

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



Tennessee Department of Education
and
Tennessee Department of Health



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B. ACKNOWLEDGEMENTS

The "Guidelines for Use of Health Care Professionals and Health Care Procedures in a School Setting" written in 2007 and the supplemental "Guidelines for the Emergency Use of Anti-Seizure Medication in Tennessee Schools" written in 2009 were combined and revised by the Tennessee Departments of Health and Education. In 2014 a group of expert stakeholders was formed to review both documents and current related laws to make recommendations. There was an initial face-to-face meeting with all stakeholders to plan and discuss the structure of the guidelines; subsequently three smaller workgroups were formed to focus on disease specific topics. The smaller focused workgroups met during three all-day meetings to review proposed recommendations and make revisions. The final draft was sent to the Board of Nursing for comment and review in December 2014 then distributed statewide by the Department of Education. Periodic review and updates will be scheduled and revision will be made as needed.

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C. INTRODUCTION

The Tennessee Department of Education in collaboration with the Tennessee Department of Health has developed guidelines to assist Tennessee public school districts and non-public schools when developing policies and procedures to meet the diverse health care needs of students in school settings. The intent of the guidelines is to give direction to local school systems to adhere to state law. The guidelines have been written according to nationally recognized standards established by the National Association of School Nurses and the National Council of State Boards of Nursing, and in accordance with the *“Tennessee Nurse Practice Act.”*

The Guidelines for Use of Health Care Professionals and Health Care Procedures in a School Setting details the following areas:

- Federal and State Requirements
- Health Care Procedures and Medication Administration (including Asthma-Reliever Inhaler)
- First Aid Emergencies
- Diabetes Management
- Food Allergy and Anaphylaxis Management
- Seizure Management

To be successful, a coordinated school health program requires collaboration among staff within the school district and community members representing the various components of the coordinated school health model. The guidelines define the roles of school personnel within Diabetes, Food Allergy and Seizure management sections.

Health Assessment and Individual Health Plan:

Any child with acute or chronic health issues should have a health assessment completed by a registered nurse. As warranted by the child’s condition or diagnosis, an Individual Health Plan (IHP) will be completed by the registered nurse and reviewed annually or sooner as needed. An IHP helps to ensure that all necessary information, needs and plans are considered to maximize the student’s participation and performance in school. The IHP also covers other aspects of care such as a student’s knowledge about their condition, self-care abilities and any modifications needed to enhance learning and prevent emergencies. Benefits of an IHP include: quality assurance of school nursing services, continuity of care and development of a safer delegation process of nursing in the school setting.

The National Association of School Nurses (NASN) [position statement](#) defines the IHP as a written document based on the nursing process. Development of the IHP by the school nurse provides a framework for meeting these clinical and administrative needs:

- Demonstrates Standard of School Nursing Practice
- Documents the Nursing Process
- Provides Legal Documentation
- Clarifies Clinical Practice
- Provides Administrative Information
- Becomes the Foundation for Health Portion of Other Educational Plans and Emergency Plans

The student Emergency Plan (Emergency Care Plan or Emergency Action Plan) is developed based on the IHP, and is written in clear action steps and provided to school staff to assist them in responding to a health crisis.

Annual Reporting:

T.C.A. § 49-5-415 requires the departments of education and health to jointly compile an annual report. The report should include data related to the self-administration of medications and health care procedures including the administration of medications to students served in all public and non-public accredited schools in Tennessee.

Each year the Department of Education will distribute a form, designed by the Departments of Health and Education, to both public and non-public school systems to collect the data and other school health information. This form should be submitted at the end of each school year.

Reports can be found at: http://www.tn.gov/education/health_safety/reports.shtml

D. FEDERAL REQUIREMENTS

Individuals with Disabilities Education Act (IDEA), Section 504 of the Rehabilitation Act and the **Americans with Disabilities Act (ADA)** require that each student with disabilities attending public school be able to participate fully in the academic program. Specifically, this means that students must have access to necessary health care during the school day and for school-sponsored activities, even when they occur outside regular school hours. These laws require that health services for complex student health needs be provided so that students can access their education. Access to emergency medications, such as glucagon is critical and vital to the effectiveness of these life-saving interventions. In addition to other needs, students with diabetes require management of injectable medications (insulin and glucagon) for use during school and school-sponsored activities. (NASN, AAP).

Family Educational Rights and Privacy Act (FERPA) specify when student health information may be shared and when it may not. FERPA protects the confidentiality of student health information. Student health information must be kept private except for situations “where disclosure serves a compelling purpose”, is required by law or when parental permission is obtained.

Occupational Safety and Health Administration (OSHA), a regulatory agency within the U.S. Department of Labor, requires schools to meet safety standards set forth by this agency. These standards include the need for procedures to address possible exposure to blood-borne pathogens. Schools are also required to maintain a clean and healthy environment. They must adhere to Universal Precautions designed to reduce the risk of transmission of blood-borne pathogens, which include the use of barriers such as surgical gloves and other protective measures, such as needle disposal, when dealing with blood and other body fluids or tissues.

Confidentiality: Health Insurance Portability and Accountability Act (HIPAA) was enacted by Congress in 1996 to, among other things, improve the efficiency and effectiveness of the health care system through the establishment of national standards and requirements for electronic health care transactions and to protect the privacy and security of individually identifiable health information. The HIPAA Privacy Rule requires covered entities to protect individuals’ health records and other identifiable health information by requiring appropriate safeguards to protect privacy, and setting limits and conditions on the uses and disclosures that may be made of such information without patient authorization. The rule also gives patients’ rights over their health information, including rights to examine and obtain a copy of their health records, and to request corrections. (HIPAA 2008).

E. STATE REQUIREMENTS

- 1996 Guidelines were initially approved by the Tennessee Board of Nursing and the State Board of Education for implementation during the 1996-97 school year. The guidelines provide information for compliance with Tennessee Code Annotated (“T.C.A.”) § 49-5-415 which requires **certain health care procedures, including the administration of medications during the school day or at related events, to be performed by appropriately licensed health care professionals.**
- 2002 T.C.A. § 49-5-415 (b) was amended to allow “...school personnel who volunteer under no duress or pressure and who have been properly trained by a registered nurse” to **administer Glucagon** in the event of a diabetes emergency in the absence of the school nurse. The guidelines were revised to address this change in law and to provide further clarification for medical and nursing procedures performed in the school setting.
- 2004 T.C.A. § 49-5-415 was amended to “permit possession and self-administration of a prescribed, metered dosage, **asthma-reliever inhaler** by any asthmatic student;”

T.C.A. § 49-5-415 was amended to “permit school personnel to **volunteer to assist with the care of students with diabetes**, excluding the administration of insulin;”

T.C.A. § 49-5-414 encourages LEAs to have **CPR-certified individuals** in their employment or as a volunteer;

T.C.A. § 49-3-359 was amended so that each **public school nurse employed or contracted by an LEA will maintain current CPR certification** consistent with the guidelines of the American Heart Association;

T.C.A. § 49-6-5004 was amended to authorize health care professionals to indicate the need for a **dental or vision screening** on any report or form used in relationship to reporting immunization status for a child. Health care professionals shall provide a copy of the report or form to the parents or guardians indicating the need to seek appropriate follow up.
- 2008 T.C.A. § 49-5-415 was amended to allow school staff, who under no duress, **volunteer to be trained in the administration of anti-seizure medication**, including diazepam rectal gel as prescribed by a licensed health care provider.
- 2013 T.C.A. § 49-5-415 was amended to provide **that each school is authorized to maintain at least two epinephrine auto-injectors** so that epinephrine may be administered to any student believed to be having a life-threatening allergic or anaphylactic reaction.
- 2014 T.C.A. § 49-5-415 (b) was amended to allow “...school personnel who volunteer under no duress or pressure and who have been properly trained by a registered nurse” to **administer daily insulin to a student** based on the student’s individual health plan in the absence of the school nurse. The guidelines were revised to address this change in law and to provide further clarification for medical and nursing procedures performed in the school setting.

F. SCHOOL NURSING ROLES

This section seeks to differentiate the practice of registered nurses (RNs) from that of licensed practical nurses (LPNs). This information is provided in order to ensure students' health and safety as well as to help superintendents, principals, school staff, and school health personnel understand the differences in the roles of the RN, the LPN and other individuals in the school setting who are assigned responsibility for health care.

The **school nurse is a professional licensed registered nurse** meeting the licensing requirements of the Tennessee Department of Health. As part of the school education team, school nurses manage the school health services in collaboration with their supervising personnel, principal and superintendent. It is not feasible in many schools to have a school nurse always present; therefore schools must make use of appropriately trained ancillary personnel to meet students' health related needs.

The school administration is responsible for implementing policies and practices to ensure the safety of students. Therefore, it is important to assure that:

- Any staff assigned health related tasks are working within their job descriptions and within their scope of practice,
- Any licensed professional is supervised by the proper authority,
 - This is especially appropriate in the case of the LPN where the Nurse Practice Act **specifically requires supervision by the physician, dentist or registered nurse** (T.C.A. § 63-7-108).
- Any unlicensed person providing health related tasks receives appropriate training by a qualified professional, and that
- The unlicensed individual staff is competent to carry out the assigned task.

The scopes of practice of RNs and LPNs are not interchangeable and such practices expose schools to potential litigation. The RN is the professional nurse in school setting who may independently, within the scope, triage, assess students, interpret clinical student data, develop nursing care plans, and make decisions regarding student nursing care. An LPN does not meet the professional requirements for licensure as a registered nurse.

A. Role of the Registered Nurse:

- Manages the school health services in compliance with school district policy.
- Functions in accordance with the Standards of Professional School Nursing Practice, the Nurse Practice Act, and Federal and State statutes that impact school nursing practice.
- Provides information to the school board and school administrators as they develop school health policies and procedures.
- Provides health related training to school personnel.
- Provides preventive health services to students including health education, screening, consultation and referrals.
- Provides nursing assessments and nursing diagnoses and develops plans of care for students needing health and nursing interventions.
- Implements interventions within the plan of care directly, through delegation, or through the provision of oversight and coordination to other responsible staff based on consideration of health, safety, and welfare of the student.
- Coordinates in-school health care with the student's health care provider, the school-based health center, and other providers/staff as necessary and appropriate.

- Is responsible for determining appropriate delegation of health related tasks or coordination and oversight:
 - The Nurse Practice Act authorizes Registered Professional Nurses to delegate tasks to Licensed Practical Nurses.
 - Delegation and coordination/oversight of health related tasks/services must be determined on an individual basis. Factors to be considered for delegation and/or coordination and oversight include safety, acuity of the student, stability of the condition of the student, training and capability of the staff, and nature of the task.
 - The registered nurse must exercise professional judgment in determining delegation or coordination/oversight activities.
- Coordination and oversight of licensed health care professional(s) employed or contracted by the LEA. Training should include initial, annual and periodic review of skills competency.
- Coordination and oversight of unlicensed assistive personnel/school personnel volunteer.
 - Identify the student's needs and develop/consult the plan of care.
 - Identify the tasks to be performed by the school personnel volunteer.
 - Provide direction and training to the school personnel volunteer.
 - Determine the ability of the unlicensed staff to perform the task.
 - Monitor the designated staff's reporting and documentation of the task.
 - Ensure that designated staff reports directly to the registered nurse for the performance of the task.

B. Role of the Licensed Practical Nurse and other Medical Personnel:

- May assist the registered nurse with specified health tasks.
- May assume health related responsibilities **only** when those responsibilities **do not** require independent, specialized nursing knowledge, skill, or judgment including assessment and evaluation of student health outcomes and only when those responsibilities have standardized protocols and procedures leading to a predictable outcome.
- Must receive appropriate annual training and demonstrate competency on the specific task to be performed before accepting the task.
- Must work under the direction of a registered nurse in providing school health services.
- Must function within their scope of practice including medication administration.

C. Role of the Unlicensed Assistive Personnel (UAP)/School Personnel who Volunteer:

- May assist the registered nurse in carrying out specified tasks that do not require independent, specialized nursing knowledge, skill, or judgment including assessment and evaluation of student health outcomes and health counseling or teaching. (Examples of appropriate tasks include assistance with vision and hearing screenings and assist with self-administration of medication.)
- Must receive appropriate training on the specific task to be performed before accepting it.
- Must comply with policies, procedures, and health care plans as directed.
- Must report to and receive oversight from the School Nurse (RN) regarding assigned tasks.
- Must carry out assigned tasks as directed and document all tasks.
- Volunteer school personnel may also, with appropriate training, administer emergency medications, such as Diastat® (Diazepam), glucagon, insulin and epinephrine.

G. HEALTH CARE PROCEDURES AND MEDICATION ADMINISTRATION

The provisions of Tennessee Code Annotated, Section 49-5-415 (a)(2) state that health care procedures including administration of medication to students during the day or at related events shall be performed by appropriately licensed health care professionals in accordance with applicable guidelines of their respective regulatory boards and in conformity with policies and rules of local boards of education or governing boards of non-public schools. The student's parent or guardian must give permission in writing for appropriately licensed health care professionals to perform health care procedures. The written permission must be kept in the student's school records.

T.C.A. § 49-5-415 (a)(3) requires that any person assisting in self-administration of medication or performing health care procedures, including administration of medications under this section, and any local board of education or governing board for a non-public school authorizing the self-administration of medications or the performance of health care procedures shall not be liable in any court of law for injury resulting from the reasonable and prudent assistance in the self-administration of such medication or the reasonable performance of the health care procedures, including administration of medications, if performed pursuant to the policies and guidelines developed by the Departments of Health and Education and approved by applicable regulatory or governing boards or agencies.

G.1 HEALTH CARE PROCEDURES

The purpose of assisting with or performing health care procedures in school is to help each child maintain an optimal state of health to enhance his or her education. Nothing in the guidelines requires schools to assist students with procedures. However, any school which provides such assistance is required to follow these guidelines.

School nursing staff and any other school personnel, including transportation personnel, who perform or assist with procedures which may involve blood borne pathogens, must receive annual training on blood borne pathogens and be offered the hepatitis B series of vaccinations if employee is determined to be at risk for potential exposure. Furthermore, the employer must provide all appropriate personal protective equipment (PPE). Suggested PPE in the school setting includes gloves, face shield, apron/gown and goggles. A mouth-to-mouth shield should also be available for use by those staff properly trained and certified in its use, i.e. emergency response/CPR/first aid trained employees. Exam quality, non-latex, powder free gloves must also be available for students or staff with a known or potential sensitivity to latex.

PROCEDURES DONE BY LICENSED HEALTH CARE PROFESSIONAL

T.C.A. § 49-5-415 requires that a licensed health care professional perform any health care procedure a student is not capable or competent to perform. Procedures should be documented and show compliance with standard nursing guidelines. Documentation should include the name of the procedure, name of the person performing the procedure, date, time, results of the procedure or the reason procedure was omitted. A prescriber's orders and parental authorization are required for any health care procedures performed by a licensed health care professional in the school setting.

There are certain health care procedures that may only be provided by a licensed health care professional. Urinary catheterizations and tube feedings are two such procedures. The Tennessee Nurse Practice Act regulates this type of nursing care for both the RN and LPN.

Although nurses can legally perform procedures, there are trends in health care that can impact technology, interventions, treatments, and equipment being utilized daily that may be unfamiliar to the nurse in the school setting (i.e. insulin pumps). These changes can also impact the nurse's responsibilities. Specific orientation or training regarding a procedure or equipment may be required.

At the beginning of the school year and periodically as needed an LEA should determine the types of health care procedures that may be performed in their schools. With those specific procedures in mind, an initial, annual and periodic review of the skills competency evaluation should be performed by the licensed health care professional employed or contracted by the LEA. The evaluation should be maintained by the School Nurse (RN) or principal.

➤ **Suggested Training Resource for Health care Procedures**

Wisconsin Improving School Health Services Project (WISHeS):

A collaborative project between the Wisconsin Public Health Association and the Medical College of Wisconsin aimed at improving school health services (www.wishesproject.org). The tool lists health care procedures for the urinary, respiratory, digestive, endocrine and cardiovascular systems that could be performed in a school setting. Each procedure (i.e. ostomy care) lists considerations, supplies, resources, reference and detailed step-by-step instructions.

PROCEDURES DONE BY STUDENTS WITHOUT ASSISTANCE

If a student has been taught to perform his/her own procedure and does not need assistance, space must be made available for the student to perform this task. If a student is performing an invasive procedure, that student should have a minimal bi-annual nursing assessment of competency and proficiency as well as an IHP. Physician's orders and parental authorization are highly recommended but are not required for procedures done by a student without assistance.

It is not the intent to make a child or adolescent feel the school system or School Nurse (RN) is attempting to remove personal choice or ability to manage medications or procedures. Every attempt should be made on an individual basis to allow a child who is independent to continue self-management. It is prudent for the student and the nurse to work out a method of reporting or asking for assistance on an as needed basis.

PROCEDURES DONE BY STUDENTS WITH ASSISTANCE FROM THE UNLICENSED ASSISTIVE PERSONNEL

An IHP that includes a nursing assessment, physician's orders, and parental authorization are required. The nursing assessment will determine whether or not unlicensed assistive personnel (UAP) can assist the student with a procedure. Appropriate training and demonstration of competency on the specific task must be performed prior to providing assistance. Once trained to provide a specialized health service for one student, he/she cannot perform that same service for another student without receiving delegated authority and training from the School Nurse (RN).

ACTIVITIES OF DAILY LIVING

Those activities that are commonly deemed to be activities of daily living (ADL) do not need to be performed by a licensed health care professional. Activities that can be performed by unlicensed assistive personnel or a teaching assistant may include but are not limited to:

- | | | |
|-------------|--|-------------------------------|
| ➤ Toileting | ➤ Transferring | ➤ Recording intake and output |
| ➤ Bathing | ➤ Positioning | ➤ Vital signs |
| ➤ Diapering | ➤ Application and removal of protective and supportive devices | |
| ➤ Dressing | | |
| ➤ Feeding | | |

In general, nursing assessment, physician's orders and parental authorization are not needed for ADL's, although some of the listed items may require a check off or competency evaluation by a registered nurse or therapist.

G.2 ADMINISTRATION OF MEDICATION

The purpose of administering medications in school is to help each child maintain an optimal state of health to enhance his or her education. Medications should be limited to those required during school hours and necessary to provide the student access to the educational program. The intent of the guidelines is to reduce the number of medications given in school, yet assure the safe administration of medications for those students who require them. Nothing in the guidelines requires schools to assist students with self-administration of medications or procedures. However, any school which provides such assistance is required to follow these guidelines.

Some alternatives for medication administration include:

- Work with the licensed prescriber and the parent(s) or guardian to adjust medication administration time so administration is not needed during the school hours.
- Hire a registered nurse or contract with a local community agency, e.g., local health department, home health agency, or local hospital, for a registered nurse to come into the school and administer medications.
- Allow a parent, guardian, or parental adult designee, per local school system policy and as determined by IHP, 504 Plan, IEP or other education plan, to come to the school to administer medication to their child.

LEAs are encouraged to have on hand certain products, such as eye wash, for first aid purposes. If such products are kept, they, along with any student medications, should be monitored and stored under proper temperatures according to pharmacy or manufacturer guidance in order to maintain efficacy. If it is discovered that storage temperatures fell, at any time, outside the manufacturer's recommendations for more than a few hours, the products should be discarded and not used for students.

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 non-prescription, 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.

➤ **All Prescription Medications (including CAM's - complementary and alternative medicines, if LEA permits) given at school shall:**

- Be prescribed by a licensed prescriber on an individual basis as determined by the child's health status.
- Be brought to school in the **original, pharmacy labeled container**. The container shall display:
 - Child's name
 - Prescription number
 - Medication name and dosage
 - Administration route or other directions

- Date
- Licensed prescriber's name
- Pharmacy name, address, and phone number
- Require a written parental/guardian request which shall be kept in the student's school records and include:
 - Child's name
 - Name and address of parent/guardian
 - Name of medication, dose, route, time of administration
 - Discontinuation date
 - Reason medication is needed
 - Parent/guardian current phone number in case of emergency
- Be renewed at least annually.
- Have each dose of medication documented and the documentation easily retrievable. Documentation shall include date, frequency, time, dosage, route and the signature of the person administering or assisting the student in in self-administration.
- Have written authorization from the licensed prescriber and parent when there are changes in the prescription medication. The change will be noted on the medication administration record (MAR) without obliterating the previous information. Only an RN or LPN can make changes on the MAR. Changes can include but are not limited to: time, dose, addition, discontinuation, etc.

➤ **All Non-Prescription Medications (excluding CAM) given in school shall:**

- **Be brought in with the** original label listing the ingredients, dose schedule, and child's name affixed to the container.
- Require a written parental/guardian request which shall be kept in the student's school records and include:
 - Child's name
 - Name and address of parent/guardian
 - Name of medication, dose, route, time of administration
 - Discontinuation date
 - Reason medication is needed
 - Parent/guardian current phone number in case of emergency
- Have each dosage of medication documented and the documentation easily retrievable. Documentation shall include date, frequency, time, dosage, route and the signature of the person administering or assisting the student in in self-administration.

STORAGE

All individual students' medications, except those exempted by law, must be put in a leak proof container and stored in a secure or locked area. Each medication should be stored in the original pharmacy or manufacturer labeled container with the student's name on it. Medications must be kept no longer than the expiration date or end of the school year, whichever is sooner. Access to stored medication and medication cabinet keys must be limited to school personnel authorized to administer medications. It is recommended that if a medication requires refrigeration, it should be stored under proper temperatures according to the pharmacy or manufacturer guidance and in a locked refrigerator or in a locked container in a refrigerator specifically for medications. It is also recommended to keep a certified, calibrated thermometer in the refrigerator. If it is suspected or discovered that storage temperatures fell, at any

time, outside the manufacturer's recommendations, for more than a few hours, the products should be discarded and not used for students.

Emergency medications such as the Glucagon kit and the Epinephrine kit must be kept in a secure area near the student and readily available for timely, emergency use. The student's Individual Health Plan (IHP) will determine availability and parameters for use of emergency medications.

ADMINISTRATION

Certain guiding principles are mandatory when dealing with medication administration, the most important of which is being sure to follow the five "R's" of administration. These simple but important guidelines help assure that the correct person is given the intended medication in the prescribed amount at the correct time and in the proper way. Ensuring medication safety requires that health care providers identify and confirm the following facts prior to administering any medication and/or treatment:

- | | |
|----------------------------|----------------------------------|
| 1) Right patient (student) | 4) Right time |
| 2) Right drug or treatment | 5) Right route of administration |
| 3) Right dose | |

Schedule II controlled substances, e.g. Ritalin, as with any other medication, should be stored in a secure or locked area and inventoried upon receipt by the person routinely administering it. When administered, each dosage of medication shall be documented. If at the end of the medication regimen a count discrepancy is noted, it should be reported to the school nurse to enable further investigation.

➤ **Self-Administration of Medication:**

The provisions of Tennessee Code Annotated, Section 49-5-415(a) state that a local board of education or a governing board for a non-public school may permit an employee or a person under contract to the board to assist in self-administration of medications, under the following conditions:

- (1)(A) The student must be competent to self-administer nonprescription or prescription medication with assistance;
- (B) The student's condition, for which the medication is authorized or prescribed, must be stable;
- (C) The self-administration of the medication must be properly documented;
- (D) Guidelines, not inconsistent with this section, for the assistance in self-administration of nonprescription or prescription medications by personnel in the school setting, developed by the Departments of Health and Education and approved by the board of nursing, must be followed;
- (E) The student's parent or guardian must give permission in writing for school personnel to assist with self-administration of medications. The written permission shall be kept in the student's school records; and
- (F) Assistance with self-administration shall primarily include storage and timely distribution of medication.

All training of school personnel providing assistance with self-administration of medications shall be done by a registered nurse employed or contracted by the local school system. Training for school personnel in the assistance with self-administration of medications shall be repeated annually, and competencies shall be documented in the employee personnel file. It is strongly recommended that backup personnel be trained for each school site.

T.C.A. § 49-5-415 (a)(3) requires that any person assisting in self-administration of medication or performing health care procedures, including administration of medications under this section, and any local board of education or governing board for a nonpublic school authorizing the self-administration of medications or the performance of health care procedures shall not be liable in any court of law for injury resulting from the reasonable and prudent assistance in the self-administration of such medication or the reasonable performance of the health care procedures, including administration of medications, if performed pursuant to the policies and guidelines developed by the Departments of Health and Education and approved by applicable regulatory or governing boards or agencies.

➤ **Guidelines for Assistance with Self-Administration of Medication:**

Medications should be limited to those required during school hours and necessary to maintain the student's enrollment and attendance in school.

- The student should be able to identify his or her medication, the reason the medication is used and be competent to self-administer the authorized and/or prescribed medication with assistance.
- The individual assisting with medication self-administration must visually observe the student self-administer the medication **OR** in the case of a cognitively competent but physically challenged student, perform that portion of self-administration for which the student is physically incapable.
- Each dosage of medication shall be documented and the documentation easily retrievable. Documentation shall include date, frequency, time, dosage, route and the signature of the person assisting the student in self-administration.
- In the event a dosage is not administered as ordered (e.g. missed dose) or any other medication error occurs, a Medication Error Form must be filled out and routed to the appropriate administrative person in the local school system or routed per the protocol of a contracted agency. The School Nurse (RN) and parent/guardian must be notified in the event of a medication error.
- A procedure shall be established for providing communication with the parent(s) or guardian regarding any problems with administration of the medication.
- To assure safety and accountability, nursing supervision shall be provided to personnel assisting with the self-administration of medication to insure local school board policies and state guidelines are being followed.

DISCARDING

The parent or guardian shall be responsible at the end of the treatment regimen for removing any unused medication from the school. When the duration of a medication is complete or out of date, the parent/guardian shall be advised to pick up the medication. After notification attempts per local school system policy, if not picked up in 14 days, the medication shall be destroyed per local environmental protocol by the School Nurse (RN) or School Administrator, documented and witnessed by at least one other school staff person.

G.2.a Asthma-Reliever Inhaler

The provisions of Tennessee Code Annotated, Section 49-5-415 (c) states that an LEA **must** permit possession and self-administration of a prescribed, metered dosage, asthma-reliever inhaler by any student with asthma if the student's parent or guardian:

- Provides to the school written authorization for student possession and self-administration and
- Provides a written statement from the prescribing health care practitioner that the student is diagnosed with asthma and has been instructed in self-administration of the prescribed, metered dosage, asthma-reliever inhaler. The statement must also contain the following information:
 - i. The name and purpose of the medication.
 - ii. The prescribed dosage.
 - iii. The time or times the prescribed inhaler is to be regularly administered, as well as any additional special circumstances under which the inhaler is to be administered.
 - iv. The length of time for which the inhaler is prescribed.
- These statements shall be kept on file in the office of the School Nurse (RN) or school administrator.
- The LEA shall inform the student's parent or guardian that the school and its employees and agents shall incur no liability as a result of any injury sustained by the student or any other person from possession of self-administration of the inhaler.
- The student's parent or guardian shall sign a statement acknowledging that the school shall incur no liability and the parent or guardian shall indemnify and hold harmless the school and its employees against any claims relating to the possession or self-administration of the inhaler.
- The permission for self-administration of the prescribed, metered dosage, asthma-reliever inhaler shall be effective for the school year in which it is granted and must be renewed each following school year upon fulfilling the requirements set forth in these guidelines.
- The LEA may suspend or revoke the student's possession and self-administration privileges if the student misuses the inhaler or makes the inhaler available for usage by another person.
- Upon fulfilling the requirements set forth in these guidelines, a student with asthma may possess and use the prescribed, metered dose, asthma-reliever inhaler when at school, at a school-sponsored activity, or before or after normal school activities while on school property, including school-sponsored child care or before or after school programs.

Students with asthma must have an Individual Health Plan (IHP) developed by the School Nurse (RN). The IHP can serve as the Asthma Action Plan. There should be a mechanism to include self-reporting of reliever inhaler use and frequency that can be documented on the student MAR and included in the annual report. A sample action plan is available at American Lung Association:

<http://www.lung.org/lung-disease/asthma/>.

H. FIRST AID EMERGENCIES

The provision of Tennessee Code Annotated, Section 49-5-414 states every public elementary and secondary school in this state is encouraged to have in its employ, or as a volunteer, at least one (1), preferably more, persons who are currently certified by the American Red Cross or another qualified certifying agency approved by the department of education, as qualified to administer emergency first aid and cardiopulmonary resuscitation (CPR). The local board of education is authorized to allocate up to six and one half (6.5) hours a year of in-service days established pursuant to T.C.A. § 49-6-3004 to conduct training programs for teachers and other personnel who have expressed an interest in becoming qualified to administer emergency first aid and CPR.

In addition, T.C.A. § 49-3-359 states that each public school nurse employed by an LEA shall maintain current certification through a certifying cardiopulmonary resuscitation course consistent with the scientific guidelines of the American Heart Association in collaboration with the International Liaison Committee on Resuscitation.

The following conditions may require first aid and/or immediate emergency care provided by a school staff person. Examples of conditions and school staff interventions may include but are not limited to:

- Seizures: vagal nerve stimulator magnet, emergency seizure protocol
- Respiratory distress: reliever inhaler, assisted nebulizer treatment, rescue breathing
- Bleeding: pressure to site, elevation, shock prevention
- Choking: Heimlich maneuver
- Fainting: protect from injury, elevated feet
- Heat/cold emergency: application of blanket, ice pack
- Major Trauma: activate EMS, airway management
- Hypoglycemic emergency: Glucagon injection if training completed
- Cardiac arrest: CPR, activate EMS
- Allergic reaction: epinephrine auto-injector if training completed

School personnel must respond appropriately in any emergency situation. Children with known health problems or certain diagnoses should have an Individual Health Plan (IHP) that includes emergency care procedures, a nursing assessment, physician's orders, and parental authorization. In addition, it is recommended that the school protocol include parental or guardian notification, School Nurse (RN) notification, and activation of EMS as appropriate for any emergency situation.

H.1 EXEMPTIONS BY LAW: EMERGENCY PROCEDURES BY TRAINED PERSONNEL

Tennessee law permits certain emergency procedures to be performed by school personnel with appropriate training. Those laws include:

Diazepam Gel: T.C.A. § 49-5-415 provides that "... school personnel who volunteer under no duress or pressure and who have been properly trained by a registered nurse employed or contracted by the LEA or governing board for a non-public school may administer anti-seizure medications, including diazepam gel, to a student in an emergency situation based on that student's IHP. . ." The Departments of Health and Education shall jointly amend guidelines to reflect the appropriate procedures for use by registered nurses in training volunteer school personnel to administer anti-seizure medications to a student in an

emergency situation. The guidelines shall require at least one school employee to serve as a witness when a volunteer administers anti-seizure medication during an emergency situation, unless a witness is not available within the time limit for administration specified in the IHP. Training to administer anti-seizure medication shall be repeated annually. Training is outlined in the Seizure section of the guidelines.

Epinephrine: T.C.A. § 68-140-310 allows any lay person eighteen (18) years and older who has been trained to administer epinephrine in emergency situations, and T.C.A. § 49-5-415 authorizes schools to maintain epinephrine auto-injectors in a secure, unlocked location and authorizes trained school personnel to administer epinephrine to any student believed to be having a life-threatening allergic or anaphylactic reaction. The statute authorizes a physician to prescribe epinephrine auto-injectors in the name of an LEA or non-public school for such use. Training is outlined in the Food Allergy and Anaphylaxis section of the guidelines.

