

Cross
Country
Ski



Coach's
Manual



What is Cross Country Skiing?

- Cross country skiing are loops made up of three equal sections of uphill, level and downhill fields.
- The sport made its Paralympic Games debut in 1976 at Örnsköldsvik, Sweden.
- There are two skiing techniques used in Cross Country Skiing.
 - Classic
 - The athletes skis remain parallel as they travel on premade snow tracks.
 - Freestyle
 - The athletes carve their own path pushing off the side of their skis.

Events

- There are a total of 20 different events.
- Athletes can compete in short, middle and long distance events (ranging from 2.5 km to 20 km).
- Athletes can also compete in team relay's.

Sprint

10 KM middle

20 KM long

Mixed Relay

Open Relay



Eligibility

Any athlete that have one or more of the following impairments are eligible to participate;

- Impaired Muscle Power
- Limb Deficiency
- Leg Length Difference
- Hypertonia
- Ataxia
- Athetosis
- Impaired Passive Range of Movement
- Vision Impairment

Classification

Classification is the system in all para sports that determine who is eligible to compete and who will be grouped together. This grouping is similar to grouping athletes by age, gender and weight.

Athletes are classified by their limitations.

Classification of an athlete change with the evolution of the impairment.

A great resource that simplifies classification:
<https://lexi.global/sports/winter-sports/cross-country-skiing>



Classification- Standing Skiers

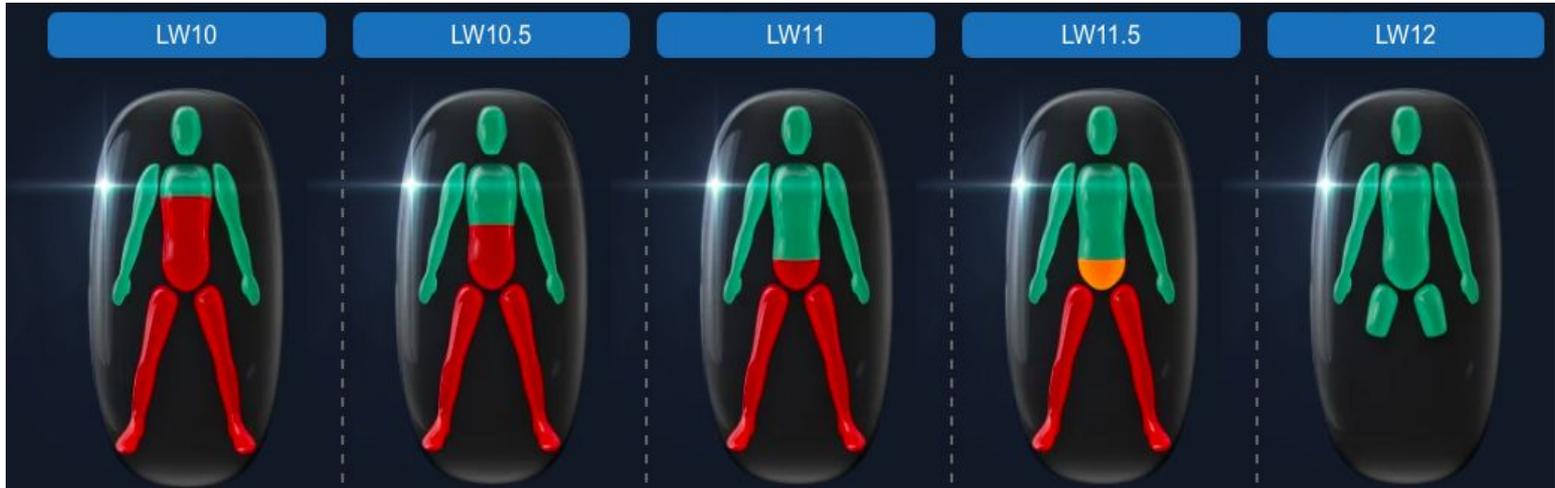
- Athletes with a classification of LW2-9 have some kind of limb deficiency.
 - **LW2-4: Lower Limb Impairments**
 - LW2: Athletes that have an impairment in one leg.
 - LW3: Athletes have an impairment in both legs.
 - LW4: Athletes have an impairment in one leg.
 - **LW5-8: Upper Limb Impairments**
 - LW5/7: Athletes have an impairment in both arms and compete without ski poles.
 - LW6: Athletes have an impairment in one arm and compete with one ski pole.
 - LW8: Athletes have an impairment in one arm and compete with one ski pole.
 - **LW9: Combined Upper and Lower Limb Impairments**
 - Athletes have an impairment that affects their arms and their legs. Depending on their degree of impairment they compete with one or two skis and one or two poles.

