

**STUDY GUIDE**  
**for**  
**Pediatric Emergencies**

1. The leading cause of death in the 1-15 year age group is/are
  - A. Trauma
  - B. Respiratory illness
  - C. SIDS
  - D. Congenital problems
2. The age group most obsessed with monsters and mutilation is
  - A. 1-3 years
  - B. 3-5 years
  - C. 5-12 years
  - D. 12-15 years
3. A sunken anterior fontanelle may indicate
  - A. increased intracranial pressure
  - B. meningitis
  - C. epidural hematoma
  - D. dehydration
4. As a rule, as a child gets older
  1. the BP falls and the pulse rate rises
  2. the BP rises and the pulse rate falls
  3. the BP and pulse rates fall
  4. the BP and pulse rates rise
5. Which of the following airways is recommended for pediatric use?
  - A. Esophageal Obturator Airway (EOA)
  - B. Nasopharyngeal Airways
  - C. Pharyngeotracheal Lumen Airway (PTL)
  - D. None of the above
6. The narrowest portion of the upper pediatric airway is at the
  - A. larynx
  - B. vocal cords
  - C. cricoid ring
  - D. arytenoids

7. Pop-off valves should be functional when ventilating the pediatric patient
1. to avoid over inflation of the lungs
  2. to avoid causing a pneumothorax
  3. to avoid barotrauma to the lungs
  4. None of the above. Pop-off valves are not recommended.
8. The commonly accepted age limit for attempting an intraosseous infusion is
- A. 3 years old
  - B. 5 years old
  - C. 7 years old
  - D. none of the above
9. Verifying proper placement of an intraosseous needle includes
- A. noting a lack of resistance
  - B. the needle standing upright
  - C. free flow of infusion with infiltration
  - D. all of the above
10. The initial dose for defibrillation in the pediatric patient is
- A. 1j/kg
  - B. 2j/kg
  - C. 4j/kg
  - D. 200j
11. A 3-year-old who burns both legs and arms has burned approximately \_\_\_\_% of his entire body surface area.
- A. 54
  - B. 45
  - C. 72
  - D. 36
12. Which of the following children may be at higher risk for child abuse?
- A. handicapped child
  - B. twin child
  - C. premature child
  - D. all of the above

13. Which of the following are classic characteristics of a child abuser?
- A. parent who spends majority of time with child
  - B. parent who was abused as a child
  - C. parent experiencing financial or marital stress
  - D. all of the above
14. Prehospital management of the abused child includes all of the following **EXCEPT**
- A. treating all injuries
  - B. eliciting a complete history from child and parents
  - C. allowing parent to drive child to hospital
  - D. reporting your findings to the emergency department staff
15. Which of the following statements regarding febrile seizures is true
- A. They usually occur between the ages of 6 months and 1 year.
  - B. They are caused by extremely high temperatures.
  - C. They are caused by a sudden increase in temperature.
  - D. The patient usually does not need to be transported.
16. Which of the following statements is true regarding SIDS?
- A. It usually occurs between the ages of 1 year and 3 years
  - B. Death usually occurs during sleep
  - C. It is usually caused by external suffocation.
  - D. All children are at equal risk.

### **SCENARIO**

Your patient is a 2-month-old who presents lethargic and febrile. His mother says that he has been ill with upper respiratory congestion for two days. He has not eaten well and he generally appears to be very ill. His anterior fontanelles are sunken, he is tachycardic, tachypneic, with a four second capillary refill.

17. You should suspect \_\_\_\_\_ until proven otherwise.
- A. Reye's syndrome
  - B. Down's syndrome
  - C. meningitis
  - D. bronchiolitis
18. His presentation indicates that this patient
- A. is in respiratory failure
  - B. is in shock
  - C. has increased intracranial pressure
  - D. none of the above

19. Prehospital management should include oxygen and
- A. IV Mannitol
  - B. 20mg/kg IV fluid challenge
  - C. IV antibiotics
  - D. the pneumatic antishock garment

**SCENARIO**

Your patient is a 7-year-old who presents with severe nausea and vomiting. His mother says he has had the flu for two days and that she gave him aspirin to lower his fever. He exhibits some combative behavior and appears restless. He has rapid, deep respirations and sluggish pupils. His pulse rate is 60, BP is 150/80.

