

# Stomach Bloat

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### Locations

#### Auburn Hills

3412 E. Walton Blvd.  
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(248) 371-3713

#### Grand Rapids

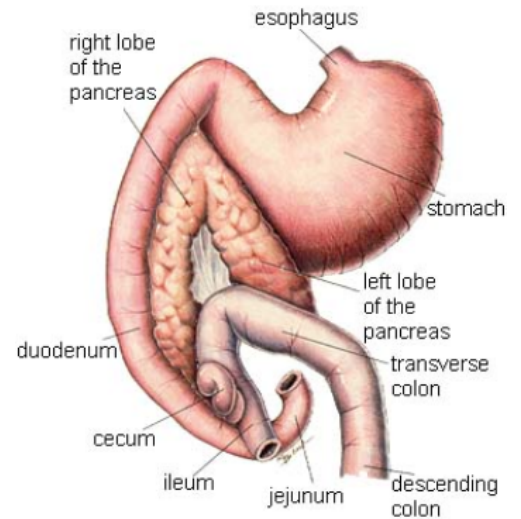
1425 Michigan St. NE  
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(616) 284-5300

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29080 Inkster Rd.  
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(248) 354-6660

## Anatomy

The esophagus is a tube that passes food from the mouth to the stomach. The stomach is a hollow dilation of the gastrointestinal tract where initial digestion of food occurs. The duodenum is the first part of the small intestine that leaves the stomach. The spleen is attached to the stomach by a series of blood vessels and the gastrosplenic ligament.



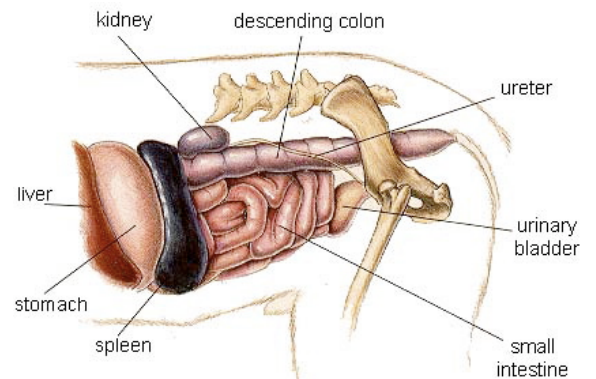
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## What is it?

Gastric dilatation and volvulus (GDV) or bloat is a condition in which the stomach becomes distended with gas. In some cases the stomach is distended with fluid or food. As the stomach becomes distended, it usually twists in a clockwise direction. After the stomach is twisted and distended, the esophagus and duodenum become twisted and kinked off, thus trapping the gas in the stomach. The twist in the stomach not only makes the pet very uncomfortable, but also impairs the blood flow to the stomach, thus if left untreated may result in death of the stomach and ultimately death of the patient. Another event that occurs is occlusion of the main vein (vena cava) leading from the back half of the body to the heart and resultant shock. Shock, a condition in which there is inadequate perfusion of the body with blood, is fatal if not treated.

## Signs

A number of breeds are commonly affected by stomach bloat. About 50% of all Great Danes will bloat during their lifetime. About 1 in 5 Irish wolfhounds will bloat in their lifetime. Other susceptible breeds include Standard poodles, Blood hounds, Akitas, Irish setters, German shepherds, Dachshunds, and Labrador retrievers. Females and males are equally affected. Clinical signs of bloat include unproductive retching, abdominal distension, pale gums, rapid heart rate, and weak pulses. The diagnosis of bloat is confirmed with abdominal x-rays.



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## Treatment

Initially, intravenous fluids are administered to help reverse shock. Next, the patient is anesthetized and a tube is passed from the mouth to the stomach to relieve gas and fluid build-up. The stomach is then rinsed with water to remove ingested food.

# Stomach Bloat Continued...

The patient is then taken to surgery and the stomach is untwisted. The stomach is tacked to the right side of the body wall (called gastropexy) to prevent the stomach from twisting again. Sometimes a portion of the stomach has died (necrosed) and needs to be removed. If too much of the stomach is dead, euthanasia may be recommended. If the spleen has developed blood clots, it is removed.

After surgery the patient is carefully monitored in the intensive care unit. Intravenous fluid therapy is continued after surgery. In some cases, artificial plasma (Hetastarch), plasma and blood transfusions may be needed. Pain is controlled after surgery with a variety of medications. Blood pressure, EKG and other vital signs are closely monitored.

## Aftercare

After surgery, you can continue to give your pet a prescribed pain reliever to minimize discomfort. A motility modifier may also be prescribed to promote passage of food and gas through the stomach. It's also extremely important to limit your dog's activity and exercise level during the first month after surgery so that the stomach can heal to the body wall. Daily feeding rations should be divided into three daily meals for the first 2 weeks. Thereafter, meals should be fed twice daily. Detailed instructions will be given to you after the surgery. The surgeon will monitor the healing process with two follow-up exams. The first is scheduled at two weeks after the surgery and the second is at six weeks after the surgery. During the second evaluation, an ultrasound may be recommended to confirm that the stomach has healed to the body wall.

## Prognosis

If treated early, about 90 to 95% of the dogs having surgery to treat bloat will survive. If a portion of the stomach is found to be dead at the time of surgery, the survival rate decreases to 50%. Patients that have bloated are predisposed to abnormal heartbeats that if left untreated uncommonly may result in death. Disseminated intravascular coagulation uncommonly occurs and results in dysfunction of multiple internal organs, bleeding disorder, and commonly death. Breakdown of the stomach tack (gastropexy) occurs less than 5% of the time. Chronic recurrent bloat occurs infrequently, but usually is due to very poor function of the muscle of the stomach. Medication may be administered to improve the stomach motility, but this will be effective in about 50% of the patients. A gastropexy (stomach tack) can also breakdown and result in recurrent bloat and twisting of the stomach, but this is unusual (less than 5% chance).

## Preventative surgery

A preventative surgery can be performed to minimize the risk of GDV in high-risk patients such as Great Danes, German Shepherds, Blood Hounds, Irish Setters, Irish Wolfhounds, Standard Poodles, and other susceptible breeds. Great Danes are at very high risk and research has shown that one in two Danes will bloat in their lifetime. This surgery is done laparoscopically via two small incisions and the aid of a telescopic camera. The surgery can be done as early as 6 months of age (at the time of neutering). This procedure has minimal morbidity, less anesthesia and surgery time, short hospital stay (done as an outpatient surgery), and is less expensive than treating GDV.



# Stomach Bloat Continued...

## Assessment and recommendations

Patient: \_\_\_\_\_ Date: \_\_\_\_\_

### Treatment

- Surgery is recommended
- Conservative treatment is recommended
- Prophylactic laparoscopic gastropexy can be scheduled at the earliest available appointment

### The following has been prescribed

- No medications or special diet are necessary at this time
- Diet: \_\_\_\_\_
- Motility modifiers: \_\_\_\_\_
- Pain relieving medication: \_\_\_\_\_
- Ant-acid medication: \_\_\_\_\_

### Exercise

- Restrict exercise to leash walks 10 minutes twice daily for 1 month; no running, jumping, or rough play with other pets during this time

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