(10 questions from this outline in the blue section)

Emergency Medical Services for Children grants are aimed at improving emergency care for children by continuing education and other programs to EMS.

1. Define and give specific characteristics for the following age groups:

a. Newborn.

b. Neonate.

c. Infant - fear of separation and stranger. Age of SIDS. Chocking on foreign objects.

d. Toddler - fear of separation and stranger. Most common illness is respiratory emergencies. Chocking on foreign objects.

e. Preschooler - fear of bodily injury and mutilation, loss of control, unknown and dark area, being left alone.

g. School age - fear of loss of control, bodily injury and mutilation, death. Most illnesses are caused by viral infections.

h. Adolescent - fear of alteration of image, separation of peer group.

2. Using your pediatric handouts, give approximate heart rates, respiratory rates, and systolic pressures for:

a. Neonate pulse above 120 pulse.

b. Infant pulse about 100.

c. Toddler pulse about 80.

d. School age children - at age 10 vitals start to fall into adult values.

e. Adolescent.

3. Describe physical differences between children and adults.

- Larger head proportionally.
- Tongue takes up more space.
- Superior and interiorly.
- Cricoid cartilage smallest opening that an ETT passes.

4. Describe the differences in assessment in children vs adults.

- If over 3 years of age to maintain neutral airway place towel under occiput.
- If under 3 years of age place towel under shoulders to maintain neutral airway.
- A child's chest muscles are immature and tire easily.
- In stable children the first phase of assessment is transition phase. This allows the child to get use to the paramedic and equipment first.

(9 questions from this outline in the green section)

5. Describe the Rapid Cardiopulmonary Assessment techniques for children.

6. Describe the 6 physiological status categories (from handouts) in which a pediatric patient will be placed following the rapid assessment.

7. Why is it important to recognize signs of respiratory failure and shock early in children? Cardiac arrest is secondary to respiratory failure in most cases.

8. Describe recognition of respiratory distress in a pediatric patient.

9. Define and list treatment for the following respiratory ailments in children:

a. Croup – virus, slow onset, drooling possible but swallowing present, low grade fever. 3 month to 3 years most common. Winter months.

b. Epiglotitis – fever, bacterial infection, sudden onset 3 years to 7 years most common. Sore throat. Drooling no swallowing.

c. Asthma Common in children over 18 month of age.

· If intubated per medical direction lower tital volume to avoid barotraume. If we ventilate with high volume but cannot get the air out we can cause barotrauma.

d. Bronchiolitis Common in children less than 18 months of age.

e. Pneumonia.

10. From your handouts, differentiate between respiratory distress and respiratory failure and the differences in care.

11. List proper tidal volumes, respiratory rates, tube sizes and depths of insertion for pediatric patients

12. Describe the special considerations for using a BVM on a pediatric patient.

13. Define appropriate blood volumes in children.

14. Define the compensatory differences between adults and children and why it is important to never assume a child is stable.

15. Define compensated vs decompensated shock in children and how to manage shock.

- Children rely on heart rate to increase cardiac output the most.

- Compensatory mechanisms allow the child to mask potentially serious conditions very well.

- Septic shock is most commonly caused by bacterial infections.

16. Describe the techniques for intraosseous infusion in children.

17. Describe fluid resuscitation in children less than one month of age and children older than one month.

10mL/kg and 20mL/kg

18. Be able to use a Broslow Pediatric Tape.

19. List the rate definitions for sinus vs supraventricular tachycardia in the pediatric patient.

20. List the treatment for the following:

a. bradycardia – Epi preferred drug in pedi. Bradycardia can also be caused by hypothermia in newborns and small infants.

b. PEA.

c. SVT.

d. V-tach/V-fib.

21. Describe management of pediatric seizures;

· Most common cause is a rising temperature.

(3 questions from this outline in the black section)

22. Describe signs, symptoms, and management of hypoglycemia and hyperglycemia in a pediatric patient.

- Less than 40 in small children is low blood sugar.

23. Differentiate the signs, symptoms, and treatment for the following medical emergencies in children:

a. meningitis.

b. otitis media.

c. foreign body obstruction of the airway, especially toddlers.

d. septic shock - caused by systemic bacterial infections most commonly.

e. Toxic ingestion and overdose.

24. List the steps of the pediatric chain of survival: Prevent, CPR, Call for help, ALS.

25. List the most common causes of injuries to children. Trauma – Motor vehicle.

26. List the signs, symptoms, and management of the following pediatric trauma emergencies:

a. Head and neck injuries – ICP in infants cause bulging fontanelle's along with the usual Cushing's signs.

b. Brain injuries.

c. Chest trauma.

d. Abdominal trauma.

e. Burns.

27. Describe signs, symptoms, and treatment for SIDS.

· Number one cause of deaths for infants.

28. Describe signs, symptoms, and treatment for child physical abuse.

29. Describe care for children with special needs.

30. Define the DOPE mneumonic for troubleshooting patients on special equipment.

- Displaced, Obstructed, Pneumo, Equipment Failure.

31. Be able to draw up and dilute medications appropriate for children.

32. Be able to get vascular access on children.

33. Be able to recognize the 6 physiological states and provide appropriate therapies.

34. Be able to treat the various cardiac dysrhythmias.

(3 question on the inverted pyramid)

Inverted Pyramid

First level - **position** **(first step - you cannot do anything without positing a patient)**, warm, dry, stimulate, suction.

Second level - Oxygen delivery by basic methods.

Third level - Oxygen delivery with advance methods.

Fourth level - Compressions.

Fifth level - Drugs.If heart rate is less than 60 start CPR. If greater than 60 but less than 100 start sixty seconds on O2 therapy.

If heart rate does not improve start CPR. If CPR and O2 therapy does not work start with EPI.