Information Sheet 1: Screening for Tuberculosis

What is Tuberculosis?

Tuberculosis (TB) is an infectious illness caused by the airborne bacteria Mycobacterium tuberculosis. TB can cause serious health problems – particularly if it is not caught early. But the illness is curable, and testing and treatment are free and confidential in the UK. If you breathe in these bacteria, one of three things will happen:

- Your body kills off the TB bacteria so they cannot harm you now or in the future
- The TB bacteria make you ill this is called active TB
- The TB bacteria remains asleep in your body this is called latent TB

About active TB

When people talk about TB, they usually mean 'active TB'. If you have active TB, the bacteria are making you ill and you might be passing TB on to other people. Active TB can be very harmful to your health, but it can be cured with a course of medicine.

About latent TB

If you have latent TB, the bacteria in your body are 'asleep'. You are not ill and you cannot pass TB on to others. However, the bacteria might 'wake up' in the future, making you ill with active TB. The good news is that latent TB can be treated to prevent this from happening.

What parts of the body are affected by TB?

TB in the lungs or throat (pulmonary TB) are the only forms of the illness that are infectious, which means it can be passed on to other people. However, TB can also affect any other part of the body, including kidneys, brain or bones. This is called non-pulmonary TB – and is not infectious.

How is TB spread?

When someone with TB in their lungs or throat coughs or sneezes, they send droplets into the air that contain the TB bacteria. If you breathe in these bacteria over a long time, you may become ill with TB. But most people won't get ill because:

you normally need to spend many hours close to a person with infectious TB to breathe in enough bacteria to be at risk

- most people's immune systems are strong enough to kill off TB bacteria.
- TB cannot be spread through touch, sharing cutlery, bedding or clothes.

How do I know if I have latent TB?

If you have latent TB, you will not have any symptoms. The only way to know if you have latent TB is to have a blood or skin test. If you have latent TB, a course of medicine can kill the bacteria before they have a chance to wake up and harm you.

What does a test for latent TB involve?

You may be offered either one of two different tests for latent TB, a TB skin test (known as a TST or Mantoux) or a blood test (known as an IGRA).

The doctor, nurse or other healthcare professional that performs the test will talk you through the test and possible outcomes, answer any questions you may have, and advise when you can expect the results.

The person taking the test may also ask a number of questions, to help identify your risk of TB:

- if you were born in, or have strong links to, particular countries
- whether you or you know anyone who has had TB

- if you have any long-term illnesses, such as HIV
- if you currently have any unexplained symptoms.

Skin test (Mantoux): A tiny amount of TB extract is injected under the skin on your forearm. If your body has come into contact with TB, the skin becomes raised and red. You will need to return to the test centre between 48-72 hours later for the doctor or nurse to measure and interpret the results.

Blood test: A small amount of blood is taken from your arm and sent to a laboratory. You will be told when to expect the results.

What does my latent TB test result mean?

If you have received a **positive** test result: This means that you have TB bacteria in your body but try not to worry because latent TB can be cured with a course of antibiotics. The screening team or your GP will refer you to a specialist TB clinic. You will then see a TB doctor or TB nurse who will offer you support and treatment for latent TB. It is also worth knowing that before treating you for latent TB they will do some final tests to make absolutely sure you do not have active TB.

If you have received a **negative** test result: This means that you do not have TB bacteria in your body. However, there is a small chance that you might breathe in TB bacteria in the future. It is useful to remember the most common symptoms of active TB and see your GP if you notice them:

• a cough which lasts for three weeks or longer

• fever (a high temperature)

night sweats

weight loss

no appetite

• tiredness.

Will I develop active TB?

About 1 in 10 people with latent TB will develop active TB in the future. There is no way to know if you will be one of them. It is possible to become ill with active TB many years after you breathe in TB bacteria. This is why it is a good idea to put your mind at ease by treating latent TB while you are healthy and before the bacteria wakes up.

What treatment do I need for latent TB?

A course of antibiotic medicine will treat latent TB. You may be given Rifampicin and Isoniazid for three months (which is likely to be together in a tablet called Rifinah) or Isoniazid by itself for six months.

Your doctor or TB specialist nurse will talk through treatment with you and answer any questions you may have. Make sure to tell them about any medicine you take, or if you use hormonal contraceptives, as these may not work so well while you are taking TB medicine.

Is there a vaccination against TB?

