

NEWBORN SCREEN (PKU) COLLECTIONS

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|--|---|---|
| <input checked="" type="checkbox"/> St. Joseph Medical Center Tacoma, WA | <input checked="" type="checkbox"/> St. Clare Hospital Lakewood, WA | <input checked="" type="checkbox"/> St. Elizabeth Hospital Enumclaw, WA |
| <input checked="" type="checkbox"/> St. Francis Hospital Federal Way, WA | <input checked="" type="checkbox"/> St. Anthony Hospital Gig Harbor, WA | <input checked="" type="checkbox"/> PSC |

PURPOSE

To provide instruction for the collection, documentation, and processing of Newborn Metabolic Screening (PKU) samples.

BACKGROUND

Newborn Metabolic Screening samples are collected to screen for congenital disorders that may lead to developmental impairment or physical disabilities if not detected. RCW 70.83.050 requires the screening of newborns born in Washington state hospitals prior to their discharge or no later than 5 days of age as well as later to detect other metabolic conditions. This second collection often occurs after discharge from the hospital. The metabolic conditions screened for includes: hypothyroidism, phenylketonuria, galactosemia, maple syrup urine disease, homocystinuria, tyrosinemia, histidinemia, sickle cell and other hemoglobinopathies, adrenal hyperplasia, and a variety of other disorders.

SPECIMEN REQUIREMENTS/PATIENT PREPARATION

Collection of capillary or dorsal blood in sufficient quantity to soak through the card to fill a minimum of 4 or 5 preprinted PKU circles completely.

EQUIPMENT

- Lancet - Quikheel
- Alcohol swabs
- Gauze
- Gloves
- Newborn (PKU) Screening Forms and Envelopes
- Warm washcloth, glove filled with warm water or approved heel warmers specifically for infant heel warming.

RELATED DOCUMENTS

State of Washington DOH Specimen Collection Standards for PKU Collections
<http://www.doh.wa.gov/Portals/1/Documents/5220/NBSCardSample.pdf>

Submitter and Provider ID directories:
<http://www.doh.wa.gov/YouandYourFamily/InfantsChildrenandTeens/NewbornScreening/NBSProviderDirectories.aspx>

PKU CARD CONTENTS

1. Fill out the PKU card with the following information: see example at end of procedure
2. Mother's LAST and FIRST name.
3. Miscellaneous Information – write in Accession number. The state lab will use this number on the report.
4. Submitter Name: Enter Hospital name and ID number.
 - a. St. Joseph H - 032
 - b. St. Clare H - 032 (use 032 for PacLab or Outpatients)
 - c. St. Elizabeth H - 035
 - d. St. Francis H - 202
 - e. St. Anthony H - 032 (use 032 for PacLab or Outpatients)
5. Provider Name and ID Number. Look up submitter & provider ID numbers at:
<http://www.doh.wa.gov/YouandYourFamily/InfantsChildrenandTeens/NewbornScreening/NBSProviderDirectories.aspx>
6. Check category of health care provider (MD, DO, etc)
7. Child's DATE and TIME of birth
8. Sample collection DATE and TIME
9. FIRST name of the baby and LAST name.
10. Medical Record number in LIS
11. Sex: M or F
12. Indicate if the baby is a twin
13. Birth weight in pounds or grams
14. Indicate if transfused: Yes or No
15. Race: White, Black, Asian, Native American, Other
16. Ethnicity: Hispanic Yes or No

STEPS

Hand hygiene must be performed before and after patient contact. Wash hands or use antiseptic gel prior to gloving, and following glove removal.

1. Positively identify the patient by actively comparing 2 patient identifiers from the patient armband or requisition against the sample labels/Newborn screening (PKU) card.
2. Warm the heel for at least 3 minutes prior to specimen collection to optimize blood flow, using an approved infant heel warmer.
3. Perform infant heel puncture according to laboratory procedure. Gloves must be worn.
4. Wipe away the first drop of blood with gauze. Gently touch the filter paper against a large drop of blood forming on the heel until the pre-printed circles are completely filled – be careful to not overfill or over-saturate the circle.
 - The filter paper should NOT be pressed against the puncture site.
 - Blood must only be applied to 1 side of the filter paper.
 - Circle should be fully filled or saturated so that the circle also appears filled from the opposite side of the filter paper. Note: Over-saturated samples are unacceptable for testing.
5. At minimum, 4 of 5 circles should be filled with blood.
6. Allow the specimen to dry for 3 hours in a horizontal position.
7. When specimens are dry, place them in individual envelopes. Do not place samples in plastic bags.

8. Specimens collected in the nursery by non-laboratory staff will be delivered to the laboratory. Check for completeness and follow-up with nursery if details are missing from the card.
9. Order all PKU's as NB SCR. Press the F11 (Footnote key) before entering NB SCR.
 - At prompt for MOM NAME – Enter SEE COM, see Figure 1 below.
 - When window opens, move the cursor below the dotted line.
 - Insert a Template by pressing PF1key and G.
 - Enter past the ID
 - Enter NB SCR as the template, see Figure 2 below.
 - Enter the Mother's full last name and first name in the fields in Figure 3 below.
 - Place Cerner label on the front of the NB Screening card - to the right of the brown box on top.