Glucagon: T.C.A. § 49-5-415 provides that “...school personnel who volunteer under no duress or pressure and who have **been properly trained by a registered nurse employed or contracted by the local education agency** [emphasis added] may administer Glucagon in emergency situations and may administer daily insulin to a student based on that student’s Individual Health Plan (IHP). ...Training to administer Glucagon shall be repeated annually and competencies shall be documented in the employee’s personnel file.” No school system is required to have volunteer school staff trained to administer Glucagon. This is a choice each school system will make based on their needs and the availability of school staff who volunteer. Training is outlined in the Diabetes section of the guidelines.

I. DIABETES OVERVIEW

Tennessee Code Annotated, Section 49-5-415(d)(3) states that all school nurses must be educated in diabetes care and have knowledge of the guidelines. School personnel, who volunteer under no duress to assist with the care of students with diabetes, must receive training pursuant to the guidelines from a school RN. The school RN may use certified diabetes educators and licensed nutritionists to assist with the training. All training must be renewed on an annual basis and competency must be noted in the personnel file. No school personnel shall be required to volunteer for the training. School personnel may not be reprimanded, subject to any adverse employment action, or punished in any manner for refusing to volunteer.

Per T.C.A. 49-5-415 (d)(7): Upon written request of the parent or guardian, and if included in the student's medical management plan and in the Individual Health Plan (IHP), a student with diabetes shall be permitted to perform blood glucose checks, administer insulin, treat hypoglycemia and hyperglycemia and otherwise attend to the care and management of the student's diabetes in any area of the school or school grounds and at any school-related activity, and shall be permitted to possess on the student's person at all times all necessary diabetes monitoring and treatment supplies, including sharps. Any sharps involved in diabetes care and management for a student shall be stored in a secure but accessible location, including on the student's person, until use of the sharps is appropriate. Use and disposal of sharps shall be in compliance with the guidelines set forth by the Tennessee Occupational Safety and Health Administration (TOSHA).

Diabetes is considered a disability under federal law. Under Section 504 of the Rehabilitation Act of 1973, it is illegal to discriminate against a person with a disability. Children with diabetes must have full access to all activities, services, or benefits provided by public schools. A local education agency shall not assign a student with diabetes to a school other than the school for which the student is zoned or would otherwise regularly attend because the student has diabetes.

The following persons shall not be liable in any court of law for injury resulting from reasonable assistance with the care of students with diabetes if performed pursuant to these guidelines:

- Any School Nurse (RN) who provides the training.
- Any person who is trained and whose competency is indicated in such person's personnel file.
- Any local board of education or governing board for a non-public school that authorized school personnel to volunteer to assist with the care of students with diabetes.

STUDENT HEALTH PLANS AND CARE PLANS

It is recommended that the School Nurse (RN) develops an **Individualized Health Plan (IHP)** in collaboration with the student, parent/guardian, student's health care provider and other school staff. The student's IHP should include as applicable, information from the **Diabetes Medical Management Plan (DMMP), Diabetes Emergency Care Plans, and Individualized Education Plan (IEP)**, as well as documents such as plans for events outside the usual school day and protocols for the appropriate disposal of materials that come in contact with blood. Plan information should be reviewed and updated each school year or upon a change in the student's prescribed regimen, level of self-management, school circumstances (e.g., a change in schedule) or at the request of the student or parents/guardian.

Use of the following information is essential in the development of a student's IHP:

- Date of diagnosis

- Current health status
- Emergency contact information
- Student's willingness and ability to perform self-management tasks at school
- List of diabetes equipment and supplies
- Specific medical orders
 - Blood glucose monitoring
 - Insulin, glucagon, and other medications to be given at school
 - Meal and snack plan
 - Exercise requirements
 - Additional monitoring
- Typical signs, symptoms, and prescribed treatment for hypoglycemia
- Typical signs, symptoms, and prescribed treatment for hyperglycemia

The DMMP is completed by the student's parents/guardians and the health care provider and is the medical basis for an IHP. It generally includes how to recognize and treat hypoglycemia and hyperglycemia as well as specific orders for blood glucose monitoring, administration of insulin and the steps to take in an emergency.

The emergency plan of care for hypoglycemia and hyperglycemia, based on the DMMP, summarizes how to recognize and treat hypoglycemia and hyperglycemia and who to contact for help. The School Nurse (RN) will coordinate development of these plans. An emergency plan of care should be completed for each student with diabetes and should be copied and distributed to all school personnel who have responsibility for students with diabetes during the school day and during school-sponsored activities. Consider laminating these plans for use throughout the school year. Provide completed copies to the parents/guardian as well.

An emergency plan of care should include:

- Emergency contact information for parents/guardians and health care provider.
- Causes of hypoglycemia and hyperglycemia.
- Symptoms of hypoglycemia and hyperglycemia.
- Actions for treating hypoglycemia and hyperglycemia.

During all levels of training, information in the emergency plans on the signs and symptoms of hypoglycemia and hyperglycemia, how to respond, and who to contact for help in an emergency should be reviewed with school personnel.

[Sample Health and Care Plans](#) are available in the Diabetes Forms section.

I.1 DIABETES DESCRIPTION

Diabetes is a chronic disease in which the body does not make or properly use insulin, a hormone that is needed to convert sugar, starches, and other food into energy by moving glucose from blood into the cells. Insulin lowers blood glucose. People with diabetes have increased blood glucose (sugar) levels for one or more of the following three reasons: Either

1. Little or no insulin is being produced,
2. Insulin production is insufficient, and/or
3. The body is resistant to the effects of insulin.

As a result, high levels of glucose build up in the blood, and spill into the urine and out of the body. The body loses its main source of fuel and cells are deprived of glucose, a needed source of energy. High blood glucose levels may result in short and long term complications over time. Type 1 diabetes is usually diagnosed in children and young adults. In type 1 diabetes, the body does not produce insulin. Type 2 diabetes is the most common form of diabetes. In type 2 diabetes, the body does not use insulin properly.

According to the National Diabetes Education Program, diabetes is one of the most common chronic diseases in school aged children affecting about 208,000 young people in the United States. Most children with diabetes have Type 1 diabetes (www.YourDiabetesInfo.org). Diabetes is not contagious and cannot, at this time, be cured. However, it can be managed and treated. Treatment consists of administering multiple doses of insulin, monitoring blood sugar several times during the day, eating nutritious meals and snacks, as well as following a regular exercise program. A balance between insulin, food, and exercise must be maintained to prevent blood sugar levels from being either too low (hypoglycemia) or too high (hyperglycemia).

Diabetes must be managed 24 hours a day, 7 days a week. For students with Type 1 diabetes, and for some with Type 2 diabetes, that means careful monitoring of their blood glucose levels throughout the school day and administering multiple doses of insulin by injection or with an insulin pump to control their blood glucose and minimize complications. Blood sugar monitoring, careful attention to a healthy diet and daily exercise are important to controlling Type 2 diabetes.

SIGNS AND SYMPTOMS OF HYPOGLYCEMIA/HYPERGLYCEMIA

1) Causes of Hypoglycemia:

- too much insulin
- late food or too little food
- too much or too intense exercise
- a planned or unplanned activity without additional food

The recognition and treatment of **hypoglycemia** is vitally important. Mild **hypoglycemia** can usually be treated easily and effectively. Most episodes of hypoglycemia that will occur in the school setting are of the “mild” type. Symptoms of hypoglycemia may include the following:

- Extreme hunger
- Shakiness
- Tremors
- Dizziness
- Lethargy
- Headache
- Increased heart rate/palpitations
- Dilated pupils
- Pallor
- Clammy skin
- Sweating
- Anxiety
- Changed personality

If not treated promptly a mild hypoglycemic reaction can quickly progress to a severe state or condition which may be characterized by:

- Irritability/frustration
- Behavior/personality changes
- Extreme tiredness/fatigue
- Sudden crying
- Restlessness
- Confusion
- Inability to swallow
- Dazed Appearance
- Seizures, convulsions
- Unconsciousness/coma

Remember, onset and progression can happen very quickly. Each student will have his/her own set of symptoms that characterize hypoglycemia. These should be listed in the DMMP. The important thing to remember is that early recognition and intervention is the best strategy to prevent progression to more severe symptoms.

2) Causes of Hyperglycemia:

- too much food
- too little insulin
- illness
- infection
- decreased activity
- stress
- increased growth
- puberty

The recognition and treatment of significant **hyperglycemia** is vitally important. Symptoms of may vary somewhat from individual to individual, or from episode to episode and can include:

- Thirst
- Blurred vision
- Lack of concentration
- Weight loss
- Frequent urination
- Sweet, fruity breath
- Fatigue/sleepiness
- Stomach pains
- Increased hunger
- Flushing of skin

The following symptoms indicate that hyperglycemia has escalated. Mild symptoms plus:

- Dry mouth
- Nausea
- Vomiting
- Stomach cramps
- Sweet, fruity breath

This last group of symptoms indicates severe hyperglycemia, and probable ketoacidosis. Mild and moderate symptoms plus:

- Labored breathing
- Profound weakness
- Confusion
- Loss of consciousness

The important thing to remember is that intervention at any of these levels will prevent progression to more severe symptoms.

TREATMENT FOR HYPOGLYCEMIA/HYPERGLYCEMIA

Diabetes is managed with medication, nutrition, physical activity and glucose monitoring.

- Intervene promptly when **hypoglycemia** is mild/moderate to prevent the progression to severe symptoms. The steps for intervening with each student will be outlined in his/her DMMP.
 - The initial response would be to treat with oral carbohydrates according to the DMMP.
 - Glucagon is administered as an injection when a person's blood sugar becomes so low that the person is unresponsive, passes out, or cannot eat or drink safely. Glucagon is a hormone that raises blood sugar levels. Glucagon can cause severe nausea and vomiting when the person regains consciousness, but can be a lifesaving treatment for treating extreme low blood sugar.
- The goal in the treatment of **hyperglycemia** is to lower the blood glucose level to within a student's target range. Always follow the individual student's DMMP which may include the administration of insulin.

I.2 DIABETES: CARE OF STUDENT

Tennessee Code Annotated, Section 49-5-415 (d)(1) states a local board of education or a governing board for a non-public school may permit school personnel to volunteer to assist with the care of students with diabetes if parent or guardian and the student's personal health care team have developed a medical management plan that lists the health services needed by the student at school and is signed by the student's physician, nurse practitioner or physician assistant. The parent or guardian shall have given permission for the school's trained volunteer or school nurse to participate in the care of the student with diabetes. The written permission shall be kept in the student's school records. Assistance in care of a student by trained volunteers must be documented.

Tennessee Code Annotated, Section 49-5-415 (d)(4) states that if a school nurse is on site and available to assist, the school nurse must provide any needed diabetes assistance rather than other trained school personnel volunteering to assist the student. In addition, a school RN has primary responsibility for maintaining all student health records.

Tennessee Code Annotated, Section 49-5-415 (b) states that school personnel who volunteer under no duress or pressure and who have been properly trained by a registered nurse employed or contracted by the LEA may administer glucagon in emergency situations and may administer daily insulin to a student based on that student's Individual Health Plan (IHP). However, if a public school nurse is available and on site, the nurse shall provide this service to the student.

The Diabetes Medical Management Plan (DMMP) details the specific conditions for all routine and emergency diabetes care tasks, including insulin and glucagon administration. Non-medical school staff can be trained to assist students with these tasks as laid out in the DMMP. However, any and all clinical assessments are made by the student's health care providers in the development of the DMMP; school staff is simply following the plan as prescribed. Once the DMMP has been provided to the school, it is implemented collaboratively by the school diabetes team, which includes the School Nurse (RN), student, parent/guardian, and other school personnel.

The need for performance of or assistance with diabetes care tasks will vary from student to student.

Routine Care:

- Many students will be able to handle all or almost all of their routine diabetes care by themselves. They can check their own blood glucose, and they can dose and give their own insulin or medication, keeping it in balance with physical activity and food intake.
- Some students, because of age, developmental level, or inexperience, will need help from school staff, including performing tasks like insulin administration, blood glucose monitoring, or carbohydrate counting.

Emergency Care:

- ALL students with diabetes will need help in the event of an emergency situation.

CARBOHYDRATE COUNTING AND NUTRITION GUIDANCE:

The nutritional needs of a student with diabetes differ slightly from the needs of a student without diabetes. Both should eat a variety of foods to maintain normal growth and development. The major difference is that the timing, amount, and content of the food that the student with diabetes eats are carefully matched to the action of the insulin. There are two methods of meal planning using carb count-

ing: following a consistent carb intake meal plan and adjusting insulin for changing carb intake. Students who follow a consistent carb meal plan aim for a set amount of carb grams at each meal and snack and do not adjust their mealtime insulin for the amount of carb intake. Students who use multiple daily injections or an insulin pump usually use the adjusting insulin for changing carb intake method of meal planning. This method requires adjusting insulin doses to cover the amount of carbs consumed using an insulin-to-carb ratio. This information will be provided in the student's DMMP.

Carbohydrate counting involves calculating the number of grams of carbohydrate or choices of carbohydrate the student eats. This information can be obtained from nutrition information on food labels, school nutrition services, parents or at CalorieKing.com, and is used to determine the amount of insulin the student needs to control blood glucose for any given meal or snack. The student's meal plan is designed to balance nutritional needs with the insulin regimen and physical activity level. The student should eat lunch at the same time each day. Snacks are often necessary for a child with diabetes and must be eaten to balance the peak times of insulin action. A missed or delayed snack could result in hypoglycemia. Additional information is available at [National Diabetes Education Program \(NDEP\)](http://NationalDiabetesEducationProgram.org).

I.2.a Roles and Responsibilities for Management of Diabetes

Collaboration, cooperation and planning are key elements in developing and implementing successful diabetes management at school. As is true for children with other chronic diseases, students with diabetes are more likely to succeed in school when students, parents, school nurses, principals, teachers, other school personnel and the student's health care providers (or personal health care team) work together to ensure effective diabetes management.

A. STUDENT WITH DIABETES

To remain active and healthy, the student with diabetes should strive to maintain blood glucose levels within a target range. School health policy and staff will promote and support the student toward self-sufficiency and independence in following the DMMP designed by his/her health care provider. The student, however, must also assume age appropriate responsibility. The following responsible actions are recommended:

- Cooperate with school personnel in implementing the diabetes plan of care.
- Wearing a medical alert identification tag while in school is strongly advised.
- Observe all local policies and procedures related to blood and body fluid precautions and sharps disposals.
- Complete the initial and ongoing diabetes education provided by the health care provider.
- Seek adult help immediately when low blood glucose levels are suspected or verified by blood glucose monitoring.
- Record and report all blood glucose monitoring according to the medical plan of care.
- Conform to all nutritional guidelines according to the medical plan of care.
- Demonstrate competence in blood glucose monitoring and insulin administration in the school setting.

B. PARENT/GUARDIAN

- Inform the school as soon as possible when a student is newly diagnosed as having diabetes or when a previously diagnosed student enrolls in a new school so that planning and training of

personnel can be arranged quickly. Ideally, parents should work with the school staff prior to their child's admittance to ease the student's transition into the school environment.

- Participate in team meetings and development of the IHP or communicate with individual school personnel who will be in contact with your child.
- Provide the school with emergency contact information (cell phone, work number, beeper) and designate someone to act on your behalf if you are unavailable.
- Provide the School Nurse (RN) with medication orders from a health care provider, permission to consult with the provider, and signed consent forms to administer medications and share health information on a need-to-know-basis.
- Provide the School Nurse (RN) with any new written medical orders when there are changes in the medical management that must be implemented in school.
- Provide and transport to the school all medications, equipment, supplies, and carbohydrate snacks associated with the medical management of the student's diabetes.
- Assume responsibility for the maintenance and calibration of all medical equipment.
- Work with health care providers, their staff, and the child to promote self-sufficiency in diabetes management.
- Provide the school with updates on the child's diabetes status annually and as needed.
- Communicate with schools regarding parent participation on school field trips or off-site school sponsored events.
- Providing a medical alert identification tag for your child is strongly advised.

C. SCHOOL NURSE (RN)

- Introduce yourself to the student and orient him/her how to access the nurse.
- At the beginning of the school year, meet with the parent of the student with diabetes or as soon as possible after diagnosis.
- Obtain and maintain a current knowledge base and update skills and abilities related to the medical management of diabetes in the school-age population.
- Organize and facilitate planning meetings with the student's parent/guardian and other key school staff to discuss planning and implementation of the student's IHP.
- Develop an IHP in cooperation with the student, the parents/guardians, the health care provider, and other school-based staff.
- Assure that the IHP with the Emergency Care Plans includes the student's name and photo, if available.
- Regularly review and update the IHP whenever there is a change in medical management or the student's response to care.
- Establish and maintain a working relationship with the student's parent/guardians and health care provider and act as a liaison between the student's authorized health care provider and the school.
- If necessary, work with the health care provider and/or parent to re-evaluate the student's competency level to further enhance the student's independence or, if necessary, to require closer supervision until the student's knowledge and skills improve.
- Practice universal precautions and infection control procedures at all student encounters.
- Train school personnel who volunteer and are willing to assist with the care of students with diabetes. The nurse shall be under no duress to qualify any volunteer unless such volunteer is trained and deemed by the nurse to be competent.

- Provide or arrange for student specific training to all school-based personnel who will have direct contact with the student on how to respond in an emergency.
- Maintain appropriate documentation of the training and care provided and monitor the documentation of services provided by unlicensed assistive personnel.
- Act as a resource to the principal and other school-based personnel, providing or arranging for in-service education appropriate to their level of involvement with the student with diabetes.
- Establish a diabetes resource file of pamphlets, brochures, and other publications for use by school personnel.
- Participate in Individualized Education Planning or Section 504 planning meetings and provide relevant health information.
- Establish a process for ongoing and emergency communication with the parent/guardian (this should include a parental notification procedure to address repairing or replacing equipment, and replenishing supplies and medications), the authorized health care provider, the unlicensed assistive personnel, and the school staff that come into direct contact with the student.
- Request a functioning communication device in the health clinic (example: phone system, intercom or two way radios).
- Serve as the student's advocate.
- Respect the student's confidentiality and right to privacy.

D. SCHOOL ADMINISTRATOR

- Participate in planning the IHP as a member of the team, and support school personnel, the student and parents in its implementation.
- Review emergency response plans to ensure that any food, equipment or services unique to the needs of students with diabetes is covered by those plans.
- Provide leadership for all school-based personnel to ensure that all health policies related to diabetes management at school are current and implemented.
- Monitor overall compliance with the implementation of the emergency response plan.
- Recommend that communication devices are provided and are in functioning condition in the appropriate location-nurse's clinic, classroom, cafeteria etc.
- Collaborate with the School Nurse (RN) in selecting and designating unlicensed assistive personnel to provide the student-specific services required for each student with diabetes in their school.
- Require that training and education of all involved personnel is completed and documented.
- Inform parent/guardian if any student experiences an emergency incident (hypoglycemia/hyperglycemia) at school.
- Communicate in advance with School Nurse (RN) when a field trip or off-site school sponsored event or class party might require adjustment in their meal plan or insulin administration.
- Provide adequate time for School Nurse (RN) to train school personnel who volunteer.

E. EDUCATIONAL PERSONNEL (TEACHERS, AIDES, COACHES etc.)

- Participate in team meetings for the student with diabetes.
- Be aware of which students have diabetes and cooperate with the accommodations listed in the IHP or Section 504 Plan.
- Recognize the signs and symptoms associated with hypoglycemia and hyperglycemia.

- Be sure volunteers, student teachers, aides, specialists and substitute teachers are informed of the student's diagnosis and necessary safeguards on a need-to-know basis.
- Request that the classroom have a functioning intercom, two way radios or other communication device for communication with the School Nurse (RN) and administrator.
- Work with the School Nurse (RN) to educate other parents about the presence and needs of the child with diabetes on a need to know basis and with parent's permission.
- Respect the student's right to confidentiality and privacy.
- Inform parents of any special school events where food will be served.
- Ensure that the student (e.g. engaged in physical or extracurricular activity) has a safe location (if possible) to monitor blood glucose or administer insulin in accordance with the student's IHP. By law, students with diabetes must not be restricted to certain areas to self-manage.
- Monitor before exercise or strenuous activity and allow for snacks before and after the physical activity if indicated in the student's IHP.
- Communicate and collaborate in advance with School Nurse (RN) when a field trip or off-site school sponsored event or class party might require adjustment in their meal plan or insulin administration.
- If for safety reasons, medical alert identification needs to be removed during specific activities, the student should be reminded to replace this identification immediately after the activity is completed.
- Notify substitute teachers of students with diabetes and leave a clear plan of care regarding the special needs of the student.
- Keep the student's Emergency Care Plan readily accessible in the classroom in an organized format for substitute teachers and for use in emergencies.

F. GUIDANCE COUNSELOR

While the school counselor and/or social worker may not always have direct contact with the student, they should be aware of the students in their schools who have diabetes and the potential impact of diabetes and its treatment on the student's behavior and performance.

- Communicate with the School Nurse (RN) as needed in the development of the student's IHP.
- Monitor anxiety, stress levels, and social development of students with diabetes and provide interventions as appropriate.
- Act as a resource to parents and students regarding anxiety, stress and normal development.
- Educate classmates to avoid endangering, isolating, stigmatizing or harassing students with diabetes (with parental and student's permission) per LEA policy (at a minimum annually).

G. FOOD SERVICE MANAGER/PERSONNEL

Food and nutrition service staff members play an important role in providing nutritional and balanced meal for all students, including students with diabetes.

- Provide nutritional information including carb counts for all foods/drinks served.
- Keep information about students with diabetes readily available.
- Respect the student's right to confidentiality and privacy.
- Have a functioning communication device to support emergencies.
- Be knowledgeable about activation of emergency services.
- If a student is suspected to be experiencing a diabetes emergency, activate the school's emergency response plan.

H. SCHOOL BUS COMPANY

- Understand that students with diabetes may carry snacks or equipment for emergency response and may need to eat and/or drink during the bus ride.
- Provide functioning communication devices.
- Know local emergency medical services procedures.
- Communicate to the School Nurse (RN) any concerns regarding the student's actions or behavior regarding diabetes management.
- Respect the student's right to confidentiality and privacy.
- Individual LEA's school bus company should consider receiving emergency CPR training.

I. TRAINED SCHOOL PERSONNEL WHO VOLUNTEER

- Understand the student's DMMP, IHP, 504 Plan, IEP, or other education plan.
- Understand the student's Emergency Plan.
- Attend the student's school health team meetings.
- Participate in diabetes management training by the school registered nurse or designated educator.
- Assist with the care of the student, which may include blood glucose monitoring, urine or blood ketone testing, and emergency Glucagon and Insulin administration, as trained.
- Practice universal precautions and infection control procedures.
- Participate in planned evaluations of care.
- Assistance with care must be documented in accordance with these guidelines and according to standards and requirements outlined in school policy.
- Observe and record student health and behavior, noting any changes over time.
- Communicate directly and regularly with the School Nurse (RN) or the supervising health professional.
- Consult with appropriate member of the student's school health team when questions arise or the student's health status changes.
- Respect the student's confidentiality and right to privacy.
- Accompany the student on field trips or off-campus school-sponsored sports events and activities, as determined by the 504 Plan, IHP, IEP, or other education plan.
- Provide support and encouragement to the student.
- Help ensure that the student has a supportive learning environment.

I.2.b Off-site School Sponsored Event/School Administered Care Programs

- No student should be excluded from a field trip or any extracurricular program or activity due to diagnosis of diabetes. The parent of the student should be allowed to accompany their child on the school trip in addition to the school chaperone. Parents are not required to attend the trip.
- The teacher requesting/organizing the field trip will coordinate in advance with the principal, school RN or designee to meet the student's health care needs.
- Parent/guardian must provide glucose meter and supplies, appropriate snacks, and a suitable high glucose source (such as glucose tablets, a tube of cake frosting, or other oral solution) for their child's emergency for availability during extracurricular activities.

Before a field trip or extracurricular activity, the school shall:

- Notify the student’s parent(s) in a timely manner in order to prepare for food/snacks/medications.
- Make certain that an emergency communication device is always present. Minimum of two (2) people with cell phones is recommended.
- Maintain records of the names and phone numbers of parent/guardian of the student and the health care provider.
- Be sure that a trained staff person is assigned to stay with the student at all times if emergency medication has been administered.
 - Designate someone to call the student’s parents with the name and location of the hospital.
- Verify that the school board employee accompanying the student has received specific training in the blood glucose monitoring procedure and insulin administration as documented on the skills checklist by the school RN. The school employee must also be trained in the signs/symptoms of high and low blood sugar and follow the student specific emergency care plan. This employee will supervise the carrying of the glucose meter and supplies, snacks, glucose source, a copy of the orders, and emergency information card.
- Be sure that the bus driver has the emergency route to the hospital if the cell phone cannot make the connection to EMS. Only if EMS cannot be reached should the bus driver take the child to the nearest Emergency Room in the bus.

Blood Glucose Monitoring

- According to the IHP, if the student ordinarily performs his own finger stick and testing, he will do this while on the field trip if necessary.
- The health care provider orders will be followed if high or low blood sugar is found. If after doing so, the student appears disoriented or level of consciousness deteriorates, call 911.

I.3 DIABETES MEDICATION ADMINISTRATION

T.C.A. § 49-5-415 (b): If an LEA permits, school personnel who volunteer under no duress or pressure and who have been properly trained by a registered nurse employed or contracted by the LEA may administer glucagon in emergency situations and may administer daily insulin to a student based on that student's Individual Health Plan (IHP). However, if a public school nurse is available and on site, the nurse shall provide this service to the student. The public school nurse may train as many school personnel as volunteer and are willing to assist with the care of students with diabetes but should seek to ensure at least two (2) volunteers are available.

I.3.a Glucagon Administration

Glucagon is a hormone that causes the liver to release sugar into the blood. It is used to raise the blood sugar when a child is unable to take liquids or food by mouth because of severe sleepiness, unconsciousness or seizure activity. Glucagon is an emergency medication, given by needle and syringe. It should be given immediately in the event of severe hypoglycemia. It is important to remember that **the risk of not giving Glucagon is more life-threatening than giving it under these emergency conditions.**

If Glucagon is part of a child's DMMP or emergency care plan then a health care provider's order and written parental permission is needed.

- One Glucagon Emergency Kit supplied by the family is needed.
- Keep Glucagon at room temperature, and inform the appropriate staff of the storage location.
- Check the date of Glucagon kits on a regular basis. Obtain a refill prior to expiration date and dispose of expired medication.
- When possible, practice drawing up Glucagon with a Glucagon Demonstration Practice kit or an expired kit.
- Glucagon must be mixed per the specified instructions.

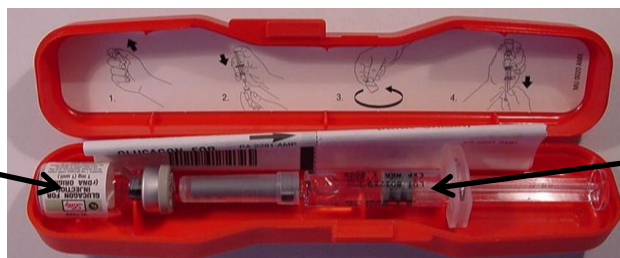
If the School Nurse (RN) is unavailable, trained school personnel who volunteer may administer glucagon to a student with diabetes who may require prompt treatment in order to protect against serious harm or death. No trained school personnel who volunteer shall administer medication unless:

- such trained personnel annually completes any training required by the School Nurse (RN) in the administration of medication with injectable equipment used to administer glucagon;
- the School Nurse (RN) has attested, in writing, that such trained school personnel has completed such training.

STEPS FOR ADMINISTERING GLUCAGON:

1. Never attempt to give a student suffering from severe hypoglycemia food or drink or put anything in their mouth because this could cause choking.
2. Position the student on their side to prevent choking in the event of vomiting, which is a side effect of the Glucagon.
3. Have a staff member call for emergency medical assistance (911) and also have them notify the parent/guardian.

1 mg of freeze dried glucagon (vial)



1 ml of water for reconstitution (syringe)

4. Remove the cap from the glass vial containing the powder.
5. Remove the cap from the syringe and insert the needle into the vial through the rubber stopper.
6. Inject all of the fluid from the syringe into the bottle containing powder.
7. Shake gently, or roll to mix until all of the powder is dissolved in the liquid and solution is clear.
8. Inspect the vial. Glucagon, when mixed, should be clear and colorless. Do not administer if the liquid is discolored
9. Hold the vial upside down in one hand and insert the syringe into the vial.
10. Draw the solution into the syringe.
11. Clean the site with alcohol if possible.
12. The best locations to give Glucagon are in the thighs or upper arms.
13. Inject the Glucagon at a 90° angle and push syringe plunger all the way down.
14. Count to five.
15. Remove the needle from the skin and dispose of in a sharps container.
16. Confirm that 911 has been called.

17. Stay with the student until EMS arrives. It may take the student 15-20 minutes to regain consciousness.

Do not be surprised if:

- The student doesn't remember being unconscious, or is incoherent.
- The student has nausea or vomiting.
- The student's blood glucose becomes very high.

I.3.b Administering Daily Insulin

Insulin is a hormone that can only, at this time, be taken by multiple injections or by insulin pump. Insulin lowers blood sugar. The various kinds of insulin work for differing lengths of time. Most children take a combination of insulin at different times of the day. The types and amount of insulin the student needs must be ordered by the physician.

Students with type 1 diabetes and some students with type 2 diabetes require insulin to be given at regular times each day. Some students who need insulin during the school day are able to administer it on their own; others need supervision; and some need someone to administer the insulin for them. The School Nurse (RN) should provide this help in accordance with the IHP. School personnel who are responsible for the student's care should be knowledgeable about the student's insulin delivery system and how to respond to an emergency.

The three most common ways to administer insulin are with a syringe, an insulin pen, or an insulin pump. The manufacturers of insulin, insulin syringes, insulin pens, and insulin pumps have websites where school personnel can learn more about these products.

Storing Insulin:

- Review the product storage instructions and check the expiration date.
- Generally store at room temperature less than 86 degrees.
- Refrigerate unopened vials and insulin pens.
- Be careful NOT to freeze.

When to Give Insulin:

- Insulin must be administered as specified in the student's DMMP. The DMMP specifies the orders of the student's health care provider.
- The DMMP should clearly specify insulin dosing procedures.

Dosing Insulin:

- Some students will use a standing insulin dose (same dose) regardless of blood glucose level or food intake.
- Others will have a varied dose, depending upon:
 - Carb or meal boluses, to cover what is eaten and
 - Correction boluses, to cover high blood glucose.

These two concepts are covered in the training link found in the Diabetes Training Section.

Where to Give Insulin:

- Insulin works best when it is injected into a layer of fat under the skin, above the muscle tissue.
- Rotating sites is important to insulin absorption.

- Common preferred sites are the abdomen, thighs, buttocks, and upper arms.
- Student should help choose injection site.

After Giving Insulin:

A few points to keep in mind after insulin is given, regardless of whether it is by syringe, pen, or pump.

