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Circular Letter: 13-5-590

TO: Chief Executive Officers, Maternity Hospitals and Birthing Centers

FROM: Lauren A. Smith, MD, MPH, Interim Commissioner
Madeleine Biondolillo, MD, Director, Bureau of Health Care Quality and Safety MB

CC: Ron Benham, Director, Bureau of Family Health and Nutrition
Marlene Anderka, ScD, MPH, Director, Massachusetts Center for Birth Defects Research and Prevention

DATE: May 10, 2013

RE: Screening for Critical Congenital Heart Disease in Newborns

The purpose of this letter is to provide guidance to maternity hospitals in the Commonwealth about screening for Critical Congenital Heart Disease (CCHD) in newborns using pulse oximetry.

The Massachusetts Department of Public Health (DPH) recommends that maternity hospitals in the Commonwealth incorporate pulse oximetry screening for CCHD into the routine assessment of the newborn, using the guidelines recommended by the Secretary of Health and Human Services Advisory Committee on Heritable Disorders in Newborns and Children (SACHDNC), and the American Academy of Pediatrics (AAP). The use of these guidelines by all Massachusetts hospitals will ensure a consistent, evidence-based approach across the Commonwealth. A summary of the guidelines is provided in the Screening for Critical Congenital Heart Disease in Newborns Factsheet attached. Also enclosed is a data form to be used in reporting screening activity to DPH. The Factsheet and the Reporting Form are both available on the DPH website at www.mass.gov/dph/birthdefects > Birth Defects Monitoring Program > Regulations and Policies.

Congenital heart disease (CHD) is the most common type of birth defect in the U.S, occurring in 8 per 1,000 live births and comprising nearly 30 percent of infant deaths resulting from birth defects. CCHDs, defined by the Centers for Disease Control and Prevention (CDC) as congenital heart defects requiring surgery or palliative care within the first year of life, account for approximately one-quarter of all cases of CHD. In Massachusetts, a total of 784 cases of CCHD were identified through the Massachusetts

Birth Defects Monitoring Program among live births from 2005-2009. Of these cases, 103 (13.1%) were diagnosed after discharge from the hospital.

Delayed diagnosis of CCHD can results in death or injury to infants. The most common approaches to diagnosing CCHD in the United States have been prenatal ultrasound and physical examinations after birth. These approaches, however, have failed to detect some affected newborns. Several studies have shown that including pulse oximetry screening in newborn care can improve CCHD detection and save newborns' lives.

If you have any questions about the information in this correspondence, please contact Marlene Anderka, the Director of the Massachusetts Center for Birth Defects Research and Prevention, at 617-624-6045 or at Marlene.Anderka@state.ma.us.

We request that you forward this circular letter to the following staff at your hospital, and any others as appropriate: Chief Medical Officer, Chief of Obstetrics, Chief of Pediatrics, Chief of Neonatology, Chief Nursing Officer, Director of Maternal and Child Health, and QA Director/Risk Manager.

Enclosures: CCHD: Pulse Oximetry Screening and Reporting Factsheet
CCHD Data Reporting Form