GEORGIA | PEACH STATE PATHWAYS

Career, Technical, & Agricultural Education

HEALTHCARE SCIENCE

COURSE: 25.562 Concepts of Emergency Medicine

UNIT: 27.1 Infants and Children

INTRODUCTION

Annotation:

In this unit students will learn that the skills gained in providing care for adults will need to be modified in caring for infants and children. Special approaches based on the infant or child's age and development are needed and must be learned and practiced. Students will learn how to make adjustments and practice giving emergency care to infants and children through simulations. Included are suggestions of how students can practice interacting with children of different ages.

Grade(s):

	9th
	10th
X	11th
X	12th

Time:

Ten 50 minute periods

Author:

Mark Elsey, BS, NREMT-P

Additional Author(s):

Multimedia Presentation by Jama Willbanks

Students with Disabilities:

For students with disabilities, the instructor should refer to the student's IEP to be sure that the accommodations specified are being provided. Instructors should also familiarize themselves with the provisions of Behavior Intervention Plans that may be part of a student's IEP. Frequent consultation with a student's special education instructor will be beneficial in providing appropriate differentiation.

FOCUS STANDARDS

GPS Focus Standards: Please list the standard and elements covered.

HS-CEM-14:

Students will identify, assess, and treat infants and children with medical, traumatic, and environmental emergencies.

- **a.** Summarize the developmental considerations affecting the provision of emergency care for each of the following age groups: infants, toddlers, preschool, school age, and adolescent.
- **b.** Discuss the differences in the response of an ill or injured pediatric patient to that of an ill or injured adult patient.
- **c.** Demonstrate the assessment and emergency medical care procedures for the pediatric trauma/medical patient(s) to include: respiratory distress/failure, cardiac arrest, shock, and seizures.
- **d.** Summarize the indicators of child abuse/neglect and describe the Emergency Medical Services Provider's legal responsibilities in suspected cases of abuse/neglect.
- **e.** Analyze the provider's own emotional response to caring for infants or children and recognize the need for debriefing following a difficult call involving an infant or child.
- **f.** Demonstrate a caring attitude and empathy when providing emergency medical care for pediatric patients and in communicating with their parents/guardians.
- **g.** Place the interests of the infant and child with an illness or injury as the foremost consideration when making any and all patient care decisions.

GPS Academic Standards:

ELA11C:. The student demonstrates understanding and control of the rules of the English language, realizing that usage involves the appropriate application of conventions and grammar in both written and spoken formats.

National / Local Standards / Industry / ISTE:

See module at:

www.nhsta.gov/people/injury/ems/pub/frnsc.doc

Lesson 6-2

Infants and Children

UNDERSTANDINGS & GOALS

Enduring Understandings:

- Responding to emergency calls involving sick or injured infants and children can be most difficult and challenging for EMS providers.
- While assessment and treatment is primarily the same as for adults, it is vital that the responder understands how to provide age specific care and the emotions that may be attached to caring for infants and children with illness or injuries.
- It is important that EMS providers are proficient, confident, and willing to adjust approaches to provide the care needed.

Essential Questions:

- How does an EMS provider give age-specific emergency care to infants and children with an illness or injury?
- Why is special care and treatment very important for infants and children?
- What type of equipment is utilized to care for the pediatric population only when dealing with emergencies?
- How does an EMS provider manage the emotional aspects of caring for infants and children with an illness or injury? What are some of the new technologies used to care for children with special needs?

