Cross Country Ski Ontario
Field Testing Program Manual

Developed by XCSO's High Performance Committee

in Collaboration with Nordiq Canada

20 June 2025 - V2

Para Nordic Testing Adaptations will be
integrated into the Manual once it is complete

Video Demonstrations are on
XCSO's YouTube Channel

Please note that the XCSO Field Testing Protocol is in pilot mode for 2025.

If you encounter any errors, inconsistencies, or unclear instructions, please report them to techdirector@xcskiontario.ca. A formal feedback period will take place in October 2025 to help refine the program for future seasons.

Testing Manual Updates

<mark>All updated text in the manual is highlighted in yellow for ease of reference</mark>.

Date	Test	Edits
20250614	Data Recording Sheet	Updated to include date column for each test
20250620	Hexagonal Jump Test	Equipment & location, testing sequence and diagram updated.

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XCSO Field Testing Program

**"Ontario athletes, coaches, officials, wax technicians, and event hosts
are consistently recognized as among Canada's best."**
Excellence Pillar - XCSO 2023-2028 Strategic Plan

Achieving this standard goes beyond podium results—it requires a shared commitment to high-quality daily training environments, continual learning, and athlete-centered development. To build on this foundation, XCSO has developed an integrated program that includes a **province-wide Camps Program, a Field Testing Program, and targeted Coach Professional Development**. Together, these initiatives are designed to elevate athlete support at the club level and reinforce Ontario's leadership in cross country skiing across Canada.

Audience

All Ontario athletes **U14 and older who are engaged in regular training** are encouraged to participate in the XCSO Testing Program. Regular testing supports athlete development and helps align training across the province. **Participation is required for members of Team Ontario**, which includes athletes on the Ontario Development Team, Ontario Junior Ski Team (OJST), Ontario Ski Team (OST), NTDC Thunder Bay, the Ontario Para Nordic Ski Team, and the Ontario Para Nordic Development Team. (Adaptations for Para Nordic athletes will be included in Version 2 of the protocols.) Our goal is for all club coaches to facilitate testing for athletes in these categories as part of their seasonal training plans.

Purpose

Cross country skiing places high demands on both **strength endurance** and **movement quality**. Athletes must ski with technical precision while maintaining strong, stable positions. The XCSO Field Testing Program is designed to identify **movement quality gaps** and highlight opportunities for improvement.

With a focus on movement quality, these tests help athletes build **structural tolerance**—the physical capacity to handle increased training demands while staying healthy and injury-free. The protocols are simple, quick to administer, and require minimal equipment, allowing them to be performed almost anywhere.

Because the tests are non-fatiguing, they can be easily integrated into training plans and repeated regularly throughout the season, giving coaches and athletes and XCSO meaningful data to guide long-term development.

Testing Objectives

Athletes:

Testing protocols are essential for athletes to track progress, prevent injuries, and optimize training. These tests will provide objective data to personalize programs, assess readiness for competition and benchmark performance. By completing these tests on a consistent basis, athletes will also have the opportunity to reconnect and socialize with other athletes from various clubs.

Coaches:

Testing protocols provide objective data to assess athlete development, tailor training programs and prevent injuries. They help monitor progress, identify potential weaknesses, and help athletes progress with confidence towards their goals.

XCSO:

Testing protocols will provide XCSO with the data required to ensure standardized athlete development practices, enhance club daily training environments, and deliver camps that address identified deficiencies. Consistent provincial testing also aligns athletes with procedures occurring at the national and international level of Cross Country Skiing. Global data will be compared with other provincial data to ensure that Ontario athletes' benchmarks are competitive.

Testing Blocks

Coaches are encouraged to test their athletes regularly, as it helps athletes track progress, set goals, and stay engaged in their development. Regular testing also helps athletes get into a racing frame of mind, providing valuable practice that can reduce both race-day and testing anxiety.

The XCSO Testing Program aims to collect data from two designated testing blocks each year:

- June, with results submitted by June 30, and
- September, with results submitted by September 30.

