



STATE OF MICHIGAN

DEPARTMENT OF COMMUNITY HEALTH
LANSING

RICK SNYDER
GOVERNOR

OLGA DAZZO
DIRECTOR

MEMORANDUM

DATE: April 13, 2012

TO: Hospital Administrators and Directors of Newborn/Pediatric Services

FROM: Olga Dazzo
Director 

RE: Pulse Oximetry Screening for Detection of Critical Congenital Heart Disease (CCHD)

I am writing to provide an update regarding a recent public health recommendation for routine pulse oximetry screening of newborns, and to let you know that the Michigan Department of Community Health (MDCH) plans to work with Michigan birthing hospitals to help implement new screening and reporting procedures.

In November, 2011 the U.S. Department of Health and Human Services, Secretary's Advisory Committee on Heritable Disorders in Newborns and Children (SACHDNC) published a Workgroup Report, "Strategies for Implementing Screening for Critical Congenital Heart Disease." The Workgroup was a collaborative effort of SACHDNC, the American Academy of Pediatrics (AAP), the American College of Cardiology Foundation and the American Heart Association (AHA). The report found sufficient evidence to recommend screening for low blood oxygen through the use of pulse oximetry monitoring to detect CCHD in well infant and intermediate care nurseries and included a screening protocol for U.S. hospitals.

As background for this decision, it is important to recall that congenital heart defects are the most common group of birth defects (9/1,000 newborns). A subset of congenital heart defects (approximately 2.2/1,000) requiring surgery or catheter intervention before the first year of life are classified as critical congenital heart disease. CCHD is responsible for more infant deaths than any other congenital malformation in the United States. Prevention of death or disability due to CCHD has previously focused on early detection by mid-trimester ultrasound and clinical examination in the newborn nursery prior to discharge. More recently, pulse oximetry has been recommended as an important screening tool for detection of CCHD in asymptomatic newborns.

A few Michigan birthing hospitals have been providing routine pulse oximetry screening for a number of years. Following publication of the SACHDNC Report and a subsequent AAP policy statement, additional hospitals have begun, or are in the process of initiating screening. In order to assure uniform provision of screening, diagnosis and medical intervention across all Michigan birthing hospitals, MDCH has convened a CCHD Advisory Committee to establish quality assurance standards addressing staff training; a Michigan specific screening protocol; provision of pediatric cardiology follow-up services; and documentation of screening performance metrics and costs. The committee includes pediatric cardiologists, neonatologists, nursery directors and other health professionals involved in the care of newborns, a parent advocate, Michigan AAP and AHA representatives, and a Children's Special Health Care Services/Medicaid physician consultant.

It is expected that pulse oximetry screening for CCHD will be phased in across the state, and ultimately added to the mandated Michigan newborn screening panel in the next two to three years. Your nursery staff will be kept informed as screening guidelines for Michigan become available, and will be contacted by a representative of our Newborn Screening Program to offer technical assistance in developing a plan for pulse oximetry screening and reporting in your hospital. In the meantime, please feel free to contact Dr. William Young, Newborn Screening Program Manager, at youngw@michigan.gov or (517) 335-8938 for more information or with any questions.

OD:jb