



Bowls Alberta



LONG TERM ATHLETE DEVELOPMENT

**A systematic approach to maximizing athlete potential
and participant involvement & enjoyment**

Bowls A Sport for Life

FORWORD

FOR TOO LONG we have played and ignored practice

FOR TOO LONG we have not had long-term coaching strategies

FOR TOO LONG we have not focused on player development

FOR TOO LONG our champions have not had a continuous support team

IT IS TIME to make champions by design and participants for life.

Long Term Athlete Development (LTAD) is a systematic framework encompassing every element of lawn bowls with the athlete/participant as the central focus. LTAD will support Albertans to embrace bowls as a sport for life and to reach the top of the podium more regularly for those that strive for high performance.

The key benefits of LTAD are:

- everyone will see where they fit and what their role is
- coaches will have a guide in the design of practice planning, annual plans and programs
- every bowler will understand what they need to do
- stakeholders will make decisions that benefit long-term development

Many people share in an athlete's success and enjoyment in lawn bowls and the Bowls AB LTAD framework recognizes that clubs are central to the long-term development of bowlers.

LTAD gives AB bowlers the ability to identify support structure gaps. It will enable the lawn bowls community to adapt infrastructure and program delivery to provide the best opportunities to those who lawn bowl - whatever their motivation or level of play.

The competitive nature of sport implies that only a few bowlers will achieve the level to be in elite programs. However, LTAD provides a solid foundation for all bowlers at all ages and levels allowing long-term participation, enjoyment, and achievement. Let us celebrate the best and cheer on the rest.



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What is Long Term Athlete Development?

Long Term Athlete Development (LTAD) is a systematic approach that is developed and adopted by Bowls AB to maximize athlete potential and participant involvement. The LTAD framework aims to define optimal training, competition and recovery based on biological age rather than chronological age. LTAD considers early entry and late entry sport participants. It is athlete centered, coach driven and administration, sport science and sponsor supported.

The instruction, coaching and training are tailored to develop an athlete/participant's fundamental physical, literacy, and sport technical skills to best position for the participant to:

- Reach their full potential
- Increase lifelong participation in lawn bowls and other physical activities
- Improve health and well-being

This framework will recommend training sequences and skills developments for the participant from the 'Beginner Bowler' to the 'Elite Bowler' and back to the 'Active for Life Bowler'. It addresses the physical, mental, emotional, and technical needs of the athlete as they pass through each stage of development.



Who Else Is Using LTAD?

The Council of Federal, Provincial and Territorial Ministers responsible for Sport have endorsed and established the goal of the implementation of a Long-Term Athlete Development program throughout the Canadian sport community. Sport Canada has worked with National Sport Organizations to develop their own sport specific LTAD models according to an overall framework established by an expert group of sport scientists. (See BCB's LTAD model on page 6)

Bowls AB references the Bowls Canada Boulingrin LTAD framework and has revised and expanded upon it within this manual.

Why Implement a LTAD model and strategy?

There are 10 reasons for implementing an LTAD approach:

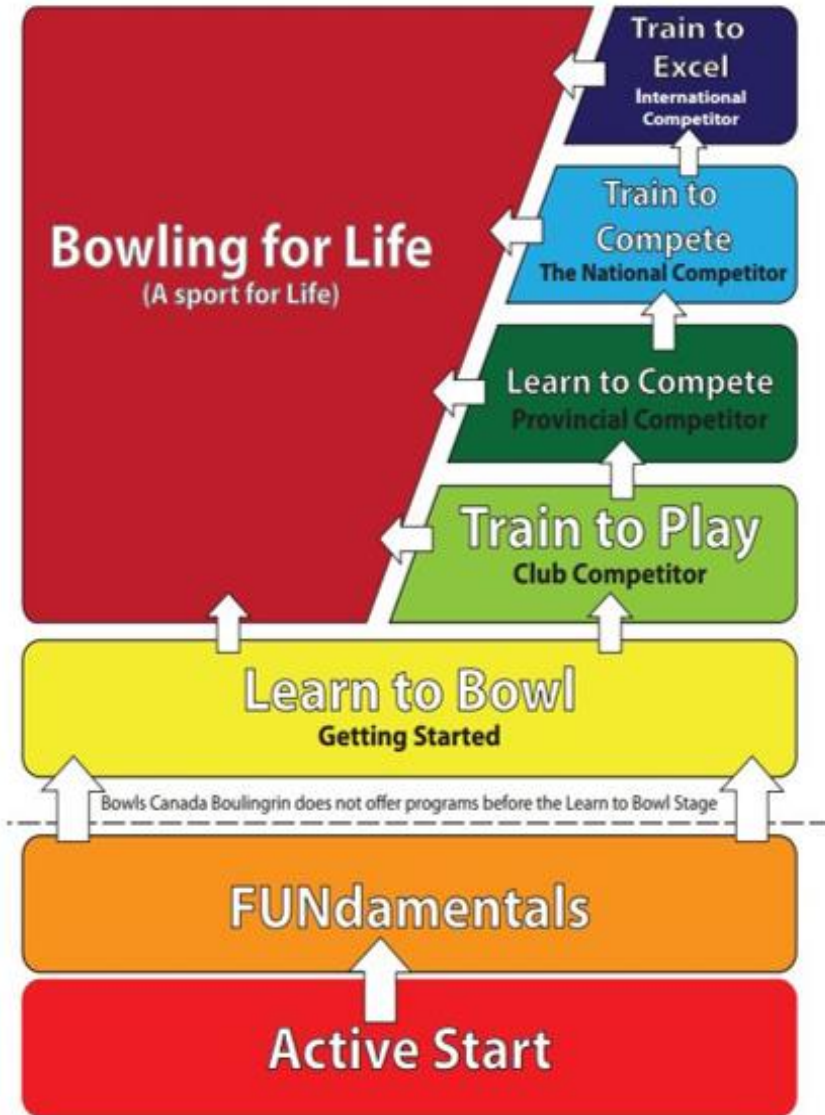
1. To establish a clear development pathway for lawn bowlers
2. To identify gaps in the current lawn bowls development pathway
3. To provide solutions
4. To act as a change agent to create proper planning, training, competition and recovery programs for developing Canadian bowlers
5. To create a streamlined efficient system
6. To provide a planning tool, based on scientific research for coaches and administrators
7. To provide awareness, education and action planning for parents and clubs
8. To improve communication within the sport
9. To help athletes achieve their goals
10. To facilitate lifelong enjoyment in lawn bowls



Lawn bowls is a great sport and has huge potential for participation and international performance. The LTAD framework provides Bowls AB with an opportunity to closely examine our programs to identify inconsistencies with the LTAD key factors and explicitly identify our shortcomings and their related consequences. Most of our shortcomings as a sport can be addressed by developing a comprehensive long-term athlete development model. The following shortcomings are considered the main issues on which Bowls AB will focus:

