

2024 Protocol Study Guide With Answers

Question in Sections 1-8 apply to everyone. Questions in other sections are indicated at the beginning for level of provider.

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 percentage of continuing education must be done through classes taught or sponsored by the Memorial EMS System? 3.D.1
3. 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 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

Section 6

1. Who specifically should EMS contact when a protocol requires contacting Medical Control? 6.A.1
2. 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.1 – 6.F.3
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 30 minutes? 6.F.2
13. What facilities, if within 30minutes, 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 30 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. When is a BLS unit able to disregard/cancel an ALS unit that is enroute? 6.E.4
18. When can a patient be transported by a lower level of care unit after ALS has established patient contact? 6.E.4
19. 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
20. When can a Multiple Casualty Release (MCI) form be used? 6.G.2
21. 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
22. What are the acceptable forms pertaining to Advanced Directives recognized by Memorial EMS Providers? 6.J.1
23. 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
2. If a provider finds a discrepancy or missing controlled substance, who should be notified? 8.B.1

General Assessment and Interventions

Section 11

1. (BLS/ILS/ALS) 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

Section 12

1. (BLS/ILS/ALS) What are some contraindications of Aspirin? 12.A.1
2. (BLS/ILS/ALS) How often can Nitroglycerine be repeated? 12.A.2
3. (BLS/ILS/ALS) When must Medical Control be contacted to administer nitroglycerine? 12.A.2
4. (BLS/ILS/ALS) What is the goal of Pit Crew CPR? 12.D.6
5. (BLS/ILS/ALS) How frequently do you ventilate a patient in Pit Crew CPR? 12.D.1, 12.D.4
6. (BLS/ILS/ALS) What are the jobs of the first two responders on scene of a cardiac arrest? 12.D.1
7. (BLS/ILS/ALS) What is the minimum systolic BP a patient can have for a provider to administer nitroglycerin? 12.A.2
8. (BLS/ILS/ALS) What two steps are required to activate a Pre-hospital STEMI? 12.B.1
9. (BLS/ILS/ALS) When obtaining a 12-lead where should EKG limb leads be placed? 12.A.3
10. (BLS/ILS/ALS) 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. (BLS/ILS/ALS) Besides observing one of the obvious signs of death, what other requirement must be performed to confirm death in the Withholding of Resuscitation protocol? 12.F.1
15. (ALS) What must an agency have in place prior to being able to use the Field Termination of Resuscitation protocol? 12.G.2
16. (ALS) Prior to terminating resuscitation in the field, how long, at minimum, should on scene resuscitation efforts been made? 12.G.1
17. (ILS/ALS) What level of provider can administer Atropine without consulting Medical Control? 12.H.2
18. (ILS/ALS) What is the single dose and maximum total dose of Atropine for the unstable bradycardic patient? 12.H.2

19. (ILS/ALS) What is the target heart rate for pacing? 12.H.2
20. (ILS/ALS) What might be some underlying causes of bradycardia? (Name 3) 12.H.3
21. (ILS/ALS) If a patient remains hypotensive, what is the medication, dose and titration rate for administration? 12.H.3
22. (ILS/ALS) What is the criteria for administering Adenosine? 12.I.1
23. (ILS/ALS) What qualifies a patient to have synchronized cardioversion? 12.I.2
24. (ILS/ALS) What medications might each level of provider administer in the PEA patient? 12.E.2
25. (ALS) What dose and how do you obtain it to administer Amiodarone in the case of wide complex tachycardia? 12.J.2
26. (BLS/ILS/ALS) How long should EMS treat on scene after obtaining ROSC on a post arrest patient? 12.M.1
27. (ALS) What medication should be ready for possible administration in the post arrest patient? 12.M.2

Respiratory

Section 13

1. (BLS/ILS/ALS) What are some options for administration of oxygen to patients? 13.A.2
2. (BLS/ILS/ALS) What is apneic oxygenation and when would it be implemented? 13.C.1
3. (BLS/ILS/ALS) What level provider can place a supraglottic airway? 13.D.1
4. (BLS/ILS/ALS) What are some of the contraindications for insertion of a supraglottic airway? 13.D.1
5. (BLS/ILS/ALS) How many attempts can be made to place a supraglottic airway? 13.D.1
6. (ILS/ALS) How many attempts to place an 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. (BLS/ILS/ALS) After oxygen, what medication would next be administered for the symptomatic asthma/COPD/Pneumonia patient? 13.G.1
10. (BLS/ILS/ALS) What is the above medications dose and how many times can it be administered? 13.G.1

