

Screening for infectious diseases prior to treatment for assisted conception

Why do we screen for infectious diseases prior to assisted conception treatment?

In line with good practice in 'preparing for pregnancy' and in keeping with HFEA regulation the Department of Reproductive Medicine screens patients for a number of viruses that may affect treatment options and pregnancy outcomes. The Departmental policy states that all couples/donors must have virology screening before commencing assisted conception treatment within 3 months for first treatments and every two years thereafter. It is important that you understand the implications of both positive and negative results before testing.

You should also ensure that you have not been exposed to the possibility of endemic infections e.g. Zika, Ebola, Trypanosoma, malaria and others. As the prevalence of these disease changes with time, please refer to the Foreign and Commonwealth Office and Centre for Disease Control for the most up to date advice. These diseases may cause significant harm in pregnancy and we will delay the start of your treatment if there is a possibility of exposure, even if you have not suffered from the disease.

We also screen for Covid 19 infection in line with national guidance. This guidance is evolving as our understanding of the disease increases and therefore the specific screening processes may alter.

Please read the information below. If you wish to discuss any of the information further, then please do not hesitate to ask the nursing team. Supporting leaflets are also available within the department regarding on-going treatment and care should any of these tests be significant. The Department currently screens for:

- Rubella immunity – by asking you to confirm that you have had the appropriate vaccinations
- Hepatitis B – by a blood test
- Hepatitis C – by a blood test
- Syphilis – by a blood test
- Human Immunodeficiency Virus (HIV) – by a blood test
- Human T-cell Lymphotropic Virus 1 (HTLV-1) - in selected high risk cases – by a blood test
- Chlamydia – by a urine test
- Gonorrhoea – by a urine test

Some of these viruses are more common in certain groups, for example, men who have sex with men, intravenous drug users and people from certain geographical areas such as Africa, South East Asia, South America, Australia, Japan and the West Indies. If you are concerned about HIV, syphilis or hepatitis infections and would like further confidential advice or testing before attending the Department of Reproductive Medicine, please attend or call the Hathersage Centre; for current contact details and opening hours see: www.manchestersexualhealth.org.

1. What is Rubella?

Rubella is an infectious illness commonly known as German measles and is caused by a virus. Once you have had Rubella you cannot catch it a second time. This is called 'being immune to it' (your body produces antibodies which are the body's defence system against infection).

What could Rubella mean for me in pregnancy?

Rubella is one of the few infections which can affect the developing baby of a pregnant woman. The degree of risk associated with the infection depends upon when the mother becomes infected – the earlier in the pregnancy, the higher the risk. Rubella can cause death of the baby, premature birth, hearing/sight defects and heart problems.

What do I need to do in relation to Rubella before starting to try for a baby?

You should confirm that you have had the appropriate rubella vaccinations in the past if you're planning to have a baby. If you are not sure whether you've had two doses of the MMR vaccine, you can get your GP practice to check your vaccination history. If your records show you haven't had both doses or there is no record, ask to have the vaccinations. Because MMR vaccination could cause a risk to your baby in pregnancy, you should avoid becoming pregnant for one month after having it. This means you'll need a reliable method of contraception.

2. What is Hepatitis B?

Hepatitis B is a viral infection that may be caught from the mother at birth (rare in people from the UK but more common in those who come from African or Asian countries) or through contact with infected bodily secretions by close personal, such as sexual, contact. Most adults who get Hepatitis B clear it without treatment, but some don't and in some of those it can cause liver problems. Hepatitis B infection can be treated with antiviral drugs by a liver specialist. All pregnant women are offered a test for Hepatitis B because their babies can be vaccinated at birth to prevent them getting the virus.

What could Hepatitis B mean for me in pregnancy?

A pregnant woman with Hepatitis B could pass the virus on to her child.

What are the implications for assisted conception treatment for patients who test POSITIVE for Hepatitis B?

If you or your partner test positive for Hepatitis B you will be referred to the appropriate specialist for further tests and treatment. The Department of Reproductive Medicine at Saint Mary's Hospital will be able to provide treatment on a satellite basis. This means that you will attend Saint Mary's for blood tests, scans and monitoring during your treatment cycle, however your egg collection and embryo

transfer will take place at another clinic, which will be fully arranged for you by the nurses at Saint Mary's.

3. What is Hepatitis C?

Hepatitis C is a viral infection which is caught through exposure to infected blood products, such as during tattooing with non-sterile needles, sharing drug using equipment, or very rarely through sexual contact. In most people the virus remains in the body and can affect the liver. Antiviral drugs are available which can treat Hepatitis C infection.

What could Hepatitis C mean for me in pregnancy?

Occasionally a pregnant woman with Hepatitis C could pass the virus on to her child.

What are the implications for assisted conception treatment for patients who test POSITIVE for Hepatitis C?

If you or your partner test positive for Hepatitis C you will be referred to the appropriate specialist for further tests and treatment. The Department of Reproductive Medicine at Saint Mary's Hospital will be able to provide treatment on a satellite basis. This means that you will attend Saint Mary's for blood tests, scans and monitoring during your treatment cycle, however your egg collection and embryo transfer will take place at another clinic, which will be fully arranged for you by the nurses at Saint Mary's.

