



∴ LONG TERM HOCKEY
∴ DEVELOPMENT

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Easy navigation across LTHD Stages

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LONG TERM HOCKEY DEVELOPMENT

INTRODUCTION

Long Term Hockey Development (LTHD) is a comprehensive and holistic approach to athlete development that focuses on the long-term development of athletes at all levels of the sport. It recognises that athlete development is a process that takes time and requires careful planning and implementation of development programs for their biological and psychological development.

"Children who enjoy playing hockey from a young age will be healthy and more likely to continue in lifelong physical activity. In addition, if they are well trained and have access to an appropriate development pathway, more of them will reach elite playing levels that enable our National Teams to qualify and compete consistently [1]. Long-Term Hockey Development (LTHD) addresses field hockey's important role in promoting wellness and provides an athlete development pathway [...] success." (Field Hockey Canada LTHD Implementation Resource Paper, 2014).

The Singapore Hockey Long Term Hockey Development Paper is a guide that outlines a systematic approach to developing field hockey athletes in Singapore. It is based on research and best practices in athlete development and provides a framework for coaches, parents, and administrators to support the development of Hockey athletes from grassroots to elite levels.



The LTHD model includes seven stages of development, each of which corresponds to a specific age range and level of development. It emphasises the importance of physical literacy, fundamental movement skills, technical and tactical development, and mental, emotional, and social development.

Overall, the Singapore Hockey Long Term Hockey Development Paper provides tools and resources for implementing LTHD programs. It also emphasises the importance of collaboration and communication between coaches, athletes, parents, and administrators to ensure a coordinated and effective approach to athlete development. It offers a roadmap for developing top-class athletes who can compete at the highest levels of the sport.



Long-Term Hockey Development (LTHD) addresses field hockey's important role in promoting wellness and provides an athlete development pathway [...] success.

- Field Hockey Canada LTHD Implementation Resource Paper, 2014

LONG TERM HOCKEY DEVELOPMENT

STAGES OF LTHD

Field Hockey can be considered a sport involving late specialisation.

Late specialisation in sport refers to a training approach where the athlete delays focusing exclusively on a specific sport until later in development. That means that the athlete would have had experience in various sports or physical activities before choosing one to specialise in.

In a late specialisation approach, athletes often only focus on a specific sport once reaching their PHV, when full physical maturity is reached. This approach allows athletes to develop various physical qualities and skills transferable to multiple sports. That can lead to improved overall athleticism and a better foundation for success in Hockey.

General, late specialisation in sports emphasises developing a broad range of physical skills and attributes before focusing on one specific sport, which can ultimately lead to better all-around athletic performance and injury prevention.

However, as players progress and become more experienced, they may specialise in specific positions or skills that suit their strengths and preferences. For example, some players may focus on becoming skilled strikers or defenders. This late specialisation can occur in the teenage years or early adulthood.

It is typically recommended that young athletes engage in various sports and activities to develop a broad range of physical and technical skills before specialising in a single sport.

1 Active Start Stage (Ages 0-6)

Children are developing basic motor skills and learning to interact with others. The focus is on developing a love for the game and general physical literacy.

2 Learn to Play Stage (Ages 6-10)

Children learn fundamental hockey skills, such as running, passing, and shooting. Girls 6-8 and boys 6-9 focus on developing individual skills and understanding team play. Girls 9-10 and boys 10-11 continue developing individual skills and introducing more complex team play.

3 Learn to Train Stage (Ages 9-12 males, 8-11 females)

This stage (ages 9-12) focuses on developing technical and tactical skills and physical attributes such as speed, agility, and endurance.

LTHD STAGE

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- Field Hockey Canada LTHD Implementation Resource Paper, 2014



Overall, the Singapore Hockey Long Term Hockey Development Paper provides tools and resources for implementing LTHD programs. It also emphasises the importance of collaboration and communication between coaches, athletes, parents, and administrators to ensure a coordinated and effective approach to athlete development. It offers a road map for developing top class athletes who can compete at the highest levels of the sport.

FIELD HOCKEY FOR KIDS, A LIFELONG SPORT

Hockey is a team sport that requires speed, agility, coordination, and endurance. It involves two teams of eleven players each, who use sticks to hit a ball into the opponent's goal. Players need to work together to pass the ball, create scoring opportunities, and defend their goals. The sport is fast-paced and exciting, with plenty of opportunities for players to showcase their skills and strategic thinking. However it may seem like a challenging sport to master, but the benefits of starting Hockey at an early age are significant.

Because it is dynamic and exciting, Hockey can be enjoyed throughout a person's lifetime. Millions of people around the world play it. Whether you are a beginner or a seasoned player, Hockey provides numerous benefits that can enhance your physical, emotional, and social well-being. Starting at an early age can have particularly significant advantages. Children can develop the skills and techniques needed to succeed in the sport while building solid foundations for a lifelong commitment to physical exercise.



Hockey can be an excellent way to build social skills, teamwork, and physical fitness. Playing on a team teaches children to work together, communicate effectively, and rely on one another to achieve a common goal. Additionally, the sport requires players to develop hand-eye coordination, agility, and endurance. Regular practice and games can help improve these skills, increasing self-confidence and a sense of accomplishment.

In this modern age, where children spend more time indoors and are glued to screens, Hockey can also provide an opportunity for kids to get outside, connect with nature, and engage in sports. With the right coaching and training, Hockey is a safe and fun sport for children of all ages and skill levels.



UNDERSTANDING LTHD

Long-Term Athlete Development (LTAD) is a framework developed by Istvan Balyi and Robert Hamilton in 2003, aimed at providing a systematic approach to the development of athletes from childhood to adulthood. The framework focuses on the stages of athletic development. It is built on the principle that athletes need to be developed over a long period, with each stage building upon the previous one.

LTAD is a holistic approach to athlete development, which takes into account the physical, mental, emotional, and social aspects of the athlete's development. It provides a guideline for coaches, parents, and athletes to follow to ensure that athletes are developed in a way that maximises their potential and minimises the risk of injury and burnout.

The Long-Term Hockey Development (LTHD) model is a specific application of the LTAD framework developed by Balyi and Hamilton in collaboration with Field Hockey Canada. LTHD focuses on the development of Hockey players, and it consists of six stages, which are similar to the LTAD stages but adapted to the specific needs of Hockey players.

In outline, LTAD and LTHD are methodical processes to athlete development to ensure that athletes are developed in a way that works out skills and abilities and reduces the chance of harming talent. The frameworks provide an approach to guidance, and they are based on scientific research and best practices in athlete development.

PLANNED EXCELLENCE

To achieve excellence in Hockey development, avoiding premature competition and focusing on winning at all costs is essential. This approach can be detrimental to the long-term development of young athletes, as it can lead to a lack of overall growth. Instead, the focus should be on developing fundamental skills and physical literacy in the early stages of development. That includes emphasising the importance of various physical activities and skills, such as throwing and catching.

Another critical aspect of developing excellence in Hockey is the need for individualised training. That involves tailoring training programs to the specific needs of each athlete based on their strengths, weaknesses, and developmental stage. This approach can help athletes to reach their full potential and achieve excellence.



PHV, OR PEAK HEIGHT VELOCITY

PHV, or peak height velocity, refers to the period of most rapid growth during adolescence, which typically occurs between the ages of 11 and 15 in boys and between the ages of 9 and 13 in girls. PHV is critical in youth sports development because it can significantly affect an athlete's physical performance and athletic potential.

During PHV, athletes experience significant changes in body composition, muscle mass, bone density, and other physical attributes. These changes can affect an athlete's strength, speed, endurance, and overall athletic ability. Therefore, coaches and trainers must understand the impact of PHV on youth athletes to optimise their development and minimise the risk of injury.

Here are some ways that PHV can affect youth sports development:

Strength and Power Development

PHV is crucial for developing strength and power in youth athletes. During this period, athletes experience a rapid increase in muscle mass, which can provide a significant advantage in strength-based sports like Football, basketball, and Hockey.

