



For players, coaches, match officials, administrators and Unions

rugbyready.worldrugby.org





### Welcome

## World Rugby is proud to provide a host of resources to assist people around the world involved in Rugby. One of those resources that helps to improve and standardise processes in a range of areas within the sport is Rugby Ready.

This programme was launched in October 2007 to educate, aid and support players, coaches, match officials, administrators and Unions on the importance of sufficient preparation for training and playing in order for Rugby to be played and enjoyed while reducing the risk of serious injury. Ultimately, it is about player welfare at all levels of the Game.

We all have a collective responsibility to manage the welfare of the ever-increasing number of men, women and children who play the Game at all levels around the world and to ensure that the Game maintains its core principle of fair play, which is central to its global appeal.

Since its inauguration, Rugby Ready has established a strong profile as a leading global education resource for the Game's stakeholders in the important areas of match preparation, technique, injury prevention, management and discipline. Rugby Ready supplements programmes successfully delivered by some World Rugby Member Unions.

The Rugby Ready handbook is available not only in the three official languages of World Rugby – English, French and Spanish – but also several others. Consult the website - **rugbyready.worldrugby.org** - for an up-to-date list of language provision and resources.

Rugby Ready is widely available to the global Rugby family so that players, coaches, match officials, administrators and Unions all over the world can enjoy Rugby to the fullest.





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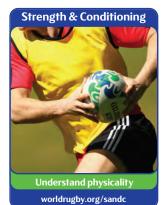
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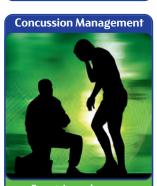
It is important to highlight that, in order to gain best use from Rugby Ready, you should use it in conjunction with other World Rugby programmes, such as the ones detailed below.



Be prepared • Manage the risks worldrugby.org/rugbyready







Recognise and remove worldrugby.org/concussion













Everybody involved in organising and playing Rugby has a duty of care in relation to the players. The Rugby Ready programme is intended to raise awareness of good practice and help stakeholders manage the inherent risks of a contact sport by putting appropriate safeguards in place.

### The Game of Rugby Union

Research shows that 180 minutes of vigorous physical activity per week linked with a healthy diet can reduce the prevalence of life-threatening diseases such as cardiovascular disease, stroke, high blood pressure, diabetes and some forms of cancer. Rugby, in its various formats, provides players of different physiques, skills, genders and ages with the opportunity to undertake vigorous exercise in a controlled and enjoyable environment.

The Rugby community provides a long-term development (LTPD) programme for players of all ages with an infrastructure that supports individual players' expectations and sporting ambitions. Players are therefore able to play the game purely for fun or, if they choose, to develop their individual skills and understanding of the technical aspects of the game from the grass roots level up to the elite level.

Rugby, however, provides more than just the opportunity to undertake vigorous exercise; it is a sport with values that develop players within a social and moral context. The Game's core values are:

- **INTEGRITY** Integrity is central to the fabric of the Game and is generated through honesty and fair play
- **PASSION** Rugby people have a passionate enthusiasm for the Game. Rugby generates excitement, emotional attachment and a sense of belonging to the global Rugby family
- **SOLIDARITY** Rugby provides a unifying spirit that leads to lifelong friendships, camaraderie, teamwork and loyalty which transcends cultural, geographic, political and religious differences
- **DISCIPLINE** Discipline is an integral part of the Game, both on and off the field, and is reflected through adherence to the Laws, the Regulations and Rugby's core values
- **RESPECT** Respect for team mates, opponents, match officials and those involved in the Game is paramount

View the World Rugby Core Values video at: rugbyready.worldrugby.org/en/corevaluesvideo





### The purpose of Rugby Ready

### WHY is Rugby Ready necessary?

Rugby Union is a game played by two teams of 7, 10 or 15 players that physically contest for the ball and, as such, the game carries a risk of injury.

Research has identified the magnitude, nature and sources of these risks.

It is the responsibility of all people involved in the game of Rugby to understand and manage these risks within acceptable levels.

### WHAT is its purpose?

Rugby Ready aims to assist in the communication and understanding of the risks associated with Rugby and to raise awareness of good practice.

### WHO is it aimed at?

Rugby Ready is designed as a resource for all potential participants in the Game of Rugby, including players, coaches, match officials, parents, teachers, first-aiders and volunteers supporting players and coaches on match day and during training.

### How to use Rugby Ready

Rugby Ready is available via three platforms:

1. Handbook

- 2. Online learning programme
- 3. Face-to-face course.

While any one of the handbook, website or face-to-face course is effective in isolation, it is more effective to use a combination of the three platforms.

It is recommended that ALL participants involved in the Game of Rugby undertake the online learning programme at **rugbyready.worldrugby.org**. The website allows you to read material, watch video content and complete an on-line self

check test which, when completed successfully, generates an awareness certificate. Wherever you see this icon, you can follow the link to the Rugby Ready website for further information.



Attendance at a face-to-face course is strongly advised for those people involved in an on-field capacity in the Game – players, coaches, match officials, first-aiders, etc. The face-to-face programme will often build on the understanding you have previously gained from the online course by giving you practical, hands-on experience of the elements of the Game covered in Rugby Ready. The face-to-face course can be delivered in many formats and contexts. Your national Union will have its own policies and procedures in place. If you want to contact your own Union, you can find their details at **worldrugby.org/memberunions** 

World Rugby and national Unions encourage participants to regularly update their knowledge.

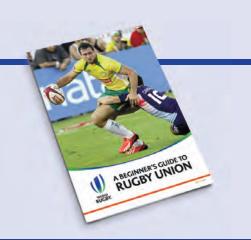
Rugby Ready is applicable for all forms of Rugby, including the 15-a-side, 10s and 7s formats.

### World Rugby Beginner's Guide to Rugby

If you are completely new to Rugby, we recommend that you read the World Rugby Beginner's Guide to Rugby Union.

Download a printable Adobe PDF and take an online quiz:

### passport.worldrugby.org/beginners



**Disclaimer** This Rugby Ready product has been developed in the context of the laws applying to accident and injury prevention and medical practice in Ireland and the information and guidelines incorporated on these matters are made available strictly on the basis that World Rugby does not accept any liability to any person or entity for loss, cost or damage howsoever arising out of any reliance on and/or use of the information and/or guidelines contained in this Rugby Ready product.



## Long-term player development (LTPD)

LTPD is a long-term approach to maximising individual potential and involvement in Rugby. LTPD models highlight the importance of having coaches working with children and youth, who understand the technical, tactical, physical, mental and lifestyle needs of children and young people as they progress along their Rugby journey. LTPD provides a platform for coaches to encourage and support participants at every level of their involvement in the game, to help them fulfil their potential and to remain involved in sport.

### Sample LTPD stages

Please note that the example below uses chronological age to define the different stages of the LTPD. Best practice for the earlier stages is to use biological age, as some young players mature earlier than others and some later.

Stage: FUN Age guide: 6-12 Player **PLAYS** Coach GUIDES Content: Learning to move, basic Rugby skills Stage: DEVELOPMENT Age guide: 12-16 Player EXPLORES Coach **TEACHES** Content: Learning the Game Stage: PARTICIPATION Age guide: 15-18 Player FOCUSES Coach CHALLENGES Content: Playing the Game, developing the player Stage: PREPARATION Age guide: 17-21 Player SPECIALISES Coach FACILITATES Content: Reaching full potential Stage: **PERFORMANCE** Age guide: 20 and over Player INNOVATES

Coach **EMPOWERS** Content: Consistency of performance

Stage: **RE-INVESTMENT** Age: any Content: Support and enjoyment of the Game



### References

The following sources provide some examples of long-term player development models:

- Lloyd, R.S. and Oliver, J.L: The Youth Physical Development Model: a new approach to long term athletic development. Strength and Conditioning Journal 34: 37-43, 2012
- 2. Balyi, I. and Hamilton, A.: Long Term Athlete Development: Trainability in Childhood and Adolescence. National Coaching Institute, Victoria, British Columbia and Advanced Training and Performance Ltd., 2004

LTPD models should be developed with specific context in mind. Contact your national Union for more information.



## **Pre-participation**

Before playing Rugby, there is a series of checks which should be undertaken by the team coach to ensure that a player is Rugby Ready.

#### A Rugby Ready player will:

- have the physical attributes and have attained the necessary level of fitness for their level of play
- have sufficient technical skill and ability for the grade at which they are playing
- have been fully rehabilitated from any previous injuries and will not be predisposed to serious injury
- be familiar with the Laws of the Game and what constitutes foul play
- have been assessed for their readiness to play through player profiling

Player profiling is an established method of assessing players' readiness to play Rugby. A good profile will help coaches ascertain if a player is Rugby Ready. Profiling should take place before pre-season training starts and when new players join the squad. It should then be repeated at intervals throughout the season. The profile should ask for information on the following areas:

- personal contact and next of kin details
- medical history (including details of any medication taken)
- cardiac questionnaire
- lifestyle and fitness information
- history of injury
- previous exposure to Rugby

Special attention should be given to:

- age grade (U19 and below) players, e.g., physique, skill, fitness, etc
- all new players
- players with pre-existing injuries
- any player with a history of concussion
- front row players with a history of, or any previous, neck injury
- older players who may have degenerative conditions

As well as coach-led profiling, a physical assessment by a doctor, physiotherapist, strength and conditioning coach or sports trainer could be undertaken. This assessment could test for:

- functional ability
- strength
- speed
- balance
- flexibility
- aerobic endurance
- anaerobic endurance
- physical abnormalities, e.g., biomechanical

Strength and conditioning coaches should only conduct assessments that they are competent in administering, in line with their Union's protocols.

An example of a player profile form is available for download at: rugbyready.worldrugby.org/en/downloads







# Equipment, environment and emergency plan



Before playing Rugby, there are various checks which should be undertaken to ensure that all equipment and the environment are Rugby Ready. It is also important to develop an emergency plan to ensure that if an incident does occur, everyone involved knows their role and responsibilities, and the incident is then managed effectively.

### Players' personal equipment

Players can help themselves and potentially prevent injuries to themselves and other players by ensuring they use appropriate equipment.



#### Mouth guards

It is strongly recommended that all players wear a custom-made mouth guard during training sessions and matches. A good mouth guard protects the teeth and surrounding soft tissue and can prevent a broken jaw. Since mouth guards became compulsory in New Zealand in

1997 there has been a 47% reduction in Rugby-related dental claims. Mouth guards made from a dental mould generally provide the best protection.

There are two important considerations in a mouth guard; the fit so that it is retained easily and spreads forces correctly, and its ability to absorb energy (material and thickness).

#### Footwear

Players' footwear should be in good condition and appropriate to the playing surface. Studs/cleats should be appropriate to the conditions and must conform with World Rugby Specifications (Regulation 12) - that is, they must not



be longer than 21mm, and must not have any burring or sharp edges.



#### Scrum caps and head guards

Properly fitted headgear can help prevent soft tissue injuries to the head and ears. There is no evidence that headgear provides protection against concussion. Headgear must comply with World Rugby standards.

