

Chapter 5

MEDICATION ADMINISTRATION

Guidelines for Administering Medications in Schools

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Guidelines for Administering Medications in Schools

Overview

Children who have health problems that go untreated may be prevented from reaching their full academic potential. Many students who have a chronic illness or disability must receive medication during the school day. Ideally, a parent or health care professional will administer the medication. The school administration must have the permission of the parent or guardian to administer each medication. All parents of Texas schoolchildren are provided with a student handbook at the beginning of each school year (or at the time of enrollment), which they are required to read and sign. This handbook outlines the school district's policy regarding the delivery of health services, including medication administration policies.

Many medications prescribed for school-aged children can be administered at home by the child's parent(s) or guardian. For example, a medication that is to be administered three times daily (TID) should be given every eight hours. Most students are not in school for more than eight hours, and therefore, parents or guardians should give this medication before and after school, and then at bedtime¹. The school nurse may be able to facilitate this situation by helping the parent/guardian work with their child's health care provider. Together, they may arrange a schedule that allows the parent/guardian to assume the majority of responsibility for this task. Exceptions will always exist and it is imperative that each school develops policies to guide its employees in administering medications to students when necessary.

Texas Education Code Provisions

Schools must be prepared to administer medication for some of their students. The Individuals With Disabilities Education Act (IDEA), which is a federal law, mandates that school districts provide health-related services to students with disabilities if it is required in their Individualized Healthcare Plan (IHP)². These "services" frequently include the administration of medication. The Texas Education Code requires that school health services be provided by appropriately licensed or credentialed personnel. The administration of medications, along with providing minor first aid, is an exception to this requirement. Section 22.052(a), Education Code, states:

On the adoption of policies concerning the administration of medication to students by school district employees, the school district, its board of trustees, and its employees are immune from civil liability from damages or injuries resulting from the administration of medication to a student if:

The school district has received a written request to administer the medication from the parent, legal guardian, or other person having legal control of the student; and when administering prescription medication, the medication appears to be in the original container and to be properly labeled.

Legal permission to administer medication is granted to employees of the school district, when authorized by school principals or superintendents. These employees do not need to be health care professionals. The law grants immunity to all school district employees. The responsibility of administering medications to students is considered an administrative task assigned by the principal, rather than a health-related service delivered or delegated by a health care professional³.

Additionally, Sections 22.052(b) and (c), Education Code, state:

The board of trustees may allow a licensed physician or registered nurse who provides volunteer services to the school district and for whom the district provides liability insurance to administer to a student:

- nonprescription medication; or
- medication currently prescribed for the student by the student's personal physician.

This section may not be construed as granting immunity from civil liability for injuries resulting from gross negligence.

The only non-employees of the school district allowed to administer medication to students (and these, only if granted authority by the board of trustees) are licensed physicians and registered nurses. Licensed personnel may only administer medication with parental consent and that is in a properly labeled container.

No school district employee or volunteer, licensed or unlicensed, may provide any original medication to a student.

School districts should not provide any medication for students or personnel. Only medication provided by and requested by a parent/guardian should be dispensed. If medication is provided, school districts and school nurses will be in the position of not only “diagnosing and prescribing,” but also in “dispensing” medication for which they are not licensed. “Medication” is recognized as prescription as well as nonprescription drugs and includes, but is not limited to: analgesics, antipyretics, antacids, antibiotic ointments, antihistamines, decongestants, and cough/cold preparations⁴.

Liability

There are two types of liability exposure related to school health services. The first is civil liability, monetary damages for harm caused by some act or omission. The other is professional licensure liability, disciplinary action taken against a license granted by the state or other governmental entity. Because of the broad immunity granted to governmental entities, school districts and their employees have little civil liability exposure. Licensed health care professionals employed by school districts are protected from civil liability, but they do have licensure liability exposure, i.e., disciplinary action against their license.

Organizations or individuals providing school health services on behalf of school districts as independent contractors do not receive civil liability protection even if they are working in the school district. They have the same liability exposure as a private business. Licensed health care professionals working for independent contractors also have licensure liability⁵.

When administering medications in the public school, those who comply with Section 22.052(a), Education Code, enjoy broad immunity from civil liability. This includes nurses (RNs and LVNs) as well as unlicensed assistive personnel (UAPs). This immunity does not apply if the person administering the medication is out of compliance with Section 22.052, Education Code (i.e., does not have the permission of the parent). Acts of gross negligence are not protected from either civil or licensure liability. Nurses who

are uncertain as to what constitutes gross negligence in the administration of medication and/or what types of licensure liability to which they may be vulnerable are advised to consult the Texas Nursing Practice Act⁶ (See Appendix A for the text of this legislation).

Nursing Practice Considerations

The school nurse in Texas may function in one or more roles:

Clinician. The Registered Nurse may administer medication (see procedures below). In this circumstance, nurses will be administratively responsible to the school principal/district administrators who assigned the task, and professionally responsible to the Texas Board of Nurse Examiners (BNE). This role will be necessary if the condition necessitating medication is not “predictable and stable”⁷. When possible, a school nurse should administer the first dose of a medicine in the school setting, particularly if it is a new medication that has not previously been administered to the student⁸. Nurses may refuse to administer medication if, in their best clinical judgment, they believe that doing so would be unsafe for the student. The nurse should always contact the prescribing provider and the student’s parent/guardians with concerns.

Trainer/educator. The Registered Nurse may instruct school district employees about the proper administration of medication and must provide feedback to the principal regarding the competency of those designated to do so. It is important to note that the Nursing Practice Act prohibits a nurse from delegating the administration of injectable medications to unlicensed personnel⁹. School districts are advised to develop their own policies and procedures based on the availability of professional nursing staff employed in individual schools and districts.

Counselor/case manager. The nurse may coordinate and/or make referrals to the primary health care provider in the event that an unmet need for medication is detected for a student. This role should include a working knowledge of available community services and health care providers at all socioeconomic levels (ie.,CHIP, Medicaid, manufacturers free medical resource).

Documentation manager. The nurse and school should maintain records pertaining to medications, including provider authorizations (e.g., prescriptions), parental consent

forms (Rx and OTC), IHPs, medication logs, incident/error reporting forms, and emergency medication plans.

Relationship with Other Health Care Providers

The nurse will need to collaborate with many other members of the student's (or student body's) health care team. This collaboration may be direct, when the nurse speaks directly with a student's health care provider, or indirect, such as checking a prescription label prepared by the student's pharmacist. Members of this team include nurse practitioners, physical therapists, pharmacists, audiologists, psychotherapists, case managers, social workers, physicians, nutritionists, athletic trainers, speech or occupational therapists, physician assistants, unlicensed healthcare personnel, licensed vocational nurses (LVNs), clinical nurse specialists, and optometrists.

Guidelines for Administering Medications

The purpose of these guidelines is to give school personnel basic knowledge of medication administration at school. The goal is safe and accurate administration of oral, topical, inhalant, nebulizer, suspension, injectable, and intravenous medications, including emergency medications when necessary.

Definitions

Commonly used concepts and definitions for medication administration.

- A. Medications: Substances used to prevent, diagnose, cure, or relieve signs and symptoms of disease.
- B. Sources: Plant, animal, mineral and synthetic.
- C. Action:
 1. Local: Act mainly at site of application.
 2. Systemic: Absorbed into the bloodstream and circulated in the body.
 3. Variables that effect actions:
 - a. Dose
 - b. Route of administration
 - c. Drug-diet interactions
 - d. Drug-drug interactions
 - c. Age
 - d. Body weight

- e. Sex
 - f. Pathological conditions (disease states)
 - g. Psychological considerations
- D. Adverse effects: all medicines are capable of producing undesired responses ranging from rare, mild, and localized, to widespread, severe and life-threatening, depending on the medicine and the person receiving it.
- E. System of Naming: medicines are classified and grouped according to their effect on a particular body system, therapeutic use, and chemical characteristics.
- 1. Generic: Related to chemical or official name.
 - 2. Brand or trade: Designated and patented by the manufacturer.
- D. Classification of Drugs:
- 1. Prescription: Medications including controlled substances that require a prescriber's order.
 - 2. Over the Counter (OTC): Drugs that may be purchased without a prescription (i.e., first aid cream, analgesics, antacids).
- F. Schedule of Controlled Substance: Five schedules of drug and drug products under the jurisdiction of the Controlled Substances Act related to the abuse potential of drugs. Listings are subject to change. For a complete list, contact the Drug Enforcement Administration (DEA) or a pharmacist.
- 1. Schedule I. Substances that have no accepted medical use in the U.S. and have a high abuse potential (e.g., heroin, LSD, etc.)
 - 2. Schedule II. Substances that have a high abuse potential and/or with severe psychic or physical dependence liability. No prescription renewals are permitted. Consists of narcotic, stimulant, and depressant drugs (e.g., opium, codeine, Demerol, Percodan, Dexedrine, Ritalin).
 - 3. Schedule III. Substances that have some potential for abuse. Use may lead to low-to-moderate physical dependence or high psychological dependence. Includes compounds with limited quantities of certain narcotic drugs and non-narcotic drugs (e.g., Doriden, compound or mixture containing secobarbital).
 - 4. Schedule IV. Substances with low potential for abuse. Use may lead to limited physical or psychological dependence (e.g., Phenobarbital, Placidyl, Librium, Valium, Tranxene, Darvon, Talwin-NX).

5. Schedule V. Substances subject to state and local regulation. Abuse potential is low. Limited quantities of certain narcotic and stimulant drugs generally for antitussive, antidiarrheal and analgesic purposes.

Written Requests for Medication Administration

According to Section 22.052, Education Code, any medication administered to a student in a Texas school must have a written request/authorization from the student's parent or legal guardian and must "appear... to be in the original container and ... be properly labeled."

Written request from a parent or guardian shall contain:

- The student's name;
- The name of the medication to be given;
- Date of permission and number of days the medication is to be given;
- Time of day the medication is to be given; and
- Signature of parent or legal guardian.

According to the Texas Department of Health, parental consent is "good until revoked"¹⁰. The majority of school districts will accept parental consent as valid for one year past the date of signature, although in health care settings consent for treatment is valid until either revocation or a treatment change occurs. Schools can set their own policies regarding the length of valid parental consent using the above information as a guideline. In the event of a treatment change, a school should obtain the information from the provider and parent and follow the same guiding principles as with any new medication.

Original Container

A properly labeled original container shall, if prescription, be dispensed from a pharmacist and shall contain a clear and legible label with:

- Name and address of the pharmacy;
- Name of the patient (student);
- Name of the prescribing practitioner;
- Date the prescription is dispensed;
- Instructions for use; and
- Expiration date of the medication.

Unless otherwise directed by the prescribing practitioner, in addition to the information listed in this section, the label shall bear:

- Brand name, or if no brand name, then the generic name of the drug dispensed;
- The strength of the drug; and
- Name of the manufacturer or distributor of the medication (name of the manufacturer or distributor may be reduced to an abbreviation or initials if they are sufficient to identify the manufacturer).
- Combination drug products without a brand name must list the principal active ingredient on the label¹¹.

