



# ACTIVATE – INJURY PREVENTION EXERCISE PROGRAMME

**YOUTH (UNDER 15 / UNDER 16 / UNDER 17-18)**

Instruction Manual



# WELCOME TO THE ACTIVATE INJURY PREVENTION EXERCISE PROGRAMME INSTRUCTION MANUAL (YOUTH PROGRAMME).

**Please read this carefully as it provides important information on how the exercise programme should be carried out. The effectiveness of the programme is based on the exercises being carried out as closely to the prescribed programme as possible based on what is realistic and practical.**

## WHAT IS THE ACTIVATE INJURY PREVENTION EXERCISE PROGRAMME?

The Activate Injury Prevention programme is a structured exercise training regime designed to be completed prior to rugby training sessions and matches.

Research conducted with schoolboy and adult male players found that when completed 3 times a week (twice before training and on a match day) the programme lead to a reduction of injuries including concussion.

In line with the studies, ideally the programme should be completed as per the guidance provided, however it is also possible to integrate exercises into other parts of sessions should time be restricted. Carried out in full (as per the programme) it takes approximately 20 minutes to complete.

There are 4 different exercise programme U15, U16, U17/18 and Adult. This resource provides information for the 3 youth programmes (U15, U16, U17-18), for more information on the Adult programme please go to: [www.englandrugby.com/rugbysafe/activate](http://www.englandrugby.com/rugbysafe/activate)

This instruction manual is designed to accompany the Activate cue cards and video resource, all of which are free to access online at [www.englandrugby.com/rugbysafe/activate](http://www.englandrugby.com/rugbysafe/activate). It is essential that coaches to fully understand the programme, how it should be delivered and the importance of the techniques in performing the exercises, therefore it is highly recommended that coaches/teachers attend the face to face session to further develop their understanding of the programme. To organise a face to face session at your club or school please ask your Club Coach Coordinator/Head of Rugby to contact your local Rugby Development Officer or Community Rugby Coach.

The online resources should be accessed in stages based on the progressions stated in the programme. After signing up, the Phase 1 resources will be accessible. Information on how to access Phase 2 will be sent out shortly before it should be started (6-8 weeks), Phase 3 after that and so on.

Coaches/teachers will be required to sign up for a new programme each season e.g. a coach will need to sign up for the U16 programme having completed the U15 programme.

# WHAT ARE THE BENEFITS?

## The Activate programme is designed to improve:

- **General movement control** – develops adaptability allowing for better ‘physical’ decisions and reaction around the contact areas.
- **Pre-activation** – The progressive nature of the programme improves muscle activation and enables them to respond better to the demands of exercise.
- **Functional conditioning** – overtime functional power and strength develops which increases flexibility and range of movement.
- The neck exercises aid activation of stabilising muscles around the head and neck therefore **reducing the potential “whiplash” effect that can cause concussion.**

Research has shown that developing a player’s ability in these areas improves general fundamental movement skills and has the potential to reduce the risk of injury including concussion.



# HOW SHOULD THE PROGRAMME BE DELIVERED?

**The Activate exercises should be performed as part of the preparation/ warm up component to all training sessions and matches.**

Each age group programme is made up of 4 progressive phases and a final maintain phase, each progressive phase should be carried out for 6-8 weeks. For example:

	Phase 1	Phase 2	Phase 3	Phase 4	Maintain
School	Autumn 1st Half Term	Autumn 2nd Half Term	Spring 1st Half Term	Spring 2nd Half Term	Until end of season
Club	September / October	November / December	January / February	March / April	

Ideally the programme should be started at the beginning of the season although this is not essential; it can be picked up at any time. However, all the players should begin at phase 1 and progress through the phases appropriately, regardless of prior ability.

The different phases are designed to be more progressive and the 6-8 week period allows players to develop, however it is important to move on to the next phase to challenge the players and keep them motivated throughout the programme.

