**Plano Independent School District**

**School Health**

**Seizure Management Administrative Guideline**

**Purpose**

A seizure is a sudden disruption of the brain's normal electrical activity accompanied by altered consciousness and/or other neurological and behavioral manifestations. Epilepsy or a seizure disorder is a chronic condition that is characterized by recurrent seizures. If the electrical disturbance is limited to only one area of the brain, then the result is a partial seizure. If the electrical disturbance affects the entire brain, the result is a generalized seizure. Many students have more than one seizure type and may exhibit other symptoms as well. Some students continue to experience seizures despite medical treatment. Acute prolonged or repetitive seizures are detrimental to a student’s health.

Seizures can be caused by head injuries, brain tumors, lead poisoning, maldevelopment of the brain, genetic, infectious illnesses, low blood sugar and fevers. In fully half of the patients with seizures, no cause can yet be found.

**Definitions**

**Seizure Types and Symptoms**

Based on the type of behavior and brain activity, seizures are divided into two broad categories: generalized and partial (also called local or focal). Generalized seizures are produced by electrical impulses from throughout the entire brain; whereas partial seizures are produced (at least initially) by electrical impulses in a relatively small part of the brain. The part of the brain generating the seizures is sometimes called the focus.

**Generalized Seizures**

* **Tonic-Clonic or Grand Mal** – most common and dramatic. The student loses consciousness and usually collapses. The loss of consciousness is followed by generalized body stiffening (called the “tonic” phase of the seizure) for 30 to 60 seconds, then by violent jerking (the “clonic” phase) for 30 to 60 seconds, after which the patient goes into a deep sleep (the “post-ictal” or after-seizure phase). During grand-mal seizures, injuries and accidents may occur, such as tongue biting and urinary incontinence.
* **Absence or Petit Mal** – cause a short loss of consciousness (just a few seconds) with few or no symptoms. This most often occurs in children and causes an interruption in activity and they will blankly stare. These seizures begin and end abruptly and may occur several times a day. Students are usually not aware that they are having a seizure, except that they may be aware of “losing time”.
* **Myoclonic** – consist of sporadic jerks, usually on both sides of the body. When violent, these seizures may result in dropping or involuntarily throwing objects.
* **Clonic** – repetitive, rhythmic jerks that involve both sides of the body at the same time
* **Tonic** – characterized by stiffening of the muscles.
* **Atonic** – consist of a sudden and general loss of muscle tone, particularly in the arms and legs, which often results in a fall.

**Partial Seizures**

Partial seizures are divided into simple, complex and those that evolve into secondary generalized seizures. The difference between simple and complex seizures is that during simple partial seizures, students retain awareness; during complex partial seizures, they lose awareness.

* **Simple partial seizures** are further subdivided into four categories according to the nature of their symptoms: motor, autonomic, sensory, or psychological.

1. Motor symptoms include movements such as jerking and stiffening.
2. Sensory symptoms caused by seizures involve unusual sensations affecting any of the five senses (vision, hearing, smell, taste, or touch). When simple partial seizures cause sensory symptoms only (and not motor symptoms), they are called “auras”.
3. Autonomic symptoms affect the autonomic nervous system, which is the group of nerves that control the functions of our organs, like the heart, stomach, bladder, intestines. Therefore autonomic symptoms may include a racing heartbeat, stomach upset, diarrhea, and loss of bladder control. The only common autonomic symptom is a peculiar sensation in the stomach that is experienced by some students with a type of epilepsy called temporal lobe epilepsy.
4. Psychological symptoms are characterized by various experiences involving memory (the sensation of deja-vu), emotions (such as fear of pleasure), or other complex psychological phenomena.

* **Complex partial seizures** include impairment of awareness. Students seem to be “out of touch,” “out of it,” or “staring into space” during these seizures. There may also be some “complex” symptoms called automatisms. Automatisms consist of involuntary but coordinated movements that tend to be purposeless and repetitive. Common automatisms include lip smacking, chewing, fidgeting, and walking.
* The third kind of partial seizure is one that begins as a focal seizure and evolves into a generalized seizure. Most students with partial seizures have simple partial, complex partial, and secondarily generalized seizures.

**Program Coordinator**

Coordinator for District Health

Special Education Nurse Case Manager

**Responsibilities**

* Coordinates with Plano ISD principals and/or building manager and school nurses in the selection of employees for training.
* Assure quality improvement by revising this guideline as required through the monitoring of training.
* Communicate with medical officer on issues related to care.

