

Safety in sport and recreation

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The importance of physical activity

Physical activity is essential for growth and development. Being physical active can help children obtain physical, social, emotional and intellectual health. In the first two decades of life, sport is among the most developmentally appropriate ways of being physically active. All popular sports in Australia offer developmental pathways into sport that are designed to match the physical and mental health of young participants. The new Safety Guidelines for Children and Young People in sports emphasise that the health benefits from sport far outweigh the risks of inactivity. Being aware of safe sport practices helps ensure positive sporting experiences for children of all abilities. Renowned paediatric exercise researcher, Professor Don Bailey once said 'Sport may not be for all, but the right to try out to be'. Safe practices in junior sport protect that right.

Ten points to remember about Safety Guidelines for Children and Young People in Sport, from Sports Medicine Australia

W <http://www.sma.org.au/pdfdocuments/ChildrenSafetyGuidelines-fulldoc.pdf>

- 1** Clubs, schools and providers should ensure that they identify, manage and monitor the risks involved in sport and recreation activities.
- 2** An estimated 50% of all sports injuries are preventable.
- 3** Coaches should have at least an entry-level qualification from a coaching course conducted by the National or State organisation of their sport.
- 4** A first aider should be present at all sporting events with participants under 16 years of

age. A sports trainer should be present at all sporting events with participants over 16 years of age. Any complaint of pain, tenderness, limitation of movement or disability should be promptly referred to a qualified sports first aider, sports trainer or medical professional for management.

- 5** Appropriate and properly fitted protective equipment, clothing and footwear should be used at all times.
- 6** The environment and facilities should be inspected and made safe before participation.
- 7** All coaches and teachers must be aware of the medical history and other commitments of participants. A pre-season medical and activity questionnaire should be completed by all participants and the current medical state of individuals should be taken into consideration prior to and during participation. A medical clearance must be obtained from the treating doctor before any child or young person taking prescription medication participates in sport or physical activity.
- 8** Warm up, cool down and stretching should be included before and after all participation.
- 9** Activities for children and young people should be well planned and progress from easy to more difficult. Strength training can be safely introduced to young people provided it is carefully supervised. It should involve low-resistance and high repetition to avoid maximal lifts.
- 10** To reduce the likelihood of injury, match the physical and mental maturity of the child to the level of participation, complexity of the task and the game rules.

Safety in sport – Smartplay

Smartplay is a sport safety and injury prevention program that aims to help reduce the incidence and severity of sport and recreational injuries. Participation in sport and recreation provides a range of benefits. It combats obesity, enhances self-esteem, improves physical skills and develops friendships.

However, one of the main deterrents for participation in sport and recreation, particularly for young people, is the risk of injury.

Sports injuries aren't inevitable. It is estimated that more than 50% of all sporting injuries are preventable.

The following advice provides children, parents and coaches with a guide on how to prevent sporting and recreational injuries.

Warm up

A warm up should be completed before physical activity to prepare the body. The warm up should be fun and include games and activities relevant to the activity ahead. The length of a warm up will depend on the weather – if it is cold a longer warm up may be needed than if it is hot.



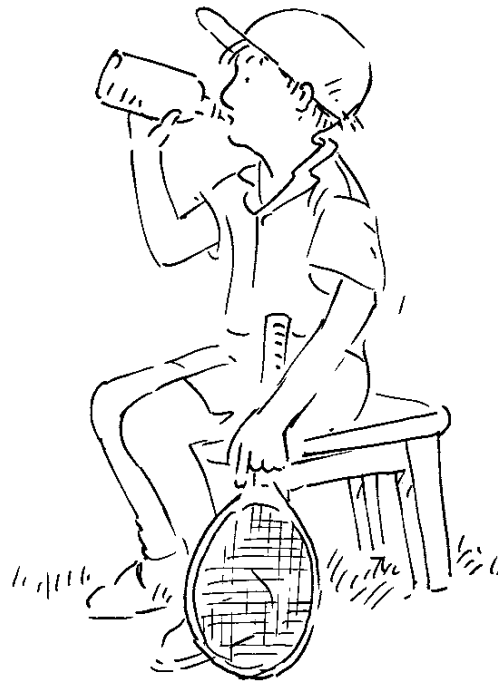
After warming up, stretching should be done. When stretching:

- Stretch all the muscles involved in the activity
- Stretch gently and slowly
- Never bounce
- Keep breathing when stretching.

