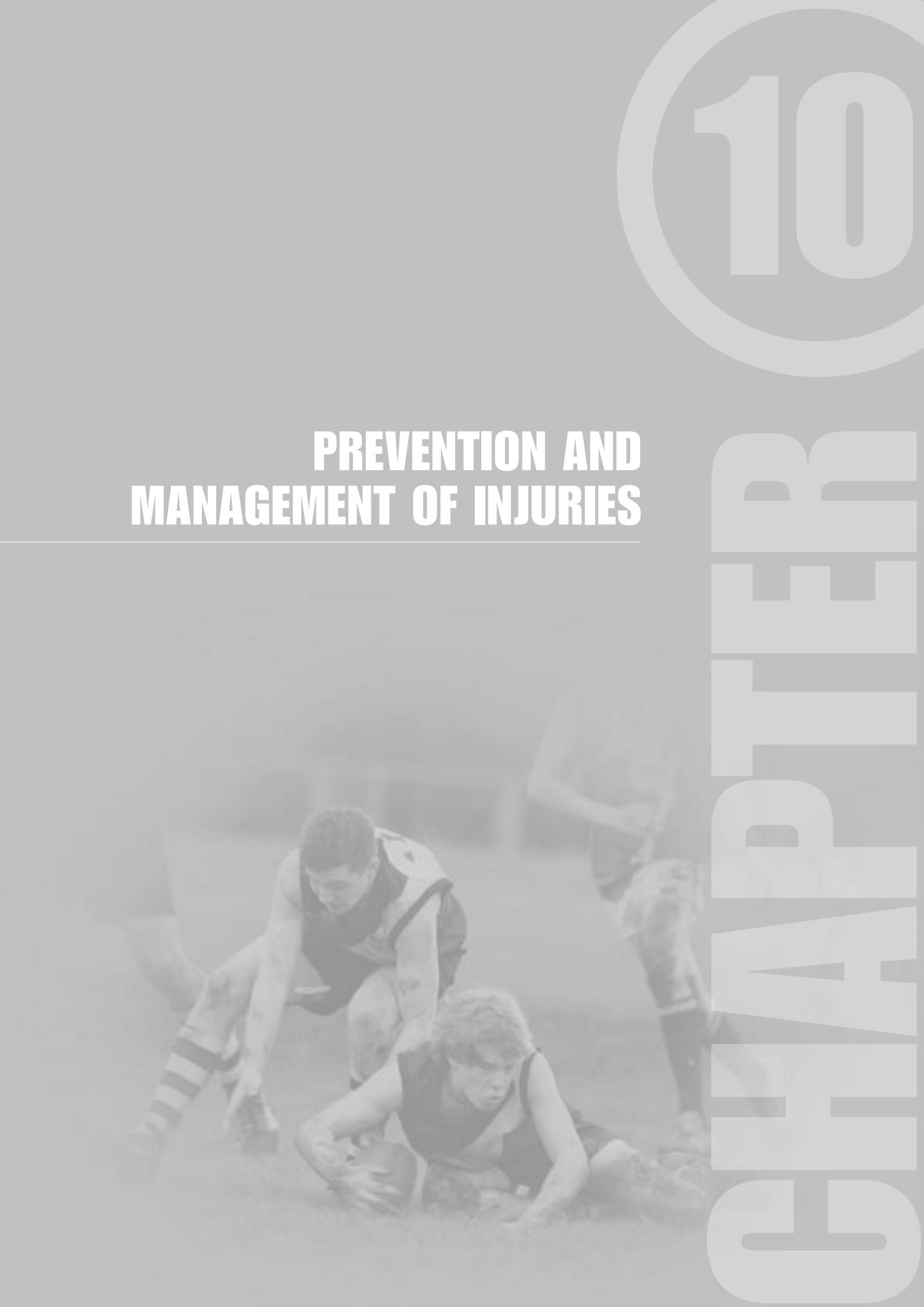


10

**PREVENTION AND
MANAGEMENT OF INJURIES**

CHAPTER



Chapter 10

Prevention and Management of Injuries

The role of the football coach covers a range of responsibilities. One of the most important roles is to provide an environment that does not predispose players to unnecessary injury. An effective coach must be concerned with the prevention, immediate care and rehabilitation of injuries. Coaches must be aware of warm-up routines and methods used to prepare the players for competition. Coaches should also ensure that all players have the appropriate gear, such as mouthguards, to avoid injury. Players must be taught the correct way to perform the body contact skills of the game and how to protect themselves from serious injury. Any player who is injured during a game must have their injury dealt with immediately and in a professional manner. It is important that qualified personnel make a diagnosis, and if there is any doubt about the seriousness of a player's injury then they should be kept off the ground.

