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The risk of fatal car crashes in people with epilepsy

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What are seizures and epilepsy? Seizures are sudden, unpredictable events that can temporarily interfere with a person's ability to think or act normally. A person has epilepsy if he or she has had more than one seizure. Sometimes medication can control epilepsy, but not always. Seizures can cause injury or death if they happen while swimming or driving a car. More information about seizures and epilepsy appears on the next page.

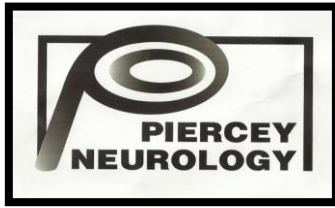
What does the law say about driving and seizures? Laws temporarily prohibit people from driving after a seizure. The restriction period varies by state (usually 3 to 12 months). If no seizures occur during the restriction period, the patient can drive again. However, sometimes seizures recur after long periods without seizures, even if a patient takes medicine to prevent seizures. Seizures more commonly recur if a patient stops taking seizure medications.

What is the latest research on driving and epilepsy? In this issue of *Neurology*, researchers from Johns Hopkins University studied how often seizures or epilepsy cause fatal car accidents.¹ They looked at death certificates of drivers who died in car crashes from 1995 to 1997.

About 44,027 US drivers die each year in car crashes. Only 86 of these death certificates (0.2%) listed seizures or epilepsy as a contributing factor. Alcohol caused 156 times more driver deaths than seizures. Young drivers (age 16 to 24) died in accidents 123 times more often than drivers of any age who crashed due to a seizure. The driver fatality crash rate for the general population was 2.6 times higher than epilepsy-related driver fatalities. This is because seizures rarely cause crashes, but alcohol use, driver error, or road conditions often do.

The researchers also compared driver fatality crashes with other causes of death for epilepsy patients. The most common cause of death for epilepsy patients was heart disease, the same as in the general population. Epilepsy patients more often died of accidental drowning, suffocation, or brain tumors than people without epilepsy. Epilepsy is directly related to all three of these events or conditions.

Driving restrictions for epilepsy patients: Driving restriction for epilepsy patients causes a dilemma. It is very difficult to work or even run errands if a person cannot drive. However, states must consider both patient and public safety. In this study, the length of



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driving restriction after a seizure did not seem to matter. The seizure-related fatal crash rate of drivers in states with 6- to 12-month restrictions was the same as in states with 3-month restrictions. Other studies have shown that longer restriction periods are associated with lower crash rates. Future research may identify which epilepsy patients are at the lowest risk for seizures. This could lead to new rules that would shorten restrictions for these patients.

What does this mean to me? Even though seizures rarely cause car accidents, they sometimes do. Also, this study counted only deaths of drivers, not passengers or pedestrians. Accidents causing non-fatal injuries were also not counted. If you have epilepsy, you can lower your chances of having seizures while driving. Always take your seizure medicine as directed by your doctor. Never stop your medicine suddenly. Never drive when overly tired or if you have a fever. These things can trigger seizures in people even if they are taking medicine. Of course, it is never a good idea for anyone to drink alcohol and drive.

For more information AAN Foundation: www.thebrainmatters.org

Epilepsy Foundation of America: www.efa.org

1. Sheth SG, Krauss G, Krumholz A, Li G. Mortality in epilepsy: driving fatalities vs other causes of death in patients with epilepsy. *Neurology*. 2004; 63: 1002–1007. [[Abstract](#)/[Free Full Text](#)]