



NOVA SCOTIA HIP SURVEILLANCE PROGRAM

For children and Youth with Cerebral Palsy

Information for
Parents and
Caregivers of
Children with
Cerebral Palsy

What is hip surveillance?

Hip surveillance is a plan for regular check-ups of your child's hips. Children and youth with cerebral palsy (CP) are at higher risk for their hip sliding or being out of the joint. Sometimes a child's hip can gradually move out of joint which can cause them problems. Hip surveillance aims to pick up on these problems so that they can be treated early.

Who is hip surveillance important for?

Children with CP are at risk of developing hip problems. This is due to the impact their condition can have on their ability to stand and walk. The N.S. Hip Surveillance Program is helpful for any child who has difficulty standing and walking regardless of their diagnosis. If you are not sure if your child is at risk for hip displacement, please discuss with your child's physiotherapist, family doctor or pediatrician.

Why do hip problems develop?

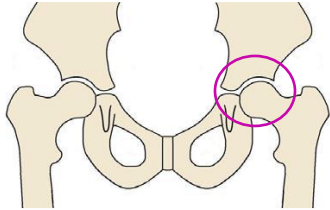
When children are late to stand and walk or can only do so with help, the hip joint may not develop as expected. Also, some of the leg muscles are often tight or stiff and can pull the hip out of place.

If the hip is sliding out of the joint (hip displacement) or is out of the joint (hip dislocation) your child may have or develop:

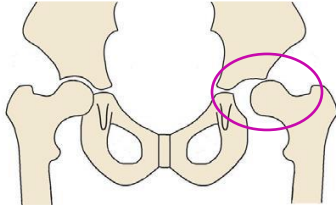
- pain
- decreased ability to move the hip, particularly taking their leg out to the side
- difficulty with personal care or toileting
- difficulty sitting or lying comfortably
- difficulty standing or walking
- pressure sores

Some children may have none of these signs or symptoms but still be experiencing changes to the position of their hips.

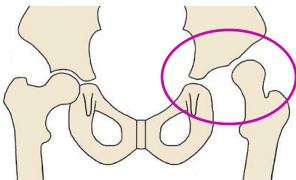
What do hip displacement and hip dislocation look like?



The hip is a ball and socket joint. The head of the femur (top of the thigh bone) is the ball and the part of the pelvis that meets the upper end of the thigh bone is the socket.



This is a picture of **hip displacement**, also called **subluxation**. When this happens the ball gradually moves out from under the socket.



This is a picture of **hip dislocation**. When this happens, the ball is completely out from under the socket.

What is involved in hip surveillance?

Hip surveillance is made up of an assessment of your child's hips by a physiotherapist or health care provider and hip X-rays at scheduled times. Hip X-rays are taken to look at the position of the hip because hip displacement can happen without any signs or symptoms.

When does Hip Surveillance start and how often will my child need a Clinical Exam and x-ray?

Your child should join the Hip Surveillance Program when they are suspected of having or diagnosed with cerebral palsy. Your child will have their first Clinical Exam when joining the program. How often your child requires Clinical Exams and x-rays after that depends on their ability to move. We use a scale called the Gross Motor Function Classification System (GMFCS) to help us with this.

The GMFCS is used to describe a child's ability to move and includes five levels from Roman numeral I (1) to V (5). Your child's physiotherapist, occupational therapist, family

doctor, or pediatrician can help you determine your child's GMFCS level in just a few minutes.

What happens at the Clinical Exam?

At each Clinical Exam, your child's physiotherapist (or another health care team member) will:

- Review your child's ability to move and select a GMFCS level.
- Measure the movement and muscle tone in your child's hips.
- Ask you and your child questions about your child's pain when changing positions, difficulty during your child's personal care, or a decrease in your child's ability to walk, sit, or stand.

How do I get an x-ray referral and where is the x-ray done?

Your child will have one x-ray of their hips taken in your local community or at the IWK. The x-ray will be reviewed by the Hip Surveillance Team at the IWK. The amount of the ball that is outside the socket will be measured on the x-ray. The Hip Surveillance Coordinator will send you the results in writing.

What happens if my child has signs of hip displacement?

If your child's x-ray shows a specific amount of hip displacement (e.g., the ball has moved outside the socket between 30%- 40%), the x-ray will be reviewed by a pediatric orthopedic surgeon who is experienced in treating hip displacement.

Your child's care will also be discussed with a pediatric orthopedic surgeon if your child's Clinical Exam finds that your child has:

- Pain when changing positions or difficulty with personal care
- Decrease in function (sitting, standing, or walking)
- Less hip movement than expected (e.g., able to bring leg out to the side less than 30 degrees).

- A decrease in the amount of movement of your child's hip(s) compared to earlier exams.
- A difference between the right and left sides in the amount of movement of your child's hips.

Th treatment options will depend on the severity of your child's hip displacement and their symptoms on the Clinical Exam. They can vary from continuing to monitor closely, to discussing possible surgical intervention.

What can I do to help prevent my child's hips from dislocating?

The is no singular known way to prevent hip displacement/dislocation from happening. Detecting concerns early and keeping up with your scheduled hip surveillance clinical exams and x-rays is important to maintain healthy hips.

Contact us

If you have any questions or concerns, please email the Hip Surveillance Coordinator at: cphipsurveillance@iwk.nshealth.ca

For more information on Hip Surveillance:

Cerebral Palsy Foundation: <https://www.yourcpf.org/>

BC Children's Hospital: <http://www.bcchildrens.ca/our-services/clinics/orthopaedics/orthopaedic-cerebral-palsy/hip-surveillance>