



### **ACKNOWLEDGEMENT**

- Kentucky Department of Education (KDE) recognizes the need for a uniform medication administration training program for unlicensed school personnel
- Developed collaboratively between the KDE, the Kentucky Board of Nursing (KBN) and the Kentucky Department for Public Health (KDPH). This training program has been reviewed and approved by the KBN
- Aligns with the guidelines form the American Academy of Pediatrics' (AAP) policy statement:
   <u>Safe Administration of Medication in School</u> (2024), the National Association of School
   Nurses (NASN) school nursing evidence-based clinical guideline: <u>Medication Administration</u>
   <u>in Schools implementation Toolkit</u> (2022), and advisory opinions form the Kentucky Board of
   Nursing
- This curriculum is the official training program for all unlicensed Kentucky public school personnel who accept delegation to perform medication administration





### **Please Note:**

- Due to the vast number of medications that may be prescribed to students, it is not feasible to include every possible medication in our medication administration training program for unlicensed school personnel.
- Our training program is designed to provide comprehensive guidance on the administration of the most commonly prescribed medications in the Commonwealth.
- We strive to equip school personnel with the knowledge and skills necessary to safely and effectively manage these medications, while also emphasizing the importance of consulting with healthcare professionals for any medications not covered in the training.



### **Recommended Individuals**

- Employing schools reserve the right to recommend individuals for this training
- Upon successful completion, the non-licensed school employee will demonstrate competency as determined by the delegating Registered Nurse (RN), Advanced Practice Registered Nurse (APRN), Physician's Assistant, or physician in:
  - Administration of student medication
  - Verification of student instruction on self-administration of medications
  - Administration of emergency medications for students with diabetes, allergic anaphylactic reactions, and seizures



### **Course Objectives**

#### Upon completion of this course, unlicensed school personnel will be able to:

- ✓ Understand how medication administration may be safely delegated
- ✓ Identify the responsibilities of the school nurse and unlicensed school personnel in medication administration
- ✓ Understand local school board policies for medication administration
- ✓ Recognize and apply the six rights of medication administration
- ✓ Identify proper storage of prescription and over-the-counter medication
- ✓ Understand appropriate and correct documentation of medication administration
- ✓ Understand proper action and documentation necessary for refusal and omission of scheduled medications
- ✓ Understand prevention of medication errors and incident reporting
- ✓ Recognize when it is appropriate to contact additional resources (nurses, physicians, poison control and emergency medical services)





### **Course Goals**

- This course is intended for non-licensed personnel who have accepted the delegation to provide medication administration to students in a school setting
- 702 KAR 1:160, Section 5, proof that all unlicensed school personnel who have accepted delegation to perform medication administration in school have completed a training course provided by the KDE
- KBN to ensure compliance with 201 KAR 20:400
- KRS 156.502, the delegation is only valid for the current school year





### **Course Description**



- Module I: Laws, Policies and Procedures
- Module II: Administration of Medications
- Module III: Administration of Emergency Medications
- Module IV: Local School Board Policies and Procedure
- Module V: Understanding HIPPA vs. FERPA for Unlicensed School Personnel



### **Course Completion**

- ✓ Upon successful completion of this course (course exam and skill competency evaluation), the non-licensed school employee will receive a proof of completion certificate
- ✓ This in no way identifies the individual as a Certified Medication Administration Technician
- ✓ This training and competency evaluation must be renewed each school year



### **Medication Administration Competency Verification**

Personnel will be required to score a 100% on the skill competency evaluation and 85% on an open book final exam which will include demonstration of:

- Reviewing student medication history on Medication Administration Record/Medication log for documentation of allergies and other co-existing medical condition
- Using proper hygiene/universal precautions in medication preparation
- Accurately identify student/client medication information by comparing medication label to the transcribed Medication Administration Record/Log
- Correctly administer eye ointment/drops, ear drops and topical ointments/creams
- Correct administration of oral medications
- Correct administration of oral/nasal inhalers
- Correct administration of emergency medications prescribed for the treatment of hyperglycemia, anaphylaxis, seizures and opioid overdose
- Understanding of local school district policies and procedures





# MODULE I: LAWS, POLICIES AND PROCEDURES



### **Laws Related to Medication Administration**

- Potential for unsafe administration of medication in schools or during school sponsored events poses a possible liability for schools
- An understanding of state laws and school district policies and procedures is necessary to reduce the potential liability issues of medication administration in the school setting
- School personnel who accept the delegation of medication administration and successfully complete this course, including demonstrated competency, are protected from liability under KRS 156.502





### Who Can Prescribe Medicine?

- Only physicians, dentists, physician assistants and advanced practice registered nurses (APRN) are licensed to "prescribe" medication
- Nurses are licensed to "administer" medications (KRS 314.011)
- Only registered nurses, APRNs, PAs or physicians in the school setting may delegate the task to administer medications to persons who have completed a course such as this, and have demonstrated competency (KRS 156.502)
- School personnel may be trained to administer medications that are prescribed to treat emergency or life-threatening health conditions such as hypoglycemia, anaphylaxis, seizures and opioid overdoses.

KRS 158.838, KRS 217.186, KRS 156.502, KRS 158.834, KRS 158.836



### **School Nurse**

- May be either an advanced practice registered nurse (APRN), a registered nurse (RN), or licensed practical nurse (LPN)
- Educational Preparedness Differences
  - APRN
  - RN and
  - LPN
- Defined in KRS 314.011 and described in KBN AOS #30, "Roles of Nurses in School Nursing Practice"



### **Advanced Practice Registered Nursing (APRN)**

### **Advanced Practice Registered Nurse**

- Designated nurse practitioner or clinical nurse specialist
  - Provides primary healthcare services to students in accordance with 201 KAR 20:057
  - The APRN may also perform acts within the scope of registered nursing practice
  - An APRN in a local school district could also act as the district's medical director, providing protocols and standing orders for medical treatment





### Registered Nursing Practice



#### **Registered Nurse**

- Qualified by education, experience and current clinical competence to provide school health services/acts including but not limited to the following:
  - Utilize substantial, specialized nursing knowledge, judgment and skill in providing primary healthcare to students including "... initial assessment, management of minor illness and/or referral to other health professionals, monitoring of chronic diseases, health supervision, counseling, promotion of healthy lifestyles, disease prevention, and the coordination of services when specialized care is required." (National Association of School Nurses, Resolution--Primary Health Care, June 1981.)
  - Serve as a health advocate of students, and a consultant to educational staff
  - Serve in family resource and youth services centers as defined in KRS 156.497
  - Provide health teaching with a focus on disease prevention, health promotion and health restoration
  - Monitor the quality of the healthcare services provided for students
  - 201 KAR 20:400 Provide direct clinical services for students with special needs and/or teach and verify competency, supervise and delegate [as defined in KRS 314.011(2)] the performance of select acts to unlicensed school personnel in accordance with the administrative regulation 201 KAR 20:400 governing delegation of nursing tasks to unlicensed persons
  - Participate in the development of policies and procedures to guide nursing practice in school settings, and to address expanding school health services to students, families and communities
  - Delegate select health services to a school employee in accordance with KRS 156.502 and 201 KAR 20:400



### **Licensed Practical Nursing Practice**

#### **Licensed Practical Nursing Practice**

KRS 314.011(10)

- Licensed practical nurses practice under the direction of a registered nurse, physician or dentist and are not licensed for independent nursing practice
- The board recognizes the participation of the licensed practical nurse (LPN) in school nursing practice when the LPN is qualified by education, experience and current clinical competency and practices under the direction and delegation of a designated registered nurse, physician or when applicable, a dentist
- The licensed practical nurse performs acts within the scope of licensed practical nursing practice as defined in KRS 314.011 (10); however, under KRS 156.502 (2) the LPN does not delegate the performance of health services to school employees





### **Administering Medication**

- RNs may administer medications and treatments as prescribed by physicians, physician assistants, dentists and advanced practice registered nurses (APRNs)
- Supervision of the LPN does not require the supervisor to be physically present in the same building.



• However, the LPN shall **not** provide nursing care in the school setting without oversight (supervision) from an RN, APRN, PA, medical doctor (MD) or when applicable, dentist



### **Different Educational Preparation**

Registered Nurse practice and the Licensed Practical Nurse practice

- > Degree of educational preparation and the responsibilities of each are different
  - Both the RN and LPN must hold a current license from the Kentucky Board of Nursing and their licenses must be renewed annually
  - Licensure renewal each nurse is required to complete KBN approved continuing education each year, or provide documentation of a state nursing board approved alternative
- ✓ Licensed practical nurses practice under the direction of a registered nurse, therefore they cannot train or delegate to unlicensed personnel in the school setting. They can assist a medical provider during training.





### **KBN Legal Authority**



KBN has the legal authority (KRS 314.021) to regulate nursing practice in order to safeguard the health and safety of citizens of Kentucky

- Delegation is defined by the American Nurses' Association
  - "The transfer of responsibility for the performance of an activity from one individual to another, while maintaining the accountability for the outcome"
  - School health services (i.e., such as the administration of medications) may be delegated to unlicensed school personnel according to related sections of KRS 156.502
  - KRS 156.502 describes who may delegate health service(s) (physician, APRN or RN), the training and documentation of the training
- √The delegation and training is only valid for the current school year (KRS 156.502 (2)2)



### **Kentucky Administrative Regulation**

#### (KAR) 201 KAR 20:400 Delegation of nursing tasks to non-licensed personnel

- Provides direction on how tasks may be delegated to a non-licensed individual by a licensed registered nurse
- The delegating school nurse will also be responsible for ongoing training and competency evaluations of the non-licensed personnel to safeguard the health and welfare of the students in their care
- Supervision is defined in 201 KAR 20:400 to mean "the provision of guidance by a qualified nurse for the accomplishment of a nursing task with periodic observation and evaluation of the performance of the task"
- The evaluation should include validation that the nursing task has been performed according to established standards of practice
- Even when school personnel may perform the task, whoever delegates the task will retain the responsibility for the outcome
- Supervision of unlicensed school personnel does not require the delegating nurse to be present in the same building.
- ✓ The delegating school nurse should be available by phone for consultation.





### Role of Unlicensed Personnel in Medication Administration

- KRS 156.502 established the definition of "health services" and the provisions for who may provide health services in schools
- School employees may be delegated selected health services according to KRS 156.502





### **Accepting Delegation**

When accepting the delegation to perform medication administration in the school setting:

- The unlicensed school employee performs this function under the supervision of the delegating licensed professional (KRS 156.502)
- Unlicensed school personnel should only accept a delegation that he/she knows is within his/her skill set or knowledge and should always contact the supervising school nurse if unclear about administering a medication
- Unlicensed personnel have the responsibility to follow school district policies and procedures and report to the nurse if they have any reason to believe they have made a medication error
- Errors should be reported as soon as possible



### **Consent to Delegate**

- KRS 156.502
- Requires written documentation of the school employee's consent to the delegation of medication administration verifying that they have received training and demonstrated competency
- The delegation, training and documentation are only valid during the current school year



### **Confidentiality and Privacy**



#### **FERPA**

- Rights and Privacy Act (FERPA) is the federal law that protects the privacy interests of students and their educational records
- Applies to any educational agency that receives funds from the United States Department of Education (USDOE)
- Health records maintained by school employees for Pre-Kindergarten through grade 12 students are protected by FERPA
- Information regarding student health information should be shared with school personnel only on a "need to know" basis
- Health records contain sensitive information and may not be disclosed without parental/guardian permission.
- Certain student health information may be necessary to share with school personnel who may be assisting with medication administration. However, this information is confidential and should not be shared with other students or school employees
- Privacy is a separate legal concept
- If a student tells school personnel how they feel about having a chronic health condition, this information should be shared with the school nurse but not disclosed to those who do not have a "need to know"



## Other Legal Considerations in Medication Administration

- All school districts should have written policies and procedures on medication administration
- The purpose of these policies and procedures are to give guidance to the local school district employees and students
- Each school district employee administering medications should be familiar with their district's policies and procedures on medication administration



### National Association of School Nurses (NASN)

The following are accepted practice guidelines on medication administration from the National Association of School Nurse Association's (NASN) school nursing evidence-based clinical guideline: <u>Medication Administration in Schools implementation Toolkit</u> (2022)

- Administration of Medication
- Student self-medication
- Medication Safety
- Changes in Medication
- Storage and Disposal of Medications
- Medication Administration on Field Trips
- Refusal of Medications
- Medication Errors





### **Administration of Medications**



#### **Prescribed Medication**

- Prescribed medication must be sent to the school in the <u>original</u> labeled container and the label shall include:
  - Name and address of the pharmacy
  - Name of the student
  - Name of the prescribing health care provider
  - Date the prescription was dispensed
  - Expiration date of the medication
  - Name of the medication, dosage and strength of medication
  - Route of administration
  - Frequency of medication
- An authorization form completed by the parent/legal guardian must be on file in the student's cumulative health record or the Kentucky Student Information System (preferred) and is only valid for the current school year

### **Points to Note**



It is important to note that a prescription label alone does not meet the legal requirement for a medical provider's order.

