

Chronic Health Conditions in the School Setting



**A PROFESSIONAL DEVELOPMENT AND TRAINING
TOOL KIT FOR SCHOOL NURSES**

**PRODUCED IN ASSOCIATION WITH THE
ILLINOIS STATE BOARD OF EDUCATION
AS CAPSTONE PROJECT OF
AYESHA QAADIR, RN, BSN, IL-PEL
MASTER'S IN NURSING EDUCATION STUDENT
BENEDICTINE UNIVERSITY**

Chronic Health Condition Management and the School Nurse



- Providing chronic health condition education and management to students, parents, and staff
- Development and implementation of case management of students affected by chronic conditions via Individual Health Plans (IHP)
- Provision of direct care, conducting health assessments, and collaborating with school staff to maintain a safe environment for this vulnerable student population.

This professional development tool kit should be used as a means of keeping staff, parents, and students current on chronic conditions such as asthma, diabetes, and food allergies. The tool will be used to learn strategies on how to manage these specific chronic conditions in the school setting and can act as a template for others. It is hoped that this tool helps to increase your confidence as an informed school nurse and enhance your leadership skills to educate the staff, students, and parents that school nurses serve.

Chronic Health Condition Management and the School Nurse



For most health conditions, each school setting will need an emergency plan of action to be developed and implemented, an Individual Health Plan (IHP), physician referrals, as well as area and student-specific guidelines for staff to follow.

Let's begin!

MODULE I



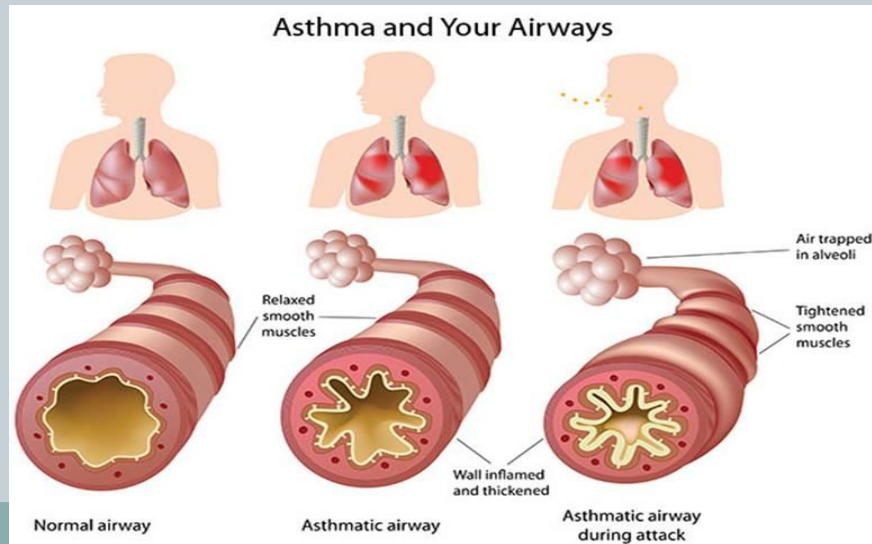
MANAGING ASTHMA IN THE SCHOOL SETTING

ASTHMA



Quick Overview:

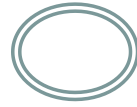
- Common and chronic
- Affects 6.3 million children in the U.S. (Center for Disease Control and Prevention, 2017).
- Characterized by:
 - excessive coughing (at night or early morning), wheezing, chest tightness, and shortness of breath.



Asthma and Academics

- Frequent absenteeism
 - Three times more than unaffected peers (Nadeau & Toronto, 2016)
- Negative impact on grades
 - Student unable to keep up with curriculum
- Know the law!
 - Section 504 of the Rehabilitation Act of 1973
 - Americans With Disabilities Act Amendments Act of 2009

School Nurses Role

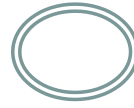


Our roles in the management of asthma

- Educate students and parents on avoiding triggers
- Encourage preventative measures
- Encourage maintenance measures
- Ensure that the environment is conducive

If a student is encountered as having frequent exacerbations, a log can be kept detailing circumstances leading up to the exacerbation.

