

PATIENT CARE STANDING ORDERS



Scouting America — New Hampshire Patient Care Standing Orders

Patient Care Standing Orders - Version 2025-03. Approved July 11th, 2025.

These orders are authorized for use ONLY by Scouting America — New Hampshire medical personnel approved by the Medical Director and ONLY at Scouting events OR on Scouting America — New Hampshire properties. The mere presence of licensed personnel on a Scouting America — New Hampshire property or at a Scouting event DOES NOT authorize that individual to operate under these orders. Personnel authorized to operate under these orders may use them ONLY on Scouting America — New Hampshire OR at a Scouting America — New Hampshire event (including events of subsidiaries of Scouting America — New Hampshire, such as district or unit events).

These standing orders are based heavily upon the Patient Care Protocols for New Hampshire Prehospital Medical Providers, which can be viewed in their entirety here: <https://www.nh.gov/safety/divisions/fstems/ems/advlifsup/documents/1Version8.0Final.pdf>. This was done with the intent to provide prehospital providers working with Scouting America — New Hampshire a document that shares many features with the document that they are accustomed to using in their role as EMS providers — in its graphic presentation, its flow and its content. As is standard with the New Hampshire Protocols, higher level standing orders include lower level standing orders. For example: a paramedic is authorized paramedic level standing orders, advanced EMT standing orders, and EMT standing orders.

Prehospital providers licensed in the state of New Hampshire who are also providing medical services for Scouting America — New Hampshire under these orders are further authorized to operate to the full extent of their New Hampshire protocols in any circumstance when the Emergency Medical Services system has been activated, notwithstanding any absence or omission of a treatment or procedure in these standing orders. This authorization is regardless of whether or not they are practicing with a service with which they are licensed or affiliated, or are practicing in advance of the arrival of EMS. **This authorization does not constitute an authorization to purchase restricted pharmaceuticals or equipment for use when supporting Scouting America — New Hampshire activities.**

Due to the more varied training of non-EMS providers, in particular nursing staff, certain standing orders are identified with a “certification required” tag, such as “ACLS Required.” Non-EMS providers must possess the required certification to proceed beyond that point in the standing order. EMS providers are deemed to have met all of these requirements by virtue of their EMS licensure.

Nothing in these standing orders authorizes any individual to perform a procedure for which they are not trained and comfortable performing, nor to administer a medicine with which they are not familiar, not notwithstanding its inclusion in these standing orders **except under direct medical control — online or physically present**. The inclusion of a treatment in these standing orders authorizes, but does not mandate, delivery of that treatment. Providers should use their training and judgement to determine which of the available options are appropriate to the situation.

When instructed to “Contact Medical Control,” any licensed independent provider authorized to provide medical control to EMS may be used to meet this requirement. When instructed to “Contact Medical Director,” only the Scouting America — New Hampshire medical director or their designee may be used to meet this requirement. Medical control can be sought at any time that a provider feels it would be appropriate and helpful — not only when specified in these standing orders.



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Medical Director
Scouting America — New Hampshire

How to use these Standing Orders

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Legend

E	EMT orders
A	Advanced EMT orders
P	Paramedic orders
X	Extended care and RN orders

In the above legend, higher levels of training include the lower level orders. An Advanced EMT's orders include all of the EMT's orders; a Paramedic's orders include all of the Advanced EMT's orders and EMT's orders; a nurses orders include all orders on the page (except as noted below).

Headings are included to clarify the extent of the orders, or to which class of patient they apply, or when medical control contact is required, such as:

PARAMEDIC EXTENDED CARE ORDERS AND RN STANDING ORDERS

PARAMEDIC MEDICAL CONTROL ORDERS - ADULT

Medical control orders require the involvement of a licensed independent practitioner authorized as medical control for New Hampshire EMS, or the involvement of the Medical Director or their designee. Contact Medical Director requires involvement of the Medical Director or their designee.

Contact Medical Control / Contact Medical Director

Because the training and experience of nursing personnel may vary depending upon their practice environment, headers may be inserted that require certain specific training modules for nursing staff to proceed with those orders. These headers do not apply to EMS personnel licensed by the State of New Hampshire since their training is consistent and these orders take into account that training.

ACLS training OR contact with Medical Control is required for nursing use.

Warnings and other very important information is highlighted as follows:



Respiratory distress in children must be promptly recognized and treated. Respiratory arrest is the most common cause of cardiac arrest in children.

PEARLS (instructional and informational points) are highlighted as follows:

PEARLS:

- Exertional hyperthermic patients may be significantly dehydrated, and may require repeat fluid boluses.
- Immersion cooling is the most effective method to lower core body temperature if proper resources are available.

Table of Contents

General Information.....	1
Routine Patient Care	2
Exception Principle	5
Extended Care Guidelines	6
Medical Standing Orders.....	7
Abdominal Pain, Non Traumatic – ADULT & PEDIATRIC	8
Adrenal Insufficiency – ADULT & PEDIATRIC	9
Anaphylaxis/Allergic Reaction – ADULT (Age 12 or over)	10
Anaphylaxis/Allergic Reaction – PEDIATRIC (Age under 12)	11
Ready, Check, Inject	12
Asthma, COPD, RAD, Bronchiolitis, Croup – ADULT & PEDIATRIC	14
Behavioral Emergencies – ADULT & PEDIATRIC	16
Childbirth & Newborn Care	17
Hyperglycemia – ADULT & PEDIATRIC	19
Hyperthermia – ADULT & PEDIATRIC	20
Hypoglycemia – ADULT & PEDIATRIC	21
Hypothermia – ADULT & PEDIATRIC	22
Nausea or Vomiting – ADULT & PEDIATRIC	24
Newborn Resuscitation	25
Obstetrical Emergencies	26
Opioid Overdose – ADULT & PEDIATRIC	28
Pain Management – ADULT	29
Pain Management – PEDIATRIC	30
Poisoning/Overdose – ADULT & PEDIATRIC	31
Seizures– ADULT & PEDIATRIC	32
Sepsis– ADULT & PEDIATRIC	33
Non-Traumatic Shock – ADULT & PEDIATRIC	35
Smoke Inhalation/Carbon Monoxide Poisoning – ADULT & PEDIATRIC	37
Sore Throat / Upper Respiratory Infection – ADULT & PEDIATRIC	38
Stroke – ADULT	39
Syncope – ADULT & PEDIATRIC	42
Cardiac Standing Orders	43
Acute Coronary Syndrome – ADULT	44
Bradycardia – ADULT	45
Bradycardia – PEDIATRIC	46
Cardiac Arrest – ADULT	47
Cardiac Arrest – PEDIATRIC	49
Congestive Heart Failure (Pulmonary Edema) – ADULT	50
Post Resuscitative Care – ADULT & PEDIATRIC	51
Tachycardia – ADULT	52
Tachycardia – PEDIATRIC	54

Trauma Standing Orders	55
Burns/Electrocution/Lightning – ADULT & PEDIATRIC	56
Crush Injuries – ADULT & PEDIATRIC	58
Drowning/Submersion Injuries – ADULT & PEDIATRIC	60
Hemorrhage Control – ADULT & PEDIATRIC	63
Hemorrhage Control – Intramuscular Tranexamic Acid	65
Shock Traumatic – ADULT & PEDIATRIC	66
Spinal Trauma – ADULT & PEDIATRIC	67
Thoracic Injuries – ADULT & PEDIATRIC	69
Traumatic Brain Injury (TBI) – ADULT & PEDIATRIC	70
Traumatic Cardiac Arrest – ADULT & PEDIATRIC	71
Infectious Disease	73
Infectious Disease Control	74
Medical Procedures	75
Airway Management – ADULT	76
Airway Management – PEDIATRIC	77
Continuous Positive Airway Pressure (CPAP)	78
Cryothyroidotomy – Percutaneous	80
Restraint Procedures – ADULT & PEDIATRIC	81
Policies	83
Epi-Pen and Inhaler Availability Policy	84
Laboratory Testing and Prescription Policy	86
Licensed Personnel	87
Medication Definition	88
Medication Administration Policy	89
Non-Prescription Medication Administration Policy	91
Medication Administration Officers	92
High Risk Medications	93
Variable Dose Medications	94
Schedule I Controlled Substances	95
Supplemental	97
Supplemental Resources	98
Revision History	99

Table of Contents

Routine Patient Care2

Exception Principle5

Extended Care Guidelines6

Routine Patient Care

Routine patient care is the base upon which all other care is built. A number of the things mentioned here will seem obvious and intuitive. However, without a strong base upon which to build, more advanced and complex care falters. Here are some things to be considered in the routine care of your patients.