SHORTCOMING	CONSEQUENCE
<p>A step-by-step program is not consistently taught to guide participants from beginner to highly competitive athlete</p>	<p>Fundamental movement skills like bending, squatting, lunging, and arm swing are not performed properly by many bowlers</p> <p>Remedial programs are needed by coaches to re-teach technical and fundamental movement skills</p> <p>No systematic development of the next generation of top performing players/athletes</p> <p>Bowls AB has not had a coaching framework that supports the NSO coaching program resulting in international performances that are inconsistent because of a fragmented approach to athlete and coaching development</p> <p>The training needs of older athletes are not well understood</p>
<p>Lack of awareness of bowls as a sport</p>	<p>Athletes are unaware of the opportunities within bowls</p>
<p>Too few active coaches at all levels hinders basic skill development and advanced strategic and tactical play</p> <p>Few athletes seek out qualified coaching</p>	<p>Athletes may not reach their potential due to lack of guidance and support from qualified coaches</p> <p>Athletes have poor skill development</p> <p>Athletes are not introduced to a structured practice routine</p>
<p>Too few athletes are recruited to the sport at an early age</p> <p>Most participants enter bowls later in life</p>	<p>Critical windows of trainability are missed</p> <p>Late entry to the sport makes it challenging for bowlers to master the advanced bowling skills</p>
<p>Insufficient time spent on skill development</p>	<p>Basic skills are performed poorly and thus cannot be performed when required in competition</p>
<p>Players view lawn bowls as a five to eight-month season</p>	<p>Over competing leads to a focus on short-term solutions and under training leads to poor skill development, compromising long-term player development</p>

The Canadian LTAD Model



This model was prepared by a Canadian wide committee in 2006 in response to direction from Sport Canada.

Most LTAD sport models begin with the Active Start stage for young children. Movement and exploration of what our bodies can do is essential for young children.

Then comes the FUNdamentals stage. In our sport this would mean teaching children to lunge, to reach, to bend, and to roll underhand; an emphasis on the fundamental movements required for our sport but taught in a fun way.

But realistically one cannot begin to bowl until they are at least 8-9 years old. In the world of bowls, we have people of all ages take up our sport for the first time. So, compared to many LTAD models the BCB model is not based on ages.

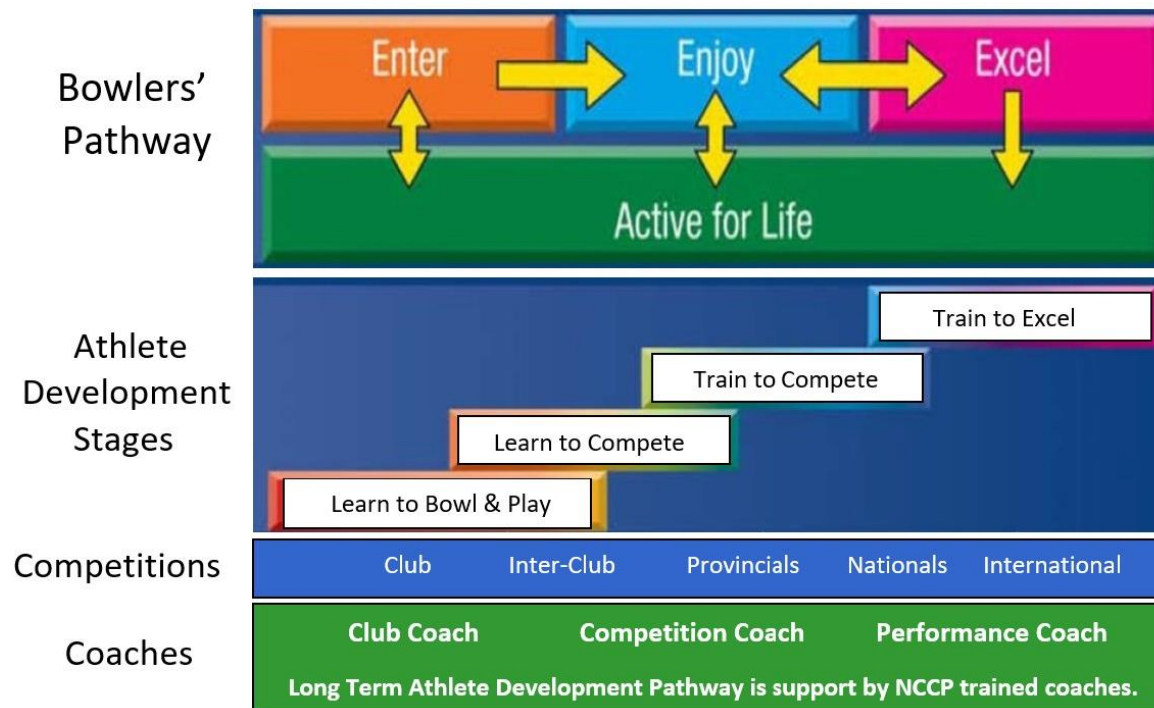
Since this bowls model was published, Sport Canada has produced many updates to their generic model. Most significantly the red Bowling for Life stage should stretch across the top of the 'chart' and the Train to Compete and Train to Excel boxes should be much smaller.

Our sport serves a very large *Bowling for Life* group and includes bowlers well into their 80's and 90's but also provides great opportunities for playing at a highly competitive level, provincially, nationally and internationally.

Bowls AB LTAD Model

There are three overarching categories of involvement (Entry, Enjoy and Excel) along with the route of involvement and progression through stages from Learning to Bowl through to Excelling at the International Level. Most bowlers will enter, learn to bowl & play and as they enjoy the game move into the Active for Life stage. The ones that excel to the international level are few but supported by the system in progression through stages and by certified coaches.

Athletes enter at any age but typically no younger than 10 years of age. Youth under age ten are in the LTAD FUNdamentals and Active Start Stages shown on many other sport LTAD models. The youth are active in a good variety of activities and sports to develop their overall physical literacy and then are welcomed into bowls when they can roll the bowl in such a way as to not damage the playing fields (greens).



For further information on coaches see the BCB program Coaching page: <https://bowlscanada.com/en/programs/coaching.html>

Another important element of an LTAD model is the giving back to the sport; players in various stages will become board members of their clubs, serve on various committees, or become coaches and officials and ensure the LTAD pathway continues.

Long-Term Athlete Development Program

- Is a five-stage model based on the physical, technical, strategic, mental, emotional and cognitive development of sport participants. The priority of LTAD is Sporting Excellence and the Active for Life stage encourages lifelong physical activity.

This will provide Bowls AB with an opportunity to fully examine a systematic approach to player development using the LTAD key factors to evaluate current athlete development plans and adapt programs to address shortcomings.

- Contributes to and promotes a healthy, physically literate province whose citizens participate in lifelong physical activity.

Currently there is a lack of information in coaching material about exercise and aging populations who are still active or wish to remain in sport. Many of the Bowls AB members are older and appropriate material must be developed for coaches to use when working with older athletes.

