SECTION II:
DRYLAND TRAINING SUPPLEMENT

Relationship to Risk Management

Risk Management is the process of assessing potential variation in outcomes and then developing strategies to mange those areas where a resulting loss could have a negative impact on the organization's ability to achieve its objectives.

Strength and conditioning programs are on the rise, and more hockey participants are becoming involved in this secondary program. It falls to the governing bodies to acknowledge the relative risks and devise strategies to manage them. For instance, there is the risk that a player may be injured during the course of an activity because the Instructor is unqualified and provides poor instruction or supervision.

This section is intended to provide education, awareness and guidance regarding the risks of dryland strength and conditioning training and potential strategies to offset risk and increase participant safety and well-being.

OHF Position on Sanctioning Dryland Training

For dryland strength and conditioning programs to meet the sanctioning requirements of the OHF and to be insured by Hockey Canada, the following guidelines must be considered and specific requirements met.

Teams requesting insurance coverage for this type of activity will be required to provide a supplementary application form in addition to the Insurance Certificate Request.

Overview of Dryland Training

Most would agree that being physically fit is an important part of the overall development of children and youth. Various studies have demonstrated that children and youth who participate in sport and physical activity generally have higher self esteem, increased self and body image, improved grades in school, are less likely to engage in dangerous or illegal activities (like drug use), are less likely to become teen parents, and are less likely to develop diseases like diabetes, breast cancer and obesity related health conditions. Physical fitness also plays an expanding role in the development of a player's ability in hockey. As players move into higher divisions and more competitive levels of play, physical fitness will become more important for optimal performance.

Historically speaking, strength and conditioning training for a pre-pubescent child was not always well looked upon by the medical field[1]. General consensus was that strength training in pre-pubescent children could not enhance strength because of the lack of available hormones required to build muscle. However, it seems these beliefs were based on relatively few studies and may not have taken significant factors into consideration[2]. Today studies have shown that strength gains can be achieved in boys and girls with properly designed and supervised training programs[3].

It is important to recognize that children and youth are not simply smaller adults. Emotionally, cognitively and physically they require special considerations and a different approach to strength and conditioning programs than do adults.

The OHF recognizes that strength and conditioning programs can play an important role in minor hockey. Such programs are safe when properly designed and supervised; and can increase children's strength, fitness skills, sports performance, psycho-social well-being and overall health. In addition, the benefits of strength and conditioning training may include injury protection as muscle strength increases the stability of joints. However, it is important to take certain precautions when training young players.

This document has been developed to provide a framework for strength and conditioning activities that take place under the auspices of the OHF and with appropriate Hockey Canada insurance coverage.

Definition of Dryland Training

Strength and conditioning, also referred to as "Dryland Training", includes activities prescribed and supervised by a certified trainer in a specific location for the purposes of enhancing overall fitness that includes cardiovascular endurance, muscular strength and general flexibility. Strength and conditioning programs will be approved as a team activity and not on an individual basis.

- Strength and conditioning programs will supplement on-ice training programs;
- Strength and conditioning activities will be prescribed and supervised by a certified Instructor.
- Strength and conditioning activities will take place in the presence of Speak Out certified team or organization personnel.

Strength and conditioning programs do not include (at least for the purposes of defining it for insurance coverage), individual personal training or training sessions done on the player's own time (i.e. running, swimming, biking), participation in other sporting activities (like, but not limited, to floor or ball hockey), or any activity not expressly defined in this document.

Importance of Supervision

It has been estimated that 80% of all court cases (United States) concerning athletic injuries deal with some aspect of supervision[4]. Although serious accidents are rare in supervised exercise programs, the liability costs associated with inadequate supervision are very expensive.

The main causes of these accidents are poor facility maintenance, defective equipment, and inadequate instruction or supervision.

DRYLAND TRAINING GUIDELINES

1. Safety

The same principles for safety apply to the facility and equipment for strength and conditioning training as those for on-ice activities. This includes consideration of the condition of the facility, location, lighting, ventilation, other patrons, personnel, equipment, and other similar items.

1.1 It is the responsibility of the team and/or organization personnel to ensure that the facility and equipment being utilized for the purposes of strength and conditioning meet applicable safety standards. If there is doubt about the safety of the facility, equipment or instructor, the team/organization personnel should stop the program.

2. Emergency Planning

An emergency action plan is a written document that details the proper procedures for caring for injuries that may occur to participants during activity. While all strength and conditioning facilities should have such a document, it is important to appreciate that the document itself does not save lives. In fact, it may offer a false sense of security if it is not backed up with appropriate training and preparedness. This plan should align with the Emergency Action Plan found in the Hockey Canada Trainer's Program, Hockey Canada's Safety Requires Teamwork booklet, or Hockey Development Centre of Ontario Hockey Trainers Certification Program (HTCP).

2.1 The Instructor, or other team personnel, must develop a written, venue-specific emergency action plan to deal with injuries and reasonably foreseeable events within each facility. The plan must be shared with the players and be posted during strength and conditioning training sessions. As part of the plan, a readily accessible and working telephone must be immediately available to summon on-premise and/or off-premise emergency assistance.