Each phase consists of 4 parts and has 12 different exercises in total:

Part	Focus	Time	No. of Exercises
A	Running-based Preparation & Change of Direction <b>Focus:</b> Running technique, coordination and changing direction through enhancing movement control in the trunk and lower limb.	2 mins	3
B	Lower body Balance Training <b>Focus:</b> Enhancement of movement control.	4 mins	2
C	Targeted Resistance Training <b>Focus:</b> Improve functional strength, power and range of movement.	8 mins	5
D	Landing, Change of Direction & Plyometrics <b>Focus:</b> Controlled landing and changing direction through improving movement control.	6 mins	2

# COACHING ACTIVATE

**The key role of the coach is to monitor the exercise technique focusing on the key coaching points and ensuring good form.**

For the potential benefits to be achieved and the programme to be effective players need to execute the correct technique. When delivering the Activate programme, coaches should:

- Focus on the “Key Activate 8” coaching points.
- Remember quality over quantity is the priority.
- Encourage players to practice.
- Watch players so that poor technique can be identified and corrected.
- Provide feedback to individuals if needed.

Whilst all the Activate 8 coaching points are important, focus on 2-3 at a time and prioritise them based on the exercise, for example:

## **FOWARD LUNGE:**

- Chest up
- Hip-knee-ankle in line
- Knees over toes

## **PLANNED PLANT & CUT:**

- Head neutral
- Hip-knee-ankle inline on planting foot
- Knee on toes on planting foot

## **PRESS UP LAWNMOWER**

- Head neutral
- Shoulder-hips level
- Engage core

**Tip:** Take time to become familiar with the new exercises prior to starting the phase.

**Tip:** Allocate extra time for the first warm-up session of each new phase. This can allow specific coaching points to be emphasised to ensure players understand the requirements of each exercise. This may include using players to demonstrate certain exercises.

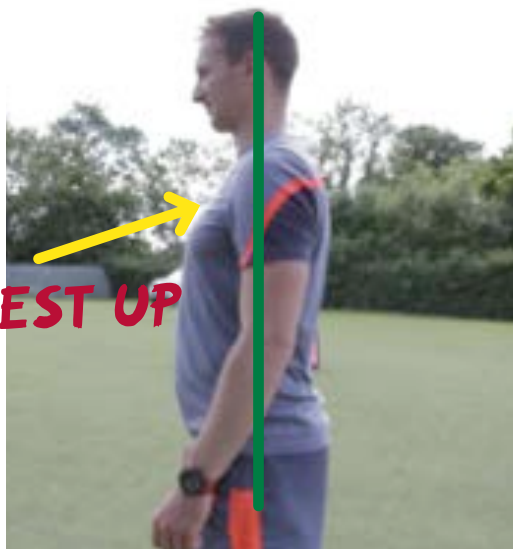
It may take a few weeks for players to correctly learn each exercise and execute them to the desired quality and consistency throughout the sessions; however, it is important that good form is reinforced.

As with all exercise programmes, players should monitor how their body reacts to the exercises. If an exercise causes pain or discomfort, the player should stop and either return to the immediately previous level or move to an exercise that is pain free.

# KEY ACTIVATE 8

The “Key Activate 8” are coaching points consistently referred to across all exercises in the programme, they are essential for good form and correct technique.