A coach must ensure that a player undergoes the correct rehabilitation from injury before he/she returns. It is important that communication occurs between player, coach and a qualified medical personnel before a decision is made regarding the player's return.

PREVENTING INJURIES

Many football injuries can be prevented by players, coaches, officials and clubs. Giving priority attention to safety issues will also improve performance in Australian Football. Training programs should also be designed to maximise the player's capabilities and ensure that the long-term team objectives are achieved, while caring for the well-being of the individual player. The coach's emphasis should be on coaching the players to be preventative and aim to minimise injury wherever possible.

The following safety tips apply to all players, irrespective of the level at which they play.

Pre-season safety

- All competitive players should undertake appropriate pre-season conditioning. Advice about the content of the pre-season training program should be sought from a coach or fitness advisor.
- All players should develop football skills and good technique before playing in competitive games.
- New participants should undergo a pre-participation medical screening examination with a qualified and experienced practitioner.

Pre-game safety

- All players should warm up for about 20 minutes before each game. This should include stretching to increase flexibility and slow jogging which progresses to more intense running activities, with and without a football.
- Players should have a balanced, nutritional diet.
- Players should ensure that they are adequately hydrated before a game.
- Players should seek professional advice about the most appropriate boots to wear for their playing conditions.
- Players should apply sunscreen and reapply it during breaks in play on sunny days.
- All players should make sure that they are fully aware of the rules of the game, particularly as they relate to safety.

Safety during the game

- All players should wear a mouthguard at all times during training and competition. If possible, players should wear custom-made mouthguards.
- Players with a history of head injury should seek professional advice about the appropriateness of headgear.
- Players with a history of ankle injury should wear some form of external ankle support, e.g. taping.
- Thigh protectors may be useful for players who have suffered a recent cork thigh or those with a history of significant cork thighs.
- All players should ensure that they remain hydrated during the game by drinking water or a sports drink during every break.
- Officials should use the 'order off' rule to discourage and deter illegal and potentially injurious play.
- Umpires should strictly enforce the rules of the game at all levels.
- All bleeding players should be removed from the field until the risk of further bleeding is controlled.
- All clubs should have qualified trainers or first-aiders on-site to provide initial management of injuries that occur on the field.
- Injured players requiring further treatment should seek prompt medical attention for their injury.
- Advice from the injured player's treating health professional should always be sought before a decision about return to play is made.



PREVENTION OF INJURY IS BETTER THAN CURE

An injury to a player can be frustrating and occur even with all the appropriate training and coaching methods. 'Prevention is better than cure' is the golden rule and coaches must ensure training programs are properly planned and that facilities and equipment are adequate and properly maintained.

Warm-up

Warming up is very important as part of any competition or training session and is an essential part of minimising the risk of injury. The main benefit of a warm-up is that it is an excellent tool for injury prevention. Warming up results in improved flexibility and prepares the mind, heart, muscles and joints for the activity ahead.

General guidelines for a warm-up

- 10-15 mins in duration.
- Low-intensity activities first, building to higher-intensity movement.
- Activities should move from general to specific.
- Activities should be specific to the needs of the playing group and weather conditions.
- A good indication of a sound warm-up is a light sweat.

Always remember...

- **Modify the warm-up to suit the needs of the playing group.**

Cool-down - recommendations

An effective cool-down consists of a gradual reduction in activity levels for 10 to 15 minutes, while still putting the body through a full range of motion.

- A slow, easy jog or walk incorporating general stretching is normally adequate.
- It is more appropriate for static stretching after competition as the players' core temperatures are elevated and muscles are more elastic.
- Complete some active recovery immediately following a game (general body movement and static stretching) in addition to next day recovery session (a water-based recovery session is best as it is non weight-bearing and a full range of motion can be exercised).

STRETCHING FOR GAMES AND TRAINING

Stretching

The major purpose of stretching is to increase flexibility and maintain muscle balance on either side of a joint. Without stretching, muscles will gradually lose their flexibility and may fail to respond effectively during activity. An injury could be the result.

Stretching enables both physical and mental preparation for upcoming training sessions and games. It can also reduce tension to relax the body, enhance body awareness, promote circulation and assist with co-ordination by allowing free movement.

