NYC REMAC

PUBLIC NOTICE

PROPOSED REVISIONS PREHOSPITAL TREATMENT PROTOCOLS

The Regional Emergency Medical Advisory Committee (REMAC) of New York City Prehospital Treatment Protocols define the minimum standard of care provided to patients by Certified First Responders (CFRs), Emergency Medical Technicians (EMTs), and Advanced Emergency Medical Technicians-Paramedic (AEMT-Ps) in New York City. These protocols reflect both the curriculum and certification requirements of the New York State Department of Health Bureau of Emergency Medical Services and the Regional Emergency Medical Advisory Committee (REMAC) of New York City.

The REMAC of New York City has proposed revisions to the current regional Prehospital Treatment Protocols.

In order to meet regional needs, the REMAC of New York City is conducting a public notice and is requesting comments from the Emergency Medical community. Comments must be submitted in writing on the attached 'Comment Form' or via email to mdiglio@nycremsco.org . If available, appropriate supporting documentation should also be submitted. **Comments must be received no later than 30-days from date of this posting.**

Draft revised protocols can be reviewed on-line at www.nycremsco.org (under "News and Announcements"). All NYC REMAC Protocols can be accessed in their entirety at www.nycremsco.org.

Date Distributed/Posted: March 8, 2022

DIRECT ALL INQUIRES AND COMMENTS TO:

Pamela Lai, MD
Chair, Protocol Committee
Regional Emergency Medical Advisory Committee of New York City
c/o Regional EMS Council of NYC
475 Riverside Drive, Suite 1929
New York, New York 10115
Email: mdiglio@nycremsco.org

PLEASE BE ADVISED THAT pursuant to Section 3004-A of Article 30 of the Public Health Law of the State of New York, the Regional Emergency Medical Advisory Committee (REMAC) of New York City is responsible to develop prehospital triage, treatment, and transportation protocols that are consistent with the standards of the State Emergency Medical Advisory Committee and that address specific local conditions with regards to the provision of prehospital medical care rendered by NYS Department of Health certified First Responders, Emergency Medical Technicians and Advanced Emergency Medical Technicians within the City of New York.

THE REGIONAL EMERGENCY MEDICAL SERVICES COUNCIL OF NEW YORK CITY, INC.

Regional Emergency Medical Advisory Committee (REMAC) of New York City
Protocol Revision Comment Form

Name:	
Title (e.g., MD, DO, EMT, EMTP, RN, etc.):	
Telephone Number:	Email:

Protocol Number:	Protocol Title:

Comments: (Please Type)

(Continue on additional sheet if necessary)

Appropriate supporting documentation should be submitted.

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This form may be duplicated as needed.

THE REGIONAL EMERGENCY MEDICAL SERVICES COUNCIL OF NEW YORK CITY, INC.

List of Revised Protocols

- Non-Traumatic Cardiac Arrest (Pediatrics)
- Shock (Adult)
- Behavioral Emergencies
- Overdose (Adult and Pediatric)
- General Pain Management (Adult and Pediatric)
- Sedation for Advanced Airway Management (Adult and Pediatric)

Non-Traumatic Cardiac Arrest (Pediatric)

CFR and All Provider Levels

1. Begin CPR as per AHA guidelines
2. Turn on the Automated External Defibrillator (AED)
3. Apply appropriately-sized AED pads to the patient's bare chest with minimal interruption of chest compressions
4. Connect AED pads and follow the AED voice prompts
5. Continue CPR, re-analyze every two (2) minutes and shock as indicated

CFR STOP

EMT

6. Request ALS assistance
7. Continue CPR and AED analysis with minimal interruption of chest compressions
8. Transport after a total of three (3) cycles of CPR and AED analysis