2.2 The components of a written and posted emergency action plan must include: planned access to a physician and/or emergency medical facility when warranted, including a plan for communication and transportation between the venue and the medical facility; appropriate and necessary emergency care equipment on-site that is quickly accessible; and a thorough understanding of the personnel and procedures associated with the plan by all individuals.

2.3 All participants should know the Emergency Action Plan and the proper procedures for dealing with an emergency (i.e. location of phones, activating emergency medical services,

designated personnel to care for injuries, ambulance access, and location of emergency supplies).

2.4 All participants should review and practice emergency policies and procedures regularly.

2.5 All participants should adhere to universal precautions for preventing exposure to and transmission of blood-borne pathogens.

3. Instructor

Whether the players improve their overall physical wellbeing and whether that translates to on-ice success is a by-product of a well managed strength and conditioning program. Selecting a qualified and appropriate Instructor is vital to achieving the desired level of success.

3.1 The Instructor must comply with any screening protocol applicable within the organization he or she is intending to work with.

3.2 The Instructor must provide proof of insurance coverage when requested.

3.3 The Instructor must be certified by an accredited organization. The following is a list of recommended organizations. There may be others that are not listed here, please check with Branch Office for approval.

- Ontario Physiotherapy Association (OPA)
- Ontario Kinesiology Association (OKA)
- Ontario Athletic Therapist Association (OATA)
- Ontario Association of Sport and Exercise Science (OASES)
- International Sport Science Association (ISSA)

3.4 The Instructor should achieve and maintain professional certification(s) and follow the applicable code of ethics.

3.5 The Instructor should have experience with children and strength and conditioning training.

3.6 When teaching new exercise, the Instructor should have the child perform the exercise under his or her supervision.

3.7 The Instructor should cooperate with a player's health care providers at all times, and provide service in the participant's best interest according to instructions specified by such providers.

4. Program Design

4.1 Strength and conditioning programs are to be designed and supervised by a certified Instructor and executed under the supervision of Speak Out certified team personnel.

4.2 Parents are to be informed of strength and conditioning programs, including content, requirements for attendance, fees, location and schedule prior to the commencement of the activity.

4.3 Strength and conditioning activities should be planned and the requisite number of qualified staff should be available.

4.4 Younger participants, novices or special populations engaged in such strength and conditioning activities should be provided with greater supervision.

4.5 Resistance training should supplement rather than replace other forms of physical activity.

4.6 The correct techniques should be taught for each exercise performed.

4.7 The size of the exercise equipment used should correspond to the size of the child.

5. Location & Equipment

The OHF recommends that training sessions take place in accredited fitness facilities. The Accredited Fitness Appraisal Centres (AFAC) designation insures that minimum standards have been developed for personnel, the tests and equipment utilized, and the emergency procedures followed for use in a fitness centre. However, in circumstances where this is not possible, the following guidelines are suggested:

5.1 Strength and conditioning programs should take place in a safe environment (such as a gymnasium or other fitness facility with attention given to the lighting conditions, air quality and overall layout of facility) to ensure optimal supervision;

5.2 Exercise devices, machines and equipment—including free weights—should be assembled, set up and placed in activity areas in accordance with manufacturer's instructions, tolerances and recommendations and with accompanying safety signage, instruction placards, notices and warnings posted or placed according to relevant standards so as to be noticed by users prior to use. In the absence of such information, Instructors must complete these tasks in accordance with authoritative information available from other sources.

5.3 Prior to being put into service, exercise devices, machines or free weights must be thoroughly inspected and tested by the Instructor to ensure that they are working and performing properly, and as intended by the manufacturer.

5.4 Exercise machines, equipment (such as resistance balls and bands) and free weights must be inspected and maintained at intervals specified by manufacturers. In the absence of such specifications, these items must be regularly inspected and maintained according to the Instructor's professional judgment.

5.5 Exercise devices, machines, equipment and free weights which are in need of repair, as determined by regular inspection or as reported by users, must be immediately removed from service and locked "out of use" until serviced and repaired and be re-inspected and tested to ensure that they are working and performing properly before being returned to service.

5.6 Instructors and Team personnel should ensure that facilities are appropriate for strength and conditioning activities. Factors to be reviewed and approved prior to activity include, but are not limited to, floor surfaces, lighting, room temperature and air exchanges.

5.7 All equipment, including free weights, should be cleaned and/or disinfected regularly as deemed necessary by staff. Users should be encouraged to wipe down skin-contact surfaces after each use.

6. Supervision

6.1 Appropriate supervision of players participating in strength and conditioning activities is the primary and most significant tool we have in reducing injury or incident.

6.2 Participants must be properly supervised and instructed at all times to ensure maximum safety.

6.3 There must be a minimum of two (2) certified team or organization personnel per team in attendance at each strength and conditioning activity in addition to the instructor(s).

6.4 Players will not be alone or left unsupervised with the Instructor at any time.

6.5 The Instructor should have a clear view of all areas of the facility, or at least the zone being supervised by each Instructor.

