



MEMORANDUM

DATE: August 19, 2026

TO: South Carolina Newborn Screening Community

FROM: Jenny Meredith, Ph.D., HCLD(ABB) *JM*
SC DPH Public Health Laboratory (PHL) Director

SUBJECT: South Carolina (SC) Newborn Screening (NBS) Program's Revised Expected Range

Effective August 25th, 2026, the SC Newborn Screening Laboratory is updating the expected ranges for two acylcarnitine analytes: **C0** and **C5DC+C6OH**. These analytes are used in newborn screening as primary markers for organic acid and fatty acid oxidation disorders. For **C0**, the lower limit of the expected range is being revised. For **C5DC+C6OH**, the upper limit of the expected range is being revised. The current and revised expected ranges are provided below in Table 1.

Table 1. Revised analyte expected ranges.

Analyte	Current Expected Range (μmol/L)	New Expected Range (μmol/L)
C0 (Free carnitine)	> 9.00	> 7.00
C5DC (Glutaryl carnitine) +C6OH (3-Hydroxy-hexanoyl carnitine)	< 0.300	< 0.400

This change is part of the SC NBS Program's commitment to continuous improvement. The SC NBS Program monitors test results and determines if adjustments are needed based on population studies.

Please direct any questions to Beth Bair, M.S., Ph.D., Newborn Screening Section Director at bairea@dph.sc.gov; 803-896-0991.