

LONG-TERM BOXING DEVELOPMENT



BOXING CANADA

1 ACTIVE START - Males and Females ages 0 - U6



At this stage, the focus should be on children enjoying the sport.

Physical activity is essential for the development of a healthy child, therefore, it is important to encourage basic movement skills, as these develop depending on the child's genetics, environment and activity experiences and become harder to learn as the child ages.

Starting in infancy, parents need to provide children with opportunities to participate in daily activities that promote movement. Building a well structured environment combining the four pillars of physical literacy (skiing, athletics, swimming and gymnastics) will enable the child to move effortlessly into the Fundamentals stage.

Although the sport of Boxing does not have a direct role during the Active Start stage, it is important it supports organizations that promote physical activity.

Physical

Fun, structured and unstructured activities are necessary to learn and promote physical literacy. These include:

- The ABC's of movement: (agility, balance and coordination)
- speed
- Running
- Jumping
- Throwing

Mental

Promote fun, discovery, participation and reinforce the individual efforts of the child

Mental capacities:

- Fun and enjoyment of the game
- Participation and sportsmanship
- Positive interactions with others
- Confidence and self-esteem

Implications for the coach:

- Promote participation and enjoyment of the game
- Provide positive reinforcement for efforts
- Select activities and drills in which success is almost always guaranteed
- Progress from simple activities to complex activities in a gradual fashion
- De-emphasize outcome and encourage fun
- Focus on participation and good spirit versus outcome

Health

Nutrition:

Parents should:

- Encourage their child to maintain a healthy weight by ensuring they are eating meals that are high in nutritional content and low in fat
- Allow their child to eat as needed, in order to encourage the use of their natural ability to monitor food intake
- Allow their child to eat small amounts on a more frequent basis

Sleep:

- Sleep as much as desired

Recommendations For Training and Competition

- Participate in as many physical activities and sports possible
- Provide organized physical activity for at least 30 minutes per day for toddlers and at least 60 minutes per day for preschoolers
- Provide unstructured activity – active play – for at least 60 minutes per day, and up to several hours per day for toddlers and preschoolers. Toddlers and preschoolers should not be sedentary for more than 60 minutes at a time, except while sleeping.
- No formal competitive structure

Where?	Physical Literacy	Who?
Home Preschools Day care Sport programs Community recreation	Active Start Can 0-6 and ages 0-6	Parents/Guardians Day care providers Preschool teachers Kindergarten teachers

2 FUNDAMENTALS - Males ages 6 – U9 Females ages 6 – U8



This stage is characterized by optimizing overall general athletic development. Improving basic movement abilities such as agility, balance, speed, and coordination and improving fundamental sport skills such as running, jumping, throwing, punching, and swimming are the primary focus. Fun is critical in all aspects of training, as one of the primary objectives of this stage is to encourage participation in sport and physical activity, with the goal of creating life-long interest. In addition, children should be introduced to decision-making skills, as well as simple rules and ethics of sport.

Well-structured programs with proper progression in which are monitored regularly by trained educators, coaches and parents should be promoted.

At this stage, motor patterns become more refined and balance skills improve as the inner ear gradually matures. No gender differences are apparent and physical activity should

still be done through games and sport play. Opportunities for preferred and supportive physical activities should be provided at least four times a week. If a child has a favourite sport, participation up to twice per week in that activity is suggested so long as there is also participation in many other sports.

The awareness of as many sports as possible is key in order to promote a life-long love for sport and physical activity.

Where: Elementary school physical education classes, boxing clubs, community programs and clubs

Why: To introduce children to fundamental motor skills, including the basic skills of boxing

Who: Teachers, instructors or club coach

Physical

- Fun fitness activities to begin developing aerobic fitness, muscular strength/ endurance with own body weight, flexibility and stability

- The first "window" of speed training (accelerated adaptation to training) is from 6-8 years in females and 7-9 years in males.

