

Chronic Health Conditions Toolkit

For Non-Medical Staff in Schools

Tennessee Department of Education | August 2018

Overview

Chronic health conditions can often cause distress for non-medical staff members within our schools, especially if a nurse is not present part or all of the day.

The guide will provide education and things to look for in several of our most common chronic conditions of Tennessee students.

Each section has its own link so that you can go to the part that you are needing the information on quicker. If you have any questions, please contact your local district's nurse/health supervisor and/or your coordinated school health personnel. You may also contact me at Christie.Watson@tn.gov.

Conditions in this toolkit

- Asthma
- <u>Diabetes</u>
- <u>Seizures</u>
- Severe Allergies
- ADD/ADHD

How asthma friendly is your school building? According to the American Lung Association, asthma accounts for more than 10 million lost school days every year. Asthma continues to be one of the main illness-related reasons that students miss school.

What is asthma?

Asthma is a chronic lung condition that causes difficulty breathing when "triggered." Triggers, also known as allergens and irritants, vary from person-to-person, but the most prevalent ones are:

- **Dust mites** Encourage students to bring their own washable covers for sleeping mats or pillows.
- Pets Cats, dogs, and other furry or feathered animals shed animal dander, which are tiny particles of protein from skin, saliva, and waste that settle in carpets and dust. No breed is truly "allergen free." Discourage allowing animals in the classroom. Accommodations for students with service animals and students with asthma would need to be made in accordance to their prospective 504s in place.

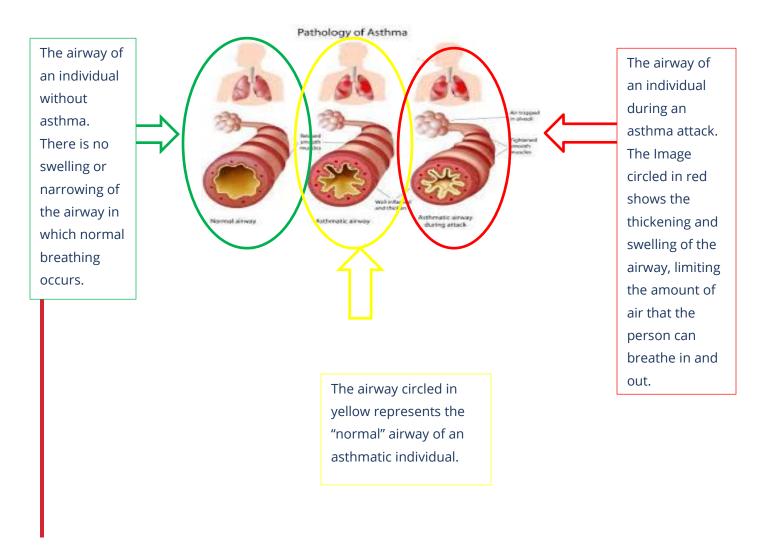
Asthma continues to be one of the main illness-related reasons that students miss school.

- **Mold** Mold grows in damp areas, both indoors and outdoors. Unfortunately, mold is common in some schools, especially if the air conditioner is shut off or the temperature is turned up in the summer months when school is not in session. Books can often be the host of dangerous mold in certain conditions.
- **Cockroaches and rodents** Proper and safe pest control for your buildings are important. Keep all food covered, and it is best if food is kept in plastic bags or plastic tubs.
- **Secondhand smoke** This does not only take into account the actual smoke drifting through the air; this includes the residue that is on the clothing of your staff members and children who live with smokers.
- **Germs and bacteria** Students with asthma are at risk for asthma complications that can lead to death when combined with common illnesses, such as the flu. Encourage influenza vaccine administration of students and staff members in your building. Exercise frequent hand hygiene (i.e., washing with soap and water for 20 seconds or use alcohol-based hand gels). Encourage others to do the same. Cover mouth and nose when sneezing or coughing. Choose to stay home when ill.
- Indoor and outdoor air quality Chemicals; strong odors; and other airborne irritants like lotions, candles, wax melts, cologne, perfume, plug-in air fresheners, aerosolized spray, bleach, and idling vehicles near the school building can affect air quality. The exhaust that buses and some cars/trucks emit in to the air could be detrimental for breathing in individuals with asthma. Opening windows to let in fresh air during warm weather months can allow pollen and other outdoor irritants into the classroom.

- **Exercise** Exercise intensity may need to be adjusted to the current asthma state.
- Strong emotions Some children experience asthma symptoms in response to anxiety, stress, excitement, etc.

What is happening to a student during an asthma attack?

When a student and/or staff member that has asthma encounters a "trigger," the airways in the lungs become irritated and swollen, making breathing difficult. This can happen very quickly after exposure to the trigger.



What You May See When a Student is Having an Asthma Attack

According to the National Heart Lung and Blood Institute, "An asthma attack requires prompt action to stop it from becoming more serious or even life-threatening. Recognizing the signs and symptoms of asthma attacks when they appear, and taking appropriate action in response, is crucial."

Some early signs of an asthma attack:

- Coughing
- Difficulty keeping up with peers on the playground or in physical education classes
- Chest tightening; children may say their chest hurts or they feel short of breath/can't catch their breath
- Throat tightening
- Breathing through the mouth (noticeably); working hard to breathe

If medication has not been provided during the early stage, symptoms will worsen. Stages of an asthma attack could include:

- Wheezing (whistling sound, indicating very narrow airways)
- Shortness of breath, possibly to the point of having trouble speaking (A good rule of thumb is to ask the child to sing a line of their favorite song or repeat a sentence after you. If they can't, call 911.)
- · Rapid, shallow breathing
- Panic/fear
- Skin pulling between the ribs, looks like ribs sink in when inhaling

If the student has had asthma attacks in the past and can recognize the signs and symptoms, you may hear him/her say the following (possibly in short sentences or phrases):

- "My chest hurts" or "my chest feels tight"
- "I can't breathe or "I can't catch my breath"
- "My throat feels itchy"

The American Lung Association has posted, "5 Steps to Follow for an Asthma Episode in the School Setting," which can guide a non-medical individual that is trying to assist a person suffering with an asthma attack.