Knowledge from this Unit:

- How to demonstrate a caring attitude towards infants and children
- The need to place the interests of the infant or child with an illness or injury as the foremost consideration when making any and all patient care decisions
- How to cope with personal feelings and emotions in caring for infants and children who have an illness or injury
- When to empathize with infants and children who have an illness or injury, as well as with family members and friends of the patient
- How to do a patient assessment on an infant and child

Skills from this Unit:

Using a manikin:

- Demonstrate a caring attitude towards infants and children with illness or injury who require emergency medical services.
- Recognize the need to place the interests of the infant or child with an illness or injury as the foremost consideration when making any and all patient care decisions.
- Communicate with empathy to infants and children with an illness or injury, as well as with family members and friends of the patient.
- Demonstrate assessment of the infant and child.
- Summarize and support the skills needed to provide various forms of emergency care to infants and children suffering from medical illnesses or traumatic injuries.
- Demonstrate the techniques of foreign body airway obstruction removal in the infant.
- Demonstrate the techniques of foreign body airway obstruction removal in the child.
- Demonstrate the assessment of the infant and child.
- Demonstrate bag-valve-mask artificial ventilations for the infant.
- Demonstrate bag-valve-mask artificial ventilations for the child.

ASSESSMENT(S)

Assessment Method Type: Select one or more of the following. Please consider the type(s) of differentiated instruction you will be using in the classroom.

____ Pre-test
_X_ Objective assessment - multiple-choice, true- false, etc.
  _X_ Quizzes/Tests
  _X_ Unit test
_X_ Group project
_X_ Individual project
_X_ Self-assessment - May include practice quizzes, games, simulations, checklists, etc.
  __ Self-check rubrics
  __ Self-check during writing/planning process
  __ Journal reflections on concepts, personal experiences and impact on one's life
  __ Reflect on evaluations of work from teachers, business partners, and competition judges
  __ Academic prompts
  _X_ Practice quizzes/tests
_X_ Subjective assessment/Informal observations
  __ Essay tests
  __ Observe students working with partners
  _x_ Observe students role playing
____ Peer-assessment
  __ Peer editing & commentary of products/projects/presentations using rubrics
  __ Peer editing and/or critiquing
_X_ Dialogue and Discussion
  __ Student/teacher conferences

_____ __ Partner and small group discussions
_x_ Whole group discussions
__ Interaction with/feedback from community members/speakers and business partners
_____ Constructed Responses
__ Chart good reading/writing/listening/speaking habits
__ Application of skills to real-life situations/scenarios
_____ Post-test

Assessment(s) Title:

- Adjusting your care multimedia presentation
- Vocabulary Contract from CEM-2 lesson plan
- Unit Workbook pages
- Unit Quiz
- Unit written assessment

Assessment(s) Description/Directions:

- Students will research the internet, find the laws and procedures for reporting child abuse in their area and then write a summary.
- Using slide show software, students will create a summary of the developmental considerations affecting the provision of emergency care for each of the following age groups: infants, toddlers, pre-school, school age, and adolescent.
- Students will complete the Practical Evaluations using NREMT candidate skill sheets from www.nremt.org, candidate section; basic skills.
- Learners will complete the workbook pages related to this unit. Workbook pages will be graded on a 100 point scale.
- Students complete a written exam on a scale of 0-100 to assess understanding of infants and children.
- Students will complete the Chapter Key Terms (Definitions) using a vocabulary contract. Vocabulary Contract will be graded on a 100 point scale.

Attachments for Assessment(s): Please list.

LEARNING EXPERIENCES

Instructional planning: Include lessons, activities and other learning experiences in this section with a brief description of the activities to ensure student acquisition of the knowledge and skills addressed in the standards. Complete the sequence of instruction for each lesson/task in the unit.

Sequence of Instruction

1. Identify the Standards. Standards should be posted in the classroom for each lesson.

HS-CEM-4. Students will identify, assess, and treat infants and children with medical, traumatic, and environmental emergencies.

2. Review Essential Questions.

- How does an EMS provider give age-specific emergency care to infants and children with an illness or injury?
- Why is special care and treatment very important for infants and children?
- What type of equipment is utilized to care for the pediatric population only when dealing with emergencies?
- How does an EMS provider manage the emotional aspects of caring for infants and children with an illness or injury? What are some of the new technologies used to care for children with special needs?

