SCHOOL NURSE Train-the-trainer: Effective Medical Emergency Response Teams

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Genesee Intermediate School District
President, Michigan Association of School Nurses
MERT Training Objectives

• Establish and train a MERT Team
• Streamline medical emergency responses
• Empower and train school staff
• Provide updates on Sudden Cardiac Arrest and the BIG 4
• Identify Essential elements of Emergency Response Plans
• Maximize effective staff communication during emergencies
• Build staff and district support
• Learn Who, what, when, and where
• Practice and plan for MERT trainings
• Receive and extensive handbook
ROLE OF THE SCHOOL NURSE
Definition of School Nursing:

• School nursing, a specialized practice of public health nursing, protects and promotes student health, facilitates normal development, and advances academic success. School nurses, grounded in ethical and evidence-based practice, are the leaders that bridge health care and education, provide care coordination, advocate for quality student-centered care, and collaborate to design systems that allow individuals and communities to develop their full potentials.

Approved by the NASN Board of Directors June 2016.
Framework for 21st Century School Nursing Practice™

STANDARDS OF PRACTICE

Care Coordination

Community/Public Health

Leadership

Quality Improvement

Students

Healthy, Safe, Ready to Learn

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Rev. 10/28/15
Framework for 21st Century School Nursing Practice™

Standards of Practice
- Clinical Competence
- Clinical Guidelines
- Code of Ethics
- Critical Thinking
- Evidence-based Practice
- NASN Position Statements
- Nurse Practice Acts
- Scope and Standards of Practice

Care Coordination
- Case Management
- Chronic Disease Management
- Collaborative Communication
- Direct Care
- Education
- Interdisciplinary Teams
- Motivational Interviewing/Counseling
- Nursing Delegation
- Student Care Plans
- Student-centered Care
- Student Self-empowerment
- Transition Planning

Leadership
- Advocacy
- Change Agents
- Education Reform
- Funding and Reimbursement
- Healthcare Reform
- Lifelong Learner
- Models of Practice
- Technology
- Policy Development and Implementation
- Professionalism
- Systems-level Leadership

Quality Improvement
- Continuous Quality Improvement
- Documentation/Data Collection
- Evaluation
- Meaningful Health/Academic Outcomes
- Performance Appraisal
- Research
- Uniform Data Set

Community/Public Health
- Access to Care
- Cultural Competency
- Disease Prevention
- Environmental Health
- Health Education
- Health Equity
- Healthy People 2020
- Health Promotion
- Outreach
- Population-based Care
- Risk Reduction
- Screenings/Referral/Follow-up
- Social Determinants of Health
- Surveillance
Nursing Process

Assessment
Health History

Asthma History
Triggers
Symptoms
Medications
Hospitalizations
ED Visits

Nursing Diagnosis
NANDA

Outcomes (NOC)
ECP identified and utilized

Plan
Daily Management Plan
Emergency Plan
Emergency Processes

Interventions (NIC)
Care Coordination
Training

Evaluation
Nursing Process

Identify Students with Health Conditions
Train staff
Secure medications
Emergency Care Plan
"Could someone help me with these? I'm late for math class."

"If all children had a safe harbor... none would be at risk."
The Needs of Students

- An increasing number of school-age children do not have access to basic health care

- Increased complexity of health issues

- Other health issues suicide, teen pregnancy, bullying, ATOD issues, and other mental health issues
The Needs of Students

- Treatments at school
- Medication, injections, rectal meds
- Insulin pumps and CGM
- Complex orders require
  - BS testing
  - carbohydrate counting
  - insulin administration
- Life threatening allergies to insects, foods, latex
The Needs of Students

- Communicable diseases

- Sudden Cardiac Arrest in the Young

- Common chronic illness among children
  - e.g. big 4+
  - Asthma
  - Allergies
  - Diabetes
  - Seizure Disorders
  - + Obesity

要求:
- 健康护理计划
- 紧急护理计划
- 监控
- 药物
- 员工培训
- 学生教育

Vacation BERS
Asthma

– Affects over 10 million children in the U.S.
– Michigan 3 students in every classroom of 30

http://www.cdc.gov/asthma/most_recent_data.htm
Asthma

**Asthma Federal Legislation**

https://www.congress.gov/search?q=%22search%22:%22%22asthma%20in%20school%22%22}&searchResultViewType=expandedS.2817

111th Congress (2009-2010) A bill to amend part D of title V of the Elementary and Secondary Education Act of 1965 to provide grants to schools for the development of asthma management plans and the purchase of asthma inhalers and spacers for emergency use, as necessary.

