# Denver Metro EMS Medical Directors

Protocol Updates July 2025

# February 2025 Change List

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- 0030 Consent
- 0031 Patient Determination
- 0032 Patient Non-Transport or Refusal
- 0050 Field Pronouncement
- 0051 Termination of Resuscitation
- 0070 Lift Assist/Medical Assist **NEW PROTOCOL**
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- 2040 Pediatric Wheezing

# February 2025 Change List

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- 3040 Tachyarrhythmia with Poor Perfusion
- 4010 Universal Altered Mental Status
- 6000 Psychiatric/Behavioral
- 9095 Diltiazem **NEW PROTOCOL**
- 9170 Ipratropium Bromide
- 9180 Lidocaine
- 9200 Methylprednisolone
- 8000X Trauma Extended Care Supplements
- Evidence-based Google Sheets List

# 0010 Introduction

OLD

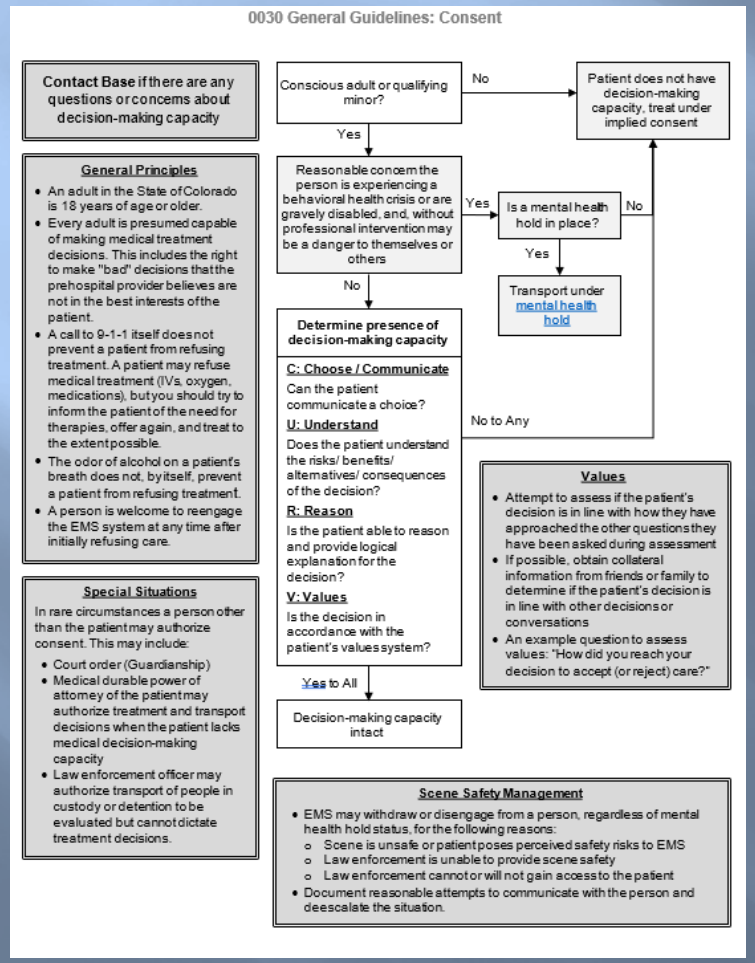
The following protocols have been developed and approved by the Denver Metro EMS Medical Directors (DMEMSMD) group. These protocols define the standard of care for EMS providers in the Denver Metropolitan area, and delineate the expected practice, actions, and procedures to be followed.

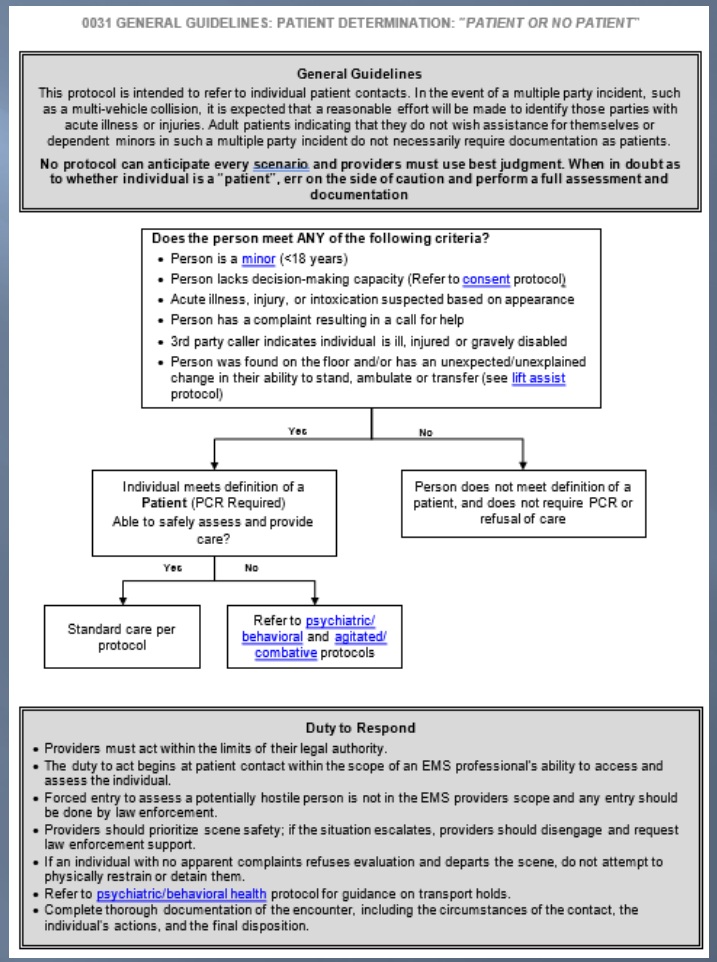
NEW

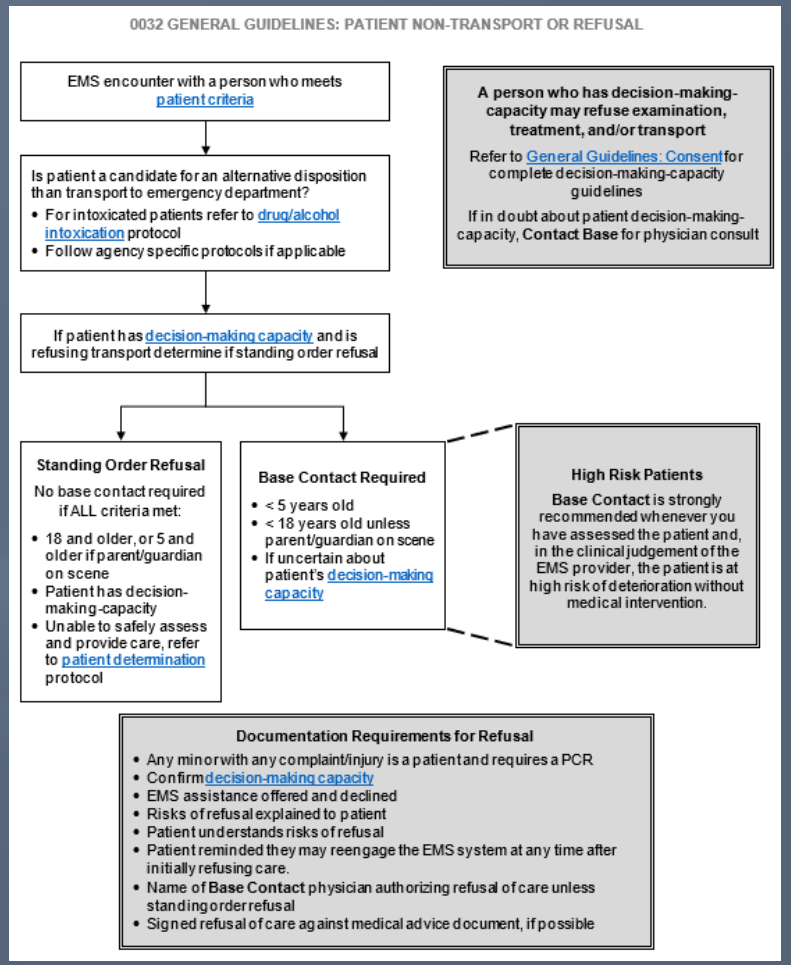
The following protocols have been developed and approved by the Denver Metro EMS Medical Directors (DMEMSMD) group. These protocols define the treatments, procedures, and guidelines approved by the Denver Metro EMS Physician Group. In Colorado, the scope of practice and acts allowed for EMT, EMT-IV, AEMT, EMT-I and Paramedic certifications are defined by the Colorado Department of Public Health and Environment, 6 CCR 1015-3 Chapter Two - Rules Pertaining to EMS Practice and Medical Director Oversight. These protocols do not supersede Chapter Two allowances, but in some instances may not include all acts allowed from Chapter Two depending on medical directors' preference.

These protocols are consensus based incorporating current industry best practices and available evidence to the extent possible. No protocol can account for every clinical scenario encountered, and the DMEMSMD

# 0030 Consent, 0031 Patient Determination, 0032 Refusal Protocols



# 0030 Consent

OLD

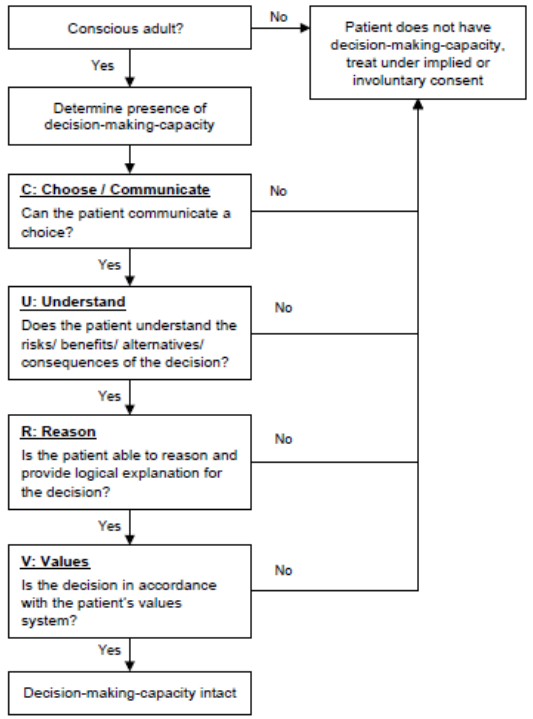
## 0030 General Guidelines: Consent

**General Principles**

- An adult in the State of Colorado is 18 years of age or older.
- Every adult is presumed capable of making medical treatment decisions. This includes the right to make "bad" decisions that the prehospital provider believes are not in the best interests of the patient.
- A call to 9-1-1 itself does not prevent a patient from refusing treatment. A patient may refuse medical treatment (IVs, oxygen, medications), but you should try to inform the patient of the need for therapies, offer again, and treat to the extent possible.
- The odor of alcohol on a patient's breath does not, by itself, prevent a patient from refusing treatment.

**Values**

- Attempt to assess if the patient's decision is in line with how they have approached the other questions they have been asked during assessment
- If possible, obtain collateral from friends or family to determine if the patient's decision is in line with other decisions or conversations
- An example question to assess values: "How did you reach your decision to accept (or reject) care?"