3. Identify and review the unit vocabulary.

- Adolescent
- Preschool child
- Shunt
- Blow-by oxygen
- Respiratory distress
- Sudden infant death syndrome
- Central lines
- Respiratory failure
- Toddler
- Child abuse
- Retractions

- Near drowning
- Drowning
- School-age child
- Neglect
- Gastric Tube
- Secondary drowning
- Newborn
- Grunting
- Nasal flaring
- Infant

4. Assessment Activity.

Interest Approach

Infant and child patients often cause anxiety for the prehospital care provider. This anxiety is caused by a lack of dealing with this special population and a fear of failure. Understanding the special factors involved, such as body size, developmental considerations, and normally ranged vital signs of infants and children is important in their emergency medical care.

LESSON ONE

Distribute copies of the "Infant and Child Assessment" summary before the lecture to help students identify developmental differences as children grow.

Start the Unit, base knowledge

Set some dates.

Set some dates, Vocabulary Menu

Developmental Differences in Infants and Children

A. Newborns and infants

1. Birth to 1 year of age
2. Minimal stranger anxiety
3. Do not like to be separated from parents
4. Do not want to be suffocated by an oxygen mask
5. Need to be kept warm—make sure hands and stethoscope are warmed before touching child
6. Breathing rate best obtained at a distance—watch chest rise, note color and level of activity

7. Examine heart and lungs first, head last; this is done to build confidence; it is best to obtain heart and lung sounds before the child becomes agitated

B. Toddlers

1. 1 to 3 years of age
2. Do not like to be touched
3. Do not like being separated from parents
4. Do not like having clothing removed; remove, examine, replace
5. Do not want to be suffocated by an oxygen mask
6. Reassure child that he or she was not bad; children think their illness/injury is punishment
7. Afraid of needles
8. Fear of pain
9. Should be examined trunk to head approach to build confidence; it should be done before child becomes agitated

C. Preschool children

1. 3 to 6 years of age
2. Do not like to be touched
3. Do not like being separated from parents
4. Do not like having clothing removed; remove, examine, replace
5. Do not want to be suffocated by an oxygen mask
6. Reassure child that he or she was not bad; children think that the illness/injury is a punishment
7. Afraid of blood
8. Fear of pain
9. Fear of permanent injury
10. Modest

D. School-age children

1. 6 to 12 years of age
2. Afraid of blood
3. Fear of pain

4. Fear of permanent injury

5. Modest

6. Fear of disfigurement

E. Adolescents

1. 12 to 18 years of age

2. Fear of permanent injury

3. Modest

4. Fear of disfigurement

5. Treat them as adults

6. These patients may desire to be assessed privately, away from parents or guardians

Have co-workers with children bring them to your class. Have the students interact with "patients" of various ages. Ask children questions about school or siblings while trying to take a pulse, blood pressure, or other assessment component. If this is not possible, consider obtain permission from an elementary school principal to arrange a field trip to allow students to practice interacting with students of different ages. Students could plan an activity like teaching a mini lesson on safety or hand washing or a first aid skill to various age groups

LESSON TWO

Anatomy and Physiology

Slide show presentation/Lecture

Any difference with the A & P

The Airway

A. Anatomic and physiologic concerns

1. Small airways throughout the respiratory system are easily blocked by secretions and airway swelling

2. Tongue is large relative to small mandible and can block airway in an unresponsive infant or child

3. Positioning the airway is different in infants and children; do not hyperextend the neck

4. Infants are obligate nose breathers, so suctioning a secretion filled nasopharynx can improve breathing problems in an infant

5. Children can compensate well for short periods of time

a. Compensate by increasing breathing rate and increased effort of breathing

b. Compensation is followed rapidly by decompensation caused by rapid respiratory muscle fatigue and general fatigue of the infant