Players generally perform stretches in three areas:

1. As part of a warm-up
2. As part of a cool-down
3. Flexibility training

- Before stretching, it is important for all players to have completed a warm-up sufficient to get enough blood flow to the areas being stretched. This can involve walking, riding an exercise bike, slow jogging or a fun warm-up activity.
- With each stretch, make sure your players know where they should feel the stretch.

Some stretching tips

- Stretch both before and after exercise.
- Stretch gently and slowly; never bounce or stretch rapidly.
- Do not hold your breath when stretching; breathing should be slow and easy.
- Hold each stretch for 10-20 seconds.
- Stretch alternative muscle groups.
- Stretch each muscle group two to three times.

Stretches make up only a part of a pre game/training warm-up. A complete warm-up should include stretching with an active warm-up.

- Bending for the ball.
- Kicking.
- Running.
- Changing direction.

All activities should start slowly and gradually move towards match speed. This will take your stretches and incorporate them into better movement flexibility.

When cooling down, the stretches performed in the warm-up can be repeated to aid in muscle recovery. Stretching following the training session helps to prevent areas tightening and removes waste products from the muscles produced by activity.

Examples



• Low back extension

Push head and shoulders up with arms. Back is relaxed and pelvis stays on the floor. There should be no pain associated with this stretch.

Stretch area: Abdominals, front of hip region and mobilising lower back.



• Low back flexion

Pull knees into chest and roll into a ball.

Stretch area: Lower back region.



• Low back rotation

Lie on your back, keeping the shoulders flat. Lift one leg across to other side. Gently push further with opposite hand.

Stretch area: Side of back and the back of the moving hip.



• **Side bends**

Put one hand over your head and lean to opposite side. Other hand rests on the hip. Try not to twist.

Stretch area: On the side of the body, under the arm that is above you.



• **Shoulder flexion**

Hold hands together and reach them up above your head until your elbows are straight. Keep core on and back straight, not arched.

Stretch area: Shoulders/arms or between shoulder blades.



• **Hip flexors**

Set into a lunge position with one knee on the ground. Keep back straight and core on. Lean forward.

Stretch area: On the front of the hip of the rear leg.



• **Gluteals (a)**

Lay leg out in front of you with knee bent at 90 degrees. Lean your chest forward over your thigh, keeping back straight.

Stretch area: In butt of front leg.



• **Gluteals (b)**

Lay on back and pull knee and ankle of one leg across chest with both hands.

Stretch area: In butt of leg being pulled across.



• **Adductors (a)**

Sit with back straight and feet together, or just crossed. Gently push knees apart.

Stretch area: Inside of both thighs.



• **Adductors (b)**

Stand and lunge to the side. Keep core on and back straight.

Stretch area: Inside of thigh of straight leg.



• **Hamstrings**

Stand and place foot on chair, fence or partner's hand. Keep back and knee of front leg straight, and then lean chest forward over thigh.

Repeat with knee of front leg slightly bent.

Stretch area: The back of the thigh of the front leg.

Stretch area will be different when knee is bent.



• **Quadriceps**

Stand and grab one foot and pull toward butt. Keep back straight.

Stretch area: Front of thigh.



• **Calf (a)**

Stand, put hands on wall. Put one leg back, maintain a straight knee while leaning forward.

Stretch area: Back of lower leg.

• **Calf (b)**

Stand and put one foot forward. Bend the knee over this foot and keep heel on floor.

Stretch area: Back of lower leg and achilles.

ENVIRONMENTAL CONDITIONS

Cold

Cold weather conditions can increase the chance of injuries should muscles not remain warm and flexible. Because long breaks will cause the body to cool down, coaches should be vigilant in avoiding unnecessarily long pauses and be prepared to warm up players periodically throughout all training sessions.

In wet or cold conditions:

- Avoid having players standing exposed for long periods.
- Ensure players change out of any wet clothing as soon as practicable.
- Ensure players wear appropriate clothing, suitable to the conditions.

Heat injury

It is important that players and coaches are aware and react quickly to the following symptoms of heat injury.

- Fatigue.
- Nausea.
- Headache.
- Confusion.
- Light headedness.

Beat-the-heat emergency plan

- Lie the player down.
- Loosen and remove excessive clothing – cool by fanning.
- Give cool water to drink if conscious.
- Apply wrapped ice packs to groins and armpits.
- SEEK MEDICAL ASSISTANCE.

