



Module Nine Emergency Medical Services for Children (EMSC)

Wisconsin EMS Medical Director's Course

Pediatric Issues

- Pediatric emergencies are challenging
- Historical paucity of training
- Relative infrequency of life-threatening pediatric emergencies
 - o Variability in size, development and physiologic responses to illness and injury
 - o Nature and causes of pediatric emergencies usually different from adult



Pediatric Issues

- Outcomes for pediatric trauma are worse than for adults
 - Related to issues of preparedness and experience in both prehospital and hospital settings
- Children with special health care needs pose additional challenges
 - May be dependent on technology unfamiliar to the EMT
 - Baseline condition may be highly abnormal

The (EMSC) Project

- Federally funded initiative of the former Bureau of EMS/IP started in 1986.
- Goal - Reduce pediatric death and disability by incorporating children's issues into Wisconsin's emergency care system:
 - o Promoting pediatric injury and illness prevention
 - o Improving children's access to emergency care system
 - o Fostering improved emergency care
 - o Enhancing community awareness and capability for managing childhood emergencies

EMSC Organization

- Project coordinator integrated within the Wisconsin EMS Section
- EMSC Advisory Committee:
 - o Members include nurses, physicians, EMT's and family representatives
 - o Meetings occur in conjunction with the EMS Advisory Board and Trauma Advisory Board meetings to facilitate integration of pediatric emergency care goals into our statewide emergency care system.

EMSC Focus Areas

- Prehospital pediatric emergency care
- Pediatric assessment/treatment support
- System integration
- Hospital-based pediatric emergency care

EMT-Basic Curriculum

- Pediatric issues identified in WI-modified national EMT-Basic curriculum
- Contact local training center or EMSC office (608-266-0472) for further information

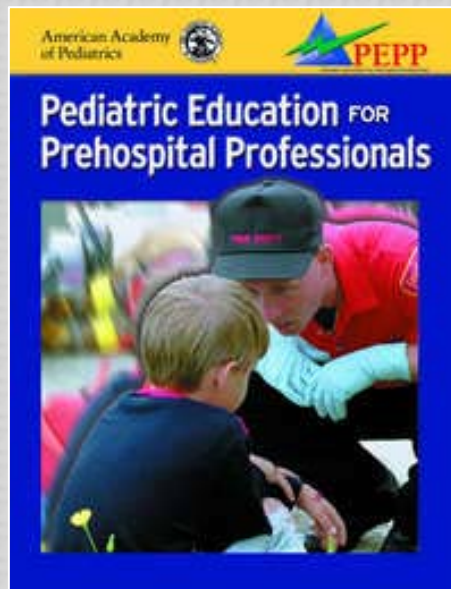
The PEPP Course

- “Pediatric Education for Prehospital Professionals” (PEPP) Curriculum:
 - o Developed by broadly representative National Steering Committee and AAP
 - o BLS and ALS training, primary and refresher, (for BLS, probably best as refresher)
 - o National recognition and application
 - o Outstanding teaching materials
 - o Support from the AAP

Components and Materials

Course components

- Text
- Lectures
- Skill Stations
- Scenarios
- Video



Materials provided

- Textbook
- Resource Manual
- ALS Video
- BLS Video
- Slide Set
- Toolkit CD
- Written Test

Implementation in WI

- EMSC-sponsored PEPP instructor/coordinator courses have trained course coordinator(s) at all ALS training centers
- Teaching materials provided to all training centers
- Contact local ALS training center or EMSC office (608-266-0472) for information about course participation opportunities

Pediatric Emergencies Protocols

- Reviewed and approved by EMSC members
- Protocols approved for use by PAC and EMS Board
- Encourage use and availability of pediatric emergency protocols
- Best practice consensus

Children and Youth with Special Health Care Needs (CYSHCN)

- Children with a variety of problems:
 - Premature infants with chronic lung disease
 - Children with congenital heart disease, neurologic abnormalities, chronic illnesses, anomalies or technology dependent
- May present with complex life-threatening emergencies to prehospital providers:
 - May have isolated or multiple problems
 - Technology and devices often unfamiliar

Clinic/Urgent Center Care Guidelines

- “Recommended Guidelines for Physician Offices, Clinics, and Urgent Care Centers for Pediatric Emergency Preparedness”
- Recommended level of preparedness based on time to paramedic or ED care
- Recommended preparedness elements:
 - o Emergency Equipment
 - o Emergency medications
 - o Transport and transfer policies
 - o Levels of resuscitation training
 - o Equipment for specific emergencies

Pediatric Emergency Care and Disaster Planning Guidelines

- Available from the American Academy of Pediatrics at www.aap.org
- Guidelines include; Emergency Preparedness for CYSHCH, Care of Children in the Emergency Department, Pediatric Care recommendations for freestanding Urgent Care Centers

System Integration

- PAC membership
- EMS Advisory Board membership
- Pediatric-specific statewide data collection
- Focus for broad community collaboration
- STAC participation

Role of Pediatric-Focused Input in State Trauma Plan Development

- Implementation of State Trauma Plan focused on development of Regional Trauma Advisory Councils (RTAC)
- RTACs to involve local stakeholders in trauma care, from prevention through treatment
- Essential that pediatric issues be represented on the RTACs: pediatrician, pediatric surgeon or pediatric nurse practitioner

Safe Transport of Children

- 12,000 ambulance crashes/yr
 - o 1 death/100 crashes
- Patient compartment occupants have higher mortality
- Restraint decreases mortality by 4 times
- A 30 pound child involved in 35 mph crash equivalent to falling 4 stories

Summary

- Pediatric issues are uniquely important in EMS
- EMSC has provided leadership in improving pediatric emergency care through:
 - o Prehospital provider education
 - o Clinical management support
 - o System integration
 - o Collaboration with hospital-based and pre-hospital based partners to ensure quality pediatric emergency care

More Information

- **Additional information**

- o <http://www.ems-c.org>

- o <http://dhs.wisconsin.gov/ems/emsc/>