



W e s t c h e s t e r R E M A C
On-Line Medical Control Physician Application

Please Type or Print Legibly

Last Name _____ First Name _____ M.I. _____
Birthdate ____/____/____ Male Female
Address _____
City _____ State _____ Zip _____ Email _____
Home Phone (____) _____ Work Phone (____) _____

NYS License # _____ Expiration Date ____/____/____

(Check one) MD DO

Primary Hospital* _____ Hospital ID _____
Other Hospital _____ Hospital ID _____

(* Note: Westchester Regional Medical Control or Special Resource Hospital)

The following documentation is attached to this application:

- ▶ Copy of Valid Driver's License or other State issued photo Identification
- ▶ Copy of Valid NYS MD or DO License

I am employed by the Westchester Regional Medical Control or Special Resource Hospital indicated above and will maintain all training and certifications required by the Westchester Regional Emergency Medical Advisory Committee to provide on-line medical control to pre-hospital providers in the Westchester regional "911" EMS system.

Applicant's Signature _____ Date ____/____/____

THIS SECTION TO BE COMPLETED BY THE MEDICAL CONTROL OR SPECIAL RESOURCE HOSPITAL

As Emergency Department Director (or his or her designee) of _____ (a Westchester Regional Medical Control or Special Resource Hospital), I support the application of this physician to become a Medical Control Physician in the Westchester Region as indicated by my signature hereon:

ED Director or designee (Print) _____

Signature _____ Date ____/____/____



Medical Control Physician Examination

This exam is intended to assess your understanding of the Westchester Regional Emergency Medical Advisory Committee (REMAC) Paramedic Patient Treatment Protocols. **This is not a general medical knowledge exam.** You should select the most appropriate answer based on the protocols and may utilize a copy of the protocols while reviewing the exam. Your answers should be placed on the answer sheet provided on the next page.

80% (20) questions must be answered correctly to pass the examination.

Please return the entire test with a completed Westchester REMAC Medical Control Physician application. The application should be obtained from the Emergency Department Director of your primary Westchester hospital affiliation. Be sure to include a copy of a government issued photo identification (ie. drivers license, passport, etc.) and a copy of the NYS physician license, ensuring that both the license number and the expiration date are legible.

All documents should be mailed or delivered to:

**Westchester REMAC
4 Dana Rd.
Valhalla, NY 10595**

Following review of the application and successful completion of the examination, the Regional EMS Office will contact you regarding the issuance of a Photo I.D.

For additional information please contact the Regional EMS Office at (914) 231-1616 or wremSCO@wremSCO.org.



Westchester REMAC Medical Control Physician Exam /Answer Sheet Test Version – NOV 05

Please select the most appropriate answer based on the Westchester Regional Paramedic protocols. Assume that the patient referenced in the question is an adult unless otherwise indicated.

80% (20) questions must be answered correct to pass the examination.

Check the box corresponding to the answer selected on the appropriate line on the answer sheet.

- | | A | B | C | D |
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Name (Print)

Date

Signature

Instructions: Enter answer choices on the answer sheet provided at the back of the booklet. Leave answer sheet attached and return entire test.

1. A REMAC Medical Control Physician should assume that a Paramedic treating a 3 year old pediatric patient presenting with dyspnea and audible wheezes has initiated IV therapy as a component of standing orders.

- a. True
- b. False

2. A Paramedic has contacted the ER to advise that EMS is transporting a patient involved in motor vehicle collision. The patient is a 33 year old female who was unrestrained in the accident and struck her chest on the steering wheel. The Paramedic describes the patient as confused and having a GCS of 12. He further states that she is having difficulty breathing. Her respiratory rate is 26 breaths per minute and instability to the left chest wall has been noted, although her pulse oximetry is trending as 98 - 99%.

In accordance with Trauma Protocol 2: Ground transport, this patient should be transported to which medical facility?

