

North Carolina School Health Program Manual

Section D, School Health Services, Chapter 6, Emergency Response

Managing Medical Emergencies

The report titled [*Guide for Developing High-Quality School Emergency Operations Plans*](#) includes the expectation from families and communities that students will be kept safe from threats such as crime, violence, and other hazards including natural disasters, disease outbreaks and accidents (USDE, 2013). Injuries and illness are common occurrences in the school-age population. The school is responsible for the safety and well-being of students during the hours of school attendance, while on school property, and during school-sponsored activities. The American Academy of Pediatrics policy statement, *Medical Emergencies Occurring at School*, first written in 2008 and later reaffirmed in 2017, attributes the increased risks of medical emergencies in schools to an increase in the number of children with special health care needs and chronic medical conditions attending schools along with the limited access students have to licensed health care professionals (i.e., school nurses) (AAP, 2008).

Preparation for health-related emergencies should involve planning for those students with a known health condition or disability and training of school staff to respond appropriately during unanticipated emergencies. Plans should include students and staff with disabilities, as required by the [*Americans with Disabilities Act*](#), and address appropriate evacuation plans. “Preparedness in schools is a process designed to protect students and staff from harm, minimize disruption, ensure the continuity of education for students, and develop and maintain a culture of safety” (NASN, 2019). Individualized Healthcare Plans (IHPs) and Emergency Care Plans/Emergency Action Plans (ECP/EAPs) should include provisions for care during evacuation, lock down and/or shelter in place situations. Planning, preparation and training help to maximize positive outcomes when a medical emergency occurs.

Roles of School Staff Members

School Nurse

- Assists with school and/or districtwide development of emergency response policy and procedures using an *all-hazards* approach that includes a variety of potential emergencies.
- Provides or coordinates training for designated first responders and other school staff as necessary in first aid, CPR and AED use as referenced in [G.S. 115C-375.1](#). Instruction and certification in cardiopulmonary resuscitation for one or more school personnel as part of the “school supply of epinephrine auto-injectors” is required per [G.S. 115C-375.2A](#).
- Periodically monitors the school environment for safety hazards and audit injury reports to identify high occurrence areas. The school nurse should share data on excessive hazards and injuries with the principal and encourage an assessment for possible corrective action.
- Participates in development, implementation and debriefing of practice drills for a variety of emergency scenarios. Ensures that school staff responsible for medication administration have a known “assigned” location during building evacuations to facilitate students’ access to emergency medications as needed.
- Works with administration to ensure that each school has the following in place:
 - health service facilities (space to triage, provide immediate first aid, and emergency

North Carolina School Health Program Manual

Section D, School Health Services, Chapter 6, Emergency Response

- shelter if necessary),
 - emergency supplies,
 - general response training for all school staff, including bus drivers and cafeteria workers, and specialized training for designated first responder teams.
- Creates a “Go Box” that contains essential information and equipment needed during an emergency. The box should be portable, easily accessible, and assigned to a specific staff person to grab in the event of an emergency (include this task in drills as appropriate). Consider including a 3-day supply of student medications or, at a minimum, all emergency medications such as inhalers, epinephrine auto-injectors, and those ordered for diabetic and seizure emergencies as well as documentation forms. Selekman et al. (2019) provides a list of recommended contents (p. 468). Student confidentiality and security of supplies should be maintained as much as possible during drills and emergencies.
 - Ensures availability of emergency flip charts or first-aid algorithms to be located in convenient areas as a readily accessible reference for school personnel.
 - The Emergency Guidelines for Schools, 2009 Edition, a publication of the NCDHHS Office of Emergency Medical Services for Children program, should be available at each school main office and can be loaded onto teacher computers for easy reference. The Emergency Guidelines for Schools can be downloaded at <https://info.ncdhhs.gov/dhsr/EMS/pdf/kids/guidelines.pdf>.
 - [North Carolina Poison Control Center](#) (1-800-222-1222)
 - Ensures that a process is in place whereby emergency information for each student is completed and maintained in the health room and/or office for staff members’ use. Emergency information should contain demographic information; home, cell, and work phone numbers for both parents/guardians; names and contact info for other adults authorized to retrieve a student from school; allergies; chronic health conditions; and contact information for the student’s primary provider, dentist, or other health professionals as indicated. Emergency information should be easily accessible while also protecting the confidentiality and security of information (Selekman et al., p. 899-900).
 - Ensures access to Emergency Action Plans for students with known life-threatening conditions.
 - Incorporates school safety, injury prevention, and first-aid education into the health curriculum to be reinforced via health promotion activities.
 - Ensures notification of parents regarding student injury/illness is consistent with local policy and procedure as well as use of sound nursing judgment.