ILLNESS AND PARTICIPATION

During times of illness, the player's body is particularly vulnerable, with an increased risk of damage to tissues or organs. When ill or feverish, players should not participate.

HIV (AIDS) AND HEPATITIS B

A number of blood-borne infectious diseases can be transmitted through body contact or transmission of body fluids. The more serious conditions include HIV (AIDS) and Hepatitis B infections.

These diseases may be spread by contact with infected blood, saliva (not for HIV) and other body fluids.

Preventing the transmission of Hepatitis B and HIV is the responsibility of all parents, players, coaches, officials and sporting organisations. The following precautions to protect players from possible HIV (AIDS) and Hepatitis B infection should be observed:

- Immediately report and treat all cuts and abrasions.
- Maintain a strict level of personal and venue hygiene. Ensure blood spills are cleaned up immediately.
- Send off players with blood on themselves or their clothing and deal with the problem.
- Encourage all coaches and officials to be vaccinated against Hepatitis B.
- Discourage communal bathing and sharing of towels and drink containers.
- Treat all blood-contaminated clothing and equipment as potentially infectious and discard appropriately.

It is essential that information outlining these risk factors and prevention strategies are known and practised by players at all levels.



RECOMMENDED FIRST AID REQUIREMENTS FOR AFL YOUTH PROGRAMS

Sports Medicine Australia (SMA) recommends the following minimum requirements for sporting events:

- A sports first-aider is present where participants are under 16 years.
- A sports trainer is present where participants are 16 years or older.

Sports Trainer Program

The Sports Trainers Program is designed to educate people involved in sport and recreation in the basic principles of injury prevention, first aid and sports medicine.

Four levels of courses are offered throughout Australia:

- Sideline Help Course – 3 hours
- Sports First Aid Course – 16 hours
- Level 1 Sports Trainers Course – 25 hours
- Level 2 Sports Trainers Course – 16 hours

The courses offered are coordinated by state branches of Sports Medicine Australia and are open to everybody interested in sport.

FIRST AID AND INJURY PREVENTION PRINCIPLES

A person appropriately trained in first aid should be present at all training sessions and games as inadequate first aid may aggravate the injury. The 'golden rule' in managing an injury is '**do no further damage**'.

It is therefore crucial that either the coach or a member/parent involved in the club or school have a minimum of Level 1 Sports Trainers accreditation from SMA's SaferSport program or an appropriate first aid certificate.

FIRST AID REQUIREMENTS

Ensure your team/venue has the following:

- A first aid kit.
- Ice.
- Stretcher.
- A trained first-aid person who can use the above items (recommended SMA accredited sports first-aider or sports trainer).
- Access to a phone.
- Transport.
- Knowledge of the location and contact details of doctor, clinic, nearest suitable hospital, ambulance.
- Accessibility to the playing area by ambulance.

ROLE OF THE COACH IN INJURY MANAGEMENT

Appropriate initial management of an injury can significantly reduce the overall recovery time for players. Coaches should therefore be well prepared for any eventuality and, in the absence of appropriate medical facilities, carry their own first aid kits. This should include the following:

- Elastic bandages.
- Ice/cold packs.
- Gauze pads.
- Rigid strapping tape.
- Scissors.
- Disposable gloves.
- Steri-strips.
- Alcohol swabs.
- Skin disinfectant.

MANAGEMENT OF INJURIES

When injuries occur, there are many decisions that need to be made. The most important of these for the coach is whether the player should continue to participate or not. Coaches should always err on the side of caution as resuming participation may cause further injury.

Before allowing a player to return to training and competition, the player should be able to answer yes to the following questions:

- Can the player move the injured part easily through a full range of movement (as compared to the other side of the body that was not injured) without pain?
- Has the injury area fully gained its strength?

The following diagram outlines the effective procedure in the first aid management of sports injuries.