6.6 The Instructor should be in close proximity to the group of participants under his or her care in order to see and communicate clearly with the participants and have quick access to participants in need of immediate assistance.

6.7 In combination with appropriate safety equipment, attentive spotting must be provided for participants performing activities where free weights are supported on the trunk or moved over the head/face.

7. Frequency, Intensity & Duration

The program design is the responsibility of the designated Instructor. This information below will help participants to understand what they can expect and what might be considered excessive.

7.1 All training sessions should be preceded by a warm-up routine and followed by cool-down period.

7.2 Resistance training should supplement rather than replace other forms of physical activity.

7.3 There should be a gradual progression in the training intensity.

7.4 To introduce the participant to specific strength training exercises, it is recommended that no load be used initially. Later, once the participant has mastered the technique of the exercise, gradual loads can be introduced. If the participant's technique begins to break down, the load must be reduced to a point at which the correct technique is restored.

7.5 All exercises should be performed in a controlled manner, throughout a full range of motion. Training programs should centre on the "high repetitions - low loads" principle.

7.6 The maximum number of formal training sessions, including resistance training, per week for children up to twelve (12) years of age should not exceed three (3). Each training session should last no longer than ninety (90) minutes. Resistance training should never exceed three (3) sessions per week.

8. Monitoring & Evaluation

Appropriate and timely feedback will help players to maximize their potential gains in strength and overall conditioning.

8.1 Instructors should include an evaluation and monitoring system to provide growth and development feedback to the players.

8.2 Players should be evaluated a minimum of three (3) times during the course of the program or season – at the beginning, middle and end.

9. Age Specific

As children progress in physical and psychological maturation their capacities will change. Recognizing the differences between young children and older adolescents is important in program design and safety.

9.1 Strength and conditioning programs are not permitted for participants under the age of seven (7), even if that player is playing on a team in a higher division.

9.2 Strength and conditioning programs with additional restrictions are permitted for pre-adolescent participants (prior to the onset of puberty). Strength and conditioning programs with fewer restrictions are permitted for adolescent participants (post onset of puberty).

9.3 Children between seven (7) and fourteen (14) years of age who have reached a level of maturity allowing participation in specified strength and conditioning activities (as determined and certified by their medical care provider and after clearance for participation) should be individually assessed by the strength and conditioning Instructor in conjunction with the child's parent(s)/guardian(s) to determine if they may engage in such activities. If so permitted, such activities should be developed and implemented according to the Instructor's professional judgment, in conjunction with the child's health care provider(s), and with a greater degree of instruction and supervision than that supplied to adolescents and adults.[5]

9.4 Children fourteen (14) years of age and older who, according to the strength and conditioning Instructor's professional judgment, have reached a level of maturity allowing them to engage in specified strength and conditioning activities (provided they have been appropriately cleared for participation by parent(s) or guardians and health care provider(s), may engage in such activities in areas containing free weights and exercise

devices/machines generally used by adults, but with a greater degree of instruction and supervision than that supplied to adult populations while training.[6]

10. Compliance

10.1 A team engaging in strength and conditioning activities will demonstrate compliance with the requirements within these guidelines prior to receiving a Proof of Insurance Certificate by completing a secondary insurance request form and sharing that with their OHF Member Partner.

GUIDELINES FOR PARTICIPANTS

Guidelines for Parents

- Be informed
- Speak to the Instructor regularly
- Obtain regular updates on player's progress
- Obtain medical advice prior to start of strength and conditioning activities
- Speak to your child
- Be aware of any use of performance enhancing techniques
- Ensure there is proper supervision and attention before leaving your child
- Request references and credentials from of the Instructor from the team staff

Guidelines for Players

- Be aware of your physical limitation
- Ask questions if you are unsure
- Do not attempt any exercise that you are uncomfortable with

Guidelines for Team Coaches & Trainers

- Read this guideline and share with coaches
- Make information available
- Be vigilant
- Ensure proper insurance coverage is in place
- Properly screen Instructors prior to activity
- Obtain references and credentials from Instructor and share with parents
- Never force a player to do an exercise
- Ensure a safe environment

Guidelines for Organizations

- Read this guideline and Inform coaches
- Make information available
- Be vigilant
- Be informed – know which teams are participating in strength and conditioning activities
- Ensure proper insurance coverage is in place
- Never force a player to do an exercise
- Ensure a safe environment

References

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2. Falk B, Tenenbaum G: The effectness of resistance training in children: a meta-analysis. Sports Med 1996; 22(3): 176-186.

3. Falk B, Mor G: The effects of resistance and martial arts training in 6 to 8 year old boys. Pediatric Exercise Science 1996; 8(1): 48-56.

4. Bucher C.A. & Krotee M.L.: Management of Physical Education & Sport (11th Edition). Boston MA: McGraw-Hill, 1998.

5. NSCA Professional Standards and Guidelines Task Force: Strength and Conditioning Professional Standards and Guidelines, May 2001 – 8.2.

6. NSCA Professional Standards and Guidelines Task Force: Strength and Conditioning Professional Standards and Guidelines, May 2001 – 8.3.