

Risk Factor Screening for Permanent Hearing Loss in Ontario

AN INTRODUCTION FOR COMMUNITY PEDIATRICIANS

Newborn Screening Ontario (NSO)



- Newborn Screening Ontario is the provincial program that coordinates dried blood spot testing for a variety of rare but treatable diseases.
- NSO also provides support regarding the standardization, quality assurance, and accessibility of point of care screening for Critical Congenital Heart Disease for infants in Ontario.



The Infant Hearing Program (IHP)



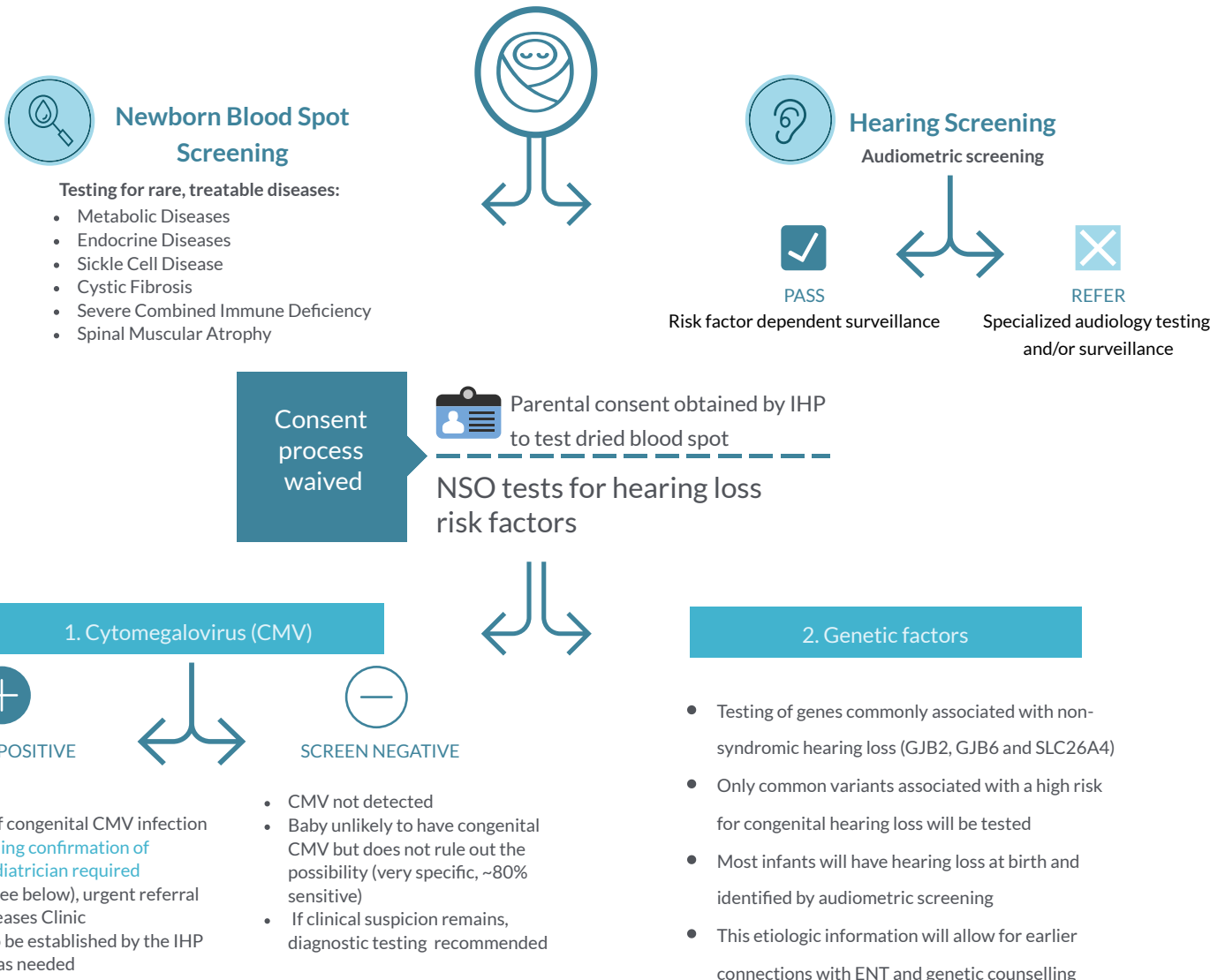
- The Infant Hearing Program is a provincial program that identifies infants with permanent hearing loss and provides services to these children and their families to support language and early literacy development so they are ready to start school.
- IHP services also include monitoring for those infants born at risk of early childhood hearing loss.



MINISTRY OF CHILDREN, COMMUNITY AND SOCIAL SERVICES

NSO and the IHP have partnered to offer **risk factor screening**, which will improve the detection of infants at risk for childhood hearing loss and introduce an etiologic focus to hearing loss identification.

Hearing Loss Risk Factor Screening



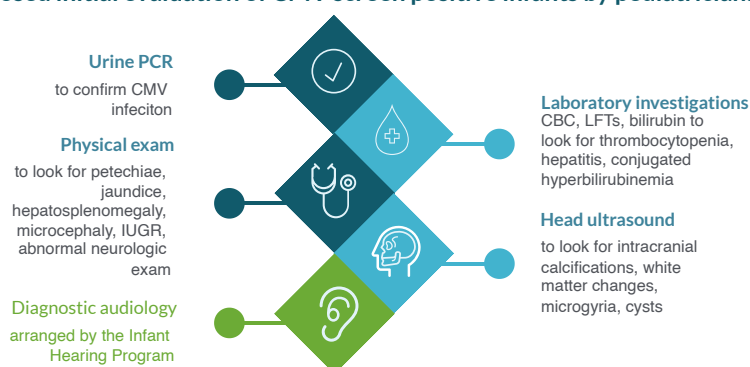
Congenital Cytomegalovirus (cCMV)

cCMV signs and symptoms:

- petechiae
- jaundice
- hepatosplenomegaly
- microcephaly
- IUGR
- chorioretinitis/optic atrophy
- seizures
- intracranial calcifications
- permanent sequelae can include hearing loss, intellectual and motor disabilities, seizures, and/or vision loss

Note: the majority of infants with cCMV (~85%) will be asymptomatic.

Proposed initial evaluation of CMV screen positive infants by pediatrician:



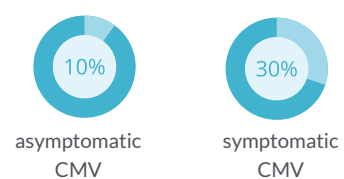
If symptomatic, referral to be made by pediatrician to Infectious Diseases Clinic for further assessment and treatment decision-making (within 1 month). Shared care between the pediatrician and ID specialist may be considered for ongoing management and monitoring.

cCMV and hearing loss:

cCMV accounts for up to **25%** of hearing loss in children

An infant with cCMV can pass their hearing screen at birth and still be at risk to develop CMV-related hearing loss in childhood.

Risk for hearing loss:



cCMV associated hearing loss can:

- be congenital
- affect one or both ears
- affect some or all pitches
- be mild to severe
- be progressive and fluctuating

Developmental surveillance by pediatrician:

- Facilitated by standardized parent reported tool (ASQ). Cost of the tool will be covered by NSO.

Treatment for cCMV

