Teaching Snowshoeing

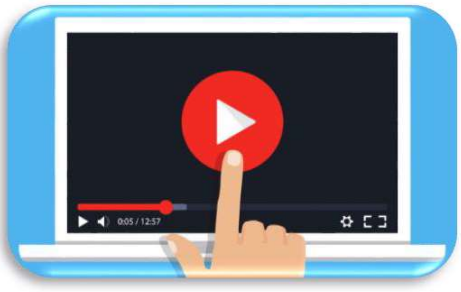
Moving Forward

To move forward on snowshoes is as easy as walking. The movement forward is just placing one foot forward while the other foot is stationary.

Once athletes can competently move forward, they will be able to progress to running and sprinting.

Teaching Points

1. Begin on flat terrain with athlete standing.
2. Move first foot forward.
3. Raise and bring second foot forward allowing for the width of the snowshoe to clear the ankle.
4. Place second foot down ahead of first foot.
5. Repeat steps.
6. To move faster, increase stride rate and/or length.



Click here to watch a video on Moving Forward in Snowshoes

Avoiding Snowshoe Overlap

A certain amount of distance is required between foot-plants to avoid overlapping the snowshoes. When overlap occurs with a shorter stride, the tail of the leading snowshoe lands on and presses down on some part of the frame of the trailing snowshoe. When the snowshoer tries to bring the trailing snowshoe forward and off the ground to start another stride, he or she cannot since the trailing snowshoe is pinned to the ground by the overlap.

Avoiding this overlap is the primary technique to be learned when snowshoeing. Snowshoe overlap most frequently occurs at slower speeds and when walking. It is technically easier to run in snowshoes than to walk in them, simply because the stride and distance

between foot plants is longer when running. Even when running, though, an athlete's stride may be too short to allow clearance.

Conditions that may result in snowshoe overlap:

1. Athletes with shorter legs
2. Deeper or looser snow
3. Uphill slopes
4. Fatigue
5. Toes do not point straight ahead when walking
6. The first few steps to accelerate from a stationary position are too short
7. Improper foot placement on snowshoe

Experienced snowshoers recognize these conditions and apply the required technique to compensate. It does not take much, as you only need about five or six inches between the feet to clear eight-inch-wide snowshoes. Most people walk or run best with one foot planted in front of the other. Some athletes must focus on spreading the snowshoes apart constantly when moving.

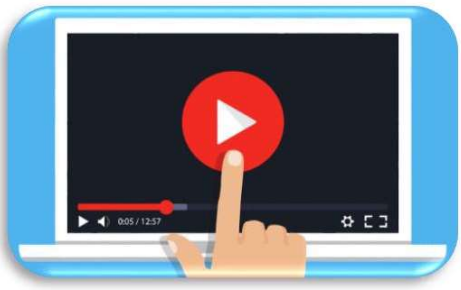
Stopping

Many athletes may have a fear of slick snow that resulted in a fall or an unpleasant experience with a sliding sport (skating, skiing) because stopping required a skill they did not have. You may not see this until the snowshoers come to the top of their first hill and freeze, refusing to descend.

Stopping is the same as when stopping while running or walking without snowshoes. Athlete must de-accelerate if they are moving fast by taking gradually smaller steps/strides until they can just cease taking any further steps.

Teaching Points

1. Gradually, over a few strides, decrease stride length and rate.
2. Teach athlete to keep weight forward, off of tails of snowshoes.
3. Teach athlete not to use other object to stop.
4. Gradually slow down; don't stop abruptly.
5. Show athlete that a snowshoe does not slide like a ski.



Click here to watch a video on Stopping in Snowshoes

Falling

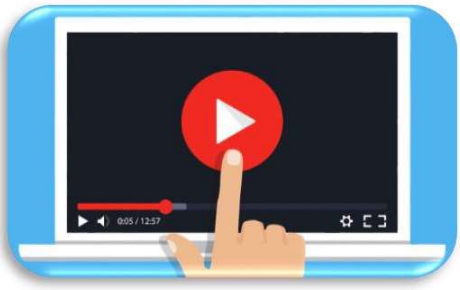
Before you begin the on-snow portion, it is important to teach your athlete the proper way to fall. Falls are a natural part of snowshoeing and falling in the correct way can prevent injury.

Take some time to talk to your athlete, letting them know that it is okay for a fall to occur. By practicing falling, an athlete will become less apprehensive if a fall does occur. Be sure that the athlete also has all of the proper protective equipment prior to practicing falls.