- a. The closest hospital.
- b. Any area or regional trauma center
- c. The regional trauma center (Westchester Medical Center) only
- d. Any regionally approved EMS receiving hospital

3. Which of the following constitutes the minimum standard for pre-hospital confirmation of proper placement of an ET tube?
- Auscultation of bi-lateral breath sounds
 - End-Tidal CO₂ monitoring
 - Pulse oximetry monitoring
 - Utilization of all of the above constitute the minimum standard
4. A Paramedic has contacted Medical Control and requested orders to administer Morphine Sulfate for pain management to a patient who has suffered a large area of partial thickness (2nd Degree) thermal burns. The anticipated medical control option for this patient is:
- Morphine sulfate, 5-10 mg IVP, repeated to a maximum of 40 mg
 - Morphine sulfate, 2-5 mg IVP, repeated to a maximum of 20 mg
 - Diazepam, 2-5 mg IVP, repeated to a maximum of 20 mg
 - Midazolam, 2-10 mg IVP, repeated to a maximum of 40 mg
5. A Paramedic has contacted Medical Control and advised that he is treating a 45 year old male who is complaining of palpitations. Physical assessment was unremarkable, but examination of the ECG revealed supraventricular tachycardia. You should expect that prior to contacting you for medical control orders, the Paramedic has completed all of the following treatments except:
- Cardioversion, 100 joules, followed by 200 joules, 300 joules and 360 joules if no change.
 - Vagal maneuver
 - Adenosine, 6 mg IVP, followed by 12 mg (repeated) if ineffective
 - Routine Medical Care, including IV and oxygen therapy.

6. A Paramedic has contacted Medical Control and advised that he is treating a patient presenting with signs and symptoms consistent with the onset of an anaphylactic reaction, including audible wheezing, dyspnea and swelling about the face. You should expect that the Paramedic has already performed which of the following treatments in accordance with his/her standing orders?

- a. Epinephrine 1:10000 1 mg in 250 ml normal saline (1-2 ml min), titrated to effect
- b. Methylprednisolone 125 mg/50 ml normal saline (0.9% NaCl)
- c. Epinephrine 1: 1000 0.3 mg SQ
- d. Fluid Challenge

7. A Paramedic contacts the ER to advise that he is treating a patient and will be transporting shortly. As the Paramedic describes the presenting signs and symptoms and explains the patient history, it becomes evident that the patient is experiencing a hypertensive crisis. Of the following, which intervention is listed as a medical control option for this patient?

- a. Labetolol 10 mg IV over 2 min
- b. Morphine sulfate 2-5 mg IVP, repeat at 2 minutes at 5-10 mg as needed
- c. Verapamil 5-10mg IVP
- d. Magnesium Sulfate 1-2 gm over 1-2 minutes, IVP

8. A Paramedic has responded to an office building to treat a patient having a generalized motor seizure. Bystanders explain that the seizure has been occurring for more than 20 minutes. They are not able to give any information regarding the patient's past medical history. Due to the generalized convulsions, the Paramedic is unable to establish an IV line. He has administered 0.2 mg / kg of Midazolam IM. The seizure has not abated.

What additional medication should the Paramedic have given under standing orders to this patient?

- a. **Glucagon 1 mg IM**
 - b. **Diazepam 5-10mg IM**
 - c. **Lorazepam 2 mg IM**
 - d. **Dextrose 50 % 25 gm IM**
9. **In directing a Paramedic in the treatment of a patient in cardiac arrest presenting in ventricular fibrillation, which of the following is not listed as a medical control option?**
- a. **Amiodarone 150 - 300 mg IVP**
 - b. **Vasopressin 40 units IVP**
 - c. **Procainamide 30 mg / min IVP**
 - d. **Calcium Chloride 250 mg IVP**
10. **A paramedic has contacted Medical Control and advised that she has been treating a patient who initially presented in ventricular fibrillation. Following administration of repeated defibrillation, epinephrine (1.0 mg) and lidocaine (1.5 mg / kg), the patient has converted to a perfusing sinus tachycardia. You should expect that the paramedic has also administered what additional treatment prior to contacting you for medical control?**
- a. **Amiodarone 300 mg IVP**
 - b. **Lidocaine infusion 3 mg / min**
 - c. **Lidocaine infusion 4 mg / min**
 - d. **Vasopressin 40 units IVP**
11. **A Paramedic has contacted Medical Control and requested approval to terminate resuscitation efforts. Which of the following criteria must be met to allow termination of efforts?**

- a. IV bolus epinephrine and atropine were administered when indicated.
- b. The pulseless arrest has been at least 20 minutes in duration
- c. Effective ventilation and oxygenation was achieved
- d. All of the above criteria must be met to allow field termination of resuscitation efforts.

12. Of the following medications, which may only be administered with approval of Medical Control in treating a stable patient presenting with ventricular tachycardia (with a pulse)?

