



## **SKI JUMPING CANADA STRATEGIC PLAN: 2014 – 2022 APPENDIX C – LONG TERM ATHLETE DEVELOPMENT PLAN**

---

Ski Jumping Canada and Nordic Combined Ski Canada have a Long Term Athlete Development Plan that follows the outline provided by Sport Canada. More information on Sport Canada's Sport For Life (LTAD model) is available at the following link:

[http://canadiansportforlife.ca/sites/default/files/user\\_files/files/CS4L%2020EN\\_April16\\_webpdf.pdf](http://canadiansportforlife.ca/sites/default/files/user_files/files/CS4L%2020EN_April16_webpdf.pdf)

**Oversight of the LTAD is done on behalf of the SJC Board of Directors by the High Performance Committee.**

**Implementation of the LTAD is the primary responsibility of the applicable coaching staff.**

**SJC/NCSC LTAD has the following Stages:**

- |          |  |
|----------|--|
| Stage 1: | Active Start   |
| Stage 2: | Fundamentals   |
| Stage 3: | Learn to Train   |
| Stage 4: | Train to Train (Building the Engine)   |
| Stage 5: | Train to Compete <ul style="list-style-type: none"><li>• Phase 1: Learn to Compete</li><li>• Phase 2: Train to Compete</li></ul> |
| Stage 6: | Train to Win   |
| Stage 7: | Active for Life  |



## SKI JUMPING CANADA STRATEGIC PLAN: 2014 – 2022 APPENDIX C – LONG TERM ATHLETE DEVELOPMENT PLAN

---

### [Long Term Athlete Development \(LTAD\) Ten Key Factors](#)

The following information is quoted directly from [www.canadiansportforlife.ca](http://www.canadiansportforlife.ca) and is attached here for information and education.

#### Ten Key Factors

**Long-Term Athlete Development (LTAD) is based on sport research, coaching best practices, and scientific principles. LTAD expresses these principles, research, and practices as 10 Key Factors essential to athlete development.**

To optimize the development of our athletes, we need to take advantage of the best sport science and best practices in coaching and training. Long-Term Athlete Development (LTAD) does this by codifying important elements of sport science and coaching practices into the 10 Key Factors of LTAD:

1. [Physical Literacy](#)
2. [Specialization](#)
3. [Developmental Age](#)
4. [Sensitive Periods](#)
5. [Mental, Cognitive and Emotional Development](#)
6. [Periodization](#)
7. [Competition](#)
8. [Excellence Takes Time](#)
9. [System Alignment and Integration](#)
10. [Continuous Improvement - Kaizen](#)

Along with sport science and coaching, the 10 Key Factors include broader principles behind the way we organize and manage sport. For example, competition scheduling to optimize athlete development, organizational alignment of different groups and agencies that make up the “sport system”, and the philosophy of Continuous Improvement so we always work to make our science, coaching, and system of athlete development better.

#### 1. Physical Literacy

Physical literacy is the cornerstone of both participation and excellence in physical activity and sport. Individuals who are physically literate are more likely to be active for life.

- Becoming physically literate is influenced by the individual's age, maturation and capacity.



## SKI JUMPING CANADA STRATEGIC PLAN: 2014 – 2022 APPENDIX C – LONG TERM ATHLETE DEVELOPMENT PLAN

---

- Ideally, supporting the development of physical literacy should be a major focus prior to the adolescent growth spurt.
- The skills that make up physical literacy vary by location and culture, and depend on how much importance a society places on certain activities.

Physically literate individuals:

- Demonstrate a wide variety of basic human movements, fundamental movement skills and fundamental sports skills.
- Move with poise, confidence, competence and creativity in different physical environments (on the ground, both indoor and outdoor; in the air; in and on water; on snow and ice).
- Develop the motivation and ability to understand, communicate, apply and analyze different forms of movement.
- Make choices that engage them in physical activity, recreation or sport activities that enhance their physical and psychological wellness, and permit them to pursue sport excellence in proportion with their ability and motivation.

### 2. Specialization

**Sports can be classified as either early or late specialization. Well-known early specialization sports include artistic and acrobatic sports such as gymnastics, diving and figure skating. These differ from late specialization sports in that very complex skills are learned before maturation since they cannot be fully mastered if taught after maturation.**

Ski Jumping and Nordic Combined are classified as late specialization ski disciplines.

Most other sports are late specialization sports; however, all sports should be individually analyzed using international and national normative data to determine whether they are early or late specialization. If physical literacy is acquired before maturation, athletes can select a late specialization sport when they are approaching the age of 14 and have the potential to rise to international stardom in that sport.

Based on sport-specific work done by more than 100 organizations around the world, experts from the sport-specific groups indicated when sport specialization is recommended. This has allowed groupings of sport within early and late specializations.



