Newborn Oxygen Saturation Screening for Critical Congenital Heart Disease

PURPOSE

The purpose of this procedure is to screen newborns with an oxygen saturation level to help assess for occult congenital cardiac disease. Implementation of saturation screening will increase the likelihood that newborns with clinically occult congenital heart disease will be identified in a timelier manner.

SCOPE

All newborns cared for at Alaska Native Medical Center Mother Baby Unit will have oxygen saturation screening before discharge

PROCEDURE

As part of the newborn screening process, all newborns are screened for oxygen saturation at 24 hours of age, when newborn metabolic screening and transcutaneous bilirubin testing is done. If the baby is discharged from the Mother Baby Unit prior to 24 hours, all screening will be done prior to discharge.

1. Place O2 monitor on right hand/wrist(RH), and on either foot(F).

2. When baby is quiet, monitor saturation for approximately 1-5 minutes, or until accurate reading is obtained.

    - If highest O2 sat reading on both RH and F is ≥ 95 %, record result.
    - If highest O2 sat reading <90%, record result and notify on-call nursery physician right away.
    - If highest reading 90-94%, or if >3% difference between RH and F, repeat screen in 1-2 hour. If repeat <94%, notify on-call nursery physician

3. Record result with vital signs.

4. Record result on Newborn Screening Log with date and time of test.

REFERENCE:

Hoke, T.R., Donohue, P.K., Bawa, P.K., Mitchell, A. Pathak, Rowe, P.C., Byrne, B.J. Oxygen Saturation as a Screening Test for Critical Congenital Heart Disease: A Preliminary Study. *Pediatric Cardiology, 23:403-409, 2002.*

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