Always remember that YOUR SAFETY COMES FIRST. If it's not safe — **DON'T DO IT.**

Dispatch

The Scouting setting has various methods of “dispatching” care, from the Cub Scout walking up and asking for a Bandaid to telephonic or radio dispatch. The more removed you are from the situation, the greater the need to carefully gather information. All of the following items are important to a successful dispatch of care:

- Where am I going?
 - Not just a name of a location, but how will I get there?
 - Do I know the route?
 - Will I need special transportation?
 - Is there a hike-in component?
- What am I responding to?
 - What is the perceived problem?
 - Do I have the equipment to address that problem?
 - Do I have the equipment necessary to address unexpected other issues that may arise?
 - Do I have clothing and equipment necessary to shelter in place, if needed?
- Should I provide advice?
 - Do I need to remind personnel not to move trauma patients?
 - Should I recommend use of a patient's epi-pen or inhaler?
 - Do I need to remind them how to use it?
- Should I handle this myself, or does it sound serious enough that I should activate formal EMS now?
 - Should I be considering aeromedical evacuation?
 - Do I need to have someone preparing a landing zone?

Response

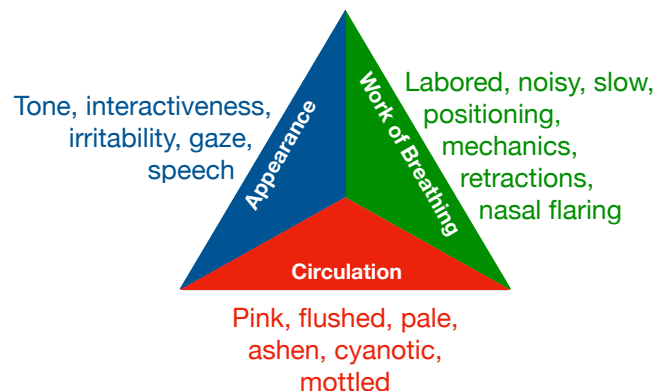
Always respond safely. You do no one any good by creating another emergency.

Approach

Check your scene safety and use your universal precautions. This includes environmental safety, such as snow, mud, fast or deep water, loose rocks, etc.

Patient

- Determine the mechanism of injury or nature of the illness. It may be different from the “dispatch”.
- Many of our patients will be pediatric.
 - Youth member **DOES NOT** equal pediatric. In general, a pediatric patient is under 36 kg (about 80 lbs) and under 145 cm (a little less than 5 feet) tall.
- Check for responsiveness.
- Get a general impression.
 - Is this serious? Use the **patient assessment triangle** to help decide.
 - Reassess the need to involve formal EMS.



Airway Assessment

- Assess the patient for a patent airway.
- If necessary:
 - Open the airway using a head-tilt/chin-lift, or a jaw thrust if suspicious of cervical spine injury.
 - Suction the airway as needed.
 - Treat foreign body obstruction in accordance with current guidelines.
 - Consider an oropharyngeal or nasopharyngeal airway.
 - Consider advanced airway interventions as appropriate and as trained and credentialed to perform.

Guide Continues

Breathing Assessment

- Assess breathing: rate, effort, tidal volume, and breath sounds.
 - If breathing is ineffective, ventilate with 100% oxygen using Bag-Valve-Mask.
 - If breathing is effective, but patient's oxygen saturation remains $\leq 94\%$ ($\leq 90\%$ for COPD patient) or short of breath, administer oxygen.
 - Both skin signs and pulse oximetry are important in assessing potential hypoxia.
 - For patients with an SpO₂ of 100%, consider titrating oxygen lower while maintaining SpO₂ of 94% - 98%.
 - Consider capnography (EtCO₂) and/or CO-oximetry, if available.
- Assess lung sounds and chest.

Circulation Assessment

- Assess patient's pulse, noting rate, rhythm, and quality.
- Control active bleeding using direct pressure, pressure bandages, tourniquets, or hemostatic bandages.
 - Hemostatic powders or granules are not approved.
- Assess patient's skin color, capillary refill, temperature, and moisture.
- Assess blood pressure.
- Provide IV access and fluid resuscitation as appropriate for the patient's condition.
 - For adult patients, administer fluids to maintain systolic blood pressure per the Shock Order Set
 - For pediatric patients, administer fluids based on physiological signs and therapeutic end-points per the Shock Order Set.
 - For adult patients with suspected dehydration without shock administer IV fluids as indicated in increments of 250 mL 0.9% NaCl or Lactated Ringers.

NOTE: An IV for the purposes of these orders is a saline lock or line with 0.9% NaCl (normal saline) or Lactated ringers, unless otherwise specified in an individual order set.

Routes of medication administration when written as "IV" can also include "IO".

Disability Assessment

- Assess level of consciousness appropriate for age; use Glasgow Coma Scale for trauma.
- Assess need for spinal motion restriction per Spinal Injury Order Set.
- If a child requires spinal motion restriction, transport in a child safety seat (See Spinal Trauma and Pediatric Transportation).

Transport

- The destination hospital and mode of transport are determined by the prehospital provider with the highest medical level providing patient care; it should not be determined by fire, police or bystanders.
 - For non-emergency transport of minors, attempt parental contact and involvement in hospital choice, but do not delay transport and do not transport to a medically inappropriate location based upon a parent's wishes.
- Refer to the Trauma Triage and Transport Decision and Air Medical Transport policies as necessary.
- Notify receiving facility as early as possible.

Secondary Focused Assessment and Treatment

- Obtain chief complaint, history of present illness, and prior medical history.
 - If readily available, send a copy if the Scouting America Medical Forms with the patient.
 - If not readily available, fax a copy to the receiving hospital later, or provide an oral report.
- Complete a physical assessment as appropriate for the patient's presentation.
- Determine level of pain.
- Consider field diagnostic tests including: cardiac monitoring, blood glucose, temperature, stroke assessment, pulse oximetry, capnography, etc.
- Dress and bandage lacerations and abrasions.
- Cover evisceration with an occlusive dressing and cover to prevent heat loss.
- Stabilize impaled objects. Do not remove an impaled object unless it interferes with CPR or your ability to maintain the patient's airway.
- Monitor vital signs approximately every 15 minutes (more frequently if the patient is unstable).

Assessment Tables and Guidelines



When a child tires and is unable to maintain adequate oxygenation, respiratory failure occurs and may rapidly lead to cardiac arrest.

Recommended Ventilation Rates

Patient	Basic Airway	Supraglottic/ETT
Adult	12-20 breaths/min	8-10 breaths/min
Child	12-20 breaths/min	8-10 breaths/min
Infant	20-30 breaths/min	8-10 breaths/min

Ventilation rates should be titrated to EtCO₂, if available, or patient conditions (asthma, aspirin overdose, traumatic brain injury)

Percent O ₂ Saturation	Description	Patient Care
94% — 100%	Normal	Usually indicates adequate oxygenation, verify with clinical assessment
90% — 93%	Mild Hypoxia	Consider oxygen to maintain saturation ≥ 94-98%.
Less than 90%	Moderate/Severe Hypoxia	Give oxygen to maintain saturation ≥ 94-98%.
<p>* In children, pulse oximetry may identify clinically significant hypoxia not apparent on exam.</p> <ul style="list-style-type: none"> If pulse oximeter's heart rate is not the same as ECG the saturation reading may be unreliable. If patient is profoundly anemic or dehydrated, saturation may be 100% but patient may be hypoxemic. False pulse oximetry readings may occur with hypothermia, hypoperfusion, carbon monoxide poisoning, hemoglobin abnormality, vasoconstriction or nail polish. 		

EtCO ₂ Reading	Description	Patient Care
35 — 45 mmHg	Normal	Usually indicates adequate ventilation, verify with clinical assessment
Greater than 45 mmHg	Hypercarbia	Consider increasing ventilatory rate, assess equipment for occlusions or failure.
Less than 35 mmHg	Hypocarbia	Consider slowing ventilatory rate.