If the medication requested by the parent or guardian is OTC (over the counter/non-prescription), the medication must be provided by the parent in what “appears to be the original container,” which should include recommended dosage and directions. See below for a further discussion of OTC medications in schools.

Change in Original Request

Changes in directions for administering a medication can be received via telephone from the prescribing provider, but must be confirmed in writing within 3 days of the change. Each school/district will need to institute its own policy regarding what to do if written changes are not received (e.g., school staff will not give product/parent will be expected to administer product). Legible faxed orders and changes may be accepted.

Additional Information Needed

Although not legally required, the school nurse or person assigned to administer medications to students may request the following information:

- Emergency contact numbers for the provider and the parent/guardian and the address of the prescribing provider.
- The student’s diagnosis (reason for the medication) and anticipated length of treatment.
- Any special handling instructions for the medication.
- Any serious reaction(s) that can result from either administering OR withholding the medication.

- Any other medications the student is taking, including herbal or dietary supplements or OTC medication.
- Any medication or other allergies the student has.
- Any other health problems or illnesses that the student has.
- Administration instructions from the parent/guardian should match those printed on the labeled container.
- An explanation as to why the medication cannot be administered at home.
- Was at least one dose of the medication given at home? If so, what was the child's reaction, if any? If not, why not?
- Will the parent or the student be responsible for bringing the medication to school?¹²

Storage of Medications

For medication that is not taken daily throughout the year, a two-week supply or less can be kept in an appropriately labeled container, which is locked and secured in a designated space (i.e., a locked box stored within a locked cabinet). This may be in the school nurse office or in the principal's office in schools without a nurse. Access to keys for the storage space in which medication is kept should be limited to the school nurse, the principal, and authorized staff. A listing of authorized staff should be maintained by the principal and updated routinely. Keys to medication storage should never leave school grounds. Arrangements need to be made for medications requiring refrigeration. The school nurse or principal should establish a date when unused medication should be picked up by parents or destroyed and that date should be provided in writing to the parents¹³.

Medication that is given on a daily basis throughout the school year should be stored under the same conditions. However, the amount of medication that is kept for the student at one time may vary (depending on the type of medication, the frequency with which the student sees the provider). It is recommended that no more than a month's supply of medication be stored on school property. Requiring a parent or guardian to bring in each month's supply on a mutually agreed upon date (e.g., the 1st, the 15th) will allow the school nurse to discuss the student's condition and plan of care with the parent or guardian on a regular basis. Some parents may allow their children to carry the medicine to school to give to the nurse when needed.

Prescription or “Dangerous” Drugs Provided to Students by School District and Stored by the School District

Districts are advised that storage and provision of prescription drugs, such as Kwell or Povan, require a Class D pharmacy license. Standing orders signed by a licensed physician are also required for each prescription drug.

- School districts may apply for a Class D pharmacy license at: Texas State Board of Pharmacy, 211 E. Seventh St., Suite 1121, Austin, TX 78701. Inquiries concerning requirements for a license should be made to the Pharmacy Board’s Compliance Division at (512) 478-9827.
- Texas Pharmacy Rules of Procedure must be explicitly followed by class D pharmacy licensed agencies.
- School districts are exempt from a license fee¹⁴.

Procedures for Administering Medications

Five “Rights” of Medication Administration

- Right Student – Properly identify student. (Hint: Rather than asking student “Are you Jane Doe?” before administering the medication, ask the student instead to state their name).
- Right Time – Administer medication at the prescribed time. This can usually be within 30 minutes on either side of the designated time unless otherwise specified by the provider or the pharmacist.
- Right Medicine – Administer the correct medication. Check 3 times—see procedure for medication administration below.
- Right Dose – Administer the right amount of medication.
- Right Route – Use the prescribed method of medication administration.

Procedure for Medication Administration *

**This section has been adapted with permission from the Virginia School Health Guidelines, 1999.*

- A. Follow School District Policy for Administering Medications to Students.
 1. Wash hands. Administration of medication is a clean (not sterile) procedure.

2. Verify authorization, check the label. Seek help for questions and dose
 3. Gather necessary items.
 4. Prepare and give medications in a well-lit area.
 5. **Check the label for name, time, medication, dose, and route** when picking up the medication bottle.
 6. Prepare the correct dosage of medication without touching medication if possible.
 7. **Check the label for name, time, medication, dose, and route** while preparing the correct dose.
 8. **Check the label for name, time, medication, dose, and route** before returning the container to the locked cabinet.
 9. Do not leave medication unattended or within reach of the student.
 10. Identify the student. Ask the student to say his/her name. Nonverbal students may need third party assistance with identification.
 11. If the student questions the right medication, stop, and verify the medication against records or with parent.
 12. Ask and observe the student for any unusual behaviors or conditions prior to medication administration. If any noted, do not give the medication. Report the behavior immediately and record.
 13. Explain procedure to student.
 14. Position the student properly for medication administration.
 15. Provide equipment and supplies as needed.
 16. Administer the correct dose of medication to the correct student, at the correct time, by the correct route.
 17. Observe student placing medication in his/her mouth, when applicable.
 18. Record as soon as possible name, time, medication, dose, route, person administering the medication, and any unusual observations.
 19. Clean, return, and/or dispose of equipment as necessary.
 20. Wash hands.
- B. Procedures for Administering Oral Medications.
1. Oral bottled medication:
 - a. Remove bottle cap and hold the cap in one hand and the bottle in the other hand.
 - b. Pour the prescribed dose into the cap. Do not touch the pill/tablet/capsule.

- c. Transfer medication from cap to a clean medicine cup and give to student.
 - d. Give with a full glass of water unless otherwise indicated. Follow special label instructions (e.g., take with milk).
 - e. Observe student placing medication in his/her mouth. c. Transfer medication from cap to a clean medicine cup and give to student.
 - d. Give with a full glass of water unless otherwise indicated. Follow special label instructions (e.g., take with milk).
 - e. Observe student placing medication in his/her mouth.
 - f. Recap bottle and return it to locked cabinet.
 - g. If a student is to receive part (i.e., $\frac{1}{2}$) of a pill as a regular dose, be sure parent or pharmacist cuts the pills if a school nurse is not available to do so.
2. Oral individually wrapped medications (“blister packs”):
 - a. Remove or tear off number needed and place package in a medicine cup.
 - b. Remove and transfer to cup when student takes medication.
 - c. Follow above steps d-g.
3. Oral liquid or powders:
 - a. Shake medication per label instructions.
 - b. Pour liquid from side of bottle opposite the label (hold label in palm of hand) into graduated medicine cup to avoid dripping medicine on label.
 - c. Pour medication at eye level and directly in front of eyes in order to get the correct dose.
 - d. Measure the dosage at the bottom of the disc (meniscus).
 - e. Wipe off any medication on the outside of the container.
 - f. Be certain that medication does not cling to cup or spoon to ensure that student receives proper dosage.
 - g. Use calibrated medicine dropper or syringe to measure small amounts of liquid.
 - h. Hold medicine dropper at right angle to cup to measure drops.
 - i. With *dropper or syringe*: squirt medicine to back and sides of the student’s mouth in small amounts. Do so slowly, allowing the student to swallow.

j. With *nipple*: pour medicine into the nipple after it has been measured. Allow the student to suck the medication from the nipple. Follow with a teaspoon of water from the nipple.

k. Pour liquid medications into separate containers unless otherwise ordered.

l. Give cough syrup undiluted and do not follow with water.

C. Problems with oral medication administration:

1. Refusal of medication –

a) Record on medication sheet.

b) Report to school nurse, parent, and/or principal.

2. Vomiting after medication administration–

a) Record medication and dosage administration time, time of vomiting, and whether or not medication was present in the vomit.

b) Report to school nurse, parent, and/or principal.

3. Suggestions for students with difficulty swallowing:

a) Position student in an upright position. (*Hint: A relaxed position may be achieved by flexing the student's neck, rounding the shoulders, and positioning the student in a slightly forward or flexed position*).

b) Give one medication at a time with adequate fluids.

c) Place medication on back of tongue.

d) Give medication slowly.

e) Watch for choking. Placing the student in a relaxed position will lessen the chance of this.

f) Verify that the student swallowed the medication.

g) Give medication with other food or crushed if directed by provider or pharmacist.

D. Procedures for administering skin (topical) medications:

1. Gather necessary equipment, such as tongue blade, gauze, tape, cleansing material, cotton-tipped applicator, or gloves.

2. Note condition of affected area. If unusual, report before applying medication.

3. Cleanse skin gently with soap and water, removing previously applied medication, and apply medication in a thin layer or as ordered.

4. Record any changes seen in skin area treated. Notify school nurse, parent, and/or principal of any change.

5. Cover with gauze or other skin protector as ordered on label of medication

E. Procedures for administering eye drops and ointment. **Use only preparations labeled for ophthalmic use.**

1. Gather necessary equipment: cotton gauze, tissue, and gloves.
2. Observe affected eye for any unusual condition and report before administering medication.
3. If needed, cleanse eye with gauzy square of cotton, wiping once from inside to outside. Use clean cotton ball for each eye.
4. Position student with head tilted back and eyes looking up, lying down if possible.
5. Open eye to expose conjunctival sac (lower inside lid).
6. Approach eye from outside the field of vision. Avoid touching the dropper tip to anything, including eye, to reduce contamination of the medication.
7. Hold the dropper approximately one inch from the eye. Drop the medication gently into the corner of the eye, not on the eyeball. Wait 1 -5 minutes between instillations if more than one drop is ordered.
8. Gently close eye. Ask student to keep eye closed for a few minutes.
9. Blot excess medication with a clean cotton ball or tissue.
10. For *ointment*: pull lower lid down, apply ointment along edge of lower eyelid from the nose side of the eyelid to the opposite side. Avoid touching tip of medication container to the eye to avoid contamination of the medication.

F. Procedures for administering ear drops.

1. Gather necessary equipment: cotton balls, tissue, and gloves.
2. Position student:
 - a. If lying flat on a cot, turn face to opposite side.
 - b. If sitting, tilt head sideways until ear is horizontal.
3. Cleanse entry to ear canal with clean cotton ball as needed.
4. Observe affected area for any unusual condition. Report to nurse, parent, and/or principal.
5. Straighten the ear canal: pull outer ear gently down and back (ages 3 and under) or up and back (children over 3).
6. Drop the medication inside the ear canal. Avoid the dropper touching anything, including the ear, to reduce risk of contamination of the medication.
7. Instruct the student to maintain the required position for at least one minute.
8. Gently rub the skin in front of the ear to assist the medication to flow to the inside of the ear.
9. If the other ear is to be treated, repeat procedure after 1 minute.

