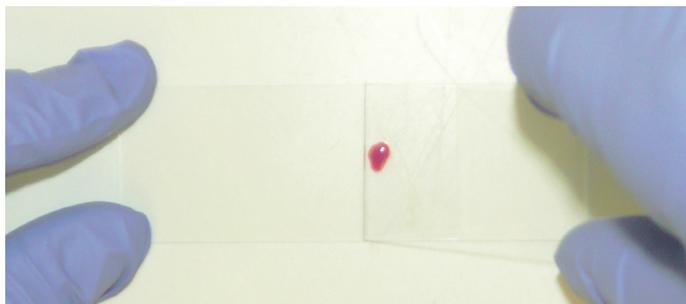


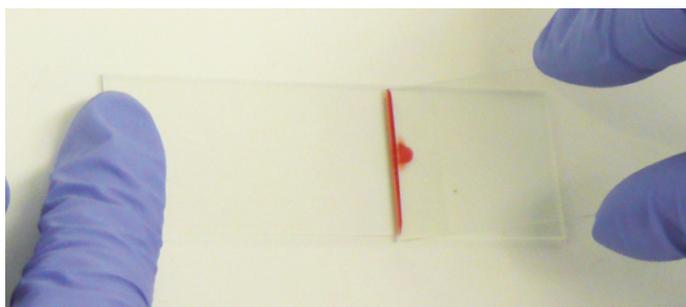
Preparing a Blood Smear

Preparation of Blood Smears

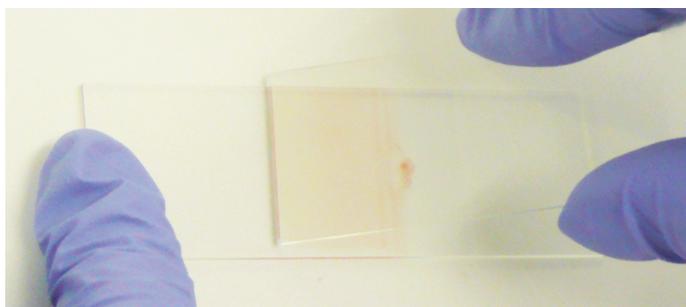
- 1 Ensure that the slide is clean since dirt and grease will affect the quality of the smear. Slides should not be left uncovered on the top of the bench.



- 2 Using a small pipette or microhaemocrit tube, place a drop of fresh whole blood 4mm in diameter near the frosted end of the horizontal slide.



- 3 Rest the spreader slide at a 25° angle on the horizontal slide. Bring the slide carefully up to the drop of blood.
- 4 The drop should flow along the edge of the spreader slide.
- 5 Keep the spreader slide at a 25° angle with light but firm pressure against the horizontal slide. Increasing the angle results in a thicker smear; whereas a lesser angle gives a thinner smear.



- 6 Draw the spreader slide rapidly and smoothly over the length of the horizontal slide, leaving a thin, even film of blood.



- 7 Leave the slide to air dry on a flat surface.
- 8 Label the slide using a pencil with the animal and owner's name, and the date of sampling.
- 9 Place the slide in a slide mailer (available on request). This protects the slide from scratches and moisture.
- 10 Store slides at room temperature prior to despatch – do not refrigerate.

For feline *Mycoplasma spp.* (*Haemobartonella*) examination EDTA blood must not be used. Use fresh blood and submit 4-6 smears.

Troubleshooting

- 1 Once the drop of blood is placed on the slide, there should be no delay in making the smear. Any delay will result in abnormal distribution of the white cells with many of these accumulating at the thin edge of the smear. Rouleaux formation and clumping of platelets may also occur.
 - 2 Avoid making the initial drop of fresh blood too large, or too small.
 - 3 Do not jerk the spreader slide across the horizontal slide, use a rapid, smooth action.
 - 4 Ensure the edge of the spreader slide remains in contact with the horizontal slide at all times.
 - 5 Maintain the 25° angle unless the blood looks watery (anaemic), in this case increase the angle of the spreader slide to make a thicker smear.
- 6 Draw the spreader slide rapidly and smoothly over the length of the horizontal slide, leaving a thin, even film of blood.