# **Encouraging Physical Activity For Preschoolers with Visual Impairment**

### A RESOURCE FOR PARENTS





Produced by the British Columbia Blind Sports and Recreation Association

www.bcblindsports.bc.ca

# **Encouraging Physical Activity For Preschoolers with Visual Impairment A RESOURCE FOR PARENTS DVD**

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Produced by the British Columbia Blind Sports and Recreation Association

# **Encouraging Physical Activity For Preschoolers with Visual Impairment: A Resource for Parents**

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### Introduction

Welcome! This resource was created for parents whose preschool children are:

- Blind;
- Visually impaired;
- Deaf-blind; or
- Blind or visually impaired with an additional disability.

The resource (which includes a written guide and DVD) offers ways to help these children be physically active, and to lay the foundation for a lifetime of physical activity.

We refer to a specific level of vision or additional disability only if that disability has distinct needs.

This resource was produced by British Columbia Blind Sports and Recreation Association. We facilitate participation in all aspects of physical activity.

Please contact us if you have questions or would like copies of this resource; we are here to help.

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#### **CHAPTER 1**

# Physical Activity For Children Who Are Visually Impaired–Why it Matters





Getting through life is easier for anyone if they are physically fit.

But it's even more important for children who are visually impaired. Everything from walking to eating can take more energy and coordination for them. The fitter they are, the easier (and more fun!) life will be.

Self-stimulating behaviours such as eye rubbing and head-banging can be a sign that a child is receiving too much or too little stimulation. Exercise can help children regulate their energy levels.

Encouraging physical activity from an early age will help your child be healthier—physically, emotionally, and socially—for the rest of their life. Alethea was born with no vision...just completely blind.

I was relieved to know that there was help out there and that there were people out there to help us because I didn't know what to do.

[Today]...she loves the outdoors...walking around outside with her push toys ...we take her walking and running and just being out on the playground...doing swings or the slide.

Physical activity is hugely important in order to keep up things like muscle development and mobility skills...And we have so much fun! We have a ton of fun! And she sleeps well... With Alethea it [physical activity] takes a bit of an extra effort but I think it is so important.

-Winnie,
Alethea's mom





### **Physical Benefits**

Physical activity improves:

- Balance;
- Body awareness;
- Motor skills;
- Muscle and bone development;
- Heart rate and blood pressure;
- Endurance;
- Coordination;
- Posture; and
- Overall health.

#### **Emotional Benefits**

Physical activity is fun!

It can also provide:

- Stress release;
- Something to look forward to; and
- A sense of acceptance and accomplishment.

#### **Social Benefits**

Socially, physical activity facilitates:

- Interacting with new people;
- Making friends; and
- Learning to play.

#### **CHAPTER 2**

# Compensating for Less (or No) Vision



All the hard work that we put into Aidan [who is legally blind] has definitely paid off...I truly believe that he is who he is today, the active child that he is because James and I took the time to play with him when he was little...

-Kishani, Aidan's mom

Vision provides lots of information—fast. It can tell us how big something is, what colour and shape it is, and how fast it is moving—in one glance. It also gives us the "big picture", and helps us understand information we get from other senses. ("That loud sound is probably coming from that car.")

Vision is great motivation for moving. With sight, we can assess an object or situation from a distance and decide whether to explore further. The other senses—hearing, touch, smell and taste—just don't provide the same amount of information.

Children with normal vision get about 75 per cent of their sensory information through sight. So **children** who are visually impaired need more support and stimulation to be physically active. You can do this by making the most of the senses they do have.

Children who are visually impaired need more support and stimulation to be physically active.



Continually describe what's going on.

Let your child explore as much of what you are describing as possible.

#### **Sound or Signing**

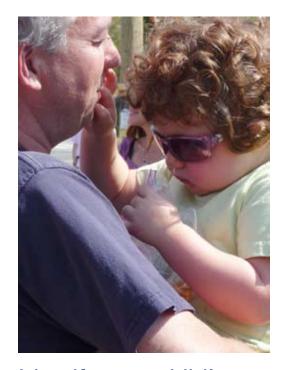
One way to give children who are visually impaired the stimulation they need is to **communicate with them constantly**. Keep telling them about their environment, about moving and about their body. Even if your child is too young to understand words or sign language, talking or signing to them prepares them (and you) for future learning.

- 1. Continually describe what's going on. For example: "We're going uphill...now we're at the noisy intersection where we have to wait for the light to change from red to green...now we're going past the pine tree that smells so fresh...." Let your child explore as much of what you are describing as possible.
- 2. Identify your child's body parts, such hands, feet, knees, head, and compare them to other people's body parts. For example: "This is your hand; this is mommy's hand, and this is your sister's hand, here's a doll's hand."
- 3. Teach your child terms like "right", "left", "up", "down", "over", "under" and "beside" by using the terms at every opportunity.

For example, say (or sign): "We're putting your mitt on your left hand. Mom's putting on her right boot. This is your left foot. This is grampa's left foot." In a stroller or car, say, "Now we're turning right."

Or say, "Put your arms up so I can pick you up" and move the child's arms up, then reinforce the message by saying "Help Teddy Bear lift his arms up so you can pick him up."