10. Loosely place a cotton ball in the ear as ordered.

G. Procedures for Administering Rectal Medications

1. Place student in side-lying or prone position (on stomach).
2. Lubricate suppository with water-soluble gel (i.e., K-Y Jelly).
3. Using a finger cot, gently insert the suppository into the rectum.
4. Do not insert finger more than ½ inch.
5. Hold buttocks together for 5-10 minutes. This will help to prevent quick expulsion of the medication, enhancing absorption.
6. Maintain privacy at all times for these students especially!¹⁵

H. Procedures for administering enzyme replacement Therapy (used with students with cystic fibrosis to provide pancreatic enzymes).

1. Enzymes should be given **prior** to a meal or snack.
2. Microspheres or microtablets should not be crushed or chewed.
3. For infants and small children, the capsules should be broken open and mixed with a **lower pH** food, such as applesauce (these enzymes should dissolve in the higher pH environment of the intestines, they are coated with an enteric coating that prevents the enzyme from being dissolved until it reaches the intestine. Crushing or chewing may disrupt the coating, risking improper absorption)¹⁶.

I. Procedures for administering aerosol/nebulizer therapy

1. Gather equipment and place on clean surface.
2. Wash your hands.
3. Connect the small tubing to the air outlet and to the nebulizer cup.
4. Put the medications in the medication cup (include dosages):
5. Replace top on cup and connect the mask or mouthpiece.
6. Position child in a sitting position.
7. Turn machine on.
8. Have child take slow breaths.
9. Observe for side effects.
10. Stop the treatment when mist is no longer seen.
11. Encourage child to cough.
12. Take equipment apart.
13. Clean cups, tops, masks, mouthpieces, syringes, and medication cup with

warm, soapy water.

14. Do not wash tubing. Wipe off outside with alcohol.
15. Rinse each piece in running tap water.
16. Allow to air dry completely.
17. Put equipment pieces together and place in plastic bag.

Errors and Omissions in Medication Administration and Recording

- Report medication errors immediately to school nurse, administrator, parents, and/or physician.
- Errors in recording should be red lined, marked “VOID,” and initialed and dated.
- Record immediately after administering medication.
- Record omissions, absence, or refusals immediately. Record what child did or said. Explain.
- If a student does not appear for a medication, confirm the child’s presence or absence in school.

Principles of Medication Administration for Non-Nursing Staff

Non-nursing personnel who are expected to assist students receiving medication at school should have in-service training regarding district policy and procedures for administering medication.

The following are important principles of medication administration:

1. All drugs have the potential to cause side effects. Observe student’s response to medication and report to parents, nurse, or physician (according to district procedure) any changes in behavior or awareness, rash, complaints, or anything that may be related.
2. **Give medication exactly as ordered by the health care provider.**
3. Encourage student to drink 6-8 oz of water unless otherwise ordered when medication is taken by mouth.
4. **A “no-show” is not acceptable, especially for seizure medications and antibiotics.**
 - a. first check attendance and make sure the child is in school
 - b. if in school, inquire about the reason for missing medication

- c. if still unclear about why child did not appear for medication, contact the parents.
5. If child develops a rash, do not give the next dose of medication until you have contacted the parent/guardian and he/she has contacted the doctor.
6. Check storage requirements—heat, light, and moisture. Most medications need to be stored in a cool, dry place. Some need refrigeration.
7. Before giving medication:
 - a. Check the name of the student,
 - b. The name of the medication, and
 - c. Check dosage: When taking it from the locked cabinet, before giving it to the student, and when charting that the medication was given.
8. Errors can happen. Prevent them! Do not allow yourself to be distracted. **DO NOT USE ONE CHILD’S MEDICATION FOR ANOTHER.**
9. When measuring liquid medication, use standard measuring device, not a tableware teaspoon. Place measuring device at eye level and/or on a straight, firm surface.
10. Document that the medication was given.
11. If there is an error or medication incident (accident), follow district procedure for notifying school nurse, administration, the child’s parents, and/or physician. Complete documentation. It is important to act as soon as the error is discovered. The school administrator or supervisor may report an error made by unlicensed staff. **ERRORS MUST BE REPORTED.**

Administration of Over the Counter (OTC) Medications in Schools

School district personnel should comply with Section 22.052, Education Code, when administering OTC medication (a written request from the parent providing consent) and refrain from administering medication that is not in its original and properly labeled container. Parental consent, particularly in a health care situation is “good until revoked”¹⁷; however, schools and districts may wish to develop guidelines regarding how long and under what conditions they will administer an OTC medication without a health care provider’s authorization. Registered Nurses must consider the Nurse Practice Act, which requires them to exercise reasonable and prudent judgment. Long-term need for OTC medication may indicate the need for clinical evaluation and possible treatment; nurses must be prepared to advise the families of students about such possibilities. Other considerations for the nurse and/or school district include safeguarding other children and

staff from contagious diseases, preventing disruption to the classroom environment by symptomatic students, and preventing classmates from sharing medications¹⁸.

The American Academy of Pediatrics (AAP) recommends that schools consider developing guidelines to allow children with minor illnesses to attend school, acknowledging the reality of working parents who are not able to take “sick time” to stay at home with their children¹⁹. School administrators and nurses must pay appropriate attention to recognized contagious disease policies and to state regulations. Students (especially those in middle or high school) should be allowed to self-medicate at school with OTC medications when the parent has provided an appropriate note to the school. The note should specify the medication, amount to be given, time it may be taken, and the reason for its use. The parent’s note should include a statement relieving the school of any responsibility for the benefits or consequences of the medication when it is parent-prescribed and self-administered and acknowledging that the school bears no responsibility for ensuring that the medication is taken. The school should retain the note for at least the duration of time the medication is used at school. It is preferable that the note becomes a permanent part of the student’s school health record. The school should reserve the right to limit the duration of parent-prescribed medications and/or require a physician statement for continued use of any medication beyond a specified time period²⁰. Many school districts in Texas have OTC medication guidelines that require an OTC be given for 5 school days or 3 times before requiring health care provider authorization²¹. The school should restrict the availability of the medication from other students, with immediate confiscation of the medication and loss of privileges if medication policies are abused or ignored²².

It is strongly recommended that the school NOT purchase and/or provide any OTC medication to students. Parents must provide the OTC medications. School administrators may formalize this as written policy. Dispensing and administering OTC medications to students without parental provision of, and written request for, such medication (e.g., Tylenol for a headache) constitutes practicing medicine without a license because it assumes diagnosis and treatment of a patient symptom²³. The Texas Education Agency also recommends that schools refrain from providing OTC medications to students, but recognizes that a local district may choose to develop a policy to do so. This policy would require the collaboration of a physician or medical advisor who would write and sign a “standing order.” A standing order to administer medication must include: criteria

for administration, patient's condition or signs and symptoms, and age-specific dosage requirements.

Sample Medications

Sample medication provided by a physician can be administered by an RN when the medication is accompanied by a written order for the medication from the student's health care provider AND written permission from the child's parent or legal guardian. School districts may adopt policies regarding the administering of sample medication. Check the school district policy or develop one when confronted with such a request²⁴.

Students Who Forget to Take Their Medication

It is the school personnel's responsibility to give the medication. A forgetful student must be sent for, or medication brought to their classroom. It can be given privately outside of the classroom. If a student forgets or refuses to come for medications, a conference with parent, counselor, nurse, and student should be arranged. Check the child's record for an IEP that may explain the need for medication and/or provide a rationale for the child's difficulty in remembering their medication.

A care plan should be developed that includes strategies to help forgetful students remember to come to the nurse's office for their medication. Some students may need help with problem solving.

Documentation of Medication Administration

The Education Code does not specify the type of documents to use to record information. The school or district should develop policies governing medication administration documentation. At a minimum, records should be specific to each student receiving medication and should include parental consent forms, any authorization from the student's provider, and daily medication logs. Medication logs should contain dose, date and time of medication administered, and any reason for omission. Documentation must be done in unalterable ink and should include any significant reactions by the student to the medication administered. Entries should be signed by the employee that administered the medication. Initials are satisfactory if the full name that corresponds with such initials exists elsewhere on the page. Sample forms are provided in Appendix C.

Disposition of Medication Left in the School/Clinic at the End of the Year

The following procedures should be followed when medication (prescription or nonprescription) is disposed of at the end of the school year:

Provide advance notice that parents will need to collect medication at the end of the school year by adding this information to the school handbook; or include the information a month before the end of school in the school newsletter; or send a written notice with the last refill.

The school nurse should attempt to contact by telephone the parent/guardian of any student who still has medication stored in the clinic prior to the end of the school year. The parent/guardian should be informed that the medication will be destroyed unless picked up by the end of the last day of classes. If the parent wishes to make other arrangements, he/she should contact the school or nurse.

Students may bring their medication home from school if the parents have signed an authority/responsibility form allowing their child to transport the medication.

The school or nurse will destroy all medication remaining in the school the day after the last day of classes, unless the child will be attending summer school.

Medications from Mexico

It is up to the school and/or district to decide whether they will allow school personnel to administer medications that were prescribed and/or purchased in Mexico or elsewhere outside of the U.S. Some districts have adopted a policy that excludes administration of prescription medications from outside the U.S. Other districts offer a very strict interpretation of the medication requirements set forth in Section 22.052, Education Code, and will not allow medication from Mexico on the basis of this interpretation.

Medication prescribed and/or purchased in Mexico presents several problems:

1. The medication label is in Spanish;
2. Drugs that require a prescription in the U.S. may be purchased over the counter in Mexico; and
3. In Mexico, a person is not required to be a licensed pharmacist in order to fill a prescription.

The Education Code does not specify the country in which a physician must be licensed or the country in which the prescription must be filled. Therefore, it is up to the local district to decide how they wish to handle these requests from families and guardians of students²⁵. The Texas Department of Health does not recommend that schools allow the administration of medications that were not prescribed by a physician licensed in the U.S.²⁶

Special Topic: Medication Administration off of School Grounds (Field Trip/Event)

Occasionally, a student may need a medication while away from school property, but involved in a school-related event (field trip or athletic or recreational event). It is not necessary for a nurse to accompany students off school grounds to administer medication. Texas law allows principals to authorize other school employees to administer medication as long as they are in compliance with Section 22.052, Education Code. School nurses, however, may wish to consult the Nurse Practice Act, Rule 218.8, which discusses the “[d]elegation of tasks for the client in independent living environments with stable and predictable health care needs.” This rule applies to schools, and includes metered dose inhalers and pill box containers, and can be accessed online at: www.bne.state.tx.us/rr218.htm#218.8. The student’s medication must be administered from what “appears to be the original container” and there must be written parental consent in place. Although each district may develop their own guidelines as to how they provide this service, the following can be used as a general guideline:

Before the student leaves, the nurse or employee may place the needed amount of medication into the (original) properly labeled container, leaving the remainder of school-maintained medication locked and appropriately labeled. (Parents may be asked to maintain this supply at home until the student returns the original container to the school.) The authorized school employee on the trip may administer the medication from the original container at the appropriate time(s). A photocopy of the parental consent may be made and taken along with the student and the medication. It is recommended that the preparation of the medication be made on the last working day before the day of the field trip.