11. (BLS/ILS/ALS) Is Medical Control necessary to administer the medication in question 9 at the BLS level? 13.G.1
12. (ILS/ALS) 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. (BLS) 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. (BLS/ILS/ALS) When should the above criteria be reassessed and documented? (Name all) 13.H.1
18. (ALS) What is the suction setting when using an Orogastic (OG) tube? 13.F.2
19. (BLS/ILS/ALS) 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. (BLS/ILS/ALS) When should the above method of monitoring be implemented? (Name all) 13.I.1
21. (BLS/ILS/ALS) For what reasons might no value be detected with capnography? (Name all) 13.I.1

Medical

Section 14

1. (BLS/ILS/ALS) When should oral glucose be administered? 14.A.1
2. (BLS/ILS/ALS) When should glucagon be administered, what dose and what route? 14.A.2
3. (ILS/ALS) When administering D10W to a patient who is hypoglycemic, when should the infusion be stopped? 14.A.2
4. (BLS/ILS/ALS) When caring for unresponsive or altered mental status patients once respiratory concerns are addressed, would verifying blood glucose level and treating accordingly or administering Narcan be the next appropriate treatment? 14.A.1
5. (BLS/ILS/ALS) What elements are in the Los Angeles Motor Scale and how does it differ from the FAST test? 14.B.2
6. (BLS/ILS/ALS) What is the maximum time you should stay on scene with a suspected stroke patient? 14.B.4
7. (BLS/ILS/ALS) What is the dose of Zofran ODT? 14.E.1

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

Environmental Emergencies

Section 15

1. (BLS/ILS/ALS) When and where should a patient be decontaminated? 15.A.3
2. (BLS/ILS/ALS) How do you treat electrical burns? 15.D.1
3. (BLS/ILS/ALS) What are the differences between Heat Cramps, Heat Exhaustion, and Heat Stroke? 15.C.2
4. (BLS/ILS/ALS) 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. (BLS/ILS/ALS) What amount of time on scene is the goal for a “load & go” trauma patient? 16.A.1
2. (BLS/ILS/ALS) What is the lowest score a patient can obtain on the Glasgow Coma Scale? 16.A.5
3. (BLS/ILS/ALS) What criteria is used in the Revised Trauma Score? 16.A.5
4. (BLS/ILS/ALS) What resource, in the Trauma protocols, would you use for determining whether or not a patient requires spinal immobilization? 16.F.1
5. (BLS/ILS/ALS) What is the process of preparing an amputated part for transport? 16.J.2
6. (BLS/ILS/ALS) What are the signs indicating a pelvic sling should be used? 16.M.1
7. (BLS/ILS/ALS) What is the landmark used for proper placing of the pelvic sling? 16.M.1
8. (BLS/ILS/ALS) What is the procedure for applying a tourniquet? 16.N.2
9. (BLS/ILS/ALS) At what point in care can a tourniquet be removed by EMS? 16.N.2
10. (BLS/ILS/ALS) When and how should an injury be treated with wound packing? 16.N.1
Indications for Wound Packing
11. (BLS/ILS/ALS) What basic point of care testing should be done on all confused patients with a traumatic head injury? 16.C.2
12. (BLS/ILS/ALS) What systolic BP and SpO2 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.O.1
17. (ALS) In a crush injury patient exhibiting evidence of hyperkalemia, what medication would be administered? 16.P.2