Head guards are not recommended in all players because there is some evidence that they can encourage risk taking behaviour. The more important way of preventing head injuries is to ensure players have good technique in the tackle and other contact phases.

#### Padded equipment

Research shows that padded equipment can help reduce the number of minor injuries such as bruises, cuts and abrasions. It does not protect against major injuries and should not be worn as a means of allowing injured players to return to play before they are fully recovered. For all



matches, padding must be in accordance with the Laws of the Game and World Rugby regulations and be approved. All World Rugby approved clothing will carry the logo shown below.

A **pre-match safety check** by match officials will identify potentially dangerous items such as rings or elements of dress that do not comply with World Rugby specifications.



For more information on provisions relating to players' dress, see World Rugby Regulation 12 at **playerwelfare.worldrugby.org/reg12** 

### The playing environment



It is important to ensure that the playing environment is Rugby Ready. This will allow players to enjoy themselves more and reduce the risk of injury. Environmental issues that need to be checked before training or playing are:

#### The playing arena

Facilities should be appropriately sized, with spectators and vehicles positioned well away from the playing area. If there are perimeter fences or hoardings, these should be a safe distance away from the touchline and appropriately padded.

#### The playing surface

The surface should be level, free of holes and adequately lit. It should not be waterlogged, slippery or too hard - an overly hard surface increases the risk of injury, particularly head injury. There should be no exposed sprinkler heads, broken glass, rubbish or stones on the surface.





- Goal posts should be suitably padded;
- All scrum machines and tackle / rucking bags should be in good condition and well maintained;
- Corner flags should be placed properly and should flex on impact.

#### The weather

Extreme weather may cause

## The playing equipment

Equipment should be appropriate to the age and experience of the players. Critical checks include:



overheating and dehydration or hypothermia. Ensure players wear appropriate and adequate clothing, e.g., in cold and wet conditions, ensure players wear waterproof clothing during training sessions and before and after matches. Warm, waterproof clothing should be worn by substitutes and injured players.

#### Disclaimer

Rugby is a physical contact sport and there are inherent risks associated with participating in Rugby related activities. Accidents can happen and may happen to you. World Rugby does not accept any responsibility or liability in negligence or otherwise in relation to any injury, loss or damage suffered by persons seeking to replicate activities demonstrated in this Rugby Ready product or participating in Rugby related activities generally.

### **Emergency plan**

An essential step towards becoming Rugby Ready is planning for emergencies. This means having the correct medical equipment in place and ensuring that appropriately trained personnel (i.e., medical practitioner, other healthcare professional or trained firstaider) are present.

Please visit **playerwelfare.worldrugby.org/firstaidinrugby** for the World Rugby First Aid in Rugby online course.

#### **Example medical equipment**

Only equipment that those responsible for first aid cover have been trained to use should be made available.

- Stretcher additionally, a spinal board and/or 'scoop' stretcher with head blocks and straps, if trained in their use.
- Collars various sizes or adjustable, if trained in their use.
- Limb splints various types are available but simple padded 'box' splints are appropriate.
- Basic first aid kit which typically includes:
  - scissors (blunt ended)
  - non-sterile medical gloves (consider the type of latex, as allergy can be an issue)
  - gauze swabs
  - compression bandages (5cm, 7.5cm, 10cm)
  - sterile gauze bandages
  - adhesive skin closures, (e.g. Band Aid)
  - elastic adhesive bandages (2.5cm, 5cm)
  - petroleum jelly
  - irrigation solution (sterile eyewash)
  - wound dressings (e.g. Melolin)
  - triangular bandages
  - ice pack and ice
  - zinc oxide adhesive tape



Spinal board



Defibrillator



Emergency bag

- emergency foil blanket
- plastic bag for contaminated dressings/gloves

An automatic emergency defibrillator (AED) may be appropriate depending on the circumstances. These are expensive items and it is highly recommended that individuals are trained in their use. Considerations to be made include the likely frequency of use and the availability/response times of emergency services. Having sufficient appropriately trained and equipped first aiders should be the first priority.

All these items should be located in the Technical Zone.

#### First aid room

A Rugby Ready first aid room should be available and should have:

- access for a stretcher
- access for an ambulance
- wall linings and worktops which can be easily cleaned, to comply with hygiene and infection control requirements
- floors which are non-slip, impervious and washable
- a sink with hot and cold running water
- adequate lighting and heating
- an examination couch with waterproof protection
- appropriate safe storage for medical equipment and first aid materials
- adequate arrangements for the disposal of clinical waste and sharps, e.g., needles
- access to a telephone
- a record book for recording incidents where first aid has been given
- emergency telephone numbers clearly displayed

More detail on developing an emergency plan is available for download at: rugbyready.worldrugby.org/en/downloads



#### If an emergency does occur

For information on what to do in an emergency, see the Injury Management section.



## **Physical conditioning**

Improving your fitness can make you a better player and less prone to injury. For players, coaches and those who design physical conditioning programmes for Rugby players, you need to have a general understanding of the key components of fitness and also the specific physiological demands of the Game.

What follows is a brief introduction to the area of physical conditioning for Rugby. If you would like more detailed information, please register for and complete theWorld Rugby's online Level 1 Strength and Conditioning programme at sandc.worldrugby.org.

## What are the components of physical conditioning?

**Speed** = the ability to coordinate simple or complex limb movements at high velocity.

Strength = the maximum force an individual can exert through a muscle or group of muscles, against an external resistance.



**Endurance** = a measure of the body's ability to maintain a rate of work.

**Functional competence** = the extent to which a player has good stability and mobility during movements related to the game.

**Power** = speed x strength

In Rugby, all players require a degree of each of these components, but the relative importance of each component will vary according to a player's playing position.

### **Principles of training**

• **Individuality.** People react to the same training stimulus in different ways. The main reasons are: genetic; initial fitness levels; maturity.

- Adaptation. When you train regularly, physiological changes take place over time to make you more effective and efficient.
- **Overload.** To improve your fitness, you must continually progress the work you perform.
- Work / Play vs Rest / Regeneration. Although it is important that training load is progressive, time for rest and regeneration is just as important.
- **Specificity.** Fitness is specific and your training must relate to the demands of the game you play.
- **De-training.** Any prolonged lay-off from training will be accompanied by a drop-off or de-training of fitness levels. So, you should undertake a reconditioning programme before you return to full training / play.

### Needs analysis

Rugby players need varying amounts of strength, power, endurance, speed and agility. There are few team sports that require such a diverse and comprehensive range of physical attributes.

The different demands of the various playing positions should also influence how you train. For example, the front five players in the scrum require power and endurance to scrummage effectively, whereas a flanker will make more frequent sprints throughout a game and as a result require higher levels of speed and speed endurance.

For you to be physically prepared - to be truly Rugby Ready basic functional competence must be in place. For example, you must develop a good general base in terms of strength, stability, mobility and endurance as a platform on which to build enhanced speed and power qualities.

For an accurate and relevant needs analysis, you should seek the help of a registered or accredited conditioning coach to design and implement the conditioning programme. Primary considerations are:

- 1. Your current physical condition using standardised physical tests and functional assessment
- 2. Any history of injury
- 3. Training history: this needs to take into account training age (the number of years you have been specifically preparing for Rugby) and fitness training age (the number of years you have been supervised by an accredited strength and conditioning coach)
- 4. Specific game-related needs (playing position, refereeing, etc.)

Once individual needs have been determined based on these criteria, specific issues relating to rehabilitation / prehabilitation and perceived weaknesses can be focussed on and a training programme can be designed and implemented to meet these needs.

Regular monitoring and evaluation of your progress will require testing procedures to be in place. This will ensure that the programme is constantly changing and progressing to meet new objectives.

competence

### **Functional assessment**

A functional assessment can be conducted using simple exercises such as the overhead squat with a basic balance test, as seen below.



The type of strength required for Rugby is a specific type of strength which often has to be deployed in conditions of instability. So a fitness programme for Rugby must focus on the development of stability of the potential injury sites such as the shoulder, core, hip, knee and ankle, rather than placing an excessive emphasis on gym-based weight lifting.

The World Rugby Level 1 and Level 2 Strength and Conditioning courses (see **sandc.worldrugby.org**) cover functional assessment in more detail.

### Planning a conditioning programme

There are a number of variables to consider:

- your age
- your training age
- your long-term and short-term goals
- the availability of facilities and resources

The other key consideration is the phase of the Rugby season. The timing and length of the season varies across the world. Whatever the timings of your season, you will need to plan your training around four distinct phases:

- Off-season
- Pre-season
- In-season
- Transition

#### This process is called **periodisation**.

When designing your weekly plan, an important consideration is the 48-hour rule. Recent research in Rugby\* has shown that you can still be fatigued 48 hours after an intense game. Your plan should reflect this, so high-intensity training should be avoided for 48 hours after a game. A sample weekly plan is shown here.

This is only one of many possible plans and is only designed to show how the 48-hour rule can be integrated into the training week.

Phase	Off season	Pre-Season	In-Season	Transition
Activity	General preparation	Specific preparation	Maintenance	Recovery / active rest
Southern Hemisphere	Nov-Jan	Feb-March	April-July	Aug-Oct
Northern Hemisphere	May-June	July-Aug	Sept-April	May

Months are approximate and may vary according to the Union and level of play.

Day	Activity
0	Match
1	Recovery
2	Strength and conditioning training, or recovery option
3	High-intensity Rugby training
4	Strength and conditioning training
5	Medium to low-intensity Rugby training
6	Rest
7	Match

\* Source: Evaluation of muscle damage after a Rugby match with special reference to tackle plays. Takarada Y. Br J Sports Med. 37. 416-419. 2003.

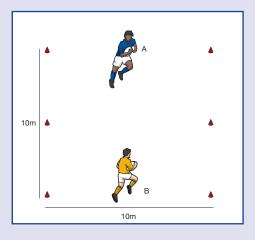
### **General training tips**

- Ensure you complete a warm-up (use dynamic stretches) and cool-down (use static stretches) for all sessions (see the warm-up and cool-down sections)
- Good nutrition and hydration are extremely important to support your conditioning
- Wherever possible, get the help of a registered or accredited physical conditioning coach
- Try to train with someone else or, even better, train in groups following similar programmes
- Try to keep your sessions fun and varied
- Try to develop match fitness through conditioned games and Rugby-specific drills such as those shown below



### **Examples of practices**

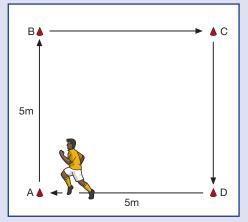
### Watch these practices online at rugbyready.worldrugby.org



Mirror me

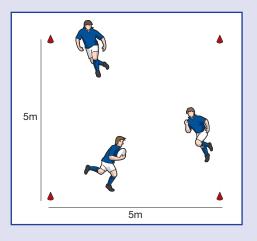
Player A can move laterally, forwards or backwards. Player B must mirror Player A's movements.



