Understanding Epilepsy

What Is Epilepsy?
Sometimes called a seizure disorder,is a chronic medical condition produced by temporary changes in the electrical function of the brain,causing seizures which affect awareness,movement,or sensation.

What is a seizure?
A seizure is an abnormal electrical discharge of neurons in the brain.
Seizure can produce a variety of symptoms,depending on the location of the seizure focus and the spread of the electrical activity through the brain.

What is an aura?
An aura is a feeling or experience that may warn the person that a seizure is about to begin all epileptic's don't have aura's one's that do experience this warning often have time to move away from possible hazards.
Sometimes the expected seizure does not follow and all that happens is the aura.

What is the best diagnostic test for epilepsy?
There is no blood test for epilepsy.The most useful test for the neurologist is the electroencephalograph(EEG),which amplifies a patients brain waves and records them on paper or displays them on a video screen.A typical pattern of spikes occurs during an epileptic seizure. In between seizures,spikes may not be present and the diagnosis can be more diffcult.For this reason,multiple EGG's may be needed before a definite diagonsis is made. Other tests,such as computed axial tomography (CATscan) and magnetic resonance imaging (MRI),provide a detailed picture of the brain.They can reveal birth defects,tumors,and scars,all of which can cause epilepsy. Your doctor will diagnose epilepsy based on finding of the history,physical examination,EEG,brain scans.

Is Epilepsy a Disease?
Epilepsy should not really be described as a disease because recurrent

seizures can be caused by many very different diseases.The term epilepsy refers to a chronic (lasting a long time) disorder in which the individual either has recurrent seizures caused by disturbanes in brain activity,or would have such seizures if not controlled by medications.In other words,a seizure is a symptom of a problem that is causing a disturbance in the brain.To say that someone has epilepsy only that the person has recurrent seizures.A more complete description of he/she disorder would include the type of epilepsy he/she has,and the kind of seizures he/she experiences.

Epileptic seizures result from a temporary electrical disturbance of the brain. Sometimes seizures may go unnoticed, depending on their presentation, and sometimes seizures may be confused with other events,such as a stroke,which can also cause falls or migraines. It is important for physicians to perform an EEG recording to accurately diagnose the condition. Persons who have lived with epilepsy for much of their lives may find that their seizures change as they age. The duration of the seizures may become longer or shorter; the intensity of the seizures may worsen or improve; seizure episodes may occur more or less frequently. Seniors also demonstrate a high rate for newly-diagnosed cases of epilepsy.Some test using to diagnosis Epilepsy seizure disorder are: EEG,CT scans,MRI,EEG Video recording monitoring etc...

Seizures that may give signs of epilepsy. Yet not all seizures indicate that a person has epilepsy. Some seizures that do not indicate epilepsy are those caused by high fever (febrile convulsions),those resulting from alcohol or drug withdrawal,those due to an imbalance of body fluids or chemicals,or because of a brain tumor. A single seizure that does not reoccur is not classified as epilepsy.

Who does Epilepsy affect and why? There are many possible causes of epilepsy,but in 70% of the cases there is no known cause. Most people are not born with epilepsy. This disorder can strike anyone,primarily children and young adults.

Is there any danger of a person dying during a seizure?

A seizure is seldom a cause of death,BUT it can happen.There is a chance of accidental
death if someone has a seizure in water or near heights,or while driving a car.Occasionally a person may fall in such a way that breathing is blocked,or may suffer a heart attack as a result of the stress of the seizure. In rare cases,breathing may not start again when a convulsive seizure is over, in which case artificial as a result of a series of non-stop seizures that may last for hours if not treated in a hospital.People sufferng covulsive seizures in a short period should also receive immediate medical care.
Young adults with hard-to-control seizures may be at higher risk of sudden,unexplained death....

CAUSES

Epilepsy is caused by abnormal brain wiring, which is often related to an imbalance of nerve signaling chemicals called neurotransmitters. This may occur during brain development or when the brain repairs itself after a head injury or stroke.

Other seizure disorders may be caused by:

*Brain abnormalities existing since birth
*Brain damage from other disorders:
*Conditions that alter normal brain function: brain tumors,alcoholism, Alzheimer's disease,and brain abscesses
•Inherited diseases such as phenylketonuria (PKU),tuberous sclerosis,and neurofibromatosis
•Heredity
*Conditions that deprive the brain of oxygen: stroke, heart failure, near drowning
*Head injury leading to brain swelling or bleeding
*Infectious diseases: meningitis, AIDS, viral encephalitis
*Hydrocephalus (excess fluid in the brain)
*Celiac disease (intolerance to wheat gluten)
*Exposure to lead, carbon monoxide, or other environmental toxins

*Exposure to certain illegal drugs
*Overdose of antidepressants and other medications

In children:
*High fever
*Maternal infections
*Poor nutrition
*Oxygen deficiency

Risk Factors

A risk factor is something that increases your chance of getting a disease or condition. Some factors, called seizure triggers, can cause first seizures or breakthrough seizures in people whose seizures are controlled with medication.

These triggers include:

*Lack of sleep
*Alcohol consumption
*Psychological stress
*Hormonal changes of the menstrual cycle
*Light flashing at a certain speed or the flicker of a computer monitor (photosensitive epilepsy)
*Cigarette smoking
*Certain medications

SYMPTOMS

Symptoms include:
*Convulsions
*Brief stares
*Muscle spasms
*Odd sensations or emotions
*Episodes of unusual or automatic behavior
*Altered consciousness

DIAGNOSIS

The doctor will perform a detailed examination to determine if you have epilepsy. The exam will include the following:
*Questions about your medical history, including medications and current or previous health problems
*Physical exam, especially of the nervous system
*Blood tests
*Lumbar puncture (possibly) â€" removal of a small amount of spinal fluid to determine if your seizure was caused by infection or bleeding in the brain (also called a spinal tap)
*Electroencephalogram (EEG) â€" measures electrical activity of the brain to detect abnormal activity
*Magnetoencephalogram (MEG) â€" monitors brain activity by measuring magnetic fields of the brain
*Developmental, neurological, and behavioral tests
*Brain imaging â€" detects brain tumors, blood clots, malformations, tissue scarring, swelling or hydrocephalus:
*Computed tomography (CT) scan
*Positron emission tomography (PET) scan
*Magnetic resonance imaging (MRI)
*Single photon emission computed tomography (SPECT)
*Angiography â€" x-rays taken after injecting dye into the blood vessels leading into the brain

*In babies, echoencephalogram â€" use of high-frequency sound waves to produce pictures of the brain

TREATMENT MEDICATIONS

Medications to prevent seizures are typically the first line of treatment. These medications are called anticonvulsants or antiepileptic drugs. They do not cure epilepsy, but for many people, they prevent seizures. Others may continue to have seizures, but less frequently.

SURGERY

Surgery may be considered in the following situations:

*When seizures occur in just one part of the brain (partial seizures)
*When seizures begin as partial seizures before spreading to the rest of the brain
*When medications don't control the seizures or they cause severe negative side effects
*To treat the underlying cause of epilepsy, such as a brain tumor or excess fluid
*When there is unilateral multifocal epilepsy with infantile hemiplegia (such as Rasmussen's encephalitis)

Surgeries to treat epilepsy include:

Lobectomy or Lesionectomy â€" removal of the area of the brain that is producing the seizures, called the seizure focus

Multiple Subpial Transection â€" a series of cuts along the nerve path through which seizure impulses spread; designed to prevent seizures from spreading into other parts of the brain

Corpus Callosotomy â€"cutting the nerve connections between the right and left halves of the brain to prevent seizures from spreading from one side to the other
Hemispherectomy â€" removal of half of the brain's outer layer

Vagus Nerve Stimulation
Prevents seizures by sending regular small pulses of electrical energy to the brain through the vagus nerve (a large nerve in the neck).

Ketogenic Diet

A diet very high in fat and low in protein and carbohydrate. It produces a change in body chemistry that controls or decreases the frequency of seizures in some children. It is sometimes used for children whose seizures cannot be controlled with medication, or who experience negative side effects from medication. It is unclear if this diet will work for adults. The long-term effects of such a high fat diet are unknown.

PREVENTION

To reduce your chance of getting a seizure disorder:

*Prevent head injury by wearing seat belts and bicycle helmets, and putting children in car seats.
*Take medication after first or second seizures.
*Take medication to control high fevers in young children.
*Get prenatal care, including treatment of high blood pressure and infections during pregnancy, to help prevent brain damage in a developing baby.
*Prevent and treat heart disease, high blood pressure, infections, and other disorders that can affect the brain.
*Avoid illicit drugs and excessive alcohol.

~Important Facts to Remember~

Although seizures look different,they have certain things in common:

•During a seizure,a person stop breathing for only a few seconds.
•Most seizures only last 1-2 minutes, although the person may be confused for a long time afterwards.
•The brain almost always stops the seizures safely and naturally.
•Once a seizure has begun,you cannot stop it — just let it run its course.
•Only in emergencies,doctors use drugs to bring a non-stop seizure to an end.
•People don't feel pain during a seizure, although muscles might be sore afterwards.
•Seizures are usually not life threatening, but the risk is increased in seniors

by the extra strain on the heart,the possibility of injury, or a reduced intake of oxygen.
•Seizures are not dangerous to others.
•REMIND YOU SEIZURES AREN'T CONTAGIOUS OK....

Is it Possible to lessen the embarrassment and public fuss that a seizure can cause?

Yes,through public education about epilepsy.When people understand something,they are less likely to fear or ridicule it.Prepare friends and relatives for what to do when a seizure occurs Calmy explain seizures and dispel myths when they occur in public,so that we can all decrease the possible harm and embarrassment to the person with epilepsy.

Believe me living with epilepsy day to day in NO way is it fun nor should you make fun of others that may be suffering from this illness or any illness period making fun of someone else doesn't make you a better person now does it?....
Take a good look at yourself in the mirror that same person you see looking back at you at any given time may become an epileptic or may experiance a seizure don't point fingers and laugh because that same one you laugh and make jokes about may very well be you one day!! We are all equal in this world learn to love and help one another...:)

Because at times seizures involves loss of some body control or completely all control, epileptic seizures are dangerous,and they can be embarrassing.The person with epilepsy may feel ashamed or angry. Children or unthinking adults may add to the problem,ridiculing the individual or making too much of fuss about the seizure.This indeed unfortunate,but public education is helping people understand-rather than FEAR-epilepsy....please help educate others take a stand if you suffer from this or any illness don't care what the illness may be educate others,sometimes we epileptic's do feel alone often,and don't tell anyone about our disorder scared as hell because of how society see's us DON'T fear us get to know us...

The person with epilepsy,family,and friends can reach out an help by learning and teaching the public simple first-aid steps to take when someone has a seizure..