- a. Adenosine
- b. Procainamide
- c. Amiodarone
- d. All of the above listed medications may only be administered following orders from an online Medical Control Physician in the setting of stable VT with a pulse

13. A Paramedic contacts Medical Control and advises that she is treating a patient who is apneic and pulseless. Examination of the ECG has revealed sinus tachycardia at rate of approximately 160 bpm. She states that she has started an IV line of normal saline, and it is infusing at a TKO rate. She further informs you that she has administered epinephrine 1:10,000 1.0 mg IVP. She has found no evidence or history of hyperkalemia, acidosis or tricyclic antidepressant, cocaine or diphenhydramine use.

Has this Paramedic properly completed her standing orders?

- a. Yes, her standing orders have been properly completed.
- b. No, she forgot to administer atropine sulfate.
- c. No, she forgot to administer sodium bicarbonate.
- d. No, she forgot to administer a fluid challenge.

14. A Paramedic contacts Medical Control and advises that he is treating an apneic and pulseless 91 year old female patient. The ECG presented as asystole. The Paramedic informs you that he has intubated and oxygenated the patient, initiated an IV, administered epinephrine, atropine, sodium bicarbonate and attempted transcutaneous pacing all without any change in rhythm. The Paramedic states that the police initiated CPR on their arrival at the scene some 25 minutes ago. He is requesting to terminate the resuscitation.

Is this an acceptable medical control option at this time?

- a. Yes, if none of the exclusion criteria apply.
- b. No, as the patient has not received Calcium Chloride as listed in the medical control options for treatment of asystole.
- c. No, geriatric patients are not candidates for field termination.
- d. No, field termination of resuscitation efforts is only permitted in the event of medical control communications failure.

15. A Paramedic contacts Medical Control and reports that she is treating a patient who is apneic and pulseless. Examination of the ECG has revealed sinus tachycardia at rate of approximately 160 bpm. She informs you that she has started an IV and administered a 250cc fluid challenge of normal saline. She further states that she has administered epinephrine 1:10,000 1.0 mg IVP, which has been repeated at 3 minute intervals. There is no evidence or history of hyperkalemia, acidosis or tricyclic antidepressant, cocaine or diphenhydramine use.

Of the choices listed below, which is not listed as an acceptable medical control option?

- a. Atropine .5 - 1.0 mg IV, ET, or IO
- b. Dopamine 5 - 10 mcg/kg/min, increased as need for effect to a maximum of 25 mcg/kg/min
- c. Calcium Chloride 250 - 500 mg IVP
- d. Isoproterenol 2 - 10 mcg/min IV infusion

16. A Paramedic contacts Medical Control and advises that he is treating a patient who was found slumped in a chair at the local mall. Initial assessment of the patient by the Paramedic revealed an approximately 50 year old male patient who is responsive only to verbal stimuli (shouts). He informs you that the vital signs are as follows: pulse 180, irregular and weak in the periphery; respirations 26 and shallow; blood pressure 84/52. The rest of the physical exam is unremarkable. The ECG shows a ventricular (wide complex) tachycardia. The Paramedic has cardioverted the patient at 100, 200, 300 and 360 joules with no change in rhythm. He has also administered lidocaine 1.5 mg/kg IVP.

Which of the following is not an acceptable medical control order for this patient?

- a. Procainamide 20 mg/min to a maximum of 17 mg/kg
- b. Magnesium sulfate 1-2 gm IV over 5 minutes
- c. Asynchronous cardioversion
- d. Repeat lidocaine 1.5 mg/kg

17. You are informed by the Triage Nurse that an Advanced Life Support ambulance is about to arrive with a 44 male patient complaining of severe substernal chest pain. He relates the report from the EMS crew that the patient is being transported from a location in the immediate vicinity of the hospital. It is expected that the Paramedic will be just completing standing orders prior to arrival at the ER. Based on this information you should then expect that the Paramedic has administered all of the following except:

- a. 81 mg Aspirin tablet, up to 4
- b. 2% Nitroglycerin ointment, ½ to 2 inches on the chest wall
- c. 0.4 mg sublingual Nitroglycerin tablet or metered spray, repeated q 5 minutes as indicated
- d. Morphine Sulfate 2 - 5 mg slow IVP, repeated to maximum of 15 mg

18. A Paramedic contacts Medical Control and reports that he is treating and transporting a 4 year old male patient who weighs approximately 20 kgs. The patient was found lethargic and confused, with weak, thready pulses at 40 beats per minute. The Paramedic report indicates that the patient is receiving appropriate oxygenation and ventilation. Examination of the ECG revealed a sinus bradycardia. The Paramedic has administered epinephrine 1:10,000 0.01 mg/kg IV.

