

## CATEGORY E SEIZURES AND OTHER EPISODIC CONDITIONS

1. Epilepsy includes any recurrent loss of consciousness or conscious control arising from intermittent change in brain function. Because of the similarity of consequences, other disorders affecting consciousness or control such as syncope, hypoglycemia, etc. which interfere with function may be included in this section, to be considered in a similar fashion. For sleep disorders and associated conditions, **see Category K**
2. Since all forms of epilepsy (tonic-clonic or grand mal, partial complex or psychomotor, partial, with or without spread, and absence or petit mal) may interfere with safe driving, they will affect the level of driving recommended and will require initial and follow-up reports.
3. If a seizure has occurred, regardless of the cause, an Assessment Level 8 (no driving) should be indicated. An operator's license, with or without limitations, may be issued after a suitable interval of seizure freedom, at least for a period of three (3) months from the date of the most recent seizure, if in the judgment of the health care professional, continuing freedom from seizures is anticipated. (In other words, a mere hiatus in seizures extending over a three (3) month period is no guarantee of ongoing freedom from seizures, unless there has been initiation of treatment or appropriate alteration in treatment.)

Exceptions to the 3-month interval of prohibited driving after a first seizure (or after an unexpected recurrent seizure) may be possible under certain circumstances, following a medical case review, if recommended by a panel of the Medical Advisory Board, but a 3-month period of observation in order to document an apparent response to the initiation or augmentation of anti-seizure treatment is judged to be appropriate for the sake of public safety. If the physician believes that a patient's seizure is truly symptomatic (see paragraph four of this same section [3]), and wishes to permit continued driving, he/she must submit a

letter to the Driver License Division Medical Advisory Board detailing the reasons for believing seizures to be symptomatic in that case. A mere assertion is not sufficient. There must be a cogent explanation for the belief, with supporting medical data as appropriate. Such cases will be reviewed by members of the Medical Advisory Board, and may involve additional correspondence.

This driving restriction applies specifically to persons with a first or single seizure or flurry of seizures, and to persons with recurrent seizures in the context of a known seizure disorder, when seizures are of a sort which produces an alteration in consciousness, an alteration in alertness, or a loss of bodily control.

Certain seizure types (and circumstances associated with seizures) which do not affect driving safety may rarely be exempted from the driving restrictions, but only if said seizures or circumstances are consistently and completely restricted, for a period of at least twelve (12) months, to:

- a. Seizures occurring only during sleep, never during wake-time;
- b. Seizures (simple partial) never producing an impairment in consciousness or alertness or any loss of ability to control equipment\*

Special consideration may also be given, on appeal, in the case of genuine symptomatic seizures; that is, single seizures or a flurry of seizures, which are clearly and definitely attributable to the effect of a known or identifiable cause not likely to recur, e.g., administration of a toxin or of a medication known to cause seizures. Alcohol-withdrawal seizures are a special case of symptomatic seizures, which are typically not amenable to treatment with antiepileptic medications. (Requires safety assessment for Category H.)

Seizures occurring in the context of mere sleep deprivation, fasting status, fever or stress are NOT considered to qualify as symptomatic seizures.

In uncertain cases, specialist (neurological) referral is recommended.

\*The practitioner should make every necessary effort to document the phenomena of a patient's seizures, if it is asserted that consciousness impairment does not occur; this may include obtaining reports from family members or other observers. Accepting a patient's self-reported lack of consciousness-impairment during seizures is not sufficient.

4. To qualify for an assessment level based upon freedom from seizures, a person should be free from side effects of medications which affect driving. Anyone taking medication is responsible to refrain from driving if it affects their alertness and coordination, until the health care professional approves resumption of driving and believes the patient can drive safely. Side effects such as skin or gum changes which do not affect driving may be disregarded. In individual cases where anticonvulsant medication effects cause a slowing of reaction time, consideration should be given to limitations on speed as suggested in Neurologic Category D.
5. Persons experiencing seizures may have associated problems which may affect driving safety and these should be reported under the appropriate assessment levels.
6. Persons with past seizures may qualify for a higher risk responsibility level by making sure they faithfully take their prescribed medication
7. and use other means of control. Under these guidelines and standards, it is possible for a person to resume driving a private vehicle after a seizure-free interval of only three months. Each case should be considered carefully to balance possible risk against the person's need to get to and from work, etc.