- Recognizes best practices in elite sport and what normative data and research tell us about long-term athlete development.

Bowls AB is at the stage where we need to incorporate research and standards into our High-Performance Development and Selection Plans. Using a stage-by-stage approach, our organization needs to educate developing athletes regarding the standards and skills required to win on the world stage.

- Recognizes the need to have all Albertans be physically active, including athletes with disabilities.

Lawn bowls is an inclusive sport where people with disabilities are included in all programs. The LTAD process will provide more insights into additional opportunities for athletes with disability.

- Is an inclusive concept that recognizes the importance of athletes, coaches, officials, volunteers, clubs, schools, various supporting organizations all working together.

The Bowls AB Strategic Plan will incorporate many of the LTAD concepts to ensure consistency and inclusion of all people and organizations that can make a difference in our sport. Players/athletes at all levels will be motivated to train and to receive coaching as coaches set standards for them and ensure player/athlete development and growth.

Six Key Factors that Influence Optimal Athlete Development and Ongoing Quality Participation

1. Excellence Takes Time

Thousands of hours of training for an individual are required to become an expert in a sport. These hours include time spent learning fundamental movement and fundamental sport skills in a variety of sports and other activities. Primarily, this is centered on unique but consistent opportunities to practice, train, and compete. A lawn bowler could participate in a complimentary sport where the technical skills and physical capacities are similar.

2. The Fundamentals

Participants need to have developed the fundamental movements and motor skills before the onset of adolescence. This means that lawn bowls relies on children and youth developing physical literacy in physical education classes and participation in a variety of sports and recreational activities.

Mastery of the fundamental lawn bowls movements of squat, balance, bend, lunge, and arm swing is necessary for elite bowlers. However, the reality in lawn bowls is that most athletes/participants take up lawn bowls later in life and therefore need to learn, re-learn or improve these fundamental bowling movements.

Lawn bowls is a social game and can be modified for all abilities and disabilities including persons with a sensory, mobility or intellectual disabilities. People with a disability can participate in lawn bowls to develop their fundamental movement, motor, and sport skills.

3. Specialization

Lawn bowls is a specialization sport where athletes 18 years of age are as likely as someone who is 50 to be a world champion. Individuals with congenital or acquired disabilities can develop the skills to play the game and/or compete internationally.

While some may want to specialize in lawn bowls, it is complimentary to other target sports such as curling, five or 10-pin bowling. It is a sport that can be enjoyed and played well into the senior years - a true 'sport for life'.

4. Trainability

Lawn bowls attracts participants of all ages, regardless of skill, flexibility, strength, speed or endurance and they can always be trained and improve. Older adults benefit from being physically active and through their activity maintain or improve their quality of life and ability to remain independent. Those who wish to improve their lawn bowls playing ability should engage in off-field workouts targeting improved strength, flexibility, and aerobic endurance.



5. Physical, Mental, Cognitive, and Emotional Development

A major objective of LTAD is a comprehensive approach to development which includes physical, tactical and technical as well as psychological, social and emotional preparation skills. Every individual enters lawn bowls with his/her own personal and unique attributes. For example, an athlete may be very technically proficient for what is needed to compete on the provincial or national stage. However, psychological abilities may be indicative that the athlete is not ready to compete at that level. Sending an athlete to compete in a high-level competition without good skills in distraction control will have negative impact on the overall performance.

Beyond the physical, technical, and tactical development — including decision-making skills — mental, cognitive, and emotional development should be enhanced. Training, competitive and recovery programs should consider the mental, cognitive, and emotional development of each athlete.

Programs must evaluate all components to determine areas for development. Programs need to be individual, identifying strengths and weaknesses within each area. This includes emphasis on ethics, fair play and character building throughout the various stages, an objective that reflects Bowls AB values. Programming should be designed considering athletes' cognitive ability to address these concepts.



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 sequences the training components into weeks, days, months or sessions. Periodization is situation-specific, depending upon priorities and the time available to bring about the required training and competition improvement. In the LTAD context, periodization connects the athlete's present stage to the requirements of that stage.

For play in Alberta, a typical yearly training cycle would start in February and conclude in the late summer or early fall. Most club and provincial competitors would be involved in other fitness activities in the off season and would train on the greens throughout May and June in preparation for competitions in July and August. For international players, the yearly training cycle would be adjusted to accommodate key international events and would follow a 12-month training cycle.

The LTAD Pathways

Learn to Bowl - The Beginner Bowler

The Beginner Bowler would have a six-month outdoor season. The Beginner Bowler would be introduced to the basics of the game: how to choose the correct size of bowl; how to hold the bowl; the muscles involved in the delivery action of a bowl; a simple delivery action; the central concepts of the game; and the etiquette and rudimentary rules of the game. The Beginner Bowler would be introduced to all the social aspects and recreations of the club and shown a clear path of what could be achieved in the sport at club, provincial, national, and international levels of competitions. A mentor could be assigned to the Beginner Bowler to ensure that he/she felt welcome and included and was made aware of all the suitable playing events of the club.

General Preparation	Competition	Transition
March– April	May - September	October - February
Specific fitness of bending, lunging, etc.	Club and Novice Inter-club leagues and competitions	Other fitness activities



Learn to Play - The Club Competitor

The Club Competitor has a 6-month outdoor season or a 12-month season if an indoor facility is available. The focus for the athlete would be on skill development at a level to more enjoy the game and to competently participate in club, inter-club and provincial competition events. The training would support the athlete's desire to enjoy the full range of social and competitive aspects of bowls.

General Preparation	Competition	Transition
February – March	April – September	October – January
Indoor bowls if available	Club, Inter-club and provincial competitions	Other fitness activities

Learn to Compete - The Provincial Competitor

The Provincial Competitor is focused on competing in provincial championships. The training plan targets one key month around which all training is focused. The training period is now extended from six months to 12 months.

General Preparation	Specific Preparation	Pre-Competition	Competition	Transition
Jan. - March	April - May	May - June	June - August	Sept. - Dec.
General fitness Indoor bowls general skill development	Maintain fitness bowls strategy specific bowling skills	Maintain fitness practice events game strategy	Provincial championships [if winners - National Championships]	Indoor bowls other Fitness activities

Train to Compete - The National Competitor

National Competitors would train year-round and design their yearly training schedule based on key provincial and national events. The athlete would follow a detailed plan focusing on strategy, tactics and team play. The athlete would use a structured practice routine where all practice scores would be recorded for discussion purposes between athlete and the coach.



General Preparation	Specific Preparation	Pre-Competition	Competition	Competition Phase 2	Transition
Jan. - March	April - May	May - June	July - August	August - Sept.	Sept. - Dec.
General fitness Indoor bowls General skills Set goals for the playing season	Practice specific bowls skills Discussions with coach for skill improvement	Maintain practice routines and skill development Develop team strategy and participate in competitive events	Provincial Championships Maintain fitness & practice / training events	National Championships International event if earning the right or selected	Other fitness activities

Train to Excel - The International Podium Competitor

National competitors training and fitness program would be a twelve-month program. The athlete would design his/her yearly and multi-year training schedule based on key international events. A player on the Canadian Squad would follow a detailed plan focusing on the World Championships and Commonwealth Games. Athlete preparation requires detailed physical, technical, tactical and psychological preparation to ensure podium performances are by design, not by chance.

