Newborn Screening Specimen Collection Workflow

Birth of Baby

Collect specimen 24-48 hours after birth

Specimen Collection

Materials
- Newborn screening card
- Powder-free gloves
- Alcohol wipes
- Lancet 1.0mm deep 2.5mm long
- Heel warming device
- Sterile gauze pad

Process
- Warm baby’s foot
- Clean puncture site with alcohol wipe
- Puncture medial or lateral planter surface of foot
- Wipe away first drop of blood
- Fill all five circles on collection card

Specimen Card
Include the following key information:
- Mother’s name
- Name of baby’s primary care physician
- Birth date and time
- Collection date and time
- Birth weight
- Gestational age

Wait 3 hours for specimen to dry

Review of Specimen Collection
Collect another specimen if there are...
- Blood clots
- Incomplete Saturation
- Multiple layers of dried blood
- Plasma separated from RBCs
- Contamination
- Damage to filter paper
- Blood on tan cover

Shipment to WSLH within 24 hours after collection

Package and Ship Specimen
- Replace cover slip over card
- Place card in shipping envelope
- Do not place in sealed container
- Never batch samples
- Never hold blood card for hearing or pulse oximetry data

WSLH NBS Laboratory

Unsatisfactory Specimen

Specimen accessioning and evaluation

Specimen Accepted for Testing

Recollect specimen as soon as possible

WSLH NBS Laboratory notification
- NBS Laboratory notifies submitter
- Submitter is responsible for recollection
- Recollection should occur as soon as possible, no longer than 7 days after notification

Recollect specimen as soon as possible

Poor Specimen Identified

Quality Indicators to be Monitored
1. Specimen cards missing key information
2. Unsatisfactory specimen collection
3. Specimens collected within the recommended time frame (24-48 hours after birth)
4. Timing between specimen collection and receipt at the laboratory