## HEAD NEUTRAL



## HEAD LIFT (LOOK THROUGH EYEBROWS)



## SHOULDERS AND HIPS LEVEL



**ENGAGE CORE**



**SOFT KNEES**

**HIP, KNEE,  
ANKLE IN LINE**



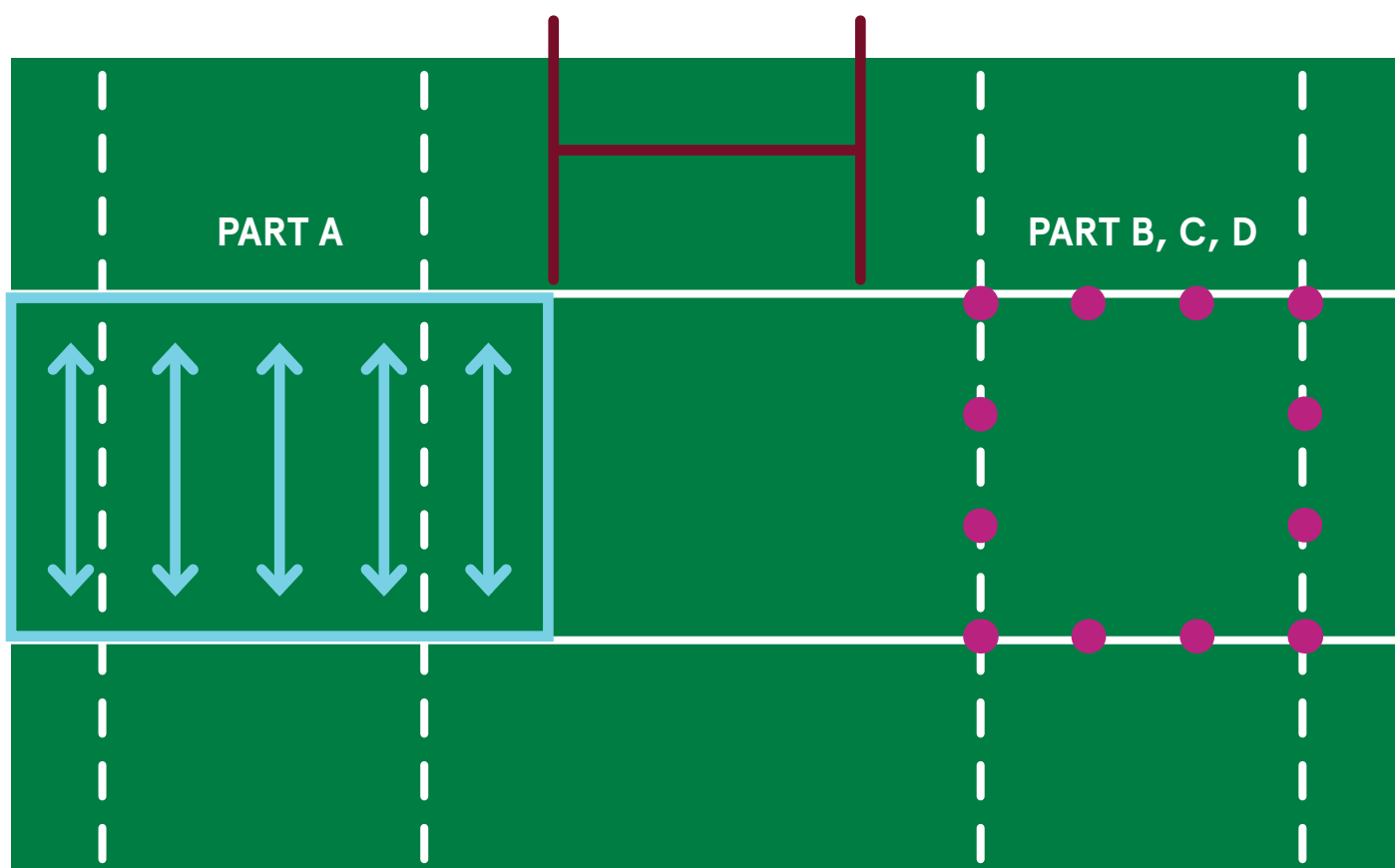
**KNEES OVER TOES**



# PITCH SET UP

The programme is designed to be carried out on the pitch, as part of the warm-up before a training session or match. However, it can be carried out indoors on a gym/sports hall surface if required.

Suggested pitch lay-out:



**Part A** – Set up channels approx. 5 metres wide. Players line up and perform exercise (e.g. snake run) moving away from and back towards try line. Aim to have as many players active as possible at once, with as little rest as possible.

**Parts B, C, D** – Players find space to perform exercise, allow players to move around in between different exercise e.g. 6 x zombie squat, jog around for 20-30 seconds then 8 x double leg bridge. For exercises that involve running and/or change of direction, have players form a circle close to centre of the rectangle facing outwards or set up as part A.



# FREQUENTLY ASKED QUESTIONS

## **WHEN SHOULD THE PROGRAMME BE COMPLETED?**

Ideally the programme should be completed 3 times a week as the first group-based activity of a training session or match day warm up.

## **IF TIME TO WARM UP IS LIMITED PRIOR TO TRAINING SESSIONS OR MATCHES, WHAT SHOULD BE DONE?**

In such cases, certain parts of the programme can be prioritised to accommodate shorter times to prepare for matches and training sessions or lessons. The following order, listed from 1 (highest priority) to 4 (lowest priority) details which parts of the programme should be completed when time is short:

1. Part A—2 minutes
2. Part C—8 minutes
3. Part D—6 minutes
4. Part B—4 minutes

## **ARE THERE DIFFERENCES BETWEEN THE MATCH AND TRAINING PROGRAMMES?**

A majority of the exercises used in the programme are suitable for both matches and training sessions. The only exercise that should not be completed on a match-day is the Nordic Hamstring Curl (Part C—Phases 2-4) and this can unduly fatigue the hamstrings prior to the matches.