Pediatric Respiratory Distress	Pediatric Respiratory Failure
<ul style="list-style-type: none"> Able to maintain adequate oxygenation by using extra effort to move air. Signs include increased respiratory rate, sniffing position, nasal flaring, abnormal breath sounds, head bobbing, intercostal retractions, mild tachycardia. 	<ul style="list-style-type: none"> Hallmarks of respiratory failure are respiratory rate less than 20 breaths per minute for children <6 years old; less than 12 breaths per minute for children <16 years old; and >60 breaths per minutes for any child; cyanosis, marked tachycardia or bradycardia, poor peripheral perfusion, decreased muscle tone, and depressed mental status.

Glasgow Coma Scale

Motor Response	Score	Verbal - Adult	Verbal - Infants	Score	Eye Response	Score
Obeys commands	6	Oriented and alert	Babbles	5	Open	4
Localizes pain	5	Disoriented	Irritable	4	To voice	3
Withdraws to pain	4	Inappropriate words	Cries to pain	3	To pain	2
Decorticate	3	Moans, unintelligible	Moans	2	No response	1
Decerebrate	2	No response	No Response	1		
No response	1					

Exception Principle

These standing orders represent the best effort to anticipate the medical needs of Scouts, Scouters, and guests of the Scouting America — New Hampshire at typical Scouting events. They should serve as the basis of medical care delivered by Scouting America — New Hampshire medical staff, whether volunteer or employed.

For situations covered by these orders, providers are expected to operate using the orders herein. This exception principle **may not** be used to circumvent these orders. We recognize, however, that on rare occasion good medical practice and the needs of the patient may require actions not otherwise authorized by these orders, as no set of orders can anticipate every clinical situation. In those circumstances, under this Exception Principle, Scouting America — New Hampshire medical personnel are authorized to take actions not otherwise explicitly authorized under these protocols provided that:

1. Such action is within their current licensure level and scope of practice, **AND**
2. They have obtained the approval of online medical control unless it is **impossible** to do so without jeopardizing patient care.

The exception principle is intended only to be used when unanticipated situations arise. The exception principle is not intended to cover advancements in medical science or emerging changes or improvements to existing care regimens. We will review these orders periodically to ensure that they are as up-to-date as possible. Suggestions for changes should be directed to the Scouting America — New Hampshire Medical Director.

When a patient has a medical condition that cannot be appropriately treated under these orders, and has a written treatment plan prepared by the patient's physician and approved by the Medical Director, the provider may perform the treatments prescribed in the treatment plan provided they are within their level of licensure and scope of practice. This specific instance would not require online medical control.

Actions taken under this principle are considered to be appropriate and within the scope of these orders. The provider shall provide a written notification pertaining to the action taken describing the events including the patient's condition and treatment given. This report must be sent to the Medical Director within 48 hours of the event, either by email or a hard copy delivered to the Council Office by fax, regular mail, or hand delivered.

If it was impossible to obtain the approval of medical control prior to use of the Exception Principle, the Medical Director must be notified by telephone as soon as contact can reasonably be made.

This telephone contact does not relieve the provider from providing the written report described above.

Extended Care Guidelines

It is not possible, especially in the sometimes remote and high adventure settings of Scouting, to ensure expeditious intervention by traditional EMS. Under such circumstances, a provider may find it necessary to care for an injured or ill individual for an extended period of time. Other, non-scouting, circumstances may also make prompt EMS intervention impossible, such as extreme weather conditions, extended mass casualty or active shooter incidents.

Extended care patients may require repeat administration of medications beyond what is specified in regular standing orders or assistance with administration of the patient's prescribed medication. Patients may also require some treatments and procedures that clearly exceed the usual scope of the provider.

In an extended care environment, providers will follow the following guidelines:

1. Every effort should be made to contact medical control (or the medical director) for guidance.
2. If medical control is unavailable, it is reasonable to administer repeat medication dosing at the same intervals as prescribed in the standing orders or as prescribed for patient's own medications. Caution must be used due to cumulative effects that may result in over-sedation, hypotension, respiratory depression, etc.
3. If changes to regular standing orders are necessary for medication use in extended care situations, these changes appear in the specific standing order under a separate Extended Care Section denoted by an X.
4. Any other treatment or procedure outside the provider's normal scope of practice requires additional levels of training and certification from nationally recognized courses or other methods approved by the Medical Director, as appropriate, such as suturing or reduction of orthopedic injuries.

Special circumstances to consider in an extended care environment:

- Protecting the patient from the environment while awaiting extrication and/or transport. This may require an improvised shelter and insulation to protect the patient and providers from rain, snow and wind.
- Requesting additional resources/personnel early if an extended care situation is anticipated.
- Resources to consider but are not limited to:
 - NH Fish and Game
 - Rescue organizations
 - Technical Climbers
 - Snowmobile, ATV or boat
 - Helicopters
 - Tracking dogs
 - Swift water technicians
- Oral fluids to maintain a patient's hydration and high energy foods to maintain caloric requirements, if the patient is conscious and able to swallow.
- Limited resources due to difficulty accessing patient and/or transporting equipment to the patient's location. These resources may include:
 - Oxygen
 - Suction
 - Cardiac Monitor/AED
 - Pulse Oximetry
 - Capnography
 - Glucose Meter
 - BP Cuff and Stethoscope
 - Intravenous access
 - Medications
 - Communication with online medical control

Table of Contents

Abdominal Pain, Non Traumatic – ADULT & PEDIATRIC.....	8
Adrenal Insufficiency – ADULT & PEDIATRIC	9
Anaphylaxis/Allergic Reaction – ADULT (Age 12 or over)	10
Anaphylaxis/Allergic Reaction – PEDIATRIC (Age under 12)	11
Ready, Check, Inject	12
Asthma, COPD, RAD, Bronchiolitis, Croup – ADULT & PEDIATRIC	14
Behavioral Emergencies – ADULT & PEDIATRIC	16
Childbirth & Newborn Care	17
Hyperglycemia – ADULT & PEDIATRIC.....	19
Hyperthermia – ADULT & PEDIATRIC	20
Hypoglycemia – ADULT & PEDIATRIC.....	21
Hypothermia – ADULT & PEDIATRIC.....	22
Nausea or Vomiting – ADULT & PEDIATRIC	24
Newborn Resuscitation	25
Obstetrical Emergencies	26
Opioid Overdose – ADULT & PEDIATRIC	28
Pain Management – ADULT.....	29
Pain Management – PEDIATRIC	30
Poisoning/Overdose – ADULT & PEDIATRIC	31
Seizures– ADULT & PEDIATRIC.....	32
Sepsis– ADULT & PEDIATRIC.....	33
Non-Traumatic Shock – ADULT & PEDIATRIC.....	35
Smoke Inhalation/Carbon Monoxide Poisoning – ADULT & PEDIATRIC	37
Sore Throat / Upper Respiratory Infection – ADULT & PEDIATRIC.....	38
Stroke – ADULT	39
Syncope – ADULT & PEDIATRIC	42

Abdominal Pain, Non Traumatic — ADULT & PEDIATRIC

EMT STANDING ORDERS

E

- Routine Patient Care
- Vaginal Bleeding or suspected pregnancy see Obstetrical Emergencies Order Set
- Adults over 18: consider 12 lead EKG acquisition.

ADVANCED EMT STANDING ORDERS

A

- If patient is hypotensive, consider fluid per Shock Order Set

PARAMEDIC STANDING ORDERS

P

- See Nausea/Vomiting Order Set

EMT EXTENDED CARE ORDERS

X

- Constipation:
 - Evaluate diet and encourage fiber and fluids. Encourage exercise.
- Heartburn
 - Over 18 and no clear dietary reason for heartburn: consider 12 lead EKG acquisition.
 - Recommend bland diet.

PARAMEDIC EXTENDED CARE ORDERS AND RN STANDING ORDERS

- Constipation:
 - Miralax 17 grams in 8 ounces of water up to three times daily as needed to achieve bowel movement.
- Diarrhea without other signs of illness (fever, pain on palpation, blood in stools, etc.):
 - Pepto-Bismol **OR**
 - Imodium-AD **OR**
 - Kaopectate
 - Follow instructions on packaging for dosing.
- Heartburn:
 - Pepcid or Pepcid-AC, or Pepsi Bismol, or Tums
 - Follow instructions on packaging for dosing.
 - No more than three days of medication without formal medical evaluation.



Abdominal pain can be a symptom of serious pathology, including heart attack. See PEARLS below for details.