These timelines support consistent evaluation and help align athlete development across the province

Testing Education and Collaborative Sessions

Implementing the new testing protocols will involve a learning curve for coaches, athletes, and XCSO alike. **The first year of the program will serve as a pilot phase**, and we are committed to adapting the protocols based on feedback and experience. To support this process, **XCSO will provide**

guidance through Community Updates, online education resources, and collaborative testing opportunities. For example, NOD will host a testing camp in June to promote consistency and peer learning. Clubs and training groups across the province are encouraged to work together to deliver testing sessions, share best practices, and help create a supportive and engaging testing culture.

The Need for New Testing Protocols

Cross Country Ski Ontario (XCSO) is updating its field testing program to better support athlete development and respond to challenges with the previous system, which was overly complex, inconsistently applied across the province, and not yielding the insights needed to guide training. The new testing model is simpler, easier to administer, and more directly connected to ski-specific demands, allowing for consistent use by clubs and coaches while improving the quality and relevance of the data collected.

The updated tests focus on key physical qualities linked to skiing performance and include select protocols that align with national standards. This alignment enables meaningful inter-provincial comparisons and helps benchmark Ontario athletes against top performers across Canada. The goal is to raise the overall performance standard and better support Ontario athletes as they transition through high school and into more competitive environments, ensuring they are well-prepared to meet the demands of national-level racing.

Data Privacy

To support data collection and analysis, coaches will upload testing results using the provided template, which includes the athlete's name and age at the time of the test. To protect athlete privacy, each individual will be assigned a unique identification number for any published or shared data. Personal identifying information (such as names and ages) will not appear in publicly accessible datasets. XCSO is committed to handling all athlete data in accordance with best practices for privacy and confidentiality.

Feedback on Protocols

XCSO embraces a culture of continuous improvement, and while we always welcome input, we are specifically seeking feedback this year as the testing protocols are in their pilot phase. Please report any errors, inconsistencies, or areas of confusion as you encounter them by emailing techdirector@xcskiontario.ca. A formal feedback period will take place in October 2025 to help refine the program for future seasons.

Testing Overview

Age Group	Team Ontario Virtual Meet & Greet (OJST, OST/Bridge Program, NTDC)	Testing Block	Testing Block	Team Ontario Development Meet and Greet
	May	June	September	September
U14 Y1			🟩	🟩
U14 Y2			🟩	🟩
U16 Y1			🟩	🟩
U16 Y2	🟩	🟩	🟩	🟩
U18 Y1	🟩	🟩	🟩	
U18 Y2	🟩	🟩	🟩	
U20 Y1	🟩	🟩	🟩	
U20 Y2	🟩	🟩	🟩	
U23 Y1	🟩	🟩	🟩	
U23 Y2	🟩	🟩	🟩	
U23 Y3	🟩	🟩	🟩	
Senior	🟩	🟩	🟩	

Definitions

Team Ontario: All Ontario athletes are invited to participate in this testing program. There are specific testing requirements for members of Team Ontario. Team Ontario is defined as Ontario Development Team, Ontario Junior Ski Team (OJST), Ontario Ski Team (OST), NTDC - Thunder Bay, Ontario Para Nordic Ski Team, and Ontario Para Nordic Development Team (Para Nordic adaptations will be included in Version 2).

Testing: A measurement that determines an athlete's current performance against specific standards or markers.

Pull-Up (Neutral Grip): The purpose of this test is to measure upper body strength and endurance. This exercise tests the strength capacities of the muscles used in the poling motions during skiing.

Broad Jump: The purpose of this test is to measure lower body explosive power. The farther an athlete can jump, the more likely they are able to generate lower body power during skiing.

Hexagonal Jump: The purpose of this test is to evaluate explosive power and precision during multidirectional jumping as well as neuromuscular control and movement efficiency.

Erg Critical Power Test: The Erg Critical Power Test is designed to assess two key physiological parameters - Maximum sustainable power output (Critical Power) and Anaerobic capacity over a short period of time. The data collected from this test can be used to monitor training effectiveness and to inform individualized pacing strategies and training intensities.

50 m & 3000 m Track Run: The purpose of the 3000 m test is to assess an athlete's aerobic fitness and endurance. This test also evaluates athletes cardiovascular fitness and VO2 Max. The purpose of the 50 m run is to assess the athletes' anaerobic performance. This test also evaluates athletes speed and acceleration over a short distance.