**Involuntary Consent**

In rare circumstances a person other than the patient may authorize consent. This may include:

- Court order (Guardianship)
- Law enforcement officer may authorize transport of prisoners in custody or detention in order to be evaluated but cannot dictate treatment decisions.
- Persons under a mental health hold or commitment who are a danger to themselves or others or are gravely disabled.
- It is sufficient to assume the patient lacks decision-making-capacity if there is a reasonable concern when any person appears to have a mental illness and, as a result of such mental illness, appears to be an imminent danger to others or to himself or herself or appears to be gravely disabled. Effort should be made to obtain consent for transport from the patient, and to preserve the patient's dignity throughout the process. However, the patient may be transported over his or her objections and treated under involuntary consent if the patient does not comply.

**Contact Base** if there are any questions or concerns about decision-making-capacity.

NEW

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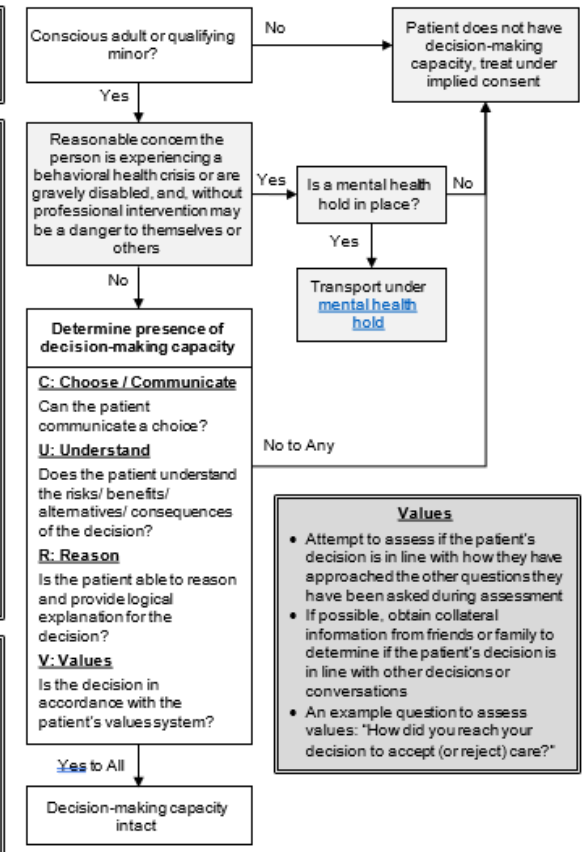
- The odor of alcohol on a patient's breath does not, by itself, prevent a patient from refusing treatment.
- A person is welcome to reengage the EMS system at any time after initially refusing care.

**Special Situations**

In rare circumstances a person other than the patient may authorize consent. This may include:

- Court order (Guardianship)
- Medical durable power of attorney of the patient may authorize treatment and transport decisions when the patient lacks medical decision-making capacity
- Law enforcement officer may authorize transport of people in custody or detention to be evaluated but cannot dictate treatment decisions.

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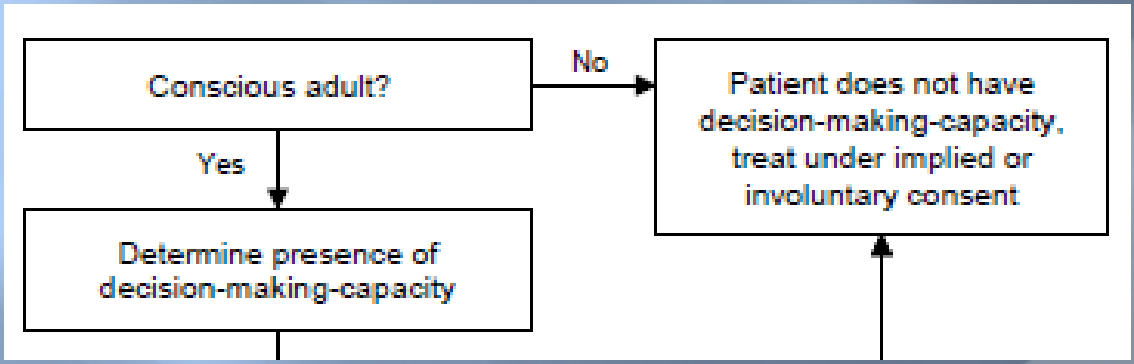
- Attempt to assess if the patient's decision is in line with how they have approached the other questions they have been asked during assessment
- If possible, obtain collateral information from friends or family to determine if the patient's decision is in line with other decisions or conversations
- An example question to assess values: "How did you reach your decision to accept (or reject) care?"

**Scene Safety Management**

- EMS may withdraw or disengage from a person, regardless of mental health hold status, for the following reasons:
  - Scene is unsafe or patient poses perceived safety risks to EMS
  - Law enforcement is unable to provide scene safety
  - Law enforcement cannot or will not gain access to the patient
- Document reasonable attempts to communicate with the person and deescalate the situation.

# 0030 Consent

## OLD

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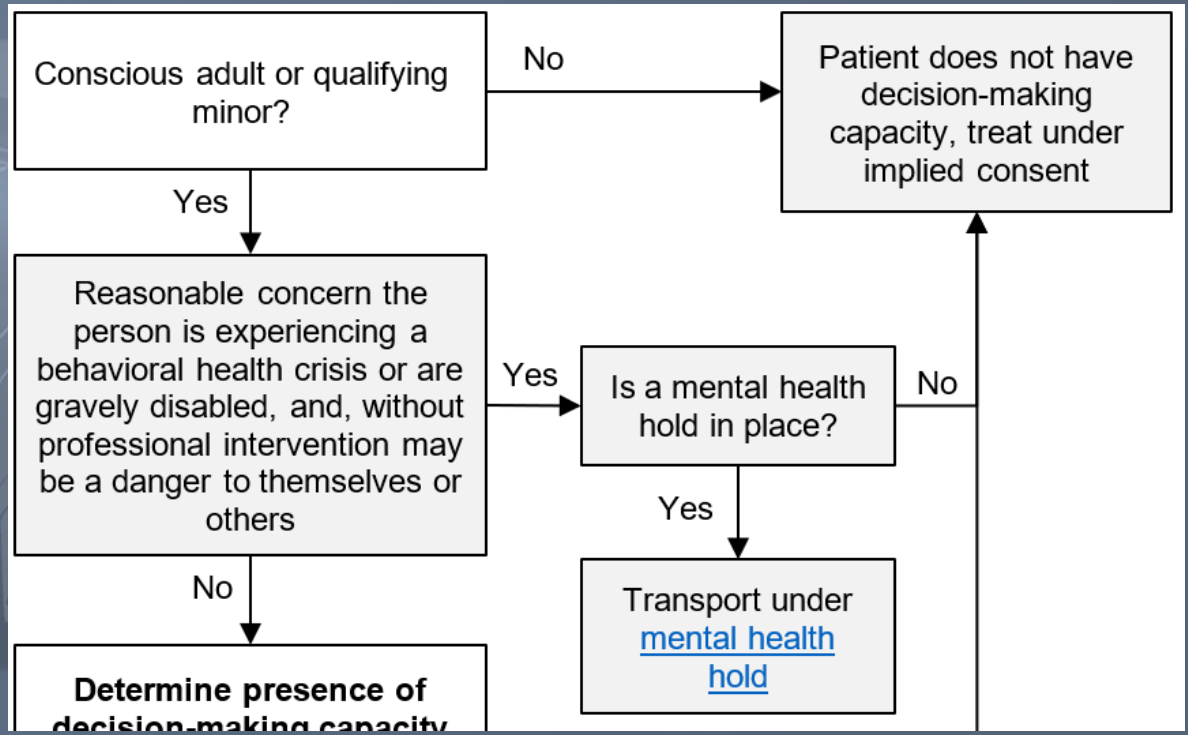

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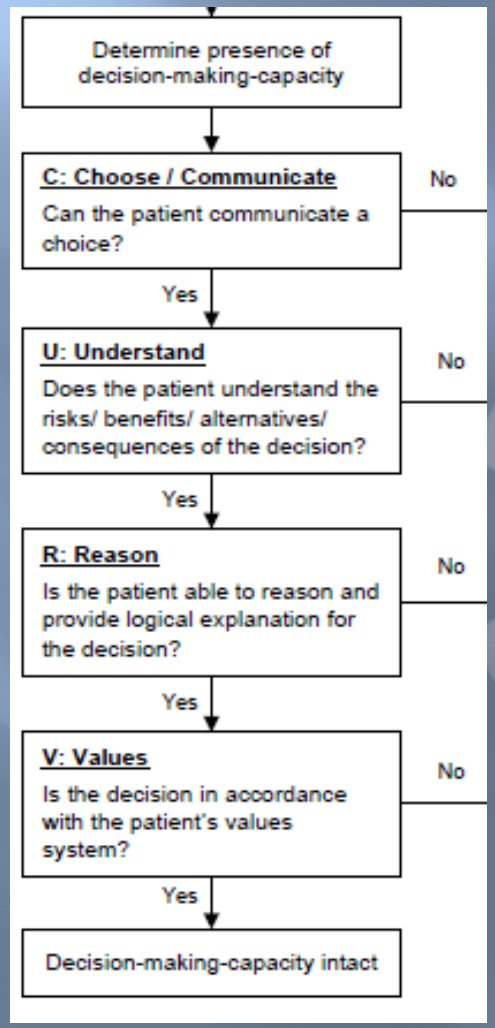


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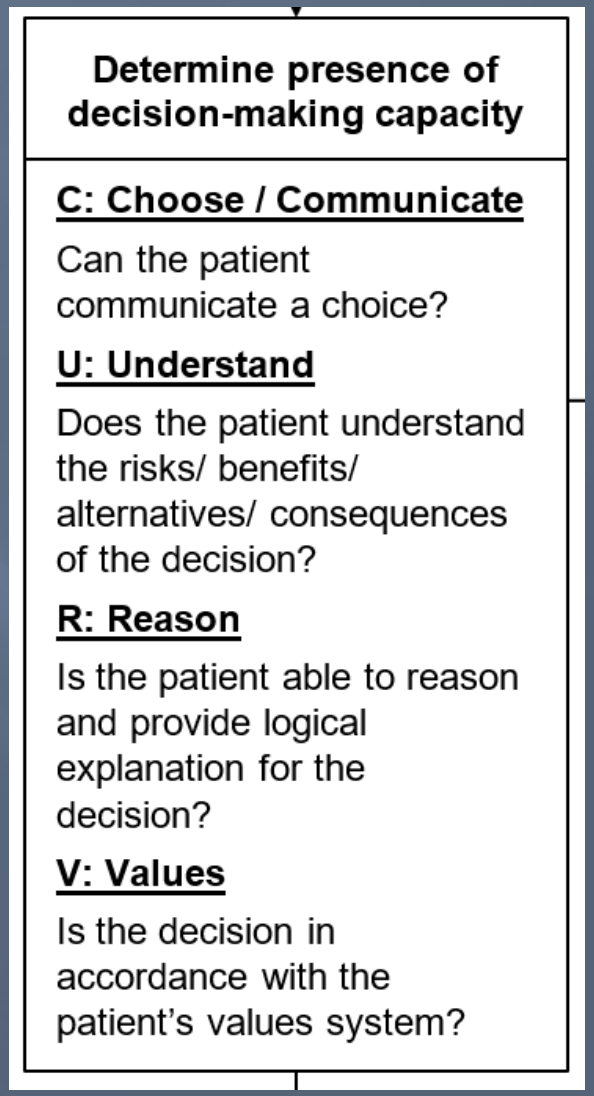

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- It is sufficient to assume the patient lacks decision-making-capacity if there is a reasonable concern when any person appears to have a mental illness and, as a result of such mental illness, appears to be an imminent danger to others or to himself or herself or appears to be gravely disabled. Effort should be made to obtain consent for transport from the patient, and to preserve the patient's dignity throughout the process. However, the patient may be transported over his or her objections and treated under involuntary consent if the patient does not comply.

