

Vomiting in Cats

Drs. Foster & Smith Educational Staff

What is vomiting?

Vomiting is the forceful expulsion of stomach contents through the mouth. Vomiting involves the forceful contraction of stomach muscles; regurgitation does not. Both vomiting and regurgitation can occur right after eating or drinking, or up to several hours later.

What is the difference between vomiting and regurgitation?

In regurgitation, the food that is expelled comes from the mouth or esophagus, versus the stomach.

If my cat is vomiting, when should I call my veterinarian?

If your cat is bright and alert, and only vomits once, it is probably not necessary to call your veterinarian. Many cats will vomit after eating grass, for instance. If your cat vomits more than once or appears sick, call your veterinarian. Your veterinarian will ask you a series of questions to determine how severe the vomiting is. It will be helpful for your veterinarian to know when the vomiting started, how many times your cat has vomited, what the vomit looks like, and if your cat is uncomfortable. It is especially important that you call your veterinarian immediately if:

- There is blood in the vomit
- Your cat acts like he wants to vomit, but nothing is expelled
- Your cat appears bloated or has a swollen abdomen
- You suspect your cat may have eaten something toxic or poisonous
- Your cat has a fever or is depressed
- Your cat's gums are pale or yellow
- Your cat is a kitten or has not received all his vaccinations
- Your cat appears to be in pain
- Your cat also has diarrhea

Do not give your cat any medications, including over-the-counter human medications unless advised by your veterinarian to do so.

How is the cause of vomiting diagnosed?

There are many causes of vomiting (See Table 2. Causes, Diagnosis and Treatment of Vomiting in Cats). It is important to determine the cause so the appropriate treatment can be given. Your veterinarian will combine information from you, the physical exam, and possibly laboratory and other diagnostic tests to determine the cause of the vomiting.

When cats vomit, their abdominal muscles contract very strongly multiple times before the food is actually ejected from the mouth. It may appear as though the whole body is involved in the effort. Often they will go through this process several times in a row.

Onset of symptoms: How suddenly the symptoms appeared is a good clue to what the cause of the vomiting may be. If the symptoms appeared suddenly, the condition is called "acute". If the symptoms remain over a long period of time (weeks), the vomiting is called "chronic".

Appearance of vomit: Distinguish vomiting from regurgitation (expelling food that has not yet reached the stomach; whether the vomit contains food, hair or just fluid; color of vomit; presence of blood or bile in the vomit.

Degree of nausea: As shown by such signs as licking or smacking of lips, drooling, swallowing, or gulping.

Timing of vomiting in relation to meals or drinking.

Severity: How often the vomiting occurs and whether it is projectile.

Presence of other signs: Fever, pain, dehydration, urinary changes, depression, weakness, diarrhea, or weight loss. Vomiting is often caused by diseases not directly related to conditions of the digestive tract, such as hepatitis, pancreatitis, diabetes, and kidney disease.

Medical History

Your veterinarian will ask about your cat's medical history including vaccinations, what type of wormer the cat has received and how often, contact with other cats, diet, any access to garbage or toxins, and any medications. The more information you can offer, the easier it will be to make a diagnosis.

Physical examination

Your veterinarian will do a complete physical exam including taking your cat's weight and temperature, checking the heart and respiration, looking in the mouth and under the tongue, palpating the abdomen, and checking for dehydration.

Laboratory and diagnostic tests

In some cases of vomiting, your veterinarian will recommend a fecal flotation. This is a test to check for parasites such as intestinal worms or Giardia. If a bacterial infection is suspected, a fecal culture and sensitivity are performed.

If the cat is showing signs of illness, a complete blood count and chemistry panel are often recommended. Special blood tests may also be conducted if certain diseases are suspected.

Radiographs (x-rays) are appropriate if a tumor, foreign body, or anatomical problem is suspected. Other diagnostic imaging such as a barium study or ultrasound may also be helpful. Examinations using an endoscope may be indicated.

For some diseases, the only way to make an accurate diagnosis is to obtain a biopsy and have it examined microscopically.

How is vomiting treated? Because there are so many causes of vomiting, the treatment will vary (See Table 2. Causes, Diagnosis and Treatment of Vomiting in Cats).

In many cases of vomiting in cats, it is recommended to withhold food for at least 24 hours, and provide small amounts of water frequently. Then, a bland diet such as boiled hamburger and rice is offered in small amounts. If the vomiting does not recur, the cat is slowly switched back to his normal diet or a special diet over the course of several days.