## **WHAT HAPPENS IF MY PLAYERS CANNOT DO IT 3 TIMES A WEEK?**

The results from the study showed that highly compliant teams (3 times a week) saw the biggest reduction in injuries however those teams who were less compliant (1-2 times a week) still experienced a reduction in injuries, like participating in most exercises programmes, something is better than nothing. Players may also choose to carry out sessions outside of organised rugby training utilising

the free online resources, this is fine providing they understand the technique and focus of the relevant exercises.

## **SOME OF THE PLAYERS ARE STRUGGLING TO COMPLETE CERTAIN EXERCISES, WHAT SHOULD BE DONE?**

If a player(s) struggles with some of the exercises then regress to a previous phase or adapt appropriately e.g. knees on floor for press ups (ensuring good technique remains). However, try to encourage players to continue with the exercises as over the 6-8 weeks they should improve through practice. There are some regression examples available on certain exercises within the individual phase sections of the online resource.

## **WHAT HAPPENS IF A PLAYER GETS INJURED AND/OR MISSES PART OF THE PROGRAMME?**

Activate may be used as a component of graduated return to participation in players returning to training from injury. If a player suffers an injury during a 6-8 week phase they should return to the same phase of exercises they were performing at the time of their injury (even if the rest of the team have moved on to the next phase). They should only progress to the next level if and when they are pain-free and can demonstrate the necessary level of competence.

### **WHY DOES THE PARTICIPATING IN THE PROGRAMME REDUCE INJURIES ESPECIALLY CONCUSSION?**

The research suggests that the programme helps players to improve general movement control and functional conditioning. The exercises are designed to develop functional power and strength, and increases flexibility and range of movement which better prepares players to react and make 'physical' decisions.

The neck exercises aid activation of stabilising muscles around the head and neck therefore minimising/softening the potential "whiplash" effect that can cause concussion.

The progressive nature of the programme improves muscle activation and enables them to respond better to the demands of exercise.

### **CAN ALL PLAYERS USE THE EXERCISE PROGRAMME?**

The current studies were carried out using schoolboys across the U15 to U18 age groups and adult male players. Whilst the exercise programme may also have benefit to other groups of players it should be noted that not all of the exercises may be appropriate for younger players and females, therefore variations may be required to meet their specific needs. The RFU are continuing to progress the research and insight into injury prevention and hope to develop further understanding into different playing groups.

### **CAN THE EXERCISES BE BUILT INTO A MORE GAME FOCUSED WARM UP?**

The results from the study were based on the exercises being performed in isolation prior to a training session / match. However it is possible to incorporate the exercises into a Game zone-Skill Zone approach. Whilst it is important that the exercises are carried out correctly (quality over quantity), coaches can be creative with delivery, integrating small sided games in between the different parts or as suggested in the programme as an initial pulse raiser at the start of the session. Activate can still be delivered effectively using the philosophy of APES (Active, Purposeful, Enjoyment and Safe).

### **IN A SCHOOL CAN IT BE USED AS A WARM UP FOR OTHER SPORTS?**

Activate could be Integrated across the P.E curriculum as the programme improves general conditioning and movement control, both of which provide benefits in the development and performance of other sports. Schools therefore may want to consider how Activate best fits into the P.E. curriculum.

### **WHAT RESEARCH IS THE PROGRAMME BASED ON?**

Developed by a research team at University of Bath the study involved 40 schools and nearly 2,500 players aged 14 - 18, the researchers found that overall injuries fell by 72% when players completed the exercises at least three times a week. Concussion injuries were reduced by 59%. Comparable results were also found in a similar study carried out with adult males in 40 clubs.

The articles for both the adult male and schoolboy injury prevention studies have been published in the British Journal of Sports Medicine. For details on how to access these articles and other relevant research please go to:

[www.englandrugby.com/rugbysafe/research](http://www.englandrugby.com/rugbysafe/research)

The Activate Injury Prevention Exercise Programme was developed in collaboration with:

