



**We save lives.
And so can you.**

**Firefighter fitness
A practical guide**



FIREFIGHTER FITNESS TESTING

Firefighters undertake a range of roles across response, prevention, and protection, all of which require a level of physical fitness.

Your level of fitness will be tested as part of the application process to become a firefighter. This guide explains why it is important for firefighters to be fit, what physical activity the job involves and gives advice on activities you can undertake to prepare for the recruitment process.

Why do Firefighters need to be fit?

Being a firefighter involves responding to emergency situations and working closely with the local community to prevent fires happening in the first instance.

The work often involves responding to rapidly changing situations in different environments and weather conditions. This requires a range of skills including good communication, teamwork and requires a level of physical fitness.

Examples of physical activities that can be regularly required by firefighters as part of their role include hose runs, climbing stairs of high-rise buildings, working within a team to lift ladders, using ropes to manoeuvre people and animals.

How can I improve my fitness?

Fitness is something you can improve in preparation for the 'have a go days' and the recruitment processes. Being a firefighter requires cardiovascular fitness, strength, and flexibility. You do not necessarily have to join a gym or buy equipment to improve in these areas. Many of the suggested exercises in this guide can be carried out at home or at the local park.

Good to know

You should warm up before you undertake any physical activity. Warming up prepares your body, helping to improve performance and reducing risk of injury by increasing blood flow through the body and reducing muscle stiffness.

Common warm up exercises include stretching, walking and low intensity activities.

Cooling down after you exercise is as important as warming up, as it will gently lower your pulse and prepare your body for recovery.



You should also adapt your training plan every month or so to challenge yourself and make sure you continually improve.

Correct exercise technique is essential to improve your fitness and avoid injury. If you have any doubt about your ability to do any of the exercises, please seek advice from a qualified professional.

Cardiovascular

Cardiovascular exercise is sustained or prolonged physical activity that raises your heartbeat. It includes most activities you would think of as 'exercise'. For example, running, cycling, swimming, team sports, rowing, skipping, group class exercise, climbing.

Flexibility

Activities that lengthen and stretch muscles can help you prevent injuries, back pain, and balance problems. Stretching gets your blood and oxygen flowing to your muscles so they can more easily achieve their full range of motion.

For example, yoga, tai chi, pilates.

Strength

Strength training works your muscles as they move against resistance, developing your muscular strength and endurance. This will allow you to lift, lower, push and pull heavy objects and produce force during repetitive movements over longer periods of time.

You can use your own body weight as resistance (e.g. press ups) and/or do exercises that use external loads (e.g. dead lift).

For example, squats, shoulder press, step up, press up, bent over row, load carriage lunge, trunk rotation, dead lift.



What will be expected of me as part of the recruitment process?

You will be required to undertake a series of tests which are designed to assess your ability to work in a team, as well as your reaction to environments that you will be required to work in.

You can expect to be assessed on your level of fitness, strength, and manual dexterity, as well as your level of confidence in simulated exercises.

Don't worry if you haven't done these kinds of exercises before. You will be given clear guidance and instruction on how to use the equipment involved, as well as a demonstration of each individual test. You may be required to wear firefighter Personal Protective Equipment and undertake the following tasks:

Ladder Climb:

To complete the test successfully you will need to demonstrate confidence when ascending the ladder, applying the correct 'leg lock' technique and then descend the ladder safely and in the correct manner.

1. You will be required to climb the ladder to around two-thirds of its height, the assessor will instruct and indicate that position.
2. Take a leg lock, release your hands from the ladder, outstretch your arms to the side, and look down to identify a symbol, call out the symbol.



3. Regain your hand hold, remove the leg lock, and descend to the ground. You should complete this task in a safe and controlled manner. You will be wearing a full body harness and will be attached to a fall-arrest device.

A safety officer will demonstrate the test, emphasising the correct mount and dismount.

Confined Space Test:

This test is designed to simulate activities and circumstances that you could reasonably expect to face when undertaking operational firefighting i.e. thick smoke, moving in a restricted space, and searching for a casualty.

1. You will start the test wearing a modified breathing apparatus set with face mask with obscured vision.
2. You will be given some instructions by the assessor to remember and will be asked to repeat these at the end of the crawl gallery (restricted space, obstacle course).
3. You will be led to the starting point of the crawl gallery and instructed to assume a crawl position i.e. on your hands and knees.

Casualty evacuation:

You will be dragging a casualty simulation dummy (55kg) over the length of the course, which covers a distance of 30 metres (15m there and back). The test is designed to be done at walking pace.

You will be walking backwards; therefore, an assessor will guide you.

