Pre-clinical placement Physical Capacity Testing



Physical capacity test is an industry requirement for students to attend clinical placements with Ambulance Victoria. Hence, students are required to undertake a number of physical tests at InjuryNET to determine their ability to perform the physical demands inherent in the emergency ambulance services.

You are required to successfully complete this test once. The results will be valid for the 1 year duration of the Diploma of Paramedic Science (Ambulance) and 3 year duration of the Bachelor of Health Science (Paramedic) course.

The test includes aerobic step testing, double leg hold, supine neck hold, core strength, static lifts at various heights, static pull, and static push, and grip strength tests. All ten (10) components of the test must be passed to achieve an overall pass.

Aerobic Step Test

Procedure

This test requires the subject to step up and down on a 415mm step at a gender-determined rate for 3 minutes. The heart rate response to exercise predicts the student's Aerobic Capacity.

Pass Mark

Predicted VO₂ MAX - **AVERAGE** age/gender related Norms

Heart Rate Recovery – AVERAGE



Grip Strength

Procedure

The subject is seated and holds the dynamometer in the dominant hand to be tested, with the arm at right angles and the elbow by the side of the body. The handle of the dynamometer is adjusted so the base should rest on the thumb pad (heel of palm), while the handle should rest on the pads of the index and middle finger. When ready the subject squeezes the dynamometer with maximum isometric effort, which is maintained for about 5 seconds. No other body movement is allowed. The subject produces a maximum effort.

Pass Mark

28kg Pass, 38kg Desirable



Supine Neck Hold

Procedure
The subject lies supine on the plinth, with their head of the end of the plinth. The assessor must support the subject's head with their hands.

• Subject will be asked to maintain the neutral neck position for "As long as you can or until assessor says stop."

• The test concludes when the subject lets their head down, when control of chin position is lost or when the predetermined time is reached.

Pass Mark

The recommended endurance time is **30 seconds**



Double Leg Hold

Procedure The subject lies prone on the plinth, with their chest on the plinth and their legs over the end of the plinth. Position their body so that their ASIS (Anterior Superior Iliac Spine) is exactly at the end of the plinth.

- 2. The subject may hold on to the plinth with their hands for stability.
- The subject is asked to lift both legs simultaneously, with the knees straight until their hips are flexed 10°. Their feet, heels and knees must remain together.
- 4. Ask the subject to maintain the double leg lift position "As long as you can or until I say stop."
- 5. The test concludes when the subject lets their legs down or when the pre-determined time is reached.

Pass Mark

The recommended endurance time is 120 seconds



Core Strength – Timed Prone Hold

Procedure

The subject balances their weight evenly on their wrists (hands clasped together directly under their chin), elbows and feet (between 100mm and 200mm apart).

Pass Mark

75 seconds Pass, 90 seconds Desirable







Static Lift – 245mm Height

Procedure

1. The Force gauge is attached to a cable from the floor and adjusted to the required height of 245mm 2. After a warm up, the subject is required to perform a 50% maximum lift to get a feel for the test. The subject is then required to perform a safe maximum lift from the lowest height. This force is exerted for 5 seconds. Note that the computer software will record the force exerted over a 5 second period.

3. After a comfortable rest period is achieved or a maximum rest period of 30 seconds, the same procedure is followed for the second lift height, and then again for the third lift height.

4. The subject stands with their feet at shoulder width apart.

5. Correct manual handling techniques must be maintained throughout the test.

Pass Mark

42kg Pass, 61kg Desirable



Static Lift – 600mm Height

Procedure

As per 245mm Height lift with adjusted required height 600mm

Pass Mark

41kg Pass, 57kg Desirable



Static Lift – 950mm Height

Procedure

As per 245mm Height lift with adjusted required height 950mm Pass Mark

36kg Pass, 56kg Desirable



Static Push – 950mm Height

Procedure

- 1. The Force gauge is attached on one end to the wall and the other end to the modified handle.
- 2. After a warm up, the subject is required to perform a 50% maximum push to get a feel for the test. The subject is then required to perform a safe maximum push. This force is exerted for 5 seconds.
- 3. The subject stands with one foot in front of the other at about 200mm apart.
- 4. The subject is given 3 attempts and a graph for each attempt is recorded.
- **5.** Correct manual handling techniques must be maintained throughout the test.

Pass Mark 21kg Pass, 32kg Desirable



Static Pull – 950mm Height

Procedure As per *Static Push* with a safe maximum <u>push</u>

Pass Mark 20kg Pass, 29kg Desirable



