# 2024 Protocol Study Guide

# **EMS System Introduction and Expectations**

# Section 2

- 1. Within what amount of time should the EMS office be notified of an adverse event or incident? 2.E.2
- 2. What is an agency's responsibility toward maintaining their glucometers? 2.E.3

# Licensing and Credentialing

# Section 3

- 1. What is the minimum score allowed to pass the Memorial EMS System Protocol Exam? 3.A.1
- 2. What licensing/certifications are required for your level of provider? 3.A.1
- 3. What percentage of continuing education must be done through classes taught or sponsored by the Memorial EMS System? 3.D.1
- 4. At minimum, how many days prior to licensure expirations should you submit for recertification? 3.D.2

# **EMS Wellbeing**

# Section 5

- 1. What protective measures should EMS personnel take during all patient contact? 5.A.1
- 2. In the event of an exposure during patient care, what steps should the exposed provider take? 5.A.1
- 3. What is the policy for substance abuse in the Memorial EMS System? 5.C.1

# **Medical Operations**

- 1. Who specifically should EMS contact when a protocol requires contacting Medical Control? 6.A.1
- Name some reasons why online Medical Control should be used in the pre-hospital setting? (Name 4)
  6.A.2
- 3. Name some conditions that are considered "High Risk Refusals". (Name 4) 6.A.3
- 4. What is considered a "Low Risk Refusal". (Name 2) 6.A.3
- 5. What level of provider can obtain a "Low Risk Refusal" and who can obtain a "High Risk Refusal"? 6.A.3
- 6. Does an EMS response for a mobility assist require a documented refusal be obtained? 6.A.3

- 7. List all the EMS Alert Patient Report categories that are required to activate specific resources for some severe patients. 6.B.1
- 8. Is EMS required to supply a copy of a refusal to the patient? 6.D.2
- 9. What conditions allow a patient, who would otherwise be considered a minor, to consent to or refuse treatment? 6.D.2
- 10. What are some of the reasons why an incident report should be filled out. (Name 4) 2.E.1 and 6.I.1
- 11. Where would EMS look for guidance on the appropriate facility destination for certain types of patients? 6.F.2
- 12. An early term OB patient > 20 and < 32 full weeks gestation, having possible OB related complications, should be recommended to what facilities, if within 25 minutes? 6.F.2
- 13. What facilities, if within 25 minutes, are appropriate for patients with a suspected STEMI? 6.F.2
- 14. Patients with a positive FAST and no measurable LAMS, with a last known well of 4 hours, are recommended to be transported to what type of facility? 6.F.1
- 15. What facilities, within 25 minutes of the scene, are most appropriate for a pediatric trauma? 6.F.2
- 16. Under what conditions would EMS be allowed to deviate from the Patient Destination Criteria? 6.F.3
- 17. In what situation does the distance/time to a hospital differ from all others listed in the Patient Destination Criteria? 6.F.1
- 18. When is a BLS unit able to disregard/cancel and ALS unit that is enroute? 6.E.4
- 19. When can a patient be transported by a lower level of care unit after ALS has established patient contact? 6.E.4
- 20. Based on whether you are a Region 3 or Region 6 provider, what are the four categories of School Bus Incidents and what is the criteria for each? 6.G.2
- 21. When can a Multiple Casualty Release (MCI) form be used? 6.G.3
- 22. List all four of the criteria that should be present to utilize a helicopter response outside of approval by Medical Control or a mass casualty situation? 6.H.1
- 23. What are the acceptable forms pertaining to Advanced Directives recognized by Memorial EMS Providers? 6.J.1
- 24. Under what exceptions would an EMS responder not honor Advance Directives? 6.J.1

## **Medical Legal**

## Section 7

- 1. What is the procedure for a patient that has a concealed carry weapon on them while under EMS care? 7.A.1
- 2. What should EMS do with a weapon found at a suspected crime scene? 7.C.1
- 3. Under what circumstances can EMS leave the scene of a deceased person? 7.D.1
- 4. In reference to the Physician/Other Medical Professional on Scene, what is the procedure for relinquishing care to an on scene medical person who is not a part of EMS? 7.E.1