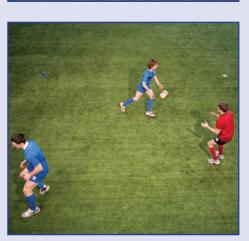


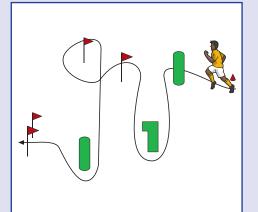
### Agility grid Move from: A to B forwards B to C laterally C to D backwards D to A laterally.





### Touch the cones In threes or fours, the players pass to each other and after every pass must touch 1, 2 or 3 cones (as decided by the coach) and then rejoin play.





#### Dodge

Arrange any kit in a slalom fashion. Design the course so that players will run forwards, backwards and laterally.

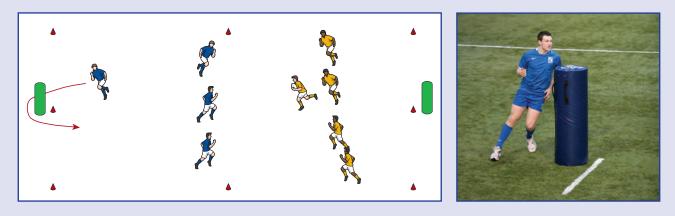


### **Examples of practices**

Watch these practices online at **rugbyready.worldrugby.org** 



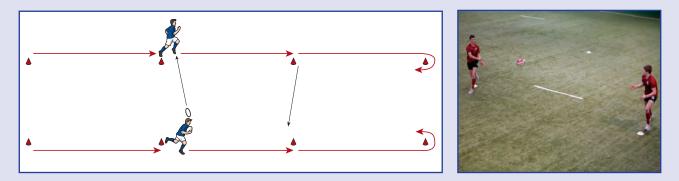
#### **Touch and retreat**



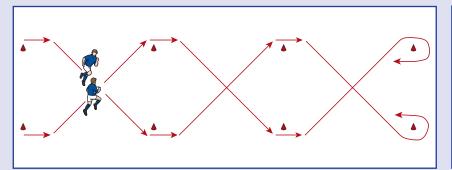
Team A attacks team B. When a player is touched, that player must play the ball between the legs and a team mate must pass it to restart the attack. The player who makes the touch must run around a cone or tackle bag before returning to the game.

#### **Rectangle drill**

There are two versions of this drill. In drill 1, the players run to the first cone where they must then make a pass, continue to the next and make a return pass. When they reach the last cone they sprint back to the start. The drill is timed and the players are encouraged to concentrate on a good pass. Distances between the cones are 10m.

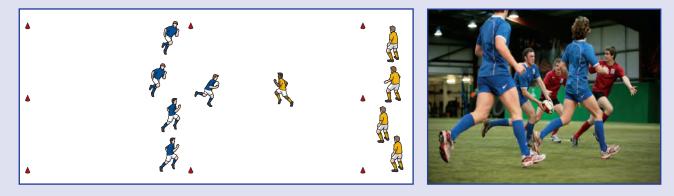


In drill 2, after initial straight line acceleration the players go diagonally from the first to second cones and as the players cross, they make a switch pass. This is completed for the next two sections. After the players reach the last cone they sprint back to the start. The drill is timed and the players are encouraged to concentrate on a good pass. Distances between the cones are again 10m.





#### **Overload touch**



Team A attacks team B. The attacking team receives a kick from team B.

Part one is 5 attackers against 1 defender, with just one touch allowed. If team A score, they run back to their side and receive another kick from team B. This then progresses to:

Part two: 5 v 2 and two touches allowed

Part three: 5 v 3 and three touches allowed

And so on until it is  $5 \vee 4$  with four touches allowed. Possession changes to the other team if the attacking team is touched more than the allowed number of times.

### Physical conditioning exercises on the field

You don't need large amounts of specialist equipment to improve your physical conditioning. This section lists some exercises that can be completed on the field with limited equipment. This type of session is the starting point for most players who have limited strength training experience and poor functional competence.

The session could be described as an example of **anatomical adaptation** as it gradually strengthens the body and teaches proper technique. This will eventually enable you to move on to more advanced strength training in a safe manner and with appropriate progression. If you were to undertake an advanced strength and conditioning programme without first completing a functional assessment and performing the appropriate corrective exercises through anatomical adaptation, it could have a negative impact on your performance and increase the chances of injury. It is important that exercises such as those shown below are supervised by an accredited strength and conditioning coach.

The session outlined here is just an example of what can be undertaken on the field for an adult team. The repetitions and times must be determined by the current levels of technique and experience. It is best to complete this session in a circuit format, going from exercise 1, to 2, to 3, to 4, etc., and having a break once a circuit is complete; then, continuing with more circuits depending on your experience and technique.

### 1. Push up

From a fully locked-out position, with arms straightened, lower the body so that the chest touches the ground. Using the chest, shoulders and triceps, return to the starting point.





Keeping a straight, flat back,

maintain a controlled descent / ascent throughout the exercise. Keep the shoulders and hips in line to prevent lifting or dropping of the buttocks.

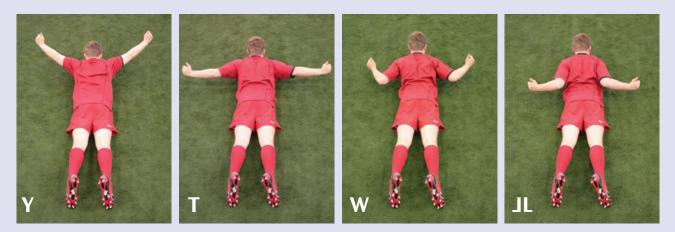
### 2. Aeroplane

Support body weight on one leg with a slight bend in it. Lean forward with a straight back and straighten the arms out to the sides. The rear leg points straight behind at a slight angle to the back.



### **3. YTWL**

This is a prone shoulder circuit that is used to strengthen and stabilise the muscles of the upper back and shoulder. The letters Y, T, W and L describe the shape made by the prone positions.



- Y place the arms above the head at 45 to 90 degrees above shoulder level. Point the thumbs up to activate the rotational muscles of the shoulder blade area.
- **T** place the arms fully straightened at a 90 degree angle from the torso. Turn the thumbs up. Keep the shoulder blades down and pulled back throughout, whilst trying to maintain a 90-degree angle.
- **W** place the upper arm at a 45 degree angle to the torso, with the lower arm at a 90 degree position to form a W shape. Maintain alignment between wrist, elbow and shoulder.
- L place the upper arms as close to the side of the body as possible, with the lower arm as near as possible to a 90 degree angle. Keep the elbows pressed into the torso. Try to maintain alignment of elbows, wrist and shoulders.

### 4. Bodyweight squat

This exercise develops strength, stability and flexibility in the lower body, while also improving core stability. Place the feet slightly wider than shoulder-width apart, with the toes turning outwards so that the middle toe is in line with the knee. Before descent into the squat, take a deep breath to fully inflate the lungs so that the upper and lower back remains braced. Descend under control, squatting as low as possible with a straight back. Ensure that the chin is off the chest and the eyes are looking straight ahead to maintain a strong, flat back. Focus on sitting back by pushing the hips and buttocks behind the body and placing bodyweight through the heels. In the ascent phase, focus on keeping the chest and head held high and the hips up and forward. Push the heels into the floor and exhale as you return to an upright stance.





### 5. Bridge

This exercise improves core stability and strengthens the muscles of the hamstring and buttocks. Lie on your back and raise the hips to create a straight line from the knee to the shoulder. Ensure the heels are flat on the floor and that the flat of the hand is pressed firmly into the ground. Focus on pulling the navel in towards the spine and activate the buttock muscles throughout.



### 6. Lunge

Step forward and bend the back knee. Keep the back straight and perpendicular to the ground. Don't let the front knee go past the toes. Return to starting position and repeat the same movement starting with the opposite leg.



### 7. Partner pull

This exercise involves two people. The first person lies on the ground and the second person straddles the first. The person in the straddle position squats down with a straight back and bends the arms at the elbow. The person on the ground grips the partner's arms like a chin-up bar and, keeping a straight body, pulls up off the ground, pivoting at the heel.



### 8. Oblique / side bridge

This exercise strengthens the muscles at the side of the torso and the lower back. Position the body on the side so that it is supported by the elbows and feet. Lower the hips under control so that they touch the ground lightly and then return to the starting position by raising the hips. Ensure that the body is kept in a straight line and that there is no inward or outward rotation. Keep the shoulders, hips, knee and ankles in line.





### 9. Single leg stance

Stand on one leg with hands on hips. The non-stance knee must be bent to 90 degrees and raised into the high knee running position with the toes curled up towards yourself. Try to stay balanced for the same time on both legs.



### 10. Hamstring drop

This is best performed with partner assistance. One player adopts a kneeling position with the second player positioned directly behind. Kneel on a soft surface with the partner securing and anchoring the participant's ankles. The player then descends slowly with good posture and makes contact with the ground by absorbing the drop with open palms. Keep the shoulder blades pulled down and back to maintain a flat back. Avoid dropping the head by keeping the chin off the chest. The player should push themselves back up so as not to use hamstrings concentrically.



#### Disclaimer

Anyone intending to undertake a physical conditioning programme should seek medical advice from a registered medical practitioner prior to doing so. The information and guidelines regarding the skills of Rugby and associated physical conditioning should only be used following and in conjunction with advice from appropriately qualified trainers, coaches and referees.

### Functional strength training for Rugby

#### A progression from bodyweight drills to the inclusion of functional training equipment

Rugby is a contact sport so players need to be strong enough to maintain balance and stability in contact. Players need to be able to apply strength both when making a tackle and also when resisting a challenge (i.e., being tackled). The other key benefit provided by a functional strength and conditioning programme is that you will be less prone to injury. The muscles and joints become stronger, which is especially important for the neck, shoulders, hips, knees and the core of the body.

Weight training is an excellent form of strength training which provides a comprehensive range of benefits to the Rugby player. However, not all players will have access to weight training facilities at the training ground or at a local gym or sports centre.

Weight training must be supervised by a fully qualified strength and conditioning coach or experienced fitness instructor for two important reasons: first, health and safety, and second, sessions need to be Rugbyrelevant and specific. This could also present a problem for some places where Rugby is played if such an individual is not available.

The illustrated body weight circuit shown above is an excellent starting point, but it is important that there be a progressive challenge available. This can be provided by the use of functional training apparatus. The benefits produced are not just limited to gains in strength but also in flexibility, stability and balance.

A practical and convenient alternative to weight training is provided by the use of tyres, medicine balls, stability balls and suspended bodyweight training apparatus. All of these training tools will facilitate functional strength development as opposed to developing general strength for no real purpose.

As with weight training, they produce a compound and whole body conditioning effect. But it is likely that they will provide a cheaper and more versatile option that can be used indoors or outside on the training pitch. The other advantage offered by these tools is that they can be conveniently stored and used at the Rugby club itself.

They are also very adaptable and can be used to develop positional specific qualities such as sprinting, tackling or scrummaging.