- A "medical order" is a directive issued by a licensed healthcare provider for the administration of a drug or treatment within the healthcare setting, which includes schools. This order provides clean clinical intent and authorization for treatment
- A "prescription drug order": refers to a written, electronic or verbal instruction from a licensed practitioner to a pharmacist, directing the dispensing of a medication to a patient.
- A "prescription label" is the printed label affixed to a medication container after a prescription drug order has been processed by a pharmacist. While it includes important information such as the patient's name, medication details, dosage and prescribing provider, it is not a written order, signed by a qualified health care provider that authorizes administration of the medication. It may reflect what medication was dispensed, but it is not sufficient on its own as a provider's order for administration.

### Non-prescribed/Over the Counter (OTC) Medications

- Non-prescribed/OTC medications require a written order from the student's medical provider with instructions regarding the medication dose, route and when to administer the medication
- An authorization form completed by both the healthcare provider and the parent/legal guardian must also be on file in the student's cumulative health record or in the Kentucky Student Information System (preferred)
- Medications must be provided by the parent/legal guardian in the original container which includes
- An OTC medication shall not be administered beyond its expiration date.
- Provider and parental authorizations are only valid for the current school year





### **Student Self-Medication**



#### Student self-medication

- Allowed in certain situations, with a written health care provider's authorization, that allows a student to responsibly carry self-administered medication (e.g., Epipen® or asthma inhaler, diabetic or seizure care)
- An authorization form must be completed by the parent/guardian and health care provider and on file in the school.
- This authorization must be renewed each school year.
- Documentation from the prescribing health provider shall include:
  - Student is capable of administering the prescribed medication
  - Name and purpose of the medication
  - Prescribed dosage of the medication
  - Times at which or circumstances under which the medication may be given and the period of time for which the medication is prescribed
- Students may not share any medication with another student. It is recommended as best practice that self-administered medications be documented on the Medication Administration Record. If the student uses his/her medication inappropriately or more often than prescribed, the parent/guardian should be notified
- Only share student health information with the student's teachers or school staff on a "need to know" basis



### **Medication Safety**

- The first dose of any new medication should be given at home and not at school
- When possible, all medication should be brought to the school by a parent or guardian
- If medication must be transported to the school by the student, it should be transported in the original container and in a sealed envelope with the student's name on the outside and given to the appropriate school personnel (school nurse or designated school personnel)
- According to school district policy and procedures, prescribed medication should be counted and the number of pills received should be noted on the Medication Administration Record or in the Kentucky Student Information System (preferred)
- Medication shall only be administered according to the health care provider's instructions on the prescription label. (May apply clear tape over the label to maintain legibility of label.)
- Discrepancies that exist between the information on the Parent/Guardian Authorization Form and the prescription label should require one of the following:
  - New Authorization Form completed by the parent/guardian and medical provider
  - New prescription bottle or label issued by the dispensing pharmacy
- Medications shall not be given beyond the date specified on the authorization form, or beyond the expiration date on the label



HEALTH

### **Changes in Medication**

- The authorization to administer medication is only valid for the current school year or until treatment changes
- A new Authorization for Medication Administration signed by both medical provider AND parent/guardian form must be obtained whenever there is a change to the medication, dosage, time and/or frequency and a new prescription bottle from the pharmacy indicating the prescription change
- Nurses may only accept medication orders as prescribed by a physician, advanced practice registered nurse (APRN), physician's assistant (PA), or dentist
- Nurses may not accept requests from parents to change a prescribed medication dose without first contacting the prescribing health care provider and obtaining updated orders for the medication

### Storage and Disposal of Medications



- Except for emergency medications (Diastat®, Glucagon® and EpiPen®) specified in an emergency care plan, all medications should be kept in an appropriately labeled, secure, locked container or cabinet accessible only to the responsible authorized school personnel
- Medications requiring refrigeration shall be kept in a separate refrigerator in a supervised area or locked container that can be stored with food in a supervised area
- Temperature of that refrigerator should be checked daily and recorded according to agency policy. Temperatures should be maintained between 33-and 45-degrees Fahrenheit
- For students receiving medication throughout the school year, it is recommended that no more than a month's supply of medication be stored on school property



### Discontinued, Unused, and Expired Medications

- When medications are no longer needed, the school should notify the parent/guardian and request that it be picked up by the parent/guardian
- For disposal of unused medication or expired medication that has not been picked up by parent/guardian:
  - Pills: pour glue into pill container, after glue is hardened, container may be thrown into garbage can
  - Liquids: pour cat litter or sand into container and wait for it to set-up, after it becomes hardened, it may be thrown into garbage can
  - Disposal of medication must be documented on the student's medication record to verify it was destroyed, sign, date and have a witness also sign and date
  - Items such as inhaler canisters may be placed in a sharps container or disposed of according to the school district's Bloodborne Pathogen Occupational Safety and Health Administration (OSHA) plan



### Field Trip Medication Administration

- If a student is attending a field trip away from school during his/her scheduled medication time, school personnel with current training on medication administration may be designated to administer the medication while on the field trip
- Notification and preparation for administering medications during a field trip should begin
  well in advance of the day of the field trip
- Student medication should not be repackaged into envelopes or other containers for field trips
- The school should request the parent request an extra, empty bottle to store the medication on field trip day
- The medication bottle should also have a pharmacy prescription label attached
- Consult local school district policies and procedures for field trip medication administration
- Reminder: Training and Delegation expires on June 30<sup>th</sup> of each school year
  - In the event of a field trip lasting longer than the June 30<sup>th</sup> deadline, a waiver may be granted to extend delegation on a case-by-case basis
  - Please contact KDE school health team to request consideration of a waiver





### Kentucky Laws: KRS 156.502 and KRS 158.838

- Kentucky's law (KRS 156.502 and KRS 158.838)
  - Addresses the required provision of "health services" to students in the "school setting or a school sponsored activity"
  - According to federal laws, schools that received federal funds are subject to Section 504 and the American with Disabilities Act (ADA) of 1990
  - Under Section 504 regulations, schools must provide equal access including school health services on instate or out of state school-sponsored field trips
  - Kentucky nurse's provision or delegation to a school employee of health services to students on out-or-state, school-sponsored field trips will be governed by the state boards of nursing where the care is provided
  - This will include all the states along the travel route as well as the final destination of the field trip
- More information about medication administration rules on out-of-state field trips may be found below:
  - NASN Guidance on Out of State Field Trips



### Refusal of Medications

- When school personnel are unable to grant the request from a parent/legal guardian to administer medication to a student, the delegating school nurse or physician should be notified
- Some of the circumstances may include:
  - Medication was sent to school out of the original container
  - Medication is prescribed twice daily and can be administered before school and after school hours
  - Medication is prescribed three times daily and can be given before school, after school and before bedtime
  - Student has requested over-the-counter medication every day for several days (which may be beyond school district policy of no more than 3 consecutive days without their medical provider's authorization)
  - No written authorization is on file
- Other unusual circumstances that are not listed above will require consultation with the supervising school nurse or health care provider



### Refusal to take Prescribed Meds

#### A student may refuse to take prescribed medications

- As best practice and according to the student's developmental level, the student should understand the symptoms for which the medications are prescribed and know any common side effects
- The student should be able to verbalize their understanding that these
  medications are considered a part of treatment and that the parent and/or
  prescriber will be notified should he/she refuse the medication





### **Medication Administration Record**

- Refusing medications is **not** considered a medication error and should be documented on the Medication Administration Record as "refused medication"
- This shows that the individual has been offered the medication as ordered by the physician
  - When a student refuses medications, the school nurse and parent should be notified as soon as possible



### **Medication Errors**

#### **Preventing and Reporting Medication Errors**

District policies and procedures should state what documentation is required if an error in medication administration has been made.

Any error must be documented on the school district's "medication error" or incident form and reported as soon as possible to the school nurse, school principal and parents

A medication error occurs when one of the "six rights of medication administration" have been violated. The six rights include:

- Administering the wrong medication
- Administering the wrong dose of medication
- Administering medication at the wrong time
- Administering the medication in the wrong way (e.g., ear drops administered to eye)
- Administering medication to wrong student
- Failing to document that medication was given or inaccurate documentation of medicine given Accidents do happen. In the interest of the student's health and safety, report all errors promptly!





### **Preventing Medication Errors**

- Knowing the following before administering medications will help prevent medication errors:
  - Name of medication (the generic and real or "trade" name)
  - Purpose
  - Potential side effects
  - Special instructions (if appropriate)
  - Health care provider and emergency contact names and phone numbers



### **Medication Error Occurrence**

When a medication administration error occurs, follow these guidelines:

- Keep the student in the health room
- If the student has already returned to class, have someone accompany the student back to the health room
- Observe the student's status and document what you see
- Identify the incorrect dose or type of medication taken by the student
- Notify the principal and supervising school nurse immediately if medication was given by non-licensed personnel (The supervising nurse will contact the parents of the student and/or health care provider)



### **Adverse Reactions**

- Medication errors may result in adverse reactions to the student
- These reactions could range from a rash to a life-threatening situation
- Always check the medication label when:
  - Removing the medication from storage
  - Removing the medication from its container
  - Returning the medication to storage



### **Poison Control Center**

- If contacting the Poison Control Center for instructions:
  - Give the name and dose of the medication taken in error
  - Give the student's age and approximate weight, if possible
  - Give the name and dose of any other medication the student receives, if possible
  - Follow instructions from the Poison Control Center, if possible. If unable to follow their instructions, explain the problem to the Poison Control Center to determine if the student should be transported for emergency care
- Complete a Medication Administration Incident Report form
  - Carefully record all circumstances and actions taken, including instructions from the Poison Control Center or the student's health care provider, and the student's status
- All reports are to be filed and kept according to district policy
- Errors made in recording medications on the Medication Administration Record should be marked "void," initialed and dated. Whiteout may not be used



# MODULE II: ADMINISTRATION OF MEDICATIONS





### **Medication Classifications**

- Classifications of medications include prescribed medications, controlled medications, non-controlled medications and over-thecounter (OTC) medications
- Prescribed medications are medications that a licensed practitioner has ordered for treatment of a student's diagnosis or symptoms
  - These medications may include controlled/scheduled or noncontrolled/scheduled
- Prescribed medications may be ordered on an as needed basis (PRN) or on a routine scheduled basis



## Medication Classifications, Continued

#### Medications may be controlled or non-controlled

- It is very important that a person administering medications compares the medication label with the medication record including the student's name, time of administration, how the medication is to be given, and the dosage for administration
- All medications must be given in accordance with school district policies
- It is recommended that school employees administering medication have access to an updated drug book or an online medical website for review of any newly prescribed medications and/or over the counter medication when questions arise
- Student health information is important for student safety in medication administration and management
- This information includes, but is not limited to student name, date of birth, sex and any allergies



# Standing Orders and School Protocols

- Standing orders are essential for administration of over-the-counter (non-prescription) medications in schools.
- Standing orders are written instructions from a licensed healthcare provider that authorize school nurses and unlicensed personnel to administer specific medications under defined circumstances.
- Standing orders should include the following:
  - Identification of Authorized Personnel: Clearly specify which unlicensed school personnel are authorized to administer the medications
  - Medication Details: Include the name, dosage and administration route of the medication
  - Indications for Use: Provide step-by-step instructions for administering the medication, including any necessary follow-up actions
  - Documentation Requirements: Outline procedures for documenting the administration of the medication and any subsequent actions taken.



