

Appendix B

Neonatal Resuscitation Knowledge Test

Instruction to candidates:

For each question stem, **circle the single best answer** from the options provided.

Questions

1. Approximately what percentage of newborns will require some assistance to begin regular breathing?
 - a. 1%
 - b. 5%
 - c. 10%
2. Approximately what percentage of newborns will require extensive resuscitation to survive?
 - a. 1%
 - b. 5%
 - c. 7%
3. The air that fills the baby's alveoli during normal transition contains:
 - a. 21% oxygen
 - b. 40% oxygen
 - c. 100% oxygen
4. If a baby does not begin breathing in response to stimulation, you should:
 - a. Provide positive pressure ventilation
 - b. Intubate the trachea
 - c. Perform tracheal suctioning for meconium.
5. Restoration of adequate ventilation will usually improve the baby's heart rate
 - a. Rapidly
 - b. Gradually
 - c. Slowly
6. True or false: *A vigorous term newborn with meconium in the amniotic fluid will need to have his trachea suctioned via an endotracheal tube?*
 - a. True
 - b. False
7. When deciding which babies need tracheal suctioning, the term 'vigorous' is defined by what 3 characteristics?

- a. Strong respiratory efforts, good muscle tone, heart rate greater than 100 beats per minute.
 - b. Strong respiratory efforts, good muscle tone, good skin colour.
 - c. Strong respiratory efforts, good skin colour, heart rate greater than 100 beats per minute.
8. When suctioning a newborn's nose and mouth with a bulb syringe or suction catheter, the correct order is:
 - a. Mouth, then nose.
 - b. Nose, then mouth.
9. Once resuscitation has been initiated, how often is it recommended that the team re-evaluate the baby's condition?
 - a. 45 seconds
 - b. 30 seconds
 - c. 60 seconds
10. Which of the following is a recommended method of stimulating an apneic newborn?
 - a. Slap the back
 - b. Squeeze the rib cage
 - c. Flick the sole of the foot
11. True or false: *In the delivery room, the oximetry probe should always be placed on the baby's right hand or wrist.*
 - a. True
 - b. False
12. True or false: *Oxygen saturation should be expected to be >85% by 2 minutes of age.*
 - a. True
 - b. False
13. You have stimulated a newborn and suctioned her mouth. It is now 30 seconds after birth, and she is still apneic. Her heart rate is 80 beats per minute. Your next action should be:
 - a. Continue stimulation, and give free-flow supplemental oxygen.
 - b. Provide positive pressure ventilation.
 - c. Begin chest compressions.
14. The color of which body parts should be used to assess the baby's state of oxygenation?
 - a. Lips, tongue and torso

- b. Hands and feet
15. Resuscitation of the term newborn should begin with what percentage of oxygen?
- a. 21%
 - b. 40%
 - c. 60%
16. When ventilating a newborn, you should provide positive-pressure ventilation at a rate of:
- a. 20 – 40 breaths per minute
 - b. 30 – 40 breaths per minute
 - c. 40 – 60 breaths per minute
17. What initial inspiratory pressure should you aim to begin positive pressure ventilation with?
- a. 10 cmH₂O
 - b. 20 cmH₂O
 - c. 30 cmH₂O
18. The 'S' in MR SOPA stands for:
- a. Start chest compressions
 - b. Suction mouth and nose
 - c. Saturation probe
19. The 'O' in MR SOPA stands for:
- a. Open mouth
 - b. Oxygen
 - c. Orogastric tube
20. When providing positive-pressure ventilation with a mask for more than a few minutes, what device should be inserted to vent gas from the stomach?
- a. Endotracheal tube
 - b. Meconium aspirator
 - c. Orogastric tube
21. You have provided effective positive-pressure ventilation for 30 seconds and the baby's heart rate is below 60 beats per minute. Your next action should be:
- a. Reposition the head
 - b. Insert an endotracheal tube
 - c. Start chest compressions

22. The baby is now breathing and its heart rate is >100 bpm. It is now safe to discontinue positive-pressure ventilation.
- True
 - False
23. The preferred method of delivering chest compressions is the:
- Thumb technique
 - 2-finger technique
 - Palm technique
24. The correct depth of chest compressions is about:
- One-quarter the anterior-posterior diameter of the chest
 - One-third the anterior-posterior diameter of the chest
 - One-half the anterior-posterior diameter of the chest
25. During positive-pressure ventilation with chest compressions, the rate of total events per minute (compressions plus breaths) should be:
- 60 events per minute
 - 100 events per minute
 - 120 events per minute
26. After 30 seconds of chest compressions, you stop and count 8 heartbeats in 6 seconds. What is the baby's heart rate?
- 48 beats per minute
 - 60 beats per minute
 - 80 beats per minute
27. You have performed the corrective sequence for inadequate positive-pressure ventilation (MR SOPA). The baby's heart rate fails to rise and bilateral breath sounds are not heard while you are using a bag and mask. Which of the following actions is most appropriate?
- Insert an umbilical vein catheter and give IV epinephrine
 - Insert a laryngeal mask airway or an endotracheal tube
 - Increase the rate of positive-pressure ventilation
28. When using an anatomically shaped mask, which end should be placed over the infant's nose?
- Pointed
 - Rounded

29. When positioning an infant's head for positive-pressure ventilation, which position is appropriate?
- a. Flexed
 - b. Extended
 - c. Sniffing
30. What 3 things must be determined first during your initial neonatal resuscitation assessment?
- a. Gestational age, respiratory effort or crying, muscle tone
 - b. Muscle tone, presence of meconium, respiratory effort or crying
 - c. Heart rate, gestational age, skin colour