

# Athletes

## with cerebral palsy

A disability resource developed by



### WHAT IS CEREBRAL PALSY?

*What is cerebral palsy?*  
"Cerebral palsy" is a broad definition used to describe a group of neurological (brain) disorders that interrupt the communication between the brain and the muscles.

It is a permanent condition that affects an individual's ability to control body movement, posture, reflexes and muscle tone.

Cerebral palsy is caused by damage to the areas of the brain which control movement. Such damage will have occurred before, during or shortly after birth.

It is a condition which is not fatal and it is not contagious. It will not worsen over time, however there is no cure. Cerebral palsy is not an intellectual disability however this may be one of a number of other associated conditions. Other conditions may include hearing impairments, vision impairments, or epilepsy.

The effects of cerebral palsy may be very mild (a slight limp or speech impediment) to severe (a total inability to control movement) and different characteristics are evident in each person.

### THE LITTLE ATHLETICS ENVIRONMENT

*The Little Athletics Environment*  
Of importance in the context of a sporting environment is the fact that athletes with cerebral palsy may require varying degrees of modification to enhance participation. Changing the task, the rules, the equipment, or the environment will help to allow the athlete to achieve success and have fun.

### General tips for officials and age managers:

- General tips for officials*
- Learn as much as you can from the athlete's parents/guardians about the typical characteristics that the athlete exhibits. Find out if there are any associated conditions of which you need to be aware.
  - Allow the parent/guardian to accompany the athlete out onto the field if they see this as appropriate.
  - Ask the athlete what they can and can't do. Don't assume.
  - Ask the athlete if they would like assistance before helping. They may not want or require your help.
  - Be prepared to change your expectations of the athlete's participation. They may not be able to perform skills as well as the other children. Consider modifying the requirements of the skills.
  - Be prepared to adapt activities (rules, equipment, etc) to allow the athlete to participate. This may require some creativity and thinking "outside the box". The extent of the modifications will depend on the athlete's ability. Some athletes may not require any modifications. Others may require extensive modifications to become involved. Modifications can also be made

in view of phasing these out over time.

- Make the athlete and their parents/guardians aware that some of the modifications you may use to allow the athlete to participate at your Centre are permitted at a Centre level only. Ensure they know that if they intend to progress to a higher level of competition, that event rules, equipment and specifications become more formal, and that some events (e.g. hurdles) will not be offered. This will help to avoid later disappointment.
- Take steps to prevent teasing and bullying from the other children in the group. Educate the rest of the group about the typical characteristics of the child's cerebral palsy. Provide guidelines for their behaviour towards the athlete.
- Be flexible, positive, patient and understanding.

## Tips for Participation in Little Athletics Events:

### SPRINTS:

- If required, consider reducing the length of races according to the ability of the athlete.
- "Handicap" races may allow the athlete to compete more fairly. Allow the athlete to start at different times or from different places.
- When moving quickly, an athlete with cerebral palsy may need to use sticks, crutches or a walking frame for balance. On the other hand, balance may actually improve in some athletes with cerebral palsy when they move quickly.\*
- Try to allocate an athlete with balance problems a lane with level ground.
- The athlete may have difficulties with performing the basic starting positions i.e. "On your marks" & "Set". Change your expectations here. Relax the starting rules that require complete steadiness in these positions.

- Be aware that the noise of a starting gun may cause a "startle" reflex in some athletes with cerebral palsy. Consider alternatives.
- Some athletes with cerebral palsy may have to use a wheelchair when participating in races. Modify the event accordingly.
- \* While sticks, crutches or walking frames may be used at a Centre level (assuming that all safety precautions are taken) such devices are not permitted to be used in formal competition e.g. Championships.

### MIDDLE DISTANCE:

- Similar to sprints.
- Be aware that due to inefficient movement patterns, an athlete with cerebral palsy may be very prone to fatigue and therefore may tire quickly.

### RACE WALKING:

- Similar to sprints and middle distance.
- Many athletes with cerebral palsy will have difficulties race walking within the strict definition of the rules. Change your expectations and consider accepting an approximate attempt at the skill.

### HURDLES:

- Many athletes with cerebral palsy will have difficulty with achieving a basic hurdling action and negotiating the standard hurdle heights for their age group. Simply performing a series of movements such as running up to and clearing a barrier may be beyond their ability.
- Some athletes with cerebral palsy will have a poor ability to assess the relationship between themselves and the objects around them e.g. hurdles. They may misjudge distances when attempting to jump or step over a barrier and have difficulties with their body in space.
- Consider using lower and/or modified soft hurdles.
- Replace the hurdles with other objects

e.g. ropes, ribbons, mats, etc, or simply use lines on the ground.

- Decrease the distance of the race. Reduce the number of hurdles. Move the hurdles closer together.
- A partner or buddy may be able to provide some balance assistance as the athlete clears the barrier.
- Consider introducing a "slalom" option where the athlete weaves in and out around the barriers rather than being required to go over them.