- 4. Use movement terms related to their body and your body. For example, say or sign: "Let's bend your elbow to help put your shirt on." (You can lightly touch your child on the elbow to help them understand.)
- 5. If your child is in a room and you are entering it, speak as you walk into the room to help your child understand that you are moving. If your child doesn't hear (or does not hear well), announce your presence through touch—by gently patting the blanket they are laying on, for example. You can communicate to your child that you are moving by tapping a blanket or piece of furniture as you move along it. (You can also explain to others that you are communicating to your child about movement because your child doesn't see or hear well.)
- 6. Use songs, rhythm, music, to teach names of body parts, to move or march in time to music.
- 7. Use sounds to emphasize movement—for example, saying "clop clop" to highlight the rhythm of walking, or using exclamations such as "woosh" or "wee" when your child goes down a slide.
- 8. Toys that make sounds can be great for children who have visual impairment. However, infants have a hard time telling where a sound is coming from, especially without visual cues. So, for example, instead of waving a rattle in front of your child's face, gently shake it close to one ear, then put it in the child's hand on the same side of their body.



Identify your child's body parts, such hands, feet, knees, head, and compare them to other people's body parts. For example: "This is your hand; this is mommy's hand, and this is your sister's hand, here's a doll's hand."



Explore movement with your child by carrying them in different positions.



#### **Touch or Feeling**

Even at a very young age, children will feel different sensations in their body as they are carried. This is one of the ways children learn to move.

Explore movement with your child by:

- Carrying your child while jumping, walking, dancing, climbing, and other activities;
- Holding your child in your lap while on a swing;
- Carrying your child in different positions; such as facing forward, facing backwards, on your shoulders, on their side, or like an airplane with their arms spread out;
- Bouncing or swinging your child;
- Using child carrier, baby swing or Jolly Jumper;
- Using a bicycle trailer, tricycle, buddy bike, or trail-a-bike (which attaches to your bike) or tandem bike.
- Having your child stand on your feet while holding under his or her arms or holding your child's hands and sliding, marching, taking giant steps or baby steps etc.

Again, speaking or signing while doing these activities (and have your child speak or sign back about their experience) will give your child vocabulary and reference points for future activities.

You can also use a tactile rug, strip of rope taped to the floor, mat, or towel to give your child something to follow, to guide exploration. Textured "footprints" and "hand prints", which can be bought or made, can be used to provide a guide for following paths, or learning steps.

#### **Smell and Taste**

Smells can give children a great reason to move. Talk or sign to your child about what you can smell, whether it's a bakery, flowers, or a garbage bin. Explore moving closer to a smell and farther away from it. Incorporate smells into routines, such as smelling a certain pine tree on the way to the store, or have your child buy an orange, peel it, smell it, then taste it (to whatever degree is appropriate for your child.)

Talk or sign to your child about what you can smell, whether it's a bakery, flowers, or a garbage bin.

#### **Vision**

If your child has some sight, help them use it by:

- Increasing colour contrast. A lime green ball on green grass might be obvious to a person with average vision, but may be nearly invisible to someone with impaired sight. So place objects on contrasting backgrounds, such as a dark toy on a light coloured floor. Black and white offer the greatest colour contrast, followed by yellow and black.
- Moving objects. Movement attracts the eye and can help a child locate an item.
- Adjusting lighting conditions. Lower light, use sunglasses or a hat if your child is light sensitive, or use brighter light if that helps. You can also experiment with the direction of the light (a gooseneck lamp can be helpful for this.)
- Drawing attention to an item by using another sense (such as tapping object, or causing it to release a scent.)



For children with some vision, tools such as high contrast footprints can help them learn movement.

For children with cortical visual impairments, it can also help to:

- Block out background clutter by using a black board to present toys;
- Using the child's favourite toys or favourite color toys to get movement responses and support vision use;
- Dimming lights and presenting objects/toys in quiet areas; or
- Allow for a delayed response (it may take longer than usual for a child with a cortical visual impairment to process and react to what they see.)

Using one of the above techniques at a time may work best.

# **CHAPTER 3 Starting To Move**





We played a lot of physical games with her like tickling her on her leg her feet her legs her stomach...carrying her, moving her about in different positions...

Alethea's three years old... a lot of kids that are older don't know their left from their right yet. She's able to understand how to use her body a bit better...[she has the] building blocks... it's had a huge impact.

-Winnie, Alethea's mom

Since children who are visually impaired tend to move less, and can't easily observe how other people move their bodies, they often don't develop the very basic physical skills other children develop naturally.

For example, children with full vision develop strong neck muscles as they turn their heads to see, whereas children with less vision don't have the same motivation to turn their heads, so don't develop those muscles as much.

The exercises below will help your child develop basic skills needed for more complex movement.

The exercises below will help your child develop basic skills needed for more complex movement. It's never too early or too late to help your child learn to move more.

Give your child only as much help as your child needs to complete the exercise. It's never too early or too late to help your child learn to move more.

#### **Tips**

Your child might not be able to do these exercises fully at first. But give your child only as much help as your child needs to complete the exercise.

Encourage your child to do the pieces of the movement that they are able to, so your child can develop strength and balance, and build up to doing the whole movement themselves.

Help your child feel what it's like to complete the entire motion, so the movement will eventually make sense to your child as a whole. When your child is older, you can also demonstrate the movement on a doll (the articulated wooden dolls artists use as models are very good for this.)