## **Supply and Preparedness**

## Section 8

- 1. How can EMS determine if a medication has expired? 8.D.1
- (ILS/ALS) If a provider finds a discrepancy or missing controlled substance, who should be notified?
  8.B.1

## **General Assessment and Interventions**

- 1. What are the three contraindications for administering a medication via IN? 11.F.2
- 2. (ILS/ALS) How many IV attempts can be made with adult patients on scene during a routine call? 11.C.2
- 3. (ILS/ALS) What are the indications and contraindications for placing and EZ-IO? (List two of each) 11.E.1
- 4. (ILS/ALS) What are the approved sites for placing and E-IO and which is the preferred site? 11.E.2
- 5. (ILS/ALS) What is the Lidocaine dose for EZ-IO discomfort in a conscious adult patient? 11.E.3
- 6. (ALS) How many attempts may be made when establishing an EJ vein cannulation in the pre-hospital setting? 11.D.1
- 7. (ILS/ALS) What medications may be administered via intranasal (IN)? 11.F.2
- 8. (ILS/ALS) What is the maximum single dose of Fentanyl? Renal dose? 11.G.1
- 9. (ILS/ALS) What medications are administered for pain and, if there a specific order they are to be administered, what order? 11.G.2

## Cardiac

- 1. What are some contraindications of Aspirin? 12.A.1
- 2. How often can Nitroglycerine be repeated? 12.A.2
- 3. When must Medical Control be contacted to administer nitroglycerine? 12.A.2
- 4. Explain the key concepts of Pit Crew CPR? 12.D.6
- 5. How frequently do you ventilate a patient in Pit Crew CPR? 12.D.4
- 6. What are the jobs of the first two responders on scene of a cardiac arrest? 12.D.6
- What is the minimum systolic BP a patient can have for a provider to administer nitroglycerin? 12.A.2
- 8. What two steps are required to activate a Pre-hospital STEMI? 12.B.1
- 9. When obtaining a 12-lead where should EKG limb leads be placed? 12.A.3
- 10. To what facility should EMS send the 12-lead? 12.B.1
- 11. (ILS/ALS) What anti-arrhythmic medication should an ILS provider administer in a cardiac arrest? 12.E.1
- 12. (ILS/ALS) What is the initial dose and follow-up dose of the previous questions medication? 12.E.1
- 13. (ALS) What anti-arrhythmic medication and initial dose should an ALS provider administer in a cardiac arrest? 12.E.1
- 14. What are the signs of biological death a provider would look for in order to withhold resuscitation? 12.F.1
- 15. What must an agency have in place prior to being able to use the Field Termination of Resuscitation protocol? 12.G.2
- 16. Besides observing one of the obvious signs of death, what other requirement must be performed to confirm death in the Field Termination of Resuscitation protocol? 12.G.1
- 17. Prior to terminating resuscitation in the field, how long, at minimum, should on scene resuscitation efforts been made? 12.G.1

- (ILS/ALS) What level of provider can administer Atropine without consulting Medical Control? 12.H.1
- 19. (ILS/ALS) What is the single dose and maximum total dose of Atropine for the unstable bradycardic patient? 12.H.2
- 20. (ILS/ALS) What is the target heart rate for pacing? 12.H.2
- 21. (ILS/ALS) What might be some underlying causes of bradycardia? (Name 3) 12.H.3
- 22. (ILS/ALS) If a patient remains hypotensive, what is the medication, dose and titration rate for administration? 12.H.3
- 23. (ILS/ALS) What is the criteria for administering Adenosine? 12.I.1
- 24. (ILS/ALS) What qualifies a patient to have synchronized cardioversion? 12.I.2
- 25. (ILS/ALS) What medications might each level of provider administer in the PEA patient? 12.E.2
- 26. (ALS) What dose and how do you obtain it to administer Amiodarone in the case of wide complex tachycardia? 12.J.2
- 27. How long should EMS treat on scene after obtaining ROSC on a post arrest patient? 12.M.1
- 28. (ALS) What medication should be ready for possible administration in the post arrest patient? 12.M.2