## Lifestyle



Sport offers a number of benefits for those who take part. These benefits cover a wide variety of areas including physical and mental health and a broadening of cultural and social awareness. Training is designed to prepare you physically, mentally and technically for the Game. To maintain good health and to help prevent injury and illness, players, coaches and associated medical staff should focus on maintaining a healthy body through proper training, diet, stress management and rest.

### Fitness through exercise

The health benefits of Rugby are many and varied, and at the most basic level, Rugby is a great way of increasing the time spent doing physical activity. Current guidelines\* suggest that adults should undertake at least 30 minutes a day of moderate to vigorous intensity physical activity on five or more days of the week. For children, the recommendation is at least 60 minutes of at least moderate intensity physical activity each day. At least twice a week this should include activities to improve bone health, muscle strength and flexibility.

### Rugby for young people a sport for all shapes and sizes

Rugby is a game that is uniquely suited for all shapes and sizes, girls and boys, all ages and abilities. It can be enjoyed in many forms, from fifteens to sevens to non-contact games and can even be played on the beach or on snow. There is a level of participation for every child to enjoy.

By applying a holistic approach, Rugby and other sports can play a prominent role in promoting a healthy lifestyle, allowing players to enjoy a lifetime of sporting participation.



\*Source: World Health Organisation (www.who.org)

### 1. Try Rugby / Try Sport

Encouraging participation and promoting enjoyment, whatever the child's ability, is a positive way to make the first significant steps towards developing a healthy lifestyle.

#### 2. Social skills development

Participation in team sports in particular stimulates inclusion and interaction. It builds self-confidence and self-esteem, and forges the fellowships and friendships that are unique to sport and values such as integrity, solidarity and respect amongst others that are characteristic of Rugby.

### 3. Mental skills awareness

Through participation and structured training, Rugby develops the key mental skills of self-control, concentration, discipline, decision-making and leadership. Such important skills transcend all aspects of daily life.

#### 4. Diet and nutrition

A balanced diet is key to sustaining the energy levels necessary to compete and train at every level of the Game. This also plays an important role in boosting energy levels for everyday life, improving concentration and performance and promoting a healthy lifestyle.

### **Basic hygiene**

Basic hygiene is essential for maintaining a healthy active lifestyle, particularly when operating in the closed environment of a team. A good rule of thumb is:

- keep yourself clean, e.g. wash your hands at least five times a day
- keep your kit clean, e.g. clothing, water bottles and gum shields
- if you sustain a cut, clean it and cover it.

### Fluid intake

Water is essential to normal body function. During exercise, the major water loss from the body is through sweat. To avoid a significant decrease in performance, this water must be replaced, both during matches and training.



Children should not routinely use sports drinks as their high sugar content may cause dental problems. Milk or milk shakes are a very good recovery drink as they provide fluid, protein and carbohydrate (in the case of milk shakes).

An easy way to check your hydration level is to observe the colour of your urine. The chart below will help. You should aim for your urine to be pale in colour which equates to 1 to 3 in the chart. If your urine colour matches 4 to 8, then you are dehydrated and must follow a rehydration protocol.



### **Nutrition**



Nutrition, how it works and what foods you should be eating during your training and games are very important to your sport and performance. It is important to find the right balance between fats, carbohydrates and protein to ensure your body has enough fuel to sustain not only a single game of Rugby but also the training necessary to make it to that point. The body can be put through rigorous amounts

of training but only if you supply it with the food it needs to stay strong and energised.

It is becoming apparent that many people eat too much carbohydrate including fructose from fruit. Carbohydrate intake should be mainly slow release (low GI) rather than refined carbohydrates (high GI). By contrast, most people's diets contain too little protein (animal, especially fish and white meat, and plant), and vegetables. Most players should not need any protein supplementation. Vegetables are preferred to fruit as the main source of fibre, vitamins and minerals. In most people, eating a fresh balanced diet ingests sufficient vitamins and minerals so supplements should not be required.

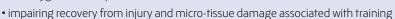
An example of a nutritional plan can be downloaded from: rugbyready.worldrugby.org/en/downloads



### Alcohol

Alcohol consumption is harmful as it affects training and performance in several ways, such as:

- reducing muscle force production
- decreasing muscle strength and power capabilities
- altering the transport, activation, utilisation and storage of most nutrients
- causing dehydration which may persist long after alcohol consumption dehydration impairs performance
- altering protein and carbohydrate metabolism, increasing metabolic rate and oxygen consumption



• impairing the functioning of the central nervous system, co-ordination and precision.

### Dietary supplements a case study

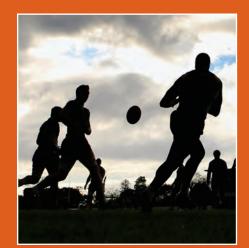
Adam Dean, a 17 year old Rugby player, was achieving the highest honours at his age group in Rugby, receiving international caps for England at under 18 level. Following the pressures of being told he needed to be "bigger, faster and stronger", Adam began the use of supplements to complement his training and diet.

Although aware of having to adhere to the rules of the Prohibited List, the education Adam had received had not made him fully aware of the risk of potential contamination of supplements and he decided to make his decision based on his own research.

Adam chose a supplement that did not have any prohibited substances on the product label, a product that also made claims of being "suitable for drug tested athletes". Assuming that the information provided by the manufacturer was accurate and substantiated, Adam began to take the supplements as part of his training regime.

#### Adam tested positive for

19-Norandrosterone (a prohibited anabolic agent) and the only explanation Adam could comprehend was that the positive test was attributable to the supplements that he was taking. Adam was banned for two years from Rugby.



### Drugs

Doping control plays an essential part in promoting and protecting doping free Rugby. World Rugby operates a zero tolerance policy to doping in Rugby. As a player you are solely responsible for any prohibited substances found to be present in your body. It is not necessary that intent or fault on your part be shown in order for an anti-doping rule violation to be established. This is known as the 'strict liability' principle.

### **Prohibited List**

The Prohibited List is updated annually by the World Anti Doping Agency (WADA) and defines what substances and methods are prohibited in Rugby. The current Prohibited List can be downloaded from the World Rugby's anti-doping web site at: **keeprugbyclean.worldrugby.org** 

### **Medications and dietary supplements**

Players who are taking any medication, prescribed or otherwise, or dietary supplement, should be certain it does not contain a prohibited substance. To check the ingredients of specific substances, the Global Drug Reference Online at www.globaldro.com may be of assistance, but only for products purchased in Canada, the UK or the USA. If in doubt, or for any other country, contact your National Anti-Doping Organisation.

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Always advise your doctor or
pharmacist before you are
prescribed a
medication
that you may
be subject to
drug testing.
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The biggest risk associated with the use of dietary supplements is

cross contamination or lacing with substances that are prohibited. A product could contain ingredients that are also not listed on the label which are prohibited. A product should only be used where the nutritional review and supplementation process is controlled and individually monitored by appropriately qualified medical practitioners or nutritionists.

## Therapeutic Use Exemption (TUE)

Rugby has a process to provide a player with authorisation to use a prohibited substance or method to treat a legitimate medical condition or illness whilst continuing to play Rugby. More information on TUEs can be found at: **keeprugbyclean.worldrugby.org** 

### **Drug testing procedures**

If you are ever selected for testing you should know what is involved and what rights and responsibilities you have.



You can read more information which explains the doping control process at: **keeprugbyclean.worldrugby.org** 

### 'Social' drugs – Cannabis, Cocaine, Ecstasy, Amphetamines

Cannabis, cocaine, ecstasy and amphetamines are all prohibited substances and players who return a positive sample for any of them may be subject to sanctions with a starting point of a twoyear ban from all sport.

The residue for all of these substances can be detected in the body for days after they were taken, and in the case of cannabis, sometimes weeks.

For more information on the effects of these substances visit:



keeprugbyclean.worldrugby.org



## Warm-up



Understanding the warm-up is a vitally important first step for any player to become Rugby Ready. The aims of the warm-up are to prepare the players to perform effectively and efficiently, and to reduce the risk of injury.

The warm-up should last between 10 and 20 minutes, depending on the activity to follow. It must be versatile enough to be adaptable to meet the requirements of a competitive match or a training session. The warm-up should start off at low intensity, with a gradual progression through a series of movements from a general and simple level to a more specific and higher intensity level. This will enable the players to prepare muscles and joints to move at the appropriate speed and with the range of motion that is required by the following session or game.

The key benefits of the warm-up are:

- to raise the temperature of the body so that muscles become more elastic and thus movements are more efficient
- to stimulate the heart and lungs so that the pulse and breathing rates are increased
- to activate the relevant muscle groups
- to improve reaction speed by stimulating the nervous system
- to improve co-ordination
- to enable the players to prepare mentally.

The warm-up has three distinct phases:

### 1. General mobility

Begin the warm-up with some light jogging / fun activities to get the heart pumping and the blood flowing, moving on to some basic movements to loosen up the muscles and increase joint mobility. Use dynamic stretches in the warm-up as static stretches may be counter-productive, because they might reduce power output and relax the player as opposed to improving physical readiness and sharpening mental awareness.



Below are some examples of exercises which can be completed during the general mobility section. The reps and time spent completing the exercises will vary depending on the players' experience and the content of the session or match to follow.

#### Squats

Squat as low as possible while maintaining a straight back. Squat to a slow and controlled tempo. Look straight ahead. Keep your heels on the ground throughout the exercise. A variation option would be to hold a ball above the head.



### Lunge twist

Step forward and bend your back knee. Keep your back straight and perpendicular to the ground. Don't let your front knee go past your toes. Twist to the left and right in a controlled manner. Step forward with the rear leg so it lands level with the front leg. Repeat same movement starting with the opposite leg.



### **Standing lateral lunge**

Step to the left, bending your left knee and keeping your right leg straight. Return to the upright position, and perform the same movement on the opposite side. Keep your back straight throughout.



### **Back slaps**

Start with arms fully extended behind. Swing the arms forwards, crossing them over to complete the back slap. Return to start position and repeat, alternating the top arm each time.



### 2. Transit mobility

The next stage of the warm-up increases the level of intensity and focuses more on transit movements that require the player to travel a greater distance. Use dynamic stretches as shown here, not static stretches, at this stage.

Below are some examples of exercises which can be completed during the transit mobility section. The reps and time spent completing the exercises will vary depending on the players' experience and the content of the session or match to follow.

### Walking lunge



This is an excellent exercise for the hip and buttock muscles. It also prepares the groin, quadriceps and hamstring muscles. Keep the chest high and back flat, whilst keeping the head still and chin off the chest. The movement begins by standing with the feet together and by taking a stride with a high knee that is long enough to stretch the hip and hamstrings but not so deep that balance is lost. Don't let your front knee go past your toes. Bring your rear foot forward to land beside your front foot. Repeat with the opposite leg. A variation option would be to hold a ball above the head.

### Walking carioca



Walk sideways by placing your right foot across the front of the body until it is past the left foot. Place the weight of your body on the right foot and pull your left foot past your right foot. Place your right foot behind your body and past your left foot. Pull your body sideways with your right foot and place your left foot past your right. Complete above for a set distance and complete facing both ways.

