Chapter 6

Special Needs

6.1 General

This chapter provides some general information on a number of disabilities, how people with these disabilities may be affected and gives guidance to coaches when providing instruction to people involved in adaptive rowing. This is not intended to be a detailed review of any of these disabilities and is provided more for the purposes of increasing awareness and dispelling some myths. It is recommended that coaches and instructors seek more detailed advice from medical and health care practitioners, where necessary. Also, as explained in chapter 4.2, the coach should interview every individual who wishes to take up rowing to find out directly from them how their particular disability may influence their rowing technique. This vital self-analysis, in conjunction with the coach's own observations of performance, will lead to the most positive results in terms of enjoyment and progress with the sport.

This chapter is set out under the following headings:

6.2 People with Visual Impairments

General Information

Blindness by definition is total loss of sight. However, between normal vision and blindness there are many gradations of visual impairment, referred to as low vision; low indicates that vision is not normal, vision indicates that it is not blindness either.

Classification of visual performance is determined by an eye care practitioner using established medical tests. The level of visual acuity is accurately measured and a score is assigned which determines whether the individual is in the blind or low vision category.

The Canadian National Institute for the Blind (CNIB) uses the term "Registered Blind" to determine eligibility for income tax and other government benefits. Generally speaking, a person is said to be Registered Blind when he or she has a visual acuity in the better eye, after correction, of 20/200 or less. With 20/200 vision a person can see at 20 feet (6 m) what someone with perfect vision can see at 200 feet (60 m). The field of vision is also considered. An individual would be diagnosed as Registered Blind if a loss of side vision results in a reduction of central vision to 20 degrees or less.

The functional limitations of visual impairment are as follows:

The loss of visual acuity in which the sharpness and clarity of near vision is reduced. This type of impairment is the most common. While reading may be difficult and the world may appear unclear, vision for moving about is less restricted.

The loss of sight in the visual field in which there is narrowing of peripheral vision. In this case, the visually impaired person may be able to read but moving around can be hazardous because of the restricted field of vision.

Each type of visual impairment creates a different kind of seeing problem. For example, blind spots can also occur in one or both eyes and vision may fluctuate from day to day. Overall, the extent to which changed vision limits what a person is able to do depends upon:

- the severity of the visual impairment; and
- the amount and type of vision required to do the task at hand.

Misconceptions about What Blind People See

Many misconceptions exist about the different kinds and varying degrees of vision loss. A common misconception is that blind people live in a world of total darkness. This is not commonly the case. More than 80 per cent of people with changed vision retain some ability to see.

Even a person with profound vision loss may be able to determine the outlines of objects, the presence or the absence of light, light projection, and what direction the light may be coming from.

Remember the following tips when you meet a blind or visually impaired person:

- People with vision problems are not deaf. Identify yourself, and address them by name if you can. Tell them when you are leaving. When offering assistance, be direct. Simply ask “May I be of help?"
- Never grab a blind person's arm. Say "Here's my left (or right) arm" and permit him or her to take your arm.
- When guiding a blind or visually impaired person, walk at a normal pace. Hesitate slightly before stepping up or down.
- When giving directions, don't point or say "over there". Use landmarks or identify streets by name.

- If you are not sure how much the person can see, ask!
- Do not hesitate to use words like "see", "look" or "read"; blind or visually impaired people will not be offended by your use of these words.

- It may be beneficial to describe surroundings such as scenery from a car window, a television program, or the layout of a room.

- Never distract or feed a dog guiding a blind or visually impaired person. Speak only and directly to the person.

Ref: *Living with Vision Loss: A Handbook for Caregivers (CNIB website)*

The Canadian National Institute for the Blind

Coach's Corner

To group all blind rowers together is misleading. Someone who is legally blind has no more than 10% vision. Some rowers have limited vision while others have no vision at all, and some rowers have had sight at some time while others have been blind from birth. What does that mean to the coach? The key to coaching blind and visually impaired rowers is to remember that each rower has individual needs. Ask the participant what is relevant to him or her; then adapt the following information to the participant's needs.

Before you start, make sure the environment is clear of obstacles on the ground or overhead. Chairs must be pushed in when not in use; shoes, oars and the assortment of objects often left scattered on the dock should be put away; doors should be completely open or completely closed.

Helpful Tip

Congenitally blind rowers are most concerned with what is within a 0.6 m (2 foot) perimeter.

Every time you meet the rower, initiate the greeting by identifying yourself. When you leave the rower, make sure that he or she is aware that you are leaving and that the person is left in contact with a wall, table or chair, etc. – something from which the rower can orient him or herself.

At the first session, remember to go over the safety code (see Chapter 5). It is of particular importance that you emphasize the buddy system in case of a capsize since the thought of capsizing is particularly frightening for a rower who is visually impaired.

Helpful Tip:

Use descriptive terms like "on the north wall of the boathouse" rather than "over there."

To guide rowers to the water, you should touch your hand to the back of the rower's hand as a signal for the rower to take your arm. The rower will then hold your elbow and walk slightly behind you with his or her shoulders parallel to yours.

When the terrain is about to change, e.g. you will be stepping from grass to gravel, hesitate slightly or alert the person you are guiding. Before going up or down stairs, stop. Give the rower time to hold on to the handrail and find the first step. Then walk up or down the stairs keeping one step ahead of the rower. Come to a full stop at the last step.

Some blind rowers have guide dogs. Generally, once taking your arm, the rower will let go of the dog's harness, but maintain leash control. Remember that a guide dog wearing a harness is on duty and should not be distracted, but if the harness is removed, the dog can be treated like all other dogs. Arrange with the rower how the guide dog should be cared for during the training session.

On the water, you will need to make some of the following adaptations:

1. When rowers begin, they need to know when the oar is feathered and when it is squared. Initially, velcro or other physical marker material can be used on the handle to indicate the squared position. In time, the rower will recognize the difference by the feel of the oar in the oarlock.

2. A sighted person is needed to guide the boat. This person could be a cox'n, another rower, the coach in the attending coach boat or a sculler in a shell just ahead of the blind rower's shell.

3. The rowers need their coaches to provide instruction and feedback by means of oral description rather than by illustration since the rowers cannot see examples of good rowing technique. So the coach must be able to provide

accurate word descriptions to explain the sensations involved in the rowing stroke and how it should feel.

4. Dockside rowing will allow for physical cueing and facilitation of a good stroke and hand work. This will assist in initial learn-to-row sessions and is also a good tool when verbal cueing is not effective on the water. As with all athletes, consent must be obtained before hands-on facilitation is used.

5. Taking the time to analyze how things should feel and sound to the rower and how best to convey that in words will take you a long way when it comes to explaining technique to the crew.

6. Because an unbalanced shell can also be quite frightening for a visually impaired rower, balance exercises should be done regularly – perhaps at the beginning of each practice.

7. Make sure the rowers can hear you from your coach boat over the noise of the motor.

8. Involve the athlete in all crew activities, e.g., carrying the boat, inserting the oars, coach boat set-up, etc. Encourage all the crew members to communicate well and to make full integration possible.

