



Newborn Screening Ontario: Dried Blood Spot Specimen Collection

1. Discuss newborn screening with parents/guardians

- Provide education to parents/guardians regarding newborn screening and obtain consent.

2. Complete the newborn screening card

- Check NBS card expiry date in the top right corner.
- Keep filter paper clean, avoiding touches or spills.
- Fill all demographic/information fields legibly using a ballpoint pen, ensuring all information is complete and accurate. If a hospital stamp/sticker is used, ensure it is placed on all copies of the card.

3. Enhance comfort

- Use appropriate measures to enhance comfort for the baby (e.g. breastfeeding, skin-to-skin contact, sucrose).

4. Prepare the site

- Wash hands and don gloves.
- Warming the infant's heel can improve blood flow and ease of obtaining a sufficient blood drop.
- Landmark site on lateral aspect of infant's heel, on plantar surface (see shaded area of image). Avoid previous puncture sites.
- Prepare the site as per hospital policy.



5. Collect the sample

- Puncture infant's heel using lancet with tip no longer than 2mm (shorter for babies <1500g).
- Wipe away first blood drop with sterile gauze.
- Allow second large drop of blood to form by intermittently applying gentle pressure. Do not squeeze!
- Touch filter paper gently against the single, large blood drop to soak through and completely saturate circle. Do not layer more than one drop per circle.
- Repeat until all 5 circles are filled completely.
- Allow sample to air dry for at least **3 hours** prior to shipping to NSO.



- ◇ Click here to watch a video of newborn screening sample collection: <https://www.youtube.com/watch?v=LoSgXHqyHs0>
- ◇ More details on blood spot specimen collection can be found in the submitter manual on our website: <https://www.newbornscreening.on.ca/en>
- ◇ For any questions, contact us at 613-738-3222 ext. 1045 or newbornscreening@cheo.on.ca