### Walking high knee stretch

This is a good starting drill as it stretches the muscles of the hips and buttocks. Keep the chest high and spread wide, whilst focusing on pulling shoulder blades down and drawing them together. Step forward and grasp the shin of the opposite leg and pull the knee to the chest. Focus on extending the supporting leg and raise up onto the toes. This will also prepare the muscles of the foot and ankle joint.



### Quad stretch / kicks

Raise one leg from the ground in a stable and controlled manner. Kick the leg straight up so you feel a stretch on the front of your thigh. Repeat the same movement with the opposite leg.





### 3. Skill preparation

The warm-up can be used not only to prepare the player for the session but also to develop the player's skills at the same time. Coaches should integrate a technical element into the warm-up which relates to the main focus of the session.

Players can work in pairs or in small groups focusing on the skills which will be required in the session, e.g., scrum, lineout, tackle, etc.











## **Principles of play**

Rugby is an invasion and evasion game; once possession has been gained, the objective is to move the ball forward (by carrying or kicking) into opposition territory and ultimately to score points. It is important for everyone to understand the fundamental principles of play and how they relate to the skills required to play the Game.



### **Foul play**

Foul play is anything a person does within the playing enclosure that is against the letter and spirit of the Laws of the Game. It includes:

- Obstruction
- Unfair play
- Repeated infringements
- Dangerous play
- Misconduct

Any form of foul play must be dealt with quickly and firmly by the referee.

Remember - we all have a collective responsibility to ensure that the unique spirit and ethos of the Game are upheld and that we take a responsible attitude towards the welfare of ourselves and others.

The following sections offer some best practice guidelines for players, coaches and match officials to introduce, develop and execute the skills of Rugby in a safe manner so as to minimise the risk of injury.



- Use conditioned games to build confidence, progress in a safe manner and develop players' decision-making skills
- Observe and analyse players to highlight good practice and identify faults
- Provide positive and constructive feedback to improve players

## **REFEREE TIPS**

View video examples at: rugbyready.worldrugby.org/en/principles



- Protect the space for players to use
- Ensure the Game is played in a safe and enjoyable manner
- Use advantage wherever possible



## **Open field play**



### GAME CONTEXT

Rugby is an invasion and evasion game: once possession has been gained, the objective is to move the ball forward (by carrying or kicking) into opposition territory and ultimately to score points.

The most effective way of moving the ball forward is for the ball carrier to avoid contact by running forwards into space or passing backwards to a team mate.

Contact is, however, inevitable at some point in open play. Using the correct techniques can help retain possession, continue the attack and minimise the chance of injury.



### **Pre-contact**

• Look to evade the defender first - aim for the space around the defender, not the defender's body 12

If contact is unavoidable:

- Avoid head-on tackles by attacking the space and using evasive footwork **2**
- Keep the ball in both hands 23
- Prepare for contact by adopting a strong and stable body position 3
- Force the tackler to make a side-on tackle 3
- Try to stay on your feet 3
- Maintain your momentum using a strong leg drive 3
- Try to pass out of the contact **4**



### **During contact**

If held by an opponent and brought to ground:

- You have been tackled; see also the tackle section
- Try to pass to support on landing 5
- If unable to pass to support, present the ball
- If support players are unable to pick and go / pick and pass, a ruck will form; see the ruck section

If brought to ground but not held by an opponent:

• You have not been tackled; get back to your feet and continue with open play

If held by an opponent but not brought to ground:

- You have not been tackled; maintain a strong body position and forward momentum through leg drive 6
- Brace for the arrival of additional tacklers and/or opposing supporting players
- Look for arriving support 7
- $\cdot$  Offload to a team mate if possible old 8
- If a supporting team mate binds on to you, a maul is formed; see also the maul section





# COACHING TIPS

- Ensure players are aware of and understand the principles of play
- Ensure players understand the importance of evasion and attacking space rather than opting for contact
- Construct sessions to encourage evasion rather than contact skills
- Use key points to improve the players' invasion and evasion skills in a safe manner
- Avoid gender, size, age and experience mismatches when introducing and developing skills
- Focus on one or two key points at a time don't try to coach too many key factors at once

## **REFEREE TIPS**

#### View video examples at:

rugbyready.worldrugby.org/en/openfieldplay Visit World Rugby's Law Education web site at: laws.worldrugby.org



- Keep up with play
- Protect the space for players to use
- Keep a wide view of the field of play

#### Watch for:

- Players who charge or obstruct opponents who are not near the ball (attackers and defenders)
- Players who 'clear out' without legally joining the ruck/maul
- Players who 'tackle' without attempting to use the arms

#### Check that:

- Tackler contact remains below the shoulder level
- Hand-offs are performed legally



## The tackle



A tackle is used by the defending team to stop the attacking team moving forward and is an opportunity for the defending team to contest for possession of the ball. Competence in tackling and taking a tackle is critical in developing a safer and more enjoyable game. Recent studies from Australia and the UK have shown that 58% of injuries result from tackle situations, so it is essential that this aspect of the Game must be must be coached, performed and refereed with due care and attention, with good technique and safe, appropriate practice paramount. This will enable players to become confident and competent in the tackle.

### LAW DEFINITION

A tackle occurs when the ball carrier is held by one or more opponents and is brought to the ground.



### Key points for players in every tackle situation

### Tackler - contact with opponent(s)

- 'Eyes up' looking at the ball carrier to keep head in correct position
- Track the movement of the ball carrier, and get the feet close enough to make the tackle
- Prepare for contact adopt a body position that is strong, stable and low
- Position the head behind or to one side of the ball carrier never position the head in front of the ball carrier
- Use the arms to 'wrap' around the ball carrier
- Release the tackled player, get back to your feet immediately and contest for possession

### Ball carrier - contact with ground

- Carry the ball in both hands
- Protect the ball hold it tight to your chest with elbows in to your sides
- Make contact with the ground with the buttocks and then shoulder
- Don't break your fall with your hand or the ball
- Turn towards your team and pass, place or present the ball
- Get back to your feet as soon as possible

For specific key points, see the individual tackle types below.

Player safety research for the tackle tells us that:

- 55-60 % of injuries in adult Rugby result from the tackle
- Poor head position will cause head and neck injuries - in adult Rugby, 72% of all concussion injuries are sustained in the tackle, and in junior Rugby, the head is one of the commonest body parts injured
- Collisions are 70% more likely to result in an injury than a legal tackle

### Shoulder tackle - front-on

- 'Eyes up' looking at the ball carrier to keep head in correct position
- Maintain strong, stable and low body position 1
- Target and make contact with the shoulder on the ball carrier's thighs 2
- Squeeze the arms tight around the ball carrier's legs while driving with the legs 3
- $\cdot$  Continue the leg drive to bring the ball carrier to ground  ${f Q}$
- Release the ball carrier 5
- Get back to feet quickly 6
- Contest for possession 7









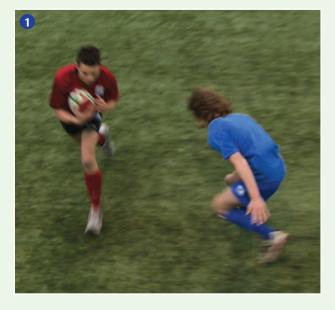






### Shoulder tackle - side-on

- 'Eyes up' looking at the ball carrier to keep head in correct position
- $\cdot$  Maintain strong, stable and low body position  $oldsymbol{1}$
- Target and make contact with the shoulder on the ball carrier's thighs 2
- Squeeze the arms tight around the ball carrier's legs, drive with the legs and bring the ball carrier to ground 3
- Roll to finish on top 4
- Release the ball carrier and get back to feet quickly
- Contest for possession 6











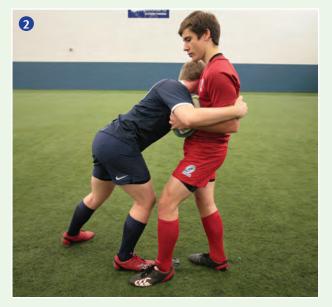


### Smother tackle

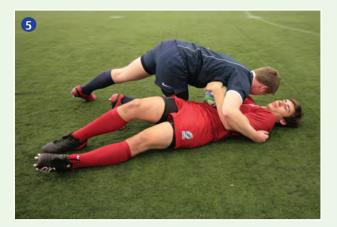
- Plant lead foot close to attacker 1
- Target the ball which should be between waist and chest height 2
- Try to wrap both arms around the ball carrier and in doing so trap the ball carrier's arms and the ball 3
- Drive forward after contact 4
- Bring the ball carrier to the ground 5











## Tap tackle

- Chase the ball carrier until within diving distance
- Dive and make contact with the ball carrier's feet or ankles with an outstretched arm 1
- Keep the head away from the ball carrier's feet 2

Unless the ball carrier is held after being brought to ground, then in Law, a tackle has not been made and the referee will allow open play to continue.





## Tackles involving more than one tackler

- First tackler should follow the key points for the front-on shoulder tackle
- Second tackler should follow the key points for the smother tackle
- Try to communicate with the other tackler and act simultaneously
- Both players should release the tackled player as soon as possible, get back to their feet and compete for the ball



Nearly half of all tackles involve more than one tackler. The double tackle is rarely planned and is difficult to coach. It is not encouraged, particularly among young players.

## **Tackle from behind**

- Chase the ball carrier until within tackling distance
- $\cdot$  Wrap the arms around the hips/legs of the ball carrier  $oldsymbol{1}$
- $\cdot$  With the head to the side, make contact with the shoulder and pull the arms inward  $oldsymbol{1}$
- Squeeze the arms tight and slide down the ball carrier's body (remembering to keep the head to one side) until the ball carrier is taken to the floor and finish on top 23







## Tackling in a dangerous manner

All players are responsible for their actions when tackling a ball carrier and, as such, a tackler must **NOT** 'tackle' an opponent in a dangerous manner. Examples of dangerous 'tackles' include:

**High contact** - 'Tackling' above the line of the shoulders, especially around the neck or head

In the air - 'Tackling' a player whose feet are off the ground





**Spear/tip tackle** - Lifting a ball carrier (opponent) from the ground and dropping that player (tipping) or driving that player (spear) onto the ground so they land on their upper body, neck or head

Late (ball gone) - 'Tackling' a player after a pass is made





Early - 'Tackling' a player without the ball



**Charging** - 'Tackling' a ball carrier without attempting to grasp that player using hands/arms



## **Arriving players**

- All arriving players must enter the tackle area through the gate (see page 41)
- Only players on their feet may compete for the ball
- Keep shoulders above hips
- Players arriving at an attempted but incomplete tackle:
  - maintain a strong, stable and low body position
  - use the arms to grasp ball carrier
  - avoid contact with other players' heads and necks
  - bring the ball carrier safely to the ground
- If clearing or driving out defenders:
  - maintain a strong, stable and low body position
  - 'eyes up' sight the target, chin off the chest
  - keep the spine in line with the direction of drive
  - start the drive from a low body position
  - make contact with defender using the shoulder and arms, not the head
  - close arms around opponent
  - drive the player away and clear the ball
  - bind with a team mate to improve stability

## How the tackle gate forms

During the tackle, both players should attempt to rotate to face their own team mates.

