

## HOW TO PERFORM VENIPUNCTURE IN RABBITS

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**Venipuncture is a common diagnostic procedure in rabbits. Veterinary staff not accustomed to working with exotic animals are often reluctant to draw blood from a rabbit, because they feel that rabbits do not have enough blood to spare or that the stress of venipuncture will kill the rabbit.**

Regardless, except for the most anemic rabbits, the amount of blood needed for a complete blood count (CBC) and biochemistry panel can be drawn safely. The average blood volume of most rabbits is 6% to 8% of body weight (kg), and it is nearly always safe, even in dwarf breeds, to withdraw 6% to 10% of that amount. This article provides a step-by-step approach to venipuncture in

rabbits with the goal of reducing stress for both the patient and the phlebotomist.

The reasons to draw blood from rabbits are similar to those in dogs and cats. However, rabbits more commonly present with non-specific signs, such as anorexia. The history and physical examination may not reveal the cause of the illness, thereby rendering the CBC and biochemistry profile especially important in obtaining a diagnosis.

The most common sites for venipuncture are the jugular, cephalic, lateral saphenous, and marginal ear veins. With experience, certain venipuncture sites will become preferable to others.

The jugular and lateral saphenous veins are the best choices for large-volume venipuncture. The jugular vein of rabbits, as in other mammals, lies in the jugular furrow. The vein is typically superficial but in obese rabbits, may lie under a substantial amount of fat.

### PRO PEARL

**Even dwarf rabbits nearly always have sufficient blood to safely allow for a CBC and chemistry panel.**

### Jugular Vein — For Large Volumes



1

One technique is to hold the rabbit at the edge of the table with the forefeet pulled down and the head held upward. In dyspneic and stressed rabbits, this technique can lead to respiratory arrest; therefore, respiration must be monitored closely.



2

Use a 25-gauge needle attached to a 1- or 3-ml syringe. In female rabbits, the dewlap may make it difficult to find the jugular vein.



**Lateral Saphenous Vein — For Large Volumes**



**1** The lateral saphenous vein may be more easily accessible.



**2** Place the rabbit on its side, and grasp the scruff. The rabbit's anxiety may be eased by covering the eyes. Hold off the vein by encircling the proximal thigh area. Increase visualization by removing a small amount of fur on the lateral side of the leg. Pluck—do not shave—the hair. Shaving is likely to tear the skin due to the delicate, thin nature of rabbit skin. Use a 25-gauge needle attached to a 1-ml syringe to collect blood. The key to good stabilization and thus successful venipuncture is to hold the leg steady with your free hand. Put pressure on the venipuncture site as soon as the procedure is over because large hematomas form quickly.

**Cephalic Vein — For Small Volumes**



**1** The cephalic vein is used for venipuncture when small volumes of blood are needed. Use a 25-gauge needle attached to a 1-ml syringe or an insulin syringe and small-gauge needle for venipuncture.



**2** Hold the rabbit in sternal recumbency, and encircle the front leg near the elbow. Wet the fur on the foreleg for better visualization of the vein, which lies on midline and should be palpable, if not visible.



The marginal ear vein lies on the very edge of the pinna. While it may be the most accessible, using this site can lead to pinna necrosis even with proper technique. Thus, this approach should be reserved for only those practiced in the procedure. ■

**PRO PEARL**  
Large hematomas form quickly. Apply pressure to venipuncture site immediately.

**PRO PEARL**  
Caution: Rabbits have very fragile, easily torn skin. Pluck rather than shave!