

## BRINGING HIP SURVEILLANCE TO B.C.

In 2011 and 2012, Child Health BC organized meetings with over 50 participants, including pediatric orthopaedic surgeons, family physicians, pediatricians, a radiologist and technician, physiotherapists, occupational therapists, nurses, parents, policy makers, and health administrators to discuss hip surveillance. Consensus was reached on the commencement, frequency, and discharge criteria for hip surveillance based on current best evidence and the resources available in the province. A provincial implementation plan was developed at the meeting in 2012; we are now working to put this plan into action. Once implemented, the Child Health BC Hip Surveillance Program will be the first of its kind in North America.

The Child Health BC Hip Surveillance Program for Children with Cerebral Palsy was launched with a focus on program development in the fall of 2014; full clinical launch will occur in the fall of 2015. This first phase of work has included:

- Creation of a communication and knowledge translation plan
- Determination of service providers (see page 2)
- Completion of a knowledge and needs survey (see pages 2 & 3)
- Formation of an Advisory Committee (see page 2)

## WHAT'S HAPPENING NOW?

- Children attending the BC Children's Orthopaedic CP Clinic will soon be enrolled in the Hip Surveillance Program. Watch for updates on your clients attending clinic.
- Creation of knowledge translation materials for clinicians and families including information booklets, posters, website, and an online learning module.
- The on-line learning module will describe everything that you need to know about hip surveillance. Videos will demonstrate how to perform the clinical exam measurements (hip abduction and modified Thomas test), categorize children at different GMFCS levels, and describe hemiplegic gait patterns you will need to know to correctly identify children for surveillance.
- Development of a data management system so we can share information.

The **CHILD HEALTH BC HIP SURVEILLANCE PROGRAM FOR CHILDREN WITH CEREBRAL PALSY** aims to ensure that all BC children with cerebral palsy or cerebral palsy like conditions receive appropriate screening and are referred to a pediatric orthopaedic surgeon at the appropriate time to minimize or prevent complications associated with hip dislocations. This program is based on the "BC Consensus Statement on Hip Surveillance for Children with CP" that was collaboratively established in 2011 and 2012 by a multi-disciplinary group of stakeholders, representing all regions of the province.



## THERAPIST SURVEY RESULTS

Thank you to all that completed the Knowledge and Needs Survey for therapists in February. Your input will help guide what information we provide to you and how we delivery it. Below are some highlights from the survey. For answers to the clinical questions that were included in the survey, please see page 3.

- 102 respondents with 43.1% having 21+ years experience and another 18.6% having 16-20 years of experience
- Practice setting: 40.2% Metro, 25.3% Urban/Rural area, 17.6% Rural, 6.9% Remote
- 96.1% agreed “a great deal” or “very great deal” that hip displacement in children with CP is a problem that requires standardized monitoring
- 71.5% identify Gross Motor Function Classification System (GMFCS) levels “a great deal” or “very great deal” for all clients with CP – we need this to be 100% for Hip Surveillance
- Only 44.1% are “very confident” measuring end range hip abduction and only 9.8% are “very confident” measuring a dynamic contracture (R1) of the adductors
- Your preferred methods of getting information from us: website, online learning module, webinars, in person workshop, and email. All of these are being created – stay tuned!

## PEDIATRIC THERAPY SERVICES IN BC: Did you know?

Implementation of the Child Health BC Hip Surveillance Program requires the participation of pediatric physiotherapists throughout the province who provide services to children with cerebral palsy, and similar conditions, so we have worked to determine who provides services and where in B.C. Thank you to Shirley Meaning, Children and Youth with Special Needs Therapy Manager with the Ministry of Children and Family Development (MCFD) for sharing the Ministry’s mapping work which formed the basis of our search. Here’s what we found:

### Early Intervention Services Providers

- 35 Child Development Centres
- 9 centers operated by Health Authorities (in 4 HAs)
- 2 communities have no PT or OT service providers

### School Age Services: 59 school districts (Excluding Provincial French school)

- 3 have more than one service provider
- 24 serviced by Child Development Centers
- 12 serviced by employees of Health Authorities
- 20 contract their own PT/OT
- 5½ have no PT service; 4 have no PT or OT



## ADVISORY COMMITTEE ESTABLISHED

We are pleased to have commitment from 30 individuals from all regions of the province representing physiotherapists in early intervention programs and schools, occupational therapists, parents, physicians, pediatricians, MCFD, Health Authorities, radiology, the Positioning and Mobility Team, BC Children’s Hospital and Sunny Hill Health Centre who will form an Advisory Committee to the Child Health BC Hip Surveillance Program for Children with Cerebral Palsy. This Committee will provide leadership and guidance to support the development and implementation of the program. The Committee will assist in identifying learning needs and challenges to implementation as well as champion the program within their area or network.