Helpful Tip:

Analogies work well; for example, "sitting up at the catch is like sitting up in a recliner trying to get an object that is just out of reach on the coffee table".

Remember that the wind will carry your voice away.

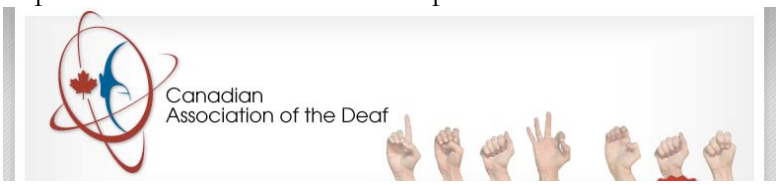
6.3 People with Hearing Impairments

General Information

Statistics have shown that 10% of the Canadian population, over three million Canadians, has some degree of hearing loss, making it the largest disability in Canada.

A person who is hard of hearing is a person who has a hearing loss and whose usual means of communication is spoken language. This definition includes a broad spectrum of hearing loss, including those who are late-deafened and those deaf in childhood and educated orally. This population is represented by The Canadian Hard of Hearing Association (www.chha.ca).

A person who is Deaf is one whose preferred mode of communication is sign language.



This population is represented by the Canadian Association of the Deaf (www.cad.ca).

What is Speechreading?

Speechreading (often called lipreading) is the ability to perceive speech by watching the movements of a speaker's mouth, by observing all other visible clues including facial expressions and gestures, and using the context of the message and the situation. Used to some extent by everyone, for individuals with hearing loss, however slight, the development of speechreading skills can augment communication received through diminished hearing. A hearing aid does not eliminate the need to speechread, but rather requires the user to combine hearing and seeing. Listening and speechreading work together.

What is American Sign Language?

American Sign Language (ASL) is a complete, complex language that employs signs made with the hands and other movements, including facial expressions and postures of the body. It is the first language of many deaf North Americans, and is said to be the fourth most commonly used language in the United States.

Communication Tips…..

for Coaches Instructing Hard of Hearing or Deaf Participants One on One

- **Ask about communication preferences**. Ask the individual what communication method will work best such as assistive listening devices, providing a note-taker, engaging a sign language interpreter.
- **Background noise**. Surrounding noise level can make a big difference. Be aware that an individual with partial hearing may have trouble hearing in certain situations. You may need a quiet place to converse with little or no background noise.
- **Use mime, body language and facial expressions**. These supplement your communication – a lively speaker is always more interesting to watch.
- **Avoid standing in front of a light source.** The glare and shadows created on the face by a bright light or window make it almost impossible for your audience to speechread.
- **Face the person when talking**. Ensure that you do not talk to the chalkboard because hard of hearing students need to see your face in order to be able to speechread.
- **Keep your mouth free from obstacles including hands, untrimmed mustaches and beards.** Also, anything you have in your mouth makes it difficult for the participant to speechread.
- **Avoid pacing up and down**. It is difficult to speechread someone who is roaming.
- **Speak clearly and use a natural voice**. Do not exaggerate your speech or enunciate excessively. Speech that is too slow or too fast is difficult for the hard of hearing participant to understand.
- **Get the hard of hearing participant's attention before speaking**. Do this in a variety of ways so that the participant is not constantly singled out. Call out the person's name. If that is not successful a tap on the shoulder, a wave or another visual signal usually does the trick.
- **A deaf individual may bring an interpreter.** You should view the interpreter as any formally hired interpreter and direct your attention and communication to the Deaf person.
- **Maintain eye contact with Deaf persons**. Eye contact conveys the feeling of direct communication. Even if an interpreter is present continue to speak directly to the deaf person. He or she will turn to the interpreter as needed.

- **Use "I" and "you" when communicating through an interpreter.** Do not direct your communication to the interpreter with such phrases as "tell him" or "does she understand?"

Communication Tips…..

for Coaches Instructing Hard of Hearing or Deaf Participants in a Group

- **Ask about communication preferences**. Ask the group what communication methods will work best such as assistive listening devices, providing a note-taker, engaging a sign language interpreter.

- **Use an ASL/Oral interpreter in a large group setting.** In such a situation, an interpreter makes communication much more effective for participants. The interpreter will be a few words behind the speaker in translating the information. Therefore, allow time for your audience to obtain all the information and ask questions.

- **Provide notes or use a note-taker to record information.** It is difficult for many hard of hearing and Deaf individuals to pay attention to a speaker and take notes simultaneously.

- **Learn to use Assistive Listening Devices (ALDs).** If the individual uses an assistive listening device, familiarize yourself with its operation. Read the instruction booklet and test it out before the meeting or event. (http://www.nad.org/site/pp.asp?c=foINKQMBF&b=180440)

- **Seat the hard of hearing or Deaf person to his/her best advantage.** This usually means a seat near the speaker, so that the person can see the speaker's lips. If possible, use a round table or semi-circular seating so that he/she can see everyone's face. Usually, the person will know best where to sit. Also take into consideration lighting in the area, so that the speaker is illuminated clearly.

- **Provide new vocabulary in advance**. It is difficult, if not impossible, to speechread or read the fingerspelling of unfamiliar vocabulary. If new vocabulary cannot be presented in advance, write the terms on paper, a whiteboard, or overhead projector, if possible. A brief outline or script provided in advance helps the person follow the presentation.

- **Avoid unnecessary pacing and speaking when writing on a whiteboard.** It is difficult to speechread a person in motion, and impossible to speechread someone whose back is turned. Write or draw on the board, then face the group and explain the material. If you use an overhead projector, do not look down at it while speaking.

- **Use visual aids if possible.** Vision is a hard of hearing or Deaf person's primary channel for receiving information. Make full use of visual aids, including films, overhead projectors, diagrams, and whiteboards. Give participants time to read before speaking.

- **Make sure the participant doesn't miss vital information.** Write out any changes in session times, special requirements, additional instructions, etc. Allow extra time when referring to manuals and texts, since participants must look at what has been written and then return their attention to the speaker.

- **Slow down the pace of communication slightly to facilitate understanding.** Many speakers talk too fast. Allow extra time for the person to ask or answer questions.

- **Repeat questions or statements made from the back of the room and point to the person speaking.** Remember, deaf and hard of hearing people are cut off from whatever happens outside their visual area.

- **Allow full participation by the Deaf or hard of hearing person in the discussion.** It is difficult for Deaf people to participate in group discussion because they are not sure when the speakers have finished. Be aware of turn taking and try to give the person a chance to look at the various participants before each speaks.

- **Use hands-on experience whenever possible in training situations**. Like other people, hard of hearing and Deaf people learn quickly by "doing".

- **Repeat or rephrase questions and comments** from all participants for the benefit of those who are hard of hearing. Knowing the topic and changes in the discussion are important to enable the hard of hearing and Deaf participants to have a greater awareness of what is happening in the classroom and to make it easier for them to speechread.