## Respiratory

- 1. What are some options for administration of oxygen to patients? 13.A.2
- 2. What is apneic oxygenation and when would it be implemented? 13.C.1
- 3. What level provider can place a supraglottic airway? 13.D.1
- 4. What are some of the contraindications for insertion of a supraglottic airway? 13.D.1
- 5. How many attempts can be made to place a supraglottic airway? 13.D.1
- 6. (ILS/ALS) How many attempts to place and ET tube can be made before switching to a supraglottic airway? 13.E.2
- 7. (ALS) What medication is used to initiate Medicated Assisted Intubation (MAI) and what is the dosage? 13.E.3

- 8. (ALS) After a MAI what medication at what dose is administered for comfort and pain? 13.E.3
- 9. After oxygen, what medication would next be administered for the symptomatic asthma/COPD/Pneumonia patient? 13.G.1
- 10. What is the above medications dose and how many times can it be administered? 13.G.1
- 11. Is Medical Control necessary to administer this medication at the BLS level? 13.G.1
- 12. Name three of the contraindications for using CPAP. 13.J.1
- 13. (ILS/ALS) If status asthmaticus is present what should be the priority treatment? 13.G.2
- 14. (ALS) What medication and dose can be given at the ALS level for asthma/COPD/Pneumonia? 13.G.2
- 15. What criteria is used to confirm airway at the BLS level? 13.H.1
- 16. (ILS/ALS) What criteria is used to confirm airway at the ILS/ALS level? 13.H.1
- 17. When should the above criteria be reassessed and documented? (Name all) 13.H.1
- 18. (ALS) What is the suction setting when using an Orogastric (OG) tube? 13.F.2
- 19. What method of monitoring is the most reliable and easily assessable tool for verification of airway patency and effects of respiratory support? 13.I.1
- 20. When should the above method of monitoring be implemented? (Name all) 13.I.1
- 21. For what reasons might no value be detected with capnography? (Name all) 13.I.1

#### Medical

- 1. When should oral glucose be administered? 14.A.1
- 2. When should glucagon be administered, what dose and what route? 14.A.2
- When administering D10W to a patient who is hypoglycemic, when should the infusion be stopped? 14.A.2
- What elements are in the Los Angeles Motor Scale and how does it differ from the FAST test? 14.B.1 & 14.B.2
- 5. What is the maximum time you should stay on scene with a suspected stroke patient? 14.B.4

- 6. What is the dose of Zofran ODT? 14.E.1
- 7. What are some common Benzodiazepine drugs that patients may have used? 14.H.3
- 8. What are the three parts of the Miami Sepsis Score? 14.I.1
- 9. What is considered a hypertensive crisis? 14.D.1
- 10. What is the shock index and how is calculated? 14.I.1
- 11. When should you call a potential sepsis alert? 14.I.3
- 12. (ILS/ALS) What routes of administration are allowed for Versed in an adult seizure? 14.F.2
- 13. (ILS/ALS) What is the IM dose of Versed for an adult? 14.C.2
- 14. (ILS/ALS) When are you able to give pain medications for a patient with Acute Abdominal pain? 14.E.2
- 15. (ILS/ALS) What is the dose for Benadryl IM? 14.G.2
- 16. (ALS) What are some common Tricyclic Antidepressants (TCA's) (Name 3) 14.H.3
- 17. (ALS) What situations allow EMS to use a Central Line? 14.J.1

#### **Environmental Emergencies**

#### Section 15

- 1. When and where should a patient be decontaminated? 15.A.3
- 2. How do you treat electrical burns? 15.D.1
- 3. What are the differences between Heat Cramps, Heat Exhaustion, and Heat Stroke? 15.C.2
- 4. What does the acronym "SLUDGE" mean? 15.A.2
- 5. (ILS/ALS) What medications would you consider for Organophosphate poisoning? 15.A.2
- 6. (ILS/ALS) What is the maximum temperature for warming an infusion bag? 15.B.2
- 7. (ILS/ALS) How long can IV fluids be stored on a commercial warming device? 15.B.2