As part of the Knowledge and Needs Survey completed in February 2015, we asked you questions to assess your level of knowledge on hip surveillance to assist us in identifying your learning needs. We had requests for the answers, so have provided them below. The correct answers are marked with a ✓ and incorrect answers with a ✗.

**A 10 year old child walks with a hand held mobility device indoors without physical assistance and mobilizes in a wheelchair for long distances. Based on the provided description, what is the child's most likely Gross Motor Function Classification System (GMFCS) level?**

- ✓ GMFCS Level III (77.5% answered correctly)

**A 5 year old child sits using adaptive seating, walks short distances with a walker and adult supervision and is transported in a wheelchair. She self mobilizes using a powered wheelchair. Based on the provided description, what is the child's most likely GMFCS level?**

- ✓ GMFCS Level IV (80.4% answered correctly)

**Which conditions would you consider CP or CP-like conditions? (Check all that apply)**

- ✓ Motor dysfunction from perinatal brain injury (99.0% answered correctly)
- ✓ Motor dysfunction from genetic or metabolic cause (74.5% answered correctly)
- ✗ Motor dysfunction from spinal nerve injury
- ✗ Motor dysfunction from muscular origin
- ✓ Motor dysfunction from an acquired brain injury during the first 2-3 years of life (91.2% answered correctly)

**Which description describes a Winters, Gage, and Hicks Group IV hemiplegic gait pattern?**

- ✗ Equinus
- ✗ Jump Knee
- ✗ Pelvic Rotation
- ✗ Hip Flexed, adducted, and internally rotated
- ✓ All of the above (24.5% answered correctly)
- ✗ I don't know, I'm not familiar with this classification (71.6% were not familiar)

**Migration percentage is:**

- ✓ A measure completed on a radiograph to determine the percentage of femoral head OUTSIDE of the acetabulum (79.4% answered correctly)

**At what migration percentage is a hip considered "at risk" and warrants a referral to an orthopaedic surgeon?**

- ✓ 30% (46.1% answered correctly)

**Please select True or False:**

- ✗ Hip displacement is directly related to motor type (eg. Spastic, dystonic, hypotonic) - **FALSE** (49.0% answered correctly)
- ✓ The risk for hip displacement increases from GMFCS level 1 to 5 – **TRUE** (96.1% answered correctly)
- ✗ Pain always accompanies hip displacement – **FALSE** (95.1% answered correctly)
- ✓ Detection of hip displacement is completed through clinical and radiological exams – **TRUE** (98.0% answered correctly)
- ✓ Clinical exam findings are a poor indicator of hip displacement - **TRUE** (46.1% answered correctly)

**When is hip surveillance discontinued? (check all that apply)**

- ✗ When the child/youth has an orthopaedic intervention
- ✗ When the youth turns 18 years
- ✓ When the youth reaches skeletal maturity (52.9% answered correctly)
- ✗ After 3 radiographs show no change in hip displacement
- ✗ I don't know/I prefer not an answer

**When should a child see an orthopaedic surgeon for concerns about hip displacement? (check all that apply):**

- ✗ Only once migration percentage(MP) is greater than 50% (A referral should occur at a MP of 30%)
- ✓ Function has decreased, related to the hip (78.4% answered correctly)
- ✗ Hip abduction, with hips and knees in 90 degrees of flexion, is less than 30 degrees (This measure should be done in extension)
- ✓ Hip abduction, with hips and knees in 0 degrees of flexion, is less than 30 degrees (46.1% answered correctly)
- ✓ There is asymmetrical hip abduction (70.6% answered correctly)
- ✓ The child has increased pain, related to the hip (81.4% answered correctly)



**Questions?** For more information on the Child Health BC Hip Surveillance Program for Children with Cerebral Palsy or to reach the program Coordinator, Stacey Miller, please email [hyps@cw.bc.ca](mailto:hyps@cw.bc.ca) or call 604-875-2345 ext. 4099 or 1-888-300-3088 ext. 4099.