Alternatively, the parent may provide the required amount of medication (depending on length of the trip) in a separate original labeled container (e.g., an extra from the provider or pharmacist), with or without a separate parental consent form specific to the event or trip. This may be useful for any trips that exceed one day in length²⁷.

There are no state or federal law governing the documentation of such medication. Schools and/or districts will need to develop their own guidelines and policies about documentation; they should be consistent with the documentation procedure used in the schools²⁸.

Emergency Medications

Written policies should be developed to guide each district on the administration of emergency medications to students when they are off school property on a field trip, etc. Any student with a history of an allergy severe enough to require the use of emergency epinephrine should have an IHP or EHP (emergency health plan) detailing the allergy and the plan for use of emergency medication. This plan and emergency medicine should accompany the student off school property at school-related events. See “Use of Emergency Medication in Schools” section for further discussion of this issue.

Self-Administration of Medication

“Self-administration” is defined as the student consuming or applying medication in the manner directed by the licensed prescriber without additional assistance or direction. Although several types of medications may fall into this category (e.g., emergency epinephrine, insulin), only the self-administration of asthma medication (inhalers) is allowed by the Education Code, effective September 1, 2001²⁹:

Section 38.013, Education Code. SELF-ADMINISTRATION OF PRESCRIPTION ASTHMA MEDICINE BY STUDENTS.

(a) In this section:

- (1) "Parent" includes a person standing in parental relation.
- (2) "Self-administration of prescription asthma medicine" means a student's discretionary use of prescription asthma medicine.

(b) A student with asthma is entitled to possess and self-administer prescription asthma medicine while on school property or at a school-related event or activity if:

- (1) the prescription asthma medicine has been prescribed for that student as indicated by the prescription label on the medicine;
- (2) 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
- (3) a parent of the student provides to the school:
 - (A) a written authorization, signed by the parent, for the student to self-administer prescription asthma medicine while on school property or at a school-related event or activity; and
 - (B) a written statement from the student's physician or other licensed health care provider, signed by the physician or provider, that states:
 - (i) that the student has asthma and is capable of self-administering the prescription asthma medicine;
 - (ii) the name and purpose of the medicine;
 - (iii) the prescribed dosage for the medicine;
 - (iv) the times at which or circumstances under which the medicine may be administered; and
 - (v) the period for which the medicine is prescribed.
- (c) 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.
- (d) This section does not:
 - (1) waive any liability or immunity of a governmental unit or its officers or employees; or
 - (2) create any liability for or a cause of action against a governmental unit or its officers or employees.

School administrators may determine that other medications may also be self-administered by students and may choose to develop policies and protocols to guide their use. It is strongly recommended that a nurse be involved in developing these guidelines (NASN). A student may be responsible for taking the student's own medication after the school or nurse has determined that the following requirements are met:

- The student, school nurse, and parent/guardian, where appropriate, enter into a written agreement, which specifies the conditions under which medication may be self administered.
- The school nurse, as appropriate, develops a medication administration plan, which contains only those elements necessary to ensure safe self-administration of medication.
- The student's health status and abilities are evaluated by the school nurse, who then determines whether self-administration is safe and appropriate. The school nurse should observe initial self-administration of the medication to check proper technique.
- The school nurse is reasonably assured that the student is able to identify the appropriate medication and knows the frequency and time of day for which the medication is ordered.
- There is written authorization from the student's parent or guardian that the student may self-medicate.
- If requested by the school nurse, the licensed prescriber provides a written order for self-administration.
- The student documents self-administration of medication.
- The school nurse establishes a policy for the safe storage of self-administered medication and, as necessary, consults with teachers, the student, and parent/guardian, if appropriate, to determine a safe place for storing the medication for the individual student, while providing for accessibility if the student's health needs require it. This information shall be included in the medication administration plan. In the case of an inhaler or other preventive or emergency medication, whenever possible, a backup supply of the medication shall be kept in the health room or a second readily available location.
- The student's self-administration is monitored based on the student's abilities and health status. Monitoring may include teaching the student the correct way of taking the medication, reminding the student to take the medication, observing the student to ensure compliance, recording that the medication was taken, and notifying the parent, guardian, or licensed prescriber of any side effects, variation from the plan, or the student's refusal or failure to take the medication.

- With parental/guardian and student permission, as appropriate, the school nurse may inform appropriate teachers and administrators that the student is self-administering a medication³⁰.

The school may develop a system involving a medication “pass” for each student who self-administers medications. This “pass” can be shown upon request to authorized faculty and staff in order to monitor students’ possession of drugs on school property³¹.

Also consult the section entitled “Administration of Over-the-Counter Medications in Schools” in this manual for a discussion of self-administration of OTC medications in schools.

Special Topic: Herbal and Dietary Supplements

Nurses and other personnel administering medications in Texas schools may be asked by a student’s parents and/or health care provider to administer an herbal or dietary supplement. Indeed, the use of such treatments is on the rise, and it is estimated that more than one-third of adults in the U.S. have used some variation of what many call complementary or alternative medicine. Pediatric use of alternative medicines is more common in children with a chronic illness or disability.

State law does not specifically address these types of remedies, school districts can develop their own policies regarding handling these requests. Schools should exercise caution and should recall that NO substance should be administered to any child or adolescent without the express written request of the parent or guardian. Such products should also be provided by the parent (as with all medications administered at school) and in a properly labeled, original container. Aside from complying with these two tenets of the Education Code, school personnel may consider the discussions included below when developing policies regarding herbal or dietary supplements.

The Texas Department of Health’s School Health Program has addressed this issue, specifically regarding the administration of such products by school nurses. Their position reads as follows:

The RN is obligated to administer only those medications and treatments for which the RN is knowledgeable and there is a supporting body of research literature for [sic]. (See BNE Rule 217.11(3).) The RN has the authority to refuse to administer medication, which the RN believes is not in the best interest of the patient per Rule 217.11(1a). Further, the RN has the duty to clarify and question any unclear order. Therefore, since herbals, home remedies and dietary supplements do not come with a doctor's order, supporting body of research literature, known side effects, FDA approval, or a list of ingredients, the wise and prudent RN does not administer them³².

The American Academy of Pediatrics has developed a policy statement regarding “nontraditional” medical therapies³³. This statement analyzes the use of these substances from a position of balancing “a commitment to family-centered care with the ethical responsibility to guard the welfare of children”. Their recommendations for the health care professional working with these families are:

- Seek information for yourself and be prepared to share it with families.
- Evaluate the scientific merits of specific therapeutic approaches.
- Identify risks or potential harmful effects.
- Provide families with information on a range of treatment options (avoid therapeutic nihilism).
- Educate families to evaluate information about all treatment approaches.
- Avoid dismissal of complementary or alternative medical treatments in ways that communicate a lack of sensitivity or concern for the family's perspective.
- Recognize feeling threatened and guard against becoming defensive.
- If the [alternative] approach is endorsed, offer to assist in monitoring and evaluating the response.
- Actively listen to the family and the child with chronic illness³⁴.

Administration of such medications by school personnel other than registered nurses, including LVNs, would not be held to the same standard and would be considered an administrative task assigned by a school principal, rather than delegated by an RN. Schools can make decisions about assigning this task accordingly. In a recent statement by the Texas Association of School Boards, it was suggested that until there are clearer

legal or legislative mandates, such requests by parents continue to be “considered on a case-by-case basis ... determined by the specific facts of the case”³⁵.

Nurses can also use the request by a parent/guardian to administer an “alternative” medication as an opportunity to discuss the proposed treatment. In many instances, the patient’s health care provider is unaware of their use of alternative medicine, which may affect a more traditional plan of care. The nurse in the role of counselor/educator might alert the student’s parent or guardian about the importance of communicating clearly with the primary provider about any and all alternative medications in use. The nurse can provide case management for children with complex health care needs.

Helpful Internet Resources:

1. University of Texas Center for Alternative Medicine Research, <http://www.sph.uth.tmc.edu/utcam/default.htm>
2. The National Institutes of Health Office of Alternative Medicine, <http://altmed.od.nih.gov>
3. The National Council for Reliable Health Information, <http://www.ncahf.org>
4. The Consumer Federation of America, <http://www.quackwatch.com>

Special Topic: Use of Emergency Medication in Schools

Students and faculty/staff in Texas schools may have or develop life-threatening allergies, so schools and districts must be prepared to administer emergency medications to prevent the development of **anaphylaxis**. Anaphylaxis refers to signs and symptoms that occur as a reaction to allergies. These symptoms may include: difficulty breathing and/or swallowing and a tightening or closing of the throat. Anaphylaxis and other allergic reactions develop from exposure to allergens, most commonly: insect stings, peanuts, milk and other foods, and latex³⁶. Children with asthma or other chronic respiratory disorders are at a higher risk of developing anaphylaxis. Anaphylaxis requires prompt medical intervention with an injection of epinephrine, followed by transport to the nearest emergency room. It is the position of the National Association of School Nurses (NASN) that “school nurses supervise the management and treatment of life-threatening allergies”³⁷.

Chapter 9 of this manual, *Emergency Care*, provides a comprehensive overview and discussion of emergency situations in schools, including allergic reactions and the use of

emergency medications. The following is a protocol for the use of injectable epinephrine in the school setting.

Emergency Injectable Epinephrine in the School Setting

- A. Have emergency epinephrine kits available.** Kits should be available on school grounds and in unlocked areas in order to increase access by staff to the medicine in an emergency situation. All school personnel should be aware of their location and trained in how to use them.
- B. Identify students at high risk for anaphylaxis and allergic reaction.** This includes any student who has a history of an allergic reaction to an allergen or a chronic respiratory illness such as asthma. This may be reported to the school by either a parent or a health care provider; ideally, the student’s medical record will include documentation of this risk based on history and appropriate medical testing. Aids in identification may include identification sheets with the student’s name, photograph, specific allergy (i.e. peanut or bee sting), warning signs of reactions, and emergency treatment³⁸. An Individualized Healthcare Plan (IHP) that includes “continuous monitoring, emergency plans, and evaluation should be written by the school nurse and maintained” for each of these students³⁹. Additionally, these students should have an epinephrine auto-injector device clearly labeled with their name and classroom number. Recent studies demonstrate that “children with either peanut or tree nut allergies should be treated as if the next reaction could be fatal”⁴⁰. This means that the student’s emergency epinephrine must travel with him or her from location to location throughout the school day. Students may be authorized by their provider to self-administer epinephrine, but school personnel should be aware that the nature of severe allergic reactions may incapacitate the affected student. Staff must be prepared to administer the epinephrine.
- C. Identify areas and/or situations in which allergic reactions are more likely.** School personnel need to be aware that ANY student could potentially develop an allergic reaction, and that prevention and avoidance of allergens is “the cornerstone of management in preventing anaphylaxis”⁴¹. Personnel working in areas in which students are exposed to insect stings, latex, or foods should be educated about allergies and anaphylaxis. They should also be trained in the use of emergency epinephrine and be aware of where it is stored.

