

Irish Hockey
Umpires
Association

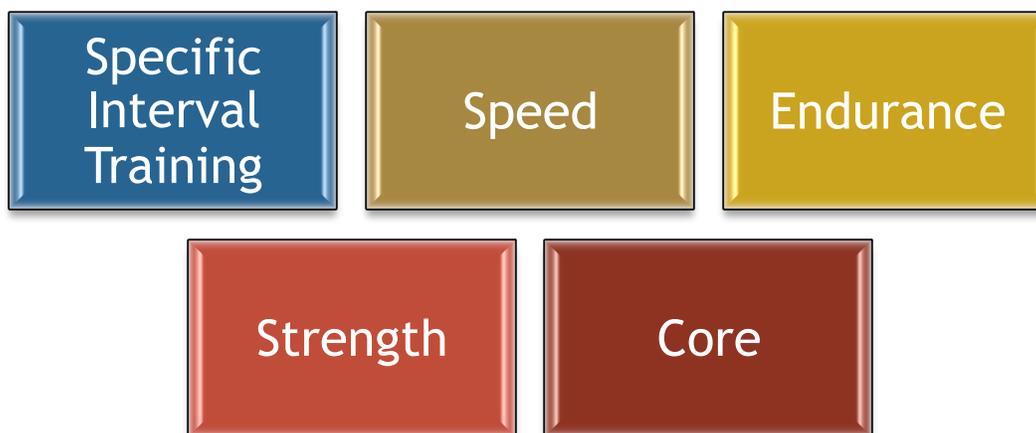
EHF Nominated Umpires
Fitness Guide
October 2014



**KEEP
CALM
AND
EXERCISE**

Introduction

The aim of this manual is to provide help and propose ideas for the formulation of personal training plans for all IHUA umpires who are nominated to the EHF list for competition selection. Match fitness has become a vital component of international umpiring in recent years. Most umpires have a training plan whilst others may only train leading up to a national fitness test or tournament. These tests can, in general, fail to demonstrate the rounded fitness level required by a hockey umpire to satisfy all match situations. The manual highlights FIVE key fitness areas (core, endurance, strength, speed and specific interval) that studies have proven as paramount specifically for hockey umpiring. These areas, along with the training proposals, are credited to Sunderland, Twedde and Motley (2010) who authored the 'International Umpire Fitness Training Manual' for FIH. The exercises proposed here are of an introductory nature and should be increased in intensity if levels are too comfortable.



Fitness

Fitness is by no means a singular dimensional concept. As a hockey umpire it is required both in terms of keeping up with the play (physical fitness) as well as an ability to make the correct decision in pressurized situations (mental fitness). In a given match situation the majority of movement required from a hockey umpire is mainly of low to moderate intensity, interspersed with intermittent bursts of high intensity sprints. As a result it is vital that personal training programs and exercises are balanced in the same way between sprint/high speed intensity and low intensity.

Low intensity exercise is commonly called endurance exercise. Low intensity exercise aims to increase the ability of the heart to adapt to long-term exercise. As such, it should be performed at a level of 60% effort and no more, but over a longer period of time, and longer distances. In contrast, high intensity exercise works to increase the hearts capacity to exercise at high efforts over an extended or repeated period of time. For that reason, high intensity sessions will focus on small distances, higher speeds/sprints, and an effort of above 80%.

The following sections (1-5) each deals with the key fitness areas mentioned above and will propose a number of training exercises in each case. The manual doesn't fully explain each of the exercises and is suggested that the correct methodology for their execution be clarified. These can be sourced either by YouTube video clip or from the accompanying 'International Umpire Fitness Training Manual' sent with this manual.

1. Core

Core fitness is all about the control and movement of the middle portion of the body and emphasizes the muscles in the abdomen. Speed is generated from the core and is additionally responsible for increasing the efficiency of muscle power. A strong core also enables a hockey umpire a greater ability to change direction quickly and at the same time improves balance, coordination and posture. Good core body strength also reduces the risk potential to injury.

These exercises should be performed using controlled and slow movements. Do not hold your breath while doing these exercises, as breathing normally will help with control. Do not continue with the exercise if it is uncomfortable and instead try another. Allow a minimum of 30 seconds between reps for recovery. Select 3 of the following exercise per session.

Plank

- Hold 15 seconds
- 3 reps

Side plank

- Hold 20 seconds
- 2 reps each side (alternate)