8. Further detailed information regarding the handling of epilepsy is to be found on the following page.
9. **COMMERCIAL INTRASTATE DRIVERS:** A commercial intrastate license may be granted under Safety Assessment Levels 2,3 and 4 depending upon the degree of seizure control and MAB review and approval. A commercial driver must be seizure free for a period of at least six (6) months in order for an application for an intrastate waiver to be considered.

## ADDITIONAL INFORMATION PERTAINING TO SEIZURES AND OTHER EPISODIC CONDITIONS

1. Epilepsy is defined as recurrent seizures.
2. Seizure – an “electrical storm” in the brain, which disrupts normal electrical brain activity.
3. Partial seizures – seizures which begin in one spot in the brain and may or may not spread.
  - a. Simple partial seizures: seizures which begin in one spot in the brain and do not spread to involve other areas of the brain. There is no loss of consciousness, and little or no break in contact with the environment.

### EXAMPLES:

- Simple partial seizure with motor symptoms – clonic jerking of a hand caused by focal seizure activity in the opposite side brain motor cortex.
  - Simple partial seizure with intrapsychic symptoms – any seizure “aura”, including déjà vu, force memory, inappropriate emotional tone such as unreasonable fear, etc.
    - b. Complex partial seizures: seizures which begin in one spot in the brain (usually a temporal or frontal lobe location) and spread to the opposite side in the same area but do not involve the whole brain. There is a loss of self-awareness and loss of normal awareness and loss of normal awareness of the environment but no convulsion. This type of seizure is typically followed by a period of drowsiness or confusion.
    - c. Secondarily-generalized seizures: seizures which start in one spot in the brain, then spread to involve the entire brain, producing a convulsion. (Convulsion = major motor seizure = “generalized tonic-clonic seizure” = “grand mal” seizure.)
4. Primary-generalized seizures – seizures which begin with bilateral symmetry on both sides of the brain. These may be of several types. Most are inherited. They may be:
    - a. Convulsive (major motor = generalized tonic – clonic = grand mal); or
    - b. Absence (“petit mal”)

True petit mal seizures usually begin in childhood. They are brief, lasting seconds only, but may occur up to hundreds of times in a day. There is no state of fatigue or confusion afterward, just a brief “lapse” of behavior-attention-awareness during the actual seizure.

5. Syncope – “fainting” or loss of consciousness produced by a failure of adequate delivery of blood to the brain, usually caused by:
  - a. Vascular abnormalities:
    - i. Vasodilatation, such as with sudden emotional shock, or with prolonged standing. This is a transient effect.
    - ii. Abnormal vascular capacitance, wherein blood vessels do not constrict as they should to keep blood up in the head. This may occur with diabetes, or with a number of less common conditions including autonomic peripheral neuropathies attributable to conditions other than diabetes, and conditions producing central autonomic failure, such as Multiple System Atrophies.
  - b. Cardiac abnormalities:
    - i. Rhythm disturbances, either too slow (less than 40 beats per minute or heart block with periods of asystole), or too fast (greater than 150 beats per minute) a rhythm.
    - ii. Structural abnormalities of the heart valves or chambers, which interfere with the effective pumping action of the heart.

Proper terminology/descriptors should be used wherever possible when providing information to the Driver License Division. Use of such terms as “blackouts”, “falling out” or “spells” is vague and ambiguous.

Persons with:

- Primary-generalized major motor seizures,
- Secondarily-generalized major motor seizures,
- Complex partial seizures, and
- Absence seizures

are all potentially unsafe to operate motor vehicles, unless seizures are controlled by medication or some other recognized-effective treatment. Other recognized-effective treatments might include: “epilepsy surgery” and vagal nerve stimulation. Homeopathic medicine and other Alternative Medicine approaches, including psychosocial-behavioral medicine approaches, used alone and without recognized-effective treatments, are not acceptable.

Persons with ONLY simple partial seizures, who never have any interruption of alertness and who always remain in physical control of themselves, are safe to operate motor vehicles. “Symptomatic” seizures are primary-generalized major motor seizures which are wholly and sufficiently explained by circumstances known to be capable of producing sudden and profound brain irritability. Examples would include sudden high fever to 106°F, insulin overdoses, ingestion of stimulant drugs, or withdrawal of sedative drugs. Persons with this type of seizure do not have epilepsy, and are probably safe to drive, as long as the seizure-causing condition(s) is unlikely to recur. Emotional

stress, sleep deprivation, minor infectious illnesses or the fasting state are NOT sufficient explanations for the occurrence of a seizure, though such may act as “triggers” for seizures in predisposed persons.

