

Gastric Dilatation & Volvulus

Alternate Names: GDV, bloat, gastric torsion, stomach torsion, twisted stomach.

Species Affected: Dogs, most commonly large, deep-chested dog breeds such as Great Danes, Doberman Pinschers, German Shepherds, St. Bernards, and Weimaraners. Cats may also be affected.

What causes GDV? Gastric dilatation may occur after rapidly eating a large meal. Gastric volvulus occurs when the stomach expands and twists on itself. Risk factors include breed (large and giant deep-chested dog breeds), feeding dry food once a day, voracious appetite, and littermates with GDV.

Is GDV contagious? No

What are the clinical signs of GDV: Initial signs are associated with abdominal pain including panting, restlessness, drooling and retching without producing any vomit. The dog may turn and stare at its abdomen frequently. As GDV progresses, gas and food trapped in the bloated stomach prevent normal blood flow to the heart and normal breathing. GDV will rapidly progress to a life-threatening veterinary emergency that requires immediate surgery.

What are the consequences of GDV? Damage to the stomach due to lack of blood flow, rupture of the stomach, damage of multiple organs including heart, liver, spleen, and kidneys due to lack of oxygen, damage of the intestine and leakage of bacteria into the bloodstream (sepsis). With veterinary care, overall mortality of GDV is 25% (one in four dogs die) to 30% (one in 3 dogs die). GDV is lethal without veterinary care.

How is GDV detected? Based on clinical signs and history. Laboratory testing of blood samples helps measure liver and kidney function. Abdominal x-rays confirm the enlargement and twisting of the stomach.

How is GDV prevented? Recommendations for owners of large, deep-chested dogs include feeding multiple small meals instead of one large meal per day, avoiding exercise before and right after meals, and not breeding dogs which have had GDV or which have littermates with GDV. Stomach surgery is an option to prevent GDV in high-risk dogs.

How is GDV treated? Immediate veterinary care is necessary to stabilize the dog using intravenous (IV) fluids and decompressing the stomach by passing a tube down the throat. If the tube doesn't pass into the twisted stomach, the vet may need to cut through the abdomen skin to directly insert the tube into the stomach. Once stabilized, patients will go for emergency surgery to correct the twisting of the stomach. If circulation was cut off to parts of the stomach for too long, the tissue that has died off will need to be removed. If the spleen was twisted it will often need to be removed too.

Once the position of the stomach has been corrected, the veterinary surgeon may permanently attach the stomach to the abdominal wall (gastropexy) to prevent future twisting. The dog will require smaller, more frequent meals for life and should avoid exercise around mealtime to help prevent GDV.

References:

- *Gastric Dilatation-Volvulus* | American College of Veterinary Surgeons - ACVS. (n.d.). ACVS. <https://www.acvs.org/small-animal/gastric-dilatation-volvulus>
- Gibson, T. W. G. (2021, December 15). *Gastric Dilatation and Volvulus in Small Animals*. Merck Veterinary Manual. <https://www.merckvetmanual.com/digestive-system/diseases-of-the-stomach-and-intestines-in-small-animals/gastric-dilatation-and-volvulus-in-small-animals>