- **Allow the participants more time to respond** to oral instructions and questions. Hearing people have a 0.8 second processing delay whereas hard of hearing individuals have a 3 second delay. This means that the hard of hearing participant is not able to keep up in a class or group situation without your help.

Coach's Corner

Coaching hard of hearing and Deaf rowers can seem a little daunting because of the communication issues, but being patient, flexible and creative will get you a long way.

Consider the following

- asking your local hard of hearing or Deaf resource centre to provide an oral or sign language interpreter or invite a family member or friend to attend with the prospective rower.

- Do not limit your imagination in addressing how they will be able to participate. Try things out – invent your own modifications! Take on new activities as a challenge.

- Think positively and build on successes. Work on skills progressively.

- Take extra time at the beginning of a unit of work. This will be most beneficial as time and energy are saved over the long run. Pre-teach important aspects of the activity and hand out rules and strategies beforehand.

- Give and expect eye contact from participants who are hard of hearing or Deaf, as you would do with other participants.

Helpful Tips

- If an interpreter is not available for the first day, make full use of Assistive Listening devices (available from resource centres) and the resources available at your club, such as a chalkboard or whiteboard.

- You can see how the letters of the manual alphabet are formed by visiting http://www.iidc.indiana.edu/cedir/kidsWeb/amachart.html

- Avoid spending a lot of time explaining rowing technique. This way of teaching is not very effective with hard of hearing and Deaf rowers. It is more effective to provide regular feedback during pauses in a practice.

- Remember that hard of hearing and Deaf people are visual learners so show them what you want them to do rather than attempt to put it into words. Make extensive use of a dockside rower and have an experienced rower demonstrate the rowing stroke.

As always, safety is of utmost importance. Have guidelines ready **to hand out** to each participant, and be sure to take the time to go over them. While preparing handouts and using the chalkboard, remember that drawing pictures and providing demonstrations are more effective than written instructions alone.

While you are learning the rowers' names, ask Deaf rowers who use American Sign Language (ASL). to show you their name sign; using the rower's name sign will save you the task of trying to use the manual alphabet to fingerspell each name.

Now it is time for a boathouse tour and an introduction to rowing-specific equipment. Each piece of equipment may have a sign which you can learn by asking an interpreter from the local resource centre. Briefly introduce the equipment, its proper handling and care, and then go to the ergs.

Draw everyone's attention to the person (model) demonstrating the stroke on the erg. The model should begin by performing the erg motion at a training rate, then breaking it down piece by piece. Then have the model take up the rate and finish off with the full motion and the full picture.

Have each rower spend time on the erg until you are satisfied with his or her technique and are ready to move on to the next step. When working one on one, sit beside the rower and show him or her again how to move.

Getting on the Water

Have the rowers watch you as you demonstrate in front of the boat they will be using. Put your hands on the boat exactly how you want the rowers to, then step-by-step mime the lifting and carrying of the boat from *hands on* to *split*. Then have the rowers repeat the action. Replace each call you would normally yell with a calculated action, pausing after each movement. A dry

run, walking through the trip to the water indicating where the rowers will turn, change position and put the boat on the water, can be very helpful.

Now it is time for the real thing. Once the rowers split and have the boat on their shoulders, tap your hand on the side of the boat to indicate moving forward. Each change of position or change of direction can be communicated by tapping on the boat. As you would normally, show the rowers how to put the oars in the oarlocks, indicating how to tell which oar belongs in which oarlock.

When the boat is ready, demonstrate getting in and out of the boat safely. Remember to take the time to demonstrate adjusting the foot stretchers and positioning the hands on the oar. Finally, after demonstrating the motions of sculling or sweeping, push off.

On the Water

By holding your arms out with palms up, you are giving the sign for feathering and keeping the oars feathered above the water. By turning your palms at right angles with arms out, you are signaling the rowers to square. By alternating these signs, you are showing the process of feathering and squaring. This is a very clear way of showing the rowers what to do with their oars.

Demonstrating the Rowing Stroke

Pretend that the arm is the oar and the hand is the blade as follows:

- move the arm forward with the palm at right angles to simulate the drive;
- raise the arm and hand vertically to simulate coming out vertically on the square at the finish;
- turn the palm face up as the arm begins to move backward to simulate feathering; and
- roll the hand back to vertical as the arm approaches the catch position to simulate squaring the blade on the way to the catch.

Helpful Hint

Put away your blow horns and megaphones. Instead, wait for an appropriate time to stop the crew and give them instructions. Make lots of use of visual demonstrations.

When introducing a new technical focus or instruction of any kind, it is best to do so when the rowers have stopped. Have them stop first and then go to instructing. Get ready to use the sign for STOP a lot.

Another modification that will help you direct the crew is to have the communicating come from stroke seat. Simply by nodding his or her head to port or starboard the stroke can indicate direction. Both bow and stroke are responsible for making sure they do not hit anything. By stopping and banging on the side of the boat, they can make emergency communication.

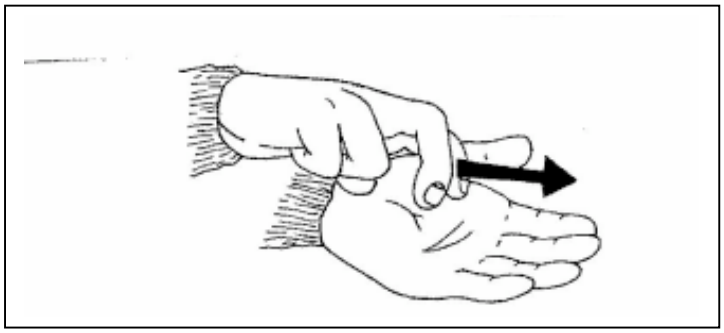
Race plans are difficult for a cox'n to communicate on the water so do it on land before the race. Consider having each rower tape a race plan to his or her back for the person behind and review visual cues in advance.

Getting the Crew's Attention

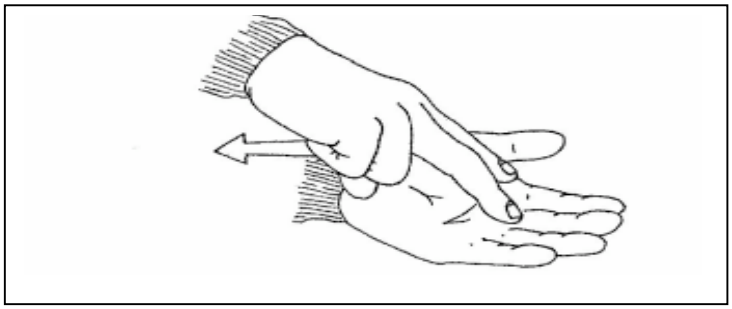
Prior to getting on the water, emphasize the importance of paying attention. When applicable, tap the rower on the shoulder or have someone else who is closer in proximity tap the person on the shoulder. Once you are on the water, the best way to get the rowers' attention is to wave your hands. Enter into discussion with the athletes regarding what will work best for them and make sure all crew members are aware of these strategies before going out on the water.

