Advice and Guidance notes to prospective candidates

As part of the selection process for the Paramedic, Patient Transport Service, Emergency Care Support Workers role you will be required to complete a fitness test that is necessary for you to be able to undertake your position with the South East Coast Ambulance Service (SECAmb) during the programme.

The test is designed to assess your ability to carry out peak demands of ambulance work. SECAmb feels that this is necessary to ensure that you have sufficient physical ability to cope with extreme work demands, as and when these occur, and to minimise the health/injury risks known to exist within low fitness groups when regularly engaged in such physical work.

The testing objectives include each candidate having reasonable aerobic capacity, muscular strength and endurance, anterior chain strength and endurance. If you have not engaged in physical activity for some time, are not used to exercise, or suspect any problems (e.g. heart, joint or muscle) that may be made worse by exercise, please consult your own GP. The test, that should last no longer than 45 minutes in total, is reasonably physically demanding and you need to be medically fit to undertake it. However, it should not be a seen as an ultimate level of fitness ability, moreover a suitable level of fitness for the role and therefore perhaps you should aim to uphold you own personal fitness to higher standards.

PREPARING FOR THE TEST

Below is some advice we would recommend:

To increase fitness levels it is recommended to manipulate the frequency, duration and intensity of the exercises you carry out through logical progressions to facilitate an overload factor. This is what will bring about a physiological change over time.

If you require any further advice about types of exercise, frequencies, intensities or durations, seek the assistance of a reputable qualified fitness trainer or health club, explaining your requirements.

THE FITNESS TEST

The test will comprise of a number of elements each of which is listed below.

Information gathering:

**Anthropological testing**

a) Height  
b) Weight  
c) Circumferential measurements of waist and hip

From the above we shall calculate your BMI and your waist to hip ratio a very predictor to potential health issues. SECAmb will keep these on file as a reference for any potential future testing.
GRIP STRENGTH:

A certain amount of grip strength is paramount for working as a paramedic and the test conducted is a reasonable gauge of general arm strength. The exercises below will help to improve and maintain good grip.

1. Use spring loaded grip handles – so long as after 10 repetitions your grip is exhausted. If you can do more than 10 you require a stronger grip.
2. Hanging exercises. Holding on to a bar with your body weight off the floor is great way to develop grip strength. Measure the length of time you can hold on for. If you can do longer than 60 secs try to pull your body weight up as in a ‘chin up.’
3. Free weight training is recommended over fixed weight machines so long as you familiar with correct form. Gain advice if you are not sure form a reputable trainer/instructor.
4. Pinch grips are a good drill to carry out. Plate pinches require you to grip two weight plates from the top, with your thumb on one side and your fingers on the other, then pick up the plates and hold for as long as possible.
5. Rock climbing is a great way to improve grip strength.

Requirement

The candidate will be tested on grip strength in both hands using the machine below. 3 alternating attempts are allowed to gain the score required. The candidate has to achieve a grip strength of 31kg on both hands.

LIFTING STRENGTH:

Lifting strength is also a paramount for working as a paramedic, carrying and lifting is a large part of the role. The hydraulic dynamometer measures your lifting strength and is a good for testing this area of fitness.

We encourage safe lifting at all times and so if you are unsure on how to lift using your legs get some advice from someone qualified to teach. The exercises below will help to improve and maintain good lifting strength.

1. Basic squatting exercises with or without weights will help to improve form in this test.
2. Dead lifting using a barbell is probably the best exercise to practice. The test is carried out from just above knee height so do not expect to lift 100kg in the gym from the floor, however, carrying out the drill trains the correct muscles to achieve the right score.
Requirement

The candidate will be tested on lifting strength using the equipment below. 3 attempts are allowed to reach the score required. The candidate has to reach a lifting strength of over 100 kg of force.

![Weightlifting equipment](image)

Upper body and anterior chain muscular strength/endurance

PRESS UP TEST

The press up test is a well proven test that measures the most amount of press up you can achieve in one minute. It measures the ability of upper body in conjunction with deep stomach muscles to be able to overcome one’s body weight repeatedly without undue fatigue. Resting in between press ups is allowed.

Full press ups are required not ¾ versions. Good form will be explained and demonstrated as there are often many variations in form, the facilitator will inform you if your form is not appropriate. Expected is a 90 degree bend in the elbow and maintaining a neutral spine at all times so that the lower back is protected.

Practicing the test exercise is the best way to prepare for this test.

Requirement

Depending on age and whether you are male or female will depend on how many you require to achieve a pass.

![Press up demonstration](image)
PLANK TEST

The plank test measure the endurance of the deep Transversus Abdominis stomach muscles if carried out correctly. We know that if this area is well maintained you are a slightly less risk of lower back issues and so this is a highly recommended exercise for most individuals.

The facilitator will explain and demonstrate what is expected of you and will point out if the form you are presenting is not appropriate.

Practicing the test exercise is the best way to prepare for this test.

Requirement

It is expected of you to hold a static position for 60 seconds without having to rest.

- Abdominal muscles are tight.
- Shoulders are aligned directly over the elbows.
- Body is properly aligned so that neck and spine are neutral. Model is looking down at the floor.
- Shoulders are down and back.
- Only toes, forearms, and hands are touching the floor.

Wrong

- Head is lifted and neck is craned
- Torso sags toward the floor. Only toes, forearms, and hands should be touching the floor.
- Neck and spine are not in a straight line.
WORK RELATED TASK

This test has been devised to replicate a simple task that you may come across at work.

The candidate will wear a 20 kg weighted jacket throughout the whole test.

A simple walk through some cones the length of the hall followed immediately by two minutes going up and down a step to 100 bpm set by a metronome. This is followed immediately by two minutes of compressions on a Little Anne. Once finished a 10kg weight will be collected and then walked though the cones back to the start point.

Requirement

The facilitator will be looking out for ‘exertional intolerance’ i.e. the candidate cannot complete the task without stopping.

Multi Stage Fitness Test (Bleep Test)

A well documented, standardised fitness test used to calculate aerobic and anaerobic capacity.

This test involves continuous running between two lines 20m apart in time to recorded beeps. For this reason the test is also often called the ‘beep’ or ‘bleep’ test. The candidates stand behind one of the lines facing the second line and begin running when instructed by the recording. The speed at the start is quite slow. The candidates continue running between the two lines, turning when signaled by the recorded beeps. After about one minute, a sound indicates an increase in speed, and the beeps will be closer together. This continues each minute (level). If you reach the line before the beep sounds, you must wait until the beep sounds before continuing. If the line is not reached before the beep sounds, you are given a warning and must continue to run to the line, then turn and try to catch up with the pace within two more ‘beeps’. The test is stopped if you fail to reach the line (within 2 meters) for two consecutive ends after a warning. It is possible to find this test on phone apps as well as online.

Requirement

Attain a level of 5:4
All tests will be overseen by a qualified instructor. The candidates will be asked to sign a pre health questionnaire disclaimer before the fitness assessments are carried out and the candidates must declare any physical / fitness problems prior to participation. The tests can be halted at the instructor’s discretion if they feel the assessments are having a negative impact of the candidate’s health.

The candidates are asked to bring / wear suitable clothing to this assessment and flat shoes. **The test will not be completed if the candidate is not wearing appropriate footwear.**

A candidate has to pass all elements of the fitness assessment in order to progress.