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  - Law enforcement cannot or will not gain access to the patient
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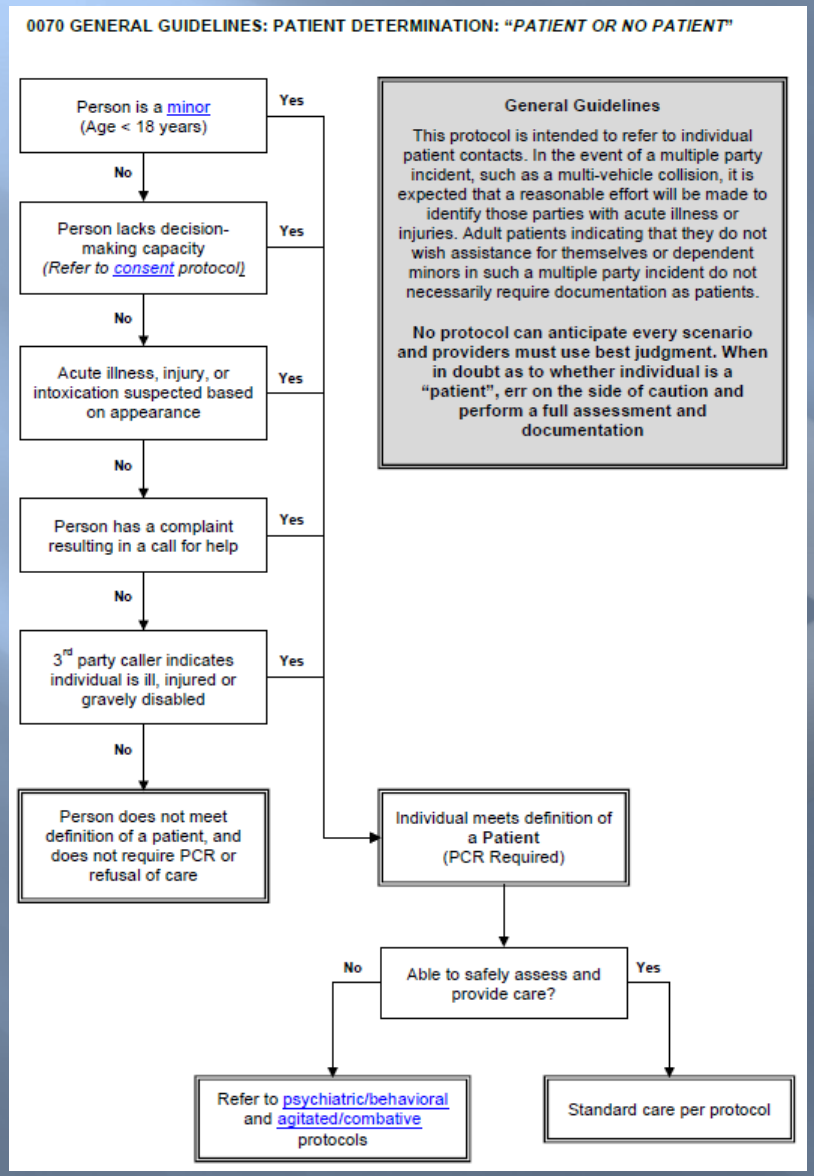
# 0031 Patient Determination

OLD

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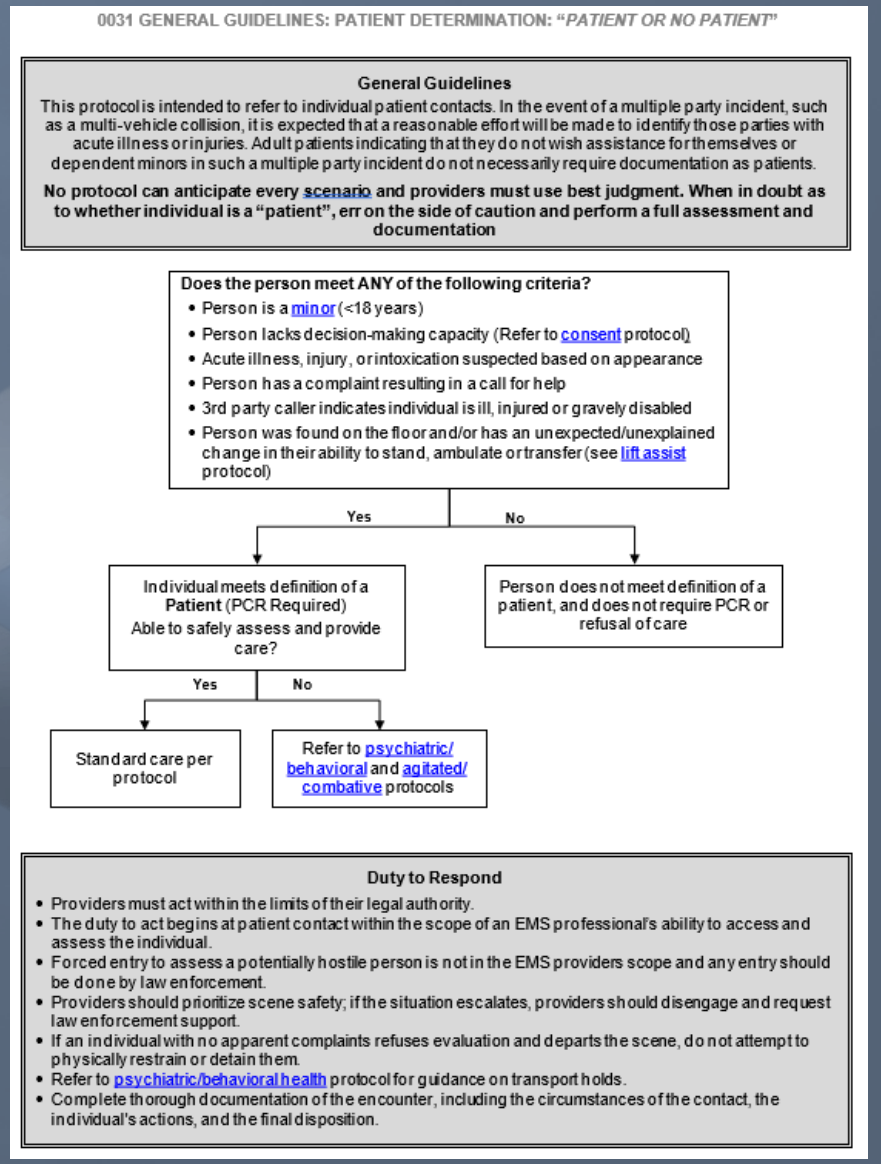
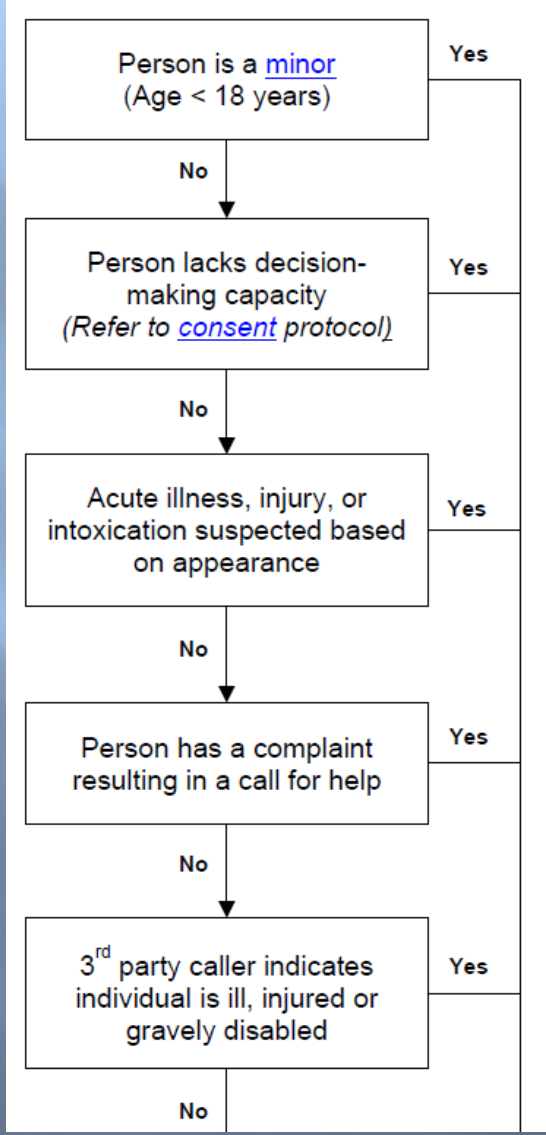


# 0031 Patient Determination

OLD




NEW

**Does the person meet ANY of the following criteria?**

- Person is a minor (<18 years)
- Person lacks decision-making capacity (Refer to consent protocol)
- Acute illness, injury, or intoxication suspected based on appearance
- Person has a complaint resulting in a call for help
- 3rd party caller indicates individual is ill, injured or gravely disabled
- Person was found on the floor and/or has an unexpected/unexplained change in their ability to stand, ambulate or transfer (see lift assist protocol)

# 0031 Patient Determination

NEW

**Duty to Respond**

- Providers must act within the limits of their legal authority.
- The duty to act begins at patient contact within the scope of an EMS professional's ability to access and assess the individual.
- Forced entry to assess a potentially hostile person is not in the EMS providers scope and any entry should be done by law enforcement.
- Providers should prioritize scene safety; if the situation escalates, providers should disengage and request law enforcement support.
- If an individual with no apparent complaints refuses evaluation and departs the scene, do not attempt to physically restrain or detain them.
- Refer to psychiatric/behavioral health protocol for guidance on transport holds.
- Complete thorough documentation of the encounter, including the circumstances of the contact, the individual's actions, and the final disposition.