Comparative Speed Roller Ski Test: The purpose of this test is to assess an athlete's upper and lower body strengths and weaknesses by comparing their speed—specifically, Full Body Skate versus Double Pole, and Full Body Skate versus Legs Only—under standardized conditions using a consistent course and timing method. The test is designed to measure performance and calculate two key ratios: Full Body Skate to Double Pole, and Full Body Skate to Legs Only. These ratios help identify strengths, imbalances, and areas for targeted development.

Testing Protocol: Pull-Up Test (Neutral Grip)

Purpose

The purpose of this test is to measure upper body strength and endurance. This exercise tests the strength capacities of the muscles used in the poling motions during skiing.

Equipment & Location

- ☐ Sturdy pull-up bar with adequate grip
- ☐ Box or chair to assist with initial positioning
- ☐ Stopwatch
- ☐ Indoor location preferred for consistency; note conditions if conducted outdoors

Athlete Preparation

- ☐ Standard athletic wear and training shoes
- ☐ Ensure proper hydration and pre-test nutrition
- ☐ Minimum 15-minute warm-up focusing on upper body mobility, shoulder activation, and grip readiness

Testing Sequence

1. Initial Setup
   a. Athlete uses box or chair to reach the bar
   b. Test begins from a dead hang position with arms fully extended and body vertical

2. Execution
   a. Hands placed approximately shoulder-width apart using a neutral grip (palms facing each other. If equipment does not allow this, use prone grip (palms facing forward)
   b. Pull-up counts only if:
      i. Chin clearly passes above the bar in the top phase
      ii. Arms return to full extension in the bottom phase
      iii. No swinging or hip flexion is used
   c. The movement must be continuous with the athlete maintaining a hanging position
   d. The test continues until failure (loss of proper form or inability to complete another repetition)

3. Rest & Repeat
   a. Rest period of 2 minutes
   b. Second attempt performed under same conditions

Modifications for this Protocol

If an athlete is unable to perform a single chin-up, modifications can be made to ensure all athletes experience success and can track progress over time. The goal of the Pull-Up Test is to develop upper body strength in a supportive and inclusive way. Coaches are encouraged to modify the test based on the outlined modification protocol and to revisit the test periodically as strength improves.

1. Select The Right Band
   Bands come in a variety of strengths, with a thick band offering more assistance (making the pull-up easier), and a thinner band providing less assistance. Used bicycle tubes work well.

2. Attach the Band to the Pull-Up Bar
   Next loop the resistance band around the pull-up bar. To do this, reach up and hook one band over the bar, then pull it down and thread it through the other end of the band, creating a secure loop around the bar. Once it's attached, pull it tight so that it doesn't shift when you step into it.

3. Position your Feet or Foot in The Band
   Step on a stool or bench (if necessary) and place one foot or knee into the band. The band should be taut, providing a slight resistance. If you're using your foot, the band should be sitting under your feet. If you're using your knee, it should sit just below your knee joint.

4. Grip the Bar
   Reach up and grab the bar with an overhand grip (palms facing away from you).

5. Perform the Pull-Up
   With the band looped under your feet or knees, pull your body up towards the bar.

6. Repeat!
   Repeat for as many repetitions as you can manage without comprimings form.

Watch Test Demonstration

Recording & Reporting

- ☐ Total number of properly executed pull-ups for each set
- ☐ Modification, if used
- ☐ Any deviations (e.g., improper form, equipment used, environmental conditions) must be noted

Testing Protocol: Standing Broad Jump

Purpose

The purpose of this test is to measure lower body explosive power. The farther an athlete can jump, the more likely they are able to generate lower body power during skiing.

Equipment & Location

- ☐ Flat, even surface (asphalt or track preferred)
- ☐ Tape measure
- ☐ Tape (to mark start line)
- ☐ Dowel or metre stick (for measurement accuracy)
- ☐ Optional: Video recording for technique analysis

Note: The use of a dowel or metre stick ensures a straight and accurate alignment for measuring jump distance.

