

Like an Expanding Balloon in Your Pet's Tummy, This Can Kill in Only Hours

If you overindulge, you may feel uncomfortable, but usually there's nothing to worry about. With certain dogs (especially these 12 at-risk breeds), it can be a death sentence. Know the early warning signs and solutions to help your pet on the way to the emergency clinic.

Analysis by [Dr. Karen Shaw Becker](#)

STORY AT-A-GLANCE

- A recent study revealed the vast majority of dogs who undergo surgery for gastric dilatation volvulus (GDV), also called bloat, survive this life-threatening event
- The study also suggests dogs most likely to develop GDV are purebred and over 88 pounds, and the risk increases as they age
- Previous studies show there are several other potential risk factors for bloat primarily involving diet, eating habits and exercise
- GDV is a life-threatening situation, and immediate veterinary intervention is required to save your dog's life
- Guardians of high-risk dogs can take a number of steps to help prevent the development of GDV

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Recently I ran across some encouraging new information on the prognosis for dogs treated for bloat, or gastric dilatation volvulus (GDV). For those of you who might not be aware, the condition known as "bloat" is exactly what it sounds like — the stomach expands to several times its normal size due to trapped gas, air and in some cases, fluid. In people, feeling bloated is usually the result of overindulgence and nothing to worry about.

In dogs, however, a bloated tummy can quickly become a life-threatening situation. If your dog has simple bloat, also called gastric dilatation, the stomach is distended with gas and air but remains in position. It can be painful for the dog because the swelling puts pressure on blood vessels in the abdomen.

In a worst-case scenario, the condition progresses to gastric dilatation volvulus (GDV), in which the bloated stomach twists around on itself, squeezing off the blood supply to the stomach and spleen, and creating the potential for significant damage to other internal organs. Gastric dilatation with volvulus is a life-threatening event in dogs. Without treatment, it can lead to death in a matter of hours.

Study Shows the Majority of Dogs Who Undergo Surgery for Bloat Survive

A recent epidemiological study conducted by a team of U.K. and Australian veterinary researchers has "... blown the myth that gastric bloat is almost always a death sentence for affected dogs" according to study coauthor Dan O'Neill, Ph.D.¹

The researchers looked at the records of over 77,000 dogs brought to emergency veterinary clinics in the U.K. over an 18-month period. Of that population, 492 had GDV. Of the GDV dogs who made it to the clinic alive, about half their owners opted for surgery to correct the problem. Of the dogs who received surgery, 79% survived to discharge.²

The study also revealed that mixed breeds were far less likely to develop bloat than purebred dogs, and breeds at highest risk were the Great Dane, Akita, Dogue de Bordeaux, Irish Setter and Weimaraner. Purebred dogs were over five times more likely to develop GDV than mixed breeds.

According to the researchers, a heavier body weight was also strongly linked to GDV. Dogs weighing over 88 pounds had almost 150 times the chance of developing bloat as dogs under 22 pounds. The odds also increased as dogs aged.

Assessing Your Own Dog's Risk for GDV

GDV is most often seen in older, large and giant breed deep-chested (as opposed to barrel-chested) dogs. It may be a partially inherited trait, since many GDV dogs have relatives that also have the condition. However, it's important to note that although genetics seem to play a role, bloat can affect any dog. Breeds at highest risk include:

- Great Dane
- Basset Hound
- Saint Bernard
- Doberman Pinscher
- Weimaraner
- **Old English Sheepdog**
- Irish Setter
- German Shorthaired Pointer
- Gordon Setter
- Newfoundland
- Standard Poodle
- German Shepherd

Some studies suggest elevated food dishes increase a dog's risk, as does fast eating. Dogs who gobble their meals and swallow air in the process seem to be at higher risk for GDV.

Other dietary habits considered to be risk factors include eating large amounts at each meal, eating just one meal a day, exercising shortly after a meal and drinking large quantities of water right after eating. Post-meal stressful situations, as well as a generally fearful or aggressive temperament may also play a role.

Dogs fed primarily **dry diets** are at significantly increased risk for GDV,³ as are dogs who swallow indigestible or slow-to-digest foreign bodies, usually as a result of indiscriminate eating.⁴

Other suspected risk factors include increased gastrin concentration (gastrin is a hormone that controls release of acid in the stomach); decreased stomach motility and delayed gastric emptying (meaning food stays in the stomach longer than normal); and removal of the spleen.

Signs to Watch For

Many of the early signs of GDV can be easy to miss. Your dog may seem anxious. She may stand and stretch, or nip at or guard her abdomen. Panting and drooling are also common. If your dog has simple bloat, she should be able to relieve the pressure by belching. But if the bloat has caused a volvulus, she won't be able to expel the gas and air because both the entry and exit to the stomach are pinched shut. Signs your dog has developed GDV include:

- Markedly distended abdomen filled with air
- Unproductive belching, **retching** and/or vomiting
- Noticeable abdominal pain that interferes with her movements
- Restlessness

Dogs with GDV decline very rapidly and display shallow, rapid breathing and pale gums.

