

An Outline of LTAD

LTAD is a training, competition, and recovery framework for individuals at all stages of life.

The first four stages, with their respective approximate age ranges, are generally appropriate for all late-specialization sports. In the Training to Compete and Training to Win stages, age ranges vary from sport to sport.

LTAD focuses on the general framework of athlete development with special reference to growth, maturation, and development.

Athletes with a Disability (AWADs) pass through the same stages as able-bodied athletes, although the ages and rate of progress may differ.

Active Start

The lifelong importance of an Active Start for kids with a congenital disability cannot be over-emphasized

Focuses on learning basic movement skills such as running, jumping, wheeling, twisting, kicking, throwing, catching, skating, skiing, and swimming (physical literacy)

Not sedentary for more than 60 minutes except when sleeping

Some organized physical activity

Exploration of risk and limits in safe environments

Active movement environment combined with well-structured gymnastics and swimming programs

Daily physical activity

Awareness

The period following acquisition of a disability is one of transition and great change for most individuals.

Some activities in which they were previously engaged may no longer be open to them in the same form

They may not be aware of the many sporting and recreation activities that are available

Sports need to develop awareness plans to make their offerings known to prospective AWADs

FUNDamentals

Different sensory disabilities require different teaching/learning approaches

Focuses on general, overall development

Integrated physical, mental, cognitive, and emotional development

Elements of athletics: running, jumping, wheeling, and throwing

Medicine ball, Swiss ball, and own body weight exercises

Introduce simple rules and ethics of sport

No periodization, but well-structured programs

Daily physical activity

First Contact / Recruitment

Sports need to create a welcoming environment for prospective AWADs, since it may not be easy for them to make the first approach to a sport

Research shows that if AWADs don't have a positive first experience, they may be lost to the sport and to a healthy lifestyle

Learning to Train

Major skill learning stage: all basic movement and sport skills (physical literacy) should be learned before entering Training to Train

Overall physical, mental, cognitive, and emotional development

Introduction to mental preparation

Medicine ball, swiss ball, and own body strength exercises

Introduce ancillary capacities

Single or double periodization

Sport specific training 3 a times week; participation in other sports 3 times a week

Training to Train

Major fitness development stage: endurance, strength, and speed

Overall physical, mental, cognitive, and emotional development

Develop fundamental mental skills

Introduce free weights

Develop ancillary capacities

Frequent musculoskeletal evaluations during PHV (growth spurt)

Single or double periodization

Sport specific training 6-9 times per week including complementary sports

Training to Compete

Sport, event, position specific physical conditioning

Sport, event, position specific technical and tactical preparation

Sport, event, position specific technical and playing skills practised under competitive conditions

Overall physical, mental, cognitive, and emotional development

Advanced mental preparation

Optimize ancillary capacities

Single, double, or triple periodization

Sport specific technical, tactical, and fitness training 9-12 times per week

Training to Win

Focus on high performance

Maintenance or improvement of physical capacities

Further development of technical, tactical, and playing skills

Modelling all possible aspects of training and performance

Frequent preventive breaks permitting recovery to avoid injuries

Maximize ancillary capacities

Single, double, triple, or multiple periodization

Sport specific technical, tactical, and fitness training 9-15 times per week

Active For Life

Focus on being physically active for life with a minimum of 60 minutes moderate daily activity or 30 minutes of intense activity for adults

There is a better opportunity to be Active for Life if physical literacy is achieved before Training to Train

Transfer from one sport to another

Move from highly competitive sport to lifelong competitive sport through age group competition

Move from competitive sport to recreational activities

Move to sport careers or volunteering

Athletes with a disability who retire from competition are encouraged to remain involved in the sport as coaches, program volunteers, fundraisers, mentors, or officials.

“The bottom line is everyone has the right to participate in sport programs, there are enough success stories to guide and support inclusive programs.”

Mary Bluechardt PhD



“I have gone through all the same stages of development as Canada’s other elite athletes. From training hard as a teenager, through learning to compete on the international stage, to standing on the Paralympic podium, my development has taken time and perseverance.”

Chantal Petitclerc

“Athletes with a disability go through the same stages as all children. They need support and challenges from their parents and coaches to reach their potential.”

Colin Higgs PhD



“First our children need an active start to develop movement and sport skills so they are physically literate. Then they can strive for excellence and or be active for life.”

Richard Way MBA



Long-Term Athlete Development: Athletes with a Disability



A supplement to
“Canadian Sport for Life”

