

# Neonatal Screening for Critical Congenital Heart Disease

## Abstract

Congenital heart defects are the most common cause of birth defects. It affects 9 in 1000 births. Among the congenital heart defects in children, critical congenital heart defects (CCHD) are those requiring surgery or catheter intervention in the first year of life. CCHD remains one of the most significant causes of infant death in the United States. (How about the rest of the world?)

Newborn physical examination alone has not identified these cardiac defects. Pulse oximetry screening has been shown to be a simple but an excellent bedside tool in the identification of these neonates with CCHD. In 2011, pulse oximetry screening for CCHD was recommended by the US Department of Health and Human Services Secretary's Advisory Committee on Heritable Disorders in Newborns and children as an important screening tool for detection of CCHD in asymptomatic newborns. This recommendation was subsequently endorsed and accepted by American Academy of Pediatrics, American Heart Association and American College of Cardiology. Current recommendations have been accepted by all states including District of Columbia in US.

We will discuss the reasons for screening and review the supporting data from International studies. We will also discuss, algorithms, equipment and personnel needed to successfully implement in hospitals.

## Publication

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## Biography

Muthukumar Vellaichamy is currently working as a Pediatric Intensivist in Stormont Vail Health Care and Pediatric Medical Group. He has a significant experience in ECMO, CVVH, HFOV, Post Cardiac management, Post-Transplant management and NO therapy in addition to routine ICU experience. He has done his post-graduation in pediatrics at AIIMS, New Delhi, India at the year 1993. He has received the Outstanding teacher of the year 2000" by Lutheran general children's hospital, park ridge, IL, and Outstanding teacher of the year 2009" by Ku school of medicine - Wichita. He is also the member of American academy of pediatrics and Society of critical care medicine.



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