



Working Effectively with Employees Who Have Epilepsy

What is Epilepsy?

The word “epilepsy” derives from the Greek word “to be seized.” It is a generic term that refers to a wide variety of seizure conditions. There are very well known individuals in history such as Julius Caesar, Socrates, Vincent van Gogh, Dostoyevsky, and others who have had active seizure conditions, as do a number of present day celebrities, sports figures, and political figures (e.g., Margaux Hemingway, Buddy Bell, Tony Coelho). These individuals were or are quite obviously very productive persons contributing significantly to society.

A seizure involves a disruption of the normal activity of the brain through neuronal instability. Neurons become unstable and fire in an abnormally rapid manner, similar to a misfiring engine, with the excess electric discharges resulting in a seizure. The seizure may be confined to one area of the brain (partial seizure) or take place throughout the entire brain (generalized seizure). The most common generalized seizure, formerly known as a “grand mal” seizure (now known as a tonic-

clonic seizure), is often easier to control than a partial seizure. A majority of the individuals coming to specialized epilepsy centers for treatment have partial seizures, which can be more difficult to control, but usually are functionally safer. The causes of epilepsy are wide ranging and include infectious diseases in a pregnant mother, parasitic infections, vascular diseases, birth trauma, etc. Only 1-2% of conditions can be traced to genetic causes. It must be remembered that epilepsy involves recurring or more than one seizure – for various medical reasons; any number of individuals may experience a single seizure.

Establishing a seizure diagnosis involves the taking of a medical history and an evaluation by a neurologist, and generally, an awake and/or sleep electroencephalograph (EEG) assessment. It is important to note that precise seizure diagnosis can involve not only both types of EEGs, but also magnetic resonance imaging (MRI), computerized

tomography (CT) scanning, or even 24 hour EEG video monitoring. The MRI can now be the first step in diagnostic sequence, preceding EEG.

Many individuals with the correct diagnosis and medication can have their epilepsy easily managed. The vast majority of individuals with epilepsy can have complete freedom from seizures, or good seizure control. Individuals with recurring seizures should always be referred to a neurologist. If a neurologist cannot achieve seizure control with an individual over a nine-month period, referral to a specialized epilepsy center should be made. During the 1990s, a number of new medications, including Gabapentin, Lamotrigine, and Topiramate, have been developed. Some of these newer medications can be used individually or as “add on” drugs, usually without negative sided effects. A number of individuals in our society with continuing seizures are often not adequately treated. In addition to anticonvulsant medications, some individuals can benefit dramatically from use of a vagal nerve stimulator (VNS), which is not an implant that can help people for whom medications have not been effective. Some people are also candidates for epilepsy surgery, which can provide seizure freedom or improved control.

First Aid for Seizures

Since the majority of individuals with epilepsy have partial seizures which

typically involve a short period of disorientation (e.g., 30 seconds) or brief cessation of activity; first aid concerns are minimal. These individuals simply need to be watched during the period of seizure, or gently guided (not restrained) to a chair with reassuring statements. For individuals who have a generalized tonic-clonic or grand mal seizure involving loss of consciousness, a period of rigidity, and convulsions, the most important first aid concern is that the seizure be timed.

Emergency medical aid is not required unless the seizure length approaches five minutes. Most of these seizures last slightly over a minute. Most persons will require some time in order to orient and compose themselves post-seizure. When possible, they should be turned on their sides for comfort and any harmful items moved out of the way. It is often dangerous to individuals with seizures to try to place something in their mouths during a seizure (e.g., to prevent biting their mouths) and simply not necessary.

Is Epilepsy Really a Concern at the Work Place For Those With an Active Condition?

For those with active epilepsy, seizure conditions can vary widely and need to be considered on an individual basis. Many individuals experiencing seizures will present absolutely no job-relevant concerns. These are individuals who have seizures only nocturnally, have a

consistent warning aura and can seat themselves or take other safety precautions, or have a partial seizure in which, for example, they do not lose consciousness and have only a limb tremor.

Many individuals with epilepsy will simply not discuss their condition because of their freedom from seizures, a high level of seizure control, or the fact that it doesn't impact performance of the essential functions of the job (e.g., a person with nocturnal seizures only). Some individuals with epilepsy will prefer to discuss their disability at the end of the interview as a matter of personal comfort or courtesy to the employer even if it is not required. However, they may need to discuss their condition if drug testing is a standard part of the employment screening process once a job offer is extended. The presence of anticonvulsant drugs can be misinterpreted during drug testing.

Implications of the Americans with Disabilities Act (ADA) for Individuals with Epilepsy

The ADA defines disability as a physical or mental impairment that substantially limits a major life activity. The ADA defines physical impairment as including a physiological disorder or condition. Epilepsy is an example of a physiological disorder affecting the neurological system. Persons with seizure disorders therefore have a physical impairment.

In determining whether an impairment rises to the level of a disability under the ADA, mitigating measures, such as medications, must be considered. Thus, if an individual's epilepsy is completely or substantially controlled with medication, s/he might not be considered to have an ADA disability because the condition might not substantially limit a major life activity when successfully controlled with medication.

A General Perspective on Employer Concerns in the Work Place for Employees with Epilepsy

Employers sometimes have a number of unfounded concerns about the work performance of individuals with epilepsy; some of the information below may be helpful:

- Attendance and performance – Most studies suggest attendance and performance records for those with epilepsy are equal to or better than the general working population (McLellan, 1987).
- Accident rates – Risch (1968) demonstrated the actual time lost due to seizures was approximately one hour for every thousand hours worked for individuals with active seizure conditions. Sands (1961) reviewed workers' compensation cases over a 13-year period in the state of New York and established that

accidents caused by sneezing or coughing on the job were twice as frequent as those related to seizure occurrences. Quattrini, et al. (1999) indicates no change in job accident rate after the onset of epilepsy for 860 workers.