# Red team

Blue team



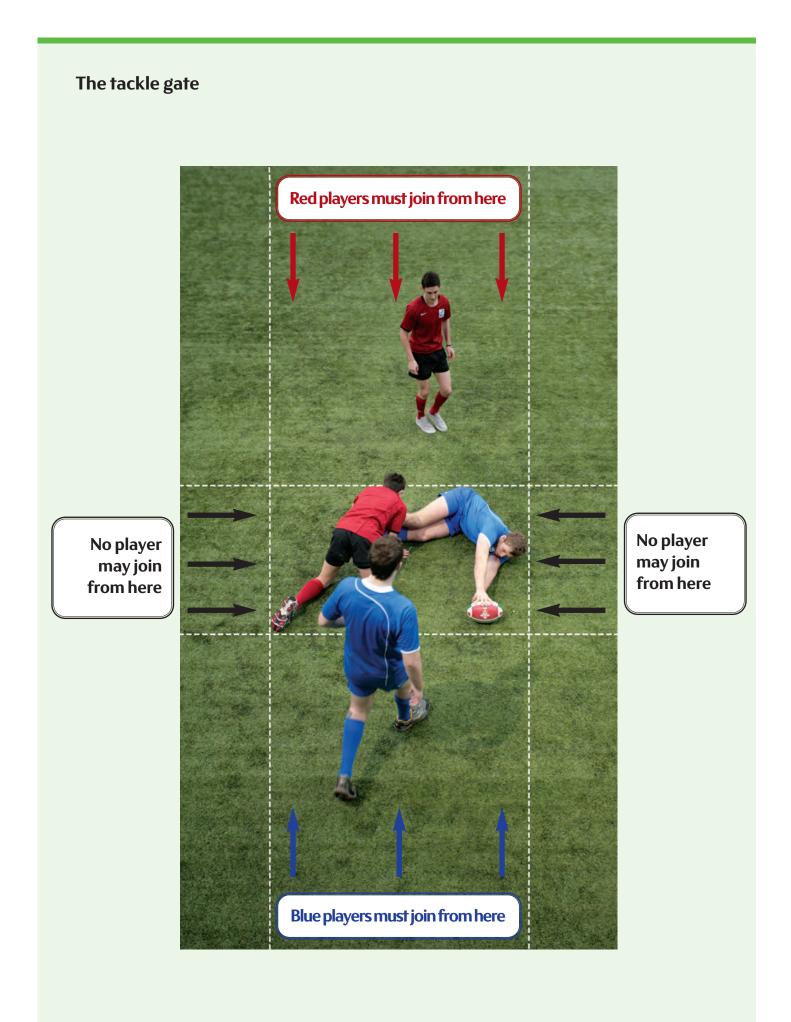
Before contact



**Red team** 

**Blue team** 

**Tackle completed** 



# COACHING TIPS

Poorly executed tackles tend to be the result of poor positioning by the tackler rather than poor tackle technique. Correct positioning can and should be practised. It involves the tackler closing down the ball carrier's space and then establishing balance and stability before stepping in close with the lead foot to allow shoulder and arm contact, which should then allow leg drive in the tackle.

- Use the key points to improve the players' tackle skills in a safe manner
- Emphasise the legal requirements in the tackle regarding use of arms (see the earlier section on dangerous tackles)
- Focus on one or two key points at a time don't try to coach too many key factors at once
- Observe and analyse players to highlight good practice and correct faults
- Provide positive and constructive feedback to improve players
- Construct coaching sessions to encourage progressive development, and build confidence
- An example of the tackle progression for the side-on tackle is as follows:
  - Ball carrier kneel tackler kneel (only for side-on tackle to demonstrate head position)
  - Ball carrier stand tackler kneel (encourage leg drive)
  - Ball carrier walk tackler on one knee
  - Ball carrier stand tackler squat
  - Ball carrier walk tackler squat
  - Ball carrier walk tackler walk
  - Ball carrier run tackler run
- Avoid gender, size, age and experience mismatches when introducing and developing skills
- Ensure players practise in sufficient space to avoid accidental collisions with unseen players

# **REFEREE TIPS**

View video examples at **rugbyready.worldrugby.org/en/tackle** Visit World Rugby's Law Education web site at **laws.worldrugby.org** 



## Check that:

- The tackle is made below the shoulder line
- The tackler uses the arms to grab and hold the ball carrier
- If the ball carrier is lifted off the ground, they are brought back to ground safely
- The tackler releases the tackled player
- The tackled player passes, places or releases the ball immediately
- Both players get to their feet
- Arriving players enter the tackle zone through the correct gate
- Arriving players remain on their feet

### Watch for:

- Illegal and/or dangerous acts, which are not tackles (see the earlier section on dangerous tackles)
- Players who charge or obstruct opponents who are not near the ball
- Tackles making contact with the head or neck or which might cause damage to the neck or head these **MUST** be strictly dealt with



# The ruck

## GAME CONTEXT

A ruck typically evolves from a tackle situation and can develop into an effective method of retaining or contesting possession. A ruck can commit defenders, therefore creating an opportunity to create space. On formation of the ruck, offside lines are created.

## LAW DEFINITION

A ruck is a phase of play where one or more players from each team, who are on their feet, in physical contact, close around the ball on the ground. Open play has ended.

# COACHING TIPS

- Use conditioned games to develop support players' decision-making skills
- Practise and re-practise all contact skills
- Use opposition progressively, e.g., touch, ruck touch, defenders with bags, full contact
- Ensure all players maintain a strong body shape throughout the contact and emphasise the need to stay on their feet and be able to support their body weight at all times
- Ensure all players are aware of the Laws governing the ruck, especially those relating to safety
- Coaches should not coach and/or encourage 'squeeze ball' due to the risk of injury. At levels below U19, it is also an illegal act

## **REFEREE TIPS**

View video examples at: **rugbyready.worldrugby.org/en/ruck** Visit World Rugby's Law Education web site at: **laws.worldrugby.org** 



#### Check that:

- Players joining the ruck do so from behind the feet of the hindmost player and by binding onto a team-mate
- Players are on their feet when joining the ruck and remain on their feet until the ruck has ended
- Players keep their shoulders above their hips

### Watch for:

- Players intentionally falling to the ground over the ball
- Rucking of the player rather than the ball

- Players who intentionally jump on top of a ruck
- Players attempting to gain possession using their hands
- Players charging into rucks without binding
- Players clearing out opponents who are not part of the ruck
- Players who are not participating in the ruck breaking their offside line
- Players lifting opponents out of the ruck



- After the tackle, the ball carrier should present the ball quickly, with both hands, as far away from the opposition as possible 12
- Arriving players should adopt a strong, stable body position, with head and shoulders above hips at all times, 'eyes up' and make contact by binding on a player using the whole arm as they join the ruck 2
- Join the ruck from behind the foot of the hindmost team-mate in the ruck; this represents the offside line 3
- Support players must bind onto team-mates and drive over and, if appropriate, past the ball. When the ball leaves the ruck, the nearest support player should play the ball 3 4 5
- Players who leave the ruck must immediately retire behind their offside line
- All players at a ruck must remain on the their feet and support their own body weight











#### Player safety research for the ruck tells us that:

- 'Eyes up' to keep head and neck in a good position
- Keep head and shoulders above hips at all times
- Make contact by binding on a player using the whole arm
- 'Squeeze ball' is a potentially dangerous technique. It is not permitted below U19 level and should be discouraged in adults



## The maul

## GAME CONTEXT

A maul typically evolves from a contact situation where the ball carrier is held by an opponent but is not brought to ground. It can develop into an effective method of retaining or contesting possession. A maul can be a dynamic attacking platform which commits defenders and therefore creates space to play. On formation of the maul, offside lines are created.

## LAW DEFINITION

A maul begins when a player carrying the ball is held by one or more opponents, and one or more of the ball carrier's team mates bind on the ball carrier. A maul therefore consists, when it begins, of at least three players, all on their feet; the ball carrier and one player from each team. All players involved must be caught in or bound to the maul and must be on their feet and moving towards a goal line. Open play has ended.

# COACHING TIPS

- Use conditioned games to develop support players' decision-making skills
- Practise and re-practise all contact skills
- Use opposition progressively: e.g., touch, maul touch, defenders with bags, full contact
- Ensure all players maintain a strong body shape throughout the contact and emphasise joining the maul legally by binding onto a team-mate
- Ensure all players are aware of the Laws governing the maul, especially those relating to safety; players in defence must be encouraged to remain on their feet at all times and not illegally 'pull down' a maul

## **REFEREE TIPS**

View video examples at: **rugbyready.worldrugby.org/en/maul** Visit World Rugby's Law Education web site at: **laws.worldrugby.org** 



### Check that:

- The ball carrier remains fully bound
- Players joining the maul do so from behind the feet of the hindmost player and by binding onto a team-mate
- Players who are not participating in the maul remain behind their offside line

### Watch for:

- Players who drag opponents out of a maul
- Players who try to collapse the maul
- Players charging into the maul
- Players lifting opponents in the maul



- $\cdot$  Maintain forward momentum and make the ball available to your team mates  $oldsymbol{1}$
- First arriving support player attempt to secure possession by ripping the ball free or driving beyond the ball 2
- Subsequent support (second and third arriving players) bind onto the ball carrier and maintain forward momentum 3
- Heads and shoulders should be no lower than hips and all players must be bound 3 4
- All support players must conform to basic safety key factors:
  - Adopt a strong and stable body position,
  - Keep the spine in line with the direction of drive
  - Drive from low to high
  - Bind onto team mate making contact using the shoulder and arm
  - Remain on your feet at all times while driving forward
- Drive forward in a balanced formation 3
- $\cdot$  When additional support arrives, move the ball further back from opposition m 4
- Once the ball is at the back, the ball carrier can either continue driving, leave the maul or pass to a team mate 45











Player safety research for the maul tells us that players should:

- have the 'eyes up' to keep head and neck in a good position
- keep head and shoulders above hips at all times
- make contact by binding on a player using the whole arm



## The scrum



## GAME CONTEXT

The scrum is a restart of the game that takes place after a minor infringement such as a forward pass. It is a physical contest for possession and therefore, as with any contact, safety must be a prime consideration. Players, coaches and referees all have a responsibility to ensure the scrum is fair, competitive and safe. It is imperative that all players understand the correct techniques for their position and collaborate with their opponents to stay on their feet.

In the scrum, the non-offending team has the advantage of throwing the ball in, usually from the left hand side of the scrum. The defending side has the opportunity to regain possession by either trying to hook the ball on the throw-in, or by driving the attacking team back over the ball.

The scrum restarts the match and open play follows when the ball emerges from the scrum.