- D. Expiration dates on emergency epinephrine kits should be checked regularly!!!!** The use of epinephrine for students without documentation of previous allergy risk will require standing orders from a school district physician.
- E. Administer emergency epinephrine according to product insert instructions.** Several options exist as to types of emergency epinephrine available (refer to Chap 9, Emergency Care). Each school district and its employees will need to determine which type they will use, and familiarize themselves accordingly. An example of a product insert follows in **Exhibit 13**.
- F. Transport affected and treated student to emergency services as soon as possible.** A Registered Nurse or EMS personnel experienced and/or trained in how to handle allergic or anaphylactic emergencies should accompany the student to emergency services, as additional treatment with epinephrine is occasionally necessary⁴².

Special Topic: Psychotropic Medications in Schools

School nurses and other personnel administering medication may need to administer prescribed psychotropic drugs to students in Texas schools. The majority of disorders for which a student may be treated with psychotropic or psychoactive medications are disorders for which behavioral or psychotherapy is an integral part of the treatment⁴³. The most common disorders for which nurses might encounter a prescribed psychotropic medication are: depression, attention deficit-hyperactivity disorder (ADHD), anxiety, bipolar disorder (manic-depression), and phobias. It is vital that school nurses and other personnel be familiar with these disorders and their treatment because, like other medical conditions, treatment of psychiatric and psychological disorders “is essential ... so that [students] can be free to develop necessary academic and social skills”⁴⁴.

The following is a brief review of the psychotropic medications that schools and nurses will most likely encounter. The use of these drugs is increasing in children and adolescents. It should be noted, however, that pediatric use of many of these medications is not yet specifically approved by the Food and Drug Administration (FDA). Such approval requires demonstrated safety and efficacy, and studies of long-term use of these medications by children do not yet exist⁴⁵. This means that important clinical information, such as the kinds of side effects most likely to occur, is being extrapolated from studies of adult use. Children and adolescents may experience a medication differently from adults. Nurses and school personnel who administer and monitor these

medications should have regular contact with the child's psychiatrist or prescribing provider in order to be more fully aware of what they should expect (in terms of effect, behavior, etc.). This is especially important since many of these drugs are not "approved" to be used either in children or for the disorder for which they are being prescribed (e.g., antihistamines for ADHD, antidepressants for anxiety, or antipsychotics for aggressive behavior). A resource list is provided at the end of this chapter containing helpful Internet sites and professional organizations. These resources provide current and practical information about these medications for schools, nurses, students, and their families.

Antidepressants (*Depression*)

The newest class of antidepressants are called **selective serotonin reuptake inhibitors**, usually referred to as **SSRIs**. Commonly prescribed brand names include Prozac (fluoxetine), Paxil (paroxetine), and Zoloft (sertraline). These medications act in the brain on a chemical messenger called serotonin. A decreased amount of this neurotransmitter in the bloodstream is believed to be one cause of depression; these medications regulate its "reuptake" by the brain, allowing for greater amounts in the bloodstream. These medications may not have a noticeable effect on mood for the first six weeks after beginning administration. However, changes in brain chemistry begin after the first dose. Users of SSRIs sometimes report feeling slightly nauseated or jittery with initial use; these symptoms usually resolve in a few weeks to a few months. Chronic side effects, however, are often an indication that a different drug is in order. A medication change will usually be to a different SSRI, since both the efficacy and the side effects can vary widely among users⁴⁶.

Older antidepressants fall into one of two classes—**tricyclics (TCAs)** (i.e., Elavil) and **monoamine oxidase inhibitors (MAOIs)** (i.e. Phenelzine). These drugs also act to regulate the availability of neurotransmitters thought to affect mood—the monoamines, serotonin and norepinephrine. While SSRIs work primarily on regulating only serotonin, TCAs and MAOIs act on both serotonin and norepinephrine simultaneously. This dual action can mean a better antidepressant effect for the patient. However, the majority of these medications have dietary restrictions or side effects that make them difficult to tolerate. Users of MAOIs must avoid foods containing tryptophan (turkey, chocolate, warm milk) and tyramine (yeast, cheese, ripe fruit). Side effects can include GI

symptoms, palpitations, and drowsiness. TCA side effects include extrapyramidal symptoms and a dry mouth⁴⁷.

Another relatively new and commonly prescribed antidepressant is called Wellbutrin (bupropion). It does not fall into any of the above categories. In fact, little is known about its exact mechanism of action; it does not affect or inhibit monoamine oxidase, and compared with other drugs, it is a weak blocker of neural uptake of serotonin. Its antidepressant effect has been well demonstrated in adults. A special caution is an increased risk of seizures⁴⁸.

Antianxiety Medications (*Anxiety, Phobias*)

Many health care providers prescribe **antidepressant** medications for anxiety disorders. However, there are specific medications available for anxiety. Anxiolytics, including **benzodiazepines** (Valium or Xanax), are high-potency, and relieve symptoms quickly and have few side effects other than drowsiness. The biggest risk from this class of drug is developing tolerance, which can lead to dependence or a need for progressively higher dosages. Because of this, they tend to be used for short periods of time. In the case of panic disorder they can be prescribed for six to twelve months. Withdrawal symptoms can occur after any length of usage. Other anxiolytics include **azapirones** (Buspar), which do not have the tolerance problems of the benzodiazepines, but can take several weeks to take effect. Side effects include dizziness, headaches, and nausea⁴⁹.

Beta-blockers (such as propranolol) have also been used to treat anxiety, particularly social phobia. They may be used only if they are needed in particularly feared situations (such as public speaking) in order to prevent symptoms of nervousness (palpitations, shaking hands, etc.)⁵⁰.

Mood stabilizers (*Bipolar Disorder*)

Lithium carbonate is a naturally occurring salt that has been used successfully for decades to calm mania and prevent mood cycling. It is most commonly prescribed for a student with bipolar disorder. Most adults with bipolar disorder do very well, but this

medication is not as useful with children. The most common side effect is a dry mouth and increased thirst, due to its salt properties.

Anticonvulsants. Depakote (divalproex sodium, valproic acid) is prescribed for children whose disorder includes rapid mood cycling. Tegretol (carbamazepine) has anti-aggressive properties and is therefore useful in treating frequent rage attacks. Side effects to these drugs can include drowsiness/sedation, weight gain, and GI symptoms. Newer anticonvulsants being used with children include: Neurontin (gabapentin), Lamictal (lamotrigine), Topamax (topiramate), and Gabitril (tiagabine). Of these, Gabitril is the only one with FDA approval specifically for adolescents and is also being used frequently in children⁵¹.

Stimulants (ADHD)

Cerebral stimulants, used for children with attention deficit hyperactivity disorder (ADHD), are usually considered quite safe. These drugs include Ritalin (methylphenidate), Cylert (pemoline), and Dexedrine (dextroamphetamine). These medications seldom make children "high" or jittery, nor are they sedatives. Instead, stimulants help children control their hyperactivity, inattention, and other behaviors. Side effects include nervousness, insomnia, palpitations, and anorexia⁵².

Different providers use the medications in slightly different ways. Cylert is a long acting medication with a duration of 5 - 10 hours. Ritalin and Dexedrine are short-term medications with a duration of 3- 4 hours, although longer-term preparations are available that can last through the school day. The short-term dose is often more practical for children who need medication only during the school day or for special situations, like attending church or a prom or studying for an important exam. The sustained-release dosage frees the child from the inconvenience or embarrassment of going to the office or school nurse every day for a pill. The health care provider can help decide which preparation to use and whether a child needs to take the medicine during school hours only or also on evening and weekends⁵³.

Nine out of 10 children improve on one of the three stimulant drugs. So if one does not produce the desired effect, then others should be tried. Usually a medication is used on a trial basis for at least a week before the decision to continue or change to another drug is

made. Sometimes, changing the dosage of the medication is enough to produce the desired effects.

Other types of medication may be used to treat ADHD if the stimulants are ineffective or the side effects are too uncomfortable for the child or parent. Children with ADHD may exhibit a comorbid disorder, often depression or anxiety. Some medications may treat both disorders or it may be necessary to give a medication specific to each disorder. **Antidepressants** and other medications may be used to help control accompanying depression and anxiety. In some cases, **antihistamines** may be tried. Clonidine, a medication frequently used to treat hypertension in adults, may be effective in children with both ADHD and Tourette's Syndrome. Although stimulants tend to be more effective, Clonidine may be tried when stimulants are ineffective or cause too many side effects. Clonidine can be administered either by pill or by skin patch; possible side effects include drowsiness/sedation, dry mouth, and/or constipation⁵⁴.

As with any medication used in Texas schools, psychotropic drugs should be administered according to Section 22.052(a), Education Code, i.e., only with written parental request and only from the original and properly labeled container. Unlicensed personnel who administer these medications do not have the education or training to monitor students for related problems or side effects. School nurses are in a unique and extremely useful position to provide this type of monitoring. Regular administration of psychotropic medication provides the nurse with a daily opportunity to use the nursing process to assess these children for problems. If identified, the nurse can offer feedback to the family and the student's health care provider. Changes made to the student's treatment should be discussed with the school nurse.

Antipsychotic Medications. Antipsychotic medications can be helpful in controlling psychotic symptoms (delusions, hallucinations) or disorganized thinking. These medications may also help muscle twitches ("tics") or verbal outbursts as seen in Tourette's Syndrome. They are occasionally used to treat severe anxiety and may help reduce very aggressive behavior. Examples of traditional antipsychotic medications include: Chlorpromazine (*Thorazine*), Thioridazine (*Mellaril*), Fluphenazine (*Prolixin*), Trifluoperazine (*Stelazine*), Thiothixene (*Navane*), and Haloperidol (*Haldol*). Newer antipsychotic medications include: Clozapine (*Clozaril*), Risperidone (*Risperdal*), Quetiapine (*Seroquel*), Olanzapine (*Zyprexa*), and Ziprasidone (*Zeldox*)⁵⁵.

Chapter 6 in this manual provides school nurses and personnel with a comprehensive overview of mental and emotional health issues and offers suggestions for strategies to assist students and their families in coping with these illnesses.

Special Topic: Medication for Diabetes (Type I and II) in Schools

NOTE: For a more comprehensive review of diabetes, its management, possible complications, and the development of IHPs for students with diabetes, see the section "Chronic Illness Protocols" of this manual. The following section addresses medication administration issues only.

School personnel must understand diabetes and its management to appropriately care for the child with diabetes. Knowledge is essential if the child is to achieve the metabolic control required to decrease risks for later development of diabetes complications⁵⁶. Management of diabetes involves a combination of blood glucose monitoring, careful timing and planning of meals and snacks, regular physical exercise, awareness of conditions such as stress that can exacerbate the student's illness, and treatment with medications, including insulin. All students with diabetes will need an IHP, which will individually define that student's optimal blood glucose levels, frequency of monitoring, and how and when to administer medications. For students with Type I, or insulin-dependent, diabetes, frequent blood glucose monitoring may be necessary, as well as up to four or five insulin injections per school day. Some students and providers may elect to deliver insulin via an insulin pump, which can deliver precise amounts of insulin at pre-programmed times or as a bolus.