#### Trauma

#### Section 16

1. What amount of time on scene is the goal for a "load & go" trauma patient? 16.A.1

- 2. What is the lowest score a patient can obtain on the Glascow Coma Scale? 16.A.5
- 3. What criteria is used in the Revised Trauma Score? 16.A.5
- 4. What resource, in the Trauma protocols, would you use for determining whether or not a patient requires spinal immobilization? 16.F.1
- 5. What is the process of preparing an amputated part for transport? 16.J.2
- 6. What are the signs indicating a pelvic sling should be used? 16.M.1
- 7. What is the landmark used for proper placing of the pelvic sling? 16.M.1
- 8. What is the procedure for applying a tourniquet? 16.N.2
- 9. At what point in care can a tourniquet be removed by EMS? 16.N.2
- 10. When and how should an injury be treated with wound packing? 16.N.1
- What basic point of care testing should be done on all confused patients with a traumatic head injury?
  16.C.2
- 12. (ILS/ALS) What systolic BP and Sp02 saturation level should EMS monitor/maintain in patients with a traumatic head injury? 16.C.2
- 13. (ILS/ALS) How many attempts at intubation should be made in a traumatic arrest patient? 16.H.1
- 14. (ALS) When performing a needle decompression, what is the location where the chest should be penetrated? 16.K.1
- 15. (ALS) What medication should be administered for a hypotensive spinal trauma patient? 16.D.2
- 16. (ALS) What medication might be administered to patients for hemorrhage in instances where other bleeding control options don't work? 16.0.1
- 17. (ALS) In a crush injury patient exhibiting evidence of hyperkalemia, what medication would be administered? 16.P.2

## OB/Gyn

- 1. What key information should be gathered for patients who are pregnant? 17.A.1
- 2. What do gravida and para mean? 17.A.1
- 3. What is the difference between eclampsia and pre-eclampsia? 17.B.3

- 4. Name some situations that are considered high risk pregnancies? (Name 4) 17.A.5
- 5. Upon a childbirth delivery, when should the APGAR scores be obtained? 17.A.3
- 6. How fast should you ventilate a newborn? 17.A.3
- 7. What is left uterine displacement? 17.A.1
- 8. How do you treat a prolapsed cord? 17.C.3
- 9. What is a major concern with abruptio placentae? 17.B.3
- 10. What is the McRoberts Maneuver and how does it assist the EMS provider? 17.C.2
- 11. (ILS/ALS) What is the initial fluid bolus for the mother during childbirth? 17.A.2

## **Aberrant Situations**

#### Section 18

- 1. What are some of the indications EMS might see that domestic abuse or neglect are occurring? 18.A.1
- 2. Name 4 common "Date Rape" drugs. 18.B.2
- 3. What should a patient who has been assaulted be discouraged from doing? 18.B.1
- 4. What is the first step when dealing with an emotionally disturbed patient? 18.C.1
- 5. How should a patient in restraints or handcuffs be transported? 18.D.1
- 6. If a patient has been restrained, what must be documented and how often? 18.D.1
- 7. (ALS) When a combative patient requires chemical sedation and all other venues have been exhausted, what medications might be administered? 18.E.1
- 8. What is the treatment for a patient that has been sprayed with OC (pepper spray)? 18.F.1
- 9. What level of provider can remove taser probes? 18.F.3

## **Pediatric Assessment**

- 1. What is the maximum age of a minor patient treated with pediatric protocols? 21.A.1
- 2. What are the key areas of the Pediatric Assessment Triangle? 21.A.1

- 3. What does each letter of the pneumonic TICLS represent? 21.B.1
- 4. How many IV attempts can be performed on scene with a pediatric patient? 21.E.2

## **Pediatric Airway**

#### Section 22

- 1. How do you clear an airway obstruction of a conscious pediatric patient? 22.B.1
- 2. What are some ways the BLS provider can manage a pediatric patient's airway? 22.A.1
- 3. (ILS/ALS) What are the sizes of pediatric Supraglottic airways and their associated weights? 22.C1
- 4. (ILS) How many intubation attempts can be made on a pediatric patient? 22.C.2