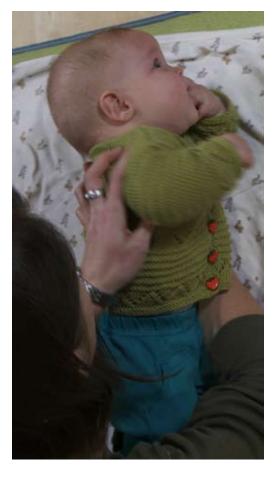


#### **Rolling**

To get your child used to being in different positions, have your child lie on their front, side and back. Gently roll your child from one position to the other. You may need to support your child's neck. (Children with typical vision develop their neck muscles by looking; the less vision a child has, the less they are likely to do this.)

Have your child lie on top of you as you roll from side to side.

After your child is used to this, create variation between each side, by using a towel or other tex-



tured item on one side. This difference in texture will make the rolling more interesting for the child.

Next, place a toy on one side, so your child can discover it when they roll; this will give your child motivation to explore. For a child who has some vision, use a toy that contrasts with the surface the toy is lying on. If your child doesn't see, use a toy that makes a sound or has an interesting texture.

Try this exercise starting from lying on their front, their back, and their side.

#### **Using Hands**

Encourage your child to play with toys in front of them. Have your child use both hands, then change hands, then reach to the left pick something up, then reach to the right.

Take something from one of your child's hands, and put in your child's other hand.

Guide your child to pick up something on their left side with their left hand, transfer the item to the right and put it down on their right side. (This encourages use of both hands and develops balance.)

Encourage your child to play with a toy while sitting against you, against a wall or corner, against a pillow, on their own. (Activities that use both arms and hands and which cross over the centre of your child's body will help develop their range of motion, balance, and movement planning.)



Encourage your child to play with toys in front of them. Have your child use both hands, then change hands, then reach to the left pick something up, then reach to the right.



To help your child develop spatial awareness, encourage your child to climb on and off items, such as a couch, play space, or a tent built from couch cushions.

#### **Body Parts**

Play games that help your child locate body parts such as "Head and Shoulders Knees and Toes" (see instructions at http://kids.niehs.nih.gov/lyrics/headsh.htm) or the "Hokey Pokey" (see instructions at http://kids.niehs.nih.gov/lyrics/hokey.htm.)

#### **Spatial Awareness**

To help your child develop spatial awareness, encourage your child to climb on and off items, such as a couch, play space, or a tent built from couch cushions.

Encourage your child to climb safely by supporting your child or allow your child to push themselves against your body or hand or foot.

When your child climbs into something such as a box or cupboard, or onto a rock or a jungle gym, show your child immediately how to get out or how to get down, and encourage your child to climb back in. This helps your child understand the situation better, and gives your child a greater sense of control.

If your child gets stuck on something they've climbed up on, verbally or physically help them find their way down, rather than simply lifting them down.

### **CHAPTER 4**

## **Learning Basic Movement Skills**





It's important that Alethea knows what skip, hop and run are so that she can participate fully with her peers at daycare and later on at school.

-Winnie,
Alethea's mom

Children who have basic movement skills, such as walking, running, climbing and hopping, will be ready to learn more complex physical activities, from playground games to sports. These skills will also help them interact with sighted children.

Your child will likely need lots of repetition and practice to develop these skills, much more than children with full vision.

#### Walking

Ways to help your child learn to walk include:

- Using a walker;
- Walking in water (this helps children understand the flow of walking, and is especially great for children who have difficulty with balance or mobility);

Your child will likely need lots of repetition and practice to develop these skills, much more than children with full vision.



Ways to help your child learn to walk include using an orientation and mobility aid (such as a cane.)

- Use an orientation and mobility aid (such as a cane) as recommended by a orientation and mobility instructor;
- Use a human guide technique (as recommended by a orientation and mobility instructor);
- Providing opportunities to practice where your child doesn't have to worry about walking into something. (The fear of walking into something often leads to poor technique.) Walking in a large open field, having your child walk with a toy they can push in front of them, or giving verbal cues about hazards are a few ways to help children feel safe to walk freely; or
- Have your child hold a scarf in each hand and exaggerate their movements; this can help them learn the flow of the movement.

As your child learns to walk, you may need to help them:

- Keep their head up in the correct position (balancing a bean bag or other object on their head is a fun way to help them learn this); and
- Move the right arm forward as left foot goes forward and vice versa. To help your child understand this, have them stand on your feet and move their arms for them as you walk so they can feel the movement.

Introduce your child to variations on walking they may encounter in the community or school, such as:

- "Baby steps" (tiny steps) and giant steps;
- Walking slowly, fast, and changing directions: moving forwards, backwards, left, right, sideways;

- Marching like a soldier;
- Walking stiffly like a robot;
- Walking like a ballerina, use flowing movements; and
- Gliding or skating along linoleum or hardwood floors.

Learning these variations can be lots of fun when done to music. Games such as Simon Says<sup>1</sup> or Go Go Stop<sup>2</sup> are also great ways for children to practice these variations on walking. They are also games children are likely to encounter in school, and they teach safety skills, so that children have a reflex to freeze when they hear the command "stop".

#### Running

Even children who can walk independently will often need help learning to run.

