



HIP SURVEILLANCE

Bottom Line 'Evidence-Informed' Recommendations for the Hip Surveillance
in Individuals with Cerebral Palsy

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Plain Language Summary

Hip surveillance is a plan for regular check-ups to watch for signs that your child's hip may be moving out of joint (this is called hip displacement). Your child is at risk for hip displacement if your child has cerebral palsy. Cerebral Palsy (CP) affects a child's ability to move. When children are late to stand and walk or can only do so with help, the hip joint may not develop as expected. In addition, the muscles that pull the legs together and up are often tight or stiff and may affect the muscle balance around the hip. Hip displacement can lead to the hip coming completely out of the joint (hip dislocation). Hip displacement and dislocation can cause pain, difficulty moving the hip, and problems with sitting, standing, and walking.

Hip surveillance includes clinical examinations and hip x-rays at regularly scheduled times. Clinical examinations include asking you and your child about any hip pain, measuring hip movement and noting any pain on movement. Hip x-rays are done to view the hip joint because hip displacement can occur without any signs or symptoms. Taking part in Hip Surveillance allows your child's health care team to find hip displacement early and help your child before the hip becomes dislocated.

Your child should begin Hip Surveillance when they are diagnosed or suspected of having CP. How often your child requires Clinical Examinations 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.





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- Risk for hip displacement is directly related to GMFCS level.
- Children whose ability to move is at GMFCS Level I have the lowest risk of hip displacement. They receive the fewest Clinical Examinations and x-rays.
- Children whose ability to move is at GMFCS Level V have the highest risk of hip displacement (8 out of 10 children that are at GMFCS Level V will have hip displacement). Clinical Examinations and x-rays are done most often for children that are at GMFCS Levels IV and V.
- In addition to GMFCS, children with hemiplegia (one side of the body affected) who walk with one hip turned and pulled inward (this is called a Gait Type IV pattern of walking) are at higher risk for hip displacement.

The table in the care pathway shows how often children need clinical examinations and hip x-rays.

Children at low risk will stop Hip Surveillance at age 6 years (ability to move at GMFCS I) or 10 years (ability to move at GMFCS II). Because hip displacement can occur while children and youth are growing, children who are at higher risk (ability to move is at GMFCS Levels III, IV, and V or a Hemiplegia Gait Type IV pattern of walking) take part in Hip Surveillance until an x-ray determines that their bones have stopped growing.

If your child's health care team finds signs of hip displacement, they can refer your child to a doctor with experience treating hip displacement in children with CP to determine suitable next steps to prevent hip dislocation.

The above summary, aimed to support parents and families, was provided by the Child Health BC Hip Surveillance Program for Children with Cerebral Palsy in British Columbia, Canada. If replicated please acknowledge appropriately.

