

# Von Willebrand Disease – Causes, Risks, and Care for Dogs

This inherited bleeding disorder usually affects certain purebred dogs, and the symptoms can be alarming. However, it's still possible for them to live long, fulfilled lives with proper care and treatment. Here's what to do.

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## STORY AT-A-GLANCE

- Von Willebrand Disease (vWD) is a rare inherited bleeding disorder found in over 40 breeds, although in certain breeds such as Doberman Pinschers it is more prevalent than in others. It causes problems with blood clotting, leading to prolonged bleeding even from minor injuries and during surgical procedures
- There are three main types of vWD, ranging from mild to severe. Doberman Pinschers most often develop Type 1, while Scottish Terriers and Shetland Sheepdogs may carry the severe Type 3
- Symptoms include nosebleeds, gum bleeding, blood in stool or urine, easy bruising, and excessive bleeding after surgery. Some dogs show no symptoms until later in life or after trauma
- Diagnosis requires blood tests or DNA testing to measure clotting ability and identify carriers. Testing is essential before surgical procedures and before breeding, especially in high-risk breeds, to prevent passing the condition on to any puppies
- Although incurable, vWD can be managed. With precautions, treatment during bleeding episodes, and responsible lifestyle choices, many dogs live long, fulfilling lives despite the condition

When it comes to your dog's health, most of the things you worry about are easy to spot — like itchy skin, tummy upsets, or sore joints. But some conditions can hide quietly beneath the surface until a big event brings them to light. Von Willebrand Disease (vWD) is one of those hidden health issues. It doesn't show itself in every dog that carries it, but when it does, the effects can be serious.

Von Willebrand Disease is an inherited bleeding disorder that can affect dogs from several breeds. While it can sound frightening, the good news is that with knowledge, planning, and good veterinary care, many dogs with vWD live full and happy lives.

## Basic Facts About Von Willebrand Disease

Von Willebrand Disease is a blood-clotting disorder caused by a shortage or problem with proteins in the blood called von Willebrand factor (vWF). vWF is made up of a group of large and small proteins that "act as glue" and are essential for normal clotting. When a blood vessel is injured, vWF helps platelets stick together and form a plug or seal that stops the bleeding.

In a healthy dog, this process happens quickly and naturally. If your dog has vWD, there may not be enough vWF in their system, or the proteins may not work as they should. As a result, bleeding can last much longer than normal — even after something as simple as a small cut or losing a baby tooth.<sup>1,2</sup>

It's important to note that vWD is not the same as hemophilia, though both involve issues with clotting; vWD is its own condition with distinct causes and risks.

Veterinarians classify von Willebrand Disease into three main types, based on how much vWF a dog has and whether the proteins making up the vWF are all present and working correctly.<sup>3</sup>

- **Type 1** — This is the most common form, found most commonly in Doberman Pinschers, and also in Shetland Sheepdogs, German Shepherds and Standard Poodles. Dogs with Type 1 vWD have lower-than-normal amounts of vWF, but both the larger and smaller proteins are present and normal in structure. The severity can range from mild to moderate, meaning some dogs may only have issues after surgery or trauma, while others may experience more frequent bleeding episodes.
- **Type 2** — Here, there's both a shortage of vWF and an abnormal structure, meaning the larger proteins making up the factor are absent and only the smaller proteins are present. This makes clotting very inefficient. Dogs with Type 2 vWD often experience more severe bleeding episodes. This type is seen in breeds such as German Shorthaired Pointers and German Wirehaired Pointers.
- **Type 3** — This is the most severe form, where vWF proteins are completely absent. Dogs with Type 3 vWD are at high risk of spontaneous and dangerous bleeding. Breeds like Scottish Terriers, Shetland Sheepdogs, and Chesapeake Bay Retrievers are known to carry this form.

Knowing the type of vWD is important because it shapes the level of risk your dog may face and the strategies your veterinarian will use to keep them safe

## Which Breeds Are Most Affected?

While von Willebrand Disease can be present in over 50 breeds, some breeds are at a higher risk. These breeds include the Doberman Pinscher, Golden Retriever, Shetland Sheepdog, Rottweiler, Miniature Schnauzer, German Shepherd, German Short Haired Pointer, Standard Poodle, and Scottish Terrier.<sup>4</sup> It can be found in both males and females.

Mixed-breed dogs can also be affected, though the condition is more often documented in purebreds. Because it's inherited with a recessive gene, knowing your dog's family background can provide important clues. Doing a genetic test on your dog is easy to do at home with a test kit and a quick cheek swab and can show if your dog is a carrier for von Willebrand's. If your dog is at risk then a more comprehensive blood test would be recommended at your veterinarian's office.