SOFT TISSUE INJURY MANAGEMENT (RICER)

		HOW	WHY
R	Rest	Place the player in a comfortable position, preferably lying down. The injured part should be immobilised and supported.	Activity will promote bleeding by increasing blood flow.
I	Ice	The conventional methods are: <ul style="list-style-type: none"> • Crushed ice in a wet towel/plastic bag. • Immersion in icy water. • Commercial cold packs wrapped in wet towel. • Cold water from the tap is better than nothing. Apply for 20 minutes every two hours for the first 48 hours. CAUTION: <ul style="list-style-type: none"> • Do not apply ice directly to skin as ice burns can occur. • Do not apply ice to people who are sensitive to cold or have circulatory problems. • Children have a lower tolerance to ice. 	Ice reduces: <ul style="list-style-type: none"> • Swelling. • Pain. • Muscle spasm. • Secondary damage to the injured area.
C	Compression	Apply a firm wide compression bandage over a large area covering the injured part, as well as above and below the injured part.	Compression: <ul style="list-style-type: none"> • Reduces bleeding and swelling. • Provides support for the injured part.
E	Elevation	Raise injured area above the level of the heart at all possible times.	Elevation: <ul style="list-style-type: none"> • Reduces bleeding and swelling. • Reduces pain.
R	Referral	Refer to a suitably qualified professional such as a doctor or physiotherapist for a definitive diagnosis and ongoing care.	Early referral for a definitive diagnosis to ascertain the exact nature of the injury and to gain expert advice on the rehabilitation program required.

This regime should be used for all ligament sprains, muscle strains and bruises.

Remember with injuries of this kind, you should avoid:

Heat – increases bleeding.

Running – exercise too soon can make the injury worse.

Massage – increases swelling and bleeding in the first 48-72 hours.

WHEN AN INJURY OCCURS, REMEMBER S.T.O.P.

S

STOP

STOP the player from participating or moving.

STOP the game if necessary.

T

TALK

TALK to the injured player.

- What happened?
- How did it happen?
- What did you feel?
- Where does it hurt?
- Does it hurt anywhere else?
- Have you injured this part before?

O

OBSERVE

OBSERVE while talking to the player.

GENERAL

- Is the player distressed?
- Is the player lying in an unusual position/posture?

INJURY SITE

- Is there any swelling?
- Is there any difference when compared to the other side/limb?
- Is there tenderness when touched?
- Can the player move the injured part?

DO NOT TOUCH OR ASSIST THE PLAYER IN ANY WAY.

(Only move the injured part to the point of pain)

- If yes,
 - does it hurt to move?
 - is the range of movement restricted?
 - how does it feel, compared to normal?
 - how does it feel, compared to other side/limb?

P

PREVENT FURTHER INJURIES

3 OPTIONS



PROVIDE A FEW WORDS OF ENCOURAGEMENT

PROVIDE A FEW WORDS OF ENCOURAGEMENT

1 SEVERE INJURY

Suspected head, facial, spinal, chest, abdomen injuries, fractures or major bleeding.

GET HELP

GET PROFESSIONAL HELP
DON'T MOVE THE PLAYER.

- Keep onlookers away.
- Comfort the athlete until professional help arrives.
- Immobilise and support.

2 LESS SEVERE

Soft-tissue injuries such as sprains, strains and muscle bruises.

RICER REGIME

THE FIRST 48 HOURS ARE VITAL IN THE EFFECTIVE MANAGEMENT OF SOFT-TISSUE INJURIES.

- Rest.
- Ice.
- Compression.
- Elevation.
- Referral.

3 MINOR INJURY

Bumps and bruises which do not impair performance.

PLAY ON

A FEW WORDS OF ENCOURAGEMENT WILL HELP.

- Monitor any such injuries.
- Minor injuries should also be managed using the RICER regime.

UNCONSCIOUS PLAYER

If a player is unconscious, it is a life-threatening situation and the DRABC first aid routine should be used by an accredited sports trainer or a trained first aider. It is therefore important that the coach or a member/parent involved in the club or school have a minimum of a Level 1 Sports Trainers accreditation from SMA's SaferSport program or an appropriate first aid certificate.

DRABC

D

Remove dangers

Check the surrounding area for dangers such as biological hazards, electrical wiring, glass, hazardous fumes and the like. Only proceed if the area is safe. You cannot help anyone if you are injured yourself.

Check for and control dangers to:

- Yourself.
- The injured player.
- Other people.

Remove the danger or remove the injured player from the danger.

R

Response

To check a player's response, use the 'shake and shout' technique.

Gently shake the player by the shoulder.

Ask him/her simple questions, e.g. 'Can you hear me?', 'What is your name?' Give the player a simple command, e.g. 'Open your eyes', 'Squeeze my hand.'

If the player responds, that is, can speak words or can obey a command, he/she is conscious and you should:

- Assist the player into a position of comfort.
- Check for and manage bleeding.
- Check for and manage other injuries (STOP).
- Continue to observe and monitor the player's breathing and circulation until ambulance or expert help arrives.