A scrum is formed in the field of play when eight players from each team, bound together in three rows for each team, close up with their opponents so that the heads of the front rows are interlocked. This creates a tunnel into which a scrum half throws in the ball so that front row players can compete for possession by hooking the ball with either of their feet.



## **REFEREE TIPS**

View video examples at: **rugbyready.worldrugby.org/en/scrum** Visit World Rugby's Law Education web site at: **laws.worldrugby.org** 



#### Before the match:

- Check that all front row players are suitably trained for the level of the game
- Speak to the front row forwards and scrum halves to explain the sequence of the engagement process

#### At the scrum:

- Be directive throughout the process
- Ensure both packs are ready before initiating the engagement sequence
- Ensure neither front row is driving down or have their shoulders below their hips

- Check correct binding
- Ensure the ball is thrown in straight down the tunnel
- If the scrum becomes unstable, blow the whistle early and loudly
- Ensure the defending side does not illegally disrupt possession
- Ensure players not in the scrum remain onside
- If you have any safety doubts, go to uncontested scrums

## **Scrum Ready**

The starting point is to understand the individual body shape required of all participants. Players must adopt and maintain a strong and stable body position throughout the process.

Players should progress to the next stage only when they can demonstrate competence at each stage of the process as defined below.

# Players should NOT play in the scrum until they are Scrum Ready.

In the images on the following pages, the player in red is the player going through the Scrum Ready process.

Advice offered for each stage holds true for subsequent stages.







- Head in neutral position
- Shoulder blades back
- Chest out
- Chest ahead of the knees
- Tight core (stomach muscles clenched)
- Hips tilted (bum pointing out/up)



- Encourage all scrum players to strengthen the neck and shoulder areas during training
- Observe and analyse player's body position before, during and after engagement and correct technique accordingly

## Research

Player safety research for the scrum tells us that:

- The propensity for injury (risk per scrum event) has been rated as the highest for all contact events studied
- Reductions in scrum-related spinal injuries have been achieved through the introduction of compulsory injury prevention programmes
- A mismatch in skill, experience or strength has been identified as a risk factor for injury in the scrum, with evidence of a mismatch of some type in 25% of all scrum injuries
- Lack of experience of playing in the front row has been highlighted as a risk factor for injury and attributed in around 40% of scrum injuries
- Several studies have identified that up to 50% of scrummaging injuries occur during the engagement phase







- Knees slightly bent
- Feet shoulder-width apart and pointing forwards
- Weight on balls of feet



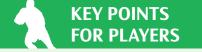
• Ensure that all players are wearing suitable footwear for the playing surface and conditions



• Ensure that all players are wearing suitable footwear for the playing surface and conditions







• On engagement work hard to maintain a safe, strong and stable body position whilst binding safely to the machine

# COACHING TIPS

- Practise using the correct engagement sequence
- Ensure backs are flat and heads are in a neutral position. If the head is down, the body will follow. If the head is too high, there is the risk of impacting the head on the opposition shoulder, thereby putting stress on the neck



• Practise using the correct engagement sequence



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## KEY POINTS FOR PLAYERS

- Aim to position 'ear to ear' with opponent at crouch stage
- Engage after following the correct sequence and only after the referee's command
- Form a legal bind with opponent
- On engagement work hard to maintain a safe, strong and stable body position

# COACHING TIPS

• Ensure players bind legally

# REFEREE TIPS

- Ensure players are aware of the correct engagement sequence
- Look out for illegal binding











## KEY POINTS FOR PLAYERS

- Form a legal bind with team mates and opponents
- Do not push until the ball is in



• Ensure players bind legally to team mates and opponents











• Form a safe bind with machine











































# The lineout

## GAME CONTEXT

The lineout is a means of restarting the game after the ball, or a player carrying the ball, crosses the touchline. The opponents of the team who last held or touched the ball, prior to it going out of play, throw the ball into the lineout. To win possession, any player in the lineout can jump for the ball, supported in the jump by two team mates. The team throwing in the ball has the advantage since they can call a code that alerts their team mates to the destination of the throw. After the ball is caught, the ball can be passed to the scrum half for further distribution or a maul can develop. The option chosen may depend on field position. The age at which players may be supported can vary per Union. All should make themselves aware of the differences.

## LAW DEFINITION

The purpose of the lineout is to restart play quickly, safely and fairly, after the ball has gone into touch, using a throw-in between two lines of players.

# COACHING TIPS

- Use progressions to ensure safety
- Start with support players lifting rucking pads and tackle bags to build technique and coordination
- Ensure support players are using the legs rather than the back to support the jumper
- Work with jumpers to ensure they maintain a strong, long body position throughout the jump
- Focus on developing the speed and coordination of each jumper/support group
- Ensure the thrower practises individual skill
- Challenge the jumper to perform different distribution options after the catch

# REFEREE TIPS

#### Check that:

- The lineout is formed with two straight lines, each 0.5m from the mark
- The ball is thrown in straight between the two lines
- Jumpers are correctly supported in the lineout and brought safely back to the ground (players not being abandoned in mid air).
- Players not participating in the lineout retire behind the 10-metre offside line

#### Watch for:

- Players intentionally destabilising players in the air
- Players destabilising the support players who are holding players in the air
- Players closing the space between the two lines illegally
- Players who lever on an opponent
- Players holding or shoving an opponent
- Players illegally charging an opponent
- Support players moving to obstruct the opposition

## **KEY POINTS FOR PLAYERS**







## **General points**

- All players should ideally be able to be jumpers and supporters
- Players can change roles (jumper/supporters) and position during the lineout
- The performance of the thrower is key to a successful lineout
- Players must communicate to ensure a safe and effective lineout

## Jumper

- Starting position:
  - Chest and hands up 1
  - Bend knees 2
- Explode upwards from a two-footed take off 3
- Move dynamically into a position from which you can easily be supported 4
- Maintain a long body shape (brace by squeezing butt cheeks) to ensure that both jumper and support players can maintain control **5**
- Sight ball through hands as you extend arms to catch 5
- Communicate with your support players to manage your safe return to the ground 6
- $\cdot$  Make a two-footed landing and bend at the knees 7









### Lineout safety:

- Players must not do anything to intentionally destabilise a player in the air
- Players must not do anything to intentionally destabilise a player who is supporting a player in the air
- Support players are responsible for the players in the air and bringing them to ground safely

## Support players

- Move with the jumper into space
- $\cdot$  Form a stable, wide base, with feet shoulder width apart  $oldsymbol{1}$
- Adopt a squat position with a flat back, bend at the knees and keep the chest up **2 3 4 5**
- Grip with palms towards jumper and fingers open 6789













Front lifter





Back lifter





## Support players (continued)

- Support the jumper with leg drive and locked arms 10 11 12 13
- Push together on the jumper to support the jumper 10 11 12 13
- Ensure the jumper is returned to the ground safely and under control without moving into a position which obstructs/blocks the opposition 14 15 16













# **Cool-down and recovery**

During exercise, the body goes through a number of stressful processes. Muscle fibres, tendons and ligaments become damaged and waste products build up in the body. An effective cool-down is necessary to enable the player to recover fully from the activity. Players should take responsibility for their cool-down as well as their warm-up. It should be noted that it is just as important for match officials as well as players to follow a safe and effective cool-down routine.

The cool-down has three distinct phases:

- 1. Gentle exercise
- 2. Stretching
- 3. Re-fuel

## **Cool-down routine**

Some players might be new to the sport. Coaches should ensure there is a cool-down routine available for players, and that they follow a safe and effective cool-down routine.

Five minutes of gentle exercise like light aerobic exercise in the form of jogging and walking with a combination of upper body drills such as low impact arm swings, shoulder circles, rolls and back slaps will assist the player in cooling down.

This process will gradually help the heart rate to return to a normal, resting pulse rate. This will in turn prevent the pooling of blood in the limbs and reduce feelings of fatigue.

Deep breathing should be included in the cool-down to help the body recover by oxygenating the system.

Follow with 5-10 minutes of static stretches. This will help the joints and muscles return to their normal length and function, thereby accelerating the recovery process. Using static stretching in the cool-down will increase flexibility and may reduce the risk of injury in future exercise or game situations.

Part of a good recovery includes ensuring you re-hydrate well. Plain water not ideal as it tends to encourage urination; milk shake or milk is ideal. Re-fuel by eating within 60 minutes of activity (ideally a meal high in carbohydrate and a moderate amount of protein). A post-match recovery should also involve light activity (light cycling/jogging for 20 minutes and stretching the day after activity). Following a training session or match, try to get a good quality, uninterrupted eight hours of sleep.

Below are some examples of static stretching where the player holds each stretch for 10-30 seconds, for 2 or 3 times on each limb. Some of the important stretches are for the hamstring, calf, hip flexor, quad and shoulder.

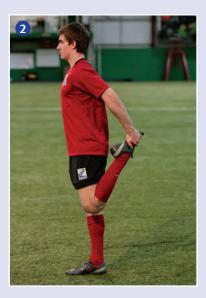
### Hamstring stretch 1

Bend your rear leg, and keep your front leg straight. Keep your back straight and lean towards the straight leg.



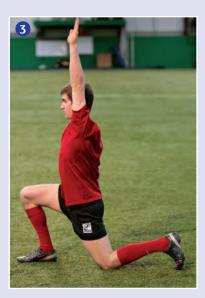
## Quad stretch 2

In a standing position, hold one of your legs with your hand on the same side. Keep your back straight and both knees in line.



## Hip flexor stretch 3

In a kneeling position, raise the arm on the same side as the kneeling leg. Slowly push your hip forward until you feel a stretch.



## Lat stretch 4

In a kneeling position, reach forward with both arms. Slowly lower your shoulders to the ground until you feel a stretch.



## Calf stretch 5

Go into a sprinter's start position with both knees bent. Slowly straighten the rear leg and lower the heel to the ground until you feel a stretch.





## **Injury management**

Injuries are a part of any contact sport. Serious or life threatening injury in Rugby is, however, rare. The outcome of many injuries can often be improved by very simple first aid skills until emergency help arrives. For the majority of the Rugby-playing world, there is little qualified medical support available pitch side. Thus, first aid responsibility may fall to club officials, coaches, players, parents, or referees.

Often when faced with an injury, the issue is what not to do rather than what to do, i.e., 'do no further harm'. Many things improve with a little bit of time and, commonly, taking control of a situation and preventing panic is all that is needed until the player improves or more experienced help arrives. In certain circumstances, simple measures such as protecting the head and neck, ensuring an open airway or supporting an injured limb are often all that is needed in the immediate stages of injury management.

There are, of course, some conditions where the idea of simply supporting the player and waiting will be the wrong thing to do, e.g. cardiac arrest. These, while rare, do occur and are one reason for ensuring there is trained first aid support available at games and training. World Rugby recommends that there is an appropriate level of first aid cover at every game and training session. World Rugby provides different levels of training and more details can be found at **playerwelfare.worldrugby.org/firstaidinrugby** 

The general principles of looking after an injured player are:

- 1. Do no further harm
- 2. Take control
- 3. Avoid unnecessary movement
- 4. Speak to the player
- 5. Call for help if needed
- 6. Ensure more experienced help is on the way
- 7. Recognise when you need to do more which may include calling an ambulance



Take control of the situation. Preventing panic until the player improves or more experienced help arrives is fundamental to looking after an injured player.



