

Pre-employment Functional Capacity for Operational Ambulance Personnel

Testing Protocols



**SA
Ambulance
Service**

INTRODUCTION

The *Medical and Physical Fitness Assessment* includes:

- ✓ Flexibility
- ✓ Power
- ✓ Endurance
- ✓ Functional Strength

Preparation for a physical assessment cannot be done in a short time frame. Medical clearance should be obtained prior to starting any exercise program. Help for a training program can be obtained from someone with a degree in sports science or human movement. A list is available from the Australian Association of Exercise and Sport Science (www.aauss.com.au) for recommendation of an accredited trainer or coach.

Manual handling is defined as any activity requiring a person to lift, lower, push, pull, carry, move, hold or restrain any animate or inanimate object. Most of a Paramedic or Ambulance Transfer Officer's work involves manual handling, or more specifically patient and equipment handling. Officers frequently perform all of these functions with patients weighting up to and over 150kg, while simultaneously implementing various pre-hospital emergency care procedures. For an individual to successfully perform these types of tasks concurrently they must have:

- The intellectual capacities to perform the pre-hospital care procedures
- The physical ability to perform the manual handling component of patient care.

It is acknowledged that injury prevention is multi-factorial. Functional fitness relevant to the physical demands of the work is important, as one of the components in the range of strategies designed to reduce injury and promote the health of employees. Consequently, selection of individuals who are both functionally able to perform such duties is an important strategy in reducing workplace injuries.

Research was conducted by SAAS to develop a functional fitness screening protocol which is used as part of the selection process for new recruits. Most standards for SAAS' medical requirements are found in the Commercial Vehicle Driving Standards - Assessing Fitness to Drive document which can be accessed through their website www.austroad.com.au

The functional fitness testing protocols were designed in conjunction with profession providers by assessing the performance of current operational staff to establish some baseline data for comparison with applicants. They were validated with work related situations to ensure the tests accurately reflected the duties performed during ambulance related work.

IMPORTANT INFORMATION:

SAAS does not provide direction for self assessment and advises that intending applicants should engage qualified assessors to conduct tests in a suitably supervised environment with specialised equipment.

Tests include but are not restricted to the following:

Height and weight assessment

- Height and weight are measured to calculate applicants BMI

Clinical assessment of joints

- Examination all joints of the body
- Testing ranges of movement, with overpressure of significant joints
- Repeated range of movement testing of some joints
- Hyper-mobility assessment of nine joints
- Palpation of significant joints

Clinical assessment of muscle endurance

Five muscle endurance / strength tests are performed as part of the clinical examination

- Wall squat
- Abdominal strength
- Abdominal endurance (hold for 120 seconds)
- Double leg hold
- Supine neck hold

Fitness assessment

- The Astrand Step Test to predict VO₂ max

Static strengths test

The applicant's static strength is measured in 5 distinct test procedures

- Static biceps strength
- Static leg lift
- Static push
- Static Pull
- Grip Strength

Dynamic lift capacity

- Dynamic lift capacity from 250mm – 870mm
- Minimum test requirement is a safe lift of 41kg minimum from 250mm to 870mm

Applicants will be assessed on their overall fitness standards in relation to the above information.