School Administration

- Establishes a core emergency response planning team that includes a variety of key school personnel; student/parent/family representatives; agency representatives that support groups with special needs; and community partners who have a role in emergency response.
- Designates staff to be trained to respond to emergency situations in the role of first responder as defined by [Article 25A](#), *Special Medical Needs of Students*.

North Carolina School Health Program Manual

Section D, School Health Services, Chapter 6, Emergency Response

- Provides opportunities to practice components of the emergency response plan (i.e., drills). Includes a mechanism for ensuring that all new staff receive training at the time of hire.
- Ensures regular review of the emergency response plan and update as needed.
- Ensures the development and implementation of local policy and procedures that address the handling of health care emergencies. Be sure that planning includes the classroom, playground, school-based health center (if applicable), before- and after-school programs, field trips, school transportation, and athletic events.
- Communicates policy and procedures to all school staff, students and parents.

Other School Staff

- Participate in general staff training related to common school health emergencies.
- Follow healthcare plans as written. Communicate with the school nurse/parent/provider as needed or appropriate.
- Respond promptly to emergent and urgent health concerns, communicating concerns to the school nurse, designated first responder team members, school administrators and parents.
- Recognize the limits of licensure, job description and training.
- Adhere to school policy related to blood-borne pathogens, universal precautions, and the exposure control plan.
- Adhere to school policy on emergency response to health care needs.
- Participate in completion of incident reports in accordance with school policy and procedure.

Parent/Guardian

- Provides school staff with current information specific to student health care needs.
- Ensures the school has up-to-date contact information and current care plans that address the needs of the student during the school day, while on field trips and in the event of an extended shelter in place situation.
- Follows school plans regarding emergency supply of medication and/or supplies.
- Participates on the emergency response planning team if invited.

National Framework for Preparedness Efforts

According to the USDE (2013), “National preparedness efforts, including planning, are now informed by Presidential Policy Directive (PPD) 8, which describes the nation’s approach to preparedness. This directive represents an evolution in our collective understanding of national preparedness, based on the lessons learned from terrorist attacks, hurricanes, school incidents, and other experiences.” The five mission areas related to preparedness include: Prevention, Protection, Mitigation, Response, and Recovery, as described below.

- **Prevention:** the capabilities necessary to avoid, deter, or stop an imminent crime or threatened or actual mass casualty incident. Prevention is the action schools take to prevent

North Carolina School Health Program Manual

Section D, School Health Services, Chapter 6, Emergency Response

a threatened or actual incident from occurring.

- **Protection:** the capabilities to secure schools against acts of violence and manmade or natural disasters. Protection focuses on ongoing actions that protect students, teachers, staff, visitors, networks, and property from a threat or hazard.
- **Mitigation:** the capabilities necessary to eliminate or reduce the loss of life and property damage by lessening the impact of an event or emergency. Mitigation also means reducing the likelihood that threats and hazards will happen.
- **Response:** the capabilities necessary to stabilize an emergency once it has already happened or is certain to happen in an unpreventable way; establish a safe and secure environment; save lives and property; and facilitate the transition to recovery.
- **Recovery:** the capabilities necessary to assist schools affected by an event or emergency in restoring the learning environment.

As schools plan for and execute response and recovery activities through the emergency operations plan, they should use the concepts and principles of the National Incident Management System (NIMS). One component of NIMS is the Incident Command System (ICS), which provides a standardized approach for incident management, regardless of cause, size, location, or complexity. By using ICS during an incident, schools will be able to more effectively work with the responders in their communities (USDE, 2013). It is important to have a representative from the school system on the community's crisis/emergency response team. More information on [NIMS](#) and [ICS](#) is available online.

Nursing Assessment and Triage

When a student experiences an emergent illness or injury, the actions taken can make the difference between permanent disability and full recovery. Assess the student's condition swiftly and accurately, without overlooking important physical and historical findings. These findings provide the basis for selecting and prioritizing interventions, evaluating the student's response, and determining disposition. A systematic, consistent approach is the key to this process (Illinois Department of Public Health and Illinois Emergency Medical Services for Children, 2017).

Components of a Systematic Assessment: A systematic assessment can be categorized into four major activities, each of which has a specific role in emergency nursing care.

