

## **MEDICAL STANDARDS**

### ***Cardiovascular***

Customs requires that each officer maintain a high degree of self-responsibility and responsibility for the safety of others. An officer should not place themselves or others at risk through failure to disclose known problems or seek appropriate treatment and management of medical conditions which could lead to collapse, lapse of consciousness or cardiac event.

The combined examination of the cardiovascular system and the assessment of cardiovascular risk factors is an integrated evaluation aimed at:

- Assessing cardiovascular risk prior to aerobic exercise testing.
- Excluding current significant physical cardiovascular disease.
- Assisting the assessment of the applicant's ability to undertake all required tasks.

The assessment of cardiovascular risk requires completion of an established algorithm which evaluates blood pressure, resting ECG, total and LDL cholesterol, fasting blood sugar (presence or absence of diabetes), age, sex, smoking history, and exercise activity against the CHD risk table.

A resting ECG is required for all applicants. This is required to assess cardiovascular risk profile. A stress ECG would generally not be performed (see below).

In general, the applicant should not have a medical history of:

- Ischaemic heart disease.
- Any other significant heart disease such as aortic stenosis.
- Cerebrovascular disease.
- Cardiac ischaemia or ventricular hypertrophy.

A guide to acceptable risk prior to undergoing standard exercise testing of sub-maximal aerobic capacity with bicycle ergometer would include the following:

- Resting pulse rate should be less than 100 per minute.
- Resting blood pressure should be equal or less than 160/100.
- Body mass index should be less than 30 (preferable but not obligatory).

Where applicants do not meet these guidelines or who have a high cardiovascular risk profile they do not meet the medical requirements for medically unsupervised exercise testing.

A medically supervised stress ECG might rarely be indicated under these circumstances, but generally the person would not be considered to meet the medical guidelines and the case would be fully discussed with the Customs liaison officer and an Occupational Physician.

### **Respiratory**

The assessment of the respiratory system should have a functional approach to assessing an applicant's ability to undertake all required work tasks.

The assessment involves attention to the amount of exercise undertaken by the person, any symptoms, cough, chest pain, and any unusual shortness of breath on physical activity or respiratory disease.

All applicants should generally:

- Be free of chronic respiratory disease.
- Not suffer from complicated asthma.

Some individuals with minor asthmatic histories, may be acceptable, provided that they:

- do not have a history of sudden or severe dyspnoea.
- meet the above guidelines with spirometry.
- do not have exercise induced asthma.

Individuals with active treatment for a current chest infection would not meet the guidelines for the duration of their illness. Those with complicated asthma would not be expected to meet the guidelines at any point in time and should be carefully assessed.

A Spirometry is required for all applicants with respiratory problems to assist in the assessment of respiratory status. In the context of this medical screening a reduction of either FEV1 or FVC to less than 70% of the predicted values or FEV1/FVC ratio of less than 0.7 is significant and equates with appreciable respiratory impairment.

### ***Musculoskeletal***

The response requirements for particular roles may impose demands for sudden or sustained physical activity and effort on an unpredictable basis. The musculoskeletal examination must concentrate on the functional ability of an individual to safely meet the physical demands of the work and work environment.

There must be no significant restriction of the upper or lower limbs or the back  
All limb and back movements must be pain free.

An applicant must be free from musculoskeletal or neurological problems, which impair:

- Manual dexterity and hand function.
- Manual handling.
- Mobility, agility, balance and coordination.
- Physical exercise activity.

A history of current, recurrent or past back problems must be fully documented and carefully evaluated in the assessment of medical fitness in relation to the physical demands of the position.

A history of a back problem over a short period of time with subsequent full functional recovery would not cause as much concern, as would recurrent and continuing symptoms and current disability and functional loss.

Any history of conditions causing neck pain, upper or lower limb pain or requiring surgery must also be fully documented and carefully assessed.

Applicants who require orthopaedic appliances for joint stability or mobility would generally not meet the physical demands of the full range of essential job requirements.

Problems involving disorders of balance, tremor or sensory loss may interfere with fine motor control and motor coordination, balance, mobility and agility.

### ***Vision***

An applicant must have adequate vision to be able to read pressure gauges on safety equipment, read documents and to undertake tasks and functions under a variety of weather and lighting conditions.

Distance vision is acceptable if visual acuity is:

- 6/12 or better in each eye aided or unaided.

There is a minimum requirement of unaided distance vision of:

- 6/24 in the better eye unaided and 6/36 unaided in the weaker eye.

This is to ensure some residual useful vision should visual aids be displaced in any emergency activity or operation or any work in confined spaces or at heights in particular.

Acceptable visual aids are soft contact lenses, or CR39 plastic or similar spectacle lenses in sturdy metal or plastic frames.

Near vision binocular or monocular and either corrected or uncorrected should be N5 using the Times Roman Chart at 40cm. This level of corrected visual function would allow safe recognition of pressure gauges during OST functions.

### ***Colour Vision***

Colour vision perception should be sufficient to allow reliable red-green colour discrimination of surface colours and coloured light. The initial screening test is the Ishihara colour vision test.

Pseudo-isochromatic plates (Ishihara 24-Plate booklet) with three errors or less are considered normal and pass colour vision screening. The number of errors should be documented.

Colour vision is abnormal if there are more than three errors on Ishihara testing. The applicant may still have safe red green colour discrimination, but will require further testing by the medical examiner or an optometrist or ophthalmologist for a colour vision safe standard. The sequence for subsequent testing for those who do not pass the initial colour vision screening is:

- Oscar or Medmont 100 – if normal or deutan type defect pass overall.
- If protan type defect is identified then further testing is helpful, but not obligatory. D15 test or FM100 or equivalent – pass to discriminate red green surface colours.

If the individual has a protan form of colour vision confusion or fails test 2 then the case should be discussed with the Customs contact officer. Colour vision status should be documented.

### **Hearing**

An applicant should have normal unaided hearing in both ears to allow normal conversation hearing and safety critical hearing, communication by electronic devices and undertaking safety and rescue functions in a variety of environmental conditions. An audiogram is required for all applicants and the recommended guide for minimum standards in each ear is as follows:

Hz	500	1000	2000	3000	4000
DB loss	35	35	35	35	35

### ***Some positions may require that you pass the following Physical Fitness Assessments prior to being offered employment.***

The assessment of physical fitness is aimed at evaluating the dynamic ability of an applicant to:

- Work safely and efficiently at heights.
- Work safely and efficiently in enclosed areas with restricted access/exit and variable light conditions.

Applicants must be physically fit to enable intermittent episodes of sustained physical activity. For those applicants who are deemed medically fit, further exercise and endurance testing will be as arranged by Customs.

The methods for measuring aerobic physical fitness, agility strength and cardio-respiratory endurance involves a range of standard specific tests, which are appropriate for the range of physical tasks and abilities required of a Customs Officer.

These endurance and exercise tests will include:

- Knee Extension.
- Thomas Test.
- Waiters Bow.
- Core Stability Test.
- Lower Abdominal Strength Test.
- Queens College Step Test.
- Multi-directional Lunge Test.
- Vertical Jump.
- Hexagonal Obstacle Test.
- 20 Repetition Squad Assessment.
- Push Up Test.
- 10 Repetition Functional Lift Test.

These standard exercise tests allow reliable measurement, quantification and prediction of capacity for aerobic exercise, such as would be required for carrying, climbing and manual handling. The testing is performed by trained exercise testers and uses Australian standards for predicted sub-maximal exercise capacity.