Come with an open mind because having epilepsy can sure have it's ups and downs at times.put up a BIG fight don't give up!! An having epilepsy sure doesn't mean it's the end of your life take it one step at a time go on with your life yes!! yes!! Keep setting goal's and ways to achieve those goal's and if at sometime in life you may not accomplish what you've set..Keep trying make your wishes come true "dust yourself off" an try again but also keep in mind of your limitations,and please understand that your NOT alone...Talking openly and honestly about epilepsy an how it affects your life helps in every way...This is certainly not easy,but it is actually much easier and more productive than hiding the disorder and fearing the inevitable discovery.

What is a seizure?
Surprisingly,few people with epilepsy ask what a seizure actually is.Everything they know about what happens to them during a seizure is based on what they have been told by family memebers and friends who have witnessed their seizures.But more people should ask what happens inside them during a seizure,or what it really means when a person has epilepsy.A better understanding of seizures and the different types of epilepsy will help you become actively involved in treating your epilepsy.

While there are over 40 types of seizure, most are classed within 2 main categories:
Partial seizures,Generalized seizures

1.Partial seizures occur when the excessive electrical activity in the brain is limited to one area. The 2 most common forms are simple partial seizures and complex partial seizures.
2.Generalized seizures occur when the excessive electrical activity in the brain encompasses the entire organ. The 2 most common forms are generalized absence seizures and tonic-clonic seizures.There are many more but just to name a few:

Tonic-Clonic~
(grand mal or known as the BIG BAD) seizures-In a generalized tonic-clonic

(grand mal) seizure,the person will usually emit a short cry and fall to the floor. Their muscles will stiffen (tonic phase) and then their extremities will jerk and twitch (clonic phase). Bladder control may be lost. Consciousness is regained slowly.
After a seizure, the person may feel fatigue, confusion and disorientation. This may last from 5 minutes to several hours or even days. Rarely, this disorientation may last up to 2 weeks. The person may fall asleep, or gradually become less confused until full consciousness is regained.

Myoclonic seizures~
consist or multiple myoclonic jerks.. Myoclonic seizures occur in several different types of childhood epilepsy. They involve abrupt muscle jerks in part or all the body. A hand may suddenly fling out,a shoulder may shrug,a foot may kick,or the entire body may jerk.Myoclonic seizures can occur as a single event or in series. Consciousness and memory are not impaired. A myoclonic seizure may cause a child to spill or drop what his/her is holding or to fall from his/her chair.Myoclonic seizures should NOT be confused with tics or "startle" responses.

Absence seizures~
In an absence seizure, epileptic activity occurs throughout the entire brain. It is a milder type of activity which causes unconsciousness without causing convulsions. After the seizure,there is no memory of it.An absence seizure begins abruptly and without warning, consists of a period of unconsciousness with a blank stare,and ends abruptly. There is no confusion after the seizure,and the person can usually resume full activity immediately. An absence seizure may be accompanied by chewing movements,rapid breathing,or rhythmic blinking.
Absence seizures are short,usually lasting only 2-10 seconds. They are very mild, and may go unnoticed by parents and teachers. Because absence seizures may recur frequently during the day,a child who experiences them may have difficulty learning if they are not recognized and treated.

Complex Partial Seizures
(Psychomotor or Temporal Lobe Seizures)
A complex partial seizure occurs when epileptic activity spreads to both temporal lobes in the brain. A complex partial seizure often occurs after a simple partial seizure of temporal lobe origin. Complex partial seizures are experienced most by children. In some children,they lead to tonic-clonic

seizures.
A complex partial seizure does not involve convulsions,but consciousness is impaired. Someone experiencing one will no longer respond to questions after the seizure starts.
A complex partial seizure often begins with a blank look or empty stare. They will appear unaware of their surroundings and may seem dazed. The seizure may progress to include chewing movements, uncoordinated activity,or sometimes performing meaningless bits of behaviour which appear random and clumsy. These automatisms may include actions such as picking at their clothes,trying to remove them, walking about aimlessly,picking up things,or mumbling. Someone experiencing a complex partial seizure may become frightened and try to run and struggle. Following the seizure,there will be no memory of it.
A complex partial seizure usually lasts about 2 to 4 minutes. It may be followed by a state of confusion lasting longer. Once the pattern of seizures is established,it will usually be repeated with each subsequent seizure. Complex partial seizures sometimes resist anticonvulsant medication.

Secondarily Generalized

Secondarily generalized seizures are usually partial seizures evolving into generalized seizures,most often with tonic-clonic convulsions. The partial seizures which were once limited to one hemisphere of the brain progress to encompass the entire brain bilaterally,causing a generalized seizure. The clinical nature of a secondarily generalized seizure usually does not differ from that of the initial,originating seizure.
Secondarily generalized seizures are predominant in 16% of all children and 9% of all adults with seizure disorders. Most people with complex partial seizures and many with simple partial seizures will experience a secondarily generalized seizure at some point. When they occur frequently,the chances for future partial seizures may be increased.
Secondarily generalized seizures occur infrequently and are easily controlled by anti-epileptic medication.

Status Epilepticus

Is considered a medical emergency.
Immediate medical care is required.
Status epilepticus is a seizure which lasts for a long time, or repeats without recovery. This prolonged or repeated seizure activity can result in death if it is not treated immediately.
Status epilepticus can be convulsive (tonic-clonic or myoclonic seizures) or

non-convulsive (absence or complex partial seizures). A person in non-convulsive status epilepticus may appear confused or dazed.
Status epilepticus and mortality in status epilepticus are more common among seniors than in the rest of the population. (Mortality in status epilepticus is recognized as death within 30 days of the event.) The highest incidence of status epilepticus occurs during the first year of life and after age 60.

In seniors,the majority of status epilepticus cases are related to:
•Cerebrovascular accidents
•Metabolic problems
•Decreased anticonvulsant medications — the level of the medication in the blood may have fallen too low. (This further shows the importance of taking your medication properly.)

Status epilepticus may occur as the first manifestation of a seizure disorder,or it may occur in a person known to have seizures. Status epilepticus is usually treated in hospital, where diazepam (Valium®) or lorazepam (Ativan®) is given intravenously. Phenobarbital is sometimes added intravenously. If your child is prone to status epilepticus,your doctor may teach you to administer diazepam or lorazepam suppositories at home. While it is not believed to cause brain damage,it should be stopped as soon as possible.
Sudden Unexplained Death
For reasons that are poorly understood, people with epilepsy have an increased risk of dying suddenly for no discernible reason. This condition,called sudden unexplained death,can occur in people without epilepsy, but epilepsy increases the risk about two-fold. Researchers are still unsure why sudden unexplained death occurs.
One study suggested that use of more than two anticonvulsant drugs may be a risk factor. However,it is not clear whether the use of multiple drugs causes the sudden death,or whether people who use multiple anticonvulsants have a greater risk of death because they have more severe types of epilepsy.

Simple Partial Seizures
(Focal Cortical Seizures)
Simple partial seizures result from epileptic activity which is localized in one part of the brain,usually the cortex or limbic system.
Consciousness is not impaired: people experiencing a simple partial seizure

can talk and answer questions. They will remember what went on during the seizure.
Simple partial seizures take different forms in different people. They are further classified according to their symptoms:
Autonomic Seizures - These seizures are accompanied by autonomic symptoms or signs,such as abdominal discomfort or nausea which may rise into the throat (epigastric rising),stomach pain,the rumbling sounds of gas moving in the intestines (borborygmi),belching,flatulence and vomiting. This has sometimes been referred to as abdominal epilepsy. Other symptoms may include pallor,flushing,sweating,hair standing on end (piloerection),dilation of the pupils,alterations in heart rate and respiration,and urination. A few people may experience sexual arousal,penile erection, and orgasm.

Emotional and Other - Simple partial seizures which arise in or near the temporal lobes often take the form of an odd experience. One may see or hear things that are not there. One feels emotions, often fear, but sometimes sadness, anger, or joy. There may be a bad smell or a bad taste, a funny feeling in the pit of the stomach or a choking sensation. These seizures are sometimes called simple partial seizures of temporal lobe origin or temporal lobe auras.

Motor - Other simple partial seizures include (clonic, jerking) convulsive movements. Jerking typically begins in one area of the body -- the face, arm, leg, or trunk -- and may spread to other parts of the body. These seizures are sometimes called Jacksonian motor seizures; their spread is called a Jacksonian march. It cannot be stopped.

Sensory Seizures - Some simple partial seizures consist of a sensory experience. The person may see lights,hear a buzzing sound,or feel tingling or numbness in a part of the body. These seizures are sometimes called Jacksonian sensory seizures.
Simple partial seizures usually last just a few seconds,although they may be longer.
If there are no convulsions,they may NOT be obvious to the onlooker.
In some children,simple partial seizures lead to complex partial seizures,or to tonic-clonic convulsions.

Drop Attacks~

Atonic (Drop) Seizures
Atonic seizures (drop attacks) are not seen in many children. Without warning, a child abruptly loses consciousness, collapses and falls to the floor. There is no convulsion, but children may bang their heads as they fall. Recovery occurs after a few seconds. The child regains consciousness, and can again stand and walk.
Atonic seizures may occur with Lennox-Gastaut Syndrome. They sometimes resist anticonvulsant medication. If so, the child may have to wear a helmet to prevent head injuries.

What can you do in helping someone thats having a seizure? Well for all seizures types,the best thing to do is reamain CALM!!!...Understand that there are different kinds of seizures require different kinds of help....Ok let's learn more about epi Shall we Oh come on =)

~Medications~

By far the most common approach to treating epilepsy is to prescribe antiepileptic drugs. The first effective antiepileptic drugs were bromides, introduced by an English physician named Sir Charles Locock in 1857. He noticed that bromides had a sedative effect and seemed to reduce seizures in some patients. More than 20 different antiepileptic drugs are now on the market,all with different benefits and side effects.
The choice of which drug to prescribe,and at what dosage,depends on many different factors,including the type of seizures a person has,the person's lifestyle and age, how frequently the seizures occur,and,for a woman,the likelihood that she will become pregnant. People with epilepsy should follow their doctor's advice and share any concerns they may have regarding their medication.

Doctors seeing a patient with newly developed epilepsy often prescribe carbamazapine,valproate,or phenytoin (dilantin) first,unless the epilepsy is

a type that is known to require a different kind of treatment. For absence seizures, ethosuximide is often the primary treatment.
Other commonly prescribed drugs include clonazepam,phenobarbital,and primidone.
In recent years,a number of new drugs have become available. These include tiagabine, lamotrigine,gabapentin,topiramate, levetiracetam,felbamate,and zonisamide,as well as oxcarbazapine,a drug that is similar to carbamazapine but has fewer side effects. These new drugs may have advantages for many patients. Other drugs are used in combination with one of the standard drugs or for intractable seizures that do not respond to other medications.
A few drugs,such as phenytoin, are approved for use only in hospital settings to treat specific problems such as status epilepticus. For people with stereotyped recurrent severe seizures that can be easily recognized by the person's family,the drug diazepam is now available as a gel that can be administered rectally by a family member. This method of drug delivery may be able to stop prolonged seizures before they develop into status epilepticus.