- Emphasis should be on the development of physical literacy and the development of basic movement skills:

- Running
- Jumping
- Striking
- Catching
- General motor abilities of:
 - Agility
 - Balance
 - Coordination
 - Speed

Technical

- Introduction to the three Fundamental Principles of Boxing:
 1. Offense
 2. Defence
 3. Footwork

- **Introduction to Boxing-specific skills:**
 - Introduce basic straight punches
 - Introduce basic body position
 - Introduce basic block technique against straight punches



Tactical

- Focus on fun games and the exploration of spatial awareness
- Festivals should be held at the end of the season or program to emphasize fun and participation
- Experience the outcomes of training
- Experience the outcomes of competition
- Promote uninhibited/ spontaneous play

Mental

Promote:

- Experience the enjoyment of competition
- Positive reinforcement of strengths
- Focus on effort-based goals versus outcome (winning)
- Basic self awareness of thinking and feeling states
- Basic imagery with little structure, in order to encourage creativity
- Sportsmanship and ethical play
- A "no excuse" atmosphere

Some implications for the coach:

- The coach serves as positive role model
- Teach athletes that mistakes or poor performance are not "bad", they are simply feedback
- Focus on processes (efforts) verses on the outcome (winning)
- Start to develop basic self awareness
- Introduction to Boxing etiquette, rules and the concept of fair play

Health

Nutrition

Parents should:

- Ensure adequate nutrition
- Discourage over-eating
- Ensure optimize hydration

Sleep

- Sleep as much as necessary

Strength and Flexibility

- Promote good movement pattern habits and proper technique
- As sport-specific training increases, choose alternate activities that emphasize different movements to decrease risk of injury from muscle imbalance
- No maximal or near-maximal strength activities to preserve growth plates

Equipment

- Use equipment to match physical size and skill of the child

Injury Prevention

- Teach body awareness

Where?	Physical Literacy	Who?
Schools Sport clubs Community recreation Sport programs Home	Fundamental Can 6-9 and ages 6-9	Parents/Guardians Coaches Teachers Recreation leaders Youth leaders

3 LEARN TO BOX - Building Technique - Males ages 9 – U12 Females ages 8 – U11



The "Learn to Box" phase is one of the most important periods for the development of young athletes as the optimal window of trainability for skill training in females is between 8-11 years and 9-12 years for boys. At this stage, children are developmentally ready to acquire the general sports skills that are the cornerstones of all athletic development. Boxing fundamentals such as straight punches, blocking and body position should be further developed with more emphasis put on the execution of proper technique. However, specialization in one sport must be resisted at this stage, as it can be detrimental to later stages of skill development and the refinement of fundamental motor skills. Inter Club competitions are introduced for enjoyment, but are not the main focus. This stage is where the competitive spirit in athletes of the future is born.

At the end of this stage, athletes will typically choose one of the two streams: elite development or recreational participation. It's important to note that the technical, physical, mental and cognitive aspects of the program do not differ at this stage from one stream to the other. The difference is reflected in the volume of training. General talent identification begins during this stage.

Where: Elementary school physical education classes, boxing clubs, community programs and clubs

Why: To build on the fundamental skills of boxing and expand the athlete's exposure and love for the game.

Who: Teachers, instructors and club coach

Physical

- Greater emphasis should be placed on learning sport-specific movement through training. Strength training should utilize the athlete's body weight, stability balls and medicine balls.

- Basic training concepts should be introduced

- Early information about nutrition and hydration should be provided

- The major skill learning window (the skill hungry years) is during this stage

Technical

- Development of skills – continued emphasis on refinement of the fundamental principles of Boxing and the expansion of these needs to begin
- The development of basic boxing technical skills
- Athletes should start to acquire new boxing skills

The following Boxing-specific skills be introduced:

- Develop straight punches
- Introduction to hook and uppercut punches
- Introduction to straight punches combination
- Introduction to straight punches counter punch technique
- Develop blocking technique against straight punches
- Introduce blocking technique against hook and uppercut
- Introduction to parry technique
- Develop body position

- Emphasize technical perfection
- All skills to be trained in both stationary and dynamic positions

Tactical

- Introduction to the knowledge of competition systems
- Development of Boxing terminology
- Introduction to tactics against different style of opponents
- Introduction to condition sparring with set condition by the examiner
- "Thinking" of how to get an advantage

Mental

Concepts of mental preparation begin to be introduced. Rules of the game should be expanded, as well as the principles of fair play understood.