EMT STOP

Paramedic

9. Continue CPR and defibrillation cycles with minimal interruption of chest compressions
10. If an AED is in place, transition from the AED to an ALS monitor after AED analysis and begin cardiac monitoring
11. Obtain intravascular access
12. Administer Epinephrine 0.01 mg/kg IV (maximum 1 mg) (0.1 ml/kg of a 1:10,000 concentration). Repeat every 3-5 minutes until patient achieves return of spontaneous circulation (ROSC)
13. Perform advanced airway management after second rhythm analysis only if unable to provide effective bag valve mask ventilations
14. If the rhythm is ventricular fibrillation/pulseless ventricular tachycardia:
    - 14.1 Defibrillate with the following energy settings using appropriately-sized AED/monitor pads:
      - Initial defibrillation: 2 joules/kg
      - Second defibrillation as needed: 4 joules/kg
      - Subsequent defibrillations as needed: 10 joules/kg
    - 14.2 Administer one of the following medications:
      - OPTION A: Amiodarone 5 mg/kg IV (maximum 300 mg)
      - OPTION B: Lidocaine 1 mg/kg IV (maximum 100 mg)

~~15.~~ Obtain blood glucose level (BGL). If BGL < 60 mg/dl, administer Dextrose 0.5 g/kg IV (maximum 25 g) ~~using the following concentrations:~~

- ~~Age ≤ 1 month: 10% Dextrose~~
- ~~15.Age between 1 month - 14 years: 25% Dextrose~~

16. Administer crystalloid fluids 20 ml/kg IV (maximum 2 L)

Paramedic STOP

Medical Control Options

17. For suspected tricyclic antidepressant overdose, salicylate toxicity, or hyperkalemia, administer Sodium Bicarbonate 1 mEq/kg IV (maximum 44 mEq). Repeat as needed every 10 minutes
18. For suspected hyperkalemia or calcium channel blocker overdose, administer Calcium Chloride 20 mg/kg IV (maximum 1 g) slowly, followed with a crystalloid fluid flush
19. Administer crystalloid fluids 20 ml/kg IV (maximum 2 L)
20. For persistent or recurring ventricular fibrillation or pulseless ventricular tachycardia, administer one of the following:
    - OPTION A: Amiodarone 5 mg/kg IV (maximum 150 mg). Repeat as needed (maximum cumulative 3 doses, maximum cumulative 450 mg)
    - OPTION B: Magnesium Sulfate 25-50 mg/kg IV (maximum 2 g)

Key Points / Considerations

- Defibrillation should not be delayed or withheld for any reason
- If the cardiac monitor is unable to deliver the desired weight-based joule setting, use the closest setting without exceeding the desired setting
- Do not interrupt chest compressions for placement of an advanced airway
- Effective bag valve mask ventilation is a reasonable alternative to advanced airway interventions (endotracheal intubation or use of a supraglottic airway) in the management of pediatric cardiac arrests in the out-of-hospital setting
- 10% Dextrose is strongly preferred for patients with age ≤ 1 month; 5% Dextrose may be used if 10% Dextrose is unavailable. For patients with age between 1 month – 14 years, 5% Dextrose, 10% Dextrose or 25% Dextrose may be used
- Magnesium Sulfate must be diluted prior to administration. An example method uses Magnesium Sulfate 2 g diluted in 50 ml Normal Saline (final concentration 40 mg/ml). Agitate the solution prior to withdrawing the desired volume
- If the provider is uncertain whether a patient should be treated under adult or pediatric cardiac arrest protocols, begin CPR and consult OLMC

~~Undifferentiated~~ Shock (Adult)

CRITERIA

- This protocol is for patients who are persistently hypotensive (SBP < 90 mmHg or MAP < 65 mmHg) ~~and symptomatic from an unclear etiology or who are persistently hypotensive~~ despite treatment under other existing protocols, or are hypotensive from an unclear etiology.
- Patients with shock due to specific ~~reasons~~ etiology (e.g. trauma, ~~cardiac,~~ dysrhythmia, sepsis, anaphylaxis) should be treated accordingly prior to utilizing this protocol.

