



# Fitness for Umpires



An England Hockey publication for Umpires

# Fitness for Umpires

## Introduction

A fitness training programme for hockey umpiring must aim to develop:

- Speed and agility specific to the nature of the running that occurs while umpiring
- Endurance to be able to perform 5km of functional running in 70 minutes, of which approximately 50% or more is at moderate to high intensity.

Umpires are known to cover up to 5km during a match that lasts 70 minutes. The total distance covered can vary and is dependent on the nature of each specific match. The intensity of the work can also vary considerably regardless of the total distance covered in each match.

The total work performed comprises of a variety of modes of work that determine the physical demands. These modes of work include various types of motion; walking, jogging, cruising and sprinting, which are performed forwards, backwards and sideways. This is known as **functional running** and is punctuated with stopping, starting, accelerating and decelerating.

A certain amount of time is spent standing and there are stationary positions which are commonly assumed by umpires to enhance viewing which include the sideways lunge and the squat position to varying depths.

## Running in a typical hockey match

<b>Percentage</b>	<b>Running speed</b>
Maximal sprinting intensity	10-16%
Moderate intensity	50%
Stationary - low	34-40%



## Dynamic Warm-up and flexibility

We recommend that you use the warm-up on the table below before all training sessions and umpiring appointments. Perform the dynamic exercise in the left-hand column at an intensity that you feel comfortable with and then the corresponding static stretches in the right hand column.

<b><i>Dynamic Exercise</i></b>	<b><i>Static Stretches</i></b>
1. Jog for 200m or perform stationary cycling or rowing machine for 5-10 minutes	Hamstrings Quadriceps
2. Walking lunges for 25m	Groin Calves Hip flexor
3. Walking with high knee lifts for 25m	Gluteus Achilles
4. Sideways shuffling for 15m each way	Hamstrings Lower back
5. Running butt kicks for 25m	Groin Quadriceps
6. Sideways bounding for 25m	Groin Calves
7. Strides at 60% of maximum effort for 40m	Hip flexor Gluteus

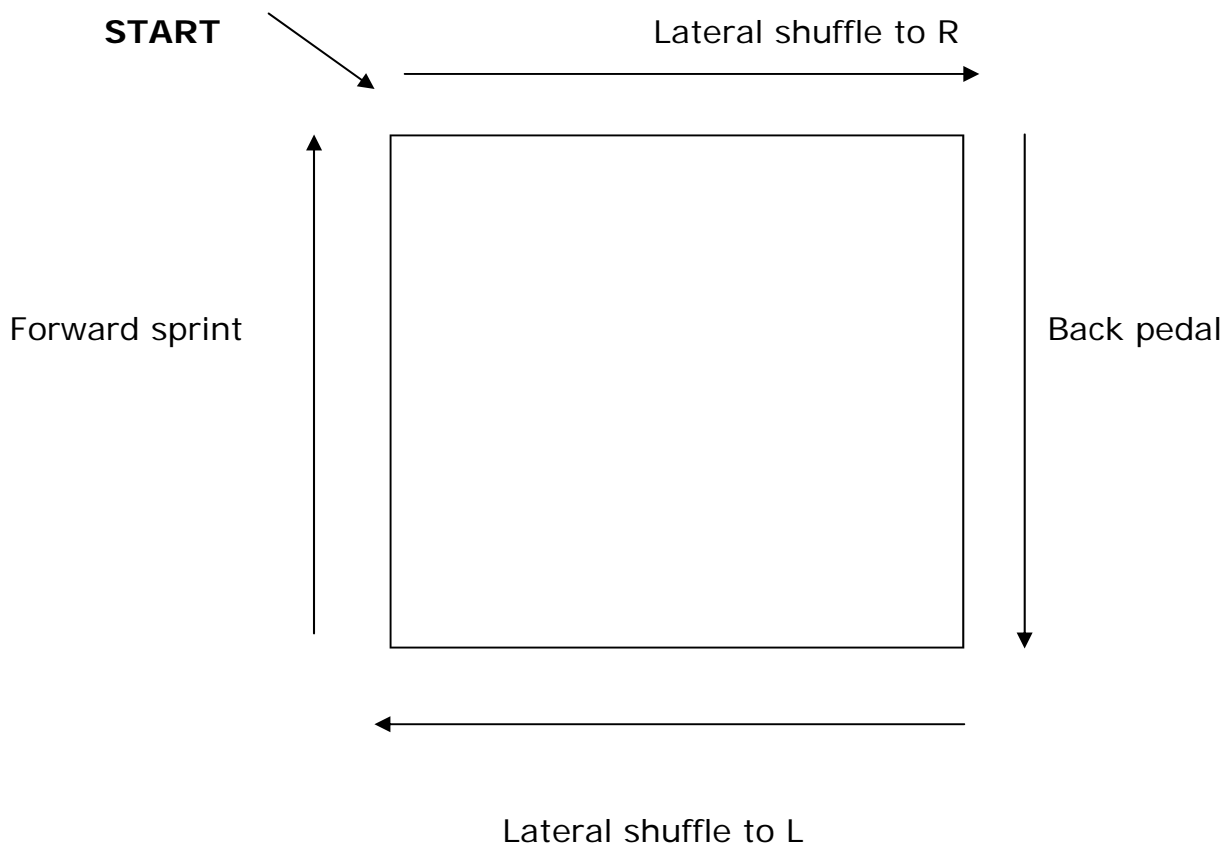
## Speed and Agility

Speed and agility development requires that each exercise is performed at maximum effort level with adequate recovery between sets and reps. Umpiring requires running both forwards and backwards, together with getting low to the ground and changing direction quickly (especially when the ball is in the circle). Below are three exercises which can be performed to improve both your speed and your agility.

