

♥ Remember that blood bags purchased commercially have an expiration date independent of product collection. This expiration date guarantees anticoagulant-preservative activity and bag sterility.

Additives

✓ Adsol® (AS-1, Fenwal), Nutricel® (AS-3, Haemonetics), and Optisol® (AS-5, Terumo) are three commercially available additives. These additives allow red cell shelf life of 42 days when stored at 1-6° C for 42 days. In human blood collection systems, these additives are used in conjunction with the anticoagulant CPD.

Feline Blood Collection Systems

Open Systems

✓ Remember that the volume of blood drawn from a feline donor is considerably less than that of its canine counterpart. A typical feline donation is approximately 50 milliliters, making 60 cc syringes a popular blood collection device for cats. Since this is an open system, blood stored at 1-6° C should be used within 24 hours of collection.

✓ The anticoagulant of choice is citrate phosphate dextrose adenine. The amount of blood taken into any citrate based anticoagulant is critical. Too little blood with too much free citrate is contraindicated for use in cats. Citrate not consumed in anticoagulation is a notable chelator of patient calcium, so much so that severe and often delayed hypocalcemia can occur. CPDA anticoagulant is far superior than any other commonly used anticoagulant as red cell viability is maintained and plasma proteins remain functional. This anticoagulant may be purchased from a commercial veterinary blood bank in multiuse vials.

Closed Systems

✓ Blood collection systems used for canine blood collection are not suitable for collection of feline blood since the volume of anticoagulant in the blood collection bag used for canine is intended for a 450-ml blood draw. Although the amount of anticoagulant may be reduced in order to perform a smaller volume blood draw, the integrally attached 16-gage collection needle is too large for the feline jugular vein used to collect

blood. For this reason, blood bags used for the collection of canine blood are not used with cats.

✓ A specialized blood collection system for cats (Figure 2-1) is available through Animal Blood Bank (Appendix 1).

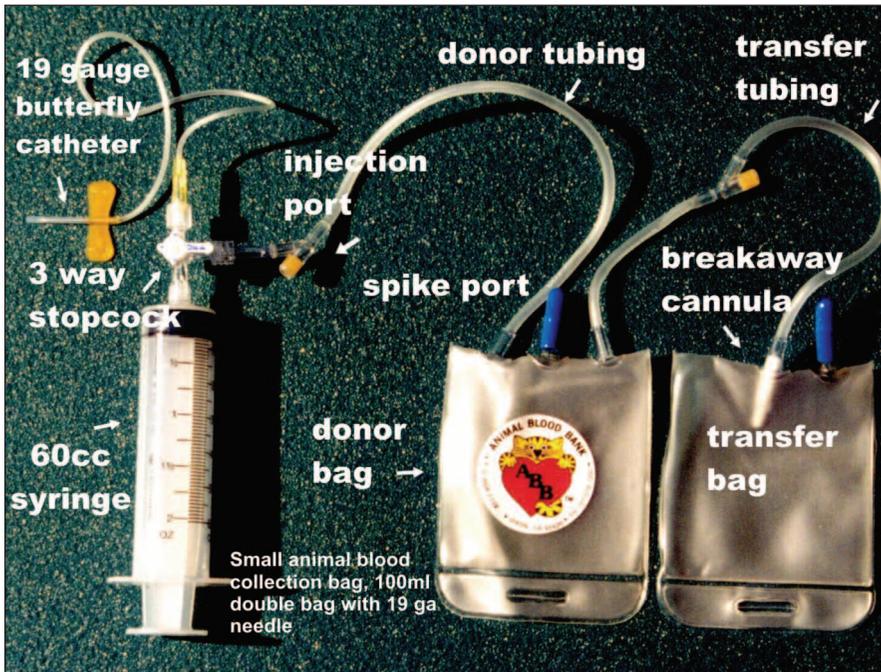


Figure 2-1 Small animal double syringe collection set (Photo used with permission of Animal Blood Bank).

Blood Product Overview

Blood Products

✓ While the properties of blood products are similar in dogs and cats, this discussion is limited to closed systems and 450 ml blood draws.

♥ **Remember** – blood products collected in open systems should be transfused within 24 hours of collection. Closed systems **that have been opened** should be used within 24 hours of opening.

✓ The following information is summarized in Table 2-2.