

# Functional Neurological Disorder

## Background

Functional neurological disorder (FND) involves a miscommunication within the nervous system causing motor or sensory symptoms. Functional symptoms are caused by abnormal brain function and are incompatible with any underlying neurological condition.

Diagnostic criteria requiring an identifiable psychological stressor preceding the onset of symptoms has been removed. While psychological factors such as history of life stressors, conflict or trauma may play a role in FND, they are not required for diagnosis. FND is evolving beyond a "conversion" of psychological distress symptoms to recognition as a disorder with complex interactions between biological, psychological, and social dimensions.

Terms associated or previously used to describe FND include *conversion disorder*, *functional movement disorder*, *functional neurological symptom disorder*, *pseudo-seizure*, and *psychogenic non-epileptic seizures*.

Several subtypes of FND can affect motor, sensory, and cognitive function, causing symptoms including:

- Irregular movements such as tremors, muscle jerks, tics
- Weakness, difficulty walking
- Alterations in speech, difficulty swallowing
- Abnormal sensations such as numbness, tingling, pain
- Changes in sensory perception affecting vision, hearing, smell
- Memory problems, difficulty concentrating
- Functional seizures\*

\*Functional seizures are episodes of abnormal shaking or convulsing that sometimes include loss of consciousness. Functional seizures may resemble an epileptic seizure, but their symptoms are not caused by abnormal electrical signals in the brain. Distinguishing between the clinical symptoms of the two can be challenging, but a diagnosis of functional seizures is confirmed using comprehensive history and video electroencephalography (EEG) evidence.



## Top Takeaways for School

FND is caused by a dysfunction of the nervous system that impairs motor and sensory function, causing symptoms that cannot be turned on and off at will.

The focus of treatment is to increase function as the student learns to manage their symptoms independently. Anticipate fatigue and setbacks but continue to encourage the use of adaptive coping mechanisms and achieving realistic goals.

Resuming a school routine is an important component of recovery. Validate the student's experience but avoid constantly asking about or drawing attention. Reaction and response to the student's symptoms can have a significant impact.

Work with the student to identify a safe space where they can independently manage their symptoms. Breaks should be brief (only a few minutes) with encouragement for the student to resume their previous activity.

Functional seizures do not indicate a medical emergency. Development of a school response plan can assist staff to minimize attention and disruption during the FND episode (see suggestions listed on next page).

## Considerations for Individualized the Healthcare Plan (IHP)

- Nursing diagnoses: Impaired thought process, risk for disturbed sensory perception, fatigue
- Student-specific triggers and early warning signs, with prevention tips
- Activity (consider precautions but note that long-term use of adaptive aids/devices is not routinely recommended as they can prevent return of normal physical movement and strength)
- Consider emergency action plans (EAPs) and emergency evacuation plans (EEPs) related to special health care needs, including staff education/training

## Suggestions for School Response Plan

- Clear immediate area of hazards.
- Do not restrain student.
- Avoid sensory overload (refrain from providing physical comfort and contact). Minimize intervention or medical management (there is no need to time the episode or obtain pulse oximeter reading).
- Maintain a neutral and calm response. Recognize the student remains aware of their surroundings during and after an episode (can “read the room”).
- Develop a simple verbal script with student that affirms their experience. *“You are having an episode. I will be here when you are ready to rejoin us.”*
- Redirect attention of classroom peers. *“The student needs some time to work through this. Let’s give them space and allow them to rejoin us when they’re ready.”*
- Offer reassurance and encourage return to activity.
- Remind all staff that FND is not a medical emergency and avoid calling 911.

## Discussion Starters for the Educational Team

1. Would the student benefit from evaluations or assessments in any of the following areas: physical therapy, occupational therapy, speech and language therapy, assistive technology, adapted physical education, functional
2. Would the student benefit from additional academic support and/or modified education (e.g., copies of notes, extra time, reduced workload, simplified instructions, alternative formats for presentation of material, 504/IEP)?
3. Does the student need additional adult support to access the academic curriculum in the least restrictive environment?
4. Is the physical school environment safely accessible for the student’s mobility needs (e.g., entry and exit, ramps, location of classes, access to elevator, doorways)?
5. Does the classroom environment support the student’s needs and/or equipment (e.g., desk/seating options, maneuverability space, electrical outlets, flash pass for bathroom or nurse)?
6. Will staff receive education/training to implement the student-specific emergency plan?

## Resources

Kennedy Krieger Institute: Functional Neurological Clinic  
[kennedykrieger.org/patient-care/centers-and-programs/functional-neurological-disorder-clinic](https://www.kennedykrieger.org/patient-care/centers-and-programs/functional-neurological-disorder-clinic)

FND Hope Functional Neurological Disorder  
[fndhope.org/](https://www.fndhope.org/)



For more information, please scan the QR code or visit: [KennedyKrieger.org/SHNIC](https://www.KennedyKrieger.org/SHNIC)