# 0032 Patient Non-Transport or Refusal

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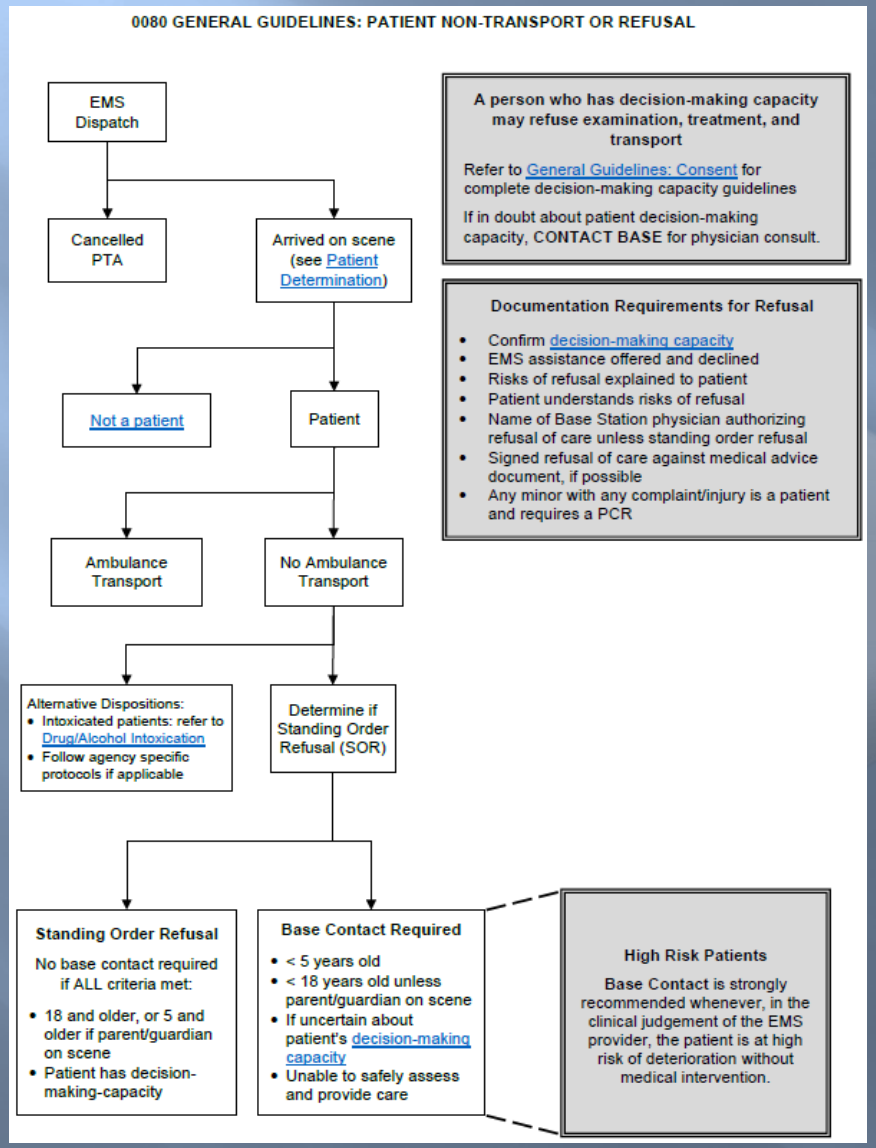


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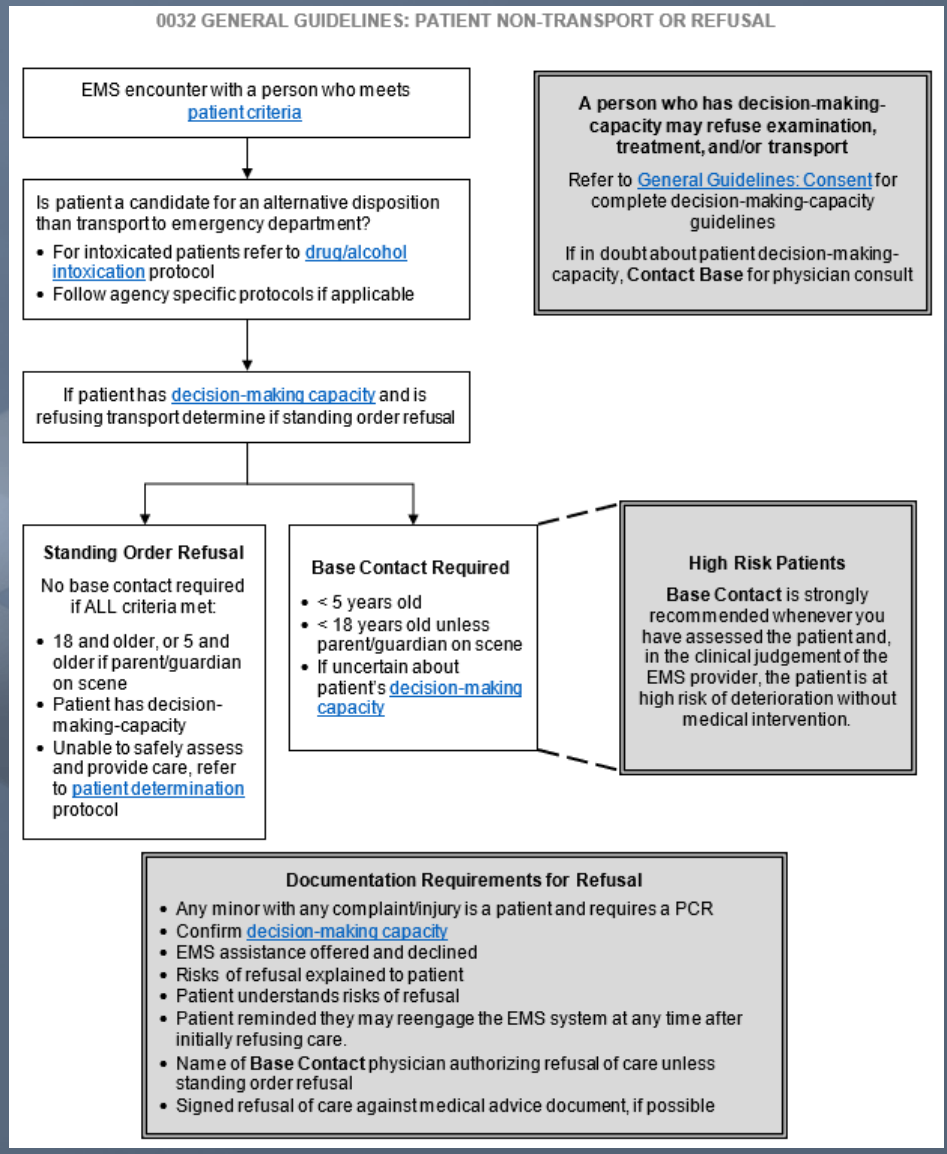


# 0032 Patient Non-Transport or Refusal

OLD

**Standing Order Refusal**

No base contact required if ALL criteria met:

- 18 and older, or 5 and older if parent/guardian on scene
- Patient has decision-making-capacity

NEW

**Standing Order Refusal**

No base contact required if ALL criteria met:

- 18 and older, or 5 and older if parent/guardian on scene
- Patient has decision-making-capacity
- Unable to safely assess and provide care, refer to patient determination protocol

# 0032 Patient Non-Transport or Refusal

OLD

**High Risk Patients**

**Base Contact** is strongly recommended whenever, in the clinical judgement of the EMS provider, the patient is at high risk of deterioration without medical intervention.

NEW

**High Risk Patients**

**Base Contact** is strongly recommended whenever you have assessed the patient and, in the clinical judgement of the EMS provider, the patient is at high risk of deterioration without medical intervention.

# 0032 Patient Non-Transport or Refusal

OLD

**Documentation Requirements for Refusal**

- Confirm decision-making capacity
- EMS assistance offered and declined
- Risks of refusal explained to patient
- Patient understands risks of refusal
- Name of Base Station physician authorizing refusal of care unless standing order refusal
- Signed refusal of care against medical advice document, if possible
- Any minor with any complaint/injury is a patient and requires a PCR

NEW

**Documentation Requirements for Refusal**

- Any minor with any complaint/injury is a patient and requires a PCR
- Confirm decision-making capacity
- EMS assistance offered and declined
- Risks of refusal explained to patient
- Patient understands risks of refusal
- Patient reminded they may reengage the EMS system at any time after initially refusing care.
- Name of **Base Contact** physician authorizing refusal of care unless standing order refusal
- Signed refusal of care against medical advice document, if possible

# 0050 Field Pronouncement

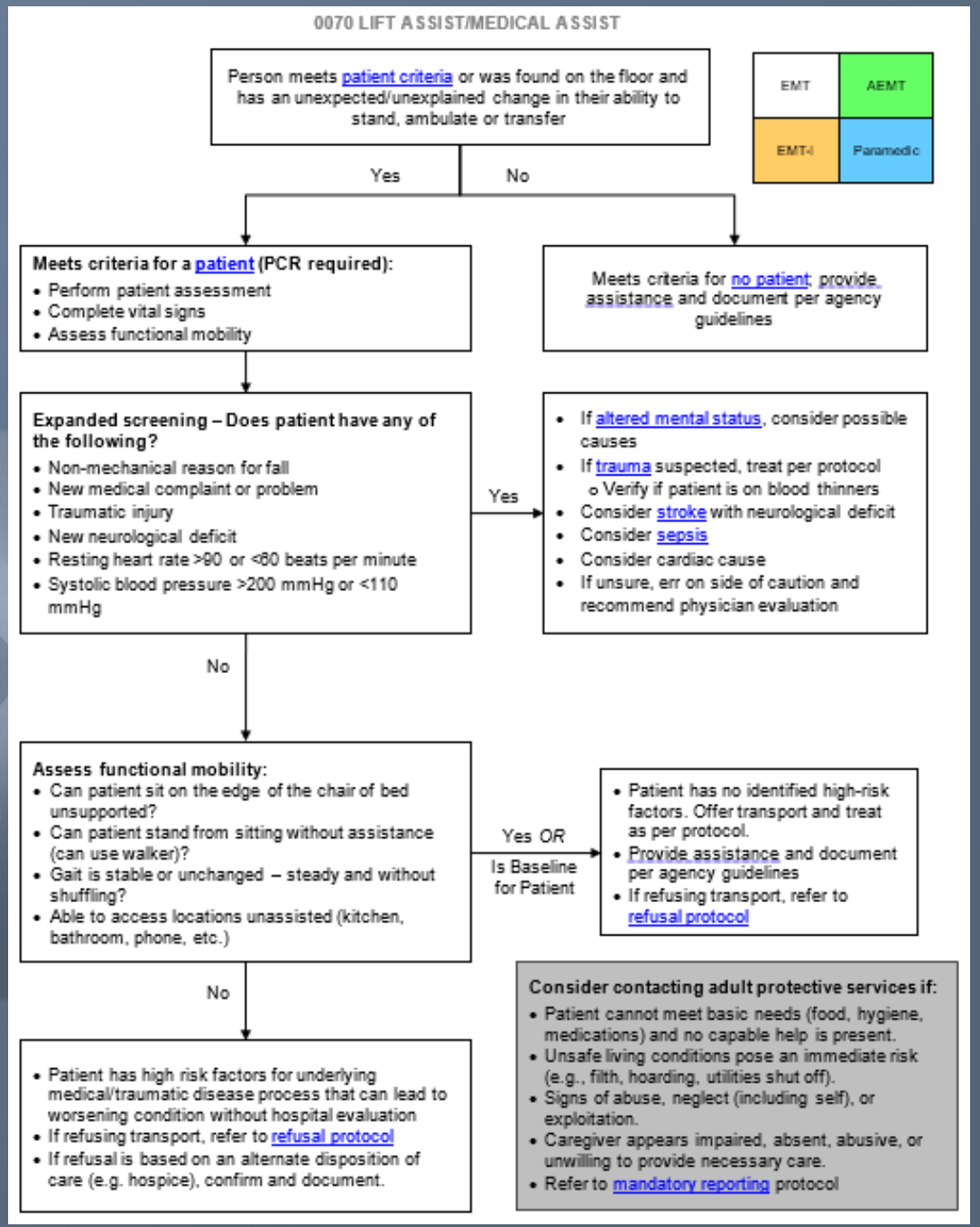
D. Nonviable Birth:
   1. If <22 weeks gestation, do not resuscitate
   2. If gestational dates unknown, examine fingers
      a. If not fused, resuscitate
      b. If fused, do not resuscitate
   3. Regardless of gestational age, if infant is born with no signs of life and has one of the following, do not resuscitate
      a. Decomposing and/or macerated, sloughing skin
      b. Anencephalic infants, missing a major part of the head and/or brain
   4. Keep mother and child together, if possible.
   5. **Contact Base**