5 Step to Follow for an Asthma Episode in the School Setting:

- → If a student has excessive coughing, wheezing, shortness of breath, or chest tightness:
 - Help to sit in an upright position; speak calmly and reassuringly
 - Follow individualized action/emergency plan for use for quick-relief inhaler
 - If quick-relief inhaler or action/emergency plan is not available, send to health office accompanied by a peer or with a staff member
 - Get emergency help from school nurse or designated emergency staff if the student has any of these:
 - Inhaler not helping or is not available
 - Breathing hard and fast

- Nostrils open wide
- Can't walk or talk well
- Call 911: If not breathing, unconscious, lips, or fingernails are blue, struggling to breathe (hunched over or ribs show), or having any other signs of distress
- Notify parent or guardian

What do you do when signs/symptoms are present (in any stage)?

- Identify the students that have an asthma diagnosis prior to the beginning of the school year, if possible.
- Make sure that the students that have an asthma diagnosis have an **Asthma Action Plan**, including the healthcare provider's orders for emergency medication (inhaler) and that the quick relief medication is at school.
- Communicate with the school nurse.
- Keep an open line of communication with parents/guardians.
- Meet/Notify the staff that "need to know" about the students diagnosed with asthma. The
 staff that need to know of the medical condition would be those staff members that come in
 contact or may come in contact with the student during the school day.
- Consider policy changes to ensure that students with asthma can attend school safely (avoidance of triggers).

Asthma Action Plan

ARENT/GUARDIAN complete and sign the t	op portion of f		Copies of Plan
ame:	Date of Bi	Date of Birth:	
Grade:		Teacher/Homeroom:	
rent/Guardian:	Secondary	Secondary Contact: ParentOther	
arent Email:		Secondary Contact Phone:	
nt Phone: Other Phone Number:			
Triggers (please circle): Weather (cold air, w	vind) Illness Exercise Smoke Dus	st Pollen Other:	
Life threatening allergies: Specify If there is no quick relief inhaler at school	and the student is experiencing a	sthma symptoms, school staff w	ill:
HEALTH CARE PROVIDER complete a			
GREEN ZONE: Student participation in	activity and need for pretreatmer	nt. No current symptoms.	
Pretreatment for strenuous activity: ☐ I Pretreatment for strenuous activity: ☐ I ☐ Give 2 puffs of quick relief med (Check On ☐ Repeat in 4 hours if needed for additional If student is currently experiencing symptom	Routinely <u>OR</u> □_Upon request - Expla ne): □ Albuterol □ Other:10-15 m l or ongoing physical activity.		
YELLOW ZONE: SICK - UNCONTROLL	ED ASTHMA		
IF YOU SEE THIS:	DO THIS:		
 Trouble breathing Wheezing Frequent cough Complains of chest tightness Not able to do activities but still talking in complete sentences Peak flow between and Other: 	Dose: 2 puffs 4 puffs 3. Call parents/guardians and so 4. Stay with student and mainta 5. Student may go back to norm	in sitting position.	
RED ZONE: EMERGENCY SITUATION -	SEVERE ASTHMA SYMPTOMS		
IF YOU SEE THIS:	DO THIS IMMEDIATELY:		
 Coughs constantly Struggles to breathe Trouble talking (only speaks 3-5 words) Skin of chest and/or neck pull in with breathing Lips or fingernails are gray or blue ↓ Level of consciousness Peak flow < 	Dose: 2 puffs 4 puffs Name Apulfs 2 Call 911 and inform EMS the raction of the second of the	hool nurse. calm. Encourage student to take sl nce first dose and symptoms continued by the state of the stat	ow deep breaths.
INSTRUCTIONS for QUICK RELIEF INHALER U ☐ Student understands the proper use of his independently. ☐ Student is to notify his/her adult at school ☐ Student needs supervision or assistance to	s/her asthma medications and, in my after using inhaler.	· ·	
HEALTH CARE PROVIDER SIGNATURE	PRINT PROVIDER'S NAME	PHONE	DATE

,	,	he request of and as an accommodation to t	0 1		
guardian. I understand that I am responsible for furnishing all medications. The school nurse has permission to communicate with the					
healthcare provider regarding this r	healthcare provider regarding this medication and plan of care including, but not limited to, orders, clarification of orders, etc. I understand				
that the health care provider may d	sclose protected health inf	ormation in consultation with the school nur	ses. All information obtained will		
remain confidential and be available	remain confidential and be available on a need-to-know basis to those individuals who are involved in providing for your child's health and				
educational needs at school. In con-	sideration of the acceptance	e of the request to perform this service by ar	ny person employed by the		
School System, the ur	dersigned parent or guard	ian hereby understands and agrees that the	School System and		
its personnel shall not be liable for	any injury resulting from the	e reasonable and prudent administration of	medication or the reasonable		
performance of health care procedu	res, including the administ	ration of medication. I, the undersigned pare	ent or guardian hereby		
understand and agree that the	and its person	nel shall not be liable for any injury resulting	from the student's self-		
administration of the asthma-reliev	er inhaler, if applicable per	health care provider's selection above, while	on school property or at a		
school-related event or activity unle	ss in cases of wanton or wi	llful misconduct. (T.C.A. § 49-5-415)			
By signing, parent indicates agree	ement with the plan of ac	tion as described by health care provider.			
PARENT SIGNATURE	DATE	SCHOOL NURSE SIGNATURE	DATE		
Call parents/guardians to pick up	student and/or bring inhale	er/medications to school.			

