



Dogs' Social Lives and Disease Risks

Whether it's the dog park, doggie day care, boarding, competitions or training classes, mingling dogs with varied or unknown health histories can present health problems for dogs as well as their owners. The very reason you take your dog to a dog gathering – social mixing with other dogs – is the same thing that can put them at risk. Diseases can be spread through direct contact between dogs, shared bowls and equipment, contaminated water, stool, insects and other methods. People who visit these areas and interact with the dogs may also become infected with zoonotic diseases, which are diseases that can be spread from animals to people. In addition, any gathering that puts people and dogs together introduces the risk of dog bites.

As always, your veterinarian is your best source for animal health information. If your dog is showing signs of illness, consult your veterinarian for diagnosis and treatment. If you feel you have been exposed or made ill by any of the conditions listed below, consult a physician.

This document isn't intended to scare dog owners away from participating in and enjoying social events involving dogs; rather, it is intended to inform you of the risks and some common sense measures that can decrease the disease risks for you and your dog(s).

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Disease Risks for Dogs

The following is a list of the most common diseases to which your dog(s) may be exposed at a dog gathering. There may be specific risks in your area that are not listed. For more information about specific diseases in your area, consult your veterinarian.

People can also spread some diseases (such as mange, ringworm, kennel cough and canine influenza) from dog to dog through shared brushes, collars, bedding, etc. or by petting or handling an infected dog before petting or handling another dog.

Canine distemper

[Canine distemper](#) is caused by a very contagious virus. Puppies and dogs usually become infected through virus particles in the air or in the respiratory secretions of infected dogs. Infected dogs typically develop runny eyes, fever, snotty nose, coughing, vomiting, diarrhea, seizures, and paralysis. It is often fatal.

Fortunately, there is an effective vaccine to protect your dog from this deadly disease. The canine distemper vaccine is considered a “core” vaccine and is recommended for every dog.

Canine influenza (“canine flu” or “dog flu”)

[Canine influenza](#) is caused by the canine influenza virus. It is a relatively new disease in dogs. Because most dogs have not been exposed to the virus, their immune systems are not able to fully respond to the virus and many of them will become infected when they are exposed. Canine influenza is spread through respiratory secretions, contaminated objects (including surfaces, bowls, collars and leashes). The virus can survive for up to 48 hours on surfaces, up to 24 hours on clothing, and up to 12 hours on people’s hands.

Dogs can be shedding the virus before they even show signs of illness, which means an apparently healthy dog can still infect other dogs. Dogs with canine influenza develop coughing, a fever and a snotty nose, which are the same signs observed when a dog has kennel cough.

There is a vaccine for canine influenza, but at this time it is not recommended for every dog. Consult your veterinarian to determine if the canine influenza vaccine is recommended for your dog.

Canine parvovirus (“parvo”)

[Parvo](#) is caused by the canine parvovirus type 2. The virus is very contagious and attacks the gastrointestinal system, causing fever, vomiting and severe, often bloody, diarrhea. It is spread by direct contact between dogs as well as by contaminated stool, surfaces, bowls, collars, leashes, equipment, and the hands and clothing of people. It can also survive in the soil for years, making the virus hard to kill. Treating parvo can be very expensive and many dogs die from parvo despite intensive treatment.

Fortunately, there is a vaccine for parvo. It is considered a “core” vaccine and is recommended for every dog.

External parasites (ticks, fleas and mange)

[External parasites](#), such as ticks, fleas and mange, are fairly common dog problems. Ticks from the environment, fleas from other dogs and the environment, and mange from other dogs pose risks at dog gatherings. Ticks can transmit diseases (see tick-borne diseases below). Fleas can transmit some types of tapeworms as well as some diseases, and they may end up infesting your home and yard if they hitchhike home on your dog(s).

There are many approved products available to effectively prevent and treat external parasites on dogs. Consult your veterinarian about the best product for your dog.

Cheyletiella mites cause “walking dandruff” on dogs (itching and flaky skin on the dog’s trunk). They are spread from dog to dog by direct contact, and may require more aggressive treatment than fleas.

Fertilizers and pesticides

Some fertilizers and pesticides can be toxic to dogs. Avoid letting your pet walk, run, play or roam in areas that have recently been treated with fertilizers or pesticides.

Fungal infections (blastomycosis, histoplasmosis, cryptococcosis, coccidioidomycosis, etc.)