Athlete Preparation

- ☐ Standard athletic footwear and attire
- ☐ Ensure hydration and appropriate warm-up
- ☐ Recommended warm-up includes dynamic lower-body movements and jump preparation (minimum 10–15 minutes)

Testing Sequence

1. Setup
   a. Mark a clear starting line (0 m) on the ground using tape
   b. Athlete stands with feet apart and toes just behind the line

2. Jump Execution
   a. Athlete performs a two-footed jump, bending the knees and using the arms to assist in generating forward drive
   b. One counter movement (dip and swing) is allowed before take-off
   c. The athlete must land on both feet and hold the landing until instructed to move
   d. The distance is measured from the starting line to the heel of the rear foot (e.g., 212 cm)

3. Attempts and Rules
   a. Three (3) attempts are allowed, and all distances must be recorded
   b. The best (furthest) jump is used as the final score
   c. A jump is disqualified if:
      i. The athlete steps forward or backward after landing
      ii. Feet skid or slide upon landing
      iii. Hands touch the ground
      iv. The take-off is not from two feet or the landing is not a "stuck" two-foot landing

[Watch Test Demonstration](#)

Recording & Reporting

- ☐ Record each attempt in centimeters
- ☐ Use a dowel or metre stick to ensure tape alignment for accuracy
- ☐ Final score = longest legal jump out of the three
- ☐ Note surface type and any conditions affecting performance

Testing Protocol: Hexagonal Jump Test

Purpose

The purpose of this test is to evaluate explosive power and precision during multidirectional jumping as well as neuromuscular control and movement efficiency.

Equipment & Location

- ☐ Standard hexagonal jump apparatus with 60cm side lengths and 120 degree side angles, and the following hurdles IN ORDER clockwise: H_1= 20cm, H2=32 cm, H3=20 cm, H4=25 cm, H5=20 cm, H6=35 cm - see diagram below
- ☐ Stopwatch
- ☐ Even, hard surface with good traction (e.g., turf, track, court, or dry asphalt)
- ☐ Optional: Video recording for technique analysis

Note: Ensure the surface provides adequate traction to prevent slipping or injury.

Athlete Preparation

- ☐ Standard athletic footwear and attire
- ☐ Ensure proper hydration and light nutrition
- ☐ Minimum 15–20 minute warm-up focusing on dynamic movements, mobility, and jump preparation

Testing Sequence

1. Initial Set-up
   a. The athlete stands in the center of the hexagon with the first hurdle (H1) on their left for the clockwise direction (and then on their right for the counterclockwise direction).
   b. Timekeeper gives the command: "Ready… Go!"

2. Execution
   a. The athlete starts with both feet together inside of the hexagon. At the start command, the athlete jumps laterally across H1 and back, landing with the next hurdle on their left (or right for counterclockwise).
   b. Athlete jumps with two feet, moving continuously around the hexagon.

c. Each attempt consists of two full revolutions around the hexagon, starting and ending on H1 (athlete jumps over H1 3 times)
d. Timing begins on the "Go" command and stops when the athlete completes the second full lap after completing their 3rd and final jump over H1.

3. Attempts and Rules
   a. A maximum of three (3) attempts per direction is allowed. Athletes will begin with the clockwise direction, alternating to the counterclockwise direction following their initial attempt
   b. Athletes will have a rest period of 30 seconds between each attempt
   c. If a hurdle is touched or knocked down, the attempt is disqualified
   d. One false start is permitted (only if contact occurs within the first two hurdles); repeat the attempt in that case
   e. Starting before the "Go" command results in automatic disqualification
   f. If all three attempts in a direction are disqualified, a score of zero (0) is recorded for that direction

Watch Test Demonstration

Recording & Reporting

☐ Record the best time (in seconds) for each direction
☐ Note disqualifications or any false starts
☐ Record surface type and environmental condition

Modifications for this Protocol

If appropriate hurdles are unavailable, athletes can complete this test using a taped hexagon as an acceptable alternative. If this modification is implemented, it must be noted in the testing log.