Help your child to:

- Maintain proper posture and technique. They should look balanced, not lopsided, run with flow and roughly in a straight line, and keep their head up. (Having them try to balance a hat or other object on their head can make this into a fun game.)
- Move the right arm forward as left foot goes forward and vice versa. To help your child understand



<sup>&</sup>lt;sup>1</sup>Instructions for Simon Says can be found at http://en.wikipedia.org/wiki/Simon\_Says)

<sup>&</sup>lt;sup>2</sup>Instructions for "Go, go, stop...": One person would say "go go go go go", and the rest of us would run trying to get as far as we could before she said, "stop" and opened her eyes. If one of us had not stopped when she said "stop!" that person would be "it."



Encourage your child to explore their environment on their hands and knees, and to explore large objects by having them climb on them, up them, through them.

- this, have them stand on your feet as you run so they can feel the movement.
- Some children find moving from fast walking to running easier than trying to introduce running as an entirely different activity.

You can guide your child as they run by:

- Having them hold on to your wrist;
- Having them hold on to a stick or rope between you;
- Describing the terrain or potential hazards (many children with some sight have poor depth perception);
- Having them follow a sound such as clapping;
- Having them follow a large visual cue, such as a person, if they have some sight; or
- Running just behind your child and giving them gentle movement corrections (such as lightly pressing them on the right shoulder when you want them to move to the left) when necessary.

#### **Dance and Movement to Music**

Movement to music, clapping, singing, using a drum or musical instrument (or even a cooking pot) is fun. Show your child how to move in time with music, and play with variations such as moving only arms or only legs, moving one side of the body only, or dancing on one foot.

#### **Climbing**

These techniques can be applied to climbing stairs, ladders, and jungle gyms.

Encourage your child to explore their environment on their hands and knees, and to explore large objects by having them climb on them, up them, through them. To help build their spatial sense and ability to problem solve, encourage and support them in climbing down whatever they climb up.

For example, you can ask questions such as: "Can you move over top of this? Can you climb down feet first or head first?"

You can also assist by guiding your child's hands or feet to safe positions. For example, you might say: "Can you feel where daddy's hand is?" [tap hand or snap fingers to help your child find your hand] "Put your right hand on top of mine. Now move your left hand to where my left hand is." [Snap or tap to help your child find the left hand.] "Now move your right foot down a bit." [Help your child to find a foot hold.]

Your child may need to try "getting down" many times before your child masters it; in order to give your child lots of opportunities to practice, try to pick your child up only as a last resort. The payoff will be your child's increased confidence and spatial awareness.

**Sliding** 

Start with a small, short, jungle gym type slide, and build up to sliding down it gradually using the following steps:

1. Help your child explore the slide by touch (and vision, if the child has vision.) Lift them so they are able to feel all the parts of the slide.

Your child may need to try "getting down" many times before your child masters it; in order to give your child lots of opportunities to practice, try to pick your child up only as a last resort.





Jumping, hopping (jumping more than once) and skipping are hard to teach to a child who isn't fully sighted. You may need to try teaching it many times, using many different strategies.

- 2. Slide something (toy, stick, teddy, doll) down the slide.
- 3. Help child climb part way up the slide and then slide down slowly, while holding them.
- 4. Climb a bit higher up the slide partway and do the same thing.
- 5. Try assisting your child to climb part way up the ladder part of the slide, then climb down, so they know they can do it.
- 6. Assist them in climbing to the top.
- 7. Assist them with sliding down.
- 8. Repeat sliding down several times, assisting them less each time, so that they are holding your hand, then a finger, then can maybe descend on their own. It may help to have someone at the bottom of the slide to speak or gently tap the slide (for children who are deaf-blind) to give the descending child a reference point and sense of security.

#### **Jumping and Hopping**

Jumping, hopping (jumping more than once) and skipping are hard to teach to a child who isn't fully sighted. You may need to try teaching it many times, using many different strategies.

#### Strategies include:

- Picking the child up and holding them while you jump, to give them the feeling of the movement;
- Have the child put their hand on your knee while you jump, or the shoulder of another child while they jump;

- Ask them to try running, but lift both feet off of the ground at the same time;
- Have them jump off something low with both feet, then ask them if they can immediately jump back on with both feet;
- Have them step over something low, then see if they can do it with both feet at once (this may require lots of practice);
- Have them try jumping up and down while in the water (this provides additional balance and slows down the whole process);
- Once they have the idea, work on the balance, posture, follow-through, and have them try big jumps, little jumps, sideways jumps, two footed and one footed jumps; and
- Hop on one foot, both feet, the other foot (remember to use the terms right and left to reinforce these terms.)

**Skipping** 

Carry your child while skipping to help them get a sense of the movement. Then have them hop while alternating legs (hop right, hop left, hop right, hop left.) Learning to skip to music can help children learn the flow of the movement.

**Balance** 

Balancing is hard for children who can't focus visually on something to steady themselves. (Try closing your eyes and standing on one foot, then change to the other foot. Even most adults will find it harder than doing the same thing with eyes open and focused on an object.)

You can help your child find the correct head position by having them balancing a beanbag or other object on their head; this can be a great game.



Swinging on a swing (starting in parent's lap first, if necessary) will strengthen your child's core muscles, which assist with balance.



Like all children, children with vision difficulties sometimes fall. They also get bumps and bruises and they will heal from them, like all children! Balance is affected by head position and posture. You can help your child find the correct head position by having them balance a beanbag or other object on their head; this can be a great game.