Skill Acquisition

PHV can affect the acquisition of technical skills in sports. During this period, athletes may experience coordination, balance, and motor control changes, which can affect their ability to learn new skills or refine existing ones.

Injury Risk

PHV can also increase the risk of injury in youth athletes. The rapid changes in body composition and bone density during this period can make athletes more susceptible to injuries such as stress fractures, muscle strains, and ligament sprains.

Endurance and Aerobic Capacity

PHV can also affect an athlete's endurance and aerobic capacity. As athletes' body composition changes, they may experience changes in their lung capacity and cardiovascular system, which can affect their ability to perform endurance-based activities.

PEAK HEIGHT VELOCITY DEVELOPMENT CHART

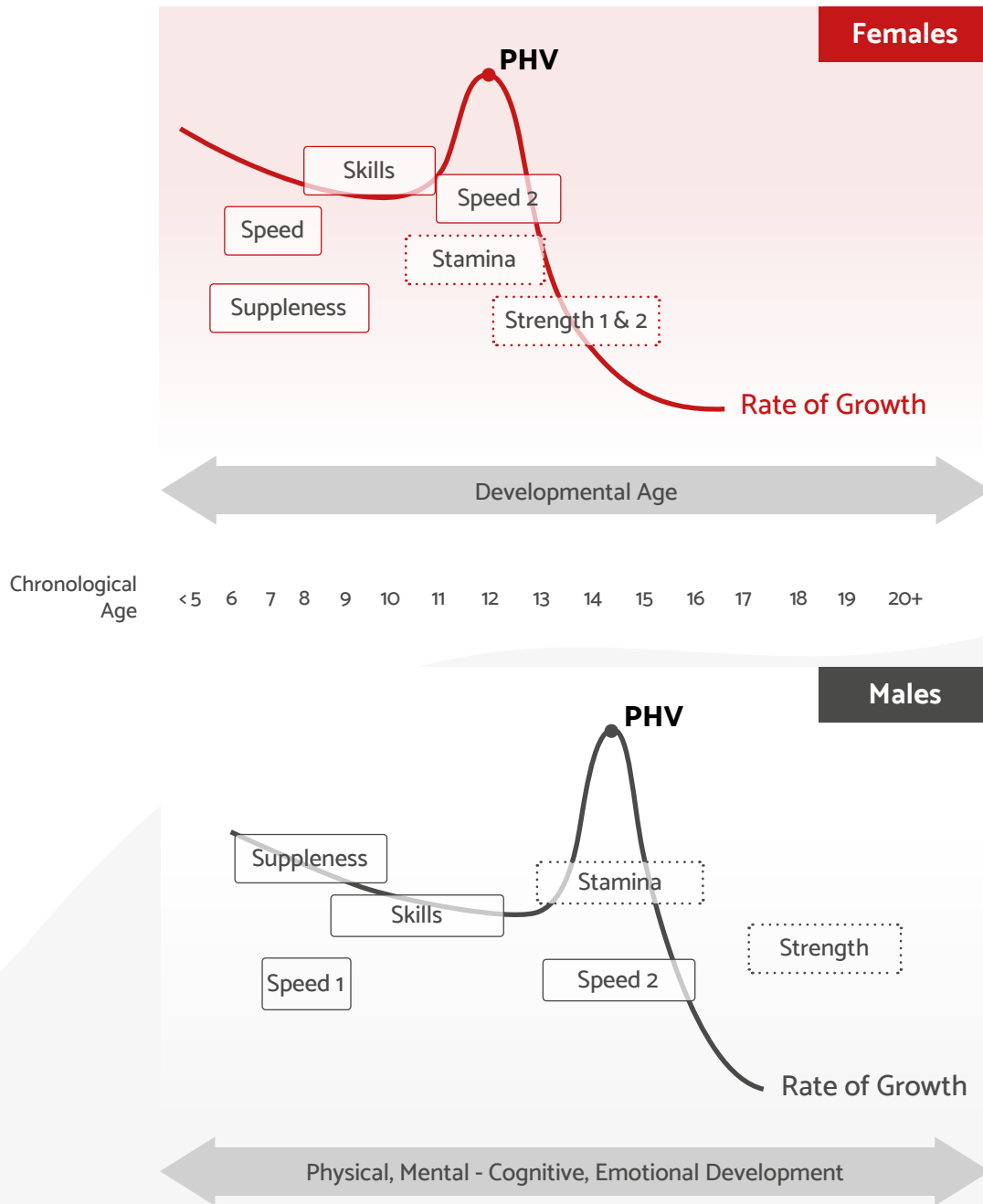


Figure 1: Adapted from: US Youth Soccer Player Development Model

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STAGES OF LTHD

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However, as players progress and become more experienced, they may specialise in specific positions or skills that suit their strengths and preferences. For example, some players may focus on becoming skilled strikers or defenders. This late specialisation can occur in the teenage years or early adulthood.

It is typically recommended that young athletes engage in various sports and activities to develop a broad range of physical and technical skills before specialising in a single sport.

Children are developing basic motor skills and learning to interact with others. The focus is on developing a love for the game and general physical literacy.

Children learn fundamental hockey skills, such as running, passing, and shooting. Girls 6-8 and boys 6-9 focus on developing individual skills and understanding team play. Girls 9-10 and boys 10-11 continue developing individual skills and introducing more complex team play.

This stage (ages 9-12) focuses on developing technical and tactical skills and physical attributes such as speed, agility, and endurance.





STAGES OF LTHD

This stage is characterised by significant physical, emotional, and social changes. Players may begin to specialise in a specific position, but it is essential to continue developing fundamental skills and athleticism. It is focused on refining technical and tactical skills and developing physical and mental capacities required to compete at a high level.

During this stage, players focus on developing the skills necessary to compete at a high level. Late specialisation may occur during this stage, as players may transition to a new position or create a new skill to fit their team's needs better. It is focused on preparing athletes for high-performance competition and refining skills, strategies, and tactics for match play.

Players are focused on competing at the highest level possible. Late specialisation may continue, as players may need to adapt their skills to fit the demands of professional play. It is focused on preparing elite athletes for international competition, including refining technical, tactical, and physical needs. Training is highly specialised and individualised.

Hockey for life refers to the stage beyond the competitive playing years when players continue to participate in the sport in a recreational or social capacity. This stage can encompass a wide range of ages, from young adults to seniors.

Overall, the LTHD framework emphasises the importance of developing a solid foundation of fundamental skills and athleticism early on while allowing for some specialisation as players progress through the different stages of development.

ACTIVE START

The Active Start stage focuses on developing fundamental movement skills and promoting physical activity in children from birth to age six.

There is no specific age at which children should start participating in Active Start activities, as every child's development is different. However, it is generally recommended that children begin engaging in physical activity as soon as possible, with appropriate modifications for their age and abilities.

Activities such as tummy time, crawling, rolling, and playing with toys can help develop gross motor skills for infants and toddlers. For preschoolers, running, jumping, throwing, catching, and balance games can help build their coordination and balance.

It's important to note that at this stage, the emphasis should be on fun and enjoyment of physical activity rather than competitive sports or rigorous training. Children should be encouraged to participate in various activities to develop their skills and confidence.



“Children should not go longer than 60 minutes without physical activity unless they are asleep. Many short activities throughout the day are ideal for children. Let children explore their play space and play equipment in a safe environment.” (Canada Sport For Life, 2018)

WHO recommends that boys and girls be engaged in daily active play. They develop fundamental movement skills through play and movement and learn how to link them. At this stage, developmentally appropriate activities will help participants feel competent and comfortable participating in various fun and challenging activities and games.

“

Children should not go longer than 60 minutes without physical activity unless they are asleep. Many short activities throughout the day are ideal for children. Let children explore their play space and play equipment in a safe environment.