Some Signs…

The following signs have been specifically developed for rowing.



RECOVERY– Start with straight fingers and move your hand forward while bending your fingers.



DRIVE – Start with bent fingers (like bent knees) and mimic the drive phase of the stroke.

References

- Active Living Alliance for Canadians with a Disability: Active Living Through Physical Education: Maximizing Opportunities for Students Who Are Deaf and Hard of Hearing (www.ala.ca/Content/Home.asp?langid=1)
- Canadian Association of the Deaf (www.cad.ca)
- Canadian Hard of Hearing Association Hearing Awareness Project (www.chha.ca/chha/projects-atoz.php)
- Kings County, Office of Civil Rights: Tips for Communicating with Deaf and Hard of Hearing People (www.metrokc.gov/dias/ocre/deaftips.htm)

- National Association of the Deaf, Benefits of Assistive Listening Systems, (www.nad.org/site/pp.asp?c=foINKQMBF&b=180440)
- Rowing Canada Aviron: Coaching Deaf Rowers. A Coaching Manual by Jill Yates (www.rowingcanada.org/member_services/tools_clubs/)
- ThinkQuest, ASL Dictionary by Subject (http://library.thinkquest.org/10202/asl_dictionary_text.html)
- GeDIR's Disability Awareness Sight for Youth, American Manual Alphabet Chart, (www.iidc.indiana.edu/cedir/kidsWeb/amachart.html)

6.4 People with Cerebral Palsy

General Information

Cerebral Palsy (CP) is a broad term used to describe a group of chronic disorders affecting body movement and muscle coordination. It appears in the first few years of life and generally does not worsen over time; i.e., it is non-progressive.

What does Cerebral Palsy mean?

"Cerebral" means of the brain (referring to the two hemispheres of the brain)
"Palsy" means lack of muscle control/body movement

It is important to note that these disorders are not caused by problems in the muscles or nerves themselves. Instead, faulty development or damage to motor areas in the brain during pregnancy and the first few years of life disrupts the brain's ability to control movement and posture. The degree of disability may range from very minimal to extremely severe. The numerous manifestations of CP may be categorized based on the types of presenting symptoms.

Spasticity

Damage to the cerebrum causes a degree of loss of control of certain affected voluntary motor actions, leading to increased muscle tone and may develop into certain muscles becoming permanently shortened and contracted. It often results in jerky movements and can lead to postural problems, with those affected usually having difficulty moving from one position to another and often cannot easily hold or release objects.

This particular impairment may be seen as;

- spastic diplegia: - both legs affected causing difficulty in walking;

- ❖ spastic hemiplegia: - one side of the body affected, often the arm being more severely affected than the leg;
- ❖ spastic quadriplegia: - the most severe form in which all four limbs and trunk are affected often along with the muscles controlling the mouth and tongue.

Athetosis

The control centre for purposeful movement, the basal ganglia, is affected. (Note: ganglia or ganglions are masses of nerve cells). It is characterized by constant, involuntary, slow and writhing movements that are uncontrollable, unpredictable and purposeless (mostly occurring in the hands and feet). Abnormal movements are exaggerated by voluntary movement, postural adjustments and changes in motion or speech. It may be accompanied by speech impediment, poor oral motor control, and possibly impaired respiratory control. There are many different presentations of this classification of CP involving varied muscle groups and tone of muscles.

Ataxia

This is caused by damage to the cerebellum, which is responsible for the coordination of muscle functions affecting balance and depth perception. It results in uncoordinated movements, awkward gait, lack of hand coordination, possible tremors and low postural tone. The bilateral distribution more commonly affects trunk and legs than arms and hands.

Hypotonia (flaccio cerebral palsy)

This is often a transient stage in evolution of athetosis or spasticity. It is characterized by decreased muscle tone, real or apparent weakness and increased range of movement.

Mixed Types

Classification used when characteristics described are from various presentations. It is most commonly used to indicate spastic diplegia mixed with athetosis.

Other presenting symptoms:

Rigidity

Is a result of damage to motor cortex and basal ganglia. It could also cause very tense and stiff muscles; therefore, movement is quite difficult.

Tremor

This results from damage to the cerebellum and/or basal ganglia. The least frequent manifestation is characterized by uncontrolled, involuntary rhythmic motion, the most prevalent when attempting to control movement.

Due to the numerous physical manifestations of CP it is difficult to group athletes for fair competition. As a result, a classification system (8 classes) is used to assess CP athletes individually in their respective sports. Within each class, every person should have similar functional abilities but could have very different physical characteristics. The classification system equates the functional ability of the CP athlete to the sport, enabling fair competition.

Cerebral Palsy is:

- **A condition, not a disease**
- **Not hereditary**
- **Not contagious**
- **Non-progressive**
- **A life long condition**
- **Not life threatening**
- **People with CP have a normal life expectancy**
- **CP affects 2 to 3 out of every 1000 people**

Coach's Corner

Athletes with CP will cover a wide range of abilities. Depending on the degree of the disability and the resulting level of mobility and muscle coordination, athletes with CP may row with arms only, with trunk and arms or with the full rowing stroke. It is therefore essential that the coach obtain a complete understanding of what the athlete can and cannot do in

terms of range of motion. A frank and open discussion should take place with the athlete about other sporting and recreational activities that they have been involved in. In the case of a younger athlete additional information may also be obtained from a parent or caregiver. An early assessment should establish whether the athlete will row with a sliding or fixed seat. This will allow a determination as to whether an introduction to rowing technique should be with a conventional rowing ergometer or one fitted with a fixed seat. The coach should look at the athlete's abilities and coach to these by providing drills and targets that are appropriate. Rowers with CP who row arms only may require strapping at various heights on their trunk to provide anterior, posterior or lateral stability throughout the stroke. This strapping may have some elastic give, and may consist of neoprene wraps or firm straps depending on the amount of support required. As the athlete progresses in rowing, the seating and postural support provided should be re-examined to ensure it is assisting the athlete to achieve optimal stroke mechanics.

Athletes with limited ability to shift weight during prolonged sitting leaves the rower susceptible to pressure sores in areas of high pressure and decreased cushioning, i.e. "sit bones" and areas of boney protuberance. Proper cushioning will be required and the athlete should be advised to use his or her current cushion and perform a skin assessment after the use of any new seating surface. Ensure that all strapping of the trunk, legs and hands on the oars, will allow for quick release in the event of an emergency. The athlete should practice the release procedure to ensure that it is effective and quick. A planned and appropriate safety protocol should be in place when athletes with CP are training. This protocol should be developed in consultation with the athletes and should consider the type of rowing shell being used, the athletes' swimming abilities, range of mobility and experience level with water sports. The precise procedures to be followed in the event of capsize or other difficulty being experienced should be reviewed and agreed in advance of the training session.

Some athletes with CP may have speech difficulties and sufficient time should be taken to ensure that the athlete has fully understood specific instructions. If the athlete's comments and responses are unclear do not assume that they are unimportant. Instead ask them to

repeat the comment or question and if necessary ask for assistance from a parent or caregiver.

