

# Blood film preparation

An essential part of any complete blood count is the examination of a blood smear. The blood smear may provide more information concerning the patient's diagnosis or state of treatment than any other blood test. All EDTA blood samples submitted to the laboratory should be accompanied by a fresh blood film.

## Materials required:

Microscope slides\* / spreader slides\* / capillary tube\* / fresh blood / pencil / slide containers\*

\* Can be obtained from us using online ordering.

## How to:

1. Place a clean slide on a level surface, label frosted-end with the animal's name (use a pencil). DO NOT use felt tip or ballpoint pen as this will wash off during the staining process.
2. Place a very small drop of well-mixed EDTA blood at one end of the slide.
3. Using the edge of another slide (or a special spreader slide) spread the blood as follows:
  - > Hold the 'spreader' slide between the thumb and forefinger and draw it towards the blood.
  - > As it makes contact, the blood will spread along the edge of the 'spreader' slide; the 'spreader' is then moved forward in a smooth motion.
4. The speed of the forward motion and the angle at which the 'spreader' slide is held determines the thickness of the film, the more acute the angle the thinner the smear.
5. The resultant film should have a feathered edge; this is important as the mono-layer produced is the area in which microscopy should be performed.
6. Allow the film to air dry (DO NOT refrigerate) and submit to the laboratory with EDTA sample (place slides in a slide container to avoid breakage).

## Tips from the lab:

- Dipping the end of your 'spreader' slide into water and drying prior to making a blood film will help ensure it is always clean and glides smoothly when preparing films.
- Practice makes perfect!

