



Pet-Associated Zoonotic Diseases and Natural Disasters

National Center for Foreign Animal and Zoonotic Disease Defense

Zoonotic diseases are those that can pass from animals to humans¹. The risk of exposure to disease increases after natural disasters such as hurricanes and floods.² It may be assumed that this increased risk also applies to zoonotic diseases because of the following factors:

- ❑ Exposure of free-roaming pets to many kinds of disease-causing bacteria, viruses, fungi and/or parasites spread by flood waters and debris
 - A pet's exposure may occur by direct contact with other infected animals or by ingestion of contaminated food or [water](#).
 - Stress that may lower a pet's ability to fight off disease
- ❑ Increased likelihood of bites and scratches to people by frightened and/or disoriented pets
- ❑ Housing in emergency animal shelters where disease agents may easily build up in the environment and pass between pets and people³

Common zoonotic disease agents that people may be exposed to from pets, particularly following natural disasters include:

- ❑ Bacteria and viruses such as:
 - [Rabies](#)⁴, [Leptospira](#)⁵, [Salmonella](#)⁶, [E. coli](#)⁷, and many others
- ❑ External parasites such as:
 - [Fleas and ticks](#)⁸, [Scabies mites](#)⁹, [Cheyletiella mites](#)¹⁰
 - Depending on the region the animal comes from, the bites of these parasites may also transmit diseases such as:
 - [Lyme disease](#)^{11;12}, [Rocky Mountain spotted fever](#)¹³, and [Plague](#)¹⁴
- ❑ Internal parasites such as:
 - [Toxocara](#) (roundworms that cause [visceral larval migrans](#)¹⁵ in humans)
 - [Ancylostoma](#) (hookworms that cause [cutaneous larval migrans](#)¹⁶ in humans)
 - [Giardia](#)¹⁷ (protozoa that cause intestinal disease in humans))

Pets may not show any signs of illness while carrying some zoonotic disease agents such as:

- [Toxocara](#) (roundworms)¹⁵
- [Bartonella](#) (the [cat scratch fever](#) agent)¹⁸
- [Salmonella](#)⁶
- Others

Pets may also shed infectious zoonotic agents for some time **after** they have recovered from some zoonotic diseases³ such as:

- [Ringworm](#)¹⁹
- [Leptospirosis](#)⁵
- [Salmonellosis](#)⁶



Protecting Human Health from Pet-Associated Zoonotic Diseases after Natural Disasters

People can help protect themselves from zoonotic diseases that their pets may have encountered during or after a natural disaster by taking several steps:

- ❑ If at all possible, enlist the help of a veterinarian.
 - They can help rid the pet of disease-associated external and internal parasites and check for signs of illness.
 - They can also determine if vaccines are appropriate to protect the pet against such common zoonotic diseases as leptospirosis and rabies.
 - Pet owners relocating to a new area can help protect themselves and their pet by letting their new veterinarian know that the pet originates from a different part of the country and has been through a recent natural disaster.
 - This aids the veterinarian in formulating a health plan that will also encompass disease agents common to the pet's original home state that might not normally be considered by a veterinarian in a different part of the country.
- ❑ If a veterinarian is unavailable, treat the pet on a regular basis with a non-prescription flea product and an over-the-counter dewormer to control internal and external parasites.
 - Be sure to carefully follow all label instructions.
 - **Never** use a flea product or dewormer sold for use in dogs on a cat or kitten unless the label **specifically states** that it is safe to do so.
- ❑ Minimize the risk of bites and scratches by approaching pets calmly and handling them gently and with caution.
- ❑ Wash hands with soap and clean water after animal contact including playing, petting, feeding and grooming.
- ❑ Clean pet enclosures, utensils and litter pans with soap and water, then disinfect them on a regular basis. Wear disposable or other waterproof gloves.
 - A 1:32 dilution of household bleach and water (1 ounce or 1/8 cup of bleach per quart of clean water) may be used
 - A disinfectant may also be purchased from a pharmacy or veterinary clinic, if available. **Be sure to follow label instructions carefully.**
- ❑ Minimize the pet's exposure to the outdoors and to other animals outside the household until conditions have improved.
 - Walk pets on a leash and do not allow contact with other animals outside the family.
 - Do not allow pet foods to be an attractant for flies, rodents or other animals that may also be carriers of disease.



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