# 0051 Termination of Resusciation

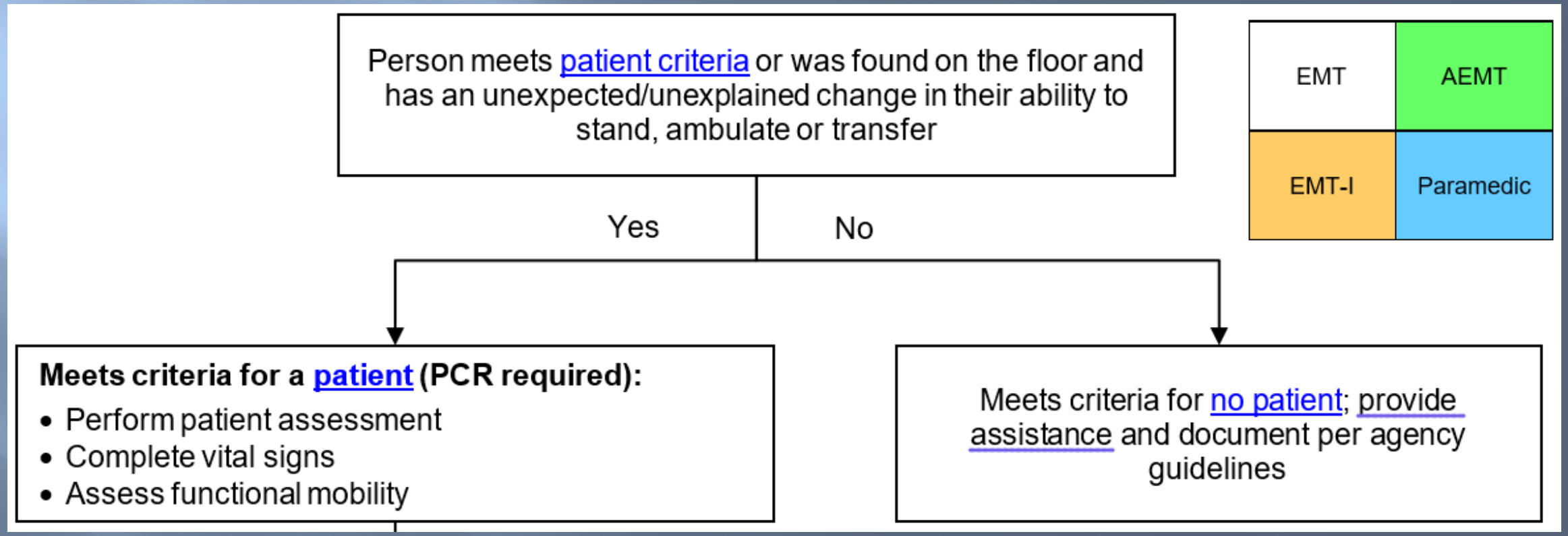
D. In newly born babies deemed a viable birth receiving resuscitation, if there is no heart rate and all the steps of resuscitation have been performed, cessation of resuscitation efforts may be discussed with the team and the family. A reasonable time frame for this change in goals of care are around 30 minutes after birth. **Contact Base**

E. Once the patient is pronounced, they become a potential coroner's case. From that point on the patient should not be moved and no clothing or medical devices (lines, tubes etc.) should be removed or altered pending coroner evaluation. Exceptions may exist in order to keep newly born and mother together.

# **NEW**
# 0070 Lift Assist / Medical Assist



# 0070 Lift Assist / Medical Assist



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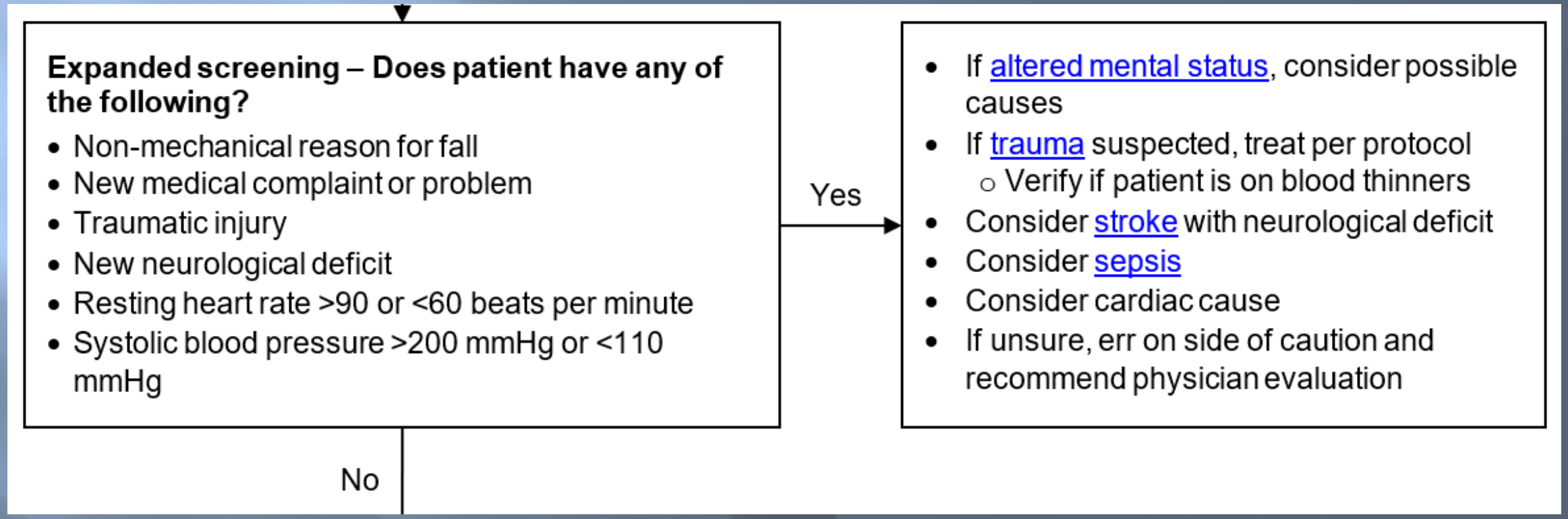

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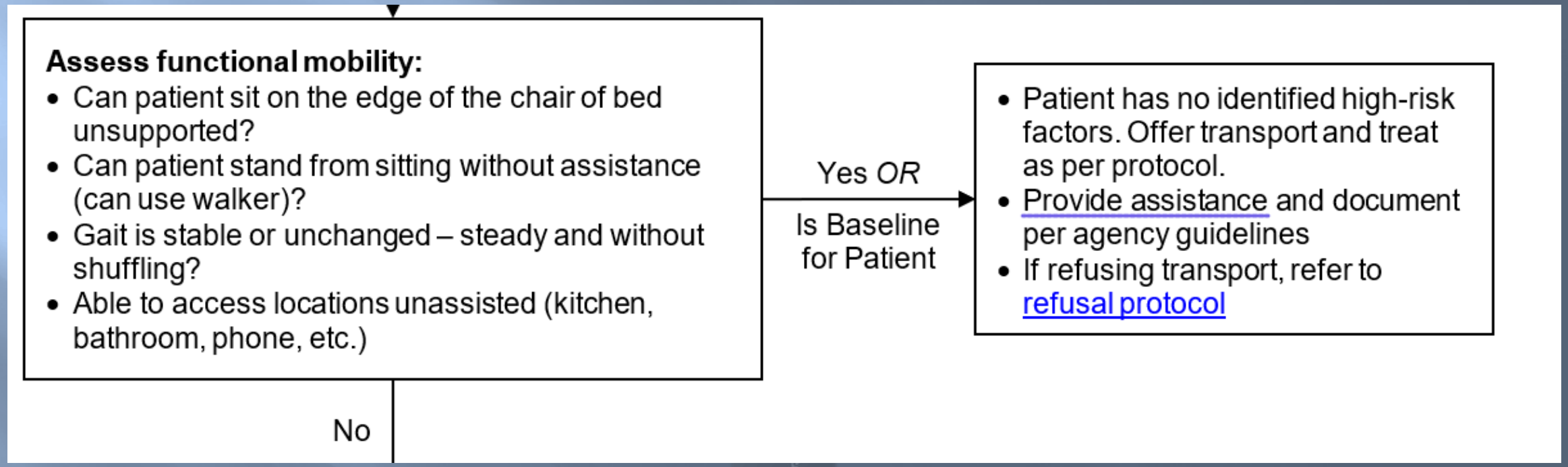


# 0070 Lift Assist / Medical Assist

- Patient has high risk factors for underlying medical/traumatic disease process that can lead to worsening condition without hospital evaluation
- If refusing transport, refer to refusal protocol
- If refusal is based on an alternate disposition of care (e.g. hospice), confirm and document.

# 0070 Lift Assist / Medical Assist

**Consider contacting adult protective services if:**

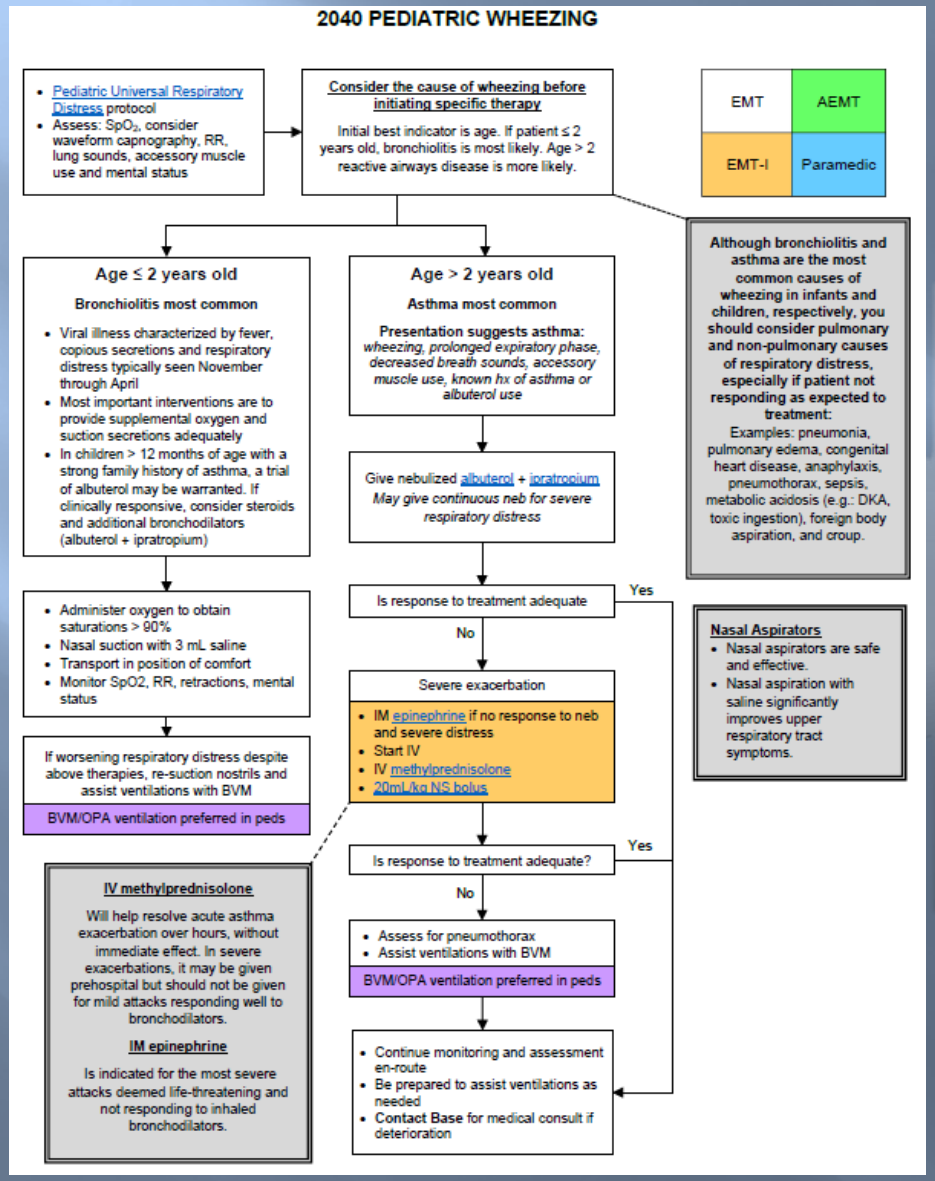
- Patient cannot meet basic needs (food, hygiene, medications) and no capable help is present.
- Unsafe living conditions pose an immediate risk (e.g., filth, hoarding, utilities shut off).
- Signs of abuse, neglect (including self), or exploitation.
- Caregiver appears impaired, absent, abusive, or unwilling to provide necessary care.
- Refer to mandatory reporting protocol