After activity, cool down. This prevents soreness and stiffness. To cool down, do a light jog or brisk walk followed by stretching.

Drink up

Dehydration and heat stress prevent us from playing at our best. Active people should drink water or sports drinks before, during and after activity to help replace lost fluids through sweat. Aim to drink 2 cups (500ml) of water an hour before activity, 150ml every 15 minutes during activity, and enough to fully re-hydrate after activity.



Gear up

Protective equipment can prevent injury. It should be worn at all times during training and games. It is important that it fits properly, is in good condition and is designed for the activity being undertaken.

Some common protective equipment includes wrist, elbow and knee guards; shin, shoulder and body padding; helmets; gloves and mouthguards.

Mouthguards

When playing sport, where there is a risk of injury to the face, players should protect their mouth against dental injuries by wearing an appropriately designed and made mouthguard.

Custom-fitted mouthguards are considered to provide the best protection for the teeth, lips and jaw. They provide a close fit, comfort and

cushioning (shock absorption) effect. Other types of mouthguards are available such as the boil and bite (formed to the upper teeth after the lining is softened in boiling water) and the ready-to-wear which comes pre-formed, however, both offer limited protection.

To get the most protection from a mouthguard, it should have the following features:

- Be comfortable but a tight fit within the mouth
- Allow normal breathing and swallowing
- Allow normal speech
- Be the correct thickness (4mm) over the teeth to provide protection against impact
- Not cause gagging
- Be odourless and tasteless.

To maintain a mouthguard's protective qualities it needs to be cared for after activity by:

- Rinsing it in soap and warm (not hot) water or mouthwash after each use and allowing it to air-dry.
- Keeping it in a well-ventilated plastic storage box (with several holes) when it is not in use.
- Not leaving it in direct sunlight or hot conditions such as in a closed car or in a car's glovebox.
- Ensuring it is in good condition before each use.
- Getting a dentist to check it at check ups.
- Replacing it if it is damaged.

Weather conditions

Children are highly susceptible to extremes in temperature; therefore the environmental weather conditions before, during and after activity should be assessed regularly and activity modified or cancelled when appropriate.

In hot conditions, the temperature and humidity must be considered and if deemed too hot or humid the event should be postponed or cancelled. To prevent sunburn, dehydration and heat illness, children should be provided with shaded areas; wear light-coloured and light-weight clothing to cover exposed skin; wear broad-rimmed hats and sunglasses; and apply SPF 30+ sunscreen. In hot conditions children are the best judges of

their own wellbeing and capacity to play. If they feel unwell, they will usually simply stop activity. This is the best first response to heat illness. Under no circumstances should children be compelled to keep playing if they feel unwell in the heat.

In cold conditions, children should dress in layers to trap heat and prevent heat loss. Layers can be removed according to exercise levels and conditions. Wet clothing should be changed as soon as practical.

Have some flexibility from competition rules about clothing to allow children and young people to feel more comfortable in extremely cold or hot weather. This includes allowing tracksuit pants in cold weather or hats when hot, even if not part of regulation uniform.

Medical conditions

All coaches must be aware of the medical history and current medical conditions of their players.

Children and young people should not participate in sport when ill or recovering from a viral illness with symptoms such as fever or a higher than normal body temperature in the previous 24 hours. When assessing whether a child should participate in physical activity remember:

- The child should not participate if the symptoms are general (e.g. temperature, aches, pains, general muscular tiredness)
- For uncomplicated upper respiratory tract symptoms, such as a runny nose and sneezing, the child should be allowed to participate for 10–15 minutes. The child's condition should then be reassessed, and if they feel unwell, or are obviously struggling to keep up, then they should not continue to participate in that session.

Those taking prescribed medication should obtain a medical clearance form from their treating doctor before participating in sport or physical activity.

Any complaint of pain, tenderness, limitation of movement or disability should be referred to a medical professional for management. Adolescents in particular should take note of their spine, knees, ankles and wrists, which are

the most vulnerable to training at their age and stage of growth.

If injury occurs

Unfortunately injuries sometimes do occur, despite the best prevention.