- Check site for leaks (Occasionally injection sites or infusion sites will leak when insulin is administered.)
- Document on log sheet.
- When correction doses are given to lower blood glucose, a retest should be done, if specified in the DMMP, to determine how well the correction dose worked.
- **When insulin has been given prior to a meal or snack, it is important that the food is eaten soon (beginning within 15 minutes) after the insulin has been taken.**

I.4 DIABETES TRAINING

TRAINING FOR SCHOOL NURSES:

- T.C.A. § 49-5-415(d)(3) states that all school nurses must be educated in diabetes care and have knowledge of the guidelines.
- Some health care professionals may have little expertise in diabetes education and/or management but provide support to students with diabetes. Licensed health care professionals employed or contracted by an LEA who will be providing care to a student with diabetes should demonstrate competency for both knowledge and skills on an annual basis.
 - **Suggested Training Resource for School Nurses:**
Helping Administer to the Needs of the Student with Diabetes in School (H.A.N.D.S.)
 H.A.N.D.S. is a live continuing education full day program developed by the National Association of School Nurses (NASN) for school nurses to equip the school nurse with current diabetes knowledge, and provide tools and resources to facilitate effective diabetes management for students at school. It is presented by a School Nurse with a specific interest in diabetes and a Certified Diabetes Educator. For more information, contact NASN at <http://www.nasn.org/ContinuingEducation/LiveContinuingEducationPrograms/HANDSDiabetesProgram>

TRAINING FOR SCHOOL PERSONNEL WHO VOLUNTEER:

- T.C.A. § 49-5-415 (b) states that school personnel who volunteer under no duress or pressure and who have been properly trained by a registered nurse employed or contracted by the LEA may administer glucagon in emergency situations and may administer daily insulin to a student based on that student's Individual Health Plan (IHP). Training to administer glucagon and insulin shall be repeated annually and competencies shall be documented at least twice a year in the employee's personnel file. The provisions of subdivision (a)(3) regarding protection from liability shall apply also to the volunteers who provide services pursuant to this subsection and the registered nurses who provide their training.
 - T.C.A. § 49-5-415 (a)(3) provides that any person assisting in self-administration of medication or performing health care procedures, including administration of medications under this section, and any local board of education or governing board for a non-public school authorizing the self-administration of medications or the performance of health care procedures shall not be liable in any court of law for injury resulting from the reasonable and

prudent assistance in the self-administration of such medication or the reasonable performance of the health care procedures, including administration of medications, if performed pursuant to the policies and guidelines developed by the Departments of Health and Education and approved by applicable regulatory or governing boards or agencies.

- T.C.A. § 49-5-415(d)(3) states that school personnel, who volunteer under no duress to assist with the care of students with diabetes, must receive training from a school RN. The school RN may use certified diabetes educators and licensed nutritionists to assist with the training. All training must be renewed on an annual basis and competency must be noted in the personnel file. No school personnel shall be required to volunteer for the training. School personnel may not be reprimanded, subject to any adverse employment action or punished in any manner for refusing to volunteer.
 - T.C.A. § 49-5-415(d)(5) states that the following persons shall not be liable in any court of law for injury resulting from reasonable assistance with the care of students with diabetes if performed pursuant to the guidelines developed by the Departments of Health and Education:
 - (A) Any school RN who provides the training;
 - (B) Any person who is trained and whose competency is indicated in the person's personnel file as required in subdivision (d)(3); and
 - (C) Any local board of education or governing board for a non-public school that authorizes school personnel to volunteer to assist with the care of students with diabetes.

School Registered Nurses who provide training to volunteers under this subsection shall not be subject to any disciplinary or otherwise adverse licensing action by the board of nursing for injury resulting from assistance with the care of students with diabetes if performed pursuant to these guidelines.

➤ **Suggested Components for Training Curriculum:**

Training curriculum and teaching methods for preparing the school personnel who volunteer should include both knowledge and skills components. Both a written test and a skills check should be included, and the learner must demonstrate competency on both in order to be designated as a trained school personnel volunteer. A copy of the training guidelines, test and skills check results, and a record of staff training must be maintained by the School Nurse (RN) or principal.

A [Sample Skills Checklist](#) and a [Sample Written Test](#) is available in the Diabetes Forms section.

Content shall include, at a minimum, the following elements so that the learner:

- Understands the essential elements of the DMMP, IHP, 504 Plan, IEP, or other education plan.
- Has a general understanding of type 1 and type 2 diabetes.
- Understands the effects of balancing insulin, food and exercise upon a student's blood glucose levels.
- Recognizes the signs and symptoms of low blood sugar/glucose (hypoglycemia) and high blood sugar/glucose (hyperglycemia) levels;
- Understands and knows how to take or help the student take proper action if the blood sugar/glucose and/or urine ketones are outside the range indicated by the student's diabetes management and treatment plan;
- Performs or assists a student with monitoring of blood sugar/glucose using a continuous glucose monitoring (CGM) system or a glucose monitor provided by the student's family and/or urine testing strips for ketone evaluation and recording the results in the designated record;

- Knows how to safely and properly administer insulin and glucagon according to the student's diabetes management and treatment plan and individual health plan and knows how to record the action in the designated record;
- Knows and recognizes the signs and symptoms and blood sugar/glucose levels that require emergency assistance and knows how to take proper action;
- Knows and understands the nutritional needs of students with diabetes, including but not limited to, the need for regular meals, how snacks are utilized in the daily regimen of children with diabetes, how exercise affects blood sugar/glucose, and how changes in schedules, such as illness, tests and field trips, can affect children's nutritional needs; and
- Knows when to call the parent(s), a health care professional and/or 911 for help.

➤ **Suggested Training Resources for School Personnel:**

- **Helping the Student with Diabetes Succeed: A Guide for School Personnel**
Prepared by a panel of organizations and published by the National Diabetes Education Program. The manual can be accessed on the following web link:
<http://ndep.nih.gov/hcp-businesses-and-schools/Schools.aspx>

The comprehensive guide provides a framework for supporting students with diabetes with an optimal team approach. It has copy-ready sample action plans and includes the following topics:

1. Diabetes Primer
 - a) Overview of type 1 and type 2 diabetes basics
 - b) Effective diabetes management in schools
 - c) How a school can plan and implement effective diabetes management
 - d) Why diabetes self-management is important
 - e) Why diabetes management training is essential for school personnel
2. Responsibilities of School Personnel
 - a) School District Administrator
 - b) Principal, School Administrator, or Designee
 - c) School Nurse (registered nurse)
3. Trained Diabetes Personnel
 - a) Teachers
 - b) Coaches and Physical Education Instructors
 - c) Food Service Managers, Lunchroom Staff or Monitors
 - d) Bus Drivers
 - e) Guidance Counselors or School Psychologists
4. Responsibilities of the Parents and/or Guardians and Student
5. Sample DMMP's and Individualized Emergency Plans
6. Applicable Federal Laws
 - a) Section 504 of the Rehabilitation Act of 1973
 - b) Americans with Disabilities Act of 1990
 - c) Individuals with Disabilities Education Act (IDEA)

- **Diabetes Care Tasks at School: What Key Personnel Need to Know** is a two-part training curriculum consisting of 13 PowerPoint slides with corresponding video segments developed

by the American Diabetes Association. The modules are intended to be used by a trainer who is a School Nurse (RN) or a health care professional with expertise in diabetes care in order to train other nurses and staff members about diabetes care tasks at school. The modules are available at www.diabetes.org/schooltraining. The modules can be used in conjunction with 'Helping the Student with Diabetes Succeed: A Guide for School Personnel'.

<http://www.diabetes.org/living-with-diabetes/parents-and-kids/diabetes-care-at-school/school-staff-trainings/diabetes-care-tasks.html>

SUGGESTIONS FOR OBTAINING TRAINING SUPPLIES

Schools may be able to obtain training supplies from the following sources:

- pharmacies;
- manufacturers of diabetes products and supplies;
- local health departments;
- parent donations, especially expired glucagon kits;
- physician's offices;
- hospitals and clinics.

TASKS & SKILLS CHECKLIST

School Nurses (RN) assess skills as part of the initial training as well as during any subsequent training. The School Nurse (RN) can use this checklist for initial, annual and periodic reviews during the school year. Participants should receive hands-on training in the skills listed below and should be able to demonstrate that they can successfully perform the tasks correctly three times.

- ✓ **Individual Health Plan**
 - Read and understand each step
 - Identify signs of high and low blood sugar/glucose levels
 - Describe actions to be taken
 - Help a student respond to high and low sugar/glucose levels
 - Know when and who to contact for information or help (parent, student's health care provider, and emergency medical services)
- ✓ **Testing**
 - Use blood glucose monitor(s) furnished by the student(s)
 - Calibrate equipment
 - Check blood or urine ketone level
 - Record results and know what action is indicated
- ✓ **Insulin Administration**
 - Demonstrate aseptic and sterile techniques
 - Use insulin syringes, pens, or other delivery devices
 - Prepare a correct dose
 - Inject subcutaneous (under the skin) insulin
 - Record action (time, dose, site) and any student observation
- ✓ **Insulin Pump**
 - Recognize proper attachment
 - Know how to disconnect the pump when indicated
 - Know how to administer a bolus dose of insulin
 - Recognize signs of malfunction and what to do in the event of a problem

Note: Specific training by a healthcare professional that works with the specific pump and written directions from the manufacturer is warranted. Parent participation in this instruction is recommended.

✓ **Glucagon administration**

- Know when to administer glucagon and call for emergency help
- Prepare medication using diluent
- Calculate the proper dose, as ordered by an authorized healthcare professional
- Record action and blood sugar/glucose test results

✓ **Universal Precautions**

- Staff and students with diabetes need to adhere to the district or school policy that addresses universal precautions to prevent potential needle stick injuries and potential infection. The school or district policy should be consistent with standard Universal Precautions and local waste-disposal laws. Local waste disposal laws vary from community to community.

I.5 DIABETES FORMS

1. [Sample Diabetes Medical Management Plan \(DMMP\)](#)
2. [Sample Individualized Health Plan \(IHP\)](#)
3. [Sample Hypoglycemia Emergency Care Plan](#)
4. [Sample Hyperglycemia Emergency Care Plan](#)
5. [Sample Skills Checklist](#)
6. [Sample Written Test](#)

Sample Diabetes Medical Management Plan (DMMP)



Place
Child's
Picture
Here

Diabetes Medical Management Plan (DMMP)

This plan should be completed by the student's personal diabetes health care team, including the parents/guardian. It should be reviewed with relevant school staff and copies should be kept in a place that can be accessed easily by the school nurse, trained diabetes personnel, and other authorized personnel.

Date of Plan: _____ This plan is valid for the current school year: _____ - _____
Student's Name: _____ Date of Birth: _____
Date of Diabetes Diagnosis: _____ type 1 type 2 Other: _____
School: _____ School Phone Number: _____
Grade: _____ Homeroom Teacher: _____
School Nurse: _____ Phone: _____

CONTACT INFORMATION

Mother/Guardian: _____
Address: _____
Telephone: Home _____ Work _____ Cell _____
Email Address: _____

Father/Guardian: _____
Address: _____
Telephone: Home _____ Work _____ Cell _____
Email Address: _____

Student's Physician/Health Care Provider: Address: _____
Telephone: _____ Emergency Number _____
Email Address: _____

Other Emergency Contacts:
Name: _____ Relationship _____
Telephone: Home _____ Work _____ Cell _____

CHECKING BLOOD GLUCOSE

Target range of blood glucose: 70-130 mg/dL 70-180 mg/dL

Other: _____

Check blood glucose level: Before lunch _____ Hours after lunch

2 hours after a correction dose Mid-morning Before PE After PE

Before dismissal Other: _____

As needed for signs/symptoms of low or high blood glucose

As needed for signs/symptoms of illness

Preferred site of testing: Fingertip Forearm Thigh Other: _____

Brand/Model of blood glucose meter: _____

Note: The fingertip should always be used to check blood glucose level if hypoglycemia is suspected.

Student's self-care blood glucose checking skills:

Independently checks own blood glucose

May check blood glucose with supervision

Requires school nurse or trained diabetes personnel to check blood glucose

Continuous Glucose Monitor (CGM): Yes No

Brand/Model: _____ Alarms set for: (low) and (high)

Note: Confirm CGM results with blood glucose meter check before taking action on sensor blood glucose level. If student has symptoms or signs of hypoglycemia, check fingertip blood glucose level regardless of CGM

HYPOGLYCEMIA TREATMENT

Student's usual symptoms of hypoglycemia (list below):

If exhibiting symptoms of hypoglycemia, OR if blood glucose level is less than _____ mg/dL, give a quick-acting glucose product equal to _____ grams of carbohydrate.

Recheck blood glucose in 10-15 minutes and repeat treatment if blood glucose level is less than _____ mg/dL.

Additional treatment: _____

Follow physical activity and sports orders (see page 7).

- If the student is unable to eat or drink, is unconscious or unresponsive, or is having seizure activity or convulsions (jerking movements), give:
- Glucagon: 1 mg 1/2 mg Route: S C I M
- Site for glucagon injection: arm thigh Other: _____
- Call 911 (Emergency Medical Services) and the student's parents/guardian.
- Contact student's health care provider.

HYPERGLYCEMIA TREATMENT

Student's usual symptoms of hyperglycemia (list below):

Check:

Urine Blood for ketones every ____ hours when blood glucose levels are above ____ mg/dL.

For blood glucose greater than ____ mg/dL AND at least ____ hours since last insulin dose, give correction dose of insulin (see orders below).

For insulin pump users: see additional information for student with insulin pump.

Give extra water and/or non-sugar-containing drinks (not fruit juices): ____ ounces per hour

Additional treatment for ketones: _____

Follow physical activity and sports orders (see page 7).

- Notify parents/guardian of onset of hyperglycemia.
- If the student has symptoms of a hyperglycemia emergency, including dry mouth, extreme thirst, nausea and vomiting, severe abdominal pain, heavy breathing or shortness of breath, chest pain, increasing sleepiness or lethargy, or depressed level of consciousness: Call 911 (Emergency Medical Services) and the student's parents/guardian.
- Contact student's health care provider.

INSULIN THERAPY

Insulin delivery device: syringe insulin pen insulin pump

Type of insulin therapy at school:

- Adjustable Insulin Therapy
 Fixed Insulin Therapy
 No insulin

Adjustable Insulin Therapy

- **Carbohydrate Coverage/Correction Dose:**

Name of insulin: _____

- **Carbohydrate Coverage:**

Insulin-to-Carbohydrate Ratio:

Lunch: 1 unit of insulin per _____ grams of carbohydrate

Snack: 1 unit of insulin per _____ grams of carbohydrate

Carbohydrate Dose Calculation Example

$$\frac{\text{Grams of carbohydrate in meal}}{\text{Insulin-to-carbohydrate ratio}} = \text{_____ units of insulin}$$

- **Correction Dose:**

Correction Dose Calculation Example

$$\frac{\text{Actual Blood Glucose} - \text{Target Blood Glucose}}{\text{Blood Glucose Correction Factor/Insulin Sensitivity Factor}} = \text{_____ units of insulin}$$

Blood Glucose Correction Factor/Insulin Sensitivity Factor = _____

Target blood glucose = _____ mg/dL

Correction dose scale (use instead of calculation above to determine insulin correction dose):

Blood glucose _____ to mg/dL give _____ units

Blood glucose _____ to mg/dL give _____ units

Blood glucose _____ to mg/dL give _____ units

Blood glucose _____ to mg/dL give _____ units

When to give insulin:

Lunch

- Carbohydrate coverage only
- Carbohydrate coverage plus correction dose when blood glucose is greater than _____mg/dL and _____ hours since last insulin dose.
- Other: _____

Snack

- No coverage for snack
- Carbohydrate coverage only
- Carbohydrate coverage plus correction dose when blood glucose is greater than _____mg/dL and _____ hours since last insulin dose.
- Other: _____
- Correction dose only:

For blood glucose greater than _____ mg/dL AND at least _____ hours since last insulin dose.

- Other: _____

Fixed Insulin Therapy

Name of insulin: _____

- _____ Units of insulin given pre-lunch daily
- _____ Units of insulin given pre-snack daily
- Other: _____

Parental Authorization to Adjust Insulin Dose:

- Yes No Parents/guardian authorization should be obtained before administering a correction dose.
- Yes No Parents/guardian are authorized to increase or decrease correction dose scale within the following range: +/- _____units of insulin.
- Yes No Parents/guardian are authorized to increase or decrease insulin-to-carbohydrate ratio within the following range: _____units per prescribed grams of carbohydrate, +/- _____grams of carbohydrate.
- Yes No Parents/guardian are authorized to increase or decrease fixed insulin dose within the following range: +/- _____units of insulin.

Student's self-care insulin administration skill

- Yes No Independently calculates and gives own injections
- Yes No May calculate/give own injections with supervision
- Yes No Requires school nurse or trained diabetes personnel to calculate/give injections

ADDITIONAL INFORMATION FOR STUDENT WITH INSULIN PUMP

Brand/Model of pump: _____ Type of insulin in pump: _____

Basal rates during school: _____

Type of infusion set: _____

- For blood glucose greater than _____ mg/dL that has not decreased within _____ hours after correction, consider pump failure or infusion site failure. Notify parents/guardian.
- For infusion site failure: Insert new infusion set and/or replace reservoir.
- For suspected pump failure: suspend or remove pump and give insulin by syringe or pen.

Physical Activity

May disconnect from pump for sports activities Yes No

Set a temporary basal rate Yes No _____% temporary basal for _____ hours

Suspend pump use Yes No

Student's self-care pump skills:

Independent?

- | | |
|---|--|
| Count carbohydrates | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Bolus correct amount for carbohydrates consumed | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Calculate and administer correction bolus | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Calculate and set basal profiles | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Calculate and set temporary basal rate | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Change batteries | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Disconnect pump | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Reconnect pump to infusion set | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Prepare reservoir and tubing | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Insert infusion set | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Troubleshoot alarms and malfunctions | <input type="checkbox"/> Yes <input type="checkbox"/> No |

OTHER DIABETES MEDICATIONS

Name: _____ Dose: _____ Route: _____ Times given: _____

Name: _____ Dose: _____ Route: _____ Times given: _____

MEAL PLAN

Meal/Snack	Time	Carbohydrate Content (grams)
------------	------	------------------------------

Breakfast	_____	_____ to _____
-----------	-------	----------------

Mid-morning snack	_____	_____ to _____
-------------------	-------	----------------

Lunch	_____	_____ to _____
-------	-------	----------------

Mid-afternoon snack	_____	_____ to _____
---------------------	-------	----------------

Other times to give snacks and content/amount: _____

Instructions for when food is provided to the class (e.g., as part of a class party or food sampling event):

Special event/party food permitted: Parents/guardian discretion Student discretion

Student's self-care nutrition skills:

Yes No Independently counts carbohydrates

Yes No May count carbohydrates with supervision

Yes No Requires school nurse/trained diabetes personnel to count carbohydrates

PHYSICAL ACTIVITY AND SPORTS

A quick-acting source of glucose such as glucose tabs and/or sugar-containing juice must be available at the site of physical education activities and sports.

Student should eat:

15 grams 30 grams of carbohydrate other _____

before every 30 minutes during after vigorous physical activity

other _____

If most recent blood glucose is less than _____ mg/dL, student can participate in physical activity when blood glucose is corrected and above _____ mg/dL.

Avoid physical activity when blood glucose is greater than _____ mg/dL or if urine/blood ketones are moderate to large.

DISASTER PLAN

To prepare for an unplanned disaster or emergency (72 HOURS), obtain emergency supply kit from parent/guardian.

Continue to follow orders contained in this DMMP.

Additional insulin orders as follows: _____

Other: _____

SIGNATURES

This Diabetes Medical Management Plan has been approved by:

Student's Physician/Health Care Provider

Date

I, (parent/guardian)_____ give permission to the school nurse or another qualified health care professional or trained diabetes personnel of (school)_____ to perform and carry out the diabetes care tasks as outlined in (student)_____ 's Diabetes Medical Management Plan. I also consent to the release of the information contained in this Diabetes Medical Management Plan to all school staff members and other adults who have responsibility for my child and who may need to know this information to maintain my child's health and safety. I also give permission to the school nurse or another qualified health care professional to contact my child's physician/health care provider.

Acknowledge and received by:

Student's Parent/Guardian

Date

Student's Parent/Guardian

Date

School Nurse/Other Qualified Health Care Personnel

Date

Sample Individualized Health Plan (IHP) for Students with Diabetes

Student: _____

Grade: _____ Dates: _____ School Year _____

IHP Completed by: _____ Date: _____

IHP Review Dates: _____

Nursing Assessment Review: _____

Nursing Assessment Completed by: _____ Date: _____

Nursing Diagnosis	Sample Interventions and Activities	Date Implemented	Sample Outcome Indicator	Date Evaluated										
<p>Managing Potential Diabetes Emergencies (risk for unstable blood glucose)</p>	<p>Establish and document student's routine for maintaining blood glucose within goal range including while at school:</p> <p>Blood Glucose Monitoring</p> <ul style="list-style-type: none"> • Where to check blood glucose: <ul style="list-style-type: none"> ✓ Classroom ✓ Health room ✓ Other • When to check blood glucose: <ul style="list-style-type: none"> <input type="checkbox"/> Before breakfast <input type="checkbox"/> Mid-morning <input type="checkbox"/> Before lunch <input type="checkbox"/> After lunch <input type="checkbox"/> Before snack <input type="checkbox"/> Before PE <input type="checkbox"/> After PE <input type="checkbox"/> 2 hours after correction dose <input type="checkbox"/> Before dismissal <input type="checkbox"/> As needed <input type="checkbox"/> Other: _____ • Student Self-Care Skills: <ul style="list-style-type: none"> <input type="checkbox"/> Independent <input type="checkbox"/> Supervision <input type="checkbox"/> Full assistance • Brand/model of BD meter: _____ • Brand/model of CGM: _____ 		<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <p>Blood glucose remains in goal range</p> </div> <p>Percentage of Time</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">0%</td> <td style="text-align: center;">25%</td> <td style="text-align: center;">50%</td> <td style="text-align: center;">75%</td> <td style="text-align: center;">100%</td> </tr> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">3</td> <td style="text-align: center;">4</td> <td style="text-align: center;">5</td> </tr> </table>	0%	25%	50%	75%	100%	1	2	3	4	5	
0%	25%	50%	75%	100%										
1	2	3	4	5										

Individualized Health Care Plan (IHP) (Continued page 2 of 2)

Nursing Diagnosis	Sample Interventions and Activities	Date Implemented	Sample Outcome Indicator	Date Evaluated				
Supporting the Independent Student (effective therapeutic regimen management)	Hypoglycemia Management STUDENT WILL: <ul style="list-style-type: none"> • Check blood glucose when hypoglycemia suspected • Treat hypoglycemia (follow Diabetes Emergency Care Plan) • Take action following a hypoglycemia episode: • Keep quick-acting glucose product to treat on the spot Type: _____ Location: _____ <ul style="list-style-type: none"> • Routinely monitor hypoglycemia trends r/t class schedule (e.g., time of PE, scheduled lunch, recess) and insulin dosing • Report and consult with parents/guardian, school nurse, HCP, and school personnel as appropriate 		<p style="text-align: center;">Monitors Blood Glucose (records, reports, and correctly responds to results)</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">Never Demonstrated</td> <td style="text-align: center;">Consistently Demonstrated</td> </tr> <tr> <td style="text-align: center;">1 2 3 4 5</td> <td></td> </tr> </table>	Never Demonstrated	Consistently Demonstrated	1 2 3 4 5		
Never Demonstrated	Consistently Demonstrated							
1 2 3 4 5								
Supporting Positive Coping Skills (readiness for enhanced coping)	Environmental Management <ul style="list-style-type: none"> • Ensure confidentiality • Discuss with parents/guardian and student preference about who should know student's coping status at school • Collaborate with parents/guardian and school personnel to meet student's coping needs • Collaborate with school personnel to create an accepting and understanding environment 		<p style="text-align: center;">Readiness to Learn</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">Severely Compromised</td> <td style="text-align: center;">Not Compromised</td> </tr> <tr> <td style="text-align: center;">1 2 3 4 5</td> <td></td> </tr> </table>	Severely Compromised	Not Compromised	1 2 3 4 5		
Severely Compromised	Not Compromised							
1 2 3 4 5								

Sample Hypoglycemia Emergency Care Plan

Place
Child's
Picture
Here

Student: _____

Grade: _____ Teacher: _____

Dates of Plan: _____

Emergency Contact Information

Mother/Guardian: _____

Email address: _____ Home phone: _____

Work phone: _____ Cell: _____

Father/Guardian: _____

Email address: _____ Home phone: _____

Work phone: _____ Cell: _____

Health Care Provider: _____

Phone Number: _____

School Nurse: _____

Contact Numbers: _____

Trained Diabetes Personnel: _____

Contact Numbers: _____

The student should never be left alone, or sent anywhere alone, or with another student, when experiencing hypoglycemia.

Causes of Hypoglycemia	Onset of Hypoglycemia
<ul style="list-style-type: none"> Too much insulin Missing or delaying meals or snacks Not eating enough food (carbohydrates) Getting extra, intense, or unplanned physical activity Being ill, particularly with gastrointestinal illness 	<p>Sudden— symptoms may progress rapidly</p>

Hypoglycemia Symptoms

Circle student's usual symptoms

Mild to Moderate		Severe
<ul style="list-style-type: none"> • Shaky or jittery • Sweaty • Hungry • Pale • Headache • Blurry vision • Sleepy • Dizzy • Confused • Disoriented 	<ul style="list-style-type: none"> • Uncoordinated • Irritable or nervous • Argumentative • Combative • Changed personality • Changed behavior • Inability to concentrate • Weak • Lethargic • Other: _____ 	<ul style="list-style-type: none"> • Inability to eat or drink • Unconscious • Unresponsive • Seizure activity or convulsions • (jerking movements)

Actions for Treating Hypoglycemia

Notify School Nurse or Trained Diabetes Personnel as soon as you observe symptoms.

If possible, check blood glucose (sugar) at fingertip.

Treat for hypoglycemia if blood glucose level is less than ___mg/dL.

WHEN IN DOUBT, ALWAYS TREAT FOR HYPOGLYCEMIA AS SPECIFIED BELOW.

Treatment for Mild to Moderate Hypoglycemia	Treatment for Severe Hypoglycemia
<ul style="list-style-type: none"> • Provide quick-acting glucose (sugar) product equal to _____ grams of carbohydrates. <p>Examples of 15 grams of carbohydrates include:</p> <ul style="list-style-type: none"> ○ 3 or 4 glucose tablets ○ 1 tube of glucose gel ○ 4 ounces of fruit juice (not low-calorie or reduced sugar) ○ 6 ounces of soda (½ can) (not low-calorie or reduced sugar) <ul style="list-style-type: none"> • Wait 10 to 15 minutes • Recheck blood glucose level. • Repeat quick-acting glucose product if blood glucose level is less than _____mg/dL. • Contact the student's parents/guardian. 	<ul style="list-style-type: none"> • Position the student on his or her side. • Do not attempt to give anything by mouth. • Administer glucagon: _____ mg at _____ site • While treating, have another person call • 911 (Emergency Medical Services). Contact the student's parents/guardian. • Stay with the student until Emergency • Medical Services arrive. • Notify student's health care provider.

Sample Hyperglycemia Emergency Care Plan

Place
Child's
Picture
Here

Student: _____

Grade: _____ Teacher: _____

Dates of Plan: _____

Emergency Contact Information

Mother/Guardian: _____

Email address: _____ Home phone: _____

Work phone: _____ Cell: _____

Father/Guardian: _____

Email address: _____ Home phone: _____

Work phone: _____ Cell: _____

Health Care Provider: _____

Phone Number: _____

School Nurse: _____

Contact Numbers: _____

Trained Diabetes Personnel: _____

Contact Numbers: _____

Causes of Hyperglycemia	Onset of Hyperglycemia
<ul style="list-style-type: none"> • Too little insulin or other glucose-lowering medication • Food intake that has not been covered adequately by insulin • Decreased physical activity • Illness • Infection • Injury • Severe physical or emotional stress • Pump malfunction 	<p>Sudden— symptoms may progress rapidly</p>

Hyperglycemia Signs	Hyperglycemia Emergency Symptoms (Diabetic ketoacidosis, DKA, which is associated with hyperglycemia, ketosis, and dehydration)
Circle student's usual signs and symptoms.	
<ul style="list-style-type: none">• Increased thirst and/or dry mouth• Frequent or increased urination• Change in appetite and nausea• Blurry vision• Fatigue• Other: _____	<ul style="list-style-type: none">• Dry mouth, extreme thirst, and• Dehydration• Nausea and vomiting• Severe abdominal pain• Fruity breath• Heavy breathing or shortness of breath• Chest pain• Increasing sleepiness or lethargy• Depressed level of consciousness

Actions for Treating Hyperglycemia	
Notify School Nurse or Trained Diabetes Personnel as soon as you observe symptoms.	
Treatment for Hyperglycemia	Treatment for Hyperglycemia Emergency
<ul style="list-style-type: none">• Check the blood glucose level: _____ mg/dL.• Check urine or blood for ketones if blood glucose levels are greater than: _____ mg/dL.• If student uses a pump, check to see if pump is connected properly and functioning.• Administer supplemental insulin dose: _____• Give extra water or non-sugar-containing drinks (not fruit juices): _____ ounces per hour.• Allow free and unrestricted access to the restroom.• Recheck blood glucose every 2 hours to determine if decreasing to target range of _____ mg/dL.• Restrict participation in physical activity if blood glucose is greater than _____ mg/dL and if ketones are moderate to large.• Notify parents/guardian if ketones are present.	<ul style="list-style-type: none">• Call parents/guardian, student's health care provider, and 911 (Emergency Medical Services) right away.• Stay with the student until Emergency Medical Services arrive.

Sample Format for Skills Check

Name of individual being tested: _____

Name of registered nurse assessing competency: _____

Date: _____

Skill	*Pass/Fail
Testing	
Use blood glucose meter	
Calibrate equipment	
Check urine for ketones	
Record results	
Insulin Injection	
Adhere to sterile technique	
Use of insulin syringe and pen	
Prepare a correct dose	
Inject via subcutaneous route	
Record time, dose, site	
Glucagon administration	
Prepare medication using diluent	
Calculate proper dose	
Record time, dose, site	
Universal Precautions	
Dispose of needles/sharps properly	
Use of Individual Health Plan (IHP)	
Able to locate IHP	
Able to identify glucose ranges	
Able to identify orders	
Able to identify steps to implement orders	
Insulin Pump Management	
Able to identify individual pumps	
Able to know what emergency supplies are needed (i.e. batteries)	
Able to know how to quick release	
Able to know how to bolus, if needed	

*Demonstrate that they can successfully perform the tasks correctly three times.

