



# Nerve Conduction Studies (EMG) Clinic

## Royal Perth Hospital



### INFORMATION FOR PATIENTS

#### RPH Neurology EMG Clinic

The tests described in this brochure are in addition to the nervous system examination performed by your neurologist. These tests can be helpful in testing the function of your nerves and muscles, and can assist in the evaluation of weakness, fatigue, changes in sensation, and pain. The tests mentioned in this brochure are a way of checking the body's nerve circuits, and take approximately 30-60 minutes.

There are no restrictions or limitations on activities before or after the tests, and there are no permanent after-effects. You may be required to have one or more of the following tests depending on the questions that your referring doctor has asked.

#### Nerve conduction studies

Nerve conduction studies test how fast and how well nerve signals travel.

Your neurologist will perform a brief electric stimulus to one part of a nerve. The signal travelling along the nerve, or the muscle twitch it produces, can be measured by small recording electrodes taped to the skin surface. The electrical stimulus may cause an unusual tingling sensation and make the muscles twitch, but is usually only mildly uncomfortable.

#### EMG (electromyography)

Your neurologist will analyse the electrical activity usually present in muscles by gently inserting a fine needle electrode into selected muscles. Needle insertion may cause temporary discomfort, and occasionally a bruise. Your neurologist can determine whether the muscle is working normally by the pattern of electrical activity shown on a screen and heard over a loudspeaker. Recordings are made when the muscle is relaxed and when it's active. The needle is not used for injection and no shocks are given.

#### Preparation / special precautions

Be sure to notify the doctor performing the test if you are taking a blood thinning medication such as warfarin, have haemophilia or a cardiac pacemaker. The tests can still be performed, but it is helpful to know this information beforehand.

In all of these tests, the signals recorded are quite small, and the information obtained is more accurate and much easier to obtain if you are as relaxed as possible.

#### You don't need to do anything special to prepare for these tests, however:

- for nerve conduction studies of the hands or feet, **it is important that you keep them warm** before and during the examination. If you are having difficulty keeping them warm, please notify staff when you arrive for your appointment.
- please keep your skin free of moisturising lotions on the day of examination.

#### Results

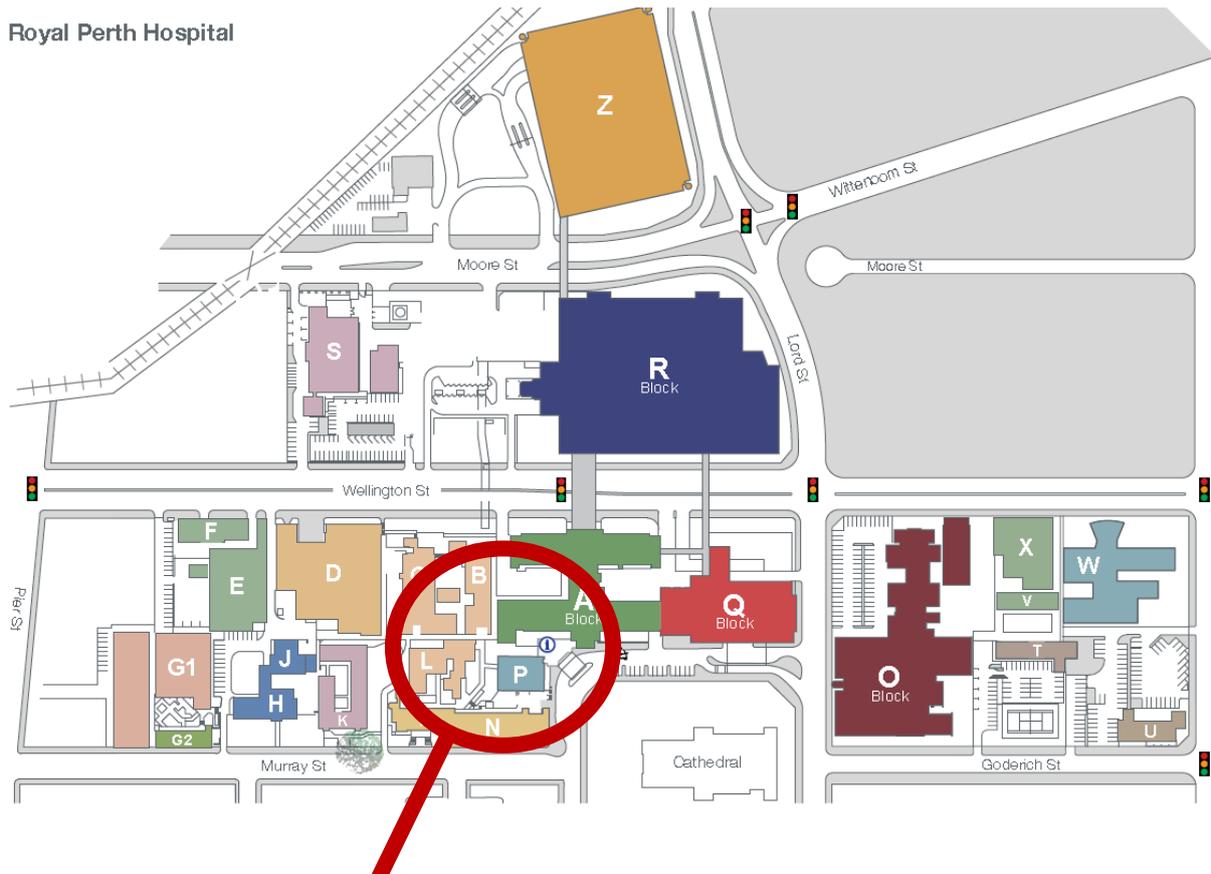
Your neurologist will interpret the results of your examination and will deliver a report to your referring doctor, who will then discuss the results with you.

## Any questions

If you have any questions before or during the tests, please don't hesitate to ask us.

**If you cannot attend this appointment for any reason, please contact RPH Neurology clinic on 9224 3072.**

## Royal Perth Hospital Map



### ***For EMG appointments:***

**The EMG Clinic is located in A Block  
on Level 7**

Neurology Department Royal Perth Hospital  
Level 7, A Block, Victoria Square, Perth 08 9224 3072 (Monday to Friday 8am – 4 pm)