Practicing activities while in water can help children develop balance, as the water provides extra support. It also helps children build strength, since water provides more resistance to motion than air. Children who can't walk on land due to a locomotor disability may be able to walk in water with or without assistance. On the other hand, practicing activities while on ice or other slippery surfaces is more challenging, but will improve performance off the ice.

Practicing balancing on different surfaces (such as rocks, sand, or logs) will help your child develop their balance and help them identify these surfaces. (Offer a hand for support at first if necessary.)

Swinging on a swing (starting in parent's lap first, if necessary) will strengthen your child's core muscles, which assist with balance.

Gymnastics, tumbling, jumping on a trampoline, and some martial arts (like judo) will all help build core muscles and balance.

#### **Falling**

Like all children, children with vision difficulties sometimes fall. They also get bumps and bruises and they will heal from them, like all children!

To make falling easier, have your child practice falling, from sitting, kneeling and standing positions. Model falling and putting your hands out to break your fall. Have your child try to fall then roll, instead of coming to a complete stop. If your child is concerned about falling (or any other movement) break the movement down, starting with the last part of movement.

For example, have your child:

- Lie down and roll:
- Kneel, lie down, roll;
- Stand, kneel, lie down, roll;
- As part of this process, you can also teach the "Stop Drop and Roll" technique for putting out burning clothing. (See instructions at http:// en.wikipedia.org/wiki/Stop,\_drop\_and\_roll.)

Having your child practicing falling in water, on a mat or soft surface can help your child to understand what it feels like, and how to do it properly.

#### **Throwing and Catching**

#### Help locating the ball

To help your child know where the ball is, you can use some or all of the following techniques:

Use a ball which:

- Has a contrasting colour to the surface you are playing on;
- Is tactile; or
- Makes a sound when it moves.

You can also:

- Tell your child where the ball is;
- Have the person who is to receive the ball speak;





Show your child how to roll a ball to someone else. Have that person roll the ball back to your child. Have your child put their hands out to prepare to receive the ball.

- clap or make a noise so the child can tell where they are; and
- Have the person who is pushing/rolling the ball ask your child if they are ready before they send the ball.

#### **Teaching throwing and catching**

Start with your child sitting in your lap, sitting supported (for example, in a corner or propped up with pillows), or sitting on the floor on their own.

Show your child how to roll a ball to someone else. Have that person roll the ball back to your child. Have your child put their hands out to prepare to receive the ball.

This exercise can also be done with a group of children and/or adults. Roll the ball from one person to another, across the circle and/or around the circle. This exercise not only teaches throwing and catching basics, it also works on balance and teaches social skills such as sharing and taking turns.

Have your child practice rolling and receiving with balls of various sizes. Then show them how to roll the ball through their legs, and how to pick it up and throw it.

Show them how to throw, first with both hands, then underhand, then overhand. Chose balls that are easy for your child to grasp (smaller, squishy, or slightly deflated.) You may need to let your child feel your arm and hand while you throw a ball. You can also help to move their arm back, then forward, and tell them when to release the ball. Have your child practice this with each hand.

When they start, the motion will be from the hand, wrist and maybe elbow/arm. It will progress to involve the shoulder, then upper trunk, and finally can involve a step with the foot opposite to the throwing arm, the core of the body moving forward with the throwing arm following last.

There are devices that can help children learn to throw; contact BC Blind Sports for more information.

Show your child how to receive or stop a ball. Begin with a ball rolling towards them, which they can track by sound, colour contrast, or by someone telling them that it is coming. Start with a large ball and move to a smaller ball. The child can stop it with their hands, feet, body or other tool (hockey stick, racquet, pillow, etc.)

An oversized bat or racquet can be useful helping your child to understand throwing and striking.

Children with some fine motor difficulty or difficulty with grasp can use a Velcro ball and glove or Velcro disk (easily made, or sometimes available at the dollar store.) Please contact BC Blind Sports for other equipment suggestions.

#### **Kicking**

#### Help locating the ball

Use the techniques described under the Throwing and Catching section above to help your child know where the ball is.

#### **Teaching kicking**

Help your child to understand kicking by moving their foot/leg through the motion to strike a ball.

Children with some fine motor difficulty or difficulty with grasp can use a Velcro ball and glove or Velcro disk (easily made, or sometimes available at the dollar store.)





Make sure they try each foot; one foot may be significantly better. Show them how to strike the ball with the front of their foot, as well as with the inside of their foot.

Next have them take a step with one foot and kick the ball with the other. Help your child track the ball with the suggestions given above under "Teaching throwing and catching". Kick the ball back and forth with them. If possible have them both stop and kick the ball with one foot then with their other foot.

Children who are in a wheelchair and are able to move their legs can try kicking with the footrests moved out of the way, or if they are able to stand with assistance can try it that way.

#### Tricycles and Other "Ride On" Equipment

Introduce your child to tricycles, scooters, push toys or other "ride on" equipment by having them touch it, move the moving parts, and push it. (Children with some sight can also look at it closely.)

Explain to your child the purpose of the key parts. (For example, "The wheels help it to move, this is where you hold on with your hands, this is where you sit.") Show them parts that are similar to parts on other things they are familiar with. Add contrasting tape on parts such as the seat or the pedals to help them locate these parts to increase the colour contrast. Or use tape or stickers with a distinct texture to help them find where they should put their hands, for example.

Use scooters, tricycles and push toys in a safe location with protected boundaries and no drop offs



Introduce your child to tricycles, scooters, push toys or other "ride on" equipment by having them touch it, move the moving parts, and push it.