- Working around machinery – In consideration of today’s safety standards, it is rare that machinery would require any special modification for individuals with a seizure condition. Plastic guards, cut-off mechanisms on machinery, and other safety modifications, are becoming standard.
- Insurance rates – Hiring individuals with epilepsy does not increase a company’s industrial insurance rates. These rates are linked to the hazards of specific occupational classifications. EPI-HAB, a sheltered work system for those seizure disorders, reported receiving significant insurance premium reductions due to outstanding safety records. Health insurance providers generally link rates to age and sex in larger companies, while among smaller companies, the providers usually pool claim experiences and no one employer is penalized.
- People with epilepsy generally refrain from drinking alcohol or engaging in recreational drug activity and otherwise lead a

relatively healthy lifestyle in order not to aggravate their condition. Consequently, they are often safer on the job than the average employee and are highly stable employees.

Accommodation Issues for the Individual with Epilepsy

During the application and interview process, reasonable accommodations are generally not necessary for an individual with epilepsy. In the interview, however, some individuals may indicate that they need a specific type of accommodation in order to perform the essential functions of a job or to perform those functions more safely.

As an employer, you should identify the essential functions of a job that an individual is required to do at your work place with or without reasonable accommodation.

Although a number of companies routinely require a driver’s license, this requirement is often not linked to an essential function of a job. A company may need to examine whether the capacity for driving is actually an essential job function, and, if not, whether a job could be slightly modified or restructured so that a minimal amount of driving is performed by another worker or shared by other workers. Many individuals with epilepsy, however, are very capable of driving due to their level of seizure control, type of seizure warning, and other

considerations. To drive, people with this disability are generally required to have a seizure free period of three months to a year. In some states, this is at the discretion of the individual's physician and his or her assessment of an individual's seizure condition. In sum, driving can be an essential job function for some positions, such as a traveling sales representative or courier, but in any number of other cases, driving is often a marginal and non-essential job function.

In addition to restructuring job tasks, other examples of accommodation for individuals with epilepsy would include:

- Installing a safety guard on a piece of machinery.
- Installing some industrial rubber matting or carpeting in order to cover a concrete floor in a work area.
- Scheduling consistent day work shifts for individuals whose seizures are exacerbated by inconsistent sleep patterns caused by rotating shifts and, in some cases, night shifts.
- Allowing individuals to have an extended break or some time off after they have experienced a seizure while on the job.
- Providing flame-retardant clothing for individuals working in an area in which a burn could be incurred during a seizure event and period of disorientation.

- Provision of some type of safety helmet while on the job.

When they are needed, accommodations for individuals with epilepsy generally are not costly. The Job Accommodation Network (JAN), a service of the U.S. Department of Labor, Office of Disability Employment policy, and headquartered at West Virginia University, indicates that 80% of the accommodations made result in a cost of no more than \$500 to an employer with about 20% involving no cost whatsoever.

Accommodations for individuals with epilepsy frequently involve a type of procedural consideration rather than physical changes to the worksite or purchase of equipment. This generally does not require any significant cost, nor is it likely to impose an undue hardship to the employer. Employees with epilepsy, particularly with a reasonable accommodation in place, will rarely pose a direct threat of harm in the work place.

Selecting an Accommodation

The selection of reasonable accommodation can often be accomplished through direct dialogue between the employee and the employer. Accommodations can involve *procedural* changes, which change how the job is done but do not involve assistive equipment or physical modifications to the worksite. They can also involve physical modifications or safeguards

to a workstation, or low tech or high tech assistive equipment. Again, most of the considerations for those with epilepsy will involve a procedural change or perhaps some safeguarding of a workstation.

If the employer and employee cannot agree on an effective reasonable accommodation, a state vocational rehabilitation agency, a local Epilepsy Foundation affiliate, the national Epilepsy Foundation, or resources such as the Job Accommodation Network (JAN) can be contacted for assistance. State vocational rehabilitation agencies will often send a vocational rehabilitation counselor or assistive technologist to the job site in order to help with reasonable accommodation needs. Again, it must be underscored that accommodation concerns for employees with epilepsy, when necessary, are generally very low cost. Individual companies may also be eligible to receive tax credits or deductions for physical modification or equipment purchase efforts at the work site if this cost is not borne by a local or state vocational rehabilitation agency.

RESOURCES

Assistive Technology Partners
601 E. 18th Avenue, Suite 130
Denver, CO 80203
303/315-1280 Main
800/255-3477 within Colorado
303/837-8964 TTY
303/837-1208 FAX
www.assistivetechpartners.org

The Epilepsy Foundation of America
4351 Garden City Drive
Landover, MD 20785
800/EFA-1000
www.epilepsyfoundation.org

The Epilepsy Foundation of Colorado
234 Columbine Street, #333
Denver, CO 80206
303/377-9774
www.epilepsycolorado.org

Job Accommodation Network (JAN)
West Virginia University
P.O. Box 6080
Morgantown, WV 26506-6080
800/526-7234
www.jan.wvu.edu

Rocky Mountain Disability and
Business Technical Assistance
Center
3630 Sinton Road, #103
Colorado Springs, CO 80907
800/949-4232 Voice/TTY
719/444-0269 FAX
www.ada-infonet.org

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