For some cases of vomiting, it may be necessary to modify the diet permanently. Special foods may need to be given as a way to avoid certain ingredients, add fiber to the diet, decrease the fat intake, or increase digestibility.

If intestinal worms are present, the appropriate wormer will be prescribed. Few wormers kill every kind of intestinal worm, so it is very important that the appropriate wormer be selected. In most cases it is necessary to repeat the wormer one or more times over several weeks or months. It is also important to try to remove the worm eggs from the environment. The fecal flotation test looks for worm eggs, and if no eggs are being produced, the test could be negative even though adult worms or larvae could be present. For this reason, in some cases, even if the fecal flotation test is negative, a wormer may still be prescribed.

If dehydration is present, it is usually necessary to give the animal intravenous or subcutaneous fluids. Oral fluids are often inadequate since they pass through the animal too quickly to be sufficiently absorbed.

Antibiotics are given if the vomiting is caused by bacteria. They may also be given if the stomach or intestine has been damaged (eg., blood in the stool or vomit

would indicate an injured intestine or stomach) and there is a chance that the injury could allow bacteria from the digestive tract into the blood stream.

In some cases, medications may be given to decrease vomiting. As a general rule, these drugs should not be given if the cat could have ingested a toxin or may have a bacterial infection, so it is always important to have an accurate diagnosis before use of these drugs.

Table 1: Causes, Diagnosis and Treatment of Vomiting in Cats					
Cause	Example	Cats Most at Risk	Symptoms	Diagnosis	Treatment
Diet change	Changing cat food brand	Those switching from a consistent diet	Usually no other signs of being ill	History and physical exam; tests (eg., fecal flotation) to rule out other causes	Withhold food as needed then switch to bland diet and then slowly back to normal diet
Food intolerance or sensitivity	Sensitivity to or inability to digest or absorb certain foods such as milk or gluten		Sudden onset of diarrhea, sometimes with gas	Monitor response to removing ingredient from diet and then adding it again (food trial)	Withhold food as needed then switch to diet without the offending ingredient
Bacterial infection	<i>Salmonella</i> , <i>E. coli</i> , <i>Clostridia</i> , <i>Campylobacter</i>	Young cats or those who are immuno-suppressed	Mild to severe bloody diarrhea with loss of appetite, depression, fever and vomiting	Fecal culture and sensitivity	Antibiotics; intravenous fluids and supportive care in more serious conditions
Hookworms		Kittens	Diarrhea, vomiting, weakness, pale gums, dehydration, anemia, swollen abdomen, black and tarry stools	Fecal flotation exam	Multiple treatments with appropriate wormer; decontaminate environment
Giardia		Usually young cats or those who are immuno-suppressed	Mild to severe soft diarrhea with mucus and a bad odor; weight loss, abdominal pain and vomiting; often intermittent	ELISA test on feces; fecal flotation exam or microscopic exam of feces; difficult to diagnose - often need multiple samples over several days	Metronidazole, albendazole or febantel; bathing and sanitation to remove Giardia from coat and environment. Reinfection commonly occurs.
Viral infections	Panleukopenia (feline distemper)	Young cats who have not received full series of feline distemper vaccinations and those who are immuno-suppressed	Acute diarrhea, loss of appetite, fever, depression, vomiting, dehydration, abdominal pain	History, physical exam, white blood cell count	Intravenous fluids, antibiotics to prevent secondary bacterial infection, withhold food and water
	Feline corona virus (FCoV)	Young cats, cats in catteries	Diarrhea and possible vomiting	History and physical exam; tests (eg., fecal flotation) to rule out other causes; FCoV antibody test, electron microscopy or	None