Sample Written Test for Diabetes Training

Name of individual being tested: _____

Date: _____

Instructions: Check only one answer for each question. Must obtain a passing score of 80%

Diabetes Basics

1. Diabetes is:

- a) an endocrine disorder in which either the pancreas no longer secretes insulin or the body does not use insulin properly
- b) a disease of the liver
- c) a disease of the gall bladder

2. The three main types of diabetes are:

- a) type 1, type 2, and metabolic syndrome
- b) type 1, type 2, type A
- c) type 1, type 2, and gestational diabetes
- d) none of the above

3. The main function of the pancreas is to:

- a) produce enough insulin to allow glucose to enter the body's cells
- b) produce enough insulin to keep glucose values within a normal range
- c) a and b

4. You can tell if a student has diabetes just by looking at him/her.

- True False

5. Students with type 1 diabetes must take insulin

- True False

6. Students with type 1 diabetes are

- a) usually in the first grade
- b) usually in middle school
- c) any age

7. Students with type 2 diabetes may or may not take insulin

- True False

8. Students with diabetes must check their blood glucose

- a) three times a day
- b) five times a day
- c) four times at school and four times at home
- d) as outlined in their medical management and treatment plan

9. Diabetes is managed by

- a) following a recommended eating plan
- b) taking medication as prescribed
- c) getting physical activity
- d) seeing a healthcare provider routinely
- e) all of the above

10. The goal of good diabetes management is to:

- a) be as healthy as possible

- b) avoid the complications associated with diabetes
- c) fully participate in all academic and extracurricular activities
- d) keep blood glucose levels within an acceptable range
- e) all of the above

11. Physical activity can help to:

- a) control weight
- b) maintain cardiovascular fitness
- c) lower blood glucose levels
- d) increase insulin sensitivity
- e) all of the above

Diabetes Management

12. Students with diabetes are required to have an individual health plan (IHP).

True False

13. The IHP should include the following:

- a) a list of all the medicines the student is to take while at school
- b) a schedule of when medicines are to be administered
- c) doses of medicines that will be taken at school
- d) ranges of glucose values and steps to take when the values are out of range
- e) when and how often the student is to have snacks
- f) name and phone number of treating healthcare provider
- g) a, c, and d
- h) a, e, and f
- i) all of the above

14. Insulin may be administered by using

- a) insulin syringes
- b) an insulin pump
- c) insulin pens
- d) all of the above

15. Students with diabetes cannot eat foods with sugar.

True False

16. Students with diabetes may dispose of their blood testing equipment

- a) by taking lancets home, using safe needle disposal recommendations
- b) by taking lancets to the nurse's office, using safe needle disposal recommendations
- c) by adhering to the district policy related to safe needle disposal
- d) by throwing away in the regular trash
- e) all of the above
- f) a, b, and c only

17. Symptoms of mild to moderate hypoglycemia may include:

- a) hunger
- b) headache
- c) dizziness
- e) excessive sweating
- f) inability to concentrate
- g) confusion
- h) all of the above

18. Mild to moderate hypoglycemia is determined by:
 a) testing the student's blood glucose
 b) looking at the child and asking her/him how she/he feels
19. Mild to moderate hypoglycemia is treated by:
 a) eating
 b) administering insulin
 c) following the IHP
 d) a and c
20. Symptoms of severe hypoglycemia should be suspected if:
 a) the student collapses
 b) has a seizure
 c) a and b
21. Treating severe hypoglycemia should include:
 a) administering fast-acting glucose, if the student can swallow
 b) administering glucagon, if the student is unconscious
 c) a and b
22. Before and while engaging in physical activity, a student with diabetes should:
 a) monitor blood glucose levels before, during and after the scheduled physical activity
 b) adjust his/her insulin dose according to the IHP
 c) have a snack available as well as a source of fast-acting glucose to treat an episode of hypoglycemia
 d) all of the above
23. Symptoms of hyperglycemia include:
 a) thirst
 b) increased urination
 c) drowsiness
 d) irritability
 e) ketones in the urine
 f) blurred vision
 g) all of the above
 h) a, b, and c only
24. Hyperglycemia is determined by:
 a) the student's appearance
 b) the student's blood glucose value
25. The treatment of hyperglycemia may include:
 a) administering insulin
 b) following the IHP
 c) drinking water
 d) all of the above

Answers and Discussion Points for Diabetes Written Test

Note: 20 questions must be answered correctly in order to obtain a passing score of 80%.

Diabetes Basics

1. a

Diabetes is a chronic endocrine disorder that is either the result of having no insulin production (type 1) or limited insulin production and/or impaired use of insulin (type 2).

2. c

The three main types of diabetes are type 1 (a condition in which the pancreas no longer secretes insulin), type 2 (a condition in which the pancreas does not secrete enough insulin or the body fails to utilize the insulin properly), and gestational diabetes (diagnosed during pregnancy in a woman with no diagnosis prior to the pregnancy). There are other types of diabetes, but they account for a small percentage of cases.

3. c

The pancreas is a gland that produces insulin for glucose (sugar) absorption. Without insulin, glucose remains in the bloodstream and causes elevated glucose values; glucose values that are not in the normal range can cause damage to major organs and blood vessels.

4. False

It is not possible to look at a person with diabetes and tell that they have the disease. The disease is diagnosed by a blood test.

5. True

A person with type 1 diabetes (formerly called insulin-dependent diabetes) must take insulin, as their pancreas does not produce insulin.

6. c

A person with type 1 diabetes can be any age; while most persons with type 1 diabetes are diagnosed before the age of 19, type 1 diabetes can be diagnosed at any age.

7. True

A person with type 2 diabetes may be diet-controlled, may be taking oral medication, or may be on insulin.

8. d

How often a person with diabetes checks his/her blood glucose (sugar) will vary depending on many factors: age, number of episodes of hypoglycemia, stability of blood glucose values during the day, as well as other considerations. A student with diabetes will have an order from a provider that will let school staff know the frequency with which the student will check his/her blood glucose levels while at school. The number of times and the time frames (e.g., before lunch, after lunch, before physical activity, during physical activity, and after physical activity) should be outlined in the IPA.

9. e

Managing diabetes is accomplished by following a meal plan, knowing which foods elevate blood sugar, taking medications (both oral and injectable) as prescribed, getting physical activity, and seeing a healthcare provider routinely.

10. e

The goal of diabetes management is to have acceptable glucose values (usually expressed as a range) during the day; other goals include being healthy overall, and avoiding the co-morbid conditions associated with not being in control. Students with optimal management should participate fully in academic programs and extra-curricular activities.

11. e

Students with diabetes involved in physical activity during the school day benefit from the same advantages as anyone that participates in physical activity, such as weight control and cardiovascular fitness. A student with diabetes that exercises may have a decreased need for, or better utilization of insulin. Further, the most common problem encountered during physical activity is hypoglycemia.

Diabetes Management

12. True

Students with diabetes are expected to have an IHP so that school staff can know how to best manage the student during the school day.

13. i

The IHP should include a list of all medications the student is taking, including a schedule for when the medications are to be administered, and doses of medications; ranges of acceptable glucose values during the day and what to do when the glucose values are not in that range; when and how often the student will have snacks; and the name and phone number of the treating healthcare provider.

14. d

Insulin is available in vials (for which insulin syringes must be used), in pens, and in cartridges (used in pumps and must be pre-loaded).

15. False

A person with diabetes can have foods that contain sugar, such as cookies, some breakfast cereals, and most desserts; a student that consumes sugar-containing foods should know how to count the carbohydrates in those foods and then adjust his/her insulin accordingly.

16. f

A student with diabetes must dispose of his/her sharps (including lancets, syringes, empty pens, insulin vials, insulin cartridges, and pump infusion sets) by following the school or district policy related to safe needle disposal and adhering to universal precautions. Some schools will allow a student to take supplies home and dispose of them, with the caveat that he/she must carry sharps in a safe container (such as a little glass jar with a lid or a plastic container with a lid). Some schools may require that a student dispose of sharps daily by taking sharps to the nurse's office or clinic on campus.

17. h

Mild to moderate hypoglycemia (low blood sugar) will cause a student to be hungry, dizzy, sweat, tremble, unable to concentrate, confused, and/or have a headache. During mild to moderate episodes of hypoglycemia, a student will be able to speak; however, the speech may be slurred.

18. a

While there are physical symptoms of hypoglycemia (trembling, sweating, confusion), the only way to definitively know if a student has mild to moderate hypoglycemia is to test the blood glucose. Students that can recognize hypoglycemia will probably have a snack. If the IHP requires that if this occurs a student must report this to the school nurse of UDCA, then the student shall tell the appropriate school staff so that the episode can be documented.

19. d

Mild to moderate hypoglycemia is treated by eating or having a snack.

20. c

Severe hypoglycemia is usually suspected if a student collapses and/or has a seizure.

21. c

The goal of reversing severe hypoglycemia is to raise the blood sugar immediately; this is accomplished by administering a fast-acting glucose source (if the student can swallow) or by administering glucagon (if the student cannot swallow or is unconscious).

22. d

A student with diabetes that participates in physical activity should monitor his/her blood glucose prior to, during, and after exercising. Should the student have an episode of hypoglycemia, the student should have snacks available for moderate hypoglycemia as well as sources of fast-acting glucose in the event of severe hypoglycemia. Insulin doses prior to exercising would need to be adjusted according to the student's IHP.

23. g

Symptoms of hyperglycemia include being thirsty, urinating more often, being drowsy, being irritable, having ketones in the urine, and having blurred vision.

24. b

Hyperglycemia, just like hypoglycemia, cannot be ascertained by physical symptoms alone; to determine if blood glucose is elevated, the only way to know is to assess the blood glucose value.

25. d

A treatment option to lower blood sugar is by drinking a lot of water. This helps dilute the glucose in the blood. Administering insulin as outlined in the IHP is also a treatment option.

J. FOOD ALLERGY AND ANAPHYLAXIS OVERVIEW

The following guidelines have been developed to assist public school districts and non-public schools [that are served pursuant to Tennessee Code Annotated Section 49-5-415 (f)] in effectively preventing and controlling the incidences of life-threatening food allergies efficiently and managing the health and safety needs of children with life-threatening allergic conditions. Food is the most common cause of anaphylaxis. However, other causes of anaphylaxis include insect bites, bee stings, natural rubber latex, and/or medications and even in rare instances exercise. Food allergy is a growing food safety and public health concern in the United States because of the increased prevalence. While these guidelines focus primarily on food allergies they may be applied to all sources of anaphylaxis.

School settings are faced with major challenges due to students with one or more food allergies. According to the [Centers for Disease Control and Prevention](#); an estimated 4% - 6% ^{[1],[2]} of children in the United States are affected. Even small amounts of allergen in food can cause a reaction in individuals who are sensitive to the specific allergen. Strict avoidance of the food allergen is the only remedy to prevent life-threatening food allergy reactions. In some cases, deaths have occurred in schools, resulting from not recognizing symptoms and not responding promptly or effectively.

EMERGENCY ALLERGY RESPONSE PLAN AND ALLERGY ACTION PLAN:

Each school district/LEA shall develop a comprehensive program for managing allergies at school. Each school shall have an allergy management team which may include but is not limited to the school nurse, principal, teacher, student, food service director, bus driver, school physician, and counselor. Implementation of health care procedures, guidelines and plans that focus on allergy education, awareness, avoidance and immediate treatment of allergic reactions are critical to saving lives. School districts should anticipate the enrollment of students with life-threatening allergies in their schools and hence be prepared to assist these potential individuals when needed.

Each school district/LEA shall develop and implement an Emergency Allergy Response Plan that focuses on prevention and an appropriate response procedure should an unexpected emergency occur. This plan should be in place before the start of the school year and may be administered and adopted into policy and procedures at the district and local education level. Using the state food allergy guidelines plan as a guide, each school district must develop processes to identify all students with food allergies and develop and implement an Individualized Health Plan (IHP) with an Allergy Action Plan for each specific student.

➤ **EMERGENCY ALLERGY RESPONSE PLAN**

The LEA's system wide policy will outline the requirements of a program to manage students with life-threatening allergies. These more comprehensive and detailed protocols should include measures to reduce exposure to allergens and procedures to treat allergic reactions. There are four suggested components include:

1. Education and Training

All school personnel should have general education on managing life-threatening allergies.

^[1] Branum AM, Lukacs SL. Food allergy among U.S. children: trends in prevalence and hospitalizations. *NCHS Data Brief*. 2008;10:1-8.

^[2] Liu AH, Jaramillo R, Sicherer SH, et al. National prevalence and risk factors for food allergy and relationship to asthma: results from the National Health and Nutrition Examination Survey 2005-2006. *J Allergy Clin Immunol*. 2010;126(4):798-806.e13.

Mandatory training requirements include:

- Scheduling and implementation of the training in collaboration with the LEA administration by the School Nurse (RN).
- Annual training at a minimum.
- Cleaning protocol for classroom and cafeteria (type of cleaners, frequency, etc.).
- Guidelines for snacks, parties, lunch substitutions based on USDA guidelines.
- Allergen free tables in cafeterias and classrooms if desired (being careful not to compromise student confidentiality).
- Students/staff hygiene (frequent hand washing).
- Field trip management.
- Bus/transportation management:
 - Storage of epinephrine auto-injectors.
 - Instructions for care and use.
- Emergency response protocol:
 - Personnel responsibilities.
 - Communication procedures.
 - Emergency drills.
 - Administration/possible repeat administration of epinephrine.
 - Demonstration and competency checks on administration of the epinephrine auto-injectors.
- Training in cardiopulmonary resuscitation (CPR) based on LEA policy and [T.C.A. §§ 49-5-414, 49-3-359](#).

2. Record Keeping/Documentation

- Initiation and distribution of the IHP with an Allergy Action Plan by the School Nurse (RN). Copies should be in a clearly designated and readily accessible area at all times and updated as changes occur in the student's health status, including current photo if feasible.
- Locations of epinephrine auto-injectors and monitoring of expiration dates.
- Reviews of system wide policies on allergies as needed.
- Lists of trained personnel and documentation of competency maintained by school administrator or designee.
- Policies regarding student self-administration of epinephrine, with competency to be evaluated by the School Nurse (RN) twice annually.
- Identification of students with medical diagnosis or chronic health issues who are at risk for allergies by review of health information by the School Nurse (RN).

3. Development and Reviews of the Allergy Action Plan

The Individualized Health Plan (IHP) with Allergy Action Plan should be based on information provided by the parent, licensed medical provider and School Nurse (RN). The primary goal of the Allergy Action Plan is to provide direction to the School Nurse (RN), school personnel, and EMS responders that enable them to react promptly with specific procedures for the particular student. It is important to revise an IHP as needed based on student's ability to self-administer epinephrine auto-injectors and the health care provider's statement on their competency. Student should have a minimal bi-annual nursing assessment of competency and proficiency.

4. Protocols for Classrooms and Cafeterias that include Strategies to Reduce Exposure to Allergens

- Plan for activating EMS and notifying the School Nurse (RN), the parent and school administrators.
- Functioning communication devices are recommended for personnel use whether on the school campus, field trips, bus routes, or extracurricular events. Examples include but are not limited to intercom systems, telephones, cell phones, and two way radios.
- Emergency drills. Implement a periodic anaphylaxis drill similar to a fire drill.
- Communication devices should be tested with emergency drills per LEA policy and malfunctions corrected immediately.
- Collaboration should occur with local emergency response teams to assure that they will respond to a 911 call with epinephrine. Do not assume that all ambulance services carry it.
- Include in the Allergy Action Plan steps to notify the School Nurse (RN) and parent immediately of an anaphylactic reaction.
- Develop a School Crisis Plan. In the event of a fatal reaction, plan to deal with the death of a student. There should be counseling for classmates and the parents.
- The School Nurse (RN) should maintain open communication with all members of the allergy management team(s), particularly the parent and the health care provider.

Special challenges to consider on an individual basis when creating protocols:

- Religion or ethnic influences.
- Vending machine options.
- Home economics/culinary classes/biology labs.
- Provision for safe art supplies.
- Outdoor events beyond cell phone coverage area.
- Emergency crisis plan in the event of a fatal anaphylactic reaction that results in the death of the student; identify crisis team members.
- Celiac disease could be mistaken as an allergic reaction to food. It should be clearly stated in the IHP of the child with this diagnosis that epinephrine is not the appropriate treatment.

Evaluation of the Emergency Allergy Response Plan:

- A written narrative should document each emergency exposure to allergens. The School Nurse (RN) and the allergy management team should evaluate the cause of the exposure, effectiveness of personal responses and suggestions for improvements.
- Conduct post exposure review to examine any problems with the IHP, then update annually as needed.
- There should be a minimum of one annual review of system wide policies on allergy management. Review and update of the individual Allergy Action Plan will be conducted as needed.
- Complete incident reports of anaphylaxis based on LEA policy.

➤ ALLERGY ACTION PLAN

All students with identified life-threatening allergies should have an Allergy Action Plan with the student's Individual Health Plan (IHP). The RN level school nurse will develop, review and update the plan as needed. The Allergy Action Plan should include the following information:

- Name of the student and photos (if picture available).
- The specific offending allergens or generic ingredients that could be identified on labels.
- Warning signs of allergic reaction.
- Health care providers and/or allergy specialists with name and phone numbers.
- Emergency response procedures designating who administers the epinephrine based on the location of the exposure.
- Where epinephrine auto-injectors and backup auto-injectors will be stored.

Once formalized, the Allergy Action Plan will contain a summary of the nursing assessment describing the student's competency to carry and administer his or her own epinephrine auto-injectors. A copy of the Allergy Action Plan will accompany the student to the emergency room. Revise IHP as needed based on student's ability to self-administer epinephrine auto-injectors and the health care provider's statement on their competency. Students should have a minimal bi-annual nursing assessment of competency and proficiency.

[Sample IHP and Allergy Action Plan](#) is available in the Food Allergy and Anaphylaxis Forms section.

J.1 FOOD ALLERGY AND ANAPHYLAXIS DESCRIPTION

Food allergy is a distorted response by the immune system to one or more foods that the body identifies as harmful and toxic to the body. Once the ingested food is identified as toxic by the immune system, the immune system produces specific antibodies to that specific food or foods.

The immune system response can produce a series of chemical triggers due to the allergic symptom and in some instances can affect the respiratory system, cardiovascular system, skin and the gastrointestinal tract. Symptoms of the allergic reaction to food may appear in one or several body systems. The signs and symptoms may range from mild to severe and may be life-threatening in some cases, depending on the individual level of dose response and mode of exposure.

Presently, there is no cure for food allergy and avoidance is the only remedy to prevent an allergic reaction. Individuals, particularly children, may have life-threatening allergies to one or many groups of food, including fish, fruits, vegetables, and meats. Listed below are most of the commonly known foods to cause allergic reactions in some individuals.

- | | |
|---|--------------|
| 1) Peanuts | 4) Eggs |
| 2) Tree nuts (walnuts, cashews, pecans, hazelnuts, almonds, coconuts, pistachios, pine nuts, and brazil nuts) | 5) Fish |
| 3) Cow's milk | 6) Shellfish |
| | 7) Soy |
| | 8) Wheat |

These eight foods are responsible for most food reactions. However, there are other foods that can cause a serious allergic reaction. Nuts generally cause the most severe allergic reactions, and it is estimated that in the United States approximately 90% of fatal and near fatal reactions are due to these foods: **peanuts**,

tree nuts, fish and shellfish. In some cases individuals may have fatal reactions resulting in death if there are no rapid medical interventions. [A Food Allergen List giving terms that may indicate the presence of these allergens is available in the Food Allergy and Anaphylaxis Forms section.](#)

SIGNS AND SYMPTOMS

Individuals can have an allergic reaction to tactile (touch) exposure or inhalation exposure. It is exceedingly rare for exposure to an allergen via tactile or inhalation to result in severe or life-threatening reactions, unless the individual has also ingested the allergen. Exposure by mouth, nose or eyes is considered to be ingestion and, depending on the dose response of the specific individual, may cause anaphylaxis and trigger an allergic reaction. The level of sensitivity to allergens, types of symptoms, and the severity of symptoms are dependent on the individual and can range from mild to severe, including the potentially life-threatening condition known as **anaphylaxis**.

Mild symptoms may include one or more of the following:

- Hives (reddish, swollen, itchy areas on the skin)
- Eczema (a persistent dry, itchy rash)
- Redness of the skin or around the eyes
- Itchy mouth or ear canal
- Nausea or vomiting
- Diarrhea
- Stomach pain
- Nasal congestion or a runny nose
- Sneezing
- Slight, dry cough
- Odd taste in mouth
- Uterine contractions

Anaphylaxis is a severe allergic reaction with rapid onset and may cause death. Symptoms occur rapidly after exposure to a likely allergen (minutes to hours) and may include one or more of the following:

- Nausea, vomiting and diarrhea
- Abdominal pain and cramping
- Skin redness
- Watery eyes
- Throat tightness/closure
- Slurred speech
- Wheezing
- Abnormal high pitched breathing
- Anxiety
- Confusion
- Cough
- Difficulty breathing
- Fainting, dizziness or lightheadedness
- Hives, itching
- Nasal congestion
- Palpitations or tachycardia

Symptoms of allergic reaction to insect sting, latex or food or in some instances caused by exercise sometimes appear to be the same as life-threatening food allergies. Treatment of these serious allergic reactions should be the same, and the use of anaphylaxis management should be encouraged if there is no signed medical provider statements specific to the individual at risk. It is imperative that the emergency medical system (EMS) is activated (dial 911) immediately and stock epinephrine be administered if available.

TREATMENT

No treatment exists to prevent reactions to food allergies or anaphylaxis. Strict avoidance of the food allergen is the only way to prevent a reaction. However, avoidance is not always easy or possible, and staff in schools must be prepared to deal with allergic reactions, including anaphylaxis. Early and quick

recognition and treatment of allergic reactions that may lead to anaphylaxis can prevent serious health problems or death.

- Mild to moderate symptoms (e.g., itching, sneezing, hives and rashes) are often treated with antihistamines and oral or topical steroids.
- For students at risk of experiencing a severe reaction (anaphylaxis), epinephrine is prescribed. Epinephrine, also called adrenaline, is naturally produced by the body. When given by injection, it rapidly improves breathing, increases heart rate, and reduces swelling of the face, lips, and throat. Epinephrine is the only medication that can reverse the symptoms of anaphylaxis. It is available in an auto-injector (Auvi-Q™, EpiPen® or Adrenaclick®).

J.2 FOOD ALLERGY AND ANAPHYLAXIS: CARE OF STUDENT

Each student with a diagnosis of a life-threatening allergy should have an individual health plan (IHP) in place with an Allergy Action Plan. It should include the student photo if available, specific offending allergen of reaction and names of the trained staff responsible for administering epinephrine based on the order from the doctor for that specific student.

J.2.a Roles and Responsibilities for Management of Food Allergies

An effective Individual Health Plan (IHP) will include an Allergy Action Plan and requires the cooperation of designated school personnel who are knowledgeable and trained regarding the management of students with life-threatening food allergies. Staff who may be present in the event of an anaphylactic reaction should be prepared for their responsibilities prior to the emergency. The food allergy management team should include, but is not limited to, the student, School Nurse (RN), parents, administrators, teachers, counselors, food service directors and personnel, bus/transportation staff, coaches and/or extracurricular advisors. The School Nurse (RN) shall meet with the team annually as a group, but he or she may also meet separately with staff members to ensure their competency in emergency response procedures. Responsibilities are shared among all partners to assist the child in food avoidance when there are known allergies.

A. STUDENT WITH LIFE-THREATENING ALLERGIES

- Learn to recognize symptoms and take them seriously in early stages.
- Take as much responsibility for avoiding allergens as possible, based on developmental level, including participation in planning the Allergy Action Plan.
- Learn to read food labels.
- Wearing a medical alert identification tag while in school is strongly advised.
- Trading or sharing foods is prohibited.
- Wash hands before and after eating.
- Promptly inform an adult if he/she suspects exposure to an allergen.
- Develop trusting friendships with peers and ask them for help if needed.
- Report teasing or harassment immediately.
- Carry own epinephrine auto-injectors and demonstrate competency if age appropriate.
- If permitted by school authorities and parents, carry a cell phone for emergency use only with parental consent (middle and high school students). Cell phones should not take the place of notifying school personnel.

B. PARENT/GUARDIAN

- Inform the School Nurse (RN) and administrators of your child's allergies prior to the opening of school or as soon as possible after diagnosis. Explain what he or she is allergic to, triggers, warning signs of allergic reaction and emotional responses of your child.
- Participate in team meetings and development of the IHP or communicate with individual school personnel who will be in contact with your child.
- Provide the school with emergency contact information (cell phone, work number, beeper) and designate someone to act on your behalf if you are unavailable.
- Provide a list of foods and ingredients that the child should avoid, as recommended by their health care provider or observed by the parent.
- Provide the School Nurse (RN) with medication orders from a health care provider, permission to consult with the provider, and signed consent forms to administer medications and share health information on a need-to-know-basis.
- Provide the school with up-to-date epinephrine auto-injectors (two recommended) to be stored in secure unlocked locations according to school policy. It is not the school's responsibility to furnish epinephrine auto-injectors for children with known allergy.
- Communicate with schools regarding parent participation on school field trips or off-site school sponsored events.
- Provide the school with updates on the child's allergy status annually and as needed.
- Providing a medical alert identification tag for your child is strongly advised.
- Advocate for your child regarding the seriousness of allergies and encourage your child to take more responsibility as he/she grows older.

C. SCHOOL NURSE (RN)

- Introduce yourself to the student and orient him/her how to access the nurse and allergy medication if applicable.
- At the beginning of the school year, meet with the parent of the student with life-threatening allergies or as soon as possible after diagnosis.
- Obtain and maintain a current knowledge base and update skills and abilities related to the medical management of food allergies in the school-age population.
- Arrange and convene a food allergy management team meeting to plan and review IHP with special attention to the Allergy Action Plan; encourage parental participation.
- Assure that the IHP with the Allergy Action Plan includes the student's name, photo if available, allergens, and symptoms of allergic reaction, risk reduction procedures, emergency responses and required signatures. Monitor that it is filed in the cafeteria and classroom.
- Regularly review and update the IHP whenever there is a change in medical management or the student's response to care.
- Establish and maintain a working relationship with the student's parent/guardians and health care provider and act as a liaison between the student's authorized health care provider and the school.
- Document attempts to collaborate with parents who have not participated in the development of the IHP or fail to supply Epinephrine auto-injectors (letters or phone calls and consequences of lack of cooperation per LEA policy).
- Familiarize assigned school personnel with the Allergy Action Plan on a need-to-know basis.
- Coordinate or conduct in-service training and education for appropriate staff per LEA policy.

- Implement a periodic anaphylaxis drill with the assistance of the school administrator based on local school policy.
- Make sure there is a contingency plan for substitute School Nurse (RN).
- File location of epinephrine auto-injectors in the main office, health clinic, food service area and with all assigned teachers. Check expiration dates and stock up supply per LEA policies.
- Request a functioning communication device in the health clinic (example: phone system, intercom or two way radios).
- Serve as the student's advocate.
- Respect the student's confidentiality and right to privacy.

D. SCHOOL ADMINISTRATOR

- Participate in planning the IHP with an attached Allergy Action Plan as a member of the allergy management team, and support school personnel, the student and parents in its implementation.
- Include in the school's emergency response plan a written plan outlining emergency procedures for managing life-threatening allergic reactions.
- Include district health professional in the development and reviews of health policies and emergency protocols for the LEA's.
- Monitor overall compliance with the implementation of the Allergy Action Plan.
- Recommend that communication devices are provided and are in functioning condition in the appropriate location-nurse's clinic, classroom, cafeteria etc.
- If the school system chooses to have epinephrine on hand for students having a life-threatening or anaphylactic reaction for the first time or when the student's personal auto-injector is not available, pursuant to T.C.A. § 49-5-415, the school must develop a protocol for administration of epinephrine.
- Require the completion and documentation of training and education of all involved personnel as set forth in T.C.A. § 49-5-415 (f).
- Inform parent/guardian if their student experiences an allergic reaction at school.
- Monitor strategies to reduce risk of exposure.
- Communicate in advance with School Nurse (RN) when a field trip or off-site school sponsored event or class party might require additional planning.
- Provide adequate time for School Nurse (RN) to train school personnel who volunteer.

E. EDUCATIONAL PERSONNEL (TEACHERS, AIDES, COACHES etc.)

- Participate in team meetings for the student with life-threatening allergies.
- Be aware of signs and symptoms of an allergic reaction and follow planned procedure during and described in the Emergency Response Plan.
- Be sure volunteers, student teachers, aides, specialists and substitute teachers are informed of the student's food allergies and necessary safeguards on a need-to-know basis.
- Request that the classroom have a functioning intercom, two way radios or other communication device for communication with the School Nurse (RN) and administrator.
- Work with the School Nurse (RN) to educate other parents about the presence and needs of the child with life-threatening allergies on a need to know basis and with parent's permission. Enlist their help in keeping certain foods out of the classroom.
- Respect the student's right to confidentiality and privacy.

- Participate in the planning for student's re-entry to school after an anaphylactic reaction, when possible.
- Inform parents of any special school events where food will be served.
- A student with suspected allergic reaction should never be sent to the office alone.
- Request a teacher's aide or assistant based on the student's IHP.
- Establish procedures in the classroom to ensure that the student with life-threatening food allergies eats only what he or she brings from home.
- Prohibit students from sharing or trading snacks.
- Allow time for proper hand washing before and after eating and/or using food products.
- Consider students' allergies when offering incentives and rewards as well as classroom crafting activities.
- Communicate and collaborate in advance with School Nurse (RN) about a field trip, off-site school sponsored event or class party.
- If for safety reasons, medical alert identification needs to be removed during specific activities, the student should be reminded to replace this identification immediately after the activity is completed.
- Notify substitute teachers of students with allergies and leave a clear plan of care regarding the special needs of the student.
- Keep the student's Allergy Action Plan readily accessible in the classroom in an organized format for substitute teachers and for use in emergencies.

F. GUIDANCE COUNSELOR

While the school counselor and/or social worker may not always have direct contact with the student, they should be aware of the students in their schools who have a seizure disorder and the potential impact it may have on the student's behavior and performance.

- Communicate with the School Nurse (RN) as needed in the development of the student's IHP and Allergy Action Plan.
- Monitor anxiety, stress levels, and social development of students with life-threatening allergies and provide interventions as appropriate.
- Act as a resource to parents and students regarding anxiety, stress and normal development.
- Educate classmates to avoid endangering, isolating, stigmatizing or harassing students with food allergies (with parental and student's permission) per LEA policy (at a minimum annually).

G. FOOD SERVICE MANAGER/PERSONNEL

- Set up policies for the cafeteria regarding food allergic students.
- Communicate as needed with the School Nurse (RN) regarding the development of the food Allergy Action Plan.
- File the student's Allergy Action Plan with consent of parent(s).
- Review the legal protections for a student with special health care needs.
- Read all food labels and re-check routinely for potential food allergens ([see Food Allergen List available in the Food Allergy and Anaphylaxis Forms section](#)). **This includes new products as well as items with long shelf life.**

- Train all food service staff and their substitutes to read product food labels and recognize food allergens. Train lunchroom monitors on how to recognize signs of an allergic reaction. Re-train all staff annually.
- Maintain contact information for manufacturers of food products (Consumer Hotline).
- Review and follow sound food handling practices to avoid cross-contamination with potential food allergens.
- Create specific areas that will be allergen safe, if feasible.
- Enforce strict sanitation with staff using commercial cleaning solutions on tabletops to avoid cross-contamination.
- After receiving a doctor's order, make appropriate substitutions or modifications for meals served to students with food allergies; consult with the district food service director as needed.
- Plan ahead to have safe meals for field trips.
- Recommend that food service personnel wear non latex gloves.
- Provide advance copies of the menu to parents/guardians when feasible.
- Have a functioning communication device to support emergencies.