## SKI JUMPING CANADA STRATEGIC PLAN: 2014 – 2022 APPENDIX C – LONG TERM ATHLETE DEVELOPMENT PLAN

---

### 3. Developmental Age

Children of the same chronological age can differ by several years in their level of biological maturation. Growth, development and rate of maturation is the result of a complex interaction of genes, hormones, nutrients and the environments (physical and psychosocial) in which the individual lives. This combination of factors regulates the child's physical growth, neuromuscular development, sexual maturation, mental, cognitive and emotional development, and general metamorphosis during the first two decades of life.

Puberty is characterized by numerous physical changes by which a child's body matures into an adult body capable of reproduction. These events occur over a number of years and include major changes to height, deposition of fat, bone and muscle, transformation of the brain, and acquisition of secondary sexual characteristics (e.g. breast, genitalia, public and auxiliary hair growth).

### 4. Sensitive Periods

**A sensitive period is a broad timeframe or window of opportunity when the learning of a specific skill or the development of a specific physical capacity is particularly effective. The entire period of childhood can be viewed as a sensitive period for mastering fundamental movement skills.**

Trainability during the sensitive periods of accelerated adaptation to training refers to the body's responsiveness to training stimuli at different stages of growth and maturation. The physiological systems of the athlete can be trained at any age, but there are sensitive periods when individuals are especially responsive to specific types of training.

The ten S's have been identified as important to building a complete and holistic plan for developing athletes (in order of development priority for Ski Jumping and Nordic Combined):

1. Speed
2. Skill
3. Stamina (Endurance)
4. Suppleness (Flexibility)
5. Structure/Stature
6. Strength
7. (p)Sychology
8. Socio-Cultural
9. Schooling
10. Sustenance



## SKI JUMPING CANADA STRATEGIC PLAN: 2014 – 2022 APPENDIX C – LONG TERM ATHLETE DEVELOPMENT PLAN

---

11.

### 5. Mental, Cognitive and Emotional Development

**Mental, cognitive and emotional factors are essential to each athlete's development. Not only is holistic development - which encompasses all of these factors, in addition to physical development - beneficial to the individual, but all of these skill sets are interlinked.**

Just as physical and technical skills require long-term and sequential development, so too do the psychological aspects of athlete development. This includes a range of knowledge sets, such as the underpinnings of fair play and ethical sport, mental skills for performance, emotional regulation, sequencing and decision-making.

Programming should be designed to deliver all aspects of athlete development in a complementary manner, including mental, cognitive and emotional components.

### 6. Periodization

**Simply put, periodization is time management. As a planning technique, it provides the framework for arranging the complex array of training processes into a logical and scientifically-based schedule to bring about optimal improvements in performance.**

Periodization outlines all annual and seasonal training within a logical schedule to bring about optimal improvements in athlete performance at the right times, while minimizing injury and burnout. Periodization plans connect the LTAD stage of the athlete with the training and development requirements of that stage.

Periodization breaks training into months, weeks, days and individual sessions. It helps coaches to organize all aspects of volume, intensity, frequency and type of training, competition and recovery programs through long-term and short-term timelines.

Periodization is a highly flexible tool. When it is used in combination with proper training techniques, athlete monitoring and athlete evaluation, it becomes an essential component to deliver optimal sport performance and athlete development at all stages of LTAD.



## SKI JUMPING CANADA STRATEGIC PLAN: 2014 – 2022 APPENDIX C – LONG TERM ATHLETE DEVELOPMENT PLAN

---

### 7. Competition

**Optimal competition calendar planning at all stages is critical to athlete development. At certain stages, developing the physical capacities take precedence over competition. At later stages, the ability to compete well becomes the focus.**

#### STAGES & RECOMMENDED RATIOS

Active Start - No specific ratios - all activity based on developing physical literacy and child's passion to play and participate

FUNdamentals - All activities FUN-based including some structured competition

Learn to Train - 70% training to 30% competition-specific training and actual competition

Train to Train - 60% training to 40% competition-specific training and actual competition

Train to Compete - 40% training to 60% competition-specific training and actual competition

Train to Win - 25% training to 75% competition-specific training and actual competition

Active for Life - Based on the individual's desire

### 8. Excellence Takes Time

**How long does it take for athletes to reach the top of their game? About 10,000 hours of training and competing. For most athletes, that translates into about 10 years. Other evidence indicates that elite athletes require at least 11 to 13 years of practice to reach levels of excellence. The essential lesson is the same: there are no shortcuts to achieving excellence.**

This translates into an average of 3 hours of daily training, applied practice and competition over 10 years. Again, this is an average over the span of 10 years. It is not desirable to see children formally “training” in one sport for three hours every day when they are 7 years old. Training hours increase during adolescence, and this rounds out the average.