Hurdle Diagram

60cm
$H_6=35cm$
$H_5=20cm$
$H_1=20cm$
$H_4=25cm$
$H_2=32cm$
$H_3=20cm$

1.
2.
3.
4.
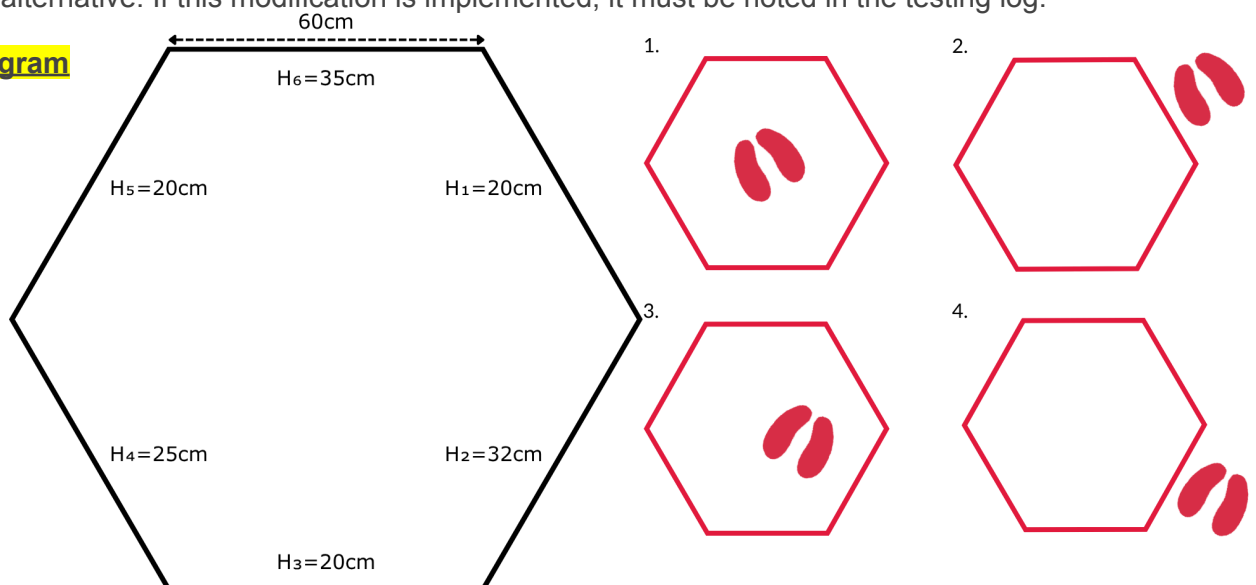
Testing Protocol: Erg Critical Power Test

Purpose

The Erg Critical Power Test is designed to assess two key physiological parameters:

- Maximum sustainable power output (Critical Power)
- Anaerobic capacity over a short period of time

The data collected from this test can be used to monitor training effectiveness and to inform individualized pacing strategies and training intensities.

Equipment

- ☐ Concept2 Skierg (preferred for standardization)
- ☐ Erg placed on a non-slip surface or secured with weights to prevent movement during maximal efforts
- ☐ Video recording recommended for technique review and verification
- ☐ Stopwatch and data recording sheet or ErgData app

Set-up & Calibration

- **Drag Factor: Set the machine to a drag factor of 110 (around 7)**
  - This ensures consistency between machines and across test sessions
  - This drag factor standardizes power output regardless of resistance setting
  - *Note: If gender or age-specific drag factor adjustments are eventually introduced, they must be explicitly documented and applied consistently*

- **Stroke Rate / Stroke Length: Not standardized for this test**
  - Athletes are encouraged to use their natural race stroke rate and technique
  - However, stroke rate and stroke length should be recorded for analysis

Test Duration

- 10-minute warm-up (self-directed, low to moderate intensity)
- 3-test protocol (22 minutes total, including 5 minute rest periods between each interval):

- ○ 30-second maximal effort
- ○ 2-minute maximal effort
- ○ 4-minute maximal effort

Testing Sequence

1. Warm-Up (10 min):
   a. General warm-up with light double-poling on the erg
   b. Include a few short bursts to prepare for maximal efforts

2. 30-Second Test:
   a. All-out effort using double-pole technique
   b. Emphasis on maximal anaerobic power
   c. Record: *Max Power*, *Average Power*, *Stroke Rate*, *Distance*