CFR and All Provider Levels

1. ABCs and vital signs
2. Administer oxygen
3. Control external bleeding
4. Maintain body temperature

CFR STOP

EMT

5. Obtain blood glucose level and treat as needed
6. Request ALS assistance
7. Transport

EMT STOP

Paramedic

8. Perform advanced airway management as needed
9. Begin cardiac monitoring
10. Perform, record and evaluate EKG rhythm
11. Obtain intravascular access via either large bore IV or IO
12. Administer crystalloid fluids 20 ml/kg IV
13. For patients who remain in shock after the initial 20 ml/kg IV bolus, administer one of the following to maintain SBP > 90 mmHg or MAP > 65 mmHg:
    - OPTION A: Additional crystalloid fluids 20 ml/kg IV (total fluid bolus 40 ml/kg)
    - OPTION B: Norepinephrine 2 mcg/min continuous IV infusion (maximum 20 mcg/min). Titrate as needed every 3-5 minutes
    - OPTION C: Epinephrine 10 mcg IV over 1 minute. Repeat as needed every 3-5 minutes
    - OPTION D: Dopamine 5 mcg/kg/min continuous IV infusion (maximum 20 mcg/kg/min). Titrate as needed every 3-5 minutes
14. Monitor vital signs every 2-3 minutes

Paramedic STOP

Medical Control Options

15. Administer additional dosing of any standing order medication
16. Administer Vasopressin 0.02 units/min continuous IV infusion (maximum 0.04 units/min) to maintain SBP > 90 mmHg or MAP 65 mmHg. Titrate as needed every 3-5 minutes

Key Points / Considerations

- Peri-intubation hypotension may lead to patient decompensation and/or cardiac arrest. Attempt to improve blood pressure via crystalloid fluid infusion and/or vasopressors prior to intubation
- Continuous vasopressor infusions must be administered using an IV flow regulating device or IV infusion pump

~~Excited Delirium (Adult and Pediatric)~~Behavioral Emergencies

CFR and All Provider Levels

1. ~~Treat as needed for a patient with suspected excited delirium ONLY IF an underlying medical or traumatic condition causing an altered mental status is not apparent~~
1. Assess the scene for potential or actual danger and establish a safe zone, if needed.
2. Request law enforcement assistance if the patient presents a risk of physical harm to providers, public, or themself.
3. ~~If the patient is agitated and presents a risk of physical harm to providers, public or self, request for law enforcement assistance.~~
3. If safe to do so, attempt to verbally de-escalate the patient's condition.
4. Providers may participate in physically restraining a patient when it becomes necessary to protect patient or others from harm.
   4. ~~for self-protection or if a police officer requests assistance.~~

   Providers shall only use:
   - The minimal a~~A~~mount of force required to effectively restrain the patient and protect them (and others) from harm~~may be used~~
   - Soft restraints~~,~~ (such as towels, triangular bandages, or commercially available soft medical restraints) to restrain the patient to the stretcher~~, and only if necessary, to protect the patient and others from harm~~
5. Identify and treat any underlying medical or traumatic condition that may be causing agitation or hyperactive delirium.
5.6. ~~If the patient continues to struggle while being physically restrained,~~ ~~r~~Request ALS assistance if chemical restraint may be required.~~for sedation~~
6.7. ABCs and vital signs, if able to do so safely
7.8. Airway management and appropriate oxygen therapy

CFR STOP

EMT

8.9. Obtain blood glucose level and treat as needed, if able to do so safely
9.10. Transport

EMT STOP

Paramedic

10. For **ADULT** patients~~-~~ with **Hyperactive Delirium** AND continue to violently struggle despite being physically restrained AND are in danger of injuring themself or

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others~~who are persistently agitated and who present a risk of physical harm to providers, public, or self~~, administer Midazolam~~ as follows (IM is the preferred route of administration if intravascular access has not been established)~~:

- OPTION A: Midazolam 0.2 mg/kg IM/IN (maximum 10 mg)
- OPTION B: Midazolam 0.2 mg/kg IV (maximum 5 mg)

~~11.~~ After adequate sedation:

11~~.1~~ Obtain intravascular access

1~~1.~~2 Begin cardiac and pulse oximetry monitoring

13. Begin non-invasive capnography monitoring, if available

Paramedic STOP

Medical Control Options

12. For **ADULT** patients who are persistently agitated~~ and who present a risk of physical harm to providers, public, or self, administer one of the following~~:
    - OPTION A: Ketamine 2-4 mg/kg IM (maximum 400 mg) OR Ketamine 1-2 mg/kg IN (maximum 200 mg)
    - OPTION B: Midazolam 0.2 mg/kg IM/IN (maximum 10 mg) OR Midazolam 0.2 mg/kg IV (maximum 5 mg)
    - OPTION C: Lorazepam 0.1 mg/kg IM (maximum 4 mg) OR Lorazepam 0.1 mg/kg IV/IN (maximum 2 mg)
    - OPTION D: Diazepam 0.2 mg/kg IV/IN/IM (maximum 5 mg)
13. For **PEDIATRIC** patients who are persistently agitated~~ and who present a risk of physical harm to providers, public, or self, administer one of the following medications~~:
    - OPTION A: Ketamine 2-4 mg/kg IM (maximum 400 mg) OR Ketamine 1-2 mg/kg IN (maximum 200 mg)
    - OPTION B: Midazolam 0.1 mg/kg IM/IN (maximum 5 mg) OR Midazolam 0.1 mg/kg IV (maximum 2 mg)
    - OPTION C: Lorazepam 0.1 mg/kg IM (maximum 4 mg) OR Lorazepam 0.1 mg/kg IV/IN (maximum 2 mg)

Key Points / Considerations

- Chemical restraint is defined as the administration of a sedative or dissociative

medication to prevent injury

- In this protocol, standing order chemical restraint is intended for patient who are suffering from Hyperactive Delirium. This is a syndrome that includes psychomotor agitation (aggression, reduced sensitivity to pain, violent struggling), physiologic excitation (tachycardia, tachypnea, diaphoresis), and delirium.
- Medication for chemical restraint MAY NOT be administered as a standing order (i.e., without OLMC order) if the patient is:
    - Agitated or non-compliant with requests or directions, but does not require physical restraint

  OR
    - Physically restrained and not struggling against the restraints
- Intramuscular is the preferred route for standing order midazolam administration in this protocol due to the speed of administration. Intravenous administration should only be done if the patient already has IV access prior to needing sedation.
- Agitated patients should be presumed to have an underlying medical or traumatic condition
- ~~Consider monitoring the patient using non-invasive capnography, if available when using any of the above medications~~
- ~~Consider the patient's ideal body weight when dosing any of the above medications~~
- All suicidal or violent threats or gestures must be taken seriously. ~~Utilize law enforcement personnel if the patient poses a danger to themselves, emergency personnel, and/or others~~
- Diabetic patients with a blood glucose level reading between 60-80 mg/dl may still be symptomatic secondary to hypoglycemia. In the presence of such signs and symptoms, treat accordingly
- Patient must NOT be transported in a prone (face-down) position
- If the patient is in police custody and/or has handcuffs on, a police officer must accompany the patient in the patient compartment of the ambulance to the hospital. The provider must have the ability to immediately remove any mechanical restraints that may hinder patient care at all times
- It is preferrable for patients to have their handcuffs secured to the stretcher and NOT~~not~~ be handcuffed behind their back when on a stretcher
- EMS providers are responsible for determining the need for chemical restraint. EMS providers may not be ordered to administer chemical restraint by law enforcement. If there is any question about the appropriateness of chemical restraint, contact OLMC.