Fungal organisms in the soil can infect dogs when they eat or sniff contaminated soil. Dogs can also be infected through the skin, especially through a skin wound. The types of fungus seen vary throughout the U.S.: [histoplasmosis](#) is more common in the Eastern and Central

U.S.; [blastomycosis](#) is more common in the Southeast, Southcentral and Midwest regions; [cryptococcosis](#) is more common in the Pacific Northwest region; and [coccidioidomycosis](#) is more common in the Southwest U.S. Histoplasmosis can be spread by bird or bat droppings.

In general, the fungus infects the body through the respiratory tract and causes fever, coughing, lethargy and flu-like or pneumonia-like signs. If eaten, digestive problems (e.g., pain, diarrhea) can occur. Immunosuppressed dogs (dogs whose immune systems are weakened because of disease or certain medications) are much more likely to become infected with these fungi and develop disease.

Heartworms

[Heartworms](#) are spread by mosquitoes and can cause coughing, lethargy, difficulty breathing, heart disease and death. Fortunately, there are many approved products to prevent heartworm infection. Consult your veterinarian about the best product for your dog.

Heatstroke

Heatstroke is a big risk during warm and hot weather. Remember that your dog is always wearing a fur coat and they are usually warmer than you are. A temperature that seems only a little warm to a person can be too hot for a dog. Add to that the fact that dogs at dog gatherings are often active and playing, and the heat could become deadly for your dog. **Never** leave your pet in the car on warm days. Even a 70°F day can be too hot in a car. Short-nosed breeds, such as pugs, Boston Terriers, boxers, bulldogs, etc. are more prone to heatstroke and breathing problems because they don't pant as effectively as breeds with normal-length noses.

Signs of heatstroke include excessive panting and drooling, anxiousness, weakness, abnormal gum color (darker red or even purple), collapse and death.

Any dog showing signs of heatstroke should be immediately taken to a shaded area and cooled with cold, wet towels that are wrung out and rewetted every few minutes. Running cool water over the dog's body and quickly wiping it away (so the water absorbs the skin's heat and is immediately wiped away) can also help. Transport the dog to a veterinarian immediately, because heatstroke can rapidly become deadly.

Injuries

Any time unfamiliar dogs and/or dogs with different temperaments are mixed, there is a risk of conflict and injury. Bite wounds should be immediately evaluated by a veterinarian and efforts should be made to determine the rabies vaccination status of the biting dog. Overweight dogs and dogs accustomed to more sedentary lifestyles should be encouraged to become more active, but excessive activity can put them at risk of injury to joints, bones or muscles. If your dog is overweight and/or you plan to increase its activity level, consult with your veterinarian about the best plan to get your dog active with the least risk of injury.

Intestinal parasites

[Intestinal parasites](#) such as roundworms, hookworms, whipworms and tapeworms lay eggs that are passed in the dog's stool and infect other dogs when they eat contaminated soil, lick contaminated fur or paws, or drink water contaminated with the stool from infected dogs. Tapeworms are spread when dogs eat fleas, lice, or rodents infected with tapeworms.

These worms can cause malnutrition (because they steal nutrients as food is being digested) and diarrhea, and hookworms can cause blood loss. There are many products available to treat worms, and you should consult their veterinarian for the appropriate products for your pets.

Coccidia and *Giardia* are single-celled parasites that damage the lining of the intestine. Dogs can become infected with coccidia by eating infected soil or licking contaminated paws or fur. Puppies are at the highest risk of infection and illness.

Kennel cough

[Kennel cough](#) can be caused by a combination of viruses and bacteria. It is very contagious and your dog can become infected if it comes into contact with an infected dog. Dogs with kennel cough may not seem ill in the early stages of the disease but they can still infect other dogs. Most commonly, dogs with kennel cough will have a snotty nose and a dry, hacking cough.

There are vaccines for kennel cough, but not all dogs need to receive the vaccine. Consult your veterinarian about whether or not the kennel cough (*Bordetella*) vaccine is right for your dog.

Leptospirosis

Leptospirosis is caused by species of the *Leptospira* bacteria. The bacteria are shed in the urine of infected animals, and animals and people usually become infected by drinking contaminated water or coming into contact with contaminated soil or food. Dogs infected with *Leptospira* may develop fever, muscle weakness, vomiting, lethargy, abdominal pain, and kidney or liver failure. There is a vaccine for leptospirosis; consult your veterinarian about whether or not the vaccine is appropriate for your dog. Some canine distemper combination vaccines include a *Leptospira* vaccine.

