



**University Hospitals  
Bristol and Weston**  
NHS Foundation Trust

Patient information service  
**Maternity**

# Preventing group B streptococcus (GBS) infection in newborn babies



This information is for you if you are expecting a baby, planning to become pregnant or have recently had a baby.

This leaflet will tell you about Group B Streptococcus (GBS) infection in babies in the first week after birth (known as early-onset GBS) and provides further links to information about late-onset GBS infection.

This information is based on the Royal College of Obstetricians and Gynaecologists (RCOG) guideline 'Prevention of early onset neonatal Group B Streptococcal disease'.

# Key points about GBS

GBS is part of the streptococcus family and is one of many bacteria that normally live in our bodies (including the vagina and rectum) and which usually cause no harm.

About two in ten women in the UK carry GBS, this is called GBS carriage or GBS colonisation.

Screening for GBS is not routinely offered to all pregnant women in the UK.

If you carry GBS, most of the time babies will be born safely and will not develop an infection. However in rare cases a severe infection known as neonatal GBS.

1 in 200 babies develop neonatal GBS, however it can be very serious and lead to sepsis, pneumonia and/or meningitis.

If GBS has been found in your urine, on vaginal or rectal swab, you will be offered antibiotics in labour to reduce the small risk of your baby developing neonatal GBS.

The risk of your baby becoming unwell with neonatal GBS infection is increased if your baby is born preterm, if you have had a temperature while you are in labour, or if your waters break before you go into labour.

If your new born develops signs of GBS infection, then they will be treated with antibiotics straight away.

It is safe to breastfeed your baby. Breastfeeding has not been demonstrated to increase the risk of GBS and could protect your baby against other infections and offers many benefits to both you and your baby.

# What is GBS?

GBS is a common bacterium (bug) which is carried in the vagina and rectum. Around two in 10 women carry this bacterium in the UK. GBS is not a sexually transmitted disease and most women who carry GBS will have no symptoms. Carrying GBS is not harmful to you, however it can affect your baby around the time of birth. If GBS is passed from mother to baby, it can occasionally cause serious infection in new born babies.

## How is GBS found?

GBS is sometimes found during pregnancy when you have a urine test or a vaginal or rectal swab.

In the UK, the NHS does not routinely offer all pregnant women screening for GBS. For more information about available tests, visit the Group B Strep Support (GBSS) website: [www.gbss.org.uk/TestingforGBS](http://www.gbss.org.uk/TestingforGBS).

## Why aren't all women offered GBS screening during pregnancy in the UK?

You will not be offered screening for GBS routinely in pregnancy as there is no national screening programme for this in the UK. This is because:

- Many women carry the GBS bacteria and, in the majority of cases, their babies are born safely and do not develop an infection.
- Screening all women late in pregnancy cannot accurately predict which babies will develop GBS infection.
- No screening test is entirely accurate: a negative swab test does

not guarantee that there is not a presence of GBS.

- Many babies who are severely affected by GBS infection are born preterm, before the suggested time for screening (35-37 weeks).
- Giving antibiotics to all women who carry GBS would result in a large number of women receiving treatment that they do not need.

## **What could GBS mean for my baby?**

Most babies will come into contact with GBS during labour or around birth. The vast majority of these babies will not become unwell. However, there is a small chance that your baby will develop GBS infection and become seriously ill, or even die.

Around 1 in every 1750 new born babies in the UK and Ireland is diagnosed with early – onset GBS infection. The infections that GBS most commonly cause in new born babies are sepsis (infection in the blood), pneumonia (infection in the lungs), and meningitis (infection of the fluid and lining around the brain).

Although GBS infection can make your baby very unwell, most babies will recover fully with prompt treatment.

On average in the UK, every month:

- 43 babies will develop early – onset GBS infection.
- 38 babies will make a full recovery.
- Three babies survive with long term physical or mental disabilities.
- Two babies die from their early onset GBS infection.

# What puts my baby at higher risk of developing GBS infection?

Infection is more likely to happen if:

- Your baby is born preterm (before 37 completed weeks of pregnancy), the earlier your baby is born, the greater the risk.
- You have previously had a baby affected by GBS infection.
- You have had a high temperature or other signs of infection during labour.
- You have had any positive urine test or swab test for GBS in this pregnancy.
- Your waters have broken more than 24 hours before your baby is born.

