



DEPARTMENT OF HEALTH

Wes Moore, Governor · Aruna Miller, Lt. Governor · Meena Seshamani, M.D., Ph.D., Secretary

Laboratories Administration
Robert A. Myers, Ph.D., Director
1770 Ashland Avenue
Baltimore, Maryland 21205

MEMORANDUM

Date: May 1, 2026

To: All providers of Newborn Screening specimens

From: M. Christine Dorley Ph.D., Newborn Screening Chief, Laboratories Administration

Through: Robert A. Myers, Ph.D., Director, Laboratories Administration *RAM*

Subject: Newborn Screening for Congenital Hypothyroidism

We are pleased to announce that on Monday, May 4, 2026, we will transition testing for Congenital Hypothyroidism (CH) to our new Genetic Screening Processor (GSP) platform. We will measure Thyroid Stimulating Hormone (TSH) as our first-tier assay and if TSH is above the cutoff, we will perform reflex testing for Thyroxine (T4). Our cutoffs are changing for TSH and T4. TSH cutoffs are based on the age of the infant at the time of specimen collection (See below). We will report TSH and T4 when normal as within normal limits (WNL) but report a quantitative result when these analytes are outside of normal limits.

Age at time of specimen collection	TSH		T4	
	Abnormal Cutoff $\mu\text{U/mL}$ (serum)	Normal Cutoff $\mu\text{U/mL}$ (serum)	Abnormal Cutoff $\mu\text{g/dL}$ (serum)	Normal Cutoff $\mu\text{g/dL}$ (serum)
* <24 hours	≥ 82	< 82	≤ 5	> 5
≥ 24 - <192 hours	≥ 15	< 15		
≥ 192 hours	≥ 9	< 9		

*A positive screen on this group will be relayed to the follow-up team only. Mailers will reflect INVALID.

Additional information:

1. Less than 24-hour collections are known to cause false positives and, in some cases, false negatives especially in premature and low birthweight infants due to a slow rise in TSH.
2. For infants weighing less than 2500 grams, we strongly urge that additional specimens be recollected according to the established protocols to minimize false negatives.
3. Maternal conditions and treatment can cause false positive and false negative results.
4. TSH as the first-tier screen may not detect central hypothyroidism so be alert for signs and symptoms.

We are excited about this change and appreciate your patience as we continue to make improvements. We anticipate our migration of biotinidase, congenital adrenal hyperplasia, and cystic fibrosis testing to the GSP shortly. For questions or inquiries, please contact the MDH NBS Laboratory at 443-681-3900 or by email at mdphl.nbs@maryland.gov. For inquiries about the interpretation of results please contact the MDH NBS Follow-up Unit at 443-681-3916 or by email at: mdh.newbornscreeningfollowup@maryland.gov.