1. You will start by lifting the casualty under the dummy's arms.
2. Drag the casualty walking backwards with an assessor guiding you as you go.
3. You will not be able to see the direction you are walking so an assessor will place a hand on your shoulder to guide you.

4. You are required to find your way through the crawl gallery negotiating any obstacles encountered until you complete the course.

5. You should complete the test without jeopardising your safety and wellbeing. Your time will start as soon as you enter the crawl/walkway and will stop when you exit.



4. Move yourself and the casualty around the cone at the halfway mark and continue towards the finish line, dragging it backwards.

5. Ensure the casualty is over the finish line to complete the test.

Ladder extension:

To complete this test successfully you will need to raise the section of the ladder to its full extent and then safely lower it to the bottom.

1. You will take hold of the extension line and using the 'hand over hand' technique, raise and lower the ladder.

(This section of the test will be performed with an experienced firefighter).

2. Raise the ladder to its full extension and engage the pawls. Please inform the assessor if you feel that you require help engaging the pawls.

3. When instructed carefully lower the ladder again, using the 'hand over hand technique'. **(This section of the test will be performed by you on your own).**



4. Fully lower the section to the base.

5. If you feel that you are losing control of the ladder at any point, inform the assessor, completely release your grip and step away from the ladder.

6. The assessor WILL intervene at any stage where he or she believes there is a safety risk. This will not automatically result in failure of the test.

A safety officer will demonstrate the test, emphasising the correct grip and technique.

Equipment carry:

To complete this test successfully you will need to combine endurance, upper and lower body strength and co-ordination and complete the test in 5 minutes and 47 seconds.

You will be required to carry equipment over the length of the course, covering a distance of 25 metres. The items are laid out in the order which they are to be used.

1. You will start holding the hose reel at waist height.

2. Run the hose 25 meters and place it down.

3. Run/jog back to the start and pick up two coils of red hose by the handles.

4. Carry them up and down the course for 4 lengths (100m), then place one down back in the marked space.

5. Pick up the other by the centre lugs and carry at chest height down 25m and place it down, then jog three lengths back to the start.

6. Pick up and carry the straight hose and basket up and down the course 4 lengths and place back in the marked space.

7. Then run/jog up and down the course 4 lengths.

8. Pick up and carry the barbell (30kg) up and down the course 4 lengths.

Once you have completed all the tasks that would be the end of the test.

The chester treadmill test:

To be employed by Gloucestershire Fire and Rescue Service you are required to have a reasonable standard of physical fitness which is assessed using the chester treadmill walking test which forms part of the assessments to become a firefighter.

The chester treadmill walking test was designed specifically for fire and rescue services by Occupational Health & Fitness within the Centre for Exercise and Nutrition Science at Chester University.

The object of the test is to measure the Aerobic Capacity (Vo2 Max). Aerobic fitness is the ability to carry out activities in all aspects of your social and occupational life without causing undue fatigue.

This is a 12-minute progressive treadmill walking test to identify individuals that are capable of reaching the required occupational fitness standard of 42 Vo2 Max.

This is a brisk paced walking test, which requires you to use your leg muscles to climb gradually increasing gradients.

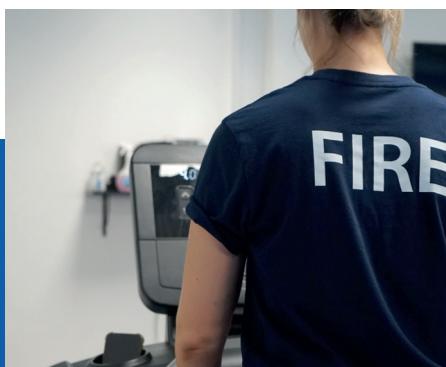
The treadmill pace is set at 6.2 km/hr (3.8 mph) and the incline at 0% for 2 minutes.

Every 2 minutes thereafter the gradient is increased by 3%.

Successful completion of the test requires you to walk unaided for a total time of 12 minutes with an increasing incline to 15%.

The test WILL be stopped by the test administrator; if at any point they have concerns with the candidate's physical ability to complete the test.

Stopping/being stopped before the 12 minutes is completed constitutes a failure to achieve an indicative VO2 Max Score of 42 MLSO2/KG/Min.



How can I find out

We strongly recommend attending a 'have a go' day session before you apply to be a firefighter. By attending a 'have a go' day you will be able to find out more information about the tests and talk to firefighters about their work. You'll be able to do some practice tests and be given guidance on the technique associated with each test and advice on how you can improve. Don't be afraid to give the practice tests a go. No one will judge you and it will give you a better idea of how you can prepare to be at your best on the actual day.

You can also find more information on our website:

www.glosfire.gov.uk



Gloucestershire
Fire and Rescue Service

Working together for a safer Gloucestershire