4. What is Human Immunodeficiency Virus (HIV)?

HIV (Human Immunodeficiency Virus) is caught through close contact with body secretions or blood which contain this virus, such as having sex with someone who has the virus or a blood transfusion with infected blood. HIV causes damage to the immune system so you are less likely to fight off infections and also more likely to get certain types of cancer. It can take many years for someone with HIV to become ill and often the infection can be missed unless a test for HIV is performed. The good news is that HIV treatments work very well and with treatment it is possible for HIV positive people to live a long and health life and also to have an excellent chance (more than 99% chance) of having an HIV negative baby.

What could HIV mean for me in pregnancy?

All pregnant women are asked to have an HIV test in pregnancy so that if they are HIV positive they can benefit from the treatments and their baby can be protected from infection. If an HIV positive woman takes anti-HIV drugs and formula feeds her baby, the chance of her baby getting HIV are usually less than 1%.

What are the implications for assisted conception treatment for patients who test POSITIVE for HIV?

If you or your partner test positive for HIV you will be referred to the appropriate specialist for further management and treatment of the HIV. The Department of Reproductive Medicine at Saint Mary's Hospital will be unable to provide your IVF treatment. Your treatment will need to be provided by a centre that deals specifically with HIV positive

patients. We will discuss how this can take place during a clinic consultation.

5. What is Syphilis?

Syphilis is an infection caused by infection with a bacterium called *Treponema pallidum*. The infection is passed from person to person through close bodily contact, usually sex, or from a mother who has the infection to her baby before birth or during breast feeding, or through blood transfusion with infected blood products. Although it can be very serious, syphilis can be cured with antibiotic treatment.

What could syphilis mean for me in pregnancy?

Untreated syphilis can cause miscarriage, premature birth, stillbirth, or death of newborn babies. There is also risk of deformities, delays in development or seizures, along with many other problems such as rash, fever, swollen liver and spleen, anaemia and jaundice. With antibiotic treatment before or during pregnancy this can be completely prevented.

What are the implications for assisted conception treatment for patients who test POSITIVE for syphilis?

If you or your partner test positive for syphilis you will be referred to the appropriate specialist for further management and treatment of the infection. Once the doctor who has treated you confirms that the syphilis has been cured the Saint Mary's team will be able to commence your assisted conception treatment.

6. What is Human T-cell Lymphotropic Virus 1 (HTLV-1)?

HTLV-1 antibody testing is a virus in the same category as HIV. This test must be performed for donors of eggs or sperm and for patients living in or originating from high-prevalence areas or with sexual partners originating from those areas. Your individual history will be assessed by your clinician and testing arranged if necessary.

7. What is chlamydia?

Chlamydia is an infection caused by the bacteria *Chlamydia trachomatis*. It is usually transmitted from person to person through sexual contact and commonly does not cause symptoms. If untreated, it can result in long term health issues including pelvic inflammatory disease which can cause damage to the Fallopian tubes. Chlamydia infection can be treated with antibiotics.

What would chlamydia infection mean for me in pregnancy?

Untreated chlamydia can increase the risk of your baby being born prematurely or with a low birthweight. You could also pass the infection to your baby which can cause lung problems (pneumonia) or eye problems (conjunctivitis).

What are the implications for assisted conception treatment for patients who test **POSITIVE** for chlamydia?

If you test positive for chlamydia you will be referred to the appropriate specialist for further management and treatment of the infection. Once the doctor who has treated you confirms that the chlamydia has been cured the Saint Mary's team will be able to commence your assisted conception treatment.

8. What is gonorrhoea?

Gonorrhoea is an infection caused by the bacteria *Neisseria gonorrhoea*. It is usually transmitted from one person to another through close bodily, sexual, contact. If untreated it can cause long term health problems including pelvic inflammatory. Gonorrhoea infection can be treated successfully using antibiotics.

What would gonorrhoea infection mean for me in pregnancy?

If untreated, gonorrhoea can cause miscarriage or could cause you baby to be delivered prematurely. Gonorrhoea can cause a baby to develop eye problems (conjunctivitis).

What are the implications for assisted conception treatment for patients who test **POSITIVE** for gonorrhoea?

If you test positive for gonorrhoea you will be referred to the appropriate specialist for further management and treatment of the infection. Once the doctor who has treated you confirms that the chlamydia has been cured the Saint Mary's team will be able to commence your assisted conception treatment.

9. Will having these tests affect my mortgage or insurance applications?

The information we hold regarding all aspects of your care, including tests results, is entirely confidential and will not be forwarded to any third party. The only exception to this is if you agree to be referred to another centre for further treatment.

Screening for HIV and hepatitis viruses is a consequence and requirement of your treatment. It does not suggest that you are at risk of infection and therefore will not affect your mortgage or insurance status. However, if you belong to one of the high risk groups described above, an insurance company might reasonably expect you to inform them of this.