All stakeholders - coaches, referees, parents, and anyone else involved in the Game - should undertake at least basic first aid training

## For non-life-threatening and non-limb-threatening injuries

Assess the player on the field of play using the **TOTAPS** system.

Steps	Assessment	Action
<b>T</b> alk	What happened? Where does it hurt?	
<b>O</b> bserve	Look at the injured area. Is it different from the other side (swollen, deformity, different colour, etc)?	If swollen or there is a deformity, call first aider.
<b>T</b> ouch	Feel for swelling, tenderness and pain.	If tender to touch, call first aider.
<b>A</b> ctive movement	Ask the player to move the injured part without assistance.	If unable to move or painful to move, call first aider, and remove from the field (non weight-bearing).
<b>P</b> assive movement	If the player moves the injured part actively, then carefully move it through a full range of movement.	If unable to do so or painful, the player should be removed from the field (non weight-bearing).
<b>S</b> kill test	If the active and passive movements did not produce pain, ask the player to stand and see if lower limb is fully weight-bearing and he/she can walk.	If unable to do so, the player should be removed from the field (non weight-bearing).

## Bleeding

When treating a bleeding player, gloves should be worn to protect the player and the first-aider from possible transmission of bloodborne diseases such as HIV and hepatitis. Blood must not be transferred from one player to another. Any items that have been contaminated by blood must be sealed in a plastic bag and discarded appropriately.

Major bleeding must be treated as soon as possible to reduce the flow of blood, as this may be enough to preserve a life. Apply direct pressure to a wound first and only apply indirect pressure if this is not possible. Arrange urgent transport to a hospital or doctor's surgery.





Visit World Rugby's Law Education web site at **laws.worldrugby.org** 

- Check who the first aider is covering the game and where they will be located
- Confirm any signals to be used
- If a player is injured and continuation of play would be dangerous, the referee must stop play
- Players must not wear any items of clothing that are contaminated by blood
- Players who have an open or bleeding wound must leave the playing area and must not return until the bleeding is controlled and the wound has been covered

## Soft tissue injuries

Soft tissue injuries are typically ligament sprains and muscle strains, tears and bruises. They should be treated using the method known as **PRICED**.

<b>P</b> rotect	Once an injury has occurred, it is of vital importance that the injured area and the player are protected from further injury. Failure to do so can exacerbate the problem and delay healing. • Abrasions / lacerations should be covered • The injured joint should be supported by taping or bracing • Weight-bearing should be avoided
Rest	Adequate rest to enable tissue healing and repair is vital for any injury. Remember - if it hurts, it is probably not good for the injury. Don't put any weight on the injured part of the body.
lce	Application of ice to an injury helps prevent bleeding and further swelling. Regular use of crushed ice in a damp towel is helpful in shortening recovery time and decreasing pain in the interim. Apply ice to the injury for 20 minutes every 2 hours for the first 48 hours. Protection of the skin with petroleum jelly or oil avoids unnecessary thermal injury.
Compression	Compression of a soft tissue injury prevents swelling and shortens recovery time. Compression using a firm bandage is effective. Ensure that bandaging is not so tight that it cuts off circulation or causes tingling or pain past the bandage. Bandage the area between ice treatments.
<b>E</b> levation	Elevation of the affected area decreases swelling and pain.
<b>D</b> iagnosis	Early diagnosis by an appropriately qualified health professional and correct management are the fastest route to recovery. Consult a medical professional, especially if you are worried about the injury, the pain or swelling gets worse or the pain or swelling has not gone down within 48 hours.



Ice helps to prevent bleeding and further swelling



Elevation decreases swelling and pain

Once the injury has been diagnosed, avoid any element of **HARM** for 72 hours.

<b>H</b> eat	Can increase bleeding and swelling and worsen pain and stiffness.	
Alcohol	Can increase bleeding and swelling as well as masking pain and the severity of the injury.	
<b>R</b> unning	Rest is essential.	
Massage	Best avoided as it can increase bleeding and swelling, thereby delaying recovery.	

## Concussion

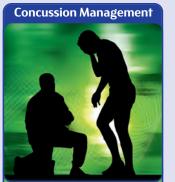
Concussion must be taken extremely seriously to safeguard the short and long-term welfare of players. Although commonly caused by a blow to the head, it can come from a blow to the body where the force of the collision is transmitted up to the brain. It is not always associated with loss of consciousness.

Concussion has many different symptoms or signs and many of these can be found in the World Rugby Concussion Guidelines at playerwelfare.worldrugby.org/concussion. Common symptoms include poor concentration, memory loss and balance difficulties. The Pocket Concussion Recognition Tool (shown below) may help with the recognition of concussion.

If an athlete has a suspected concussion, he/she should be removed from the field of play and not allowed to return.

If a concussed player continues to play, they will put themselves at risk of greater injury and they will also let the team down because they will have difficulty processing the game happening around them.

Young players are more susceptible to rare and dangerous neurological complications, including death, caused by a



Recognise and remove worldrugby.org/concussion

second impact in an already concussed or not fully recovered individual.

Anyone removed due to suspected concussion should be assessed by a health care professional. They should not be allowed to drive a motor vehicle. Return to play should follow a graduated approach as described in the World Rugby Concussion Guidelines.

## **Pocket CONCUSSION RECOGNITION TOOL™**

To help identify concussion in children, youth and adults



#### **RECOGNIZE & REMOVE**

Concussion should be suspected if one or more of the following visible clues, signs, symptoms or errors in memory questions are present.

#### 1. Visible clues of suspected concussion

Any one or more of the following visual clues can indicate a possible concussion:

Loss of consciousness or responsiveness Lying motionless on ground / Slow to get up Unsteady on feet / Balance problems or falling over / Incoordination Grabbing / Clutching of head Dazed, blank or vacant look Confused / Not aware of plays or events

#### 2. Signs and symptoms of suspected concussion

Presence of any one or more of the following signs & symptoms may suggest a concussion:

- Loss of consciousness
- Seizure or convulsion
- Balance problems
- Nausea or vomiting
- Drowsiness
- More emotional
- Irritability
- Sadness

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- Fatigue or low energy
- Nervous or anxious
- "Don't feel right"
- Difficulty remembering

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- Headache
- Dizziness
- Confusion
- Feeling slowed down
- "Pressure in head"
- Blurred vision
- Sensitivity to light
- Amnesia
- Feeling like "in a fog"
- Neck pain
- Sensitivity to noise
- Difficulty concentrating

#### 3. Memory function

Failure to answer any of these questions correctly may suggest a concussion.

- "What venue are we at today?" "Which half is it now?"
- "Who scored last in this game?"
- "What team did you play last week / game?"
- "Did your team win the last game?"

Any athlete with a suspected concussion should be IMMEDIATELY **REMOVED FROM PLAY, and should not be returned to activity until they** are assessed medically. Athletes with a suspected concussion should not be left alone and should not drive a motor vehicle.

It is recommended that, in all cases of suspected concussion, the player is referred to a medical professional for diagnosis and guidance as well as return to play decisions, even if the symptoms resolve.

#### **RED FLAGS**

If ANY of the following are reported then the player should be safely and immediately removed from the field. If no qualified medical professional is available, consider transporting by ambulance for urgent medical assessment:

- Athlete complains of neck pain - Increasing confusion or irritability
- Deteriorating conscious state - Severe or increasing headache
- Unusual behaviour change
- Double vision
- Repeated vomiting - Seizure or convulsion
- Weakness or tingling / burning
- in arms or legs

#### **Remember:**

- In all cases, the basic principles of first aid (danger, response, airway, breathing, circulation) should be followed.
- Do not attempt to move the player (other than required for airway support) unless trained to so do.
- Do not remove helmet (if present) unless trained to do so.
- from McCrory et. al, Consensus Statement on Concussion in Sport. Br J Sports Med 47 (5), 2013

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## Rehabilitation

Rehabilitation requires supervision and management by appropriately trained medical staff, doctors, physiotherapists and fitness advisors. The aim of rehabilitation is to restore the player to full fitness, which includes:

- recovery of muscle strength
- restoration of a full range of movement in the joint
- recovery of co-ordination and balance
- fitness maintained by exercises such as cycling and swimming
- when ready the gradual introduction of Rugby-specific skills
- contact drills followed by full contact.

If all these are achieved - return to play.

### **Return to play**

Players who return to play before full recovery place themselves at significant risk of making the injury worse or developing another injury.

Players should only return to play once the coach, doctor or physiotherapist has tested them to ensure that they are ready to get back onto the field.

These returning players must once again demonstrate that they are Rugby Ready. The tests should include similar fitness tests to those used at the beginning of the season and Rugby skills and movements that the players will perform in a game, e.g., tackling, sidestepping, jumping, etc.

Player profiling information should be used to compare performances and see if players are once again Rugby Ready. If players can demonstrate the same performance level as preinjury, then they are once again Rugby Ready.

Normally, the best advice is, if it hurts, don't play.

## **Injury reporting**

Clubs should maintain a record of injuries that occur. This will enable any patterns and common injuries to be identified and appropriate preventative actions to be taken. This will also provide a record in case of any enquiries or complaints that may be made at a latter date.

Where regions/provinces or Unions have injury reporting systems, it is important that these are complied with. This type of information helps inform player welfare policy and training, such as Rugby Ready.

The World Rugby Injury Report Form can be downloaded from rugbyready.worldrugby.org/en/downloads



## KEY POINTS FOR PLAYERS

- Ensure you are fit to play that you are not feeling unwell, and have fully recovered from any injuries
- Ensure that you have covered any wounds
- If you have any doubt seek advice from your health care provider



- Do not select players who have not fully recovered from injury
- Know what the emergency plan is
- Ensure you have and appropriate level of first aid cover for the game or training session
- Why not do a first aid course yourself?

**Disclaimer** The injury management information provided in this Rugby Ready product is intended as a tool to assist in the care and management of injured players. It does not displace the benefit of having suitably qualified personnel available to treat injuries. World Rugby does not accept any responsibility or liability in negligence or otherwise relation to the treatment, care or management of injured players.



## Summary

Everybody involved in organising and playing Rugby has a duty of care in relation to the players. The Rugby Ready programme is intended to raise awareness of good practice and help stakeholders manage the inherent risks of a contact sport by putting appropriate safeguards in place.

## Now you're Rugby Ready, stay Rugby Ready

All stakeholders have a collective responsibility to ensure the Game is played with a sense of fair play. Rugby is intensely physical so players must be continuously taught the importance of discipline. That means that foul play, thuggery or referee abuse must not be tolerated. All custodians of this great Game need to promote fair play.

- Respect yourself, the opposition, the officials and the Laws of the Game
- Win with honour, lose with dignity
- Try to stay calm
- The referee is in charge; show your support by playing fair and respecting decisions



For further information and downloads please go to **rugbyready.worldrugby.org** 





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