# School Policies and Procedures Related to Medications in the School Setting



- Compressive district policies and procedures regarding stock medications for both over-the-counter or non-prescription and emergency medications are crucial for ensuring the safety and wellbeing of students. Policies should include:
  - Clear Guidelines
  - Training Requirements
  - Emergency Protocols
  - Documentation and Reporting
  - Accessibility

For additional information, please refer to the KDE Medication Administration Training Manual

✓ Keep in mind a medical provider's order and signed parental/guardian consent must be on file



### Prescribed Medications Administered at School

The prescribed medication to be administered at school must be in the original container from the providing pharmacy. The pharmacy label must include:

- Name, address, and phone number of licensed pharmacy
- Date
- Prescription identifying number
- Patient's full name
- Name of drug, strength and amount
- Directions for use
- Required controlled substances transfer warnings, where applicable
- Expiration date
- Identity of dispensing pharmacist
- Storage requirements, when applicable, and
- Auxiliary labels, when applicable
- Reminder, a pharmacy label does not meet the requirement for a medical provider's order



# Controlled/Scheduled Medications

- "Controlled scheduled medications" are medications that are potentially addictive and that are:
  - Regulated under the Controlled/Scheduled Substance Act of 1970
- Controlled/scheduled medications cannot be obtained without a written prescription from a licensed practitioner (e.g., Percocet, Valium, Ritalin®, Tylenol® with Codeine, etc.)



## **Handling of Controlled Medicine**

It is very important that controlled/scheduled medications be handled according to school district policies and procedures. Policies and procedures regarding these medications should include the following:

- Medications should be kept under double lock and key, separate from other medications
- Medications should be signed out each time a dose is administered
- The RN or individual providing the medication administration should count and record the number of remaining pills on the student's medication record
- Medications should be disposed of according to the medication storage and disposal by U.S. Food and Drug Administration



# Non-controlled/Scheduled Medications

- Non-controlled medications include prescribed medications that are used to treat medical conditions
- All prescribed, non-controlled/scheduled medications require an order from a licensed practitioner
- All non-controlled/scheduled medications are kept locked, according to school district policies and procedures
- School district policies should address student safety in relation to secure storage of medication





# Over-the-Counter (OTC) Medications



- OTC medications are administered to students, according to school district policy
- OTC medications require a completed authorization form by the parent/legal guardian AND the medical provider
- Approval from the student's individual health care provider is required for any OTC use
- Examples of these medications:
  - ibuprofen (Motrin®)
  - acetaminophen (Tylenol®)
  - cough medication (Robitussin®)
  - antibiotic ointment (Neosporin® or Bacitracin®)
  - antacids (Tums® or Rolaids®)
- Documentation of OTCs on the student's Medication Administration Record is required



# Understanding Effects of Medications and Adverse Drug Effects

- It is very important to be familiar with any medication that is being administered
- An adverse effect is an unwanted, unexpected and/or dangerous reaction to a drug
- Pharmacies are required to provide a "medication" education sheet with each drug dispensed
- The sheet contains the most common adverse effects of that medication



### **Adverse Effects of Medication**

Another way to learn the adverse effects of medications is to review the medication in a current drug handbook

- Medication handbooks are updated on an annual basis and contain the most current Information on newly developed drugs, to include:
  - Recommended dosage
  - What diagnosis or symptom the drug treats
  - How the drug is absorbed
  - The potential side effects/adverse effects of the drug.
- Medication information is also available online at Drugs.com



# **Allergic Reactions**

An allergic reaction occurs when the immune system overreacts to a harmless substance known as an allergen (American Academy of Allergy, Asthma & Immunology)

In the case of medications, the drug itself may be the substance that causes the effect. Other allergic reactions could arise from environmental factors such as exposure to pollen, dust mites, animal dander, mold spores, insect stings, foods, latex, etc.

- Allergic reactions may have many symptoms that could appear immediately or not for several days or weeks
- Examples of an allergic reaction
  - Redness
  - Rash
  - Hives
  - Shortness of breath
  - Itching
  - Swelling
  - Yellowing of the skin or fever





# Medication Administration and Student Observation

Observing the student after a medication has been administered is crucial in identifying any adverse reactions to that medication

- If a student vomits after taking a medication, report to the supervising school nurse
  - 1. The student's name and age
  - 2. Medication name and dose
  - 3. Time interval between the medication administration and when vomiting occurred

Severe adverse reactions should be treated as emergencies and unlicensed school personnel should be familiar with school district policies and procedures regarding how emergencies are to be handled



### **Medication Administration**

When administering medications, school staff should ensure to follow the Six Rights of Medication Administration:

- 1. Right Student -Always have two ways of identifying the student when administering medications.
- 2. Right Medication Verify that the name of the medication on the label on the medication container matches the information on the Medication Administration Log
- **3. Right Dose** Read the label on the medication container and compare it to the information on the Medication Log. Be sure to note the dose of the medication to be given.
- **4. Right Route** Read the label on the medication container and compare it to the information on the Medication Log. Be sure this information matches.
- **5. Right Time** Follow the instructions on the Medication Log. Compare with the instructions on the medication container label. Follow school district policy for the time frame acceptable to give the medication (Example: 30 minutes before or 30 minutes after the scheduled time.)
- **6. Right Documentation -** Each medication given must be documented when it is given. (Remember- If a medication has been given but not documented, there is the potential of overdosing.)

#### Always Check the Medication:

- When removing the medication from storage (drawer/shelf)
- When removing the medication from the container/package
- When returning the medication container to storage (drawer/shelf)





# **Procedure for Administering Medications**

All medication administration procedures must include these basic steps regardless of the type of medication to be administered:

- Student reports to office or call student to the office
- Verify identity of student (using two methods of identification)
- Identify yourself and what you will be doing
- Assemble necessary equipment
- Wash your hands before and after administering medications



# **Administering Medication Safely**

- Only prepare and administer one individual's medication at a time
- Never document the medication has been administered before the student receives it
- To safely manage and administer medications to students, the "six rights of medication administration" must be followed



# **Best Practices When Administering Medications**

- As best practice and according to the student's developmental level, the student should understand why the medication is being administered, and should be made aware of any common side effects
- The student should also be able to verbalize understanding that these medications are considered a part of treatment and that the parent/guardian will be notified should he/she refuse the scheduled medication
- Medication Administration Documentation (Medication Log/Medication Administration Record, Electronic Record)
- The use of mediplanners (pill organizers) for student medications in schools is generally not recommended by major health organizations due to concerns regarding safety, accuracy, and legal liability. Please refer to the <a href="KDE Medication Training Program for Unlicensed School Personnel Training Manual">KDE Medication Training Program for Unlicensed School Personnel Training Manual</a>



### **Medication Records**

The medication record (log) may be used to also make notes of additional comments of any unusual circumstance related to the student receiving the medication

- This medication record becomes a permanent part of the student's file (in student's cumulative health folder) and provides legal documentation for those who administer medications to students
- When a student receives a medication, the actual time must be recorded on the medication record (initial if on paper)
- This must also be done when a medication is missed due to an absence, field trip or
  if the student refuses to take the medication
- The medication administration record (log) is a legal and permanent document
- Use only ink and never use "whiteout" if using a paper log. If a mistake is made in the recording of the time of the medication administration on a paper log, draw a single line through the time, write "void" and initial beside the time



# Comparing Information Prior to Administering Medications

- Compare the information on the medication label with the information on the medication log
- This information must match whenever a change in the dose of the same medication is ordered by the prescribing medical provider, a new medication log must be created
- Contact the school nurse immediately and do not give the medication if the medication label is missing or the label cannot be read



# **Record Keeping**

- Record-keeping is very important when medication is given at school
- A medication "log" (medication administration record) must be kept for each student who takes medications at school
- The log can be kept on paper or in the Kentucky Student Information System (preferred) for each student
- When using paper documentation, multiple medications should not be charted on the same medication log. Each prescribed medication must be documented on its own log.
- The log contains the student's name, the prescribed medication and dosage, the route the medication is to be given, the time the medication is scheduled to be given and any student allergies (allergies in red ink if on paper)
- It is also recommended that a picture of the student be attached to the document if paper is used for identification purposes



## **Kentucky Student Information System (KSIS)**

Medication administration may also be documented in the Kentucky Student Information System. This is a permanent record for medication administration.

Advantages to electronic medical records include:

- Records follow student electronically when transferring from school to school within the district
- Discontinuation of paper logs/charts to file or store
- Easier case management of students with chronic health conditions
- Ability to track health office visits and outcomes
- See local school district medication administration form and follow local school district policies for documentation



### Forms of Medication Administration

Medications may be administered via the following routes:

- Orally (Capsules, Tablets, Solutions, Syrups, Elixirs)
- Topically
- Inhalers and Nebulizers
- Nasally
- Injections



# **Hand Hygiene**

- Before administering any medication to a student, always wash your hands
- If the student will touch the medication, they should also wash their hands
- Good hand washing techniques include washing the hands with soap and water
- Alcohol-based hand sanitizers are an excellent alternative to hand washing when soap and water are not available. However, if the hands are visibly soiled, hands should be washed with soap and water



# **Hand Washing Steps**

- Wet hands
- 2. Apply soap and rub hands together for 20 seconds
- 3. Scrub backs of hands, wrists, between fingers and under fingernails
- 4. Rinse
- 5. Towel dry
- 6. Turn off water with towel

Alcohol-based hand sanitizers are an excellent alternative when soap and water are not available

However, if hands are visibly soiled, soap and water must be used

How to use an Alcohol-Based Hand Sanitizer:

- 1. Apply a half a teaspoon (nickel size) of the sanitizer to the palm of the hand
- 2. Rub hands together, covering all surfaces until they are dry (approximately 20 seconds)



# **How to Avoid Touching Medications**

- Pour pills, tablets or capsules into the bottle cap first then pour them into the disposable medicine cup. (This technique allows for more control in pouring and avoids having to remove extra amounts.)
- A clean paper towel or paper cup may also be used if the medicine is only one capsule or tablet
- Have the student pick up the medication themselves and put it in their mouth
- ✓ Some children do not have the developmental skills to put tablets or capsules into their mouth
- ✓ If you must put the medication directly into the child's mouth, use disposable gloves Note: The gloves are considered contaminated after use. Be aware of any allergies to latex gloves



### **Oral Medication Administration**

When administering oral medications school health staff should:

- 1. Follow the Six Rights of Medication Administration; **Right** student, **Right** medication, **Right** dose, **Right** time, **Right** route and **Right** documentation
- 2. Pour medication into the bottle lid and then into the disposable medicine cup
- 3. Provide the student with 4 to 6 ounces of water or other liquid that allows for easy swallowing
- 4. Verify the student has swallowed the medication
- 5. Document on the medication administration record (medication log) that you have administered the medication.
- 6. Replace the medication in locked storage area.
- 7. Observe the student for any medication reaction as appropriate



#### **Oral Medications**

Oral medications include solid and liquid forms of mediation. Solid forms include tablets or capsules, and liquid forms include syrups/elixirs and suspensions.

- Tablet forms: regular, chewable, oral disintegrating (sublingual and buccal) and scored
- Tablets are delivered in either enteric coated or un-coated forms as certain medications can cause irritation to the stomach. These tablets are "coated" so that they cannot dissolve in the stomach, protecting the stomach from irritation as the "coating" dissolves in the small intestine instead of the stomach.
- Regular tablets are simply taken with liquid
- Scored tablets are designed so that they can be cut into smaller doses with a special cutting tool
- Tablets that are not clearly designated as chewable, sublingual, or buccal, should be swallowed whole
- Chewable tablets should be chewed before they are swallowed
   Oral medication should not be crushed without a licensed practitioner's order. These tablets should not be split or crushed



#### **Cutting or Crushing Tablets**

- Cutting, crushing or sprinkling of the medication are examples of changing the form of an oral medication
- If the form of an oral medication must be changed, (e.g., cutting, crushing or sprinkling) the prescribing health care provider will indicate this in the written prescription and on the pharmacy label
- Scored tablets that must be cut in half to obtain a smaller dose should be cut by either the school nurse or the student's dispensing pharmacist
  - For example, the medication is packaged in 10 milligram (mg) tablets and the health care provider's order or prescription indicates the student is to receive 5 milligrams or half a tablet. The school nurse, licensed health care provider or dispensing pharmacist should cut the scored tablets



## **Oral Medication Dosage**

- All oral medications should be given with at least four to six ounces of water or other liquid that allows for easy swallowing
- After the student has received the medication, it is very important to make sure they have swallowed the medication
  - Ask the student to open their mouth and raise their tongue
  - Inspect cheeks, under tongue, roof of mouth and teeth for hidden medication
  - Check orthodontic braces as well
- This practice will ensure students are not hoarding medications (sometimes called "cheeking")



#### **Oral Disintegrating Tablets**

#### Oral disintegrating tablets:

- Oral disintegrating tables are medications designed to dissolve in the mouth (do not chew)
- The two types of oral disintegrating tablets usually seen in the school setting are sublingual and/or buccal
- Sublingual medications are placed under the tongue to be dissolved and absorbed
- Buccal medications are placed inside the cheek and along the gum line to be dissolved and absorbed