- Canada Sport For Life, 2018

ACTIVE START

KEY CONCEPTS

- Physical activity should be a fun part of a child's daily life and is essential for healthy child development.
- Active play is critical at this stage as it builds meaningful connections within and between the brain and children's muscles.
- Opportunities for exploration of risk and limits in safe environments.
- Unstructured access to a wide variety of colourful toys and equipment.
- Activities should help children feel competent and comfortable participating in fun and challenging activities and non-competitive games.
- For children with a disability, access to age and disability-appropriate adapted equipment is an essential contributor to success in being physically active.
- Daily physical activity with an emphasis on fun.
- Resources
- Developing Physical Literacy
- Actively Engaging Women and Girls

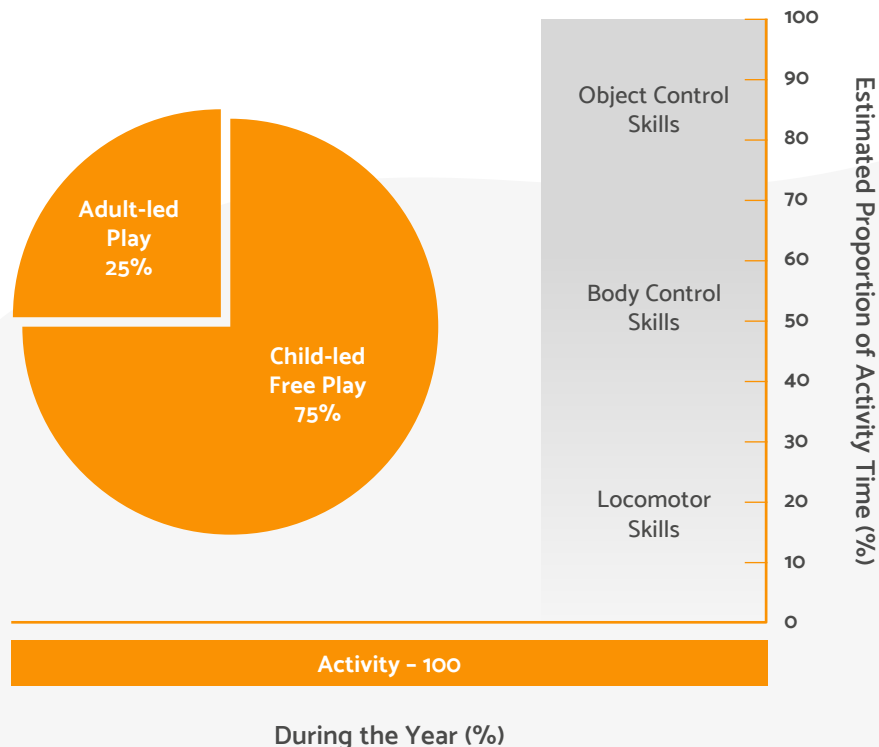


Figure 2: "Canada Sport for Life (Long-Term-Development-in-Sport-and-Physical-Activity-3.0)"

LEARN TO PLAY

In the Learn to Play stage, participants develop fundamental movement skills in structured and unstructured environments for play. The focus is on providing fun, inclusive, multi-sport, and developmentally appropriate sports and physical literacy. These experiences will result in the participant developing a wide range of movement skills, confidence, and a desire to participate.

KEY CONCEPTS

- Children usually start at around 4-6 years old and are generally in the preschool and early primary school years.
- Target 180 minutes of activity daily, with 60 minutes spent in vigorous physical exercise.
- Activities should include significant time for repetition, require minimal correction allowing children to safely test their limits, and improve their abilities through experience. Activities should help children build confidence and competence as they engage in physical activity.
- Emphasize the overall development of the child's physical capacities, fundamental movement skills, and the ABCs of athleticism: agility, balance, coordination, and speed.
- Develop skills by exposing participants to indoor and outdoor environments.
- A mixture of structured and unstructured play, with some instruction.
- The fundamental movement skills comprise techniques such as running, jumping, and throwing and basic stick skills such as grip, stance, and dribbling.
- Children are introduced to Hockey's basic rules and regulations, including how to handle the stick, pass, and shoot.
- Emphasis is placed on fair play, respect for teammates and opponents, and having fun.
- Teams may be formed, but competition is generally kept to a minimum and may be in small-sided games or scrimmages.
- Coaches and parents are crucial in providing a positive and supportive environment for children to learn and develop their skills.
- At this stage, there is typically a focus on participation and enjoyment rather than elite performance or winning.
- Safety and injury prevention are important considerations at this stage, with appropriate protective equipment and supervision provided as necessary.



LEARN TO PLAY

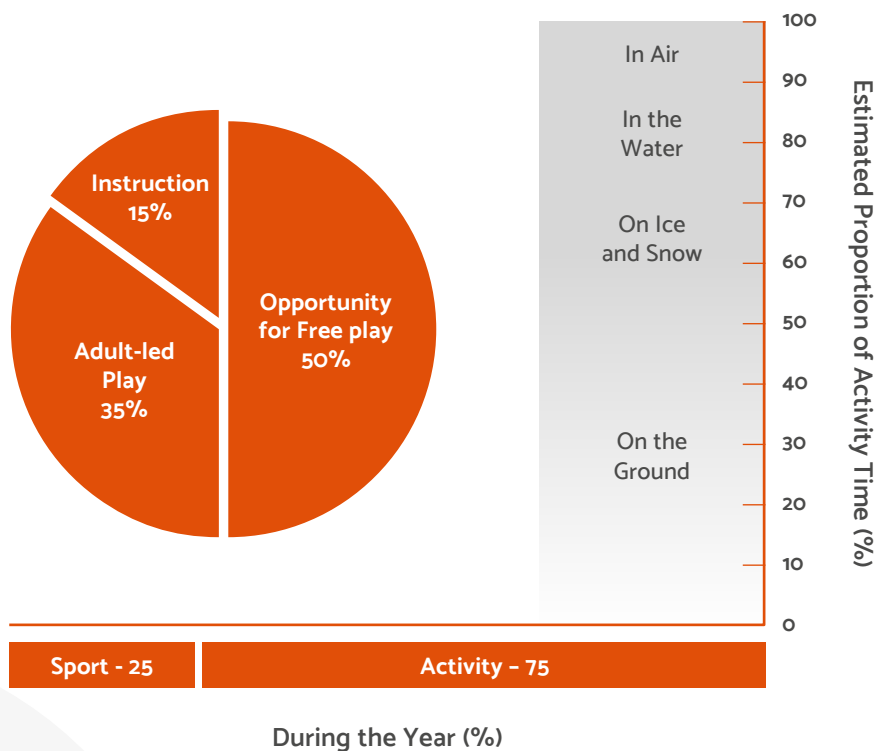


Figure 3: "Canada Sport for Life (Long-Term-Development-in-Sport-and-Physical-Activity-3.0)"

