

Seizure Fact Sheet for Medical Professionals



Seizures

A seizure is a sudden change in behavior that may range from loss of consciousness or body control to a mild subjective feeling, due to acute abnormal brain electrical activity. People who have had a seizure are generally at greater risk for another seizure than people who have never had a seizure. As a rule, the longer the seizure-free period, the less likely a person is to have another seizure. Epilepsy is the common medical disorder characterized by recurrent seizures.

Impact on Driving

NHTSA data shows that the number of fatal driver crashes related to seizures is small. Some seizure types such as simple partial seizures that do not interfere with consciousness or motor control and seizures that are unlikely to occur while driving (nocturnal seizures or those related to reversible illnesses) are unlikely to have an impact on driver safety.

The most common type of seizures relate to epilepsy. Patients with epilepsy (seizure disorders) are at increased risk for motor vehicle crashes because of the seizure, the underlying condition causing seizures, or the side effects of anti-epileptic drugs. Epilepsy patients who have ongoing seizures are legally or medically prohibited from driving.

Usually patients who are seizure-free for periods varying from 3 to 18 months are permitted to seek driving privileges, and many drive; the rules vary by state. How long a person has remained seizure free is helpful in predicting the risk of seizure recurrence. The annual risk of seizure recurrence is less than 2 percent after 8 years and less than 1 percent after 10 years.

Clinician's Role

- » Anti-epileptic drugs (AED) can produce side effects in some patients that may affect driving. Clinicians should monitor drug levels regularly and counsel these patients to restrict their driving until any side effects pass.
- » Cessation of AEDs may lead to a new seizure. Counsel drivers who experience a seizure until therapeutic levels of AEDs are achieved.
- » Seizures induced by the ingestion of alcohol or drugs must be followed by a 6-month period of abstinence before resuming driving.
- » Counsel a patient who has experienced a unique seizure to cease driving until an investigation of the cause can occur. The person can start driving again if the neurological and cardiac investigations do not reveal a cause or if a treatable cause has been identified and the therapy is successful.
- » Schedule an annual examination for patients with epilepsy. These controls can be relaxed based on a clinical assessment.

Source: *Driver Fitness Medical Guidelines, National Highway Traffic Safety Administration, DOT HS 811 210, September 2009; Physician's Guide to Assessing and Counseling Older Drivers, American Medical Association and NHTSA, 2nd Edition, 2010.*