20. Judging from his history and physical finding, you should suspect
- A. asthma
  - B. meningitis
  - C. sepsis
  - D. Reye's syndrome
21. His physical exam shows the presence of
- A. shock
  - B. poisoning
  - C. vaso-vagal episode
  - D. increased intracranial pressure

**SCENARIO**

Your patient is a 3-year-old who presents with a sudden onset of severe difficulty in breathing. She has not been ill and had been playing with friends at the time of onset. She presents afebrile with inspiratory stridor and ashen skin.

22. You should suspect
- A. foreign body obstruction
  - B. croup
  - C. epiglottitis
  - D. asthma
23. Initial prehospital management of this patient includes
- A. back blows
  - B. abdominal thrusts
  - C. leaving the patient alone
  - D. encouraging the patient to cough followed by abdominal thrusts if ineffective

24. Further management of this patient may include

- A. direct laryngoscopy
- B. removal with Magill forceps
- C. cricothyrotomy
- D. all of the above

**SCENARIO**

Your patient is a 5-year-old who presents sitting forward using all accessory muscles to breathe. He has inspiratory stridor, retractions, a sore throat, and drools. He is febrile and has been ill for almost a week prior to this incident.

25. In this patient, you should suspect

- A. foreign body obstruction
- B. croup
- C. epiglottitis
- D. asthma

26. Initial prehospital management of this patient includes

- A. racemic epinephrine
- B. direct laryngoscopy
- C. Heimlich maneuver
- D. none of the above

27. If the patient totally occludes his airway, you should immediately

- A. deliver 5 abdominal thrusts
- B. perform bag-valve-mask ventilation
- C. inject 0.03 mg/kg epinephrine 1:1000 SC
- D. none of the above

**SCENARIO**

Your patient is an 8-month-old child who presents with difficulty in breathing. She has diffuse expiratory wheezing, retractions, and uses accessory muscles to move air. She is tachypneic and tachycardic. She is warm and has been ill since yesterday.

28. In this patient you should suspect

- A. asthma
- B. bronchitis
- C. bronchiolitis
- D. croup

29. Signs that this patient is in imminent respiratory arrest would include

- A. slowing of the respiratory rate
- B. decrease in the respiratory effort
- C. decrease in breath sounds
- D. all of the above

30. Prehospital management of this patient should include

- A. oxygen
- B. albuterol via nebulizer
- C. sitting child upright
- D. All of the above

### SCENARIO

Your patient is a 4-year-old who presents listless and appears very ill. She has a decreased level of consciousness and responds only to loud voices. Her mother says she has had diarrhea for two days and has not been able to keep food or drink down. She has tenting, dry mucous membranes, tachycardia, and delayed capillary refill.

31. From this patient's presentation, you should suspect

- A. respiratory failure
- B. severe dehydration
- C. pulmonary edema
- D. respiratory infection

32. Prehospital management should include oxygen and

- A. 20mg/kg IV fluid challenge
- B. 40mg furosemide IV
- C. IV antibiotics
- D. albuterol via nebulizer

33. Which of the following is recommended immediately following delivery of the infant?

- A. Suction the mouth, then the nose
- B. Dry the baby off
- C. Cover to maintain body temperature.
- D. All of the above

34. Which of the following is recommended practice regarding the umbilical cord?
- A. Milk the cord toward the baby
  - B. Milk the cord toward the mother
  - C. Clamp and cut the cord after it stops pulsating (a few minutes after delivery)
  - D. Disregard the cord until the placenta delivers
35. The normal respiratory rate of the neonate should be \_\_\_\_\_ breaths per minute.
- A. 10-20
  - B. 20-40
  - C. 40-60
  - D. 60-100
36. A pulse rate of less than 100 beats per minute in the newborn infant
- A. is normal after 2-3 minutes postpartum
  - B. indicates an infant in distress
  - C. requires immediate atropine administration
  - D. requires aggressive fluid therapy
37. Which of the following statements is true regarding the APGAR score?
- A. It should be calculated at 1 and 5 minutes after delivery
  - B. An infant with a score of 3 requires immediate resuscitation
  - C. Scores in the 7-10 range indicate a normal infant
  - D. All of the above
38. The presence of meconium at birth requires immediate
- A. bag-valve mask ventilation
  - B. suctioning of the trachea
  - C. stimulation of the baby to breathe
  - D. cardiopulmonary resuscitation
39. Which of the following statements is true regarding neonatal suctioning?
- A. Normal suctioning should be performed by bulb syringe or Dele trap
  - B. Suctioning should last no longer than 10 seconds
  - C. Meconium should be suctioned through an endotracheal tube
  - D. All of the above