OB/Gyn

Section 17

1. (BLS/ILS/ALS) What key information should be gathered for patients who are pregnant? 17.A.1
2. (BLS/ILS/ALS) What do gravida and para mean? 17.A.1
3. (BLS/ILS/ALS) What is the difference between eclampsia and pre-eclampsia? 17.B.3
4. (BLS/ILS/ALS) Name some situations that are considered high risk pregnancies? (Name 4) 17.A.5
5. (BLS/ILS/ALS) Upon a childbirth delivery, when should the APGAR scores be obtained? 17.A.3
6. (BLS/ILS/ALS) How fast should you ventilate a newborn? 17.A.3
7. (BLS/ILS/ALS) What is left uterine displacement? 17.A.1
8. (BLS/ILS/ALS) How do you treat a prolapsed cord? 17.C.3
9. (BLS/ILS/ALS) What is a major concern with abruptio placentae? 17.B.3
10. (BLS/ILS/ALS) 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. (BLS/ILS/ALS) What are some of the indications EMS might see that domestic abuse or neglect are occurring? 18.A.1
2. (BLS/ILS/ALS) Name 4 common "Date Rape" drugs. 18.B.2
3. (BLS/ILS/ALS) What should a patient who has been assaulted be discouraged from doing? 18.B.1
4. (BLS/ILS/ALS) What is the first step when dealing with an emotionally disturbed patient? 18.C.1
5. (BLS/ILS/ALS) When transporting a patient who is in restraints, what assessments should be monitored? 18.D.1
6. (BLS/ILS/ALS) 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. (BLS/ILS/ALS) What is the treatment for a patient that has been sprayed with OC (pepper spray)? 18.F.1
9. (BLS/ILS/ALS) What level of provider can remove taser probes? 18.F.3

Pediatric Assessment

Section 21

1. (BLS/ILS/ALS) What is the maximum age of a minor patient treated with pediatric protocols? 21.A.1
2. (BLS/ILS/ALS) What are the key areas of the Pediatric Assessment Triangle? 21.A.1
3. (BLS/ILS/ALS) What does each letter of the mnemonic TICLS represent? 21.B.1
4. (ILS/ALS) How many IV attempts can be performed on scene with a pediatric patient? 21.E.2

Pediatric Airway

Section 22

1. (BLS/ILS/ALS) How do you clear an airway obstruction of a conscious pediatric patient? 22.B.1
2. (BLS/ILS/ALS) 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

Section 24

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. (BLS/ILS/ALS) What is the minimum patient age to receive Zofran ODT? 24.B.2
6. (ILS/ALS) What is the IN dose for Versed with a pediatric patient? 24.D.1

Pediatric Resuscitation

Section 25

1. (BLS/ILS/ALS) In what instance would a provider initiate CPR on a patient with a pulse? 25.C.1
2. (BLS/ILS/ALS) 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
7. (BLS/ILS/ALS) Besides oxygen, what medication might be administered to the pediatric patient in respiratory distress? 25.F.1
8. (BLS/ILS/ALS) How often can a DuoNeb be administered to the pediatric patient? 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
10. (ALS) Are Medical Control orders required to perform a needle decompression on a pediatric patient? 25.B.2
11. (BLS/ILS/ALS) What is a "Brief Resolved Unexplained Event (Brue)" and what is the recommended action regarding transport? 25.I.1

Pediatric Treatment

Section 26

1. (BLS/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 and 26.B.3
3. (BLS/ILS/ALS) What is the dose of epi for a pediatric patient with anaphylaxis at your level of provider? 26.C.1
4. (ALS) What is the dose of Benadryl for a pediatric patient? 26.C.2
5. (BLS/ILS/ALS) 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. (BLS/ILS/ALS) 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. (BLS/ILS/ALS) What hospitals are licensed as Pediatric Trauma Centers and where would you find them listed?
6.F.2
9. (BLS/ILS/ALS) When faced with the pediatric patient that may be exhibiting shock it is important to remember what? 26.F.2
10. (ILS/ALS) With a closed head injury in the pediatric patient, what is the concern with hypotension? 26.H.1
11. (BLS/ILS/ALS) When rendering care to the pediatric patient with a heat-related emergency, what is the first action that should be taken by EMS? 26.J.1
12. (BLS/ILS/ALS) When dealing with hypothermic pediatrics, it is important to prevent what from happening to the affected areas? 26.K.2
13. (BLS/ILS/ALS) What high risk effect might the hypothermic patient experience? 26.K.2
14. (BLS/ILS/ALS) What is a concern with the near-drowning patient who may now appear to be acting their normal? 26.L.2
15. (BLS/ILS/ALS) To whom should providers give report of suspected incidents of child abuse/neglect? 26.M.1