## How can the risk to my baby be reduced?

If GBS is found in a urine sample, it should be treated with antibiotics straight away and you should also be offered antibiotics through a drip in labour.

You should be offered antibiotics through a drip during labour if you have had a GBS positive swab or urine test.

If you have previously had a baby who was diagnosed with GBS infection, you should be offered antibiotics through a drip in labour.

If your waters break after 37 weeks of your pregnancy and you are known to carry GBS, you will be offered induction of labour straight away. This is to reduce the time that your baby is exposed to GBS

before birth. You should also be offered antibiotics through a drip.

Even if you are not known to carry GBS, if you develop any signs of infection in labour, you will be offered antibiotics through a drip that will treat a wide range of infections including GBS.

If your labour starts before 37 weeks of your pregnancy, your health care professional will recommend that you have antibiotics through a drip even if you are not known to carry GBS.

Penicillin is usually the antibiotic given where GBS is diagnosed. If you are allergic to Penicillin you will be given an appropriate alternative. If your doctor suspects that you have an infection but is unsure of the cause, you will be offered an antibiotic that will treat a wide range of infections.

## **If GBS has been found, when should I have antibiotics?**

If you are found to carry GBS in your vagina or rectum, receiving antibiotics before you go into labour does not reduce the chance of your baby developing GBS infection. You do not need antibiotic treatment until labour starts, then you will be offered antibiotics through a drip to reduce the chance of your baby being infected.

If GBS is found in your urine then you will need antibiotics as soon as it is diagnosed to treat your urinary tract infection, you will also be offered antibiotics through a drip during labour to prevent GBS infection in your baby.

## **If I had GBS in a previous pregnancy, should I be given antibiotics during labour?**

If a previous baby was affected with GBS infection then you should be offered antibiotics during labour in all following pregnancies as there is an increased risk that a future baby may also be affected.

If, however, GBS was found in a previous pregnancy and your baby was unaffected then is a 1 in 2 chance that you will carry GBS again in this pregnancy. To help you choose whether you would like to have antibiotics in labour, you can have a specific swab test( known as the enriched culture medium or ECM test) to see whether you are carrying GBS when you are 35 to 37 weeks pregnant.

### **If the results show that**

- You are still carrying GBS at this stage of pregnancy then the risk of your baby developing early-onset GBS infection is increased to around 1 in 400 and you will be offered antibiotics in labour.
- You are not carrying GBS at this stage of pregnancy then the risk of your baby developing early-onset GBS infection is much lower (1 in 5000) and you may choose not to have antibiotics.

## **What are my options for where I can have my baby?**

You should discuss your planned place of birth with your midwife during pregnancy to make sure that you receive the appropriate care. It is important that you receive antibiotics through a drip during labour and this will not be possible at home or at Ashcombe Birth Centre. However, the Central Delivery Suite and Midwife Led Unit at St. Michael's can provide this care.



The use of water emersion in labour with GBS is not contraindicated, and so use of the birthing pool will be accommodated where appropriate. You will need to vacate the birthing pool to have the antibiotics but can then return to the pool. It is also advised that you try and keep your cannulated hand out of the water and keep it as dry as possible.

## **What will my treatment during labour involve?**

If you have been offered antibiotics to prevent GBS infection in your baby, these should be started as soon as possible after your labour begins or after your waters have broken, They will be given through a drip and continued at regular intervals (usually every four hours) until your baby is born.

You should still be able to move freely during labour and this should not stop you from having a water birth.

If your waters break before labour start, your healthcare professional will talk to you about when you will need antibiotics and about the best time for your baby to be born. This will depend on your individual circumstances and on how many weeks pregnant you are.

## **Can antibiotics in labour cause any harm?**

Some women may experience temporary side effects such a feeling sick or having diarrhoea. Women can be allergic to certain antibiotics and in rare cases the reaction may be severe and life-threatening (anaphylaxis). Tell your health care professional if you know that you are allergic to penicillin or any other medications.

Your health care professional should discuss with you the benefits and risks of taking antibiotics in labour to prevent early-onset GBS infection in your baby.

If you choose not have antibiotics in labour that your baby will be monitored closely for 24 hours after birth as they are at increased risk of developing early-onset infection.

