

## **Bowling**



Bowling is the most popular SO sport. There are two disciplines, five and ten pin, that share the same basic technique. Five-pin bowling is the more popular of the two types of bowling in Canada, and the main differences besides the number and the size of pins, is the size and weight of the ball. The weight of a 10-pin ball varies from 10 to 16 pounds (4.5 to 7.25 kg) compared to a ball that is almost 25% lighter for 5-pin (3.6 to 3.8 pounds). Ten-pin requires more strength than 5-pin bowling, and ball weight differences can explain why 5-pin is so popular. Heavier balls have more energy to knock down pins than lighter ones and the same can be said for fast travelling balls compared to slower moving ones. Precision, ball speed and consistency of ball deliveries are the three main elements of basic skill acquisition for both disciplines. Fitting the right bowling ball to each athlete and finding the appropriate speed are important parts of a consistent approach and are rarely done in SO.

Bowling is an activity that comes easy to SO participants, it requires little equipment, and shoes and balls are usually supplied by bowling centers. Picking up a ball and aiming at pins is both easy to do and with some luck, strikes are always possible. SO bowler's skill levels vary a lot. Some deliver balls with two hands, while others have excellent three steps approaches, and some even require a ramp for ball delivery due to physical limitations.

There are many skills to learn in bowling such as the step approach, correct ball speed, straight, curve and hook balls, all with different spin speeds. Although there are some excellent SO bowlers, most SO bowlers have low precision because of low consistency in their deliveries. The results are widely inconsistent games and very little progress even after participating for many years. Unless a focused approach is initiated with proper fitting balls and consistent deliveries, participants will be struggling with their scores.

Skills required for consistent bowling deliveries are listed in the bowling basic skill (upcoming pages). These sheets can be used as a guide, and when all skills are marked "yes", bowlers can consistently hit the front pin and are ready for more advanced intermediate skills where 5-pin and 10-pin techniques are quite

different due to different “pocket sizes”, space between pins, ball speed and spins required.

**Guidelines for using the skill sheets (next page) for bowling**

1. Bowlers are fitted with the proper ball and have proper grip.
2. When this is acquired (usually very fast), it is then time to start on the three-step approach.
3. Repeat all skills together as they are acquired. For example, an athlete can be working on releasing the ball past the foul line but would have to have correct grip and proper three-step approach.
4. Follow each step of the skill sheet (next page) until bowling basics are acquired.

**Bowling (5-pin) Basic Skills**

<b>Basic Skill:</b>	<b>YES</b>	<b>NO</b>	<b>Comments</b>
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Sub Skills (one hand delivery unless limited by physical disabilities)

Hold the ball (hand on top of ball)



<input type="checkbox"/>	<input type="checkbox"/>
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Using a properly fitting ball

<input type="checkbox"/>	<input type="checkbox"/>
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3 steps (start and end points)  
Always the same and straight line

<input type="checkbox"/>	<input type="checkbox"/>
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Release ball past foul line

<input type="checkbox"/>	<input type="checkbox"/>
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Watching the target

<input type="checkbox"/>	<input type="checkbox"/>
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Ball close to body (side)

<input type="checkbox"/>	<input type="checkbox"/>
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Shoulder square to pins

<input type="checkbox"/>	<input type="checkbox"/>
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Perpendicular back swing

<input type="checkbox"/>	<input type="checkbox"/>
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Low-ball delivery (knee 90°)  
High follow through

<input type="checkbox"/>	<input type="checkbox"/>
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Minimum speed

(Men 2 sec. or less-release to pins)  
(Women 2.5 sec. or less-release to pins)

<input type="checkbox"/>	<input type="checkbox"/>
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Hitting top pin (5/10)  
(With 3-step approach)

<input type="checkbox"/>	<input type="checkbox"/>
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Hitting top 3 pins (7/10)  
(With 3-step approach)

<input type="checkbox"/>	<input type="checkbox"/>
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**When athletes achieve all “YES”, they have acquired basic skills.  
Expectations are critical to skill acquisition.**

### **Bowling (10-pin) Basic Skills**

<b>Basic Skill:</b>	<b>YES</b>	<b>NO</b>	<b>Comments</b>
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Sub Skills (one hand delivery unless limited by physical disabilities)

Using a properly fitting ball	<input type="checkbox"/>	<input type="checkbox"/>	
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4-step (start and end points) Always the same and straight line	<input type="checkbox"/>	<input type="checkbox"/>	
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Release ball past foul line	<input type="checkbox"/>	<input type="checkbox"/>	
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Watching the target	<input type="checkbox"/>	<input type="checkbox"/>	
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Ball close to body (side)	<input type="checkbox"/>	<input type="checkbox"/>	
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Shoulder square to pins	<input type="checkbox"/>	<input type="checkbox"/>	
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Perpendicular back swing	<input type="checkbox"/>	<input type="checkbox"/>	
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Arm holding ball Always straight (throughout)	<input type="checkbox"/>	<input type="checkbox"/>	
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Low-ball delivery (knee 90°) High Follow through	<input type="checkbox"/>	<input type="checkbox"/>	
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Minimum speed (Men 2.5 sec.or less-release to pins) (Women 4.5 sec.or less-release to pins)	<input type="checkbox"/>	<input type="checkbox"/>	
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Hitting top pin (7/10)	<input type="checkbox"/>	<input type="checkbox"/>	
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Hitting top 3 pins (9/10) (4 Steps approach)	<input type="checkbox"/>	<input type="checkbox"/>	
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Curved ball capable Hitting top 3 pins 7/10	<input type="checkbox"/>	<input type="checkbox"/>	
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**When athletes achieve all “YES”, they have acquired basic skills.  
Expectations are critical to skill’s acquisition.**

