

PARTNERS



CANADA



Dear Physiotherapist,

The BC Speed Skating Association (BCSSA) has recommended that all developing and high performance skaters undergo a yearly Functional Assessment to proactively diagnose and correct functional imbalances. For select skaters, the cost of the Functional Assessment (completed by a registered physiotherapist) will be reimbursed to the skater. There is no action required on your part regarding funding; the athletes will be expected to pay up-front as usual and will submit their receipt (complete with the practitioner's name and registration number) to BCSSA for reimbursement.

It is our hope that the Functional Assessment covers the typical aspects assessed in a developing athlete, including, but not limited to:

- Postural assessment
- Core recruitment and strength assessment
- Flexibility assessment
- Muscle pairing imbalances
- Muscle recruitment patterns
- Patterns of functional movement.

It is not expected that the physiotherapist follow a specific standardized functional movement test or screen; these standardized test may be used at the therapist's discretion. Each skater is expected to access a physiotherapist in their home community, preferably in the late spring or early summer. Local access facilitates follow-up, when necessary. However, we realize that many physiotherapists have never worked with speed skaters and are not familiar with the sport. As such, we have prepared an overview of Functional Assessments as they related to our sport. We respect that each individual practitioner is a professional and the included information is meant for reference only.

The following is a diagram of a speed skater's 'basic position':



Front view

Side view



As you can see from the diagram, speed skaters would be more comfortable being tested in two- and one-legged squats in basic position than in 'typical' squat position. Basic position encourages the knees to extend beyond the toes in a side-view and allows the back to be rounded. From a front-view, skaters are expected to have their shoulders, hips and knees aligned vertically. The line between their shoulders should be parallel to the floor, similarly to the line between their hips.

Some common 'trouble spots' seen in speed skaters include:

- Muscle imbalances between quadriceps and hamstrings strength (and related orthopaedic issues in the knee, hips and pelvis)
- Muscle imbalances between anterior and posterior core muscles
- Inflexibility in the lower limbs (particularly the gastroc/soleus complex, lateral hip musculature and hamstrings) and trunk
- Gluteus medius weakness (manifested by allowing the knee to deviate medially in a one-legged squat).

As follow-up to a Functional Assessment, it is suggested that the practitioner will provide the skater with written results of the Assessment and/or written recommendations. Some skaters may benefit from ongoing physiotherapy (or visits to other related professions) to correct specific imbalances or related pathologies. BCSSA funding for ongoing treatment cannot be guaranteed. Many skaters are participating in supervised weight training programs, in addition to off-ice technical dryland programs. The coaches/trainers of these skaters may benefit from a copy of the Functional Assessment results, in order to incorporate functional movement pattern corrections into these trainings sessions.

Orthotic intervention may be indicated for some skaters. Skaters will either be in semi-custom skating boots, or custom skating boots. Custom skating boots can be created to suit the orthotic need. It is not possible to mould the foot bed of a semi-custom skate; however, inserting custom orthotics into the footbed and remoulding the 'upper' skate may be possible. Again, BCSSA funding for orthotic intervention cannot be guaranteed. Skaters being referred to an orthotist are encouraged to speak with knowledgeable equipment reps to determine the options they have in their skating boots.

Thank you for your participation in supporting our developing skaters. If you have any questions, please do not hesitate to contact me.

Christina Acton

Chris Acton
BCSSA Technical Director
Registered Physiotherapist
christina.acton@live.com