H. SCHOOL BUS COMPANY

- Provide functioning communication devices.
- Know local emergency medical services procedures.
- Recommend that there be no consumption of food on school buses unless medically necessary such as students with diabetes.
- Respect the student's right to confidentiality and privacy.
- Individual LEA's school bus company should consider receiving training on emergency allergy response epinephrine administration and CPR training.

J.2.b Off-site School Sponsored Event /School Administered Care Programs

- An epinephrine auto-injector must be with the child on all field trips, both long and short trips.
- No student should be excluded from a field trip or any extracurricular program or activity due to risk of allergen exposure. The parent of the student at risk of anaphylaxis should be allowed to accompany their child on the school trip in addition to the school chaperone. Parents are not required to attend the trip.
- As a matter of safe practice, school may reasonably require that parents supply an extra set of emergency medication (epinephrine auto-injector) for availability during extracurricular activities.

Before a field trip or extracurricular activity, the school shall:

- Notify the student's parent(s) in a timely manner in order to prepare for food/snacks/medications.
- Prohibit sharing or trading food
- Make certain that an emergency communication device is always present. Minimum of two (2) people with cell phones is recommended.
- Clearly identify who is responsible for keeping the epinephrine auto-injector, first aid kit and other medication along with a copy of the student Allergy Action Plan.
- Have the School Nurse (RN) assess if it is appropriate for the student to carry his/her own epinephrine auto-injector.
- It is recommended that students and staff use hand wipes before and after eating.

- Maintain records of the names and phone numbers of parent/guardian of the student, the health care provider, and allergist.
- Be sure that a trained staff person is assigned to stay with the student at all times if emergency medication has been administered.
- Immediately call an ambulance to transport the student to the nearest hospital when an epinephrine auto-injector is given.
- Designate someone to call the student's parents with the name and location of the hospital.
- Communicate in advance with School Nurse (RN) when a field trip or off-site school sponsored event is planned.
- Train staff in proper separation, storage and distribution of the children's snacks/lunches.
- Be sure that the bus driver has the emergency route to the hospital if the cell phone cannot make the connection to EMS. Only if EMS cannot be reached should the bus driver take the child to the nearest Emergency Room in the bus.

J.3 FOOD ALLERGY AND ANAPHYLAXIS MEDICATION ADMINISTRATION

T.C.A. § 49-5-415 (e)

(1): States that a student with anaphylaxis is entitled to possess and self-administer prescription anaphylaxis medication while on school property or at a school-related event or activity if:

- (A) The prescription anaphylaxis medication has been prescribed for that student as indicated by the prescription label on the medication;
- (B) The self-administration is done in compliance with the prescription or written instructions from the student's physician or other licensed health care provider; and
- (C) A parent of the student provides to the school:
 - i. Written authorization, signed by the parent, for the student to self-administer prescription anaphylaxis medication while on school property or at a school-related event or activity;
 - ii. A written statement, signed by the parent, in which the parent releases the school district and its employees and agents from liability for an injury arising from the student's self-administration of prescription anaphylaxis medication while on school property or at a school-related event or activity, except in cases of wanton or willful misconduct; and
 - iii. A written statement from the student's physician or other licensed health care provider, signed by the physician or provider, that:
 - a) Supports a diagnosis of anaphylaxis;
 - b) Identifies any food or other substances to which the student is allergic;
 - c) Describes any prior history of anaphylaxis, if appropriate;
 - d) Lists any medication prescribed for the child for the treatment of anaphylaxis;
 - e) Details emergency treatment procedures in the event of a reaction;
 - f) Lists the signs and symptoms of a reaction;
 - g) Assesses the student's readiness for self-administration of prescription medication; and
 - h) Provides a list of substitute meals that may be offered by school food service personnel.

(2) The physician's statement must be kept on file in the office of the school nurse of the school the student attends or, if there is not a school nurse, in the office of the principal of the school the student attends.

(3) If a student uses the medication in a manner other than prescribed, the student may be subject to disciplinary action under the school codes.

RECOMMENDATIONS FOR SCHOOL DISTRICT/LEA:

- The school district will share pertinent health information with school staff who have a legitimate educational interest in the student.
- A current and updated list of all students who are carrying their own epinephrine should be placed in the nurse's office.
- Provide information about students with life-threatening allergies and their photos (if consent is given by parent) to all staff on a need-to-know basis (including bus drivers).
- The school system shall maintain and make available a list of those school personnel authorized and trained to administer epinephrine by auto-injector. List of all trained personnel should be filed centrally and immediately available in an emergency.
- Develop a policy on student carrying his or her own epinephrine auto-injector.
- Administration of epinephrine should also be documented in the students' IHP.
- LEA shall develop a policy for carrying and disposal of the sharps.
- Periodically check medications for expiration dates and arrange for them to be updated.
- Review the Allergy Action Plan as described in the IHP, or if a student does not have an IHP, consider initiating one for first time reaction.

T.C.A. § 49-5-415 (f)(3): States that schools, both public and non-public, be prepared to treat allergic reaction in the event a student's personal epinephrine auto-injector is not available or the student is having a reaction for the first time. Each school in an LEA and each non-public school is authorized to maintain at the school in at least two (2) unlocked, secure locations, including, but not limited to, the school office and the school cafeteria, epinephrine auto-injectors so that epinephrine may be administered to any student believed to be having a life-threatening allergic or anaphylactic reaction. A physician may prescribe epinephrine auto-injectors in the name of an LEA or non-public school to be maintained for use in schools when necessary. When a student does not have an epinephrine auto-injector or a prescription for an epinephrine auto-injector on file, the school nurse or other trained school personnel may utilize the school supply to respond to an anaphylactic reaction, under a standing protocol from a physician licensed to practice medicine in all its branches.

If applicable, at the beginning of the school year, the school should inform parents of its election to maintain epinephrine auto-injectors for use in emergencies. The District's standing protocol is to be followed in those circumstances.

If a student is injured or harmed due to the administration of epinephrine:

- The physician will not be held responsible for the injury unless the physician issued the prescription or standing protocol with intentional disregard for safety.
- The school nurse or other trained school personnel will not be held responsible for the injury unless the school nurse or school employee administered the epinephrine injection with an intentional disregard for safety.

J.3.a Epinephrine Auto-Injector Administration

For students at risk of experiencing a severe reaction (anaphylaxis), epinephrine is prescribed. Epinephrine, also called adrenaline, is naturally produced by the body. When given by injection, it rapidly improves breathing, increases heart rate, and reduces swelling of the face, lips, and throat. Epinephrine is the only medication that can reverse the symptoms of anaphylaxis. However, it must be administered

promptly during anaphylaxis to be most effective. Delayed use of epinephrine during an anaphylactic reaction has been associated with deaths. It is available in an auto-injector (Auvi-Q™, EpiPen® or Adrenaclick®).

Timely Accessibility of Epinephrine Auto-Injector:

- Epinephrine by auto-injector should be readily accessible and secure at all times during school hours. It may be carried by the student if appropriate.
- To promote rapid lifesaving steps, emergency medication should be in accessible and “unlocked, secure locations” that can be properly supervised by a nurse or other authorized and trained staff member. Key staff members, such as the teacher, principal, and cafeteria staff, should know where the auto-injector is stored even if they are not trained to administer it.
- All staff trained in use of epinephrine should know exactly where it is located.
- Identification of the place where the epinephrine is to be stored is selected after considering where students may be most at risk of anaphylaxis and where the school can provide ready and secure access. The epinephrine may be stored at more than one location. The location of the auto-injector and the backup should be written in the student’s health care plan.

Instruction and Care of the Epinephrine auto-injector:

- Should only be injected into the anterolateral aspect of the thigh (outer thigh). **Do not inject into the buttock.**
- Do not expose the epinephrine auto-injector to direct sunlight.
- Store the epinephrine auto-injector in its original packaging.
- Keep the epinephrine auto-injector at room temperature (do not refrigerate).
- Do not store in a vehicle during hot weather or extreme cold.
- Make sure the solution is clear and colorless. If it is brown, replace with a new unit.
- Give your used epinephrine auto-injector to a healthcare worker for proper disposal. Do not throw away in a regular trash can. **(Dispose per your LEA policy.)**
- Accidental injection of epinephrine into the hands or feet may result in a loss of blood flow to the affected area. **If this occurs, immediately go to the nearest emergency room for treatment.**



Available Epinephrine Auto-Injectors:

There are a number of epinephrine auto-injectors that have been approved by the FDA and are available, with a prescription. The devices operate in different ways, so it is important to be properly trained to use the device. Below is a list of the devices currently on the market, links to important information about each product, and training videos on how to use them.

1. Auvi-Q™

It has a retractable needle system and a red safety guard located at the same end as the needle. Activation of the device by removing the outer case initiates an audio voice recording that provides step-by-step instructions and a 5 second countdown during the injection.

Detailed information about Auvi-Q is available at www.auvi-q.com.

[Training Video for Auvi-Q](#)



2. EpiPen®



A disposable, prefilled automatic injection device used to treat life-threatening, allergic emergencies including anaphylaxis. EpiPen contains a single dose of epinephrine.

Detailed information about EpiPen is available at www.epipen.com
[Training Video for EpiPen](#)

3. Adrenaclick®

An automatic injection device designed for self-administration delivering one dose of epinephrine. The press and hold technique: press hard, hold in the middle of the outer side of the thigh (upper leg) for 10 seconds - is designed to deliver the full dose of epinephrine.

Detailed information about Adrenaclick is available at

www.adrenaclick.com.

[Training Video for Adrenaclick](#)



When giving Epinephrine:

- **It is very important when giving epinephrine that the emergency medical system (911) be called and the student transported to the nearest hospital emergency room.** Even if the symptoms appear to be resolved, the effect of the injection begins to wear off after 10 to 20 minutes or sooner. Remember to call immediately for further evaluation and treatment.
- In the event an allergic reaction occurs where there is no known allergic history (first time reaction), the staff should call the School Nurse (RN) and activate the School Emergency Allergy Response Plan. The emergency medical service should be called immediately (911).

J.4 FOOD ALLERGY AND ANAPHYLAXIS TRAINING

T.C.A. § 49-5-415(f)(1) states that guidelines should include education and training for school personnel on the management of students with life-threatening food allergies, including training related to the administration of medication with a cartridge injector.

Some health care professionals may have little expertise in anaphylaxis education and/or management but provide support to students with allergies. Licensed health care professionals employed or contracted by an LEA who will be providing care to a student with known allergies should demonstrate competency for both knowledge and skills on an annual basis.

➤ **Suggested Strategy**

A strategy for training provided by National Association of School Nurses (NASN) is to offer different levels of training. For example:

- Level 1: General training for all school personnel. This training would be required of all school personnel who need to understand the basics in food allergy education, who will be interacting with students with food allergies, and who may be called to assist others in responding to food allergy-related emergencies.
- Level 2: In depth training for personnel with frequent contact with a student with food allergies. This training would be required for classroom teachers, physical education

teachers, coaches, bus drivers and food service personnel. Level 2 content should include level 1 strategies.

- Level 3: Specialized training for individuals responsible for the daily medical management of students with food allergies. This training should be required for the school nurse, district nurse, school physician, and health advocate or health consultant. Level 3 content should include level 1 and 2 strategies.

➤ **Suggested Components for Training Curriculum:**

- Provide overview of food allergies.
- Review signs and symptoms of food allergy and anaphylaxis.
- Explain medications for food allergy and anaphylaxis.
- Discuss best practices for preventing exposure to food allergens.
- Review policies on bullying of and discrimination against students with food allergies.
- Delineate communication process during medical emergencies including who to contact for help in an emergency.
- FERPA privacy and confidentiality and legal rights of students with food allergies.
- Provide guidance for the staff team accountable for the student specific Food Allergy Action/Emergency Care Plan.
- Review preventing exposure to allergens.
- Discuss school wide staff response to allergen exposure or symptoms of anaphylaxis.
- Train and evaluate staff detection of symptoms of anaphylaxis.
- Train, practice and evaluate staff administration of epinephrine auto-injector.
- Train, practice and evaluate staff in activating emergency care plan in case of a food allergy emergency.
- Document training and evaluation of training.
- Periodically provide training updates as needed.
- Provide background on the importance of partnering with parents.
- Discuss the need to investigate local emergency medical services carrying of epinephrine.
- Describe the team approach for preventing exposures and responding to emergencies, including identifying the school personnel team needed to support the food allergic student.
- Educate regarding legal issues related to students with food allergies.
- Reinforce the need for ongoing evaluation and documentation of emergency response and staff competence in responding to food allergy emergencies, including debriefing following an exposure or epinephrine administration.

[Sample Training Checklist is available in the Food Allergy and Anaphylaxis Forms section.](#)

➤ **Suggested Training Resources:**

1. Get Trained ©

Get Trained is a program intended to be used as a tool and resource for scripted training of unlicensed school staff to administer epinephrine via an auto injector during an anaphylactic emergency. The program recommendations and content are based on best practices. Each school nurse must exercise independent professional judgment when practicing and conducting training. Because nurse practice acts differ from state to state, each school nurse must ensure before presenting the training that it is consistent with applicable state laws and

regulations, including those governing delegation, as well as applicable school district policies and procedures.

<http://www.nasn.org/ToolsResources/FoodAllergyandAnaphylaxis/GetTrained>

2. NASN Food Allergy and Anaphylaxis Tool Kit

The Centers for Disease Control has worked with NASN, the Food Allergy & Anaphylaxis Network and the National School Boards Association to develop comprehensive guidance and resources for food allergy and anaphylaxis management in the school setting.

<http://www.nasn.org/ToolsResources/FoodAllergyandAnaphylaxis>

a. Clinical Conversations for the School Nurse – Food Allergy Management in the School Setting

The Clinical Conversation Guide for Food Allergy Management in the School Setting provides the school nursing professional with access to recently published articles in the school health literature to provide a framework for leading a meeting with other school nurses or school health staff, a professional development workshop or an interactive nursing conference presentation based on prepared discussion questions. [Access the Guide.](#)

b. Saving Lives at School: Anaphylaxis and Epinephrine

Initiate meaningful conversations with students and parents on topics related to anaphylaxis and epinephrine using NASN's Connections Cards with School Nurse Handbook.

[Learn more.](#)

3. Safe@School® CD-Rom

This component of the School Food Allergy Program is available for purchase separately and provides resources for school nurses or administrators to conduct in-service training about food allergies and anaphylaxis. Making a presentation about food allergies in schools will be simplified with the use of this CD, which also provides talking points for presenters.

<http://store.foodallergy.org/ProductDetails.asp?ProductCode=SAS>

4. How to C.A.R.E. for Students with Food Allergies: What Educators Should Know

This is an online course designed to help teachers, administrators and other school personnel prevent and manage potentially life-threatening allergic reactions. Based on the latest scientific research and expert consensus, the online course enables school personnel the flexibility to complete the program anytime and anywhere that has an Internet connection. It includes step-by-step guides, teaches the use of an epinephrine auto-injector with confidence and provides certificate of completion. An enhanced version with site license enables Health and Safety Officers to monitor compliance and track progress. <http://allergyready.com/product/>

5. Food Allergy Management & Education (FAME)

FAME is designed to provide schools with the components of a comprehensive school-based food allergy program to promote best practices, offer resources and materials to area schools and families on creating a safe, nurturing educational environment for children with food allergies and increase awareness that children with asthma and food allergies have an increased risk of anaphylaxis which is a rapid, severe allergic reaction. It can cause difficulty breathing, swelling, dizziness, and even death.

<http://www.stlouischildrens.org/health-resources/advocacy-outreach/food-allergy-management-and-education>

J.5 FOOD ALLERGY AND ANAPHYLAXIS FORMS

1. [Sample Individualized Health Plan \(IHP\)](#)
2. [Sample Food Allergy Action Plan](#)
3. [Food Allergen List](#)
4. [Sample Food Allergy Training Checklist](#)

Sample Individualized Health Plan (IHP) for Students with Allergy/Anaphylaxis

Place
Child's
Picture
Here

Student Name: _____ Grade: _____

Teacher/Staff: _____ Date of IHP: _____ Review Date: _____

Secondary Health Concerns: _____

Sample Individualized Healthcare Plan – Food Allergy Management

Goal: Student will have an integrated appropriate allergy management regimen during the school day with a focus on prevention. School personnel will be prepared and trained to respond in an emergency medical situation.

INTERVENTIONS	IMPLEMENTED DATE & INITIAL	EVALUATION or OUTCOME INDICATORS (Circle & Date)																																				
<p>Food Allergy Management at School</p> <ul style="list-style-type: none"> ▪ Food Allergen – Signs and Symptoms <ul style="list-style-type: none"> ○ Assist student to recognize symptoms of an allergic reaction and encourage him/her to access appropriate care and medications when needed. Show respect for self-management and self-determination. ▪ Maintain individual school health record to note allergy information from healthcare provider and exposure at school. <ul style="list-style-type: none"> ○ Document original diagnosis ○ Document each episode of allergic reaction ○ Document any medications given ▪ Provide instruction to student and staff on prevention measures and emergency response. <ul style="list-style-type: none"> ○ Provide appropriate guidance in creating a safe classroom and school environment to minimize the risk of exposure to food allergens. <ul style="list-style-type: none"> • Alert classroom teacher to request alternative snacks from parent. ○ Provide faculty with presentation related to food allergy management. 		<p>Student Health Needs and Responses</p> <p>Parent participation in health needs – Provides for child’s physical needs Provides needed medical information, medical orders and medication to school:</p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <tr> <td style="padding: 2px;">Never</td> <td style="padding: 2px;"></td> <td style="padding: 2px;"></td> <td style="padding: 2px;"></td> <td style="padding: 2px;"></td> <td style="padding: 2px;">Consistently</td> </tr> <tr> <td style="padding: 2px;">1</td> <td style="padding: 2px;">2</td> <td style="padding: 2px;">3</td> <td style="padding: 2px;">4</td> <td style="padding: 2px;">5</td> <td style="padding: 2px;"></td> </tr> </table> <p>Student self-care. Student recognizes symptoms and self-manages food allergy well:</p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <tr> <td style="padding: 2px;">Never</td> <td style="padding: 2px;"></td> <td style="padding: 2px;"></td> <td style="padding: 2px;"></td> <td style="padding: 2px;"></td> <td style="padding: 2px;">Consistently</td> </tr> <tr> <td style="padding: 2px;">1</td> <td style="padding: 2px;">2</td> <td style="padding: 2px;">3</td> <td style="padding: 2px;">4</td> <td style="padding: 2px;">5</td> <td style="padding: 2px;"></td> </tr> </table> <p>The following records are up to date, accurate and legible:</p> <ul style="list-style-type: none"> • Cumulative Health Record, Student Visit Record • Allergy Action Plan (Emergency Care Plan) • Medication Record <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <tr> <td style="padding: 2px;">Never</td> <td style="padding: 2px;"></td> <td style="padding: 2px;"></td> <td style="padding: 2px;"></td> <td style="padding: 2px;"></td> <td style="padding: 2px;">Consistently</td> </tr> <tr> <td style="padding: 2px;">1</td> <td style="padding: 2px;">2</td> <td style="padding: 2px;">3</td> <td style="padding: 2px;">4</td> <td style="padding: 2px;">5</td> <td style="padding: 2px;"></td> </tr> </table>	Never					Consistently	1	2	3	4	5		Never					Consistently	1	2	3	4	5		Never					Consistently	1	2	3	4	5	
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- Work with Food Service personnel.
 - Determine if food allergic food is served in cafeteria.
 - Avoid cross-contamination with allergen.
 - Establish safe environment for all students.
- Develop emergency protocols (and initiate care as needed) that include: accessing emergency care at school, as well as EMS as needed, medication protocols (including orders from healthcare provider).
 - Check medications for dosage and expiration dates.
 - Counsel student if self-carrying medication.
- Develop student specific Emergency Care Plan that outlines emergency care to school staff, including teachers, support staff, food service staff, custodial staff, transportation staff.
- Instruct staff in epinephrine administration as appropriate.
 - Follow student’s Emergency Care Plan at onset of symptoms.
 - Address specific issues that may be present for field trips and other educational activities that occur at an off campus location including box lunches, food options.
 - Have plan in place in the event that the nurse is not available.
- Implement organizational changes to facilitate shared decision making for self-management of chronic illnesses.
- Plan and prepare for building evacuations and other emergency responses to provide care to students with allergies.
 - Have medication available in all settings.
 - Have medical orders available.
 - Have parent contact information available at all times.

Prevention measures that allow student to fully access educational program:

- Faculty and staff have been trained to reduce accidental exposures to allergens.
- Faculty and staff are willing and have been trained to respond to an anaphylactic emergency.
- Faculty and staff has alternative foods in classroom for curricular and celebration use.
- Faculty has been instructed in food allergy management.

Never					Consistently	
1	2	3	4	5		

Food Service Personnel make appropriate accommodations for student with food allergy:

- Substitutions are available as needed.
- Accommodations are made to prevent cross-contamination during food preparation.
- Student is protected from exposure in cafeteria while not being socially isolated.

Never					Consistently	
1	2	3	4	5		

Policies and procedures are in place in school to address the following concerns:

- Emergency medication availability, storage and administration.
- Student may self-carry if student is responsible and policy is in place.
- Accommodations necessary on field trips or during extra-curricular activities.
- Plan in place in the event that the nurse is not available.

Not in place					Consistently employed	
1	2	3	4	5		

Sample Food Allergy Action Plan

Place
Child's
Picture
Here

Student: _____ D.O. B: _____ Teacher: _____

ALLERGY TO: _____

Diagnosed with Asthma: Yes* No * Higher risk for severe reaction

■ STEP 1: TREATMENT ■

SYMPTOMS:

- If a food allergen has been ingested, but no symptoms
- Mouth Itching, tingling, or swelling of lips, tongue, mouth
- Skin Hives, itchy rash, swelling of the face or extremities
- Gut Nausea, abdominal cramps, vomiting, diarrhea
- Throat † Tightening of throat, hoarseness, hacking cough
- Lung † Shortness of breath, repetitive coughing, wheezing
- Heart † Thready pulse, low blood pressure, fainting, pale, blueness
- Other † _____
- If reaction is progressing (several of the above areas affected), give:

Give Checked Medication:

- () Epinephrine () Antihistamine
- () Epinephrine () Antihistamine
- () Epinephrine () Antihistamine
- () Epinephrine () Antihistamine
- () Epinephrine () Antihistamine
- () Epinephrine () Antihistamine
- () Epinephrine () Antihistamine
- () Epinephrine () Antihistamine
- () Epinephrine () Antihistamine

The severity of symptoms can quickly change. † Potentially life-threatening.

DOSAGE

Epinephrine: inject intramuscularly (circle one) EpiPen Auvi-Q Adrenaclick

Antihistamine: give _____
Medication/dose/route

Other: give _____
Medication/dose/route

IMPORTANT: Asthma inhalers and/or antihistamines cannot be depended on to replace epinephrine in anaphylaxis.

■ STEP 2: EMERGENCY CALLS ■

1. Call 911 - State that an allergic reaction has been treated and an additional epinephrine may be needed.
2. Call Dr. _____ Phone: _____
3. Mother _____ Phone: _____
Home Work Cell
4. Father _____ Phone: _____
Home Work Cell
5. Emergency Contact: _____ Phone Number _____

EVEN IF PARENT/GUARDIAN CANNOT BE REACHED, DO NOT HESITATE TO MEDICATE OR TAKE CHILD TO MEDICAL FACILITY!

Parent/Guardian Signature _____ Date _____

Nurse Signature _____ Date _____

Food Allergen List

Knowing how to read a food label will help to avoid food allergy problems caused by ingredients in food.

How to Read a Label for a Milk-Free Diet	How to Read a Label for an Egg-Free Diet
<p>All FDA-regulated manufactured food products that contain milk as an ingredient are required by U.S. law to list the word “milk” on the product label.</p>	<p>All FDA-regulated manufactured food products that contain egg as an ingredient are required by U.S. law to list the word “egg” on the product label.</p>
<p>Avoid foods that contain milk or any of these ingredients:</p> <ul style="list-style-type: none"> • butter, butter fat, butter oil, butter acid, butter ester(s) • buttermilk • casein • casein hydrolysate • caseinates (<i>in all forms</i>) • cheese • cottage cheese • cream • curds • custard • diacetyl • ghee • half-and-half • lactalbumin, lactalbumin phosphate • lactoferrin • lactulose • lactose • milk (in all forms, including condensed, derivative, dry, evaporated, goat’s milk and milk from other animals, low fat, malted, milk fat, nonfat, powder, protein, skimmed, solids, whole) • milk protein hydrolysate • pudding • Recaldent® • rennet casein • sour cream, sour cream solids • sour milk solids • tagatose • whey (<i>in all forms</i>) • whey protein hydrolysate • yogurt <p>Milk is sometimes found in the following:</p> <ul style="list-style-type: none"> • artificial butter flavor • baked goods • caramel candies • chocolate • lactic acid starter culture and other bacterial cultures • luncheon meat, hot dogs, sausages • margarine • nisin • nondairy products • nougat 	<p>Avoid foods that contain eggs or any of these ingredients:</p> <ul style="list-style-type: none"> • albumin (also spelled albumen) • egg (dried, powdered, solids, white, yolk) • eggnog • lysozyme • mayonnaise • meringue (meringue powder) • ovalbumin • surimi <p>Egg is sometimes found in the following:</p> <ul style="list-style-type: none"> • baked goods • breaded foods • candies • canned soups • casseroles • cream fillings/custards • lecithin • macaroni • marzipan • marshmallows • nougat • pasta • meatballs/meatloaf • salad dressing <p>Keep the following in mind: Individuals with egg allergy should also avoid eggs from duck, turkey, goose, quail, etc., as these are known to be cross-reactive with chicken egg.</p>

How to Read a Label for a Soy-Free Diet
<p>All FDA-regulated manufactured food products that contain soy as an ingredient are required by U.S. law to list the word “soy” on the product label.</p>
<p>Avoid foods that contain soy or any of these ingredients:</p> <ul style="list-style-type: none"> • edamame • miso • natto • shoyu • soy (soy albumin, soy cheese, soy fiber, soy flour, soy grits, soy ice cream, soy milk, soy nuts, soy sprouts, soy yogurt) • soya • soybean (curd, granules) • soy protein (concentrate, hydrolyzed, isolate) • soy sauce • tamari • textured vegetable protein (TVP) • tofu <p>Soy is sometimes found in the following:</p> <ul style="list-style-type: none"> • Asian cuisine • vegetable broth • vegetable gum • vegetable starch <p>Keep the following in mind:</p> <ul style="list-style-type: none"> • The FDA exempts highly refined soybean oil from being labeled as an allergen. Studies show most allergic individuals can safely eat soy oil that has been highly refined (not cold pressed, expeller pressed, or extruded soybean oil). • Soy protein may be found in numerous products, such as breads, cookies, crackers, canned broth and soups, canned tuna and meat, breakfast cereals, high-protein energy bars and snacks, low-fat peanut butters, and processed meats. • Most individuals allergic to soy can safely eat soy lecithin. • Follow your doctor’s advice regarding these ingredients.

How to Read a Label for a Peanut-Free Diet
<p>All FDA-regulated manufactured food products that contain peanut as an ingredient are required by U.S. law to list the word “peanut” on the product label.</p>
<p>Avoid foods that contain peanuts or any of these ingredients:</p> <ul style="list-style-type: none"> • artificial nut • beer nuts • cold pressed, expeller pressed, or extruded peanut oil • goobers • ground nuts • mixed nuts • monkey nuts • nut meat • nut pieces • peanut butter • peanut flour • peanut protein hydrolysate <p>Peanut is sometimes found in the following:</p> <ul style="list-style-type: none"> • African, Asian (especially Chinese, Indian, Indonesian, Thai, and Vietnamese), and Mexican dishes • baked goods (i.e., pastries, cookies) • candy (including chocolate candy) • chili • egg rolls • enchilada sauce • marzipan • mole sauce • nougat <p>Keep the following in mind:</p> <ul style="list-style-type: none"> • The FDA exempts highly refined peanut oil from being labeled as an allergen. Studies show that most allergic individuals can safely eat peanut oil that has been highly refined (not cold pressed, expeller pressed, or extruded peanut oil). Follow your doctor’s advice. • A study showed that unlike other legumes, there is a strong possibility of cross-reaction between peanuts and lupine. • Mandelonas are peanuts soaked in almond flavoring. • Arachis oil is peanut oil. • Many experts advise patients allergic to peanuts to avoid tree nuts as well. • Sunflower seeds are often produced on equipment shared with peanuts.

How to Read a Label for a Shellfish-Free Diet

All FDA-regulated manufactured food products that contain a crustacean shellfish as an ingredient are required by U.S. law to list the specific crustacean shellfish on the product label.

Avoid foods that contain shellfish or any of these ingredients:

- barnacle
- crab
- crawfish (crawdadd, crayfish, ecrevisse)
- krill
- lobster (langouste, langoustine, Moreton bay bugs, scampi, tomalley)
- prawns
- shrimp (crevette, scampi)

Mollusks are not considered major allergens under food labeling laws and may not be fully disclosed on a product label.

Your doctor may advise you to avoid mollusks or these ingredients:

- abalone
- clams (cherrystone, geoduck, littleneck, pismo, quahog)
- cockle
- cuttlefish
- limpet (lapas, opihi)
- mussels
- octopus
- oysters
- periwinkle
- scallops
- sea cucumber sea urchin
- snails (escargot)
- squid (calamari)
- whelk (Turban shell)

Shellfish are sometimes found in the following:

- bouillabaisse
- cuttlefish ink
- fish stock
- glucosamine
- seafood flavoring (i.e., crab or clam extract)
- surimi

Keep the following in mind:

- Any food served in a seafood restaurant may contain shellfish protein due to cross-contact.
- For some individuals, a reaction may occur from inhaling cooking vapors or from handling fish or shellfish.

How to Read a Label for a Tree Nut-Free Diet

All FDA-regulated manufactured food products that contain a tree nut as an ingredient are required by U.S. law to list the specific tree nut on the product label.

Avoid foods that contain nuts or any of these ingredients:

- almond
- artificial nuts
- beechnut
- Brazil nut
- Butternut
- cashew
- chestnut
- chinquapin
- coconut
- filbert/hazelnut
- gianduja (a chocolate-nut mixture)
- ginkgo nut
- hickory nut
- litchi/lychee/lychee nut
- macadamia nut
- marzipan/almond paste
- Nangai nut
- natural nut extract (i.e., almond, walnut)
- nut butters (i.e., cashew butter)
- nut meal
- nut meat
- nut paste (i.e., almond paste)
- nut pieces
- pecan
- pesto
- pili nut
- Pine nut referred to as Indian, pignoli, pignolia, pignon, piñon, and pinyon nut)
- pistachio
- praline
- shea nut
- walnut

Tree nuts are sometimes found in the following:

- black walnut hull extract (flavoring)
- natural nut extract
- nut distillates/alcoholic extracts
- nut oils (i.e., walnut oil, almond oil)
- walnut hull extract (flavoring)

Keep the following in mind:

- Mortadella may contain pistachios.
- Tree nut proteins may be found in cereals, crackers, cookies, candy, chocolates, energy bars, flavored coffee, frozen desserts, marinades, and barbeque sauces.
- Ethnic restaurants (i.e., Chinese, African, Indian, Thai, and Vietnamese), ice cream parlors, and bakeries are considered high-risk for people with tree nut allergy due to the common use of nuts and the possibility of cross contamination/cross contact, even if you order a tree-nutfree item.
- Tree nut oils are sometimes used in lotions and soaps.
- There is no evidence that coconut oil and shea nut oil/butter are allergenic.
- Many experts advise patients allergic to tree nuts to avoid peanuts as well.
- Talk to your doctor if you find other nuts not listed

How to Read a Label for a Wheat-Free Diet

All FDA-regulated manufactured food products that contain wheat as an ingredient are required by U.S. law to list the word "wheat" on the product label. The law defines any species in the genus *Triticum* as wheat.