(watch for the areas which your child won't see.)
Have your child wear protective gear (such as a helmet when on a tricycle.) This gets them used to the idea of wearing protective gear.

**Learning Through Physical Contact** 

Physical contact can be a way to teach physical skills, but has to be done in a way that is safe and respectful.

Instructors wanting to demonstrate a skill by physical contact should explain to your child what they are going to do before touching them, and get your child's permission.

For example, the instructor could say, "I want to move your arms to show you how they should move when you run. Is it OK if I stand behind you and put my hands on your elbows?"

Your child should know they can ask for clarification, or ask the instructor to stop if they are uncomfortable.

If your child does not feel comfortable with the physical contact, the instructor should find another way to teach the movement. For example, the motion can be demonstrated on a doll (jointed wooden artist's dolls are good for this.)

Respecting a child's wishes in not being touched when they say stop or otherwise indicate they are not comfortable—even in potentially ambiguous situations such as when a child is being tickled—helps the child develop clear personal boundaries.

Physical contact can be a way to teach physical skills, but has to be done in a way that is safe and respectful.

# CHAPTER 5 Physical Literacy





Physical activity has definitely helped Aidan be extremely confident in his day to day activities ...[plus there's] that overall satisfaction of knowing that he's been out in the fresh air, that he's had fun playing with his friends...

–Kishani,Aidan's mom

Physical literacy means having the skills to enjoy physical activities throughout life. It means having the basic physical and social skills, and knowing the process of learning and improving physical skills.

For a preschooler, physical literacy means understanding:

- How we move and basic movement terms;
- How to move with flow, confidence and control;
- How to move in different physical environments, such as on rocks or in water;
- Some of the equipment they will likely encounter in the community or in school;
- How they learn physical activity best; and
- The social aspects of physical activity.

It is never too late or too early to begin moving.

Physical literacy means having the skills to enjoy physical activities throughout life. It means having the basic physical and social skills, and knowing the process of learning and improving physical skills.

Simple instruction and lots of practice are the keys to developing flowing movements. If you are concerned that your child is older than other children who are learning an activity, or that they need additional assistance, contact BC Blind Sports for tips, try a private lesson or ask a community service provider if you can come in and explore the environment with your child.

#### **How We Move**

Having a basic idea of muscles, joints and concepts such as flexibility will make it easier for your child to learn other aspects of physical activity. You can use simple ideas such as:

"Joints connect one bone to another bone."

"Muscles stretch across a joint from one bone to another bone. When a muscle tightens up, it pulls the bone with it. When it relaxes, it releases the bone back to its original position. To make a muscle stronger, you contract it repeatedly until it gets tired."

"Flexible muscles can move farther. To make a muscle more flexible, you stretch it, like stretching an elastic band. People get less flexible if they don't keep stretching, so it's good to stretch your muscles."

#### **Basic Movement Terms**

If you teach your child the meaning of terms such as stretch, bend, reach, jump, jump on one foot and skip, "join hands and make a circle" and "walk two by two" (where each child has a partner) your child will be better prepared to understand teachers or recreation instructors.

#### Moving with Flow, Confidence and Control

To get a toy on the other side of the room, your child may have to combine the movements of standing up, walking, bending over, picking up the toy, walking back, and sitting back down. Sighted children naturally combine these movements in a flowing way. For children with visual impairments linking these movements may initially be awkward and jerky.

Simple instruction and lots of practice are the keys to developing flowing movements. For example, you might explain bowling as "step left, right, left, then throw the ball." Teach them the large components of a movement then help them refine the movement.

For example, to teach throwing, you might first have your child throw the ball toward you with two hands, then with one hand. Then you could further refine the movement by teaching them to move their arm behind them, and then throwing the ball.

#### **Different Environments**

Environments such as grass, rocks or water offer different physical challenges. Experiencing movement in different environments can help your child be more confident.

Help your child practice moving on a range of indoor and outdoor surfaces including grass, asphalt, gym, sand, pebbles and gravel. (Remember to warn children without depth perception about changing terrain.) Your child may want to lie on a surface or bring it as close to their face as possible in order to understand it; this is normal.



Experiencing movement in different environ-ments can help your child be more confident.

Help your child practice moving on a range of indoor and outdoor surfaces including grass, asphalt, gym, sand, pebbles and gravel.



Introduce your child to water experiences such as pools, fresh and salt water, sandy beaches, as well as being in boats, kayaks or canoes.

Specific tips related to water, ice, snow, water and air environments are below.

#### Water

Introduce your child to water experiences such as pools, fresh and salt water, sandy beaches, as well as being in boats, kayaks or canoes. (Parent and tot swim programs are a great way to start off.) Moving in water provides stability, so it can be a good place to learn certain skills, especially for children with balance difficulties. Moving forward in the water on their front, back, and side, floating and learning to breathe (bob) while in the water are all important skills for your child to develop.

Alert your child to the fact that water may get deeper as they proceed. Indoor aquatic environments such as swimming pools can be loud, so make sure your child is comfortable with the noise level. You may want to introduce your child to this environment when it's quieter.

#### **Ice**

Help your child to understand ice by having them feel ice cubes or other forms of ice. Have them try sliding their stocking feet on the kitchen floor or other slippery surfaces.