## SKI JUMPING CANADA STRATEGIC PLAN: 2014 – 2022 APPENDIX C – LONG TERM ATHLETE DEVELOPMENT PLAN

---

Lately, the validity of the 10 000 hours has been questioned. It has been suggested that when athletes specialize in certain sports, they can achieve excellence in a much shorter period. However, the three or four other sports the athletes participated in before they specialized has usually not been taken into account. LTAD emphasizes a multi-sport approach: all former activities should be included as they are an integral part of the 10 000 hours. Whether it is 10 000 hours, more, or less, excellence always takes time.

### 9. System Alignment and Integration

**Based on CS4L principles, LTAD promotes system alignment and integration between sport clubs, provincial/territorial and national sport organizations. CS4L addresses the overarching system and structure of sport and physical activity in Canada, including the relationship between school sport, physical education and high performance sport at all levels from policy to program delivery.**

LTAD calls for system alignment and integration by bringing together athletes, coaches, clubs, school sports, recreation, provincial and national organizations to build a better sport system in Canada.

Athlete development is the core business of national, provincial/territorial and local sport organizations. Without quality athletes in sport programs, these organizations would not be viable. Consequently, it is in the best interests of these groups to collaborate, align and integrate in delivering optimal athlete development programs.

LTAD must also be supported and promoted by all levels of government, including:

- Provincial/Territorial ministries responsible for sport and recreation.
- Provincial/Territorial health ministries and Health Canada.
- Provincial/Territorial education ministries.
- Other relevant federal and provincial/territorial departments and ministries.
- Municipal governments.

LTAD initiatives and support programs must be designed and implemented with a focus on the needs of athletes, and a commitment to cross-sectoral collaboration and cooperation.

Coaches, teachers, and recreational professionals may lead athlete training and physical activity programming at the ground level, but they need to be supported by administrators, sport scientists, health, and government across multiple sectors.



## **SKI JUMPING CANADA STRATEGIC PLAN: 2014 – 2022 APPENDIX C – LONG TERM ATHLETE DEVELOPMENT PLAN**

---

### **10. Continuous Improvement - Kaizen**

**The LTAD framework is based on the principle of continuous improvement, both in its dynamic evolution and in its application. The concept of continuous improvement is drawn from the respected Japanese industrial philosophy known as Kaizen.**

We never assume that LTAD in its current form is ever complete or final. We operate from the position that it represents the best practices in coaching and athlete development as they are understood today.

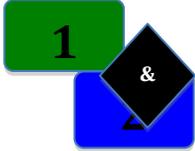
The concept of continuous improvement, which permeates LTAD, is drawn from the respected Japanese industrial philosophy known as Kaizen. By applying a willingness to always seek improvements in our understanding and practice, LTAD will continuously evolve to accommodate new breakthroughs in sport science research, new innovations in technology, and evolving best practices in coaching.

By focusing on continuous improvement, we will also ensure that LTAD reflects all emerging facets of physical activity, sport, recreation and education to ensure that it is inclusive of all types of activity.



## SKI JUMPING CANADA STRATEGIC PLAN: 2014 – 2022 APPENDIX C – LONG TERM ATHLETE DEVELOPMENT PLAN

---



### Active Start/Fundamentals

---

#### Athlete Ages:

- Male: 7- 9
- Female: 7-8

#### Programs:

- WinSport and Altius recruitment camps (Alberta) [www.winsport.ca](http://www.winsport.ca)
- Altius Nordic Ski Club Hopper Program (Alberta) [www.altiusnordicskiclub.org](http://www.altiusnordicskiclub.org)
- Sea to Sky Nordics (British Columbia) – recruitment camps [www.seatoskynordics.ca](http://www.seatoskynordics.ca)

**Training Year:** May 01 to Oct 15, Nov 15 to March 20

**Training hour's week:** 8 to 10

#### Ski Jump Size:

- COP - K18 and K38 jumps
- WOP/Squamish - K20 and K40 jumps

**Travel:** Day trips only (cross country, alpine skiing, biking, and hiking)

#### Prioritized Sensitive skill development, in order of priority:

1. Speed
2. Skill
3. Stamina (Endurance)
4. Suppleness (Flexibility)
5. Structure/Stature

#### Physical Literacy Objectives:



## SKI JUMPING CANADA STRATEGIC PLAN: 2014 – 2022 APPENDIX C – LONG TERM ATHLETE DEVELOPMENT PLAN

---

- To develop a solid base of physical skills as required in Ski Jumping/Nordic Combined or any other sport.
- Activity, which improves agility, balance, and coordination, are the main training focus at this stage.
  - Summer: individual and team sports: running, swimming, rollerblading and basic gymnastics.
  - Winter: alpine skiing, cross-country skiing and ice-skating.
- Flexibility to develop and maintain an optimal range of motion.
- General aerobic development should be delivered mainly by fun and games.
- Speed/Power development should be based on agility, speed and multidirectional movement.