Avoid foods that contain wheat or any of these ingredients:

- bread crumbs
- bulgur
- cereal extract
- club wheat
- couscous
- cracker meal
- durum
- einkorn
- emmer
- farina
- flour (all purpose, bread, cake, durum, enriched, graham, high gluten, high protein, instant pastry, self-rising, soft wheat, steel ground, stone ground, whole wheat)
- hydrolyzed wheat protein
- Kamut
- matzoh, matzoh meal (also spelled as matzo, matzah, or matza)
- pasta
- seitan
- semolina
- spelt
- sprouted wheat
- triticale
- vital wheat gluten
- wheat (bran, durum, germ, gluten, grass, malt, sprouts, starch)
- wheat bran hydrolysate
- wheat germ oil
- wheat grass
- wheat protein isolate
- whole wheat berries

Wheat is sometimes found in the following:

- glucose syrup
- starch (gelatinized starch, modified starch, modified food starch, vegetable starch)
- soy sauce
- surimi

How to Read a Label for a Fish-Free Diet

All FDA-regulated manufactured food products that contain fish as an ingredient are required by U.S. law to list the specific type of fish on the product label.

More than half of all people who are allergic to one type of fish also are allergic to other fish, so allergists often advise their patients to avoid all fish.

Finned fish and shellfish do not come from related families of foods, so being allergic to one does not mean that you will not be able to tolerate the other. Be sure to talk to your doctor about which kinds of fish you can eat and which to avoid.

The term "fish" encompasses all species of finned fish, including (but not limited to):

- anchovies
- bass
- catfish
- cod
- flounder
- grouper
- haddock
- hake
- herring
- mahi mahi
- perch
- pike
- pollock
- salmon
- scrod
- sole
- snapper
- swordfish
- tilapia
- trout
- tuna

Mollusks are not considered major allergens under food labeling laws and may not be fully disclosed on a product label.

Fish is sometimes found in the following:

- caesar salad/dressing
- caponata (Sicilian eggplant relish)
- caviar
- fish gelatin (kosher gelatin, marine gelatin)
- fish oil
- fish sauce
- imitation fish
- pizza
- seafood flavoring
- shark cartilage, fin
- sushi
- surimi (artificial crabmeat also known as "sea legs" or "sea sticks")
- worcestershire sauce

Keep the following in mind:

- Some sensitive individuals may react to aerosolized fish protein through cooking vapors.
- Seafood restaurants are considered high-risk due to the possibility of cross contamination/cross contact, even if you do not order fish.
- Ethnic restaurants (i.e., Chinese, African, Indonesian, Thai, and Vietnamese) are considered high-risk because of the common use of fish and fish ingredients and the possibility of cross contamination/cross contact, even if you do not order fish.

Sample Food Allergy Training Checklist

Training Levels:

- Level 1: General training for all school personnel. This training would be required of all school personnel who need to understand the basics in food allergy education, who will be interacting with students with food allergies, and who may be called to assist others in responding to food allergy related emergencies.
- Level 2: In-depth training for personnel with frequent contact with a student with food allergies. This training would be required for classroom teachers, physical education teachers, coaches, bus drivers and food service personnel.
- Level 3: Specialized training for individuals responsible for the daily medical management of students with food allergies. This training should be required for the school nurse, district nurse, school physician, and health advocate or health consultant.

Level 1 All School Personnel
<ul style="list-style-type: none"> <input type="checkbox"/> Provide overview of food allergies including: <ul style="list-style-type: none"> ▪ define food allergy ▪ define anaphylaxis ▪ list major allergens ▪ compare and contrast food allergy vs. food intolerance <input type="checkbox"/> Review signs and symptoms of food allergy and anaphylaxis <input type="checkbox"/> Explain medications for food allergy and anaphylaxis <input type="checkbox"/> Discuss best practices for preventing exposure to food allergens (food and non-food items) <ul style="list-style-type: none"> ▪ Identify manufacturer’s ingredient label on all classroom food ▪ Consult with parent to provide allergen free snacks from home for all allergic students <input type="checkbox"/> Review policies on bullying of and discrimination against students with food allergies <input type="checkbox"/> Delineate communication process during medical emergencies including who to contact for help in an emergency. <input type="checkbox"/> Reinforce the seriousness of life-threatening anaphylactic food allergies <input type="checkbox"/> FERPA privacy and confidentiality and legal rights of students with food allergies
Level 2 School Personnel with Frequent Contact with a Student with Food Allergies
<ul style="list-style-type: none"> <input type="checkbox"/> All Level 1 strategies /activities <input type="checkbox"/> Provide guidance for the staff team accountable for the student specific Food Allergy Action / Emergency Care Plan <input type="checkbox"/> Review preventing exposure to allergens in: <ul style="list-style-type: none"> ▪ Classrooms ▪ School lunches / cafeteria ▪ Field trips ▪ Weekend or before and after school sponsored programs and sporting events ▪ Weekend or before and after early childhood education program sponsored programs <input type="checkbox"/> Discuss school wide staff response to allergen exposure or symptoms of anaphylaxis <ul style="list-style-type: none"> ▪ Classroom teachers and staff ▪ Food service ▪ Transportation ▪ Coaches and volunteers ▪ School health office staff ▪ School administration

- Other School staff as needed
- Train and evaluate staff detection of symptoms of anaphylaxis
- Train, practice and evaluate staff administration of epinephrine auto-injector
- Train, practice and evaluate staff in activating emergency care plan in case of a food allergy emergency
 - Immediately alerting 911 emergency medical services
 - Train, practice and evaluate communications with parents AFTER alerting 911
- Document training and evaluation of training
- Periodically provide training updates as needed

Level 3 Health Service Personnel

- All Level 1 and Level 2 strategies /activities
- Provide background on the importance of partnering with parents including
 - Interview student and parent for a Family Health History
 - Assisting families to locate assistance to apply for state child health insurance as needed
 - Assisting families who need to establish a medical home
 - Discussing the balance between safety and privacy/confidentiality
 - Collaboration with the parent to create the Individual Health Care Plan and Food Allergy/Emergency Care Plan
- Discuss the need to investigate local emergency medical services carrying of epinephrine
- Describe the team approach for preventing exposures and responding to emergencies, including identifying the school personnel team needed to support the food allergic student
- Emphasize the burden and quality of life of parents of food allergic children and strategies for relieving their anxiety
- Provide direction for:
 - Obtaining written authorization for exchange of information with health care provider(s)
 - Requesting treatment and medication orders from the student's health care provider
 - Assessing student's self-care capability
 - Increasing student self-care capability
 - Auditing reliability of student's self-carry status
 - Writing the Individual Healthcare Plan and Food Allergy/Emergency Care Plan
 - Assuring student and school personnel access to rescue medication
- Educate regarding legal issues related to students with food allergies including
 - District and school policies regarding students with food allergies
 - State guidelines and regulations for students with food allergies
 - Requirements of Section 504
 - Supporting a student self-management of food allergies
 - Documentation of all food allergy care equipment and policies, assessments, plans, interventions and evaluations
- Reinforce the need for ongoing evaluation and documentation of emergency response and staff competence in responding to food allergy emergencies, including debriefing following an exposure or epinephrine administration.

K. SEIZURE OVERVIEW

Tennessee Code Annotated, Section 49-5-415(g)(1) states that public and non-public school personnel who volunteer under no duress or pressure and who have been properly trained by a registered nurse employed or contracted by the LEA or governing board for a non-public school may administer anti-seizure medications, including diazepam gel, to a student in an emergency situation based on that student's IHP; however, if a school nurse is available, on site, and able to reach the student within the time limit for administration specified in the IHP, then the nurse shall provide this service to the student.

According to the [National Epilepsy Foundation](http://www.epilepsy.com) (www.epilepsy.com) about 300,000 American children under the age of 15 have epilepsy and 200,000 new cases of epilepsy are diagnosed each year. Often the cause for seizures is not apparent. Due to such a high incidence of seizure activity, most schools will have one or more students who may need care for a seizure problem at school. An LEA shall not assign a student with epilepsy or other seizure disorder to a school other than the school for which the student is zoned or would otherwise regularly attend because the student has a seizure disorder.

With the availability of an effective medication which may rapidly stop a seizure, it is important that provisions are made to provide this medication when a nurse is not available in the school. Therefore, the purpose of T.C.A. § 49-5-415 is to allow school districts to develop and implement an Emergency Seizure Response Plan that includes training school staff in the recognition of seizure activity and the administration of anti-seizure medication in the school setting.

Using this document as a guide, each school district must develop processes to identify students with seizure conditions that would require diazepam rectal gel. It is important to note that not all students with seizure problems are treated with diazepam rectal gel. For other students there are different emergency anti-seizure medications that may be used. While these guidelines specifically address using diazepam rectal gel, they could also be used to develop an Emergency Seizure Response Plan for other anti-seizure medications.

Trained volunteer school personnel administering emergency anti-seizure medications under subsection 49-5-415(g)(6), any registered nurse who provides training to administer such medications and any local board of education or governing board for a non-public school authorizing the same shall not be liable in any court of law for injury resulting from the reasonable and prudent assistance in the administration of such medications, if performed pursuant to the policies and guidelines developed by the Departments of Education and Health and approved by applicable regulatory or governing boards or agencies.

Once a child with a seizure disorder is identified and parents express the desire to have diazepam rectal gel available at school, pursuant to T.C.A. § 49-5-415 (g)(2), a registered nurse employed or contracted by the LEA shall be responsible for developing, updating and maintaining an Individualized Health Plan (IHP) for each student outlining the response plan for that individual child.

The following information is essential in the development of an IHP for a student diagnosed with epilepsy/seizure disorder:

- All medical diagnoses that may impact medication administration
- Known allergies to food or medication
- Specific seizure history
- Specific type(s) of seizure(s)

- Explanation the student's response to any previous administration of emergency anti-seizure medication
- Frequency of seizure activity
- Description of the usual type of seizure activity
- Usual duration of seizure activity
- Description of usual post seizure activity and plan
- Medications, especially the ones that may potentiate emergency anti-seizure medication
- Previous medication history
- Requirements for reporting administration of emergency anti-seizure medication, prescription medication or over-the-counter medicines that are administered when the student is not present at school. Such notification shall be given after administration of medication, before or at the beginning of the next school day in which the student is in attendance.

[Sample IHP for a student with seizure disorders](#) is available in the Seizure Forms section.

EMERGENCY SEIZURE RESPONSE PLAN:

The average convulsive seizure in a child who has epilepsy is not a medical emergency. It usually resolves without problems. It does not require immediate medical attention unless:

- A child has a seizure and there is no known history of epilepsy. Some other medical problem might be causing the seizure and emergency treatment of that problem might be required.
- Consciousness does not return after the seizure ends.
- A second seizure begins shortly after the first one without regaining consciousness in between.
- The seizure shows no sign of ending after 5 minutes.

If a child hits his head with force, either during the seizure or just before it began, and if one or more of the following signs is noted, call for immediate medical attention:

- Difficulty in rousing
- Vomiting
- Complaints of difficulty with vision
- Persistent headache after a short rest period
- Unconsciousness with failure to respond
- Dilation of the pupils of the eye, or if the pupils are unequal in size. If a seizure occurs while swimming, he should be checked by a doctor as soon as possible even if he seems to be fully recovered.

DURING SEIZURE ACTIVITY:

- **STAY WITH THE CHILD.**
- If falling or generalized jerking occurs:
 - Place child on floor.
 - Gently support head to side position and monitor breathing and pulse.
 - **DO NOT** restrain child.
 - **DO NOT** try and place anything in child's mouth or between child's teeth.
 - Protect child by moving items away that may cause injury – e.g. desks, chairs.
 - Loosen clothing at neck and waist; remove eyeglasses (if applicable).
 - Have another classroom adult remove/direct students from the area.
- Use watch. **TIME THE SEIZURE.** Observe pattern of the seizure and be prepared to describe it.
- **CALL 911** if:

- Absence of breathing and/or pulse (Start CPR for absence of breathing and pulse).
- Seizure of **5** minutes or greater duration.
- Two or more consecutive (without a period of consciousness between) seizures which total 5 minutes or greater.
- No previous history of seizure activity.
- Continued unusually pale or bluish skin/lips or noisy breathing after the seizure has stopped.
- Emergency anti-seizure medication is administered.

AFTER SEIZURE ACTIVITY:

- 1) Reorient and reassure child.
 - a. Allow/assist change into clean clothing if necessary.
 - b. Allow child to sleep, as desired, after seizure.
 - c. Allow child to eat, as desired, once fully alert and oriented.
- 2) A child recovering from a generalized seizure may manifest abnormal behavior such as incoherent speech, extreme restlessness, and confusion. This may last from five minutes to hours.
- 3) Inform parent immediately of seizure by telephone if:
 - a. Seizure is different from usual type/frequency/has not occurred at school in past month.
 - b. Seizure meets criteria for 911 emergency call.
 - c. Child has not returned to “normal self” after 30/60 minutes.
- 4) It is the parent’s responsibility to determine follow-up care with health care provider for symptoms.

K.1 SEIZURE DESCRIPTION

A seizure happens when the electrical system of the brain malfunctions. Instead of discharging electrical energy in a controlled manner, the brain cells keep firing. Normally the brain sends small electrical impulses from nerve cell to nerve cell to communicate and process information that controls our day to day bodily functions and activities. The best way to explain what seizures are is to imagine abnormal electrical impulses firing rapidly in one or more parts of the brain. These rapidly firing impulses disrupt the normal electrical operations of the brain and result in altered levels of consciousness, altered sensations, and possibly unusual muscle contractions causing parts of the body to stiffen and convulse.

If only part of the brain is affected, it may cloud awareness, block normal communication, and produce a variety of undirected, uncontrolled, unorganized movements. Most seizures last only a minute or two, although confusion afterwards may last longer. An epilepsy syndrome is defined by a collection of similar factors, such as type of seizure, when they developed in life, and response to treatment.

Under certain conditions, such as a reaction to medication or during pregnancy, anyone can have a seizure. Seizures are also common in certain illnesses such as when a child has a rapidly rising fever or when a student with diabetes has severely low blood sugar. Most of the time a seizure only lasts for a few seconds. Occasionally they will last for several minutes. When seizures continue for over five minutes, they are considered a medical emergency and require treatment to stop them.

TYPES OF SEIZURES

There are many different kinds of seizures, and they do not all cause the same symptoms and behaviors. People may experience just one type or more than one. The kind of seizure a person has depends on which part and how much of the brain is affected by the electrical disturbance that produces seizures. Experts divide seizures into generalized seizures (absence, atonic, tonic-clonic, myoclonic), partial seizures (simple and complex), nonepileptic seizures and status epilepticus.

What most people think of when they think of a seizure is what is known as a generalized tonic-clonic seizure. These used to be called grand mal seizures but are now classified by the symptoms present during the seizure. Tonic-clonic type seizures are characterized by sudden stiffing of the body, arms, or legs usually lasting several seconds. This stiffing is followed by a rhythmic contraction and relaxation of certain muscle groups causing the body to jerk. At the other end of the seizure spectrum are Absence Seizures, formally called petit mal seizures. When someone has an absence seizure the person might appear as if they are staring off into space or like they temporarily “zoned out” for a few seconds.

Classification of Epileptic Seizures

1. Primary Generalized Seizures

- Absence Seizures (formerly called petit mal):
 - Typical brief episodes of staring, blinking, being unaware of surroundings; usually last less than 10 seconds but may last up to 20 seconds.
 - Atypical staring spells lasting between 5 to 30 seconds, eye blinking or slight jerking movement of the lips may occur; partial reduction in responsiveness.
- Myoclonic: Brief jerks of a muscle or group of muscles; usually involving the neck, shoulders, and upper arms.
- Atonic: Sudden loss of muscle strength, eyelids may droop, head may nod, objects may be dropped, or the child may fall to the ground; usually last less than 15 seconds, injury is common; child typically needs to wear a helmet.
- Clonic: Rhythmic jerking movements of the arms and legs, may be generalized
- Tonic: Sudden stiffening movements of the body, arms, or legs involving both sides of the body; usually last less than 20 seconds.
- Tonic-Clonic (formerly called grand mal): Convulsive seizures; body briefly stiffens followed by a jerking motion of the arms and legs; loss of consciousness and falls frequently occur, excessive saliva production may be present, possible loss of bowel and bladder control; usually last a couple of minutes; the child is often tired or confused after the seizure and may want to go to sleep.

2. Partial Seizures (seizures originating in specific parts of the brain)

- Simple Partial (focal seizures) Consciousness not impaired
 - With motor symptoms Jerking and stiffening
 - With somatosensory Touch, smell, hearing, taste, and sight symptoms
 - With autonomic symptoms Heart rate change, internal sensations
 - With psychic symptoms Dreamy state
- Complex Partial seizures Consciousness impaired
 - Movements of the mouth and face (e.g., lip smacking, chewing, and swallowing movements), the hands and arms (e.g., fumbling, picking, and tapping movements),

➤ Seizure Clustering

vocalizations (e.g., grunts or repetition of words or phrases)

Repetitive or serial seizures

Clustering implies that the occurrence of one seizure may influence the probability of a subsequent seizure. Health care provider will give specific details.

EPILEPSY

Some people have a condition known as epilepsy in which they have multiple recurrent seizures. The cause for epilepsy is not always known but usually someone with epilepsy will have had an evaluation to try and determine the cause for their seizures. Although the symptoms of a seizure may affect any part of the body, the electrical events that produce the symptoms occur in the brain. The location of that event, the extent of its reach with the tissue of the brain, and how long it lasts all have profound effects. Once they are determined to have epilepsy, treatment is usually initiated with medication, diet, special devices, or even surgery to treat the problem.

Classifying epilepsy by seizure type alone leaves out other important information about the patient and the episodes themselves. Classifying into syndromes takes a number of characteristics into account, including the type of seizure; typical EEG recordings; clinical features such as behavior during the seizure; the expected course of the disorder; precipitating features; expected response to treatment; and genetic factors.

Causes of Epilepsy

Seizures are symptoms of abnormal brain function. With the exception of very young children and the elderly, the cause of the abnormal brain function is usually not identifiable. In about seven out of ten people with epilepsy, no cause can be found. Among the rest, the cause may be any one of a number of things that can make a difference in the way the brain works. Head injuries or lack of oxygen during birth may damage the delicate electrical system in the brain. Other causes include brain tumors, genetic conditions (such as tuberous sclerosis), lead poisoning, problems in development of the brain before birth, and infections like meningitis or encephalitis. A child's brain contains billions of nerve cells. They communicate with each other through tiny electrical charges that fire on and off in a coordinated fashion. When some or all of these cells suddenly begin to fire in a disorganized manner, a wave of electrical energy sweeps through the brain, causing a seizure.

Seizures interfere with the child's normal brain functions. They produce sudden changes in consciousness, movement, or sensation. Some people use the term "seizure disorder" instead of "epilepsy" to describe this condition. Both mean the same thing, an underlying tendency to experience seizures. Having a single seizure does not mean a child has epilepsy. Epilepsy is the name for seizures that happen more than once without a known treatable cause, such as fever or low blood sugar. While epilepsy can begin at any time, many cases start in early childhood. One reason is that immature brains are more susceptible to seizures from any cause. Pinpointing the cause of epilepsy is difficult at any age. In many cases there is no known cause and they are labeled as having idiopathic epilepsy. "Idiopathic" is a Latin word meaning "of unknown cause."

Genetic Factors

Epilepsy is a common disorder and frequently within an extended family more than one person may have

seizures. In most cases a specific pattern of inheritance of epilepsy within the family cannot be determined. However, there does appear to be a slightly increased risk of epilepsy in close relatives of individuals with seizures compared to the risk in the general population. Sometimes there is a family history of seizures, including febrile (fever-caused) seizures, epilepsy, or seizures in childhood that later went into remission. Absence and juvenile myoclonic epilepsy are two types of epilepsy that tend to run in families and are thought to have a genetic basis. A lot of research is going on now in an effort to find the genetic roots of some forms of epilepsy or the inherited conditions that have seizures as a primary symptom.

Seizure Triggers

Some people who have epilepsy have no special seizure triggers, while others are able to recognize things in their lives that do affect their seizures. Keep in mind, however, that just because two events happen around the same time does not mean that one is the cause of the other. Generally, the most frequent cause of an unexpected seizure is failure to take anti-seizure medication as prescribed. Other factors include ingested substances, hormone fluctuations, stress, altered sleep patterns and photosensitivity.

Photosensitive epilepsy is more common in children and adolescents, especially those with generalized epilepsy, in particular juvenile myoclonic epilepsy. It becomes less frequent with age, with relatively few cases in the mid-twenties. Many people are unaware that they are sensitive to flickering lights or to certain kinds of patterns until they have a seizure. They may never go on to develop epilepsy, which is characterized by recurrent spontaneous seizures, though a seizure may be triggered by certain photic conditions. Many individuals who are disturbed by light exposure do not develop seizures but experience other symptoms such as headache, nausea, dizziness and more. They do not have epilepsy.

To help minimize the risk of photosensitive epilepsy with computer monitors:

- Use a flicker free monitor (LCD display or flat screen).
- Use a monitor glare guard.
- Wear non glare glasses to reduce glare from the screen.
- Take frequent breaks from tasks involving the computer.

TREATMENT OF SEIZURES

There are several possible treatment methods to use to control epilepsy including medication, surgery, a special ketogenic diet, or an implanted magnet that can stimulate the vagus nerve when activated. Of these treatments, drug therapy is by far the most commonly used, and is usually the first to be tried. A number of medications are currently used in the treatment of epilepsy. These medications control different types of seizures. People who have more than one type of seizure may have to take more than one kind of medication, although physicians try to control seizures with one drug if possible. A seizure preventing drug (also known as an antiepileptic or anticonvulsant drug) will not work properly until it reaches a certain level in the body, and that level has to be maintained. The goal is to keep the blood level high enough to prevent seizures, but not so high that it causes excessive sleepiness or other unpleasant side effects.

However, even with therapeutic levels of anti-seizure medication, sometimes a seizure can still occur. When this happens additional medication is needed to stop the seizure. One such medication that is now commonly used is diazepam (commonly known as Valium). A special formulation of diazepam has been developed that can be administered to an unconscious person during a seizure. This special formulation is administered rectally as a gel, and is known by the trade name Diastat®.

Diazepam rectal gel works to stop seizure activity by acting on brain cell interactions that inhibit the seizure discharges. It is rapidly absorbed from the lining of the rectum and quickly achieves therapeutic levels in the blood. It can be used in both children and adults.

K.2 SEIZURE: CARE OF STUDENT

The immediate first aid for seizures will be outlined in the IHP/safety plan developed for each child with seizures. Since not all children with seizures have an order for anti-seizure medication at school, it is very important that school staff understand what first aid response is necessary as well as the appropriate after seizure care. Below are the first aid steps to follow for seizures. This information is also included on the seizure safety plan with additional space to customize the plan for each student with a seizure diagnosis.

For all Seizures:

It is important to respond quickly to assist the student having a seizure. Most seizures last only a short time and may not require diazepam. The initial response for all seizures involves the following steps:

- 1) Keep calm; let seizure run its course.
- 2) DO NOT attempt to restrain or force objects between teeth.
- 3) Ease child to floor if possible and remove objects from the immediate area which may cause injury.
- 4) Turn on side to prevent aspirating saliva.
- 5) Loosen tight clothing and place something soft and flat under his/her head.
- 6) Time the seizure and observe the seizure pattern (such as the number of seizures clustered together, nature of movements and level of consciousness).
- 7) All students with seizures will have an IHP with emergency guidelines in place.

K.2.a Roles and Responsibilities for Management of Seizures

Any member of the school staff could be present while a student is having a seizure. The School Nurse (RN) should provide training, including the emergency response plan, to all school personnel about the nature of epilepsy and seizure disorder, how to recognize them, and what to do in the event that one occurs. When the only symptoms of a seizure disorder are frequent episodes of blank staring and unresponsiveness, the teacher is often the first adult to notice them. All staff should understand that they should call the school nurse as soon as possible in order to evaluate the student after the seizure has subsided and to determine if any further medical attention is needed. When teachers, students and school personnel better understand epilepsy, schools are more equipped to provide the best possible environment for students with seizures.

A. STUDENT WITH EPILEPSY/SEIZURE DISORDERS

- Learn to recognize symptoms and take them seriously in early stages.
- Take as much responsibility for avoiding triggers as possible, based on developmental level.
- If age appropriate, participation in development of the seizure health plan.
- Promptly inform an adult if he/she is aware of an impending seizure.
- Notify school staff when he/she is not feeling well.
- Develop trusting friendships with peers and ask them for help if needed.
- Report teasing or harassment immediately.
- Wearing a medical alert identification tag while in school is strongly advised.
- Be aware of and follow any restrictions such as swimming/use of playground equipment.

B. PARENT/GUARDIAN

- Inform the School Nurse (RN) and administrators of your child's medical condition prior to the opening of school or as soon as possible after diagnosis.
- Participate in team meetings and development of the IHP or communicate with individual school personnel who will be in contact with your child.
- Provide the school with emergency contact information (cell phone, work number, beeper) and designate someone to act on your behalf if you are unavailable.
- Provide a written authorization to administer the medication at school with district's release of liability pursuant to T.C.A. § 49-5-415.
- Deliver the medication to the school in an original package with the dosage locked in by the dispensing pharmacy with a prescription label affixed with a valid expiration date. While the parent/guardian is present, the nurse will check to ascertain that the medication is ready to use per the manufacturer's recommendation (i.e. green ready seal is visible for Diastat®) otherwise, the parent/guardian should return medication to the pharmacy for correction.
- Provide and transport to the school all medications, equipment (i.e. protective head gear) and supplies.
- Replace expired medication prior to the expiration date. If not replaced by parent or guardian, then 911 will be called in the event of a seizure based on criteria for use of the emergency anti-seizure medication.
- Understand that the medication order is good for the entire school year unless rescinded in writing.
- Notify the school administrator or School Nurse (RN) if emergency anti-seizure medication or any new prescription or over-the-counter medication is given outside of school hours by the next school day.
- Provide the school with updates on the child's medical status annually and as needed.
- Providing medical alert identification tag for your child is strongly advised.
- Communicate with schools regarding parent participation on school field trips or off-site school sponsored events.
- When 911 is called for treatment of seizures, it is at the parent or guardian's expense.

C. SCHOOL NURSE (RN)

- Introduce yourself to the student and orient him/her how to access the nurse.
- At the beginning of the school year, meet with the parent of the student with a seizure disorder or as soon as possible after diagnosis.
- Obtain and maintain a current knowledge base and update skills and abilities related to the medical management of seizures.
- Organize and facilitate planning meetings with the student's parent/guardian and other key school staff to discuss planning and implementation of the student's IHP.
- Develop an IHP in cooperation with the student, the parents/guardians, the health care provider, and other school-based staff.
- Regularly review and update the IHP whenever there is a change in medical management or the student's response to care.
- Establish and maintain a working relationship with the student's parent/guardians and health care provider and act as a liaison between the student's authorized health care provider and the school.

- Coordinate or conduct child specific training to all school-based personnel who will have direct contact with the student on how to respond in an emergency per LEA policy.
- Make sure there is a contingency plan for substitute School Nurse (RN).
- Describe the established method of communication for the student /nurse/volunteer/witness to facilitate a rapid response in the event of a seizure.
- Require notification of the administration of emergency anti-seizure medication or over the counter non-prescription medication outside of school hours with instructions to return to the School Nurse (RN) or school administrator the next school day that student attends.
- Check to verify that the correct dose of medication is ready to use per the manufacturer's recommendation (i.e. green ready seal is visible for Diastat®) otherwise, the parent/guardian should return medication to the pharmacy for correction.
- Identify the location of the medication in the school.
- Identify any specific storage and handling required for the medication.
- Determine the plan for anti-seizure medication that is transported daily to and from school.
- Indicate the specific time frame for administration of emergency anti-seizure medication intervention.
- School administrator/School Nurse (RN) shall check monthly, and document, the expiration dates for each anti-seizure emergency medication in possession of the school.
- At least one (1) month prior to the expiration date of each medication, the School Nurse (RN) or administrator shall inform the student's parent or guardian of the expiration date and the need for replacement medication.
- Request a functioning communication device in the health clinic (example: phone system, intercom or two way radios).
- Serve as the student's advocate.
- Respect the student's confidentiality and right to privacy.

D. SCHOOL ADMINISTRATOR

- Participate in planning the IHP as a member of the management team, and support school personnel, the student and parents in its implementation.
- Include in the school's emergency response plan a written plan outlining emergency procedures for managing seizures.
- Include district health professional in the development and reviews of health policies and emergency protocols for the LEA's.
- Monitor overall compliance with the implementation of the Emergency Response Plan.
- Recommend that communication devices are provided and are in functioning condition in the appropriate location (nurse's clinic, classroom, cafeteria etc.)
- Require that training and education of all involved personnel is completed and documented.
- Inform parent/guardian if any student experiences a seizure at school.
- School administrator/School Nurse (RN) shall check monthly, and document, the expiration dates for each anti-seizure emergency medication in possession of the school.
- At least one (1) month prior to the expiration date of each medication, the School Nurse (RN) or administrator shall inform the student's parent or guardian of the expiration date and the need for replacement medication.
- Communicate in advance with School Nurse (RN) to review field trip plans and emergency care.
- Provide adequate time for School Nurse (RN) to train school personnel who volunteer.

E. EDUCATIONAL PERSONNEL (TEACHERS, AIDES, COACHES etc.)

- Participate in team meetings for the student with epilepsy/seizure disorders.
- Be aware of signs and symptoms of a seizure and to follow planned procedure during and after a seizure as described in the Emergency Response Plan.
- Be sure volunteers, student teachers, aides, specialists and substitute teachers are informed of the student's diagnosis and necessary safeguards on a need-to-know basis.
- Request that the classroom have a functioning intercom, two way radios or other communication device for communication with the School Nurse (RN) and administrator.
- Work with the School Nurse (RN) to educate other parents about the presence and needs of the child with epilepsy/seizure disorders on a need to know basis and with parent's permission.
- Respect the student's right to confidentiality and privacy.
- Participate in the planning for student's re-entry to school after a seizure has occurred, when possible.
- Communicate and collaborate in advance with the School Nurse (RN) to review field trip plans and emergency care.
- If for safety reasons, medical alert identification needs to be removed during specific activities, the student should be reminded to replace this identification immediately after the activity is completed.
- Notify substitute teachers of students with epilepsy/seizure disorders and leave a clear plan of care regarding the special needs of the student.
- Keep the student's Emergency Response Plan for Seizures readily accessible in the classroom in an organized format for substitute teachers and for use in emergencies.