40. Which of the following is **NOT** part of the first step of the inverted pyramid?
- A. oxygen administration
  - B. tactile stimulation
  - C. drying and warming
  - D. positioning
41. An infant's best indicator of distress is the
- A. respiratory effort
  - B. heart rate
  - C. cardiac rhythm
  - D. blood pressure
42. If the infant presents with cyanosis after performing step 1 of the inverted pyramid, you should
- A. administer blow-by oxygen
  - B. perform bag-valve mask ventilation
  - C. begin CPR
  - D. insert an endotracheal tube
43. If the heart rate is less than 100, or the infant is still cyanotic after performing step 2, you should
- A. administer blow-by oxygen
  - B. perform bag-valve-mask ventilation
  - C. begin CPR
  - D. insert an endotracheal tube
44. If the infant's heart rate is less than 80 after performing steps 1-3, you should
- A. administer atropine
  - B. perform chest compressions
  - C. insert an endotracheal tube
  - D. administer epinephrine
45. The infant's heart rate can best be checked by
- A. auscultating the heart at the apex
  - B. feeling the umbilical cord
  - C. palpating the brachial pulse
  - D. all of the above



46. Which of the following is true regarding neonatal resuscitation?
- A. Pop-off valves on bag-valve devices should be disengaged
  - B. Uncuffed ET tubes should be used on all neonates
  - C. Chest compressions should be performed over the midsternum
  - D. All of the above
47. Fetal feces is greenish-black to brown and may be present in the amniotic fluid. Presence of this fecal matter is produced by a period of fetal distress and can cause severe lung infection if aspirated. This material is called
- A. meconium
  - B. mercronial feces
  - C. melena
  - D. fetal diarrhea
  - E. mucous stools
48. CPR is required for a newborn when
- A. respirations are less than 40 - 60
  - B. the pulse rate is less than 60 per minute
  - C. the pulse is absent
  - D. answers a and c only
  - E. answers b and c
49. Physical examination of the neonate or infant includes observation of the anterior fontanelle. In a normal state, the fontanelle
- A. feels tight and may bulge
  - B. is level with the skull or slightly sunken
  - C. falls below the level of the skull surface and appears sunken
  - D. any of the above
  - E. none of the above
50. With increased intracranial pressure, the fontanelle
- A. feels tight and may bulge
  - B. is level with the skull or slightly sunken
  - C. falls below the level of the skull surface and appears sunken
  - D. any of the above
  - E. none of the above

51. With dehydration, the fontanelle
- A. feels tight and may bulge
  - B. is level with the skull or slightly sunken
  - C. falls below the level of the skull surface and appears sunken
  - D. any of the above
  - E. none of the above
52. The generally accepted definition of a neonate is the infant from birth to the age of
- A. 1 week old
  - B. 2 weeks old
  - C. 1 month old
  - D. 2 months old
  - E. 6 months old
53. Sudden infant death syndrome (SIDS) is defined as the sudden death of an infant between the ages of 1 week and 1 year, which is
- A. the result of regurgitation and aspiration of vomitus.
  - B. unexpected by history and in which a thorough postmortem examination fails to reveal an adequate cause of death
  - C. the result of external suffocation (for example, from a pillow or blanket).
  - D. the result of child abuse
  - E. any of the above
54. Which of the following statements regarding SIDS is true?
- A. The incidence of SIDS is greatest during the hot months of summer
  - B. SIDS is more common in female infants than males
  - C. SIDS is more prevalent among families from middle and upper socioeconomic groups
  - D. infants with low birth weight are at greatest risk for SIDS
  - E. All of the above are true
55. A SIDS infant may exhibit any of the following, except
- A. a normal state of nutrition and hydration
  - B. frothy fluids in and around the mouth and nostrils which may be blood tinged
  - C. the presence of vomitus
  - D. signs of repeated trauma (such as multiple bruises of different ages).
  - E. unusual positioning at time of death