# 0990 Quick Reference Guide

- Addition of diltiazem for Paramedics (base contact only)
- Under epinephrine, correction by adding “Pediatric systemic allergic reactions – IM”

# 2040 Pediatric Wheezing

OLD

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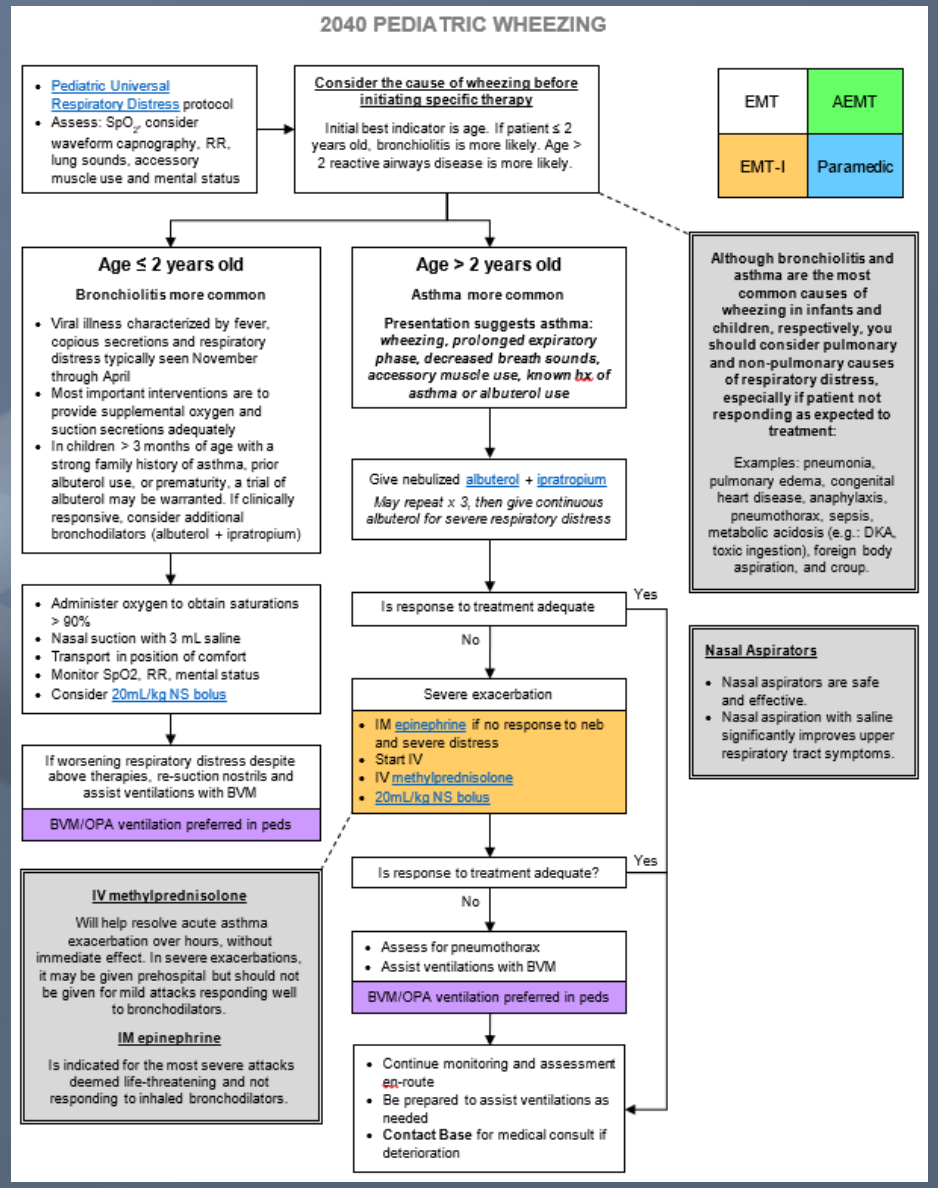

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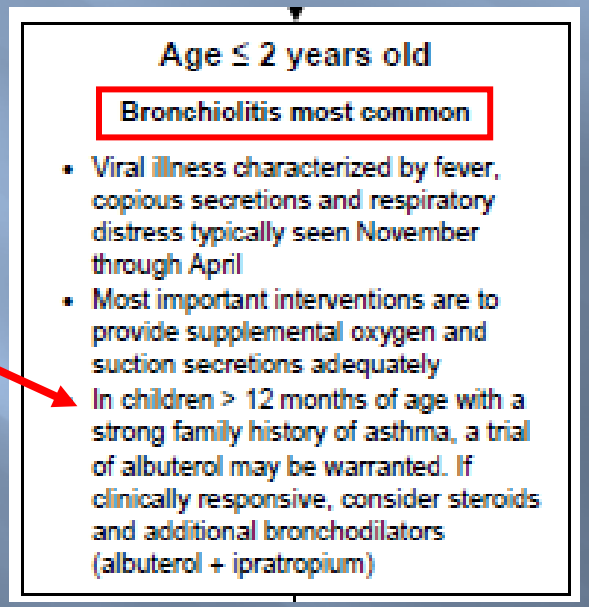


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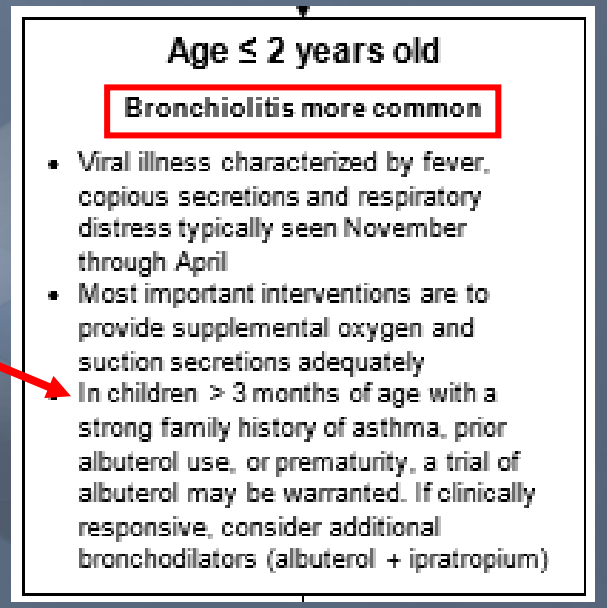


# 2040 Pediatric Wheezing

OLD

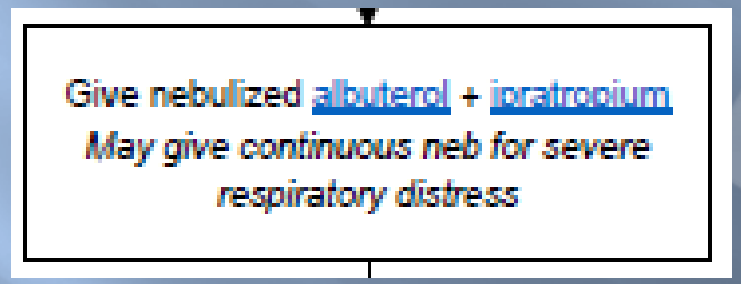
- Administer oxygen to obtain saturations > 90%
- Nasal suction with 3 mL saline
- Transport in position of comfort
- Monitor SpO2, RR, retractions, mental status

NEW

- Administer oxygen to obtain saturations > 90%
- Nasal suction with 3 mL saline
- Transport in position of comfort
- Monitor SpO2, RR, mental status
- Consider 20mL/kg NS bolus

# 2040 Pediatric Wheezing

OLD




NEW

# 3020 Neonatal Resuscitation

OLD

**Termination of Resuscitation**

- In newly born babies receiving resuscitation, if there is no heart rate and all the steps of resuscitation have been performed, cessation of resuscitation efforts may be discussed with the team and the family. A reasonable time frame for this change in goals of care are around 30 min after birth.

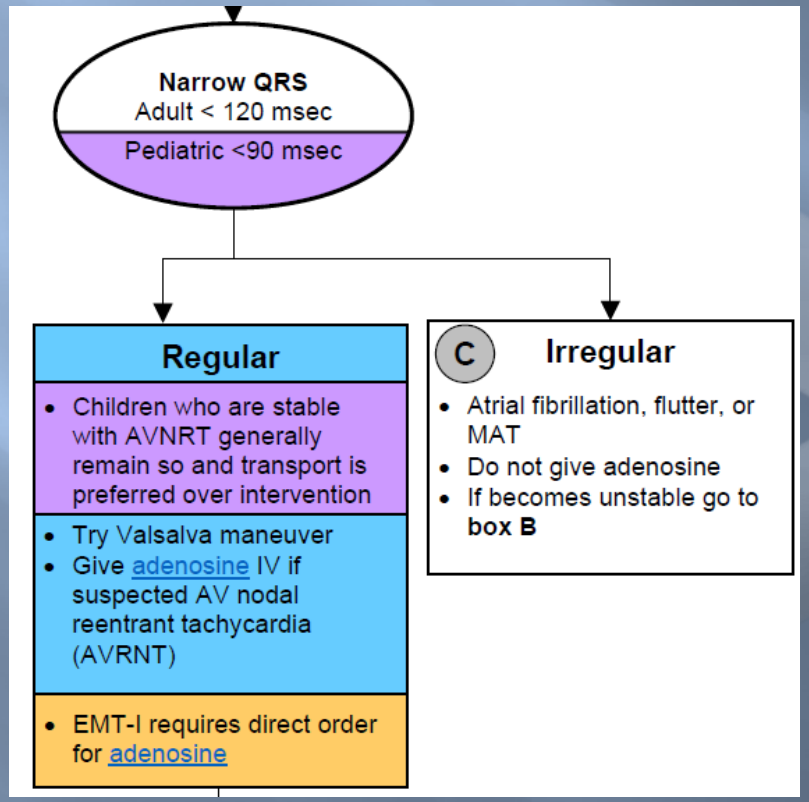
NEW

**Field Pronouncement / Termination of Resuscitation**

- For information on pronouncement of nonviable births, refer to field pronouncement protocol.
- For information on termination of efforts of newly born, refer to termination of resuscitation protocol.