B. Opening the airway

1. Position to open airway is different—head-tilt chin-lift—do not hyperextend
2. Jaw thrust with spinal immobilization

C. Using airway adjuncts

1. Oropharyngeal airway

a. Adjunct, not for initial artificial ventilation

b. Should not have a gag reflex

c. Sizing

d. Techniques of insertion

(1) Use tongue depressor

(2) Insert tongue blade to the base of tongue

(3) Push down against the tongue while lifting upward

(4) Insert oropharyngeal airway directly in without rotation

LESSON THREE

Vocabulary Menu due

LECTURE/POWER POINT

A. General impression of well versus sick child can be obtained from overall appearance

1. Assess mental status
2. Effort of breathing
3. Color
4. Quality of cry/speech
5. Interaction with environment and parents

a. Normal behavior for child of this age

b. Playing

c. Moving around

d. Attentive versus non-attentive

e. Eye contact

f. Recognizes parents

g. Responds to parents calling

6. Emotional state

7. Response to the First Responder

8. Tone/body position

B. Approach to evaluation

1. Begin from across the room

a. Mechanism of injury

b. Assessment of surroundings

c. General impression of well versus sick

d. Respiratory assessment

(1) Note chest expansion/symmetry

(2) Effort of breathing

(3) Nasal flaring

(4) Stridor, crowing, or noisy

(5) Retractions

(6) Grunting

(7) Respiratory rate

e. Perfusion assessment—skin color

2. Hands-on approach to infant or child patient assessment

a. Assess breath sounds

(1) Present

(2) Absent

(3) Stridor

(4) Wheezing

b. Assess circulation

(1) Assess brachial or femoral pulse

(2) Assess peripheral pulses

(3) Assess capillary refill

(4) Assess blood pressure in children older than 3 years of age; use appropriate size cuff

(5) Assess skin color, temperature, and moisture

c. Detailed physical examination—begin with a trunk-to-head approach

(1) Situation- and age-dependent

(2) Should help reduce the infant or child's anxiety

LESSON FOUR

Common Problems of the airway

Slide show software presentation/Lecture

airway rethink

*****LECTURE/SLIDE SHOW******

Common Problems in Infants and Children

A. Airway obstruction

1. Partial obstruction

a. Infant or child who is alert and sitting

b. Stridor, crowing, or noisy

c. Retractions on inspiration

d. Pink

e. Good peripheral perfusion

f. Still alert, not unresponsive

2. Emergency care of patients with partial airway obstruction

a. Allow position of comfort, assist younger child to sit up, do not lay down; may sit on parent's lap

b. Offer oxygen

c. Transport

d. Do not agitate child

e. Limited examination; do not assess blood pressure

3. Complete obstruction

a. Altered mental status or cyanosis and partial obstruction

b. No crying or speaking and cyanosis

(1) Child's cough becomes ineffective

(2) Increased respiratory difficulty accompanied by stridor

(3) Victim loses responsiveness

(4) Altered mental status

4. Emergency care for the responsive infant with foreign body airway obstruction
5. Emergency care for the unresponsive infant with foreign body airway obstruction
6. Emergency care for the responsive child with foreign body airway obstruction
7. Emergency care for the unresponsive child with foreign body airway obstruction

B. Respiratory emergencies

1. Recognize the difference between upper airway obstruction and lower airway disease
    a. Upper airway obstruction—stridor on inspiration
    b. Lower airway disease
        (1) Wheezing and breathing effort on exhalation
        (2) Rapid breathing (tachypnea) without stridor
2. Complete airway obstruction
    a. No crying
    b. No speaking
    c. Cyanosis is present
    d. No coughing
3. Recognize signs of increased effort of breathing
4. Assessment of respiratory problems
    a. Early respiratory distress is indicated by any of the following:
        (1) Nasal flaring
        (2) Intercostal retraction (neck muscles), supraclavicular, subcostal retractions
        (3) Stridor
        (4) Neck and abdominal muscles—retractions
        (5) Audible wheezing
        (6) Grunting
    b. Respiratory failure is the presence of signs of symptoms of early respiratory distress and any of the following:
        (1) Rate greater than 60
        (2) Cyanosis
        (3) Decreased muscle tone
        (4) Severe use of accessory muscles

