



Medical Assessment

for Recruits



Updated May 2023 (JE)



Firefighters may be exposed to extreme physical and psychological demands in hostile and dangerous environments. To comply with relevant statutory provisions, the medical screening for Firefighters is rigorous. Under the Health and Safety at Work Act 1974, the Fire and Rescue Service must reduce risk so far as is reasonably practicable. This means a medical condition giving rise to reasonably foreseeable occupational risk would not be acceptable.

However, the nature and effect of medical conditions vary, and it is therefore not possible to confirm medical conditions that would be unacceptable prior to an individual medical assessment. If you have a medical condition or a history of a medical condition which might present problems, the following general guidance should help you consider your medical suitability and whether additional specialist information will be necessary at your medical assessment.

A medical condition or functional limitation which, despite any reasonable adjustments, gives rise to significantly increased occupational risk of the following is likely to be unacceptable:

- Sudden collapse or sudden incapacitation
- Impaired judgement or altered awareness
- Substantial physical or psychological injury/ill health
- Any other effect which would pose a substantial health and safety risk to yourself or others

During your assessment health professionals will examine your general health against the required standards and this will include a discussion about your completed medical questionnaire. Your health information is confidential to the occupational health and fitness team. In some cases, we may need to see further information from your GP.

***We recommend prior to applying** as, if we find colour sensitivity at the medical it will delay your starting date on the course whilst you get the Farnsworth D15 done, if you pass all other aspects and are offered a place, ie you will have to wait for a later course.

The medical assessment will include the following:

- General health questionnaire includes a history of physical and mental health, (with additional respiratory questions for the Asbestos Regulations)
- Measurement of pulse, blood pressure, height, weight and waist measurement
- Urinalysis
- Vision (both near and distance) plus colour vision
- Spirometry (lung capacity test)
- Audiometry (hearing test)
- General physical examination (e.g. cardiovascular, neurological, respiratory, musculoskeletal etc)
- Cardiovascular Fitness Test

Firefighter - eyesight requirements

If you have any doubts regarding your eyesight, we suggest that you book an appointment with your optician and make them aware of the required standards (these can be found in the FAQs).

Colour Sensitivity (aka Colour Blindness) – If you believe you have colour sensitivity, it is advised that you arrange formal assessment ***prior to applying**. An Ishihara test is carried out at the medical assessment and **if this is not passed**, our OH doctor will need to see evidence that your colour sensitivity is MILD and this can be done by having the Farnsworth D-15 standard test with a suitably qualified professional, providing evidence of the results with a report from said professional stating that you meet the requirements for becoming a Firefighter.



FAQs

I would like to become a firefighter, but I wear glasses or have had laser eye surgery, is that a problem?

The Vision Standards for becoming a Firefighter are as follows:

- Vision must be binocular, with **full visual fields**.
- Distance vision:
 - Visual acuity should be at least 6/9 binocularly, and a minimum of 6/12 in the worse eye, this can be wearing visual aids.
 - If visual aids are required then the minimum uncorrected vision should be 6/18 in the better eye and 6/24 in the worse eye.
- Near vision:
 - be able to read N6 at 30cm unaided with both eyes open (applicants aged 25 years or under) or be able to read N12 at 30cm unaided with both eyes open (applicants aged 26 and over).
- Eye disease:
 - Have no history of night blindness or any other ocular disease that is likely to progress and result in future failure of the visual standards for serving firefighters.
 - Individuals with keratoconus are unlikely to be fit for firefighting duties
 - Compound astigmatism assess for capability, history of headaches and eyestrain
- Have an appropriate level of colour perception, as described on page 1.
- Have not undergone refractive surgery in the previous 12 months. Individuals who have had Radial Keratotomy cannot be considered for operational firefighting duties due to the relatively high incidence of refractive instability.
- Individuals who have undergone the following types of refractive surgery can be considered 12 months after surgery:
 - Photorefractive Keratectomy (PRK)
 - Laser assisted in-situ keratomileusis (LASIK)
 - Laser epithelial keratomileusis (LASEK)
- Soft contact lenses can be worn.
- Rigid (hard) lenses are not considered safe as debris can become trapped beneath these which can cause visual discomfort and disability.

Assessment after Refractive Surgery – an examination to consider the suitability of a refractive surgery patient for operational firefighting should include:

- A slit lamp examination to confirm that the eye has returned to normal and that there is no significant loss of corneal transparency over the pupil area
- Refraction, topographic examination and pachymetry to screen for keratectasia.
- Candidates should have their visual performance assessed using a technique sensitive to the presence of scattered light and aberrations.

***Any doubts – see an optician, before applying, taking the above criteria and come to your medical with the test result evidence for the OH doctor to see.**



FAQs

I struggle sometimes to hear things, will this be an issue?

