
Epilepsy Awareness Month

November is Epilepsy Awareness Month. Epilepsy Families Southeast Wisconsin will be hosting an update dinner on November 13, 2025. The dinner will be held at the Hilton Garden Inn Milwaukee Airport. There will be a guest speaker who will speak about living with epilepsy. The dinner will begin at 6:00 pm.

Atenolol Rescues Premature Mortality in Genetic Mouse Models of Sudden Death in Epilepsy (SUDEP)

In this study researchers focused on mutations in cardiac ion channels – known to cause abnormal heart rhythms – which are found in some individuals with SUDEP and may contribute to an increased risk of SUDEP. To test this hypothesis, they developed novel mouse models by combining epilepsy-related genetic mutations with a mutation in a heart ion channel that disrupts normal cardiac rhythm. These mice were significantly more likely to die from seizures compared to those with functional heart channels, providing compelling evidence that cardiac-related genetic factors can increase SUDEP risk.

The team also evaluated the effect of atenolol, a widely used heart-protective medication, in these SUDEP-prone mice. Remarkably atenolol extended survival without reducing seizure frequency, suggesting that seizure-induced cardiac dysfunction may play a critical role in SUDEP – and that targeting the heart could be a viable protective strategy.

Read more at <https://onlinelibrary.wiley.com/doi/10.1111/epi.18642>

Website accessed on October 31, 2025.

Distinct T Cell Dysregulation Reflects Disease Severity and Progression in Infantile Epileptic Spasms Syndrome and Lennox-Gastaut Syndrome

In a recent study, researchers performed comprehensive profiling to identify distinctive patterns of immune dysregulation, focused on specific immune cells called T cells. These unique cells release substances known as cytokines. One of several findings of this study was that children with IESS and LGS had T cell characteristics and cytokine profiles that were distinct from children who did not have epilepsy.

Read more at <https://pmc.ncbi.nlm.nih.gov/articles/PMC12411106/>

Website accessed on November 5, 2025.

AI Tool Helps Researchers Treat Child Epilepsy

Researchers have developed an AI tool that has the potential to cure a form of treatment-resistant epilepsy. The tool can identify small focal cortical dysplasias on imaging that are typically missed by radiologists. These lesions can cause recurring seizures, and an accurate assessment can assist surgeons in removing them, which often leads to seizure cessation.

Read more at <https://techxplore.com/news/2025-09-ai-tool-child-epilepsy.html>

Website accessed on November 5, 2025.

30 Years of Post-Traumatic Epilepsy Research: Where Do We Stand?

For decades, researchers have worked to unravel the mysteries of post-traumatic epilepsy (PTE), a form of epilepsy that emerges after a traumatic brain injury (TBI). “We’re moving beyond symptom control,” Texas A&M University neurologist Dr. Samba Reddy said. “We’re looking at disease modification, changing the directory of epilepsy before it starts.”

Read more at <https://www.cureepilepsy.org/news/30-years-of-post-traumatic-epilepsy-research-where-do-we-stand/>

Website accessed on November 5, 2025.