

Bloat is a very serious health risk for many dogs, yet many dog owners know very little about it. *According to the links below, it is the second leading killer of dogs, after cancer.* It is frequently reported that deep-chested dogs, such as German Shepherds, Great Danes, and Dobermans are particularly at risk. This page provides links to information on bloat and summarizes some of the key points we found in the sites we researched. Although we have summarized information we found about possible symptoms, causes, methods of prevention, and breeds at risk, we cannot attest to the accuracy. **Please consult with your veterinarian for medical information.**

If you believe your dog is experiencing bloat, please get your dog to a veterinarian immediately! Bloat can kill in less than an hour, so time is of the essence. Call your vet to alert them you're on your way with a suspected bloat case. Better to be safe than sorry!

The technical name for bloat is "Gastric Dilatation-Volvulus" ("GDV"). Bloating of the stomach is often related to swallowed air (although food and fluid can also be present). It usually happens when there's an abnormal accumulation of air, fluid, and/or foam in the stomach ("gastric dilatation"). Stress can be a significant contributing factor also. Bloat can occur with or without "volvulus" (twisting). As the stomach swells, it may rotate 90° to 360°, twisting between its fixed attachments at the esophagus (food tube) and at the duodenum (the upper intestine). The twisting stomach traps air, food, and water in the stomach. The bloated stomach obstructs veins in the abdomen, leading to low blood pressure, shock, and damage to internal organs. The combined effect can quickly kill a dog.

Be prepared! Know in advance what you would do if your dog bloated.

- If your regular vet doesn't have 24-hour emergency service, know which nearby vet you would __use. Keep the phone number handy.
- Always keep a product with <u>simethicone</u> on hand (e.g., Mylanta Gas (not regular Mylanta), Gas-X, etc.) in case your dog has gas. If you can reduce or slow the gas, you've probably bought yourself a little more time to get to a vet if your dog is bloating.

This information is not intended to replace advice or guidance from veterinarians or other pet care professionals. It is simply being shared as an aid to assist you with your own research on this very serious problem.

Symptoms

Typical symptoms often include some (but not necessarily all) of the following, according to the links below. Unfortunately, from the onset of the first symptoms you have very little time (sometimes minutes, sometimes hours) to get immediate medical attention for your dog. *Know your dog and know when it's not acting right.*

Attempts to vomit (usually unsuccessful); may occur every 5-30 minutes This seems to be one of the most common symptoms & has been referred to as **the "hallmark symptom"** 🖭 "Unsuccessful vomiting" means either nothing comes up or possibly just foam and/or mucous comes up Doesn't act like usual self Perhaps the earliest warning sign and may be the only sign that almost always occurs 🗄 We've had several reports that dogs who bloated asked to go outside in the middle of the night. If this is combined with frequent attempts to vomit, and if your dog doesn't typically ask to go outside in the middle of the night, bloat is a very real possibility. Significant anxiety and restlessness One of the earliest warning signs and seems fairly typical "Hunched up" or "roached up" appearance This seems to occur fairly frequently Lack of normal gurgling and digestive sounds in the tummy Many dog owners report this after putting their ear to their dog's tummy. Elf your dog shows any bloat symptoms, you may want to try this immediately. Bloated abdomen that may feel tight (like a drum) Despite the term "bloat," many times this symptom never occurs or is not apparent Pale or off-color gums Dark red in early stages, white or blue in later stages Coughing Unproductive gagging Heavy salivating or drooling Foamy mucous around the lips, or vomiting foamy mucous Unproductive attempts to defecate Whining Pacing Licking the air Seeking a hiding place Looking at their side or other evidence of abdominal pain or discomfort May refuse to lie down or even sit down May stand spread-legged May curl up in a ball or go into a praying or crouched position May attempt to eat small stones and twigs Drinking excessively Heavy or rapid panting Shallow breathing Cold mouth membranes Apparent weakness; unable to stand or has a spread-legged stance Especially in advanced stage Accelerated heartbeat Heart rate increases as bloating progresses Weak pulse Collapse

Causes

According to the links below, it is thought that the following may be the primary contributors to bloat. To calculate a dog's lifetime risk of bloat according to Purdue University's School of Veterinary Medicine, <u>click here</u>.

