Title 15: Mississippi Department of Health

Part 4: Office of Health Services

Subpart 1: Division of Genetics

Chapter 1. NEWBORN SCREENING AND BIRTH DEFECTS REGISTRY

Subchapter 1. AUTHORITY

Rule 1.1.1. **Statutory Authority**

1. Sections 41-21-201 and 41-21-203 of the Mississippi Code of 1972, Annotated, authorizes the State Department of Health to adopt rules and regulations to carry out the Newborn Screening and Follow-up Program for hypothyroidism, phenylketonuria (PKU), hemoglobinopathy, congenital adrenal hyperplasia (CAH), galactosemia, and other such conditions as specified by the State Board of Health as stated herein below in section B .

2. Section 41-24-1 of the Mississippi Code of 1972, Annotated, authorizes the State Department of Health to adopt rules and regulations to establish a program of testing to determine the presence of sickle cell trait or sickle cell anemia.

SOURCE: Miss. Code Ann. §41-21-201

Rule 1.1.2. **Legal Requirements**

1. Under the statutory authority, the physician attending a newborn child, or the persons attending a newborn child who was not attended by a physician, is held responsible for ensuring that the child is tested for the newborn screening tests as described in these rules and regulations. State law exempts from these tests any child whose parents object thereto on the grounds that such tests conflict with their religious practices or tenets.

2. Under the statutory authority, screening for congenital hypothyroidism (TSH), phenylketonuria (PKU), hemoglobinopathies (Hgb), congenital adrenal hyperplasia (CAH), and galactosemia (GAL) will be conducted statewide. Screening for the following conditions, as determined and specified by the State Board of Health, will also be conducted:

    a. Argininemia

    b. Argininosuccinic Aciduria (ASA Lyase Deficiency)

    c. Biotinidase Deficiency

d. Carbamoylphosphate Synthetase Deficiency (CPS Deficiency)

e. Carnitine Palmitoyltransferase I Deficiency (CPT I)

f. Carnitine Palmitoyltransferase II Deficiency (CPT II)

g. Carnitine/Acylcarnitine Translocase Deficiency (Translocase)

h. Citrullinemia (ASA Synthetase Deficiency)

i. Cystic Fibrosis (CF)

j. Glutaric Aciduria Type I (GA I)

k. Homocystinuria

l. 3-Hydroxy-3-Methylglutaryl-CoA Lyase Deficiency (HMG)

m. Hyperammoninemia, Hyperornithinemia, Homocitrullinemia Syndrome (HHH)

n. Hypermethioninemia

o. Isobutyryl-CoA Dehydrogenase Deficiency

p. Isovaleric Acidemia (IVA)

q. Long-Chain 3-hydroxyacyl-CoA Dehydrogenase Deficiency (LCHAD)

r. Malonic Aciduria

s. Maple Syrup Urine Disease (MSUD)

t. Medium-Chain Acyl-CoA Dehydrogenase Deficiency (MCAD)

u. 2-Methylbutyryl-CoA Dehydrogenase Deficiency

v. 3-Methylcrotonyl-CoA Carboxylase Deficiency (3MCC Def)

w. 3-Methylglutaconyl-CoA Hydratase Deficiency

x. Methylmalonic Acidemia (MMA)

y. Mitochondrial Acetoacetyl-CoA Thiolase Deficiency

z. Multiple Acyl-CoA Dehydrogenase Deficiency (MADD or GA II)

aa. Multiple CoA Carboxylase Deficiency

bb. 5-Oxoprolinuria (Pyroglutamic aciduria)

cc. Propionic Acidemia (PPA)

dd. Short-Chain Acyl-CoA Dehydrogenase Deficiency (SCAD)

ee. Short-Chain Hydroxy Acyl-CoA Dehydrogenase Deficiency (SCHAD)

ff. Trifunctional Protein Deficiency (TFP Deficiency)

gg. Tyrosinemia Type I (TYR I)

hh. Tyrosinemia Type II (TYR II)

ii. Very Long-Chain Acyl-CoA Dehydrogenase Deficiency (VLCAD)

jj. Severe Combined Immunodeficiency (SCID)

kk. Critical Congenital Heart Defects (CCHD) - Under the statutory authority, all licensed hospitals and other state licensed birthing facilities must test every newborn for CCHD statewide. All CCHD screenings must be performed prior to discharge and in accordance with current standards of care. Screening results must be reported to the Mississippi State Department of Health Newborn Screening Program.

SOURCE: Miss. Code Ann. §41-21-201

Subchapter 2. SPECIMEN COLLECTION

Rule 1.2.1. **Specimen Collection Requirements**

1. The specimen must be dried blood spots for screening and whole blood for confirmatory testing. Specimen should be collected according to the instructions issued by the Newborn Screening Program and as specified in the Child Health and Public Health Nursing Manuals.

2. Newborn screening should be performed prior to hospital discharge. Any specimen collected prior to 24 hours of age will require repeat specimen collection.

3. Newborn screening collection for GAL and Hgb are accepted for testing under the assumption that the infant has had a lactose feeding and has not been transfused. This statement is noted on Mississippi's newborn screening lab slip. Any alternate feeding status or most recent transfusion date must be appropriately documented on the lab slip.

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