

Fainting (Syncope)

Syncope is the medical term for fainting. Fainting occurs fairly commonly in children and teens and is usually not serious. In a small percentage of cases, fainting can be caused by heart rhythm problems (abnormal heartbeat) or other uncommon causes. Tests may be needed to determine the origin of the problem.

Fainting during physical activity can be more serious and always requires medical evaluation.



What is fainting?

Fainting is also called “passing out”—the medical term is syncope. People who faint temporarily lose consciousness, often falling down as they do so. The person usually regains consciousness (wakes up) in a minute or two.

Fainting can be scary, but most of the time it doesn’t signal any serious disease or health problem. Fainting occurs because not enough blood (oxygen) is getting to the brain. The most common reason involves certain nerves causing the heart to temporarily slow down and pump less blood to the brain. This is called “vasovagal” or “neurocardiogenic” syncope.

In children and teens, fainting often occurs after standing around on a warm day. It can also be related to pain, fear, even straining when going to the bathroom. Most children who faint need no treatment. If fainting is a more frequent problem and not caused by any medical conditions such as problems with heart rhythm, treatments are available.

What does it look like?

- Your child suddenly collapses, losing consciousness.
- He or she may have various symptoms before passing out, such as:
 - Dizziness (lightheadedness)
 - Fast breathing (hyperventilation)
 - Flushing: feeling warm, sweating
 - Vision changes
 - Nausea
- Many other symptoms are possible.
- Sometimes after fainting, muscle twitching occurs. This can make it difficult to tell simple fainting from a seizure (involuntary, uncontrollable muscle movements).
- Your child regains consciousness a minute or two after fainting. He or she should be alert and aware of what’s going on. (If not, a seizure may be more likely to have occurred.)

What causes fainting?

- The most common cause of simple fainting in children is “vasovagal” syncope, sometimes called “neurocardiogenic” syncope.
 - An abnormal response of the parasympathetic nervous system (which controls automatic activities such as heartbeat) results in a drop in blood pressure and heart rate. This reduces blood flow to the brain, causing unconsciousness. Blood flow returns to normal when your child falls or lies down.
 - This type of fainting is uncommon before ages 6 to 10 years.
- Fainting can be a sign of low blood sugar in people with diabetes (sometimes even in those without diabetes).
- Rarely, fainting in children can result from some potentially serious heart conditions, including heart rhythm problems called *arrhythmias*. With arrhythmias, the heart beats too fast or, less often, too slowly. This sometimes doesn’t allow enough blood to be pumped to the brain and causes fainting. The child may feel his or her heart beating very fast.
- Fainting during exercise always requires medical evaluation!



Can fainting be prevented?

- If the cause is simple fainting (vasovagal syncope), try to make sure that your child avoids factors that seem to trigger fainting spells, for example, not having enough to eat or drink or being emotionally upset. Your child should be aware of the early warning signs of fainting (feeling dizzy, sweating) and sit down immediately.
- If a specific cause of fainting is identified (such as heart disease), treatment given by your doctor will seek to prevent fainting and other complications.

How is the cause of fainting diagnosed?

- Most of the time, your doctor can diagnose simple fainting without any special tests. A test called an electrocardiogram (ECG) may be done to be sure there are no heart rhythm problems.
- If your child has had frequent episodes of fainting, we may recommend a visit to a heart specialist (cardiologist). The cardiologist may perform a simple test called a “tilt-table test.”
- This test is just what it sounds like; your child is strapped onto a table, which is then tilted up and down. He or she is monitored closely during the procedure. The response

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will help to determine whether your child's fainting spells are vasovagal syncope.

- If your child has fainted during exercise or activity, more extensive testing is needed.

How is fainting treated?

In general, you should call your doctor after a fainting spell. If your child has simple fainting and the circumstances surrounding the event seem pretty clear (for example, standing for a long time on a hot day), call the doctor and report the incident.

- If your child has repeated episodes of simple fainting, treatment may be recommended. Several different treatments may be helpful, including increasing salt intake and taking heart medications, such as "beta-blockers."
- If your child has some form of heart disease that is contributing to fainting spells, treatment is obviously needed. Evaluation and treatment by a cardiologist will be recommended.



When should I call your office?

Although fainting spells are usually not a sign of serious disease, it's a good idea to get medical evaluation if your child faints.

- In general, you should call or see the doctor the first time your child faints. The doctor will advise you what to do if fainting occurs again.
- If your child is being evaluated for fainting and the episode appears different than usual, call our office or go to the emergency room. For example:
 - If your child loses control over urination or bowel movements.
 - If your child is unconscious for more than a minute or two, or if he or she is confused after waking up.

If your child faints during activity or exercise, call our office or go to the emergency room.