Go to the ice rink when it's relatively quiet. There, start by having your child sit on the ice, feel the ice, and push something on the ice to feel how slippery it is. Have them stand up on the ice, and then walk and slide their feet. Once your child is comfortable you can introduce them to walking on skates, first on a non-ice surface, then on ice.

#### **Snow**

Snow is fun to move in. Help your child to move, walk, run, tumble, roll, jump and dance in snow. Activities such as moving snow, making shapes or pushing large snowballs to make a snowman or fort also help build strength. Introduce your child to cross country and downhill skis and snowboards, as well as toboggans. Your child can ride in, push, or pull a toboggan/sled. Sitting behind your child in a sled, you can help them to understand how to lean to the right or left to turn, or far to one side to stop.

#### Air

We are temporarily airborne as part of sports such as diving, skiing and gymnastics. Because there's temporarily no contact with anything else, being airborne can be exhilarating—but it can also be frightening, especially initially.

To help your child become comfortable with being airborne, begin with simple activities such as jumping off a log or rock. Help children understand that the ground is still there. For example, before your child jumps off the bottom step of a flight of stairs, have them first feel with their foot how far down the ground is.

Jumping on a trampoline can be a fun way to experience being airborne, especially if you can use a large community centre trampoline with your child.

# **Sports Equipment**

Children with visual impairments will need more time to understand equipment that would make sense to a sighted child quickly, so introduce your child to as many of the items they may encounter as possible,



To help your child become comfortable with being airborne, begin with simple activities such as jumping off a log or rock.



Introduce your child to equipment such as skipping ropes, hoops and balls.

Help your child to discover how they learn physical activity best. Some children learn best by trying the activity, others by watching (using whatever vision they have), others by talking through it, or by feeling someone else do it. such as skipping ropes, parachutes, hoops and all sizes of balls.

For more complex equipment, such as a snowboard, go to a store, rental facility, or borrow a piece of equipment and allow your child to explore the item, feel its moving parts or surfaces and feel how it would move. Have them push or pull it, if applicable, and get comfortable.

# **Learning Styles**

Help your child to discover how they learn physical activity best. Some children learn best by trying the activity, others by watching (using whatever vision they have), others by talking through it, or by feeling someone else do it.

Encourage your child to identify what helps them and begin to express it to other children, instructors, teachers and others. For example, encourage them to say things such as, "Can you let me feel the piece of equipment?" or "Could you please stand on my right side so I can see you better?" or "Can I use a guide for running in this game?"

## **Social Aspects of Physical Activity**

Physical literacy also includes understanding the social aspects of games and sports. For example, it might mean being able to talk about the local hockey team, knowing what ice is, what a hockey stick and puck feel like, what the dimensions of a hockey rink are and what some of the basic rules are. It might mean trying to play hockey in the backyard, on the grass, on the driveway or on ice.

Introduce your child to as many of the social aspects of physical activity as possible.

# **CHAPTER 5**

# **Participating in Community Activities**





I started off taking her swimming with me initially I think she was about 10 months old. She loves water. So swimming is a huge one. When she was two I took her to do parent tot gymnastics and she just loved that.

–Winnie,Alethea's mom

Introduce your child to activities in the community, and to facilities, such as gyms, swimming pools, ice rinks, and classrooms, so you can be with your child to provide reassurance and facilitate learning.

Classes for parent and child, such as "Mom and baby yoga" or "Dad and tot swim" are ideal, since the parent is on hand to take care of special needs.

## **Equal Access**

Community programs are for everyone, and their advertisements, policies, and other materials usually state that everyone is welcome. You may have to help instructors or others in the facility to understand how to work with a child with vision impairment and/or other disability; the vision checklist in this chapter may be helpful. BC Blind Sports can help you choose a community program and/or explain your child's learning needs, and/or help families with low incomes access community programs.

Community programs are for everyone.



Give your child as much help as possible before the class starts.

BC Blind Sports can assist with orienting the instructor. BC Blind Sports can also provide and/or train a volunteer who can assist in the class.

## **Preparation for Community Classes**

Because your child takes in less visual information, they may take longer to feel comfortable in a new environment and to understand what is going on. To compensate, give your child as much help as possible before the class starts. Before the first day of class, you may want to:

- Orient your child to the facility. Give them a general tour and cover specifics. For example, in a swimming pool, make sure your child knows how to get in and out of the pool;
- Meet the instructor and explain your child's learning needs (the vision checklist which follows this section may be helpful);
- Introduce your child to the class instructor;
- Ask the facility whether they provide volunteers or additional instructors, or have smaller classes when the class includes a child with visual impairment. BC Blind Sports can assist with orienting the instructor. BC Blind Sports can also provide and/or train a volunteer who can assist in the class;
- Teach your child the terminology, games, and actions taught in the class;
- Provide private lessons to supplement the class;
- Orient your child to the class meeting place, and let them know you'll be watching, and/or you will be there to meet them when the class is over;
- Introduce your child to the equipment used in the class; and/or
- Determine if there are safety rules or other issues your child should know about, and discuss this

with the instructor. (An example might be: "My child can't go down the slide unless they know an adult is directly supervising them.")