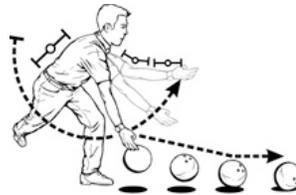
## 20-hour acquisition

### Skill Breakdown: Examples of priority elements to focus on during practice

#### Spend time on each one until acquired

1. Approach: Three or four steps - Starting and finishing always at the same spot - Holding the ball – Having the right ball
2. Delivery: Spot bowling – Acceleration throughout – Low delivery (front knee at 90°) - Follow through – Balance at end of throw
3. Straight Ball: Hands position – Leg action –
4. Curve/Hook Ball: Hand position - Arm delivery – Accuracy – Rotation speed

Each skill requires a 20-hour program. The most important one, Delivery (without three steps approach) is acquired first. The other ones will follow later.



#### Home skill practice is possible for bowling:

Most SO bowlers don't get low enough on ball delivery. Practicing correct delivery position can be done at home.



or using weights



### **Bowling Example: Focused Basic Skills Session (1 hour)** **(Performance objectives of 50% accuracy: hitting front pin)**

**Practice only one skill at a time and don't worry about perfect technique, bowl as much as possible: Example "Delivery"**  
(15' = 15 minutes)

## *Changing Expectations in Special Olympics*

15' Warm up and stretching (before bowling)

Practice Delivery, balance and high hand finish during warm up

5' Warm up Throwing as many balls as possible with the same approach

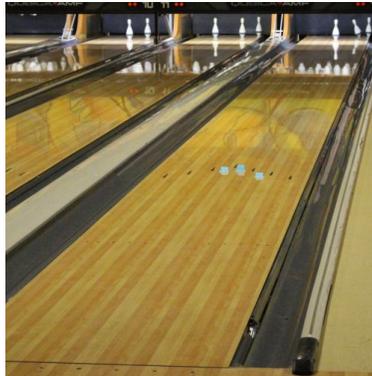
Perform pendulum swings while waiting



40' Delivery **(with video and correct examples, slow down the demonstration when introducing a new skill, use hands to guide movements when necessary)**

- With one foot just in front of the foul line aiming at arrows in the alley (15 feet ahead) and dots on the foul line (using one hand) throw 6 consecutive balls
- With one foot just in front of the foul line Straight ball target bowling using **towels\*** between the desired arrows (six balls)
- With one foot just in front of the foul line. Change **towel\*** location for different arrows and dots (6 throws on each location)
- With one foot just in front of the foul line. Curve ball target bowling with **towels\*** (six throws on each location)

\* Color stripes on the alley also works well



\* Coaches can also help delivery and aim

## *Changing Expectations in Special Olympics*



15' One game (keep track of scores)

**Don't worry about delivery quality, just try to hit each target and finish each delivery with high hand follow through. When precision is around 50% (5-pin) and 80% (10-pin) incorporate a three or four steps approach.**

**Ten-pin should use the curve ball technique as soon as possible.**

### **Conclusion:**

Unless consistent deliveries are achieved, SO bowlers will continue to struggle with precision and inconsistent scores. Many SO bowlers have functional disabilities making "normal" deliveries difficult. In these cases, special lighter balls and ramps should be used. It is possible to have consistent deliveries after a 20-hour program. Using the skill sheet is an excellent way to learn basic bowling skills and encourage athletes to practice often. The more time spent practicing with a focused approach, the better each SO athlete will become. More advanced skills such as reading lanes and pin behavior, different spins and different balls will follow when basic skills are acquired.

Bowling does not elevate the heart rate high enough to significantly contribute to healthy living, therefore Club Fit sessions, personal training and participating in another sport are necessary.

**Lesson Plan**  
**Basic Skill Acquisition Program**  
(weekly or monthly)

Sport \_\_\_\_\_ Athlete Name: \_\_\_\_\_

**Program Expectations**

**1- Weekly Practice** (attend all practices)

Day (S) \_\_\_\_\_ Time \_\_\_\_\_

Location \_\_\_\_\_

“What the group is working on”:

**2- Club Fit** 100% attendance (Including Functional Testing exercises)

Day \_\_\_\_\_ Time \_\_\_\_\_

Location \_\_\_\_\_

“What you need to concentrate on”:

**3- Basic Skill Development Homework** (4 times per week - 1 hour per day)

Skill \_\_\_\_\_

“Individual Home Practice Objectives”