

# BHIVA guidelines on the management of opportunistic infection in people living with HIV: considerations in pregnancy 2024

## non-technical summary

### HIV and opportunistic infections in pregnancy

The British HIV Association (BHIVA) produces medical guidelines about HIV treatment. These guidelines are mainly for healthcare professionals. But you should know what is in the guidelines that is relevant to your care. This non-technical summary gives you the main points from the chapter in the opportunistic infection guidelines on infections that might occur in pregnancy. You can check the guidelines for more detail at:

<https://www.bhiva.org/OI-guidelines-pregnancy>.

### Key messages:

- Your body changes when you are pregnant. The results of some tests and the way some drugs work can be different. Your immune system may also be affected.
- If you are pregnant and your doctor is concerned that you may have an infection, investigations will be carefully planned to reduce any risk to you or your baby. This may involve discussions between your HIV doctor and other specialists.
- If you have an infection while you are pregnant, your baby's health will be carefully monitored, usually with ultrasound scans. A team of specialists will plan the best treatment for you and your baby.
- Rarely, some infections can be passed on to your baby. Your baby will be seen by a specialist after birth.
- Some infections require different tests and treatments in pregnancy for women living with HIV, compared with those who do not have HIV. The following infections are discussed in these guidelines:
  - *Pneumocystitis pneumonia* (PCP)
  - Other fungal infections
  - Toxoplasmosis
  - Cytomegalovirus (CMV)
  - Mycobacterium avian complex (MAC).

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### What are opportunistic infections?

These are infections that occur more often, and are more severe, in people with a weakened immune system. In the UK, most people with HIV are on effective antiretroviral treatment (ART). This has greatly reduced the number of opportunistic infections they may experience. Most of these infections are now seen in people who have HIV but have not been diagnosed, or who have been diagnosed late, when their immune systems have already been severely weakened.

## Opportunistic infections in pregnant women living with HIV

Although opportunistic infections in pregnant women living with HIV in the UK are rare, they can be serious and can lead to severe illness or death.

Your body changes when you are pregnant. This can affect the results of some clinical tests, and may change the way drugs work in your body. It also changes your immune system, and may leave you more likely to get some infections. Some infections can also be passed on to your unborn baby.

This means that the treatment of infections during pregnancy in women with HIV can be difficult. Care is needed to be sure that any treatment given does not harm the unborn baby. So treatment is often given by a team of specialists, including obstetricians, paediatricians and pharmacists as well as HIV doctors.

You will need to have some tests if an infection during pregnancy is suspected. Most of the usual tests for infection are safe in pregnancy for both you and your baby. But some radiology tests may not be suitable and so will not be done. When you are being tested or treated for an infection, your baby's health will be carefully monitored, usually with ultrasound scans.

### What is in this chapter of the opportunistic infection guidelines?

This chapter focuses on infections that require different tests and treatments in pregnancy for women living with HIV, compared with those who do not have HIV. These infections include:

- *Pneumocystis pneumonia* (PCP)
- Other fungal infections
- Toxoplasmosis
- Cytomegalovirus (CMV)
- Mycobacterium avian complex (MAC).

Tests and treatments that may be needed for a newborn baby if the mother has had an infection just before or during giving birth are also considered.

The diagnosis and treatment of most of these infections is also discussed in other chapters of the BHIVA opportunistic infection guidelines (<https://www.bhiva.org/guidelines>).

### PCP

PCP is a serious infection of the lungs. It is caused by a fungus that is widely found and spreads through the air. It is discussed for adults living with HIV who are not pregnant in the pulmonary chapter of the opportunistic infection guidelines (<https://www.bhiva.org/OI-guidelines-pulmonary>).

There is some evidence that PCP may be more serious in people with HIV if they are pregnant, with more severe illness and a greater risk of death. Testing for and diagnosis of PCP in women who are pregnant is the same as for those who are not pregnant.

PCP is usually treated with antibiotics. But there are some differences in the choice of antibiotics in pregnancy.

### Other fungal infections

Candidiasis (thrush) is a common fungal infection that is usually seen in the mouth and throat, or the vagina. It is discussed for people who are not pregnant in the candidiasis chapter of the opportunistic infection guidelines (<https://www.bhiva.org/OI-guidelines-candidiasis>). Vaginal thrush may be more common during pregnancy. For those who are not pregnant, treatment is usually with fluconazole, but this should be avoided during pregnancy. Other treatments are given instead.

Cryptococcus is a fungus that is found in the environment in many parts of the world. Most people breathe in the fungus without developing any symptoms. But in some people, it grows in their lungs causing pneumonia, or travels to the brain causing meningitis. The fungus usually only causes disease in people with weakened immune systems. Treatment is with antifungals, some of which should be avoided during pregnancy. There are other treatment options for use during pregnancy. If you have been treated during pregnancy for cryptococcus, your newborn baby should be reviewed to see whether there is any infection present. But this is rare.

### Toxoplasmosis

Toxoplasmosis is a common infection that you can catch from the poo of infected cats, or from infected meat. It is usually harmless but can cause disease in pregnant women and their babies. If you are pregnant and have a weakened immune system, it may cause problems with your eyes, brain, heart or lungs. It is treated with antibiotics, which may be different to the antibiotics used in those with toxoplasmosis who are not pregnant. If it spreads to your unborn baby, it can cause serious complications and your baby will be checked by a paediatrician after birth.

### Cytomegalovirus (CMV)

CMV is a common virus that is usually harmless. It does not usually cause any symptoms and most people do not realise they have it. If you have a weakened immune system, CMV can affect your eyes, brain and lungs and can cause infection in your baby while the baby is still in the womb. Antiviral medicines may be needed if your immune system is weak. Because there is some concern about the safe use of these medicines when you are pregnant, they would only be given after careful consideration of the risks and benefits. If you have CMV infection in the eye, treatment may be given directly into the eye, to reduce the risk of harm to the unborn baby. If you have CMV during pregnancy, your newborn baby should be checked for CMV soon after birth.

## **Mycobacterium avian complex (MAC)**

MAC is a common type of organism found widely in the environment, in water, soil and dust. Before HIV treatment became available, about 4 in 10 people living with HIV eventually developed disease due to MAC. But it is much rarer today because of ART. MAC is discussed for adults living with HIV who are not pregnant in the non-tuberculous mycobacteria chapter of the opportunistic infection guidelines (<https://www.bhiva.org/OI-guidelines-NTM>).

Diagnosis and treatment of MAC disease in women with HIV who are pregnant is the same as for all adults living with HIV. MAC disease is not passed on to your baby.

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## **Further information and support**

Community organisations in the UK that produce information and resources about HIV treatment include HIV i-base (<https://www.i-base.info>), Terrence Higgins Trust (<https://www.tht.org.uk>) and NAM (<https://www.aidsmap.com>).

## **About BHIVA**

The British HIV Association (BHIVA) is an organisation for health professionals in the UK. Members include doctors, nurses, researchers, pharmacists and community advocates. Since 1995, BHIVA has been committed to providing excellent care for people living with and affected by HIV. BHIVA is a national advisory body on all aspects of HIV care and provides a national platform for HIV care issues. To help promote and monitor high standards of care, BHIVA publishes a range of clinical guidelines: <https://www.bhiva.org/guidelines>. Information about how BHIVA guidelines are developed can be found at: <https://www.bhiva.org/clinicalguidelines>.