(5) Poor peripheral perfusion

(6) Altered mental status

(7) Grunting

c. Respiratory arrest

(1) Breathing rate less than 10/min

(2) Limp muscle tone

(3) Unresponsive

(4) Slower, absent heart rate

(5) Weak or absent distal pulses

5. Emergency medical care for patients with respiratory problems

a. Provide oxygen to all children with respiratory emergencies

b. Emergency care for patients with respiratory failure

(1) Provide oxygen and assist ventilation for severe respiratory distress

(2) Respiratory distress and altered mental status

(3) Presence of cyanosis with oxygen

(4) Respiratory distress with poor muscle tone

(5) Respiratory failure

c. Emergency care for patients with respiratory arrest

(1) Provide oxygen and ventilate with bag-valve-mask for respiratory arrest

LESSON FIVE

*****LECTURE/SLIDE SHOW******

C. Seizures

1. Seizures in children who have chronic seizures are rarely life-threatening; however, seizures, including febrile, should be considered life-threatening by the First Responder

2. May be brief or prolonged

3. Assess for presence of injuries, which may have occurred during seizures

4. Caused by fever, infections, poisoning, hypoglycemia, trauma, or decreased levels of oxygen; could be idiopathic in children

5. History of seizures; ask the following questions:

a. Has the child had prior seizure(s)?

b. If yes, is this the child's normal seizure pattern?

c. Has the child taken his or her anti-seizure medications?

6. Emergency care for patients having seizures

a. Ensure airway position and patency

b. Position patient on side if no possibility of cervical spine trauma

c. Call for Transport; although brief seizures are not harmful, there may be a more dangerous underlying condition

7. Seizures can be caused by head injury

8. Inadequate breathing and/or altered mental status may occur following a seizure

D. Altered mental status

1. Caused by a variety of conditions

a. Hypoglycemia

b. Poisoning

c. Post seizure

d. Infection

e. Head trauma

f. Decreased oxygen levels

g. Hypoperfusion (shock)

2. Emergency care for patients with altered mental status

a. Ensure patency of airway

b. Be prepared to artificially ventilate/suction

c. Transport

E. Poisoning

1. Common reason for infant and child ambulance calls

2. Identify suspected container through adequate history; bring container to receiving facility if possible

3. Emergency care for patients with poisoning

a. Responsive patient

(1) Contact medical control

(2) Consider need to administer activated charcoal

(3) Provide oxygen

(4) Transport

(5) Continue to monitor patient—may become unresponsive

b. Unresponsive patient

(1) Ensure patency of airway

(2) Be prepared to artificially ventilate

(3) Provide oxygen if indicated

(4) Call medical control

(5) Transport

(6) Rule out trauma; trauma can cause altered mental status

F. Fever

1. Common infant or child ambulance call

2. Many causes—rarely life-threatening; a severe cause is meningitis

3. Fever with a rash is a potentially serious consideration

4. Emergency care for patients with fever

a. Transport
b. Be alert for seizures

G. Shock

1. Rarely a primary cardiac event
   a. Common:
      (1) Diarrhea and dehydration
      (2) Trauma
      (3) Vomiting
      (4) Blood loss
      (5) Infection
      (6) Abdominal injuries
   b. Less common:
      (1) Allergic reactions
      (2) Poisoning
      (3) Cardiac
2. Signs and symptoms
   a. Rapid respiratory rate
   b. Pale, cool, clammy skin
   c. Weak or absent peripheral pulses
   d. Delayed capillary refill
   e. Decreased urine output; measured by asking parents about diaper wetting and by looking at diaper
   f. Mental status changes
   g. Absence of tears, even when crying
   3. Emergency care for patients in shock
   a. Ensure airway/oxygen
   b. Be prepared to artificially ventilate
   c. Manage bleeding if present
   d. Elevate legs
   e. Keep warm
   f. Transport; note: need for rapid transport of infant and child patients with secondary examination completed en route, if time permits

H. Near drowning

1. Artificial ventilation is top priority
2. Consider possibility of trauma
3. Consider possibility of hypothermia
4. Consider possible ingestion, especially alcohol
5. Emergency care for near-drowning patients
    a. Protect airway, suction if necessary
    b. Secondary drowning syndrome—Deterioration after breathing normally from minutes to hours after event; all near-drowning victims should be transported to the hospital