# 3040 Tachyarrhythmia with Poor Perfusion

OLD

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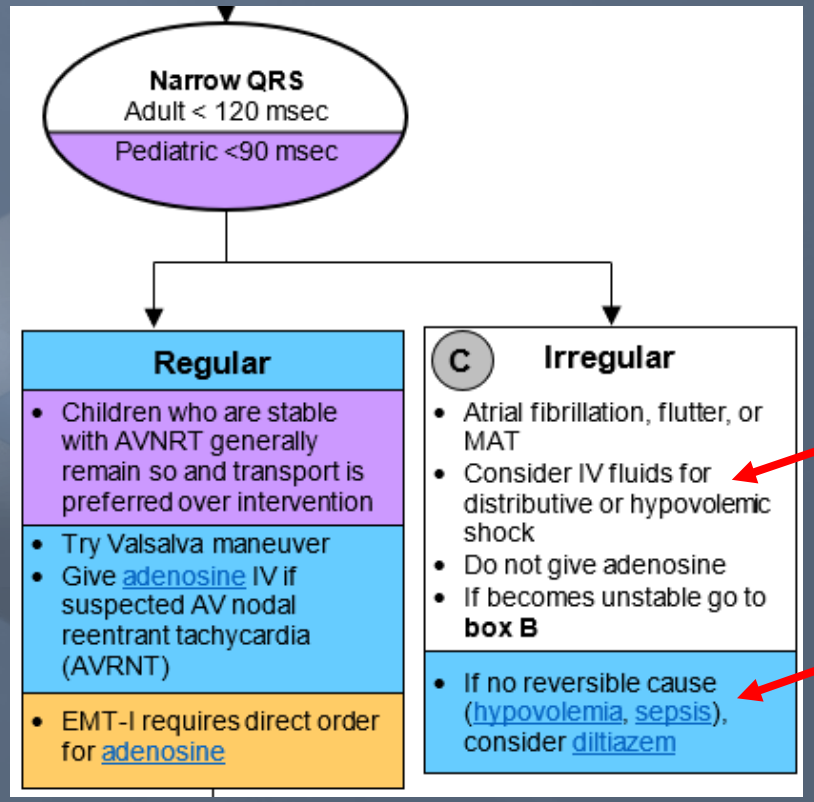

# 4010 Universal Altered Mental Status

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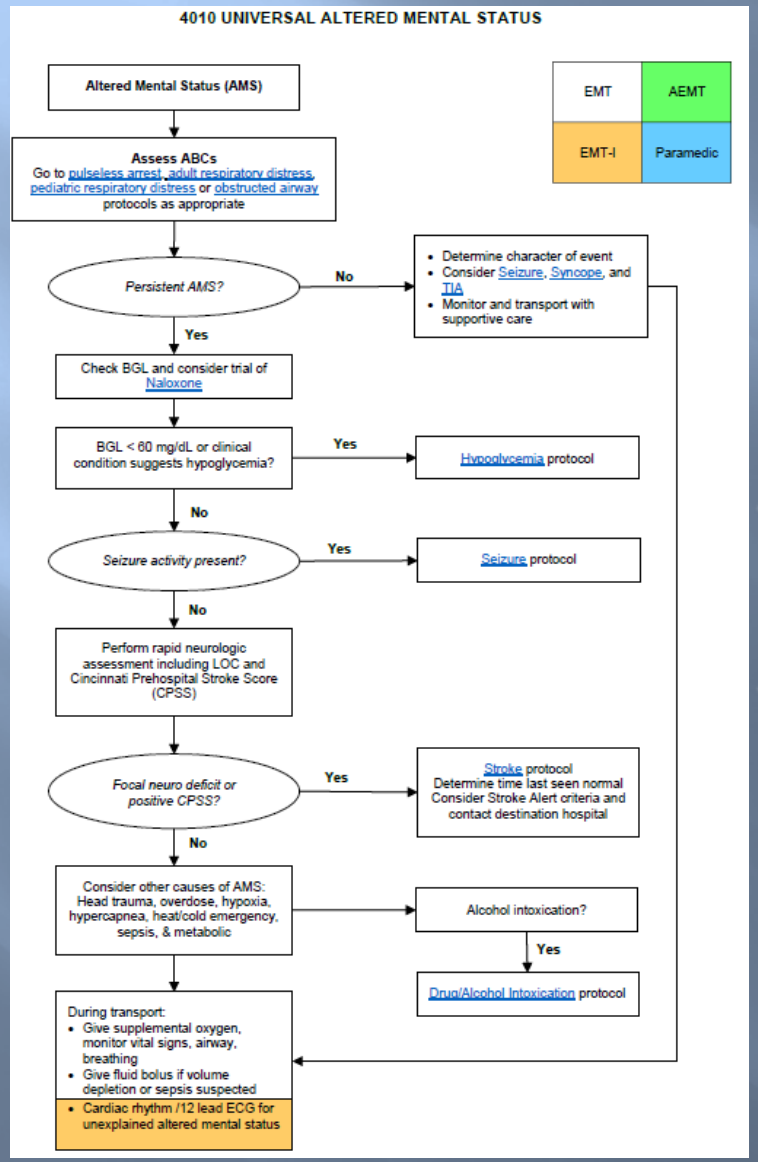


NEW

FORMAT CHANGE ONLY
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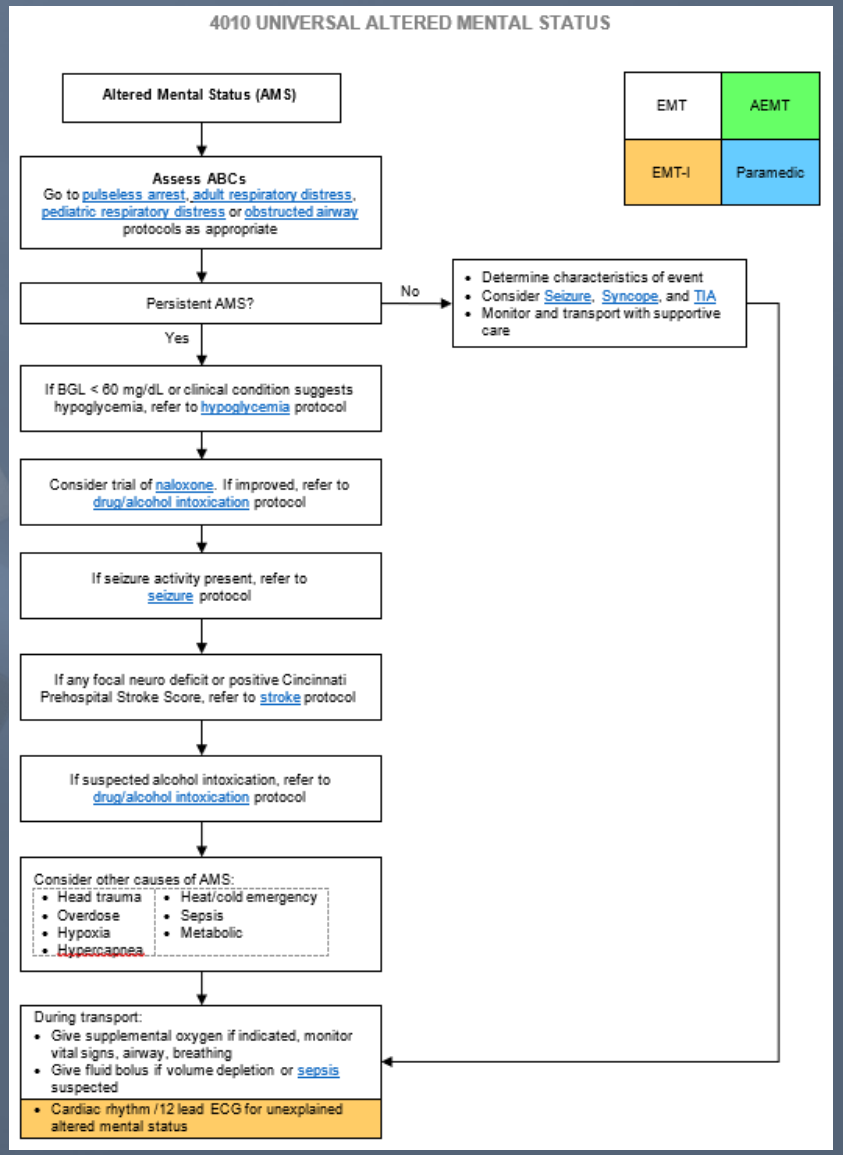

# 6000 Psychiatric/Behavioral Patient

## OLD – Transporting Patients Who Have a Behavioral Health Complaint

E. It is sufficient to assume the patient lacks decision-making capacity if there is a reasonable concern when any person appears to have a mental illness and, as a result of such mental illness, appears to be an imminent danger to others or to himself or herself or appears to be gravely disabled. Effort should be made to obtain consent for transport from the patient, and to preserve the patient's dignity throughout the process. However, the patient may be transported over his or her objections and treated under involuntary consent if the patient does not comply. A patient being transported for psychiatric evaluation may be transported to any appropriate receiving emergency department.

## NEW - Transporting Patients Who Have a Behavioral Health Complaint

E. It is sufficient to assume the patient lacks decision-making capacity if there is probable cause to believe a person is experiencing a behavioral health crisis or is gravely disabled, and, as a result without professional intervention may be a danger to themselves or others. Effort should be made to obtain consent for transport from the patient, and to preserve the patient's dignity throughout the process. If consent cannot obtained, the person can still be transported under any of the following:

   a. Responder on scene who is authorized, credentialed, and willing to initiate a transportation hold (M-0.5) or a mental health hold (M-1) (C.R.S 27-65 et seq.). Follow agency specific guidelines regarding use of transportation holds.
   b. The patient may be transported over his or her objections and treated under implied consent.

F. A patient being transported for psychiatric evaluation that does not require medical assistance may be transported to any appropriate 27-65 designated facility, walk-in crisis center, or receiving emergency department.

# 6000 Psychiatric/Behavioral Patient

## OLD – Transporting Patients on a Mental Health Hold

**Transporting Patients on a Mental Health Hold**

A. By law, patients detained on a mental health hold may not refuse transport. Similarly, by law, patients on a mental health hold are required to be evaluated by a physician or psychologist and must be transported.
B. Although it is commonly believed that the original copy of the mental health hold form is required to accompany the patient, a legible copy of the mental health hold form is also sufficient.
C. The form documenting the mental health hold should be as complete as possible, including the correct date and time that the patient was detained. The narrative portion should be completed. A signature and license or badge number is also required. Assure that the form is complete before departing.
D. The mental health hold does not need to be started on patients who are intoxicated on drugs and/or alcohol. Nor is it required for patients who are physically incapable of eloping from care, such as those who are intubated, or physically unable.
E. The patient rights form does not need to accompany the patient. The receiving facility may complete this form if there are concerns.
F. If possible, seek direction from the sending facility regarding whether the patient may require sedation and restraint. Consider ALS transport if this is the case.
G. Recall that patients who are a danger to self/others or gravely disabled due to mental illness may be transported by EMS without a mental health hold, under involuntary consent.