### **Sport Specific Objectives:**

- Most important at this stage is to properly introduce the sports of Ski Jumping & Nordic Combined to the athletes with the goal of connecting them mentally with the sport they play.
- Teaching sport specific position (ski jumping) incorporated into warm up. All technical elements (in run, take-off, flight and landing) should be mastered off the hill at this stage.
- After 2 – 4 years, athletes should be able to jump with optimal technique:
  - 16.5 points for style in competition
  - 35 meters on K38 from gate 4 summer/winter (no wind) – Calgary
  - TBD for Whistler jumps
- Cross Country skiing: 3-4 sessions per week, 40-60min long, technique time is no more the 20 min long.
- After 2 – 4 seasons' athletes should be 90% proficient with cross-country technique (Left-Right hand off-set, one and two skate).

### **Competition:**

- FUNdamentals - All activities FUN-based including some structured competition



## **SKI JUMPING CANADA STRATEGIC PLAN: 2014 – 2022 APPENDIX C – LONG TERM ATHLETE DEVELOPMENT PLAN**

---

### **Quality of Events**

- All levels of competition
- Coach run
- May have National Level and FIS officials present
- Hill Size is appropriate to competitor's development level



## SKI JUMPING CANADA STRATEGIC PLAN: 2014 – 2022 APPENDIX C – LONG TERM ATHLETE DEVELOPMENT PLAN

---

### 3

## Learn to Train

---

### Athlete Ages:

- Male: 9-12
- Female: 8-11

**Training Year:** May 01 to Oct 15, Nov 15 to March 20

**Training hour's week:** 8 to 10

### Programs:

- WinSport and Altius recruitment camps (Alberta) [www.winsport.ca](http://www.winsport.ca)
- Altius Nordic Ski Club Hopper Program (Alberta) [www.altiusnordicskiclub.org](http://www.altiusnordicskiclub.org)
- Sea to Sky Nordics (British Columbia) – recruitment camps [www.seatoskynordics.ca](http://www.seatoskynordics.ca)

### Ski Jump Size:

- COP - K38 and K63 jumps
- WOP - K40 jumps \* when built

### Travel:

- Day trips (cross country, alpine skiing, biking, and hiking)
- Winter trips between Whistler and Calgary
- Summer trips to Park City, Utah, USA and BC athletes come to Calgary



## SKI JUMPING CANADA STRATEGIC PLAN: 2014 – 2022 APPENDIX C – LONG TERM ATHLETE DEVELOPMENT PLAN

---

### Prioritized Sensitive skill development, in order of priority:

1. Speed
2. Skill
3. Stamina (Endurance)
4. Suppleness (Flexibility)
5. Structure/Stature
6. Strength training intro
7. (p)Sychology

### Physical Literacy Objectives:

- To develop a solid base of physical skills as required in Ski Jumping – Nordic Combined or any other sport.
- Activity, which improves agility, balance, and coordination, are the main training focus at this stage.
  - Summer: individual and team sports: running, swimming, rollerblading and basic gymnastics.
  - Winter: alpine skiing, cross-country skiing and ice-skating.
- Flexibility to develop and maintain an optimal range of motion.
- General aerobic development should be delivered mainly by fun and games.
- Speed/Power development should be based on agility, speed and multidirectional movement.

### Sport Specific Objectives:

- Most important at this stage is to properly introduce the sports of Ski Jumping & Nordic Combined to the athletes with the goal of connecting them mentally with the sport they play.
- Teaching sport specific position (ski jumping) incorporated into warm up. All technical elements (in run, take-off, flight and landing) should be mastered off the hill at this stage:
- After 2 – 4 years, athletes should be able to jump with optimal technique:
  - 16.5 points for style in competition
  - 35 meters on K38 from gate 4 summer/winter (no wind) –Calgary
  - 55 m on K63 from any gate (no wind) – Calgary
  - Whistler – TBD
- Cross Country skiing: 3- 4 sessions per weeks, 40-60min long each, technique session is no more the 20 min long.



## **SKI JUMPING CANADA STRATEGIC PLAN: 2014 – 2022 APPENDIX C – LONG TERM ATHLETE DEVELOPMENT PLAN**

---

- After 2 – 4 seasons' athletes should be 90% proficient with cross-country technique (Left-Right hand off-set, one and two skate).