Firefighters must not only communicate over the radio, but they must respond to shouted warnings, audible alarms and cries for help – all above the environmental noise at incidents. Therefore, they need to have a minimum hearing level to be considered 'fit for role', which would normally be H2 (military standards). Hearing aids are allowed on the fire ground, however, **they must meet certain standards.**

At your medical you will have at least one hearing test known as the Pure Tone Assessment (PTA), from this a calculation is performed and if H1 or H2 is achieved then there is no further test required, however, if neither of these are achieved then a further hearing test is required, known as the Functional Hearing Assessment (FHA) following which advice will be given as required. The PTA is carried out to get an understanding of your hearing ability before employment and is conducted without any form of hearing aid, however, the FHA is to assess your hearing capability, for which, if you have one already, an appropriate hearing aid can be used. **We do not routinely recommend getting one prior to your medical, as, unfortunately, the type required is expensive and recruits can fail selection at any point of the process,** but if it is found at the medical that one MAY help, and you pass all other aspects, then your starting date will be delayed. For further advice contact OH.

What if I have asthma?

Asthma does not necessarily prevent you from becoming a firefighter. However, firefighters are exposed to smoke and other toxicants as part of their job, which are irritating to the lungs / upper respiratory tract and can exacerbate the symptoms of wheezing in firefighters with asthma. Your condition will be assessed at the medical stage, after which a decision will be made as to your suitability for the role of firefighter. This will include:

- Careful history that focuses on current symptoms and treatment requirements,
- Potential triggers including exercise and irritant exposures
- The frequency and history of exacerbations

What if I have had mental health issues?

Mental health issues can affect anyone, and it is estimated that 1 in 6 people in the past week will have experienced a common mental health problem. Most individuals can manage these episodes with self-help strategies, counselling support or medication (in some cases) and can continue to cope well in their everyday activities. Having experienced such issues will not prevent you from applying to become a firefighter and all cases will be discussed confidentially with you during your medical assessment. If you have recently begun to have symptoms or started treatment, it could be that information will be required from your GP or Specialist to help during this assessment. Also, if you have a chronic mental health condition which requires ongoing treatment or input from a GP or specialist, we are likely to need medical reports to be able to offer an opinion on your fitness for firefighting. If you are aware that any of the above could apply to you, please get in touch with us to discuss this further and we will be able to offer advice on any next steps to assist in the assessment process.



FAQs

I am a diabetic. Can I still apply?

We will need a report from your Specialist Consultant/GP detailing the following information to allow assessment of suitability and so that an individual risk assessment can be undertaken:

- Category of Diabetes (Type 1 or 2)
- Evidence of stability of control
- Evidence of blood sugar levels (HbA1c) over a recent 12-month period

Fitness Standard

Our method of assessment is by using a standardised treadmill test and you have to reach a set standard. The level of fitness is maintained throughout a firefighter's career, which is assessed annually.

What if I have high blood pressure?

Prior to engaging in physical activities as part of the firefighter application process, we will take blood pressure readings to ensure that it is safe for someone to do so. If the readings on the day indicate Stage 2 hypertension (see below), we will not allow an individual to undertake the physical assessments and suggest that they discuss the results with their GP.

Whilst we realise that it is possible for people to have some fluctuations in their blood pressure readings dependent on many factors, we will not have the opportunity to schedule further readings during the application process. Therefore, if you are aware that you do have, or previously had high blood pressure, you should take steps to ensure that this is well managed before attending for physical assessments.

BP Classification	Systolic	Diastolic
Normal	<120	AND <80
Pre hypertension	120-139	OR 80-89
Stage 1 hypertension	140-159	OR 90-99
Stage 2 hypertension	>160	OR >100

Any questions? The OH team can be contacted via:
occupational.health@notts-fire.gov.uk

What increases risk of developing high blood pressure?

There are various things that can cause an increase in blood pressure, including:

- Being overweight
- A diet high in salt
- Not eating enough fruit and vegetables
- Drinking too much alcohol or caffeine-based drinks i.e., coffee
- Not engaging in regular physical activity
- Smoking
- A family history of high blood pressure

Lifestyle changes for managing blood pressure

To prevent or reduce high blood pressure, there are various lifestyle changes you can adopt which can help to lower your blood pressure:

- If you are overweight, then weight loss can help
- Regular physical activity
- Reduce salt intake
- Moderation on alcohol Intake

For more help and advice see:

<https://www.bhf.org.uk/information-support/heart-matters-magazine/research/blood-pressure/blood-pressure-tips>

To help us to measure your blood pressure accurately when you attend, please refrain from food, caffeine, tobacco and alcohol for 30 minutes before arrival.