



WHAKARATONGA IWI

FIRE
EMERGENCY

NEW ZEALAND

TRAINING TIPS

PRE-ENTRY PHYSICAL TEST

About this document

This document includes training recommendations for candidates looking to improve on specific areas within the Pre-Entry Physical Test. The exercises within this guide are intended to be used in conjunction with a well-balanced strength and endurance training programme to target specific training deficits.

This guide was compiled by career firefighters to give candidates an idea of what kind of training should be included in their programmes. It includes information on how to improve:

- press-ups
- grip strength
- shoulder press
- pulling strength
- deadlift strength

Please see our *PPT Training Plan* for recommendations for a strength and endurance training programme, and *PPT Guide for Candidates* for reference and requirements for the actual test.

Disclaimer

If you have a medical condition that could be adversely affected by a change in physical activity we recommend consulting your physician or health care professional before following these recommendations. Do not start this training if your physician or health care provider advises against it.

Press-ups

There are multiple methods to build strength in press-ups. Make sure you get the technique right (check the *PPT Guide for Candidates*) before you start your training to avoid injuries.



Volume:

You can increase volume by doing max rep sets, see below for an example. This is a test of muscle endurance and you will be assessed at a cadence of 1 sec up 1 sec down. We strongly suggest you use a metronome app during your training. There are also a number of apps that can help you perform your press-ups to a metronome, increase your volume and track your progress.

Example push up training session:

Perform 1 x set of max reps

Then complete 3 x sets of 50-60% of the first max rep set.

Progressions:

If you are still not able to perform full press-ups, there are multiple ways of building the strength before adding volume:

- Slow descents/negatives.
- Incline - use a box or stairs.
- Width variations – alter the positioning of your hands.
- Make sure of the depth – use a yoga block or similar to make sure you hit the required depth.
- Full ROM (hand release press-ups) – go all the way chest to ground, lift your hands at the bottom to counter the stretch reflex.

Accessory work:

These are examples of accessory exercises we would recommend adding to your training to improve your press-ups:

- ring rows
- bench press
- plank/dish holds
- scapula contractions/retractions

Grip strength

The first thing you need to do when wanting to increase your grip strength is to stop using lifting straps or hook grips as this is compensating for a weaker grip and preventing you from improving grip strength. Instead, dial back the weight to one you can hold unassisted, and your grip strength will improve.

Building strength:

Every time you train pulling or lifting exercises you will also be training your grip so keep this in mind and adopt an active grip for the duration of the set. Avoid letting the bar slide towards your fingers during a set. Instead keep it locked firmly in the palm of your hand and wrap your thumb around the bar to hold it in place, and squeeze. You can take things up a level by using “fat bars” or “fat grips” while lifting, or use a towel/rope in pulling movements.

Absolute/endurance strength:

You will need both absolute grip strength and endurance grip strength. Absolute strength can be gained through heavy lifting while endurance strength can be built up by performing prolonged holds at a moderate weight.

Specific exercises:

- farmers carries
- plate carries
- bar hangs (see top picture)
- deadlifts
- wrist rollers (see bottom picture)
- finger rolls



Shoulder press

It is important to get the technique of the shoulder press right, before you begin to increase the weight and volume to avoid injuries. Check the *PPT Guide for Candidates*.

Volume:

Work on your volume (try to use the assessment weight of 20kg) by doing max rep sets or an EMOM increasing the reps you do each training day.

Remember this is a test of muscle endurance and you will be assessed at a cadence of 1 sec up 1 sec down. We strongly suggest you use a metronome during your training.

Imbalances:

If you find one side is stronger than the other look at doing some single arm work with dumbbells or kettlebells.

Building strength:

There are many strength programmes available, make sure you choose one that relates to your level of weightlifting experience. Beginners should be looking at a rep range of 3 sets of 10 reps, whereas those more experienced will respond better to a 5 sets of 5 reps program.

Accessory work:

These are examples of accessory exercises we would recommend adding to your training improve your shoulder press:

- Ring Rows
- Bench Press
- Dips and Triceps extension
- Plank/Dish holds
- Scapula Contractions/Retractions



Pulling strength

Pulling power is tested across two planes in the PPT, horizontal and vertical. Both of these tasks require a high level of upper body strength. Its important to focus on muscle recruitment: firing the right muscles at the right time. We recommend you include compound exercises in your training as this will improve your mind-body connection.

Building strength:

The first thing to do if you find this area challenging is to build strength through the upper body.

The muscles recruited while performing these tasks are muscles of the upper back, arms, and strong core muscles. A substantial weakness in any of these areas will contribute to reduced pulling power and a difficulty in performing the task.

If possible, we recommend setting up a pulley with a weight (e.g a potato sack) and line/ rope at home.

Accessory work:

- lat pull downs
- pull-ups
- dumbbell hammer curl
- body weight rows
- seated cable rows
- bent over barbell rows
- plank/dish holds
- scapula contractions/retractions

Balance and Imbalance:

Balances: make sure the training is balanced. If you do a lot of pulling exercises, make sure you include pushing exercises into your training too.

Imbalances: correct imbalances by including exercises like single arm dumbbell rows and single arm cable pull downs.

Grip:

Remember grip is also important and will be improved during any pulling movement as long as no aids are used.



Deadlift strength

It is important that you get the technique right before you begin to increase weight and volume to avoid injuries. Check the *PPT Guide for Candidates*.

Building strength:

To increase deadlift strength you'll want to focus on increasing hamstring, quad and glute strength, as well as building strength in your lats, upper back and core. Initially start with light weights and focus on technique before increasing the weight.

Rack pulls

Deadlift power is tested in the PPT in the upper range of the movement. Therefore, in addition to your regular deadlifts, it can be beneficial to also add rack pulls to strengthen this part of the movement.

Deadlift hold

The barbell deadlift hold is another common variation that can increase your performance with both the deadlift and grip strength tests. If performed with heavy enough weights, forearms and grip strength will significantly improve.

- Begin by setting a couple of rack supports at just below hip level. Place your barbell with weight plates on the supports. The bar should be a couple of inches below your fingertips.
- Grasp the bar with an overhand grip, placing your hands just outside of your hip width. It's best to use your normal deadlifting form for this.
- Hinging at the hips and knees, bend over to pick up the bar off the rack support. Keep your core engaged and your spine neutrally aligned. Hold for 20 to 40 seconds before placing it back down.

Accessory work:

- leg press
- kettlebell swings
- rows
- rack pulls