For most people with epilepsy,seizures can be controlled with just one drug at the optimal dosage. Combining medications usually amplifies side effects such as fatigue and decreased appetite,so doctors usually prescribe monotherapy,or the use of just one drug,whenever possible. Combinations of drugs are sometimes prescribed if monotherapy fails to effectively control a patient's seizures.
The number of times a person needs to take medication each day is usually determined by the drug's half-life,or the time it takes for half the drug dose to be metabolized or broken down into other substances in the body. Some drugs,such as phenytoin and phenobarbital,only need to be taken once a day,while others such as valproate must be taken more frequently.
Most side effects of antiepileptic drugs are relatively minor,such as fatigue,dizziness,or weight gain. However,severe and life-threatening side effects such as allergic reactions can occur. Epilepsy medication also may predispose people to developing depression or psychoses.
People with epilepsy should consult a doctor immediately if they develop any kind of rash while on medication,or if they find themselves depressed or otherwise unable to think in a rational manner. Other danger signs that should be discussed with a doctor immediately are extreme fatigue,staggering or other movement problems, and slurring of words.

People with epilepsy should be aware that their epilepsy medication can interact with many other drugs in potentially harmful ways. For this reason,people with epilepsy should always tell doctors who treat them which medications they are taking. Women also should know that some antiepileptic drugs can interfere with the effectiveness of oral contraceptives,and they should discuss this possibility with their doctors. Since people can become more sensitive to medications as they age,they should have their blood levels of medication checked occasionally to see if the dose needs to be adjusted.
The effects of a particular medication also sometimes wear off over time,leading to an increase in seizures if the dose is not adjusted. People should know that some citrus fruit,in particular grapefruit juice,may interfere with breakdown of many drugs. This can cause too much of the drug to build up in their bodies,often worsening the side effects...

Blood Tests

Doctors often take blood samples for testing, particularly when they are examining a child. These blood samples are often screened for metabolic or genetic disorders that may be associated with the seizures.
They also may be used to check for underlying problems such as infections,lead poisoning,anemia,and diabetes that may be causing or triggering the seizures.

Devices

The vagus nerve stimulator was approved by the U.S. Food and Drug Administration (FDA) in 1997 for use in people with seizures that are not well-controlled by medication. The vagus nerve stimulator is a battery-powered device that is surgically implanted under the skin of the chest, much like a pacemaker,and is attached to the vagus nerve in the lower neck.
This device delivers short bursts of electrical energy to the brain via the vagus nerve. On average,this stimulation reduces seizures by about 20-40 percent. Patients usually cannot stop taking epilepsy medication because of

the stimulator,but they often experience fewer seizures and they may be able to reduce the dose of their medication. Side effects of the vagus nerve stimulator are generally mild,but may include ear pain,a sore throat,or nausea. Adjusting the amount of stimulation can usually eliminate these side effects. The batteries in the vagus nerve stimulator need to be replaced about once every 5 years; this requires a minor operation that can usually be performed as an outpatient procedure.

Several new devices may become available for epilepsy in the future. Researchers are studying whether transcranial magnetic stimulation,a procedure which uses a strong magnet held outside the head to influence brain activity, may reduce seizures. They also hope to develop implantable devices that can deliver drugs to specific parts of the brain.

Please reading the following very carefully there are some tips to help out someone you may see having a seizure don't leave them alone by themselves help them out make sure there safe and out of harms way...

IN all types of seizures,the goal is to protect the person from harm until full awareness returns. If you are living with or caring for someone with a seizure disorder who has other medical problems,check with the doctor about how to respond when a seizure happens. Find out whether the doctor wants to be notified every time or just in certain circumstances. Ask whether or when you should call an ambulance and if there are any special warning signals that you should looking for. Also note the general rule:The less done to a person during a relatively brief seizure,the better.

1. Keep Calm.
Seizures may appear frightening to the onlooker.
They usually last only a few minutes and generally do not require medical attention.
Remember that the person having a seizure may be unaware of their actions and may or
may not hear you.

2. Protect from further injury.
If necessary,ease the person to the floor.
Move any hard,sharp or hot objects well away.
Protect his/her head and body from injury. Loosen any tight neckwear.

3. ***Do not restrain the person.***
If danger threatens,gently guide the person away.
Agitation during seizure episodes is common.
Trying to restrain or grabbing hold of someone having a seizure is likely to make the agitation worse and may trigger an instinctive aggressive response.

4. ***Do not insert anything in the mouth.***
The person is not going to swallow the tongue.
Attempting to force open the mouth may break the teeth or cause other oral injuries.

5. Roll the person on their side after the seizure subsides.
This enables saliva to flow from the mouth, helping to ensure an open air passage.
If there is vomit,keep the person on their side and clear out their mouth with your finger.

6. If a seizure lasts longer than 5 minutes, or repeats without full recovery ~ SEEK MEDICAL ASSISTANCE IMMEDIATELY~
Although this rarely occurs,status epilepticus is life-threatening. It is a serious medical emergency.

7. Talk gently to the person.
After any type of seizure,comfort and reassure the person to assist them in reorienting themselves. The person may need to rest or sleep. If the person wanders, stay with them and talk gently to them.

8.Be friendly and reassuring as consciousness returns, Offer to call a taxi,friend or relative to help...

Check for a MedicAlert™ or Medical ID Bracelet -The bracelet or necklet may indicate the seizure type and any medication the person is taking. If you call the MedicAlert hotline,an operator can direct you in your any emergency contacts and physicians listed in that member's file.

~Complex Partial Seizures~

1.If the person wanders,do not try to stop or restrain him.

2.Try to remove harmful objects from the person's path,and gently coax him away from stairs or other hazards.Physically intervene only if it is absolutely necessary to prevent an accident.Get help if you are alone and the person is aggressive.

3.Talk calmly."Do NOT" agitate the person by shaking or shouting.He may become angry or aggressive if interfered with.

4.After the seizure,the person may be confused.Stay with him until fully alert.Ask if there is any way you can help.

Absence Seizures

1.These seizures are usually very brief,so just try to be aware of when a seizure may have occurred.

2.Provide any missing information and help the person get back into the lesson, conversation,or activity.

Seizure First Aid for Persons in Wheelchairs
For someone having a tonic-clonic seizure in a wheelchair during the seizure.

•Keep calm and let the seizure run its course.
•Hold up the wheelchair and ensure the brakes are on to protect him/her from injury. •Do not put anything in the person's mouth.
•Remove anything from the area that may cause injury or could be a hazard to someone who is temporarily unaware of their location or actions.

After the Seizure
Set the wheelchair to a "partial recline" position (not "full recline"). Gently turn the person's head to the side to let the saliva flow out of the mouth. Let the person rest or sleep if it is needed. Be reassuring, comforting and calm as awareness returns.

Living by yourself and having convulsions about twice or more a month.And don't have a warning. Ok How can I make my home safer?
Kitchen

The short periods of confusion during and after a complex partial seizure predispose to injury.While cooking,you may place hands or arms on a burner or spill hot food on yourself. In order to avoid this,use oven mitts and cooks only on the rear burners.
An electric stove eliminates an open flame and the worry that you might leave the gas on. The safest option is to cook with a microwave. A microwave heats food behind a closed door and shuts off automatically. Microwave cookbooks are available.
To avoid dropping hot food during a seizure,keep a cart in the kitchen that you can wheel to the table.
Tap water can become hot enough to scald.Ask your plumber to install a

heat control device in the kitchen faucet to prevent the water from becoming dangererously hot.
Consider carpeting the kitchen floor. Although not as easy to clean,it is much more comfortable to land on. Whenever possible,use plastic containers rather than glass.

Bathroom

There are many hard surfaces in the bathroom-sink,the tub,the toilet that you can't do much about,but you can carpet the floor.Carpet is softer and less slippery than tile.Do not put a lock on the bathroom door.
If you have one don't use it..It will be difficult for someone to help you after a seizure if they can not get in believe me it will be much cheaper on your pockets $$$ to just simply leave the door unlock to avoid broken doors and/or door knobs being broken.....not only is it hard on the person that's having the seizure it's very frustrating to the person on the other end that's trying to help because the door is lock and they'll have to force themselves in which can take time to do don't lock while showering between replacing doors,knobs, and medical bills
Oh gosh it can make a small probelm very very BIG!!! Avoid it!! Don't need that trust me!!.....
Learn to take a bath with only a few inches of water in the tub.Use a hand held shower head.If you have frequent seizures,bathe with supervision.Stairs can be dangerous.
If possible,choose a ranch house or one floor apartment rather than a townhouse.
make sure its a flat...or If you have stairs,try to arrange your routine to limit how often you must go from floor to floor.Use more carpet!! Avoid shiny hardwood floors,If you have a fire place keep a protective glass screen in front of it. also "Irons can be very HOT!!!." buy one that shuts off automatically...
Another household hazard is cigarettes.
To decrease the risk of fire Install alarms in each room..Or stop Smoking!! and if you have problems getting in and out of the tub make sure you have handles to grab onto for support, and another thing keep in mind you can always buy a shower seat to place in the tub they fit nicely in the tub and hold on to that hand held shower, you'll be good to go:)..Can do what ya have to and get out!, go about your business....If certain seizures make your

legs weak and/or sore it would be a very good idea to have one...:)
helps out alot and so does having the handles placed in bathrooms to grab onto for support.....:)

First Aid in the Water

If a seizure occurs while a person is in the water,follow these procedures.

•*While in the water*

•*Turn the person face up.*

•*Support the face out of the water.*

•*Tilt head back to keep airway clear.*

•*Get the person out of the water as soon as possible.*

•*Once out of the water*

•*Place person on their side.*

•*Check to see if person is breathing.*

•*If the person is not breathing,begin resuscitation promptly.*

Call an ambulance immediately.This is essential.
•After the emergency
Ensure that the person has a medical check-up promptly.(Inhaling or swallowing water may cause medical problems.)

Why do people with epilepsy often have memory problems?

Your memory process can be interfered with by epileptic seizures. Or an

underlying disorder in the brain,which causes the seizures,may be what is disrupting the memory process. It may be the effects of your anti-epileptic medication. Or it may not actually be a memory problem at all.

How can seizures cause memory problems?

Memory is a natural brain process that requires continuing attention and recording by parts of the brain. Seizures interfere with memory by interfering with attention or input of information. Confusion often follows a seizure,and during this foggy time new memory traces are not being laid down in the brain. Tonic-clonic (grand mal) seizures in which you lose consciousness can interfere with normal brain processes and disrupt the registration phase of short-term memory. Sometimes longer term memories from the period prior to the seizure are lost as well,as these memories may have not yet being fully integrated into the brain's memory system. If a seizure is very severe and prolonged (status epilepticus) and you experience hypoxia (insufficient oxygen to the brain),this can cause secondary damage to your memory system.

What else can cause memory problems?