Figure 1

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PROCEDURE
  NB SCR      90-02268      ACCESSION #
  COLLE
  REPOR MOM NAME  SEE COM_
  COLLE
  
```

Figure 2

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PROCEDURE
  NB SCR      90-02268      ACCESSION #
  ----- Enter chartable comments above the line, non-chartable below -----
                                     [End of Document]
  ID:          Template: NB SCR
  
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Figure 3

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PROCEDURE
  NB SCR      90-02268      ACCESSION #
  ----- Enter chartable comments above the line, non-chartable below -----
  Mother's Last Name: JONES-SULLIVAN
  Mother's First Name: MARY
  
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10. Build an STL if you are collecting at a site other than SJ and send to SJ. Do not put in a plastic bag, transport in paper bag only.
11. SJMC staff – Pull an RQW, account for samples and prepare to send to the NB screening lab in Seattle.
 - If baby's name has updated/changed on the RQW and differs from the Label and NB SCR card, verify the correct order by using MRN, Accn and Mother's name to match. Write the updated name on the RQW as a record.

PARENT/GUARDIAN REFUSALS

See back of PKU card if parent/guardian refuses this testing on their child. Complete back of form when this applies and send to State. The test should still be ordered and cancelled as "Patient Refused" for tracking purposes.

ORDERING NOTES

Cerner: NB SCR
Reference Lab: State of Washington
Newborn Screening Public Health Laboratory
Washington State Department of Social & Health Services
P. O. Box 55729
Seattle, WA 98155-0729
(206) 418-5410

PROCEDURE NOTES

- Do not refrigerate the samples.
- PKU cards are never to be placed in sealed plastic bags for transport.
- Specimens collected in the nursery by non-laboratory staff will be delivered to the laboratory. Check for completeness and follow-up with nursery if details are missing.
- Any positive or borderline result will be called or faxed to the provider on the report.
- Results on discharged patients will be sent to Health Information Management as well as a copy delivered (courier/mail) to the provider on record at discharge. If the baby is still an inpatient (i.e., SCN) a copy is faxed to that unit.



Newborn Screening Specimen Collection Card Sample

SEE DIRECTIONS ON BACK. PLEASE PRINT.

WASHINGTON STATE NEWBORN SCREENING

DO NOT USE THIS AREA

MOTHER'S INFORMATION	CHILD'S INFORMATION
DOH <small>LAST NAME</small> JANE <small>FIRST NAME</small> Maternal Steroids <input checked="" type="checkbox"/> (date last) <u>2 / 18 / 11</u>	Birth: <u>2 / 18 / 11</u> <u>4:36</u> <input checked="" type="checkbox"/> <input type="checkbox"/> Collection: <u>2 / 19 / 11</u> <u>1:12</u> <input type="checkbox"/> <input checked="" type="checkbox"/> Name: <u>Joe</u> <u>Smith</u> <small>First Last</small> Med Rec #: <u>M 1 2 3 4 5 6</u> Sex: M <input checked="" type="checkbox"/> F <input type="checkbox"/> Birth Order: single <input checked="" type="checkbox"/> if multiple A <input type="checkbox"/> B <input type="checkbox"/> <input type="checkbox"/> Birthweight: _____ grams OR <u>7</u> lbs. <u>0</u> <u>8</u> oz. Race/Ethnicity: (Check all that apply) White <input type="checkbox"/> Black <input checked="" type="checkbox"/> Asian <input type="checkbox"/> NaAm <input type="checkbox"/> Other <input type="checkbox"/> Hispanic <input checked="" type="checkbox"/>
MISCELLANEOUS INFORMATION	
Adoptive mom is Jill Smith, baby is on soy formula	
SUBMITTER INFORMATION	
COLLECTED AT: <u>Health Hospital</u> ID: <u>H -- 0004</u>	
OUTPATIENT PROVIDER INFORMATION	
WELL-CHILD CARE WITH: <u>Dr. J. Does</u> ID: <u>P -- 00099999</u>	
CHILD'S SPECIAL CONSIDERATIONS	
NICU <input checked="" type="checkbox"/> HA/TPN <input type="checkbox"/> Steroids <input type="checkbox"/> Antibiotics <input type="checkbox"/> Transfused <input checked="" type="checkbox"/> (date last) <u>2 / 18 / 11</u>	

IF TEST IS REFUSED BY PARENT, CHECK HERE (SIGNATURE IS REQUIRED ON BACK OF FORM) DOH304001 (REV. 04/08)

On Back of Card

LOT 0120201 / XXXXXXXX Ahstrom 226
SN XXXXXXXX

FILL EACH CIRCLE COMPLETELY BEFORE MOVING TO THE NEXT

NEWBORN SCREENING
WASHINGTON STATE DEPT. OF HEALTH
 P.O. BOX 55729 (1610 NE 150TH ST)
 SHORELINE, WA 98155-0729 www.doh.wa.gov/nbs
 Phone: 206-416-5410 Toll Free: 1-866-660-9050

MM/YY

REFUSAL OF TESTING
 Parents or guardians may refuse testing on the basis of religious practices or tenets as provided by RCW 70.83.

NEWBORN TESTING FOR HERITABLE DISEASES IS HEREBY REFUSED.

I am the parent or guardian of:

Child's Name _____ Mother's Name _____

I declare under penalty of perjury under the laws of the State of Washington that the foregoing is true and correct.

Signed: _____ Date _____
Parent or Guardian Date

DOCUMENT APPROVAL Purpose of Document / Reason for Change:

10/15/12 – Added bullets under Step 9 for entry of Mom’s name. Added Figures 1,2,3. Added caution on plastic bags in Step 10. Accn number is now written under Miscellaneous Info section (Step 3 of card contents). Clarified placement of Cerner label.

No significant change to process in above revision. Per CAP, this revision does not require further Medical Director approval.

Committee Approval Date	<input checked="" type="checkbox"/> Date: 10/15/12 <input type="checkbox"/> N/A – revision of department-specific document which is used at only one facility	Medical Director Approval (Electronic Signature)	5/22/12 <i>Linda D. Burkhardt, M. D.</i>
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