Basic mental skills are introduced:

- Relaxation: deep breathing, ratio breathing
- Goal-setting: long- and short-term goals
- Focus strategies and thought stopping
- Imagery: to promote skill development, control and confidence
- Self-awareness of self-talk and feeling states
- Confidence building, including the ability to identify strengths

Some implications for the coach:

- Introduce players to a structured mental training (MT) program, introducing the basic mental skills

Health

Activity:

- Balance one-sided skills with a variety of play activities with opposite movement patterns

Growth

- Period of rapid growth may begin for girls

Nutrition

- Ensure adequate nutrition
- Discourage over-eating
- Ensure optimize hydration

Strength and Flexibility

- Introduce plyometric activity through common games (i.e. hopscotch and jump rope)
- Introduce shoulder and torso exercises
- Introduce free weight techniques, but discourage maximal or near-maximal strength activities to preserve growth plates

Injury Prevention:

- Increased risk of injury accompanies growth spurt as rapidly growing body adapts
- Modify training programs (i.e. correct muscle flexibility and strength imbalance, decrease volume and intensity of training) during periods of rapid growth
- Wear proper fitting shoes

Where?	Physical Literacy	Who?
Schools Sport clubs Community recreation Sport programs Home	Learn to Train Can 9-12 and ages 9-12	Parents/Guardians Coaches Teachers Recreation leaders Youth leaders

- Weekly participation in 3-4 general sport and physical activity sessions
- Weekly participation in 2-3 boxing specific sessions which should last between 45 – 75 minutes
- 2-4 club well structured competition per year. The emphasis at this stage is on development and opportunities for learning and expression

4 TRAIN TO BOX - Building the engine - Males ages 12 – U16 Females ages 11 – U15



The main objective of this stage is to optimize fitness preparation and Boxing-specific skills. Training volume should remain high, while intensity increases with the importance of competition be emphasized. In many athletes this is also the time at which peak strength velocity and peak weight velocity coincide with the period of opportunity for greatest strength gain. This is why the emphasis should be on the development of individual strength, while minimizing weakness through modeling and nurturing physical, technical and tactical skills based around specific events. At this stage the possibility of pursuing a career in High-Performance Boxing can be introduced.

Where: School physical education classes, clubs and provincial programs, regional training centers.

Why: To develop a passion for Boxing and to pursue focused training. Athlete identification begins at this stage.

Who: Teachers, club coaches and provincial coaches

Physical

- Develop aerobic endurance with the onset of the growth spurt.
- Introduce speed & anaerobic concepts into training towards the end of the stage.
- The second speed window occurs at between the ages of 11-23 in females and 13-16 in males.
- Body weight and core stability work should be expanded upon as well as the introduction of free weights.
- The strength window for the use of free weights occurs immediately after PHV or with the onset of menarche for girls; and 12-18 month after PHV for boys.
- Emphasize flexibility training.
- Expanded information is provided and injected throughout training in the areas of recovery and regeneration, hydration and nutrition.
- Pre- and –post competition strategies should be developed.
- Multiple seasons occur with a built in period of rest between seasons to allow for adequate recovery.
- Single or double periodization.

Technical

- Improving the Skills – fundamental skills are progressively developed and refined.
- Strengths and weaknesses are identified and addressed.
- Mental skills (i.e. focus and confidence) should be built into match and competitions
- Consolidate basic Boxing skills

Boxing specific:

- Optimize straight punches technique
- Developing hook and uppercut punches technique
- Introduce and develop straight punches combination with hook and uppercut
- Introduce and develop hook and uppercut combination
- Optimize straight punches combination
- Developing counter punch technique with straight punches
- Introduce and develop counter punch technique with straight punches
- Optimize block technique against straight punches
- Developing block technique against hook and uppercut
- Develop Parry technique
- Optimize body position

Tactical

- Introduction to Boxing's philosophy surrounding winning and losing
- Acquire and develop appropriate tactical and strategic abilities against different style of opponents
- Work on consistency of performance in a variety of situations
- Recognition of match situation and decision-making is fostered
- Emphasis on Boxing-specific skills (e.g. offensive and defensive, counter punches etc)

Mental

Athletes should learn to cope with challenges of competition through education and the integration of basic mental skills.