## Symptoms of vWD in Dogs

The biggest sign of von Willebrand Disease is excessive or prolonged bleeding. This usually appears during puppyhood, or sometimes goes unnoticed until spay or neuter surgery. But symptoms can appear in many forms, and they don't always show up right away, especially if your pet's case is mild or borderline. Some dogs live for years before their first noticeable bleeding episode. Others may have problems as puppies. Here are some of the ways vWD may show itself:<sup>5</sup>

- **Frequent nosebleeds**
- **Bleeding gums** or bleeding after losing baby teeth
- **Prolonged bleeding after spay/neuter surgery or other procedures**
- **Blood in the urine or stool** (stool may appear black and tarry or bright red)
- **Bruising**, which can range from tiny spots to large patches
- **Excessive bleeding during heat cycles or after giving birth**
- **Spontaneous bleeding** from the mouth, urinary tract, or reproductive tract
- **Anemia** in severe cases, due to ongoing blood loss

What's tricky is that not all dogs with vWD show obvious symptoms. Some may carry the genetic trait without having active bleeding problems. That's why testing is so important, especially for dogs in high-risk breeds or for any dog considered for breeding.

## How Is vWD Diagnosed?

Diagnosing vWD usually involves blood tests. The most common is the von Willebrand factor antigen assay (VWF:Ag test), which measures the level of vWF in the blood. Results are reported as a percentage compared to a standard.<sup>6</sup>

- **Normal** — 70% to 180%
- **Borderline** — 50% to 69%
- **Abnormal** — 0% to 49%

Dogs with values below 50% are considered carriers or affected. Those with very low values (under 25%) often have the most severe symptoms. Other diagnostic tools include:<sup>7,8</sup>

- **Buccal mucosal bleeding time test** — This requires measuring how long it takes for bleeding to stop after a tiny cut inside the mouth.
- **DNA testing** — A simple cheek swab can identify whether your dog is a carrier or affected by Types 1, 2, or 3.

## Treatment Options for Dogs with vWD

There is no cure for von Willebrand Disease, but treatment and management can make a big difference in your dog's safety and quality of life.

During bleeding episodes, blood transfusions are the main treatment for severe bleeding. These provide the clotting factors your dog is missing. Plasma products may be given before surgery to reduce bleeding risk.<sup>9</sup> Desmopressin acetate (DDAVP), a synthetic hormone, can temporarily boost clotting ability in some dogs with Type 1 vWD.<sup>10</sup> Wound care with sutures, bandages, or wound glue may help control minor injuries. Herbal therapy Yunnan Baiyao can also help slow down bleeding during episodes.

Avoid medications that interfere with clotting, such as aspirin, heparin, or certain antibiotics, and notify your veterinarian of your dog's condition before any surgery, dental cleaning, or procedure. Certain supplements such as omega-3 fatty acids should be avoided as these may affect blood clotting. Limit rough play and keep an eye out for

unexplained bruising or bleeding. Regular screening for thyroid conditions is also important for dogs that have vWD as hypothyroidism can worsen the symptoms.

## Can Dogs with vWD Live a Normal Life?

Yes, many dogs with von Willebrand Disease live normal or near-normal lives. The outcome depends on the type and severity of vWD, how early it's diagnosed, and the precautions you take as a pet parent. Some dogs may never have a serious bleeding episode, while others may need frequent veterinary care.

Life expectancy is hard to predict, but with careful management and quick response to any bleeding issues, your dog has every chance to enjoy a fulfilling life. The key is vigilance and preparation and avoid any risk factors such as rough play or situations in which your pet may injure themselves.

Lifestyle measures can play a role in keeping your dog healthy. While there is no cure for vWD, a balanced diet with essential nutrients supports strong overall health, while regular exercise helps maintain circulation and immune function.

Your holistic vet or nutritionist may also recommend foods containing iron, vitamin B12, vitamin D, and vitamin K to support healthy red blood cell production. Some vitamin rich foods to incorporate into your pets diet include organ meats such as beef liver, whole foods such as eggs and leafy greens like spinach or kale. Discuss with your holistic vet whether herbal supplements that support blood and vessel health might be helpful as well.

## Final Thoughts

Von Willebrand Disease may sound intimidating, but it doesn't have to define your dog's future. With awareness, proactive care, and a strong partnership with your veterinarian, you can manage the risks and help your dog thrive. Knowing the signs and taking preventive steps gives your dog the best chance at a healthy, happy life.

As with many inherited conditions, knowledge is power. By testing, making informed choices, and providing thoughtful care, you're not just protecting your own dog — you're helping pave the way for healthier generations of dogs to come.

## Sources and References

<sup>1,3,6,9,10</sup> [Cornell College of Veterinary Medicine, Canine von Willebrand Disease](#)

<sup>2,4,5,8</sup> [PetMD, March 7, 2023](#)

<sup>7</sup> [Animal Wellness Magazine, August 20, 2025](#)

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