### **Psychological training objectives:**

- introduction and integration of mental training into the practices
- team building, goal setting
- relaxation skills
- focus
- training journals / online trackers

### **Competition:**

- 70% training to 30% competition-specific training and actual competition
- Fun oriented, coach run, local club level competitions, BC/AB competitions and Springer Tournee (Park City, Utah, USA)

### **Competition Target – Performance Indicators (DRAFT):**

Springer Tournee (Park City, Utah, USA)

- K40 – Top 10 Men
- K40 – Top 5 Women

### **Quality of Events**

- All levels of competition
- Coach run
- May have National Level and FIS officials present
- Hill Size is appropriate to competitor's development level



## SKI JUMPING CANADA STRATEGIC PLAN: 2014 – 2022 APPENDIX C – LONG TERM ATHLETE DEVELOPMENT PLAN

---

### 4

## Train to Train (Building the Engine)

---

### Athlete Ages:

- Male: 12-16
- Female: 11-15

**Training Year:** May 01 to March 20; some weeks off throughout the year for regeneration (Family vacations, school commitments, etc.)

**Training hour's week:** 10-16

### Programs:

- Alberta Ski Jumping and Nordic Combined – Club Elite [www.skijumpingalberta.com](http://www.skijumpingalberta.com)
- Alberta Ski Jumping and Nordic Combined – Provincial Development Team [www.skijumpingalberta.com](http://www.skijumpingalberta.com)
- Sea to Sky Nordics (British Columbia) – TBD [www.seatoskynordics.ca](http://www.seatoskynordics.ca)

### Ski Jump Size:

- COP – K38, K63 and K89 jumps
- WOP K40 jump and HS 106

### Travel:

- Day trips (cross country, alpine skiing, biking, hiking)
- Frequency: 1 time age 12 - 13; 2 times age 14 - 16
- Summer trips to Park City, Utah, USA and BC athletes come to Calgary
- Winter:
  - Steamboat or Park City trip, USA; age 13+, 1 – 2 x

**Prioritized Sensitive skill development, in order of priority:**

**Ski Jumping**



## SKI JUMPING CANADA STRATEGIC PLAN: 2014 – 2022 APPENDIX C – LONG TERM ATHLETE DEVELOPMENT PLAN

---

1. Speed
2. Skill
3. Structure/Stature
4. Suppleness (Flexibility)
5. (p)Sychology
6. Strength
7. Socio-Cultural
8. Stamina (Endurance)
9. Schooling

### **Nordic Combined**

12. Stamina (Endurance)
13. Skill
14. Speed
15. Structure/Stature
16. Suppleness (Flexibility)
17. Strength
18. (p)Sychology
19. Socio-Cultural
20. Schooling

### **Physical Literacy Objectives:**

- Continue to develop endurance, strength and speed
- Continue to develop sport specific skills and fitness
- Agility and mobility are very important during (PHV) Peak Height Velocity = growth period.
- Teaching the importance of: warm up, cool down, mobility, nutrition and mental skills are essential for performance and critical for success at this stage.

### **Sport Specific Objectives:**

- Progression to bigger jump hills, based on jump hill skill evaluation.
- Athlete must consistently jump 90% of K point on each given jump hill: (K38 – 35m, K63 – 55m, K89 – 80m) before progressing to the next hill size.
- Number of jumps for the year: 400 to 600.
- Introduction to more advanced takeoff imitation exercises
- Introduction and incorporation of psychological skills into daily training.



## SKI JUMPING CANADA STRATEGIC PLAN: 2014 – 2022 APPENDIX C – LONG TERM ATHLETE DEVELOPMENT PLAN

---

- Weight training is introduced slowly and progression toward more advanced weight training occurs after (PHV) slow down occurs.
- Number of hours dedicated to endurance/aerobic during the year, Nordic Combined: Age 12 – 13, (140 hours), Age 14-16, (200 hours)
- By the end of this Stage athletes participating in Cross Country should have optimal skiing technique.
- In this stage sport specialization should start to take place: Males age 14 - 15, Females age 13 - 14.

### Psychological training objectives:

- maintaining of mental training within the practices and proceeding to the next stage of proficiency
- team building, goal setting
- relaxation skills and focus
- competition simulation
- training journals / online trackers

### Competition:

- I. Preparatory (Training Competitions):
  - a. 60% training to 40% competition-specific training and actual competition
  - b. Coach run events
- II. Performance (Excellence)
  - a. 4-6 Club and National Level competitions
- III. Decisive (Peak High Performance)
  - a. 2-4 NorAm club level competitions

### Competition Target – Performance Indicators (DRAFT):

Springer Tournee (Park City, Utah, USA) & Other Noram Events

- Top 10 for Men (DRAFT)
- Top 5 for Women (DRAFT)

### Quality of Events

- All levels of competition
- National Level and FIS officials present
- Hill Size is appropriate to competitor's development level



## SKI JUMPING CANADA STRATEGIC PLAN: 2014 – 2022 APPENDIX C – LONG TERM ATHLETE DEVELOPMENT PLAN

---

**Note:**

This is the most challenging and critical stage as it encompasses both opportunity and vulnerability in terms of growth and development.