	Feline Infectious Peritonitis (FIP)	Young cats, cats in catteries; may be genetic susceptibility in some breeds	Diarrhea, fever, lethargy, loss of appetite, weight loss, vomiting	PCR History, physical exam, analysis of abdominal fluid, CBC and serum chemistry	Supportive care
Idiopathic inflammatory bowel disease	Granulomatous enteritis, eosinophilic gastroenterocolitis, or lymphocytic/plasmacytic enteritis (LPE)		Chronic vomiting and diarrhea possibly with blood and/or mucus; sometimes straining, mild weight loss, and/or black and tarry stools	History; physical exam; intestinal biopsy; tests (eg., fecal flotation) to rule out other causes	Modify diet, wormers and antibiotics to treat or prevent hidden infections; probiotics; anti-inflammatory drugs; immunosuppressing drugs if no response to other treatment
Cancer	Lymphoma , adenocarcinoma	Middle-age or older	Chronic diarrhea, weight loss, poor appetite; may see vomiting and dark, tarry stools	History, physical exam, intestinal biopsy	Chemotherapy or surgery depending upon the type tumor
Small intestinal bacterial overgrowth (SIBO); also called antibiotic resistant diarrhea		Cats with other intestinal diseases	Intermittent watery diarrhea, poor growth or weight loss, increased gas, sometimes vomiting	History; physical exam; intestinal biopsy; tests (eg., fecal flotation) to rule out other causes; ultrasound; blood tests (eg., serum folate and cobalamin, bile acids)	Antibiotics (at least 4-6 weeks); modify diet
Obstruction	Foreign body , intussusception , pyloric stenosis		Diarrhea, vomiting, loss of appetite; as progresses see depression possible, abdominal pain	History; physical exam; x-rays; barium series; ultrasound; exploratory surgery	Surgery
Pancreatitis		Adult cats, Siamese	Fever, loss of appetite, lethargy, painful abdomen, vomiting	History; physical exam; chemistry panel; other blood tests (e.g., Feline trypsin-like immunoreactivity)	Restrict oral intake as needed; administer fluids; provide pain control and other supportive care; medications to control vomiting; maintain on low fat diet if necessary
Liver or Biliary Disease	Hepatitis, biliary obstruction		Vomiting; yellow discoloration of gums and whites of the eyes	History; physical exam; chemistry panel; other blood tests; x-rays and/or ultrasound; biopsy	Medications and fluids to control effects of vomiting and liver disease; possible surgery depending on cause

Kidney Disease	Pyelonephritis, glomerulonephritis	Older cats	Vomiting, increased thirst and urination	History; physical exam; chemistry panel; urinalysis; x-rays and/or ultrasound	Diet changes; medications and fluids to control effects of vomiting and kidney disease
Peritonitis	Perforated intestine		Vomiting, painful abdomen; sometimes fever	History; physical exam; chemistry panel; complete blood count; x-rays and/or ultrasound	Antibiotics, fluids; medications to control vomiting; possible surgery depending upon cause
Pyometra (infection of the uterus)		Unspayed females	Vomiting; fever, vaginal discharge	History; physical exam; complete blood count; x-rays and/or ultrasound	Surgical removal of uterus; medical treatment
Diabetes mellitus		Overweight cats	Vomiting, increased thirst and urination; sometimes depression	History; physical exam; chemistry panel; urinalysis	Insulin therapy; dietary management; supportive care
Hyperthyroidism		Middle-age to older cats	Increased appetite, weight loss, vomiting, hyperactivity, increased volume of stools with greasy appearance	Blood test for T4 hormone	Treatment of hyperthyroidism with methimazole, surgery, or radiation
Toxins	Strychnine, ethylene glycol, lead, zinc, poisonous plants	Outside cats and those left unattended or unsupervised	Loss of appetite, depression, vomiting, dehydration, abdominal pain	History and physical exam; tests (eg., fecal flotation) to rule out other causes; testing of blood, feces or vomit for presence of toxin; x-rays	Depends on toxin
Medications	Digoxin, erythromycin, chemotherapy		Vomiting	History; physical exam; drug levels	Medications to control vomiting; change drug therapy
Septicemia			Vomiting, fever	History; physical exam; blood culture	Antibiotics; supportive care
Hypo-adrenocorticism (Addison's disease)			Vomiting	History; physical exam; chemistry panel; complete blood count	Medications to control effects of hypoadrenocorticism
Gastritis	Helicobacter infection; high blood urea nitrogen (BUN); stomach worm		Vomiting	History; physical exam; endoscopy	Medications to control vomiting and protect stomach; treat underlying cause; fluids, if necessary

Urinary tract obstruction		Male cats	Straining to urinate but producing no or little urine, vomiting, licking genital area	Physical exam	Remove obstruction while under anesthesia; intravenous fluids and supportive care
Ulcers			Vomiting; blood in vomit; black, tarry stools	History; physical exam; endoscopy or barium series	Medications to control vomiting and protect lining of stomach and intestines; treat underlying cause; fluids, if necessary
Heartworm infection			Lethargy, weight loss, coughing, vomiting	Blood testing, radiographs, echocardiogram	Supportive care
Motion sickness			Drooling, vomiting while riding in a vehicle	History; physical exam	Medications to control vomiting