Technique development should be undertaken progressively and once the coach has reached a good understanding of the athlete's goals and objectives, he or she should prepare a training plan that focuses on helping the athlete improve their fitness and skill levels. This will involve a progressive approach to the introduction of drills as well as the breaking down of complex drills into more simple components. Share these plans with the athlete, obtain commitment to training goals and provide support. Always maintain an open mind, be prepared to be amazed, provide positive feedback and celebrate successes with the athlete.

Classification of Athletes with CP

Classification is done by a team consisting of medical professionals (i.e. physical therapist) and sport technical experts, and is repeated every two years to ensure that an athlete is competing within his or her ability range. These classifications are derived from wheelchair sports so some modification may be needed for rowing. Athletes with CP are divided into eight classes ranging from CP1 to CP8, with CP8 representing those athletes with minimal disability.

Class	Rowing Classification	Brief Description
CP1	A	Athletes experience movement difficulties that affect the entire body. Typically the athlete cannot propel a manual wheelchair, often has difficulty altering sitting position, often uses the trunk in head and arm movements, has difficulty with grasp and release motions, and has no functional use of the legs.
CP2	A	Athletes have movement difficulties that affect the entire body. Typically the athlete has trunk control that may involve limb movement, has difficulty with consistent isolated shoulder movements, is able to spread the fingers and thumbs - but not quickly, is able to hand or foot push a manual wheelchair, and may be able to stand or walk but is very unstable.

CP3	A	Athletes are wheelchair users and have one affected upper limb. Typically the athlete has a limited range of shoulder movement and a marked difference in the function of the arms, is able to propel a manual wheelchair - often with the heel of the hand and straight fingers, has poor balance when sitting unsupported, raises the hips and straightens the knees during vigorous arm use, and can stand or walk if supported with crutches or other device.
CP4	A or TA	Athletes are wheelchair users whose arms are not affected. Typically the athlete has good sitting balance and body movement, has arms and hands that are unaffected, is capable of a strong controlled wheelchair push, may walk with crutches or sticks, and uses a wheelchair or throwing frame for sports.
CP5	TA	Athletes are ambulatory with both legs affected. Typically the athlete has balance when standing, has noticeable hip and shoulder rotation when walking, and has inwardly bent knees and sometimes flat feet. If standing balance is poor, the athlete may elect to compete as a Class 4 competitor from a sitting position.
CP6	TA or LTA	Athletes are ambulatory with all four limbs affected. Typically the athlete has an overall lack of control during movement, is able to walk unaided but has difficulty with balance, has a rolling head movement during running, has difficulty hopping and skipping, and is unable to sustain a clapping rhythm.
CP7	LTA	Athletes are ambulatory with the arm and leg on the same side affected. Typically the athlete is unable to hop on the affected leg, runs flat-footed with the affected leg while the arm swings across the chest, often tilts the head to one side during exertion, and has a normal throwing action but with increased body movement.
CP8	LTA	Athletes have minimal disability. Typically the athlete will have good balance and only slight coordination problems, and the disability is more obvious during exertion. The disability must be evident without having to resort to medical proof.

Ref: http://www.cpsport.org

The above information was obtained from the

Canadian Cerebral Palsy Sports Association

6.5 People with Multiple Sclerosis

General Information

Multiple sclerosis (MS) is an unpredictable, at times disabling disease of the central nervous system - the brain and spinal cord. The disease attacks the protective myelin covering of the central nervous system, causing inflammation and often destroying the myelin in patches. The severity of MS, progression and specific symptoms cannot be predicted at the time of diagnosis. While MS can cause disabilities, it is important to remember that for most people it will be many years before they may require even a cane on a regular basis.

We do not know what causes MS. Most researchers believe that MS is an autoimmune disease. For reasons that are still unclear, the body's immune system malfunctions and starts attacking the myelin which protects the central nervous system. There is some evidence that MS may be triggered by a common virus, and that certain people are more susceptible to developing MS because of genetic factors. There is no evidence, however, that MS is a directly inherited disease. A number of genes are probably involved in whatever makes some people more susceptible to MS.

Multiple sclerosis most often strikes young adults - women and men between the ages of 20 to 40 - but cases of MS have been diagnosed in childhood, and people in their fifties have been diagnosed as well. Women develop MS almost twice as often as men.

MS is not usually a fatal disease and most people who have MS can be expected to live a normal or near normal life span, thanks to improvements in the treatment of symptoms and in other therapies.

Is MS Contagious?

No, MS is not contagious, nor is it directly inherited although research studies now underway are suggesting that genetic factors make certain people more susceptible to developing MS.

Some common MS symptoms

While MS symptoms are unpredictable and vary greatly from person to person, they may include those listed below. Remember, not all people with MS will experience all symptoms and often the symptoms will improve during periods of remission.

Visual disturbances - These may include blurring of vision, double vision (diplopia), optic neuritis (inflammation of the optic nerve), involuntary rapid eye movement and very rarely, total loss of sight.

Extreme fatigue - This is a debilitating kind of fatigue that comes on suddenly or is out of proportion to the activity. It is one of the most common and troubling MS symptoms.

Balance and coordination problems - These may include loss of balance, tremor, unstable walking (ataxia), dizziness (vertigo), clumsiness of a limb and lack of coordination.

Stiffness of muscles (spasticity) - Altered muscle tone can produce spasticity or muscle stiffness, which can affect mobility. Sometimes the muscles go into spasm which can be painful.

Weakness - The muscles of the legs can feel weak, which in turn affects walking.

Altered sensation - These may include tingling, numbness (paraethesia) or a burning feeling in one particular area of the body. Facial pain may occur because of trigeminal neuralgia (also known as tic douloureux), which involves a malfunction of one of the major facial nerves.

Sensitivity to heat - Many people with MS find they become sensitive to heat and their symptoms worsen while in a hot environment.

Speech and swallowing problems - These may include slowing of speech, slurring of words, changes in rhythm of speech and difficulty in swallowing (dysphagia).

Bladder and bowel problems - Bladder problems may include the need to urinate frequently or urgently, incomplete emptying of the bladder or emptying at inappropriate times. Bowel problems may include constipation and, infrequently, loss of bowel control.

Short-term memory and cognitive problems -These may include problems with short-term memory, concentration, judgment or reasoning.

The above information is from the MS Society of Canada

Coach's Corner

Depending on the presenting symptoms, people with MS who row will be affected in a number of different ways. Discussion with the individual to explore any specific limitations is essential. As noted above extreme fatigue is one common symptom of MS, so generally short outings are preferred with lots of rest stops included. People with MS are also affected adversely by hot weather so it may be necessary to cancel practices on hot summer days. For those who use wheelchairs or mobility scooters, assistive devices may be needed to help them getting into and out of the rowing shell. Some rowers with MS will be able to row LTA while others will be in the TA category. They will frequently require back support and abdomen strapping.

