

# TRAINING PLAN FOR OXFORDSHIRE FIRE & RESCUE SERVICE SELECTION TESTS

This information is designed to provide GENERAL GUIDELINES on physical preparation for applicants intending to undertake Oxfordshire Fire and Rescue Service Selections Tests. It is important to note that good exercise training advice should be specific to the individual dependant on your health, age, current fitness level, previous training history & lifestyle.

This plan aims to help prepare an active individual with some previous physical training, exercise or sports experience to undertake the selection tests. **A good general overall level of fitness is required to undertake firefighter training** and good fitness levels can not be acquired overnight, you should only undertake this programme if you already have a basic general level of aerobic fitness.

### THE SELECTION TESTS

The 7 National Firefighter Physical Tests

- 1. Ladder Climb
- 2. Casualty Evacuation
- 3. Ladder Lift / Lower Simulation
- 4. Enclosed Spaces
- 5. Equipment Assembly
- 6. Equipment Carry
- 7. Hand Grip Test



### **KEY POINTS**

- 1. If you are in any doubt about your health or physical ability to exercise, you should consult your Doctor before commencing any physical training programme.
- 2. You must progress slowly and gradually with your training to help avoid injury and maximise your fitness gains.
- 3. A Vo2 level of 42.3 is required.

# **Developing and Maintaining Aerobic Endurance**

To maximize the efficiency of your training you should focus on exercises that are similar to those in **Oxfordshire Fire and Rescue Service selection tests**. These include running/jogging, stepping, stair climbing and other weight bearing activities.

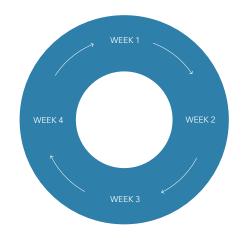
### **Steady Pace Cardio:**

**Steady Pace Cardio:** This should be performed at a comfortable pace This type of exercise will increase your aerobic endurance fitness. Eg. Running, cycling, rowing etc

### **Fartlek Training:**

**Fartlek Training:** This type of training involves changing pace throughout the session. If running is a chosen form of exercise, a steady pace of running should be interspersed with faster running, sprints, jogging, uphill running and walking. The aim of the session is to work continuously for about 20-30 minutes using the various speeds of running whenever you feel like it. There is no set order to this session, however you should begin with about 5 minutes of steady running before you do any faster running. This session will increase your aerobic and muscular endurance fitness. This type of activity may also be performed in a fitness area with many random intensity programs available on the aerobic machines (treadmills, steppers, cross-trainers).

A sample Four week plan incorporating this training, with a weekly progressive overload and increase is detailed below. This plan can be extended as necessary with the aim of increasing the time and number of intervals carried out each week as the individual becomes fitter.



	Week 1	Week 2	Week 3	Week 4
Steady Pace Cardio	30 mins	33 mins	36 mins	40 mins
Interval Session	20 mins inc minimum of 6 hard efforts	20 mins 5-6 hard efforts	20 to 25mins 6-7 hard efforts	22 to 26 mins 7-8 hard efforts

# Developing and Maintaining Muscular Strength and Endurance

To improve your strength and/or muscular endurance you will need to exercise against a resistance. This resistance can be your body weight (for example a press-up) or may involve the use of specifically designed equipment such as dumbbells, barbells or

resistance machines. Resistance training should be progressive in nature, individualised, and provide sufficient stimulus to all the major muscle groups to develop and maintain muscular strength and endurance.

Due to the nature of the selection tests and the physical demands on a firefighter the training sessions focus on an all over body routine, aimed to increase strength and endurance across the whole body and in particular the muscles and parts of the body required to pass the selection tests. The following resistance exercises have been

chosen to best suit the simulation and/or muscle specific exercise to assist those preparing to take the selection tests. Due to the variation of the selection tests and the equipment used a true correlation can not always be made but these exercises and workout routine will assist in preparing you for the tests.

# **Home & Gym Training Program**

An all over body 'home' routine is included along with a gym specific training routine.