Overdose (Adult and Pediatric)

CFR and All Provider Levels

1. Assess the scene for potential or actual danger and establish a safe zone, if necessary
2. ABCs and vital signs
3. Airway management
4. Administer oxygen
5. **CFRs only:** If an opioid overdose is suspected AND the patient's respiratory rate is inadequate, AND Paramedics are not on scene, administer Naloxone IN via mucosal atomizer device (MAD), if available, as follows:
   - **ADULT**: Naloxone 1 mg IN in each nostril (cumulative dose 2 mg). Repeat as needed after 5 minutes if there is no improvement in symptoms (final cumulative dose 4 mg)
   - **PEDIATRIC**: Naloxone 0.5 mg IN in each nostril (cumulative dose 1 mg). Repeat as needed after 5 minutes if there is no improvement in symptoms (final cumulative dose 2 mg)
6. Assess for shock and treat as needed
7. Do not induce vomiting for ingested substances

CFR STOP

EMT

8. If the patient has altered mental status:
   - 8.1 Obtain blood glucose level and treat appropriately as needed
   - 8.2 Request ALS assistance
9. **EMTs only:** If an opioid overdose is suspected AND the patient's respiratory rate is inadequate, AND Paramedics are not on scene, administer Naloxone IN via MAD as follows:
   - **ADULT**: Naloxone 1 mg IN in each nostril (cumulative dose 2 mg). Repeat as needed after 5 minutes if there is no improvement in symptoms (final cumulative dose 4 mg)
   - **PEDIATRIC**: Naloxone 0.5 mg IN in each nostril (cumulative dose 1 mg). Repeat as needed after 5 minutes if there is no improvement in symptoms (final cumulative dose 2 mg)
10. Transport

EMT STOP

Paramedic

11. Perform advanced airway management as needed
12. Obtain intravascular access

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13. For symptomatic patients with suspected cardiac medication overdose treat as needed
14. If an opioid overdose is suspected AND the respiratory rate is inadequate, administer Naloxone as follows:
    - **ADULT**: Titrate Naloxone in 0.5 mg increments IV/IM/IN (maximum 4 mg) as needed to response
    - **PEDIATRIC**: Titrate Naloxone in 0.5 mg increments IV/IM/IN as needed to response according to age as follows:
        - Age < 2 years: Maximum 1 mg
        - Age ≥ 2 years: Maximum 2 mg
15. Begin cardiac monitoring

Paramedic STOP

Medical Control Options

16. Administer Diphenhydramine 1 mg/kg IV/IM (maximum 50 mg) for dystonic reaction from suspected antiemetic, antipsychotic, or antidepressant medications
17. Administer Sodium Bicarbonate 1 mEq/kg IV (maximum 44 mEq) for prolonged QTc > 450 ms or QRS > 100 ms from suspected antidepressant medications
18. For suspected sympathomimetic overdose (e.g. cocaine, amphetamines), administer one of the following:
    - OPTION A: Midazolam 0.2 mg/kg IV/IN/IM (maximum 5 mg)
    - OPTION B: Lorazepam 0.1 mg/kg IV/IN/IM (maximum 2 mg)
    - OPTION C: Diazepam 0.2 mg/kg IV/IN/IM (maximum 5 mg)

Key Points / Considerations

- Paramedics should not administer the CFR or EMT dosage of Naloxone, and should start with the titration listed in the Paramedic section
    - It is safest to use the lowest dose of Naloxone that reverses the respiratory depression of an opioid overdose patient. This lowers the risk of precipitating opioid withdrawal and pulmonary edema. If Paramedics are on scene, the higher doses listed in the CFR and EMT sections should be withheld in favor of the titration of smaller increments as listed in the Paramedic section
- Document the name of the substance(s) involved, the amount taken, and the time and duration of exposure
- Attempt to obtain information about the product from the container label. If possible, bring the product and its container with the patient to the hospital
- CFRs and EMTs may administer a maximum of two (2) Naloxone doses as described in their respective protocol sections