An underlying brain tumour or lesion can disrupt the memory process. Or if the focus of your seizures is located deep in the temporal lobe of your brain near some of the parts that are important for memory (e.g. the hippocampus),this may be causing your problem. Some people with epilepsy have unusual electrical activity in their brains between seizures~what is known as "inter-ictal" or "sub-clinical" activity. This can interfere with attention and also,probably, with memory. Or perhaps you are experiencing a cognitive problem (e.g. an attention problem,language problem,or a visual/spatial problem) and not a true memory problem. Perhaps the problem is emotional and not memory-based,brought on by anxiety in certain situations or by depression. Your ability to recall may be interrupted by your mood or by sleep disturbances.

Can anti-epileptic medication cause memory problems?

Anti-epileptic medications may affect your thinking and memory,but on the other hand, they may control your seizures,and having lots of seizures can lead to more memory loss. Discuss the side-effects of your medication with

your neurologist. Do not stop taking your medication on your own.

Are all memory problems the same?

No. Learn more about your specific memory problem. Do you have memory lapses following a seizure? Do you have fluctuations in your memory,where it is better some times more than others? Are the fluctuations related to stress,or to certain kinds of tasks or situations?

For example,is your memory worse when you are in a particular place or with a particular person? Many kinds of memory problems are stress-related. Can you remember things if you are given a prompt or cue? Do you have a better memory for pictures (visual type memory) than words (verbal type). Memory is lots of different processes. Learn which ones you rely on in order to maximize your strengths and accept your limitations.

What are the processes of memory?

There are many different ways to classify how memory works. Some people rely more on their verbal memory,remembering in terms of words or sounds,whereas others use their visual memory,relying on pictures or spatial relationships. Which process works best for you? There is semantic memory,referring to knowledge-based memory of a particular topic,like the history of World War I,for example. This differs from episodic memory,or memory of a particular event,such as an outing you were on last week. Most of us have heard of short-term (or working) memory vs. long-term memory,which really refers to the memory of things in the recent past. Getting the information into our memory is called the encoding and then the consolidation process,and the separate process of getting it out again is called retrieval. Some people have a problem getting information into their memory in the first place,whereas others find the retrieval challenging,and may just need a cue or prompt before they are able to retrieve a memory. Start to notice which memory processes are working well for you so you can play to your strengths and minimize your weakness.

Do my emotions play a role in my memory problems?

Try to learn more about how you operate. There may be situations that are important to you where your memory problems keep interfering,but there

are other situations of less value to you when it should be less of an issue. What are the demands on you and what do you do? You may be making your problem worse by being mad at yourself when you can't remember something. If you make a memory mistake,don't fight it and impair your cognitive skills further,just move on. Trying harder usually won't help you remember. An emotional attitude of acceptance and accommodation is more beneficial to memory than self-defeating behaviours or thoughts. Chances are your memory problem is not going to go away,so keep your expectations reasonable and look at ways to work around the problem.

What are the most common everyday memory problems?

According to one survey of the five most common memory problems,first is being unable to come up with a word that we feel is "on the tip of our tongue",apparently because of a verbal memory processing problem. Second is having to go back to check to see if something was done,such as turning off the stove,probably reflecting a failure to pay adequate attention at the time. Third is forgetting where we put something, probably a visual-spatial memory process problem. Forgetting the name of someone or thing is fourth,apparently a verbal memory malfunction. Not remembering what has been said or been told is another. The types of problems people have vary,and how serious a nuisance the problems are varies from person to person as well.

Do memory problems ever improve over time?

If your memory problem is the product of a newly acquired brain injury,you may have a period of spontaneous recovery as the brain cells reorganize during the period right after your injury. However,if more than a couple of years have elapsed since a brain injury,significant change is not expected, and after two or three years all the recovery will likely be completed. If your memory problem is rooted in something that happened 20 years ago,a natural recovery is unlikely at this point. Accepting that there is no "cure" for such memory problems is important. But strategies can still help you work around the problem.

Can memory be improved through mental exercises?

Staying mentally active is a good thing, but it won't really help your memory

problem. Research has shown that playing memory games or doing exercises to sharpen your memory doesn't help your memory in general. Memory is not a muscle: exercising it doesn't work. What is more useful is developing techniques and strategies to help you cope with your memory problem.

What can I do to live better with a memory problem?

Memory coping is about good memory habits,developing a healthy "memory diet" (like the four food groups). Improved results can occur if you allow the type of memory that works best for you to compensate for another type; for example,using pictures to help you remember if your visual memory is stronger. Use consistency,and control what you can to make remembering easier.

Telling other trusted people that you have a memory problem is an excellent technique-they can help by cueing you. Just saying, "I tend to forget that,I would appreciate it if you would give me a reminder" can make all the difference in the world. Don't be afraid to rely on others. Recognize that your mood and stress can contribute to memory problems. Keep your expectations for yourself reasonable. And be flexible in your approach to fit the memory demands on your memory.

What are some good memory habits?
"Accept (that one) cannot...cure
•use remaining capacities
•pay more attention
•spend more time
•repeat
•make associations
•organize
•link input and retrieval"

What are some formal strategies for helping the memory process itself?

The memory process consists of getting the information in,keeping it in,and then getting it out again. You can actively work on getting the information in-encoding it-by simply paying close attention to the specific things you want or need to remember. Many people have problems remembering the

name of someone new because at the time,they aren't really paying attention to the name itself. Distractions get in the way of really attending to new information,so cut out distractions wherever possible. Repeating or rehearsing the information-saying it more than once-- will help encode it. Elaborating on it, exaggerating it,organizing it,or associating it with something else meaningful to you are other ways we increase its impact on our memory processes.

For instance,you may take someone's name and make up a whole outrageous picture or elaborate association with something else it reminds you of. These techniques help our brain to process the information on more than one level and to make more connections. Research shows that the memory trace is stronger if it has more connections in the brain---the information will simply stick better. Chunking or breaking down information---a telephone number,for example-- into smaller,easier to remember "chunks" is another strategy for more effectively encoding material.

How can I take control of my memory problem?

Acknowledge that you have a memory problem. Presume that you will have a memory problem tomorrow. You have got this,so live with it as best you can. Don't set yourself up for defeat. If you think that you are likely to forget something,don't test yourself to see if you do. Instead,do what you can to reduce the number of things you have to remember. You can restructure your environment so you don't have to use your memory as often. Use external aids to help you. For instance,if you want to remember to take something with you when you go out, put it by the door when you think of it so you don't have to remember it later. Put signs and labels on things so you don't have to remember them. Take control of your world. Who cares if you don't get everybody's name right?.....

What other external aids can I use?

Write things down in a diary,notebook, calendar or list so you don't have to remember it again. Or record them on a portable tape recorder or dictaphone while you are thinking of them. Employ sensory cues to remind yourself to do something: a beeper,alarm watch,or simply tie a string around your finger (as long as that cue is specific enough for what you have

to remember!). Technology can be a great help with new devices like electronic organizers, watches that record phone numbers and the new Neuropage system that tells you when to take your medications, etc.

How can I enjoy reading books when I forget what I've just read?

This can be a challenge. Try reading out loud to help you pay closer attention to what you are reading. Or use a highlighter to visually exaggerate certain key phrases as you read. Or try taking notes as you go along. Translating what you have just read into your own words can help commit it to memory. Make a special point of including it in a conversation soon after you've read it. Exaggerate it to strengthen the memory trace.

What hints can you give someone with memory problems?

Memory coping is about good habits and working around the problem. Try to relax: stress may make your memory worse. Be flexible: different types of information may require different memory methods. Be committed,motivated: paying more attention takes effort. Try again if one method fails, things may not turn out as you planned. Try not to dwell on all the things from the past that you wish you could remember. Pay attention to what is going on now so you can make some new memories. Look ahead,not behind. And... celebrate your memory successes!!

What happens when you go to sleep?

When you fall asleep,you don't actually stay in the same state all night long. You,in fact, cycle through a series of three states: dreaming sleep,non-dreaming sleep,and wakefulness. Dreaming sleep is when your mind is very active but your body is in a deep sleep state. During dreaming sleep, you have no tone in your muscles so you are unable to move and act out your dreams. If you are awakened from dreaming sleep, alertness returns relatively briskly. Non-dreaming or slow wave sleep itself has four stages,from the light stage we go into just as we're falling asleep,to the fourth stage of very deep sleep. In stage four,your brain waves on an electroencephalogram or EEG monitor would look very slow and synchronized (or regular),which is why it's called slow-wave sleep. In normal sleep you also have 5-7 short periods of wakefulness per

night,although you don't remember waking up.

What is a normal sleep pattern?

The deep stages of slow-wave sleep mostly occur in the first half of the night,whereas dreaming sleep occurs periodically but mainly in the second half of the night. You have arousals or periods where you briefly wake up,all night long. So you will have more deep,slow wave sleep at the beginning of the night,and then you have an arousal and then you might have some less deep sleep,an arousal,and then less deep sleep, and so on. You will have 6-9 cycles throughout the night.

How do sleep patterns change as we age?

Babies nap frequently throughout the day and spend 50% of their sleep time dreaming. Infants and children also have a lot of refreshing and restoring slow-wave sleep and that's where the expression "sleeping like babes " comes from. After the age of five,children stop sleeping in the daytime and consolidate their sleep at night. Teenagers are a sleepy bunch because they have a relatively high need for sleep while their lifestyle does not allow them to get the sleep they require. Adults spend only 20% of their sleep dreaming. As adults age they have less slow-wave sleep,but they also have less need for sleep overall.

What is the relationship between sleep and epilepsy?

From ancient times,scientists have noticed that a lot of seizures in people with epilepsy happen at night. Sleep and seizures are common bedfellows. Sleep tends to promote seizures. Sleep deprivation does too. That is why if you have an awake EEG test and it doesn't show evidence of epilepsy,your neurologist will often do a sleep-deprived EEG. It may bring out abnormalities that aren't seen in the awake state.

How can sleeping affect epilepsy?

During non-dreaming sleep,your brain produces the slow brain waves that form a very synchronized (or regular) electrical pattern on the EEG. This synchronized pattern of non-dreaming sleep is conducive to the production

of epileptic discharges, which are the firing together of too many neurons in a synchronized burst of abnormal electrical activity. These epileptic discharges may not be sustained enough to cause a change in behaviour or movement that is a full seizure. They may instead be brief inter-ictal (meaning `between-seizure´) discharges. In dreaming sleep,you don´t get seizures. You also don´t get very many epileptic discharges.

How common is having seizures during sleep or upon awakening?

Forty-five percent of people with epilepsy have a form of sleep epilepsy,whereas 34% have seizures upon awakening and 21% have diffuse seizures (while both awake and asleep).

Do people get different kinds of seizures in their sleep?

Yes,although partial seizures are more common during the day than at night. People with either Juvenile Myoclonic Epilepsy or Absence Epilepsy will often have seizures just after waking or 1 or 2 hours after awakening. Tonic-clonic (grand mal) seizures usually occur either right after you go to bed during slow wave sleep,or right after you wake up. People who have this pattern usually have a good prognosis and may not develop seizures when they're awake. But seizures which are caused by a scar,lesion or brain abnormality in the frontal lobe of the brain are often hard to control. Seizures that come both night and day--while the person is awake and when they are asleep--can be the most difficult to control.