**Asthma State Legislation**

http://www.cdc.gov/phlp/publications/topic/asthma.html
Complying with Legislation

- Anaphylaxis - PA 186 & 187
- Cardiac Emergency Response Teams - PA 12
- Opioid Antagonist PA 385
Anaphylaxis

• Approximately 2 students / classroom have a food allergy.

• 16%-18% of school-age children with food allergies have had a reaction in school.

• In approximately 25% of the reactions that occur at school, the student has not yet been diagnosed with a food allergy. (McIntyre 2005)
Overall, from 15% to 18% of children and adolescents have some sort of chronic health condition, nearly half of whom could be considered disabled.

Cardiac Emergencies

• SCA >300 Michigan children and young adults 1-39 years annually

• High school AED programs demonstrate a high survival rate for students and adults who suffer SCA on school campus. School-based AED programs are strongly encouraged.

http://www.michigan.gov/mdhhs/0,5885,7-339-73971_4911_4916_47257-241907--,00.html
* Kylee Shea

https://www.youtube.com/watch?v=EYNUBy80muo
GOOD MORNING, TEACHER

Illustration by Jim Borgman. Reprinted with permission from King Enterprises Syndicated.
MERT

Medical Emergency Response Team
Medical Emergency Response Plan

• Outlines staff actions during
  • Minor medical emergencies
  • Major medical emergencies

• Not first aid or CPR steps or sequences

• Recommend all faculty/staff First Aid/CPR/AED

• MERT members
  • CPR and First Aid Certified
  • MERT Members designated by Administrator
Members of M.E.R.T Team

- Principal
- Secretary
- Paraprofessional
- Teachers
- Teachers with students with special needs
- School Nurse
- P.E. Teacher
- Other
What does a medical emergency look like?

- Bleeding
- Shortness of breath
- Unconscious
- Group assembled
- Screaming for Help
Symptoms of medical emergency

1. Disorientation
2. Sleepiness, not responding
3. Sweating
4. Unusually quiet
5. Unusually belligerent
6. Difficulty breathing
7. Panic
8. Unconscious
M.E.R.T. Actions

1. If victim is able to walk, take them to the office for help

2. If not able to walk, call the M.E.R.T. Team to respond
Many actions occurring **simultaneously**

1. Recognize emergency
2. Check to make sure the scene is safe.
3. Call 911 from ?
4. Assemble MERT Announce Secure Mode
5. Buddy Classrooms utilized
6. Take First Aid, AED, EPI, ECP to scene
7. Provide care to patient
8. Call parents
9. Someone meet EMS and show them to patient
10. Someone meet parents in parking lot and inform them of emergency & actions taken
11. Inform Central Administration
12. Scene control
13. Communication / Rumor control
14. Documentation of event
15. Debrief – lessons learned/ QI
# MERT Assignments

<table>
<thead>
<tr>
<th>Established Responsibility</th>
<th>Person Designated to Take Action</th>
<th>Level 1 Subs</th>
<th>Level 2 Subs/Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Determine Emergency status.</td>
<td>Any Staff</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Send students to Buddy Teacher.</td>
<td>Teachers involved</td>
<td></td>
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<tr>
<td>Inform office of emergency status.</td>
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<tr>
<td>Call 911 with location &amp; emergency information. Stay on the phone.</td>
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<tr>
<td>Take AED, First Aid Kit and any emergency meds to location of emergency.</td>
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<tr>
<td>Inform Central Administration of Emergency.</td>
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<tr>
<td>Stay with the victim. Provide Care.</td>
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<tr>
<td>Contact parents. Meet them in the parking lot.</td>
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<tr>
<td>Meet the ambulance.</td>
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<tr>
<td>Unlock the gate/door/direct traffic as needed.</td>
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<tr>
<td>Copy the medical records of the student. Provide to EMS.</td>
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<tr>
<td>Control the scene.</td>
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<tr>
<td>Document incident and response.</td>
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<tr>
<td>Debrief</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
Medical Emergency MERT
Buddy Classroom Assignments

Room #____
Teacher
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Alternative
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Room #____
Teacher
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Alternative
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Room #____
Teacher
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Alternative
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Room #____
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Room #____
Teacher
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Alternative
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Room #____
Teacher
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Alternative
________
Communication Plan

Determine Emergency Status

Any Staff Member:
Stay with the victim. Provide care.