Yes, the BCG (Bacille Calmette-Guérin) is a weakened strain of TB bacteria which builds up immunity and encourages the body to fight TB if infected. Although the BCG gives some people protection against TB, it cannot prevent everyone who comes into contact with the bacteria from getting ill. The BCG vaccination is thought to protect up to 80% of people for a maximum of 15 years and is not generally given over the age of 35. Until a better vaccine is developed the best way to prevent TB is to make sure people know the symptoms so they can visit a doctor and get diagnosed and treated as early as possible.

Further information

The information of TB has been adapted from the following websites, whereby further information can be found:

NHS: www.nhs.uk/conditions/tuberculosis-tb/

The Truth About TB: www.thetruthabouttb.org

Information Sheet 2: Screening for Blood Borne Infections

There are three blood borne viruses (BBV): HIV, hepatitis B and hepatitis C.

These viruses are mainly passed through contact with infected blood. However, the viruses can be present in other body fluids. BBVs are passed between people through:

- Unsterile medical treatment or unsterile body piercing / tattoos for example, home or prison tattoos
- Blood transfusions before 1991 or blood products before 1988
- Sharing razors or toothbrushes with an infected person
- Unprotected sex vaginal, anal or oral
- Sharing equipment to inject or snort drugs even if only once. This includes needles, syringes, spoons, water, filters and straws.

BBVs can also be passed from an infected mother to her baby. Treatment can greatly reduce the transmission risk of HIV and Hepatitis B. The risk of a mother passing on Hepatitis C to her baby is very low.

HIV and Hepatitis B are far more common in men who have sex with men and in people who have lived abroad, especially in Southern Africa, Asia and Eastern Europe.

Hepatitis C is more common in drug users who have ever injected. Hepatitis C is less likely to be transmitted through sex.

What are the BBV tests?

The only way to know if a person has a BBV is to get a blood test. Each virus has its own blood test that tells us different things about the infection.

HIV: The first test is an antibody test. This checks the body's immune reaction to the virus. If this test for HIV is positive, it means that you are infected with the virus. Other tests called the CD4 count and the viral load will be then taken to see if the immune system has been damaged yet and how much virus is in the blood.

Hepatitis C: The test for Hepatitis C is a two-stage process. The first test is called an antibody test. This test will show if you have ever been exposed to the virus. If the result of the antibody test is positive, another test called a PCR test will determine if the virus is still present in your body. If the antibody test is positive and the PCR test is negative, this means that you have been exposed to the virus but either cleared naturally or been treated. If both the antibody test and the PCR test results are positive, you have an active Hepatitis C infection. If you are PCR positive you may be at risk of liver disease. Highly effective treatment for the virus is available free on the NHS.

Hepatitis B: A blood test will be taken to see if the Hepatitis B virus is present. If this test is positive, there is Hepatitis B infection. Other markers can tell how much of the virus is present or if a person has fought off the virus naturally.

Once you have been infected, HIV can take around 12 weeks to show up in the blood, while Hepatitis B and C can take around three to six months to show up. If you have been at risk during this time you may be advised to get a repeat test even if your first result is negative. If you put yourself at risk again, you should consider having another test.

Why have a test?

It is important to get a test for a number of reasons:

- All three BBVs can cause serious illness if left untreated and can, in some cases, be fatal. In the early stages of infection many people feel well and do not realise they are infected. Research has shown that the earlier a diagnosis is made, the more effective treatment can be. There is effective treatment for all three BBVs which is free in the UK.
- Hepatitis C can be cured in most cases and treatment for HIV and Hepatitis B can help to control the virus.

• Knowing about an infection allows you to protect your health – for example, by stopping drinking alcohol if you have Hepatitis B or C. You can also take steps to protect others from getting the infection from you by avoiding unsafe sex and not sharing any equipment for drug use. Women can also make choices about pregnancy and protecting their unborn child from HIV and Hepatitis B.

Are there reasons not to have a test?

In most cases it is much better to know if you have a BBV infection so that you can access support. Your health can be monitored, and you can access any necessary treatment and support services. If you are depressed or feel like you could not cope with a positive result it may be better to get help with this before you take the test – but most people cope with diagnosis even if they thought they could not.

Going for a test

It can be stressful to go alone – think about taking a friend you trust for support, especially when you are going to get the result. All services are confidential, and we will not disclose your result without your consent. In most cases you will be given the result in person. It is important that you arrange to discuss your results with your family doctor (GP), key worker or named nurse.

Further information

For more information, contact the BBV team on 01633 656069 or visit the following websites:

Hep C Trust: <u>www.hepctrust.org.uk</u>

British Liver Trust: www.britishlivertrust.org.uk