Static legs

- Hold 20 seconds
- 2 reps

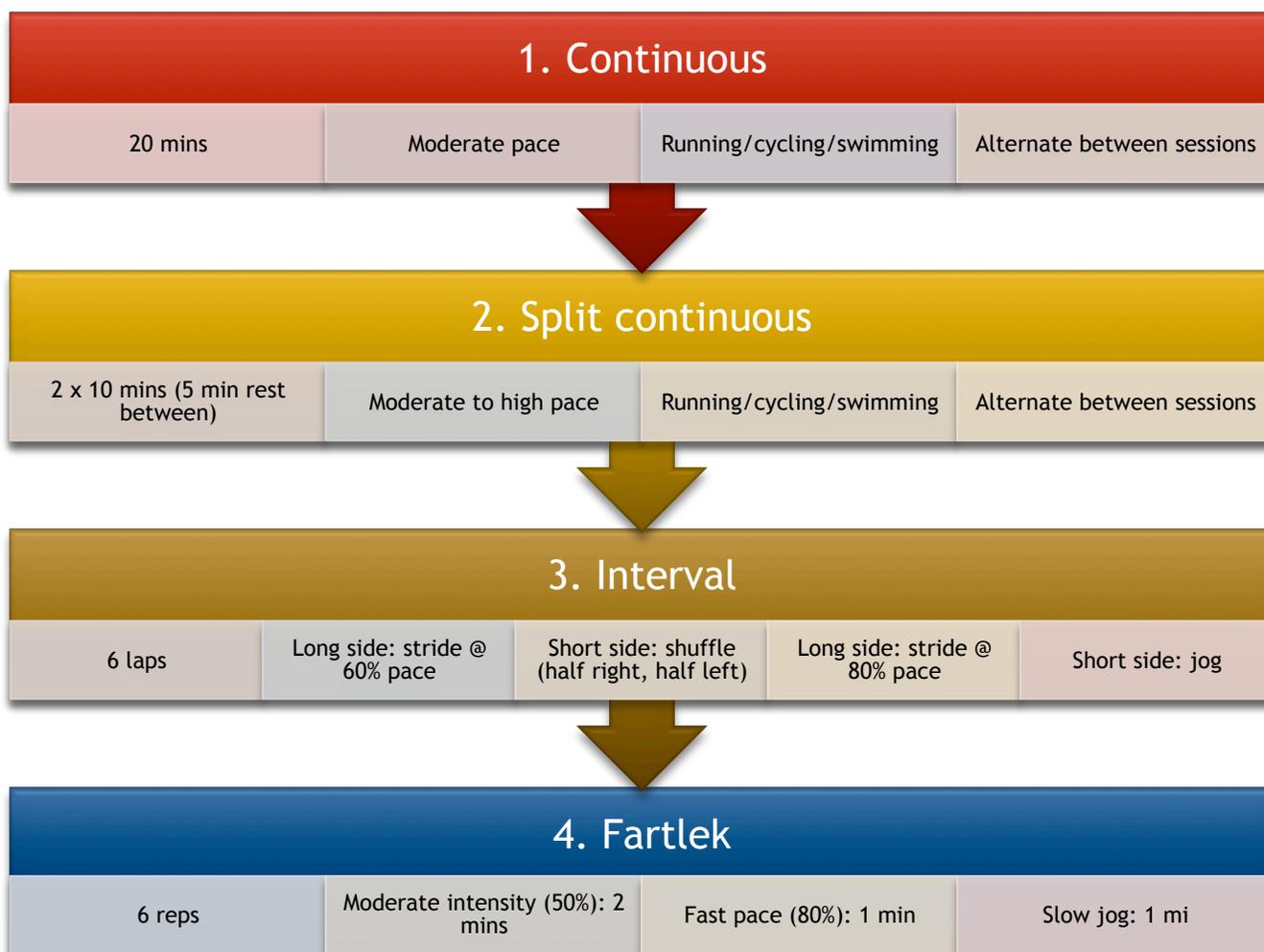
Elbow-to-knee crunches

- 10 each side
- 2 reps each side (alternate)