LEARN TO PLAY

COACH LEVEL		COMMUNITY COACH							
LTHD	Active Start	Learn to Play				Learning to Train			
Age	U4-U6	U6-U10				U8-U12			
Goal	Fundamental Movement Skills	Discover Movement, Fun, Discover Hockey				Develop Hockey Techniques			
Skill	Introduction	Introduce / Develop				Introduce / Develop			
Per Week	4-5 hours per week of physical activity, not more than 1 hour per session. Up to 3 non-sport sessions, 1 sport session, 1 hockey session	4-7 hours per week of physical activity of not more than 1 hour. No more than 1.5 hours of competition. Up to 3 non-specific activity				6-9 hours physical activity of not more than 1.5 hours. 2 hockey training + match. 3-4 non- specific activity			
ATHLETE SKILL PROGRESSION PATHWAY LEGEND		1	2	3					
		Introduce	Develop / Acquire	Refine / Competency					
TECHNICAL SKILL MATRIX									
Age of Athlete		6	7	8	9	9	10	11	12
Grip	Basic Grip	1	2	2	3				
	Double V Grip	1	2	2	3				
	One-Handed Grip	1			2				
	Pancake / Frying Pan Grip					1	2		
	Short Handle Grip					1	2		
Carrying the Ball	Running with Ball (Ball Position, Neutral, Front Right and Left)	1			2				
	Change of Direction	1			2				
	Change of Pace / Hesitation Dribble	1			2				
	Indian Dribble	1			2				
	Forehand & Reverse Stick: One-Handed Running					1	2		
	Forward Lifted Dribble					1	2		
	Small Space Control					1			
	Deception - Body and Stick Feints					1			
Elimination	Draw / Double Draw			1	2				
	Left to Right Draw Right to Left			1	2				
	Change of Speed				1	2			
	Using the Body to Eliminate Defenders				1	2			
	Lift (Forehand)					1			
	Lift (Reverse)					1			
Distribution	Forehand Push Pass (side on)	1	2	2	3				
	Forehand Snap Pass (on the run)	1	2	2	3				
	Forehand 'Slap' Push Pass	1			2				
	Reverse Stick Upright Pass	1			2				
	Forehand: Sweep		1	1	2				
	Forehand: One Touch & Deflections					1	2		
	Forehand: Lifted Push Pass					1	2		
	Reverse Stick: Sweep (to pass)					1	2		
	Forehand: Upright Hit					1	2		
	Forehand: Choke Hit					1	2		

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LEARN TO PLAY

ATHLETE SKILL PROGRESSION PATHWAY LEGEND		1		2		3						
		Introduce		Develop / Acquire		Refine / Competency						
TECHNICAL SKILL MATRIX												
Age of Athlete		6	7	8	9	9	10	11	12			
Defensive Concepts	Understanding Dangerous Space	1			2		3					
	Intercept Mentality	1			2		3					
	The Angle of Approach / Using the Body to Control Space	1			2		3					
	Creating / Defending Small Space	1			2							
	Man to Man Engaging		1			2						
	Distance + Timing		1			2						
	Defending Roles (First, Second, Cover Defender)		1			1		2				
	Regaining / Transition		1			1		2				
	Verbal / Non-verbal Communication (Vocabulary, Adjustments)					1		2				
	Zonal / Numbers Down				1		2					
	Defence Marking				1		2					
	Ball Side Marking				1		2					
	Help Side Front Man Marking				1		2					
	Goal Side Marking				1		2					
	Delaying and Channeling (Pressure vs Tackle Defender)				1		2					
	Circle Defence							1				
Age of Athlete		6	7	8	9	10	11	12	13			
Attacking Concepts	Triangle Play - Possession Concepts	1			2							
	Positioning and Structure (Width, Depth, Support)		1			2						
	1v1 Attacking Strategies		1			2						
	2v1 Attacking strategies					1		2				
	Verbal / Non-verbal Communication (Vocabulary, Actions)					1		2				
	Transfer Awareness / Change of Attacking Angles					1		2				
	Recognition of Numbers Up vs Numbers Down Situations				1		2					
	Attacking Roles (One / Two Passes Away and Off-ball)				1		2					
	Counter Attack (Transition Play)							1				
	3v2 Attacking Strategies							1				
Set Pieces	Self pass	1			2							
	Attacking 16m Free Hit Attacking					1	2					
	Free Hits inside the 25 Defending					1		2				
	Attacking 25 Free Hit					1						

LEARN TO TRAIN

Once a wide range of fundamental movement skills has been acquired, participants progress into the Learn to Train stage leading to understanding basic rules, tactics, and strategy in games and refinement of sport-specific skills. There are opportunities to participate in multiple sports with competitions focused on skill development and retention. Games and activities are inclusive, fun, and skill-based. At the end of the Learn to Train stage, participants grow (or progress) towards sports excellence in the Train to Train stage or being Active for Life, either by being Competitive for Life or Fit for Life.

KEY CONCEPTS

- Develop foundational sports skills in various sports, physical activities, positions, and environments.
- Children should continue to be active and engage in a minimum of 60 minutes of moderate to vigorous physical activity daily.
- Develop strength, endurance, and flexibility through games and fun activities.
- This is a period of accelerated development of coordination and fine motor control. It is also a time when children enjoy practising the skills they learn and seeing their improvement.
- Use physical literacy movement preparation as part of warm-ups to support the overall development of physical literacy.
- Provide opportunities for every child to learn and play. Children are less likely to be included in peer activities if they do not have the same skill level and will have fewer opportunities for practice in the future.
- Continue to encourage unstructured free play.
- Ensure sport, and physical activity remains FUN.

The Learn to Train stage is typically for children aged 8-12 years old, though the specific age range can vary depending on the athlete and program. The focus is on building a strong foundation of technical skills and tactical understanding and improving physical fitness, strength, and conditioning.

More advanced stick skills, such as reverse stick hits, aerials, and 3D skills, may be introduced and developed. Children begin to learn and practice more team tactics in 2v1 and strategies, including positioning, communication, and decision-making on the field.

Regular, structured training sessions are conducted, with a focus on progressive skill development and preparation for higher-level competition. Players may begin to participate in regional or national tournaments, though the emphasis is still on development rather than winning.

Coaches continue to play a crucial role in providing guidance and support for athletes, helping them to set goals and track progress towards achieving them.

Injury prevention and recovery also become increasingly important considerations, with appropriate warm-up, cool-down, and stretching routines implemented and injury treatment and rehabilitation as necessary.

Mental and emotional development also play a role, with coaches helping to foster a positive and growth-oriented mindset in athletes, encouraging them to learn from mistakes and setbacks and to persevere through challenges.

LEARN TO TRAIN

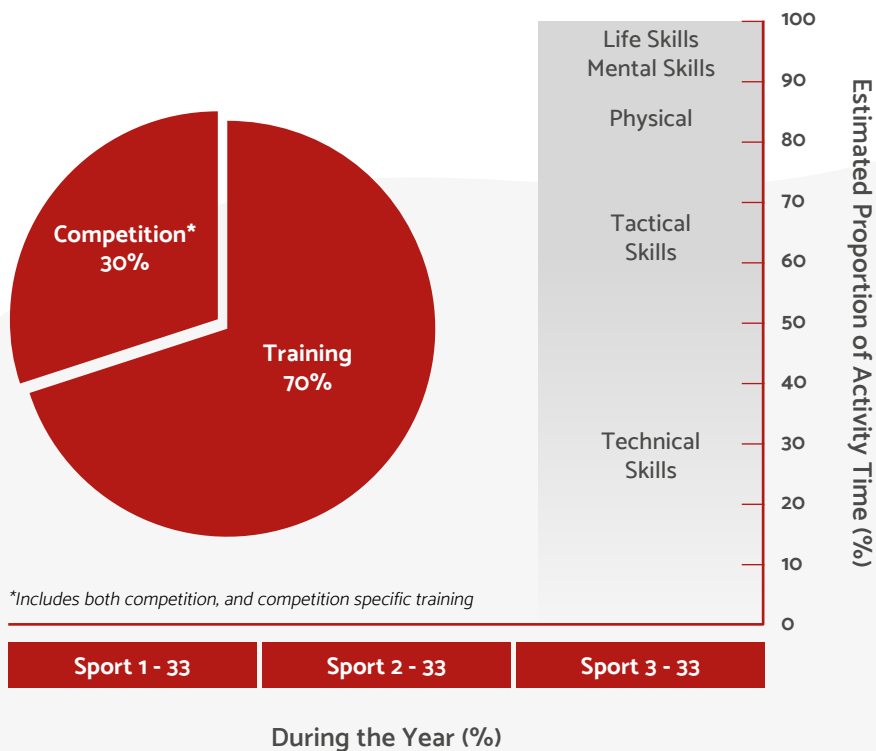


Figure 4: "Canada Sport for Life (Long-Term-Development-in-Sport-and-Physical-Activity-3.0)"