### 1. Functional square sprints

From a standing start, jog to the corner of a 10m square grid (marked by cones), perform a lateral shuffle leading with the right leg for 10m, followed by 10m back pedalling, 10m lateral shuffle leading with the left leg, and finish with a 10m forward sprint. All running should be performed at maximal effort.

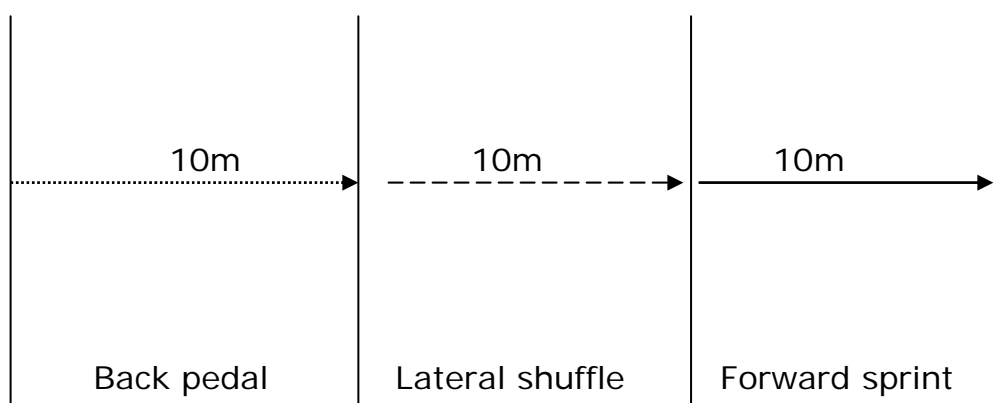
**Recovery:** Standing recovery and perform each repetition every 40seconds



## 2. Retreating sprints

From a standing start, back pedal for 10m at maximal effort, followed by 10m lateral shuffle as fast as possible and 10m forward sprint. Alternate the direction of the lateral shuffle for each repetition. Emphasise smooth transitions from back pedalling to lateral shuffle and then to forward sprint.

**Recovery:** Stationary recovery, perform each rep every 30seconds.



## 3. Shuttle runs

Measure out a 10m mark, 20m mark and 30m mark. Do a set of 5 x 10m sprints, followed by 5 x 20m sprints and 5 x 30m sprints. Recovery occurs immediately after each sprint, with the umpire either walking or jogging back to the start after each sprint.



## Endurance

Endurance is developed by performing moderate to high intensity functional running interspersed with recovery in the form of low intensity running and standing still. An endurance session that lasts for much longer than 70 minutes will not develop the high intensity component of endurance, whereas a shorter duration

session with high intensity running and reduced recovery will result in adaptations specific to the more demanding phases of umpiring. This means that as the volume (duration) of endurance training session increases, so the quality or intensity must decrease.

Endurance should be developed by starting with longer duration (70-80 minutes), lower intensity sessions, while gradually increasing the intensity and reducing the duration as the competitive season, or a particularly important tournament approaches.

**Fartlek** is a commonly used method for increasing endurance. This involves running at varying speeds over a distance; interspersing jogging, "cruising" and sprinting. An example of a fartlek program is given below – alternatively you can make up your own.

### Track Fartlek

On a running track (400m) perform four laps running according to the following schedule. Cruising is defined running with elongated stride at an intensity at which you cannot speak while running but is slower than sprinting. Sprinting for this purpose, means running at greater than 90% of maximum effort.

1. 100m jog, 100m cruise (200m)
2. 100m jog, 150m cruise (450m)
3. 100m jog, 200m cruise (750m)
4. 100m jog, 50m sprint (900m)
5. 150m jog, 50m sprint (1100m)
6. 200m jog, 50m sprint (1350m)
7. 100m jog, 50m cruise, 100m jog (1600m)



### Summary

Umpires cover up to 5km in 70 minutes during a hockey match. This comprises of functional running, which is stop-start and is characterised by changes in speed from jogging to sprinting.

It is multi-directional, forwards, backwards and sideways, and is interspersed with stationary positions including the lunge and squat.

Fitness is an extremely important attribute for umpires, and should be approached in a similar manner to which players approach fitness. Endurance should be developed in the pre-season and maintained during the season, whilst speed and agility are the core components.

It is important to vary your fitness sessions and training with others will make the process more enjoyable – why not train with the players in your club.

Umpiring is far more enjoyable when you are fit, and therefore able to be in the right position and keep up with the speed of the modern game of hockey. Good luck with your umpiring!

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### **Umpire fitness requirements in England**

England Hockey uses the 'Cooper Test' or the 'Beep Test' to measure the fitness of umpires. We encourage all umpires to be as fit and therefore as mobile as the game requires at all times.

**Level 1** umpires are advised to get fit and stay fit however, there is no official test that they are expected or have to undertake.

**Level 2** umpires are expected to submit fitness test results to their regions on an annual basis (usually between 1st August and 15th September). Either Test is acceptable and the choice usually rests with the individuals.

**Level 3** umpires are required to undergo testing annually. It is a mandatory requirement. It is usually carried out at the Pre-Season National Umpires Conference as is organised by the National Programme Umpiring Association (NPUA). As with the Level 2, either the Cooper Test or the Beep Test can be used.

If you would like to purchase a Beep Test CD please refer to the England Hockey Resources List. It's on the website. See [www.englishockey.co.uk](http://www.englishockey.co.uk)