56. When presented with an apneic and pulseless infant exhibiting rigor mortis or dependent lividity, you should
- A. follow you local protocol regarding performance of BLS alone, BLS and ACLS, or deferral of resuscitation efforts
  - B. never attempt resuscitation; protect the crime scene until the police arrive
  - C. provide unconditional support for the parents
  - D. both answers a and c
  - E. both answers b and c
57. Which of the following characteristics of the abused child is false?
- A. girls are more often abused than boys
  - B. handicapped or frequently ill children, or those with special needs are at great risk for abuse
  - C. illegitimate or unwanted children are at high risk for abuse
  - D. uncommunicative (autistic) children are at great risk
  - E. premature infants or twins are at high risk
58. Which of the following characteristics of the child abuser is false
- A. the abuser is usually a parent or individual in the role of a parent
  - B. the abuser may come form any geographic, religious, ethnic, or occupational group
  - C. when the mother is the parent who spends the most time with the child, she is frequently identified as the abuser
  - D. the abuser often was the victim of physical or emotional abuse as a child
  - E. the vast majority of abusers are either high school dropouts or of a low income socioeconomic group
59. Physical findings that should prompt suspicion of child abuse include all of the following, except
- A. any obvious or suspected fractures in a child less than 2 years old
  - B. more injuries than usually seen in children of the same age, or multiple injuries of various ages
  - C. any infant less than 1 year old who appears healthy and atraumatic, but who “died in his sleep.”
  - D. bruises or burns in patterns that suggest intentional infliction
  - E. any injury that does not fit with the provided description of cause
60. Historical points that should prompt suspicion of child abuse include all of the following, except
- A. the parent’s account is vague, inconsistent, or does not account for the nature or severity of injury
  - B. history of a previous SIDS death (SIDS does not occur twice in the same family).
  - C. accusation or inference that the child injured herself/himself intentionally.
  - D. an inappropriate delay in seeking help occurred

- E. the child is dressed inappropriately for the situation
61. Which of the following statements regarding physical neglect and sexual abuse is false?
- A. extreme malnutrition suggests neglect
  - B. genital injury is required to have occurred before sexual abuse can be suspected
  - C. multiple insect bites are suggestive of neglect
  - D. extreme lack of cleanliness is suggestive of neglect
  - E. none of the above is false
62. Causes of seizures in the pediatric patient include
- A. fever, infection, or electrolyte abnormalities
  - B. hypoxia or hypoglycemia
  - C. head trauma, tumors, CNS malformations, or idiopathic epilepsy
  - D. toxic ingestions or exposure
  - E. all of the above
63. Which of the following statements regarding pediatric febrile seizures is false?
- A. seizures are normal for any febrile child, easily diagnosed in the field, and do not constitute a significant illness
  - B. febrile seizures commonly occur between the ages of 6 months and 6 years and caused by a rapid rise in temperature
  - C. suspect fever as the cause of seizure if the temperature is above 103 degrees F (39.2C)
  - D. all pediatric patients who experience a seizure must be transported for evaluation to rule out a significant underlying illness or injury
  - E. none of the above is false
64. The pediatric dose of diazepam for infants and children up to the age of 5 years is
- A. 0.2-0.5mg (slowly) every 2-5 minutes, up to a maximum of 2.5mg
  - B. 1mg every 2-5 minutes, up to a maximum of 20mg
  - C. 2-5mg every 5 minutes, up to a maximum of 1mg
  - D. 0.2-0.5mg/kg every 5 minutes, up to a maximum of 10mg
65. The pediatric dose of diazepam for children 5 years old or older is
- A. 0.2-0.5mg (slowly) every 2-5 minutes, up to a maximum of 2.5mg
  - B. 1mg every 2-5 minutes, up to a maximum of 5 mg
  - C. 2-5mg every 5 minutes, up to a maximum of 20 mg
  - D. 0.2-0.5mg/kg every 5 minutes, up to a maximum of 10mg