Stress

Dog shows, mating, whelping, boarding, change in routine, new dog in household, etc. Although purely anecdotal, we've heard of too many cases where a dog bloated after another dog (particularly a 3rd
dog) was brought into the household; perhaps due to stress regarding pack order.
Activities that result in gulping air
Eating habits, especially
Elevated food bowls
Rapid eating
Eating dry foods that contain citric acid as a preservative (the risk is even worse if the ownermoistens the food)
Eating dry foods that contain fat among the first four ingredients
Insufficient pancreatic enzymes, such as Trypsin (a pancreatic enzyme present in meat) Dogs with untreated Exocrine Pancreatic Insufficiency (<u>EPI</u>) and/or Small Intestinal Bacterial Overgrowth (<u>SIBO</u>) generally produce more gas and thus are at greater risk New
Dilution of gastric juices necessary for complete digestion by drinking too much water before or after eating
Eating gas-producing foods (especially soybean products, brewer's yeast, and alfalfa)
Drinking too much water too quickly (can cause gulping of air)
Exercise before and especially after eating
Heredity
Especially having a first-degree relative who has bloated
Dogs who have untreated Exocrine Pancreatic Insufficiency (<u>EPI</u>) are considered more prone to
bloat New
Gas is associated with incomplete digestion
Build & Physical Characteristics
Having a deep and narrow chest compared to other dogs of the same breed
Indiving a deep and harrow chest compared to other dogs of the same breed
[™] Big dogs
^{The} Males
Being underweight
Exposition Fearful or anxious temperament
Prone to stress
History of aggression toward other dogs or people
- instory of aggression toward other dogs of people

Prevention

Some of the advice in the links below for reducing the chances of bloat are:

Avoid highly stressful situations. If you can't avoid them, try to minimize the stress as much as possible. Be extra watchful.

Can be brought on by visits to the vet, dog shows, mating, whelping, boarding, new dog in household, change in

routine, etc. Revised

Do not use an elevated food bowl

Do not exercise for at least an hour (longer if possible) before and especially after eating Particularly avoid vigorous exercise and don't permit your dog to roll over, which could cause the stomach to twist Do not permit rapid eating

Feed 2 or 3 meals daily, instead of just one

Do not give water one hour before or after a meal

It dilutes the gastric juices necessary for proper digestion, which leads to gas production.

Always keep a product with <u>simethicone</u> (e.g., Mylanta Gas (not regular Mylanta), Phazyme, Gas-X, etc.) on hand to treat gas symptoms.

Some recommend giving your dog simethicone immediately if your dog burps more than once or shows other signs of gas.

Some report relief of gas symptoms with 1/2 tsp of nutmeg or the homeopathic remedy Nux moschata 30

Allow access to fresh water at all times, except before and after meals

- Make meals a peaceful, stress-free time
- When switching dog food, do so gradually (allow several weeks)
- Do not feed dry food exclusively
- Feed a high-protein (>30%) diet, particularly of raw meat
- If feeding dry food, avoid foods that contain fat as one of the first four ingredients
- If feeding dry foods, avoid foods that contain citric acid
- If you must use a dry food containing citric acid, **do not** pre-moisten the food
- If feeding dry food, select one that includes rendered meat meal with bone product among the first four ingredients
- Reduce carbohydrates as much as possible (e.g., typical in many commercial dog biscuits)
- Feed a high-quality diet
- ____Whole, unprocessed foods are especially beneficial
- Feed adequate amount of fiber (for commercial dog food, at least 3.00% crude fiber)
- Add an enzyme product to food (e.g., <u>Prozyme</u>)
- Include herbs specially mixed for pets that reduce gas (e.g., N.R. Special Blend)
- Avoid brewer's yeast, alfalfa, and soybean products
- Promote an acidic environment in the intestine

Some recommend 1-2 Tbs of Aloe Vera Gel or 1 Tbs of apple cider vinegar given right after each meal

Promote "friendly" bacteria in the intestine, e.g. from supplemental acidophilus Avoids fermentation of carbohydrates, which can cause gas quickly. This is especially a concern when antibiotics are given since they tend to reduce levels of "friendly" bacteria.

Don't permit excessive, rapid drinking Especially a consideration on hot days

And perhaps most importantly, know your dog well so you'll know when your dog just isn't acting normally.