## HIGH JUMP:

- An athlete with cerebral palsy may have difficulties with achieving a basic high jump action. They may have difficulties with height and depth perception (i.e. how far away the bar and landing mat are from them) and difficulties with their body in space. They may not be able to coordinate a series of movements such as running at and then clearing a high jump bar.
- Consider modifying the equipment to allow the athlete to jump without a cross bar or with a flexible bar. If available, use low scissors mats as the landing area. (Athlete to land on his/her feet only).
- Consider allowing a standing jump to decrease the complexity of the movement.
- It may be easier for some athletes with cerebral palsy to coordinate a double leg jump than a single leg jump, so consider relaxing the rules to allow this.

## LONG JUMP/TRIPLE JUMP:

- Athletes with cerebral palsy may have the ability to use the same facilities and rules as everyone else.
- Some athletes with cerebral palsy may have difficulties performing the series of movements that require a run up followed by a jump. Consider allowing a standing long jump. If there are concerns about them landing safely in the sand pit, allow them to jump from the edge of the pit, rather than the

sand/mat or board.

- It may be easier for some athletes with cerebral palsy to coordinate a double leg jump than a single leg jump, so consider relaxing the rules to allow this.
- If the athlete has problems with depth perception, consider placing big, bright witches hats next to the long or triple jump take off area to assist the athlete to assess where the take off point is.
- If the athlete is having difficulties jumping from the regulation take off area, consider allowing the athlete to use a 1m square take off zone. Alternatively, measure from where the athlete takes off on the runway (wherever this may be) using a thin layer of sand or powder.
- At a Centre level, generally consider relaxing the rules to allow the athlete to record a measurement.
- In place of an actual long jump, an athlete in a wheelchair can use a single or double arm push for distance on the runway or track. Do this away from the pit. You can measure the distance covered. In place of an actual triple jump, an athlete using a wheelchair can use a single arm push, opposite arm push and double arm push on the runway or track, again away from the pit. Maybe allow a short approach of 2-3 pushes towards the mark where they have to make their first push to serve as a "run up". Ensure that there is no risk of the wheelchair ending up in the sand pit.

## THROWS:

- An athlete with cerebral palsy may have difficulties performing movements that require accuracy e.g. throwing into a sector.
- The athlete may have difficulties performing tasks that require a quick grip release i.e. shot, discus, javelin.
- The athlete may have difficulties performing a series of movements e.g. a run up and throw. Allow and encourage standing throws.
- The athlete may have difficulties with movements that involve a lot of

movement away from the middle of the body e.g. swinging a discus.

- If the athlete has low muscle tone, poor motor skills or difficulties in handling and projecting implements, consider allowing them to use implements of reduced weight or even alternative equipment. e.g. bean bags, softballs or light medicine balls (shot put); hoops or quoits (discus); Turbojavs or cricket balls (javelin)
- Some athletes with balance difficulties may need to support themselves with an object (e.g. a chair) when throwing.
- Some athletes may need to throw from a seated position (i.e. a wheelchair or regular chair). The chair can simply be anchored by an assistant to prevent it from rolling or tipping. The assistant can make sure the chair is secure by holding on tightly to the back of the chair and keeping well away from the implement and throwing arm.
- Some athletes could roll or send a shot into the throwing sector using a ramp or gutter device.
- Consider relaxing the rules to allow the athletes to be involved. Allow actions such as a two-handed chest push for shot or an underarm toss or for discus.

### Characteristics of Cerebral Palsy:

Some characteristics which may occur with considerably varying degrees of severity among people with cerebral palsy include:

- Movement difficulties / poor coordination
- Tenseness of muscles
- Uncontrolled bending in the arms and/or legs
- Strong, exaggerated muscle contractions
- Repetitive muscle contractions
- Unwanted movements
- Short, rigid, jerky movements
- Broad "floppy" movements
- Tremor / shaking / trembling
- Fixed postures / paralysis
- Problems with balance / unsteadiness; may fall frequently

- "Weakness" of muscles
- Limited ranges of joint motion
- Difficulties with speech

Some of the above characteristics may lead a person with cerebral palsy to use walking sticks, crutches, a walking frame or a wheelchair.

### Safety Considerations:

- Always consider the suitability and gradient of the track surface. A bad or sloping track surface may lead to balance difficulties. Also consider the access routes to the various facilities at the venue.
- Always select equipment that is appropriate for the individual. E.g. Softer and/or lighter throwing equipment may have to be used if the athlete lacks strength or coordination.
- If an athlete is using sticks, crutches or a walking frame during an event it is important to ensure that this does not cause a safety issue to other competitors or even the athlete themselves. If they are to be used, ensure appropriate modifications are in place to promote a safe environment for the athlete and others.
- Be aware that an athlete with cerebral palsy may be more prone to fatigue. Watch for signs of over-exertion.
- Some athletes with cerebral palsy may be more vulnerable in hot weather. Some may have difficulties with taking in enough fluids to keep adequately hydrated or protecting themselves against the sun. Stay vigilant and take appropriate precautions.

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- NSW Sport & Recreation
  - NSW Cerebral Palsy Sporting and Recreation Association
- References:
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