

Component 1 How to Optimise Training and Prevent Injury

Injury prevention:

Injury prevention	Explanation
PAR-Q	Identify potential health risks such as high blood pressure
Allow recovery time	Prevent overuse injuries by allowing time to rest and recover
Warm-up	Increases elasticity of muscles
Use correct clothing	Clothing can protect different parts of our body
Apply the rules	Rules are there to protect performers from injury
Use correct equipment	Equipment should be checked and appropriate for the age group
Check Equipment	Equipment should be checked so that faulty or inappropriate does not cause injury
Check facilities	Facilities should be checked and to remove obstacles from the playing area
Apply principles of training	Ensure you use progressive overload and are working at the correct intensity & allow rest
Balanced competition	Competition should be balanced in age, weight, skill and sex

Application

Check Equipment
When playing plays must check the correct equipment such as padded goal posts. The padded posts reduce the chance of injury if a player runs or fall into them

Correct Clothing
Player wears a gum-shield to protect their teeth

PAR-Q
Before the player trains they will fill in a PAR-Q to highlight any health problems

Allow Recovery Time
After the match the player will rest to allow recovery and adaption. This prevents overuse injuries

Apply the Rules
Player are not allowed to tackle above the shoulder this prevents injuries to the head such as concussion

Use Correct Equipment
Players should use the correct sized and weight of ball to reduce the chance of injury

Warm-Up
Player warms up before they play to ensure the elasticity of muscle so they are less likely to pull or stain them

Check Facilities
Before you play obstacles such as broken glass should be removed from the pitch

Balanced Competition
Player will only play against his own age, sex, ability

Apply Principles of Training
Players should use the correct sized and weight of ball to reduce the chance of injury



Fractures:

Compound	Simple	Greenstick	Stress
Compound or open fractures are when the bone is broken and causes the skin to break	Simple or closed fractures are when the bone is broken but does not break the skin	Greenstick fracture is where the bone breaks at one side and bends on the other. They are common in children	Stress fractures is where there is a small crack in the bone usually caused through overuse
Symptoms		Treatment	
<ul style="list-style-type: none"> Pain Bruising Swelling Misshapen limb 		Need to be treated by a doctor who will make sure the bone is properly aligned and immobilised until it has healed	
A fracture is caused when a force on the bone is greater than the bone itself. A fracture can be caused by a tackle in rugby, or falling from a height in basketball			

R.I.C.E.

1. Rest 	Do not use the injured area, allowing time to heal and to prevent further damage
2. Ice 	The cold from the ice will help reduce swelling and pain by constricting the blood vessels. Do not apply ice directly onto the skin and not for too long
3. Compress 	Apply a bandage to the area to help reduce swelling and provide support. Make sure the bandage is not too tight
4. Elevate 	Keep the affected area raised to reduce swelling by reducing the blood flow

Injuries:

Sprain		
	A sprain is a soft tissue injury where some of the fibres of the ligament are torn	Symptoms <ul style="list-style-type: none"> Pain Bruising Swelling
A sprain can occur during a twisting or overstretching of the joint		Treatment <ul style="list-style-type: none"> Rest Ice Compression Elevation
Strain		
	Strains are a soft tissue injury and is a stretch or tear to the muscle. Sometimes known as a pulled muscle	Symptoms <ul style="list-style-type: none"> Pain Bruising Swelling
A strain occurs due to overstretching		Treatment <ul style="list-style-type: none"> Rest Ice Compression Elevation
Tennis/Golfers Elbow		
	Tennis/golfers elbow is a joint injury where the tendons are inflamed. Tennis elbow the pain is felt on the outside of the elbow. Golfers elbow the pain is felt on the inside	Symptoms <ul style="list-style-type: none"> Pain Swelling
Tennis and golfers elbow are caused by overuse		Treatment <ul style="list-style-type: none"> Rest Ice Compression Elevation
Torn Cartilage		
	Cartilage acts as a cushion at the ends of bones. Torn cartilage is an injury where small tears appear in the cartilage	Symptoms <ul style="list-style-type: none"> Pain Swelling Stiffness at the joint
Torn cartilage can happen when you twist forcefully, sudden impact/stopping		Treatment <ul style="list-style-type: none"> Rest and strengthening exercises
Abrasions		
	Abrasions are minor injuries to the skin and include cuts and grazes	Symptoms <ul style="list-style-type: none"> Pain Swelling
Abrasions can occur in any activity due to a knock or a fall		Treatment <ul style="list-style-type: none"> Abrasions must be cleaned & covered with a sterile dressing. Pressure should be applied if bleeding
Concussion		
	Concussion is a mild head/brain injury. It is caused by a blow to the head or by whiplash shaking the brain inside the skull	Symptoms <ul style="list-style-type: none"> Confusion Dizziness Unconsciousness Nausea
Concussion is common in contact sports such as rugby when getting tackled		Treatment <ul style="list-style-type: none"> Seek medical advice and monitor closely to make sure the symptoms do not get worse
Dislocation		
	Dislocation is where one of the bones at a joint comes out of place, e.g. shoulder, knee, finger	Symptoms <ul style="list-style-type: none"> Pain Misshapen joint Swelling
Dislocations are often caused by a fall or a blow to the area.		Treatment <ul style="list-style-type: none"> Seek medical advice because of possible damage to surrounding nerves