#### Capsules

**Capsules** are coated oral medications. The coating allows the medication to dissolve over a period of time in the stomach or the intestines, but not in the mouth

- Most often, the prescription calls for capsules to be swallowed whole, just like tablets
  - Gel coated capsules are not to be broken
- There are also capsules designed to be broken apart and sprinkled onto soft food, like applesauce. These are called a "sprinkle" and are most often given to students who have asthma or seizures
  - If a capsule should be "sprinkled," the directions on the prescription will specifically say to do so
- Capsules may be coated with substances that permit delayed release in the small intestine in small amounts over a prolonged period
- Do not break or crush any medications considered slow release, sustained release, long-acting, extended or controlled release (usually identified with SR, LA, EX or CR)



#### **Liquid Oral Medications**

#### Syrups, Elixirs and Suspensions

- Syrups and elixirs are clear liquids
- Suspensions are liquids that are not clear
- Suspensions contain medication that doesn't dissolve completely in the liquid and usually need to be refrigerated
- Because suspensions can separate, they always need to be shaken at least 15 seconds before being measured and given to the student



#### **Measuring Liquid Medication**

- Liquid medications must be measured to ensure accurate dosage. Always use a plastic marked medicine cup, oral syringe or dropper
- When pouring liquid medications, always place bottle cap upside down on a solid surface to avoid contaminating the inside of the bottle cap
- Pay close attention to the medication order (dosage on the bottle) and find the corresponding markings on the medicine cup or dropper
- When using a plastic marked medicine cup, place the cup on a solid, level surface and look at the medicine cup at eye level to ensure the correct amount has been poured
- If a student is to receive more than one liquid medication at the same time, each liquid medication must be measured separately
- When pouring the medication out of the container, hold the bottle so the label is in the palm of your hand to
  prevent spillage and causing the label to be illegible
- Note: Liquid suspensions require shaking before being administered. This information will be on the label of the medication bottle



## **Topical Medications**

Topical medications include eye drops or ointments, ear drops or ointments, and creams or ointments applied to the skin. Gloves should be worn when administering any of the following medications:

- Ointments (salves) are a semisolid preparation, usually containing a medical substance, used for external application on the skin
- Creams are a fluid mixture of a thick consistency, usually applied to the skin or body surface
- Drops are a liquid form of medication given through a dropper when a very small dose of medication is required
- Drops are usually prescribed for the eyes (ophthalmic) or ears (otic)
- Hands should be washed before and after use of gloves. Be sure to verify whether the student is allergic to latex prior to using a latex gloves.



### **Topical Ointment and Cream Administration**

Follow the Six Rights of Medication Administration: **Right** student, **Right** medication, **Right** dose, **Right** time, **Right** route and **Right** documentation

- 1. Put on gloves
- 2. Loosen cap on the medication and squeeze a small amount directly onto cotton tipped applicator (Q-tip®)
- 3. Apply ointment directly to the area or give applicator to student for them to apply
- 4. Cover Area, if indicated
- 5. Remove gloves
- 6. Document on the medication administration record (medication log) that you administered the medication
- 7. Replace medication in locked storage area
- 8. Observe the student for any medication reaction as appropriate



#### **Eye Drops and Eye Ointment Administration**

Follow the Six Rights of Medication Administration; **Right** student, **Right** medication, **Right** dose, **Right** time, **Right** route and **Right** documentation

- 1. Know which eye is to be treated. Initials may be used to specify the eye that requires treatment, O.D.= right eye; O.S.= left eye; O.U.= both eyes
- 2. Put on gloves
- 3. Stabilize the head by having the student tilt their head back or have them lie down
- 4. Have the student look upward
- 5. Gently pull the lower lid away from the eye to form a "pocket"
- 6. Place drop(s) into pocket area allowing the drop to fall into the pocket. Do not place medicine directly on the eye itself. Make sure the bottle tip does not touch the eye or eye lid. If an ointment is used, apply a thin strip into the "pocket" without touching the eye or eyelid
- 7. Have the student close their eye(s) for a few moments
- 8. Dab away excess with tissue
- 9. Remove gloves
- 10. Document on the medication administration record (medication log) that you administered the medication
- 11. Replace medication in locked storage area
- 12. Observe the student for any medication reaction





### **Ear Drop Administration**

Follow the Six Rights of Medication Administration: **Right** student, **Right** medication, **Right** dose, **Right** time, **Right** route and **Right** documentation

- 1. Put on gloves
- 2. Loosen lid on medication and squeeze rubber stopper to fill the dropper
- 3. Stabilize the student's head by tilting it toward the opposite shoulder and turn head to the side
- 4. Gently pull the top of the ear (cartilage) back and up and hold
- 5. Place the prescribed number of drops into the ear canal without touching the dropper to the ear
- 6. Have the student to remain in the same position for a few minutes to avoid leakage
- 7. Remove gloves
- 8. Document on the medication administration record (medication log) that you administered the medication
- 9. Replace medication in locked storage area
- 10. Observe the student for any medication reaction as appropriate



#### **Inhalers and Nebulizers**

- Inhaled medications may be delivered in a fine mist by spray bottle/inhaler, an oral inhaler or nebulizer machine.
- Most inhalers are hand-held portable devises that deliver medication at a metered (pre-measured) dose
- Common inhaler problems can include:
  - Not taking the medication as prescribed
  - Incorrect activation which may occur by not following the recommended sequencing of inhaling and squeezing the canister
  - Forgetting to shake the canister if the canister is not shaken multiple times, the correct amount of medication may not be delivered
  - Not waiting long enough between puffs
  - Failure to clean the valve if debris is present, this will cause delivery failure of the correct amount of medication
  - Failure to observe whether the inhale is releasing a spray if not, call the delegating school nurse
- A student's need for bronchodilators (inhalers) more than every four hours can signal respiratory problems. Call
  the supervising RN, APRN or physician if this occurs



#### **Liquid Medication Administration**

When administering liquid medications school health staff should:

- Follow the Six Rights of Medication Administration; Right student, Right medication, Right dose,
   Right time, Right route and Right documentation
- 2. Have the container at eye level when measuring
- 3. Hold the bottle so that the label is in the palm of the hand, pouring the liquid into a plastic marked cup. Pay attention to the markings on the container to make sure the dose is accurate
- 4. Verify the student has swallowed the medication
- 5. Document on the medication administration record (medication log) that you have administered the medication
- 6. Replace the medication in locked storage area
- 7. Observe the student for any medication reaction as appropriate

Additional tips on how to use liquid measuring devices may be found on the **Safe Medication website** 



### **Spray Inhalers**

- A nasal spray inhaler is a medication delivered as a spray directly into the external nares (nostrils) and may be prescribed for allergies
- Oral inhalers deliver medication directly to the lungs through the mouth by squeezing the canister or by direct inhalation
- The nebulizers (both nasal and oral) produce a fine spray mist by rapidly passing air through a liquid that is inhaled
  - Nebulizer medication use may be prescribed for treatment of asthma
- Pre-mixed nebulizer medications are already prepared to be used with a nebulizer. Consult the equipment product information on how to use the nebulizer. Individualized training is advised to ensure understanding of medication and use of equipment





#### **Nasal Spray Administration**

Follow the Six Rights of Medication Administration: Right student, Right medication, Right dose, Right time, Right route and Right documentation

- 1. Have the student blow their nose
- 2. Have the student block one nostril with a finger
- 3. Insert the nozzle of the inhaler into the other nostril
- 4. Aim inhaler so that the spray is directed upward and outward away from midline
- 5. Instruct student to exhale
- 6. Squeeze the inhaler quickly and firmly, then instruct the student to inhale
- 7. Repeat as directed for the other nostril
- 8. Document on the medication administration record (medication log) that you administered the medication
- 9. Replace medication in locked storage area (unless it is an emergency medication)
- 10. Observe the student for any medication reaction as appropriate



#### Metered Dose Inhalers (MDI)

A metered dose inhaler is a pressurized canister of medicine that is sprayed through a mouthpiece. You can help a student follow these simple steps to properly use their MDI.

Follow the Six Rights of Medication Administration; **Right** student, **Right** medication, **Right** dose, **Right** time, **Right** route, and **Right** documentation

- 1. Shake the inhaler several times.
- 2. Check that canister is firmly positioned in plastic holder (and attach spacer if required.)
- 3. Have student slightly tilt their head backward.
- 4. Have student breathe out (exhale) completely.
- 5. Have student place the mouthpiece between the teeth and close lips around it.
- 6. Squeeze the inhaler to discharge the medicine and have student begin to inhale immediately.
- 7. Instruct student to breathe in slowly and deeply for three to five seconds. Once inhaled, have student remove the inhaler from their mouth, hold their breath for 5-10 seconds and then exhale.
- 8. Rest for a minute, then repeat this sequence for each prescribed "puff."
- 9. Document on the medication administration record (medication log) that you administered the medication.
- 10. Replace medication in locked storage area.
- 11. Observe the student for any medication reaction as appropriate.

Always consult the student's asthmas action plan/prescription for instructions on how to administer the inhaler





#### Administration of Insulin via Injection

- Unlicensed school personnel may be delegated and trained to administer or assist with self-administration of subcutaneous insulin injections (KRS 158.838).
- Training and delegation shall be according to the requirements stated in KRS 156.502





# Module III: Emergency Medication Administration

#### **Stock Emergency Medications**

- In the state of Kentucky, administration of stock medications in the school setting are regulated by statutes KRS 158.838, KRS 217.186 and KRS 158.836.
- These laws state that schools are authorized to maintain stock epinephrine for the treatment of anaphylaxis.
- The statutes permit schools to stock naloxone for opioid overdoses; and
- The statutes support the possession and use of emergency asthma medications by students with life-threatening allergies or conditions.
- Schools are encouraged to keep the following in multiple locations within the school premises in the event of an emergency: epinephrine devices, bronchodilator rescue inhalers/nebulizer treatments, and Glucagon.
- It is important to note that KRS 158.836 limits liability for schools and personnel administering these medications in good faith.



## Standing Orders and Protocols for Stock Emergency Medications

- Written standing orders from a licensed healthcare provider are essential for ensuring emergency medications are administered safely and effectively in schools.
- Protocols should be developed in collaboration with healthcare providers and should be regularly reviewed and updated to reflect the current best practices and legal requirements. This ensures the protocols remain effective and compliant with the latest guidance from the Kentucky Board of Nursing, the American Academy of Pediatrics, the National Association of School Nurses and the Kentucky Department of Education.
- Developing compressive district policies and procedures regarding stock emergency medications is crucial for ensuring the safety and well-being of students. Policies should include clear guidelines, training requirements, emergency protocols, and documenting and reporting procedures.
- The Kentucky Department for Public Health (KDPH) has issued statewide protocols for Naloxone, Epinephrine and bronchodilator rescue inhalers (BRI) in Kentucky schools. Please visit their corresponding webpages for the most up-to-date information regarding these medications.



## Commonly Prescribed Emergency Medications

- Adrena Click
- Auvi-Q
- Diastat
- Epipen
- Glucagon/Baqsimi
- Klonopin

- Midazolam/Nayzilam
- Narcan
- Neffy
- Solu-Coref
- Valtoco

See Module III for more information on these medications





#### **Asthma**

- Asthma is a chronic respiratory condition that affects the airways in the lungs, causing episodes of wheezing, breathlessness, chest tightness, and coughing.
   Prompt and appropriate administration of asthma medication is critical in preventing and managing asthma attacks in the school setting.
- In Kentucky, KRS 158.838 allows students to carry and self-administer asthma medication, including rescue inhalers, with appropriate documentation. Unlicensed school personnel may administer or assist with medication administration under the training and delegation of a licensed health professional, as outlined in KRS 156.502 and 702 KAR 1:160.



#### **Asthma Action Plan**

- Every student with asthma should have an asthma action plan (AAP) on file. This plan should be developed in conjunction with the parent/guardian, medical provider and school nurse. This plan should outline:
  - Daily management strategies
  - Medication instructions
  - Emergency procedures
  - Triggers to avoid
- Unlicensed personnel should be familiar with the student's AAP and follow it precisely



## Responsibilities of the Unlicensed School Personnel

- Recognize symptoms: wheezing, coughing and shortness of breath, chest tightness
- Assist with or administer the medication as directed in the AAP
- Ensure proper inhaler technique, especially when not using a spacer
- Stay with student and monitor their condition
- Document medication administration per district policy
- Notify school nurse as well as parent/guardian





#### Metered Dose Inhalers (MDIs)

A metered dose inhaler is a pressurized canister of medicine that is sprayed through a mouthpiece. You can help a student follow these simple steps to properly use their MDI.

Follow the Six Rights of Medication Administration; **Right** student, **Right** medication, **Right** dose, **Right** time, **Right** route, and **Right** documentation

- 1. Shake the inhaler several times.
- 2. Check that canister is firmly positioned in plastic holder (and attach spacer if required.)
- Have student slightly tilt their head backward.
- 4. Have student breathe out (exhale) completely.
- 5. Have student place the mouthpiece between the teeth and close lips around it.
- 6. Squeeze the inhaler to discharge the medicine and have student begin to inhale immediately.
- 7. Instruct student to breathe in slowly and deeply for three to five seconds. Once inhaled, have student remove the inhaler from their mouth, hold their breath for 5-10 seconds and then exhale.
- 8. Rest for a minute, then repeat this sequence for each prescribed "puff."
- 9. Document on the medication administration record (medication log) that you administered the medication.
- 10. Replace medication in locked storage area.
- 11. Observe the student for any medication reaction as appropriate.

Always consult the student's asthmas action plan/prescription for instructions on how to administer the inhaler





### Hypoglycemia

- Hypoglycemia, or low blood sugar, is a common complication for individuals with Type 1 Diabetes (those who require insulin.)
- Most individuals with Diabetes can recognize changes and feelings in his or her body as the blood sugar drops and can intervene before the blood sugar level becomes too low
- In younger students, the student may become irritable, start crying or become very emotional and aren't able to recognize that their blood sugar is dropping. In some cases, an extremely low blood sugar level will cause the student to become unable to help themselves due to an impaired level of consciousness or motor function. Hypoglycemia may result from:
  - Too much insulin
  - Student administered insulin without eating
  - Too little food consumed
  - Delay in receiving snack/meal
  - Increased physical activity
  - Illness (at times)
  - Alcohol use (a concern in adolescents)





### Hypoglycemia, Continued

- Hypoglycemia symptoms are characterized as mild, moderate or severe
- Students who receive insulin for the treatment of diabetes should have a written individual health care plan (IHP) or Emergency Diabetes Care Plan/Action Plan describing how to treat all these symptoms according to the severity of the hypoglycemia
- It is also very important to list common symptoms that the student has with hypoglycemic episodes this will allow school staff to recognize that the student may be experiencing low blood sugar levels



## Signs and Symptoms of Hypoglycemia

- Shakiness or trembling
- Looking pale (pallor)
- Sweating
- Headache
- Hunger or nausea
- Irregular or fast heartbeat
- Dizziness or lightheadedness
- Nervousness or anxiety
- Irritability or confusion





#### Students Showing Signs of Hypoglycemia

- If a student shows signs of hypoglycemia, unlicensed school personnel should consult the student's Individualized Healthcare Plan (IHP) or Emergency Diabetes Care Plan/Action Plan for guidance on how the hypoglycemia is to be treated
- The IHP or Diabetes Medical Management Plan may include giving the student a source of sugar, such as juice or a snack. If the symptoms progress, it is possible that the administration of the emergency medications may become necessary.
- In younger students, the student may become irritable, start crying or become very emotional.



## **Glucagon Emergency Administration**

- Glucagon is a life-saving medication prescribed for the student experiencing severe symptoms of hypoglycemia (severe sleepiness, loss of consciousness, seizure or inability to swallow)
- Can be prescribed as an injectable form (Glucagon®, Gvoke, GlucaGen®, Zegalogue®) or nasal powder (Baqsimi®)
- Glucagon is used to treat low blood sugar level when the patient is unable to take liquid or food by mouth
- Generally, after administration, the level of glucose in the blood increases within 5-15 minutes
- Glucagon does not harm the patient
- However, after receiving Glucagon (regardless of form), the student may experience nausea and vomiting. Position the student on their side after administering Glucagon
- Potential life-threatening complications can occur if hypoglycemia isn't treated promptly



### Parent Responsibility - Glucagon

- It is the responsibility of the parent/guardian to provide the Glucagon along with written orders from the student's medical provider as well as signed parental/guardian permission. These orders should be a part of the student's Diabetes Medical Management Plan and should be updated at least once per school year of any time there have been changes to the student's treatment plan
- KRS 158.838 requires "each local public school district to have at least one (1) school employee who has met the requirements of KRS 156.502 on duty during the entire school day "to administer Glucagon in an emergency"

### Glucagon Storage & Handling

- Glucagon should be stored at room temperature in an area where trained school personnel will have easy access to it.
- As per KRS 158.838, the expiration date of the Glucagon kit should be checked monthly and the parent/guardian notified one month in advance of the expiration date





## Injectable Glucagon





#### How to Administer Glucagon Injectable (Glucagon® or GlucaGen®)

- ✓ Identify someone to call 9-1-1
- ✓ Refer to the student's Diabetes Medical Management Plan for the correct dose
- ✓ Open the kit
- ✓ Remove the flip-top seal from the vial
- ✓ Remove the needle protector from the syringe
- ✓ Slowly Inject all sterile water from the syringe into the vial of Glucagon (leave the needle in the vial if possible)
- ✓ Gently swirl the vial (do not shake) until the solution is clear
- ✓ Withdraw the prescribed amount of Glucagon from the vial back into the syringe







#### Injectable Glucagon Continued

- ✓ Inject at a 90° angle into the upper arm, thigh or buttocks (may inject through clothing if necessary).
- ✓ Slowly inject Glucagon into the site.
- ✓ Withdraw the needle and apply light pressure at the injection site.
- ✓ Turn the person on their side as they may vomit.
- ✓ Place the used needle back in the kit and close the lid (do not recap).
- ✓ Give the used kit to emergency medical services (EMS) personnel.
- ✓ Document the administration of Glucagon on the Medication Administration Record

Source: Novo Nordisk™ 2021

For More Information: Glucogen Hypo Kit Information





### **Discontinued Glucagon Kits**





- Please note the following important information regarding discontinued glucagon emergency kits:
  - Eli Lilly Glucagon Emergency Kit: Discontinued on Dec. 31, 2022.
  - Novo Nordisk GlucaGen HypoKit: Discontinued on July 1, 2024.
- After consultation with local pediatric diabetes providers, KDE has chosen to keep the guidance regarding these two medications in our training materials as there may be students who present to school with these discontinued kits
- It is crucial that school nurses determine if the prescribed medication is not expired
- If an expired glucagon emergency kit is identified:
  - Do not administer the expired medication
  - Immediately notify the student's parent/guardian
  - Follow established school protocols for emergency situations and medication replacement









How to Administer GVOKE HypoPen

- Remove GVOKE HypoPen from foil pouch
- Check Expiration Date

Do not use GVOKE HypoPen if the expiration date has passed. If GVOKE HypoPen is expired, throw it away in a Food and Drug Administration (FDA) Cleared sharps container and use a new GVOKE HypoPen

- Inspect the Solution
  - a. Look at the liquid through viewing window and ensure it is clear and colorless, or a pale yellow. Do not use the injection if the liquid contains lumps, flakes, or particles. Do not inject if solution is not visible in the viewing window.

If you do not have another GVOKE HypoPen to utilize, call for emergency help right away.





## **Gvoke HypoPen (Glucagon Injection) Continued**





- Pull off Red Cap
  - a. Pull the red needle cap straight off of the device
  - b. Important: Do not put your thumb, fingers, or hand on or near the needle guard or needly opening to help prevent accidental needle sticks.
- Choose Injection Site and Expose Bare Skin
  - a. Choose the lower abdomen, outer thigh, or outer upper arm for your injection site
  - b. Remove any clothing covering the injection site. The injection must be performed straight into the skin
- Choose Injection Site and Expose Bare Skin
  - a. Choose the lower abdomen, outer thigh, or outer upper arm for your injection site
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  - b. Remove any clothing covering the injection site. The injection must be performed straight into the skin



### Gvoke HypoPen (Glucagon Injection), Continued-2

- ✓ Push and Hold to Start Injection
  - a. Push and hold GVOKE HypoPen straight down against the injection site. Listen for a "Click"
  - b. Continue to hold the device down and count slowly to 5 seconds
  - c. When the injection is complete, the viewing window will be red
  - d. Important: Do not lift up Gvoke HypoPen until the injection is complete.
- ✓ Lift the device straight up from the injection site (the yellow needle guard will lock over the needle)
- ✓ Turn Patient to Side
  - a. When an unconscious person wakes up, he or she may throw up. Turn the unconscious patient on their side to prevent choking
- ✓ Make Sure Patient Received Immediate Medical Attention After Use
  - a. Call for emergency help right after GVOKE HypoPen has been injected
- ✓ Document administration and continue to observe until EMS arrive
- ✓ Feed the patient as soon as he or she wakes up and can swallow. Give the patient a fast-acting source of sugar (such as a regular soft drink or fruit juice) and a long-acting source of sugar (such as crackers and cheese or a sandwich).
- \*\*If the patient does not wake up within 15 minutes, give another dose of glucagon if a second GVOKE HypoPen is available and notify emergency medical services right away.

#### Sources and Resources:

- Xeris Pharmaceuticals, Inc.
- Gvoke HypoPen Website



HEALTH





## Zegalogue® (dasiglucaon) Injection



**Important:** ZEGALOGUE is used to treat very low blood sugar (severe hypoglycemia) where you need help from others.

Zegalogue (dasiglucagon) injection 0.6mg/0.6mL; Single Dose Prefilled Syringe Injection for subcutaneous use

Emergency Use for Very Low Blood Sugar

Zegalogue contains one dose of dasiglucagon in a prefilled syringe and cannot be reused.

#### **How to Administer**

- Remove the grey cap from the needle end
- Push and hold down Zegalogue for 10 seconds and check window is red
  - a. Push straight down on skin until the yellow needle guard is fully pressed down. You may hear the first click
  - b. Keep holding down and slowly count to **10 seconds**. After 10 seconds you may hear a second click and see the medicine window turn red.



## Basqsimi (Glucagon) Nasal Powder

- FDA approved for age 4 and above
- Should be stored at room temperature
- Should be carried by student, readily accessible
- Given as a puff in the nose
- Should still be given if person is unconscious
- Can still be given if nose is congested
- A second dose may be ordered if no response after 15 minutes
- As per KRS 158.838, the expiration date of the Glucagon kit should be checked monthly, and the parent/guardian notified one month in advance of the expiration date







## Administering Baqsimi (glucagon)™ Nasal Powder

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- Identify someone to call 911
- Refer to student's Diabetes Management Plan for Glucagon dose
- Open kit
- Remove shrink wrap by pulling on red stripe
- Open the lid sand remove the device from the tube (Caution: Do not press plunger until you are ready to administer)
- Hold device between fingers and thumb
- Insert tip gently into one nostril until finger(s) touch the outside of the nose
- Push plunger firmly all the way in
- Dose is complete when the green line disappears
- Turn person to the side, as they may vomit
- Throw away used device and tube
- Document administration on student's medication administration record
- When person is safely able to swallow, give a fast-acting source or sugar such as juice and encourage the person to eat as soon as possible





### Seizures

Seizures can take many different forms, often not resembling the convulsions that many associate with epilepsy. Common types of seizures include:

- Generalized Tonic Clonic (Grand Mal)- Convulsions, muscle rigidity, jerking
- Absence (Petit mal)- Blank stare lasting only a few seconds, sometimes accompanied by blinking or chewing motions
- Complex Partial (Psychomotor/Temporal Lobe)- random activity where the student is out of touch with their surroundings
- Simple Partial jerking in one or more parts of the body or sensory distortions that may or may not be obvious to onlookers
- Atonic (Drop Attacks)- sudden collapse with recovery within a minute
- Myoclonic sudden, brief, massive jerks involving all or part of the body



## **Seizures and Epilepsy**

- Epilepsy is a neurological disorder that causes a student to have recurrent seizures
- Seizures are caused by a brief disruption in the brain's electrical activity resulting in:
  - Altered or loss of awareness
  - Shaking
  - Convulsing
  - Confusion
  - Sensory experiences



## **Achieving Seizure Control**

Many students achieve good seizure control with prescribed medication. However, a seizure is generally considered an emergency under the following conditions:

- A convulsive (tonic-clonic) seizure lasts longer than five minutes
- A student has repeated seizures without regaining consciousness
- A student is injured or has diabetes
- A student has a first-time seizure
- A student has breathing difficulties
- A student has a seizure in water





