

The Disorder That Can Turn Everyday Fun Into a Life-Threatening Event

Symptoms of the disease include bleeding from the mouth or nose, bleeding in the digestive tract, blood in urine, anemia and excessive bleeding that accompanies everything from loss of baby teeth to major surgery.

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

[Download Transcript](#) | [Download my FREE Podcast](#)

STORY AT-A-GLANCE

- Von Willebrand disease (VWD) is the most common inherited blood clotting disorder in dogs and is the result of an insufficient amount of von Willebrand factor, a plasma protein that helps blood to clot; VWD can result in excessive, serious bleeding from even a minor skin wound
- There are three types of von Willebrand's: the most common is Type 1, which is the mildest form of the disorder; Types 2 and 3 are much more serious
- Symptoms of the disease include bleeding from the mouth or nose, bleeding in the digestive tract, blood in the urine, anemia, and excessive bleeding that accompanies everything from loss of baby teeth to major surgery
- Diagnosis of von Willebrand's disease is done through blood and bleeding time tests, as well as a DNA test that identifies symptomatic dogs and those who are carrying the disease but haven't yet shown symptoms
- Caring for a dog with VWD involves managing the disease and its symptoms; the goal is to control bleeding, reduce the number of bleeding events, and correct any underlying conditions that might be contributors to the disorder

Von Willebrand disease (VWD) is the most common inherited canine blood clotting disorder. Dogs with the condition have an insufficient amount of von Willebrand factor (VWF), a plasma protein that facilitates normal blood clotting activity. VWD inhibits normal clotting function and causes excessive bleeding even for minor skin wounds. For this reason, it can be a serious and even deadly bleeding disorder.

Von Willebrand disease is caused by a genetic mutation and is equally common in both male and female dogs, though the severity of the condition varies.

Types of Von Willebrand Disease

There are three types of VWD:

- In **Type 1** von Willebrand's disease, all the proteins that make up von Willebrand's factor are present, but in very small amounts. Type 1 typically causes mild to moderate symptoms. Fortunately, it's the most common

form of the disease. Breeds prone to Type 1 VWD include Dobermans, Golden Retrievers, Standard Poodles, Manchester Terriers, the Akita, the Pembroke Welsh Corgi, and the Miniature Schnauzer.

- In **Type II**, the larger proteins that make up VWF are completely absent, leaving only the smaller proteins to do the job. This creates more severe bleeding episodes and is seen primarily in German Wirehaired and Shorthaired Pointers.
- In **Type III** VWD, there is simply no VWF at all. This is the most severe form and is usually seen in Scottish Terriers, Chesapeake Bay Retrievers, and Shetland Sheepdogs.

It's important to note that VWD isn't limited to the breeds listed above; forms of it have been found in over 50 dog breeds, as well as in cats and humans. Dogs with **hypothyroidism** may also be at greater risk of bleeding disorders.

Symptoms to Watch For

Fortunately, most dogs with this bleeding disorder have few if any symptoms, and symptoms tend to improve as the animal matures. In fact, dogs with Type 1 VWD are often not diagnosed for years until surgery or an acute injury brings the blood clotting issue to light.

More severe symptoms of the disorder are usually obvious by the time a dog reaches one year of age. These can include bleeding from the mouth or nose for no apparent reason, bleeding in the gastrointestinal (GI) tract evidenced by bloody or dark tarry stools, blood in the urine, **anemia**, excessive bleeding from the loss of baby teeth, tail docking, or ear cropping.

Sometimes **dewclaw removal** can cause excessive bleeding. So can simple wounds, surgical incisions from spaying or neutering, heat cycles or whelping (giving birth) in females, and even as a result of a routine nail trim. In addition, mild injuries that occur during play can cause bleeding to the joints and result in lameness in young dogs.

Diagnosing WVD

Von Willebrand disease can be diagnosed with a blood test and bleeding time test that measures the length of time it takes the bleeding to stop from a tiny incision in the inside of a dog's gum. The blood test for measures the level of von Willebrand factor in the dog's bloodstream. There is also a DNA test available that identifies both symptomatic dogs and those carrying the disorder. It is the most accurate diagnostic test for the disease.

Caring for Dogs With VWD

Unfortunately, von Willebrand disease can't be cured, but it can be managed. The treatment goals are to control bleeding, reduce the number of bleeding events, and correct any underlying conditions that might be contributing to the disorder.

Dogs with von Willebrand's may require blood transfusions during surgical procedures to restore levels of VWF to allow normal clotting to occur. Several transfusions can be required for dogs with the severe form of this disease.

Steps can be taken to increase a VWD dog's blood clotting ability to reduce surgical risks. These include giving intravenous (IV) clotting factors and medications prior to a procedure.

Bleeding caused by external wounds can be controlled by bandages, pressure wraps, sutures, or skin glue.

Dogs with this disease should be prevented from rough play with each other or with people, as even minor injuries to their joints or body can be risky. Hard **chew bones** and treats or hard toys that may cause bleeding from the gums should also be avoided.

Since von Willebrand dogs tend to also develop hypothyroidism, I think it's a really good idea to have an annual thyroid test for dogs with the condition.

There are certain drugs that should not be given to dogs with VWD, including NSAIDs and medications that involve any type of anticoagulant or anti-platelet activity. And there are also a few supplements that should not be given in high doses, including vitamins C and E, the proanthocyanidins such as grape seed extract and pine bark, as well as high doses of omega-3 fatty acids.

Sources and References

[Veterinary Partner, July 15, 2023](#)
