



# Newborn Screening Special Considerations

## Newborn screening for premature & sick infants

Special attention is required when infants are premature, sick, or are administered substances that interfere with newborn screening tests. Please follow these Special Considerations to assure that all infants receive appropriate newborn screening.

Whenever possible, collect the infant's newborn screening specimen prior to administering any of the following interfering substances:

- HA/TPN
- Steroids
- RBC Blood Transfusion
- Dopamine

When an infant has received interfering substances prior to specimen collection, check the appropriate box in the Special Considerations section of the newborn screening collection card *if the substance was received in the timeframe below*:

- NICU:** When an infant is or will be in the NICU or Special Care Nursery
- HA/TPN:** If the child received HA/TPN within *24 hours prior* to specimen collection
- Steroids:** If the child received steroids within *7 days prior* to specimen collection\*
- Antibiotics:** If the child received antibiotics within *24 hours prior* to specimen collection
- RBC Blood Transfusions:** Indicate the date of child's last transfusion
- **Dopamine:** Write this substance in the "Miscellaneous Information" section

### Timing of Newborn Screening Specimens

**1<sup>st</sup> Screen:** Collect the first screen before interfering substances are administered, even if prior to 18 hours of age. If no therapies are administered, the first specimen should be collected during the regular recommended timeframe of 18 to 48 hours of age. The first specimen is mandatory and must be collected no later than 48 hours of age and received by the Newborn Screening Laboratory within 72 hours of collection.

**2<sup>nd</sup> Screen:** A second screen is recommended for all infants (including healthy infants) between 7-14 days of age.

**3<sup>rd</sup> Screen:** A third specimen is recommended for all premature, sick (requiring three or more weeks of hospitalization), low birth weight infants (under 1500g), or infants that have received interfering substances.

- For RBC transfusions, a subsequent screen should be collected at least *4 weeks after the last transfusion*
- For infants that receive steroids, a screen should be collected at least *7 days after discontinuing therapy*
- Otherwise, the third specimen should be collected at 4-6 weeks of age or just prior to hospital discharge, whichever is sooner.

### Additional recommendations:

- If the *mother* received steroids within 7 days prior to newborn screening specimen collection, please indicate this in the space provided in the "Mother's Information" section of the collection cards\*
  - \* Please take care to correctly indicate whether the *mother* or *child* has received steroids
- Do *not* collect specimens using tubes containing EDTA (purple tops) as it will interfere with screening tests
- Please note that it is no longer recommended to collect specimens prior to administering antibiotics