Implications for Practice

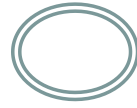


- Components of a detailed IHP
 - Actions and expectations
 - Events outside of school
 - Extracurricular
 - Assessment
- Components of a detailed emergency plan
 - Health history
 - Contacts
 - Activating EMS
 - EMS response time
 - Preferred hospital



(M.D. Bergren, personal communication, March 15, 2017)

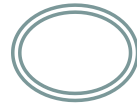
Implications Cont'd



- Ensuring parents are aware of their rights to Section 504 accommodations
 - Provide parent with safeguards
- Preparing staff for emergent situations
- Monitoring student progress or decline
- Responding appropriately to asthma exacerbations



Nursing Assessment



- Breath sound assessment
- Incentive spirometry
- Pulse oximeter



DOCUMENT and COLLABORATE

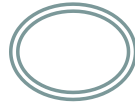
Nursing Assessment Cont'd.



Some independent nursing interventions that can be listed in an Individual Health Plan are as listed:

- Instruct the student to sit upright for maximum lung expansion
- Attempt pursed lipped breathing
- Stay calm
- Remove student from the trigger
- Seek emergency help if symptoms worsen or progress
 - Blue tinge to lips and nail beds (cyanosis)
 - Absence of wheezes
 - Use of accessory muscles (hunching shoulders, strained abdominal and neck muscles)
 - Conversational dyspnea (the inability to speak in full sentences)
 - Agitation
 - Confusion
 - A profound need to sit up or stand up
 - Nasal flaring

Teaching the Staff

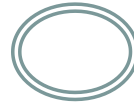


Collaborative maintenance and response to emergencies

- Stay knowledgeable
- Know how to identify symptoms of an attack
 - Labored breathing
 - Retractions between the ribs or at the clavicle
 - Anxious appearance
 - Hunching over
 - Fatigue
 - Excessive coughing
 - Color changes around the mouth or at the fingers (DANGER!)
 - Use of accessory muscles
 - Conversational dyspnea
 - Nasal flaring
 - Confusion

Get the nurse to the student as soon as possible, or call EMS. **NEVER leave the student alone.**

Key Takeaways



Collaborate

Know your stakeholders

- Parents
- Physicians
- Administrators
- Environmental service workers and/or facility maintenance workers
- Community services and resources



Some resources available for use are:

Breath Easier Illinois: www.cdc.gov/asthma

American Lung Association: <http://www.lung.org/about-us/>

National Association of School Nurses: <https://www.nasn.org/toolsresources/asthma>