Send students to buddy classroom.

Inform office of emergency status:
- Phone
- Radio
- Other

Confirm Emergency Status

PIC:

Assemble the MERT

Announce Secure Mode For Medical emergency

PA

Call 911 give location and emergency info.
Stay on line.

Take AED/First Aid Kit/EpiPen

Contact Parents

Unlock Gates

Meet ambulance

Meet Parents in Parking Lot

Unlock Gates

Document Incident and Response

Contact Parents

Inform Central Administration

Copy Medical records. Provide to EMS

Provide care
# Communication Plan

<table>
<thead>
<tr>
<th>9-1-1 Protocol</th>
<th>Communication Mode</th>
<th>Walkie/Radios Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cell Phone</td>
<td>Phones</td>
<td>Radio Check-in</td>
</tr>
<tr>
<td>Classroom Phone</td>
<td>Call Button</td>
<td>Base</td>
</tr>
<tr>
<td>Office Phone</td>
<td>Walkies/Radio Runners</td>
<td>Daily Check in</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Track down</td>
</tr>
</tbody>
</table>

**Communication Flowsheet**

Handbook Page 34
PRACTICE
1. MERT Assignments
2. Communication Plan
Health Conditions requiring a MERT Response

- Anaphylaxis
- Asthma
- Cardiac
- Seizures
- Diabetes
- Opioid Overdose
- Other
  - Injuries including Shock and Blood Loss
ASTHMA

https://www.youtube.com/watch?v=U-RfbrnMJZE
What is Asthma

https://www.nhlbi.nih.gov/health/health-topics/topics/asthma
Asthma Action Plan for Home & School

Name: ____________________________

Birthdate: ________________________

Asthma Severity: 
- Intermittent
- Mild Persistent
- Moderate Persistent
- Severe Persistent
- He/she has had many or severe asthma attacks/exacerbations

Green Zone
- Have the child take these medicines every day, even when the child feels well.
- Always use a spacer with inhalers as directed.
- Controller Medicine(s): ____________________________

Controller Medicine(s) Given in School: ____________________________
- Rescue Medicine: Albuterol/Levalbuterol __________ puffs every four hours as needed
- Exercise Medicine: Albuterol/Levalbuterol __________ puffs 15 minutes before activity as needed

Yellow Zone
- Begin the sick treatment plan if the child has a cough, wheeze, shortness of breath, or tight chest. Have the child take all of these medicines when sick.
- Rescue Medicine: Albuterol/Levalbuterol __________ puffs every 4 hours as needed
- Controller Medicine(s):
  - Continue Green Zone medicines: ____________________________
  - Add: ____________________________

- Change: ____________________________
- If the child is in the yellow zone more than 24 hours or is getting worse, follow red zone and call the doctor right away!

Red Zone
- If breathing is hard and fast, ribs sticking out, trouble walking, talking, or sleeping.
- Get Help Now

Take rescue medicine(s) now
- Rescue Medicine: Albuterol/Levalbuterol __________ puffs every __________
- Take: ____________________________

If the child is not better right away, call 911
- Please call the doctor any time the child is in the red zone.

Asthma Triggers: (List)
- [ ] School Staff: Follow the Yellow and Red Zone plans for rescue medicines according to asthma symptoms.
- [ ] Unless otherwise noted, the only controllers to be administered in school are those listed as “given in school” in the green zone.
- [ ] Both the asthma provider and the parent feel that the child may carry and self-administer their inhalers.
- [ ] School nurse agrees with student self-administering the inhalers.