People with MS will generally gain most from rowing in a double with an able-bodied rower. This arrangement provides the support and assistance in the event of an emergency.

6.6 People with Amputations

General Information

The primary cause of amputations in North America is vascular and circulatory disease, with diabetes being the cause of half of those amputations. People over the age of 50 make up 80% of those amputations. Other causes of amputation include accidents, bone cancer and congenital deformities. Ironically, improvements in the early detection and treatment of bone cancer will likely increase the number of amputations over the next decade.

There are an estimated 3 million amputees in North America. There are an estimated 3,000 new amputees each week, and 170,000 new amputees a year, in North America.

Other facts about people with amputations

Males make up 77% of the estimated number of amputees population.

50 % of the estimated amputees are between the ages of 21 and 65.

Leg amputations make up 90% of the total.

Based on 2002 survey information obtained from the

Alberta Amputee Sport and Recreation Association

Coach's Corner

For rowers with an amputation a consideration may be whether or not to row with a prosthetic. Rowers with a single leg amputation can row with full slide quite effectively with one leg. This decision will vary by individual based on:

- Their level of comfort with or without their prosthetic in sport in public places
- The ease of putting on or taking off the prosthetic
- The impact of the prosthetic limb in the rowing stroke. For example the use of an upper extremity prosthetic to maintain blade level but with limitations on the ability to pull during the drive.
- The impact of the prosthetic limb in positioning or balance within the boat, i.e. a lower extremity prosthesis may assist an individual in maintaining a more balanced position of the pelvis on the seat, although unable to be effective during the drive.

An athlete who rows with a prosthesis may require modifications to the prosthesis to accommodate the demands of the rowing stroke. For example, a prosthetic leg may require an enhanced ankle joint to allow the full flexure at the catch. With a hand or arm prosthesis, the decision needs to be made whether the athlete should row on the port or starboard side. With the prosthesis as the inside hand, modifications to the prosthesis or the oar handle may be needed to allow feathering of the oar, or alternatively the outside hand will need to both feather and pull. This latter option may lead to wrist strain and will likely impair the effectiveness of the stroke. With the prosthesis as the outside hand,

significant tensional force will be imposed on the prosthesis, also requiring some enhancements.

Athletes who choose to row with a prosthetic limb will need to inspect their skin to assess its reaction to increased activity and the repetitive friction and increased sweating that will occur with rowing. Numerous products are available to assist athletes with an amputation to meet their activity level and excel in sport performance. Specialists in the design and construction of prosthetic limbs should be consulted for advice where necessary.

6.7 People with Spinal Cord Injury

General Information

Spinal cord injuries (SCI) can be a result of a trauma (a car accident, a diving accident, a gunshot wound or a workplace accident) or disease (polio, spina bifida, Friedreich's Ataxia, etc.). The majority of the trauma incidents happen to people in the 15 to 30 year old age bracket. It is one of the most life-altering injuries that anyone can suffer. The spinal cord does not have to be severed in order for a loss of functioning to occur. In fact, in most people with SCI, the spinal cord is intact, but the damage to it results in loss of function.

The spinal cord is the major bundle of nerves that carries nerve impulses to and from the brain to the rest of the body. The brain and the spinal cord constitute the Central Nervous System.

The spinal cord is surrounded by rings of bone called vertebrae. These bones constitute the spinal column (back bone). In general, the higher in the spinal column the injury occurs, the more dysfunction a person will experience. The vertebrae are named according to their location. From the top down:

- the seven vertebrae in the neck are called the Cervical Vertebrae, the top vertebra being called C-1, the next C-2, etc. Cervical SCIs usually cause a degree of loss of function in the arms, trunk and legs, resulting in quadriplegia.

- the twelve vertebrae in the chest are called the Thoracic Vertebrae. The first thoracic vertebra, T-1, is the vertebra where the top rib attaches. Injuries in the thoracic region usually affect the chest, trunk and the legs and result in paraplegia.

- the vertebrae in the lower back - between the thoracic vertebrae, where the ribs attach, and the pelvis (hip bone), are the Lumbar Vertebrae. The vertebrae that run from the pelvis to the end of the spinal column are the Sacral vertebrae. Injuries to the five Lumbar vertebra (L-1 through L-5) and to the five Sacral Vertebra (S-1 through S-5) generally result in some loss of functioning in the hips and legs.

The location of the injury is very helpful in predicting what parts of the body might be affected by paralysis and loss of function. Remember that in incomplete injuries there will be some variation in these prognoses. Cervical (neck) injuries usually result in quadriplegia. Injuries above the C-4 level may require a ventilator for the person to breathe. C-5 injuries often result in shoulder and biceps control, but no control at the wrist or hand. C-6 injuries generally yield wrist control, but no hand function. Individuals with C-7 and T-1 injuries can straighten their arms but still may have dexterity problems with the hand and fingers.

Injuries at the thoracic level and below result in paraplegia, with the hands not affected. At T-1 to T-8 there is most often control of the hands, but poor trunk control as the result of lack of abdominal muscle control. Lower T-injuries (T-9 to T-12) allow good trunk control and good abdominal muscle control. Sitting balance is very good. Lumbar and Sacral injuries yield decreasing control of the hip flexors and legs.

The constraints to exercise for spinal cord injured athletes are dependent on the location of the injury, since the muscle mass below the injury is unable to contribute to active

movement. Spinal cord injured athletes with a high injury (in the cervical or high thoracic vertebrae) will have fewer muscles and less muscle control. They may have steel rods surgically implanted in their back for spinal stability post trauma; because of this and because of restricted use of the trunk muscles, twisting in the chair (torsional movements) may be contraindicated. These athletes also may exhibit spasticity, uncontrollable muscle contractions. These sometime become more pronounced during exercise.

Spinal cord injury causes several changes that are not just structural; spinal cord injured athletes with complete injury above T-6, not being able to involve the larger, lower-extremity muscles in the exercise, may not be able to reach the traditional target heart rate level that we have all been taught is needed for central cardiovascular training. However, exercising at an elevated heart rate (albeit less than the traditional range) can produce beneficial training effects, including increase in aerobic capacity, increased exercise tolerance, increased muscle endurance, decreased risk of cardiovascular disease, decreased fat, and increased lean body mass.

Points to remember

Several physical aspects of athletes with spinal cord injury are of concern over the entire range of levels of injury. Many will have bowel and bladder function impairment. Also, the natural thermoregulation functions may be impaired, increasing the possibility of overheating during exercise, so pay attention to the ambient temperature, the clothing that the athletes are wearing and the need for hydration. Because rowing is a seated activity, athletes must remember to make sure that they have an appropriate seat and that no part of their body is rubbing against any part of the boat or seat, since they will not feel friction from movement that could cause sores.

Ref: National Spinal Cord Injury Association Resource Center

Lifting and Transferring

Being carried is for many people an uncomfortable experience, both physically and in terms of dignity and independence. Most people prefer to

be lifted only as a last resort. There may be times, however, when a person with a mobility impairment may choose to tackle environmental barriers that require lifting or transferring.