F. GUIDANCE COUNSELOR

While the school counselor and/or social worker may not always have direct contact with the student, they should be aware of the students in their schools who have a seizure disorder and the potential impact it may have on the student's behavior and performance.

- Communicate with the School Nurse (RN) as needed in the development of the student's IHP.
- Monitor anxiety, stress levels, and social development of students with seizure disorders and provide interventions as appropriate.
- Act as a resource to parents and students regarding anxiety, stress and normal development.
- Educate classmates to avoid endangering, isolating, stigmatizing or harassing students with epilepsy/seizure disorders (with parental and student's permission) per LEA policy (at a minimum annually).
- When an episode of automatic behavior or a convulsion occurs in the classroom, the whole class is affected. Provide interventions as appropriate.

G. FOOD SERVICE MANAGER/PERSONNEL

- Be aware of special dietary requirements i.e. ketogenic diet.
- Be able to identify signs and symptoms of student distress.
- Should be knowledgeable about activation of emergency services.
- Have a functioning communication device to support emergencies.

H. SCHOOL BUS COMPANY

- Provide functioning communication devices.
- Know local emergency medical services procedures.
- Respect the student's right to confidentiality and privacy.
- Individual LEA's school bus company should consider receiving CPR training.

K.2.b Off-site School Sponsored Event/School Administered Care Programs

- No student should be excluded from a field trip or any extracurricular program or activity due to seizure disorders. The parent of the student should be allowed to accompany their child on the school trip in addition to the school chaperone. Parents are not required to attend the trip.
- The teacher requesting/organizing the field trip will coordinate with the principal, school RN or designee to meet the student's health care needs.
- As a matter of safe practice, the school may reasonably require that parents supply an extra set of emergency anti-seizure medication for availability during extracurricular activities.

Before a field trip or extracurricular activity, the school shall:

- Notify the parent(s) of the student with epilepsy/seizure disorders in a timely manner in order to prepare for medications.
- Plan activities that take into account students with epilepsy/seizure disorders who are participating.
- Train participating school staff in emergency responses relative to student's needs to include administration of student's emergency medications.
- Make certain that an emergency communication device is always present. Minimum of two (2) people with cell phones is recommended.
- Maintain records of the names and phone numbers of parent/guardian of the student and the health care provider.
- Designate someone to call the student's parents with the name and location of the hospital.
- Be sure that the bus driver has the emergency route to the hospital if the cell phone cannot make the connection to EMS. Only if EMS cannot be reached should the bus driver take the child to the nearest Emergency Room in the bus.

K.3 SEIZURE MEDICATION ADMINISTRATION

T.C.A. § 49-5-415 (g) addresses the administration of anti-seizure medications in school settings in emergency situations. This statute establishes procedures for all Local Education Agencies (LEAs) and the governing boards of non-public schools that choose to allow volunteer school personnel to administer anti-seizure medication.

- School personnel in both public and non-public schools who volunteer under no duress or pressure and who have been properly trained by a registered nurse employed or contracted by the LEA or governing board for a non-public school may administer emergency anti-seizure medications, including diazepam gel, to a student in an emergency situation based on that student's Individualized Health Plan (IHP).
- At least one (1) school employee is to serve as a witness on any occasion a volunteer administers emergency anti-seizure medication during an emergency situation, unless a witness is not available within the time limit for administration specified in the IHP.

- Training shall be conducted as soon as volunteer staff has been determined, and shall be repeated annually thereafter. In addition, competencies to administer emergency anti-seizure medications shall be documented in the personnel file of all volunteer school personnel.
- All volunteers trained to administer emergency anti-seizure medications shall also be trained in cardiopulmonary resuscitation (CPR) consistent with guidelines of the American Heart Association prior to anti-seizure medication training.
- When a trained volunteer determines the administration of diazepam gel is necessary, school officials shall immediately summon local emergency medical services to the school to provide necessary monitoring or transport to safeguard the health and condition of the student.
- Trained volunteer school personnel administering anti-seizure medications, any registered nurse who provides training to administer such medications and any local board of education or governing board for a non-public school authorizing the same shall not be liable in any court of law for injury resulting from the reasonable and prudent assistance in the administration of such medications, if performed pursuant to the policies and guidelines developed by the Departments of Health and Education and approved by applicable regulatory or governing boards or agencies.

Prior to the administration of any emergency anti-seizure medication by a volunteer or a school nurse it is essential that the proper documentation be in place and the appropriate forms be correctly completed and authorized. Each LEA currently has proprietary medication administration forms that are used in their district for the authorization of medication at school. These forms can still be used by school districts as their written authorization to administer anti-seizure medication including diazepam rectal gel.

The student's parent or guardian shall provide:

- A written authorization to administer the medication at school.
- A written statement from the student's health care practitioner that includes the following information:
 - the student's name
 - name and purpose of the medication
 - prescribed dosage
 - route of administration
 - the frequency that the medication may be administered
 - detailed circumstances under which the medication may be administered
 - a list of other medications student is taking, with emphasis on any medication that could increase or change the effects of diazepam

The written authorization to administer emergency anti-seizure medication shall be kept on file in the office of the school nurse or school administrator. Unless subsequently rescinded in writing, such authorization shall be effective for the entirety of the school year in which it is granted. New authorization must be obtained each school year.

The completed medication administration form must be supplied to the school by the child's parent or guardian along with the medication prescribed. The prescribed medication must be in the original package with the dosage locked in by the dispensing pharmacy with a prescription label affixed with a valid expiration date.

A student's parent or guardian, who has given the student's school written authorization to administer emergency anti-seizure medication, shall, in accordance with the student's IHP, notify the school

administrator or school nurse if emergency anti-seizure medication or prescription or over-the-counter medicines are administered to the student at a time at which the student is not present at school.

K.3.a Diazepam Gel Administration

Diazepam is a benzodiazepine class medication (Valium) used to stop prolonged seizures. In the rectal gel preparation, it is more convenient to administer to patients who cannot swallow during or after seizures. It is supplied in a syringe like container and has a small plastic applicator tip that is inserted just inside the rectum. The dose is predetermined by child's age and weight, and is delivered in preset dosages.

The most common side effect of diazepam is sedation. This sedation is more likely to occur at higher dosages or if the medication has previously been given within the past eight hours. **Therefore it is critical for school personnel to know about same day use of diazepam prior to school. Diazepam rectal gel is not to be used more than 5 times a month and/or more than once in 5 days.** It is also important for school personnel to be informed by the health care provider of any interactions between diazepam rectal gel and other medication the student may be taking that could possibly potentiate the sedative effect. The dosage will be predetermined by the child's health care provider and that specific dose will be loaded into the delivery container (i.e. Diastat® AcuDial™) and locked by the pharmacy. It is not necessary for school personnel to calculate the dose to be administered at school.

Prior to Administration:

The following must be in place to enable procedure to be performed at school.

- Medication Authorization form completed by health care provider and signed by parent, including indications/contraindications and follow-up plan.
- Individualized Health Plan (IHP) or Individualized Education Plan (IEP) or other written instructions for administration of this medication.
- Properly labeled pharmaceutical container with medication dosage locked with the ready seal visible (green in color for Diastat®) and specific instructions noted. Prior to storing the medication for future use, the School Nurse (RN) must verify the correct dosage has been dialed and locked by the pharmacy with the ready seal visible, check tip for cracks, and document on the Emergency Medication Log.
- Rectal diazepam medication should be stored in a secure and readily accessible place at school. Ideally a separate dose of the medication can be kept at the school at all times to avoid the possibility of leaving the medication at home when the device is transported back and forth each day. If this is not possible, other plans for storage and transport of medication will be outlined in the child's IHP.
- The volunteer trained to administer rectal diazepam must have current certification in CPR.
- Instructions and health care provider's orders for rectal diazepam administration will be in the IHP in a predetermined location along with supplies necessary for administration and communication with EMS/parent. Knowledge by the nurse and/or properly trained volunteer on what type of seizure activity this medication is to be administered for and how many minutes into the seizure it is to be given, as described by the health care provider.
- Medication administration log.
- Seizure Report. A [sample seizure observation report](#) is available in the Seizure Forms section.
- Check expiration date and ensure that protective cap is removed with the seal pin intact prior to administration.

- Make sure the correct dose appears through the dose display window. This is a visual indication that the barrel of the delivery container (i.e. Diastat® AcuDial™) is in the correct position for the desired dose.
 - Ensure that the locking ring is engaged.
 - The “READY” band (green in color for Diastat®) will be revealed at the base of the barrel. This allows you to see that the unit has been locked.
 - Repeat these steps for each dose administered.
- Administer rectal diazepam as directed by health care provider’s orders designating number of minutes to be given into the seizure.
- Review manufacturer's procedure for Diastat® AcuDial™ administration: <http://diastat.valeantonline.com/how-to-administer>
- Rectal diazepam orders must include the following information:
 - Duration and type of seizure activity before rectal diazepam is administered. Volunteer must be trained by registered nurse on exact conditions when to treat with rectal diazepam per health care provider’s order.
 - Any contraindications to the rectal diazepam (e.g., fever, respiratory infections, etc.).
 - Exact dose of the drug.
- School Nurse (RN), or volunteer in lieu of nurse, must verify the dosage received matches the healthcare provider’s order and document this on the Medication Log.
- **Always call 911 and communicate the following:**
 - Time of seizure onset
 - Description of seizure activity
 - Time seizure ended
 - Time rectal diazepam dosage given
 - Who administered rectal diazepam
- After administering rectal diazepam, the school nurse/trained volunteer will be responsible for monitoring until EMS arrives.
- Document seizure activity and administration of medication.
- Notification system for parent/guardian.

Steps for Administering Diazepam Rectal Gel:

1. Put student on their side where they can’t fall.
2. Get the medication.
3. Get Syringe. Note: seal pin is attached to the cap.
4. Push up with thumb and pull to remove cap from syringe. Be sure seal pin is removed with the cap.
5. Lubricate rectal tip with lubricating jelly.
6. Turn person on side facing you and remove clothing
7. Bend upper leg forward to expose rectum.
8. Separate buttocks to expose rectum.
9. Gently insert syringe tip into rectum. Note: rim should be snug against rectal opening.
10. Slowly count out loud to three while gently pushing plunger in until it stops.
11. Slowly count out loud to three before removing syringe from rectum.
12. Slowly count out loud to three while holding buttocks together to prevent leakage.
13. Keep person on the side facing you, note time given, and continue to observe.

[Pictorial instructions for administering Diastat®](#) are available in the Seizure Forms section.

K.4 SEIZURE TRAINING

Tennessee Code Annotated, Section 49-5-415(g)(4) provides that once a public or private school has determined to allow volunteer staff to administer anti-seizure medication in an emergency situation, the training referenced in subdivision (g)(3) shall be conducted as soon as possible, and shall be repeated annually thereafter. In addition, competencies to administer anti-seizure medications shall be documented in the personnel file of all volunteer school personnel. All volunteers trained to administer anti-seizure medications shall also be trained in cardiopulmonary resuscitation (CPR).

Some health care professionals may have little expertise in seizure education and/or management but provide support to a student with a seizure disorder. Licensed health care professionals employed or contracted by an LEA who will be providing care to a student with a seizure disorder should demonstrate competency for both knowledge and skills on an annual basis.

The curriculum for training includes:

- 1) General education about seizures and epilepsy.
- 2) The recognition of prolonged seizure activity requiring intervention.
- 3) Immediate first aid techniques including cardiopulmonary resuscitation (CPR) for the management of seizures.
- 4) Protocol and proper technique for the administration of emergency anti-seizure medication.
- 5) Appropriate post seizure aftercare.

An LEA that chooses to allow school personnel volunteers to be trained to administer emergency anti-seizure medication in an emergency situation will provide the following:

- School personnel who volunteer under no duress will be trained in the administration of an emergency anti-seizure medication.
- Cardiopulmonary resuscitation (CPR), consistent with guidelines of the American Heart Association, will be taught to any school personnel volunteer prior to receiving emergency anti-seizure medication training. The minimum training should be equivalent to the American Heart Association's Family and Friends curriculum.
- If the School Nurse (RN) or school personnel volunteer is not available or is unable to administer emergency anti-seizure medication, 911 will be called, in accordance with the Individualized Health Plan (IHP).
- School Administrator/School Nurse (RN) will conduct a monthly check of each anti-seizure medication in possession of the school and notify the parent/guardian one (1) month prior to the medication expiration date.
- The LEA will maintain CPR training and emergency anti-seizure medication training documentation in the school personnel volunteer's personnel file.
- Upon administration of emergency anti-seizure medication, the school officials will call 911.
- LEA shall not assign a student to a school other than the one to which the student is zoned or would otherwise regularly attend because the student has a seizure disorder.

School Nurse Training Responsibilities:

- Conduct an assessment and document the volunteer's competency in understanding seizures, the medication, method of administration and all tasks required to carry out the specific guidelines for administration of emergency anti-seizure medication. The School Nurse (RN) will

determine the competency of the volunteer to administer the emergency anti-seizure medication.

- Verify that the CPR status of the volunteer is current and consistent with guidelines of the American Heart Association prior to anti-seizure emergency medication training, and place certification of training in the personnel or other appropriate school file.
- Provide volunteer school personnel training in the recognition of seizures and especially prolonged seizure activity that may require rapid administration of emergency anti-seizure medication in the school setting.

➤ **Suggested Components for Training Curriculum:**

The participant(s) will demonstrate and/or verbalize the following competencies:

- Know which authorization forms are required to be completed for students with conditions requiring the emergency administration of emergency anti-seizure medication (including diazepam rectal gel) in accordance with school district policy and requirements.
- Have a basic understanding of seizures and the different types and characteristics of each type of seizure.
- Develop an understanding of how to manage seizures during the school day based upon health care provider's seizure authorization, including immediate first aid for seizures and techniques for CPR.
- Know the five rights (5 R's) of medication administration.
- Read medication label and know how to correctly follow directions on medication label.
- Proper storage of prescription medication.
- Know how to appropriately administer diazepam rectal gel.
- Know the steps to follow after administering diazepam rectal gel.
- Know when to call EMS (911).
- How to dispose of unused emergency anti-seizure medication/delivery device.
- Both a written test and a skills check should be included, and the learner must demonstrate competency on both.

A [Sample Skills Checklist](#) and a [Sample Written Test](#) is available in the Seizure Forms section.

➤ **Training Resources from The Epilepsy Foundation:**

- For the School Nurse:
 - [Managing Students with Seizures](#) is a continuing education training program designed to provide the school nurse with information, strategies and resources that will enable him/her to better manage the student with seizures by supporting positive treatment outcomes, maximizing educational and developmental opportunities, and ensuring a safe and supportive environment. The Managing Students with Seizures: A Training for School Nurses program is divided into three modules to assist the school nurse in learning to effectively manage seizures in a school environment.
<http://www.epilepsy.com/node/2000921>
- For School Personnel:
 - [Seizure Training for School Personnel](#) was developed in response to the need for a consistent educational tool to help promote a positive social and educational environment for students living with seizures and epilepsy. The program provides teachers and other

school personnel with information needed to recognize seizures, respond with appropriate first aid, and understand the impact seizures have on students. It is for elementary, middle, and secondary school staff, including teachers, administrators, cafeteria workers, security guards, custodians, or anyone else that will come in contact with students.

The Epilepsy Foundation provides a kit with a CD-ROM which includes a facilitator's guide, Power Point slides, information on continuing education units, and a DVD called *Seizures in Schools: Understanding and Assisting Students With Epilepsy*. You can also take the training online or call 1-800-332-1000 for more information.

<http://www.epilepsy.com/get-help/services-and-support/training-programs/seizure-training-school-personnel>

K.5 SEIZURE FORMS

1. [Sample Individualized Health Plan \(IHP\)](#)
2. [Sample Seizure Observation Report](#)
3. [Diastat Administration \(2 page pictorial instructions\)](#)
4. [Sample Competency Checklist](#)
5. [Sample Written Test](#)

Sample Individualized Health Plan (IHP) for Seizure Disorders

Student Name: _____ Birth Date: _____
 Homeroom Teacher _____ Bus #: _____

**Place
Child's
Picture
Here**

Parent/Guardian: _____
 Phone(s): _____ Email: _____
 Other Emergency Contact: _____ Relation: _____
 Phone(s): _____ Email: _____

Parent/guardian is responsible for all medication & supplies designated in the following Action Plan

SEIZURE INFORMATION Date of last seizure: ____/____/____ ____/____/____ ____/____/____

Seizure Type/Nickname	What Happens	How Long it Lasts	How Often

TRIGGERS

- | | |
|---|--|
| <input type="checkbox"/> Missed doses of anti-seizure medication (too little medication)
<input type="checkbox"/> Anti-seizure medication toxicity (too much medication)
<input type="checkbox"/> Blinking or flashing lights, geometric patterns (photosensitivity)
<input type="checkbox"/> Abuse of alcohol or other drugs
<input type="checkbox"/> Fever, colds, infections or other illness
<input type="checkbox"/> Lack of sleep
<input type="checkbox"/> Other: _____ | <input type="checkbox"/> Menstrual cycle
<input type="checkbox"/> Hormonal changes or imbalances, for instance, at puberty and during menopause
<input type="checkbox"/> Low blood sugar (hypoglycemia)
<input type="checkbox"/> Deficiency of vitamin B6, sodium, calcium or magnesium
<input type="checkbox"/> Sudden stress, such as being startled, which may cause hyperventilation |
|---|--|

DAILY SEIZURE MEDICINE

Medicine Name	Total Daily Amount	Amount of Tab/Liquid	How Taken (time of each dose and how much)

OTHER SEIZURE TREATMENTS

Device Type: _____ Model: _____ Serial#: _____ Date Implanted: _____
 Dietary Therapy: _____ Date Begun: _____
 Special Instructions: _____
 Other Therapy: _____

SEIZURE FIRST AID

- Keep calm, provide reassurance, remove bystanders
- Keep airway clear, turn on side if possible, nothing in mouth
- Other care needed: _____
- Keep safe, remove objects, do not restrain
- Time, observe, record what happens
- Stay with person until recovered from seizure

WHEN SEIZURES REQUIRE ADDITIONAL HELP

Type of Emergency (long, clusters or repeated events)	Description	What to Do

“AS NEEDED” TREATMENTS (VNS magnet, medicines)

Name	Amount to Give	When to Give	How to Give

CALL 911 OR SEEK EMERGENCY MEDICAL ATTENTION IF ...

- Generalized seizure longer than 5 minutes
- Two or more seizures without recovering between seizures
- “As needed” treatments don’t work
- Injury occurs or is suspected, or seizure occurs in water
- Other care needed: _____
- Breathing, heart rate or behavior doesn’t return to normal
- Unexplained fever or pain, hours or few days after a seizure

HEALTH CARE CONTACTS

Epilepsy Doctor: _____ Phone: _____
 Preferred Hospital: _____ Phone: _____
 PCP or Other Doctor: _____ Phone: _____
 Pharmacy: _____ Phone: _____

School Nurse Signature: _____ Date of IHP: _____
 Parent/Guardian Signature: _____

This plan will be reviewed annually by the school nurse, or, as often as needed, with the parent/guardian and appropriate instructional assistants. It will be revised prn. The school nurse will, in collaboration with the parent/guardian, train or arrange training, and supervise all non-medically licensed school personnel who are assigned responsibility for implementing any part of this health plan.

Review Dates	RN Initials	Parent Initials

Sample Seizure Observation Report

Student Name:			
Date and Time			
Seizure Length			
Pre-Seizure Observation (Briefly list behaviors, triggering events, activities)			
Conscious (yes/no/altered)			
Injuries (briefly describe)			
Muscle Tone Body Movements	Rigid/clenching		
	Limp		
	Fell down		
	Rocking		
	Wandering around		
	Whole body jerking		
Extremity Movements	(R) arm jerking		
	(L) arm jerking		
	(R) leg jerking		
	(L) leg jerking		
	Random Movement		
Color	Bluish		
	Pale		
	Flushed		
Eyes	Pupils dilated		
	Turned (R or L)		
	Rolled up		
	Staring or Blinking (clarify)		
	Closed		
Mouth	Salivating		
	Chewing		
	Lip smacking		
Verbal Sounds (gagging, talking, throat clearing, etc.)			
Breathing (normal, labored, stopped, noisy, etc.)			
Incontinent (urine or feces)			
Post-Seizure Observation	Confused		
	Sleepy/tired		
	Headache		
	Speech slurring		
	Other		
Length to Orientation			
Parents Notified? (time of call)			
EMS Called? (call time & arrival time)			
Observer's Name			

Please put additional notes on back as necessary.

Seizure Observation Report (ADDITIONAL NOTES)

Date: _____

Date: _____

Date: _____

Diastat Administration (2 page pictorial instructions)

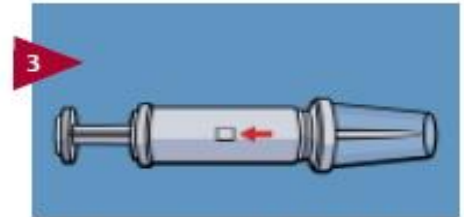
CHILD ADMINISTRATION INSTRUCTIONS



1 Put person on their side where they can't fall.



2 Get medicine.



3 Get syringe. Note: seal pin is attached to the cap.



4 Push up with thumb and pull to remove cap from syringe. **Be sure seal pin is removed with the cap.**



5 Lubricate rectal tip with lubricating jelly.



6 Turn person on side facing you.



7 Bend upper leg forward to expose rectum.



8 Separate buttocks to expose rectum.



9 Gently insert syringe tip into rectum. Note: rim should be snug against rectal opening.

SLOWLY...

COUNT OUT LOUD TO THREE...1...2...3



10 Slowly count to 3 while gently pushing plunger in until it stops.



11 Slowly count to 3 before removing syringe from rectum.



12 Slowly count to 3 while holding buttocks together to prevent leakage.

ONCE DIASTAT® IS GIVEN



Keep person on the side facing you, note time given, and continue to observe.

DIASTAT® Indication

DIASTAT® AcuDial™ (diazepam rectal gel) is a gel formulation of diazepam intended for rectal administration in the management of selected, refractory patients with epilepsy, on stable regimens of AEDs, who require intermittent use of diazepam to control bouts of increased seizure activity, for patients 2 years and older.

Important Safety Information

In clinical trials with DIASTAT®, the most frequent adverse event was somnolence (23%). Less frequent adverse events reported were dizziness, headache, pain, vasodilatation, diarrhea, ataxia, euphoria, incoordination, asthma, rash, abdominal pain, nervousness, and miosis (1%-5%).

CALL FOR HELP IF ANY OF THE FOLLOWING OCCUR

- Seizure(s) continues 15 minutes after giving DIASTAT® or per the doctor's instructions:

- Seizure behavior is different from other episodes
- You are alarmed by the frequency or severity of the seizure(s)
- You are alarmed by the color or breathing of the person
- The person is having unusual or serious problems

Local emergency number: _____ Doctor's number: _____
(Please be sure to note if your area has 911)

Information for emergency squad: Time DIASTAT® given: _____ Dose: _____

Diastat
(diazepam rectal gel)

Diastat AcuDial™
(diazepam rectal gel)

DISPOSAL INSTRUCTIONS ON REVERSE SIDE

IMPORTANT

Read first before using

To the caregiver using DIASTAT®:

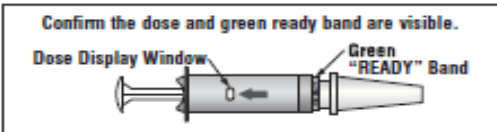
Please do not give DIASTAT® until:

1. You have thoroughly read these instructions
2. Reviewed administration steps with the doctor
3. Understand the directions

To the caregiver using Dia^{stat}® AcuDial™:

Please do not give DIASTAT® AcuDial™ until:

1. You have confirmed:
 - Prescribed dose is visible and if known, is correct
 - Green "ready" band is visible



2. You have thoroughly read these instructions
3. Reviewed administration steps with the doctor
4. Understand the directions

Please do not administer DIASTAT® until you feel comfortable with how to use DIASTAT®. The doctor will tell you exactly when to use DIASTAT®. When you use DIASTAT® correctly and safely you will help bring seizures under control. Be sure to discuss every aspect of your role with the doctor. If you are not comfortable, then discuss your role with the doctor again.

To help the person with seizures:

- ✓ You must be able to tell the difference between cluster and ordinary seizures.
- ✓ You must be comfortable and satisfied that you are able to give DIASTAT®.
- ✓ You need to agree with the doctor on the exact conditions when to treat with DIASTAT®.
- ✓ You must know how and for how long you should check the person after giving DIASTAT®.

To know what responses to expect:

- ✓ You need to know how soon seizures should stop or decrease in frequency after giving DIASTAT®.
- ✓ You need to know what you should do if the seizures do not stop or there is a change in the person's breathing, behavior, or condition that alarms you.

If you have any questions or feel unsure about using the treatment, **CALL THE DOCTOR** before using DIASTAT®.

Where can I find more information and support?

For information on DIASTAT® and DIASTAT® AcuDial™:

Call 1-877-361-2719 or visit www.diaostat.com

Additional resource:

Epilepsy Foundation (EF). You can reach EF by calling 1-800-EFA-1000 or www.efa.org.



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When to treat. Based on the doctor's directions or prescription

Special considerations

DIASTAT® should be used with caution:

- In people with respiratory (breathing) difficulties (eg, asthma or pneumonia)
- In the elderly
- In women of child bearing potential, pregnancy, and nursing mothers

Discuss beforehand with the doctor any additional steps you may need to take if there is leakage of DIASTAT® or a bowel movement.

Patient's DIASTAT® dosage is: _____ mg

Patient's resting breathing rate _____ Patient's current weight _____

Confirm current weight is still the same as when DIASTAT® was prescribed _____

Check expiration date and always remove cap before using. Be sure seal pin is removed with the cap.

TREATMENT 1

Important things to tell the doctor

Date	Seizures before DIASTAT®		
	Time	Seizure type	No. of seizures
_____	_____	_____	_____
_____	_____	_____	_____

Seizures after DIASTAT®		
Time	Seizure type	No. of seizures
_____	_____	_____
_____	_____	_____

Things to do after treatment with DIASTAT® AcuDial™

Stay with the person for 4 hours and make notes on the following:

- Changes in resting breathing rate _____
- Changes in color _____
- Possible side effects from treatment _____

TREATMENT 2

Important things to tell the doctor

Date	Seizures before DIASTAT®		
	Time	Seizure type	No. of seizures
_____	_____	_____	_____
_____	_____	_____	_____

Seizures after DIASTAT®		
Time	Seizure type	No. of seizures
_____	_____	_____
_____	_____	_____

Things to do after treatment with DIASTAT® AcuDial™

Stay with the person for 4 hours and make notes on the following:

- Changes in resting breathing rate _____
- Changes in color _____
- Possible side effects from treatment _____

DISPOSAL INSTRUCTIONS FOR DIASTAT® AcuDial™

14a

- Pull on plunger until it is completely removed from the syringe body
- Point tip over sink or toilet

This step is for DIASTAT® AcuDial™ users only

At the completion of step 14a:

- Discard all used materials in the garbage can
- Do not reuse
- Discard in a safe place, away from children

- Replace plunger into syringe body, gently pushing plunger until it stops
- Flush toilet or rinse sink with water until gel is no longer visible

DISPOSAL FOR DIASTAT® 2.5 MG

At the completion of step 13:

- Discard all used materials in the garbage can
- Do not reuse
- Discard in a safe place, away from children

Adult administration instructions available for download at diaostat.com

Sample Competency Checklist

Mark all components of training as completed with a checkmark and as Proficient (P) or Unmet (U)

Name _____ Date _____

Trainer _____

		P or U
<input type="checkbox"/>	Pre and Post Test	
<input type="checkbox"/>	Review of the student's Individual Health Care Plan	
<input type="checkbox"/>	The Brain and Epilepsy	
<input type="checkbox"/>	Types of Seizures	
<input type="checkbox"/>	Epilepsy Syndromes	
<input type="checkbox"/>	Causes of Epilepsy	
<input type="checkbox"/>	When to call 911	
<input type="checkbox"/>	Genetic Factors	
<input type="checkbox"/>	Seizure Triggers	
<input type="checkbox"/>	Review First Aid for Seizures	
<input type="checkbox"/>	Emergency Plan for Seizure	
<input type="checkbox"/>	List of recommended supplies and equipment in the vicinity of the medication	
<input type="checkbox"/>	Review of After Seizure Phase	
<input type="checkbox"/>	Monitoring in the After Seizure Phase	
<input type="checkbox"/>	Orientation and recognition of all related paperwork and forms	
<input type="checkbox"/>	Review and safeguards and steps in the safe administration of medication	
<input type="checkbox"/>	Practice the 5 "R"s of medication administration	
<input type="checkbox"/>	Identify student specific seizure and medication in the IHP to determine when to administer anti-seizure emergency medication	
<input type="checkbox"/>	Discuss the dosage prescribed by the physician	
<input type="checkbox"/>	How to check the syringe to insure the proper dose is locked in	
<input type="checkbox"/>	Medication Administration Record Sheet to record administration of medication	
<input type="checkbox"/>	Manufacturer information on Diastat® (Diazepam) before administered in the school setting	
<input type="checkbox"/>	Possible contraindications to the use of Diastat® (Diazepam)	
<input type="checkbox"/>	Duration and type of seizure activity before Diastat® (Diazepam) is administered	
<input type="checkbox"/>	Exact conditions when to treat with Diastat® (Diazepam)	
<input type="checkbox"/>	Care during treatment with Diastat® (Diazepam)	
<input type="checkbox"/>	How Diastat® (Diazepam) works	
<input type="checkbox"/>	Drug Interactions	
<input type="checkbox"/>	Forms of the medicine	
<input type="checkbox"/>	Dosing	
<input type="checkbox"/>	Duration of action	
<input type="checkbox"/>	Potential side effects	

Sample Written Test for Seizure Training

Name _____ Date _____

Score _____

1.	Epilepsy is a chronic medical condition that can be successfully treated in childhood and throughout adulthood.	True False
2.	The brain is the source of human epilepsy.	True False
3.	A seizure is an electrical disturbance in the brain.	True False
4.	The part of the brain affected by an electrical disturbance will determine what part of the body is affected during a seizure.	True False
5.	The experts have divided seizures into four (4) categories.	True False
6.	Seizures always affect the whole body.	True False
7.	Once a person has a seizure, the seizure activity is always the same.	True False
8.	People with epilepsy always know when they are going to have a seizure.	True False
9.	Some things in the environment can cause a person to have a seizure.	True False
10.	A seizure will only last a minute or two and then stop.	True False
11.	Epilepsy is always hereditary.	True False
12.	There are other syndromes and conditions that can mimic seizures.	True False
13.	Anti-seizure medications can cure epilepsy.	True False
14.	Anti-seizure emergency medication is the same the other medications students take in school.	True False
15.	Anti-seizure emergency medication administration does not require special paperwork or special training.	True False
16.	All persons assisting students with anti-seizure medication administration are required to provide proof of current CPR training.	True False
17.	Parents must report the administration of anti-seizure emergency medication at home to the school in writing by the next school day.	True False
18.	It is acceptable to administer a medication that is out of date.	True False
19.	It is not necessary to call 911 if emergency seizure medication is administered.	True False
20.	A parent can train anyone in the school setting to administer anti-seizure emergency medication.	True False
21.	Anti-seizure emergency medication cannot be administered if there is no witness available.	True False
22.	Once anti-seizure emergency medication is administered, the student can be left alone.	True False
23.	There are no complications associated with administering anti-seizure emergency medication.	True False
24.	No special precautions are needed before administering anti-seizure emergency medication.	True False
25.	The annual school nurse developed health care plan will outline all student specific seizure and medication administration information.	True False

Answers for Seizure Written Test

1. True
2. True
3. True
4. True
5. True
6. False
7. False
8. False
9. True
10. False
11. False
12. True
13. False
14. False
15. False
16. True
17. True
18. False
19. False
20. False
21. False
22. False
23. False
24. False
25. True

L. FREQUENTLY ASKED QUESTIONS (FAQ'S)

L.1 FAQ'S ABOUT GENERAL ISSUES

- Q. Is every public school system (LEA) required to provide a school nurse (registered nurse)?
- A. Yes. T.C.A. § 49-5-415 requires certain health care procedures, including the administration of medications during the school day or at related events, to be performed by appropriately licensed health care professionals. With regard to public school systems, T.C.A. § 49-3-359 (c)(1) states "There is included in the Tennessee Basic Education Program (BEP) an amount of money sufficient to fund one (1) full-time, public school nurse position for each three thousand (3,000) students or one (1) full-time position for each LEA, whichever is greater. An LEA may use such funds to directly employ a public school nurse or to contract with the Tennessee public school nurse program, created by T.C.A. § 68-1-1201 (a), for provision of school health services; provided, that after the BEP is fully funded, an LEA must use such funds to directly employ or contract for a public school nurse as provided for in this subsection or must advise the department of education that the LEA has affirmatively determined not to do so, in which case the LEA shall notify the department of the election against providing such service and the alternative arrangement which the LEA has made to meet the health needs of its students."
- Q. Define supervision of LPNs in a school setting.
- A. The LPN works under the supervision of an RN, physician, or dentist and can perform health care procedures appropriate to the LPN's level of education and experience.
- Q. Has a job description been developed for school nurses?
- A. NO. Job descriptions are the responsibility of local school systems. However, samples are available through the Tennessee Departments of Health and Education, the Tennessee Nurses Association, and the National Association of School Nurses.
- Q. Does the implementation of T.C.A. § 49-5-415 constitute a Coordinated School Health Program?
- A. NO. The eight nationally recognized components of Coordinated School Health Programs are: comprehensive health education, nutrition services, physical education, health services, healthy school environment, family/community involvement, counseling/psychological/social services, and health promotion for staff. T.C.A. 49-1-1002 establishes guidelines and standards for Coordinated School Health Programs in Tennessee that are available through the State Departments of Education and Health.
- Q. Do Health Department employees have the authority to speak with or meet with K-12 students on school grounds in the course of a health investigation?
- A. YES. The Tennessee Department of Health has the authority to conduct investigations regarding the cause and spread of disease^[1]. In cases in which a minor is most efficiently located at school, the Health Department employee may call the school and conduct a brief interview by phone, visit the school and speak with the student in person, or leave a message with the school asking the student to call.
- Q. Is parental consent required for minors to be interviewed by Health Department employees during the course of a disease investigation?
- A. NO. Parental consent is not required for Health Department employees to meet with students during the course of a disease investigation.^[2] The Health Department will not request disclosure of school records nor will it test or treat students on school grounds.