General Preparation	Specific Preparation	Pre Competition	Competition	Competition Phase 2	Transition
Jan. - March	April - May	May - June	July - August	Sept. - Nov.	Dec.
General fitness Indoor bowls Develop general skills	Maintain fitness Review bowls strategy, practice specific skills	Maintain fitness, practice events, plan game strategy	Provincial Championships Maintain practice routines & skill development	Simulate game situations International Championships	Other fitness activities



AB is proud to have members on the Canadian Squad; three players and one coach in the picture above.

Three Important Considerations for Performance

Calendar Planning for Competition

Competition at all levels tends to be the focal point for the sport. Everyone enjoys a game and it is well-recognized that competition provides a focal point for training. In sport though, too much competition can undermine some of the training objectives and hamper the overall development of the athlete. For lawn bowls, the season is often short, and athletes are faced with a compacted competition calendar. At each stage of development, there is an optimal ratio of tournaments to practices. The competition structure - [timing in the season and events] - must match the objectives outlined for optimal athlete development. The system of competition can make or break athletes!

Optimal competition calendar planning at all stages is critical to athlete development. At certain stages, developing technical skills takes precedence over competition. At later stages, the ability to compete well becomes the focus. In many cases, lawn bowls athletes are focused on winning a game and specific practice for skill development is lower on the priority list. If athletes are constantly playing to win, there may be insufficient time to practice technical or tactical skills.

The challenge is to protect the traditions of the sport but not at the expense of the development of the athlete. Bowls AB will undertake a competition review to further analyze optimal competition planning and structure.

Alignment and Integration

A well developed LTAD framework provides an opportunity for Bowls AB to examine the whole picture to ensure that our programs are consistent with the outlined stage-by-stage objective for the development of the athlete. For example, BCB and the National Coaching Certification Program (NCCP) identifies the knowledge, skills and abilities needed by a coach to work with lawn bowls athletes within various contexts. It is critical that the coaching education and development system is consistent with what athletes need depending on their development. A periodic review of the system will also ensure it is kept up to date and aligns with the national framework.

LTAD must have a strong impact on the coaching education curriculum. Support for our coaches and more intentional refresher courses are essential. Developmental readiness will replace ad hoc decision-making about programming preparation. It will include how to prepare a yearly plan and how to teach identified skills based on the LTAD model.

Continuous Improvement

The concept of continuous improvement ensures that Bowls AB is aggressively pursuing innovations that will enhance the experience and results of all athletes. New scientific and sport-specific innovations and observations will impact the LTAD model and will continually help improve it.

Learn to Bowl: The Beginner Bowler

The overall aim of this stage is to instill the love of the game. New participants to lawn bowls can learn and enjoy the game in four hours. By focusing on the basic technical skills and developing a reasonable proficiency, the Beginner Bowler will achieve enough success to stay in the sport. At this point, he or she is a social bowler enjoying social aspects of practicing and playing a game with peers' while being active. After demonstrating the basic skills, the bowler will decide which path to take: Bowls for Life or Train to Play.



Technical, Physical, Tactical, Psychological Priorities



- Learn that physical preparation is basic stretching and working on general fitness
- Introduce basic 'comfortable' grip
- Learn stance and foot positioning on the mat
- Learn the 4-phase delivery (BCB Technical Video Series)
- Introduce bias and delivery of bowl and jack
- Learn and practice jack setting, controlling length, and bowling to the center line
- Introduce and practice the draw shot
- Introduce mat placement
- Learn basic rules, game structure, scoring and etiquette Basic tactics are introduced
- Develop a basic understanding of equipment and its selection as well as appropriate attire for performance, comfort, and weather
- Basic psychological preparation is encouraged including anxiety control & positive attitude

Athletes with a disability

Bowls AB welcomes people with disabilities. Adaptations can be made to the game along with the introduction of specialized playing equipment. Accommodations are made for any individual differences to ensure that people can progress at their own pace.

Example: Visually Impaired bowlers work with sighted directors to assist with aim and distance

Bowlers with balance issues or knee problems could roll from their knees

Wheelchair bound bowlers will need ramps to access the green.

Competition

- In-club competitions, leagues, and/or modified games

Skill Performance Indicators

These benchmarks are based on practice/training drills with the main emphasis being to develop consistency of the skill.

Skill	Beginning of the Stage	Middle of the Stage	End of the Stage
Controlling the length of the jack	Within 3 metres of desired length 50% of the time	Within 3 metres of desired length 70% of the time	Within 2 metres of desired length 70% of the time
Bowling to the center line / learning 'bias'	Within 1.5 metres of the centre line 50% of the time	Within 1 metre of the centre line 50% of the time	Within .5 metre of the centre line 70% of the time
Controlling the length of delivery of the bowl	Within 3 metres of the jack 50% of the time	Within 2 metres of the jack 50% of the time	Within 1 metre of the jack 50% of the time



Train to Play: The Club Competitor

The main objective of this stage is to encourage the lawn bowls athlete to improve basic skills and begin to learn and use basic tactics during competition. The bowler should be introduced to some physical requirements needed to improve his or her game. While having an enjoyable social experience, it is essential that the athlete focuses on learning the identified skills required to progress to the next stage. In order to achieve the performance objectives of the club competitor, more opportunities for practice must be available and encouraged.

Technical, Physical, Tactical, Psychological Priorities

- Understands the specific performance of his or her own bowls under different green conditions
- Demonstrates point of aim using reference points
- Develops correct and consistent delivery of the jack
- Can introduce variations to mat placement
- Performs shots to the standards outlined for the club competitor
- Introduces a variety of game strategies including position shots, building a head, opposition weakness, matching bowls & assessing risks
- Participates effectively in a variety of game formats
- Gains experience playing different positions
- Develops the ability to deliver to targets
- Refines weight adjustment skills
- Knows rules of game, etiquette, different formats, and scoring
- Understands the basic speed of the green and effect on delivery
- Positions mat and jack to take advantage of own team's strengths
- Is introduced to reading the head and shot selection
- Learns and demonstrates team communication skills
- Is introduced to psychological preparation including goal setting and cooperation with team



Competition

- Participates in inter-club tournaments
- May participate in provincial competition

Skill Performance Indicators

These benchmarks are based on practice/training drills with the emphasis to develop consistency of the skills with noted improvement. Each practice exercise should challenge the athlete.