How does having epilepsy affect your sleep pattern?

There are a number of different ways your sleep can be impacted by your seizure disorder. When you have epilepsy,there can be a decrease in dreaming sleep. There can be a tendency to wake up after falling asleep rather that just sleeping through the night. An increase in the instability of the sleep state--with more cycles and a less consolidated or smooth sleep-is a possibility which might in turn lead to some daytime fatigue. Or an increase in the lighter stages of slow wave sleep and less of the deeper and more restful stages can also cause daytime sleepiness. There can be less of the sleep spindles that are a part of the normal slow wave sleep. It may take you longer to fall asleep if you have epilepsy. Not everyone with epilepsy has

all these changes. Whether or not you will experience any of these sleep problems depends on the seizure type,what is causing the seizure, what medications you ace on and how well controlled your seizures are.

Can epilepsy lead to a sleep disorder?

The changes to the normal sleep pattern that can happen with epilepsy described above are unlikely to be permanent. But people with epilepsy can also have sleep disorders that are separate from their epilepsy. For example,you can also have a sleep disorder like sleep apnea where you have pauses in your breathing at night, restless leg syndrome where you kick a lot at night,sleep walking,or sleep terrors (more likely in children).

What is a sleep disorder?

There are three things that can happen: hypersomnia (or being too sleepy),insomnia (where you have trouble falling asleep),or parasomnia (when something unusual happens during your sleep). Unusual events like night terrors,sleep walking,sleep talking and bed-wetting are what we mean by parasomnia. They occur upon a sudden arousal to wakefulness from stage 3 or 4 of slow-wave deep sleep,when you're half awake but still half asleep.

How can we distinguish epilepsy from a sleep disorder?

Sleep disorders may resemble seizures, making night time episodes sometimes confusing to diagnose. Even when we are sure the person has epilepsy,it's sometimes hard to tell the difference between nocturnal seizures and a sleep disorder. Physicians look for clues. Is there a family history of sleep disorder? What do the nocturnal events look like and when in the sleep cycle do they occur? Do they cause daytime fatigue?

Night terror,other parasomnia or seizure?

It's sometimes hard to tell the difference between a nocturnal seizure and a parasomnia such as a night terror, bedwetting,sleep talking or sleep walking. A night terror usually consists of a child sitting up in bed,not

knowing where they are, suddenly starting to scream or call out, looking around,bewildered,half awake and half asleep. A seizure,on the other hand, typically involves difficulty breathing,some clonic or rhythmic jerking activity,an inability to talk,and the person may bite their tongue or hurt themselves in some way. Another clue might be the timing of the event. A parasomnia will often be in the first third of the sleep whereas a seizure can happen at any time throughout the night,but often just before or after waking in the early hours of the morning.

Sleepiness or epilepsy?

One category of sleep disorder is hypersomnia-being too sleepy. Is this sleepiness because of epilepsy or because of something else? Sleepiness can indeed be caused by having a lot of seizures which are waking you up and disrupting your sleep,or it can be part of the disruption to the normal sleep pattern caused by having epilepsy which was described above.

Sleep apnea or epilepsy?

Sleep apnea includes pauses in breathing, indicated by gasping,snoring or difficulty in breathing during the night. It is more common in men than in women,and often occurs in larger people whose throat muscles and fat tissue cause an obstruction while they're sleeping. These pauses in breathing can easily be confused with seizures. In fact,having apnea can trigger seizures. Having seizures can also trigger apnea; it can work either way.

Insomnia or epilepsy?

If you have trouble falling asleep or are awakened throughout the night,and if your insomnia isn't due to any medical or psychological problems or a genetic predisposition,it could be seizures that are causing the arousals.

Sleep starts or epilepsy?

Everyone's muscles jerk as they fall asleep. These are called sleep starts or myoclonic jerks. While they are often mistaken for seizures,in fact,they are a normal part of fallng asleep.

Nightmares or epilepsy?

Some seizures can be confused with nightmares. However,it is uncommon to have nightmares starting in adulthood. People who wake up thinking there's something crawling on them,or who are cold or sweating can be having a type of autonomic seizure.

When should an overnight sleep study be done at a sleep clinic?

Sleep studies can be helpful in differentiating an epileptic from a non-epileptic nighttime event. They are used to diagnose sleep disorders that may be mistaken for epilepsy, for example,sleep apnea. They are used to investigate patients complaining of excessive daytime sleepiness that cannot be explained by their anti-convulsant medication. And finally,an overnight sleep study is used to document sleep disturbances and sleep architecture in people with epilepsy,which may be causing chronic sleep deprivation,and in turn,more seizures. This is so that proper treatment can be started. During a sleep study in a sleep lab,the patient's brainwaves, breathing,muscle tone and eye movements are monitored and the patient is videotaped during sleep.

Would an inadequate or restless sleep cause daytime seizures?

Yes. Increased seizure-related activity during sleep may lead to sleep deprivation, which may,in turn,increase daytime seizures.

Can a person with epilepsy take sleeping pills to help them sleep?

There is no absolute contra-indication to taking a sedative if you have epilepsy,but you need to check with your doctor before taking these pills. People with breathing problems at night should not take sedatives. Insomnia is very difficult to cure and people develop a tolerance to sedative hypnotic drugs after taking them for a short while. There is no drug that you can take on a long-term basis that will put you to sleep and let you feel quite rested during the day. That is why a behavioural approach is recommended.

How can I improve my sleep?

Avoid stimulating activity like (computers or parties) just before the sleep

period. Do not get into bed until you are drowsy. Get up at the same time each morning,including weekend mornings. In general,adults do not need naps,however elderly people and some people on medication for epilepsy may need naps during the day.

•Exercise regularly but avoid strenuous exercise after 6 p.m.

•A light carbohydrate snack (e.g. crackers and milk) may promote sleep.

•Sleep environment should be cool, with minimal light and noise.

•Curtail or eliminate the use of alcohol; no alcohol less than 2 hours before bedtime.
•Curtail or eliminate the use of caffeine; no consumption of caffeine after 4 p.m.

•Curtail or eliminate the use of nicotinel do not smoke within 4 hours of retiring.

** Julius Caesar (Roman Ruler)*

** Napoleon-French military leader*

** Molieve*

**Ludwig van Beethoven*

** Michelangelo Buonarroti*

** Gustave Flaubert (French novelist)*

** Edward Lear (English painter and poet)*

**Mohammed the prophet*

**Blaise Pascal (FrenchScientist,philosopher, and mathematician)*

**Algernon Charles Swinburne (English poet)*

** Alfred Nobel (founder of the Nobel prize awards)*

** Neil Young (rock musician)*

** Charles Dickins*

** Hector Berlioz (French composer)*

** Saint Paul the Apostle*

** Mike Nolan (singer with Buck's Fizz)*

** Tony Grieg (cricketer)*

** Richard Jobson (model,presenter,singer with 'The Skids')*

** Jonty Rhodes (cricketer)*

** Tony Coelho (former congressman,author of the American Disabilities Act and Chair of the President's Committee on Employment of People with*

Disabilities)

** Max Clifford (publicist)*

** Margaret McEleney (Won seven medals in 1996 Paralympic Games)*

**Socrates(Philosopher)*

** Agatha Christie*

** Leo tolstoy*

**Soren Kierkegaard*

** Queen Boadicea*

**Leonardo da Vinci*

** Sister Wendy Beckett (art expert)*

** Percy bysshe Shelly*

** Clare Gorham (writer and TV presenter)*

** Ian Curtis (singer with Joy Division)*

** Doug Wert (golfer)*

* *Martha Curtis (concert violinist,public speaker)*

* *George Gordon lord byron*

* *Reginald Bosanquet (newsreader)*

* *Elizabeth Clare Prophet (spiritual leader)*

* *William Pitt (politician)*

* *Rodney King and Reginald Denny (LA riots)*

* *James Madison-Fourth US President (constitution)*

* *Alan Blinston (marathon runner)*

* *Tony Lazzeri (baseball)*

* *Neil Abercrombie (congressman)*

* *Jonathan Swift*

* *Danny Glover (actor)*

* *Gary Howatt (hockey player)*

**Dante Aligheniri*

** Bud (William A.) Abbott - half of the comedy team Abbott and Costello*

** Alexander the Great - King of Macedonia,tutored by Aristotle*

** Aristotle - Ancient Greek philosopher, scientist and physician*

** Grover Alexander - Baseball player (1887-1950)*

** Joseph Conrad - Polish Nationalist*

** Emile Dionne - One of the Dionne Quintuplets*

** Dostoyevsky - 19th century writer*

** Albert Einstein - Scientist and scholar*

** George Inness - 19th century impressionist painter*

** Lewis Carroll - 19th century writer, authored "Alice's Adventures in Wonderland"*

** Sir Isaac Newton - 17th century physicist who discovered gravity*

••Joan of Arc - French heroine

** Florence Griffith Joyner - Olympic runner*

** Margaux Hemingway - Actress and granddaughter of famed writer Ernest Hemingway*

** Niccolo Paganini - 18th century Italian violinist*

** Edgar Allen Poe - 19th century author and poet,authored "The Raven"*

** Pythagoras - Ancient Greek philosopher and mathematician*

** Alfred Lord Tennyson - 19th century poet, authored "Ulysses"*

** Harriet Tubman - Began the underground railroad for slaves during the American Civil War*

** Vincent Van Gogh*

** William III - King of Great Britain from 1689-1702*

•George Frederick Handel

•Robert Schumann

•Peter Tchaikovsky

•Professor Manning Clarke

•*Truman Capote*

• *Sir. Richard F. Burton*

•*Elton John*

•*Hugo Weaving*

•*Kerry Armstrong*

•*Milton Cockburn (Sydney Olympics Media Manager)*

* *Guy de Maupassant(french author)*

* *Sir Walter Scott (literary figure)*

* *Michael Wilding (Actor)*

**Vachel Lindsay*

**Richard Hayes*

**Nathaniel Bone*

**Rik Mayall*

**Patrick Dempsey*

**Alen Orman*

**Tom Smith*

**Charles V of Spain*

**Louis XIII of France*

**Paul I of Russia*

**Peter the Great*

**Martin Luther King Jr.*

**William Morris (Actor,Artists,Musician)*

**Alan Blinston (British Marathon runner)*

**Hannibal (Carthaginian)*

**Tim Considne (Actor)*

**Hal Lanier (Baseball player)*

**Lindsay Buckingham-Fleetwood Mac*

**Buddha*

**Bob Jones-76'ers (basketball)*

**Buddy Bell-Pro baseball player/Manager*

**R.D. Blackmore (1825-1900) author of Lorna Doone*

**Rabbi Lionel Blue*

**Laurie Lee*

**Herakles Greek God*

Anti-epileptic drugs (AEDs) are the medications used in the treatment of epilepsy.
They are potent medications that act on the brain to prevent/control seizures. The drugs do not cure epilepsy; they improve seizure control and thereby enhance the quality of life for the majority of people with epilepsy.