PEARLS:

- Common causes of acute abdominal pain may be appendicitis, cholecystitis, bowel perforation, diverticulitis, abdominal aortic aneurysm, ectopic pregnancy, pelvic inflammatory disease and pancreatitis.
- It is important to remember that abdominal pain can be caused by a number of different disease processes. Pain may originate from the esophagus, stomach, intestinal tract, liver, gall bladder, pancreas, spleen, kidneys, male or female reproductive organs or urinary bladder. Referred pain from the chest may involve the heart, lungs and pleura.
- Lower abdominal pain in women of child bearing age should be treated as an ectopic pregnancy until proven otherwise.
- Myocardial infarction can present with upper abdominal pain especially in the diabetic and elderly.
- DKA may present with abdominal pain, nausea and vomiting.
- The diagnosis of abdominal aneurysm should be considered in patients over 50 years old.

Adrenal Insufficiency – ADULT & PEDIATRIC

EMT STANDING ORDERS

E

- Routine Patient Care
- Identify and treat the underlying condition.
- Consider increasing the level of care.

ADVANCED EMT STANDING ORDERS

A

- Assist the patient/caregiver in giving the patient his or her own medications, as prescribed.

PARAMEDIC STANDING ORDERS

P

Stress Dose:

- **ADULT:** History of adrenal insufficiency; administer hydrocortisone 100 mg IV/IM.
- **PEDIATRIC:** History of adrenal insufficiency; administer hydrocortisone 2 mg/kg, to a maximum of 100 mg IV/IM.

PARAMEDIC AND RN EXTENDED CARE ORDERS

X

- After the initial hydrocortisone dose:
 - **ADULT:** hydrocortisone 50 mg IV bolus administered every 6 hours until stabilization of vital signs and capacity to eat and take medication orally.
 - **PEDIATRIC:** 2 mg/kg IV/IM every 6 hours with a maximum single dose of 100 mg.
- In patients with the following signs and symptoms consider the need for repeat stress dosing:
 - Nausea, vomiting, weakness, dizziness, abdominal pain, muscle pain, dehydration, hypotension, tachycardia, fever, mental status changes.
- Additional Considerations:
 - Aggressive volume replacement therapy.
 - Vasopressors may be needed to treat refractory hypotension, see Shock –
 - Non-Traumatic Protocol.
 - Treat for hypoglycemia, see Hypoglycemia Protocol.
 - Normalize body temperature.

PEARLS:

Adrenal insufficiency results when the body does not produce the essential life-sustaining hormones cortisol and aldosterone. These are vital to maintaining blood pressure, cardiac contractility, water, and salt balance. Chronic adrenal insufficiency can be caused by a number of conditions:

- Congenital or acquired disorders of the adrenal gland and/or the pituitary gland
- Long-term use of steroids (COPD, asthma, rheumatoid arthritis, and transplant patients)

Acute adrenal insufficiency can result in refractory shock or death in patients on a maintenance dose of hydrocortisone (SoluCortef)/prednisone who experience illness or trauma and are not given a stress dose and, as necessary, supplemental doses of hydrocortisone.

PEARLS:

A “stress dose” of hydrocortisone should be given to patients with known chronic adrenal insufficiency who have the following illnesses/ injuries:

- Shock (any cause)
- Fever >100.4°F and ill-appearing
- Multi-system trauma
- Drowning
- Environmental hyperthermia or hypothermia
- Multiple long-bone fractures
- Vomiting/diarrhea accompanied by dehydration
- Respiratory distress
- 2nd or 3rd degree burns >5% BSA
- RSI

Anaphylaxis/Allergic Reaction — ADULT (Age 12 or over)

EMT STANDING ORDERS**E**

- Routine Patient Care
- For anaphylaxis, administer (anterolateral thigh preferred administration site):
 - Adult epinephrine autoinjector, 0.3 mg IM **OR**
 - Epinephrine 1mg/mL: administer 0.3 mg (0.3 mL) IM
 - If signs and symptoms do not resolve may repeat in 5 minutes.
 - For additional dosing, **contact Camp Nurse or Camp Medical Director**

EMTs must have completed autoinjector training with the Camp Nurse or the Ready, Check & Inject training, found at: <https://ola.nhfa-ems.com/enrol/index.php?id=16>.

ADVANCED EMT STANDING ORDERS**A**

- For anaphylaxis:
 - Repeat epinephrine every 5 minutes until signs and symptoms resolve.
 - For respiratory symptoms / wheezing consider albuterol 2.5mg via nebulizer or MDI.
 - Repeat albuterol 2.5 mg, every 5 minutes (4 doses total) via nebulizer or MDI.
 - For signs of shock consider fluid.

PARAMEDIC STANDING ORDERS**P**

- After epinephrine has been administered **OR** for isolated skin symptoms of allergic reaction where epinephrine is not indicated consider:
 - Diphenhydramine 25 – 50 mg IM/IV/PO.
- For anaphylaxis refractory to 3 or more doses of IM epinephrine, (e.g., persistent hemodynamic compromise, bronchospasm), consider:
 - Epinephrine infusion 2 - 10 **mcg**/minute until symptoms resolve, pump required.

EMT/ADVANCED EMT EXTENDED CARE ORDERS**X**

- Diphenhydramine 25 – 50 mg by mouth. May repeat every 4-6 hours as needed; maximum dose of 300 mg in 24 hours.

PARAMEDIC EXTENDED CARE ORDERS AND RN STANDING ORDERS

- Dexamethasone 10 mg IV or by mouth **OR**
- Methylprednisolone 125 mg IV **OR**
- Prednisone 60 mg by mouth.

RN STANDING ORDERS

- Famotidine 40 mg by mouth.



Epinephrine is available in different routes and concentrations. **CHECK DOSING AND CONCENTRATION PRIOR TO ADMINISTRATION**



In anaphylaxis, do not delay epinephrine administration for second line medications such as diphenhydramine

PEARLS:

- Anaphylaxis: Potential allergen exposure AND any two of the following:
 - Angioedema: facial/lip/tongue swelling, throat tightening, voice change.
 - Breathing: shortness of breath, wheeze, stridor, cyanosis.
 - Poor perfusion: hypotension, altered mental status, syncope, delayed capillary refill
 - Skin: Hives, itching, extremity swelling, erythema.
 - Gastrointestinal: vomiting, abdominal pain, diarrhea.

Anaphylaxis/Allergic Reaction — PEDIATRIC (Age under 12)

EMT STANDING ORDERS

E

- Routine Patient Care
- For anaphylaxis, administer (anterolateral thigh preferred administration site):
 - Pediatric epinephrine autoinjector, 0.3 mg IM for < 25 kg, **OR**
 - Adult epinephrine autoinjector 0.3 mg IM if > 25 kg **OR**
 - If < 25 kg, Epinephrine 1mg/mL: administer 0.15 mg (0.15 mL) IM **OR**
 - If > 25 kg, Epinephrine 1mg/mL: administer 0.3 mg (0.3 mL) IM.
 - If signs and symptoms do not resolve may repeat in 5 minutes.
 - For additional dosing, **contact Camp Nurse or Medical Control.**

EMTs must have completed autoinjector training with the Camp Nurse or the Ready, Check & Inject training, found at: <https://ola.nhfa-ems.com/enrol/index.php?id=16>.

ADVANCED EMT STANDING ORDERS

A

- For anaphylaxis:
 - Repeat epinephrine every 5 minutes until signs and symptoms resolve.
 - For respiratory symptoms / wheezing consider albuterol 2.5mg via nebulizer or MDI.
 - Repeat albuterol 2.5 mg, every 5 minutes (4 doses total) via nebulizer or MDI.
 - For signs of shock consider fluid.

PARAMEDIC STANDING ORDERS

P

- After epinephrine has been administered or for isolated skin symptoms of allergic reaction consider:
 - Diphenhydramine 1.25 mg/kg PO **OR**
 - Diphenhydramine 1 mg/kg IV/IM (maximum dose 50 mg).
- For anaphylaxis refractory to 3 or more doses of IM epinephrine, (e.g., persistent hemodynamic compromise, bronchospasm), consider:
 - Epinephrine infusion 0.1 - 2 **mcg**/kg/min (maximum 10 **mcg**/min) until symptoms resolve, pump required.

