptic mange mites can occasionally infect people, so take precautions when handling an animal with skin lesions. Clinical signs of mange in people include a localized, itchy red rash. Wash cages that held animals with hot soapy water, and allow these to air and sun dry.

## Tips on Disease Prevention

- Leave wildlife alone! If you find a young animal alone, it does not mean it is abandoned. Often the mother is nearby waiting for you to leave. Leave the baby animal where it is! If you find an injured animal, call your local DNR Office for information on animal rehabilitators in your area. Do not attempt to pet or hand feed any wild animals. If a wild animal comes close to you, try to safely scare it away. A diseased animal can exhibit unusual behaviors such as acting aggressive, coming close to people or domestic animals, or ignoring attempts to be chased away. Animals which are normally nocturnal may, when sick, also be active during the daylight hours. However, daylight activity does not mean an animal has a disease. Look for other abnormal behaviors as well.

- Do not attempt to keep wild animals as pets, regardless of how cute they may be.

- Have dogs, cats, ferrets, and livestock vaccinated annually.

## Handling a Dead Animal

If you need to handle a dead furbearer for any reason, please take appropriate precautions. Always wear gloves. Dead animals should be placed in individually sealed plastic bags for transport, or properly burned or buried.

Landowners who find sick or dead furbearers may contact the Wildlife Biologist at their local DNR office to report the death and get additional information. Please see [www.dnr.wi.gov](http://www.dnr.wi.gov) keyword "wildlife health" for information on specific wildlife diseases.

For information about disease risks for humans, please contact the Department of Health and Family services at <http://www.dhfs.state.wi.us>, your County Health Department, or visit the Center for Disease Control website [www.cdc.gov](http://www.cdc.gov).



Dead Coyote found outside of a Wisconsin Home

## Zoonotic Diseases: Diseases that can be passed between animals and humans

### Rabies

Rabies is a viral disease of the central nervous system. It is transmitted by scratches, bites, or having an open wound or mucous membrane contact an infected animal's saliva. Skunks and bats are the main rabies carriers in Wisconsin wildlife, but all warm-blooded animals, including humans, are susceptible to rabies. Infected animals can show abnormal activity, can be aggressive, show no fear of humans, and may salivate excessively ("foaming at the mouth"). They may be lethargic or wander aimlessly. Sporadic convulsions, tremors, and chewing "fits" can also be signs of rabies.

Anyone who has been bitten, scratched, has an open wound or mucous membrane, or has come into contact with fresh saliva of a wild animal is considered at risk for rabies. You should IMMEDIATELY clean the bite, wound, or scratch with soap and water.

Contact your local health department as soon as possible to report the incident. They will evaluate the risk, based on the wild animal species involved and other factors, and decide if there is a need to attempt to capture and euthanize the wild animal for laboratory testing. The person who is bitten should seek immediate medical attention.

### Giardia

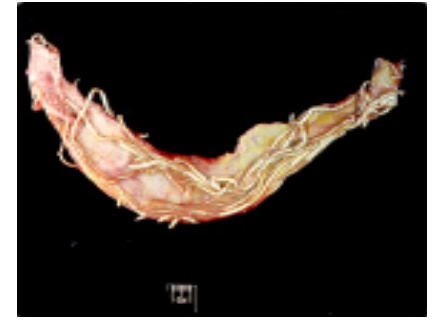
([Giardia duodenalis](#))

Giardiasis is caused by a parasite that infects and reproduces in the small intestine of many animals, including the beaver. Beavers are not typically affected by the disease, but instead aid in the spread of the disease by shedding the parasite into water sources used by people and other animals. Giardiasis spreads from drinking contaminated water or eating contaminated food. Person to person transmission can also occur and is typically the result of poor hygiene and sanitation. Human symptoms include diarrhea, cramping, weakness and mild fever. The condition can last 1-2 weeks and antibiotics are usually prescribed to treat this ailment.

### Leptospirosis

([Leptospira spp.](#))

Leptospirosis is a bacterial disease that infects humans and animals. Almost all mammals can be infected, but it is more commonly seen in domestic animals rather than wildlife. The disease has been documented in the striped skunk, raccoon, fox, opossum, bobcat, muskrat and woodchuck. Leptospirosis can spread from ingestion of infected food, contact with contaminated urine, or through contact with urine-contaminated water. The bacterium enters the body either through openings in the skin, mucous membranes, such as the nostrils, or through cuts and abrasions. Once Leptospirosis has entered the body, the bacterium begins to multiply in the blood stream. In humans, early infection may cause flu-like symptoms such as headache, fever and muscle aches, though some people experience no symptoms. In severe cases, the bacteria may affect the liver and kidney resulting in life-threatening conditions. If left untreated, recovery may take several months. Often, antibiotics are an effective form of treatment.



Raccoon Roundworm in the intestine

### Raccoon Roundworm

([Baylisascaris procyonis](#))

The raccoon round worm generally does not harm the raccoon, but simply lives in the intestinal tract.

Raccoons that have adult worms release parasitic eggs in their feces. People and animals other than raccoons can accidentally ingest these eggs, which may be on the ground, on surrounding vegetation, or in cages or enclosures. Once the eggs are ingested, they can hatch into larvae. The larvae can move through the body, causing harm to the nervous system or eyes, and can even result in death. There is no reliably successful treatment to rid the roundworms in humans.

Raccoon roundworms are very hardy and can only be killed by intense heat or boiling lye. Gloves and a mask should be worn when handling raccoon fecal material or any cages or traps that may have been contaminated with raccoon feces.