- If approved by an agency Medical Director, Naloxone Nasal Spray 4 mg (0.1 ml) IN in one nostril may be substituted for the above Naloxone IN doses for both adult and pediatric patients
- Naloxone relative contraindications:
  - Cardiopulmonary arrest
  - Active seizure
  - Evidence of nasal trauma, nasal obstruction, or epistaxis

General Pain Management (Adult and Pediatric)

CRITERIA

- This protocol is for patients who require analgesic medications for pain of any etiology
- OLMC shall be contacted **PRIOR** to the administration of analgesic medications for **ANY** of the following conditions:
  - Altered mental status
  - Hypoventilation
  - Hemodynamically unstable
  - Pregnant or suspected of being pregnant
- Patients should be monitored using non-invasive capnography, if available

CFR and All Provider Levels

CFR STOP

EMT

EMT STOP

Paramedic

1. Begin cardiac and pulse oximetry monitoring
2. Obtain intravascular access
3. Monitor vital signs every 5 minutes
4. Administer one of the following, as available:
   - OPTION A: Morphine 0.1 mg/kg IV/IM (maximum 10 mg), for patients with SBP > 110 mmHg
   - OPTION B: Fentanyl 1 mcg/kg IV/IM/IN (maximum 100 mcg). For persistent severe pain, repeat after 10 minutes (maximum cumulative dose 200 mcg)
   - OPTION C: **ADULT:** Ketorolac 15~~10~~ mg IV/IM. Administration of an additional opioid analgesic (OPTION A or OPTION B) may be considered for persistent severe pain
   - OPTION D: **PEDIATRIC:** Acetaminophen 15 mg/kg PO (maximum 650 mg)
5. Transport

Paramedic STOP

Medical Control Options

6. Administer one of the following:

   OPTION A: Morphine 0.1 mg/kg IV/IM

   OPTION B: Fentanyl 1 mcg/kg IV/IM/IN
7. Administer Ketamine 0.2 mg/kg IV (maximum 25 mg) slowly OR Ketamine 0.4 mg/kg IM/IN (maximum 50 mg)
8. Administer any standing order medication for patients who have any listed exclusion criteria

Key Points / Considerations

- Contraindications for Ketorolac:
  - Renal failure and/or hemodialysis
  - Age ≥ 65 years
  - Pregnancy
  - Abdominal pain
  - Injuries with a risk for bleeding or suspected fracture
- ~~Consider ideal body weight when dosing any of the above medications~~
- Assess for hypoventilation after opioid medication administration and treat as needed

Procedural Sedation~~-~~/ Sedation for Advanced Airway Management (Adult and Pediatric)

CRITERIA

- This protocol is for patients who are conscious and require medications for:
  - Procedural sedation: Short-term analgesic, sedation, and/or anxiolysis for procedures such as synchronized cardioversion, transcutaneous pacing~~, or CPAP~~
  - Sedation for advanced airway management: ~~Sedation," which is A~~analgesic and/or~~,~~ sedation~~,~~ ~~and/or anxiolysis, fo~~to perform~~place~~ or maintain an~~r~~ advanced airway (endotracheal intubation or use of a supraglottic airway device)
    - ~~management~~
- In order to sedate the patient under standing orders to perform advanced airway management, the patient must meet **ALL** of the following criteria:
  - Adult
  - Altered mental status
  - Respiratory rate < 10 breaths/min
  - SpO_2 < 90% without supplemental oxygen
  - No immediate reversible cause of symptoms (e.g. opiate overdose responding to Naloxone)
- Adult patients who do not meet the above criteria **MUST** have prior approval of medications through OLMC
- Pediatric patients requiring procedural sedation or sedation for advanced airway management~~, sedation for endotracheal intubation or post-intubation sedation~~ **MUST** have prior approval of medications through OLMC
- Continuous waveform capnography **MUST** be used whenever advanced airway management is performed EXCEPT when a supraglottic airway device is used and there are insufficient resources available (e.g. MCI event or other similar situations) ~~Intubated patients must be monitored using waveform capnography~~
- Other procedures should be monitored using non-invasive capnography, if available