National Institutes of Health: <http://www.nhlbi.nih.gov/health/resources/lung>

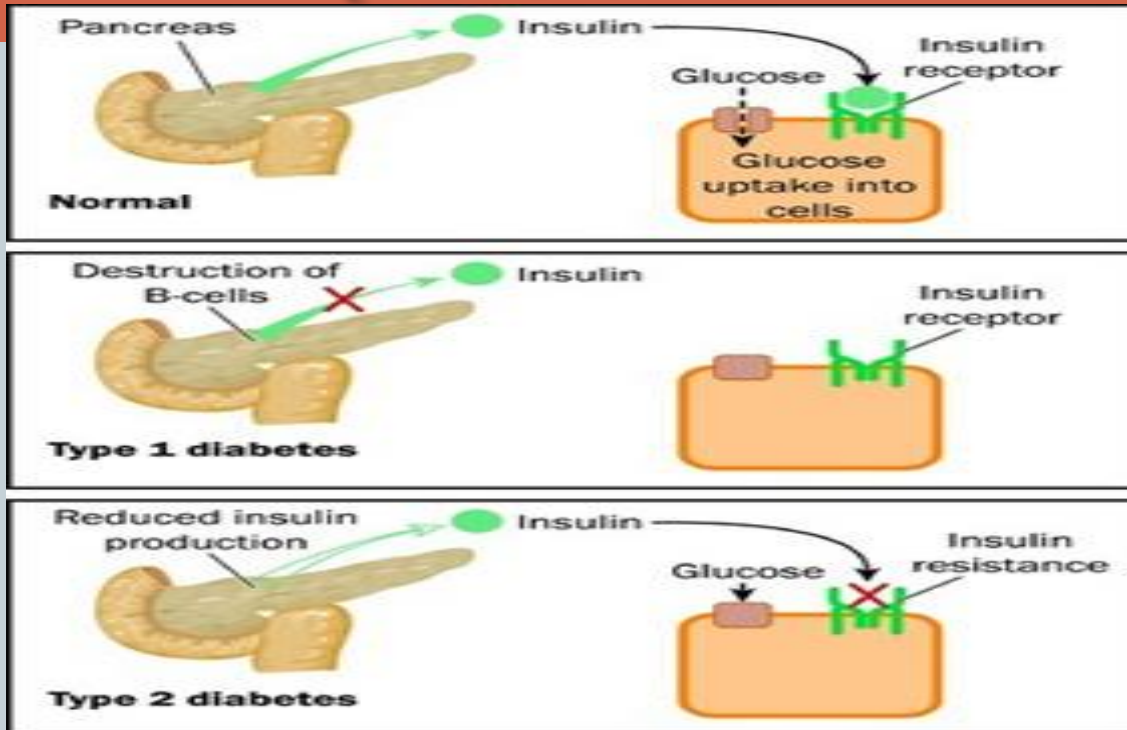
MODULE II



MANAGING DIABETES IN THE SCHOOL SETTING

DIABETES

Quick Overview:

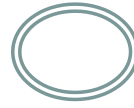


- 208,000 people younger than 20 years of age have type 1 or type 2 diabetes (CDC, 2014).

Diabetes and Academics

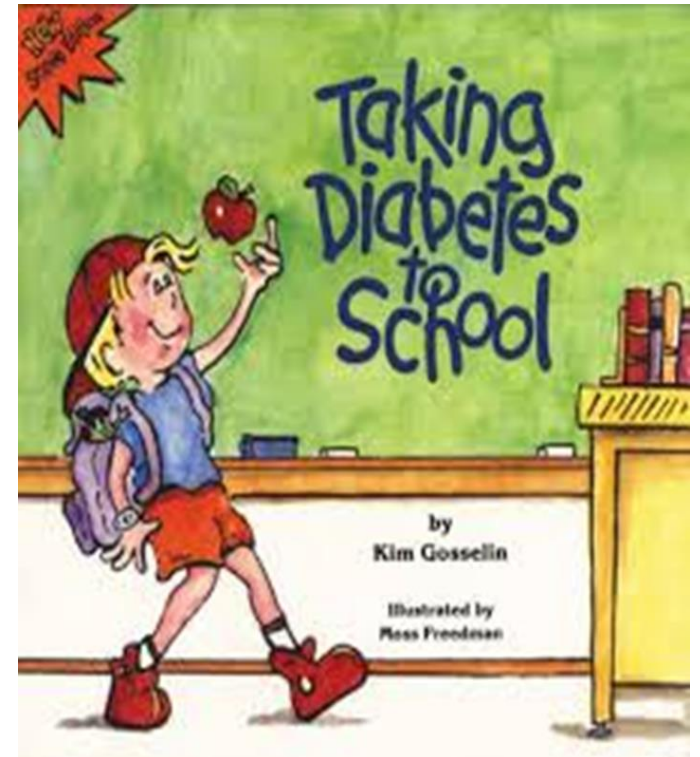
- Hyper and hypoglycemia impact bodily functions important for learning
- Negative impact on grades
 - Student unable to keep up with curriculum
- Uncontrolled DM (either equals increase in hospital visits or deteriorating health status)
- Frequent absenteeism
- Causes other serious health complications including heart disease, blindness, kidney failure, and lower extremity amputations (CDC, 2016)

School Nurses' Role



Our roles in coordinating care for the student with diabetes

- Current physician orders
- Consistent education
- Build partnerships with students, parents, and providers



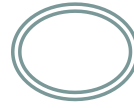
Nursing Implications



The role of the school nurse in coordinating care for the student with diabetes

- Ensure safeguards be made available
 - Section 504
 - Emergency Plan
 - Diabetes Medical Management Plan
- Review state and district policies
- Prevention of acute and long term complications
 - Verify self-care with a checklist
- Planning for events
- Management of hazardous waste
- Social/emotional issues
- Care coordination and partnership
- Culturally competent care
- Chronic Health Condition Resource Nurses

Nursing Implications Cont'd

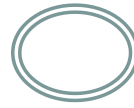


- Components of a detailed Diabetes Medical Management Plan (DMMP)
 - Hyperglycemic treatment
 - Hypoglycemic treatment
 - Emergency treatment for hypoglycemia
 - Carbohydrate dose calculations
 - Insulin therapy
 - Is there a pump?
 - How learned am I on this equipment?
 - Physical activity and extracurricular activities