Skill	Beginning of the Stage	Middle of the Stage	End of the Stage
Controlling the length of the jack	Within 2 metres of desired length 50% of the time	Within 2 metres of desired length 70% of the time	Within 2 metres of desired length 80% of the time
Bowling to the center line	Within 90 cm of the centre line 50% of the time	Within 70 cm of the centre line 60% of the time	Within .5 metre of the centre line 70% of the time
Controlling the length of the bowl	Within 2 metres of the jack 50% of the time	Within 1 metres of the jack 70% of the time	Within 70 cm of the jack 70% of the time



Learn to Compete: The Provincial Bowler

In this stage, the bowler has decided to participate in more serious competitions. Therefore, skills, tactical elements, physical and mental capacities need to be introduced to optimize performance. The athlete should be exposed to competition and games to learn how to prepare for competition. Practices should focus on priorities that are built into a yearly plan and relate to tactics executed in game situations. Athletes should understand and abide by Bowls Alberta's Code of Conduct and Ethics as well as the Athlete Code of Conduct.

Technical, Physical, Tactical, Psychological Priorities

- Set goals for provincial competitions
- Places mat strategically
- Refine ability to control the length of the jack
- Competently uses a variety of shots
- Develops solid game plans to gain competitive advantage
- Uses tournament strategies to maximize results
- Demonstrates consistency in performance
- Demonstrates ability to change tactics and remain unpredictable to opponents
- Simulates game-like situations in practice
- Demonstrates the ability to adapt to different game types
- Develops weight adjustment skills
- Has strong understanding of rules, etiquette, local practices, and code of ethics
- Demonstrates ability to select the bowl based on speed of green



Competition

Provincial and/or national championships are priority events

Bowlers work with coaches to develop skills and strategies and then select appropriate competitive opportunities to practice strategies before, during and after competition

Competition follow-up and resetting goals becomes a priority

Skill Performance Indicators

These benchmarks are based on practice/training drills with the emphasis to develop consistency of the skills with noted improvement. Each practice exercise should challenge the athlete.

Skill	Beginning of the Stage	Middle of the Stage	End of the Stage
Controlling the length of the jack	Within 1 metre of desired length 50% of the time	Within 1 metre of desired length 70% of the time	Within 1 metre of desired length 80% of the time
Bowling to the center line	Within 65 cm of the centre line 50% of the time	Within 65 cm of the centre line 70% of the time	Within 35 cm of the centre line 70% of the time
Controlling the length of the bowl	Within 1 metre of the desired length jack 70% of the time	Within 65 cm of the desired length 70% of the time	Within 35 cm of the desired length 70% of the time
Strike the target* with heavier weight	10%	40%	70%

*target – the target may be the jack, a bowl or a cluster of bowls



Train to Compete: The National Competitor

After moving from the Learn to Compete stage, the athlete is a consistent competitor and can “make the shot” under pressure most of the time. The athlete follows an individualized training, competition, and recovery plan to progress toward competing at the international level. This athlete continually performs well at provincial championships and consistently places in the top three at the national championships. Training involves practicing the advanced technical and tactical aspects of the game. The player must be familiar and be prepared to abide by BCB’s Code of Conduct and Ethics.

Technical, Physical, Tactical, Psychological Priorities

- Set goal for national competition
- Improve advanced draw shots
- Perfecting the ability to assess your opponent and prepare an appropriate game plan
- Optimizes/perfects ability to read the head and execute the right tactical shot
- Demonstrates strong skills in reading the green
- Demonstrates good team communication skills
- Demonstrates a full understanding of laws and etiquette
- Continues to advance psychological preparation in anxiety control, focusing and refocusing
- Ensures physical capacities necessary for practice and effective tournament play are optimized including stretching, endurance, and other recovery techniques



Competition

- Priority competitions include national championships and select international events
- Participation in international events is important to introduce the developing athletes to the pressures of international travel and competition

Skill Performance Indicators

These benchmarks are based on practice/training drills with the emphasis to develop consistency of the skills with noted improvement. Each practice exercise should challenge the athlete.

Skill	Beginning of the Stage	Middle of the Stage	End of the Stage
Controlling the length of the jack	Within 1 metre of desired length 75% of the time	Within 70 cm of desired length 85% of the time	Within 70 cm of desired length 90% of the time
Bowling to the center line	Within 40 cm of the centre line 70% of the time	Within 30 cm of the centre line 70% of the time	Within 20 cm of the centre line 80% of the time
Controlling the length of the bowl	Within 1 metre of the desired length jack 70% of the time	Within 45 cm of the desired length 70% of the time	Within 25 cm of the desired length 80% of the time
Strike the target with heavier weight	50%	70%	80%



Train to Excel: The International Podium Competitor

The International Competitor prepares to maximize all skills and capacities to peak for podium performance at predetermined international events. This athlete is committed to producing consistent performances on demand. The athlete can read the green, adapt to other challenging conditions and most often make *the shot*.

Competition preparation at this level requires more attention to detail than in the previous stage. Multi-sport games like the Commonwealth Games are considerably more complex with additional pressures that are absent from other international competitions. In multi-sport games, there is additional media attention that may intensify the pressures on the athlete. Therefore, athlete preparation requires detailed physical and psychological preparation. The athlete preparation also considers the effects of intercontinental travel, travel delays, food differences, hydration, inoculations, and emergency sickness.

Competition routines and mental preparation must be practiced in advance of the priority tournament to be able to produce the ideal performance state. The athlete and all support personnel must be engaged in creating a training, competition and recovery program that addresses the performance gaps. An integrated support team should be identified to ensure that a high level of expertise is used to optimize all aspects of preparation. This stage is integrated with the BCB High-Performance Squad Program.

Technical, Physical, Tactical, Psychological Priorities

- Set goal for International competition
- All technical skills have been mastered
- The focus is now on accuracy and consistency on demand
- Optimizes and perfects the application of strategies and tactics in a game situation
- Knows rules and etiquette used in international tournaments
- Exploits tactics to own advantage
- Continues to improve physical fitness for game/tournament
- Follows an annual training plan that includes peaking for identified major events in the international calendar
- Demonstrates responsible and pro-active behaviour for travel and competition
- Uses video to analyze and record technical skill and game strategy
- Perfects mental training and maximizes distraction control in competitions
- Players debrief all practices and games to ensure lessons are learned and effective measures taken
- Players track skill performance regularly



Competition

- Priority events include the Commonwealth Games, World Championships, Asia Pacific Championships, International Disabled Bowlers Championships and other AWAD events as added to International Competitions.
- Opportunities for appropriate international tournaments with teams from other countries which include bilateral test matches.

Skill Performance Indicators

These benchmarks are based on practice/training drills. The International athlete should plan his/her training/practice sessions with a coach. These sessions would be based on the established competitive goals set out at the beginning of the competitive playing season. Each practice exercise should challenge the athlete.