EMT/ADVANCED EMT EXTENDED CARE ORDERS

X

- Diphenhydramine
- Ages 2-5 years: 6.25 mg PO. May repeat every 4-6 hours as needed; maximum dose of 37.5 mg (6 doses) in 24 hours.
- Ages 6 to 11 years: 12.5-25 mg PO. May repeat every 4-6 hours as needed; maximum dose of 150 mg in 24 hours.

PARAMEDIC EXTENDED CARE ORDERS AND RN STANDING ORDERS

- Dexamethasone 0.6 mg/kg PO/IM/IV (PO preferred) maximum 10 mg **OR**
- Methylprednisolone 1-2 mg/kg IV (maximum 125 mg).



Epinephrine is available in different routes and concentrations. **CHECK DOSING AND CONCENTRATION PRIOR TO ADMINISTRATION**



In anaphylaxis, do not delay epinephrine administration for second line medications such as diphenhydramine

PEARLS:

- Anaphylaxis: Potential allergen exposure AND any two of the following:
 - Angioedema: facial/lip/tongue swelling, throat tightening, voice change.
 - Breathing: shortness of breath, wheeze, stridor, cyanosis.
 - Poor perfusion: hypotension, altered mental status, syncope, delayed capillary refill
 - Skin: Hives, itching, extremity swelling, erythema.
 - Gastrointestinal: vomiting, abdominal pain, diarrhea.

READY, CHECK, INJECT

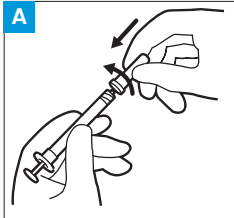
Protocol for Administering Epinephrine for Acute Anaphylaxis

1. READY

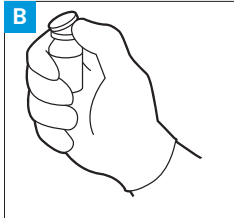
* Adult Dose: 0.3 mL

** Pediatric Dose (<55lbs/<25kg): 0.15 mL

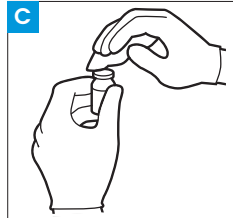
- Wear gloves
- Use 1mL syringe with 1" needle
- Use only 1mg/1mL epinephrine



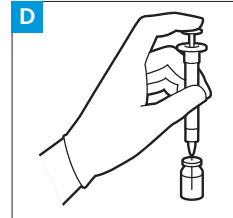
Attach needle to syringe.



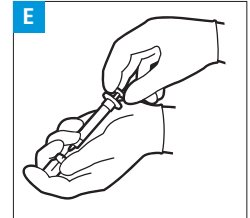
Remove cap from epinephrine vial.



Wipe top of vial with alcohol prep pad.



Remove cap from needle and then carefully insert needle into top of epinephrine vial.



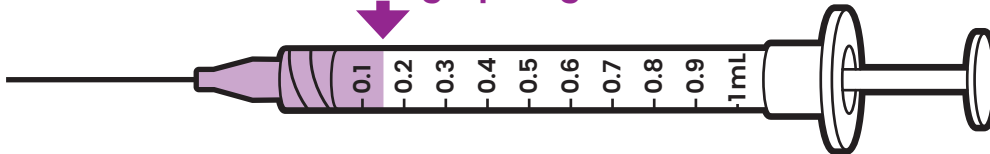
Withdraw correct amount of medication by pulling back on syringe plunger. Refer to numbers on side of syringe.

2. CHECK

Check volume of medication in syringe by comparing to diagram below. (Diagram to scale)
Use Cross Check, with another person if possible, to confirm the proper dose. **(SEE REVERSE)**

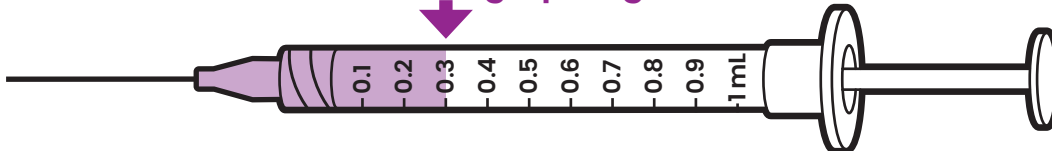
Pediatric Dose: 0.15 mL

Align plunger here



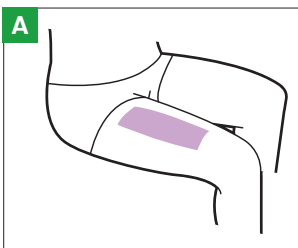
Adult Dose: 0.3 mL

Align plunger here

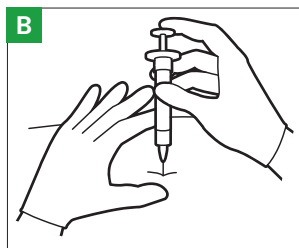


3. INJECT

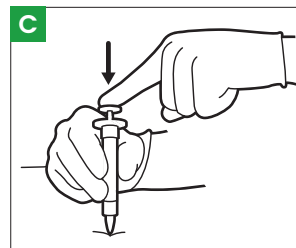
* Inject medication intramuscularly only.



Identify patient's mid-thigh. Expose skin if possible.



Flatten skin of mid-thigh with thumb and forefinger. Insert needle quickly at a 90° angle to mid-thigh.



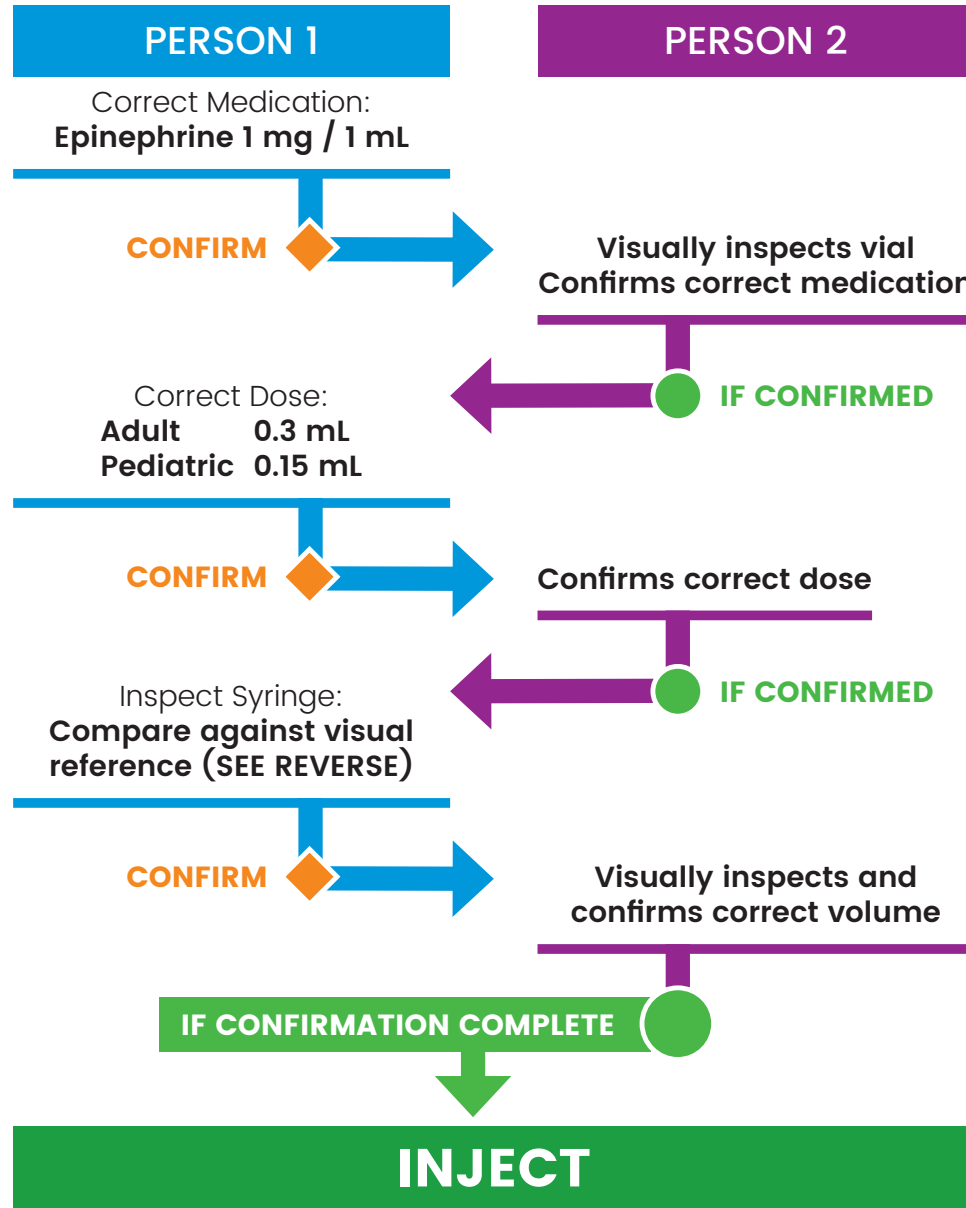
Depress plunger slowly to inject entire dose of medication.