The selection of effective AED therapy is aided by an accurate diagnosis of seizure type's and, if possible,epilepsy syndrome as not all AEDs are effective in the treatment of all types of epilepsy; some may even worsen a person's seizure disorder.
Many people with epilepsy are successfully treated with one AED. This is called monotherapy. Some people have seizure types/syndromes less responsive to AED therapy and may require two or more drugs - a process called polytherapy.
After an AED is taken orally,it is absorbed from the intestines and passes into the blood stream. The blood transports the drug to the brain where it acts to prevent seizures.

The amount of an AED in the blood,and hence the brain,is not constant. The level varies with the rate of absorption of the drug from the gut,its distribution to different parts of the body,its metabolism (i.e. breakdown to inactive components) and its excretion.
With continuous medication a 'steady state' situation is eventually reached in which the fluctuation in the blood levels of the drug is relatively small since its rate of absorption is balanced by its rate of metabolism and excretion.
For successful treatment,the aim is to produce steady state blood levels of the AED that are in the therapeutic range i.e. levels that will suppress seizures.

If drug dosage is too low,the steady state levels that are reached will not be sufficient to produce seizure control in most people.
If drug dosage is too high,the control of seizures may be accompanied by side effects such as sleepiness,unsteadiness, tremor,nausea and vomiting,double vision or learning difficulties. These side effects are dose-related and will disappear when the dosage is reduced.
It is very important to follow the doctor's instructions about medication in order to achieve the optimal level of the AED in the blood. Levels of some AEDs in the blood are often monitored to aid this process.
Some trial and error is inevitable when determining the best treatment program for an individual,since people differ in the way that their bodies handle drugs. In addition,one drug may alter the absorption, metabolism or excretion of another and hence alter the steady state blood levels that are attained. For this reason doctors should be made aware of all the medication (AED or other) that a person is taking and any over-the-counter medications should be discussed with the pharmacist.
About 75 per cent of people with epilepsy will achieve good seizure control with AED therapy. About 25 per cent do not respond well to AED therapy but some may be offered other treatments such as surgery.

HOW BEST TO RECORD SEIZURES

Keeping a record of seizures is important.
Few doctors ever see their patients having a seizure and they rely heavily on the account of an observer - parent,partner,relative,friend or colleague,in

making a diagnosis. There are many different types of seizures,and a precise diagnosis is easier to make if a clear description of the seizures is available. In addition,after diagnosis the doctor will welcome an on-going record of seizures detailing their frequency,and any changes that may occur in the pattern of the seizures or in the seizure type.
Such information will help the doctor in prescribing appropriate treatment. If you are caring for a person who has epilepsy you will need to know what to look for. You may miss important details if you do not understand their relevance. Parents may soon grow to recognise the features of epilepsy in their child. Others, such as care staff may look after a number of people with epilepsy who are all affected differently. To ensure consistency of information in such instances it may be advisable to develop a standard form of recording seizures.

SEIZURE STAGES

There may be several stages in a seizure and each should be carefully observed and recorded.

Build up and onset

This may last for several days in the form of a build-up of tension,or for only a few minutes. In some instances an 'aura' or warning (a partial seizure) consisting of odd sensations such as an unpleasant smell,tingling feeling or 'butterflies' in the stomach may precede a major convulsive seizure.

The seizure
This may be one of many types. Each seizure is individual to the person who has it.

The period after the seizure
Recovery may be immediate or may take a few hours. On rare occasions effects may last for as long as a few days, particularly in the case of an elderly person. After major convulsive seizures there is often confusion and drowsiness and sometimes unsteady gait, headache, or slurred speech.

What was the date of the seizure?

What was the exact time of day?

What was the person doing at the time?

Had the person just fallen asleep, or woken up?

What called your attention to the seizure (a cry, fall, stare, head-turn)?

Did the seizure progress slowly or quickly?

How long did each stage of the seizure last?

What parts of the body were affected?

Was one side affected more than the other?

Did the body become stiff?

Did it jerk, twitch or go into convulsions?

Was the person unconscious?

If not, was there any alteration in awareness?

Did the skin show changes (flushed, clammy, signs of blueness)?

Did the breathing change?

Did the person talk or perform any actions during the seizure?

Was the person incontinent of bladder or bowel?

Did the person vomit during the seizure?

Did any injuries result from the seizure?

How did the person behave after the seizure (alert, drowsy, confused)?

After recovery did the person remember any unusual sensations before or at

the onset of the seizure?

How long did the person take to recover completely?

If the person takes medication, when was the last dose before the seizure?

Anything else associated with the seizure you think the doctor should know? If you can answer all these questions you will provide a very full picture of the person's epilepsy. A complete account such as this can be very useful at the onset of epilepsy or at times of change (e.g. a change in medication, or a change in the pattern of seizures). At other times it may only be necessary to keep a summarised record:

Date

Time of Day

How long seizure lasted

Description of seizure and other information to be discussed with the doctor

Learning to foresee safety risks:

If you have seizures, you can protect yourself from injuries by learning to recognise potential dangers at home and at work,in fact anywhere you go. Where possible,you can adapt your environment to reduce safety risks. When this is not possible,learning to foresee safety risks will allow you to make informed choices,balancing the need for safety against your right to independence and participation

The bathroom Identifying the risks
Water in the bathroom poses two risks during a seizure: drowning and scalds.

Occasionally,bathing in very hot water can bring on a seizure.Many of the materials used in your bathroom-tiles,glass,mirrors, metal and porcelain-are hard and may be sharp and breakable.Most bathrooms are unable to be unlocked from the outside.

Improving safety General

Leave the bathroom door unlocked so that people can get in to assist you if necessary.
If privacy is a concern devise another system to achieve this.If possible,take showers or baths when other people are at home.A thermostat can be fitted to most hot water services to control the temperature of hot water from the tap which is often unnecessarily hot.For safety,water should not be more than 50 degrees Centigrade.
Safety hot water taps can be fitted.These taps have to be pushed in before they can be turned.

The Shower

Run the cold water first.Fit your shower with good quality shatter proof glass.A glazier can discuss the options available.A shower curtain makes a good alternative.Remove sharp edges from within the shower recess.

The Bath

Have a shallow bath.Use a non-slip mat in the bath.Unplug all electrical appliances as soon as you have finished with them and make sure they are off the floor.Consider this tip.Use some string to tie the bath plug to your toe.It is likely that you would pull the plug out during a seizure and let out the water.

The toilet Identifying the risks
Seizures within this confined space can cause injuries and can make it

difficult for people to reach you.

Improving safety Leave the door unlocked and devise another system to ensure your privacy.Replace an inward opening door with a sliding or outward opening door.

The kitchen Identifying the risks
Hot liquids,open flames or hot elements and electrical appliances are the main risks in the kitchen.

Improving safety Use the back elements of the stove rather than the front ones.Turn saucepan handles to the back of the stove. Consider buying a stove guard which fits around the top of the stove and lessens the chance of saucepans being pulled over.
Avoid open topped jugs and consider buying a kettle with an automatic switch off.
Consider buying a microwave oven because they do not use heat to cook and so reduce your exposure to danger.

The living room Identifying the risks
Open fires,heaters,the sharp edges of furniture and expanses of window glass all pose some risk in the event of a seizure.

Improving safety Place guards securely in front of fires and heaters. Avoid radiators that have no guards and, if you are buying a new heater,consider the fan type or a bar heater that can be fixed high on the wall.
Place furniture in front of glass windows.
Consider oval rather than square tables and furniture without sharp corners.

The bedroom Identifying the risks
Bedhead and bedside tables can contribute to injuries during a seizure, as can a fall from the bed.

Improving safety Move bedside tables away from the bed and try to reduce

hard or sharp surfaces in the bedroom.If possible,use a bed without a bedhead.If you are concerned about your pillow,consider sleeping without it or buy a porous pillow that allows as much air as possible to pass through it.If falling out of bed is a problem,consider sleeping in a hammock instead of a bed.

Medications Identifying the risks Taking the wrong medication or the wrong dose can be dangerous,as can using the medication after the use by date. Other people,especially children,are in danger if they take your medication accidentally.

Improving Safety Keep your medications in their original containers.Ensure that the containers are clearly labelled.Take medication that is out of date to the chemist to be discarded safely.Be aware that accidental poisoning occurs more often when the household is disrupted (for example when children are visiting you or you are on holidays or moving house).

Helmets Identifying the risks
If you have frequent seizures you may choose to wear a helmet to help protect your forehead,chin and head from injury. However,some helmets can get hot and uncomfortable and if they are not fitted properly,they may not give you enough protection.

Improving Safety Ask for assistance when you are choosing a helmet to make sure the helmet is the right size for you.As well as protection,consider ventilation,comfort, washability and appearance.Helmets are available from sports stores and orthotic appliance centres.You may choose to have one custom made to your requirements.

General safety

Follow the normal rules of road safety such as using the walking lights when you are crossing the road.Consider wearing identification information such as a bracelet or necklace stating your name,address and medical condition

Adjusting to Epilepsy

For many people,receiving an initial diagnosis of epilepsy is an unsettling time. You may respond to the news with all sorts of emotions including disbelief,anger and depression.Ideally,you can reach a point where epilepsy becomes an aspect of everyday life and not the dominating influence but this adjustment may take time.

There are a range of skills and techniques that can help you to adjust. However,it takes motivation to act on these suggestions and not everyone is at the stage where they can do this on their own. Most of us have times when we feel low and feel that we cannot find the resources to help ourselves. Don't try to deal with it yourself if you feel this way. There are many avenues for support and assistance including the trained counsellors,your doctor and other professionals such as psychologists and social workers.You may also benefit from talking to someone else who has epilepsy.

Understand your epilepsy

Understanding your epilepsy will help put the issue into perspective and dispel initial misconceptions. You are also likely to gain the best control of seizures if you are fully informed about the type and particular patterns of your epilepsy.Being well informed is likely to give you confidence in talking to others about your epilepsy such as health professionals,colleagues,friends and family.Books and videos that explain epilepsy and its treatment.

Talking with your doctor

Good communication is a vital aspect of good medical treatment, enabling you to form a partnership with your doctor and PLEASE take an active role in the treatment of your epilepsy. Being satisfied with the way your epilepsy is being treated medically and taking responsibility for day to day management,means you are contributing to your state of well being as well as gaining a sense of control.You can develop good communication with your doctor by reading and learning about the type of epilepsy you have and

discussing any questions with your doctor. In particular,you may want to discuss medications,their side effects,and factors which might trigger seizures.
If you find that you are still having difficulty in communicating with your doctor,try to tell your doctor about this concern. If you cannot resolve these difficulties, consider changing doctors.