LEARN TO TRAIN

COACH LEVEL		COMMUNITY COACH							
LTHD	Active Start	Learn to Play				Learning to Train			
Age	U4-U6	U6-U10				U8-U12			
Goal	Fundamental Movement Skills	Discover Movement, Fun, Discover Hockey				Develop Hockey Techniques			
Skill	Introduction	Introduce / Develop				Introduce / Develop			
Per Week	4-5 hours per week of physical activity, not more than 1 hour per session. Up to 3 non-sport sessions, 1 sport session, 1 hockey session	4-7 hours per week of physical activity of not more than 1 hour. No more than 1.5 hours of competition. Up to 3 non-specific activity				6-9 hours physical activity of not more than 1.5 hours. 2 hockey training + match. 3-4 non- specific activity			
ATHLETE SKILL PROGRESSION PATHWAY LEGEND		1	2	3					
		Introduce	Develop / Acquire	Refine / Competency					
TECHNICAL SKILL MATRIX									
Age of Athlete		6	7	8	9	9	10	11	12
Grip	Basic Grip	1	2			2		3	
	Double V Grip	1	2			2		3	
	One-Handed Grip	1				2			
	Pancake / Frying Pan Grip					1		2	
	Short Handle Grip					1		2	
Carrying the Ball	Running with Ball (Ball Position, Neutral, Front Right and Left)	1				2			
	Change of Direction	1				2			
	Change of Pace / Hesitation Dribble	1				2			
	Indian Dribble	1				2			
	Forehand & Reverse Stick: One-Handed Running					1		2	
	Forward Lifted Dribble					1		2	
	Small Space Control							1	
	Deception - Body and Stick Feints							1	
Elimination	Draw / Double Draw			1	2				
	Left to Right Draw Right to Left			1	2				
	Change of Speed					1		2	
	Using the Body to Eliminate Defenders					1		2	
	Lift (Forehand)							1	
	Lift (Reverse)							1	
Distribution	Forehand Push Pass (side on)	1	2			2		3	
	Forehand Snap Pass (on the run)	1	2			2		3	
	Forehand ‘Slap’ Push Pass	1				2			
	Reverse Stick Upright Pass	1				2			
	Forehand: Sweep			1		1		2	
	Forehand: One Touch & Deflections					1		2	
	Forehand: Lifted Push Pass					1		2	
	Reverse Stick: Sweep (to pass)					1		2	
	Forehand: Upright Hit					1		2	
	Forehand: Choke Hit					1		2	

LEARN TO TRAIN

Athlete Skill Progression Pathway Legend		1		2		3			
		Introduce		Develop / Acquire		Refine / Competency			
Technical Skill Matrix									
Age of Athlete		6	7	8	9	9	10	11	12
Receptions	Forehand: Closed Receiving	1		2		2		3	
	Forehand & Reverse Stick: Open Receiving	1		2		2		3	
	Basic Moving Reception - Changing Angles	1		2		2		3	
	Lifted Passes (Bouncing Ball)					1		2	
	Forehand: Slip Left to Right					1		2	
Goal Scoring	Forehand: Push / Flick	1		2		2		3	
	Forehand: Upright Hit / Chip / Choke Hit					1		2	
	Forehand: Hand Apart Hit / Slap (Ball in the Air)					1		2	
	Reverse Stick: Sweep					1		2	
Winning the Ball	Footwork	1		2		2		3	
	Forehand & Reverse Stick: Two handed block tackle	1		2		2		3	
	Interception	1				2			
	Forehand & Reverse Stick: Jab / Poke					1		2	
	Tackle Channel / Double Team					1		2	
	Recovery Defense					1		2	
Goalkeeping	Basic Stance			1		1		2	
	Angles					1		2	
	Positioning Balance			1		1		2	
	Ground Clear (R/L Foot)			1		1		2	
	Footwork (Lateral)					1		2	
Game Format	3 on 3	1		2		2		3	
	5 on 5			1		2		3	
	7 on 7					1		2	
General	Manipulating Space and Time (On and Off-ball Movement)	1		2		2		3	
	360-degree Vision - Width, Depth and Support	1		2		2		3	
	Recognizing Pass Lines	1		2		2		3	
	Pass and Move	1		2		2		3	
	Prescanning before Receiving					1		2	
	Communication Strategies (GK > Backs > Mid > Fwds)					1		2	

LEARN TO TRAIN

ATHLETE SKILL PROGRESSION PATHWAY LEGEND		1	2		3				
		Introduce	Develop / Acquire		Refine / Competency				
PHYSIOLOGICAL SKILL MATRIX									
Age of Athlete		6	7	8	9	10	11	12	13
General	Fundamental Movements - Run, Jump, Throw, Roll	1			2				
	Hand-Eye Co-ordination	1			2				
	Warm-up Protocols	1			2				
	Cool-down	1			2				
	Recover Protocols Flexibility	1			2				
	Aerobic Endurance Agility				1		2		
	Balance				1		2		
	COD Speed Endurance							1	
	Strength - Endurance							1	
	Education	Concussion Awareness				1		2	
Overtraining / Specialization						1			
Nutrition Management / Nutrition for Performance						1			
MENTAL SKILL MATRIX									
Age of Athlete		6	7	8	9	9	10	11	12
Mental Skills	Growth Mindset Focus	1			2				
	Positive Self Talk / Awareness of thoughts			1	2				
	1			2					
	Self-Motivation				1		2		
Mental Tools	Goal Setting Strategies	1			2				
	Failure Recovery Strategies						1		
	Visualisation Techniques						1		
Other Factors	Leadership	1			2				
	Coachability	1			2				

TRAINING TO TRAIN

The stage of “Train to Train” in field hockey is typically reached by athletes between the ages of 11 to 15 years old. During this stage, the focus is on developing fundamental skills, tactical awareness, physical fitness, and mental strength to prepare them for higher levels of competition.

During Training to Train, young athletes consolidate their basic sport-specific skills and tactics. This is a window of accelerated adaptation to aerobic, speed, and strength training. Optimal aerobic trainability begins with the onset of PHV, the major growth spurt during maturation. During competitions, athletes play to win and to do their best, but training primarily focuses on learning the basics instead of competing.



TRAINING TO TRAIN TO-DO LIST

- Make aerobic training a priority after the onset of PHV while maintaining or further developing skill levels, speed, strength, and flexibility.
- Emphasise flexibility training given the rapid growth of bones, tendons, ligaments, and muscles.
- Consider the two windows of accelerated adaptation to strength training for females: the first occurs. Immediately after PHV, the second begins with the onset of menarche. For males, there is the first window, and it begins 12 to 18 months after PHV. Both aerobic and strength trainability depends on the athlete's maturation levels. For this reason, the timing of training emphasis differs depending on whether athletes are early, average, or late matures.
- Learn to cope with the physical and mental challenges of competition.
- Introduce athletes with a disability to sport-specific equipment such as wheelchairs and athletic prostheses. For all athletes, using body-size and skill-level appropriate equipment remains essential.
- Optimise training and competition ratios and follow a 60:40 per cent training to competition ratio. Too much competition wastes valuable training time, and conversely, not enough inhibits the practice of technical / tactical and decision-making skills.

TRAINING TO TRAIN

SKILL DEVELOPMENT

Athletes should continue to refine the fundamental skills of field hockey, including passing, receiving, dribbling, shooting, and tackling.

TACTICAL AWARENESS

Athletes should begin to develop a deeper understanding of the tactical elements of the game, including positioning, team strategies, and individual roles.

PHYSICAL FITNESS

Athletes should focus on building a solid aerobic base, as well as developing strength, speed, and agility.

MENTAL STRENGTH

Athletes should begin to develop mental skills such as focus, concentration, and resilience, as well as learn to cope with pressure and setbacks.

COACHING AND SUPPORT

Athletes should have access to knowledgeable and supportive coaches who can help guide their development and provide appropriate medical and nutrition support.