Remove syringe and dispose in proper sharps container.

READY, CHECK, INJECT CROSS CHECK

- This protocol is designed to be performed by two people.
- **If a second person is not available, pause at each step, think and confirm before moving to next step.**
- All steps should be confirmed prior to administering the injection.



Asthma, COPD, RAD, Bronchiolitis, Croup — ADULT & PEDIATRIC

EMT STANDING ORDERS

E

- Routine Patient Care.
Attempt to keep oxygen saturation between 94 - 98% (90% in COPD); increase the oxygen rate with caution and observe for fatigue, decreased mentation, and respiratory failure.
- Assist the patient with his/her metered dose inhaler (MDI): 4 - 6 puffs.
 - May repeat every 5 minutes, as needed.
 - MDI containing either albuterol, levalbuterol, or a combination of albuterol/ ipratropium bromide
- For patients in severe respiratory distress consider use of CPAP. See CPAP procedure.
- For patients ≤ 2 who present with increased work of breathing and rhinorrhea, provide nasal suctioning with saline drops and bulb syringe; no more than 2 attempts.

ADVANCED EMT STANDING ORDERS

A

- Consider DuoNeb unit dose **OR** albuterol 2.5 mg and ipratropium bromide 0.5 mg via nebulizer.
 - Consider additional DuoNeb, may repeat every 5 minutes (3 doses total).
- Consider albuterol 2.5 mg via nebulizer every 5 minutes, as needed.

PARAMEDIC STANDING ORDERS - ADULT

P

Consider:

- Methylprednisolone 125 mg IV/IM **OR**
- Dexamethasone 10 mg PO/IM/IV

For patients who do not respond to treatments, or for impending respiratory failure, consider:

- BiPAP, (See BiPAP Procedure)
- Magnesium sulfate 2 grams in 100 ml NS given IV over 10 minutes.
- Epinephrine (1 mg/mL) 0.3 mg (0.3 mL) IM should only be administered for impending respiratory failure as adjunctive therapy when there are no clinical signs of improvement.

PARAMEDIC STANDING ORDERS - PEDIATRIC - ASTHMA

Consider:

- Dexamethasone 0.6 mg/kg PO/IM/IV (PO preferred), maximum 10 mg **OR**
- Methylprednisolone 1 - 2 mg/kg IV/IM, maximum 125 mg.

For patients who do not respond to treatment or for impending respiratory failure consider:

- Magnesium sulfate 40 mg/kg in 100ml 0.9% NaCl IV over 20 minutes.
- Epinephrine:
 - If < 25 kg, epinephrine (1 mg/mL) 0.15 mg IM, lateral thigh preferred.
 - If > 25 kg, epinephrine (1 mg/mL) 0.3 mg IM, lateral thigh preferred.

PARAMEDIC STANDING ORDERS - PEDIATRIC - BRONCHIOLITIS

For patients who do not respond to suctioning or for impending respiratory failure consider:

- Nebulized epinephrine (1 mg/mL) 3 mg (3 mL) in 3 mL 0.9% NaCl.

PARAMEDIC STANDING ORDERS - PEDIATRIC - CROUP

Consider:

- Dexamethasone 0.6 mg/kg PO/IM/IV (PO preferred) maximum 10 mg.

Croup with stridor at rest:

- Nebulized epinephrine (1 mg/mL) 3 mg (3 mL) in 3 mL 0.9% NaCl, repeat in 20 minute as needed **OR**
- Nebulized racemic epinephrine (2.25% solution) 0.5 mL in 2.5 mL 0.9% NaCl, may repeat in 20 minutes as needed.

Orders Continue

Asthma, COPD, RAD, Bronchiolitis, Croup — ADULT & PEDIATRIC

Orders Continued



Respiratory distress in children must be promptly recognized and treated. Respiratory arrest is the most common cause of cardiac arrest in children.



Child with a “silent chest” may have severe bronchospasm with impending respiratory failure.



In patients with suspected croup or stridor, provide necessary interventions while attempting to minimize noxious stimuli that may induce agitation.

PEARLS

ADULT:

- Chronic obstructive pulmonary disease (COPD) refers to a group of lung diseases that block airflow and make breathing difficult. Emphysema and chronic bronchitis are the two most common conditions that make up COPD.
- Reactive Airway Disease (RAD) refers to a group of conditions that include reversible airway narrowing due to external stimulation.
- Beware of patients with a “silent chest” as this may indicate severe bronchospasm and impending respiratory failure

PEDIATRIC:

- The IV formulation of dexamethasone may be given by mouth.
- For suspected epiglottitis, transport the patient in an upright position and limit your assessment and interventions.

Bronchiolitis

- Incidence peaks in 2-6 month old infants.
- History of low-grade fever, runny nose, and sneezing.
- Signs and symptoms include: tachypnea, rhinorrhea, wheezes and / or crackles

Croup

- Incidence peaks in children over age 6 months.
- Signs and symptoms include: hoarseness, barking cough, inspiratory stridor, signs of respiratory distress.
- Avoid procedures that will distress child with severe croup and stridor at rest.

Pneumonia

- Signs and symptoms include: tachypnea, fever, intercostal retractions, cough, hypoxia and chest pain.

Tachypnea in children is defined as:

- < 2 months: 60 bpm
- 2-12 months: 50 bpm
- 1-5 years: 40 bpm
- >5 years: 20 bpm

Behavioral Emergencies — ADULT & PEDIATRIC

Maintain Scene Safety

- Request law enforcement support, consider staging away until law enforcement has cleared scene.
- Maintain situational awareness, focus on crew safety.
- Observe and record the patient's behavior and living conditions.

Consider Causes & Determine Capacity

- Consider causes (e.g., hypoxia, hypoglycemia, alcohol or drug intoxication, excited delirium, stroke and brain trauma)
- Ask patient directly if they have considered harming self or others.

Refusal & Police Assistance

- Consider requesting law enforcement early
- If patient lacks capacity or is determined to be a danger to self or others, they **MAY NOT** refuse care.
 - Contact law enforcement if unable to convince patient to be transported. (Refer to Police Custody Policy, Refusal of Care Policy)

EMT/ ADVANCED EMT STANDING ORDERS – ADULT & PEDIATRIC

E/
A

Anxiety Management (Anxious, apprehensive, but not aggressive)

- Approach patient with the SAFER method.
- Provide calm emotional support and medical care as required.
- Minimize external stimuli (e.g., loud noises, lights).
- Encourage patient to be evaluated by a mental health professional.
- For significant anxiety that cannot be managed with BLS interventions, consider increasing the level of care for pharmacological intervention.

Resistant or Aggressive Management (Resisting necessary treatment/interventions)

- Attempt verbal de-escalation.
- Consider increasing the level of care for pharmacological intervention, see Restraints Policy.

Violent and/or Excited Delirium Management (Immediate danger to self/others)

- Attempt verbal de-escalation.
- Request Paramedic intercept, if available, for pharmacological intervention, see Restraints policy.

EMS and Law Enforcement must be activated or medical control contacted to proceed past this point.

- Consider physical restraints as a last resort if the patient is in immediate danger to self or others see Restraint Procedures

PARAMEDIC MEDICAL CONTROL ORDERS - ADULT

P

Anxiety Management (Anxious, apprehensive, but not aggressive) Goal is safe and compliant.

- If patient has own anxiety or agitation medications, consider administering those medications in accordance with the prescription instructions.

Contact Medical Control to consider:

- Midazolam 2.5 - 5 mg IV/IM/IN, may repeat once in 10 minutes to a total of 10 mg.

SAFER Model

S Stabilize the situation by lowering stimuli, including voice.

A Assess and acknowledge crisis by validating patient's feelings and not minimizing them.

F Facilitate identification and activation of resources (clergy, family, friends, or police).

