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 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, and birth trauma. 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.
There are 200,000 new cases of epilepsy diagnosed each year and the prevalence of active epilepsy is estimated as almost 3 million in the United States. 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 easily manage their epilepsy. The vast majority of individuals with epilepsy experience 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 Gabepentin, Lamotrogine, and Topiramate, were developed. In addition to anticonvulsant medications, some individuals benefit dramatically from use of a vagal nerve stimulator (VNS), which is 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. Contrary to popular belief, it is not necessary, and may in fact be dangerous, to attempt to place something in the mouth of a person during a seizure.

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. This includes individuals who have seizures only nocturnally, who have a consistent warning aura that allows them to take safety precautions prior to the seizure, or who have only a partial seizure in which, for example, they do not lose consciousness and experience 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 does not 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 definition of physical impairment includes physiological disorders or conditions. Seizure disorders therefore qualify as a physical impairment under the ADA.

In determining whether such an impairment substantially limits a major life activity, medications and any other mitigating measures are not considered. Thus, if an individual’s epilepsy is completely or substantially controlled with medication, s/he could nevertheless qualify as an individual with a disability entitled to ADA protections. Furthermore, as long as a person’s epilepsy substantially limits a major life activity when active, the episodic nature of the seizures will not prevent that impairment from being classified as a disability.

**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 that 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 than those related to seizure occurrences. Quattrini et al. (1999) indicate 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 workplace 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 56% of all accommodations cost nothing, while the remainder typically cost approximately $600. 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 workplace.
Selecting an Accommodation

The selection of a 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.

References


Risch, F. We lost every game...but. Rehabilitation Record, 1968, 9:16-18.

Resources

The Epilepsy Foundation of America
8301 Professional Place
Landover, MD 20785
800.332.1000
http://www.epilepsyfoundation.org
The Epilepsy Foundation provides a wealth of information on employment concerns for those with epilepsy. The 800 number or web site offers an ADA informational monograph and brochure, tips for employment interviewing and disclosure issues, information about local area employment programs or local epilepsy affiliates with employment programs, legal advocacy and job discrimination issues.

Your Local Epilepsy Foundation Affiliate:
In order to identify an Epilepsy Foundation affiliate nearest to you, contact the national office at 800 EFA 1000 or through the web site. Information can also be provided regarding any available employment program at the local affiliate office.

Job Accommodation Network (JAN)
West Virginia University
PO Box 6080
Morgantown, WV 26506 6080
800.526.7234 (V) or 877.781.9403 (TTY)
http://www.jan.wvu.edu
This is a one stop shopping resource on accommodation issues for those with disabilities. The database provides specific examples of employees with specific disabilities for whom job station accommodations were made. Contact information for company personnel involved in the accommodation and manufacturer information for the specific equipment used is available. It is an excellent resource for both employees and employers on effective reasonable accommodation approaches.

ADA Disability and Business Technical Assistance Center Hotline
800.949.4232
http://www.adata.org

State Vocational Rehabilitation Office:
Every state has a vocational rehabilitation agency that provides vocational assessment, counseling, job training and placement, advocacy, and often a variety of support or medical services critical to a person’s employability. Look for the Office of Vocational Rehabilitation Services under state listings in your telephone directory.
Disclaimer

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The Equal Employment Opportunity Commission has issued enforcement guidance which provides additional clarification of various elements of the Title I provisions under the ADA. Copies of the guidance documents are available for viewing and downloading from the EEOC web site at: http://www.eeoc.gov

About this Brochure

This brochure is one of a series on human resources practices and workplace accommodations for persons with disabilities edited by Susanne M. Bruyère, Ph.D., CRC, Director, Employment and Disability Institute, Cornell University ILR School.

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The full text of this brochure, and others in this series, can be found at www.hrtips.org.

More information on accessibility and accommodation is available from the ADA National Network at 800.949-4232 (voice/ TTY), wwwadata.org.
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