I. Sudden infant death syndrome (SIDS)

1. Signs and symptoms
    a. Sudden death of infants in first year of life
    b. Causes are many and not clearly understood
    c. Baby most commonly discovered in the early morning
2. Emergency care for SIDS victims
    a. Try to resuscitate unless there is rigor mortis
    b. Parents will be in agony from emotional distress, remorse, and imagined guilt
    c. Avoid any comments that might suggest blame to the parents

LESSON SIX

HANDS ON*

Practice with the manikins
Using a child and pediatric manikin complete the following:

- Demonstrate the techniques of foreign body airway obstruction removal in the infant.
- Demonstrate the techniques of foreign body airway obstruction removal in the child.
- Demonstrate the assessment of the infant and child.
- Demonstrate bag-valve-mask artificial ventilations for the infant.
- Demonstrate bag-valve-mask artificial ventilations for the child.

****LECTURE/SLIDE SHOW****

Trauma

A. Injuries are the No. 1 cause of death in infants and children

B. Blunt injury is most common

1. The pattern of injury will be different from adults
    a. Motor vehicle crashes
        (1) Motor vehicle passengers
        (a) Unrestrained passengers have head and neck injuries
        (b) Restrained passengers have abdominal and lower spine injuries
        (2) Struck while riding bicycle—head injury, spinal injury, abdominal injury
        (3) Pedestrian struck by vehicle—abdominal injury with internal bleeding, possible painful, swollen, deformed thigh, head injury
    b. Falls from a great height, diving into shallow water—head and neck injuries
    c. Burns

d. Sports injuries—head and neck
e. Child abuse

C. Head injury

1. The single most important maneuver is to ensure an open airway by means of the modified jaw thrust
2. Children are likely to sustain head injury along with internal injuries; signs and symptoms of shock (hypoperfusion) with a head injury should cause you to be suspicious of other possible injuries
3. Respiratory arrest is common secondary to head injuries and may occur during transport. Common signs and symptoms are nausea and vomiting
5. The most common cause of hypoxia in the unresponsive head injury patient is the tongue obstructing the airway; jaw thrust is critically important
6. Do not use sandbags to stabilize the head because the weight on a child's head may cause injury if the board needs to be turned for emesis
7. Emergency care for patients with head injury
    a. Ensure an open and patent airway
    b. Immobilize the spine
    c. Be alert for vomiting and have suction ready

D. Chest injury

1. Children have very soft, pliable ribs
2. There may be significant injuries without external signs
3. Emergency care for patients with chest injury
    a. Ensure adequate oxygenation
    b. Immobilize and transport

E. Abdominal injury

1. More common site of injury in children than adults
2. Often a source of hidden injury
3. Always consider abdominal injury in the multiple trauma patient who is deteriorating without external signs
4. Air in stomach can distend abdomen and interfere with artificial ventilation efforts

F. Burns

1. Assess criticality of burns
2. Call for Transport to appropriate facility
3. Emergency care for burn victims
    a. Ensure airway patency
    b. Provide oxygen
    c. Cover with sterile dressings (nonstick if possible, sterile sheets may be used)
    d. Identify candidates for burn centers per local protocol
    e. Immobilize if indicated

LESSON SEVEN

HANDS ON*

Practice with the manikins
Using a child and pediatric manikin complete the following:

- Demonstrate the techniques of patient assessment in the infant.
- Demonstrate the techniques of patient assessment in the child.

***** Field Trip Idea******

Visit local, feeder elementary school to work with "little" patients.

*****LECTURE/POWER POINT******

!!!! IDEA- Invite someone from DFACS to discuss this topic!!!!

