

## Hematology Sample Collection Guidelines

- **Perform a clean venipuncture.**
- Collection into a lavender top (EDTA) tube is recommended for mammals. For extremely small animals use an EDTA microtainer tube.
- Specimen tube should be at least half full.
- Mix the blood immediately after collection by at least 10 gentle inversions.
- Make two (2) air dried blood smears as soon as possible following collection (see [Blood Smear Preparation](#) below). Fresh smears are particularly important for adequate morphologic interpretation of cells and for identifying various infectious organisms (eg. *Mycoplasma*, *Anaplasma* organisms).
- Label tube and slides with the animal's name, the owner's name, and collection date.
- Keep the slides at room temperature and protected in a rigid slide holder.
- Keep the whole blood refrigerated until shipping. Samples should be shipped as soon as possible. Samples that are two days old or more when received by the Diagnostic Services Laboratory could be inaccurate.
- Ship whole blood on cold pack (**Do not freeze**).
- Do not include blood smears in the refrigerated portion of containers.
- Avoid submitting blood smears in the same package with tissues in formalin as the fumes can cause alterations in the staining.

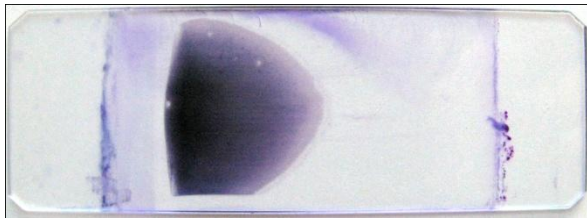
**NOTE:** Submission of blood smears for “smear only” evaluation, without accompanying whole blood, are considered submissions for pathologist review and are processed as a cytology submission. If a CBC was performed on an in-clinic analyzer, please send these results along with the blood smears to facilitate interpretation by the pathologist. Submission of whole blood and smears for a standard CBC costs less and provides more information than submission of blood smears alone. If blood submitted for a routine CBC is found to have an unusual cell type or other sources of concern, the smear will be sent to a clinical pathologist for further evaluation at no additional cost.

## Blood Smear Preparation Guidelines

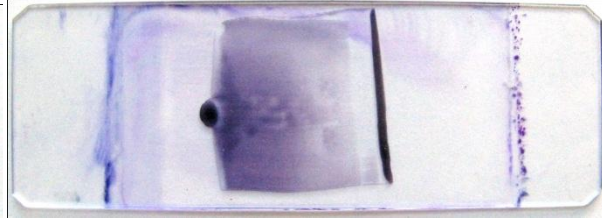
Quality blood smears:

- Have a feathered edge
- Extend 1/2 to 2/3 the length of the slide.
- Have a monolayer area where leukocytes, erythrocytes and platelets can be appropriately evaluated.

Blood smear examples:



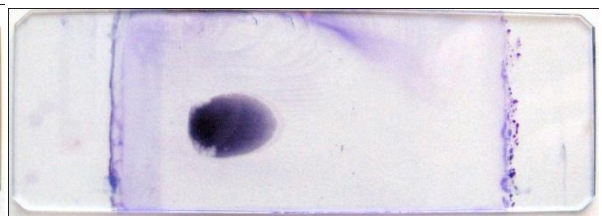
Good quality smear



Abrupt stop, no feathered edge



Too long, monolayer beyond staining area



Too short



Too thick, no feathered edge