

The knowledge to help

Why me?



Miscarriages happen for lots of different reasons. Sometimes the cause is known but often it isn't. Some women benefit from treatment but others don't need it. This leaflet looks at the possible causes of miscarriage and the tests and treatment that might help you. We have separate leaflets about ectopic pregnancy and molar pregnancy.

What is a miscarriage?

Miscarriage is when a baby (or fetus or embryo) dies in the uterus before 24 weeks of pregnancy. A loss from 24 weeks is called a stillbirth.

Miscarriage is very common. No one knows exactly how many miscarriages happen, but experts think that more than one pregnancy in every five ends in miscarriage.

There is still a lot that we don't know about miscarriage, and you may never find out why it happened to you. That can be hard to cope with.

What we do know is that miscarriage is highly unlikely to be caused by something you did – or didn't do. And the chances are that your next pregnancy will result in a healthy baby.

Miscarriages are so common, but you don't really think about it until it happens to you.

What happens now?

If this is your first or second miscarriage, you probably won't be offered tests or treatment. That's because most women go on to have a healthy pregnancy next time.

But if you think there is a strong reason for having tests now, perhaps because of your age or the time it took you to conceive, you might want to talk to your GP about an earlier referral.

If you've had three miscarriages or more in a row, you should be offered tests. That's because a cause is more likely to be found at this stage. But even then, there may not be a treatment that can help.

That doesn't mean your next pregnancy won't be successful. Even if there is no treatment, you should still get extra support from doctors and midwives next time. And research shows that this alone can improve your chances of having a healthy pregnancy. 1.2

¹The 24 week limit applies in the UK. It may be different in other countries.

^{1,2} Please see page 15 for these and all numbered references.

Different types of miscarriage

Doctors use various different terms to describe miscarriage. Here we explain what they mean.

Threatened miscarriage

This term is often used when you have some bleeding – or 'spotting' – from your vagina.

Many women with bleeding do not miscarry, even if the bleeding is heavy. But sometimes the baby has already died. And sometimes a scan shows a heartbeat but the baby dies later.

In some cases, the scan needs repeating at a later date to be sure what is happening. That wait can be a stressful time.

It is important to know that scans and internal (vaginal) examinations do not cause miscarriages.

Complete miscarriage

This means that the baby has died and your uterus (womb) has emptied naturally. You may have pain and heavy bleeding over several days.

You may need a scan to confirm that the miscarriage is complete.

I was told yesterday that my baby stopped growing at six weeks but I should be 12 weeks now and I had no idea anything was wrong.

Sometimes a scan shows that the baby has died or not developed even though you haven't had a miscarriage. There are different ways of describing this:

Missed miscarriage (also called 'delayed' or 'silent' miscarriage)

This means the baby has died but is still in your uterus. This is sometimes discovered during a routine scan and may come as a complete shock, especially if you have had no sign that anything was wrong. You may still feel pregnant and may still have a positive pregnancy test.

It can come as a shock because you may still feel pregnant and have a positive pregnancy test.



Blighted ovum (also called 'anembryonic pregnancy', which means a pregnancy without an embryo, or 'early embryo loss')

This term is sometimes used when a scan shows a pregnancy sac with nothing inside it. The embryo has stopped growing at an early stage, but the sac where the baby should develop has continued to grow. As with a missed miscarriage, you may still feel pregnant and have a positive pregnancy test.

Incomplete miscarriage

This term means that the pregnancy is over but the uterus has not emptied completely. You will probably still have pain and heavy bleeding.

If you have a missed or incomplete miscarriage or a blighted ovum, you may be offered one of these choices:

- Go home and wait for the miscarriage to happen naturally.
- Have a minor operation to remove any pregnancy tissue left in your uterus. This is called surgical management of miscarriage (SMM), or sometimes ERPC, and it can be done under general or local anaesthetic.
- Take tablets to start or complete the miscarriage (medical management).

You may need time to think about what you want to do. There is more information in our leaflet *Management* of miscarriage.

I was told I had a missed miscarriage and was then sent home to think about the various options. I decided to wait for things to happen naturally as I wanted to keep control of what was happening to me – as much as you can.

Late miscarriage

This is a miscarriage that happens between 14 and 24 weeks of pregnancy. It may start with bleeding, cramps or your waters breaking. But sometimes there are no signs and a routine scan shows that the baby has died.

If a late miscarriage is not complete, you will probably need to be admitted to hospital. You will most likely be given medication to start the process of miscarriage and this can be a very distressing time.

You may be admitted to the gynaecology ward or the labour ward. Wherever you are treated, everything should be fully explained to you.

You can find more detail in our leaflet Late miscarriage.

Recurrent miscarriage

This is the medical term for three or more miscarriages in a row. They may have different causes or the same underlying cause. Sometimes there is more than one problem that might cause your miscarriages.