The following training sessions are designed to help prepare the individual for the tests listed. The aim should be to include both aerobic and strength sessions with an increase in activity each week up to the taking of the test allowing sufficient time to recover prior to attending the selection tests.

Home Strength session (Casualty Evacuation / Ladder lift / Equipment carry / grip test)

Gym based resistance / strength session x2 (As Above)

**Grip test training (Firefighter grip test)** 

Flexibility / stretching advice (Ladder climb / Enclosed space)

# Home Training Routine - strength

Complete each set with 60 seconds rest in between or as a circuit completing all exercises back to back for a more aerobic workout.

# 1. Press ups





# 2. Seated Bench Dips





# 3. Back Raise





4. Bench / Seat Squat





# 5. Lunges





# 6. Box Step Ups





Home Training Routine - strength				
1. Press ups x 3 maximum	Drop to knees once fatigued			
2. Seated Bench Dip x 3	10 - 12 reps (add weight if required)			
3. Back Raise x 3	12 - 15 reps			
4. Bench/ Seat Squat x 3	Up to 20 reps (add weight if possible)			
5. Lunges x 3	10 - 12 on each leg			
6. Box Step ups x 2	30 - 40 steps (knee height box)			

 $\textbf{Note:} \ \textbf{If you are unsure of how to perform any exercise you should seek suitably qualified assistance}.$ 

# Gym Based Resistance / Strength Session 1

SESSION ONE include warm up and cool down 5-10mins			
1. Pulldowns x 3	10 - 12 reps		
2. Seated Row x 3	10 - 12 reps		
3. Chest Press x 3	8 - 10 reps		
4. Overhead Press x 3	8 - 10 reps		
5. Farmers Walk x 2	20 steps - out and back		
6. Squats x 3	8 - 12 reps		
7. Lunges x 2	12 - 15 reps (each leg)		

Note: If you are unsure of how to perform any exercise you should seek suitably qualified assistance.

# 1. Pulldowns





# 2. Seated Row





# 3. Chest Press





# 4. Overhead Press





# 5. Farmers Walk





# 6. Squats





### 7. Lunges





# Gym Based Resistance / Strength Session 2

# 1. Deadlifts





### 2. Barbell Rows





SESSION TWO include warm up and cool down 5-10mins				
1. Deadlifts x 3	8 - 10 reps			
2. Barbell Rows x 3	10 - 12 reps			
3. Dumbell Squats x 3	12 - 14 reps			
4. Farmers Walk x 2	20 steps - out and back			
5. One Arm Dumbell Press x 2	8 - 10 (each arm)			
6. Overhead Dumbell Press x 3	10 - 12 reps			

 $\textbf{Note:} \ \textbf{If you are unsure of how to perform any exercise you should seek suitably qualified assistance.}$ 

# 3. Dumbell Squats





### 6. Overhead Dumbell Press





# 4. Farmers Walk





### 5. One Arm Dumbell Press





# **Training for Firefighter Selection Grip Test**

By performing the resistance sessions outlined overall grip strength will improve from the exercises being performed. Below are some additional exercises that can be performed to help increase grip strength.

### **Plate Pinch Curl**







Grab a pair of light-weight plates in your left hand. Hold the two plates together by pinching your fingers and thumb, and let them hang next to your side

Without moving your upper arms, bend your elbows and curl the weight as close to your shoulder as you can. Slowly lower the weights back to the starting position. Do all of your reps on your left side before switching to your right.

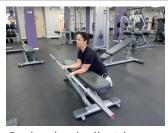
### **Hex Dumbell Hold**



The larger the implement, the bigger the challenge to your grip. Holding the head of a 10 to 20 pound hex dumbbell with your fingers will challenge every arm muscle below your elbow.

Grab the top of a hex dumbbell with each hand. Hold the dumbbell for 20 to 60 seconds.

### **Wrist Curls**





Grab a barbell with an underhand grip, shoulder width apart. Kneel in front of a bench and place your forearms on the bench so your palms are facing up.

Allow your wrists to bend backward from the weight of the barbell. Curl your wrists upward by raising your palms toward your body. Reverse the movement to return to the starting position.