MULTI-SPORT PARTICIPATION

Athletes should be encouraged to participate in other sports to develop a broad range of physical and mental skills.

CONTINUED FUN AND ENJOYMENT

Athletes should continue to enjoy playing field hockey and develop a lifelong love for the sport.

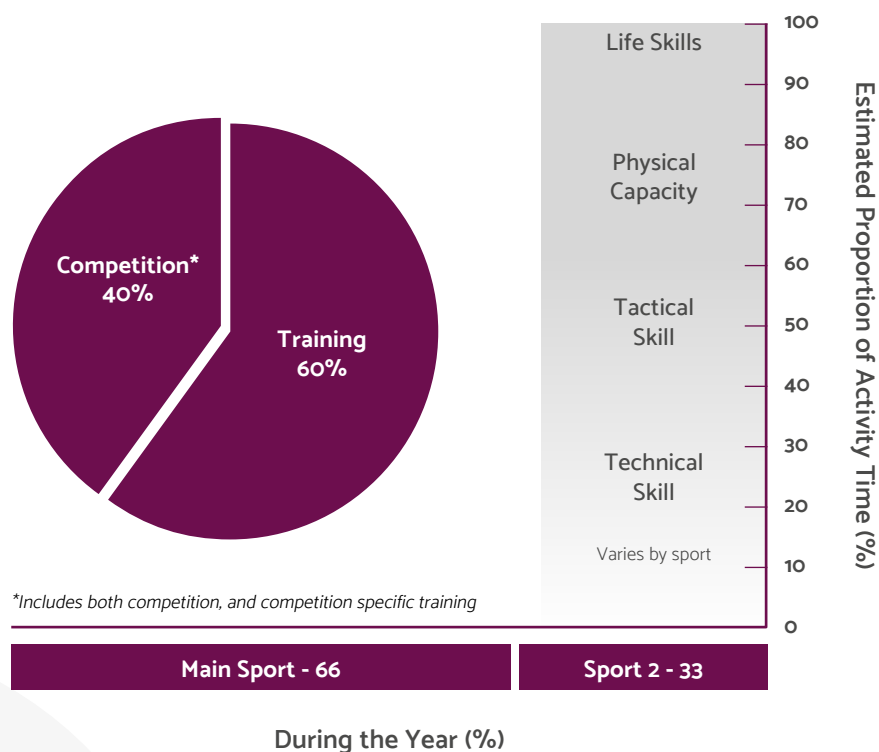


Figure 5: "Canada Sport for Life (Long-Term-Development-in-Sport-and-Physical-Activity-3.0)"

TRAINING TO TRAIN

COACH LEVEL		COACHING LEVEL 1											
LTHD	Train to Train - Competition Stream	Athletes in this stage are learning skills of the game and being introduced to 11v11 competitive games. This stage addresses School and Academy / Club teams.						Coaches in this stage could be School coaches or Academy / Club coaches in the U16 Age Group. They should be a minimum of 16 years with 2+ years of experience.					
Age	U12-U16												
Goal	Developing physical capacity, developing hockey competency. Moving into competitive play.												
Skill Progression	Introduce / Develop / Refine / Proficiency												
Per Week	3 hockey sessions per week not more than 2 hrs each (including min 1 competition). 2-3 non specific activity sessions of 1.5hrs each.												
ATHLETE SKILL PROGRESSION PATHWAY LEGEND		1		2		3		4					
		Introduce		Develop / Acquire		Refine / Competency		Proficiency					
						Entry Level Provincial Athlete U16							
TECHNICAL SKILL MATRIX													
Age of Athlete		11	12	13	14	15	16						
Grip	Basic Grip	3		4									
	Double V Grip	3				4							
	One-handed Grip (L/R)	2		3			4						
	Pancake / Frying Pan Grip	2		3									
	Short Handle Grip	2			3		4						
	Aerial Scoop or Drag Grip					1	2						
Carrying the Ball	Running with Ball (Ball Position, Neutral, Front Right and Left)	2		3		4							
	Change of Direction	2		3		4							
	Change of Pace / Hesitation Dribble	2		3		4							
	Indian Dribble	2		3		4							
	Forehand & Reverse Stick: One-handed Running	2		3									
	Forward Lifted Dribble	2		3									
	Small Space Control	1		2		3							
	Deception - Body and Stick Feints	1		2		3							
Elimination	Draw / Double Draw Left to Right	2		3									
	Draw Right to Left	2		3									
	Change of Speed	2		3									
	Using the Body to Eliminate Defenders	2		3									
	Lift (Forehand)	1		2		3							
	Lift (Reverse)	1		2		3							
	Lifted Draw Left to Right			1		2							
	Lifted Draw Right to Left			1		2							

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TRAINING TO TRAIN

COACH LEVEL		COMPETITION INTRODUCTION							
LTHD	Train to Train - Competition Stream	Athletes in this stage are learning skills of the game and being introduced to 11v11 competitive games. This stage addresses School and Academy / Club teams.				Coaches in this stage could be School coaches or Academy / Club coaches in the U16 Age Group. They should be a minimum of 16 years with 2+ years of experience.			
Age	U12-U16								
Goal	Developing physical capacity, developing hockey competency. Moving into competitive play.								
Skill Progression	Introduce / Develop / Refine / Proficiency								
Per Week	3 hockey sessions per week not more than 2 hrs each (including min 1 competition). 2-3 non specific activity sessions of 1.5hrs each.								
ATHLETE SKILL PROGRESSION PATHWAY LEGEND		1	2	3	4				
		Introduce	Develop / Acquire	Refine / Competency	Proficiency				
				Entry Level Provincial Athlete U16					
MENTAL SKILL MATRIX									
Age of Athlete		11	12	13	14			15	16
Mental Skills	Growth Mindset Focus	2	3						
	Positive Self Talk / Awareness of thoughts	2	3						
	Confidence	2	3						
	Self-Motivation	1	2	3					
	Grit / Resilience		1	2	3				
	Mental Toughness		1	2	3				
	Focus + Determination		1	2	3				
Mental Tools	Goal Setting Strategies	2	3	4					
	Failure Recovery Strategies	1	2	3					
	Visualisation Techniques	1	2	3					
	PMR - Progressive Muscular Relaxation Techniques				1				
	Optimal Performance State				1				
	Focus Strategies and Competition Readiness				1				
Other Factors	Leadership and Coachability	1	2	3					
	Management of Social Distraction Time + Schedule Management	2	3	4					
	Coach Education		1	2	3				
	Umpire Education		1	2	3				

TRAIN TO COMPETE

This is generally for athletes in national development teams. These are outstanding athletes with a serious chance of playing for their national squad or qualifying to go to the World Championships. In some sports, the Podium Pathway may begin at the end of the Train to Train or the Learn to Train stages as athletes are specialising within their primary sport for selection to international age group competitions. (Canada Sport for Life, 2018)

The stage of “Train to Compete” in field hockey is typically reached by athletes between the ages of 15 to 18 years old. During this stage, the focus is on optimising performance and preparing for elite levels of competition. Here are some bullet points that describe the critical aspects of this stage:



SKILL MASTERY

Athletes should have high technical proficiency and be able to execute complex skills and tactics consistently.

TACTICAL AWARENESS

Position-specific training: Athletes should begin to focus on position-specific training, refining the skills and tactics needed for their specific position on the field.

TRAINING TO COMPETE TO-DO LIST

- Provide year-round, high-intensity, individual event and position-specific training.
- Teach athletes who are now proficient at performing basic and sport-specific skills to perform those skills under various competitive conditions during training.
- Place particular emphasis on optimum preparation by 'modelling' high competition in training.
- Individually tailored to a greater degree fitness programs, recovery programs, psychological preparation, and technical development.
- Emphasise individual preparation that addresses each athlete's unique strengths and weaknesses.
- Select 1 sport.
- Utilise single, double, and triple periodisation as the optimal preparation framework.
- Change the training-to-competition and competition-specific training ratio to 40:60. Devote 40 per cent of available time to developing technical and tactical skills and improving fitness and 60 per cent of training to competition and competition-specific training.