E Encourage patient to use resources and take actions in his/her best interest.

R Recovery/referral - leave patient in the care of a responsible person, professional or transport to appropriate medical facility. Do not leave the patient alone when EMS clears the scene.

EMT/ ADVANCED EMT STANDING ORDERS

E/
A

Activate EMS

- Routine Patient care.
- Obtain obstetrical (OB) history.
- Expose patient and determine if signs of imminent delivery are present.
 - Do not digitally examine or insert anything into the vagina.
 - If obstetrical complication is present, consider contacting Medical Control and transport to nearest appropriate hospital per local OB Diversion Protocol. (See Obstetrical Emergencies Order Set)
- If delivery is not imminent place mother in left-lateral recumbent position and transport to a hospital with OB capability.
- If delivery is imminent, assist in newborn's delivery.
 - With palm of hand, apply gentle perineal pressure for a slow, controlled delivery.
 - As the baby's head begins to emerge support the head as it turns. Do not pull on head.
 - If membranes are intact after head emerges, tear membrane with fingers to permit escape of fluid.
 - If umbilical cord is wrapped around newborn's neck, slip the cord over head prior to delivery. If after multiple attempts you are unable to slip cord off the neck, clamp and cut the cord between the clamps.
 - Guide the baby's head downward to allow delivery of the upper shoulder.
 - Then guide the baby's head upward to allow delivery of the lower shoulders.
 - Delivery of trunk and legs occurs quickly; be prepared to support infant as it emerges.
- For newborns requiring resuscitation, see Newborn Resuscitation Protocol.
- Prevent heat loss by rapidly drying and warming:
 - Remove wet linen.
 - For stable newborn and mother, place newborn skin-to-skin on the mother's chest or abdomen.
 - Cover newborn's head, wrap newborn and mother in blankets, silver swaddler/space blanket or commercially available infant warming device. Do not use hot packs.
- Assess airway by positioning and clearing secretions (only if needed):
 - Place the newborn on back or side with head in a neutral or slightly extended position.
 - Routine suctioning is discouraged even in the presence of meconium-stained amniotic fluid. Suction oropharynx then nares only if the patient exhibits respiratory depression and/or obstruction, see Newborn Resuscitation Order Set.
- Assess breathing by providing tactile stimulation:
 - Flick soles of feet and/or rub the newborn's back.
 - If newborn is apneic or has gasping respirations, nasal flaring, or grunting, proceed to Newborn Resuscitation Order Set.
- Assess circulation, heart rate, and skin color:
 - Evaluate heart rate by one of several methods:
 - Auscultate apical beat with a stethoscope.
 - Palpate the pulse by lightly grasping the base of the umbilical cord.
 - If the pulse is <100 bpm and not increasing, proceed to Newborn Resuscitation Order Set.
 - Assess skin color: examine trunk, face and mucous membranes.
 - Assess temperature
 - Record APGAR score at 1 minute and 5 minutes (see chart).
- See Pediatric Color Coded Appendix for vital signs.
- Clamp and cut the umbilical cord:
 - After initial assessment and after the cord stops pulsating.
 - Leave a minimum of 6 inches of cord.

EMT/ ADVANCED EMT STANDING ORDERS (CONTINUED)

E/A

- Allow spontaneous delivery of placenta:
 - Do not pull on umbilical cord.
 - Do not delay transport for delivery of the placenta.
 - Massage abdominal wall overlying uterine fundus.
 - If placenta delivers, package for hospital staff. Monitor maternal blood loss and perfusion. (See Obstetrical Emergencies Protocol). Note that normal pregnancy is accompanied by higher heart rate and lower blood pressure.
- For transport:
 - Ensure newborn remains warm.
 - Turn heat to maximum in ambulance compartment.
 - Consider commercial warming device (do not put heat packs directly on skin).
 - When possible, transport newborn in child safety seat.

PARAMEDIC STANDING ORDERS

P

- Active seizures—see Seizures Protocol.
 - After delivery:
 - Administer oxytocin 10 Units IM to the mother.
- Note: In multiple pregnancy, do not give until all placentas are delivered.

Feature	2 Points	1 Point	0 Points
Activity (Muscle Tone)	Active Movement	Arms and legs flexed (weak, some movement)	Limp or flaccid
Pulse	Over 100 BPM	Below 100 BPM	Absent
Grimace (Irritability)	Cry, sneeze, cough, active movement	Grimace (some flexion of extremities)	No reflexes
Appearance (Skin Color)	Completely pink	Body pink, Extremities blue	Blue, pale
Respiration	Vigorous cry, Full breaths	Slow, irregular, or gasping breaths, weak cry	Absent

PEARLS:

- OB Assessment:
 - Length of pregnancy
 - Number of pregnancies
 - Number of viable births
 - Last menstrual period
 - Due date
 - Prenatal care
 - Number of expected babies
 - Drug use
- Newborn infants are prone to hypothermia which may lead to hypoglycemia, hypoxia and lethargy. Aggressive warming techniques should be initiated including drying, swaddling, and warm blankets covering body and head.
- Raise temperature in ambulance patient compartment.

Consider **Medical Control** for:

- Prepartum hemorrhage
- Postpartum hemorrhage
- Breech presentation
- Limb presentation
- Nuchal cord
- Prolapsed cord

Signs of imminent delivery:

- Urge to move bowels
- Urge to push
- Crowning
- Contractions less than 2 minutes apart

Hyperglycemia — ADULT & PEDIATRIC

Hyperglycemia is defined as blood glucose greater than or equal to 250 mg/dL. Patient with associated signs and symptoms such as altered mental status, increased respiratory rate, or dehydration may require treatment.

EMT STANDING ORDERS

E

- Routine Patient Care.
- Obtain glucose reading.

ADVANCED EMT/PARAMEDIC STANDING ORDERS

A
/P

- **ADULT:** Administer 1000 ml IV bolus of IV fluid,
 - May repeat 500 ml fluid bolus, as needed.
- **PEDIATRIC:** Administer 10-20 ml/kg IV bolus of IV fluid.
 - May repeat fluid bolus two time for a total of 3 fluid boluses, not to exceed 30 ml/kg.

PARAMEDIC AND RN EXTENDED CARE ORDERS

X

ONLY if there is an extended evacuation time expected and the patient has mental status changes:

- If the patient has a sliding scale insulin regimen, administer patient's insulin according to the sliding scale based upon the glucose reading.
- If the patient takes insulin, but a sliding scale is not available, administer regular human insulin according to the following sliding scale.

Glucose Reading	Regular Insulin
Under 250	None
250-300	2 units
300-350	4 units
350-400	6 units
Over 400	8 units

PEARLS:

- Diabetic Ketoacidosis (DKA) is a life threatening emergency defined as uncontrolled hyperglycemia with the signs and symptoms of ketoacidosis.
- Signs and symptoms of DKA include uncontrolled blood glucose greater than or equal to 250 mg/dL, weakness, altered mental status, abdominal pain, nausea, vomiting, polyuria (excessive urination), polydipsia (excessive thirst), a fruity odor on the breath (from ketones), and tachypnea (Kussmaul respirations).
- Common causes of DKA include infection, acute coronary syndrome, and medication non- compliance.
- Hyperglycemic Hyperosmolar Nonketotic Syndrome (HHNS) is characterized by blood glucose levels greater than 600 mg/dL and profound dehydration without significant ketoacidosis. Most patients present with severe dehydration and focal or global neurologic deficits e.g., coma, altered mental status.
- Hyperglycemia may be detrimental to patients at risk for cerebral ischemia such as victims of stroke, cardiac arrest, and head trauma.

Hyperthermia — ADULT & PEDIATRIC

EMT STANDING ORDERS - ADULT & PEDIATRIC

E

- Routine Patient Care.
- Move victim to a cool area and shield from the sun or any external heat source.
- Remove as much clothing as is practical and loosen any restrictive garments.
- If alert and oriented, give small sips of cool liquids.
- Monitor and record vital signs and level of consciousness.
- Obtain temperature – rectal temperature preferred as appropriate.
- If temperature is $> 40^{\circ}\text{C}$ ($> 104^{\circ}\text{F}$) or if altered mental status is present, begin active cooling by:
 - Continually misting the exposed skin with tepid water while fanning the patient (most effective).
 - Truncal ice packs and wet towels/sheets may be used, but are less effective than evaporation.
 - Discontinue active cooling when the patient reaches 38.5°C (101.5°F), or if shivering occurs and cannot be managed with medication (see below).