6. A healthcare professional should be aware of the following information in order to properly assess an individual case and in case of an appeal to the Driver License Division Medical Advisory Board, this information must be provided to the Driver License Division for review:
  - a. Original medical history and physical examination records pertinent to the seizure disorder, preferably from the specialist physician (usually a neurologist) or other primary treating physician. Records of neurologic consultation, if available, should be provided;
  - b. Report of cranial imaging studies (brain CT or MRI), if done;
  - c. Report of EEG, if done;
  - d. Name(s), dose(s), frequency of administration of medication taken to control seizures, and any side effects experienced by the patient;
  - e. Serum levels of medication taken for seizures (most recent);
  - f. Dates of last three (3) seizures;
  - g. Description of “what happens” during a typical seizure. Patients may have more than one type of seizure, and if so, should describe the features of each type. Descriptions may include their own perceptions and the observations of witnesses.

**CATEGORY E: SEIZURES AND OTHER EPISODIC CONDITIONS**  
**PRIVATE**

<b>Safety Assessment Level</b>	<b>Circumstances</b>	<b>Medical Report Required</b>	<b>Interval for Review</b>	<b>License Class and Restrictions</b>
<b>1</b>	No history of epileptic seizure	No	N/A	Private vehicles
<b>2</b>	Single seizure but none occurring in the past five (5) years and off anti-epileptic medication <sup>a</sup> for at least four years	Yes	2 years	Private vehicles
<b>3</b>	Seizure free one (1) year or more while on anti-epileptic medication and then followed by an additional year or more while off anti-epileptic medication <sup>a</sup> and remaining seizure free	Yes	1 year	Private vehicles
<b>4</b>	Seizure free one (1) year or more and on anti-epileptic medication and without significant adverse effects	Yes	1 year <sup>b</sup>	Private vehicles
<b>5</b>	Seizure free for six (6) months but less than one (1) year and on anti-epileptic medication and without significant adverse effects	Yes	6 months	Private vehicles
<b>6</b>	Seizure free three (3) months but less than six (6) months and on anti-epileptic medication and without significant adverse effects	Yes	6 months	Private vehicles
<b>7</b>	N/A	N/A	N/A	N/A
<b>8</b>	Date of most recent seizure is within the last three (3) months <b>AND/OR</b> Seizure or episodes not controlled, or medication effects interfering with alertness or coordination	Yes	N/A	No driving (unless approved following a case review before the Medical Advisory Board) <sup>c</sup>

a At the recommendation of health care professional

b Health Care Professional may adjust review intervals to be longer or shorter according to stability, up to a maximum period of 5 years

c See Guidelines Category E

**CATEGORY E: SEIZURES AND OTHER EPISODIC CONDITIONS**  
**COMMERCIAL**

<b>Safety Assessment Level</b>	<b>Circumstances</b>	<b>Medical Report Required</b>	<b>Interval for Review</b>	<b>License Class and Restrictions</b>
<b>1</b>	No history of epileptic seizures. Single seizure but none in past five (5) years without medication	No	N/A	Commercial unrestricted
<b>2</b>	Seizure free one (1) year or more, off medication; as recommended by health care professional	Yes	2 years	Commercial restricted, as recommended by health care professional. Initial safety assessment level requires MAB review
<b>3</b>	Seizure free one (1) year or more, on medication, without side effects	Yes	1 year <sup>a</sup>	Commercial restricted. Initial safety assessment level requires MAB review
<b>4</b>	Seizure or episode free six (6) months but less than one (1) year, on medication, without side effects	Yes	1 year <sup>a</sup>	Commercial restricted. Initial safety assessment level requires MAB review <sup>b</sup>
<b>5</b>	Seizure or episode free three (3) months but less than six (6) months, on medication, without side effects	Yes	6 months <sup>a</sup>	No commercial driving
<b>6</b>	N/A	N/A	N/A	N/A
<b>7</b>	N/A	N/A	N/A	N/A
<b>8</b>	Date of most recent seizure is within the last three (3) months <b>AND/OR</b> Seizure or episodes not controlled, or medication effects interfering with alertness or coordination	Yes	N/A	No driving

a Or as recommended by health care professional, longer or shorter interval according to stability, up to a maximum period of 5 years

b Special circumstances – case by case basis. May require appeal to Medical Advisory Board