

The **Child Health BC Hip Surveillance Program for Children with Cerebral Palsy** aims to ensure that all children in BC with cerebral palsy (CP) receive appropriate screening and are referred to a pediatric orthopaedic surgeon at the appropriate time to minimize or prevent complications associated with hip dislocations.

Within this newsletter:

Update on provincial enrollment.....	2
What therapists think of the enrollment process.....	2
Enrollment tips for school PTs.....	3
Our response to your feedback.....	3
Review of evidence on preventing hip displacement.....	4

Why do community PTs/OTs need to enroll children in hip surveillance?

Ideally, screening for hip displacement should start at or before 2 years of age. Enrollment by the child’s local healthcare team is, therefore, key. When developing the hip surveillance program, pediatric physiotherapists (PTs) identified themselves as being the most appropriate team member to identify, enroll, and complete the clinical exam. In the future, we anticipate that most children will be enrolled before school entry; until that time, we rely on PTs in schools to identify and enroll children on their caseload.

Aren’t all eligible children followed by an orthopod?

In a recent survey, a therapist commented “surely children who are eligible are already seen by an orthopaedic surgeon” and “automatically enrolled at BCCH if eligible”. Many children with CP in BC are not followed by an orthopedic surgeon. If they are seen in the Orthopaedic CP Clinic at BCCH, every effort is made to enroll them but some may be missed. To date, 51% of enrollments have been completed at BCCH and 49% by community therapists.

Enrollment Fast Facts:

As of March 31, 2018:

- **686** children enrolled
- **32%** of the estimated children, aged 2-17, with CP in BC
- 55 new referrals to see a pediatric orthopedic surgeon made as a result of the program
- **169 (25%)** children have been discharged

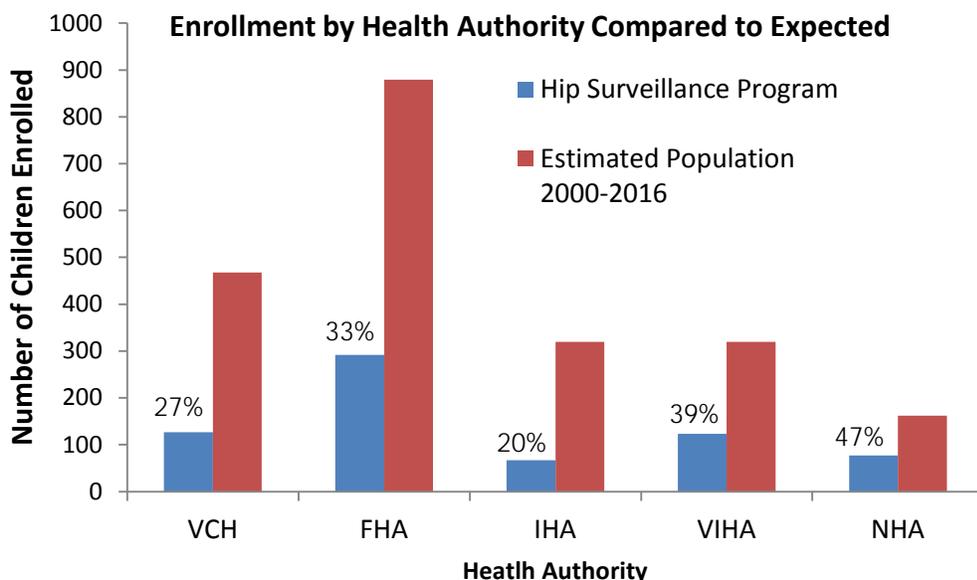
Thank you to everyone who has enrolled a child in the program and completed clinical exams.

Does your client have silent hip displacement?

In the past 12 months, **30 children**, between the ages of **18 months and 16 years**, have been referred to a pediatric orthopaedic surgeon because their migration percentage measured more than 30% (ranging from 33-62%). Only because their community PT enrolled them in the program was hip displacement found!

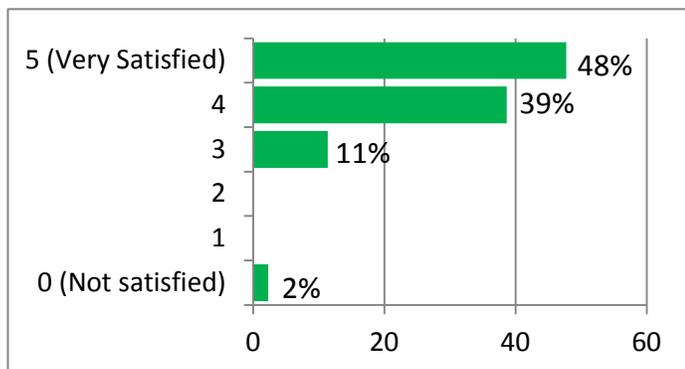
PROVINCIAL ENROLLMENT

Based on a prevalence of 2.68 per 1000 live births and BC’s population, an estimated 32% of the children with CP born between 2000 and 2016 have been enrolled in the program. Enrollment of children in early intervention (born 2012 to 2016) is currently at 37% of expected while 30% of the expected number of school aged children (born 2000 to 2012) are enrolled. Enrollment is highest for children at GMFCS level II (62% of the expected number) but is only 33% of expected for children at the highest risk of displacement, GMFCS levels IV and V. Comparison of enrollment by Health Authority is shown in the graph below.



