

# Bronchial Provocation Test

The Bronchial Provocation Tests looks at whether your lung airways are more sensitive than normal.

There are several different types presented below.

## What should I do prior to attending my appointment?

You should withhold all inhaler medication for at least 12 hours and any antihistamines for 7 days prior to your appointment.

## What is involved?

All tests will involve a short breathing test to assess your baseline lung function. Depending on the type of challenge test, the next step will involve either taking some medication or performing an exercise for a short period.

The breathing test will then be repeated at set intervals depending on the type of challenge test. If your airways are sensitive there will be a drop in your lung function.

The Physiologist will give you an inhaler and then repeat the breathing test, to ensure that you leave the department in the same condition as you came in. The test typically takes up to 1 hour 30 minutes.

## Exercise Induced Asthma

After performing a short breathing test, you will be fitted with a device that monitors your oxygen and heart rate.

You will then be asked to perform up to 8 minutes of exercise on either a bike or treadmill at a set pace.

The Physiologist will aim to keep your heart rate close to 80% of your maximum for the duration of exercise.

The breathing test will be repeated at set intervals for approximately 20 minutes. An inhaler will be given and the final breathing tests performed as before.

### **Mannitol Challenge**

After performing a short breathing test, the Physiologist will ask you inhale a simple sugar called Mannitol.

This test is time dependent and will involve up to 9 stages, which are all very similar. The Physiologist will explain how to use the inhaler at the start. You will be asked to take the inhaler, wait 1 minute and then perform the breathing test as before. If there has not been any change in lung function, the next stage of the test will begin.

This will involve a further dose of Mannitol inhaler, another 1 minute wait, and then the breathing test again. The amount of Mannitol given will increase as the test continues.

The test can be stopped once all stages have been completed or the lung function drops below a set level. An inhaler will then be given, and the breathing test repeated as before.

### **Methacholine Challenge**

After performing a short breathing test, the Physiologist will ask you inhale a drug called Methacholine.

This test is time dependent and will involve several stages, which are all very similar.

The Physiologist will give you a dose of Methacholine. You will then wait 1 minute and perform the breathing test as before. If there has not been any change in lung function, the next stage of the test will begin. This will involve a further dose of Methacholine, another 1 minute wait, and then the breathing test again.

The amount of Methacholine given will increase as the test continues. The test can be stopped once all stages have been completed or the lung function drops below a set level. An inhaler will then be given, and the breathing test repeated as before.

### **What happens after the test?**

The results will be sent to the referring doctor. You will be able to discuss the outcome at your next doctor's appointment.