## Seizure Management

- Seizure symptoms depend on where in the brain the disruption occurs and how much the brain is affected by the seizure
- Seizures may last from a few seconds to a few minutes
- Most seizures are not medical emergencies and resolve after one or two minutes
- Use a watch to time the seizure from the beginning to the end



## **Priorities During a Seizure**

The first two priorities during a seizure are airway patency (keeping the airway open) and safety

- Do not try to place an object in the student's mouth between the teeth, during a seizure
  - Efforts to hold the tongue down could injure teeth or jaw
- Turn the student to one side
  - This will help keep the airway open
  - Do not attempt to hold the student down or restrain their movements
- Clear the area around the person of anything hard or sharp



### **Seizure Action Plans**

- Students receiving medication for the control of their seizures shall have a written Seizure
   Emergency Action Plan with instructions for how to manage the student's seizures during school hours
- The student's health care provider will determine in the Seizure Emergency Action Plan what medication shall be given for seizure activity
- According to KRS 158.838, the Seizure Emergency Action Plan may include the administration of Food and Drug Association (FDA) approved seizure management medication. In Kentucky, unlicensed school personnel may administer these medications after receiving training per KRS 156.502
- Personnel trained in medication administration for the treatment of seizures and how to contact them if a seizure occurs shall be identified and shared with school personnel
- Per KRS 158.838, the expiration date of the emergency seizure medication(s) should be checked monthly, and the parent/guardian should be notified by school personnel one month in advance of the expiration date



## **Approved Federal Drug Administration (FDA) Seizure Medications**

- Seizure rescue and seizure management medications approved by the FDA for the treatment of seizures may be delegated to be administered by trained, unlicensed school personnel.
- Non-FDA approved medications for management of seizures may not be delegated to unlicensed school personnel (KRS 158.838).
- Commonly prescribed seizure medications include the following:
  - Diazepam Rectal Gel
  - Valtoco
  - Klonopin
  - Midazolam
  - Nayzilam®



## How to Administer Diastat® AcuDial (Diazepam Rectal Gel)

- Identify someone to call 9-1-1
- Turn student on side where they can't fall
- Put on gloves
- Remove medication (syringe)from container (Note: Seal pin is attached to the cap)
- Push up with thumb and pull to remove protective cap from syringe tip (Be sure seal pin is removed with the cap)
- Lubricate rectal tip with lubricating jelly from kit
- Turn student on side facing you and lower clothing
- Bend upper leg forward to expose rectum





# How to Administer Diastat® AcuDial (Diazepam Rectal Gel) Continued



- Separate buttocks to expose rectum
- Gently insert lubricated syringe tip into rectum. (Rim of syringe should be against rectal opening)
- Slowly count to three while gently pushing plunger until it stops
- Slowly count to three while holding buttocks together to prevent leakage
- Keep student on their side and note the time Diastat® was given; continue to observe until EMS arrives
- Give EMS the used Diastat® syringe (Note: you may recap the syringe)
- Document the administration of Diastat® in the student's Medication Administration Record

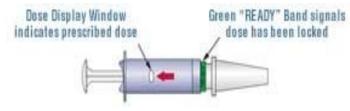




### Diastat Rectal Gel Dial and Lock Reminder

#### IMPORTANT: Check the dose when receiving Diastat® from a parent

• DIASTAT®® AcuDial™ has a unique locking mechanism that ensures that the student receives the correct dose. <u>ALWAYS</u> make sure that the green "READY" is visible



- If the prescription is for a suma, success and success sales the smaller tip size. Tip sizes come in 4.4 cm or 6.0 cm
- Because you receive two DIASTAT® AcuDial delivery systems as part of your Twin Pack with each prescription, be sure to double-check both





# What should you do if you don't see the green "READY" band?



- If you don't see the green "READY" band, it means that the medicine in your DIASTAT® AcuDial is not properly locked in
- Do not accept the prescription and have parent contact the pharmacist and return the DIASTAT® AcuDial to the pharmacy immediately
- Do not use a DIASTAT® AcuDial that does not have the correct dose properly locked in



## VALTOCO® (Diazepam nasal spray)

- Valtoco<sup>®</sup> is a prescription medicine used for the short-term treatment of seizure clusters (also known as "episodes of frequent seizure activity" or "acute repetitive seizures") in patients 6 years of age and older.
- Valtoco ® is not FDA approved for use in children under 6 years of age.
- Valtoco® can cause sleepiness or dizziness, as well as slow thinking and motor skills.
- The student's seizure plan should be followed which should include instructions for administration of Valtoco and care following its administration.





## Valtoco: Important Safety Information



- VALTOCO is a benzodiazepine medicine. Taking benzodiazepines with opioid medicines, alcohol or other central nervous system (CNS) depressants (including street drugs) can cause severe drowsiness, breathing problems (respiratory depression), coma and death
- Get emergency help right away if any of the following happens:
  - Shallow or slowed breathing
  - Breathing stops (which may lead to the heart stopping)
  - Excessive sleepiness (sedation)





## Valtoco® (Diazepam) Administration



#### **How to Administer**

- Identify someone to call 9-1-1
- Remove Valtoco nasal spray from the package
- Hold the nasal spray with your thumb on the bottom of the plunger and your first and middle fingers on either side of the nozzle
- Tilt the person's head back and provide support under the neck with your hand
- Gently insert the tip of the nozzle into one nostril until your fingers on either side of the nozzle are against the bottom of the nose
- DO NOT prime the sprayer





# Valtoco® (Diazepam) Administration Continued



- Press the plunger firmly to give the dose of Valtoco nasal spray
- Remove the nozzle after giving the dose
- Throw away the nasal spray device(s) after using
- If giving the 15mg or 20mg dose, repeat the steps and use the second device in the other nostril to give the full dose of Valtoco
- Document the administration of the medication. Continue to observe and follow the seizure action plan

#### Sources and Resources:

INSTRUCTIONS FOR USE - VALTOCO





## Klonopin (Clonazepam)

Klonopin (Clonazepam) is a Benzodiazepine approved by the FDA for seizure management

- Some students may also be prescribed Klonopin for break through seizures
- Klonopin may be provided as an oral disintegrating tablet (wafer)
  which can be administered by placing the tablet in the mouth between
  the gum and the cheek or between the lower lip and gum for it to
  dissolve (Buccal administration)



## **Buccal Klonopin (Clonazepam)**



#### **How to Administer**

- ✓ Position the person safely on their side, observing skin color and breathing effort.
- ✓ Ask another adult to bring the person's Seizure Action Plan, medication and supplies
- ✓ Consult student's Seizure Action Plan to confirm drug, dose, route and administration orders
- ✓ Perform hand hygiene and put on gloves
- ✓ Open the medication package by peeling back the foil
- ✓ Remove the tablet from the package, ensuring your glove is dry
- ✓ Gently pull the side of the mouth or lower lip out. Without putting fingers too far into the mouth, gently insert the tablet between the cheek and gum (buccal space) or between the gum and lower lip
- ✓ Close mouth and gently rub along outside of cheek or lip to promote absorption
- ✓ Once Klonopin is given, continue to observe the person. If able and appropriate based on seizure activity, keep the person on their side facing you
- ✓ Document the time the medication was given and when the seizure stops on the seizure observation record. Continue to observe
- ✓ Consult Seizure Action Plan orders for post-seizure care, have someone notify parent/guardian and 9-1-1 if necessary
- ✓ Document medication administration on medication administration record

#### **Sources and Resources:**

- Children's Hospital Colorado, Epilepsy Foundation, Bethany Children's Health Center
- For More Information: <u>Buccal Clonazepam RN Children's Hospital Colorado</u>; <u>Clonazepam Basic Seizure Medication | Epilepsy Foundation</u>; <u>1-Dose Clonazepam Rescue</u> Medication Bethany Children's Health Center



### Midazolam for Seizure Rescue



- Midazolam is used for the short-term treatment of increased or frequent seizures known as seizure clusters
- It is extremely effective in quickly stopping seizures
- FDA approved for children aged 12 and above however widely prescribed off label for younger children
- For students aged 12 and above, Nayzilam® (midazolam) nasal spray may be prescribed

#### **Additional Information:**

- The drug is absorbed by the mucous membranes, <u>not</u> via inhalation
- Intranasal midazolam easily and rapidly crosses the nasal mucosa and blood-brain barrier
- Administration is less traumatic for patient compared to Diastat®
- Onset of action: ~ 2-3 minutes (rapid)
- Oral bioavailability of midazolam: ~30%
- Sedation is common after administration





# Midazolam Safety Concerns and Side Effects



- Activate the seizure plan when administering midazolam
- The risk for addiction is almost nil
- Store at room temperature
- If swallowed, only one third of a dose is absorbed
- Prefilled syringes have a shelf life of four months



# Preparation for Administration (Syringe and Atomizer)



- Draw the syringe back to the measured dose
- Insert syringe into midazolam vial and inject measured volume of air into vial
- Withdraw appropriate volume of medication from vial
- Attach atomizer

**NOTE:** If directed on label, draw up an additional 0.1 ml of medication to allow for dead space in the atomizer



### Midalozam Administration via Atomizer

- Inspect nostrils, if blood or mucus present, suction the nares prior to delivery of medication
- Note: Drug is absorbed by the mucous membranes, not via inhalation
- Insert tip of atomizer into left nostril and administer half the dose
- Administer remaining half of medication into the right nostril (doubles the amount of mucosa for drug absorption and increases the rate of absorption)
- Direct the spray from the center of the nose and spray directly up and back towards outside of the nose

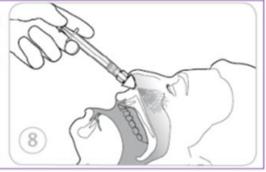




### **Illustration of Administration**



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**Step 6.** Using the free hand **to hold the base of the head stable**, place the tip of the atomizer snugly against the nostril aiming slightly up and outwards (towards the top of the ear).

Step 7. Administer half of the solution, 5 mg (1 mL), into one of the nostrils.

Step 8. Administer the other half of the solution, 5 mg (1 mL), into the opposite nostril.

Reference: step-by-step guide adapted from 2013 Teleflex Inc. LMA MAD Nasal Device Instructions. https://www.liveactionsafety.com/lma-nasal-mucosal-atomization-device-mad-syringe-vial-adapter/



## Nayzilam® (Midazolam) Nasal Spray



- Same medication different delivery system
- Stored at room temperature
- Only given in one nostril
- Only one dose in package



## Nayzilam® Administration

#### **How to Administer**

- ✓ Identify someone to call 9-1-1
- ✓ Remove Nayzilam nasal spray from the package
- ✓ Hold the nasal spray with your thumb on the bottom of the plunger and your first and middle fingers on either side of the nozzle
- ✓ Tilt the persons head back and provide support under the neck with your hand
- ✓ Gently insert the tip of the nozzle into one nostril until your fingers on either side of the nozzle are against the bottom of the nose
- ✓ Do NOT prime the sprayer. Press the plunger firmly to give the dose of Nayzilam nasal spray
- ✓ Remove the nozzle after giving the dose
- ✓ Throw away the nasal spray device(s) after using
- ✓ Document the administration of the medication

Continue to observe and follow the seizure action plan

#### Sources and Resources:

- Information for Patients | NAYZILAM® (midazolam) nasal spray, CIV
- Nayzilam Nasal Spray: Uses, Side Effects, Warnings







## **Epinephrine for Allergic Reactions**

An allergic reaction occurs when the immune system overreacts to a harmless substance known as an allergen (American Academy of Allergy, Asthma & Immunology)

In the case of medications, the drug itself may be the substance that causes the effect. Other allergic reactions could arise from environmental factors such as exposure to pollen, dust mites, animal dander, mold spores, insect stings, foods, latex, etc.