Call parents/guardians to pick up student and/or bring infraier/in
 Inform them that if they cannot get to school, 911 may be called.

Resources for Asthma

- www.cdc.gov/asthma
- www.cdc.gov/asthma/faqs.htm
- www.cdc.gov/healthyschools/asthma/index.htm
- http://www.lung.org/lung-health-and-diseases/lung-disease-lookup/asthma/asthma-education-advocacy/asthma-friendly-schools-initiative/
- http://www.allergyasthmanetwork.org/
- https://www.nhlbi.nih.gov/files/docs/resources/lung/asth-sch.pdf
- https://www.nhlbi.nih.gov/files/docs/public/lung/phy_asth.pdf
- https://www.nhlbi.nih.gov/files/docs/resources/lung/asth act plan frm.pdf
- http://journals.sagepub.com/toc/jsnb/current
- http://www.lung.org/lung-health-and-diseases/lung-disease-lookup/asthma/asthma-education-advocacy/asthma-basics.html
- Christie Watson, BSN, RN
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 Coordinated School Health
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What is diabetes?

According to the Centers for Disease Control and Prevention, CDC, diabetes is a chronic (long-lasting) disease that affects how your body turns food into energy.

Federal law gives students the right to receive the diabetes care they need to be safe and participate in school activities just like any other child.

Schools:

- Provide trained staff to monitor blood glucose levels and administer insulin and glucagon.
- Provide trained staff to provide diabetes care during field trips, extracurricular events and all school-sponsored activities.
- Allow capable students permission to self-manage their diabetes anytime, anywhere.

Schools should not:

- Make family members go to school to care for a student's diabetes.
- Transfer students to a different school to get needed diabetes care.
- Prevent students with diabetes from participating in field trips, sports, and other school-sponsored activities.

Read about your child's rights under Section 504, the Americans with Disabilities Act, and other federal laws.

"Federal law gives students the right to receive the diabetes care they need to be safe and participate in school activities just like any other child."

Basic Types of Diabetes

There are three main types of diabetes: Type 1, Type 2, and gestational diabetes (diabetes while pregnant).

- Type 1: This type of diabetes is when the body attacks itself by mistake and causes it to stop making insulin
- Usually diagnosed in children, teens, and young adults
- Requires insulin every day to survive
- Type 2:
- The body does not use insulin well and is unable to keep blood sugar at normal levels
- Develops over years
- Usually diagnosed in adulthood
- May be able to manage the condition by eating well, exercising, and maintaining a healthy weight
- If the diet alone is unable to manage the blood glucose levels, then oral medications or insulin therapy may be needed
 - Risk Factors:
 - Being overweight
 - Fat distribution

- Inactivity
- Family history
- Race
- Age
- Prediabetes
- Gestational diabetes
- Polycystic ovarian syndrome
- Gestational diabetes:
 - Can develop in pregnant women that have never had diabetes

Type 1 Diabetes:

- Previously called insulin-dependent or juvenile diabetes
- Pancreas is not making insulin or is making very little
- Less common that Type 2
- Schools will need an Individual Health Care Plan on students with this diagnosis

Common causes of low blood sugar:

- Too much medication taken
- Planning to consume a large meal but not actually eating as much as planned
- Skipping meals
- Unplanned excess physical activity without eating enough
- Alcohol can often be credited for making a person feel full, therefore, lowering their food intake and their blood glucose level
- There are also other medical conditions that cause a drop in the student's individualized health care plan

Signs and Symptoms from Blood Sugar Being Too Low – Hypoglycemia

- Shakiness
- Nervousness or anxiety
- Sweating, child, or clamminess
- Irritability or impatience
- Dizziness and difficulty concentrating
- Hunger or nausea
- Blurred vision
- Weakness or fatigue
- Anger, stubbornness, or sadness

Follow the health care plan provided to schools by the parent/guardian and medical provider along with any other medical orders that have been presented regarding the student's medical condition.

Some good options for treating low blood glucose levels when the student is <u>awake and conscious</u> are: granola bars, fresh or dried fruit, fruit juice, glucose tablets, pretzels, or cookies.

Diabetes Health Care Plan

Date of Plan
This plan is valid for the current school year
Student's Name
Date of Birth
Date of Diagnosis: Type 1 Type 2 Other
SchoolGrade
Contact Information
Parent/Guardian Name:
Address
Telephone: () Type: CellHomeWork Email:
Parent/Guardian Name:
Address
Telephone: () Type: Cell Home Work Email:
Additional Contact Relationship to student
Address
Telephone: () Type: Cell Home Work
Email:
Student's Physician/Health Care Provider:
Address:
Telephone:
Email:
Emergency Number:
The student's health care provider will need to complete the information below:
Blood Glucose Monitoring
Target range for blood glucose is 70-150 70-180 other
Scheduled times to check blood glucose:
Times to do extra blood glucose checks (check all that apply)
 Before exercise After exercise When the student exhibits symptoms of hyperglycemia When the student exhibits symptoms of hypoglycemia Other:

