

Sepsis during pregnancy or following birth

This leaflet will explain what sepsis is, what can cause it and how to recognise the symptoms. It also explains what puts you at a greater risk of sepsis and how sepsis is treated at the Royal Berkshire Hospital (RBH). If you have any questions, please speak to your doctor or midwife.

What is sepsis?

Sepsis is a life-threatening condition that happens when the body's response to an infection injures its own tissues and organs. The body's immune system – which normally helps to protect us and fight infection – can go into overdrive, which leads to shock, multiple organ failure and sometimes death, especially if not recognised early and treated promptly.

What are the symptoms of sepsis, or an infection?

The first signs are usually a rise in your temperature, heart rate and breathing. You may also feel unwell, have chills and flu-type symptoms, abdominal (stomach) pain and diarrhoea. It is important to alert your GP or midwife if you feel unwell while pregnant or after the birth. You should recognise signs that you may have an infection:

- Abnormal bleeding from vagina, unpleasant smelling discharge / waters, lower tummy pain, diarrhoea
- Feeling short of breath, pain on breathing, coughing up green / brown / blood-stained saliva (spit)
- A wound that feels very painful, looks red, is swollen, is not healing, smells unpleasant
- Pain in the lower back/side
- Pain when passing urine, unpleasant smelling urine and passing less urine than usual, despite drinking plenty of fluids
- A headache, neck stiffness, being unable to look at lights
- Pain in the back after having an epidural or spinal pain relief
- Swollen legs, red or painful calves
- Pain, redness or discharge from the place in your skin where a line or cannula was put in
- Painful, lumpy, hot and reddened breasts which does not get better with removal of breast milk and is accompanied with feverish symptoms. Redness may not be present on darker skin tones.

How do we treat an infection?

If you, or your baby, are displaying some of these signs and we suspect an infection, we will consider all potential causes and carry out tests to try and find out what sort of infection is developing and where it has come from, before giving antibiotics. These tests include blood

tests, urine samples and various swabs from which we can get the results quickly. We may also take ‘cultures’ that will test for bacteria in your blood, which can take longer to get the results. It is not always clear what has caused the infection, but it is important to treat promptly when tests show that an infection is developing in order to avoid it becoming sepsis. While the body can fight an infection with its own natural defence mechanisms, or through vaccination, it may need help to fight it with antibiotics, antivirals or antifungals.

You may hear staff discuss a “sepsis bundle or pathway”. This does not mean that you have sepsis, but we will act quickly to prevent symptoms of infection from getting worse.

How do we treat sepsis?

Sepsis always starts with an infection. Sepsis may need treatment not only with medications, like an infection, but also with interventions to maintain blood pressure, blood flow and oxygenation.

To fight the infection and hydrate we offer antibiotics and fluids through a cannula (a needle into your vein). If needed, we may suggest monitoring how much urine you pass by putting a catheter into your bladder. You may need oxygen via a face mask or to be transferred to a specialist ward if the infection has started to affect your organs.

What are symptoms of severe sepsis?

The signs and symptoms of severe sepsis can include a combination of any of the following:

- Slurred speech or confusion
- Extreme shivering or muscle pain
- Passed no / very little urine in a day
- Breathlessness
- Skin mottled or discoloured
- Vomiting and diarrhoea
- Fatigue and weakness
- High heart rate
- Clammy or sweaty skin.

What can cause an infection that may lead to sepsis during pregnancy or after the birth?

- A stitch used in the neck of the womb (cervix) – in some cases this is used to reduce the risk of miscarriage
- If “waters” / membrane sac broke before 37 weeks in pregnancy or were broken for longer than 24 hours
- If the placenta or part of the membranes remained inside the womb after birth
- If there has been close contact with someone who has Group A streptococcus, usually presented with symptoms of sore throat
- A pelvic infection, diagnosed during pregnancy

- An infection following a recent sample of fluid taken during an amniocentesis
- A urine infection
- Pneumonia
- Strep throat
- Interventions during birth – for example, forceps, ventouse or multiple vaginal examinations.

What increases the risk of sepsis?

- Surgery within the last six weeks (including a miscarriage; a tear during birth; assisted (ventouse or forceps) birth; or Caesarean birth)
- Having a weakened immune system
- If you have been taking long-term steroids
- Having, or recently had, treatment for cancer
- Heart, lung, liver and kidney disease (including conditions that you had pre-pregnancy).

There are also factors which make you more susceptible to infections:

- Having a BMI of over 30/35
- Having gestational diabetes
- Having mastitis
- If you are having twins or multiples
- If you have had IVF.

If **any** of the above apply to you, please let your doctor or midwife know.

What does having sepsis mean for my baby/babies?

If the infection is severe, it can affect your organs including the placenta and be transmitted to the baby / babies. If treated early with antibiotics, the chances of having any long-term complications is rare.

We will monitor your baby / babies' heartrate using a sonic aid or CTG machine and if their heart rate is elevated, we would advise giving birth urgently to reduce the risk of a stillbirth. If this happens, your doctor will discuss your birth options with you depending on how quickly your birth needs to happen.

We would have the neonatal team present at your birth and work closely with them to monitor your baby / babies. If we suspect that the infection passed to your baby, they will require regular observations and will be assessed to see if they need antibiotics.

Is there any way to reduce the risk of infection and sepsis?

Good personal hygiene helps both during pregnancy and after birth. This can include daily showers / baths, proper handwashing and drying (especially after using the toilet) and good perineal hygiene (keeping the area between the vagina and anus clean and dry).

You should keep Caesarean wounds, vaginal or perineal tears and other wounds clean. Maternity pads should be changed regularly, and you should not use tampons in the postnatal period.

How common is severe sepsis at the RBH?

In our maternity unit at the RBH we have over 100 suspected cases of sepsis each year and we start prompt treatment with antibiotics for all cases. Less than 10% show evidence of micro-organisms growing in their bloodstream. Less than 1% are admitted to the intensive care unit (ICU) with severe sepsis, especially those who were not treated early with antibiotics. Research has shown no significant long-lasting complications in those treated, or their babies, where sepsis was identified early and treated.

Where can I get support?

Sepsis Support Groups are held across the country for those who have experienced sepsis, or relatives of those affected.

Email: info@sepsistrust.org

Web: <https://sepsistrust.org/get-support/support/my-local-group/>

References:

<https://www.endsepsis.org/what-is-sepsis/maternal-sepsis>

<https://sepsistrust.org/about/about-sepsis/>

To find out more about our Trust visit www.royalberkshire.nhs.uk

The Trust has access to interpreting and translation services. If you need this information in another language or format, please ask your health care professional and we will arrange this for you.

M Pereira (Consultant O&G) R Napper-Bonney (IFT Lead MW), K Drain (PDT MW), October 2023

Next review due: October 2025

Our Maternity Strategy and Vision

'Working together with women, birthing people and families to offer compassionate, supportive care and informed choice; striving for equity and excellence in our maternity service.'

You can read our maternity strategy here



Compassionate

Aspirational

Resourceful

Excellent