This is the period where athletes tend to change physically, at a faster rate than when they are younger.

Flexibility, posture and technique become very important.

At this time of accelerated growth, these elements can be compromised through a reduced range of motion, which can create abnormal physical movement patterns.

Supervision and monitoring becomes critical as these changes occur.

Note: Despite increased training volume, decreases in quality and performance are common during this period.



## SKI JUMPING CANADA STRATEGIC PLAN: 2014 – 2022 APPENDIX C – LONG TERM ATHLETE DEVELOPMENT PLAN

---

### 5

## Train to Compete

---

### Learn to Compete Phase:

#### **Athlete Ages:**

- Male: 16 +
- Female: 15+

**Training Year:** May 01 to March 20 - some weeks off throughout the year for regeneration (Family vacations, school commitments, etc.).

**Training hour's week:** 15 to 20 hours

#### **Programs:**

- Alberta Ski Jumping and Nordic Combined – Alberta Team [www.albertaskijumping.com](http://www.albertaskijumping.com)
- Sea to Sky Nordics (British Columbia) – TBD [www.seatoskynordics.ca](http://www.seatoskynordics.ca)

#### **Ski Jump Size:**

- COP – K63 & K89
- WOP – HS 106 & HS 140

#### **Prioritized Sensitive skill development, in order of priority:**

##### **Ski Jumping**

1. Speed
2. Strength
3. (p)Sychology
4. Skill
5. Suppleness (Flexibility)
6. Socio-Cultural
7. Schooling

##### **Nordic Combined**



## SKI JUMPING CANADA STRATEGIC PLAN: 2014 – 2022 APPENDIX C – LONG TERM ATHLETE DEVELOPMENT PLAN

---

1. Stamina (Endurance)
2. Speed
3. Strength
4. Skill
5. (p)Sychology
6. Suppleness (Flexibility)
7. Socio-Cultural
8. Schooling

### **Physical Literacy Objectives:**

- To develop event specific physical preparation
- To develop sport specific skills and fitness
- To integrate physical, mental, cognitive and emotional development

### **Sport Specific Objectives:**

- Number of jumps for the year: 500 to 600.
- Jumping hill size and usage %:
  - Females: K63 - 30%, K89 - 60% and K120 - 10% check math
  - Males: K63 - 20%, K89 - 60% and K120 - 20%
- In the ski Jumping sport specific stream there will be a decrease in the volume of general physical training while weight/power training will become more sport specific.
- Nordic Combined: # of hours dedicated to endurance/aerobic during year is 240 - 260hrs
- At the end of this Stage athletes participating in Nordic Combined, should have optimal cross-country skiing technique.
- Preseason preparation
- Between Competition Recovery

### **Psychological training objectives:**

- incorporate mental preparation into pre-competition routine
- introduction to a professional sport psychologist in a group setting
- refining of relaxation and focusing skills
- proficiency with training journals / online trackers
- continue to pursue individual goals and benchmarks within the team setting



## SKI JUMPING CANADA STRATEGIC PLAN: 2014 – 2022 APPENDIX C – LONG TERM ATHLETE DEVELOPMENT PLAN

---

- Preseason preparation
- Between Competition Recovery

### **Competition/Travel:**

Note: During this period sport specialization takes place and more competitions (North American/International) are introduced.

### **Competition:**

40% training to 60% competition-specific training and actual competition

- I. Preparatory (Training Competitions):
  - a. 4-6 Club and National Level competitions
  - b. Coach run events
- II. Performance (Excellence)
  - a. 2-4 NorAm club level competitions
- III. Decisive (Peak High Performance)
  - a. 2-4 FIS Cup, COCJ – COCNC – WJCH – (WC Females only if appropriate)

### **Competition Target – Performance Indicators (2016-2019):**

#### COC

- Top 10 for Men
- Top 5 for Women

#### FIS Cups

- Top 10 for Men
- Top 5 for Women

#### World Junior Championships

- Top 10 for Men
- Podium for Women

### **Quality of Events**

- Circuit appropriate level of competitions
- FIS officials present
- Normal and Large Hill



## **SKI JUMPING CANADA STRATEGIC PLAN: 2014 – 2022 APPENDIX C – LONG TERM ATHLETE DEVELOPMENT PLAN**

---

Athlete selection is based on published criteria plus sport and physiological expectations:

- BMI +2kg or less
- Jump specific performance expectation:
  - 8 of 10 jumps (no wind) Calgary
    - Female: K63m, gate: 10, 60m +, K89, gate: 10, 90m
    - Male: K63, gate: 8, 63m +, K89, gate: 8, 95m
  - 8 of 10 jumps (no wind) Whistler
    - Female: TBD
    - Male: TBD



## SKI JUMPING CANADA STRATEGIC PLAN: 2014 – 2022 APPENDIX C – LONG TERM ATHLETE DEVELOPMENT PLAN

---

### Train to Compete Phase:

#### **Athlete Ages:**

- Male: ± 18-21
- Female: ± 17-21

**Training Year:** May 01 to March 20. April: transition month.

In this stage training is broken down into periods depending on FIS competition schedule and season (single, double and multiple). Event specific motor skills are refined.