Can the student perform his/her own blood glucose checks? Yes No Exceptions:
Type of blood glucose meter student uses
Base Dose of Insulin Humalog/Novalog/Regular (circle type) insulin at lunch is units. Flexible dosing using units/ grams carbohydrate Intermediate/NPH/Lantus/Ultralente (circle one) insulin at lunch is units. Additional comments:
Insulin Correction Doses Should parental authorization be obtained before administering a correction dose for high blood glucose levels? Yes No
Units if blood glucose is to mg/dL
Units if blood glucose is to mg/dL
Units if blood glucose is to mg/dL
Units if blood glucose is to mg/dL
Units if blood glucose is to mg/dL
Units if blood glucose is to mg/dL
Can the student administer his/her own insulin injections? Yes No Can the student calculate the correct amount of insulin? Yes No Can the student draw up the correct dose of insulin? Yes No
(Physician Signature) signifying that parents are authorized to adjust the insulin dosage under the following circumstances:

For Students with Insulin	Pumps			
Type of Pump:		Basal rates:	12am to _	
			12am to _	
			12am to _	
Type of insulin in pump: _				
Type of infusion set:				
	o			
Student Pump Abilities/S	kill			
Count carbohydrates			Yes	No
Bolus carbohydrates			Yes _	
Bolus correct amount for	carbohydrates consumed		Yes _	No
Calculate and administer	corrective bolus		Yes	No
Calculate and set tempora	ary basal rate		Yes	No
Disconnect pump			Yes	
Reconnect pump at infusi			Yes	
Prepare reservoir and tub	ping		Yes	
Insert infusion set	is		Yes _	
Troubleshoot alarms and	manuncuons		Yes	NO
Students Taking Oral Dia	betes Medications			
Medication	Dose	Time of dose		
Meals and Snacks Eaten of Is student independent in	at School n carbohydrate calculations ar	nd management?	Yes	No
<u>Meals/Snacks</u>	Time	Food content/amount		
Breakfast				
Mid-morning snack				
Lunch				
Mid-afternoon snack				
Snack before exercise?				
Snack after exercise?				
Other times to give snack	s and content/amount			
_		lian)		
rielelieu Sliack 1000S (to	be provided by parent/guard	iaii)		

Instructions for when food is provided to the class (class party or food sampling)
Exercise and Sports Fast-acting carbohydrates such as should be available at the site of exercise or sports. These will be provided by the parent/guardian.
Restrictions on activity, if any:
Student should not exercise if blood glucose level is below mg/dL or above mg/dL or mg/dL or if moderate to large ketones are present.
Hypoglycemia (Low Blood Sugar) Usual symptoms of hypoglycemia
Treatment of hypoglycemia
Glucagon should be given if the student is unconscious, having a seizure, to unable to swallow. Route Dosage Site for glucagon injection: arm, thigh,other:
NOTE: IF GLUCAGON IS ADMINISTERED, EMS (911) WILL BE CALLED.
Hyperglycemia (High Blood Sugar) Usual symptoms of hyperglycemia
Treatment of hyperglycemia
Urine should be checked for ketones when blood glucose levels are above mg/dL. Treatment for ketones:

Other physician orders:
Dravidar Nama:
Provider Name: Date:
Provider Signature:
 I give permission to the trained school district staff member(s) that have been designated for care and/or school nurse to perform and carry out the medical orders as outlined in this Diabetes Health Care Plan. I give permission for the trained school district staff member(s) that have been designated for care and/or school nurse to exchange health care information about my child's diabetic condition and the management of the diabetic condition. I am aware that I am expected to keep the trained school staff member(s) that have been designated for care and/or school nurse informed of any changed to my child's medical condition and the care that he/she will need at school. I am aware that the trained school staff members and/or school nurse will keep me informed (telephone or written communications) of eventful occurrences at school regarding my child's medical condition. I am aware that is my responsibility to provide all necessary supplies and snacks that my child needs for monitoring and managing his/her medical condition.
Parent/Guardian Printed Name:
<u>Date</u> :
Parent/Guardian Signature:
Trained school staff member designated for care/school nurse Printed Name:
Date:
Trained school staff member designated for care/school nurse Signature:

Resources for Diabetes

- https://www.diabeteseducator.org/docs/default-source/practice/practice-resources/position-statement_final.pd
- https://www.cdc.gov/diabetes/basics/diabetes.html
- http://www.diabetes.org/living-with-diabetes/parents-and-kids/diabetes-care-at-school/legal-protections/state-laws-and-policies.html?referrer=https://www.google.com/
- http://www.diabetes.org/living-with-diabetes/parents-and-kids/diabetes-care-at-school/
- https://www.cdc.gov/features/diabetesinschool/index.html
- http://www.jdrf.org/
- Christie Watson, BSN, RN
 School Nurse Consultant
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What is a seizure?

According to Johns Hopkins Medical Center, "A seizure is defined as a sudden, electrical discharge in the brain causing alterations in behavior, sensation, or consciousness." For a mental illustration, think of the brain as an electrical circuit board that misfires with the current meeting in the wrong places. This "misfire" can manifest in the different classifications of seizures. The two main categories are Generalized Seizures and Partial Seizures and then many subcategories that the neurologist can diagnose.

Having seizure activity is a neurologic disorder, not a mental illness. You cannot "catch" seizures from another person.

Partial seizure: This type of seizure involves part of the brain being affected by the electrical changes. This type of seizure can often be mistaken as a child not paying attention, staring off in to space, or acting out.

Think of the brain as an electrical circuit board that misfires...

Generalized seizure: This type of seizure can involve the majority of the brain. Other names that may be used to describe this type of seizure can be: Tonic-Clonic, Grand-mal, as well as many other names.