Rabies

Any mammal is capable of being infected with the virus that causes [rabies](#). Most dog parks and organized dog gatherings require proof of rabies vaccination, but some do not. Rabies is caused by the rabies virus and is 100% fatal in animals once they start to show signs of disease. The virus is spread by saliva, either by a bite from an infected animal or by saliva contaminating a skin wound. In addition, any contact with wildlife (including bats) can introduce the risk of rabies infection. Raccoons, skunks and other wild animals can carry the rabies virus and may be present in areas where dogs gather.

Fortunately, rabies infection is preventable with vaccination. Many local and state governments require regular rabies vaccination for dogs.

Regional wildlife risks and feral animals

Wildlife mixing with dogs can increase the risk of diseases, such as rabies and plague, as well as the risk of injury. In some areas of the U.S., prairie dogs often invade dog parks. Prairie dogs carry fleas that can carry the bacteria that causes plague. Skunks, raccoons, foxes, feral cats and pigs, and other wildlife can also carry rabies and other diseases that can infect dogs. Feral dogs present disease and injury risks.

Ringworm

Although its name suggests it's a worm, ringworm is actually due to fungal infection of the skin. It can be spread by contact with an infected dog, its bedding or something that has come in contact with the infected dog. The fungus can also survive in the soil. Ringworm gets its name because it often causes circular patches of hair loss. Some dogs will excessively scratch the areas, while others may not be itchy. Many dogs will recover without treatment, but they are often treated to prevent them from spreading the infection to other dogs or to people.

Tick-borne diseases (hemobartonellosis, babesiosis, ehrlichiosis, rickettsial diseases such as Lyme disease, and others)

There is a variety of diseases that can infect dogs and are spread by ticks. Some diseases are more common in specific areas of the U.S. These diseases can cause anemia (blood loss), lameness, weakness, lethargy, organ failure, and even death. The best way to prevent these diseases is to prevent tick bites. There are many products available that reduce tick bites and kill ticks on dogs; consult your veterinarian about the best product for your dog. Check your dog for ticks after any outside dog gatherings and remove the tick(s) as soon as possible.

Toxic plants

Toxic plants can cause a variety of illnesses. Some ornamental plants can be very toxic to animals. Cocoa mulch is also toxic to dogs. For more information about toxic plants, visit the [ASPCA's Animal Poison Control Center](#) Web site.

Disease risks for people

People attending dog social events can be at risk of zoonotic diseases, which are diseases that spread from animals to people. Some of these diseases can be spread directly from dogs to people, while other diseases may come from the environment where the dog social gathering is taking place.

Cryptosporidiosis

[Cryptosporidiosis](#) is caused by a single-celled, microscopic parasite that lives in the intestines and can be present in high numbers in the stool of infected animals or people. It is generally spread by the fecal-oral route, meaning that a person or animal comes in contact with the stool (or a surface or soil contaminated by the stool) of an infected animal or person then touches their mouth or eats or drinks something; often, the person can't see their hands are contaminated, and they accidentally eat the parasite and become infected. Infection can also come from swimming in or drinking contaminated water. People infected with *Cryptosporidium* may develop stomach cramps, diarrhea, vomiting and fever.

Dog bites

Dog bites are always a risk when people and dogs come together. Most people are bitten by their own dog or a dog they know. At dog gatherings, people may be bitten when they try to break up a dog fight. [Prevention](#) is the best method for avoiding dog bites. Socialize your dog

and train it to be obedient. Neutered and spayed dogs are less likely to bite. Be a responsible dog owner and be careful around unfamiliar dogs.

All dog bites should be immediately cleaned with soap and water and the rabies vaccination status of the biting dog should be determined. If bitten, consult your physician. Some states require animal bites to be reported to local health authorities, so be sure to notify them as well, if necessary.

Echinococcosis

People can be infected by several species of tapeworms. [Echinococcus multilocularis](#) and [Echinococcus granulosus](#) can infect people who come into contact with the infected animal's stool (or anything, including the animal's fur, that is contaminated with stool). The symptoms of disease vary with the type of worm, but can include respiratory or digestive problems.

