

## What are nonepileptic events?

Nonepileptic events are episodes that look like seizures, including abnormal movements of body parts, confusion, or staring, but do not have abnormal electrical activity in the brain at the same time. Nonepileptic events are NOT clinical seizures and are treated differently.

The most common type of nonepileptic event is called a **psychogenic nonepileptic event (PNEE)**. This seizure-like event is believed to be caused by subconscious thoughts, emotions, stress, or anxiety. To deal with the increased emotional stress, the body creates abnormal movements that look like seizures but are not. A person with PNEEs may believe they are really having seizures, and it is important to know that they are not faking these symptoms. Psychogenic events are sometimes called “psychogenic nonepileptic seizures,” but this term creates confusion since the events are not seizures.

## What does a psychogenic nonepileptic event look like?

The appearance of psychogenic nonepileptic events varies widely from person to person. Most often, nonepileptic events involve jerking and twitching of the body, limbs, head, and/or face. Sometimes, the individual's body will stiffen, thrash, or roll around; they may drool or roll their eyes. Responsiveness often varies, too; the person may talk or be responsive to voice or touch, or they may be completely limp and unresponsive, or appear to be asleep.

It can be difficult to tell if an event is epileptic or not. Sometimes, neurology providers experienced in seizure diagnosis may be able to tell if an event is epileptic by observing and examining the person during the event. In other cases, it may be necessary to order other tests and studies to determine whether an event is a seizure. It is very common for EMS personnel, ER doctors, pediatricians, nurses, and even experienced neurology providers to be confused by a nonepileptic event.

## How are psychogenic nonepileptic events diagnosed?

Nonepileptic events are most often recognized when they are captured on electroencephalograms (EEG). An EEG is a safe, noninvasive test that monitors electrical activity in the brain. During an epileptic event, distinct changes are observed on EEG. During a nonepileptic event, there is no abnormal activity on EEG. Sometimes, a neurology provider can recognize an event as nonepileptic without using an EEG, often by observing body movements, motions, behaviors, or duration of an event that are not consistent with epileptic seizures. These observations can be done during a hospital admission and/or through videos taken by family of these events.

## How common are psychogenic nonepileptic events?

Psychogenic nonepileptic events are very common. Some studies report up to 20% of people who are referred for EEG monitoring or epilepsy evaluation actually have PNEE. PNEE can also occur in people who have epilepsy. About 1 in 6 people with PNEE also have a diagnosis of epilepsy or history of epileptic seizures. Nonepileptic events are more common in adolescents and young adults but have also been observed in younger children.

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## How are nonepileptic events treated?

Nonepileptic events cannot be treated with epilepsy medicines. In fact, antiepileptic medicines can worsen the events. Because these events are primarily psychological, neurological treatment is not helpful.

Usually, psychiatric or psychological evaluation and treatment is recommended. While many people with PNEE do not have a serious psychiatric condition, it is important to identify sources of stress, emotional tension, or other psychological problems that may be triggering the events. A mental health professional can also help determine if your child is demonstrating signs of anxiety disorder, depression, or another mood disorder.

Often, recognizing the events as psychological is enough for them to stop. Other times, cognitive behavioral therapy, talk therapy, or relaxation and coping techniques can help prevent events and help your child learn to control them. In some cases, medication management of a psychiatric condition (such as depression or anxiety) may help treat PNEE.

## What can I do if my child is having a nonepileptic event?

When PNEE occurs, do the following and instruct others who are with your child often to:

- Take your child to a quiet area without extra stimulation, like a bedroom or the school nurse's office.
- Avoid talking or responding to your child, which will help the event end sooner.
- Remove any distractions such as TV. Ask other people to leave the room.
- Help your child calm down by encouraging them to breathe deeply. They should breathe in slowly through their nose for a count of 5, then breathe out slowly through their mouth for a count of 7.
- Call 911 or go to the hospital only if the event is not like the others and does not stop.

## How can I help my child succeed in school with PNEE?

- If your child is not attending school because of PNEE, they should go back as soon as possible.
- Your child's doctor will give the school information about PNEE so teachers and staff can help your child safely and appropriately.
- School staff should respond to PNEE the way you do. Tell your child's teachers and the school nurse about the warning signs, and share your plan for treating the events.

## Resources and References:

<https://www.epilepsy.com/learn/types-seizures/non-epilepsy-seizures>

<https://www.epilepsy.com/stories/truth-about-psychogenic-nonepileptic-seizures>