**Training hour's week:** 15 to 25 hours

#### **Programs:**

- National Development Team [www.skijumpingcanada.com](http://www.skijumpingcanada.com)

#### **Ski Jump Size:**

- COP – K89 jump
- WOP - HS 106, HS140

#### **Prioritized Sensitive skill development, in order of priority:**

##### **Ski Jumping**

1. Speed
2. Strength
3. (p)Sychology
4. Skill
5. Suppleness (Flexibility)
6. Socio-Cultural
7. Schooling

##### **Nordic Combined**

1. Stamina (Endurance)
2. Speed
3. Strength
4. Skill
5. (p)Sychology



## SKI JUMPING CANADA STRATEGIC PLAN: 2014 – 2022 APPENDIX C – LONG TERM ATHLETE DEVELOPMENT PLAN

---

6. Suppleness (Flexibility)
7. Socio-Cultural
8. Schooling

### Physical Literacy Objectives:

- To optimize event specific preparation for competition
- To continue with integration of physical, mental, cognitive and emotional development
- To conduct event-specific testing and monitoring
- IST is now integrated in preparation for performance
- Athlete is beginning to think of him/herself as a “full-time athlete”

### Sport Specific Objectives:

- Number of jumps for the year: 500 to 600.
- Jumping hill size and usage %:
  - Female: K63m 30%, K90m 60% and K120m 10%
  - Male: K89m 60% and K120m 40%
- Multiple training periods play the main role in designing sport specific training plan for Nordic Combined athletes.
- Preseason preparation
- Between Competition Recovery

### Psychological training objectives:

- Incorporate mental preparation into pre-competition routine
- Introduction to a professional sport psychologist in a group setting
- Refining of relaxation and focusing skills
- Proficiency with training journals / online trackers
- Continue to pursue individual goals and benchmarks within the team setting
- Preseason preparation
- Between Competition Recovery

### Competition:

**Note: International competitions are the focus**



## **SKI JUMPING CANADA STRATEGIC PLAN: 2014 – 2022 APPENDIX C – LONG TERM ATHLETE DEVELOPMENT PLAN**

---

### **Competition quantity per year, for specific purpose depending on the athlete's specific development:**

- 40% training to 60% competition-specific training and actual competition
- I. Preparatory (Training Competitions):
  - a. 4-6 Club and National Level competitions
  - b. Coach run competitions
- II. Performance (Excellence)
  - a. 1- 2 National Level competition
- III. Decisive (Peak High Performance)
  - a. 12-20 COCJ – COCNC – WCSJ-WCNC - WCH

### **Competition Target – Performance Indicators (2016-2019):**

- World Championships
  - Top 15 for Men
  - Top 5 for Women
- World Cup
  - Top 10 for Men
  - Top 5 for Women
- COC
  - Top 5 for Men
  - Podium for Women

### **Quality of Events**

#### **Quality of Events**

- Circuit appropriate level of competitions
- FIS officials present
- Normal and Large Hill



## **SKI JUMPING CANADA STRATEGIC PLAN: 2014 – 2022 APPENDIX C – LONG TERM ATHLETE DEVELOPMENT PLAN**

---

- Selected athletes (based on published criteria and sport and physiological expectation)
  - BMI 0 kg or less, on jump hill performance.
  - On jump performance expectation:
  - 8 of 10 jumps (no wind) Calgary.
    - Females: K63m, gate: 10, 63m +, K89, gate: 9, 90m
    - Males: K63, gate: 6, 60m +, K89, gate: 6, 93m
  - Whistler TBD



## SKI JUMPING CANADA STRATEGIC PLAN: 2014 – 2022 APPENDIX C – LONG TERM ATHLETE DEVELOPMENT PLAN

---

### 6

## Train to Win (Consistent Performance)

---

### Athlete Ages:

- Male:  $\pm 21$
- Female:  $\pm 21$

**Training Year:** May 01 to March 30. April: transition month.

In this stage training is broken down into periods depending on FIS competition schedule and season (single, double and multiple). Event specific motor skills are refined.