- *Scene safety assessment:* Ensure that it is safe to approach the injured student. Call for backup assistance if necessary (Selekman et al., pp. 422-423).
- *Across-the-room assessment:* Use ABC (Appearance, Breathing, Circulation) as a memory jog for each leg of the Pediatric Assessment Triangle (PAT) for your across-the-room assessment. Immediately activate EMS if the situation is obviously emergent (Selekman et al., p.423).
- *Primary assessment:* Use the C-ABCDE protocol to identify and treat problems that threaten life, limb, or vision. The primary assessment includes the following components:

North Carolina School Health Program Manual

Section D, School Health Services, Chapter 6, Emergency Response

control hemorrhage/perform CPR, assess airway, breathing, circulation, disability, and expose the injured area briefly for examination. The AVPU mnemonic (Alert, Verbal, Painful, Unresponsive) can be used to assess the level of consciousness or disability (Selekman et al., pp. 423-424).

- *Secondary assessment:* The secondary assessment always follows the primary assessment. Use the FGHI mnemonic to obtain data for this part of the assessment. The secondary assessment includes the following components: a full set of vital signs and pain assessment, giving comfort measures, health history and a head-to-toe or focused physical exam, and isolate injuries and provide interventions as applicable. Inspect, auscultate, and palpate affected areas to identify or investigate additional problems, and perform ongoing reassessment (Selekman et al., pp. 424- 426).

These activities can be adapted to virtually any situation providing a clear, safe, and consistent basis for clinical decision-making and nursing interventions. The systematic assessment culminates in an accurate triage decision, appropriate interventions, and optimum final disposition.

Resources

There are a variety of resources that are available to assist the school nurse in being better prepared to handle school emergencies. Some suggestions are listed below as a place to begin but the list is not comprehensive. Each school nurse is responsible for a self-assessment of competence and learning needs related to emergency response activities.

- American Academy of Pediatrics Policy Statements (2008):
 - [*Disaster planning for schools*](#)
 - [*Medical emergencies occurring at school*](#)
- [American Heart Association, Pediatric Emergency Assessment, Recognition and Stabilization](#) (PEARS)
- [American Red Cross, Resources for Schools, Preparation Tips for Schools, Staff, and Students](#)
- [FEMA, Multi-hazard Emergency Planning for Schools](#): This course is designed for teachers, substitute teachers, counselors, parent volunteers, coaches, bus drivers, and students. However, anyone with a personal or professional interest in school preparedness is welcome to participate. School administrators, principals, and first responders alike will find useful information in this course.
- National Association of School Nurses (NASN) has a variety of educational and training resources related to the management of common health emergencies including asthma, diabetes, disaster preparedness, drugs of abuse, food allergies and anaphylaxis, mental health, seasonal influenza, and violence in schools. Go to www.nasn.org
- National Association of School Nurses [Disaster Preparedness Resource Page](#)
- [NC DPI Center for Safer Schools](#)
- [NC Public Health Preparedness and Response Branch](#)
- [School Emergency Triage Training](#): The purpose of SETT is to provide school nurses with the knowledge, skills and training resources to lead school-based Disaster Response Teams and perform triage in response to mass casualty incident (MCI) events.

North Carolina School Health Program Manual
Section D, School Health Services, Chapter 6, Emergency Response

References

American Academy of Pediatrics. (2008). Medical emergencies occurring at school. *Pediatrics*, 122(4), 887-894. 10.1542/peds.2008-2171

Illinois Department of Public Health and Illinois Emergency Medical Services for Children. (2021). *Guidelines for the nurse in the school setting. 4th Edition*. Retrieved from https://www.luriechildrens.org/globalassets/documents/emsc/resourcesguidelines/guidelines-tool-and-other-resources/schoolnurseguidelines_4ed_april2022_final.pdf

NASN. (2019). *Emergency preparedness*. Retrieved from <https://www.nasn.org/nasn-resources/professional-practice-documents/position-statements/ps-emergency-preparedness>

Selekman, J., Shannon, R. A., & Yonkaitis, C. F. (2019). *School nursing: A comprehensive text* (3rd ed.). F. A. Davis Company.

U.S. Department of Education, Office of Elementary and Secondary Education, Office of Safe and Healthy Students. (2013). *Guide for developing high-quality school emergency operations plans*. Retrieved from https://rems.ed.gov/docs/REMS_K-12_Guide