External parasites

Just like their dogs, people can become the victims of fleas, ticks and *Cheyletiella* mites. Itching and bumps with dark/blackened centers may occur with *Cheyletiella* infestation. Flea bites cause itching and raised, reddened skin. In certain parts of the U.S., certain types of fleas can carry diseases such as plague. Ticks are capable of transmitting [tick-borne diseases](#) such as ehrlichiosis, babesiosis, Lyme disease, Rocky Mountain Spotted Fever and others.

People can also become infected with the mange mite that causes sarcoptic mange in dogs and develop itchy, reddened skin.

Hookworms and roundworms

Human infections with [hookworms and roundworms](#) usually occur when a person accidentally eats the larvae (for example, the person may handle infected soil or an infected dog and then eat without washing their hands) or when the larvae burrow through the person's skin.

Roundworm infection in people can cause serious, even life-threatening, illness when the parasites enter the organs. Lung, liver or brain damage can occur. If the parasites enter the eyes, permanent blindness can result.

Hookworms can cause severe itching and tunnel-like, red areas as they move through the skin. If they are eaten, they can cause intestinal problems.

Fungal infections

Like their dogs, people can be exposed to the fungal organisms that cause [histoplasmosis](#), [blastomycosis](#), [cryptococcosis](#) and [coccidioidomycosis](#). Inhalation of fungal spores is the most common route of infection in people. The symptoms may include flu-like or pneumonia-like symptoms, chest pain, fever, coughing, headache, skin rash or muscle aches. Immunosuppressed people are at the highest risk of infection and illness.

People can become infected with canine ringworm caused by the fungal organism *Microsporum canis* through contact with an infected dog. Symptoms include itching, scaly skin, hair loss and possibly "ring-like" skin rashes.

Mosquito-borne diseases

Any outdoor activity that occurs during mosquito season puts people at risk of mosquito bites and [mosquito-borne diseases](#) such as West Nile Virus and the equine encephalitis viruses. Although these diseases aren't spread from dogs to people, people are at risk of being infected with these diseases any time they are outside during periods of mosquito activity. The symptoms caused by these diseases can vary in severity, but include fever, headache, neckache, flu-like symptoms, abnormal behavior, seizures, coma and death.

Tick-borne diseases

Ticks are capable of transmitting [tick-borne diseases](#) such as ehrlichiosis, babesiosis, Lyme disease, Rocky Mountain Spotted Fever and others. The symptoms caused by these diseases vary, but may include pinpoint (or larger) blood spots on the skin and rashes, joint pain, muscle ache, fatigue and headache.

Water-borne diseases

People who swim in water frequented by any animals (or people, for that matter) can be exposed to water-borne diseases such as *Cryptosporidium* (covered separately above because it is also spread by contact with the stool of infected animals), *Giardia*, *Shigella* and *E.coli*. The symptoms can vary based on the infection, but can include diarrhea, vomiting and stomach cramps.

People can also develop [leptospirosis](#) from exposure to water contaminated with *Leptospira*-contaminated urine. Symptoms can include fever, headache, muscle aches, diarrhea and vomiting,

Although the possible disease issues to be transmitted from dogs to humans may seem overwhelming, veterinarians are experts on zoonotic diseases and animal-related health hazards. Please consult with your veterinarian if you have questions or need more information about any of the diseases described here. Your veterinarian may also wish to consult with your physician regarding any health issues to ensure that both you and your dog remain as healthy as possible.

Common sense measures to protect your dogs, yourself and others

- Consult your veterinarian about the best preventive program for your dog(s), including vaccinations, heartworm prevention and parasite prevention (deworming and regular stool checks).
- Do not let your puppy come into contact with other dogs' stool.
- Make sure you keep your dog's vaccinations up to date so it is fully protected from disease. Consult your veterinarian about the best vaccination schedule for your dog.
- If your dog has a disease or it is receiving steroids or other medications that suppress its immune system and decrease its resistance to infection, you should not take it to dog gatherings without first consulting your veterinarian.
- If your dog is ill, do not take it to a dog gathering.