90% of the injuries from falling in snowshoeing are to the wrist and shoulder. Most injuries happen when a snowshoer falls forward in the incorrect way. Practice these movements side by side with your athlete.

Teaching Points

1. Start on your knees and let yourself fall forward onto your forearms.
2. Catch your weight with the forearms away from the body slightly with the elbows bent.
3. Allow your forearms to touch the ground first.
4. Try to resist reaching out toward the ground, or placing the hands out in front.
5. As contact is made, absorb the fall with your arms.



Click here to watch a video on Falling Safely in Snowshoes

You may want to practice this movement with your athlete until he or she is completely comfortable with the movement.

Getting Up

Because falling can be a common issue in snowshoeing, it is important to teach the athlete how to get up from the snow. Many times this can be more frustrating than the fall itself, especially on an incline.

The easiest way for a snowshoer to get up is to rise from a kneeling position where the athlete can then slowly rise to a standing position.

Even an athlete in good condition may have problems getting up from a fall. It is important to work until the athlete is comfortable with this task. During lessons, it is a good idea to have the athlete practice getting up if they fall.

Teaching Points

1. If athlete falls completely to ground, roll onto side.
2. Get up to the hands and knees.
3. Raise one knee and set the shoe flat on the snow.
4. Plant poles (if using poles) in front and stand up.
5. Without poles, the athlete may plant hands on one knee for a boost, if necessary, to regain standing position.
6. Make sure the athlete is not physically injured.

Turning

Turning on snowshoes is as easy as turning when walking or running without them, as long as the turn is not too sharp and the speed is not too high. Simply make each successive step a bit farther to the side in the direction the athlete wants to go.

At high speeds or on sharp (90 degrees or greater) turns, some snowshoes may slip sideways, as most snowshoes do not "edge" well. In these situations, the athlete must plant the snowshoe flat on the snow, not angling it into the snow. The tendency is to allow the snowshoe to make contact with the snow at an angle when one leans the rest of the body into a sharp turn or at high speeds to maintain balance. To counteract this, athletes should concentrate on landing on the balls of their feet (on front claws) and not angling the snowshoe.

Teaching Points

1. Teach athletes to take successive steps to the side.
2. Teach athletes to land on the balls of their feet with the snowshoe flat on the snow.
3. Teach athletes not to cause overlap on tips and tails of their snowshoes.
4. Teach athletes not to back up in snowshoes, but to take small steps when making a 180-degree turn.

Climbing Hills

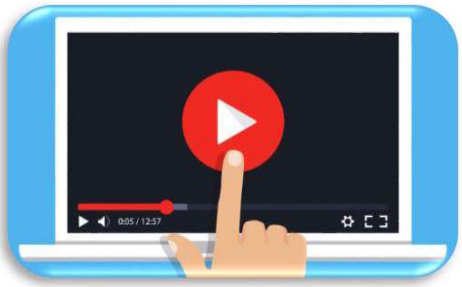
The ability to go up a hill is a part of the sport that makes snowshoeing fun. Snowshoeing is the fastest and easiest way to go up snow-covered hills. There are many different ways to go uphill depending on the snow conditions and size of the hill.

Teaching Points

1. Show the athlete where the fall line is (the line a ball would take as it rolls down the hill).
2. The fall line is usually the most direct route possible up a hill.
3. Take shorter steps, keeping the head up.
4. Keep weight on the balls of the feet.
5. Keep feet spread apart to avoid overlapping snowshoes.
6. Stamp with the toe to dig the crampon into the snow for better traction.
7. Pump arms to power up the hill.
8. Lean slightly into the hill.
9. On short steep hills with loose or deep snow, crawling forward using the hands for balance and traction can help.

Descending Hills

Descending hills can be done safely using the proper techniques.



Click here to watch a video on Descending Hills in Snowshoes

Teaching Points

1. Do not lean back.
2. Try to keep the upper body perpendicular to the slope, and point the toes down to maintain traction.
3. Extend arms out to help maintain balance.
4. Keep knees bent to cushion the impact.
5. It is easiest to run down a hill to get maximum traction and prevent snowshoe overlap, and it is important to do this on icy slopes.
6. It is easier to go straight down the fall line of packed snow hills than to traverse across slopes.
7. Avoid over striding. Brake and slow down by not leaning forward as much and taking shorter, quicker strides.

