

Seizures

The Fatal Four

There are four major health issues that impact individuals with intellectual and developmental disabilities at a greater rate and with more severity than those in the general population.

It is important for all direct care and support staff, including DSPs and QIDPs, to familiarize themselves with these conditions as, unaddressed, they may worsen quality of life and even cause preventable death in persons residing in communal IDD homes.

The Fatal Four conditions are: **aspiration, constipation, dehydration and seizures.**

Seizures

A seizure is a sudden, uncontrolled electrical disturbance in the brain that can cause changes in behavior, movement, sensation and in levels of consciousness. Individuals with intellectual and developmental disabilities are more likely to have seizures because of predisposing underlying brain dysfunction. Seizure disorder (epilepsy) is a condition of the brain characterized by recurrent seizures that may be due to head injury, brain tumors and abnormalities.

Epilepsy in-and-of itself as a developmental disability often allows for relatively typical IQ and independent living. However, epilepsy frequently manifests in IDD patients who exhibit multiple disorders, greatly affecting these individuals' morbidity and mortality if not appropriately addressed.

Complications

- **Direct physical injury** suffered during an active seizure.
- **Choking, aspiration +/- pneumonia** from inhalation of foreign substances into the airways.
- **Permanent brain damage** causing loss of function correspondent to the area of brain affected.
- **Cognitive decline** causing memory loss or difficulty learning.
- **Emotional distress** as the uncertainty of seizure activity relates directly to anxiety and depression.
- **Status Epilepticus** wherein a seizure continues indefinitely and may require medication to break.
- **Sudden Unexpected Death in Epilepsy (SUDEP)**, an incredibly rare not-fully-understood fatal outcome that occurs in roughly 0.1% of epileptic patients.

To prevent seizures and risk of these complications

Review these reminders on **WHO** is at greatest risk for epilepsy, **WHAT** the signs of epilepsy are, and **HOW** to respond if epilepsy is suspected!

Seizures

Risk Factors

The following factors indicate WHO is at greater risk for developing epilepsy:

- Prenatal brain injuries (maternal smoking, drug use, or any cause of fetal hypoxia)
- Congenital complications
- Brain tumors, clots, hemorrhages, aneurysms
- Invasive brain infections
- Dementia
- Severely high blood pressure
- Liver or kidney failure
- Traumatic Brain Injury (TBI)

Among those with epilepsy, the following factors indicate WHO is at greater risk for triggering a seizure:

- Emotional stress
- Acute illness
- Sleep deprivation
- Dehydration
- Hyperventilation
- Skipping doses of anti-seizure medications
- Exposure to flickering lights or other stimuli
- Use of drugs that lower the seizure threshold
- Alcohol consumption

Epilepsy Signs/Symptoms

Seizure activity is commonly prefaced by telltale signs or subjective symptoms called auras.

Seizures may present differently from person to person and depending on the type of seizure transpiring.

Rapid recognition of an impending seizure may allow you to prepare and improve the health outcomes for your residents.

Support Professionals should be familiar with WHAT signs are a warning for seizure activity in the IDD resident:

- Drooling
- Vomiting
- Tremors
- Disorientation
- Sensory abnormalities
- Unusual eye movements
- Headaches
- Incontinence
- Verbal outburst
- Sudden exhaustion
- Loss of consciousness
- Appearing "absent" or staring

Interventions

Support Professionals should be familiar with HOW to respond to residents at risk for seizures with these preventative interventions:

- **Encourage medication adherence** to the resident's prescribed anticonvulsant therapy.
- **Avoid triggers** unique to your resident. This can vary greatly from person to person, but common triggers include certain sounds, flashing lights, or periodic fluctuations in hormones.
- **Watch for warning signs** like the aforementioned telltale signs / symptoms indicative of an impending seizure.
- **Recommend showers** over baths, and suggest using a shower chair, to prevent falling/drowning risks.