Usual targets for blood sugars are: 75% or more readings between 70 and 150 mg/dl. However, individual targets are often set for each child. It is important to consult with parents and possibly the child's diabetes team to determine the appropriate targets for that child⁵⁷.

Insulin's vary in their onset and duration of action. Most students will have a schedule that includes a combination of short- and intermediate-acting insulin, taken a half hour before both breakfast and the evening meal. Blood glucose is lowest when insulin has its peak effect. Meals and snacks are planned for this time⁵⁸. Dosage of insulin is determined by body size, activity level, state of health, dietary intake, and duration (rather than severity) of diabetes, and is prescribed by the student's health care provider. Directions for administration by school personnel should be clearly written. Although in many states, insulin administration is the responsibility of the school nurse, in Texas the Education Code allows any school district employee to administer this medication under the direction of the principal. Employees authorized to administer insulin should be aware of and familiar with the different types of insulin. Student responsibility for insulin self-injection should occur when the child's developmental level indicates that this is an appropriate goal, and is agreed upon by the parents, the child, and the health care provider⁵⁹ (See also "Self-Administration of Medication" section in this manual).

Administration of insulin should include these 3 steps:

1. Inspect the insulin. Check the expiration date printed on the label. Humalog and Regular insulins are clear, others are cloudy. Long- and intermediate-acting insulins must be gently mixed by rolling the vial between palms. There should be no clumping of particulate in the insulin. Do not use insulin that is not uniform in consistency.
2. Select injection site. Injections may be given in the abdomen, thighs, buttocks, or arms. Insulin sites should be rotated in order to avoid tissue damage, which results in the poor absorption of the insulin. Speed of absorption decreases with each of the following sites: arms, legs, and buttocks.
3. Inject the insulin:
 - a. Get supplies.
 - b. Wash hands.

- c. Roll bottle to mix. Wipe top with alcohol swab.
- d. Pull plunger down to _____ units.
- e. Push needle into bottle. Push plunger up.
- f. Pull plunger down to _____ units.
- g. Locate injection site. Wipe with alcohol swab.
- h. Pinch up skin. Push needle into skin and push plunger in.
- i. Pull needle out.
- j. Dispose of syringe per care plan⁶⁰.

Care and Storage of Insulin

Effectiveness of insulin depends on careful handling and storage. Date the insulin when it is opened and discard 30 days after opening. Check the expiration date on stored insulin regularly. Other points to remember:

- Keep insulin refrigerated for longer shelf life. If a refrigerator is not available, a cool pack may be used. Unrefrigerated insulin should be kept as cool as possible.
- Do not let insulin freeze. If it does, discard it immediately.
- Keep insulin away from heat and light.
- Clumping or frosting results from too much shaking or rough handling. Discard.
- Insulin may be carried in a fanny pack or backpack with an ice pack, as long as it is positioned so it does not freeze or get too warm⁶¹.
- Pre-filled insulin pens should be stored in a refrigerator but not be refrigerated once they are started. Insulin pens with cartridges are not refrigerated, although the unused cartridges are refrigerated. The time period of use for an insulin pen may vary from manufacturer to manufacturer and needs to be noted by the school nurse/employee.
- Students who wear an insulin pump should keep an extra set of tubing and extra batteries in the nurse or principal's office.
- Syringes and needles should be kept in a locked cupboard.
- Disposal of syringes and needles should be in compliance with Occupational Safety and Health Administration (OSHA) guidelines⁶².

Glucagon

Glucagon is a hormone that, like insulin, is produced in the pancreas. Unlike insulin, which lowers blood glucose, glucagon raises blood sugar levels. It does this by causing the breakdown of glucose stored in the liver as glycogen; glycogen is then released into the bloodstream. Everyone who uses insulin or a sulfonylurea is at risk for severe hypoglycemia, and therefore should have glucagon on hand at all times in case sugar cannot be given orally (severe hypoglycemia can cause loss of consciousness)⁶³.

Glucagon, like insulin, must be injected. If it were taken by mouth, it would be destroyed by stomach acids. A glucagon kit contains a syringe pre-filled with a liquid and a vial of powdered glucagon. The glucagon is prepared for injection immediately before use, following the instructions that are included with the kit. In general, small children (under 20kg, or 44 pounds) are given 1/2cc (half the syringe), while older children and adults are given the entire syringe (1cc). In children, some authorities advise using 1/2cc to start with, then giving the other 1/2 cc about 20 minutes later if needed. This method can lessen the rebound hyperglycemia that can ensue after use of glucagon. There is no danger of overdose, however. Injection is given in a large muscle, such as the buttocks, thigh, or arm; it may be injected safely into fat, muscle, or a vein. The needle on the syringe is usually larger than those on insulin syringes⁶⁴.

Glucagon can cause vomiting, and it is therefore important to place the child on their side prior to injecting so that they do not aspirate. Once injected, glucagon's effect is almost instantaneous—blood glucose levels rise within 2 to 10 minutes. After injecting glucagon, follow with food once the person regains consciousness and is able to swallow.

The glucagon kit should be stored in an area where all school personnel will be able to locate and access it. Glucagon is of no value to the person with diabetes unless someone nearby can recognize severe hypoglycemia, has glucagons available, and knows how to give it. It is vital, therefore, that schools and districts establish policies and procedures regarding which staff members will be trained to administer glucagon as needed. This training should include how to activate EMS or other emergency services if and when the child does not respond to glucagon administration.

Storage temperatures should be under 90 degrees Fahrenheit (28 degrees Celsius). In the U.S., glucagon is dispensed by prescription only.

Insulin Pumps

An insulin pump is a small mechanical device that delivers insulin into the body via a thin plastic tube: an infusion set. The pump is worn outside the body in a pouch or on a belt holder. The infusion set is a long, thin plastic tube that connects the pump to a small, flexible plastic needle or cannula that is inserted beneath the skin at the infusion site (usually the abdomen). The infusion set is kept in place for two to three days and then moved to a new location (usually this is done at home before coming to school). All insulin is delivered through the infusion set⁶⁵.

The insulin pump is not an artificial pancreas. It is a computer-programmed pump that delivers either Humalog or buffered regular insulin in precise amounts at pre-programmed times. The pump must be programmed by the student/family so it will deliver insulin when desired. Blood sugars must still be monitored by the user⁶⁶.

Pumps deliver insulin in two ways: the basal rate and a pre-meal bolus. The basal rate is a small amount of insulin delivered continuously throughout the day, which should control blood glucose between meals and at night. Pumps allow the user to program different basal rates based on time of day (i.e., to receive less at night). Basal rates for children can be quite small, such as 0.5 units per hour. Pumps can accurately deliver insulin in 0.1 unit increments. Pre-meal boluses are designed to cover the food eaten during a meal. Boluses can be programmed any time to accommodate changes in mealtimes⁶⁷.

An insulin pump contains a small reservoir of insulin, a small battery-powered pump, and a computer that controls its operation. All are reasonably sturdy and should hold up to typical sports and play activities of child and adolescent users. Pumps have a variety of features, and some are even waterproof.

A plan to address pump malfunction must be developed by the parents, healthcare provider and school nurse. Students may have symptoms of hypo or hyperglycemia but ignore them or blame them on hunger or another problem and not recognize that their pump is malfunctioning. When any symptoms occur it is important to test the blood glucose and check for hypo or hyperglycemia. High levels must be reported.

Oxygen Administration In Schools⁶⁸

There are two indications for nurses to monitor oxygen use at school. The first is the presence of a child or staff member who has a condition that requires the use of oxygen on a daily basis. The second is oxygen for emergency use at a school which is located in a remote area. If EMS has a long response time due to the distance of the school, then it might be wise to keep oxygen at the school for emergencies.

If a student or staff member has a known condition that warrants oxygen availability, the treating physician and school nurse should communicate about the necessary equipment and supplies, including oxygen. An appropriate treatment plan should be in place. The treatment plan should include written physician's orders, medical diagnosis, contact information, parental consent, as well as any other pertinent medical direction. The nursing care plan is a separate document based on this collaboration with the physician and the parents or adult patient.

The decision by a school district to keep oxygen tanks on hand in the event of an emergency can be made at the local level by school board officials who:

- Have received accurate and thorough information
- Been advised by the districts health (education) advisory committee
- Have consulted with local EMS personnel and health care professionals

Factors to consider include the daily presence of a professional school nurse (Registered Nurse), the availability of first responders in the community (EMS), average EMS response time, and the proximity of emergency room facilities.

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Exhibit 1: Skills Checklist for Medication Administration

Person trained:

Position:

Instructor:

Type of Medication Administration (Oral, Topical etc.):

(*See “Steps in School Medication Administration” of this manual for procedure)

A. Preparation:

1. Verifies authorization of parent’s note with prescription label (student’s name, date, medication, and dosage).
2. Seeks information for questions and dose calculations.

B. Procedure:

1. Washes hands.
2. Gathers necessary equipment.
3. Checks label of medication for name, time, dose, and route when picking up medication container.
4. Prepares correct dosage of medication without touching medication if possible by pouring into lid cap then medicine cup or directly into medicine cup if liquid.
5. Rechecks label for name, time, dose, and route while preparing dose.
6. Rechecks label a third time when returning medicine to locked cabinet.
7. Does not leave medication unattended or within student’s reach.
8. Identifies student by asking student to say his or her name, or uses third party identification if student is nonverbal.
9. Observes student for any unusual behaviors or conditions prior to administration. If any noted, does not give medication and reports to nurse, parent or principal.
10. Explains procedure to student.
11. Positions student properly for administration.
12. Administers correct medication to correct student, at correct time, in correct dose and by correct route.
13. Cleans, returns and/or disposes of equipment as necessary.
14. Washes hands.

C. Recording

1. Records as soon as possible on medication sheet: name, time, dose, route, and person administering medication.
2. Records any unusual observations in student’s record and reports to nurse, parent or principal.
3. Reports any medication errors.

Exhibit 2: Sample Parental Consent/Provider Authorization¹

[SAMPLE]

Authorization/Parental Consent for Administering Medication
(Use a separate authorization form for each medication.)

Student's Last Name _____, First Name _____, M.I. _____
 Student Number _____ Grade _____ Date of Birth ____/____/____
 Allergies _____

Parental Consent
 I am the parent or guardian of _____. I give my permission for him/her to take the following prescribed medication while in _____ School. I hereby acknowledge that I have read and understood the School Board Regulations relating to the taking of medications. I hereby release _____ School and its employees from any claims or liability connected with its reliance on this permission and agree to indemnify, defend and hold them harmless from any claim or liability connected with such reliance. I authorize a representative of the school to share information regarding this medication with the above licensed prescriber.

