

Health and fitness for firefighters

Why do I have to be healthy and fit?

Extensive research by fire agencies places emphasis on cardio-respiratory (heart/lung) fitness, muscular strength and endurance as a means of ensuring that firefighters have the capacity to perform firefighting and planned burning tasks for long periods under arduous conditions. Individuals with higher levels of fitness are able to meet the demands of these roles better. They are able to combat fatigue and cope with heat and sustained fireline work in smoke and dust. Fitness also leads to reduced injuries, lower stress and safer work. Only people who are deemed to have suitable health and fitness will be offered on ground positions.

How does DEWNR determine health and fitness levels?

Health

Part of the selection process is a specific medical assessment. This pre-employment medical will be conducted by a contractor nominated by DEWNR. The medical will be paid for by DEWNR.

If you have serious cardiovascular, neurological or respiratory conditions, or are obese, this type of employment would not be recommended.

A successful medical is required for employment. The AFAC Guidelines below contains further specific information.

Fitness

Part of the process is a test of suitable fitness levels by the use of a Task Based Assessment (TBA). A successful assessment is required for this employment.

What is a task based assessment?

TBAs are physical tests that model work undertaken in the field.

TBAs do not simulate fire conditions such as heat, smoke and dust that are likely to be found on a fireline or prescribed burn.

They are used to ensure that employees have the range of physical skills required to fight fires. These do not alter for age, race or gender, making it fair and equitable for all applicants.

All applicants applying for firefighter roles must undertake the pack hike test.

What is the pack hike test?

The pack hike test assesses your fitness ability. It is a test of aerobic fitness and muscular endurance.

Participants must wear appropriate footwear and clothing. Footwear should have a tread sole, such as hiking boots or runners/sports shoes. Open styles of footwear such as thongs and sandals are not permitted. Recommended clothing includes loose fitting long or short sleeve shirts, long or short pants. Hats and sunglasses



should be worn for additional sun protection.

Who must complete the task based assessment?

All categories of Firefighters must successfully complete the Task Based Assessment to be considered for firefighting.

What does the Task Based Test involve?

Category	Name	Hike Test	Rake Hoe Test
A	Arduous Pack Hike Test	4.83 km (3 mile) walk carrying 20.5 kg (45lb) in 45 minutes	To continuously construct a mineral earth rake hoe line to a width of 50 cm by achieving 165 strikes in less than 3 minutes
B	Moderate Field Test	3.22 km (2 miles) walk carrying 10.0 kg (22lb) in 30 minutes	
C	Light Walk Test	1.61 km (1 mile) walk carrying 0 kg in 16 minutes	To continuously construct a mineral earth rake hoe line to a width of 50 cm by achieving 120 strikes in less than 3 minutes

How do I get fit to be a Firefighter?

You should check with your doctor before commencing any new fitness training program or dramatically increasing the one you are currently involved in if you:

- are over 40 years of age
- have experienced faintness, light-headedness or blackouts
- have experienced unusual heartbeats such as skipped beats or palpitations
- have ever been told that your blood pressure is abnormal
- have high cholesterol
- have ever had heart trouble or a heart attack
- have a family history of heart problems
- have any major illnesses.

Make sure that any program that you undertake has a warm up, conditioning and cool down phase.



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Remember

- Never exercise if you are feeling unwell or in pain
- Stop any exercise that causes pain immediately, and see a doctor
- Keep a record of what you have achieved with goals set along the way.

Also always check your heart rate while you are exercising. As a guide, in training your heart rate should be around 75% of the maximum, which can be calculated by:

- $(220 - \text{age}) \times .75 = \text{training heart rate}$
(note that your heart rate can go above and below this figure)

The recommended minimum number and length of training sessions are:

- 30 minutes, 2 to 3 times per week to maintain fitness
- 30 minutes, 4 times per week to increase fitness.

Training for the pack hike test

The best way to train for the pack hike test is to take a staged approach to the walk.

Start by walking the pace required, even if you only walk 1/2 or 1/3 of the total distance to begin, i.e. walk 1610 metres in 15 minutes. Progress to 2415 metres in 22.5 minutes. Then to 4830 metres in 45 minutes.

Then in the same pattern slowly add weight to the pack. If you are unable to increase the weight an increase of 5% in gradient is equal to 5 kg, so try walking up hills.

Always make sure that you are wearing a suitable pack and that it is adjusted correctly, with the weight placed high on the back and close to the body. The wearing of a pack while walking at this pace has been known to cause friction burns, possible sites include lower back,

armpits and hip points. Make sure clothing is not bunched, has no seams in these areas and stop and re-adjust pack and load should you feel any discomfort.

Remember always train with care.

Any information provided in this document is only a general guide. Your ability to pass these tests will depend on your fitness level.