PHYSICAL CONDITIONING

Athletes should continue to develop their physical activity, focusing on strength, power, speed, and agility, specific to field hockey.

MENTAL PREPARATION

Athletes should develop a solid mental game, including mental toughness, focus, concentration, and visualisation.

TRAIN TO COMPETE

COMPETITIVE EXPERIENCE

Athletes should regularly compete at the highest levels of competition, including regional and national tournaments.

INDIVIDUAL GOAL SETTING

Athletes should set personal goals for their performance and work with coaches to develop individualised training plans to achieve those goals.

TEAM TACTICS AND STRATEGY

Athletes should continue to develop their understanding of team tactics and strategy, including set plays and defensive structures.

RECOVERY AND INJURY PREVENTION

Athletes should prioritise recovery and injury prevention, including proper warm-up and cool-down, rest and sleep, and injury rehabilitation.

NUTRITION AND HYDRATION

Athletes should pay attention to their nutrition and hydration to ensure they are fueling their bodies properly for optimal performance.

COACHING AND SUPPORT

Athletes should have access to highly skilled and experienced coaches who can provide individualised training and support and appropriate medical and nutrition support.

CONTINUED FUN AND ENJOYMENT

Athletes should continue to enjoy playing field hockey and develop a lifelong love for the sport, even as the focus shifts more towards performance optimisation.

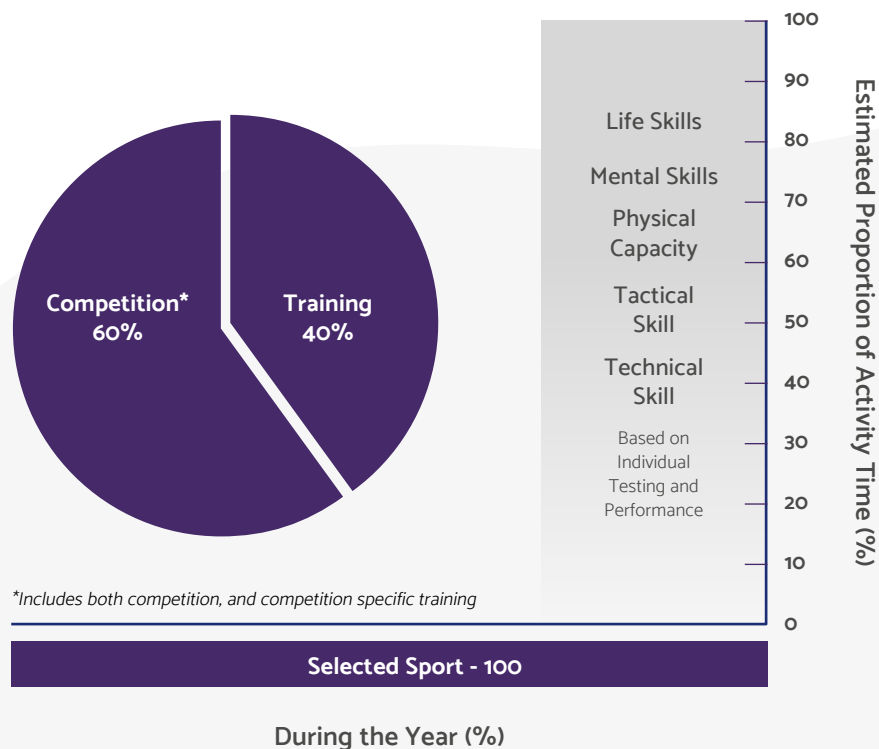


Figure 6: "Canada Sport for Life (Long-Term-Development-in-Sport-and-Physical-Activity-3.0)"

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TRAIN TO COMPETE

ATHLETE SKILL PROGRESSION PATHWAY LEGEND		2		3		4		5	
		Develop / Acquire		Refine / Competency		Proficiency		Excellence	
MENTAL SKILL MATRIX									
Age of Athlete		16	17	18	19	20	21		
Mental Skills	Growth Mindset Focus	3		4		5			
	Positive Self Talk / Awareness of thoughts	3		4		5			
	Confidence	3		4		5			
	Self-Motivation	3		4		5			
	Grit / Resilience	3		4		5			
	Mental Toughness	3		4		5			
	Focus + Determination	3		4		5			
Mental Tools	Goal Setting Strategies	4				5			
	Failure Recovery Strategies	3		4			5		
	Visualisation Techniques	3		4		5			
	PMR - Progressive Muscular Relaxation Techniques	1	2	3		4	5		
	Optimal Performance State	1	2	3		4			
	Focus Strategies and Competition Readiness	1	2	3		4			
Other Factors	Leadership	3		4		5			
	Coachability	4				5			
	Management of Social Distraction	3		4		5			
	Time + Schedule Management	3		4		5			
	Coach Education	1		2					
	Umpire Education	1		2					

TRAIN TO WIN

Maximise fitness preparation and sport-, individual-, and position-specific skills and performance. Training to Win is the final stage of athletic preparation.

All the athlete's physical, technical, tactical (including decision-making skills), mental, and personal and lifestyle capacities are fully established, and the focus of training has shifted to maximising performance.

World-class sports performances require world-class equipment that is fine-tuned to the demands of the event and the requirements of the athlete.

The stage of "Train to Win" in field hockey is typically reached by athletes who are competing at the highest levels of the sport, such as international competitions and elite professional leagues. During this stage, the focus is on optimising performance and achieving peak physical and mental conditions. Here are some bullet points that describe the critical aspects of this stage:

TRAINING TO WIN TO-DO LIST

- Train athletes to peak for major competitions.
- Ensure that training is characterised by high intensity and relatively high volume.
- Allow frequent preventative breaks to prevent physical and mental burnout.
- Utilize single, double, triple, and multiple periodisations as the optimal preparation framework.
- Change the training to a competition ratio of 25:75, with the competition percentage including competition-specific training activities.



SKILL MASTERY

Athletes should have a high level of technical proficiency and be able to execute complex skills and tactics consistently under pressure.

SPECIALISED TRAINING

Athletes should engage in specialised training tailored to their specific position and role on the team.

ELITE PHYSICAL CONDITIONING

Athletes should be in peak physical condition, focusing on maximising strength, power, speed, and agility.

MENTAL PREPARATION

Athletes should have a solid mental game, focusing on mental toughness, resilience, and the ability to perform under pressure.

HIGHLY COMPETITIVE EXPERIENCE

Athletes should regularly compete at the highest levels of competition, including world championships and elite professional leagues.

TRAIN TO WIN

PERFORMANCE OPTIMISATION

Athletes should analyse detailed performance, using data and technology to optimise their training and performance.

STRATEGIC TEAM PLANNING

Athletes should work closely with coaches and team members to develop strategic plans and tactics for each competition.

INJURY PREVENTION AND REHABILITATION

Athletes should prioritise injury prevention and rehabilitation, focusing on proper warm-up and cool-down, rest and recovery, and rehabilitation from injuries.

NUTRITION AND HYDRATION

Athletes should pay great attention to their nutrition and hydration, focusing on fueling their bodies for optimal performance.

COACHING AND SUPPORT

Athletes should have access to the best coaches, medical professionals, and support staff to optimise their training and performance.

CONTINUED FUN AND ENJOYMENT

Even at the highest levels of competition, athletes should continue to enjoy playing field hockey and develop a lifelong love for the sport.

