

## Fever during pregnancy risks



### Why fever matters in pregnancy

Fever reflects an elevated core body temperature, usually as part of the immune response to infection. In pregnancy, that physiologic response deserves extra attention because maternal illness can affect uteroplacental function, hydration status, and, depending on timing, fetal development. A short, self-limited fever may pass without consequence, but prolonged, recurrent, or untreated fever is more concerning.

Hyperthermia is sometimes used to describe elevated body temperature from any cause, including environmental heat exposure or illness. The distinction matters because a fever from infection may indicate a condition that needs testing or treatment, while heat-related hyperthermia may require urgent cooling and assessment. Either way, the key principle is the same: pregnancy lowers the threshold for medical review when body temperature stays elevated or the person feels significantly unwell.

It is also important to separate risk from certainty. The research summarized by MotherToBaby and other reviews describes associations, not proof that fever directly causes a problem in every pregnancy. Many people experience fever during pregnancy and go on to have healthy pregnancies. Still, because fetal

development is highly time-sensitive, clinicians generally treat fever as a signal that should not be ignored.

### **What risks are most consistently reported**

The strongest evidence links fever or hyperthermia in early pregnancy with a small increase in some congenital outcomes. Studies reviewed in the medical literature have reported associations with neural tube defects, and reviews also identify signals for congenital heart defects and oral clefts.

MotherToBaby notes that some studies have found small increased risks for other birth defects as well, although the evidence is less consistent.

These findings are best understood at the population level. A reported increase in risk does not mean that fever causes a defect in any specific pregnancy, nor does it mean that a single febrile illness will lead to harm. Instead, it suggests that embryonic development may be more vulnerable during periods of rapid organ formation, especially if fever is prolonged or untreated.

Some studies have also explored longer-term neurodevelopmental outcomes, including possible links with ADHD or autism spectrum disorder. However, the evidence remains limited and uncertain. That uncertainty matters: it means the current literature does not support a simple causal statement, and it also means parents should not assume that a fever automatically predicts later developmental problems.

### **Why timing changes the risk profile**

Timing is one of the most important variables in pregnancy risk assessment. In the first trimester, especially during early embryogenesis, fever is more concerning because organ systems are being formed. This is the period in which the neural tube closes and the foundations of the brain, spinal cord, and heart are established. For that reason, first-trimester fever has been associated with miscarriage risk and with fetal brain or spinal cord defects in clinical references such as Merck Manuals.

After organogenesis, the pattern shifts. Later pregnancy is less about structural birth defects and more about maternal stability, fetal well-being, and the possibility of triggering labor. Merck Manuals notes that fever late in

pregnancy can increase the risk of preterm labor. That does not mean every late-pregnancy fever will lead to contractions or delivery, but it does mean that fever should be taken seriously when it appears near the third trimester.

The duration of fever also matters. A brief spike that resolves is generally less concerning than sustained fever, repeated episodes, or a fever that remains untreated. Persistent hyperthermia may create more physiologic stress and may be a clue that the underlying illness is not improving.

### **The underlying illness may matter more than the fever itself**

In many cases, fever is a symptom rather than the primary problem. The underlying infection or inflammatory condition may carry its own pregnancy risks, and those risks can be more important than the temperature number alone. For example, a urinary tract infection, influenza-like illness while pregnant, or another systemic infection can cause fever and also affect maternal hydration, respiratory status, or inflammatory burden.

That is why a pregnancy-safe infection evaluation is often more useful than simply trying to lower the temperature. Clinicians may consider history, physical examination, and testing to identify whether the source is urinary, respiratory, gastrointestinal, or something else. Identifying the cause helps determine whether the situation is likely to be self-limited or whether closer monitoring is needed.

From a risk standpoint, this distinction matters because some studies about fever may partly reflect the effects of infection itself, not just heat.

Research reviews acknowledge that not all associations can be separated cleanly. In practical terms, that means the safest approach is to treat fever in pregnancy as a sign that the body may need evaluation, rather than assuming the fever alone explains everything.

### **When fever becomes urgent**

Seek prompt medical advice if fever is persistent, high, recurrent, or accompanied by symptoms that suggest a significant infection or obstetric complication. Concerning features can include shortness of breath, painful urination, flank pain, severe headache, stiff neck, rash, abdominal pain,

vaginal bleeding, decreased fetal movement later in pregnancy, or contractions. These symptoms do not diagnose a cause, but they can signal the need for timely assessment.

Urgency is especially important in the first trimester, when fever has been associated with miscarriage and certain birth defects, and later in pregnancy when fever may precede preterm labor. It is also important to seek help if you are unable to keep fluids down, if you feel faint, or if the fever is not improving as expected. Dehydration can worsen how sick you feel and may complicate both fever and pregnancy.

Contact a clinician if fever lasts more than a short period or keeps returning. Get evaluated sooner if fever occurs with urinary, respiratory, or abdominal symptoms.

Do not wait if you feel markedly unwell, weak, confused, or short of breath. Ask for guidance before taking over-the-counter medications during pregnancy.

### **How to reduce risk while waiting for care**

There is no substitute for medical assessment, but a few practical steps can help while you are waiting to speak with a healthcare professional. Focus on hydration, rest, and avoiding overheating. Keep the room comfortably cool, wear lightweight clothing, and sip fluids if you can tolerate them. If you are vomiting or unable to drink, that information is clinically important and should be communicated clearly.

It is also useful to note the pattern of the fever: when it started, the highest temperature you measured, whether it is constant or intermittent, and what other symptoms are present. This information helps clinicians decide whether the likely source is viral, bacterial, urinary, respiratory, or something else. If you have an obstetric care team, tell them whether you are in the first trimester, second trimester, or near term, because that changes the level of concern.

Do not try to self-manage prolonged fever by "waiting it out" if you are pregnant. The goal is not alarm; it is early, informed care. Most febrile illnesses are manageable, but pregnancy is a context where swift communication with a professional is a wise precaution.

