

Name of procedure: Occupational Inhalation Testing

- Please read this form carefully before you give your consent/agreement for the procedure
- You can change your mind about having the procedure *at any time* and this will not affect the standard of care you receive.
- Please ask about anything you do not fully understand or wish to have explained in more detail.
- If you would like this information in another language or another format (such as large print), or would like any help, please ask a member of our staff.
- In this leaflet we explain some of the aims, benefits, risks and alternatives to this procedure. We want you to understand the procedure and your choices so that you can make a decision based on facts.

Why do I need this test?

We have been asked by your doctor or nurse to try to find out what might be causing the symptoms that you have been having at work. As previous tests have not found the cause, we would like to carry out an occupational inhalation test (also known as 'specific bronchial provocation testing' or 'occupational challenge testing'). This allows us to recreate what happens to you when you breathe in certain substances at work. By watching how your lungs and airways respond during the test, we can usually find out which substances are causing your problems.

In some cases, however, we may need more information and will look at other tests such as blood tests and peak flow records (which use a peak flow meter to compare your breathing at work and away from work), before making a firm diagnosis. This is often needed as other tests may not give accurate results when you have not breathed in the substance for some time.

What happens during the test?

The test aims to recreate what happens to your lungs and airways when you breathe in certain substances at work. We closely monitor how your lungs react to these substances throughout the test, using a range of breathing tests. The tests are carried out in hospital and take no more than two weeks. You will need to stay in hospital overnight for most of this time.

Each day at about 9 am we will give you a histamine test in the laboratory to assess how sensitive your airways are on that day. Histamine is a substance that is naturally produced by the body. You will be asked to breathe in some histamine using a face mask and we will then monitor your breathing to find out whether your lungs and airways become irritated on that day. You may have a mild cough, headache or asthma symptoms as a result of doing the test.

About an hour later, we will carry out an inhalation test. This involves us measuring your lung function after you have breathed in a substance. On some days you might breathe in substances from your work place that we think may be causing you difficulties. On other days we will use harmless substances.

We will not tell you which substances you have inhaled until we have finished all of our tests to make sure that each substance is tested fairly.

How do we measure your lung function?

We use a machine called a spirometer to monitor your lung function. We will ask you to blow into this machine every hour throughout the day until you go to bed. You will need to bring a watch and a pen to record the times of your blows and complete a symptom diary. We will then use these readings to get the results of your inhalation test.

What happens after the test?

We will explain the results to you and show you a full copy of your test results, displayed as a graph. We will then give you our recommendations about your ability to continue your work, bearing in mind your current and future health. We will then write to the nurse or doctor who referred you, explaining in detail what happened during your test. A copy of this report will be sent to you and to your GP. This will normally arrive within 14 days.

Are there any alternatives?

No. At the moment occupational inhalation testing is the only procedure that shows exactly what happens to your breathing when you breathe in a substance at work. It is the best test available to confirm or rule out a diagnosis of work-related airway disease. You will probably have had other more basic tests before you came to see us in clinic. As we were not able to make a diagnosis using these tests, we have recommended occupational inhalation testing as the next step in your assessment. You may want to discuss the implications of not having the test with your occupational health nurse or doctor.

What are the risks of the test?

- Asthma reaction
The chance of a serious asthmatic reaction to the inhalation test is very low (less than one person in a hundred). However, it is common for people with occupational asthma to have a mild asthmatic reaction similar to that which they may have at work. If you do have a reaction we can give you an asthma drug such as salbutamol, which opens up the airways and normally works very quickly.
- Allergic reaction
Although there is a potential risk of a more serious allergic reaction, the chance of this happening is very low (less than one in a hundred) and any such reaction will be treated immediately. Your safety is our main concern and measures are taken at all times to make sure any risk is as low as possible and appropriate treatment is available quickly.

What are the benefits?

By providing a definite diagnosis we can give you advice on how to best manage your problems in order to protect your health in the future. The test will also give your occupational health advisor or doctor information that they will find useful in treating you in the future.

What if I don't want to have the test?

We will not be able to give you a definite diagnosis or cause for your symptoms. If the test is recommended due to substances in your work place, not having the test may affect your ability to do your job. You should discuss this with your occupational health advisor or doctor.

In some cases of work-related lung problems, such as occupational asthma, continuing to work with the substance that has caused the problem can increase the chance of your symptoms getting worse. More medication may also be needed to manage the symptoms.

Practical information

You are going to be in hospital for up to two weeks while we carry out the test, although you will be allowed home for the middle weekend, (usually from Saturday morning until Monday lunchtime). You will stay in Lind Ward, which is on the fourth floor of Royal Brompton Hospital's south block on Fulham Road. If you have to stay in until the Saturday morning, you will be moved to one of the other wards in South Block (Victoria or Foulis) on Friday evening, as Lind ward shuts for the weekend.

You will have a lot of spare time during the tests, so it's a good idea to bring in plenty to do and read. There is a pay-phone on the ward and another on which you can receive incoming calls. The number is 020 7351 8946.

Please do not drink tea, coffee, cola or hot chocolate during your stay in hospital as these contain caffeine and can affect the results.

Royal Brompton is a teaching hospital and takes part in the ongoing education of nurses, doctors and other health staff. Sometimes students or health professionals will be in the laboratory to learn about occupational inhalation testing and may observe your tests. You will be treated with respect at all times, but if you do not want to have students present during your tests please let us know before you arrive on the ward.

Useful contacts

If you have any questions about your appointment before your admission or you would like to speak to a nurse, please contact one of our team:

Julie Cannon (j.cannon@rbht.nhs.uk) or Sharon Thompson (s.thompson@rbht.nhs.uk) Clinical Nurse Specialists on 0207 351 8357.

Dr Jo Szram, Clinical Research Fellow and Honorary Specialist Registrar (j.szram@rbht.nhs.uk)

Professor Paul Cullinan, Professor and Honorary Consultant Physician (p.cullinan@imperial.ac.uk)

Kay Stephenson, Clinical Secretary (0207 351 8341, k.stephenson@rbht.nhs.uk)

This information sheet on Occupational Inhalation Testing is also available to download from our website: www.lungsatwork.org.uk

Lind Ward: Further information about Lind Ward is available on the Hospital website: www.rbht.nhs.uk/patients/brompton/wards/lind/

Lind ward nursing staff: Call 0207 351 8121 and select extension number 4337 or 8909

It is important that you understand the information provided here and the risks and benefits of the procedure that has been recommended to you.

If you have any further questions please ask your doctor who will be happy to discuss these with you.