Skill	Beginning of the Stage	Middle of the Stage	End of the Stage
Controlling the length of the jack	Within 65 cm of desired length 80% of the time	Within 55 cm of desired length 90% of the time	Within 45 cm of desired length 90% of the time
Bowling to the center line	Within 30 cm of the centre line 80% of the time	Within 20 cm of the centre line 80% of the time	Within 15 cm of the centre line 90% of the time
Controlling the length of the bowl	Within 70 cm of the desired length jack 80% of the time	Within 50 cm of the desired length 85% of the time	Within 25 cm of the desired length 90% of the time
Strike the target with heavier weight	70%	80%	90%

It is recognized that the Team Canada Squad coaches may change the above performance indicators for the athletes they are working with.



Bowling for Life: A Sport for Life

After learning the basic bowls skills in the “Learn to Bowl: Beginner Bowler Stage,” the athlete can choose to pursue lawn bowls as a highly recreational and social activity or can continue to progress to higher level tournaments and leagues. This long-term approach to athlete development promotes personal success in lawn bowls to ensure athletes remain happy and enthusiastic about the game. The Bowls for Life stage is open to all ages inclusive of all abilities and disabilities. Youth or adults can participate in this less competitive context, participating in local or district intra- or inter-club play at a less intense level. The main objectives are lifelong wellness, social interaction and fitness by participating in lawn bowls in a fun and social environment.

There are many life stresses that may interfere with the athlete’s ability to get to the club regularly. Therefore, programs should be adaptable to accommodate individual athletes. Modifications of the game such as carpet bowling, short mat bowling and indoor bowling provide opportunities to participate throughout the year.

Age appropriate physical training in the 'Bowls for Life' stage is critical as older athletes are looking for fun opportunities for overall wellness. This should include flexibility, adaptable strength training, and exercises for balance and coordination.



Technical, Physical, Tactical, Psychological Priorities

Various skills within these areas will depend on the athlete and the stage that athlete entered the Bowls for Life stage. Within this stage, the participant may become motivated to learn more skills, understand and play the game better. For the most part, the priorities will be driven by the motivation of the individual participant.

Competition

The type of competition will depend on the priorities and motivation of the athlete. For many, this will be social interaction while maintaining an active recreation. Tournaments and games could include interclub lawn bowls, vacation bowling, inter-club socials and mechanisms to allow for people with disabilities to lawn bowl.

Recommendations for Implementation of the LTAD Model & Strategies for Bowls AB








1. Bowls AB will need to take a strong leadership role to communicate with and educate its membership about the Sport for Life philosophy and LTAD model. This must be done by specifically tasking the Coach Development Committee and the Athlete and Youth Development Committees.
2. Bowls AB needs strategic plans to address the development and implementation of programs that tackle the shortcomings and stage-by-stage objectives. This will require communication, cooperation, and collaboration among the members.
3. A coherent athlete development pathway that leads to strong, consistent international performances and/or a supportive pathway to the Canadian Youth and Development Squads will need to be developed and implemented. The stage-by-stage performance indicators must become a strong part of the focus at all stages.
4. More emphasis must be placed on coaching, particularly addressing the technical and tactical aspects of the game. Competition and Instructional Coaches must be identified, trained, and certified.
5. Many of the athletes in lawn bowls are older adults. Developmentally appropriate training programs for these athletes must be developed. This should include the maintenance of capacities such as strength, flexibility, balance, and coordination.
6. Bowls AB must promote and increase program opportunities for athletes with a disability.
7. Bowls AB must review the competition calendar to ensure athletes have opportunities for developmentally appropriate tournaments both for enjoyment as well as to prepare for high level competition on the national or international stage.










Bowls AB Athlete Development Matrix

The Athlete Development Matrix is the basis for Bowls AB's new athlete development model. It provides specific guidance on how to develop each performance factor at every stage of development. It also includes specific benchmarks and standards to aim for within each of those performance factors at every stage of development. These benchmarks are based on practice/training drills and not on performance within game situations.















The LTAD Matrix will change the mind set for coaches and they should now plan practices with targets and performance growth in mind. There will be consistency in implementation as we move forward, and the implementation expectations will be the same across the province.

TECHNICAL SKILLS MATRIX						
SKILL / STAGE	BEGINNER BOWLER	TRAIN TO PLAY	LEARN TO COMPETE	TRAIN TO COMPETE	TRAIN TO EXCEL	BOWLS FOR LIFE
Grip	Relaxed comfortable grip (see Delivery Doc video)					Relaxed comfortable grip (see Delivery Doc video)
Stance: basic position on the mat	One foot must partially on the mat		Learn to use different foot positions on the mat to achieve different lines to the target			One foot must partially on the mat
Bias	Learn to identify bias & which direction bowl will turn	Know specific performance of your own or borrowed bowls				Learn to identify bias & which direction bowl will turn
Delivery technique bowl and jack	Point of aim; mechanics of movement; pendulum swing	Develop consistent and correct delivery				Point of aim; mechanics of movement; pendulum swing
Mat placement	Front of mat minimum of 2 metres from ditch and centered	Introduce variations	Vary placement for strategic purposes			Front of mat minimum of 2 metres from ditch and centered
Jack setting	Hand signals for centering					Hand signals for centering
Controlling length of bowl	Within 1.5 metre of the jack 50% of the time	Within 75 cm of the jack 70% of the time	Within 60 cm of the jack 70% of the time	Within 30 cm of the jack 80% of the time	Within 20 cm of the jack 80% of the time	Within 1 metre of the jack 50% of the time
Controlling the length of the jack	Within 2 metres of desired length 70% of the time	Within 1 metre of desired length 70% of the time	Within 1 metre of desired length 80% of the time	Within 70 cm of desired length 90% of the time	Within 45 cm of desired length 90% of the time	Within 2 metres of desired length 70% of the time
Bowling to center line	Within 75 cm 70% of the time	Within 60 cm 70% of the time	Within 35 cm 70% of the time	Within 15 cm 80% of the time	Within 15 cm 90% of the time	Within 75 cm 70% of the time












TECHNICAL SKILLS MATRIX

STAGE	BEGINNER BOWLER	TRAIN TO PLAY	LEARN TO COMPETE	TRAIN TO COMPETE	TRAIN TO EXCEL	BOWLS FOR LIFE
Shots	Draw	Refine draw shots	Draw, wick, yard-on, wresting, raise, running, trail, drive, cantering the bowl	Improve skills with advanced draw shots (boundary jack, drawing to the ditch, block, wick, combinations, etc.)	Perfect shots for consistency & accuracy	Improve skills with advanced draw shots (boundary jack, drawing to the ditch, block, wick, combinations.
Learn appropriate strategies		Position, building the head, opposition weaknesses, matching bowls, taking chances, scenarios, variety of game formats	Game plan, scouting	Refine	Optimize	Position, building the head, opposition weaknesses, matching bowls, taking chances, scenarios, variety of game formats
Learn strategy gathering		Watch experienced players and try to guess next shot; ask players about their game strategy; expand knowledge of the bowls game				Watch experienced players and try to guess next shot; ask players about their strategy; expand knowledge of the bowls game
Tournament strategies			Percentage shots; winning the toss; watch opponents bowls; find a side/hand and stick with it; exploit opposition weaknesses; be consistent but not predicable; track or scout opponents			Percentage shots; winning the toss; watch opponent's bowls; find a side/hand and stick with it; exploit opposition weaknesses; be consistent but not predictable
Play different positions		Learn to adapt to changes inherent in playing different positions on a team				Learn to adapt to changes inherent in playing different positions on a team.
Practice game-like situations			Conditional singles; phantom 4s; freeze the head; weight adjustment; piggy-in-the-middle; mental practices.			
Target drills		Practice delivery to targets				Practice delivery to targets
Learn different types of games			Adapt to different games and formats ie. set play, 2 bowl triples, short-mat or carpet bowls			Adapt to different games and formats ie. set play, 2 bowl triples, short-mat or carpet bowls
Weight adjustment	Introduce weight adjustment for shot-making	Refine weight adjustment skills	Perfect weight adjustment skills			Introduce weight adjustment for shot- making