- Allergic reactions may have many symptoms that could appear immediately or not for several days or weeks
- Examples of an allergic reaction
  - Redness
  - Rash
  - Hives
  - Shortness of breath
  - Itching
  - Swelling
  - Yellowing of the skin or fever





## **Severe Allergic Reactions**

- Severe allergic reactions may be unavoidable
  - Foods may contain unknown ingredients
  - Insects range widely
  - Latex can be found anywhere
- Once anaphylaxis has begun, the treatment may be an immediate injection dose which is effective for only 10 to 15 minutes
- After receiving epinephrine, the student should then be transported for further emergency medical attention at the nearest hospital emergency room
- The student should not return to school for the remainder of the school day



## **Severity of Allergic Reaction**

- Since the severity of an allergic reaction is difficult to predict, the allergic response may rapidly progress to anaphylaxis
- It is important for students with severe allergies who are at risk of anaphylaxis to have an Allergy or Anaphylaxis Emergency Action Plan of Care
- The Allergy or Anaphylaxis Emergency Action Plan may include the administration of epinephrine
- Epinephrine is supplied in multiple forms or brands and will be discussed further



## **Anaphylaxis**



Anaphylaxis is the most dangerous type of an allergic reaction. Anaphylaxis is a serious allergic response that often involves swelling, hives, lowered blood pressure, and in severe cases, shock. If anaphylactic shock isn't treated immediately, it can be fatal

## Emergency procedures should be implemented if anaphylaxis is suspected

- The major difference between anaphylaxis and other allergic reactions is that it typically involves more than one system of the body
- Symptom onset is typically within 5-30 minutes of coming into contact with the allergen. However, in some cases, it may take more than an hour to notice the symptoms

#### Warning Signs may include:

- Red Rash (usually itchy, may have welts/hives)
- Swollen throat or swollen areas of the body
- Wheezing
- Passing out
- Chest tightness
- Trouble Breathing
- Trouble swallowing
- Vomiting
- Diarrhea
- Stomach cramping
- Pale or red color to face and body
- Hoarse voice

Source: American Academy of Allergy, Asthma, & Immunology



## **Epinephrine for Anaphylaxis**

Anaphylaxis is a life-threatening allergic reaction that can be fatal within minutes. It can be triggered by various allergens, including certain foods (e.g., peanuts, tree nuts, fish, wheat, eggs), stinging insects (e.g., wasps, bees), medications, latex or exercise.

#### Symptoms of anaphylaxis include:

- Itching and/or hives, particularly in the mouth or throat
- Swelling of the throat, lips, tongue and/or eye area
- Difficulty breathing, swallowing or speaking
- Increased heart rate and/or sense of impending doom
- Abdominal cramps, nausea, vomiting, diarrhea
- Weakness, collapse, paleness, lightheadedness or loss of consciousness
- Students at risk of anaphylaxis should have an Allergy or Anaphylaxis Emergency Action Plan of Care, which may include the administration of epinephrine.
- Epinephrine is a prescribed medication used to reverse the effects of an anaphylactic reaction, with the prescription based on the child's weight



### **Commonly Prescribed Brands of Epinephrine**

- EpiPen®
- Auvi-Q®
- Adrenaclick®
- These medications are typically administered via auto-injectors, designed for quick and easy use during severe allergic reactions.
- Students may carry and self-administer injectable epinephrine per KRS 158.834 and KRS 158.836. Unlicensed school personnel may administer epinephrine after receiving training according to KRS 156.502



## Neffy® (Epinephrine)



- A newly FDA approved nasal epinephrine, offers an alternative to injectable epinephrine for the emergency treatment of anaphylaxis
- Approved by the FDA in 2024, Neffy® provides a needle free option that can be self administered or administered by a caregiver
- It is designed to deliver a single dose of epinephrine via nasal spray, making it a convenient and less intimidating option for those who may fear injections



# Dosage and Age Recommendations for Neffy®

- The recommended dosage of Neffy® is one spray (1 mg or 2mg of epinephrine) administered in one nostril
- In the absence of clinical improvement or if symptoms worsen after the initial dose, a second dose of Neffy® may be administered in the same nostril with a new nasal spray starting five minutes after the first dose
- Neffy® is indicated for emergency treatment of allergic reactions, including anaphylaxis, in adult and pediatric patients
- Please consult the medical provider's order and manufacturer's website for detailed dosing information



## **Neffy® Storage**



- Epinephrine, including Neffy®, should be stored at room temperature in a dark area.
- Expiration date should be checked monthly, and parents/guardians should be notified one month before expiration
- The medication should be either carried by the student or kept in an easily accessible, unlocked location



## **Neffy® Administration**



HEALTH

- ✓ Have someone call 9-1-1 and notify parent/guardian
- ✓ Reassure the patient and ensure that the patient is in a safe position.
- ✓ Remove Neffy® from its packaging
- ✓ Hold the device with your thumb on the bottom and two fingers on the top (DO NOT prime the device).
- ✓ Insert the tip of the device into one nostril
- ✓ Press the plunger firmly to release the medication
- ✓ If symptoms persist or worsen after five minutes, administer a second dose using a new Neffy® device in the same nostril
- ✓ Monitor the student until EMS arrives, notify the EMS that Neffy® has been administered.
- ✓ Document the medication administration in the student's health record

Source: <u>Epinephrine Nasal Spray for Type I Allergy Patients | Neffy</u> For More Information:

- Neffy: Uses, Dosage, Side Effects, Warnings Drugs.com
- How to Administer Neffy Nasal Spray: A Complete Guide GoodRx

\*Note: Other brands such as generic "Epi-pens" may have different instructions for administration. Instructions provided with the medication should be followed to administer the medications appropriately.



## **EpiPen® for Anaphylaxis**

- Like Neffy®, the correct dosage of medication is prescribed according to the weight of the child
- The prescribing health care provider should determine the dosage as well as under what circumstances the EpiPen® should be used and that should be documented in the student's emergency action plan
- Per KRS 158.834 and KRS 158.836, the student may carry and self-administer an EpiPen®
- Unlicensed school personnel may administer the EpiPen® after receiving training according to KRS 156.502





## Storage of EpiPen®



- Epinephrine, including EpiPen®, should be stored at room temperature in a dark area.
- Expiration date should be checked monthly, and parents/guardians should be notified one month before expiration
- The medication should be either carried by the student or kept in an easily accessible, unlocked location





## **EpiPen® Administration**

- ✓ Identify someone to call 9-1-1
- ✓ Flip open the cap at the top of the carrier tube
- ✓ Remove the EpiPen® from the carrier tube and remove the blue safety release
- ✓ Form a fist around the unit with the orange tip pointing downward
- ✓ Swing and firmly push the orange tip against the outer thigh until a click is heard (medication may be administered through clothing)
- ✓ Hold in place for three seconds
- ✓ Remove the pen from the thigh and massage the injection site for 10 seconds.
- ✓ Place the used auto-injector into the carrier tube and give it to EMS when they arrive
- ✓ Document the administration of the EpiPen® in the Medication Administration Record (MAR)
- \*EpiPen and EpiPen Jr Auto Injectors should only be injected into the thigh. Do NOT inject into the buttock as this may not provide effective treatment of anaphylaxis. Advise the patient to go immediately to the nearest emergency room for further treatment of anaphylaxis

#### Sources and Resources:

Viatris<sup>TM</sup> 2025; <u>EpiPen Prescribing Information</u>; <u>EpiPen Website</u>





## How to Administer Auvi-Q® Auto-Injector

- √ Have someone call 9-1-1
- ✓ Pull Auvi-Q up from the outer case
- ✓ Pull red safety guard down and off of Auvi-Q
- ✓ Place black end of Auvi-Q against the middle of the outer thigh, then push firmly until you hear a click and hiss sound and hold in place for 2 seconds. If you are administering to a young child or infant, hold the leg firmly in place while administering the injection
- ✓ Give the used container to the EMS for disposal
- ✓ Patients should seek emergency medical attention immediately
- ✓ Document administration and continue to observe until EMS arrive
- ✓ Source: Kaleo 2019
- ✓ For More Information: <u>Auvi-Q Website</u>







## **How to Administer Adrenaclick®**

- √ Have someone call 9-1-1and notify parent/guardian
- ✓ Reassure the patient and ensure that the patient is in a safe position
- ✓ Remove Adrenaclick® from its packaging
- ✓ Pull the gray caps from both ends of the Adrenaclick® auto-injector
- ✓ Place the red tip firmly against the side of the student's thigh, about halfway between the hip and knee. You do not need to remove clothing
- ✓ Press down hard until you hear a click, indicating that the injection has started
- ✓ Hold the auto-injector in place for 10 seconds to ensure the full dose is administered. Remove the auto-injector by pulling it straight out
- ✓ Massage the injection area for about 10 seconds to help the medication absorb
- ✓ Observe and stay with the student until EMS arrives
- ✓ If symptoms do not improve, or if they return, a second dose may be administered after 5-15 minutes if available and prescribed
- ✓ Provide the used auto-injector to EMS to dispose of and document the medication administration in the student's health record

**Note:** Other brands such as generic "Epi-pens" may have different instructions for administration. Instructions provided with the medication should be followed to administer the medication appropriately





## Adrenal Insufficiency (AI)

Adrenal insufficiency (AI) occurs when the adrenal glands do not produce enough cortisol, a vital hormone. Cortisol plays a crucial role in regulating various bodily functions, including:

- Stress response: Cortisol helps the body cope with stress, illness, and injury.
- . Blood sugar regulation: It helps maintain stable blood sugar levels.
- . Blood pressure regulation: It contributes to healthy blood pressure.
- . Immune function: It plays a role in immune system regulation.



## **Common Causes of Adrenal Insufficiency**

- **Autoimmune diseases**: The body's immune system attacks the adrenal glands (e.g., Addison's Disease)
- Long-term corticosteroid use: Prolonged use of corticosteroids can suppress the adrenal glands' natural cortisol production
- Pituitary gland problems: The pituitary gland signals the adrenal glands to produce cortisol. Issues with pituitary gland can lead to Al
- · Surgery or injury: Damage to the adrenal glands can result in Al



## Recognizing the Signs and Symptoms of Adrenal Insufficiency

#### Symptoms can vary in severity and may include:

- Fatigue and weakness: Persistent tiredness and muscle weakness.
- Weight loss and decreased appetite: Unexplained weight loss and loss of interest in food.
- Nausea, vomiting and diarrhea: Digestive issues.
- Abdominal pain: Stomach discomfort.
- Low blood pressure: Dizziness or lightheadedness, especially upon standing.
- Hyperpigmentation: Darkening of the skin (more common in primary AI).
- Salt craving: A strong desire for salty foods.
- Hypoglycemia (low blood sugar): Shakiness, sweating, confusion, irritability, seizures (in severe cases).
- Adrenal Crisis (Medical Emergency): Severe symptoms including dehydration, vomiting, diarrhea, low blood pressure, confusion and loss of consciousness. This requires immediate medical attention.



## Managing Renal Insufficiency in Schools

- Medication: The student will likely need to take daily replacement hormones (e.g., hydrocortisone, prednisone). The medication schedule should be clearly documented in the individualized health care plan (IHCP). School staff should be aware of the medication, its dosage, and administration instructions. Never administer medication without proper authorization and training.
- Stress Management: Help the student avoid excessive stress. This may involve modifications to academic workload, providing a quiet space when needed, and promoting a supportive school environment.
- Hydration: Ensure the student has access to water throughout the day, especially during physical activity. Nutrition: Encourage regular meals and snacks to prevent hypoglycemia.
- Physical Activity: The student can likely participate in physical activities with appropriate modifications and monitoring. Ensure adequate hydration and access to snacks. Discuss any activity restrictions with the student's physician and document them in the IHCP.
- Monitoring for Symptoms: Staff should be vigilant in observing the student for signs and symptoms of Al, particularly hypoglycemia and adrenal crisis. Emergency Procedures (Adrenal Crisis):





## An Adrenal Crisis is a Life-Threatening Issue

#### Recognize the Signs and Act Quicky!

- Call 911 immediately
- Notify the school nurse and principal
- Administer emergency medication (if prescribed) as per the emergency care plan (ECP) and after appropriate training. This may involve an injection of hydrocortisone (Solu-Cortef)
- Keep the student calm and comfortable
- Do not give the student anything by mouth if they are unconscious or having difficulty swallowing

Ensure relevant staff members receive appropriate training on adrenal insufficiency, medication administration, and emergency procedures



## Kentucky Board of Nursing (KBN) Guidance Regarding Solu-Cortef

- The administration of Solu-Cortef, a prescription medication, generally falls within the scope of nursing practice.
- The KBN's guidance on delegation and supervision should be strictly followed when considering delegating this task to unlicensed school staff.
- It is essential to ensure that the individual administering Solu-Cortef has received thorough training, demonstrates competency, and acts under the direct supervision of a licensed nurse.



## How to Administer Solu-Cortef



Solu-Cortef kits for emergency administration related to adrenal crisis should contain at minimum, a vial of Solu-Cortef, a syringe, a needle, and an alcohol swab.