Mental capacities:

- PMR
- Basic focus plans and competition strategies
- Self-talk – aware of thoughts and have method for replacing unproductive self-dialogue
- Motivation – more advanced goal-setting: use of SMARTER principle – Specific, Measurable, Achievable, Realistic, Time-based, Evaluated and Recorded
- Confidence – highlighting strengths and use of imagery
- Start to use pre-competition planning strategies
- Improved self-awareness
- Distraction control strategies
- Competitive attitude
- Teamwork and communication skills
- Sportsmanship and fair play reinforced Growth

Health

- **Growth**
 - Most participants experience their major growth spurt during this stage.

Nutrition

- Increased consumption normal (average of 2,200 calories for females and 2,800 for males)
- Sufficient balance of nutrient rich foods, with attention given to calcium and iron
- Optimize hydration

Sleep

- Sleep needs increase with rapid growth

Strength and Flexibility

- Introduce free weight techniques, but no maximal or near-maximal strength activities in order to preserve growth plates
- Flexibility should be emphasized during the growth spurt

Injury Prevention

- Introduce injury prevention programs for shoulder and low back because risk of repetitive use injury increases
- Provide at least 6-8 weeks of pre-season conditioning prior to intense sport participation
- Modify training programs (i.e., correct muscle flexibility and strength imbalance, decrease volume and intensity of training) during periods of rapid growth

Recommendations For Training and Competition

- Weekly participation in 3-4 general sport and physical activity sessions including to boxing specific conditioning i.e. ultra-short interval / circuit training, supervised free weight lifting
- Weekly participation in 5-7 boxing specific sessions which should last between 45- 90 minutes
- 4-8 per years Club events and provincial cadet tournament

5 TRAIN TO COMPETE - Potential Stage - Males ages 16 – U22 Females ages 15 – U22



The main objective of this stage is to optimize fitness preparation and Boxing-specific skills. Training volume remains high while intensity increases with the importance of competition. In many athletes, this is also the time at which peak strength velocity and peak weight velocity coincide with the period for the opportunity of greatest strength gain. As a result, the emphasis should be on developing individual strength and minimizing weakness through modeling and nurturing physical, technical and tactical skills based around specific events.

Where: Interscholastic competition, clubs, provincial programs, universities, National Training Centers and National Team programs

Why: Continue to monitor identified talent. Begin to prepare the elite athlete for high performance competition.

Who: Personal coaches, provincial coaches and national coaches

Physical

- All systems are fully trainable towards the end of the stage, testing should determine the priorities of training emphases
- Aerobic and anaerobic endurance
- Speed development
- Strength training
- Footwork and agility
- Positional considerations for fitness and strength training
- Refinement of routine practices of recovery and regeneration and nutrition needs
- Injury care and prevention emphasized through a strong core and flexibility program pre-and post-workout with competition
- Single, double or triple periodization plans

Technical

- Testing the Skills – development of consistency under pressure in a variety of situations. Condition sparring is important with emphasis on using specific skills with the element of competition.
- **Boxing specific:**
 - Perfecting straight punches technique
 - Optimizing hook and uppercut punches technique
 - Optimizing combination punches technique
 - Optimizing counter punch technique with straight punches
 - Optimizing counter punch technique with straight punches, hook and uppercut
 - Developing hook and uppercut counter punch technique
 - Optimizing and perfecting the block technique
 - Optimizing the parry technique
 - Perfecting the body position

Tactical

Decision-making in boxing competition (i.e. focus on the ability to read the opponent's strategies)

- Transition between attack and defence
- Defence and offensive positioning in the ring.
- Optimize tactics against different style of opponents
- Encouragement of originality and innovation

Mental

Develop a competitive attitude and the mental skills needed to manage anxiety and perform consistently with an emphasis on personal accountability for performance excellence.