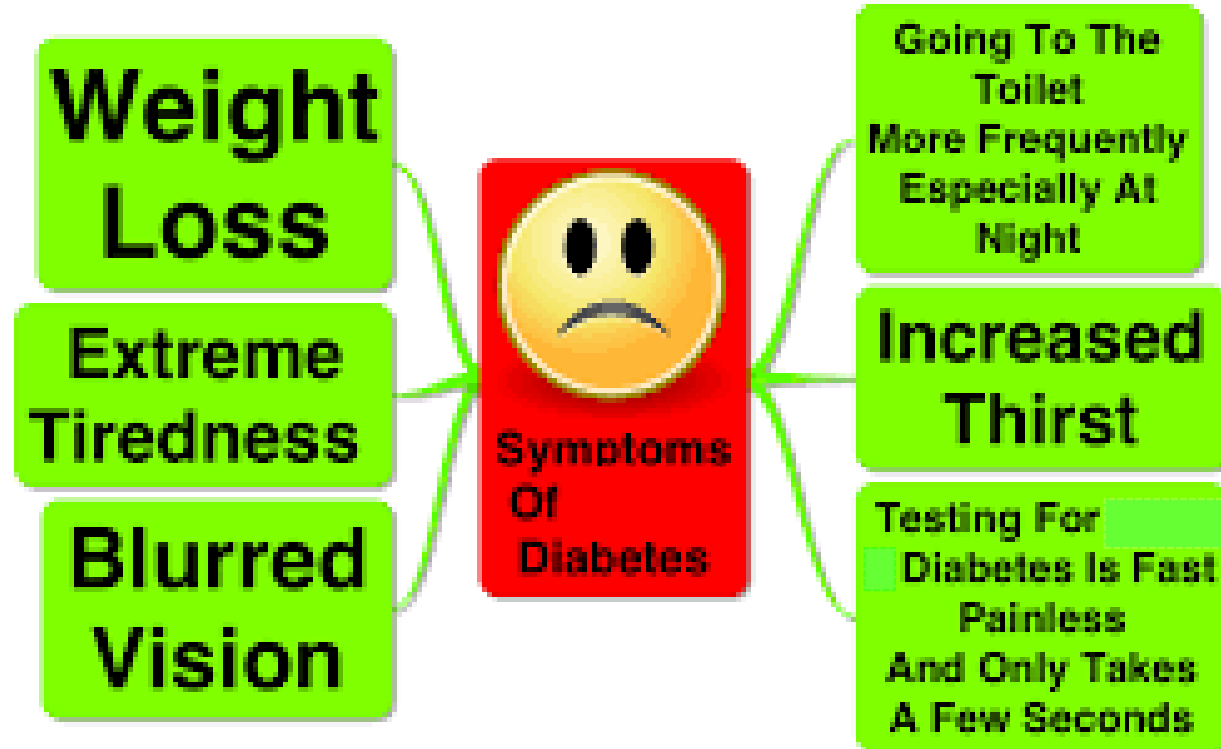
- Components of a detailed emergency plan
 - Health history
 - Contacts
 - Activating EMS
 - EMS response time
 - Preferred hospital

(M.D. Bergren, personal communication, March 15, 2017)

Nursing Assessment

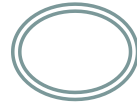


- Blood glucose reading
- Ketone testing
- Physical signs observed
- Reported symptoms
- Carbohydrate counting
- Illness
- Insulin pump management



Document!
Document!
Document!

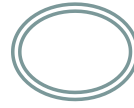
Teaching the Staff



Collaborative maintenance and response to emergencies

- Stay informed of which students have health conditions in your classroom
- Properly identify symptoms of hypo and hyperglycemia
- Follow emergency plan
 - Insulin dependent students need immediate intervention when experiencing hypoglycemia
 - Designee to accompany student to the hospital

Key Takeaways



Coordinate

- Be the key coordinator
- Continue to Collaborate
 - Include the student in their care
 - Frequent effective communication
- Know your school's policies
 - Diabetes is included under ADA
 - District and school policies
 - Carrying medication
 - Carrying syringes



A few resources:

NASN.org and

Helping the Student With Diabetes to Succeed. A Guide for School Personnel:

http://ndep.nih.gov/diabetes/pubs/Youth_NDEPSchoolGuide.pdf

MODULE III



MANAGING ALLERGIES IN THE SCHOOL SETTING

ALLERGIES and ANAPHYLAXIS



Quick Overview:

According the American Academy of Allergy, Asthma, & Immunology (2017), between 2009-2010:

- 38.7 percent children have a history of severe allergies from food
- Peanuts are the most common allergen, followed by milk and shellfish
- In up to 50 percent of individuals of people who suffer anaphylaxis from insect bites, there was no prior history.