3. Rest (5 minutes):
   a. Active or passive recovery

4. 2-Minute Test:
   a. Sustain the highest possible power output for the full 2 minutes
   b. Focus shifts to anaerobic capacity and fatigue resistance
   c. Record: *Max Power*, *Average Power*, *Stroke Rate*, *Distance*

5. Rest (5 minutes)
   a. Active or passive recovery

6. 4-Minute Test:
   a. Maximal sustainable effort
   b. Best indicator of critical power (threshold level effort)
   c. Record: *Max Power*, *Average Power*, *Stroke Rate*, *Distance*

Watch Test Demonstration

Recording and Reporting

At the end of each test: 30 second, 2 minute and 4 minute, record:

- ☐ Max Power
- ☐ Average Power
- ☐ Stroke Rate
- ☐ Distance

Testing Protocol: 50 m & 3000 m Track Run

Purpose

The purpose of the 3000 m test is to assess an athlete's aerobic fitness and endurance. This test also evaluates athletes cardiovascular fitness and VO2 Max. The purpose of the 50 m run is to assess the athletes' anaerobic performance. This test also evaluates athletes speed and acceleration over a short distance.

Equipment & Location

- ☐ Standard 400 m **rubberized track** is preferred
- ☐ **Gravel or grass tracks** are acceptable alternatives but must be noted in test records
- ☐ Stopwatch (or timing gates if available)
- ☐ Measuring tape or clearly marked distances (50 m and 3000 m)
- ☐ Split timers (for 1 km intervals during the 3000 m)
- ☐ Weather and surface conditions must be recorded

Note: The same track should be used for each athlete's repeat testing to ensure consistent comparisons.

Athlete Preparation

- ☐ Athletes must wear regular training shoes (no spikes)
- ☐ Ensure hydration and appropriate pre-test nutrition
- ☐ Minimum 30-minute active warm-up, including dynamic drills and strides

Testing Sequence

1. 30-minute warm-up

2. 50 m Sprint Test
   a. After the 30 minute warm up, athlete performs a timed 50 m sprint from a standing start
   b. Record the time

3. Extended Warm-up

a. Continue light movement, drills, and strides for approximately 10 more minutes before the endurance test

4. 3000 m Endurance Test
   a. Athlete completes a 3000 m run at best possible pace
   b. Record the total time and, 1 km splits or lap time splits
   c. Use the same pacer, timer, or system across test sessions for consistency

Watch Test Demonstration

Recording & Reporting

☐ Surface type and weather conditions must be recorded
☐ 50 m sprint: total time
☐ 3000 m run: total time in minutes and seconds, and, 1 km or lap time splits
☐ Any deviations (e.g., different track, injury notes) must be noted in the test log

Testing Protocol: Comparative Speed Roller Ski Test

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Purpose

The purpose of this test is to assess an athlete's upper and lower body strengths and weaknesses by comparing their speed—specifically, Full Body Skate versus Double Pole, and Full Body Skate versus Legs Only—under standardized conditions using a consistent course and timing method. The test is designed to measure performance and calculate two key ratios: Full Body Skate to Double Pole, and Full Body Skate to Legs Only. These ratios help identify strengths, imbalances, and areas for targeted development.

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Equipment & Location

- ☐ Slight up-hill with consistent grade on the best pavement available. Approx. 750 m (aim for 2.5 to 3.5 minutes time) - Once you choose your location, stick to it for subsequent tests.
- ☐ Designated start and finish lines
- ☐ Standard skate poles (used for all three test formats)
- ☐ Heart rate monitors (if available)
- ☐ Start clock (for self-regulated start times)
- ☐ Stopwatch or watch (worn by athlete for manual time recording)

Note: Course must have equal grade at start and finish. Surface must be safe and suitable for roller skiing.

