Alberta’s NMS Program
Annual Highlights: 2021 - 2022

Spinal muscular atrophy screening comes to Alberta

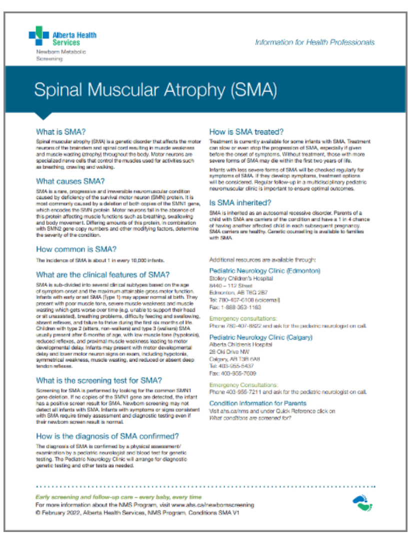
Spinal muscular atrophy (SMA) is a genetic condition that affects the motor neurons of the brainstem and spinal cord resulting in muscle weakness and muscle wasting (atrophy) throughout the body. Early diagnosis and treatment leads to better health outcomes for infants with SMA.

Alberta’s Newborn Metabolic Screening (NMS) Program has achieved another milestone with the launch of a SMA pilot program in February 2022. Intensive collaboration and consultation between all stakeholders and partners, including the NMS Program coordination team, the NMS Lab and Molecular Genetics Laboratory within Alberta Precision Laboratories, and Alberta Health made the launch successful.

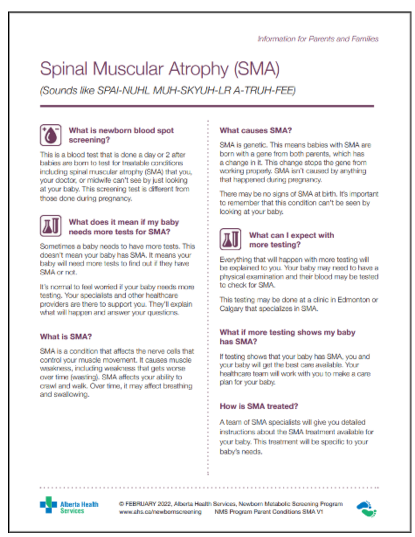
- The Alberta Children’s Hospital Foundation funded the development of SMN1 genetic testing to screen for SMA and a grant from Muscular Dystrophy Canada funded the pilot program in Alberta.
- New NMS Program resources were developed, including SMA-specific resources for providers and parents, to support care provided to families who receive an abnormal SMA screen result (see below).
- The NMS Lab and Molecular Genetics laboratory will use the pilot period to work on validation of a combined test for both SMN1 and SCID to help reduce labour and consumables costs.

Following the completion of the SMA pilot program, SMA will officially become part of Alberta’s publicly funded newborn screening program.

In the period of February 28th to March 31st, no infants received an abnormal screen result for SMA. We look forward to reporting on screening and detection for SMA in next year’s annual report.



Resource for providers



Resource for parents

Visit ***AHS.ca/newbornscreening*** to learn more about Alberta’s NMS Program