Which of the following is an acceptable medical control order for this patient?

- a. Atropine 0.02 mg/kg IV
- b. Transcutaneous pacing, premedicated with Diazepam 2 mg slow IVP
- c. Transcutaneous pacing, premedicated with Midazolam 5 mg IVP
- d. Epinephrine 1.0 mg IVP

19. In treating a 68 year old patient who is complaining of dyspnea, a Paramedic assesses her as suffering from congestive heart failure with accompanying pulmonary edema. He has determined that the vital signs are stable with a systolic blood pressure of 136 mmHg. The Paramedic has administered one nitroglycerin tablet (0.4 mg) and applied 2 inches of 2% nitroglycerin paste to the patient's chest. Which of the following treatments did the Paramedic forget to complete in accordance with the standing orders?

- a. Morphine Sulfate 2 - 5 mg IVP
- b. Albuterol 2.5 mg / 3.0 ml normal saline via nebulizer
- c. Nitroglycerin Spray, .4 mg sublingual (1 dose)
- d. Furosemide 40 - 80 mg IVP

20. A Paramedic contacts Medical Control. She reports that she responded to a residence to a report of a sick child where she found a lethargic 4 month old infant. The child is approximately 9 pounds. The history and physical exam lead the Paramedic to conclude that the child is in septic shock. The Paramedic informs you that she has completed administration of an 80 ml fluid challenge.

Of the following, which is an acceptable medical control order for this patient?

- a. Epinephrine 1:10,000 1 mg IVP
- b. Epinephrine infusion 0.4 mcg/min
- c. Fluid challenge 250 ml
- d. Dopamine 0.1 mcg/kg/min

21. A Paramedic has been treating an otherwise stable child with a perfusing supraventricular tachycardic rhythm. If the paramedic contacts you and advises that he has completed standing orders, you may assume that the Paramedic has administered 3 doses of adenosine.

- a. True
- b. False

22. In treating an unconscious 4 year old child who presented with a hypoperfusing supraventricular tachycardia, a Paramedic has cardioverted the patient once at 0.5 joules per kilogram and twice more at 1 joule / kg with no change in rhythm or patient condition. The Paramedic should then:

- a. Administer Verapamil 0.1 mg/kg IVP over 2 minutes as per standing orders
- b. Administer Adenosine 0.1 mg/kg IVP as per standing orders
- c. Contact online Medical Control for orders
- d. Cardiovert at 2 joules / kg per standing orders

23. Following an at-home delivery, a Paramedic is resuscitating the neonate. The baby presented with evidence of thick meconium in the amniotic fluid and had what appeared to be meconium in and about the mouth. The Paramedic properly completed the procedure for suctioning and intubating the

patient, however the child remains apneic with poor / absent muscle tone and a heart rate of 66 min. As the Paramedic is gaining IO access, her partner has been ventilating the child via the ET tube and performing chest compressions. The Paramedic should now:

- a. Administer Epinephrine .01 mg/kg 1:10,000 via IO, as per standing orders
- b. Contact online Medical Control for orders
- c. Administer Naloxone 0.1 mg/kg ET or IO, as per standing orders
- d. Administer Dextrose 10% 5 ml/kg IO, as per standing orders

24. A paramedic contacts Medical Control and reports that he is transporting a patient involved in a fall at a construction site. He explains that the patient appears to have a closed head injury and was very agitated and combative at the scene. The patient was intubated utilizing the rapid sequence induction (RSI) procedure. In this case, it should be assumed that prior to contacting Medical Control, the paramedic utilized all of the following medications except:

- a. Lidocaine 1 mg/kg slow IVP
- b. Etomidate 0.3 mg/kg IVP
- c. Succinylcholine 1.5 mg/kg IVP
- d. Diazepam 5 - 10 mg slow IVP

25. Routine medical care, as defined in the protocol, includes all of the following except:

- a. Proper patient positioning
- b. Pre-medication prior to cardioversion
- c. Establishment of IV/IO access
- d. Monitoring and evaluation of the ECG