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Athlete Preparation

- ☐ Proper hydration and light nutrition before testing
- ☐ Accurate pole length measurement recorded
- ☐ Minimum 20-minute warm-up appropriate for skate technique and movement patterns
- ☐ Skate poles selected and used for all three testing blocks

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Testing Sequence

1. Warm Up - Minimum 20 minutes

2. **Full Body Skate Test**
   a. Athletes start every 30 seconds, using the start clock and start list

    b. Record time in seconds

3. Active or passive recovery

4. Double Pole Test
    a. Athletes start 20 minutes from the Full Body Skate start time, using the start clock and start list.
    b. Record time in seconds

5. Active or passive recovery

6. Legs Only Test
    a. Athletes start 20 minutes from the Double Pole start time, using the start clock and start list.
    b. Record time in seconds
    c. Performed using skate technique (offset, one-skate, or two-skate only); athletes should mimic their arm/pole movement; free skating is not permitted

Watch Test Demonstration

Attempts and Rules

☐ One attempt per format (Full Body, Double Pole, Legs Only)
☐ Timing must be accurately recorded in seconds
☐ Athletes must follow start clock; no early or late starts
☐ Improper or unsafe technique results in disqualification from that segment

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Recording & Reporting

☐ Record the following times in seconds: Full Body test, Double Pole test, Legs Only test
☐ Ratios will be automatically calculated in the reporting template.
☐ Note disqualifications or any false starts
☐ Record surface type and environmental conditions

About the Ratios

The test is designed to measure performance and calculate two key ratios: Full Body Skate to Double Pole, and Full Body Skate to Legs Only. The ratios will be automatically calculated in the reporting template. The ratios are calculated as follows:

1. Full Body to Double Pole example:
    a. Full Body time: 300 seconds

    b. Double Pole time: 350 seconds

    c. Ratio FB/DB = 86%

2. Full Body to Legs Only example:
    a. Full Body time: 300 seconds
    b. Legs Only time: 325 seconds
    c. Ration FB/LB: 92%

Appendix 1 - Sample Testing Schedules

To support effective planning and consistency in testing, we have provided four sample testing schedules that reflect different weekly training rhythms. These examples are designed to help coaches and athletes integrate testing into their existing programs without overwhelming any single training block. Once a schedule is selected, we recommend maintaining the same structure throughout the season to ensure data comparability and reduce disruptions to training flow.

Sample Schedule #1
Saturday AM - Roller Ski Test
Saturday PM - Erg Test
Following Saturday - 50 m test, 3000 m and Static Tests

Sample Schedule #2
Tuesday - Roller Ski Test
Thursday - 50 m test, 3000 m and Static Tests
Saturday - Erg Test

Sample Schedule #3
Thursday - Roller Ski Test
Saturday - 50 m test, 3000 m and Static Tests
Sunday - Erg Test

Sample Schedule #4
Saturday AM - Roller Ski Test
Saturday PM - Erg Test and Static Tests
Sunday - 50 m and 3000 m Tests

Once a schedule is chosen try to keep it consistent for the rest of the season.

Appendix 2 - Data Collection and Management

The Link to Cross Country Ski Ontario's Tracking Sheet is available on the website.

Who should be taking this test

As outline in the "Audience" section of these protocols:

1. All **Team Ontario identified athletes are required to participate in the testing program** (Ontario Development Team (September testing block only), Ontario Junior Ski Team (OJST), Ontario Ski Team (OST), NTDC Thunder Bay, the Ontario Para Nordic Ski Team, and the Ontario Para Nordic Development Team.
2. All Ontario athletes **U14 and older who are engaged in regular training** are encouraged to participate in the XCSO Testing Program. (Adaptations for Para Nordic athletes will be included in Version 2 of the protocols.) Our goal is for all club coaches to facilitate testing for athletes in these categories as part of their seasonal training plans.

Exemptions

Team Ontario athletes (as defined above) that are unable to complete a required testing submission may request an exemption. The following outlines the process for athletes to complete this request.

1. All requests are to be submitted by the individual athlete seeking the exemption or extension.
2. Requests are to be received as rarely as possible and in advance of the testing submission date.
3. Appropriate documentation and reasoning should accompany all requests. Medical, or other.
4. Requests are to be submitted to Alex Roger (techdirector@xcskiontario.ca)

Privacy

To support data collection and analysis, coaches will upload testing results using the provided template, which includes the athlete's name and age at the time of the test. To protect athlete privacy, each individual will be assigned a unique identification number for any published or shared data. Personal identifying information (such as names and ages) will not appear in publicly accessible datasets.

XCSO is committed to handling all athlete data in accordance with best practices for privacy and confidentiality.