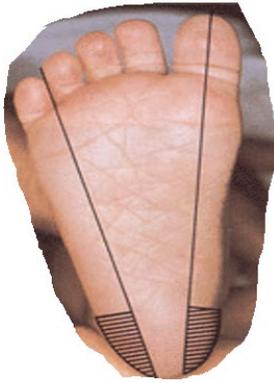


Newborn Screening Dried Blood Spots: Tips And Tricks



- 1) Fill out the newborn screening card completely, double-checking that:
 - a. ALL the boxes are filled (even the boxes that you check “none”, such as if the baby didn’t have a transfusion).
 - b. **The date and time of birth and specimen collection are accurate! We recommend using 24-hour military time.**
 - c. **You have specified a follow up provider, even if it’s your own facility.**
- 2) Gather your supplies: gloves, the filter paper card, alcohol wipe, gauze, band aid, heel warmer, a lancet (the ones meant specifically for newborn screening!)
- 3) Apply the heel warmer
- 4) Select your puncture site (see hatched areas to the left!) and wipe it with alcohol. Let it dry.
- 5) Take a secure hold of the baby’s foot. Press the lancet **firmly** against your puncture site and deploy the needle.
- 6) Wipe away the first drop of blood. Making sure you have a good blood flow, allow a large drop to form and gently apply it, and repeat to fill each of the circles. Make sure that the baby’s heel doesn’t touch the filter paper and the drop applied is big enough to saturate through the filter paper so that the spots look the same on the front and back.
- 7) **If you don’t have a good enough blood flow, you may need to do another heel stick.** Finish a spot before moving on to the next.
- 8) Only collect blood on either the front or back of the card, not both sides.
- 9) **Do not apply multiple blood drops on top of each other to fill a circle (“layering”).**
- 10) When you are finished, stop the blood flow with your gauze and apply a band aid if needed

Some ideas to help:

- You can apply blood anywhere on the filter paper. If one of your circles doesn’t look right, apply extra spots elsewhere on the filter paper. This is especially helpful if your circles aren’t filled completely or one of your circles didn’t soak through all the way. **The lab can only use fully-saturated spots.**
- Let the parent hold the baby against them, with baby’s legs dangling downward. Massage the lower leg with a downward motion, to help blood collect in the foot before you puncture and during blood collection.
- Let the spots dry, flat, for 3 hours before putting the card in the envelope and mailing. Make sure that: the side the blood was collected on (either the front or back of the card) is facing upwards. The filter paper itself should not touch a surface (a drying rack can accomplish this)

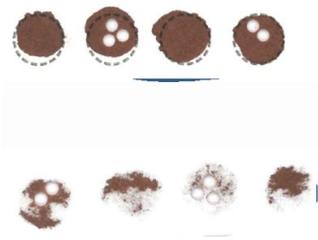
What makes for a good blood spot?



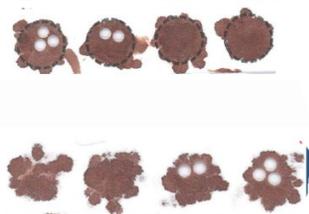
✓ The top row is the front of the card, and the bottom row is the back. This is what you want your spots to look like: even in color throughout, and fully saturated to the back. You can hardly even tell which side the blood was collected on!



✗ The problem with these spots is that there is uneven saturation. You can see that the spots are lighter in some areas, and darker in others. In some of the spots, too much blood was collected and it looks layered, like drops were placed on top of drops to try to fill the circle. These blood spots cannot be used!



✗ The top row is the front, the bottom row is the back. See the problem here? The blood did not saturate all the way through the card! The spots need to look the same on the front and the back.



✗ You can see here that the drops are too small. Although many were applied to try to fill the circles, the drops overlap each other (creating layers) and they are too small to evenly saturate through the filter paper.



✗ Here on this last row, you can see that circles are not filled in. This is an insufficient quantity to complete all the screening tests. If these spots fully saturate through to the back of the card, just apply extra drops elsewhere on the filter paper, taking care not to overlap any drops.