



# KAISER PERMANENTE®

<b>DOCUMENT NUMBER:</b> SBMC-PPP-0046
<b>DOCUMENT TITLE:</b> Newborn Screening Blood Spot Collection
<b>DOCUMENT NOTES:</b>

<b>LOCATION:</b> SBMC-rel	<b>VERSION:</b> 02
<b>DOC TYPE:</b> SBMC PPP	<b>STATUS:</b> Release

<b>EFFECTIVE DATE:</b> 10 May 2018	<b>NEXT REVIEW DATE:</b> 03 Apr 2022
<b>RELEASE DATE:</b> 10 May 2018	<b>EXPIRATION DATE:</b>

<b>AUTHOR:</b>	<b>PREVIOUS NUMBER:</b> SCPMG-PPP-0141
<b>OWNER:</b> SBMC Preatalytic Mgr	<b>CHANGE NUMBER:</b>

## Newborn Screening Blood Spot Collection

---

**Introduction** Drops of blood for testing can be obtained by puncturing or making an incision in the capillary bed in the dermal layer of the skin with a lancet. This procedure will describe the method to obtain blood from an infant 12 hours – 2 days old puncturing the heel for Newborn Screening.

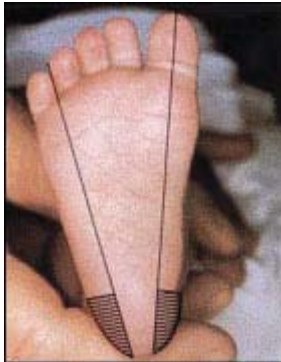
---

**Scope** This procedure is intended for any phlebotomist or health care worker who is certified to perform capillary puncture of the heel within the scope of practice.

---

**Policy**

- Only puncture the plantar surface of the heel, medial to an imaginary line extending from the middle of the great toe to the heel or lateral to an imaginary line extending from between the fourth and fifth toes to the heel.



- Do not puncture any deeper than 2.0 mm
  - Do not puncture in the arch and any areas of the foot other than the heel
  - Do not puncture severely bruised areas.
  - Do not puncture the posterior curvature of the heel.
  - Do not puncture through previous sites.
  - Do not puncture a site that is swollen.
  - Do not puncture the finger or earlobe.
- 

*Continued on next page*

**Newborn Screening Blood Spot Collection, Continued**

---

**Policy,  
Cont.**

- Do not use capillary tubes for collection of blood spot specimen.
  - Do not collect blood from the antecubital space or dorsal hand vein.
  - Do not handle blood collection area of specimen collection card prior to, during or following sampling.
  - Only use the lancet specifically approved for heel puncture.
  - The California Newborn Screening Test Request Form must be completed in full. Use only blue or black ink and block letters. Included: Baby's information, Mother's or Legal Guardian information, Newborn's Physician information, Race/Ethnicity, Primary Language, Facility drawing specimen, Newborn's Birthdate, Birth Weight, Sex, Feedings since birth, Nursery type, Date specimen collected, Initials of collector, Type of specimen, Reason for test, Medical Record number, Hospital order number.
- 

**Equipment**

- Capillary Lancet
  - Blood Spot Collection Filter Paper
  - Warming Device
  - Alcohol Pads
  - Gauze
  - Gloves
  - Sharps Container
- 

**Safety  
Precautions**

Refer to the Safety Manual for general safety requirements.

---

**Quality  
Control**

Inspect the lancet and alcohol packaging to assure sterility.

---

*Continued on next page*

**Newborn Screening Blood Spot Collection, Continued****Procedure**

Follow the steps to collect a blood spot specimen from a heel puncture:

<b>Step</b>	<b>Action</b>
1	Identify the patient using 2 patient identifiers.
2	Sanitize hands and put on gloves.
3	Position the patient.  NOTE: The infant should be lying face up with the foot lower than the torso.
4	Select the puncture site.
5	Warm the site, if applicable.  NOTE: Only use approved heel warmers.
6	Clean the site with 70% isopropyl alcohol and air dry the site.  NOTE: Do not blow on the site or wipe or wave it dry.
7	Prepare the equipment.
8	Grasp the foot gently but firmly with your nondominant hand.
9	Encircle the heel by wrapping your index finger around the arch and your thumb around the bottom. Wrap the other fingers around the top of the foot.
10	Place the lancet flat against the skin on the medial or lateral plantar surface of the heel.
11	Puncture the site and discard the lancet in the Sharps Container.
12	Using a clean gauze square, wipe away the first drop of blood.
13	Bring the filter paper close to the heel.

*Continued on next page*

**Newborn Screening Blood Spot Collection, Continued****Procedure,  
Cont.**

14	<p>Apply a large drop of blood to the filter paper in the center of the first circle and allow the blood to fill the entire circle until it <b>thoroughly soaks through both sides of the paper</b>. Fill all circles with free flowing blood.</p> <p>Note: Do not squeeze, scoop, use strong repetitive pressure or “milk” the site, as hemolysis and tissue fluid contamination of the specimen can occur. Do not touch the filter paper to the heel. Do not apply blood to both sides of the paper.</p>
15	<p>After the last circle is filled, place the gauze over the puncture site and apply pressure to the site.</p> <p>IMPORTANT: DO NOT use bandages, no tape or gauze. This may cause a choking hazard.</p> <p>NOTE: The infant’s foot should be elevated above the body while pressure is applied.</p>
16	<p>Label the filter paper. Allow the filter paper to air dry for at least 3 hours.</p> <p>NOTE: Do not hang to dry or stack with other specimens. Keep away from direct light and heat. Do not place into a plastic bag.</p>
17	<p>Check the site to verify the bleeding has stopped.</p> <p>IMPORTANT: DO NOT use bandages, no tape or gauze. This may cause a choking hazard.</p> <p>NOTE: If bleeding persists beyond 5 minutes, notify the patient’s nurse.</p>
18	<p>Dispose of used and contaminated materials into the appropriate containers.</p>
19	<p>Transport the specimens to the Laboratory.</p>

*Continued on next page*

## Newborn Screening Blood Spot Collection, Continued

---

**Non-  
Controlled  
Documents**

- California Department of Public Health Newborn Screening Instructions.
  - McCall and Tankersley, Phlebotomy Essentials, 5<sup>th</sup> Edition, Lipponcott, Williams and Wilkins, 2012. Chapter 10.
- 

**Controlled  
Documents**

Regional Parent Document Reference Number: SCPMG-PPP-0141 Rev. 02

---

**Authors**

Rebecca Rosser  
Preanalytical Processing Work Group

---

## Signature Manifest

**Document Number:** SBMC-PPP-0046

**Revision:** 02

**Title:** Newborn Screening Blood Spot Collection

**Effective Date:** 10 May 2018

All dates and times are in Pacific Standard Time.

**Review: SBMC-PPP-0046 02 Newborn Screening Blood Spot Collection**

### Review

Name/Signature	Title	Date	Meaning/Reason
Qiyamaa Portillo (K237031)	Assistant Director Operations	20 Mar 2020, 12:21:34 PM	Reviewed
Janice Wolf (K119893)	Director Operations Area Lab	03 Apr 2020, 12:24:23 PM	Reviewed