2. Endurance

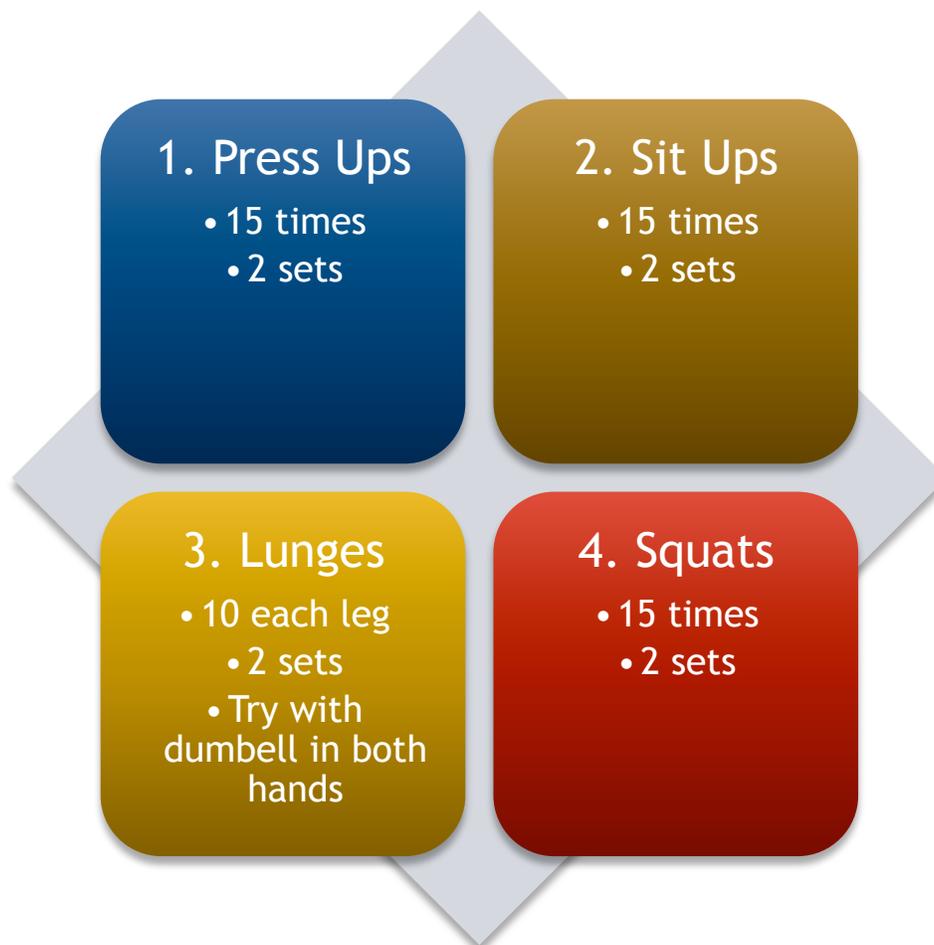
In an average match situation a hockey umpire will cover roughly 7kms. The majority of this distance is at a low to moderate intensity level. Endurance training improves the cardio function, oxygen transfer to the muscles and increases the ability to recover quicker. Most importantly endurance training will help preserve the carbohydrate store for higher intensity demands during a match and will therefore extend the fatigue point of the body.

These exercises should be performed on a soft ground (pitch or field). Best results will be achieved from a varied program of exercises. Start with 1 exercise but alternate between a continuous type and an interval type in successive sessions or over a week.



3. Strength

Strength is the ability for the body to apply force against resistance, which is vital for high intensity running. Good strength enhances flexibility. It is important when strength training to alternate exercises and ensure that different muscles are being worked. Controlled and slow movements are paramount as is using a full range of motion (don't cheat!). Avoid holding your breath during the exercises, as breathing normally will actually aid control. Allow a minimum of 30 seconds recovery between sets. Choose 3 exercises per session.



4. Speed

Less than 10% high intensity running should be necessary for a hockey umpire in a match situation. However, it is vital that whilst doing so we are comfortable at this point so that we can multitask i.e. make a decision at the same time. We can become faster through training, which will help to improve muscle composition and therefore increasing our personal ability. Speed training also compliments our agility and endurance.

The key with speed training is to keep the head stationary and lean the body forward in acceleration (not just from the hips). Body weight should be concentrated mainly on the balls of the feet. An aggressive arm action is also advised where the arms and fingers move from lip to hip in a straight action as opposed to side-to-side. These exercises should be performed at optimal pace. Try training with a partner so you can push each other. These exercises demand a methodical warm up (body and muscles) as well as remembering to cool the body afterwards to aid recovery time. Above all use the speed training to master a good sprint technique that you can translate to the pitch. It is a good idea to invest in a small set of training cones (4 or 5) to help map out some of these exercises on a pitch or field.



5. Specific Interval Training

Hockey umpiring demands a number of unconventional situations that should form part of a training program. For instance there is a requirement to be able to sprint at full pace while looking at the play to the side or to stoop/bend while running so that the ball can be seen around players. These patterns of movement are unique to hockey umpiring.

In order to prepare the muscles for the specific requirements of hockey umpiring it is important to train the body to become familiar with unnatural positions while moving about. These exercises are demanding on the body so is imperative to warm up thoroughly and at the same time give the exercises maximum effort. Ideally they should be mixed with sprints/high intensity exercises in the same session. This way we can be sure that when required in a match situation we are ready.



Summary

As an IHUA umpire committed to EHF competition it is imperative that every effort is made to have a good level of fitness both for domestic competition and when travelling to a tournament. This manual is aimed at giving a brief introduction as to the numerous demands on the body in a match situation. Training for each of these situations makes the body more accustomed and as a result has less influence on us mentally. Ultimately training correctly aids concentration levels in difficult situations.

Increasing reps, time, intensity, or adding in extra exercises into your current training program can change the levels proposed here up if they feel too comfortable or easily achievable. Use a variety of the five key areas and change the exercises chosen for each session in order to make your training less boring or monotonous. Advice: if you need to work more on their long-term endurance then choose 2 sessions of low intensity in a week and one high intensity. If it's the opposite and you need more speed, then choose 2 higher intensity sessions and one lower.

Above all we should be training year round and from season beginning through season end so that at any stage a fitness test could be easily achieved. Over the coming years it is anticipated that biannual fitness testing will become a thing of the past and may instead be replaced with adhoc fitness sessions or tests. Ensuring that we are training effectively means that our training time is most constructive to what we do on the pitch in any given match.

Good luck with your training.