Sprint Starts

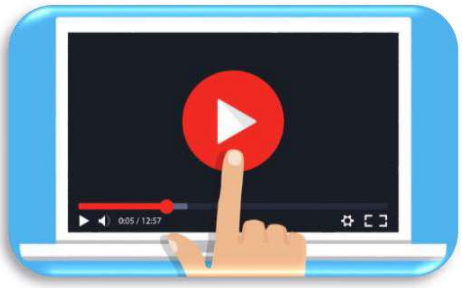
A good start can make all the difference in a sprint because the athletes want to start the race strong and fast.

In a sprint start, the athlete puts the "power foot" forward for a strong launch. Determining the power foot can be easily done by having the athlete pretend to kick a ball. The foot that is used to kick the ball is the back foot. The foot that is used to support the body is the front foot, the power foot. Another way to determine the power foot is to stand behind the athlete and give a little nudge. The foot that the athlete steps out with is the back foot for the start.

Teaching Points

At Start Line

1. Stand behind start line, relaxed, with power leg in front and tips of snowshoes behind line.



Click here to watch a video on Sprint Starts in Snowshoes

"Ready" Command

2. Lean forward slightly at hips and bend front knee slightly (about 120 degrees), placing weight on ball of front foot.
3. Hold opposite arm, from front foot, flexed in front of body.
4. Hold other arm back slightly past the hip and bent.
5. Stand as still as possible.

"Go" Command

6. Drive back leg forward, leading with knee, swinging front arm back.
7. Push strongly off ball of front foot, swinging the back arm forward forcefully.
8. Stay low, using arms to drive body forward.
9. Take wider steps when leaving the start line to avoid overlapping snowshoes.

Acceleration to Top Speed

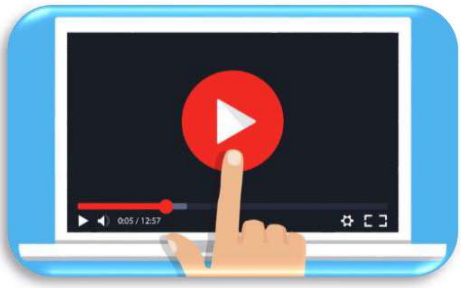
10. Use short, quick steps off the start line, allowing stride to increase in length as velocity increases.

11. Gradually transition to a more upright sprinting position.

Sprinting

Sprinting is the art of running as fast as possible. Sprinting happens when an athlete's legs move faster to propel them forward at a greater rate of speed. Sprinting is when more steps are taken and/or longer steps are taken.

Teaching Points

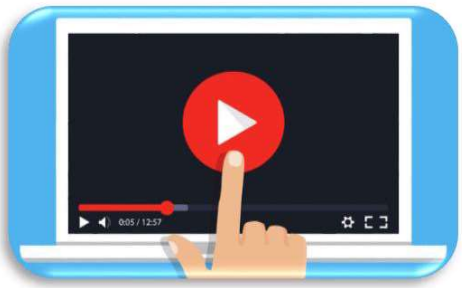


Click here to watch a video on Sprinting in Snowshoes

1. Run in an upright position so the maximum distance is attained with each stride.
2. The forearm and upper arm should form a 90-degree angle at the elbow.
3. Pump the arms (forward and back) with every stride.
4. The arm and leg movements should be synchronized. Move the right arm forward as left leg goes forward.
5. Increasing stride length or stride rate or both will increase speed.
6. Stay in lanes (25m, 50m and 100m). For other races, athletes need to keep moving forward toward the inside lane of track.

Relay Races

Relay races are the 'team' events in snowshoeing. It is the art of running as fast as possible while making a successful Baton exchange with the next runner on your team. Relays develop a friendship and sense of team. Relay teams consist of four teammates who proceed around the track in order. The proper baton exchange between incoming and outgoing runner must take place within the exchange zone.



Click here to watch a video on Relay Races in Snowshoes

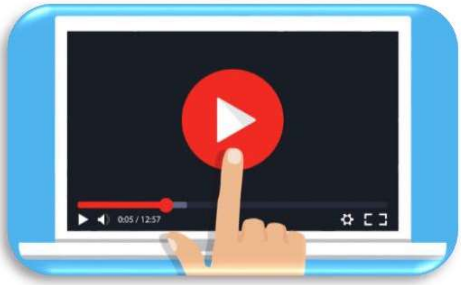
Teaching Points

1. Receiving athlete is positioned in exchange area a few meters in from the start of the exchange area.
2. Receiving athlete is standing in ready position with body slightly turned, arm extended to the side and back, with palm facing up.
3. Receiving athlete watches for approaching teammate.
4. Receiving athlete starts to move forward when approaching athlete reaches the exchange zone or a predetermined point.
5. The approaching teammate runs up to the extended-arm side of receiving athlete and passes the baton into the hand of the receiving athlete.
6. Approaching athlete continues to move in a straight line until coming to a gradual stop.
7. Approaching athlete turns to look that there are no other approaching athletes. When track is clear, proceed off track into the infield area.