EQUIPMENT FACILITY

STAGE	BEGINNER BOWLER	TRAIN TO PLAY	LEARN TO COMPETE	TRAIN TO COMPETE	TRAIN TO EXCEL	BOWLS FOR LIFE	
Selecting bowls	Determine correct size of bowls to use	Introduce concept of selecting bowls to match turf conditions	Ensure your bowls are accurate for playing conditions i.e. turf, weather			Ensure your bowls are accurate for playing conditions i.e. turf, weather	
Measuring equipment		Learn how to measure and to use a small caliper, and wedges	Learn how to use the string measure for long measure or for bowls or jack in ditches			Use a measure, small caliper and wedges when necessary	
Flat soled shoes	Flat soled shoe in accordance with Laws of the Game					Flat soled shoe in accordance with Laws of the Game	
Towel or chamois	Have towel and/or chamois to clean and/or to dry bowls and to place bowls on when counting an end					Have towel and/or chamois to clean and/or to dry bowls and to place the bowls on when counting an end	
Club equipment	Appropriately use the mats, bowls, jack, and the rakes/pushers	Learn how to use the score boards					Appropriately use and place mats, rakes/pushers
Clothing	Comfortable, casual attire	Environmental attire, i.e. rain gear, warm/cool clothing	Uniformity in team apparel			Comfortable, casual attire appropriate for an event	
Equipment Checklist			Make a check list for all equipment and ensure that it is all readily available			Make a check list for all equipment and ensure that it is all readily available	
Sun exposure	Sun glasses, sun screen, hat, protective clothing, water bottle					Sun glasses, sun screen, hat as appropriate	
First Aid	Insect repellent, 'after-bite', Band-Aids or know where supplies are in the clubhouse					Insect repellent, 'after-bite', Band-Aids or know where supplies are in the clubhouse	

KNOWLEDGE, RULES & ETHICS

STAGE	BEGINNER BOWLER	TRAIN TO PLAY	LEARN TO COMPETE	TRAIN TO COMPETE	TRAIN TO EXCEL	BOWLS FOR LIFE
Laws of the game	Basic rules such as mat possession, touchers, live / dead bowls & jacks	Basic understanding of the Laws of the Game	Proper application of Laws	Knowledge of Conditions of Play specific to event		Basic understanding of the Laws of the Game
Basic game etiquette	Where & when to stand still; minimal talking during deliveries; safe placement bowls	Understanding of Game Etiquette	Understand Local Practices	Communication with opponent	Knowledge of local customs	Full understanding of Game Etiquette
Hand signals		For bowls, for score		Team signals		For bowls, for scores
Measuring		How, who and when	Occasional measuring regarding jack and bowls in the ditch, boundary line			Who, how and when, and the odd occasional measures
Structure of the game	Competition; # of bowls per player; begin, order and end of play; duties of players, shot scored and tie shots; different types of games	Basic understanding of various formats of play	Understand tactics and skills for end and sets play			Competition; # of bowls per player; begin, order and end of play; duties of players, shot scored and tie shots; different types of games
Code of ethics	Basic understanding of Code of Conduct & Ethics ie sportsmanship & fair play; respecting Laws of the Game		Solid understanding of Code of Conduct & Ethics	Full understanding of Laws and Codes of Conduct & Ethics		Solid understanding of Code of Conduct & Ethics
Scoring	Understand how to score	Understanding how and who does the scoring				Understanding how and who does the scoring
Speed of green		Basic concept of speed of green and how it affects one's delivery and movement of a bowl	Knowledge of how speed of greens affects bowl selection; how to determine the speed of the green	Know the speed of a green and select appropriate bowl to use		Basic concept of speed of green and how it affects one's delivery
Conditions of Play		Understand rules of local tournaments	Understand rules for all competitions along with event regulations			Understand rules of local tournaments
Dress Code	Casual clothing	Know dress code for all tournaments/competitions	Know team dress code	Team uniform		Know dress code for all tournaments/competitions
Doping Control			Introduction to Doping Control regulations	Knowledge of Doping Control regulations and use exemptions		










STRATEGY & TACTICS

STAGE	BEGINNER BOWLER	TRAIN TO PLAY	LEARN TO COMPETE	TRAIN TO COMPETE	TRAIN TO EXCEL	BOWLS FOR LIFE			
Closest to the jack	Goal is to end up closest to the jack.					Goal is to end up closest to the jack.			
Mat placement		Position the mat to play to your team's strength or the opponent's weakness					Position the mat to play to your team's strength or the opponent's weakness		
Jack lengths		Position the jack to play to your team's strength or the opponent's weakness					Position the jack to play to your team's strength or the opponent's weakness		
Reading the head & choice of shots		Learn how to read the head; introduce tactical shot making	Refine	Optimize	Maximize	Know how to read the head; understand tactical shot making			
Game strategy			Have a general Game Plan; adjust to your strengths and opponents' weaknesses; have an end by end strategy					Have a general Game Plan; adjust to your strengths and opponents' weaknesses; have an end by end strategy	
Competitive scoring objectives			Win the point, win the end, win the game; know when to lose the end (cut the opponent's score down)					Win the point, win the end, win the game; know when to lose the end (cut the opponent's score down)	
Basic playing strategies			Get second shot in the head; match a cluster of opponent's bowls; refrain from over-building a head; back bowls are better early in an end					Get second shot in the head; match a cluster of opponent's bowls; refrain from over-building a head; back bowls are better early in an end	
Change up of the placement of mat and jack length			Know when to change mat placement or jack length in order to play to a strength or attack a weakness or change up the game					Know when to change mat placement or jack length to play to a strength or attack a weakness or change up the game	
Game plan (planning for winning)				Implement different strategies for team and singles play, or for game variations, ie sets play, 2 bowl triples or 3 bowl pairs					Implement different strategies for team and singles play, or for game variations, ie sets play, 2 bowl triples or 3 bowl pairs
Assess Competition				Track your opponents' play and select game strategies accordingly					Track your opponents' play and select game strategies accordingly