Being open
Choosing the right time and place to tell people about your epilepsy is a sensitive issue. However,if and when you do choose to speak,you are more likely to be relaxed and confident if you are well informed yourself.You may even influence other peoples attitudes and responses by the way you talk about epilepsy with them. Your own openness may help to reduce the stigma associated with epilepsy, by showing people that you are not embarrassed or ashamed. You can help people to better understand epilepsy and show them how to assist you during a seizure.
However,ultimately,you cannot be responsible for other people's behaviour. Getting your epilepsy out in the open is simply a weight off your mind,relieving you of some stress and anxiety.
Being open with people,especially those close to you,can help all concerned to deal with problems when they arise which is likely to increase your sense of control over your life.

Positive self-talk

Your attitude to epilepsy will influence your emotions and behaviour. It is possible to learn to substitute positive thoughts for negative thoughts. For example rather than saying to yourself I am going to have seizure try saying to yourself I'm not going to have a seizure. The mind is a very powerful tool. Some people find that positive thinking can actually prevent seizures.
Too often, it is our negative experiences which colour our view of the past. Instead of focusing on all the times you have had seizures, think of all the times you haven't and you are likely to find that seizures constitute a small part of your life. It's often a matter of putting things into a more realistic perspective. worrying about having a seizure in a certain situation is actually wasted energy because the seizure may not even occur.
It may also be helpful to deal with negative thoughts by saying to yourself, If

it does happen it's not the end of the world,I'll continue to be a worthwhile person.

Explore your options

Epilepsy can lead to lifestyle restrictions for some people. Being unable to drive is a common example. However, for most people with epilepsy the restrictions are few and the choices in life are broad.
Enjoyment and meaning in life are often gained through participation,pursuit of interests and relationships. Think about your options and who can help you make them a reality. Try to enrich your life by doing things you are interested in,things that satisfy you, that give you a sense of accomplishment and a sense of meaning as an individual. Epilepsy is likely to become a less important issue as you become more absorbed in positive,fulfilling aspects of your life.
Discover your own way of coping
Everyone has a different way of coping. Try to capitalize on your own strengths and abilities. Explore what makes you feel good about yourself. Ask yourself, When do I feel good and what am I doing to make myself feel good?. When you have identified these things,and do them regularly you may develop a more positive outlook making epilepsy less significant.

Some ideas for things to do include learning relaxation techniques, playing sports, developing a hobby, joining a support group or learning something new. Getting involved can be difficult,so start with something small which will help you gain confidence to take the next step.

Congratulate yourself

Every time you take a positive step towards adjusting to epilepsy, remember to acknowledge the courage and determination you have shown. If you have a day when you feel overwhelmed by the changes in your life, try to be kind and patient with yourself. When you are feeling down, it may be encouraging to look at all that you have achieved and congratulate yourself.

Glossary

***absence seizures—the type of seizure seen in absence epilepsy,in which the person experiences a momentary loss in consciousness. The person may stare into space for several seconds and may have some twitching or jerking of muscles.**

***ACTH (adrenocorticotropic hormone)—a substance that can be used to treat infantile spasms.**

***Arteriovenous Malformation- A tangle of arteries and veins which can cause headaches,seizures,or bleeding in the brain.Often requires surgery.**

***atonic seizures—seizures which cause a sudden loss of muscle tone,also called drop attacks.**

***auras—unusual sensations or movements that warn of an impending, more severe seizure. These auras are actually simple partial seizures in which the person maintains consciousness.**

***Ataxia-A type of clumsiness,often the result of too much medication.**

***automatisms—strange,repetitious behaviors that occur during a seizure. Automatisms may include blinks,twitches,mouth movements,or even walking in a circle.**

***benign epilepsy syndrome—epilepsy syndromes that do not seem to impair cognitive function or development.**

***benign infantile encephalopathy—a type of epilepsy syndrome that occurs in infants. It is considered benign because it does not seem to**

impair cognitive functions or development.

***benign neonatal convulsions—a type of epilepsy syndrome in newborns that does not seem to impair cognitive functions or development.**

***Benign Rolandic Epilepsy- Accounts for almost 25 percent of seizures appearing in children from age 5 to 14. Not always treated with medication,because seizures typically outgrown by adolescence.**

***biofeedback—a strategy in which individuals learn to control their own brain waves or other normally involuntary functions. This is an experimental treatment for epilepsy.**

***Catamenial- Related to a woman's monthly period.**

***celiac disease—an intolerance to wheat gluten in foods that can lead to seizures and other symptoms.**

***clonic seizures—seizures that cause repeated jerking movements of muscles on both sides of the body.**

***complex partial seizures—seizures in which only one part of the brain is affected,but the person has a change in or loss of consciousness.**

***convulsions—seizures accompanied by involuntary jerking movements.**

***corpus callosum-The white matter that connects the two hemispheres of the brain A corpus callosotomy is an operation in which a part of all of this structure is cut,disconnecting the two hemispheres. This surgery is typically reserved for patients with intractable generalized**

epilepsy,such as the Lennox-Gastaut sydrome.

***CT (computed tomography)—a type of brain scan that reveals the structure of the brain.**

***Deja Vu- A psychic seizure that produces a false sense of familiarity,as if life is repecting itself.**

***Depth Electrode- A special electrode placed inside the brain through a small hole in the skull to locate a seizure focus.**

***drop attacks—seizures that cause sudden falls; another term for atonic seizures.**

***dysplasia—areas of misplaced or abnormally formed neurons in the brain.**

***early myoclonic encephalopathy—a type of epilepsy syndrome that usually includes neurological and developmental problems.**

***eclampsia—a life-threatening condition that can develop in pregnant women. Its symptoms include sudden elevations of blood pressure and seizures.**

***Electrode-A small metal contact attached to a wire designed to record brain waves from the scalp or inside the brain.**

***electroencephalogram (EEG)—a test which uses electrodes to record brain waves.**

***Encephalitis- An inflammation in the brain caused by infection.May be**

accompanied by seizures and result in epilepsy later in lfe.

***Epilepsia Partialis Continua- A rare seizure type that consists of repeated jerking lasting long periods of time.Often seen in Rasmussen's encephalities.**

***Epileptic Focus- The site in the brain where a seizure begins.**

***Epileptologist- A neurologist with special training who trests patients with epilepsy.**

***epilepsy syndromes—disorders with a specific set of symptoms that include epilepsy.**

***excitatory neurotransmitters—nerve signaling chemicals that increase activity in neurons.**

***febrile seizures—seizures in infants and children that are associated with a high fever.**

***frontal lobe epilepsy—a type of epilepsy that originates in the frontal lobe of the brain. It usually involves a cluster of short seizures with a sudden onset and termination.**

***functional MRI ((functional magnetic resonance imaging)—a type of brain scan that can be used to monitor the brain's activity and to detect abnormalities in how it works.**

***GABA ((gamma-aminobutyric acid)—an inhibitory neurotransmitter that plays a role in some types of epilepsy.**

***generalized seizures—seizures that result from abnormal neuronal activity in many parts of the brain. These seizures may cause loss of consciousness,falls,or massive muscle spasms.**

***glia—cells that regulate concentrations of chemicals that affect neuron signaling and perform other important functions in the brain.**

***glutamate—an excitatory neurotransmitter that may play a role in some types of epilepsy.**

***grand mal seizures—an older term for tonic-clonic seizures.**

***grid-An array of electrodes placed on the brain to locate a seizure focus or map speech.**

***Hemispherectomy- A type of epilepsy surgery in which one of the hemispheres of the brain is removed or dissconnected.**

***hemispheres—the right and left halves of the brain.**

***hippocampus—a brain structure important for memory and learning.**

***idiopathic epilepsy—epilepsy with an unknown cause.**

***infantile spasms—clusters of seizures that usually begin before the age of 6 months. During these seizures the infant may bend and cry out.**

***inhibitory neurotransmitters—nerve signaling chemicals that decrease activity in neurons.**

***intractable epilepsy—epilepsy in which a person continues to**

experience seizures even with the best available treatment.

***Intractable-Refers to seizures that cannot be stopped by medication.**

***ion channels—molecular "gates" that control the flow of ions in and out of cells and regulate neuron signaling.**

***juvenile myoclonic epilepsy—a type of epilepsy that usually begins in childhood or adolescence and is characterized by sudden myoclonic jerks.**

***kindling—a phenomenon in which a small change in neuronal activity,if it is repeated, may eventually lead to full-blown epilepsy.**

***LaFora disease—a severe,progressive form of epilepsy that begins in childhood and has been linked to a gene that helps to break down carbohydrates.**

***Lennox-Gastaut syndrome—a type of epilepsy that begins in childhood and usually causes several different kinds of seizures.**

***lesion—a damaged or dysfunctional part of the brain or other parts of the body.**

***lesionectomy—removal of a specific brain lesion.**

***Liver Function Test Abnormality- An elevation of liver enzymes,which can be caused by antiepileptic medications. This is a common finding on blood tests and not a cause of concern unless the levels is very high**

***lobectomy—removal of a lobe of the brain.**

***Magnetic Resonance Angiography- A magenetic scan of the blood vessels of the brain.Does not require any contrast material (dye)**

***magnetic resonance spectroscopy (MRS)—a type of brain scan that can detect abnormalities in the brain's biochemical processes.**

***magnetoencephalogram (MEG)—a diagnostic recording technique that detects the magnetic signals generated by neurons to allow doctors to monitor brain activity at different points in the brain over time, revealing different brain functions.**
metabolized—broken down or otherwise transformed by the body.

***Meningitis-An Inflammation of the coverings of the brain**

***monotherapy—treatment with only one antiepileptic drug.**

***MRI (magnetic resonance imaging)—a type of brain scan that reveals the structure of the brain; see also functional MRI.**

***multiple sub-pial transection—a type of operation in which surgeons make a series of cuts in the brain that are designed to prevent seizures from spreading into other parts of the brain while leaving the person's normal abilities intact.**

***mutation—an abnormality in a gene.**

***myoclonic seizures—seizures that cause sudden jerks or twitches,especially in the upper body,arms,or legs.**

***near-infrared spectroscopy—a technique that can detect oxygen levels in brain tissue.**

***neurocysticercosis—a parasitic infection of the brain that can cause seizures.**

***Neuron- A nerve cell.Billions of neurons interact to make up a working brain.Epileptic discharges are produced when groups of neurons misfire.**

***neurotransmitters—nerve signaling chemicals.**

***nonconvulsive—any type of seizure that does not include violent muscle contractions.**

***nonepileptic events—any phenomena that look like seizures but which do no include seizure activity in the brain. Nonepileptic events may include psychogenic seizures or symptoms of medical disorders such as sleep disorders,Tourette syndrome,or cardiac arrhythmia.**

***Nystagmus- Bouncing eye movements, often the result of medication toxicity.**

***occipital lobe epilepsy—epilepsy with seizures that originate in the occipital lobe of the brain. It usually begins with visual hallucinations,rapid eye blinking or other eye-related symptoms.**

***parietal lobe epilepsy—epilepsy that originates in the parietal lobe of the brain. The symptoms of parietal lobe epilepsy closely resemble those of temporal lobe epilepsy or other syndromes.**

***Partial complex seizure- A seizure that begins in a specific location in**

the brain and alters consciousness,causing confusion,seizures that occur in just one part of the brain.