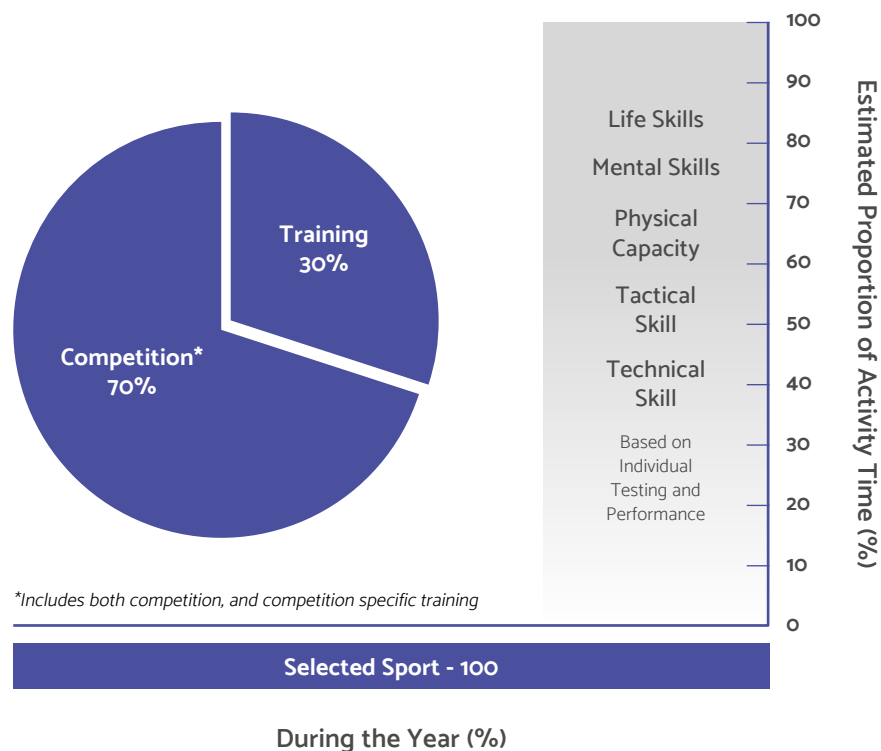


Figure 7: “Canada Sport for Life (Long-Term-Development-in-Sport-and-Physical-Activity-3.0)”

TRAIN TO WIN

COACH LEVEL		LEVEL 2 / MASTER COACH					
LTHD	Train to Compete - Train to Win (U21)	T2W U21 athletes should have 80% Competitive Opportunities both regular domestic competition, as well as international competition.				Coaches in this stage could be HP club coaches at the U18 level or Top Division Adult Leagues. Coaches at this level should be experienced with a good understanding of all aspects of coaching.	
Age	U16 - U19 and U21						
Goal	Consistency in execution of hockey skills at speed and under						
Skill Progression	Develop / Refine / Proficiency / Excellence						
Per Week	3 hockey sessions per week not more than 2 hrs each + min 1 competition. 2-4 non specific activity sessions of max 2 hrs each.						
ATHLETE SKILL PROGRESSION PATHWAY LEGEND		2	3	4		5	
		Develop / Acquire	Refine / Competency	Proficiency		Excellence	
TECHNICAL SKILL MATRIX							
Age of Athlete		16	17	18	19	20	21
Grip	Basic Grip	4			5		
	Double V Grip	4			5		
	One-handed Grip (L/R)	4			5		
	Pancake / Frying Pan Grip	3	4				
	Short Handle Grip	4			5		
	Aerial Scoop or Drag Grip	2	3	4			
	Carrying the Ball	Running with Ball (Ball Position, Neutral, Front Right and Left)	4		5		
Change of Direction		4		5			
Change of Pace / Hesitation Dribble		4		5			
Indian Dribble		4			5		
Forehand & Reverse Stick: One-Handed Running		3	4		5		
Forward Lifted Dribble		3	4		5		
Small Space Control		3	4		5		
Deception - Body and Stick Feints		3	4		5		
Elimination		Draw / Double Draw Left to Right	3	4		5	
	Draw Right to Left	3	4		5		
	Change of Speed	3	4		5		
	Using the Body to Eliminate Defenders	3	4		5		
	Lift (Forehand)	3	4			5	
	Lift (Reverse)	3	4			5	
	Lifted Draw Left to Right	2	3	4			5
	Lifted Draw Right to Left	2	3	4			5

TRAIN TO WIN

ATHLETE SKILL PROGRESSION PATHWAY LEGEND		2	3	4	5		
		Develop / Acquire	Refine / Competency	Proficiency	Excellence		
TECHNICAL SKILL MATRIX							
Age of Athlete		16	17	18	19	20	21
Distribution	Forehand Push Pass (Side On)	4	5				
	Forehand Snap Pass (On the Run)	4	5				
	Forehand 'Slap' Push Pass	4		5			
	Reverse Stick Upright Pass	4		5			
	Forehand: Sweep	4		5			
	Forehand: One Touch & Deflections	3	4				
	Forehand: Lifted Push Pass	3	4	5			
	Reverse Stick: Sweep (to pass)	3	4	5			
	Forehand: Upright Hit	3	4	5			
	Forehand: Choke Hit	3	4				
	Reverse Stick: Upright Hit (to pass)	2	3	4	5		
	Forehand Deceptive Sweep / Roll Push	2	3	4	5		
	Aerial / Scoop	2	3	4	5		
	Receptions	Forehand: Closed Receiving	4		5		
Forehand & Reverse Stick: Open Receiving		4		5			
Basic Moving Reception - Changing Angles		4		5			
Lifted Passes (Bouncing Ball)		3	4		5		
Forehand: Slip Left to Right		3	4		5		
Reverse Stick: Slip Right to Left		2	3	4		5	
Forehand Redirect		2	3	4		5	
High Ball Receptions (Scoops)		2	3	4		5	
Goal Scoring	Forehand: Push / Flick	4		5			
	Forehand: Upright Hit / Chip / Choke Hit	3	4	5			
	Forehand: Hand Apart Hit / Slap (Ball in the Air)	3	4	5			
	Reverse Stick: Sweep	3	4	5			
	Punch Shot	2	3	4		5	
	Reverse Stick Shot: Hit (R+L Foot)	2	3	4		5	
	Tipping (Forehand and Reverse)	2	3	4		5	

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TRAIN TO WIN

ATHLETE SKILL PROGRESSION PATHWAY LEGEND		2		3		4		5		
		Develop / Acquire		Refine / Competency		Proficiency		Excellence		
TACTICAL SKILL MATRIX										
Age of Athlete		16	17	18	19	20	21			
General	Manipulating Space and Time (On and Off-ball movement)	4			5					
	360-degree Vision - Width, Depth and Support	4			5					
	Recognizing Pass Lines	3	4			5				
	Pass and Move	4			5					
	Prescanning Before Receiving	3	4			5				
	Communication Strategies (GK>Backs>Mid>Fwds)	3	4			5				
	Pass V Eliminate	3	4			5				
	Decision Making Protocols	3	4			5				
Defensive Concepts	Understanding Dangerous Space	4			5					
	Intercept Mentality	4			5					
	The Angle of Approach / Using the Body to Control Space	4			5					
	Creating / Defending Small Space	4			5					
	Man to Man	3	4			5				
	Engaging Distance + Timing	3	4			5				
	Defending Roles (First, Second, Cover Defender)	3	4			5				
	Regaining / Transition	4			5					
	Verbal / Non-verbal Communication (Vocabulary, Adjustments)	4			5					
	Zonal / Numbers Down Defence	3	4			5				
	Marking Ball Side	3	4			5				
	Marking Help Side	3	4			5				
	Front Man Marking	3	4			5				
	Goal Side Marking	3	4			5				
	Delaying and Channeling (Pressure vs Tackle Defender)	3	4			5				
	Circle Defence	3	4			5				
	Counter Control / Recovery	2	3	4			5			
	Role of the Free Man	2	3	4			5			
	High Press Variations + Concepts	2	3	4			5			
	Half Court Press	1	2	3	4					

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HOCKEY FOR LIFE STAGE

Hockey for life refers to the stage beyond the competitive playing years when players continue to participate in the sport in a recreational or social capacity. This stage can encompass a wide range of ages, from young adults to seniors.



HOCKEY FOR LIFE STAGE



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