If the player does not respond or gives an abnormal response, that is, does not open eyes, cannot speak words, cannot obey a command or gives an unintelligible response, such as a groan or strange noise, he/she is unconscious. An accredited sports trainer or a trained first aider should continue ABC.

A

Airway

Make sure the airway is clear. To clear the airway, insert a gloved finger into the mouth to clear away debris such as vomit or a mouthguard.

B

Breathing

Check if the player is breathing by observing chest movements and/or air passing in or out of the mouth. If not, an accredited sports trainer or a trained first aider should begin Expired Air Resuscitation (EAR).

C

Circulation

Stop any bleeding by placing firm pressure over the injury site and check the pulse beside the adam's apple. If the pulse is absent, an accredited sports trainer or trained first aider should begin Cardio-Pulmonary Resuscitation (CPR).

EAR and CPR should be maintained until respiration and circulation are normal, and/or until professional help arrives. It is imperative that someone involved with the team is proficient in the skills of CPR and EAR.



BLOOD RULE - INFECTIOUS DISEASES

The meaning of active bleeding

The term 'active bleeding' means the existence of an injury or wound, which continues to bleed. Active bleeding does not include minor bleeding from a graze or scratch, which has abated and can be readily removed from a player or any part of his/her uniform.

Participation in matches when actively bleeding

A player must not remain on the playing surface for as long as he or she is actively bleeding. A club or team **must not allow** any of its players to remain on the playing surface for as long as the player is actively bleeding. Unless immediate treatment needs to be given, having due regard to a player's health and safety, a club or team must not allow any player who is actively bleeding to be treated on the playing surface.

Player to follow directions of field umpire

Where a player is directed by a field umpire to leave the playing surface because he or she is actively bleeding, the player must leave the playing surface immediately through the interchange area. The player must not re-enter the playing surface or take any further part in any match until and unless:

- a) The cause of such bleeding has been abated.
- b) The injury is securely bound to ensure that all blood is contained.
- c) Any blood-stained article of uniform has been removed and replaced.
- d) Any blood on any part of the player's body has been thoroughly cleansed and removed.

Replacement player

A player directed to leave the playing surface may be replaced by another player listed on the team sheet. A replacement player may enter the playing surface while the player that he or she is replacing is leaving the playing surface.

Procedure when player not actively bleeding

Where the field umpire is of the opinion that a player is not actively bleeding, but the player has blood on any part of his or her body or uniform, the following procedure will apply:

At the first available opportunity, the field umpire must signal and direct the player to obtain treatment. After the signal is given, play will continue:

The player may remain on the playing surface after the signal is given by the field umpire, but must at the earliest opportunity:

- a) In the case of blood being on any part of the uniform, have the piece of uniform removed and replaced; and/or
- b) In the case of blood being on any part of the body, have the blood removed and the cause of any bleeding (if any) treated and covered so that all blood is contained.

Protective gloves

Each club or team must ensure that any doctor, trainer and any other person treating players wears protective gloves as may be approved from time to time by the relevant controlling body.

Disposal of bloodied clothing and other material

Each club or team must ensure that:

- Any bloodied item of uniform or clothing of a player is placed as soon as possible in a hygienic sealed container and laundered to ensure the removal of all blood.
- All towels, wipes, bandages, dressings and other materials used in the treatment of bleeding players must be placed in a hygienic sealed container and discarded or destroyed in a hygienic manner.

MAINTAINING INJURY RECORDS

Coaches should ensure all facts concerning an injury are properly recorded. The form on this page from the AFCA Coaches' Diary can be used to detail all aspects of injuries to your players.

INJURY REPORT SHEET

Tick boxes

Match or Training Date: _____

ID number (give each form a unique identifying number): _____

Ground condition at time of injury: Very hard Firm Soft

Weather condition at time of injury: Fine Light rain Heavy rain

Activity of player just prior to injury event (e.g. going up for a mark, diving tackle)

.....

What went wrong that led to the injury? (e.g. slipped on muddy ground while turning)

.....

What actually caused the injury? (e.g. pushed in back, fell on to outstretched arm)

.....

Nature of injury (e.g. sprain, fracture, bruise)

.....

Body part affected (e.g. right knee)

.....

Was any protective gear being worn?

(e.g. strapping to knee, ankle, mouthguard)

.....

Was the injury

new injury

re-injury

date of previous injury: _____

Referred to: _____

Treatment received (describe)

.....

Further comments

.....

Name of person filling out form: _____

Title: _____

Signature: _____