66. Which of the following statements regarding dehydration and the pediatric patient is true?
- A. Because of their youth and resilient systems, children rarely suffer from dehydration
  - B. suspicion of neglect should be prompted by signs and symptoms of dehydration in any pediatric patient, and the proper authorities should be notified immediately
  - C. Because of the danger of fluid overload in the pediatric patient, dehydration should be treated with D5W on a microdrip infusion set only
  - D. The initial IV fluid bolus for the dehydrated pediatric patient exhibiting signs and symptoms of shock is 20ml/kg
  - E. All of the above
67. A bacterial infection of the bloodstream is called
- A. meningitis
  - B. sepsis
  - C. Reyes syndrome
  - D. both answers a and b
  - E. answers a, b, and c
68. Aspirin administration to pediatric patients is contraindicated because of its correlation to the incidence of
- A. meningitis
  - B. sepsis
  - C. Reyes syndrome
  - D. both answers a and b
  - E. answers a, b, and c
69. Fever, lethargy, and irritability are often associated with
- A. meningitis
  - B. sepsis
  - C. Reyes syndrome
  - D. both answers a and b
  - E. answers a, b, and c
70. A full or bulging fontanelle may be indicative of
- A. meningitis
  - B. sepsis
  - C. measles
  - D. both answers a and b

- E. none of the above
71. Complaints of severe headaches and stiff necks are indicative of
- A. meningitis
  - B. sepsis
  - C. Reyes syndrome
  - D. both answers a and b
  - E. answers a, b, and c
72. A recent history of chicken pox is present in 10 to 20 percent of the cases of
- A. meningitis
  - B. sepsis
  - C. Reyes syndrome
  - D. both answers a and b
  - E. answers a, b, and c
73. A recent history of upper respiratory tract infection is present in many cases of
- A. meningitis
  - B. sepsis
  - C. Reyes syndrome
  - D. both answers a and b
  - E. answers a, b, and c
74. Laryngotracheobronchitis is more commonly referred to as
- A. bronchiolitis
  - B. epiglottitis
  - C. croup
  - D. all of the above
75. Prominent expiratory wheezing is characteristic of
- A. bronchiolitis
  - B. epiglottitis
  - C. croup
  - D. answers a and b only
  - E. answers a, b, and c
76. Fever often accompanies
- A. bronchiolitis
  - B. epiglottitis
  - C. croup
  - D. all of the above
  - E. none of the above

77. A harsh, barking cough is characteristic of
- A. bronchiolitis
  - B. epiglottitis
  - C. croup
  - D. either answers a or b
  - E. either answers b or c
78. Resistance to being cradled or placed supine, difficulty in swallowing, and drooling is characteristic of
- A. bronchiolitis
  - B. epiglottitis
  - C. croup
  - D. both answers a and b
  - E. both answers b and c
79. Stridor may accompany
- A. bronchiolitis
  - B. epiglottitis
  - C. croup
  - D. either answer a or b
  - E. either answer b or c
80. Attempted visualization of the posterior oropharynx is contraindicated in
- A. bronchiolitis
  - B. epiglottitis
  - C. croup
  - D. both answers a and b
  - E. both answers b and c
81. Humidified oxygen should be administered in all cases of
- A. bronchiolitis
  - B. epiglottitis
  - C. croup
  - D. both answers a and b only
  - E. both answers a, b, and c
82. Which of the following statements regarding pediatric endotracheal intubation is false?
- A. the technique for pediatric endotracheal intubation is similar to that of an adult
  - B. the pediatric tongue is larger and the glottis is found higher than that of an adult
  - C. nasotracheal intubation is contraindicated in pediatric patients
  - D. pediatric laryngoscope blades will fit any adult sized laryngoscope handle

- E. none of the above is false
83. Suctioning of the newborn's mouth and nose should be performed
- A. immediately upon emergence of the head
  - B. immediately after birth (prior to severing the umbilical cord) and as often as needed to ensure a clear airway (but without deprivation of oxygen)
  - C. only after the umbilical cord is cut
  - D. both answers a and b
  - E. any of the above (depending upon local protocols)
84. As soon as the baby is born, place it at the level of the mother's vagina
- A. on its side with the head elevated to allow for adequate suction of its mouth and nose
  - B. providing stimulation by exposure to room temperature air
  - C. on its back with the head slightly lower than its body to allow for adequate drainage of the airway
  - D. wrapped in a warm blanket and on its side with the head elevated to allow for suctioning
  - E. on its side with the head slightly lower to allow for drainage and suction of fluids
85. APGAR assessment of the newborn should be performed
- A. only in the ambulance, on the way to the hospital
  - B. at 1 and 5 minutes after birth
  - C. at 1 and 5 minutes after the placenta delivers
  - D. at 5 and 10 minutes after the placenta delivers
  - E. at 5 minute intervals after birth