

*If you have any questions, ask your physician or nurse.*

## Syncope

Fainting, or syncope, is the sudden loss of consciousness and ability to stand. It is also called “passing out.” This common problem is the cause of many falls and injuries. One third of people faint at least once during their life. Syncope may occur without warning or can be signaled by:

- Feelings of weakness
- Feeling hot or sweating
- Dizziness
- Visual changes
- Nausea
- Palpitations

## Causes of syncope

Fainting is due to a sudden decrease in blood flow and oxygen to the brain. There are many causes of syncope, but most fall into 1 of 3 major types.

### **Abnormal nerve reflex**

Nerves that control heart rate, blood pressure and other body functions may respond in an abnormal way and cause syncope. This can be triggered by:

- Standing
- Pain
- Unpleasant sight or smell
- Stress, anxiety or emotional distress
- Coughing, sneezing or swallowing
- Urinating or having a bowel movement

Fainting due to an abnormal nerve reflex is more likely to occur under certain conditions, such as dehydration, viral infection, after prolonged bed rest or a lack of sleep or regular food intake.

Types of syncope that involve an abnormal nerve reflex include:

- **Vasovagal (neurocardiac) syncope** is the most common type and can occur at any age. It often occurs when blood pools in the leg veins. This triggers a reflex where the heart rate, blood pressure or both may suddenly fall. It generally is not a dangerous condition and can be prevented by avoiding situations that can trigger syncope.

- **Carotid sinus hypersensitivity** is more common in the elderly. In some people, pressure on the neck (such as a tight collar, heavy necklace or a tumor) affects nerves that run close to the carotid artery. This triggers a slow heart rate and/or lowers blood pressure. Treatment may include a pacemaker. Orthostatic hypotension is a drop in blood pressure when a person stands up from a lying position. It is often seen in patients who are dehydrated or taking certain medicines.
- **Postural orthostatic tachycardia syndrome (POTS)** is another type of syncope and dizziness. In POTS, the heart rate is normal when a person is lying down, but becomes fast when standing (as the body tries to maintain a normal blood pressure). The heart rate becomes even faster with a small amount of physical exertion. The blood pressure usually does not drop at first. It often occurs after viral illnesses or prolonged bed rest. POTS may cause chronic fatigue, poor sleep, headaches, dizziness or exercise problems.

### ***Heart conditions***

Defects or damage to the heart may also lead to fainting. Most often, syncope is related to an abnormal rhythm (arrhythmia). If the heart beat is too slow or too fast, there may be a lack of blood flow to the brain. Sometimes a thick heart muscle or valve disorder may decrease blood flow. Palpitations, chest tightness, shortness of breath, excess perspiration or a feeling of anxiety may occur.

### ***Other causes***

Other diseases, such as diabetes, migraines, seizure disorders or nervous system problems may cause syncope. Since syncope may be the first sign of a more serious problem, it is important to see your physician to find out the cause and needed treatment.

## **Diagnosing syncope**

Because there are many causes of fainting, making a diagnosis may take time. It begins with a history and physical exam. Tell your physician or nurse about your medical history. Bring a list of all your medicines. Describe how you felt (or what you were doing) just before and right after you fainted.

Tests may include an electrocardiogram (ECG), tilt table testing, echocardiogram (ultrasound of the heart), heart beat monitoring at home or an exercise test. Further testing may be needed.

## **Treating syncope**

Depending on the cause, treatment may vary. If fainting is rare, treatment may include being aware of triggers and avoiding certain activities. Being alert to warning signs, such as lightheadedness, nausea or cold, clammy skin. Taking steps (such as crossing the legs, tightening the leg muscles and/or lying down) if you feel these signs coming on often can prevent fainting. Increased intake of fluids and salt often is helpful. If fainting persists, medicine or a pacemaker may be needed. Other treatments may be used for arrhythmias and heart disorders.

## **Northwestern Medicine – Health Information Resources**

For more information, contact Northwestern Memorial Hospital’s Alberto Culver Health Learning Center (HLC) at [hlc@nm.org](mailto:hlc@nm.org), or by calling 312.926.5465. Health information professionals can help you find the information you need and provide you with personal support at no charge.

For more information about Northwestern Medicine, please visit our website at [nm.org](http://nm.org).

*Para asistencia en español, por favor llamar al Departamento de Representantes para Pacientes al 312.926.3112.*

The entities that come together as Northwestern Medicine are committed to representing the communities we serve, fostering a culture of inclusion, delivering culturally competent care, providing access to treatment and programs in a nondiscriminatory manner and eliminating healthcare disparities. For questions, please call either Northwestern Memorial Hospital’s Patient Representatives Department at 312.926.3112, TDD/TTY 312.926.6363 or the Northwestern Medical Group Patient Representatives Department at 312.695.1100, TDD/TTY 312.926.6363.

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