Green= No impairment
Yellow= affected at a low level
Orange= affected at a moderate level
Red- High degree of impairment



Classification- Sit Skiers

- Athletes with a classification of LW10-12 have an impairment affecting their legs and compete in a seated position.



Green= No impairment
Yellow= affected at a low level
Orange= affected at a moderate level
Red- High degree of impairment

Classification- Visual Impairments

- Athletes with a classification of B1-3 have a visual impairment, athletes with a visual impairment compete with a guide. The guide gives verbal directions to the athlete.



Green= No impairment
Yellow= affected at a low level
Orange= affected at a moderate level
Red- High degree of impairment

Adaptive Equipment

All equipment can be adjusted to fit the specific needs of the individual.

Visually impaired skiers use the same skis and poles as able bodied skiers.

Guides for visually impaired skiers wear a bright coloured bib to identify themselves.



Sit-skis

Sit-ski's or monoski are for the athletes that have an impairment of some kind affecting the torso and/or lower limbs.

Sit skis have a moulded bucket attached to the ski using a sturdy metal frame. They also have a shock absorber below the seat to make the ride more comfortable.

The poles used for sit skiers are the same as ambulatory cross country skiers.



Competition- Start Order

- The starting order is determined by the organizing committee, however typically the faster classes start first when more than one class is racing at the same time to avoid over taking.
- The recommended start order is as follows;
 - Men (LW 10-12)
 - Women (LW 10-12)
 - Men (B1-3)
 - Men (LW 2-9)
 - Women (B1-3)
 - Women (LW 2-9)

Coaching Tips

Disclaimer: The following suggestions may not represent the needs of all disabled or blind individuals. Athletes have unique requirements, and it is crucial to avoid assumptions and maintain open communication. Athletes know themselves best; listen to them.

Respect Personal Boundaries:

- Never touch or grab the athlete without their explicit consent, except in cases of immediate danger.
- Discuss this boundary with the athlete and any other individuals providing instruction on the snow.

Avoid Assumptions:

- Always ask the athlete if they need assistance before taking action.

Preparations Before Hitting the Trails

- Prior to heading out on the snow, engage the athlete in a discussion about their boundaries and safety measures.
 - Consider factors such as balance, mobility, depth perception, assistance with putting on skis, and preferred communication styles.

Understanding Visual Acuity:

- Continuously discuss the athlete's visual abilities in both the lodge and on the trails.
- Pose questions such as:
 - Do you have remaining eyesight, and if so, in both eyes or just one?
 - What is your visual field?
 - Are you sensitive to light? Does sunlight impact your vision? Are shadows affecting your depth perception?
 - Do you experience vertigo?

Consider Hearing Impairments:

- Recognize that some visually impaired individuals may also be hard of hearing.

Guiding a Visually Impaired Athlete

- Allow athlete to feel the equipment (skis, binding, poles)
- If possible, put one ski indoors to figure out weight and balance.

Discuss Language and Communication Style:

- Things to consider regarding the terrain.
 - Uphill/downhill steepness, turns at the top/bottom of hills.
 - Differences in snow texture (icy patches, powder, packed)
 - Branches popping out onto the trail
- Frequent stops and debriefing are essential.
- The amount of visual cues will vary depending on the athletes visual acuity and mobility.

Verbal Instructions

- Recognize the importance of varied communication styles.
- Understand that explaining movements may require different approaches for the athlete to grasp.
- Consider the athlete's ability to see or mimic and tailor instructions accordingly.
- For example, in classic skiing, describe the sensation of gliding, pushing off, and weight distribution. Specify where the poles should land.
- Make it fun!

Resource

- <https://www.paralympic.org/nordic-skiing/classification>
- <https://lexi.global/sports/winter-sports/cross-country-skiing>
- <https://paralympic.ca/paralympic-sports/para-nordic-skiing>
- <https://lexi.global/sports/winter-sports/cross-country-skiing/lw2-9>
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