 Parent/Guardian Signature Daytime Phone Date

MEDICATION AUTHORIZATION
(For Use By Licensed Prescriber ONLY)

Relevant Diagnosis _____ Medication _____

Dates medication must be administered at school: ___ Short Term (List dates to be given _____)
 ___ Every day at school ___ Episodic/Emergency Events ONLY

Dosage (Amount) _____ Route _____ Form _____ Time(s) of Day _____

A. Serious reactions can occur if the medication is not given as prescribed: ___ YES ___ NO
 If yes, describe: _____

B. Serious reactions/adverse side effects from this medication may occur: ___ YES ___ NO
 If yes, describe: _____

Action/Treatment for reactions: _____

Report to you: ___ YES ___ NO (Drug information sheet may be attached)

Special Handling Instructions: ___ Refrigeration ___ Keep out of sunlight ___ Other _____

Asthmatic/Diabetic ONLY
 This student is both capable and responsible for self-administering this medication:
 ___ NO ___ YES - Supervised ___ YES - Unsupervised

This student may carry this medication: ___ NO ___ YES

Licensed Prescriber's Name _____
 Telephone Number _____ Emergency Number _____
 Licensed Prescriber's Signature _____ Date _____

¹ Virginia Department of Health. 1999. *Virginia School Health Guidelines*, p. 263.

**Exhibit 3: Letter to Parent Advising of Texas Medication Law
(Version 1-School with a Nurse)**

District Letterhead
School with a Nurse

Date

Dear Parent or Guardian:

To comply with Texas State Law, the following restrictions apply to the taking of medicine by students while at school:

1. All medicine is to be brought to and kept in the school nurse's office.
2. Prescription and non-prescription medicine must be in the original container. Prescription medicine must be in a container with the pharmacy label for that student.
3. If a prescription or non-prescription medicine must be given during the school day, it must be accompanied by a note signed by a parent or guardian giving authorized school personnel directions for its administration (time and dosage).
4. School personnel will not give any medicine, including Tylenol, unless it is provided by you, in the appropriate manner as stated above.

These restrictions are necessary for protection of the health and safety of your child. We will appreciate your cooperation in this matter.

Sincerely yours,

School Nurse

Phone number

Please keep the attached form available for future use should your child need to take a medication during school hours.

**Exhibit 4: Letter to Parent Advising of Texas Medication Law
(Version 2-School without a Nurse)**

District Letterhead
School without a Nurse

Date

Dear Parent or Guardian:

To comply with Texas law, the following restrictions apply to the taking of medicine by students while at school:

1. All medicine is to be brought to and kept in the principal's office.
2. Prescription and non-prescription medicine must be in the original container. Prescription medicine must be in a container with the pharmacy label for that student.
3. If a prescription or non-prescription medicine must be given during the school day, it must be accompanied by a note signed by a parent or guardian giving authorized school personnel directions for its administration (time and dosage).
4. School personnel will not give any medicine, including Tylenol, unless it is provided by you, in the appropriate manner as stated above.

These restrictions are necessary for protection of the health and safety of your child. We will appreciate your cooperation in this matter.

Sincerely yours,

School Nurse

Phone number

Please keep the attached form available for future use should your child need to take a medication during school hours.

Exhibit 5: Refusal to Administer Medication Letter (to Parents)

Date _____

Dear Parent,

You have requested school personnel to administer (Name of Medication) to your child, (Name of child) during school hours.

After discussing your request with the school nurse consultant, and giving the matter careful consideration, we cannot give this medication to your child for reason(s) checked below:

- A. Medication can be administered before and after school hours.
- B. Medication was not sent to school in the original container.
- C. Medication (in the nurse's professional judgment) is not appropriate for student.
- D. Student has a temperature and needs medical attention.
- E. Student has had medication every day for ___ weeks. We cannot continue to administer medication. Complaints of the student include:

F. Medication received without written authorization.

G. Other _____

Should your child's health care provider feel that your child needs this medication during school hours, medication will be given after receiving written request from them.

Providing protection for students as well as our staff is of utmost importance as we endeavor to administer medication at school. You may talk to the nurse consultant, by calling here and leaving a message. She or he will call you back.

Your cooperation in this matter is greatly appreciated.

Principal

Phone number

Nurse

Exhibit 6: Administrative Regulation for Administration of Medications at School

Parents,

Your child may have an illness that requires medication for relief or cure that does not prevent his or her attending school. When possible, such medication should be scheduled to be taken at home. However, according to Texas State Legislature, and ISD Board of Trustee policy, a medication may be dispensed to a student by school personnel. The following requirements must be met by the parent or legal guardian requesting this service.

1. **Prescription or non-prescription drugs** that need to be taken at school for **15 days or less**.
 - a. All prescription drugs must be in their original pharmacy container and labeled by the pharmacist. The label must include:
 - 1) Student's name
 - 2) Name of prescribing health care provider.
 - 3) Name of drug
 - 4) Amount of drug to be given and frequency of administration
 - 5) Date prescription filled.
 - b. All non-prescription drugs must be in their **original container**. The written request for administration of these must contain the following information:
 - 1) Student's name
 - 2) Name of drug
 - 3) Amount of drug to be given
 - 4) When drug is to be given
 - 5) Reason drug is given
 - 6) Date
 - 7) Signature of parent/guardian
 - c. All prescription and non-prescription drugs to be administered at school for 15 days or less must be accompanied by a **written request, signed and dated by a parent or legal guardian**. (Form on reverse side).
2. **Prescription or non-prescription drugs** that need to be taken at school for **more than 15 days**.
 - a. All prescription and non-prescription drugs to be administered at school for longer than 15 days must be accompanied by a **written request signed and dated by the prescribing health care provider and the parent or guardian requesting this service**. (Form on reverse side).
3. Medications prescribed or requested to be given three times a day or less are not to be given at school unless a specific time during school hours is prescribed by a

- health care provider, or the school nurse determines that a special need exists for an individual student.
4. There will be no more than one medication per properly labeled container
 5. All medications will be stored and dispensed in the school clinic, or from the principal's office. Exceptions must be approved by proper school authorities in advance.
 6. No student may have prescription or non-prescription drugs in his/her possession on school grounds during school hours without proper authorization.
 7. No medication will be administered from or kept in the school or clinic for more than 15 days unless otherwise prescribed by a physician or other health care provider.
 8. In accordance with Board of Nurse Examiners Rule, 22 Texas Administrative Code § 217.11, the school nurse has the responsibility and authority to refuse to administer medications that, in his or her judgment, are not in the best interest of the student.

Exhibit 7: Parental Permission to Administer Prescription or Non-prescription Medications for more than or less than 15 days.

Parental Permit to Administer Prescription or Non-Prescription Medication at School for 15 Days or Less

Student name: Last		First	MI	Age
Grade	Teacher			
<input type="checkbox"/> Prescription Medication		<input type="checkbox"/> Non-Prescription Medication		
Name of drug		Name of drug		
Time to be given		Time to be given		
Amount to be given		Amount to be given		
Reason medication being given				
Number of: Tablets	Pills	Capsules	Other	
Send only amount student needs to take at school in properly labeled, original container, so that student will not be required to carry medication back and forth from home to school.				
Parent/Guardian signature			Date	
Home telephone ()			Work telephone ()	

Physicians - Parent Permit to Administer Prescription or Non-Prescription Medication at School for More Than 15 Days

Student name: Last		First	MI	Age
Grade	Teacher			
Reason student receiving medication				
Name of medication			Dosage	Date to DC
Possible toxic reactions				
Form of medication <input type="checkbox"/> Tablet <input type="checkbox"/> Pill <input type="checkbox"/> Capsule <input type="checkbox"/> Liquid <input type="checkbox"/> Inhalant <input type="checkbox"/> Other				
Feedback requested <input type="checkbox"/> Yes <input type="checkbox"/> No				How often
Physician signature			Date	Telephone ()
This is the school's permission to give (student name)			the above medication as prescribed by Dr. (physician name) as he directs.	
Parent/Guardian signature			Date	
Home telephone ()			Work telephone ()	

Exhibit 8: Sample Provider Authorization Form

Permission Form for Prescribed Medication

School: _____

American Academy
of Pediatrics



Date form received by the school: _____

Student: _____ Date of birth, or age: _____

Grade: _____ Teacher/Classroom: _____

To be completed by the physician or authorized prescriber

Reason for medication: _____

Name of medication: _____

Form of medication/treatment:

Tablet/capsule Liquid Inhaler Injection Nebulizer Other _____

Instructions (Schedule and dose to be given at school): _____

Start: date form received Other date: _____

Stop: end of school year Other date/duration: _____

For episodic/emergency events only

Restrictions and/or important side effects: None anticipated

Yes. Please describe: _____

Special storage requirements: None Refrigerate

Other: _____

This student is both capable and responsible for self administering this medication:

No Yes-Supervised Yes-Unsupervised

This student may carry this medication: No Yes

Please indicate if you have provided additional information:

On the back side of this form As an attachment

Date: _____ Signature: _____

Physician's Name: _____

Address _____

Phone Number: _____

To the school: Please report concerns about medications or disease to the above physician.

To be completed by parent/guardian

I give permission for (name of child) _____
to receive the above medication at school according to standard school policy.
(Some schools require parent/guardians to bring the medication in its original container.)

Date: _____ Signature: _____ Relationship _____

Exhibit 9: Sample Medication Log

1/95

Sample Medication Administration Daily Log
(To be completed for each medication)

School Year _____
 Name of Student _____ Date of Birth _____ Sex _____ Grade/Home Room (or Teacher) _____
 Name of School _____
 Name and Dosage of Medication _____ Route _____ Frequency _____ Time(s) Given in School _____

Directions: Initial with time of administration; a complete signature and initials of each person administering medications should be included below.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Sept																																
Oct																																
Nov																																
Dec																																
Jan																																
Feb																																
Mar																																
Apr																																
May																																
June																																

INITIAL (of person administering medication)

1. _____ SIGNATURE _____ (A) Absent (O) No Show

2. _____ SIGNATURE _____ (E) Early Dismissal (W) Dosage Withheld

3. _____ SIGNATURE _____ (F) Field Trip (X) No School (i.e., holiday, weekend, snow day, etc.)

4. _____ SIGNATURE _____ (N) No Medication Available

Use reverse side for reporting significant information (e.g. observations of medication's effectiveness, adverse reactions, reason for omission; plan to prevent future "in shows")

Exhibit 9: Sample Medication Log (cont'd)

EXPLANATION (with signature)	
DATE	
EXPLANATION (with signature)	
DATE	

Exhibit 10: Sample Incident/Error Reporting Form¹

Sample Medication Error Report

A medication error is defined as: "failure to administer the prescribed medication within the appropriate time frame, in the correct dosage, in accordance with accepted practice, to the correct student."