Child Abuse and Neglect
A. Definition of abuse—improper or excessive action so as to injure or cause harm
B. Definition of neglect—giving insufficient attention or respect to someone who has a claim to that attention
C. The FR must be aware of condition to be able to recognize the problem
D. Physical abuse and neglect are the two forms of child abuse that the FR is likely to suspect
E. Signs and symptoms child abuse and neglect
1. Signs and symptoms of abuse
    a. Multiple bruises in various stages of healing
    b. Injury inconsistent with mechanism described
    c. Repeated calls to the same address
    d. Fresh burns
    e. Parents seem inappropriately unconcerned
    f. Conflicting stories
    g. Fear on the part of the child to discuss how the injury occurred
2. Signs and symptoms of neglect
    a. Lack of adult supervision
    b. Malnourished-appearing child
    c. Unsafe living environment
    d. Untreated chronic illness; e.g., asthmatic with no medication
    3. CNS injuries are the most lethal—shaken baby syndrome

F. Emergency care for abused and neglected patients
1. Care for the child is most important
2. Do not accuse in the field
    a. Accusation and confrontation delays transportation
    b. Bring objective information to the responding EMT's and Paramedics
3. Reporting required by state law
    a. Local regulations
    b. Objective—what you see and what you hear—**NOT** what you think

LESSON EIGHT

Special Needs/ lecture
What to prepare for…..

Invite someone from CHOA (Children's Healthcare of Atlanta), or area children's' hospital to discuss this topic. They can bring pictures and equipment and share hands on, true life experience with the students.

Infants and Children with Special Needs
A. This can include many different types of children
1. Premature babies with lung disease
2. Babies and children with heart disease
3. Infants and children with neurological disease
4. Children with chronic disease or altered function from birth
5. Often these children will be at home, technologically dependent

LESSON NINE

Unit (GPS) Review and Quiz

*****LECTURE/SLIDE SHOW******
Reactions to Ill and Injured Infants and Children

A. The family's reaction
1. A child cannot be cared for isolated from the family; you have multiple patients
2. Striving for calm, supportive interaction with family will result in improved ability to deal with the child
    a. Calm parents = calm child; agitated parents = agitated child
    b. Anxiety arises from concern over child's pain; fear for child's well-being
    c. Worsened by sense of helplessness
3. Parents may respond to First Responder with anger or hysteria
4. Parents should remain part of the care unless child is not aware or medical conditions require separation
5. Parents should be instructed to calm child; can maintain position of comfort and/or hold oxygen
6. Parents may not have medical training, but they are experts on what is normal or abnormal for their children and what will have a calming effect

B. The First Responder's reaction
C. Anxiety from lack of experience with treating children and fear of failure
D. Skills can be learned and applied to children
E. Stress from identifying patient with their own children

LESSON TEN

Ask students to clear their desks and use a pen or pencil.

Administer the Unit's written assessment.

Grade and return.

Prepare students for GPS CEM-15

Attachments for Learning Experiences:

Notes & Reflections:

Remediation Sheets or "Ticket out the Door"

The remediation sheet should be completed after every class to identify individual students or groups of students having difficulty demonstrating the cognitive, affective or psychomotor objectives of the lesson. The instructor should provide appropriate remediation to the individual or group before the next class. Instructors should assist students to achieve success in the program.
These sheets should be copied and placed at the end of each lesson.

First Responder Remediation Sheet

Date	Student
Area of Difficulty	
Action Plan	
Completed	

CULMINATING PERFORMANCE TASK (Optional)

Culminating Unit Performance Task Title:

Culminating Unit Performance Task Description/Directions/Differentiated Instruction:

Attachments for Culminating Performance Task: Please list.

UNIT RESOURCES

Web Resources:

- **EMS-Related Organizations**

The organizations listed below offer resources for specific EMS interests and information. Some organizations offer training opportunities through local branches. To obtain membership, dues, and participation information, write to the organization(s) most closely associated with your interests.
This is only a sampling of EMS-related organizations. EMS journals and other EMS professionals may provide information on additional organizations.