#### **Activities**

Different activities develop different physical skills. Some develop strength (such as martial arts), some work more on balance (such as jumping on a trampoline) and others will work on overall fitness and endurance (such as swimming.) Exposing your child to a wide range of activities will build different physical skills, help them discover what they like, and help them feel more comfortable when they encounter new physical activity situations, so programs that will give your child experiences in a variety of activities are particularly helpful. Good activities for children with visual impairment include:

- Martial arts (particularly judo or wrestling);
- Gymnastics;
- Swimming;
- Ice skating;
- Dance;
- Horseback riding; and
- Music classes that include movement.

Call BC Blind Sports for more ideas or information.

Do I need to tell the instructor or community program leaders about my child's vision impairment and or about other disabilities?

This is up to you. If there's anything that will limit your child in their ability to participate or to be safe in the class, you may want to use the information on



Exposing your child to a wide range of activities will build different physical skills, help them discover what they like, and help them feel more comfortable when they encounter new physical activity situations.

You don't have to give information regarding why your child has a visual impairment or disability. Please contact BC Blind Sports if you need help explaining something or creating a list for an instructor.

the vision checklist at the end of this section, or give simple information such as:

- "If the power went out and the lights were dim my child would have difficulty finding an exit or seeing you or the other children in the class."
- "My child's balance is poor and he/she will have to hold onto your arm while walking on the pool deck."
- "My child doesn't see anything, or sees very little, please tell her/him when you are moving to a different area and let him take your arm. Make sure she is able to follow your voice and ask her if she would like you to guide her."
- "If you go outside, the bright light will significantly limit my child's vision, so you'll have to provide more verbal instruction."
- "Sound and colour contrast will help her locate the ball."

You don't have to give information regarding why your child has a visual impairment or disability. Please contact BC Blind Sports if you need help explaining something or creating a list for an instructor.

### **Preschool**

As you are interviewing preschools, questions related to physical activity might include:

- How much physical activity time do the children get?
- How many times a day do they do physical activity?
- Where do they do the physical activity?
- How much of the physical activity is programmed (where they are being taught) and how much is selfdirected play?

- Do they have suggestions, questions and concerns about your child's ability to participate in physical activity?
- How does the teacher suggest you work together to ensure your child gets the most out of the physical activity sessions? and
- Would the teachers consult with BC Blind Sports to learn about including your child in the physical activity programs with the other kids?

Before the first day of class, you may want orient your child to the preschool (in consultation with vision professionals or other professionals you are working with, if applicable.) Orientation related to physical activity might include:

- Arrange to orient your child to the preschool, including the playground or play area;
- Orient your child to the classroom, and let them know you'll be watching, and/or you will be there to meet them when the class is over;
- Meet the instructor and explain your child's learning needs (see vision checklist);
- Have your child meet the instructor;
- Determine if there are safety considerations your child should know about, and discuss this with the instructor.

Having a visual impairment may mean your child will take longer to follow or understand what is going on, so give them as much help as possible before the class starts.

 Teach your child the terminology, games, and actions taught in the class, such as "circle time" or "line up by twos." Before the first day of class, you may want orient your child to the preschool.

- Introduce your child to equipment used in the class, such as parachutes and balls.
- You may be able to come in earlier with your child or spend some extra time there with them if your child would benefit from extra instruction before they are in a class with other kids.
- Introduce your child to equipment they may be using in the class so they have a chance to explore it before trying to do so with other children there as well.
- Determine if there are any safety rules or considerations your child should know about, such as "You can only use the slide if the teacher is outside" and discuss these with the teacher if applicable.

Use information on the vision checklist, or give simple information such as:

- "Use lots of verbal instruction."
- "He'll be able to find you easier if you wear bright colours."
- "Her balance is poor and she'll have to hold onto your arm while walking on uneven ground if you walk to the park."
- "When she is running, she'll need someone to guide her."
- "If you go outside, the bright light will significantly limit his vision and you'll have to provide more verbal instruction."
- "Sound and colour contrast will help her locate the ball."

Please contact BC Blind Sports if you need help creating a list for a teacher, or help explaining something about your child's participation in the physical activity component of the class.

Everything is possible with your child that is visually impaired. There are people out there and resources out there that can help. And are more than willing to help.

–Winnie,Alethea's mom

## **Vision Checklist**

You may not know if or how some of these factors affect your child, just fill in what you do know. Please feel free to contact us for assistance.

General description of my child's vision (e.g. can't see well in bright light):							
Physical activity experience:							
My child:	Yes	No	Not Sure	Comments			
Is sensitive to light							
Uses visor, hat, or sunglasses outdoors							
Uses safety strap for glasses							
Wears glasses/contact lenses for physical activity							
Can detect drop off and grade changes							
Has a field of vision loss (describe)							
Can detect colour (indicate best colour or best contrasting colours)							
Needs special viewing techniques (e.g. needs to be							
very close, or needs to feel someone demonstrating)							
Other concerns e.g. risk of detaching the retina							

continued on next page

My child:	Yes	No	Not Sure	Comments
Can find and describe				
stationary objects (specify				
size/colour/distance)				
Can see a ball in the air				
(specify size/colour/distance)				
Can follow a moving object				
on the floor (specify size/colour/				
distance)				
Can imitate an instructor's				
movements				
Can locate and describe				
stationary objects (specify				
distance)				
While moving, can spot a				
stationary object				
Can see a demonstration to the				
class (specify distance and/or				
side it needs to be seen from)				
Can participate in regular physi-				
cal activity except (specify				
- e.g. needs a human guide,				
should avoid contact sports)				
Uses a physical mobility aid				
(such as a walker or cane)				

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