- Generalized seizures can cause:
 - involuntary jerking motions
 - unconsciousness/passing out, waking up feeling confused or sleepy
 - stiffening of the muscles

- bowel/bladder loss
- fall/injury
- screaming or crying out involuntarily
- a severe headache after the seizure

Common Triggers for Seizures

**Keep in mind that not all seizures, symptoms, triggers, and treatment are the same for each student, which is why an Individualized Health Care Plan (IHP) is so important for <u>all students with a chronic health condition, including seizures</u>.

Some of the common triggers for seizures:

- A specific time of day or night
- Missing sleep being overly tired, interrupted sleep patterns, not getting enough sleep
- Illness
- Fever
- Flashing lights or pattern
- Alcohol or drug use
- Stress
- Hormonal changes including menstrual cycles for women
- Not eating well low blood sugar
- Certain food, excess caffeine, or other products that may aggravate a seizure condition
- Use of certain medications

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What should you do if a student has a seizure at school?

- **Stay calm**; most seizures only last a few minutes are not emergencies.
- Try to prevent injury to the person having the seizure by moving any nearby objects out of the way, especially items that are near the head.
- If available, place something soft under the individual's head.
- Gently try to turn them to their side without force or restraint.
- Remove their eyeglasses, if applicable.
- Loosen anything that may be restrictive around their neck, such as jacket strings.
- Pay attention to the length of the seizure. Write down the time that the seizure activity started. Don't trust your judgement of time during a seizure, as three minutes seems like 30 minutes when in the situation.
- Do NOT restrain or try to hold the person down when they are convulsing. They are using an incredible amount of muscles during a Tonic-Clonic seizure, and you may be hurt or hurt them unknowingly.
- Do NOT put anything in the person's mouth! They are physically unable to swallow their tongue as once taught. Putting something in the mouth of a person convulsing can cause damage to their teeth as they may unknowingly clinch down on the object.
- Put nothing into the mouth during a seizure! No water, pills, food, or anything else until the person is completely alert.
- Have someone do "crowd control," as this person deserves the right to privacy. Only staff members that can assist need to be where the seizure activity is occurring.
- Know the circumstances that dictate when 911 should be called (provided in this toolkit).
- Talk to your school nurse when you are notified that a student has or has had seizures about the Individual Health Care Plan (IHP) for further guidance. Does the student have an emergency rescue medication at school? These are things that you need to know before a seizure occurs at school.

When is a seizure an emergency?

Most seizures are not emergencies, but there are times that they can be. First and foremost, follow the student's Individualized Health Care Plan for guidance from the parents/guardians and physician. Call 911 if:

- There is no history of seizure activity or that you have been made aware of.
- The individual is having difficulty breathing or waking up after the seizure activity has stopped.
- The seizure last longer than five minutes or other time dictated by the physician.
- The individual goes in to another seizure shortly after the first one stopped without full recovery.
- The individual is hurt during the seizure generally from a fall, objects that cause injury surrounding the person.
- The seizure occurs in water.
- The individual has a chronic health condition, such as diabetes or heart disease.
- The individual is pregnant.
- You have to administer Diastat to the individual.
- You are unsure what to do or feel the need the call for emergency services.
- The parents request that 911 is called with any seizure activity.

Helpful Tips for Managing Seizures at School

- Make sure that every student with a seizure/epilepsy diagnosis has an Individual Health Care Plan (IHP).
- Read and know the IHP in the event of seizure activity. Follow the steps defined in the plan, including the administration of rescue medications, if applicable.
- Educate teachers and staff about seizure first aid and the possible stigma associated with a seizure disorder diagnosis.
- Communicate with the parents/guardians regarding daily medication adherence. The number one trigger for seizure activity is missed or late medication administration. If the student takes the medication at home, ensure that they are compliant with following physician orders. If the medication is scheduled to be given during school hours, follow the orders without variation.
- Help students avoid seizure triggers, such as flashing lights (e.g., Christmas lighting), or any other triggers that are identified in the student's IHP.
- Depression is common for individuals that suffer from chronic health conditions, including seizures.
- Meet with staff and parents/guardians regarding a 504/IEP for the benefit of the student.

Rescue/Emergency Treatments and Medication

Rescue and emergency medications/treatments are just what the name implies – rescue steps that are done to help the individual that may be in a medical emergency. They are given PRN, which means that they are given "as needed" and following the timing and amount instructions provided by the physician. A few of the treatments will be discussed in this document but do know that it is not all inclusive so always follow the students Individualized Health Care Plan (IHP).

Emergency/Rescue medications:

- Generally start working in the brain quickly providing a way to stop seizures quickly to prevent a medical emergency from occurring.
- May not be an actual medication but instead a magnetic instrument that is swiped over a Vagal Nerve Stimulator (VNS) when a seizure begins. For this to work, the individual would have an implanted VNS. Follow the Individual Health Care Plan for when and how to perform this rescue procedure.
- May be a medication that is used to stop a seizure that is not stopping on its own. This medication should never be substituted for daily medication that has been prescribed to assist in controlling seizure activity.
- May be different for each person so it is important to know each individuals IHP.
- The most common type of emergency medication is a class known as benzodiazepines, often referred to as "Benzos." Benzodiazepines are generally fast acting, which means that they will act quickly once they are in the bloodstream comes in many forms and used for a variety of reasons but in the school setting it is important to know that in the United States, only rectal diazepam gel, commonly known by the brand name of Diastat, has been approved by the Food and Drug Administration (FDA) for out-of-hospital use.**