To ensure injuries are suitably treated, a sports first aider or sports trainer should be present at all sporting activities. Responsible coaches or activity supervisors should have some understanding of basic sports medicine principles. They can achieve this by completing a course from Sports Medicine Australia's Safer Sport Program. For more information:

W www.smavic.org

Soft tissue injuries should be treated with RICER – Rest, Ice, Compression, Elevation and Referral. Commence RICER immediately after injury occurs and continue for 48–72 hours.

Preventing sport specific injuries

In addition to the previously mentioned safety advice, undertake the following safety tips for your chosen sport.

AFL football

Common injuries

Common causes of injuries are being tackled, hit/struck by another player, hit by the ball and falls.

Common types of injuries are wrist, hand, finger and forearm fractures, dislocations and sprains.

Injury prevention

- Wear a mouthguard, preferably custom-fitted, at all times.
- Seek professional advice on the boots you should wear.
- Learn, practise and use correct skills and techniques.
- Games for children and teenagers should be played in accordance with the National Policy for the Conduct of Junior Football established by the Australian Football League.

Netball

Common injuries

Common causes of injuries are awkward landings, slips/falls, player contact/collision, over-exertion, overuse and being hit by the ball.

Common types of injuries are sprains, bruising, fractures and dislocations.



Injury prevention

- Seek professional advice on footwear.
- Learn and practise correct passing, catching and landing techniques.
- Encourage children to participate in a Net Set GO! program (incorporating FunNet and Netta) to develop good skills and techniques.
- Lower goal rings should be used for relevant age groups.

Basketball

Common injuries

Common causes of injuries are falls, player contact, awkward landings, abrupt changes in direction and being hit by the ball.

Common injuries are ankle sprains.

Injury prevention

- Learn and practise correct passing, jumping, landing and shooting techniques.

- Encourage children to take part in Aussie Hoops to develop good skills and techniques.
- Juniors should be matched for competition on physical maturity and skill level.
- Never hang or swing on a basketball ring.

Football

Common injuries

Common causes of injuries are player contact, falls and tackles.

Common types of injuries are bruising, sprains, strains, fractures and dislocations.

Injury prevention

- Wear a mouthguard, preferably custom-fitted, at all times.
- Wear shock absorbent shin guards at all times. Seek professional advice on the correct fitting of shin guards.
- Undertake fitness programs to develop endurance, strength, balance, coordination and flexibility.
- Encourage children to play small sided games at their local club to develop good skills and technique.
- Children should head the ball with the proper technique and use the correct size ball for their age and weight. Younger children should use softer balls (nerf ball) to head the ball. Once confidence is built, a regulation ball (under-inflated at first) can be introduced.



Cricket

Common injuries

Common causes of injuries are being hit with the cricket ball and falls.

Common types of injuries are strains, sprains, fractures, bruising and open wounds.



Injury prevention

- Encourage children to play MILO in2CRICK-ET to develop good skills and technique.
- There are restrictions on how many overs you can bowl in competition. Ask your local cricket club for more information.
- Get your coach to show you the proper sliding stop.

Resources for children, parents and coaches

In addition to the resources already mentioned, Smartplay has sport specific fact sheets on:

- Golf
- Hockey
- In-line skating
- Lawn bowls
- Mouthguard safety
- Rugby League
- Rugby Union

- Running
- Softball
- Squash
- Tennis
- Volleyball
- Walking.

Smartplay also has a wide range of injury prevention resources available, such as:

- Safety guidelines for children and young people in sport and recreation
- Warm up – a guide to warming up, stretching and cooling down for sport
- Drink up – a guide to hydration and staying safe in hot sporting conditions
- Gear up – protective equipment for sport and recreation
- Fix up – a basic guide to managing the first 48–72 hours of a soft tissue injury.

For further information contact:

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Safety tips for in-line skating

Safety with in-line skates, skateboards, scooters and roller skates

Small-wheel devices include items such as in-line skates, skateboards, roller skates and scooters. These devices are the fourth most common cause of recreational injuries to children behind bicycles, playground equipment and football.

Emergency department presentations

Victorian injury surveillance data indicates there were 3,836 injuries to children associated with small wheel vehicles recorded in the period July 2004 to June 2007. Most (44%) were associated with skateboarding; however it has only been since 2000 that the reported frequency of injuries associated with skateboards has been greater than in-line skates. This coincides with the renewed popularity of skateboarding. There was also a peak for scooter injury in the year 2000 to coincide with the boom in popularity of fold up micro-scooters around the Christmas period in this year.

