



# Diarrhea

**Category:** Canine, Feline

**Affected Animals:**

Dogs and cats.

**Overview:**

Defined as abnormally frequent and liquid fecal discharges, diarrhea is a very common condition that can range in severity from a mild inconvenience to a serious condition in which the animal becomes very sick and dehydrated.

Diarrhea can be classified as being acute in onset, meaning that the symptoms come on quickly and last no more than a week. Or, diarrhea can be chronic, lasting for several weeks to months. Dogs and cats with chronic diarrhea may have periods in which the condition gets better, but then grows worse again.

Diarrhea also is classified as being small bowel or large bowel in origin. Small bowel diarrhea means that the diarrhea is being caused by something damaging or irritating the stomach or small intestines. Large bowel diarrhea means that the large intestines or colon are similarly being irritated or damaged.

There are numerous causes of diarrhea. Eating rotten foods or trash, a sudden change in diet, a high-fat diet, viruses, bacteria, parasites, drugs, and cancer may cause it. Typically, animals with acute diarrhea that are not dehydrated or sick are treated symptomatically. Dogs and cats with severe or chronic diarrhea require a series of diagnostic tests to determine and treat the underlying cause. In certain cats, chronic diarrhea will be difficult to diagnose and to cure.

**Clinical Signs:**

Dogs and cats that are affected mildly generally are bright, alert and do not appear

to be sick, except for the diarrhea. Animals that are affected more severely can be vomiting, depressed, dehydrated, listless, have an increased frequency of diarrhea, and may even have blood in the stool.

Animals with small bowel diarrhea typically pass a larger volume of feces. They defecate two to four times a day, lose weight, occasionally have melena, flatulence and borborygmus, and occasionally vomit. Cats may have tenesmus or dyschezia.

Dogs with large bowel diarrhea pass a smaller volume of feces each time, but defecate more frequently, about four times a day. There may be minimal to no weight loss, but there can be hematochezia and mucus with occasional dyschezia and tenesmus, and an urgency to defecate. Vomiting is uncommon.

### **Symptoms:**

Animals that are mildly affected generally are bright, alert and do not appear to be sick, except for the diarrhea. Dogs and cats that are affected more severely can have vomiting, depression, dehydration, listlessness, an increased frequency of diarrhea, and may have blood in the stool. Cats may be unable to control defecating outside of the litter box. There may be occasional vomiting and intestinal "gurgling" noises.

### **Description:**

When the intestines are irritated or diseased, they tend to react in three general ways. The first is an inability to absorb fluids and nutrients into the blood stream. The second is by allowing more fluid secretions from the blood stream into the intestines. Both of these reactions result in an increased amount of liquid in the intestines. The third possible result of irritation or disease in the intestines is an increased movement or peristalsis of the intestinal fluid, and hence the rapid movement of watery or soft stools that occurs with diarrhea.

### **Diagnosis:**

Dogs and cats with mild diarrhea that are not that sick usually only require minimal testing. Generally just a fecal flotation examination to check for the eggs of intestinal parasites passed in the feces is required. Potential parasites include Giardia, hookworms, roundworms, and whipworms. Cats may have the coccidia parasite as well. Also, a parvovirus test may be appropriate for younger dogs.

Animals that are sick or have chronic diarrhea usually require additional tests. To assess possible underlying causes of the diarrhea, the examining veterinarian first needs to determine if the diarrhea is related to the small intestines, large intestines,

or both. Bloodwork is usually ordered to determine how well major organs such as the liver and kidneys are functioning. Red and white blood cell and platelet counts will also be taken.

The results can help determine the presence of a bacterial or viral infection. They also will show if the animal is anemic or if there is a fungal infection. For cats in particular, other blood tests that may be helpful include an assessment of the thyroid hormone level, and viral screening tests for diseases such as the feline leukemia virus and the feline immunodeficiency virus.

Occasionally more specialized tests are required, including ultrasound, endoscopy, and x-rays of the abdomen. Ultrasound uses sound waves to help visualize the structures of the different organs, including the intestines, liver, stomach, kidneys, and pancreas. Endoscopy is done under general anesthesia and it requires passing a long flexible probe with a camera through the mouth so that the examining veterinarian can see the stomach and intestines.

An endoscopic probe can be inserted into the rectum to view the colon as well. Samples of tissues can be taken and examined under a microscope to diagnose certain diseases. X-rays can be taken of the abdomen to check for any obstructions in the bowel. Barium contrast preparations can also be given to the dog or cat to swallow; this substance will reveal on the x-ray any irregularities or abnormalities within the intestines.

The examining veterinarian will be able to determine which tests are necessary to reach a diagnosis. Some cases may be referred to a veterinary internal medicine specialist.

### **Prognosis:**

The prognosis for acute, mild diarrhea is excellent; the condition should improve within a few days. More complicated causes of diarrhea may take longer to resolve, but if the underlying problem can be treated, the diarrhea will usually resolve as well.

### **Transmission or Cause:**

Causes are numerous, but the more common ones include eating spoiled food, a sudden change in diet, lactose intolerance or intolerance to a food or additive, or simply overeating. Other causes include viruses like parvovirus or coronavirus, and bacteria such as *Salmonella*, *Clostridium*, and *E. coli*. Intestinal parasites or worms such as Giardia, roundworms, coccidia, and hookworms can cause diarrhea

as well. Other causes include drugs such as aspirin or steroids, inflammatory bowel disease, endocrine disorders such as hyperthyroidism, kidney or liver disease, and cancer.

### **Treatment:**

The treatment for animals that have mild diarrhea but are not dehydrated and sick generally involves withholding food for twenty-four hours, then feeding a low fat, bland diet such as boiled rice, potatoes, boiled lean hamburger or chicken, cottage cheese, or yogurt in small feedings for two to three days. In addition, commercial intestinal diets are available by prescription through a veterinarian. The diarrhea should resolve within a few days. Owners should never withhold water unless instructed to do so by the examining veterinarian.

If the diarrhea persists, the underlying problem must be treated in order for it to resolve. Oral or intravenous fluid therapy may be necessary to rehydrate the animal and prevent further dehydration. Antibiotics will treat any bacteria in the intestines. If parasites are present on a fecal floatation exam, de-worming medications should also be administered. In cats in particular, some causes of diarrhea may not be curable and may require lifelong medications to help normalize the feces.

### **Prevention:**

Prevention involves avoiding the potential causes of the diarrhea. Dogs and cats should not be allowed to eat out of the trash, nor should there be sudden changes in dog or cat foods. Owners should take appropriate precautions against parasites. Visiting a veterinarian on a regular basis for routine fecal examinations and general physical exams can also help avoid diseases that can lead to diarrhea.