Distance Snowshoeing

These are the longer races that really test an athlete's endurance. It combines cardiovascular endurance and endurance to elements such as wind and cold. These events require specific training to ensure that athletes have the endurance to train and compete at the longer distance and not be at risk for injury.

Teaching Points

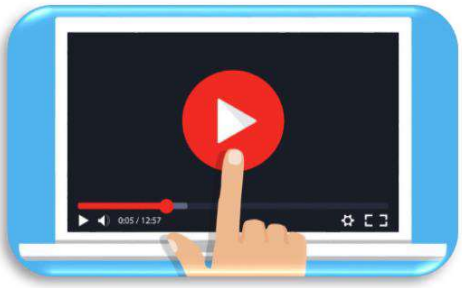


Click here to watch a video on Distance Snowshoeing

1. Keep tall, in an upright position.
2. Have controlled relaxed arm movement.
3. Keep shoulders not hunched and elbows tucked in
4. Try to maintain same speed throughout the entire distance of the race.
5. Keep body relaxed.
6. Appropriate aerobic conditioning is required – athletes should increase duration first, then intensity, to improve conditioning.

Waterfall Start

For events involving a turn, 200 meters and up and the relays, a curved "waterfall" starting line is used so that all snowshoers in all lanes of the track cover an equal distance to a point at the start of the first turn. Snowshoers are lined up starting from the inside lane or lane 1. This lane is reserved for the quickest athlete.



Click here to watch a video on Waterfall Starts in Snowshoeing

Teaching Points

1. Snowshoers should have a good understanding of starting and passing skills, as both will be required.
2. Snowshoers should position themselves at the start line so that they are pointed toward their target point at the first corner.
3. The target point should be the last point along the inside edge of the track visible to an athlete positioned at the start line.
4. Snowshoers need to judge the minimum distance to the athlete(s) ahead and beside them to avoid collisions and blocking.

Following the race start, the snowshoer should take the shortest path to the target point based on the position relative to other snowshoers. Passing can occur during this section but generally requires the athlete to pass on the right. This results in a longer path which may warrant the snowshoer waiting to pass on the straight to minimize the distance covered to accomplish the pass.

Pacing

One of the most difficult advanced skills to learn for a snowshoer is proper pacing. It is more efficient and faster to maintain a constant speed during all segments of a race than to move at an uneven pace. Proper pacing is especially important in longer distance races of 800 meters and above.

Depending on the skill and ability level of the athlete, pacing can become important in races as short as 100 meters.

It is sometimes difficult for an athlete to apply correct pacing, as many other athletes will not run with correct pacing. Most athletes start too fast, slow dramatically in the middle, and then sprint to the finish.

Teaching Points

1. Make sure the snowshoer can move at different speeds and can do this independent of others.
2. Emphasize that it is not always the athlete who starts the fastest who wins a race.
3. Emphasize that a consistent pace and speed over the entire race usually produces the fastest times.
4. Emphasize that the skill at the beginning of a race is to run at their ideal pace, this may require letting other athletes get ahead.
5. These goal pace/distance times are a key tool in allowing athletes to practice even pacing and are useful for athletes to gauge their progress in longer races.
6. As fitness improves, the athletes can increase the number of these repetitions and/or decrease the time/distance resting between them.
7. Coaches should be aware that athletes' best times for a distance may rapidly improve at first, once they learn to pace themselves properly.
8. Goal pace is something that can change weekly/daily for a novice snowshoe athlete, but is more constant for experienced athletes.
9. Be aware that snow conditions, weather, hills and terrain may affect the speed at which a snowshoer might travel in a race. Athletes should learn to base their pacing more on effort than speed.

A workout for distance snowshoers might consist of multiple repetitions over a shorter distance at a speed equal to the pace they want to maintain.

For example, a 1600-meter snowshoer with a best time of 10:00 minutes.

Workout: 6 x 400 meters at a speed of 2:30 minutes per 400m.

Rest between reps: Jog of 200 - 400 meters.