Date of report: _____ School _____ Prepared by _____

Name of student _____ Date of birth _____ Sex _____ Grade _____

Home address _____ Tel. number _____
(street)

(city/town) (zip code)

Date error occurred _____ Time noted _____

Person administering medication _____
(Name) (Title)

Licensed prescriber _____
(Name) (Address)

Reason medication was prescribed _____

Date of order _____ Instructions for administration _____

Medication _____ Dose _____ Route _____ Scheduled Time _____

Describe the error and how it occurred (use reverse side if necessary)

Action Taken

Licensed prescriber notified: Yes _____ No _____ Date _____ Time _____

Parent/guardian notified: Yes _____ No _____ Date _____ Time _____

Other persons notified: _____

Outcome:

Name _____
Type or Print Signature Title Date

¹ Goodman, I.F. and Sheetz, A.H. (Eds.) (1995). *The Comprehensive School Health Manual*. Massachusetts Department of Public Health

Exhibit 11: Sample Medication Administration Plan²

1.95

Sample Medication Administration Plan

Name of student _____ Date of Birth _____ Parent/guardian name _____
 School _____ Grade _____ Home telephone _____
 Name of licensed prescriber _____ Business telephone _____
 Business telephone _____ Emergency telephone _____
 Emergency telephone _____

Food/Drug Allergies _____ Diagnoses: _____
 (If not a violation of confidentiality)

Name of Medication: _____ Date Ordered _____ Expiration Date of Medications Received _____
 Dosage _____ Frequency _____ Route of Administration _____

Specific Directions, e.g., times to be given: _____

Possible Side Effects, Adverse Reactions: _____

Quantity of Medication Received by School and Date: _____

Required Storage Conditions: _____

Delegated to (if applicable): _____ Backup Plans (if delegatee unavailable): _____

Plan for Field Trips: _____

Plans for teaching self administration, if applicable: _____

Other persons to be notified of medication administration (with parental permission): _____

Other medications being taken by the student (if not a violation of confidentiality): _____

Location where medication administration will occur: Health Room _____ Other (specify) _____

Plan for monitoring medication, if needed: _____

School Nurse Signature _____ Date _____
 Parent/Guardian Signature _____ Date _____
 Student's Signature, if appropriate _____ Date _____
 (Medication order and parent/guardian authorization may be attached to this form.)

6 27

² Goodman and Sheetz, *Comprehensive School Health Manual*, p. 6-27

Exhibit 12: Sample Wall Poster-“5 Rights of Medication Administration”

**5 “RIGHTS” TO BE SAFE
WITH EVERY DOSE OF MEDICINE**

Check the label. Follow the directions.

- 1** **The “right” medicine.**
Know the brand and generic names.
Have a proper medicine for your health need.
- 2** **The “right” person.**
Prescriptions are meant for only one person.
- 3** **The “right” time.**
What time are you supposed to take it? For how long must it be used?
When should you stop using it?
- 4** **The “right” amount or dose.**
Use an accurate measure for liquid.
Know how to use an inhaler, spray, or ointment to get the right amount.
Check for the limit on how much you can use in a day.
- 5** **The “right” method.**
Follow directions for how you put this into or on your body. Most medicines are used in only one way.

Exhibit 13: Sample Product Insert-EpiPen

PATIENT INSERT

(PHARMACIST — PLEASE DISPENSE WITH PRODUCT)



NDC 49502-500-01

READ INSTRUCTIONS CAREFULLY,
BEFORE AN EMERGENCY ARISES.



EPIPEN® 0.3mg

EPINEPHRINE AUTO-INJECTOR

FOR ALLERGIC EMERGENCIES (ANAPHYLAXIS)

DELIVERS 0.3 mg INTRAMUSCULAR DOSE OF EPINEPHRINE FROM EPINEPHRINE INJECTION, USP, 1:1000 (0.3mg)

Rx only.

REPLACE IF DISCOLORED. STORE IN A DARK PLACE AT ROOM TEMPERATURE (15°-30°C/59°-86°F). DO NOT REFRIGERATE.

MANUFACTURED FOR DEY, NAPA, CALIFORNIA 94558, U.S.A.

by Meridian Medical Technologies, Inc., Columbia, MD 21046, U.S.A.

U.S. Patent No. 4,031,893

IMPORTANT INFORMATION

- READ THESE INSTRUCTIONS CAREFULLY BEFORE AN EMERGENCY ARISES.
- DO NOT REMOVE SAFETY CAP UNTIL READY FOR USE.
- ONLY 0.3 ML OF SOLUTION IS DISPENSED. THE MAJORITY OF THE DRUG PRODUCT, 1.7 ML, REMAINS IN THE AUTO-INJECTOR AFTER ACTIVATION.
- THE UNIT CONTAINS NO LATEX.

This unit is an automatic injection device containing epinephrine for allergic emergencies. The EpiPen auto-injector should be used only by a hypersensitive (allergic) person in an allergic emergency as prescribed by a physician. Such emergencies may occur from insect stings or bites, foods, drugs or other allergens, as well as idiopathic or exercise-induced anaphylaxis.

THE EPIPEN® AUTO-INJECTOR

The EpiPen auto-injector is a disposable, pre-filled automatic injection device which is designed to deliver a single dose of 0.3 mg of epinephrine.

- Keep the EpiPen auto-injector ready for use at all times.
- Protect from exposure to light and extreme heat.
- Note the expiration date on the unit and replace it prior to expiration. See reverse for enrollment in reminder program.
- Replace any auto-injector if the solution is discolored or contains a precipitate. The EpiPen auto-injector is designed with a see-through window to allow periodic examination of its contents. The physician may recommend emergency use of an auto-injector with discolored contents rather than to postpone treatment.

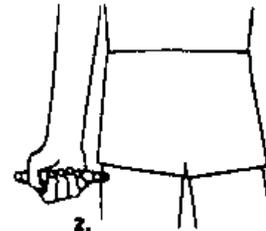
EMERGENCY TREATMENT OF ALLERGIC REACTION/ANAPHYLAXIS

If you experience the signs and symptoms described by your physician, use the EpiPen auto-injector immediately, **through clothing if necessary**. If you have been stung by an insect, remove the insect's stinger with your fingernails if possible; do not squeeze, pinch or push it deeper into the skin. If available, ice packs or sodium bicarbonate soaks may then be applied to the area stung. Keep warm and avoid exertion.

Report to the nearest hospital emergency room. Take your used EpiPen with you for proper disposal and to notify the physician that you have received an intramuscular injection of epinephrine.

DIRECTIONS FOR USING EPIPEN® AUTO-INJECTOR

1. Pull off gray safety cap (illustration 1).
2. Place black tip on thigh, at right angle to leg (illustration 2). (Always apply to thigh.)
3. **Using a quick motion**, press hard into thigh until auto-injector mechanism functions, and hold in place for several seconds. The EpiPen unit should then be removed and discarded. Massage the injection area for 10 seconds.



SEE OTHER SIDE FOR ADDITIONAL INFORMATION ABOUT INSECT STINGS.

Exhibit 14: Sample Insulin Pump

DISETRONIC pump therapy my diabetes products about us
H-TRON features specifications accessories warranty

H-TRONplus
THE INSULIN PUMP FOR ACTIVE PEOPLE

H-TRONplus, the rough and tumble insulin pump that's **designed for an active life**. H-TRONplus' **simple to USE** menu makes it a natural for those just beginning pump therapy, while its **durable construction** makes it the **first choice for athletes and children**.

Important Safety Information About Your H-TRON and H-TRONplus Pumps

Durable casing
Polymer case is designed to meet the rigors of life by reducing the incident of chipping, cracking or breaking.

No-look tactile buttons
Operate practically every pump function without looking.

Icon driven menu
Easy to learn and use interface eliminates operating system sub-menus and directories.

Soft sound motor
Near-silent motor operation means no "clicking" and delivers exact insulin doses in quantities as small as .005u every 3 minutes.

Soft sound motor No-look tactile buttons
Icon driven menu Durable casing

Welcome! Sign in here to shop on-line at Disetronic Direct!
sign in go
Your email
Your password
Forgot your password?
Register as a new user
PURCHASE NOW Disetronic direct

Exhibit 15: Additional Resources***General*****Nursing Practice Act**

Nursing Practice Act: Texas Statutes Regulating the Practice of Professional Nursing (amended 1997). Austin, TX: Board of Nurse Examiners for the State of Texas.

Available online at: <http://www.bne.state.tx.us/>

Individualized Healthcare Plans

Ornelas, D. (1999). *The School Nurse's Source Book of Individualized Healthcare Plans, Volume II*. North Branch, MN: Sunrise River Press.

Wills, S. (1993). *The School Nurse's Source Book of Individualized Healthcare Plans, Volume I*. North Branch, MN: Sunrise River Press.

Medication Administration

Graff, J., Ault, M., Guess, D., Taylor, M., and Thompson, B. (1990). Medication Administration. In *Healthcare for Students With Disabilities: An Illustrated Medical Guide for the Classroom* (pp.29-41). Baltimore: Paul H. Brookes Publishing.

Skale, N. (1992). Medication Administration. In *Manual of Pediatric Nursing Procedures* (pp. 117-123). Philadelphia: J.B. Lippincott Co.

Smith, G. and Ford, N. (Eds.) (2000). *Manual for the Training of Public School Employees in the Administration of Medication*. Richmond: Virginia Department of Education-Office of Special Education and Student Services.

Available online at: <http://www.vahealth.org/schoolhealth/onlinepubs.htm#nurse>

Documentation

Schwab, N., Panettieri, M.J., Bergren, M. (1998). *Guidelines for School Nurse Documentation: Standards, Issues, and Models*. Scarborough, Me.: NASN.

Mental Health/Psychoactive Medications

American Academy of Child and Adolescent Psychiatry.

3615 Wisconsin Ave, NW

Washington, DC 20016

(202)966-7300

<http://www.aacap.org>

American Psychiatry Association.

DPA Dept. SG

1400 K Street, NW

Washington, DC 20005

(202)682-600

<http://www.psych.org>

Malone, B.L., and Hoagwood, K. (Chrs.) (2000). *Report of the Surgeon General's Conference on Children's Mental Health.*

<http://www.surgeongeneral.gov/cmh/childreport.htm>

National Institute of Mental Health
Information Resources and Inquiries Branch
5600 Fishers Lane, Room 7C-02
Rockville, MD 20875
FACTS ON DEMAND: (301)443-5158
<http://www.nimh.gov>

National Mental Health Association
1021 Prince St.
Alexandria, VA 22314
(800)969-NMHA
<http://www.nmha.org>

Diabetes

<http://www.childrenwithdiabetes.com>

Tappen, D. *Easy as ABC.*

Available free at 1(800)280-7801 from Disetronic; useful for school nurses and personnel unfamiliar with insulin pumps (any model).

Fredrickson,L. and Graff, M. *Pumper in the School!*

Available free at 1(800)826-2099 from manufacturers of the Minimed insulin pump. Written especially for parents, school nurses and personnel. Information specific to the Minimed brand of pump.