# Flexibilty and Stretching Routine

Flexibility exercises should be incorporated into your overall fitness program, to develop and maintain your range of motion. Flexibility is required to pass certain selection tests, namely the ladder climb and confined space test where you will be required to traverse and manoeuvre through enclosed spaces and gaps.

Flexibility training may reduce your likelihood of injury, reduce muscle soreness following exercise and may enhance muscular performance.

To develop your flexibility, hold each stretch for 30-40 seconds and repeat each stretch 2-3 times.

Flexibility training is ideally suited to follow on from an aerobic endurance or muscular strength or endurance training session, and can form an integral part of the cool-down period. Not only will stretching at this time help your muscles to relax, it avoids having to build in separate training sessions for developing flexibility into a weekly plan.

The following examples show you how to stretch the major muscle groups of the body. (see Appendix A)

### **UPPER BODY (15 MINUTES)**

- 1. Neck Flexion/Extension Stretch
- 2. Neck Lateral Flexion Stretch
- 3. Latissimus Dorsi and Posterior Deltoid Stretch
- 4. Triceps Stretch
- 5. Shoulder Rotator Stretch
- 6. Pectoral Stretch at 90 and 120 Degrees
- 7. Bicep Stretch
- 8. Supraspinatus Stretch
- 9. Wrist Extensor Stretch
- 10. Thoracic Extension Stretch
- 11. Lateral Flexion Stretch
- 12. Lumbar Extension and Abdominal Stretch
- 13. Lumbar Flexion Stretch
- 14. Lumbar Rotation Stretch

# LOWER BODY (10 MINUTES)

- 15. Lying Hamstring Stretch
- 16. Seated Hamstring Stretch
- 17. Seated Adductor Stretch
- 18. Gluteal Stretch
- 19. Gluteal and Lumbar Rotation Stretch
- 20. Lying Quadriceps Stretch
- 21. Standing Quadriceps Stretch
- 22. Standing Adductor Stretch
- 23. Hip Flexor Stretch
- 24. Tensor Fascia Stretch
- 25. Gastrocnemius Stretch

# Appendix A

# **Stretching**



 Neck Flexion/Extension Stretch (forward, then back)



Neck Lateral Flexion Stretch
(one side, then the other)



3. Latissimus Dorsi and Posterior Deltoid Stretch (link hands, push citows together)



**Exercises** 

4. Triceps Stretch (pull elbow across and down)



5. Shoulder Rotator Stretch (using towel, pull up with the top arm then down with the other)



6. Pectoral Stretch at 90° and 120°



7. Bicep Stretch (hands apart)



8. Supraspinatus Stretch (keep elbow parallel to ground)



 Wrist Extensor Stretch (tilt head to opposite side, keep elbow straight)



Thoracic Extension Stretch
 (reach forward with arms,
 push chest towards floor,
 arch back down, backside behind knees)



11. Lateral Flexion Stretch (one side, then the other, push pelvis across as you bend)



12. Lumbar Extension and Abdominal Stretch (be gentle if sore)



 Lumbar Flexion Stretch (be gentle if sore)



14. Lumbar Rotation Stretch rotate legs one side, then the other side, draw in and brace stomach muscles at the same time, breathe)



15. Hamstring Stretch (straighten leg) i. with foot pointed ii. with foot pulled back towards the knee



16. Hamstring Stretch (commence with knee slightly bent, then push knee straight as tension allows, push chest towards foot)



17. Adductor Stretch (push down with elbows on knees very gently, keep back straight)



18. Gluteal Stretch (pull knee and lower leg towards opposite shoulder)



19. Gluteal and Lumba Rotation Stretch



20. Quadriceps Stretci



21. Quadriceps Stretch



22. Adductor Stretch (keep foot pointing forward, lunge sideways on bent knee keep back straight)



23. Hip Flexor Stretch (keep back straight, tuck bottom under, lunge forward on front leg)



24. Tensor Fascia Stretch continue to push bottom forward whilst pushing hip to the side)



25. Gastroonemius Stretch (keep knee straight and heel down, feet facing forward)