A proper lift and transfer should be a comfortable and safe experience, for the lifter as well as the individual being lifted. Everyone involved must work together to ensure that all transfers will be comfortable and safe. The person being lifted should direct the lift, as he or she knows what will work best. The people lifting need to have a good understanding of safe lifting techniques to protect their own bodies, as well as specific instructions from the individual being lifted.

Coach's Corner

Athletes with a spinal cord injury who are classified as trunk and arms or arms only (TA or A), will require an assessment of the seating used to ensure it meets their postural support requirements. Arms only rowers will likely require strapping at various heights on their trunk to provide anterior, posterior or lateral stability throughout the stroke. This strapping may have some elastic give, and may consist of neoprene wraps or firm straps depending on the amount of support required. As the athlete progresses in rowing, the seating and postural support provided should be re-examined to ensure it is assisting the athlete to achieve optimal stroke mechanics.

Strapping at the pelvis will also be required to provide stability as well as possible strapping of the lower extremities especially if spasticity is an issue for the athlete.

Athletes with any form of neurological impairment are likely to have partial or complete loss of sensation. This coupled with the decreased ability to shift weight during prolonged sitting leaves the rower susceptible to pressure sores in areas of high pressure and decreased cushioning, i.e. "sit bones" and areas of boney protuberance. Proper cushioning will be required and the athlete should be advised to use his or her current cushion and perform a skin assessment after the use of any new seating surface.

A quick assessment of the athlete's sitting position in the boat should also be performed to ensure that there are not any areas of friction or concentrated pressure in areas where the athlete will not be able to feel the irritation, resulting in skin breakdown.

Ensure that all strapping of the trunk, legs and hands on the oars, will allow for quick release in the event of an emergency. The athlete should practice the release procedure to ensure that it is effective and quick. A planned and appropriate safety protocol should be place when athletes with SCI are training. This protocol should be developed in consultation with the athletes and should consider the type of rowing shell being used, the athletes' swimming abilities, range of mobility and experience level with water sports. The precise procedures to be followed in the event of capsize or other difficulty being experienced should be reviewed and agreed in advance of the training session.

6.8 People with Intellectual Disabilities

General Information

An intellectual disability is an impaired ability to learn. It sometimes causes difficulty in coping with the demands of daily life. It is a condition which is usually present from birth, and it is not the same as mental or psychiatric illness.

Intellectual disability, or mental handicap, was at one time called mental retardation. We have been informed by people who have an intellectual disability that they resent being labeled by this term. For this reason, we always refer to people for who they are, rather then by what they are (i.e. the "disabled"). Preferred terms are: people who have an intellectual disability, people who have a mental handicap, and people who have a developmental disability.

There are 899,000 Canadians who have an intellectual disability. Although people with intellectual disabilities are capable of learning in regular schools, working at real jobs, and contributing to our communities, they are often excluded simply because of their disability. People with intellectual disabilities want to participate in all of these activities, they want to contribute to society and they want to lead normal lives in the community.

Canadian Association for Community Living

Opportunity to participate effectively....

Even the term "intellectually disabled" is a mere label; it doesn't come anywhere close to capturing the person behind the word. How he or she, like everyone, has ambitions, dreams, hobbies, the need to work and time for leisure and fun and relaxation, and experience the frustrations, anxieties, successes and failures that we all have. It's called the human condition, and the innate need to live a meaningful life.

It is our duty to be inclusive, to help "all persons live in a state of dignity," as Community Living eloquently states, and "share in the elements of living in the community, and have the opportunity to participate effectively."

August, 2004, John Dunford, Managing Editor, The Independent

Some Facts....

- Just over 1/3 of young people with intellectual disabilities who live with their families were enrolled in school in the 1990s.
- Fewer than 40% of these students were fully included in regular classes (compared with 85% of other students with disabilities).
- Almost 2/3 of young people with intellectual disabilities need assistance with everyday activities (compared with just over 15% of other young people with disabilities).
- Almost 50% of children, youth, and adults with intellectual disabilities want to be more involved in community activities, but can't get the community support they need.
- People with intellectual disabilities are four times more likely to be excluded from community activities than other people with disabilities, just because they cannot get people to assist them.
- They are more likely than any other group to be unemployed or out of the labour market.
- Family members are the only, or the main source of support for almost 70% of people with intellectual disabilities. The figure is almost 80% once children become adult age.
- 50% of family members providing support indicate they are not getting the back-up assistance and in-home support they need from their communities.

Coach's Corner

The following information is taken from the Special Olympics website (www.specialolympics.org) which is an excellent resource.

General guidance on coaching those with intellectual disabilities is set out below, followed at the end by more specific guidance in two tables setting out::

- Behaviour characteristics of those with an Intellectual Disability and Other Closely Related Developmental Disabilities
- Athlete Behaviour Characteristics and Strategies to Improve Learning.

How does an individual with an intellectual disability learn sport skills and rules, and what can a coach do to facilitate learning?

People with an intellectual disability learn just like everyone else. They use different strategies and strengths to help them understand. Some learn best through seeing things, others through hearing things. Some need to feel what it is like to do something before they can learn it. The only difference for people with an intellectual disability is that they will most likely be slower to learn it than their peers.

Repetition is a proven strategy for learning that is effective with everyone. It can also be effective with athletes with disabilities. Another strategy is to "tell them, show them, help them and remind them."

Bottom line: No one strategy works for everyone. Be creative and have fun. That is the best environment for learning to happen.

We all learn faster when we want to. It is important to help all athletes see how much fun they will have once they master what you are teaching. Factors that may affect motivation include the athletes' reasons for coming to practice. Is it because they asked to be there? Did someone else sign them up? Do they feel comfortable that they know this sport? Or is it a new experience for them? While it may be helpful to know the answers to all those questions, your task as a coach remains the same: No matter

what the motivation was for coming to the first practice, make the reason for coming to the second practice the fun and sense of success they felt at the first one.

Three important things to remember are safety, dignity and expectations.

- Safety is dealt with by talking to parents, guardians and athletes themselves about what you should be aware of. You are not expected to be a physician, just use common sense. Be sure to read the required Participation Information Form (see chapter 3) so you will know if there are restrictions on activity.

- Dignity is an easy thing to deny or to give. The best gauge of ability comes from talking to your athletes about what they like, how they feel during a workout or what they want to accomplish in this sport. When you talk to athletes, labels like Down syndrome, Fetal Alcohol Syndrome (FAS), or "seizure prone" become less necessary.

- Expectations come from many sources. You will set expectations for your athletes. They will set them for themselves. Their families may have expectations about what they can or cannot do. As a coach, you need to set expectations that will challenge and push your athletes, then design workouts to help them meet those expectations.

Offer a range of activities/events for all ability levels

When most people think of coaching athletes with an intellectual disability, they assume that all athletes will have the same, lower ability level. This is not the case. While some athletes will have very limited exposure to a sport others may have been playing for years, perhaps even in integrated sports programs in the community. Setting up practices will be much easier once you know the ability of each athlete. Then you can arrange crews and build workouts to meet everyone's needs.