**Training hour's week:** 20 to 30

### Programs:

- National Team [www.skijumpingcanada.com](http://www.skijumpingcanada.com)

### Ski Jump Size:

- COP – K89 jump
- WOP - HS 106, HS140

### Competition:

25% training to 75% competition-specific training and actual competition

Competition quantity per year, for specific purpose depending on the athlete's specific development

- I. Preparatory (Training Competitions):
  - a. 4-6 Club and National Level competitions
  - b. Coach run competitions
- II. Performance (Excellence)
  - a. 1- 2 National Level competition



## **SKI JUMPING CANADA STRATEGIC PLAN: 2014 – 2022 APPENDIX C – LONG TERM ATHLETE DEVELOPMENT PLAN**

---

- III. Decisive (Peak High Performance)  
a. 120-24 World Cup, WCH, OWG

### **Competition Target – Performance Indicators (2016-2019):**

#### Olympic Winter Games

- Top 10 for Men
- Podium for Women

#### World Championships

- Top 15 for Men
- Podium for Women

#### World Cup

- Top 10 for Men
- Podium for Women

### **Quality of Events**

- Circuit appropriate level of competitions
- FIS officials present
- Normal and Large Hill
- Ski Flying Hill (for Men)



## SKI JUMPING CANADA STRATEGIC PLAN: 2014 – 2022 APPENDIX C – LONG TERM ATHLETE DEVELOPMENT PLAN

---

### **Prioritized Sensitive skill development, in order of priority:**

#### **Ski Jumping**

1. (p)Sychology
2. Strength
3. Speed
4. Skill
5. Socio-Cultural
6. Sustenance
7. Schooling

#### **Nordic Combined**

1. Stamina (Endurance)
2. (p)Sychology
3. Strength
4. Speed
5. Skill
6. Socio-Cultural
7. Sustenance
8. Schooling

#### **Physical Literacy Objectives Development Phase:**

- Maximize event specific preparation for high performance results
- Continue with integration of physical, mental, cognitive and emotional development
- Learn to compete, especially when it counts
- Introduce a formal IST.
- The athlete is learning to become a "full-time athlete".

#### **Physical Literacy Objectives Professional Phase:**

- Maximize event specific preparation for results at the Olympic Games, World Championships and World Cup level
- Maximize training for performance, competition and recovery activities in support of a professional athletics career
- Achieve competitive repeatability, when it counts
- Work with IST to maximize performance
- Plan for retirement from athletic competition



## SKI JUMPING CANADA STRATEGIC PLAN: 2014 – 2022 APPENDIX C – LONG TERM ATHLETE DEVELOPMENT PLAN

---

### **Sport Specific Objectives:**

- Number of jumps for the year: 400 to 500.
- Jumping hill size and usage %:
  - Females: K63 - 10%, K90 - 80% and K120 - 10%
  - Males: K89 - 50% and K120 - 50%
- Multiple training periods play the main role in designing sport specific training plan for Nordic Combined athletes.
- Preseason preparation
- Between Competition Recovery

### **Psychological training objectives:**

- Mastering mental training as a part of competition routine
- Individual professional sport psychologist integration
- Applying all mental skills to training and competition
- Maintenance of training journals / online trackers
- Continue to pursue individual goals and benchmarks within the team setting
- Preparation of exit strategy from High Performance sport and integration into life
- Preseason preparation
- Between Competition Recovery

7

## **Active for Life**

---

It is important that through out all our stages we encourage an active lifestyle so that when an athlete decides to transition from the sport of ski jumping that we have provided them with a basis for that active lifestyle, regardless of their age.

We also encourage retiring athletes to stay connected with the ski jumping community by actively volunteering, coaching or jumping for fun.

### **Athlete Ages:**



## SKI JUMPING CANADA STRATEGIC PLAN: 2014 – 2022 APPENDIX C – LONG TERM ATHLETE DEVELOPMENT PLAN

---

- any age

**Training Year and hours:** athlete dependent

### **Programs:**

- Club Elite – Recreational [www.altiusnordicskiclub.org](http://www.altiusnordicskiclub.org)
- Whistler – TBD [www.seatoskynordics.ca](http://www.seatoskynordics.ca)

### **Ski Jump Size:**

- Dependent on skill level

### **Physical Literacy Objectives:**

- To develop a solid base of physical skills as required in Ski Jumping/Nordic Combined or any other sport.
- Activity, which improves agility, balance, and coordination, are the main training focus at this stage.
- Flexibility to develop and maintain an optimal range of motion.
- General aerobic development should be delivered mainly by fun.
- Speed/Power development should be based on agility, speed and multidirectional movement.

### **Sport Specific Objectives:**

- Number of jumps for the year: athlete dependent
- Multiple training periods play the main role in designing sport specific training plan for Nordic Combined athletes.

### **Competition:**

Based on an individual's desire

- Local Club competitions
- Masters competitions – athlete dependent



**SKI JUMPING CANADA STRATEGIC PLAN: 2014 – 2022**  
**APPENDIX C – LONG TERM ATHLETE DEVELOPMENT PLAN**

---