**Thick smears**
Thick smears consist of a thick layer of dehemoglobinized (lysed) red blood cells (RBCs).  The blood elements (including parasites, if any) are more concentrated (app. 30×) than in an equal area of a thin smear.  Thus, thick smears allow a more efficient detection of parasites (increased sensitivity).  However, they do not permit an optimal review of parasite morphology.  For example, they are often not adequate for species identification of malaria parasites: if the thick smear is positive for malaria parasites, the thin smear should be used for species identification.

Prepare at least 2 smears per patient!

1. Place a small drop of blood in the center of the pre-cleaned, labeled slide.
2. Using the corner of another slide or an applicator stick, spread the drop in a circular pattern until it is the size of a dime (1.5 cm2).
3. A thick smear of proper density is one which, if placed (wet) over newsprint, allows you to barely read the words.
4. Lay the slides flat and allow the smears to dry thoroughly (protect from dust and insects!).  Insufficiently dried smears (and/or smears that are too thick) can detach from the slides during staining.  The risk is increased in smears made with anticoagulated blood.  At room temperature, drying can take several hours; 30 minutes is the minimum; in the latter case, handle the smear very delicately during staining.  You can accelerate the drying by using a fan or hair dryer (use cool setting).  Protect thick smears from hot environments to prevent heat-fixing the smear.
5. Do not fix thick smears with methanol or heat.  If there will be a delay in staining smears, dip the thick smear briefly in water to hemolyse the RBCs.