Doctors usually offer to do tests for possible causes only after three miscarriages. But sometimes they will refer you for tests after two, e.g.:

- If you had a late miscarriage, where the baby died after 14 weeks of pregnancy.
- If you have fertility problems, such as taking a long time to conceive.

The tests may be carried out at your local hospital or at a specialist centre.

Having tests doesn't necessarily mean you will have an answer as to why you miscarried. And even if a cause is found, it may not be something that can be treated. But you might still feel better if you know what might have caused your miscarriages.

Half of the people who have tests after recurrent miscarriage don't have a specific problem found. That can be difficult to accept, but it does mean that there is a good chance that you will have a healthy pregnancy without any particular treatment.

There is more detailed information in our leaflet *Recurrent miscarriage*.

Being told all my tests were 'normal' was initially heartbreaking. I remember feeling angry with the consultant for not finding something and I couldn't help but feel this was the worst news possible. I wanted a reason and a cure.

Other types of pregnancy loss

There are two other ways that pregnancy loss can happen:

Ectopic pregnancy

This is a pregnancy that is growing in the wrong place – usually in one of the fallopian tubes leading to the uterus. In this case, it is sometimes called a tubal pregnancy.

A tubal ectopic pregnancy can't develop because there isn't enough room for the embryo to grow beyond about eight weeks. There is also a risk that the tube could burst, which can be life-threatening.

Ectopic pregnancy may be diagnosed before you even know you are pregnant. You may have some bleeding or spotting, or have pain low down on one side of your abdomen or in the tops of your shoulders, but sometimes there are no obvious symptoms.

Some women with ectopic pregnancies can be treated with medication called methotrexate; but others need an emergency operation to remove the pregnancy and sometimes the tube too. It can be a very frightening time.

There is more information in our leaflet *Ectopic pregnancy*.

Molar pregnancy (hydatidiform mole)

This term is used when an abnormal fertilised egg starts to grow in the uterus. The cells that should become the placenta grow too quickly and leave no room for a baby to develop.

Because your body continues to produce pregnancy hormones, you will have a positive pregnancy test and may feel extremely tired and sick.

Sometimes a molar pregnancy can be seen or suspected on a scan. But it is more often diagnosed after a miscarriage.

If you have had a molar pregnancy you will be referred to a specialist centre for follow-up; and this can be a very worrying time.

There is more information in our leaflet *Molar pregnancy*.



The blood tests showed that my hormone levels were far beyond anything normal. That explained why I had been feeling so unwell.

Causes, tests and treatment

This section looks at the known causes of miscarriage and tests and treatments that may help.

Around half of miscarriages are due to genetic faults. The other causes listed here are much less common, or even very rare.

Genetic causes

About half of all early miscarriages are caused by random (one-off) genetic faults in the egg or the sperm, or in how the fertilised egg develops. We don't know what causes these faults, although they are more common in women in their late 30s and older.

If your miscarriage was caused by a random genetic fault, there is a good chance that your next pregnancy will be healthy.

In a very few cases miscarriage is caused by a genetic fault in the mother or father. If you or your partner are found to have such a problem you will be offered genetic counselling. This can help you understand the chances of it affecting future pregnancies and help you think about trying again.

Hormonal causes

Women with high levels of a chemical called 'luteinising hormone' (LH) in their blood may find it harder to conceive: and when they do conceive. they are more likely to miscarry.

In many cases scans show a problem called 'polycystic ovaries'. This is when the ovaries, which make the eggs, contain small cysts that shouldn't be there

Some women are found to have a condition called 'polycystic ovary syndrome' (PCOS).

Despite a lot of research into these hormonal problems, there is still no tried and tested treatment. However, you may be offered treatment as part of a research trial.



When I miscarried I couldn't understand how everything could go so horribly wrong when I already had a perfect daughter, and not one single health problem.



Progesterone and hCG

The hormone progesterone is needed to establish a pregnancy and to help keep it going. The hormone hCG keeps progesterone levels high and helps the placenta to develop.

Some women are found to have low levels of one or both of these hormones during their pregnancy or after miscarriage. But it is difficult to know whether low levels of the hormone(s) caused the miscarriage or if they are just a sign of things going wrong.

Research in 2015 showed that overall, progesterone supplements during pregnancy did not reduce the risk of miscarriage in women with previous unexplained recurrent miscarriage³.

More recent research showed that progesterone treatment in women with early pregnancy bleeding and a history of miscarriage did improve outcomes and this treatment is now recommended^{4,5}.

Both trials showed that progesterone treatment was not harmful to the women or to their babies.

More research is needed to find out whether hCG supplementation could reduce the risk of miscarriage.

