

Psychogenic Non-Epileptic Events (PNEE)

Psychogenic non-epileptic events (PNEE) are behavioral events (episodes) that look like epileptic seizures. They can also be called psychogenic non-epileptic seizures (PNES).

- For a short time, your child can't control the way their body moves, senses things, or thinks.
- Emotional stress or trauma may cause PNEE. It's not triggered by electrical problems in the brain, which cause seizures.
- PNEE events look and feel real. They are serious, but not life-threatening. They can't hurt your child's brain. Remember that your child isn't faking the event.
- Children with epileptic seizures may also have non-epileptic events. Talk to your child's neurologist about how to respond to each the right way.

Causes

Some causes of PNEE may be:

- Divorce
- Bullying (Picture 1)
- Death in the family
- Problems with school or sports
- Problems with friends or family



Image source: National Institute of Diabetes and Digestive and Kidney Diseases, National Institutes of Health

Picture 1 Bullying can cause stress that may lead to PNEE.

Early Warning Signs

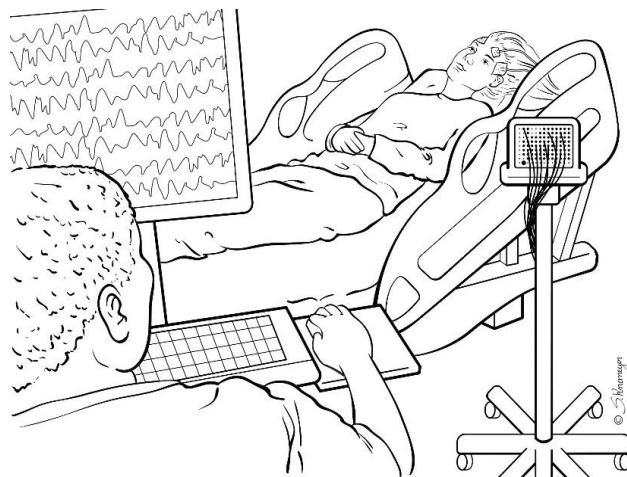
Right before a PNEE event, your child may have:

- Shaking arms, legs, or body tremors
- Light-headedness
- Headache
- A tight feeling in their chest
- Changes in breathing

Diagnosis

The doctor or health care provider needs to find out if your child's events are due to PNEE or epilepsy. To do this:

- They will ask you to describe what happened before, during, and after your child's event and where it took place. Tell them as much as you can about what you saw.
- Bring a video of your child having an episode for them if you have one.
- An electroencephalogram (EEG) may be done. The best way to diagnose PNEE is to see an event on the EEG while it happens.



Picture 2 An EEG is a safe test that records what happens inside your child's brain during an event.

- An EEG is painless. It records the brain's electrical activity (brain waves). For this test, small, round discs (electrodes) are put on your child's head. Wires from the electrodes attach to a computer that records the brain's electrical activity (Picture 2).
- **If your child does have an event during the test with abnormal brain activity,** it's an epileptic seizure. If there is no abnormal brain activity, it's likely PNEE.
- **If your child does not have an event during the test,** PNEE can still be diagnosed based on their history.
- Your child may see a mental health provider to see if there are emotional causes for their symptoms. This is called a psychological exam.

Treatment

- The goals of treatment for your child are to:
 - Stop the events from happening again.
 - Learn the early-warning signs.
 - Learn ways to manage stress better.
 - Find what triggers the events.
 - Learn ways to calm down, like deep breathing, during an event.

- Mental health counseling is the main treatment for PNEE. The neurologist will refer your child to a mental health provider.
- Your child may also be referred to a psychiatrist or back to their primary care provider for treatment. They may recommend medicines for depression or anxiety.
- If your child's symptoms are due to PNEE, the doctor will stop all seizure medicines for epilepsy. They don't work for PNEE.
- Sometimes it's hard to know if an event is a seizure or a PNEE. If it's not clear, the neurologist may prescribe anti-seizure medicines.

How to Respond

- Move your child to a quiet area, like a bedroom or the school nurse's office.
- Don't talk to your child during an event. The event will pass more when it's quiet.
- Take away anything that may distract your child. Turn off the TV. Have other people leave the room.
- Have your child take deep breaths to calm down. They should breathe in slowly through their nose while counting to 5, then slowly breathe out through their mouth while counting to 7.
- Only call 911 or go to the hospital if the event looks very different from the others and it doesn't stop.

Going to School

- If your child hasn't been going to school because of PNEE events, it's important that they go back as soon as possible.
- The doctor's office can give the school information about PNEE so staff can safely help your child.
- School staff needs to respond to the events the same way you do. Tell them about your child's early warning signs and the best ways to treat an event.

If you have more questions or need to make an appointment, call the Nationwide Children's Hospital Psychogenic Non-Epileptic Event Clinic at (614) 722-4625.