## NEW – Transporting Patients on a Mental Health Hold

**Transporting Patients on a Mental Health Hold (M-1) – C.R.S 27-65 et seq.**

A. Refer to agency specific guidelines regarding use of and requirements for transportation holds (M-0.5).
B. Although it is commonly believed that the original copy of the mental health hold form is required to accompany the patient, a legible copy of the mental health hold form is also sufficient.
C. By law, patients detained on a mental health hold may not refuse transport. Similarly, by law, patients on a mental health hold are required to be evaluated by an evaluating professional (intervening professional, physician or psychologist) and should be transported
D. The form documenting the mental health hold should be as complete as possible, including the correct date and time that the patient was detained. The narrative portion should be completed. A signature and license or badge number is also required. Assure that the form is complete before departing.
E. The mental health hold does not need to be started on patients who are intoxicated on drugs and/or alcohol.
F. The mental health hold patient rights form (M-2) for mental health holds do not need to accompany the patient. The receiving facility may complete this form if there are concerns. Refer to agency specific guidelines on requirements for transportation patient rights forms (M-0.51) for transportation holds.
G. Consider ALS attendant if the patient may require sedation during transport.
H. If you have a reasonable concern the person is experiencing a behavioral health crisis or are gravely disabled, and, without professional intervention may be a danger to themselves or others the patient can be transported under implied consent.
I. EMS may withdraw or disengage from a person, regardless of mental health hold status, for the following reasons:
    a. Scene is unsafe or patient poses perceived safety risks to EMS
    b. Law enforcement is unable to provide scene safety
    c. Law enforcement cannot or will not gain access to the patient
    d. Document reasonable attempts to communicate with the person and deescalate the situation.

# **NEW**
# 9095 Diltiazem

**9095 MEDICATIONS**

***DILTIAZEM (CARDIZEM)***

**Description**

Diltiazem is a class 4 antidysrhythmic calcium channel blocker. It inhibits extracellular calcium ion influx across membranes of myocardial cells and vascular smooth muscles resulting in inhibition of cardiac and vascular smooth muscle contraction. Inhibitory effects on the cardiac conductions system acting principle at the AV node with some effects on the SA node.

**Indications**

- Atrial Fibrillation/Atrial Flutter with a rapid ventricular response
- Narrow complex tachycardia refractory to adenosine

**Precautions**

- Use with caution in pregnant patients
- Important to recognize and treat underlying causes prior to administration (example: IV fluid resuscitation for hypovolemia)

**Contraindications**

- Hypotension
- Acute decompensated or symptomatic congestive heart failure
- AMI
- 2nd or 3rd degree AV block
- Patients who have received IV beta blockers within 3 hours
- Ventricular tachycardia or any wide complex tachycardia of unknown origin
- Sick sinus syndrome except in those with a functioning ventricular pacemaker
- Patients with atrial fibrillation or atrial flutter associated with Wolff-Parkinson White syndrome (WPW) or short PR syndrome.
- Concern for sepsis or sepsis syndrome

**Adverse Reactions**

- Hypotension
- Bradycardia
- 2nd or 3rd degree AV block

**Dosage and Administration**

**Adult:**

**Atrial Fibrillation/Atrial Flutter with a rapid ventricular response (Base Contact)**

**Narrow complex tachycardia refractory to adenosine (Base Contact)**

- 0.25 mg/kg IV/IO over at least 2-3 minutes. Half the dose in the elderly population
- Repeat in 10 minutes at 0.35 mg/kg IV/IO over at least 2-3 minutes if necessary
- For patients older than 65 years old, half the dose with a maximum initial dose of diltiazem 10 mg IV and a maximum second dose of 20 mg

**Protocol**

- Tachyarrhythmia with Poor Perfusion

**Special Considerations**

- A 12-lead EKG should be performed and documented, when available.

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# 9170 Ipratropium Bromide

## OLD

**Dosage and Administration**

**Adult**
**Bronchospasm:**
0.5 mg along with albuterol in a nebulizer

**Child (1 year – 12 years)**
**Moderate and Severe Bronchospasm**
**2-12 years:** 0.5 mg along with albuterol in a nebulizer
**1 to <2 years:** 0.25 mg along with albuterol in a nebulizer
**Not indicated for repetitive dose or continuous neb use**

**Child (<1 year)**
**Contact Base**

## NEW

**Dosage and Administration**

**Adult**
**Bronchospasm:**
- 0.5 mg along with albuterol in a nebulizer. May be repeated twice along with albuterol (total of 3 doses).

**Child (1 year – 12 years):**
**Moderate and Severe Bronchospasm**
- **2 - 12 years:** 0.5 mg along with albuterol in a nebulizer. May be repeated twice along with albuterol (total of 3 doses).
- **1 to <2 years:** 0.25 mg along with albuterol in a nebulizer. Not indicated for repetitive dose or continuous neb use.

**Child (<1 year): Contact Base**

# 9180 Lidocaine

OLD

**Dosage and Administration**

Adult:

- 50 mg slow IO push

NEW

**Dosage and Administration**

Adult:

- 50 mg slow IO push (2-3 minutes) and volume per 1% (5mL) or 2% (2.5mL)

# 9200 Methylprednisolone

OLD

**Contraindications**

- Evidence of active GI bleed

NEW

**Precautions**

- Use with caution in active GI bleed

# 8000X Trauma Extended Care Supplements

OLD

I. Pain control

1. Consider sequential doses of ketamine for patients with marginal blood pressures or hypotension **(Paramedic with Critical Care Endorsement or WAIVERED for Paramedic)**
2. If one category of drugs (opiates or ketamine) is working stay with that category
   a. Unless you run out of that medication
   b. If you switch medication categories do not continue to give medications from the first category. This will increase your risk of respiratory depression.

NEW

I. Pain control

1. Consider sequential doses of ketamine for patients with marginal blood pressures or hypotension **(Paramedic with Critical Care Endorsement or WAIVERED for Paramedic)**
2. Consider multimodal pain management.

# **NEW** List of Evidence Based Sources

- A list of evidence-based sources used for protocol development is now available on the DMEMSMD website

DMEMSMD Evidence Based Sources : Evidence Based Sources

| DMEMSMD Protocol | Author | Title | Link to Source |
|---|---|---|---|
| 9120 Epinephrine | Weant K et al. | Efficacy of bolus-dose epinephrine to manage hypotension in the prehospital setting | https://pubmed.ncbi.nlm.nih.gov/34303186/ |
| 9120 Epinephrine | Holden et al. | Safety Considerations and Guideline-Based Safe Use Recommendations for "Bolus-Dose" Vasopressors in the Emergency Department | https://pubmed.ncbi.nlm.nih.gov/28601272/ |
| 9070 Benzodiazepines | Uebinger RM, Zaidi HQ, Tataris KL, et al. | Retrospective Study of Midazolam Protocol for Prehospital Behavioral Emergencies | https://www.ncbi.nlm.nih.gov/pmc/articles/PMC72 |
| 9070 Benzodiazepines<br>9045 Antipsychotics | Chan EW, Taylor DM, Knott JC, Phillips GA, Castle DJ, Kong DC. | Intravenous droperidol or olanzapine as an adjunct to midazolam for the acutely agitated patient: a multicenter, randomized, double-blind, placebo-controlled clinical trial. | https://pubmed.ncbi.nlm.nih.gov/22981685/ |
| 9070 Benzodiazepines<br>9045 Antipsychotics | Yap CYL, Taylor DM, Knott JC, Taylor SE, Phillips GA, Karro J, Chan EW, Kong DCM, Castle DJ. | Intravenous midazolam-droperidol combination, droperidol or olanzapine monotherapy for methamphetamine-related acute agitation: subgroup analysis of a randomized controlled trial | https://pubmed.ncbi.nlm.nih.gov/28160494/ |
| 9070 Benzodiazepines<br>9045 Antipsychotics | Taylor DM, Yap CYL, Knott JC, Taylor SE, Phillips GA, Karro J, Chan EW, Kong DCM, Castle DJ. | Midazolam-Droperidol, Droperidol, or Olanzapine for Acute Agitation: A Randomized Clinical Trial | https://pubmed.ncbi.nlm.nih.gov/27745766/ |
| 9045 Antipsychotics | Page CB, Parker LE, Rashford SJ, et al. | A Prospective Before and After Study of Droperidol for Prehospital Acute Behavioral Disturbance | https://pubmed.ncbi.nlm.nih.gov/29558224/ |
| 9070 Benzodiazepines | Guterman EL, Sporer KA, Newman TB, Crowe RP, et. al. | Real-World Midazolam Use and Outcomes With Out-of-Hospital Treatment of Status Epilepticus in the United States | https://pubmed.ncbi.nlm.nih.gov/35931608/ |
| 9190 Magnesium Sulfate | Camargo CA Jr, Rachelefsky G, Schatz M. | Managing asthma exacerbations in the emergency department: summary of the National Asthma Education and Prevention Program Expert Panel Report 3 guidelines for the management of asthma exacerbations | https://pubmed.ncbi.nlm.nih.gov/19683665/ |
| 9190 Magnesium Sulfate | | Global Initiative for Asthma (GINA) 2024 guidelines | https://ginasthma.org/wp-content/uploads/2024/05 Strategy-Report-24_05_22_WMS.pdf |
| 9190 Magnesium Sulfate | Schiermeyer RP, Finkelstein JA | Rapid infusion of magnesium sulfate obviates need for intubation in status asthmaticus | https://www.sciencedirect.com/science/article/abs 94902380 |
| 9190 Magnesium Sulfate | | Gestational Hypertension and Preeclampsia: ACOG Practice Bulletin | https://pubmed.ncbi.nlm.nih.gov/32443079/ |
| 9190 Magnesium Sulfate | | Which anticonvulsant for women with eclampsia? Evidence from the Collaborative Eclampsia Trial | https://pubmed.ncbi.nlm.nih.gov/7769899/ |
| 9190 Magnesium Sulfate | Altman D, Carroli G, Duley L, et al. | Do women with pre-eclampsia, and their babies, benefit from magnesium sulphate? The Magpie Trial: a randomised placebo-controlled trial | https://pubmed.ncbi.nlm.nih.gov/12057549/ |
| 9190 Magnesium Sulfate | Crowther CA, Brown J, McKinlay CJ, Middleton P. | Magnesium sulphate for preventing preterm birth in threatened preterm labour | https://pubmed.ncbi.nlm.nih.gov/25126773/ |
| 9190 Magnesium Sulfate | Grissinger M | Avoiding patient harm from a magnesium bolus dose | https://pubmed.ncbi.nlm.nih.gov/24669174/ |
| 9045 Antipsychotics | Beach SR, Gross AF, Hartney KE, Taylor JB, Rundell JR. | Intravenous haloperidol: A systematic review of side effects and recommendations for clinical use | https://pubmed.ncbi.nlm.nih.gov/32979582/ |
| 9045 Antipsychotics | Stollings JL, Boncyk CS, Birdrow CI, Chen W, Raman R, Gupta DK, Roden DM, Rivera EL, Maiga AW, Rakhit S, Pandharipande PP, Ely EW, Girard TD, Patel MB | Antipsychotics and the QTc Interval During Delirium in the Intensive Care Unit: A Secondary Analysis of a Randomized Clinical Trial | https://pubmed.ncbi.nlm.nih.gov/38252439/ |

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