***Partial Simple seizure- A seizure that begins in a specfic location in the brain but does not alter consciousness.It may produce an abnormal sensation,such as an unpleasant smell,or a motor movement,such as jerking of an arm.**

***PET (positron emission tomography)—a type of brain scan that can be used to monitor the brain's activity and detect abnormalities in how it works.**

***petit mal seizures—an older term for absence seizures.**

***photosensitive epilepsy—epilepsy with seizures triggered by flickering or flashing lights. It also may be called photic epilepsy or photogenic epilepsy.**

***Polytherapy- Treatment with multiple drugs.**

***Postictal- The period immediately after a seizure.**

***prednisone—a drug that can be used to treat infantile spasms.**

***progressive epilepsy syndromes—epilepsy syndromes in which seizures and/or the person's cognitive or motor abilities get worse.**

***progressive myoclonus epilepsy—a type of epilepsy that has been linked to an abnormality in the gene that codes for a protein called cystatin B. This protein regulates enzymes that break down other proteins.**

***pseudoseizure—another term for a non-epileptic event.**

***psychogenic seizure—a type of non-epileptic event that is caused by psychological factors.**

***psychomotor epilepsy—another term for partial seizures,especially seizures of the temporal lobe. The term psychomotor refers to the unusual sensations,emotions,and behavior seen with these seizures.**

***Ramsay Hunt syndrome type II—a type of rare and severe progressive epilepsy that usually begins in early adulthood.**

***Rasmussen's encephalitis—a progressive type of epilepsy in which the focus of epileptic activity expands over time. This type of epilepsy is sometimes treated with hemispherectomy.**

***seizure focus—an area of the brain where seizures originate.**

***seizure threshold—a term that refers to a person's susceptibility to seizures.**

***seizure triggers—phenomena that trigger seizures in some people. Seizure triggers do not cause epilepsy but can lead to first seizures or cause breakthrough seizures in people who otherwise experience good seizure control with their medication.**

***simple partial seizures—seizures that affect only one part of the brain. People experiencing simple partial seizures remain conscious but may experience unusual feelings or sensations.**

***SPECT (single photon emission computed tomography)—A scan that**

uses an ijection of a radioactive tracer to measure blood flow in the brain.Typically two SPECT scans are done, one during a seizure and one in between seizures.SPECT scans can help identify a seizure focus in preparation for surgery.

***status epilepticus—a potentially life-threatening condition in which seizures are prolonged or recur before the person can regain consciousness.**

***stereotyped—similar every time. In epilepsy this refers to the symptoms an individual person has,and the progression of those symptoms.**

***sudden unexplained death—death that occurs suddenly for no discernible reason. Epilepsy increases the risk of sudden explained death about two-fold.**

***temporal lobe epilepsy—the most common epilepsy syndrome with partial seizures.**

***temporal lobe resection—a type of surgery for temporal lobe epilepsy in which all or part of the affected temporal lobe of the brain is removed.**

***Todd's paralysis- A temporary weakness of arm,leg,or other body part after a seizure.**

***tonic seizures—seizures that cause stiffening of muscles of the body,generally those in the back,legs,and arms.**

***tonic-clonic seizures—seizures that cause a mixture of symptoms,including loss of consciousness,stiffening of the body,and repeated jerks of the arms and legs. In the past these seizures were**

sometimes referred to as grand mal seizures.

***Toxcitiy-An undersirable effect of medication such as drowsiness,dizziness, trouble walking,or diffculty concentrating.**

***transcranial magnetic stimulation (TMS)—a procedure which uses a strong magnet held outside the head to influence brain activity. This is an experimental treatment for seizures**

***Tuberous Sclerosis- An inherited disorder,typically with mental retardation, abnormalities of the brain,shin,and other organs,and seizures.Half of these patients will have infantile spasms.**

***Vagal Stimulator- An experimental device designed to control seizures,similar to a cardiac pacemaker,but with the electrode attached to the vague nerve in the neck.**

***West Sydrome-A type of epilepsy in infants characterized by abrupt spasms of the body that usually occur in clusters,mental retardation,ad a recognizable pattern on the electroencephalograph called hypsarrhy thmia.**

COMMON MYTHS ASSOCIATED WITH EPILEPSY

*Myth:*You can swallow your tongue during a seizure.*

*Facts:*It's physically impossible to swallow your tongue.*

*Myth:*You should force something into the mouth of someone having a seizure.*

*Facts:*Absolutely NOT!! That's a good way to chip teeth,puncture gums,or even break someone's jaw. The correct first aid is simple. Just gently roll the person on one side and put something soft under his head to protect him from getting injured.*

*Myth:*You should restrain someone having a seizure.*

*Facts:*NEVER use restraint! The seizure will run its course and you can not stop it.*

*Myth:*Epilepsy is contagious.*

*Facts:*About as contagious as a gunshot wound! You simply can't catch epilepsy from another person.*

*Myth:*Only kids get epilepsy.*

*Facts:*Epilepsy happens to people over age 65 almost as often as it does to children aged ten and under. Seizures in the elderly are often the after effect of other health problems like stroke and heart disease.*

*Myth:*People with epilepsy are disabled and can't work.*

*Facts:*People with the condition have the same range of abilities and intelligence as the rest of society. Some have severe seizures and cannot work; others are successful and productive in challenging careers.*

*Myth:*People with epilepsy shouldn't be in jobs of responsibility and stress.*

*Facts:*People with seizure disorders are found in all walks of life and at all levels in business, government,the arts and the professions. We aren't always aware of them because many people,even today,do not talk about having epilepsy for fear of what others might think.*

*Myth:*With today's medication,epilepsy is largely a solved problem.*

*Facts:*Epilepsy is a chronic medical problem that for many people can be successfully treated. Unfortunately,treatment doesn't work for everyone and*

there's a critical need for more research.

*Myth:*Epilepsy is rare and there aren't many people who have it.*

*Facts:*There are more than twice as many people with epilepsy in Canada as the number of people with cerebral palsy (55,000), muscular dystrophy (28,000),*
multiple sclerosis (39,000),
and cystic fibrosis (3,400) combined. Epilepsy can occur as a single condition, or may accompany other conditions affecting the brain,such as cerebral palsy, mental retardation,autism,Alzheimer's,and traumatic brain injury.

*Myth:*You can't die from epilepsy.*

*Facts:*Epilepsy still can be a very serious condition and individuals do die of it. Experts estimate that prolonged seizures (status epilepticus) are the cause of 2,400 to 4,600 deaths in Canada each year. In a major study of status epilepticus, 42% of deaths occurred in individuals with a history of epilepsy.*

*Myth:*You can't tell what a person might do during a seizure.*

*Facts:*Seizures commonly take a characteristic form and the individual will do much the same thing during each episode. His behaviour may be inappropriate for the time and place,but it is unlikely to cause harm to anyone.*

*Myth:*People with epilepsy are physically limited in what they can do.*

*Facts:*In most cases,epilepsy isn't a barrier to physical achievement,although some individuals are more severely affected and may be limited in what they can do.*

*Myth:*Epilepsy is a psychological condition.*

*Fact:*Epilepsy is a medical condition. Seizures are the result of an excessive and disorderly discharge of electrical energy in the brain.*

Another myth is that epileptics are in some way brain-damaged.This is just RIDICULOUS!!!.
In fact,many eplipetics are exceedingly intelligent. You can go to my page listing famous people to see what I mean!...

Possibly the biggest myth of all is that you can help a person "snap out of" a seizure. This is a completely false notion. It will NOT help to shake the person,call their name or employ similar techniques. The most that you can do is to help make them as safe and comfortable as possible.

We epileptic's are NOT contagious and we are NOT "crazy" people either....

~What Everyone Should Know~...

•Epilepsy is not a disease. It is a symptom of a disorder of the central nervous system.

•Epilepsy has no single "cause" but can be caused by any number of conditions that injure or affect the brain. Many causes can be prevented; some can be cured.

•Epilepsy can affect anyone, at any age,at any time.

•Epilepsy has many forms ranging from violent convulsions to momentary lapses of attention.

•Epilepsy is an episodic disability.For most, seizures are brief and infrequent.Between seizures, most people with epilepsy are perfectly normal and healthy.

•Epilepsy, for most,can be treated,thus permitting many individuals to lead normal lives.

•Epilepsy can carry with it a host of psychological and social problems -- misunderstanding and rejection by family and friends,inability to get a job,insecurity, anger,frustration -- that for most victims are more difficult to handle than the actual seizure problem itself. "Please remember that for

many,it is not the disorder,but society's reaction to it that causes the disability"...Seizures nor Epilepsy in NO way a funny matter it's very difficult to deal with in many many way's for the idividual as well as family,friends. Please if you ever see someone having a seizure don't leave them alone you can simply help them by making sure their safe & out of harms way you could very well save his/her life in doing that..

Is it a good idea to keep epilepsy a secret from others?

Absolutely NOT!! I've dealt with epi for a long time now an being a lil kid/teenager was not always the easiest thing dealing with family as well as friends,teachers etc. who would reacted in a certain way believe me secrecy it's NOT the answer..
Secrecy used to be the preferred approach with epilepsy,because there was a great deal of public fear and official discrimination toward those with the disorder.But as doctors became more knowledgeable about epilepsy and as families and organizations worked to win rights for those with the disorder,public and offical attitudes have begun to change.There is still too much public misunderstanding,but that is partly because not enough people are willing to talk openly about epilepsy and educate others...
Secrecy not only prevents public understanding,but also contributes to a negative self-image.A teenager who is told to hide something about himself is probably
going to feel quilty and or ashamed. This may lead to avoiding others for fear of being found out. A better approach is to consider epilepsy as just one way a person can be different. Epilepsy is an unfortunate difference,but one that is shared by others,many of whom have overcome it to lead active,happy lives...
The decision about who and when to tell should be arrived at mutually by the teenager and parents.(if in school) The right of every individual to privacy must be weighed against a bad decision based on fear and ignorance..And each person must decide how to tell others about epilepsy. School officials,teachers,and coaches should definitely be told,and the parents and teenager please!!! meet with them to discuss how medications and seizures should be handled..Some epileptics will show no effects from medications and may never have a seizure at school. Of course,there will always be those who will make fun of us be mean to a person who has seizures or any other visible difference. There is little that can be done about

this,understand that they are not the type of people you would want to be friends with take it from someone that knows personally how it is to lose someone you care & love so dearly I lost two of my best friends of 12 years because of epi, and some family members as well..
No it wasn't the easiest thing to do in walking out of the friendships most certainly I know it was the best thing for me and has made me a stonger person..
(couldn't deal anymore with the case of the FAKE people so i stopped)
Often times If they see that the person handles epilepsy confidently and with courage,they will probably admire him/her. it's not the epilepsy itself that causes the disorder"it's society", the way a person with epilepsy are treated it's often times very difficult to go through we all have to let go!!! Believe & Trust in god!
Remember what I said before don't laugh and point fingers because,just as your laughing may very well be you one day!