Antiphospholipid antibody syndrome (also called APS, Hughes syndrome or sticky blood syndrome)

This is when antibodies called 'lupus anti-coagulant' or 'anti-cardiolipin' in the mother's blood cause problems in the placenta. Blood clots may form in the placenta and it may not develop normally.

High levels of these antibodies are found in up to 15 per cent of women who have recurrent miscarriages.

Blood tests can show whether antibody levels are high. But you can be sure you have APS only after two positive tests at least six weeks apart.

Treatment for APS is aimed at preventing blood clots. Most women are treated with low doses of aspirin, starting early in pregnancy or even before conception. Doctors sometimes also recommend injections with another blood-thinning drug called 'heparin'. This is normally given once you are pregnant and the baby's heartbeat has been seen on a scan.

Your should not start taking aspirin unless it has been prescribed by your doctor.

Research is still being done to work out how these antibodies are linked to miscarriage and what treatment works best.

For more information, see our leaflet Antiphospholipid syndrome and pregnancy loss.

Infection and miscarriage

Mild infections like coughs and colds are not harmful in pregnancy, but very high fevers and some illnesses can increase the risk of miscarriage. If an infection causes miscarriage, it tends to happen only once because your body will become immune to the infection.

Infections of the vagina or uterus

Sometimes an infection of the vagina or uterus can cause late miscarriages (after 14 weeks). The infection may cause the baby to die in the uterus; or it may make your waters break prematurely.

Doctors can test for this kind of infection and treat it if necessary. Sometimes your partner also needs treatment to avoid re-infecting you.

Listeria

This is caused by eating unpasteurised cheese and other dairy products. It isn't usually harmful to women but it can be a cause of late miscarriage.

Chlamydia

This infection is usually sexually transmitted; but a rare form called **Chlamydia psittaci**, can be caught from touching infected sheep or cattle, particularly during lambing or calving.

Chlamydia can lead to miscarriage, ectopic pregnancy or premature labour; it can also harm your fertility.

Toxoplasmosis

This is a parasitic infection sometimes carried by cats. It can be caught through contact with soiled cat litter, with contaminated soil, or through eating poorly-cooked contaminated meat.

Parvovirus

This is a viral infection, which is sometimes called 'slap-cheek'. Although it can cause miscarriage, most women who are infected have a normal pregnancy.

Other infections

Some other infections are especially harmful in pregnancy although they don't usually cause miscarriage. These include cytomegalovirus (CMV), rubella (German measles), genital herpes and HIV.



Anatomical problems

Miscarriage is sometimes caused by problems with your uterus or cervix (neck of the womb). Your doctor may refer you to a specialist for further assessment and possibly treatment.

Weak cervix (also called 'incompetent cervix')

Your cervix is a kind of 'gateway' between your uterus and vagina. During a normal birth the cervix dilates (widens) to allow the baby to be born.

Some women – probably less than one in a hundred – have a weakness in the cervix. This means it may dilate too early, leading to premature labour or late miscarriage.

Sometimes the weakness has been there since birth; but the cervix can also become weak as a result of previous surgery or injury.

A weak cervix can be difficult to diagnose. If your doctor suspects it, perhaps because of your pregnancy or medical history, he or she may suggest putting in a 'cervical stitch'.

This involves stitching a tape around the cervix to support it and to try to stop your baby being born too early. A cervical stitch is usually put in between 12 and 24 weeks of pregnancy and then removed at 36–37 weeks unless you go into labour before this.

The Royal College of Obstetricians & Gynaecologists publishes an excellent patient leaflet on cervical stitch (see page 15).

Fibroids

These are harmless growths that can develop inside the uterus; more rarely they develop outside the uterus. Small fibroids are fairly common and don't usually cause problems in pregnancy; but large ones can be a cause of miscarriage.

If you have a very large fibroid that has changed the shape of your uterus, your doctor may suggest removing it under anaesthetic before you get pregnant again.

Irregular-shaped uterus

Your uterus is formed from two separate tubes that fused together before you were born. Sometimes, though, the uterus develops an irregular shape. There may not be enough room for the baby to grow inside the uterus and this can lead to miscarriage, usually after 14 weeks.

If you have this problem and your doctor thinks it may have caused your miscarriage, he or she might suggest an operation to correct or reduce it. You should be given clear information to help you decide whether or not to have surgery. This will include the possible risks of the operation and how likely it is to improve your chance of having a healthy pregnancy next time.

Other causes of miscarriage

Abnormal development of the baby

Some miscarriages are caused by problems in the baby. These include spina bifida and heart defects.

Illness in the mother

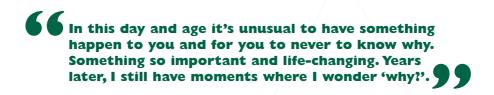
Some chronic illnesses like diabetes and kidney disease are linked with miscarriage. If you have such an illness and you are taking long-term medication, you should probably talk to your GP or a specialist before getting pregnant again.