Mental capacities:

- Commitment to training at high intensity
- Ability to manage activation/ arousal level
- Goal-setting
- Self-awareness- high level of awareness of factors that maximize and minimize performance
- Knowledge and use of planning
- Critical evaluation of training and competition
- Competitors mindset – confident, focused and determined
- Personal responsibility and involvement in decision making
- Sport-life balance skills
- Developing independence

Health

- Introduction to weight control practices and the development of individual strategies to achieve this.
- Introduce how to travel

Growth

- Some athletes may gain height until 20-21 years old

Nutrition

- Maintain balance of nutrient rich foods, with special attention to calcium and iron
- Ensure caloric intake meets needs of activity
- Optimize hydration
- Ensure strength and flexibility meets the requirements of the sport
- Continue to decrease muscle strength and flexibility imbalances

Injury Prevention

- Continue specific injury prevention programs to decrease risk of repetitive use injury
- Continue at least 6-8 weeks of pre-season conditioning prior to intense sport participation
- Introduce cross-training activities for 2-3 aerobic training sessions per week to decrease overload on any one group of tissues

Recommendations For Training and Competition

- Weekly participation in 5-6 fitness conditioning sessions which are boxing specific and 5-9 boxing specific sessions which should last between 60 – 90 minutes. It is recommended to have a minimum of 6 sessions for younger athletes and a maximum of 9 sessions for older, full time athletes.
- 8-12 per years provincial, national and international junior and senior

6 TRAIN FOR PEAK PERFORMANCE - Performance Stage - Males ages 22+ Females ages 22+



This is the final stage of athletic preparation in which athletes will begin the transition from the national level to the international level. Maturation is now complete and all the performance factors should now be established to optimize performance on the international circuit. The athlete should be exposed to international competition and special consideration should be given to developing mental abilities necessary to deal with the unique demands of competing on the international stage. Emphasis is on specialization and performance enhancement.

Where: Boxing gym and National Training Centre

Why: Maximize fitness preparation and sport-specific skills, as well as performance

Who: Personal coaches and national coaches

Physical

- Core strength/stability
- Aerobic power
- Individual weakness
- Optimal functioning / Fine tuning (tapering, peaking, pushing the limits)
- Recognizing and preventing over-training

Technical

- The testing of skills –Emphasis on consistency under pressure in a variety of situations. Condition sparring is important with emphasis on using specific skills within the element of competition.
- Perfecting skills

Boxing-specific:

- Perfecting and maintain straight punches technique
- Perfecting and maintain hook and uppercut punches technique
- Perfecting and maintain combination punches technique
- Perfecting and maintain straight punches counter punch technique
- Perfecting and maintain straight punches with hook and uppercut counter punch technique
- Perfecting and maintain the block technique
- Perfecting and maintain straight the parry technique
- Perfecting and maintain the body position

Mental

Self-confidence, motivation and competitiveness

- Independent
- Willing to learn new ways of doing things and always trying to improve
- Creative and innovative
- Strong work ethic and mentally tough
- Focused on the "big picture"
- Previously, all the training efforts have been focused on the "getting there". Now the emphasis becomes "staying there"
- Prepare for the unexpected

Health

- Emphasize the importance of:
 - Optimal nutrition and hydration
 - Recovery and regeneration
 - How to travel
 - Warm up and cool down
 - Stretching properly and at the right times

Recommendations For Training and Competition

- Weekly participation in 4-6 fitness conditioning sessions which are boxing specific and 5-12 boxing specific sessions which should last between 60 – 120 minutes.
- Peaking for major championships and selection events as necessary.

7 ACTIVE FOR LIFE - Enriched for Life - Enter at any age



At this stage, the participant moves from competitive sport to life-long physical activity and sport participation through age group competition or simply recreational enjoyment.

Where: Clubs