- **American Red Cross (ARC)**

National Disaster Response
Contact your local Red Cross chapter

- **American Trauma Society (ATS)**

Membership Department
8903 Presidential Parkway, Suite 512
Upper Marlboro, MD 20772-2656

- **FARMEDIC National Training Center**

ATTN: Dave Oliver
Alfred State College
Alfred, NY 14802

- **Florida EMS Clearinghouse**

2002 Old St. Augustine Road, Building D
Tallahassee, FL 32301

- **International Association of Dive Rescue Specialists (IADRS)**

P.O. Box 5259
San Clemente, CA 92674-5259

- **International Critical Incident Stress Foundation, Inc.**

ATTN: Team Information
5018 Dorsey Hall Drive, Suite 104
Ellicott City, MD 21042

- **National Association For Search And Rescue**

4500 Southgate Place, Suite 100
Chantilly, VA 22021

- **National Association of Emergency Medical Technicians (NAEMT)**

102 West Leake Street
Clinton, MS 39056

- **National Association of EMS Physicians (NAEMSP)**

230 McKee Place, Suite 500
Pittsburgh, PA 15213

- **National Flight Paramedic's Association**

35 South Raymond Avenue, Suite 205
Pasadena, CA 91105

- **National Registry of Emergency Medical Technicians (NREMT)**

ATTN: First Responder Department
6610 Busch Boulevard
Columbus, OH 43229

- **Air Medical Physician Association** (AMPA)

Ms. Pat Petersen, Executive Director 383 F St. Salt Lake City, UT 84103
website: www.ampa.org.

- **Association of Air Medical Services** (AAMS)

Ms. Dawn Mancuso, Executive Director
110 North Royal St., Suite 307
Alexandria, VA 22314
703 836 8732; fax 703 836 8920
e-mail: dmancuso@aams.org website: www.aams.org.

- **National EMS Pilots Association** (NEMPSA)

Ms. Dawn Mancuso, Executive Director
110 North Royal St., Suite 307
Alexandria, VA 22314
703 836 8732; fax 703 836 8920
e-mail: dmancuso@aams.org
website: www.nemspa.org.

- A**ir & Surface Transport Nurses Association** (ASTNA) Ms. Karen Wojdyla, Executive Director 9101 E. Kenyon Ave., Suite 3000

Denver, CO 80237
303-770-2220; fax 303-770-1812
e-mail: info@gwami.com
website: www.astna.org

- **National Flight Paramedics Association** (NFPA) \

Ms. Pat Petersen, Executive Director 383 F St. Salt Lake City, UT 84103
801 381 NFPA; fax 801 321 1668
website: www.nfpa.rotor.com.

- http://health.state.ga.us/programs/ems/offices
- www.nhtsa.dot.gov
- www.innerbody.com
- www.amhrt.org
- www.jems.com
- www.mosbyjems.com
- www.nremt.org
- www.dhs.gov

Attachment(s):

Materials & Equipment:

- Human skeleton
- Anatomical charts and graphs
- **AV Equipment:**Use various audiovisual materials relating to infants and children. The continuous design and development of new audiovisual materials relating to EMS requires careful review to determine which best meet the needs of the program. Materials should be edited to ensure meeting the objectives of the curriculum.
- **EMS Equipment:**Examination gloves, stethoscope, blood pressure cuffs, penlight
- **Additional Materials:** Infant and child airway models/mannequins, infant and child sizes of oropharyngeal airways, suction unit, images of children in various stages of respiratory distress, oxygen tubing, paper cup, pediatric bag-valve-mask (BVM) with pop-off valve, tape, telephone number of local poison control center (800/222-1222), sudden infant death syndrome (SIDS) information from a local SIDS chapter, pediatric PASG, local protocol for reporting abuse, equipment listed under Special Needs section, local CISD team access information.

What 21st Century Technology was used in this unit:

X	Slide Show Software		Graphing Software		Audio File(s)
	Interactive Whiteboard		Calculator	x	Graphic Organizer
X	Student Response System		Desktop Publishing		Image File(s)
	Web Design Software		Blog	X	Video
	Animation Software		Wiki		Electronic Game or Puzzle Maker
	Email	X	Website		