Resources and Citations

- https://www.epilepsy.com/sites/core/files/atoms/files/tips_seizure_observation_recording.pdf
- https://www.epilepsy.com/sites/core/files/atoms/files/seizure_first_aid_0.pdf
- https://www.epilepsy.com/learn/about-epilepsy-basics/what-seizure
- https://www.hopkinsmedicine.org/neurology-neurosurgery/centers-clinics/epilepsy/seizures/index. html
- https://www.cdc.gov/epilepsy/about/first-aid.htm
- Christie Watson, BSN, RN
 School Nurse Consultant
 Tennessee Department of Education
 Coordinated School Health
 <u>Christie.watson@tn.gov</u>

Seizure Individualized Health Care Plan (IHP) or (IHCP)

School Year:
Student Information:
Name:
Date of Birth:
School Name:
Grade:
Contact Information:
Parent/Guardian Name:
Phone number:()
Additional phone number (if applicable): _ ()
Email address:
Other emergency contact person:
Relationship to student: Phone number: _ ()
Physician Contact Information:
Student's Primary Care Provider:
Primary Care Provider Address:
Primary Care Provider Phone Number: _ ()
Fax Number: ()
Student's Neurologist's Name:
Neurologist Address (Include City and State):
Neurologist Phone Number: ()
Fax Number: ()
Seizure Information:
Significant Medical History or Conditions in addition to seizure activity?

<u>Seizure Type</u> Example: complex partial, simple partial,	Length Example: Normally 1 - 2 minutes, 3 minutes,	Frequency Example: Usually 2x/month,	Description Example: glazed eyes, grinding of teeth,
etc.	etc.	Varies, etc.	convulsions, etc.
re there any warnings a	nd/or behavior changes b	pefore the seizure occurs?	,
hat might trigger a seiz	ure in your child?		

What was your child's last seizure, and what type of seizure was it?
Have there been any changes in the seizure patterns for your child? If yes, please explain the changes. If no changes, write "No."
How does your child act once his/her seizure has concluded?
How do other illnesses affect your child's seizure condition?
Do you keep a log of your child's seizure activity? Yes No
Do you keep a log of rescue/emergency medication administration? (if applicable) Yes No
What is the best way to communicate emergency medication administration that occurs at home with your child's school?

What medication(s) does your child take?

**Physician order required if to be given at school	Dosage	Will this medication be given during school hours?	Frequency and scheduled time	Possible side effects

^{**}Note: If Diastat is administered, emergency medical services will be called.

**Provider order must be provided if this medication is to be given at school	Dosage	Route	When to be administered and care required after the seizure has concluded

By my signature below, I understand and agree that:

- All four pages of this Individualized Health Care Plan (IHP) have been completed by the parent/guardian and/or physician.
- Guidance and orders regarding emergency/rescue medication will require a provider's order to be carried out in the school setting.
- Individualized Health Care Plans will be used in the current school year ONLY.
- New physician orders and IHPs are required to be renewed annually.
- Other documentation may be required for medication administration in the school setting per district policy and state laws.

Parent/Guardian Signature	Date
Parent/Guardian Printed Name	
Physician/Provider Signature	Date
Physician/Provider Printed Name	
 School Nurse Signature	 Date

What is an allergy, allergic reaction, and anaphylaxis?

An **allergy** occurs when a person's immune system mistakes a substance as a dangerous invader and produces antibodies to maintain alertness and attack if needed.

Imagine a castle equipped with a King, Queen, the King's army, etc. The Queen unknowingly mistakes one of the Knights for someone that she heard bad things about so she alerts a small division of the King's army to confront him and make sure he knows that he (and "his kind") isn't wanted in this castle.

Now let's say that the King thinks that this Knight (or a different one) has committed the act of treason. Confirmation of the treacherous man's identity have not yet been confirmed. The king has convinced himself that this is this man and refuses to delay this punishment. He initiates a full blown attack using a strong and relentless division of his army. Their orders are to protect the castle against this traitor at all cost and make sure that no other traitors enter the castle in the future.

The Knight was innocent of all that he was accused, but no one knew.

"Anaphylaxis is the most severe form of an allergic reaction and is a lifethreatening medical emergency."

In this story,

- The King and Queen are the immune system.
- The Knight is the allergen.
- The army is the antibodies.
- The degree of threat was analyzed by the King and Queen (immune system), and an attack was initiated without proof of guilt this is how the immune system acts when it senses that there is a traitor in the mix.
- The actions towards the Queen's knight is a representative of an allergy that causes dry cough, watering eyes, sneezing, etc. Irritating but not a full blown attack such as the king initiated.
- The actions towards the King's knight is a representative of **anaphylaxis**.

Anaphylaxis is the most severe form of an allergic reaction and is a life-threatening medical emergency that can cause death.

Signs and symptoms of anaphylaxis include but are not limited to:

- Loss of consciousness
- A drop in blood pressure
- Severe shortness of breath
- Skin rash/hives
- Lightheadedness/dizziness

- A rapid, weak pulse
- Nausea and vomiting
- Swelling
- Wheezing
- Abdominal pain

What are some substances in our schools that can cause a student to have an allergic reaction with possible anaphylaxis?

Some common substances that can cause an allergic reaction and/or anaphylaxis:

- **Airborne** aerosol sprays (scented and unscented), air fresheners, chemicals such as cleaning supplies, pollen, animal dander, dust mites, mold, wax melts, candles, perfume, cologne, lotions
- Certain foods peanuts, tree nuts, wheat, soy, fish, shellfish, eggs, and milk
- Insect stings such as from a bee or wasp
- **Medications** –penicillin, aspirin, ibuprofen, etc.
- Latex or other substances you touch

The student's Individualized Health Care Plan will have the allergens that cause problems for them listed and the steps of action if an exposure occurs.

Emergency Medication and Training in Schools

Epinephrine is the treatment of choice and the first drug administered for an acute anaphylaxis episode. The administration of this medication could be the difference between life and death for a student in an emergency.

