

## Early miscarriage causes and risks



### What is early miscarriage?

Early miscarriage generally refers to pregnancy loss before 13 weeks of gestation. ACOG uses the term early pregnancy loss for a nonviable intrauterine pregnancy in the first trimester. The NHS defines miscarriage more broadly as the loss of a pregnancy during the first 23 weeks, with many losses occurring early.

Early miscarriage can present with vaginal bleeding, cramping, passage of tissue, or a decrease in pregnancy symptoms. However, symptoms are not always straightforward. Some people have light bleeding and continue a healthy pregnancy, while others have minimal symptoms and learn at an ultrasound that the pregnancy has stopped developing.

Because early pregnancy symptoms overlap, medical evaluation is important. Clinicians may use ultrasound, serial human chorionic gonadotropin measurements, pelvic examination, and blood type testing when appropriate. These assessments help confirm what is happening and rule out conditions that need urgent treatment, including ectopic pregnancy.

### Chromosomal abnormalities: the most common cause

The most common cause of early miscarriage is an abnormal number or structure of chromosomes in the embryo. Chromosomes carry genetic information. If an embryo has too many or too few chromosomes, it may not develop normally. ACOG notes that about half of early miscarriages occur when the embryo does not develop properly, often because of an abnormal number of chromosomes. Mayo Clinic and the NHS similarly identify chromosomal abnormalities as a major cause of early pregnancy loss.

These chromosomal changes usually happen by chance during formation of the egg or sperm, fertilization, or very early cell division. They are not usually inherited and are not caused by exercise, ordinary work, sex, mild stress, or a single emotional event.

This can be emotionally difficult to hear because it may not provide a specific answer. Still, it is medically meaningful: many early losses occur because the pregnancy could not continue biologically, not because the pregnant person failed to protect it.

### **Maternal age and reproductive history**

Maternal age is one of the clearest non-modifiable risk factors. As age increases, the chance of chromosomal abnormalities in eggs also increases, which raises the risk of early miscarriage. This does not mean that pregnancy after age 35 or 40 cannot be healthy; many are. It means the baseline statistical risk is higher.

A previous miscarriage also increases risk modestly, and risk rises further after multiple losses. One miscarriage is common and does not necessarily mean there is an underlying fertility problem. Many people go on to have a healthy pregnancy after a single early loss.

Recurrent pregnancy loss is usually defined clinically as two or more pregnancy losses, though thresholds for evaluation may vary. If you have had repeated miscarriages, a clinician may discuss testing for uterine anatomy, parental chromosomal rearrangements, endocrine conditions, antiphospholipid syndrome, or other factors depending on your history.

## **Chronic medical conditions that can affect miscarriage risk**

Certain uncontrolled chronic conditions are associated with a higher risk of miscarriage. These may include poorly controlled diabetes, thyroid disease, some autoimmune conditions, kidney disease, and severe hypertension. The key word is often uncontrolled: many people with chronic conditions have healthy pregnancies when their condition is identified, monitored, and treated before and during pregnancy.

Infections can sometimes contribute to pregnancy complications, although most common minor infections do not cause miscarriage. High fever, significant systemic illness, or untreated sexually transmitted infections should be discussed with a healthcare professional.

If you have a known medical condition, preconception counseling or early pregnancy care can be helpful. A clinician can review disease control, medications, vaccination status, folic acid or prenatal vitamin use, and any specialist care needed. Do not stop prescribed medication on your own, because abrupt discontinuation may be riskier than continuing it under supervision.

## **Uterine and cervical factors**

Uterine or cervical problems can increase miscarriage risk in some cases. Examples include congenital uterine anomalies, significant intrauterine adhesions, large submucosal fibroids that distort the uterine cavity, or cervical insufficiency. These factors are more often considered after recurrent losses, second-trimester loss, infertility, or abnormal imaging.

Uterine anatomy matters because implantation and placental development occur within the uterine cavity. If the cavity shape is altered, the pregnancy may have less optimal space or blood supply. Cervical insufficiency typically becomes more relevant later in pregnancy, but cervical history can still be part of a full reproductive assessment.

Testing may involve pelvic ultrasound, saline infusion sonography, hysteroscopy, MRI, or other imaging depending on the situation. These tests are not needed for everyone after one early miscarriage. Your obstetrician-gynecologist or fertility specialist can help decide what is

appropriate.

## **Lifestyle exposures and environmental risks**

Some risks are modifiable. Smoking is associated with miscarriage and many other pregnancy complications. Alcohol use during pregnancy is not considered safe, and illicit drug use can increase risks for pregnancy loss and fetal harm. The NHS recommends avoiding smoking, alcohol, and drugs during pregnancy as part of risk reduction.

Caffeine is a common question. Guidelines vary, but many clinicians advise limiting caffeine intake in pregnancy. If your intake is high, ask your healthcare professional what limit is appropriate for you.

It is also worth discussing occupational or environmental exposures if relevant. Heavy metals, some solvents, radiation exposure, and certain high-risk workplace chemicals may require specific precautions. Most everyday activities, however, are not proven causes of miscarriage. Moderate exercise, intercourse in an uncomplicated pregnancy, and routine work are not typically considered causes of early pregnancy loss.

## **Medications and medical treatments**

Certain medications can be unsafe in pregnancy or associated with pregnancy loss, while others are essential for maternal health. This is why medication review is an important part of preconception and early pregnancy care. Examples of medications that may require special review include some acne medications, anticoagulants, antiseizure medications, immunosuppressants, and drugs used for chronic inflammatory conditions.

The safest approach is not to stop medication suddenly unless a clinician tells you to. For some conditions, untreated disease can carry substantial risk. A healthcare professional can weigh the benefits and risks, adjust dosages, switch to pregnancy-compatible alternatives when appropriate, and coordinate specialist input.

If you discover you are pregnant while taking a medication that concerns you, contact your prescribing clinician or obstetric care team promptly. They can

help interpret the actual exposure risk rather than relying on alarming online information.

### **What does not usually cause early miscarriage**

People often search their memory for something to blame: lifting groceries, working late, having an argument, exercising, flying, having sex, or drinking coffee before knowing they were pregnant. In an uncomplicated pregnancy, these are not generally considered causes of miscarriage.

This distinction matters because guilt can be heavy after loss. While some risk factors can be reduced, many early miscarriages result from developmental problems that could not have been prevented. Compassionate medical care should include both physical assessment and emotional support.

If you are unsure about a specific exposure, bring it to your clinician. A direct conversation can often relieve anxiety and clarify whether any follow-up is needed.

### **When to seek medical care**

Any suspected miscarriage deserves medical support, but some symptoms require urgent assessment. Seek prompt care for heavy bleeding, severe abdominal or pelvic pain, shoulder-tip pain, fainting, dizziness, fever, foul-smelling discharge, or feeling very unwell. These can indicate complications or an alternative diagnosis such as ectopic pregnancy or infection.

If bleeding is light and you are stable, contact your pregnancy care provider for guidance. They may recommend monitoring, ultrasound, blood tests, or in-person evaluation depending on gestational age and symptoms.

After a confirmed miscarriage, follow-up may include ensuring the uterus has emptied, checking for anemia if bleeding was heavy, giving Rh(D) immune globulin when indicated, reviewing pathology or genetic testing if performed, and discussing emotional recovery and future pregnancy planning.