**Requirements**

Current physician orders/Seizure Action Plan

Consent to communicate with health care provider

Development of IHP by RN

Parental consent for care of student

Supplies provided by parent

**Suggested Personnel and Training**

Basic skills checklists will be used for competency based training in appropriate techniques and problem management. District procedures and checklists outline specific steps to be taken. Once the procedures have been mastered, the completed checklists serve as a documentation of training.

**Training**

Registered nurse is the person responsible for training.

Unlicensed personnel may be trained by an RN.

Training is done yearly and as needed throughout the year.

Protocol, procedure, problem list, health care practitioner orders and parent request are to be reviewed prior to training and throughout the year for review.

Individual Health Care Plan is completed by the nurse.

Competency checklist must be signed and dated yearly and periodically throughout the year as needed for verification of skills.

Information is shared with other employees on a need to know basis.

**Seizure Management Procedural Guidelines**

1. Remain calm. No one can stop a seizure once it starts. Time the seizure.
2. Have an adult stay and monitor the student throughout the seizure. Place student on their side facing you. If possible, put something flat and soft (like a folded blanket or jacket) under student’s head so the student cannot bang against the floor.
3. If a student is in his/her wheelchair:

* Secure wheelchair to prevent movement
* Fasten seatbelt (loosely) to prevent student from falling from wheelchair
* Protect and support head
* Ensure breathing is unobstructed and allow secretions to flow from mouth
* Pad wheelchair to prevent injuries to limbs

1. Do not place anything in the student’s mouth.
2. Loosen tight clothing, especially around the student’s neck.
3. Do not attempt to restrain student.
4. Do not give the student any oral medications or anything to drink during a seizure.
5. Document all of the student’s activity during the seizure on the Seizure Observation Record.
6. Follow Seizure Action Plan/IHP for student.

**Rectal Diazepam Administration Procedural Guideline**

**(Diastat® or Diastat® AcuDial™)**

**Purpose**

Rectal diazepam is used to control clusters of seizures and/or prolonged seizures. It is similar to other benzodiazepines (Valium), but because it is a rectal gel preparation, it is more convenient for patients who cannot swallow during or after seizures. The most commonly prescribed form is Diastat®, a rectal gel that comes pre-packaged as a quick delivery set in a syringe with a flexible, molded tip. Rectal diazepam is an emergency intervention drug used in controlling or stopping status epilepticus or other seizures as directed by a physician.

**Staff Training and Preparation**

Rectal diazepam may be administered by the school nurse, or other staff person who has had training in seizure management, medication administration, and rectal diazepam administration. Training should cover the student’s specific health care needs, potential problems, and how to obtain assistance should problems occur.

**Procedural Guidelines**

1. Check doctor’s orders, IHP, PISD guidelines, and parent consent. Rectal diazepam orders must include the following information:

* Duration and type of seizure activity before rectal diazepam is administered.
* Exact dose of the drug.
* When to call 911 if seizure continues after medication administration.

1. Use Universal Precautions.
2. Gather medication and supplies (Diastat®, lubricating jelly, and gloves). Be sure that the correct dose is visible on the syringe and the green “ready” band is visible.
3. Put on gloves.
4. Remove the protective covering from the syringe by pushing up with your thumb and pulling to remove cap. Be sure seal pin is removed with cap.
5. Lubricate the rectal tip of the syringe lubricating jelly. The lubricating jelly should be in the Diastat® kit.
6. Turn the student on his or her side facing you and pull down clothing to expose the buttocks.
7. Bend the upper leg forward to expose the rectum. If possible have another staff member available to assist. Maintain student’s privacy as much as possible.
8. Separate buttocks to expose the rectum.
9. Gently insert the syringe tip into the rectum. The rim should be snug against the rectal opening.
10. Slowly count to 3 while gently pushing in the plunger.
11. Slowly count to 3 before removing the syringe.
12. Slowly count to 3 while holding the buttocks together.
13. Keep the student on their side facing you. Note the time the Diastat® was given.
14. Monitor student closely for any signs of respiratory distress, i.e. color change, decrease in respirations, and unresponsiveness.
15. Remove gloves and wash hands when appropriate.
16. Document the seizure and the administration of Diastat®.

Medical Director Signature:

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Physician Signature/PISD Medical Officer