## **Pediatric Vascular Access**

## Section 23

- 1. (ILS/ALS) What is the minimum patient weight for EZ-IO placement? 23.B.1
- 2. (ILS/ALS) What is the Lidocaine dose for EZ-IO discomfort with a conscious pediatric patient? 23.B.1
- 3. (ILS/ALS) What are some indications for the use of an EZ-IO? (Name 3) 23.B.1
- 4. (ILS/ALS) What is the single fluid bolus dose and the total max fluid dose for pediatrics? 23.A.2
- 5. (ILS/ALS) When should a Jamshidi IO needle be used? 23.B.2

## **Pediatric Medication Administration**

- 1. (ILS) What medication, dose and route are used for controlling pain in the pediatric patient? 24.B.1
- 2. (ILS) In which situations can ILS administer pain medication to a pediatric patient? 24.B.1
- 3. (ALS) What medications, doses and routes are used for controlling pain in the pediatric patient? 24.B.2
- 4. (ALS) In which situations can ALS administer pain medication to a pediatric patient? 24.B.2
- 5. What is the minimum patient age to receive Zofran ODT? 24.B.2
- 6. What is the IN dose for Versed with a pediatric patient? 24.D.1

## **Pediatric Resuscitation**

Section 25

- 1. In what instance would a provider initiate CPR on a patient with a pulse? 25.C.1
- 2. When placing defibrillator pads, where should the pads be placed if normal placement would cause overlapping? 25.A.1
- 3. (ILS) What anti-arrhythmic and dose is used for a pediatric in VF/VT? 25.B.1
- 4. (ILS/ALS) What is the minimum and maximum single dose of epi 1:10000 a pediatric patient in cardiac arrest should receive? 25.B.1
- 5. (ILS/ALS) How many joules per kilogram is used in the initial defibrillation attempt of a pediatric patient? 25.B.1
- 6. (ALS) What is the proper procedure for pacing a pediatric patient? 25.C.2
- Besides oxygen, what medication might be administered to the pediatric patient in respiratory distress? 25.F.1
- 8. How often can the above-mentioned medication be administered? 25.F.1
- 9. (ALS) In a patient with persistent respiratory distress, what medication and dose would be an option with authorization from Medical Control? 25.F.2
- (ALS) Are Medical Control orders required to perform a needle decompression on a pediatric patient?
  25.B.2
- 11. What is a "Brief Resolved Unexplained Event (Brue)" and what is the recommended action regarding transport? 25.I.1

## **Pediatric Treatment**

- (ILS/ALS) What is the medication and dose of treatment in the pediatric patient who is hypoglycemic?
  26.A.1
- 2. (ILS/ALS) What medication should be administered to the seizing pediatric patient? What is the dose and route for your level of care? 26.B.2
- 3. What is the dose of epi for a pediatric patient with anaphylaxis? 26.C.1
- 4. (ALS) What is the dose of Benadryl for a pediatric patient? 26.C.2

- What is the dose and route of Narcan administered to the pediatric patient at your provider level? 26.D.1
- 6. (ALS) What is the dose of Sodium Bicarb for a pediatric patient? 26.D.2
- 7. With trauma in the pediatric patient, what resource would you use to determine the risk level for the patient's injuries? 26.E.5
- 8. What hospitals are licensed as Pediatric Trauma Centers and where would you find them listed? 6.F.2
- 9. When faced with the pediatric patient that may be exhibiting shock it is important to remember what? 26.F.2
- 10. With a closed head injury in the pediatric patient, what is the concern with hypotension? 26.G.1
- 11. When rendering care to the pediatric patient with a heat-related emergency, what is the first action that should be taken by EMS? 26.I.1
- 12. When dealing with hypothermic pediatrics, it is important to prevent what from happening to the affected areas? 26.J.1
- 13. What high risk effect might the hypothermic patient experience? 26.J.2
- 14. What is a concern with the near-drowning patient who may now appear to be acting their normal? 26.K.2
- 15. To whom should providers give report of suspected incidents of child abuse/neglect? 26.L.1