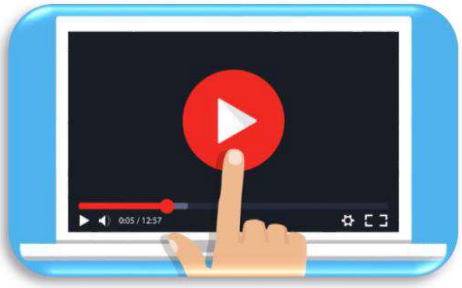
Passing

The ability to safely and effectively overtake and pass another snowshoer is a skill all snowshoers should understand and use. Snowshoeing is unique among Special Olympics winter sports in that most of the races involve a mass start and the athletes do not have to stay in lanes.

Teaching Points

1. A pass is usually required when a faster snowshoer catches up to a slower snowshoer or a snowshoer who has fallen or stopped.
    i. Near the end of a race, it is sometimes wise to initiate a pass so that the snowshoer has a clear run at the finish in case the leading snowshoer slows.
2. Straight sections of the course or track are the best areas to pass.
    i. A snowshoer attempting to pass on the outside of a turn will have to cover more distance to pass, and thus will have to be moving significantly faster to make the pass successful.
    ii. A snowshoer should be able to look ahead to see what is coming up on the course before starting a pass. If the course soon narrows, it may be best to wait until after that to initiate the pass.
3. Athletes should move to the side with sufficient space to pass, and to the side that will position them on the inside of the next turn, if possible.
    i. Generally, snowshoers on a track will keep to the left edge, and passes will have to be made on the right.
    ii. It is possible to pass on the left side on a track if the snowshoer in front has strayed from the left side and the pass can be made quickly enough so that the snowshoer in front, who has the right of way, cannot cut off the passing snowshoer.

4. Generally, you need to move at least 50 cm (20 inches) to the side of a snowshoer to pass.
5. Ideally a pass can be made without significant changes in pace.
    i. Usually, completing a pass involves a slight acceleration in order to compensate for attempts by the leading snowshoer to maintain the lead.
6. The extra length of snowshoes requires that passing snowshoers attain a greater lead before moving in front of the passed athlete.
    i. Generally, a snowshoer needs to be a minimum of two strides or about 1.5 meters (4 1/2 feet) ahead to move in front without interfering.
7. After taking the lead, the passing athlete should resume their own race. This means moving toward the side of the course so as to be on the inside of the next turn. The passing athlete should not worry about those behind him or her on the course.



Click here to watch a video on Passing in Snowshoeing

Finishing

Finishing a race requires the development of pacing skills and timing to allow the snowshoer the opportunity to maintain or even increase speed just before the finish line. Snowshoers who effectively use finishing skills can improve their final positions relative to other athletes who do not have the endurance or energy to apply the final "push" to the finish line.

Teaching Points

1. The snowshoer should have a good understanding of pace and passing skills, as both will be required.
2. The snowshoer needs to judge the maximum distance to the athlete(s) ahead and the distance required to catch and pass the athlete(s).
    i. Sufficient distance to the finish line should be given for any challenges to the passing maneuver by the opposing snowshoer.

3. An allowance of a few meters for these challenges is usually sufficient. Risk of the snowshoer regaining the position increases if the finishing kick and pass are completed too early.
4. Sprinting events require the snowshoer to maintain speed and lean into the finish line with the torso as required in close competition.
    i. The athlete should be able to lean forward just enough to gain the advantage but not so far forward as to lose balance and fall forward or lose forward speed.
5. Distance events require the snowshoer to use an adequate race pace to maintain an acceptable recovery distance from the leading athlete.

Snowshoeing Games/ Drills

With a few modifications, almost any outdoor game can be played on snow. Popular chase and capture games work well. With imagination, the possibilities are endless. The games should suit the ability and ages of the athletes; races or technical games may be intimidating for beginners.

The names of the games can be changed to make them more appropriate to the level of the athletes while maintaining the principles and skills. In most games, it is a good idea to play without poles. These games will help develop conditioning and coordination at any time of the year. These games are not intended to replace skill training but to enhance the training experience with some fun activities.

Rabbits and Hounds (could be called 'Chase Drill")

The "rabbits" are released into an open field wearing a streamer or ribbon. The "hounds" are released to chase down the rabbits and collect the ribbons as trophies. Switch roles and repeat the game. Which team can collect the most ribbons?

Relays

Teams of two racers take turns snowshoeing a loop and to each other. Incorporate a variety of terrains in the loops and increase the number of total loops per athlete over time. Variation: Practice snowshoe skills with the relays. For example, run to a designated point, remove and replace a snowshoe, then return.

Sharks and Minnows (could call it "Zone Tag")

"Minnows" line up on a beach (edge of a field or open area) with one "shark" in the ocean (middle of open area). The minnows try to snowshoe across the field without being tagged by