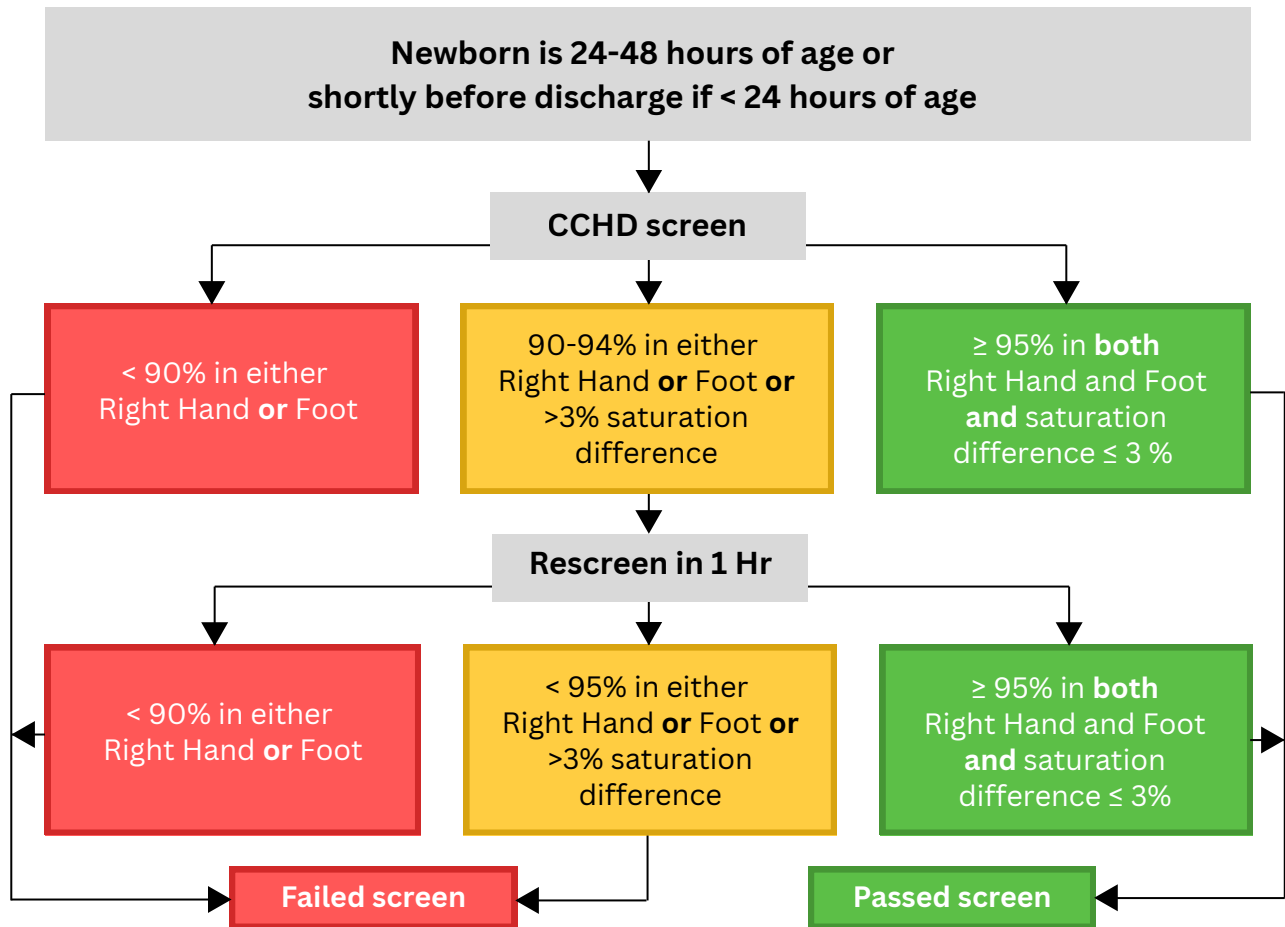


Critical Congenital Heart Disease (CCHD) screening: Pulse Oximetry Protocol

Updated American Academy of Pediatrics (AAP) guidelines, January 2025



Utah Department of
Health & Human Services
Family Health



What has changed?

- The updated passing SpO2 saturation threshold is now $\geq 95\%$ in both pre- and post-ductal measurements.
- Newborn should only be rescreened 1 time instead of 2 if they did not pass their first screen.
- Newborn should be weaned off supplemental oxygen before screening.

Resources

American Academy of Pediatrics (AAP): Newborn Screening for Critical Congenital Heart Disease: A New Algorithm and Other Updated Recommendations ([Link](#))

Center of Disease Control and Prevention (CDC): Clinical Screening and Diagnosis for Critical Congenital Heart Defects ([Link](#))



For more information about this updated protocol, critical congenital heart disease, screening, or reporting results visit:

familyhealth.utah.gov/cshcn/cchd

Table: Identifying newborns with > 3% difference between right hand and either foot

		SpO2 % on Right Hand														
		100	99	98	97	96	95	94	93	92	91	90	89	88	87	86
SpO2 % on Foot	100															
	99															
	98															
	97															
	96															
	95															
	94															
	93															
	92															
	91															
	90															
	89															
	88															
	87															
	86															

Pass

A pass on CCHD screening does not exclude the presence of a cardiac disorder. If cardiac evaluation is indicated (e.g. clinical signs or Prenatal diagnosis of congenital heart disease), proceed with evaluation even if infant achieves pass on CCHD screening.

Rescreen

- Repeat pulse oximetry screen with new measurements in **one** hour
- If this is the 2nd screen proceed to fail

Fail

- Promptly **notify** the responsible medical practitioner of failed screen and need for further evaluation
- **Evaluate** for other causes of low saturation (e.g. infection, pulmonary, hypertension, or pneumonia)
- In the absence of a clear cause of hypoxemia, **obtain** echocardiogram and **consult** pediatric cardiology