Bloat in Dogs

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 simethicone 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
  - Some have reported that it can sound like a repeated cough

- 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.
  - If 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, click here.

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 owner moistens 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 (EPI) and/or Small Intestinal Bacterial Overgrowth (SIBO) generally produce more gas and thus are at greater risk
   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
Hereditry
   Especially having a first-degree relative who has bloated
   Dogs who have untreated Exocrine Pancreatic Insufficiency (EPI) are considered more prone to bloat
   Gas is associated with incomplete digestion
Build & Physical Characteristics
   Having a deep and narrow chest compared to other dogs of the same breed
   Older dogs
   Big dogs
Males
- Being underweight
- Disposition
  - Fearful or anxious temperament
  - Prone to stress
  - History of aggression toward other dogs or 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 simethicone (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., Prozyme)

- 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 "probiotics" such as supplemental acidophilus
  Avoids fermentation of carbohydrates, which can cause gas quickly.
  This is especially a concern when antibiotics are given since antibiotics tend to reduce levels of "friendly" bacteria. [Note: Probiotics should be given at least 2-4 hours apart from antibiotics so they won't be destroyed.] New
◆ 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.

---

**Breeds At Greatest Risk**

Breeds most at risk according to the links below:

◆ Afghan Hound
◆ Airedale Terrier
◆ Akita
◆ Alaskan Malamute
◆ Basset Hound
◆ Bernese Mountain Dog
◆ Borzoi
◆ Bouvier des Flandres
◆ Boxer
◆ Bullmastiff
◆ Chesapeake Bay Retriever
◆ Collie
◆ Dachshund
◆ Doberman Pinscher
◆ English Springer Spaniel
◆ Fila Brasileiro
◆ Golden Retriever
◆ Gordon Setter
◆ Great Dane
◆ German Shepherd
◆ German Shorthaired Pointer
◆ Great Pyrenees
◆ Irish Setter
◆ Irish Wolfhound
◆ King Shepherd
◆ Labrador Retriever
◆ Miniature Poodle
◆ Newfoundland
◆ Old English Sheepdog
Pekinese
Rottweiler
Samoyed
Shiloh Shepherd
St. Bernard
Standard Poodle
Weimaraner
Wolfhound
Sighthounds
Bloodhounds

Links

◆ Bloat - the life threatening canine emergency
  Overall summary emphasizing high-risk factors
◆ Canine Gastric Dilatation-Volvulus (Bloat)
  Research from Purdue University School of Veterinary Medicine
◆ Meteorological influence on the occurrence of gastric-dilation volvulus
  Purdue University School of Veterinary Medicine study on possible influences of temperature and weather on GDV
◆ Bloat: Strikes in Minutes, Kills in Hours
  Excellent pdf trifold to give to people watching your dog or to hand out to the public for educational purposes
◆ Bloat: The Mother of All Emergencies
  Interesting statistics and clear medical explanations.
◆ Great Dane Links Directory - Bloat
  First-Hand Experiences, Articles, and Links
◆ On My Soapbox
  A commentary on the Purdue studies
◆ Bloat and Torsion: Is Nutrition a Factor?
  Explores nutritional factors
◆ Bloat and Allergies: The Relationship to Yeast Overgrowth and/or Pathogenic Bacteria
  Explores possible relationships to yeast overgrowth and pathogenic bacteria
◆ Prevention of Bloat and Torsion in Dogs
  Maintains avoidance is possible in high-protein diets with raw meat that avoid carbohydrates
◆ Gastric Volvulus and Dilatation (Stomach Bloat)
  Excellent description from a medical perspective. Detailed descriptions, photos, and drawings.
◆ Understanding Bloat and Torsion
  Lots of good information and advice
◆ Bloat First Aid
  Describes the stages and associated symptoms
◆ Bloat First-Aid Kit
  May help those who are unable to get to a veterinarian
◆ How to Tube Your Dog
  Same comment as above
◆ Signs of Bloat
  Many first-hand descriptions by dog owners of the symptoms they observed
◆ Overview of Gastric Dilatation-Volvulus (GDV)
  Provides an overview of GDV. Describes causes. Photos.
Information written by GlobalSpan.net using the references above. Although we have summarized information we found from the links, we cannot attest to the accuracy. Please consult with your veterinarian for medical information.