PHYSICAL PREPARATION

STAGE	BEGINNER BOWLER	TRAIN TO PLAY	LEARN TO COMPETE	TRAIN TO COMPETE	TRAIN TO EXCEL	BOWLS FOR LIFE
Game preparation	General fitness level; basic stretching; warm-up and cool down (pre & post game stretching)					General fitness level; basic stretching; warm-up and cool down (pre & post game stretching)
Exercises	Mobility & flexibility exercises; core strength exercises					Mobility & flexibility exercises; core strength exercises
Prevention & care of injuries	Basic understanding of how to prevent injuries & how to care for them					Basic understanding of how to prevent injuries & how to care for them
Physical Fitness			Develop and maintain core strength to provide endurance and flexibility and prevention of injuries			Maintain an age appropriate fitness level to provide flexibility and prevention of injury.
Nutrition & Hydration	Basic understanding of nutritional & hydration needs in all weather situations		Understand and plan for nutritional & hydration needs; pre, during & post games			Understand and plan for nutritional and hydration needs in all weather situations
Body weight management	Basic understanding		Understand how weight management provides more endurance and can prevent injury			Understand how weight management may provide more endurance ability to continue to play injury free

ANCILLARY

STAGE	BEGINNER BOWLER	TRAIN TO PLAY	LEARN TO COMPETE	TRAIN TO COMPETE	TRAIN TO EXCEL	BOWLS FOR LIFE
Effective communication	Ask questions to ensure understanding	Learn effective team communication skills	Refine team communication skills			Practice effective team communication skills
Game situation drills			Do case studies on various game situations and scenarios and practice drills to refine appropriate skills			
Media expectations				Learn how to deal with media		
Travel emergencies				Make back-up plans for travel emergencies		
Visas, passports				Have all necessary documentation available for travel to competition site		
Immunization				Have all the necessary immunization shots completed at appropriate times		
Video set up			Use video equipment to improve technical skills and game strategy			
Environmental issues		Deal with weather conditions i.e. heat, humidity, rain & thunderstorms		Deal with air pollution		Deal with weather conditions i.e. heat, humidity, rain thunderstorms, air pollution

SPORT PSYCHOLOGY

STAGE	BEGINNER BOWLER	TRAIN TO PLAY	LEARN TO COMPETE	TRAIN TO COMPETE	TRAIN TO EXCEL	BOWLS FOR LIFE		
Goal Setting	Set goal of mastering basic knowledge & techniques	Master more knowledge & refine techniques	Initiate year-round training & an action plan			Master more knowledge & refine techniques		
Anxiety control	Deal with and overcome anxiety of starting a new sport		Dealing with anxiety of competition	Determine individual anxiety control methods			Determine individual anxiety control methods	
Encouragement	Emphasize that game is fun; winning not most important as goal is skill development					Emphasize that game is fun; skill development can be continual		
Visualization	Introduce visualization of the perfect delivery & where the bowl should end	Continue to develop visualization skills			Visualize success at major tournaments	Continue to develop visualization skills		
Positive attitude	Focus on learning from the things that do not go as planned; do not be too hard on self	Learn how to handle defeat and victory	Maintain a fresh outlook towards the game & competition			Maintain a fresh outlook towards the game & competition		
Focus	Refocus on fundamentals after a bad shot			Refine all aspects of focus & concentration	Maintain focus & re-focusing			Refine all aspects of focus & concentration
Routine		Establish a pre-game & in-game routine; consistent pattern results in consistent shots				Establish playing routines for consistency in playing		
Team dynamics		Learn to work well and cooperate with team members	Develop skills to correct issues that affect team dynamics			Develop skills to correct issues that affect team dynamics		
Gamesmanship			Learn how to deal with gamesmanship from the opposition			Deal positively with gamesmanship from your own team and the opposition		
Analysis			Analyze performance in games & in practice sessions	Extend analysis beyond individual to team level		Analyze performance in games & in practice sessions		
Game preparation			Introduce the concept of team meetings	Develop team meetings to include coaches, managers, team psychologists				
Seasonal training program			Plan practices & tournaments to peak for major events in calendar					
Dealing with the unexpected			Maintain positive attitude thru unexpected game stoppages					

COMPETITION						
STAGE	BEGINNER BOWLER	TRAIN TO PLAY	LEARN TO COMPETE	TRAIN TO COMPETE	TRAIN TO EXCEL	BOWLS FOR LIFE
Modified games & in-club tournaments	Variety of fun games to practice skills i.e. crown bowling, yardstick, 4-3-2-1	Variety of games to refine skills i.e. crown, 2-4-2 pairs and singles, cutthroat				Variety of fun games and tournaments of all sorts; helping introduce new bowlers
Competitive bowling	Club tournaments & novice competitions	Club tournaments, novice competitions and inter-club league play	Provincial tournaments and championship; national championships	National to beginning participation in international events (i.e. US Open)	International competitions i.e. World Cup, CWG's, NAC	Social interaction; inter-club tournaments; some provincial events; vacation bowling

REST AND RECOVERY						
STAGE	BEGINNER BOWLER	TRAIN TO PLAY	LEARN TO COMPETE	TRAIN TO COMPETE	TRAIN TO EXCEL	BOWLS FOR LIFE
Stretching exercises	Do stretching exercises post-games					Do stretching exercises post-game
Multi-game & Multi-Day tournaments			Plan for rest & recovery time between games and game days			
Travel			Plan for travel time & rest before games			
Diet & Fitness			Observe good dietary habits while in tournaments to maintain optimal performance level	Add mineral & vitamin supplements if travel diet is inadequate	Observe caution with local foods & waters when in a foreign country	Observe good dietary habits and maintain overall fitness to continue playing for 'life'

ATHLETES WITH DISABILITIES

STAGE	BEGINNER BOWLER	TRAIN TO PLAY	LEARN TO COMPETE	TRAIN TO COMPETE	TRAIN TO EXCEL	BOWLS FOR LIFE	
Equipment	Assistive devices i.e. bowl lifter, bowling arm, ramps for wheelchairs, string & distance markers	→				Become aware and train on assistive devices to continue to play for life	
Delivery Technique	Adapt to individual needs & physical abilities	Ensure skilled director or coach available to train and assist	→				Adjusting technique as physical issues arise
Awareness	Become familiar with the sport & the opportunities to play and to compete	Transfer over from another parasport or play bows in offseason of other sport	→				
Re-entry to sport	Re-learning after becoming disabled	Ensure skilled director or coach available to train and assist	→				



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Bowls AB will incorporate the philosophy contained in their LTAD into all their future coaches training and from this training, the LTAD model will be the basic instrument for all player development.

This manual will be reviewed and updated when Bowls Canada Boulingrin updates their specific LTAD material and thereafter be reviewed every three years to stay current and impactful on the development of bowlers.



in 2023