

Why do we need a Blood Bank for Dogs?



Just as in human hospitals, an emergency veterinary hospital has a constant need for blood products to treat life-threatening conditions in dogs. A unit of donated blood is processed into components, usually packed red blood cells and fresh frozen plasma. These components are then stored so they are available whenever the need arises. The most common reasons that a dog may require a red blood cell transfusion are: trauma with blood loss, a ruptured spleen or liver causing internal bleeding, blood loss due to cancer, red blood cell loss due to immune-mediated diseases, or an inability to make red blood cells due to bone marrow disease. The most common reasons that a dog may require plasma include: bleeding disorders (coagulopathies) caused by rat poison ingestion, liver failure, or some hemophilias, low blood protein conditions caused by inflammatory bowel disease or kidney disease, as well as several other serious conditions. Because of the wide range of diseases that can lead to a transfusion need, the demand for blood products is high, but unpredictable. The blood banking program allows us to have a ready supply of blood components whenever they are needed.

Would my Dog make a good Blood Donor?

Donor dogs must weigh over 50 pounds and be between the ages of 1 year and 8 years old. Donors must have a good overall temperament and be in good health, and up to date on vaccines (although they cannot donate within the month after vaccination). Dogs should be currently maintained on heartworm prevention and should not be on any other medications other than flea products. Females cannot donate if they have ever been pregnant as this makes their blood undesirable for transfusion to another dog. Owners must be willing to bring their dogs in for at least 3 donations per year. This is because the screening process for each dog is expensive. If a dog does not donate 3 times in a year, the owner will be financially responsible for a portion of the screening tests. Dogs that donate at least 3 times a year qualify for our incentive program (see below).



The Screening Process

If your dog meets the initial requirements, he or she will come in for an examination by one of our doctors and have blood drawn for a series of



tests. Your dog will have his or her blood type determined by lab processing. Dogs have many different blood types. Dogs that are negative for the DEA 1.1 blood type are considered “universal donors”, meaning that their blood can be administered to most dogs without causing a reaction. Therefore, the majority of dogs enrolled in the blood banking program will be negative for this blood type. A hematocrit is taken to test for anemia. A complete blood count (CBC) and a chemistry screen will check the red and white cells, platelets, electrolyte levels and general organ function. If these tests are normal, the blood is also tested for the tick-borne diseases such as lyme, ehrlichia, rocky mounted spotted fever and leptospirosis. A heartworm test is run even if your dog has been on preventative year-round. You will be notified of all test results (this takes approximately one week). If the tests are all normal, your dog will be scheduled to make a donation. If any of the test results are abnormal, your dog will not be accepted as a donor, and you will be advised about any further testing or treatment that may be warranted. Please be advised that you will be responsible for any treatment of abnormalities detected.



The Donation Process

Blood donations will be scheduled on specific days each month. Depending on the number of donations scheduled, you may be asked to leave your dog with us for a few hours. Prior to donation, a technician will check the dog's health status and take a sample of blood from the neck or a leg. We will check a red blood cell count and a blood sugar level to make sure that your dog can spare a unit of blood that day. A small area on a leg is shaved and an IV catheter is placed for administration of fluids to replace the volume of blood donated. If a sedative is required for the donation it will be administered through this catheter. Once the donor is calm, he or she lies down and a small portion of the neck is shaved over the jugular vein. This area is scrubbed to create a sterile field. A needle that is attached to a collection bag is inserted into the jugular vein and blood is allowed to flow into the bag. A standard unit of whole blood is about 450cc (or roughly 1 3/4 cups). Once the donation is complete, the needle is removed and a pressure bandage is placed over the neck. Intravenous fluids are administered to replace the volume of blood removed. A technician stays with the donor until the fluids are given, the sedation has worn off, and the dog is alert and walking around (usually within 1/2 hour). The IV catheter is then removed and a bandage is placed on the catheter site. The donor receives lots of cookies and praise, and is then ready to go home!

THE INCENTIVE PROGRAM (or “what do I get in return for my dog’s donation?”)

The greatest reward, of course, is knowing that your dog may play an important role in saving the life of another dog. You can elect to have a photograph of your dog provided to the recipient's family so they will know something about the dog that gave the precious gift of blood. Your dog will receive a bandana proclaiming “Pet Me - I Gave Blood Today” so everyone will know you have a hero on your leash!

The lab screening that is done to determine if a dog is a blood donor candidate is paid for by OSVS. The value of this testing is approximately \$250. If your dog is deemed to be a good candidate, you will be expected to have him or her donate at least 3 times a year. The screening tests are repeated annually. If your dog does not donate 3 times a year, you will be billed for a portion of the lab testing.

If your dog donates more than 3 times a year, you will qualify for additional rewards which may include coupons for pet food or pet supplies, or complementary health products such as flea, tick, or heartworm prevention.

If you are interested in having your dog become a blood donor, please speak with one or our receptionists who will put you in contact with a blood banking technician.



Your Dog Could Save Another Dog's Life...



By Becoming a **BLOOD DONOR!**