No Accidental Champions

Published by



Published by



For more information visit www.LTAD.ca

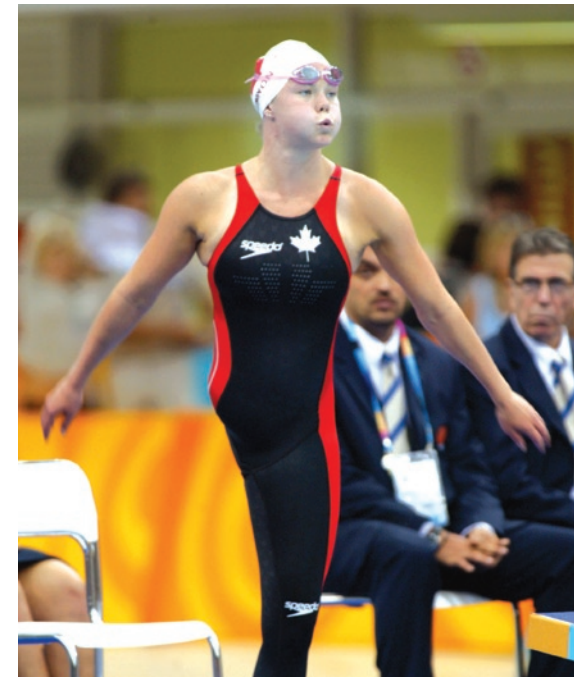


Canada's LTAD Not Different, But in Addition

Canada's homegrown LTAD model is described in detail in the LTAD Resource Paper, *Canadian Sport for Life*. LTAD is a framework for full sport system alignment in Canada, integrating health and education with sport and physical activity.

Sport for individuals with a disability has grown tremendously over the last few decades. Nowadays, virtually any sport available to an able-bodied athlete can be pursued by a person with a disability at both the recreational and competitive levels.

The factors listed below are based on and supported by available coaching and exercise science literature. The factors influencing LTAD for able-bodied athletes, and further details on LTAD for Athletes with a Disability (AWADs), can be found in *Canadian Sport for Life* or www.ltad.ca and *No Accidental Champions*.



Active for Life

Enter at any age

Training to Win

Males 19+/- Females 18+/-

Training to Compete

Males 16-23+/- Females 15-21+/-

Training to Train

Males 12-16 Females 11-15

Learning to Train

Males 9-12 Females 8-11

FUNDamentals

Males 6-9 Females 6-8

Active Start

Males and Females 0-6

The 10 Key Factors Influencing LTAD for AWADs

1. The 10-Year Rule

Exactly how long it takes to become an elite AWAD varies from sport to sport, with the nature of the disability, and with the pre-injury sporting experience and expertise of athletes who acquire a disability. The highest level of performance in hotly contested sports appears to take the same time and level of commitment as it does for able-bodied athletes, which is approximately 10,000 hours of training over 10 years.

2. The FUNdamentals

All athletes, with and without a disability, need to acquire FUNdamental movement and sport skills - physical literacy - through fun and games prior to puberty.

Children with a disability face difficulties in acquiring FUNdamental skills because

- overly protective adults shield them from the bumps and bruises of childhood play.
- adapted physical education is not well developed in all school systems.
- it takes creativity to integrate a person with a disability into a group activity where FUNdamental skills are practiced and physical literacy is developed.

Even though they may be adults, it is critical that newly disabled individuals effectively learn the FUNdamentals of new movement and sport skills so that those skills can be applied to a wide range of sports and recreational activities.

3. Specialization

Disability sports are late specialization sports and it is critically important that children with congenital or early-acquired physical or intellectual disability be exposed to the full range of FUNdamentals before specializing in the sport of their choice. Similarly, adults with an acquired disability should master their new FUNdamental movement skills before specializing in a single sport.

4. Age Factors

Although the timing of puberty may vary, the sequence of development that the adolescent goes through usually does not. For example, children with spina bifida are known to experience puberty earlier than their peers and individuals with intellectual disability tend to enter puberty early but complete the process later.

5. Trainability

Little or nothing is known about periods of optimum trainability for individuals with a disability. In the absence of information to the contrary, it is suggested that for children with a congenital disability, the ages of optimum trainability, as shown in *Canadian Sport for Life*, be adjusted based on the observed age of puberty.

First Contact/ Recruitment

Awareness

6. Physical, Mental, Cognitive, and Emotional Development

Sport can play an important role in helping individuals with a physical or intellectual disability to develop a new, positive self-image as well as enhance their self-concept. For this reason, sport programs should consider the mental, cognitive, and emotional development of AWADs in addition to their physical development. With LTAD's holistic approach to athlete development, programs for AWADs need to place emphasis on ethical behaviour, fair play, and character building throughout the various stages.

7. Periodization

There is no evidence that periodization for AWADs is substantially different from that for able-bodied athletes. It is therefore suggested that the recommendations on periodization in *Canadian Sport for Life*, pages 28-30, be followed. Since disability may reduce functional muscle mass and aerobic capacity, fatigue in AWADs should be carefully monitored, and rest and recovery periods should be adjusted accordingly.

8. Calendar Planning for Competition

Effective competition for AWADs in all classifications needs to be matched to the athletes' stage of development. This can be a problem when there are few athletes in a particular sport or classification/division within that sport. Creative solutions to this problem need to be developed, particularly for athletes with greater levels of disability.

9. System Alignment and Integration

Since *Canadian Sport for Life* focuses on athlete development through Canada's sport system, *No Accidental Champions* focuses on aligning the many components of that system for AWADs., including development of competition, coaching, funding, facilities and equipment, training partners, sport science, ancillary services, daily living support, and talent identification and development.

10. Continuous Improvement

Sport for AWADs is relatively young and, like many newer sports, is developing at an incredible rate. New research, new equipment, and new techniques appear rapidly worldwide, and to put Canadian athletes "out front", sport organizations must be on the alert to take advantage of all new information. Evaluating that information, selecting what information will be used, and then integrating it into programs and services must be an active, ongoing process, tied to the concept of continuous improvement, which permeates LTAD.