Rhesus negativity

If your blood group is Rhesus negative and you miscarry or bleed in pregnancy, you may need a special injection known as 'anti-D'. This is to prevent you developing antibodies that could cause problems in the next pregnancy.

It is important to know that having a Rhesus negative blood group will not actually *cause* a miscarriage.

For more information, ask for our fact sheet on anti-D.



Personal factors

This section looks at things about you and your lifestyle that could affect your risk of miscarriage.

Age

Your risk of miscarriage increases as you get older. One reason is that older eggs are more likely to carry genetic faults.

But even if you are in your early 40s, with up to three miscarriages, the odds are still in your favour; you are more likely to have a healthy pregnancy than another miscarriage⁶.

It's not just your age that counts. Research shows that babies of older fathers are also more likely to miscarry, even if the mother is young^{7,8}.

Pregnancy and fertility problems

Your risk of miscarriage is higher if:

- You have miscarried before, especially after three miscarriages.
- You have taken more than a year to conceive (if you have been having sexual intercourse regularly).
- You are pregnant with twins, triplets or more. This applies whether they were conceived naturally or with help from fertility treatment.

Weight

Women who are very underweight or very overweight are more likely to miscarry.

Diet

Your risk of miscarriage may be higher if you:

- Eat unpasteurised dairy products, such as blue cheese, which can cause listeria.
- Eat raw or undercooked meats, which can cause toxoplasmosis. This is especially harmful before conception or in the first three months of pregnancy.
- Eat raw or partly cooked eggs, as in home-made mayonnaise or mousse; this can cause salmonella infection.
- Take in large amounts of caffeine, especially in coffee, tea, cola and energy drinks. Drinking more than two cups of coffee a day is thought to increase your risk of miscarriage⁷.
- Drink regularly, heavily or in 'binges'. The highest risk is if you drink alcohol every day and/or drink more than 14 units in a week.

If you eat a well-balanced diet, with plenty of fruit and green vegetables, you may have a lower risk of miscarriage.⁷



Smoking, drugs and medicines

Your risk of miscarriage may be higher if you:

- Smoke regularly in pregnancy.
 Smoking can affect sperm quality too and this may also increase the risk of miscarriage.
- Take drugs like cocaine, crack and heroin.
- Regularly use some over-thecounter medicines, such as ibuprofen.
- Take particular prescribed medicines, including some antidepressants. It's important to ask your doctor which medicines are safe in pregnancy.

Stress and work

Overall, research studies suggest that there is a link between stress and miscarriage, but there is no evidence that stress on its own is a direct cause of miscarriage.

One large study found that work that is demanding and very stressful was linked to an increased risk of miscarriage, especially over a long time⁷.

Your risk of miscarriage may be higher if you are exposed to workplace hazards such as toxic chemicals, solvents, lead or radiation. Research also suggests that working nights, shifts and/or long hours are linked to increased miscarriage risk, but don't necessarily *cause* it¹⁰.

Things you don't need to worry about

These are things that don't seem to increase the risk of miscarriage even though people often worry about them in pregnancy:

- · Exercise.
- Working full time.
- Work that involves sitting or standing for long periods.
- Heavy lifting.
- · Sex.
- · Travel by air.
- · Eating spicy food.
- · Being pregnant for the first time.
- Getting pregnant soon after a previous birth or miscarriage.
- Living near electric pylons or mobile telephone masts.
- Not wanting to be pregnant or thinking about termination.



Why me: a summary

There is still a lot we don't understand about the causes of miscarriage.

It can be difficult to know how much to believe what you hear from friends, family, the media or online.

And it can be very hard to tell the difference between proper research evidence and unproved theories.

You may never know exactly why you miscarried; and that uncertainty can be very hard to live with.

But the good news is that most women who miscarry – even several times – go on to have a healthy pregnancy in the end. And that often happens without any treatment at all.

Recovering from two miscarriages is a work in progress – it never really leaves you. But I am proud and comforted to know that I did my best, that it wasn't my fault. When life throws you the ball, sometimes you aren't going to catch it, but next time you might.

Useful reading

Leaflets from the Miscarriage Association:

Antiphospholipid syndrome and pregnancy loss

Ectopic pregnancy Molar pregnancy Management of miscarriage Recurrent miscarriage Late miscarriage

All our leaflets are available at www.miscarriageassociation.org.uk/leaflets

Patient information from the Royal College of Obstetricians & Gynaecologists, available at www.rcog.org.uk/en/patients/.

Look for the patient information section and click on 'Pregnancy and birth'.

This information includes the leaflet Cervical Stitch.

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Need to talk to someone who understands?

Call our support line on 01924 200799, Monday to Friday, 9am-4pm Chat with us online at www.miscarriageassociation.org.uk

Or email info@miscarriageassociation.org.uk



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