Examples of dealing with different ability levels

- Ask more experienced athletes to help teach skills to new athletes. Practicing in recreational doubles is ideal for this purpose.

- Split the athletes into two groups: an independent group and one that you work more closely with. One option is to spend more time with the athlete on a

dockside trainer. However, try to make it interesting by devising exercizes that are fun to do and provide some variety.

- Set up a series of drills during practice, but set individual goals depending on the skill level of each athlete. Practice in doubles works best since there is more opportunity to customize the workouts. Goals for some might be 10 continuous strokes with squaring and feathering while for other it might be a rowing on the square drill.

Involve families and/or other support groups

Anything worth doing is worth getting help in doing. Families can be particularly supportive and helpful when working with athletes with intellectual disabilities as they have first hand knowledge of limitations and how to address them. Some may only want to be involved by coming to regattas and cheering while others may seek more active roles as assistants or coaches themselves. All of these are acceptable and a part of the "team experience."

The more effectively you find ways to include families in the team experience, the easier the season will become. Families are like athletes; each is unique. You shouldn't try to make assumptions about their potential for support based on anything but personal experience with each.

Behaviour Characteristics of Those with an Intellectual Disability and Other Closely Related Developmental Disabilities

At times, you may see or hear the following terms to describe something about an athlete. These terms describe traits, or conditions, but they do not describe the person. There are very few traits or characteristics that are true for all people with any label.

Disability	Characteristics	Best 3 Strategies to Affect Learning
Intellectual Disability (General)	❖ Information processing and learning occurs at a slower rate; attention span is short. ❖ This was noticed for the first time before the person turned 18.	1. Train for short periods of time 2. Provide repetition (key to athlete gaining new skill development) 3. When training, think of athletes as lateral thinkers
Autism	❖ Communication difficulties ❖ "In their own world," but frequently aware and bright	1. Craves established routines 2. Signal transition, change, loud noises, etc. 3. Provide highly structured and least distracting

		environment
Cerebral Palsy	❖ Poor muscle control ❖ Does not necessarily indicate intellectual disability ❖ Difficulty with speech articulation	1. Work on strengthening muscles 2. Teach skills in isolation to help build muscles 3. Develop gross motor skills
Down Syndrome	❖ Anywhere from moderate to significant intellectual disability ❖ Genetic cause ❖ Make sure you know about atlanto-axial instability before you do a drill that puts pressure on the neck or head. About 10 % of people with Down Syndrome have weakened vertebrae.	1. Set clear expectations and limits 2. Use eye contact when talking; work one-on-one to demonstrate new skill (gain full attention) 3. Use repetition and review
Fetal Alcohol Syndrome	❖ Tends to have attention and memory deficits. ❖ Finds it difficult to stay on task. ❖ Has difficulty in remembering what was previously learned	1. Create routine 2. Set rules and limits 3. Reinforce acceptable behaviours
Fragile X	❖ Elongated face ❖ Prone to seizures ❖ Coordination difficulties	1. Provide structured and predictable activities 2. Provide minimal auditory and visual stimulations 3. Establish routine and structure
Prader Willi	❖ Sleep disturbance ❖ Compulsive eating ❖ Skin picking	1. Signal and practice transition 2. Set firm rules and expectations 3. Establish routine and structure

Athlete Behaviour Characteristics and Strategies to Improve Learning

The goal of this chart is to provide coaches with information about athletes with different functional and learning characteristics (not labels) so that coaches can teach and coach them more effectively. When an athlete exhibits what is generally perceived as inappropriate behaviours, those behaviours may simply be a reflection or part of the person. Inappropriate behaviours that will not be tolerated include defiance, acting out or silliness.

When possible, talk with parents, providers, teachers, former coaches, etc., about an athlete's characteristics and the successful strategies used to effect learning. Use the characteristics as a checklist. Ensure that one or more of the strategies opposite the respective characteristics are employed in each practice.

Athlete Characteristics	Strategies to Improve Learning
Learning occurs at a slower rate	❖ Provide structure ❖ Provide repetition and review ❖ Break down skills into smaller parts
Short attention span	❖ Train for short periods of time ❖ Provide repetition and review (key to gaining new skill) ❖ Work one-on-one (gain full attention)
Failure to finish	❖ Provide reward via praise or the right to move on once a task is completed
Seems easily distracted	❖ Keep them busy using a variety of short tasks ❖ Be quick with praise and give it often
Appears not to listen	❖ Touch them on the shoulder and ask if they understand what to do
Has difficulty concentrating on tasks requiring sustained attention	❖ Break skills down into smaller tasks ❖ Keep instruction time limited so they move more quickly from one activity to the next ❖ Teach as you do it with them
Appears to act before thinking (impulse control	❖ Pair them with another athlete who can act as a

issue)	screener for the impulse ❖ Deep breaths help them slow down to focus and help you calm down as well
Shifts excessively from one activity to another	❖ Set up rewards for mastering a skill before moving on ❖ Ask them to teach the skill to another athlete who is having trouble. This keeps them focused on someone else's action and not on their desire to move on
Has difficulty awaiting turns in practices	❖ Outline the schedule so they understand expectations
Resistant to change	❖ Provide clear and continuous transitions ❖ Establish routines (enforce concept of flexibility) ❖ Build on successes
Stubborn/Behaviour problems	❖ Set clear rules, expectations and limits ❖ Enforce rules but provide conditions for coming back ❖ Reinforce acceptable behaviours
Verbal communication difficulties or not at all	❖ Allow for additional time to express thoughts ❖ Use picture boards and other assistive devices ❖ Ask him or her to demonstrate or show what he or she means
Prone to seizures	❖ Know signs and symptoms ❖ Control atmosphere (heat, sun, sugar, etc.) ❖ Inform and reassure teammates when they occur
Poor muscle tone	❖ Provide specific exercise and strengthening programs ❖ Stretch safely; do not allow athletes to stretch beyond normal joint range of motion
Lower pain threshold; sensitive to touch	❖ Establish eye contact when talking ❖ Use softer/adaptive equipment ❖ Forewarn if any touch is necessary
Failure to form social bonds	❖ Work in small groups ❖ Have athletes work in pairs (same pairs for several weeks) ❖ Provide highly structured and least distracting environment
Over-stimulated easily	❖ Remove or lessen stimuli (dim lights; soften sound; remove unnecessary objects) ❖ Train in separate area, or in a smaller group; gradually add people
Difficulty with balance or stability	❖ Provide additional assistance ❖ If stretching sit down, lean against wall or hold on to a partner ❖ Allow for extra time to complete a task
	❖ Break down drills to easier movements

Coordination problems	❖ Allow additional time with one-on-one support ❖ Progress according to athlete's ability
Mood swings (frequency and intensity)	❖ Provide structured and predictable activities ❖ Set clear expectations, limits and conditions ❖ Separate from group when necessary, but allow back