- Do not pet or handle a dog that appears unhealthy. If contact with an ill dog cannot be avoided, wash your hands thoroughly and change clothes (or cover your clothes) before handling your own dog or another apparently healthy dog.
- Clean up after you own dog(s) and place stool in appropriate containers.
- Follow the rules and guidelines associated with the event or area.
- Teach your dog good leash manners and obedience. If your dog does not behave well around other dogs or people, you should not take it to dog gatherings.
- Remain in sight of your dog and be aware of its behavior while at a dog gathering. Remember, your dog and its behavior are your responsibility in these situations. If your dog shows signs of aggression, fear or illness, remove your dog from the situation and consider leaving the site altogether.
- Avoid contact with dogs that appear aggressive and report their presence and behavior to the proper authorities.
- Before your children accompany you and your pet(s) to a dog gathering, make sure they are aware of safety around dogs. While present at the dog gathering, monitor your children closely to make sure they are safe and protected from harm (e.g., injury, bites, etc.).
- Do not allow your dog to have contact with any wildlife. This includes rabbits, squirrels and other wildlife that may be present in areas frequented by dogs.
- If you observe wildlife or other animals acting in an abnormal way, do not approach the animal, do not allow your dog to come in contact with the animal, and call the appropriate authorities.
- Do not swim in water frequented by dogs (e.g., in dog parks, etc.)
- Avoid letting dogs drink standing water or water that is obviously not fresh. If possible, bring water for yourself and your dog to the dog gathering.
- Take appropriate measures to reduce your risk of tick and mosquito bites, including the following:
 - Wear light-colored clothing.
 - Wear long sleeves and pants (where practical) and tuck the pant leg hems into socks to prevent ticks from crawling up your legs from the ground.
 - Use insect repellent.
 - When practical, avoid being outside during times of high insect activity.
- Check your dog for ticks after any outside dog gatherings and remove the tick(s) as soon as possible. Prompt removal of ticks is very important because it lessens the chance of disease transmission from the tick to your pet.
 - Remove ticks by carefully using tweezers to firmly grip the tick as close to the pet's skin as possible and gently and steadily pulling the tick free without twisting it or crushing the tick during removal.
 - Do not attempt to smother the tick with alcohol or petroleum jelly, or apply a hot match to it, as this may cause the tick to regurgitate saliva into the wound and increase the risk of disease if the tick is infected.
 - Crushing, twisting or jerking the tick out of the skin while its head is still buried could result in leaving the tick's mouth parts in your pet's skin; this can cause a reaction and may become infected.

- After removing the tick, crush it in a napkin or tissue to avoid contact with tick fluids that can carry disease.

Allowing your dog to interact with other dogs can provide good opportunities for exercise and socialization that can help your dog's mental and physical well-being. However, these situations are also associated with some risk to dogs and their owners. By using good common sense, you can minimize the risks while still providing for your dog's well-being.

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A note about puppy socialization and the risk of disease

The socialization period for puppies, which takes place from 6-14 weeks of age, is critical for a dog's behavioral development. During this time positive experiences with other dogs, people, noises and activities can reduce the likelihood of fearful behaviors, such as aggression and phobias, later in the dog's life. Puppies that are not properly socialized are more likely to develop behavioral problems that can make them unsuitable pets and increase the chances their owners will relinquish them to shelters.

This socialization period overlaps a period of vulnerability to disease, including canine parvovirus and canine distemper virus infection. Puppies need socialization with other dogs, but those dogs must be well vaccinated and healthy.

To fully protect your puppy from canine parvovirus, the last dose of the parvovirus vaccine must be at 14-16 weeks of age, regardless of the number of doses given at an earlier age. Until your puppy is fully protected, avoid taking it to dog parks or other areas where it has uncontrolled exposure to dogs with questionable or unknown vaccination histories.

Having a puppy 6-14 weeks of age in socialization classes can offer excellent opportunities to properly socialize puppies but there is a disease risk. To reduce the risk, puppies in the classes should be of similar age and vaccination history and should be examined and found to be healthy by a veterinarian prior to starting classes. Proper sanitation (including immediate cleanup of 'accidents') during the classes helps provide additional protection from infection. The puppies' first vaccine should be administered at least 7 days prior to the first class. Puppies with signs of illness (diarrhea, coughing, fever, etc.) should not attend puppy socialization classes until they have recovered from their illness.

If you allow your puppy to interact with dogs belonging to family or friends, make sure the dogs have been appropriately vaccinated and are adequately socialized to avoid bad experiences that could have negative long-term consequences to your puppy's behavior. Similarly, if you own an older dog and plan to introduce a puppy into your house, make sure the older dog is adequately vaccinated.

It is important to understand that it is not until 7-10 days after the last vaccination at 14-16 weeks of age that the risk of infection is very low and you can increase the puppy's introduction and socialization with all dogs.