Connecticut Newborn Screening Program
Addition of ADA-SCID to the Connecticut Newborn Screening Panel

June 26, 2020

Dear Health Care Provider:

In October 2011, the Connecticut Newborn Screening Program (CT NBS) adopted T-cell receptor excision circle (TREC) assay screening for Severe Combined Immunodeficiency (SCID). TREC is a reliable screening test for many types of SCID but may not identify some cases of Adenosine Deaminase Deficiency SCID (ADA SCID). Effective July 1, 2020, the CT NBS began screening by Tandem Mass Spectrometry (TMS) for ADA SCID. This method analyzes dried blood spots for two metabolites, adenosine and deoxyadenosine, which accumulate in infants affected by ADA SCID. For more information on ADA SCID please visit https://ghr.nlm.nih.gov/gene/ADA. The CT NBS Program will continue to report all presumptive positive SCID screening results to the Connecticut Newborn Diagnosis and Treatment Network for review by a pediatric immunologist.

The CT NBS Program has been using TMS to screen for amino acid, fatty acid oxidation and organic acid disorders for many years. As with any change in screening methods, in this case a change from derivatized method to a non-derivatized method, the resulting number of requests for newborn screening samples for repeat screening may initially increase. The cutoffs for the new method can be viewed at https://portal.ct.gov/nbstestresultlevels.

Please direct questions to the CT NBS Program at dph.nbstracking@ct.gov or 860.920.6628.

Sincerely,

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Supervising Nurse Consultant
Connecticut Newborn Screening Program