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Introduction and Background

Childhood has been identified as a critical developmental phase for establishing healthy behaviours, with the potential to ultimately encourage longer term positive health decisions during adulthood. For children and young people, exercise provides fundamental health benefits to the musculoskeletal, cardiovascular and neuromuscular systems and assists in the maintenance of a healthy body weight. Additionally, exercise contributes to positive psychological benefits and social development. The health and fitness industry can play an important role in facilitating children's exercise participation through effective and safe delivery of children's health and fitness services.

To support the increasingly diverse range of children's fitness services emerging in Australia, Fitness Australia has developed the Children's Health and Fitness Services Guidelines. The guideline is applicable to a variety of settings and activities for children and young people aged between five (5) and seventeen (17) years of age and incorporates information and recommendations for best practice service delivery for Registered Exercise Professionals and fitness businesses.

Professional Skill and Knowledge

To plan and deliver fitness services to children and young people, Registered Exercise Professionals must be appropriately qualified and should continually update their related knowledge and skills. The following minimum education is required:

- 1. Certificate III &/or IV in Fitness
- 2. Completion of relevant unit/s of competency (or equivalent):
 - SISFFIT012 Instruct movement programs to children aged
 to 12 years;
 - SISFFIT013 Instruct exercise to young people aged 13 to 17 years.

It should be noted that the Registered Exercise Professional Scope of Practice allows for the provision of independent advice and/or exercise programs for children and young people who are free of health conditions or injury.

Completion of relevant Fitness Australia approved continuing education is recommended to support further development of professional knowledge and skills for delivery of children's fitness services.



Children's Health & Fitness Services

Risk Management

Duty of Care

All Registered Exercise Professionals have a duty of care to prevent harm which could reasonably be expected to occur in the course of providing advice or instruction to clients. Professional standards and guidelines developed by Fitness Australia will assist Registered Exercise Professionals in mitigating risk and exercising their duty of care.

Working with Children

Pre-employment screening of adults and volunteers who have contact with children under the age of 18 is mandatory and legislated across most states and territories in Australia.² Registered Exercise Professionals must follow their respective state or territory legal requirements regarding working with children. See the Working with Children Guidelines* for specific requirements.

Pre-Exercise Screening and Assessment

Screening and assessment is recommended to occur before participation in exercise activities for children and young people. This will identify health risks associated with commencing exercise and to help optimise exercise programming. The screening and assessment process will also assist in identifying the expectations of children and parents, motivational factors and exercise goals.

The following information related to the child's medical history and general health should be collected as a part of the pre-exercise screening process:³

Pre-exercise screening information

- ✓ Diagnosed medical condition such as diabetes, heart disease, stroke, high blood pressure, cystic fibrosis, asthma, cerebral palsy, breathing or lung problems or any other chronic conditions.
- Experience of any abnormal episodes such as seizures, fainting, heat-stroke.
- Diagnosed psychological / behavioural disorders related to exercise.
- ✓ Muscle, bone or joint problem.
- ✓ Neuromuscular difficulties such as brain or spinal injuries.
- Sensory issues such as vision, hearing, speech, balance.
- Allergies.
- Other medical reason/condition which might prevent the child from participating in an exercise program.
- Medications currently taken, the purpose of the medication and any known side-effects.



Referral

If any of the risk factors or conditions listed above are identified, the Registered Exercise Professional must seek further guidance from the child's general practitioner or allied health professional in order to develop and deliver the exercise program.

Informed Consent

The screening process must be undertaken in conjunction with the child's parent or guardian and their informed written consent for the child's participation in the exercise service is required. It is essential that this includes an acknowledgement signed by the parent or guardian, to confirm that:

- The information they provide regarding their child's health is correct, to the best of their knowledge
- They will inform the Registered Exercise Professional of any changes to their child's health immediately
- They have been informed and understand the service that is to be provided and give permission for their child to commence the exercise program
- Both personal and emergency contact details are to be recorded.

Supervision

Registered Exercise Professionals must ensure that adequate supervision is provided for all participants. Group participant numbers should be set at a level that allows for thorough supervision, instruction and monitoring of safety and exercise technique for each child within the group. This decision may be determined by a range of factors including:

- The children's individual needs
- The type of environment
- Activities and Equipment
- Whether other associated parents, coaches or teachers are present to assist
- Cultural differences.

First Aid & Safety

Registered Exercise Professionals must maintain current Australian certifications in First Aid (Senior or equivalent) and CPR. A well-equipped First Aid kit as well as ice packs, a mobile phone and other safety equipment necessary for specific activities should be available and in close proximity for the duration of the activity.

Equipment Use

To reduce the risk of injury, all equipment should be regularly checked, maintained and should adhere to Australian Standards. It is important to note that equipment in a gym or fitness facility that has been designed for use by adults may not be biomechanically suitable for children and young people. It is essential that equipment accommodates the child's ability, developmental stage, size and that it allows for safe progression.

Instruction for the use of specific equipment should include a thorough demonstration of correct use by the Registered Exercise Professional and supervision to ensure that the child can perform the exercise and maintain correct technique.

Weather Conditions

If exercise programs are to be delivered outdoors, consistent monitoring of weather conditions is important. Registered Exercise Professionals and fitness businesses should manage weather related risk and plan contingencies for specific conditions such as heat, humidity, rain, cold, thunderstorms and lightning. Sessions should be modified, relocated or postponed if required and participants informed of session adjustments in a timely manner.

Children and young people can be more susceptible to heat-related illness,⁴ therefore Registered Exercise Professionals and fitness businesses must be aware of the risks associated with exercising in heat and humidity and put measures in place to help prevent the onset of heat illness and dehydration.