- Identify someone to call 9-1-1
- Open the emergency injection kit and take out supplies. Supplies should be laid on a clean, open surface.
- Check the expiration date of medications to ensure the medication is not expired. If it is expired, call 9-1-1.
- Clean your hands with soap and water. If soap and water are not available, utilize an alcohol-based hand sanitizer.
- Peel the cap off the medication vial
- Push down hard on the cap to release the liquid within the vial
- Swirl the vial to mix the solution (the powder medication with the liquid)
- Clean the cap with the alcohol swab
- Insert the needle into the middle of the rubber stopper. Make sure the needle tip is in the liquid



### **How to Administer Solu-Cortef Continued**

- ✓ Turn vial upside down
- ✓ Pull back the plunger of the syringe until you have the correct dose of Solu-Cortef
- ✓ Check the syringe for air bubbles. If you see any, tap the syringe with your fingers until the air bubbles rise to the top near the needle. Slowly push the plunger up to force the air bubbles out of the syringe. Be careful not to push out any medication.
- ✓ Put the cap back on the needle and place the syringe on a clean surface
- √ Use additional alcohol wipe to prep the injection site (mid-thigh)
- ✓ Take the cap off the syringe
- ✓ Inject into the outside of the mid-thigh keeping the needle in the thigh for 10 seconds.
- ✓ Remove the needle and place it in an FDA-cleared sharps disposal container right away after use.
- ✓ Document the administration of Solu-Cortef and continue to observe until EMS arrives





## Narcan® for Opioid Overdose



 Narcan® (naloxone) is an intra-nasal medication administered in the event of a life-threatening opioid overdose emergency

#### Commonly Abused Prescription Drugs:

- Opioids (for pain) such as Hydrocodone, Vicodin, Percocet, Percodan, Oxycontin (oxycodone), Demerol or Fentanyl
- Stimulants (ADHD medications) such as Ritalin, Concerta, Adderall or Dexadrine
- Benzodiazepines/ CNS Depressants (for anxiety and sleep disorders) such as Xanax, Valium or Nembutal





### Reasons for Abuse

There are a variety of reasons why students abuse prescription drugs, such as:

- Easy access
- Perception of safety
- Desire to get high
- Academic performance enhancement
- To relieve stress and anxiety
- Experimentation
- Social Acceptance



## The Opioid Epidemic

Although adolescent opioid drug use may begin with prescription pain pills, many adolescents make the switch to heroin

- Heroin is approximately half the cost of prescription pain pills and is often more readily available
- There has been a significant rise in the number of adolescents aged 12 and older who received treatment for the heroin problem-from 277,000 in 2002 to 526,000 in 2013
- Opioid overdose can affect breathing to the extent that breathing slows down and eventually stops
- Oxygen starvation leads to unconsciousness, coma and within three to five minutes without oxygen, brain damage starts to occur, soon followed by death



HEALTH

## Opioid Overdose vs. Opioid High

Opioid overdose can severely impact breathing, leading to unconsciousness, coma, brain damage within three to five minutes without oxygen, and death. Signs and symptoms of a high vs an overdose can be found in the chart below.

Opioid High	Opioid Overdose
Relaxed muscles	Pale, clammy skin
Speech slowed, slurred	Speech is infrequent, not breathing or
	may have very shallow breathing
Appears sleepy, nodding off	Deep snorting or gurgling
Normal heartbeat or pulse	Slowed heartbeat or pulse
Responds to stimuli	Unresponsive to stimuli (calling name,
	shaking or sternal rub
Normal skin color	Cyanotic skin coloration (blue lips and
	fingertips)
	Pinpoint pupils



Adapted from Massachusetts Department of Public Health-Opioid Overdose Education



## **Preventing Fatal Opioid Overdoses**

- Under Kentucky Revised Statute (KRS) 217.186, non-medical school personnel authorized to administer medications per KRS 156.502 can administer Narcan (naloxone) to prevent fatal opioid/heroin overdoses
- The statute includes a "Good Samaritan" provision protecting those seeking help for overdose victims from prosecution



## Responding to an Opioid Overdose

- If you suspect an overdose, act promptly!
- Always go to the distressed individual, never send the individual to the health room/school nurse alone or leave them alone
- Do not move an individual who is in severe distress



## **Immediate Medical Attention**

#### AN OPIOID OVERDOSE NEEDS IMMEDIATE MEDICAL ATTENTION

- Recognize signs/symptoms of opioid overdose (slow or absence of breathing; unresponsiveness to stimuli (calling name, shaking, sternal rub)
- Respond by <u>calling immediately for help</u>:
  - Call 911 or direct someone to call 911 to request immediate medical assistance. Advise the 911 operator that an opioid overdose is suspected and that Narcan (naloxone) is being given or has been given.
  - Assess for breathing. If necessary, provide rescue breathing





## **Immediate Medical Attention Continued**



- Steps for rescue breathing:
  - Place on his or her back and pinch nose
  - Tilt chin up to open airway.
  - Look in mouth to see if anything is blocking their airway. If so, remove it
  - Create an airtight mouth-to-mouth seal on victim's mouth
  - If using mask, place and hold mask over mouth and nose
  - Give two even, regular-sized breaths
  - Blow enough air into their lungs to make their chest rise

NOTE: If you are using a mask and don't see their chest rise, out of the corner of your eye, tilt the head back more and make sure the seal around the mouth and nose is secure. If you are not using a mask and don't see their chest rise, out of the corner of your eye, make sure you're pinching their nose

- Breathe again
- Give one breath every five seconds



## How to Administer Narcan® (Naloxone)

MARCAN

MARCAN

MASAL SP

- ✓ Identify someone to call 9-1-1
- ✓ Remove Narcan nasal spray from the box
- ✓ Peel back the tab with the circle to open the Narcan nasal spray
- ✓ Hold the Narcan with your thumb on the bottom of the plunger and your first and middle fingers on either side of the nozzle
- ✓ Tilt the person's head back and provide support under the neck with your hand
- ✓ Gently insert the tip of the nozzle into one nostril until your fingers on either side of the nozzle are against the bottom of the nose
- ✓ DO NOT prime the sprayer
- ✓ Press the plunger firmly to give the dose of Narcan nasal spray
- ✓ Remove the nozzle after giving the dose
- ✓ If the person does not respond by waking up to voice, touch or breathing normally within two to three minutes, a second dose of Narcan nasal spray may be given (use the second Narcan nasal spray from the box)
- ✓ Document the administration of Narcan and continue to observe until EMS arrives **Sources**: Emergent BioSolutions (formerly ADAPT Pharma), 2015 and NASN Narcan Toolkit, updated September 2023. **For more information**: NARCAN® Nasal Spray





## **After Administering Narcan**



- ✓ Place person in recovery position (lying on their side)
- ✓ Stay with the person monitoring for respiratory distress until help arrives
- ✓ If person does not respond by waking up, to voice or touch, or is not breathing normally within two to three minutes, a second dose of Narcan nasal spray may be given (use a second Narcan nasal spray from box)
- ✓ Be aware that as the medication works, the student may become combative, angry or confused as their "high goes away"
- ✓ If illegal and/or non-prescribed opioid narcotics are found on victim, give to school administrator per school protocol

## **Next Steps**

- Notify parent/guardians per school protocol
- Document administration of Narcan and complete school incident report
- Student should be transported to the nearest facility, even if the student seems to get better
- Student should not return to school for the remainder of the school day





# Module IV: Local School District Policies and Procedures

## **Local School District Policies & Procedures**

#### **Medication Administration Policies**

- KRS 156.502 states that schools shall administer health services (including medication administration) to students who require this service during the school day or school sponsored event
- School districts should have in place, policies and procedures that address how medications and other health services will be delivered
- School district policies and procedures should be readily accessible for reference by all school personnel who may be delegated and trained to administer medication



## **Local School District Policies and Procedures, Continued**

School district policies for medication administration should include:

- 1. Consent forms to be signed by parent/guardian giving authorization to the school district to administer medication
- 2. Health Care Provider's forms to be signed regarding medication administration instructions
- The above policies should also address prescribed medication, over-the-counter medication, and self-administered medication as per KRS 158.834, 158.836 and 158.838



### Additional Local School District Policies

#### Other local school district policies/procedures should include:

- Storage of medication
- Disposal of unused medication
- Administration of medication on field trips
- Medication administration documentation
- Documentation and reporting of medication errors
- Possession and use of asthma or anaphylaxis medications as per KRS 158.834 and 158.836
- Emergency administration of diabetes and seizure management medications (KRS 158.838)
- Emergency administration of Narcan (naloxone) to prevent an opioid/heroin overdose from becoming fatal (KRS 217.186)
- √The above policies/procedures should also specify the appropriate school district forms to be completed



\*\* \_\_\_ District Policies and Procedures (Enter your school's name and policies here)



# Module V: Understanding HIPAA vs FERPA for Unlicensed School Personnel



# Health Insurance Portability and Accountability Act (HIPAA)

The Health Insurance Portability and Accountability Act is a federal law that protects the privacy and security of individual's medical information. It applies to healthcare providers, health plans and healthcare clearinghouses, as well as their business associates.

HIPAA ensures that protected health information (PHI) is kept confidential and secure.

#### **Key Points:**

- 1. Protected Health Information: Includes any information about health status, provision of healthcare, or payment for healthcare services that can be linked to an individual.
- 2. Covered Entities: Healthcare providers, health plans and healthcare clearinghouses.
- 3. Privacy Rule: Established standards for the protection of PHI.
- 4. Security Rule: Sets standards for securing electronic PHI.





## The Family Educational Rights and Privacy Act (FERPA)

- (20 U.S.C. § 1232g; 34 CFR Part 99) is a federal law that protects the privacy of student education records.
- The law applies to all schools that receive funds under an applicable program of the U.S. Department of Education
- Generally, schools must have written permission from the parent or eligible student in order to release any information from a student's education record. However, FERPA allows schools to disclose those records, without consent, to the following parties or under the following conditions:
  - School officials with legitimate educational interest
  - Other schools to which a student is transferring
  - Specified officials for audit or evaluation purposes
  - Appropriate parties in connection with financial aid to a student
  - Organizations conducting certain studies for or on behalf of the school
  - Accrediting organizations
  - To comply with a judicial order or lawfully issued subpoena
  - Appropriate officials in cases of health and safety emergencies; and
  - State and local authorities, within a juvenile justice system, pursuant to specific State law

<u>Forum Guide to the Privacy of Student Information: A Resource for Schools</u> (NFES 2006–805).U.S. Department of Education, Washington, DC: National Center for Education Statistics



## Differences Between HIPAA and FERPA

- Applicability:
  - HIPAA: Applies to healthcare providers and entities handling PHI
  - FERPA: Applies to educational institutions and agencies handling student education records.
- Protected Information:
  - HIPAA: Protects PHI including medical records and health information
  - FERPA: Protects educational records including academic records, disciplinary records, and health records maintained by the school
- Disclosure Rules:
  - HIPAA: Requires patient consent for most disclosures of PHI with some exceptions
  - FERPA: Requires parental or student consent for most disclosures of education records with some expectations
- In Kentucky, HIPAA and FERPA are recognized and enforced to protect the privacy of the individual's health and education information.





## **Practical Implications for School Personnel**

#### Best Practices

- Training: Complete require training on HIPAA and FERPA to understand your responsibilities
- Confidentiality: Always maintain the confidentiality of student information whether it falls under HIPAA or FERPA
- Documentation: Follow proper documentation procedures for both health and education records
- Communication: When in doubt, consult with school administrators or legal counsel to ensure compliance with privacy laws

By understanding and adhering to HIPAA and FERPA regulations, you can help protect the privacy and rights of students and their families.





### Resources

- KDE has developed various resources for school nurses, school health staff, and unlicensed personnel to utilize.
- These resources include the following:
  - Medication Administration Guides
  - Medication Abbreviation List
  - Glossary of Medical Terminology
  - Skill Competency Checklists
- These resources can be found in the <u>2025 KDE Medication</u> <u>Administration Training Manual</u>





## 2025 Medication Administration Joint Guidance Document

- In response to numerous questions submitted to KDE, KBN and KDPH, a joint guidance document has been developed to provide key clarifications to the 2025 updates to KDE's medication administration training materials for unlicensed school personnel
- This full guidance document is available on the KDE School Health Medication Administration Training Program webpage



## **KDE Training Program Testing Materials**

- Final exams, certificates of completion and certificate for Effective Instructional Leadership Act (EILA) hours will not be posted on the KDE Health Services Website to protect the integrity of the final examination for the course.
- District Health Coordinators may request this information by emailing **Tonia Hickman at tonia.hickman@education.ky.gov**

#### \*Please submit only one request per district

Reminder: Per KRS.156.502, the delegation is only valid for the current school year. Training for the previous school year expires at the end of the district's summer programming. Training should be completed for the new school year on or after July 1.