## **How will my baby be monitored after birth?**

Your baby will be monitored closely for the first 24 hours of their life. Their breathing rate, heart rate and temperature will be observed at regular intervals throughout those first 24 hours.

## **What are the signs of GBS infection in my baby?**

Most babies who develop GBS infection become unwell within the first week of life (which is known as early-onset GBS infection), usually within 12 to 24 hours of birth.

Although less common, late onset GBS infection can affect your baby until they are three months old. Having antibiotics during labour does not prevent late-onset GBS. More information on late-onset GBS infection can be found at [\*\*www.gbss.org/infection\*\*](http://www.gbss.org/infection).

Babies with early-onset GBS infection may show the following signs:

- Grunting, noisy breathing, moaning, seeming to be working hard to breathe when you look at their chest or tummy, or not breathing at all.
- Be very sleepy and/or unresponsive.
- Be crying inconsolably.
- Be unusually floppy.
- Not feeding well or not keeping milk down.

- Have a high or low temperature and/or their skin feels too hot or cold.
- Have changes in their skin colour (including blotchy skin).
- Have an abnormally fast or slow heart rate or breathing rate.
- Have low blood pressure.\*
- Have low blood sugar.\*

\*Identified by tests done in hospital.

If you notice any of these signs or are worried about our baby, you should urgently contact your health care professional and also mention GBS. If your baby has GBS infection, early diagnosis and treatment is important as delay could be very serious or even fatal.

## **What tests and treatments are available for my baby?**

If it is thought that your new born baby has an infection, tests will be done to see whether GBS is the cause. This may involve taking a sample of your baby's blood, or a sample of fluid from around your baby's spinal cord (this is called a lumbar puncture.) Tests will be fully discussed with you before the tests are done.

Babies who have signs of GBS infection or who are suspected to have the infection should be treated with antibiotics as soon as possible.

Antibiotics can be life-saving when given to babies with a suspected infection. Treatment will be stopped if there is no sign of infection after at least 48 hours, and if all the test results are negative.

# Can I still breastfeed?

It is safe to breastfeed your new baby.

Breastfeeding has not been demonstrated to increase the risk of GBS infection and it offers many health benefits to both you and your baby.

Please discuss your options of infant feeding with your midwife.

## Further information

Group B Strep Support (GBSS) [www.gbss.org.uk](http://www.gbss.org.uk)

RCOG Green-Top Guideline No. 36, Prevention of Early onset Neonatal Group B Streptococcal Disease  
[www.rcog.org.uk/en/guidelines-research-services/guidelines](http://www.rcog.org.uk/en/guidelines-research-services/guidelines)

NICE clinical guideline CG190, intrapartum Care for Health Women and Babies: [www.nice.org.uk/guidance](http://www.nice.org.uk/guidance)

NICE clinical guidance CG149, Neonatal Infection (early onset):  
Antibiotics for Prevention and Treatment: [www.nice.org.uk/guidance/CG149](http://www.nice.org.uk/guidance/CG149)

UK National Screening Committee, recommendation on GBS screening in pregnancy: <https://legacyscreening.phe.org.uk/groupbstreptococcus>

## Notes

# Notes



As well as providing clinical care, our Trust has an important role in research. This allows us to discover new and improved ways of treating patients.

While under our care, you may be invited to take part in research.  
To find out more please visit: [www.uhbw.nhs.uk](http://www.uhbw.nhs.uk)

Help us prevent the spread of infection in hospital. Please make sure your hands are clean. Wash and dry them thoroughly/use the gel provided. If you have been unwell in the last 48 hours please consider whether your visit is essential.

Smoking is the primary cause of preventable illness and premature death. For support in stopping smoking contact  
**NHS Smokefree on 0300 123 1044.**

Drinkline is the national alcohol helpline. If you're worried about your own or someone else's drinking, you can call this free helpline in complete confidence.  
**Drinkline on 0300 123 1110.**

**Bristol switchboard: 0117 923 0000**

**Weston switchboard: 01934 636 363**

**[www.uhbw.nhs.uk](http://www.uhbw.nhs.uk)**



For an interpreter or signer please contact the telephone number on your appointment letter.



For this leaflet in large print or PDF format, please email [patientleaflets@uhbw.nhs.uk](mailto:patientleaflets@uhbw.nhs.uk).