^[1] TCA 68-10-104(2), TCA 68-10-104(c), and TDH Rule 1200-14-01-.15

^[2] Per TCA 68-10-104(2), TCA 68-10-104(c), and TDH Rule 1200-14-01-.15

L.2 FAQ'S ABOUT HEALTH CARE PROCEDURES

Q. Does the law regarding health care procedures apply to private schools?

A. YES, to most private schools.

Q. Who is authorized to perform health care procedures in the schools?

A. Most health care procedures will be performed by registered nurses or licensed practical nurses. However, under certain circumstances, other appropriately licensed professionals (for example, physical therapists) may perform health care procedures within the scope of their practice.

Q. Can a parent designate school personnel to perform health care procedures on their child?

A. NO, school personnel cannot perform health care procedures. School personnel can volunteer to be trained to administer daily insulin or to administer glucagon, diazepam, and epinephrine auto-injectors in an emergency situation based on the student's IHP. Once trained, they may assist the registered nurse in carrying out specified tasks that do not require independent, specialized nursing knowledge, skill, or judgment including assessment and evaluation of student health outcomes and health counseling or teaching. (Examples of appropriate tasks include assistance with vision and hearing screenings and assist with self-administration of medication.)

Q. Is it permissible for a parent to come to school to perform a health care procedure?

A. YES, but only for his or her child. However, a parent cannot be required to come to school to perform the child's procedure.

Q. Can a teaching assistant perform any health care procedure?

A. NO, but they may be assigned to assist in the self-administration of medications. If they volunteer, they can also be trained to administer daily insulin or to administer glucagon, diazepam, or epinephrine auto-injectors in an emergency situation when the school nurse is not available and based on the student's IHP.

Q. Can a child perform a self-catheterization?

A. YES, but the RN should assess the child at least bi-annually to assess problems, techniques and health status. The RN should also develop an IHP for the student.

Q. Can an LPN perform a tube feeding?

A. YES, under a protocol established by an RN and the student's IHP.

Q. Can a teacher wipe off a trach tube?

A. YES. With instruction and in accordance with the student's IHP, the teacher can wipe off excessive secretions around the trach or the student's mouth provided they wash their hands before and after.

Q. Does the school need a nurse close by if there is a student with a trach tube?

A. YES, a nurse should be available in the school.

Q. Are schools and school systems required to make reasonable accommodations for students who require health care procedures during off site events such as field trips?

A. YES.

Q. If a student with a special health care need attends an after-school event as a spectator, is the school obligated to provide an appropriately trained health care professional to tend to the student if needed?

A. NO.

- Q. Does a school board have to approve a policy regarding health care procedures?
 A. YES, T.C.A. § 49-5-415 specifies that health care procedures must be performed in accordance with policies and rules of local boards of education.
- Q. Is CPR a health care procedure?
 A. NO, but T.C.A. § 49-5-414 recommends that each public school have at least one, or preferably more, individuals trained in CPR. T.C.A. § 49-3-359 requires each school nurse employed by an LEA to maintain current CPR certification consistent with guidelines of the American Heart Association.
- Q. Is the handling of body fluids a health care procedure?
 A. NO, but Universal Precautions are governed by required local school board policy as mandated by the State Board of Education and OSHA Bloodborne Pathogens Regulations. School systems must provide annual training to all staff members.

L.3 FAQ'S ABOUT MEDICATIONS

- Q. How do you determine if a child is competent to self-administer medications?
 A. A student who is competent possesses the cognitive ability for self-administration of his/her own medications or medical procedures, regardless of physical capabilities. If the student can identify his or her medication and the reason that the medication is used, the student is competent to self-administer the authorized and/or prescribed medication with assistance. The decision should be made by appropriate health care professionals.
- Q. Is training required for persons assisting with self-administration of medication?
 A. YES. To be consistent and to assure safe care of students, it is required that all school personnel assisting with self-administration of medications have a basic training and annual updates from the registered nurse related to assistance and documentation of medications. Training records should be kept in the personnel file. It is recommended back-up personnel be trained at each school site. Training must be provided for school personnel who volunteer to administer glucagon, diazepam, and epinephrine auto-injectors.
- Q. Can a secretary administer medications?
 A. NO, but a secretary could assist a child in the self-administration of his/her medication if designated and trained, and the guidelines for self-administration are followed.
- Q. Can a volunteer who is a nurse assist with administration of medication or perform a health care procedure in school?
 A. NO. They are volunteers and not employed by the school system.
- Q. Can a nurse employed by the school system in another capacity (for example, health education teacher) perform health care procedures for students or assist students in the self-administration of medication?
 A. NO, they cannot do procedures because they would be practicing outside of their job description. These nurses could assist students with self-administration of medications if they have been properly trained as volunteer medication administrators or administer emergency medications if they have been properly trained.
- Q. Why do complementary and alternative medications require a prescriber's order when other over-the-counter medications do not?
 A. These medications typically do not contain appropriate dosing information such as dosing amount and schedule for children and youth.

L.4 FAQ'S ABOUT DIABETES

- Q. Can a child who has diabetes perform their own glucose monitoring?
A. YES. If not done by the child, it must be performed by an RN or LPN or the child may perform the procedure assisted by volunteer school personnel trained according to the guidelines.
- Q. Who can administer glucagon in a school setting?
A. In the absence of the school nurse, the following people who have been properly trained may administer glucagon to a specific student with diabetes: Teachers, aides, volunteers, paraprofessionals, parents of the student, food service personnel, transportation personnel, custodial staff, principals, occupational therapists and physical therapists - all on a voluntary basis. In the case of an emergency, trained personnel should only administer glucagon according to the district's developed standard protocol.
- Q. Who can administer insulin in a school setting?
A. In the absence of the school nurse, the following people who have been properly trained may administer insulin to a specific student based on that student's Individual Health Plan (IHP): Teachers, aides, volunteers, paraprofessionals, parents of the student, food service personnel, transportation personnel, custodial staff, principals, occupational therapists and physical therapists - all on a voluntary basis. Trained personnel should only administer insulin according to the district's developed standard protocol.
- Q. Who conducts training?
A. An LEA should provide training under the direction of a school registered nurse. Training should include prevention and management of diabetes.

L.5 FAQ'S ABOUT ALLERGIES

- Q. Can a teacher or other school personnel administer epinephrine if a child has life-threatening allergic reaction?
A. YES, if epinephrine is available and if personnel have been appropriately trained.
- Q. What is a food allergy?
A. An abnormal response to a food, triggered by the body's immune system. Once the immune system decides that a particular food is harmful, it creates specific antibodies against it. Allergic reaction to food may cause serious illness and in some cases death.
- Q. What is food intolerance?
A. When the body has difficulty digesting the food but the immune system is not affected. The symptoms can look and feel like a food allergy. Lactose intolerance is one example of food intolerance. A person with lactose intolerance lacks an enzyme that is needed to digest milk sugar when the person eats milk products. Symptoms such as gas, bloating and abdominal pain may occur.
- Q. What is anaphylaxis?
A. A severe allergic reaction that is rapid in onset and may cause death. Criteria are met when two or more of the following occur rapidly after exposure to a likely allergen (minutes to hours):
 1. Involvement of skin-mucosal tissue
 2. Respiratory compromise
 3. Reduced BP or associated symptoms (collapse, syncope, incontinence)
 4. Persistent GI symptoms (cramping abdominal pain, vomiting)Anaphylaxis may be fatal, in particular if not treated promptly with epinephrine.
- Q. Is anaphylaxis a medical emergency?
A. YES, anaphylaxis requires immediate attention because death may occur within minutes.

- Q. What are some of the causes of anaphylaxis?
- A. Foods - milk, eggs, fish, seafood, shellfish, food additives, yeast, gluten, peanuts, peanut oil, peanut products, soy, wheat, tree nuts (walnuts, cashews, pecans, hazelnuts, almonds).
Medication - antibiotics (penicillin), seizure medication, muscle relaxants, aspirin.
Latex - elastic waistbands, kitchen gloves, balloons, other household items.
Exercise - rare
Insect Stings
However, individuals can be allergic to any food and some children may be allergic to more than one food. Some anaphylactic reactions have no known cause.
- Q. Who gets anaphylaxis?
- A. Anyone can experience an anaphylactic reaction, not just those with known allergies.
- Q. How can I prevent anaphylaxis?
- A. Strict avoidance of substances and situations known to trigger severe allergic reactions in an individual. Read labels of all foods, and if a label contains unfamiliar terms, do not offer or permit consumption of the food to a student with known allergens. However, it is challenging to avoid all allergens completely all the time and accidental ingestions occur approximately every 3-5 years on average.
- Q. What is the difference between Epi-Pen and Jr.?
- A. Epi-Pen containing 0.3 mg single dose of epinephrine is prescribed for individuals weighing 66 pounds or more. Jr. contains 0.15 mg single dose of epinephrine and is for individuals weighing between 33 and 66 pounds. Sometimes a single dose of epinephrine is not enough to reverse the symptom of anaphylaxis, so the doctor may prescribe more than one auto-injector and this practice is consistent with updated guidelines.
- Q. What are some of the common signs and symptoms of anaphylaxis?
- A. These symptoms may include ONE or MORE of the following:
- Difficulty breathing
 - Itching (of any body part)
 - Coughing
 - Difficulty swallowing
 - Flushed or pale skin
 - Hives
 - Red, watery eyes
 - Shortness of breath
 - Swelling of lips, tongue, and throat
 - Wheezing
 - Vomiting Dizziness or faintness
- Q. How do I respond to anaphylaxis?
- A. Giving epinephrine by auto injector immediately. No matter what the cause is, whether it is food, latex, insect sting, or exercise induced, epinephrine is the first medication that should be used in the emergency management of anaphylaxis. It is the only medication that has been proven to be lifesaving in the treatment of anaphylaxis. As a second line therapy, antihistamines should be used in conjunction with epinephrine. Antihistamines should never be used alone. If in doubt it is better to give the epinephrine and seek medical care. Fatalities occur when epinephrine is withheld.
- Q. Who can administer an epinephrine auto-injector in a school setting?
- A. In the absence of the school nurse, the following people who have been properly trained may administer an epinephrine auto-injector to a specific student with life-threatening food allergies: Teachers, aides, volunteers, paraprofessionals, parents of the student, food service personnel, transportation personnel, custodial staff, principals, occupational therapists and physical therapists - all on a voluntary basis. In the case of an emergency, trained personnel should only administer epinephrine auto-injectors according to the district's developed standard protocol.

- Q. Who conducts training?
 A. An LEA should provide training under the direction of a school registered nurse. Training should and includes prevention and management of allergic reaction.
- Q. How often should staff be trained?
 A. Recommended a minimum of once a year for all personnel.
 It is recommended that there be a minimum of three to five staff members trained at a school to ensure adequate provision for emergency situations, and additional staff for every 100 students.
- Q. Is a photo needed with a student's Allergy Action Plan?
 A. YES, recommended if available, with the parents'/guardian's consent.
- Q. How does epinephrine work?
 A. It is the treatment of choice for allergic emergencies because it quickly constricts blood vessels, relaxes smooth muscles in the lungs to improve breathing, stimulates the heartbeat, and works to reverse hives and swelling around the face and lips.
- Q. Which foods are children commonly allergic to?
 A. Eggs, milk, and peanuts. Some of the most common food allergies in adults are shellfish, shrimp, and crayfish, lobster, crab, peanuts, fish, and tree nuts. Adults usually keep their allergies for a lifetime, but children sometimes outgrow them. However, both children and adults could be allergic to items on both lists.
- Q. What happens when a child goes on a field trip? Are schools and school systems required to make accommodations for field trips?
 A. Allergy Action Plan requires that the teacher notify parents, cafeteria staff and school nurse in advance of upcoming trips, providing time to plan for meals and snacks. The child should be assigned to an adult who is trained in epinephrine auto-injector administration. An adult should remain with the child at all times during transport and throughout the trip. A parent can volunteer to chaperone but their attendance should never be required. A copy of the child's Allergy Action Plan goes with the child along with all emergency information and contact numbers.

L.6 FAQ'S ABOUT SEIZURES

- Q. Can anyone have epilepsy?
 A. Virtually everyone can have a seizure under the right circumstances. Each of us has a brain seizure threshold which makes us more or less resistant to seizures. Seizures can have many causes, including brain injury, poisoning, head trauma, or stroke; and these factors are not restricted to any age group, sex, or race and neither is epilepsy.
- Q. Do seizures cause brain damage?
 A. Single brief seizures do not cause brain damage. Although tonic-clonic (grand mal) seizures, lasting longer than 20 minutes may injure the brain, there is no evidence that shorter seizures, lasting less than 20 minutes, cause permanent injury to the brain.
- Q. Can fevers cause seizures in children?
 A. In children under the age of 5 years, fever from any cause may sometimes initiate a generalized seizure, causing great alarm. These "febrile convulsions" are similar to tonic-clonic seizures, but are much briefer. The tendency seems to run in families.

Q. Who should be trained to administer diazepam in a life-threatening situation?

A. In the absence of the school nurse, the following people who have been properly trained may administer diazepam to a specific student with a seizure disorder: Teachers, aides, volunteers, paraprofessionals, parents of the student, food service personnel, transportation personnel, custodial staff, principals, occupational therapists and physical therapists - all on a voluntary basis. In the case of an emergency, trained personnel should only administer diazepam according to the district's developed standard protocol.

Q. Who conducts training?

A. An LEA should provide training under the direction of a school registered nurse. Training should include prevention and management of seizures.

M. DEFINITIONS

Accountability: As used in this document, being responsible and answerable for actions or inactions of self or others.

Advanced Practice Nurse (APN): A registered nurse who has been issued an Advanced Practiced Nurse certificate by the Tennessee Board of Nursing and who holds a master's degree or higher in nursing specialty and national certification as a Nurse Practitioner, Nurse Anesthetist, Nurse Midwife, or Clinical Nurse Specialist. An Advance Practice Nurse who holds a certificate of fitness may diagnose and prescribe treatments, diagnostics, and medications. An APN who holds a Certificate of Fitness is required to have a supervising physician pursuant to T.C.A. § 63-7-123.

Ancillary Personnel: Ancillary personnel must complete appropriate training provided by appropriate health care professionals (RN, MD, DO, dentist) and must have continued supervision by appropriately licensed health care professionals (RN, MD, DO, dentist).

Allergen: A food or other substance that triggers an allergic reaction in individuals who are sensitive to it. Allergens can cause allergic reactions when they are swallowed, touched, or even inhaled. Sometime even a tiny trace of an allergen such as a dusting of a peanut on a cake can trigger anaphylaxis.

Allergic Reaction: An immune-mediated response to an otherwise harmless substance.

Allergist/Immunologist: A physician trained in the science of immunology.

Allergy Action Plan: A written emergency care plan for students who have a life-threatening food allergy. An Allergy Action Plan provides specific directions about what to do in a medical emergency such as an accidental exposure to the allergen. The Allergy Action Plan is a part of the IHP (Individual Health Care Plan).

Anaphylaxis: A severe allergic reaction that is rapid in onset and may cause death if not treated quickly with epinephrine.

Antihistamine: A medication used to block the effects of histamine, a chemical that is released during an allergic reaction. Antihistamines are available by prescription and over the counter.

Assisted Administration: Assisting a student in the self-ingestion, application, injection, or inhalation of medication according to directions of the legal prescriber, or monitoring the self-administration of medication.

Authorized Medication: Prescription or non-prescription drugs for which the parent or guardian has submitted a written request for administration.

Blood Glucose Monitoring: Blood glucose is essential for the body to function. Blood sugar testing may be ordered to check the blood sugar level. Low blood glucose can become life-threatening and needs appropriate treatment.

CAM: Complementary and alternative medicine. Examples may include herbal and dietary supplements.

Catheterization (Urinary): A flexible, thin tube is inserted into the bladder in order to drain the urine in situations where bladder control is impaired.

Celiac Disease (Gluten Intolerance): A genetic disorder characterized by an inappropriate immune response to dietary proteins found in wheat, rye and barley. This response leads to inflammation in the intestines and the resulting damage to the intestinal walls which decreases their ability to absorb nutrients. The body begins to develop symptoms of malnutrition and osteoporosis as a common consequence. The only treatment is lifelong adherence to a gluten free diet. Symptoms include abdominal pain, bleeding tendencies, bone and joint pain, diarrhea, oral ulcerations, fatty stools with foul odor, fatigue, growth and developmental delays.

Certified Nursing Assistant (CNA): CNAs are not licensed health care professionals. Although they may assist students in some areas, they do not satisfy legal requirements for licensed health care professionals.

Competent: A student who possesses the cognitive ability for self-administration of his/her own medications or medical procedures, regardless of physical capabilities.

Diabetes Medical Management Plan (DMMP): Completed by the student's parents/guardian and personal health care team and can be used as the basis for developing education plans and nursing care plans for students with diabetes. The Diabetes Medical Management Plan should be included in the student's IHP.

Delegation: (Nursing) The transfer to a competent individual of the authority to perform a selected nursing activity in a selected situation, with the nurse retaining accountability for the delegation. Nursing delegation is governed by the nurse practice act and rules and regulations of the state board of nursing.

Emergency: A serious situation that arises suddenly and threatens the life, limb, or welfare of one or more persons; a crisis. An emergency creates a type of implied consent when the individual is unable to consent to treatment that is immediately necessary.

Emergency Plan (Emergency Care Plan or Emergency Action Plan): Plan developed based on the IHP, and is written in clear action steps and provided to the school staff to assist them in responding to a health crisis.

Epinephrine (Adrenaline): The drug of choice in emergency treatment of acute anaphylaxis. Action: It relaxes bronchial smooth muscle by stimulating alpha and beta receptors in the sympathetic nervous system. It must be administered as soon as anaphylaxis is suspected. For this reason an allergic patient often carries their own epinephrine auto-injectors.

Epinephrine Auto-Injector: A prescription device pre-filled with a medication called epinephrine to treat life-threatening allergic reactions.

Food Intolerance: When the body has difficulty digesting food and the immune system is not affected. Signs and symptoms may occur within minutes or hours after eating the food and includes headaches, abdominal pain, also a rash. Unlike the case of food allergies where only a tiny amount of the food is needed to trigger a reaction, with intolerance the person may be able to eat small quantities of the food without any problems, e.g., lactose intolerance with milk.

Gastrointestinal (GI) Tract: The system of the body that includes the stomach and intestines.

Gastrostomy: A surgical opening through the surface of the abdomen into the stomach. A flexible tube (G-tube) or “T” shaped device (G-button) is inserted into the surgical opening to provide nutrition, hydration, or medication. This method is used to bypass the usual route of feeding by mouth when there is obstruction in the esophagus and swallowing is impaired, and/or the student is at risk for choking or is unable to take in enough food by mouth to obtain adequate nutrition.

Glucagon: A polypeptide hormone identical to human glucagon that increases blood glucose by stimulating the liver to release glucose and amino acid (alanine) from the muscles. Glucagon can be administered by injection in the case of a person with diabetes having a hypoglycemic emergency.

Health Assessment: The systematic collection and analysis of information or data about an individual’s health situation to determine the individual’s general state of health, patterns of functioning, and the need for health services, counseling, and education; a licensed function of physicians and nurses. Health assessments of students by school nurses include data collection, data analysis, and the identification of relevant nursing diagnoses in order to plan interventions and accommodations, make appropriate referrals and collaborate with others (e.g. with families, educators, and health care providers) to promote students’ health and learning.

Health Care Procedure: Related to T.C.A. § 49-5-415, defined as any clinical activity or task performed by competent licensed health care professionals within the scope of practice for the profession.

Health Care Professional: An individual with specialized educational preparation, knowledge, and skill who is licensed under state statute to provide specific health care services to clients (e.g. nurse, physician, occupational and physical therapist, speech language pathologist, clinical psychologist and social worker).

Health Care Provider: A doctor of medicine or osteopathy, podiatrist, dentist, chiropractor, clinical psychologist, optometrist, nurse practitioner, nurse-midwife, or a clinical social worker who is authorized to practice by the State and performing within the scope of their practice as defined by State law.

IEP: Individualized Education Program is a written statement for a child with an educational disability developed through a collaborative process and implemented in accordance with [34 C.F.R.] §§ 300.341-300.350.

Immune System: A complex network of specialized cell tissues and organs that defend the body against attacks by disease causing microbes.

Individual Health Plan (IHP): A health care plan developed by a registered nurse for children with acute or chronic health issues. Parents and other health care providers involved with the child participate in the development/approval of the plan.

Invasive: Requiring the entry of a needle, catheter, or other instrument into a part of the body, especially in a diagnostic procedure, as a biopsy.

Lactose Intolerance: A reaction to milk that does not involve the immune system. Lactose-intolerant people lack an enzyme that is needed to digest milk sugar. When milk products are eaten, symptoms such as gas, bloating, and abdominal pain may occur. Lactose intolerance is more common in adults than in young children.

Ketogenic Diet: The ketogenic diet is a special high-fat, low-carbohydrate diet that helps to control seizures in some people with epilepsy. It is prescribed by a physician and carefully monitored by a dietitian.

LEA: Local Educational Agency, which includes county, city, and special school districts and the state special schools and achievement schools.

Licensure: Permission by a competent government agency. In Tennessee the agency is a Health Related Board, such as the Board of Nursing.

Licensed Practical Nurse (LPN): A nurse trained in basic nursing techniques and direct patient care who assists and practices under the direction or supervision of the registered nurse per the *“Tennessee Nurse Practice Act.”* The educational background of an LPN is generally one year of training in a hospital-based program or technology center program. An LPN works under the direction of an RN in providing health services in the school. The LPN must receive periodic, on site supervision by an appropriately licensed health care provider (RN, MD, DO, dentist).

Licensed Prescriber: As used in this document, refers to physicians, medical doctor (M.D.) and doctor of osteopathy (D.O.), dentists, podiatrists, Physician Assistants and advanced practice nurses legally authorized to prescribe medications.

Licensed Prescriber’s Orders (for school use): Statements written by a student’s licensed health care provider which direct the medical care at school. The orders are valid for one school year unless changed or time limited by the prescriber. The order gives school systems permission to carry out a procedure in the school setting.

Long-term Medication: Medication utilized for treatment of chronic illness and includes both daily and PRN (as needed) medication.

LTA: Life-Threatening Allergy.

MAR: Medication Administration Record.

Medical Management Plan: Completed by the student’s parents/guardian and personal health care team and can be used as the basis for developing education plans and nursing care plans for students with conditions such as diabetes, asthma, allergies, seizures, etc. The Medical Management Plan should be included in the student’s IHP.

Medication: Any substance that when taken into a living organism, may modify one or more of its functions; any medicine or preparation for internal or external use of humans, intended to be used for the cure, mitigation, or prevention of diseases or abnormalities of humans.

Non-prescription Medication: Medications which may be obtained over the counter without a prescription from a licensed health care provider.

Nurse Practice Act: A statute enacted by the legislature of a state and the Administrative Rules and Regulations that delineates the legal scope of the practice of nursing within the geographical boundaries of the jurisdiction.

Nursing Assessment: This is the first step in the nursing process where important subjective and objective information is collected, organized, analyzed, and measured against usual outcomes.

Occupational Therapist: A person licensed by the state of Tennessee to practice occupational therapy. [T.C.A. § 63-13-103]

Parental Consent: Written consent from a parent/guardian that is required before a student can be administered medication or be a recipient of health care procedure in the school setting, outside of emergency situations.

Physical Therapist: A person licensed in the state of Tennessee to practice physical therapy. [T.C.A. § 63-13-102]

Prescription Medications: Medications requiring a written order for dispensing, signed by a licensed prescriber.

Protocol: A written outline of direction relative to standards of practice for a health condition or health care procedure.

Qualified: Ability to competently demonstrate the use of equipment and performance of procedures necessary to provide health care services that are specialized. The level of competence for a registered nurse is established by professional standards of nursing practice and agency guidelines.

Registered Nurse (RN): A nurse licensed to practice in Tennessee who has successfully passed the national licensure examination for registered nurses after completing a Board of Nursing approved program leading to an Associate, Baccalaureate, or Master's degree in nursing or a 3-year diploma hospital based program. The RN is the primary professional who will coordinate health services in the school setting.

School Nurse: A professionally educated registered nurse whose role it is to strengthen and facilitate the educational process by improving and protecting the health status of the students.

Scope of Practice: The legal boundaries of a profession as set out in Tennessee Code Annotated and rules promulgated by the regulatory boards.

Self-Administration: The ingestion, application, injection, or inhalation of his/her own medication by a student in school OR in the case of a physically challenged student, student directed administration by a designated individual.

Standards of Care: A recognized standard of professional health care practice in a community.

Standardized Procedures: The minimum safe standards of practice utilized in basic and specialized health care procedures.

Student's School Records: A compilation of health, attendance, disciplinary and scholarship information that accompanies the student through his/her school career. It should also contain the student's birth certificate and a copy of the guardian's driver's license for proper identification. Some student school records may contain parental custody documentation. All student records shall be remitted in accordance with the Family Education Rights and Privacy Act.

Tracheostomy: A surgical opening into the trachea (windpipe) in the neck to allow the passage of air into the lungs.

Universal Precautions: General barrier techniques designed to reduce exposure of personnel to body fluids containing the human immunodeficiency virus or other blood borne pathogens. Schools systems must provide annual training to all staff members.

Unlicensed Assistive Personnel (UAP): A school volunteer who is trained to function in an assistive role to the registered nurse in the provision of student related activities or responsibilities. This person is not licensed or governed by a Health Regulatory Board. Unlicensed assistive personnel may only assist students in the self-administration of medications or standby to assist students to do their health care procedure based on the assessment and direction of the registered nurse.

N. RESOURCES

School Health:

Centers for Disease Control and Prevention: <http://www.cdc.gov/healthyyouth/schoolhealth/index.htm>

American Academy of Pediatrics: <http://www2.aap.org/sections/schoolhealth/>

National Association of School Nurses: <http://www.nasn.org>

Tennessee Nurses Association: <http://www.tnaonline.org/>

Tennessee Association of School Nurses: <http://tnschoolnurses.com/>

Health Care Procedures:

Wisconsin Improving School Health Services Project (WISHes): www.wishesproject.org

Asthma:

American Lung Association: <http://www.lung.org/lung-disease/asthma/>

Centers for Disease Control and Prevention: <http://www.cdc.gov/asthma/>

Diabetes:

Centers for Disease Control and Prevention: <http://www.cdc.gov/features/diabetesinschool/>

Diabetes Public Health Resource: http://www.cdc.gov/diabetes/?s_cid=cdc_homepage_topmenu_001

Diabetes Care Tasks at School: What Key Personnel Need to Know: <http://www.diabetes.org/living-with-diabetes/parents-and-kids/diabetes-care-at-school/school-staff-trainings/diabetes-care-tasks.html>

Help Your Child Manage Diabetes at School: <http://www.cdc.gov/Features/DiabetesInSchool/>

National Diabetes Education Program: <http://ndep.nih.gov/hcp-businesses-and-schools/Schools.aspx>

National Association of School Nurses: <http://www.nasn.org/>

Food Allergy:

Administration of Epinephrine for Life-Threatening Allergic Reactions in School Settings:

<http://www.nlm.nih.gov/medlineplus/foodallergy.html>

Allergy Ready: <http://allergyready.com>

American Academy of Allergy, Asthma & Immunology: <http://www.aaaai.org/home.aspx>

Centers for Disease Control and Prevention: <http://www.cdc.gov/healthyyouth/foodallergies/>

Food Allergy Management & Education (FAME): <http://www.stlouischildrens.org/health-resources/advocacy-outreach/food-allergy-management-and-education>

Food Allergy Research & Education (FARE): <http://www.foodallergy.org/>

Seizure:

Centers for Disease Control and Prevention: <http://www.cdc.gov/Epilepsy/index.htm>

National Epilepsy Foundation: www.epilepsyfoundation.org

