

CADHAM PROVINCIAL LABORATORY

Universal Newborn Sickle Cell Disease and Hemoglobinopathy Screening

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To: Manitoba Newborn and Pediatric Care Practitioners & Other Relevant Care Providers

Beginning June 1, 2024, newborn dried blood spot (DBS) specimens submitted to Cadham Provincial Laboratory (CPL) as part of the Manitoba Newborn Screening (NBS) Program will be routinely screened for Sickle Cell Disease and other significant hemoglobinopathies affecting newborns and infants. In addition to being reported to the ordering practitioner, any screen positive newborns will be automatically referred to the Pediatric Hematology program at CancerCare Manitoba to arrange for confirmatory diagnostics and early intervention.

Sickle cell disease is an autosomal recessive condition of hemoglobin, and is considered the most common single-gene disease worldwide. Sickle cell disease is more frequent among those whose ancestors are from Africa, the Caribbean, Central and South America, the Middle East and South Asia. An increasing proportion of individuals affected by this and related conditions of hemoglobin reside in Manitoba and Canada. There are many strategies to be used in the prevention of morbidity and mortality associated with hemoglobinopathies; newborn screening is considered an additional cornerstone population strategy for early identification of individuals affected by these conditions.

Screening results will be available in eChart along with all other NBS results. Complete and accurate completion of the newborn screening card with particular attention to infant demographics and chart number is critical to populating eChart correctly. Please reinforce with your teams the importance of proper completion of the information requested on newborn cards, as the highest rate of reporting failure is as a result of missing or incorrect identifiers.

Please note that the Manitoba NBS Program will not be reporting carrier status. Newborns with normal hemoglobin profiles or screening suggestive of a carrier trait will be reported as 'normal/benign', and do not require referral to Pediatric Hematology. Practitioners inquiring on behalf of at-risk families regarding carrier status disclosure may contact CPL in writing to access a report under separate cover. Not all hemoglobinopathies will be evident on newborn screening and may require investigation later in life.

References/Resources:

Please refer to the [CPL Guide to Services](#) for collection and submission information.

More Information:

[CPL Health Provider Website](#)

<https://cps.ca/en/documents/position/acute-complications-with-sickle-cell>

[Newborn Screening – Public Information](#)

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