# Group B Strep and Pregnancy

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Caught early enough Strep B can be treated successfully. Jane Plumb of the Group B Strep Support Group gives a brief outline of how to identify it and what to do.

Group B streptococcus (GBS) is a common type of the streptococcus bacterium. Approximately a third of men and women "carry" GBS in their intestines and a quarter of women of childbearing age carry it in their vagina.

Most of us are unaware it's there, as GBS can be difficult to detect and carrying it doesn't cause problems or symptoms. GBS is just one of a number of bacteria which normally live in our bodies and carrying it is perfectly normal.

Once GBS has 'colonised' the intestines, no antibiotics tested so far can eradicate it.

## What should I know about GBS?

Although GBS is the most common cause of bacterial infection in newborn babies, this complication is still relatively uncommon (around one in every 1,000 newborn babies in the UK develops a GBS infection, that's about 700 babies a year).

Babies are usually exposed to GBS shortly before or during birth. This happens to thousands of babies with no ill effects - just why some babies exposed to GBS are susceptible to the bacteria and develop infection is not clear. What is known is most GBS infection in newborn babies can be prevented by giving women in high risk situations antibiotics intravenously (through a vein) from the onset of labour or their waters breaking until the baby is born.

Aggressive intravenous antibiotic therapy successfully treats most babies who develop a GBS infection, but even with the best medical care 10-20% of these babies die (usually from septicaemia, pneumonia or meningitis) and a few suffer long-term problems, most usually those who developed GBS meningitis. The GBS bacteria can be passed from hands to a baby, so it is very important to make sure your handsare clean before handling a newborn baby.

Very occasionally GBS causes infection of the 'waters', womb or urinary tract in mothers of newborn babies.

If a woman believes she carries GBS, she should tell her GP, midwife and obstetrician and her baby's paediatrician. Proven methods for stopping most GBS infections from developing in newborn babies

exist. In most cases, the babies of women who carry GBS can be protected and born healthy and free from infection.

## Can I find out if I carry GBS?

Maybe, maybe not - and, if you do carry GBS, that's you and a third of the population, normally with no ill effects! But you may not be able to find out for sure, as no really reliable test is routinely available in the UK. The current tests miss up to 50% of GBS carriers plus GBS can come and go from your body (so if your test results were negative, would you believe them?). What you can do is make sure you know when it's more likely for babies to develop GBS infection and what the signs of this infection in babies are.

## Recommendations

In higher-risk situations, giving pregnant women intravenous antibiotics at regular intervals during labour until delivery has been proven to be effective in stopping most GBS infections in newborn babies. There are a few serious risks associated with taking antibiotics, so the decision must be considered carefully.

Our medical advisory panel's 6 key recommendations for preventing GBS infection in newborn babies are:

1. women at increased risk should be offered antibiotics immediately at the onset of labour through until delivery (this includes women known to carry the GBS bacteria where no other risk factor is present and women not known to carry GBS but who have another risk factor present).
2. women at particularly high risk should be strongly advised to accept intravenous antibiotics immediately at the onset of labour until delivery (this includes women known to be GBS carriers and who have one or more of the risk factors and women who have previously had a baby infected with GBS regardless of other risk factors. It also includes women not known to carry GBS but who have multiple risk factors).
3. for women in labour, the recommended doses of penicillin G are 3 g (or 5 mU) intravenously initially and then 1.5 g (or 2.5 mU) at 4-hourly intervals until delivery (for women allergic to penicillin, the recommended doses of clindamycin are 900 mg intravenously every 8 hours until delivery).
4. intravenous antibiotics should be given for at least 4 hours prior to delivery where possible.
5. babies born in situations where there is increased risk and the mother has received at least 4 hours of intravenous antibiotics should be assessed carefully by a paediatrician and, if completely healthy, intravenous antibiotics should not be given to them.
6. babies born in a higher risk situation where the mother has not received at least 4 hours of intravenous antibiotics should be investigated fully and initially commenced on antibiotics until it is proven the baby is not infected.

Please contact GBSS if you would like more information and you know you carry GBS or have had a baby

who developed a GBS infection.

*Editor's note:* We have not been able to find out, definitively, what the options are for women with Strep B who wish to pursue a home birth. Can anyone tell us whether midwives attending home births administer antibiotics to women at home. And if not, why not? Someone out there must know. Please write in and tell us.

## What are the signs a baby has GBS infection?

At least 60% of GBS infection in babies are apparent at birth and around 90% are apparent within the baby's first 2 days of life, so these infections should be detected and treated in hospital. In the unlikely event this information is needed, the typical signs of GBS infection in a newborn baby include grunting, poor feeding, lethargy, low blood pressure, irritability, and/or abnormally high or low temperature, heart rates or breathing rates.

Around 10% of GBS infection develops after the baby is 2 days old ("late-onset" GBS infection), usually as meningitis with septicaemia. Approximately 5-10% of babies who develop the late-onset GBS die and a third suffer long-term handicaps.

The warning signs of late-onset GBS infection may include:

- fever;
- poor feeding and/or vomiting; and;
- impaired consciousness.

The warning signs of meningitis in babies may include, as well as any of those listed above, one or more of:

- shrill or moaning cry or whimpering;
- dislike of being handled, fretful;
- tense or bulging fontanel (soft spot on the head);
- involuntary body stiffening or jerking movements;
- floppy body;
- blank, staring or trance-like expression;
- altered breathing patterns;
- turns away from bright lights; and
- pale and/or blotchy skin.

If your baby shows signs consistent with late-onset GBS infection or meningitis, call your GP immediately. If your GP isn't available, go straight to your nearest Accident & Emergency Department. If your baby has late-onset GBS infection or meningitis, early diagnosis and treatment are vital: delay could be fatal.

The risk of a baby developing a GBS infection decreases with age - GBS infection in babies is rare after one month of age and virtually unknown after three months.

## Who is most at risk?

There are seven situations in which it is more likely a baby will be exposed to GBS and, if susceptible, will develop a GBS infection:

**Clinical risk factors: each increases the risk at least 3 times:**

- where labour is preterm (prior to 37 completed weeks of pregnancy);
- where there is preterm premature rupture of membranes (prior to 37 completed weeks of pregnancy) with or without other signs of labour;
- where there is prolonged rupture of membranes (more than 18 to 24 hours before delivery) with or without other signs of labour;
- where the pregnant woman has a raised temperature (37.8°C or higher) during labour.

**Mothers who carry GBS: multiplies the risk at least four times:**

- where the pregnant woman is known to carry GBS; and/or
- where the pregnant woman has GBS bacteria in her urine at any time during the present pregnancy (which should, of course, be treated at the time of diagnosis).

**Mothers who have had a baby infected with GBS: multiply the risk about 10 times:**

- where the pregnant woman has had a baby who developed a GBS infection.

**More information:**

For more information about GBS, you should contact your medical professionals or contact:
UK Group B Strep Support Group: www.gbss.org.uk/ (Information leaflets can be downloaded from website.)
UK Midwifery Archives on GBS *www.midwifery.org.uk*, from the Association of Radical Midwives