Allergies and Academics

- As in most cases of students with chronic health conditions, academics can be highly impacted
- More than 15 percent of allergic reactions occur in school among school aged children



SOY

Common Allergens



INSECT BITES



TREE NUTS and PEANUTS



WHEAT



BEE STINGS



FISH and SHELLFISH



EGGS



MILK

LATEX



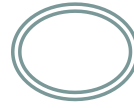
School Nurses' Role



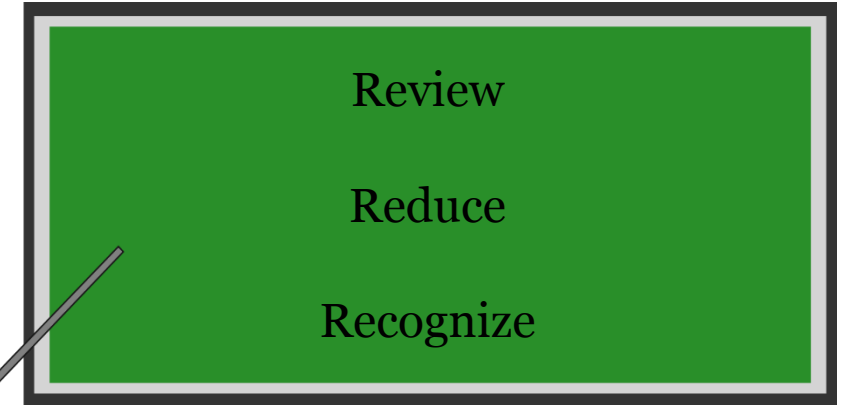
The role of the school nurse in coordinating care for the students with severe allergies

- Current district policy review
 - Should it be updated?
- Current physician orders
- Details of an Anaphylaxis Emergency Plan
 - Specific symptoms
 - Emergency Steps
- Details of a school wide emergency plan
 - Identification
 - Contacts
 - Activating EMS
 - EMS response time
 - Preferred hospital
 - Designee

Implications for Practice



- Review district policies and state laws for updates
- Reduce risks
- Recognize symptoms
- Treat effectively and immediately
- **Educate and prepare!!**
 - Staff
 - Administration
 - Parents
 - Students



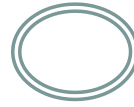
Teaching the Staff



Collaborative maintenance and response to emergencies

- Common allergens
 - How to clean surfaces
 - How to avoid exposure
- Stay knowledgeable of which students have allergies in your classroom
- Properly identify symptoms of allergic reaction and anaphylaxis
- Emergency response
- Epi-Pen administration
 - Training
- Contacting emergency medical system

Teaching the Staff Cont'd

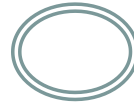


Symptoms of Allergic Reaction and Anaphylaxis

Teach staff to report these signs and symptoms immediately!

- ✓ A look of panic or fear
- ✓ Loss of consciousness, lightheaded, dizziness
- ✓ Shortness of breath, constant coughing, or wheezing
- ✓ Itching and swelling of the lips, mouth, or tongue
- ✓ Itching or tightness in the throat, hoarseness, or a hacking cough
 - ✓ Swelling of the face, hives, or flushing
- ✓ Nausea, vomiting, stomach cramping, or diarrhea

Key Takeaways



Quickly Communicate

- Fast communication and response during an episode
- Who are part of the Emergency Response Team?
- Everyone has a responsibility



Some resources available for use are:

CDC: <https://www.cdc.gov/healthyschools/foodallergies/index.htm>

American Academy of Allergy Asthma & Immunology:
<https://www.aaaai.org/conditions-and-treatments/library/school-tools>



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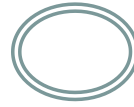
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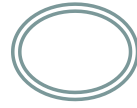
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Thank you for attending this webinar



Ayesha Qadir, RN, BSN, IL-PEL

For questions contact me at

(708) 225-4478

aqadir@isbe.net