

## Preparation of blood smear

### Leb 10

#### Blood drawing

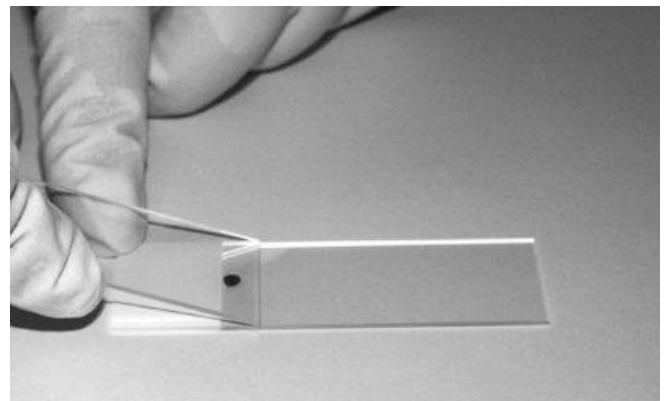
1. Label **pre-cleaned** slides with patient's name (or other identifier), date, and time of collection.
2. **Wear gloves.**
3. Do **NOT** touch the surface of the slide where the blood smear will be made.
4. Select the **finger** to **puncture**. In infants, puncture the heel.
5. Clean the area to be punctured with **70% alcohol**; allow drying.
6. Puncture the **ball** of the **finger** with a **sterilized lancet**.
7. **Wipe away** the first drop of blood with clean **cotton**.
8. Touch the next drop of blood with a clean slide. If blood does not well up, gently **squeeze** the finger.

#### Slide preparation

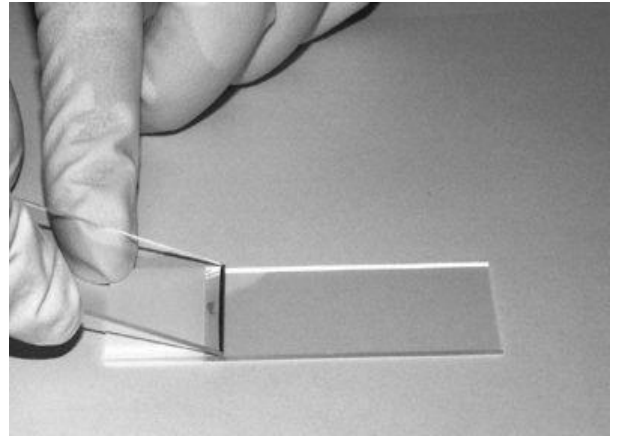
1. Placing a **small** drop of blood on a glass microscope slide.



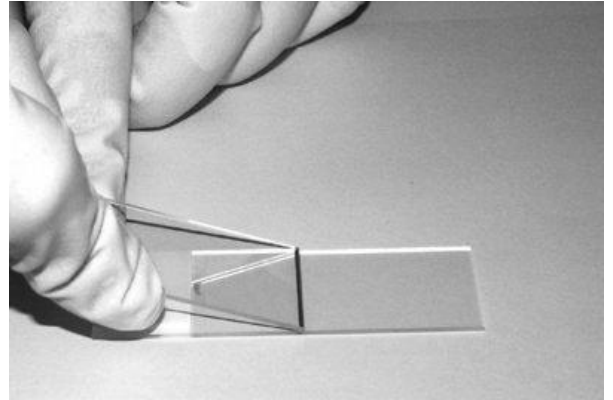
2. A **spreader** slide has been positioned at a **45 angle** and slowly drawn toward the drop of blood.



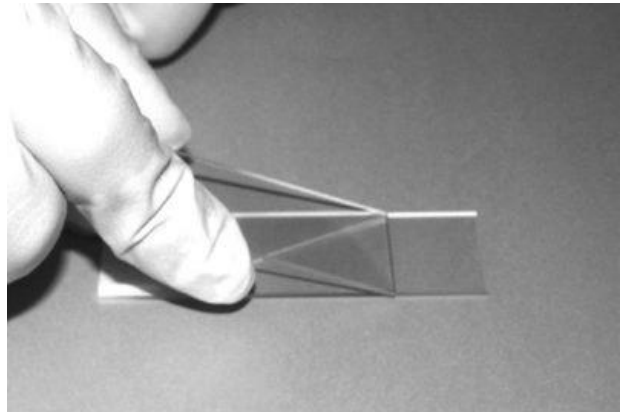
3. The spreader slide has been brought in contact with the drop of blood. **Note** layer of blood at the edge of the spreader slide.



4. The spreader slide is further **pulled out**, leaving a thin layer of blood behind.



5. The blood smear is nearly complete.



### Staining the smear

6. **Fixation** by **methanol**, wait until dry.

7. Stain the smear via **Leishman stain** (counted dropper & wait **2** minutes), and dilute with water (the same drop as a stain), wait for **4** minutes.

8. **Wash** gently the stained slide via **tap water** for **30** seconds.



1

Cover the smear with  
Leishman stain



Unstained  
smear



2

Dilute with equal  
volume of buffered  
water



Wait 10  
minutes



3

Wash



Stained  
smear

9. Dry the slide at room temperature, then use a microscope (400X) to find each types of leukocyte.