CFR and All Provider Levels

CFR STOP

EMT

EMT STOP

Paramedic

1. ABCs and vital signs
2. Administer oxygen
3. Obtain intravascular access
4. Begin cardiac monitoring
5. Monitor vital signs every 2-3 minutes

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Procedural Sedation

6. For an **ADULT** patient requiring procedural sedation (e.g. synchronized cardioversion, transcutaneous pacing), administer one of the following:
   - OPTION A: Etomidate 0.15 mg/kg IV (maximum 20 mg)
   - OPTION B: Ketamine 1 mg/kg IV (maximum 100 mg)
   - OPTION C: Midazolam 0.1 mg/kg IV (maximum 5 mg)
   - OPTION D: Diazepam 0.1 mg/kg IV (maximum 10 mg)
   - OPTION E: Lorazepam 0.02 mg/kg IV (maximum 4 mg)

Sedation for Advanced Airway Management

7. For induction~~sedation~~ to perform advanced airway management of an **ADULT** patient with ALL OF THE FOLLOWING CRITERIA:
   - Altered mental status
   - Respiratory rate < 10 breaths/min
   - SpO_2 < 90% without supplemental oxygen
   - No immediate reversible cause of symptoms (e.g. opiate overdose responding to Naloxone)
     - ~~Induction for advanced airway management, A~~administer one of the following:
       - OPTION A: Etomidate 0.3 mg/kg IV (maximum 40 mg)
       - OPTION B: Ketamine 2 mg/kg IV (maximum 200 mg)
       - OPTION C: Midazolam 0.2 mg/kg IV (maximum 5 mg)
       - OPTION D: Diazepam 0.2 mg/kg IV (maximum 10 mg)
       - OPTION E: Lorazepam 0.1 mg/kg IV (maximum 4 mg)

~~8.~~ For sedation of an **ADULT** patient with~~after placement of~~ an advanced airway in place, administer one of the following:~~one of the following:~~

8.
   - OPTION A: Fentanyl 1 mcg/kg IV (maximum 100 mcg). Administration of a sedative (OPTION B-OPTION E) may be considered for additional sedation
   - OPTION B: Ketamine 1 mg/kg IV (maximum 100 mg)
   - OPTION C: Midazolam 0.2 mg/kg IV (maximum 5 mg)
   - OPTION D: Diazepam 0.2 mg/kg IV (maximum 10 mg)
   - OPTION E: Lorazepam 0.1 mg/kg IV (maximum 4 mg)

Paramedic STOP

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Medical Control Options

9. For an **ADULT** patient who does not meet the criteria for standing order sedation for advanced airway management, administer medication options for induction and post-procedural sedation according to the dosing options as listed above
10. For a **PEDIATRIC** patient requiring procedural sedation, sedation for advanced airway management or post-procedural sedation, administer medication options according to the weight-based dosing for adult patients

Key Points / Considerations

- Due to its short duration of action, consider using Etomidate as a single sedative agent only for short-term procedures such as synchronized cardioversion
- When managing an intubated patient, it is preferable to continue additional dosing of the same benzodiazepine used for induction, rather than switch to a different medication
- Medications may be administered to a patient~~Patients may be given Airway Sedation~~ to maintain an advanced airway, even if an induction agent ~~medication~~ was not used to place the airway.
- ~~Consider ideal body weight when dosing any of the above medications~~
- ~~Consider less invasive means of managing the patient's airway.~~ If a difficult intubation is anticipated, and the patient can be effectively ventilated, consider managing the patient's airway without performing~~placing an~~ advanced airway management~~.~~
- Peri-intubation hypotension may lead to patient decompensation and/or cardiac arrest. Attempt to improve blood pressure via crystalloid fluid infusion and/or vasopressors prior to intubation
- ~~Etomidate or ketamine are the preferred medications for induction before placement of an advanced airway.~~