Why You Must Take Immediate Action

GDV can quickly become a serious systemic issue because the bloating of your dog's stomach puts pressure on blood vessels, hindering their ability to pump properly. Pressure on the diaphragm makes breathing difficult, and when the stomach twists on itself, blood circulation is further inhibited.

Toxins are released into the bloodstream and blood flow back to the heart is compromised. This can put your dog in a state of shock in as little as 20 minutes to an hour after the volvulus develops.

Since there's a good chance you won't be able to tell whether your pet has simple bloat or bloating with volvulus, you should get him to your veterinarian's office or the nearest emergency animal hospital right away. If possible, administer homeopathic Belladonna, Nux Vomica or Carbo Veg (depending on your dog's specific symptoms) on the way to the vet to try to mitigate rapid progression of the emergency.

Without immediate veterinary care, your dog's stomach will ultimately rupture and cause peritonitis, a fatal abdominal infection. The most important factor in saving GDV patients is the time that elapses between presentation of symptoms and surgery. I can't stress enough the importance of getting your dog immediate veterinary care if you suspect bloat or GDV.

Diagnosing and Treating GDV

GDV is diagnosed with x-rays. Your dog will first be stabilized with intravenous (IV) fluids and oxygen, and an attempt will be made to move the accumulated gas and fluid out of the stomach. Once your dog is stabilized, she'll undergo anesthesia and surgery to untwist the stomach and tack it to the inside of the abdominal wall in a procedure called a

gastropexy.

The gastropexy should be performed as soon as possible, because GDVs recur at a rate of nearly 100% in dogs who don't receive the surgery. The recurrence rate after gastropexy is less than 5%, and while the stomach can still dilate (bloat), it is unlikely to rotate.⁵

During the surgery, your dog's stomach will be examined for damaged areas that may need to be removed as the result of poor blood circulation. Sometimes the spleen is also torqued and must be untwisted. Occasionally, the spleen may need to be removed if it has been significantly damaged.

Antimicrobials are usually given to address bacteria that leak into the bloodstream from the damaged intestine. There can also be blood pH and electrolyte disturbances that must be corrected. If irregularities in the heart rate are occurring they must be carefully managed, and the kidneys may also need to be monitored.

Your dog will not be able to exercise for the first couple of weeks after surgery, and should be fed a bland diet in small meals along with frequent small amounts of water. Acupuncture may be beneficial in managing pain and supporting the return of normal contractions of the stomach and intestine. Laser therapy may also be helpful to speed healing and reduce pain around the incision site.

I would also recommend a **high-quality probiotic supplement** to reseed the digestive tract with friendly bacteria, and nutritional supplements and herbs appropriate to support other organs such as the kidneys.

How to Help Prevent GDV in Your Dog

If your dog is at high risk for GDV:

- Feed a nutritionally balanced, species-appropriate, fresh food diet with no grains or other fermentable carbohydrates.
- Feed two to three smaller meals a day versus one large meal (you can still practice intermittent fasting with your dog if you offer both meals six to eight hours apart).
- Slow down the speed at which your dog eats by offering food from a special bowl like the **Brake-Fast**.
- Make sure the food you're feeding contains no preservatives, genetically modified (GM) ingredients or citric acid, and add probiotics and **digestive enzymes** to assist in digestion and assimilation of food.
- Don't vigorously exercise your dog for an hour after he eats, and don't allow him to drink large amounts of water during that time.
- Be very careful not to allow your dog to have recreational bones or chews, toys or other foreign objects that are difficult or impossible to digest.
- Minimize stress on your pet. Make sure she is well exercised (though not right after meals, as I've discussed). Most large breed dogs need lots of daily physical activity to maintain muscle tone and range of motion, decrease cortisol (stress hormone) levels and relieve boredom.
- You'll also want to keep vaccines to a minimum to reduce immunologic stress, and limit the amount of chemicals your pet is exposed to orally, topically, and in the environment.

Some veterinarians recommend gastropexy as a preventive measure in high-risk dogs who have not yet experienced an episode of bloat. The procedure is usually performed at the same time the **pet is sterilized**. My first recommendation would be to try to prevent GDV with the right diet and other lifestyle choices. However, if your dog is a breed prone to the condition and has a near relative (parent, sibling, offspring) who has had a GDV, gastropexy may be your best option.

Sources and References

[Royal Veterinary College, September 1, 2017](#)

¹ [Veterinary Times, September 6, 2017](#)

² [Journal of Small Animal Practice, August 21, 2017](#)

³ [Journal of the American Veterinary Medical Association, June 15, 2012, Vol. 240, No. 12, Pages 1456-1462](#)

⁴ [Journal of the American Veterinary Medical Association, November 1, 2012, Vol. 241, No. 9, Pages 1190-1193](#)

⁵ [Institute of Canine Biology, The Purdue Bloat Study](#)