When humidity and air temperatures rise above acceptable levels, activities lasting longer than 15 minutes should be reduced in intensity.⁴ Refer to Sports Medicine Australia's UV Exposure and Heat Illness Guidelines** for more information.

Legal Obligations

Fitness businesses and exercise professionals must adhere to regulations including (but not limited to): Jurisdictional OH&S legislation, Civil Liability Law, Privacy Law, Consumer Law, Anti-discrimination Law, Criminal Law – this may include a national criminal history record check or working with children check, Local government policy for the use of public space for exercise service delivery and other relevant setting-specific policies or regulations.

^{**}http://sma.org.au/wp-content/uploads/2010/02/UV-Exposure-and-Heat-Illness-Guide.pdf

Children's Health & Fitness Services

Planning & Delivery

Building rapport and trust with each child should be a priority for the Registered Exercise Professional as this will help to develop the child's confidence and motivation.^{5,6,7} A prime objective should be to develop a structured program that is engaging and fun for each child.

The following planning and delivery variables should be considered to ensure the effectiveness of fitness services for children and young people.

Developmental differences between children

The development of children and young people typically follows a pattern, but some children develop physically, psychologically or socially more quickly or slowly than other children.⁸ A measure of a child's development (in body size, motor skill or psychological function) is expressed in terms of the age at which their development, often called 'milestones', would have typically occurred. For example, a child who develops physically more quickly than other children of the same chronological age will reach body size, shape and function milestones at an earlier chronological age.

The development of every child needs to be considered when delivering exercise programs. Registered Exercise Professionals must consider the developmental stage of each child, and plan and provide exercise activities suited to their development, experience and individual needs. In doing so, exercise professionals can support a lifelong commitment to participation in exercise by children and young people through affirming a positive attitude towards exercise, body image, healthy behavioural choices, as well as teamwork and respect during group exercise programs.

Participation and Membership Eligibility

Evidence supports the value of supervised strength training activities for school-aged children, provided guidelines and precautions are followed to ensure safety and effectiveness.⁹

It is essential that the age at which children and young people become members of a facility or service, or commence participation, is made with careful consideration of the following:

- The level of supervision available by Registered Exercise Professionals that are qualified to work with children and young people
- The developmental age of children and young people, and whether their stage of development is appropriate for the services and facilities provided
- Suitability of equipment
- Suitability of space for the services being delivered
- · Parent/guardian consent and advice.

It is essential that decisions as to the appropriateness of participation are made by those managing the service or program and are based on the principles outlined above. Facility or service membership contracts entered into by a child or young persons under the age of 18 must comply with contract law and be signed by a parent or guardian.

Exercise Programming Considerations

The following factors should be considered when developing exercise programs for children and young people:



1 Age

The chronological and developmental age of a child or young person is an important consideration in exercise programming. It's important for children to be exposed to a range of activities before they reach their teenage years. The development of coordination and skill acquisition occurs throughout childhood, and often leads to many displaying advanced skills in these areas by the start of the teenage years. ^{10,11} The following are recommended priorities for exercise delivery for children and young people (with appropriate progression):

Recommendations

Children

- Games/recreational activities.
- ✓ Team challenges.
- Skill development activities (i.e. passing, catching, running, jumping & balance).
- Use a variety of equipment (i.e. balls, skipping ropes, bean bags, cones).
- Active transport (i.e. walking & cycling).

Adolescents

- Strength/resistance training involving the use of all major muscle groups.
- Coordination development.
- ✓ Use of a range of resistance training and cardiovascular equipment.

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2 Environment/Setting

Should be safe, accessible and inviting for the chronological and developmental age of children or young people. Specific considerations that may influence program effectiveness include:

Recommendations

- The area required for participant numbers.
- Suitable visibility.
- Acoustics for instruction and monitoring.

3 Frequency Intensity Duration

Recommendations

- Consideration of other sporting and exercise commitments that the child may be involved in is important when determining an exercise program.
- There should be a balance in the frequency, duration and variety/range of activities to reduce the risk of injury.
- ✓ Intensity should be increased gradually to ensure that children remain motivated & maintain adherence to the program.
- National guidelines suggest that children and young people should accumulate at least 60 minutes of moderate to vigorous intensity physical activity every day and that physical activity above and beyond the 60 minutes per day will provide additional benefits.¹²
- ✓ The minimum duration of activity does not need to be completed in one session, but may be spread over the course of a day.¹²
- Registered Exercise Professionals are encouraged to use an RPE (Rating of Perceived Exertion) Scale to help monitor the child's exercise intensity.^{13,14}



4 Strength Training

Recommendations

- ✓ It is appropriate for children to participate in a strength training program if they can demonstrate balance and postural skills that are commensurate with adult levels and correct technique for the exercise being prescribed.⁹
- ✓ It is preferable for younger children to undertake strength training exercises that are functionally based and that individual exercises are taken through a full range of movement.⁹ These should be combined with a variety of other activities such as aerobic training.¹⁵
- ✓ The resistance used and frequency of exercises should be determined by specific program goals and the child's individual needs and ability.¹⁵
- ✓ Any form of power, maximal, explosive lifting or body building is to be avoided until children and young people reach physical maturity.¹⁵

5 Social Support

The formation of social support has a significant influence on exercise participation for children and young people. Social support can directly influence a child's access to exercise and the provision of exercise related information, guidance and encouragement. To ensure a successful exercise program for children and young people, Registered Exercise Professionals should aim to involve:

Recommendations

- ✓ Family
- Peers
- School
- Sport Communities



Additional Resources

In addition to the Children's Health and Fitness Service Guidelines, resources and guidelines are located through the <u>Fitness Australia website</u>* These may also assist in the effective delivery of children's activities and programs.

Search for education relating to exercise delivery for children and young people at the <u>Fitness Australia CEC Directory</u>**

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