Many students that are at risk for anaphylaxis will have an order for an Epi-Pen to be administered if a reaction is suspected.

For some students, the allergy can be undiagnosed and/or can happen for the first time at school. For this reason, Tennessee law, **TCA §68-140-502**, has allowed districts to obtain a standing order – an order written by a health care provider for a medication (Epinephrine) to be used on <u>any</u> student that is suspected to be suffering from an anaphylactic event.

- At least two Epi-Pens may be stored in secure, unlocked locations within each school building.
- Teachers, cafeteria workers, aides, secretaries, etc. may all <u>volunteer</u> to be trained by a registered nurse within the district.
- The staff members will be able to recognize the signs and symptoms of allergic and/or anaphylaxis reaction.
- The medication/anaphylaxis training needs to be completed and documented annually for the staff members that volunteer.
- Instruct the class on how to administer an Epi-Pen, as well as practice doing so with a medication casing, minus the needle and medication this is known as an Epi-Pen Trainer.

The American Academy of Pediatrics has developed an Allergy and Anaphylaxis Emergency Plan for students within the school that may require it. A copy of this plan is located within this toolkit.

Allergy and Anaphylaxis Emergency Plan



Child's name: Date	of plan: Attach		
Date of birth:/Age Weight:	kg child's photo		
Child has allergy to			
Child has asthma.			
For Severe Allergy and Anaphylaxis What to look for	Give epinephrine! What to do		
If child has ANY of these severe symptoms after eating the food or having a sting, give epinephrine. Shortness of breath, wheezing, or coughing Skin color is pale or has a bluish color Weak pulse Fainting or dizziness Tight or hoarse throat Trouble breathing or swallowing Swelling of lips or tongue that bother breathing Vomiting or diarrhea (if severe or combined with other symptoms) Many hives or redness over body Feeling of "doom," confusion, altered consciousness, or agitation	Inject epinephrine right away! Note time when epinephrine was given. Call 911. Ask for ambulance with epinephrine. Tell rescue squad when epinephrine was given. Stay with child and: Call parents and child's doctor. Give a second dose of epinephrine, if symptoms get worse, continue, or do not get better in 5 minutes. Keep child lying on back. If the child vomits or has trouble breathing, keep child lying on his or her side. Give other medicine, if prescribed. Do not use other		
□ SPECIAL SITUATION: If this box is checked, child has an extremely severe allergy to an insect sting or the following food(s): . Even if child has MILD symptoms after a sting or eating these foods, give epinephrine.	Give other medicine, it prescribed. Do not use other medicine in place of epinephrine. Antihistamine Inhaler/bronchodilator		
For Mild Allergic Reaction What to look for If child has had any mild symptoms, monitor child. Symptoms may include: • Itchy nose, sneezing, itchy mouth • A few hives • Mild stomach nausea or discomfort	Monitor child What to do Stay with child and: • Watch child closely. • Give antihistamine (if prescribed). • Call parents and child's doctor. • If symptoms of severe allergy/anaphylaxis develop, use epinephrine. (See "For Severe Allergy and Anaphylaxis.")		
Medicines/Doses Epinephrine, intramuscular (list type): Dose: □ 0.15 mg □ 0.30 mg (weight more than 25 kg) Antihistamine, by mouth (type and dose): Other (for example, inhaler/bronchodilator if child has asthma):			
Parent/Guardian Authorization Signature Date Physician/HCP Authorization Signature Date			
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of talking with your child's doctor. Page 1 of 2.

Allergy and Anaphylaxis Emergency Plan



Child's name:	_Date of plan:
Additional Instructions:	
Contacts	
Call 911 / Rescue squad: ()	
Doctor:	Phone: ()
Parent/Guardian:	Phone: ()
Parent/Guardian:	Phone: ()
Other Emergency Contacts	
Name/Relationship:	Phone: ()
Name/Relationship:	Phone: ()

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Resources and Links

To download a sample Allergy and Anaphylaxis Emergency Plan, visit the American Academy of Pediatrics web page at:

- http://pediatrics.aappublications.org/content/early/2017/02/09/peds.2016-4005
- https://www.cdc.gov/healthcommunication/toolstemplates/entertainmented/tips/Allergies.html
- https://www.foodallergy.org/life-food-allergies/anaphylaxis
- https://www.aaaai.org/conditions-and-treatments/allergies/anaphylaxis
- http://www.aafa.org/page/anaphylaxis-severe-allergic-reaction.aspx
- World Allergy Organ J. 2008 Jul; 1(Suppl 2): S18–S26. Published online 2008 Jul 15. doi: <u>10.1097/1939-4551-1-S2-S18</u>
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Attention Deficit Disorder (ADD)/Attention Deficit Hyperactivity Disorder (ADHD)

Attention Deficit Disorder (ADD) was the diagnostic term that was used in 1980, but was later changed to the diagnosis name of Attention Deficit/Hyperactivity Disorder (ADHD) to reflect the findings in research.

What does ADHD look like?

A child with ADHD may:

- daydream a lot
- forget or lose things often
- squirm or fidget
- talk too much
- make careless mistakes or take unnecessary risks
- have a hard time resisting temptation
- have trouble taking turns
- have difficulty getting along with others

According to the American Academy of Pediatrics (AAP), attention-deficit/hyperactivity disorder is the most common neurobehavioral disorder of childhood and can profoundly affect the academic achievement, well-being, and social interactions of children. ADHD is recognized as a disability under the Americans with Disabilities Act, and accommodations in school and work are commonly required.