Asthma Provider Printed Name and Contact Information:

Asthma Provider Signature: ____________________________

Date: ____________________________

Parent/Guardian: ____________________________

I give written authorization for the medications listed in the action plan to be administered in school by the nurse or other school members as appropriate. I consent to communication between the prescribing health care provider/clinic, the school nurse, the school medical advisor and school-based health clinic providers necessary for asthma management and administration of this medication.

Parent/guardian signature: ____________________________

Date: ____________________________

Please send a signed copy back to the provider listed above.
Asthma Emergency Treatment Plan

MANAGEMENT OF ASTHMA EXACERBATIONS: School Treatment
Steps to Follow for an Asthma Episode in the School Setting When a Nurse is Not Available

Be prepared. Know which students have asthma and where their medicine is kept.
Be alert for students who may have asthma symptoms. Symptoms can become progressively worse and lead to severe, even life-threatening asthma attacks. Treating symptoms promptly can prevent this and allow the student to resume school activities.

Common symptoms of an asthma episode include one or more of these things: Coughing, wheezing (which can sound like noisy breathing or whistling in the chest), difficulty or discomfort when breathing, tightness in the chest (a sensation of heavy weight on the chest or chest pain), shortness of breath, and breathing hard and/or fast.

If a student has asthma symptoms or complaints and needs your assistance,* take these steps.

» Quickly evaluate the situation. Call 911 if the student is struggling to breathe, talk, stay awake, has blue lips, or asks for an ambulance.
» NEVER LEAVE A STUDENT ALONE. Have an adult accompany the student to the health room or send for help from a school nurse or designee. Do not wait.
» Stop the student’s activity. If the episode began after exposure to an allergen or irritant,** remove the student from the allergen or irritant, if possible. Help the student be calm and in a comfortable position.
» Help the student locate and take his/her prescribed quick-relief inhaler medicine.
» Contact the parent/guardian.
» Repeat quick-relief inhaler medicine in 20 minutes if student is still having trouble breathing.

Call 911 if any of the following occur:

» If the student is struggling to breathe, talk, stay awake, has blue lips, or asks for an ambulance.
» If the student doesn’t improve after two administrations of quick-relief medicine, and nurse/designee or parent/guardian is not available.
» If no quick-relief medicine is available, the student’s symptoms have not improved spontaneously, and nurse/designee or parent/guardian is not available.
» If you are unsure what to do.

Remember:
* Many students who carry their own medicine may be able to self-manage asthma episodes. They should follow the school protocol. Provide support as needed.
** Common asthma allergens and irritants include tobacco smoke, pollens, furry animals, cockroach droppings, dust mites, chalk dust, or strong odors (for example, from cleaning products, paints, or perfume).

SEPTEMBER 2008

Quick Relievers

• Relax the muscles of the airway

• Generally work within 5 minutes

• ARE USED TO TREAT AN ASTHMA ATTACK OR SYMPTOMS OF AN ASTHMA ATTACK
What is a Spacer?

• Spacer or Valved Holding Chamber

• Holds the medicine  **KEEPS MUCH OF THE MEDICATION IN THE AIRWAYS INSTEAD OF ON THE TONGUE, THE BACK OF THE THROAT OR IN THE AIR**
Benefit of using a Spacer

MDI Metered Dose Inhaler

1. Take off the cap and shake canister; attach to spacer
2. Breath out all the way
3. Hold the inhaler/spacer as instructed by the doctor
4. Press down on the inhaler one time, then breath in slowly for 5 seconds
5. Keep breathing in slowly as deeply as possible
6. Hold breath and count to ten slowly
7. Let breath out slowly for 5 seconds
8. Wait 1 minute between each puff
9. If no improvement after 10 minutes, call doctor immediately
PRACTICE

5-10-5
RULES OF TWO®

When is quick relief for asthma NOT ENOUGH?

DO YOU...

- Take your “quick-relief inhaler” more than TWO TIMES A WEEK?
- Awaken at night with asthma more than TWO TIMES A MONTH?
- Refill your “quick-relief inhaler” more than TWO TIMES A YEAR?
- Measure your peak flow at less than two times 10 (20%) from baseline with asthma symptoms?

If **YOU** can answer “YES” to any of these questions, **YOUR ASTHMA IS NOT UNDER CONTROL.**

Thank You
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Section 5 MERT Training

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