

## EPILEPSY/SEIZURE DISORDER

### **Overview:**

Epilepsy is a disorder characterized by episodes of unregulated electrical discharge in a specific area of the brain, or throughout the brain. These episodes of uncontrolled and often chaotic electrical impulses alter consciousness. The most common form of epilepsy in adults, characterized by grand mal seizures, typically leads to unconsciousness, falling to the ground, uncontrolled muscle twitching, followed by a period of deep sleep. One individual per 200 U.S. residents is affected by the repeated seizures of epilepsy.

Epilepsy is often regarded as a *syndrome* of multiple and often unknown causes, not a “disease”. Epilepsy that first appears in adults may be due to a brain condition, such as a tumor or abscess, head injury, stroke, or chemical imbalance. There are a variety of classifications used to describe epileptic attacks. The most common classifications are:

<b>Common Classification of Epilepsy</b>	
<b>Type of Epileptic Attack</b>	<b>Symptoms</b>
<b>Grand Mal</b>	Initially the grand mal victim experiences an “aura”, a strange feeling/sensation indicative of impending attack. During the actual seizure, the victim often falls to the ground unconscious and makes uncontrolled twitching movements for as long as several minutes. A period of deep sleep typically follows this episode. Grand mal seizures may occur only once or twice in a victim’s life time, or they may happen as often as several times a year.
<b>Petit Mal</b>	The petit mal victim typically becomes unaware of outside world for several seconds - typically no more than half a minute. Some describe their state as “clouded consciousness”. Although petit mal victims do not typically fall to the ground, loss of muscle tone can be detected in a clinical setting. Petit mals can happen several times per day and are most common in individuals under age 20.
<b>Partial seizure - complex</b>	Partial seizures originate from a single focus of the cerebral cortex. The symptoms vary depending on the part of the cortex involved. A partial seizure labeled “complex” typically refers to a seizure that has spread to other parts of the body and has lead to a loss of consciousness.
<b>Partial seizure - simple</b>	Partial seizures originate from a single focus of the cerebral cortex. The symptoms vary depending on the part of the cortex involved. A partial seizure labeled “simple” refers to a localized seizure in the brain with some motor, sensory, or psychic involvement.

### **Impact on Life Underwriting:**

The concern with any epileptic condition, provided serious medical causes, such as a brain tumor, can be ruled out, is the risk of accident during the seizure episode. Of minor significance is an overall pattern of somewhat decreased life expectancy for individuals with the condition, although no definitive consistent cause (aside from accidents) has been identified. There is some evidence pointing to a slightly higher rate of suicide for individuals with epilepsy. Standard rates are thus the best rates available for most epileptic individuals.

The table below illustrates how some impaired risk companies view epilepsy. The rating indications assume the epileptic individual has reached at least age 16, follows the direction of their physician for the handling of the condition, and there are no serious medical causes for the condition; it also assumes the proposed insured refrains from behaviors/occupations that increase the likelihood of accidents.

Grand Mal & Complex Partial - Good Control (less than 1 seizure per year)	Standard to Table 2
Grand Mal & Complex Partial - Fair Control (1 to 3 seizures per year)	Table 2 to Table 6
Grand Mal & Complex Partial - Poor Control (4 or more episodes per year)	Table 8 to Uninsurable
<i>Petit Mal &amp; Simple Partial - Good control (less than 1 seizure per year)</i>	<i>Standard to Table 2</i>
<i>Petit Mal &amp; Simple Partial - Fair control (1 to 3 seizures per year)</i>	<i>Table 2 to Table 4</i>
<i>Petit Mal &amp; Simple Partial - Poor Control (4 or more episodes per year)</i>	<i>Table 6 to Uninsurable</i>

Given the highest impact of premature mortality for individuals with epilepsy is an accident, underwriters place more weight on the *frequency and recentness* of epileptic seizures, rather than the specific type of epilepsy diagnosed. Adults with poor control (i.e. with frequent, recent episodes) especially if they drive an automobile or engage in other “risky” behaviors, as well as young children with seizure disorders, are either highly rated or postponed until better control can be established. SB 04/17/2001