A trained medical professional must diagnose and prescribe/advise appropriate interventions for ADHD. A positive collaboration between home and school will assist the student in his/her success. School health services, such as a licensed nurse, plays an important role in managing the daily needs of students with chronic health conditions, such as ADHD, by writing an Individualized Health Care Plan (IHP), following district policies and procedures, as well as obtaining physician orders.

According to the Centers for Disease Control and Prevention (CDC), there are at least three treatment options for ADHD:

- Behavior therapy
- Medications
- School accommodations and interventions

The American Academy of Pediatrics (AAP), states that both behavior therapy and medication (preferably both together) are good options for children six years of age and older. The AAP continued to say, "For young children (under six years of age) with ADHD, behavior therapy is recommended as the first line of treatment, before medication is tried. The goals of behavior therapy are to learn or strengthen positive behaviors and eliminate unwanted or problem behaviors. Behavior therapy can include behavior therapy training for parents, behavior therapy with children, or a combination. Teachers can also use behavior therapy to help reduce problem behaviors in the classroom.

In behavior therapy with children, the therapist works with the child to learn new behaviors to replace behaviors that don't work or cause problems. The therapist may also help the child learn to express feelings

in ways that do not create problems for the child or other people. The therapist, school psychologist, or similar professional can work with the teachers to educate them on ADHD and find interventions that work for their classroom.

Behavior, Praise, and Reinforcement

Examples of classroom behavior modification techniques:

- Specific positive feedback (you worked so hard during math today)
- **Planned ignoring** (not responding to undesired behavior when possible)
- **Clear directions phrased in the positive** (tell the child what to do, instead of what not to do...such as "keep writing your sentence" instead of "stop talking")
- **Time-out** if they need time and/or space to calm down

The following strategies provide some guidance regarding the use of praise:

Define the appropriate behavior while giving praise.

Praise should be specific for the positive behavior displayed by the student: The comments should focus on what the student did right and should include exactly what part(s) of the student's behavior was desirable. Rather than praising a student for not disturbing the class, for example, a teacher should praise him or her for quietly completing a math lesson on time.

Give praise immediately.

The sooner that approval is given regarding appropriate behavior, the more likely the student will repeat it.

• Vary the statements given as praise.

The comments used by teachers to praise appropriate behavior should vary; when students hear the same praise statement repeated over and over, it may lose its value.

• Be consistent and sincere with praise.

Appropriate behavior should receive consistent praise. Consistency among teachers with respect to desired behavior is important in order to avoid confusion on the part of students with ADHD. Similarly, students will notice when teachers give insincere praise, and this insincerity will make praise less effective.

It is important to keep in mind that the most effective teachers focus their behavioral intervention strategies on *praise* rather than on *punishment*. Negative consequences may temporarily change behavior, but they rarely change attitudes and may actually increase the frequency and intensity of inappropriate behavior by rewarding misbehaving students with attention. Moreover, punishment may only teach children what not to do; it does not provide children with the skills that they need to do what is expected. Positive reinforcement produces the changes in attitudes that will shape a student's behavior over the long term.

In addition to verbal reinforcement, the following set of generalized behavioral intervention techniques has proven helpful with students with ADHD as well:

• Selectively ignore inappropriate behavior.

It is sometimes helpful for teachers to selectively ignore inappropriate behavior. This technique is particularly useful when the behavior is unintentional or unlikely to recur or is intended solely to gain the attention of teachers or classmates without disrupting the classroom or interfering with the learning of others.

• Remove nuisance items.

Teachers often find that certain objects (such as rubber bands and toys) distract the attention of

students with ADHD in the classroom. The removal of nuisance items is generally most effective after the student has been given the choice of putting it away immediately and then fails to do so.

• Provide calming manipulatives.

While some toys and other objects can be distracting for both the students with ADHD and peers in the classroom, some children with ADHD can benefit from having access to objects that can be manipulated quietly. Manipulatives may help children gain some needed sensory input while still attending to the lesson.

Allow for "escape valve" outlets.

Permitting students with ADHD to leave class for a moment, perhaps on an errand (such as returning a book to the library), can be an effective means of settling them down and allowing them to return to the room ready to concentrate.

• Activity reinforcement.

Students receive activity reinforcement when they are encouraged to perform a less desirable behavior before a preferred one.

Hurdle helping.

Teachers can offer encouragement, support, and assistance to prevent students from becoming frustrated with an assignment. This help can take many forms, from enlisting a peer for support to supplying additional materials or information.

Medications Commonly Used for ADHD

Medication is often used to help normalize brain activity and must be carefully prescribed and monitored by a medical provider.

It is very important to follow your school district's policies and procedures regarding medications taken at school. "For all Prescription and Non-Prescription medications, a written request shall be obtained from the parent or guardian requesting that medication be given during school hours. It is the parent's or guardian's responsibility to ensure that the written request and medication are brought to the school. Local school board policies related to "Zero Tolerance" may require all medications, prescription and nonprescription, be brought to school and delivered to appropriate or designated school personnel by a responsible adult. The written request must state that the child is competent to self-administer the medication with assistance."

The majority of medications that are administered for ADHD are considered Schedule II controlled substances and must be stored in a secure location with only the staff members who are trained on the medication assisting the student with administration. It is important for all trained staff members to know that the possible side effects of the medication are prior to administering the drug. Also, ADHD medications have to find that "right balance" for it to be effective in the student so communication between the nurse, teacher, and parent/guardian is very important. The prescriber will monitor behavior feedback from school and home to make any necessary changes to the medication dosage.

¹https://www.cdc.gov/ncbddd/adhd/facts.html²

Guidelines for Use of Health Care Professional and Health Care Procedures in a School Setting

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