WHAT DO THERAPISTS THINK ABOUT THE ENROLLMENT PROCESS?

In 2017, we surveyed therapists in the province to assess satisfaction with the enrollment process. Of the 74 respondents, 73% had enrolled a child in the program. The graph below shows level of satisfaction with the enrollment process.



The most common barriers to enrollment were time, lack of parent or physician support for enrollment, uncertainty around the enrollment process, and children not having a diagnosis of CP. For school therapists, space and difficulty reaching parents were also identified. Some felt that the forms were lengthy and cumbersome. When asked what support would be helpful, education for pediatricians, education about CP diagnosis, additional parent resources, more communication from us, and increased time/resources were identified. See page 3 for what we’re doing in response to the feedback received.

Enrollment Tips for School PTs from School PTs:

- Get verbal consent over the phone
- Meet parent at school drop off to review the parent booklet and get form signed
- Assess at a time scheduled for personal care
- Ask the student's Education Assistant to help
- Use the bathroom change table for the clinical exam
- If hip abduction cannot be measured, mark it as not tested.
- Position the child with their head at opposite ends of the change table to make it easier to measure each side
- **Above all else, enroll!**

FOR CHILDREN WITH CEREBRAL PALSY

**WHEN IS THE BEST
TIME TO CHECK
YOUR CHILD'S HIPS?**



If your child has or may have cerebral palsy, early enrollment in the **Child Health BC Hip Surveillance Program** could reduce the need for complex surgery down the road.

For more information, ask your child's physiotherapist or visit www.childhealthbc.ca/hips



Based on your feedback.....

Your feedback is important to us and we are working to respond to your requests.

■ Pediatrician education

Over the next 12 months, greater focus will be spent on educating pediatricians and family physicians in the province. We are currently surveying pediatricians in BC to learn more about their knowledge of CP, their comfort in diagnosing and treating children with CP, and their learning needs. This will be used to develop future educational opportunities and learning materials.

■ Additional resources for families

A new poster (shown on the left of this page) has been created to introduce the program to families. A one page information sheet that can be used prior to the detailed parent booklet was requested and will be created in the style of this new poster. A short YouTube video featuring a child with CP will be created to educate caregivers about the important of hip surveillance. We are also exploring social media as a method of reaching families.

■ Online data entry

In our 2017 therapist survey, over 60% of respondents reported they would like an online method of enrolling and providing clinical exam data. As a result, we will be exploring the feasibility of this option.

■ More Communication

To ensure that PTs are aware of which clients are enrolled in the program and when they are due for surveillance, we are aiming to send therapists individualized reports. Twice per year, PTs will be sent a list of their clients who are enrolled and their next surveillance due date.

A number of child development centers and school based programs in the province have yet to enroll any children in the program. We will be reaching out to these centers/therapists directly in the coming months to help clarify questions related to the process of enrollment and responsibilities.

Knowledge translation activities will continue with the introduction of a YouTube video for professionals and additional webinars.

If you have any other requests, please let us know!

Can Hip Displacement Be Prevented?

In 2016, colleagues from the Orthopaedic CP Clinic, Hip Surveillance Program, and Positioning and Mobility Team conducted a systematic review and evaluation of the quality of evidence for interventions to prevent hip displacement in children with cerebral palsy.¹

Twenty-four studies, published between 1991 and 2015, fulfilled the inclusion criteria. Interventions studied included: botulinum toxin A (4 articles), botulinum toxin A and bracing (2 articles), intrathecal baclofen (1 article), obturator nerve block (1 article), selective dorsal rhizotomy (7 articles), positioning (8 articles), and complementary and alternative medicine (1 article). Overall, the level of the evidence was low with only one randomized controlled trial (RCT) and one long term follow up study of the same RCT. None of the interventions demonstrated a large treatment effect on hip displacement.

Therapists often ask about standing in abduction. Two level III studies suggested that there is a positive impact on hip displacement in children at GMFCS levels III to V when standing in hip abduction for greater than 1 hour per day. However, these studies had small samples and short follow up so no conclusions could be made on whether there is a meaningful impact on hip displacement.

The review concluded that there is currently insufficient evidence to support or refute the use of the interventions studied in the systematic review to prevent hip displacement. For more information about the results of the review, contact Stacey at hips@cw.bc.ca.

1. Miller S, Juricic M, Hesketh K, McLean L, Magnuson S, Gasior S, Schaeffer E, O'Donnell M, Mulpuri K. Prevention of hip displacement in children with cerebral palsy: a systematic review. *Dev Med Child Neurol*. 2017; 59(11):1130-1138. doi: 10.1111/dmcn.13480.



Need help getting started?

Visit our website: www.childhealthbc.ca/hips and open the Launch Checklist for a step by step guide on how to get started or contact Stacey at hips@cw.bc.ca or 1-888-300-3088 ext. 4099.

What resources are available?

Find the following at: www.childhealthbc.ca/hips.

- Online Learning Module (Winner of the 2017 Fred P. Sage Award from the American Academy of Cerebral Palsy and Developmental Medicine)
- Launch Checklist
- Clinical Exam Instructions
- Frequently Asked Questions
- Family Booklets in 6 languages
- Clinician Booklets

UPDATED GUIDELINES! Watch for new resources in the mail!

Updated clinician and family booklets, Quick Guide posters, and our new "EARLY" poster (see page 3) will be mailed to child development centers and school therapists throughout the province this month. Contact us if you don't receive a package by the end of June!
