

Critical Congenital Heart Disease Screening

“EARLY DETECTION, BETTER OUTCOME”

What is Critical Congenital Heart Disease?

Congenital heart disease (CHD) is a condition that occurs when a baby’s heart or major blood vessels have not formed properly. CHD is the most common malformation babies are born with. “Critical” Congenital Heart Disease (CCHD) is a malformation requiring specialized medical and surgical care in the first year of life.

Why screen for CCHD?

CCHD is not always detected by prenatal ultrasound or by physical examination after birth and some babies can appear healthy with no symptoms. These babies are at risk for having serious complications within the first few days or weeks of life and require emergency care.

By adding pulse oximetry screening early detection rates can be increased before symptoms develop.

Can CCHD be missed with screening?

CCHD screening can identify babies with low oxygen levels, which can be a sign of CCHD, but it may not detect all heart problems.

Who is recommending CCHD screening?

The Canadian Pediatric Society is recommending that pulse oximetry screening be performed on all well babies born at 34 weeks gestation or more.

When should newborns be screened?

The screening is performed between 24 and 36 hours after birth and only takes a few minutes to complete. It should be done while baby is quiet, awake and not fussy. An ideal time is during skin to skin care.

How do you screen for CCHD?

A pulse oximeter is placed like a Band-Aid on the right hand and either foot to read oxygen levels.

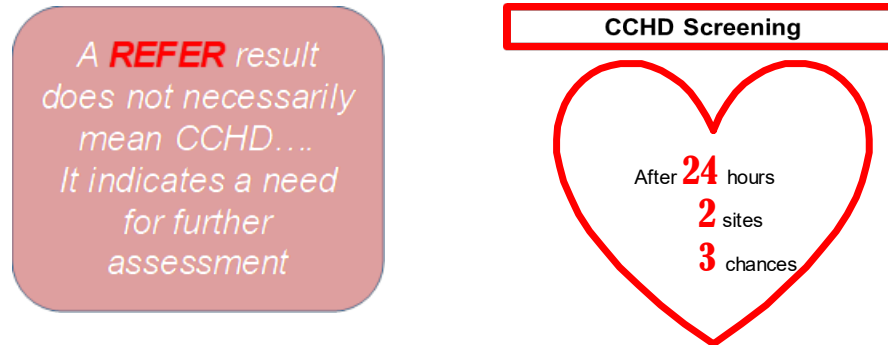
Pulse oximetry takes only a few minutes to perform and results are available immediately.



PASS
Screen is complete
REPEAT
In 1 hour (Maximum of 2 repeats)
REFER
Physician assessment required

Does a REFER result mean my baby has CCHD?

No, a REFER result does not mean your baby has CCHD but that further evaluation is needed to determine the cause of low oxygen levels. If your health care provider is concerned about your baby's screening results they will make arrangements to have additional tests done, such as an ultrasound of the heart (ECHO).



Does my baby have to have this screening?

No, CCHD screening it is not mandatory, however it is strongly recommended. The screening is:

- **SAFE**
- **QUICK**
- **EASY TO PERFORM**

The screening is done before your baby leaves the hospital. Early detection means early management and specialized care.

If you have any concerns about your baby's health, please discuss them with your baby's health care provider.

References

Narvey M, Wong K, Fournier A, *Canadian Pediatric Society Practice Point on Pulse Oximetry Screening in newborns to enhance detection of critical congenital heart disease.*, Paediatrics and Child Health, 2017, 494-498. Retrieved from <https://www.cps.ca/en/documents/position/pulse-oximetry-screening>

Wong KK, Fournier A, Fruitman DS, Graves L, Human DG, Narvey M, Russell JL, *CCS/CPCA Position Statement on Pulse Oximetry Screening in Newborns to Enhance Detection of Critical Congenital Heart Disease*, Canadian Journal of Cardiology 33(017);199-208. Retrieved from <http://dx.doi.org/10.1016/j.cjca.2016.10.006>

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