Injury was most common to persons aged 10–14 (65% of total) across all types of small-wheel devices. Males dominated most devices, except for roller skates where injury to females was most common. Males were particularly over-represented for skateboards.

In the period July 2004 to June 2007, home was the most common location for in-line skating (30%), skateboarding (30%) and scooter (52%) injury, while roller-skating and skateboarding injuries mostly occurred in places of recreation (40%) and (22%) respectively. Roadways were the second most common location for scooter (31%).

Falls account for 81% on injuries associated with these devices.

Fractures were the most common injuries associated with all four devices (42% of the total) but were most common among in-line skaters (54%) and roller skates (55%).

The wrist and forearm were the most common body region injured, consistently across all-wheeled device types.

In-line skating and skateboarding

In-line skating and skateboarding have emerged as increasingly popular recreational activities in Australia. Several factors have contributed to the rapid rise in popularity of both skating activities including: the use of skateboards and in-line skates for recreation competition and transportation; the activities appeal to all ages; the recognition that both

in-line skating and skateboarding provide physical benefits associated with exercise and the high quality and relative low cost of equipment. Unfortunately the rapid increase in popularity has led to an increase in emergency department presentations and hospital admissions for injuries related to these activities.

Who is injured

Victorian injury surveillance data indicates that during the three-year period from July 2001 to June 2004 there were at least 1,272 recorded hospital admissions and 3,590 Emergency Department (ED) presentations for injuries related to skating (in-line skating and skateboarding). Males were more commonly injured accounting for 78% of admissions and 74% of presentations. More than half of those admitted (56%) and 44% of those presenting to ED were aged between 10 and 17 years.

The cause and types of injuries

The main risk factors for injury are:

- The speed at which the skater travels
- Obstacles
- Lack of braking ability
- Hard landing surfaces.

Falls are the most common cause of injury, accounting for 90% of admissions and 85% of presentations for skating injuries in Victoria. Upper limbs are most commonly injured (65% of admissions and 59% of presentations) and the wrist and forearm are particularly susceptible to fractures and sprains and strains. Lower limb injuries (around 20% of hospital-treated injuries) and injuries to the head are also common (around 10%).

Falls typically involve two groups:

- 1 Young novice or beginner skaters wearing little or no safety gear, who either spontaneously lose their balance while skating outdoors or fall after striking an obstacle.
- 2 Experienced skaters performing tricks, often at speed.

Safety tips for in-line skaters and skateboarders

Prepare well

Warm up and cool down, including adequate stretching before and after skating, may assist the prevention of overuse injuries.

Take lessons

Undertake lessons to improve confidence and technique, including:

- Proper balancing
- Braking (in-line skating) and 'bailing' (skateboarding) techniques
- Falling techniques
- Safe skating practices.

Hiring outlets, rinks, skate parks and schools should offer and promote skating instruction by certified instructors.

Local certification training for in-line skating and skateboarding instructors should be established in Victoria.

Wear protective equipment and maintain skates and boards.

Protective equipment provides a hard barrier between the body and the ground, absorbing or dissipating potentially injurious energy.

In-line skaters should wear and ensure proper fit of protective equipment, including:

- Helmet
- Wrist guards
- Knee pads
- Elbow pads.

Skateboarders should wear the same with the addition of ankle guards.

It is essential to ensure that young children or beginner skaters wear helmets.

Hiring outlets, rinks and skate parks should offer complete protective equipment to skaters. In-line skaters should ensure proper fit and condition of skates, including properly adjusted heel brakes.

Provide supervision

Carers should actively supervise children and novices until they develop sufficient skills to skate safely.

Ensure all novice in-line skaters are able to stop by using their heel brake. Instruct all

novice skaters to skate with their knees bent and their weight forward (over their toes rather than their heels), which allows them to fall forward rather than backwards.

Provide a safe environment

Local councils should designate and maintain areas free of traffic, crowds, debris and surface irregularities for the use of in-line skaters and skateboarders.

Other safety tips

Use a broad-spectrum sunscreen in high UV conditions. Wear bright or reflective clothing if skating at night.

For further information contact

Smartplay

W www.smartplay.com.au

Sport and Recreation Victoria

www.sport.vic.gov.au

Victorian Injury Surveillance Unit (VISU)

W www.monash.edu.au/muarc/VISU

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