ADVANCED EMT STANDING ORDERS - ADULT & PEDIATRIC

A

- ADULT: Consider 500 ml IV fluid bolus for dehydration even if vital signs are normal.
- PEDIATRIC: Consider 10 – 20 ml/kg IV fluid bolus for dehydration even if vital signs are normal.

PARAMEDIC STANDING ORDERS - ADULT

P

- If uncontrolled shivering occurs during cooling:
- Midazolam 2.5 mg IV/IN, may repeat once in 5 minutes or; 5 mg IM may repeat once in 10 minutes.

PARAMEDIC STANDING ORDERS - PEDIATRIC

- If uncontrolled shivering occurs during cooling:
- Midazolam 0.05 mg/kg IV/IM or 0.1 mg/kg IN (maximum dose 3 mg); may repeat once in 5 minutes.

PEARLS:

- Exertional hyperthermic patients may be significantly dehydrated, and may require repeat fluid boluses.
- Immersion cooling is the most effective method to lower core body temperature if proper resources are available.

EMT STANDING ORDERS - ADULT & PEDIATRIC

E

- Routine Patient Care.
- Obtain glucose reading:
- Administer commercially prepared glucose gel or equivalent (15-30 grams for adults).
 - Hypoglycemic patients must be alert enough to swallow and protect airway.
- If intranasal glucagon has been prescribed by the patient's physician, assist the patient or care giver with the administration in accordance with the physician's instructions.
- For patients with an insulin pump who are hypoglycemic with associated altered mental status:
 - Stop the pump or remove catheter at insertion site if patient cannot ingest oral glucose or ALS is not available.
 - Leave the pump connected and running if able to ingest oral glucose or receive ALS interventions.

ADVANCED EMT/PARAMEDIC STANDING ORDERS - ADULT

A
/
P

- Administer dextrose 10% IV via premixed infusion bag (preferred) or prefilled syringe until mental status returns to baseline and glucose level is greater than 60 mg/dL. IV pump not required.
- If unable to establish IV access, administer glucagon 1 mg IM
 - Recheck glucose 15 minutes after administration of glucagon.
 - May repeat glucagon 1 mg IM if glucose level is < 60 mg/dl with continued altered mental status.

ADVANCED EMT/PARAMEDIC STANDING ORDERS - PEDIATRIC

Administer dextrose 10% 5 mL/kg IV via premixed infusion bag (preferred) or prefilled syringe per Pediatric Color Coded Appendix 3, may repeat every 5 minutes until mental status returns to baseline and glucose level is greater than 60 mg/dL. IV pump not required.

- If unable to establish IV access, administer glucagon 1 mg IM
 - Patients < 20 kg (44 lbs), give glucagon 0.5 mg IM.
 - Patients > 20 kg (44 lbs), give glucagon 1 mg IM.



Intraosseous (IO) administration of dextrose should be reserved for hypoglycemic patients with severe altered mental status or active seizures and IV access cannot be obtained.

PEARLS:

- Causes of hypoglycemia include medication misuse or overdose, missed meal, infection, cardiovascular insults (e.g., myocardial infarction, arrhythmia), or changes in activity (e.g., exercise).
- Sulfonylureas (e.g., glyburide, glipizide) have long half-lives ranging from 12 - 60 hours. Patients with corrected hypoglycemia who are taking these agents are at particular risk for recurrent symptoms and frequently require hospital admission.
- Oral glucose equivalents include 3 - 4 glucose tablets, 4 oz. fruit juice (e.g. orange juice), non-diet soda, 1 tablespoon of pure New Hampshire maple syrup, sugar, or honey.
- Encourage patients who refuse transport after improvement of GCS and are back to baseline to consume complex carbohydrates (15 grams) and protein (12 - 15 grams) such as peanut butter toast, mixed nuts, milk or cheese to stabilize blood sugar.
- Hypoglycemia may be detrimental to patients at risk for cerebral ischemia, such as victims of stroke, cardiac arrest, and head trauma.

Hypothermia — ADULT & PEDIATRIC

EMT STANDING ORDERS - ADULT & PEDIATRIC

E

- Routine Patient Care.
- Handle gently. Avoid rough movement and excess activity.
- Prevent further heat loss:
 - Insulate from the ground and shield from wind/water.
 - Move to a warm environment.
 - Gently remove any wet clothing and dry patient.
 - Cover with warm blankets including the head and neck.
 - Consider use of heat reflective emergency blanket.
 - Apply truncal warm packs.
- Patients with moderate to severe hypothermia require active external rewarming with chemical, electrical, or forced hot-air heating packs or blankets.
- Classify hypothermia clinically on the basis of vital signs, level of consciousness and intensity of shivering.
- Core Temperature, if available, provides additional treatment information (see chart)
- Obtain blood glucose.
- Support shivering with calorie replacement if alert and able to swallow.
- Mildly hypothermic patients should not be allowed to stand or walk for 20 minutes, while being kept as warm as possible with calorie replacement and shelter.
- A minimum of 60 second assessment of respirations and pulse is necessary to confirm respiratory arrest or cardiac arrest.
- If pulse and breathing are absent, start CPR **unless contraindications exist**.
 - Contraindications to CPR in the hypothermic patient include:
 - Obvious signs of irreversible death.
 - Chest wall not compressible as whole body is frozen solid.
 - A valid DNR order.
 - Avalanche burial > 35 minutes **AND** airway packed with snow.
 - Rescuers exhausted or in danger.
- * Rigor mortis or fixed and dilated pupils are **NOT** a contraindication for CPR in hypothermia.
- Hypothermic patients without contraindications to CPR should have continuous CPR and should not be considered for Termination of Resuscitation until the core temperature is above 32°C (90°F) without ROSC.
 - Prolonged CPR is not indicated in patients who are thought to have experienced cardiac arrest prior to cooling (temperature is thought to have been above 32°C (90°F) at the time of cardiac arrest).
 - Causes of cardiac arrest before cooling include major trauma, witnessed normothermic arrest and avalanche burial > 35 minutes **WITH** snow or ice packed airway.
- Patients whose torsos are cool to the touch are likely to have cardiac instability [systolic blood pressure < 90 mmHg or ventricular arrhythmias, core temperature < 28°C (82°F)].
- When feasible, patients in cardiac arrest with continuing CPR should be transported directly to a center capable of providing cardiopulmonary bypass (CPB) or extracorporeal membrane oxygenation (ECMO).
- CPR may be delayed or performed intermittently if necessary to accomplish evacuation to an ECMO or CPB center.

ADVANCED EMT/PARAMEDIC STANDING ORDERS - ADULT

A/P

- Warm IV 0.9% NaCl should be used.
- If pulse and breathing are absent and esophageal or rectal temperature core temperature is < 32° C (89.6° F):
 - Continue CPR.
 - Give IV medications based on dysrhythmia (consider limiting and/or increasing the dosing time).
 - Defibrillation as indicated.

Orders Continue

Hypothermia — ADULT & PEDIATRIC

Orders Continued

HYPOTHERMIA CHART	
STAGE: I	Conscious, shivering
Core Temp	35 to 32°C (95 to 89.6°F)
Treatment:	Warm environment and clothing, warm sweet drinks, and active movement (if possible).
STAGE: II	Impaired consciousness, not shivering
Core Temp	<32 to 28°C (<89.6 to 82.4°F)
Treatment:	Cardiac monitoring, minimal and cautious movements to avoid arrhythmias, horizontal position and immobilization, full-body insulation, active external and minimally invasive rewarming techniques (warm environment; chemical, electrical, or forced- air heating packs or blankets; warm parenteral fluids).
STAGE: III	Unconscious, not shivering, vital signs present
Core Temp	<28 to 24°C (<82.4 to 75.2°F)
Treatment:	Stage II management plus airway management as required; ECMO or CPB in cases with cardiac instability that is refractory to medical management.
STAGE: IV	No vital signs
Core Temp	<24°C (<75.2°F)
Treatment:	Stage II and III management plus CPR and up to three doses of epinephrine (at an intravenous or intraosseous dose of 1 mg) and defibrillation, with further dosing guided by clinical response; rewarming with ECMO or CPB (if available) or CPR with active external and alternative internal rewarming.

Hypothermia — ADULT & PEDIATRIC

Nausea or Vomiting — ADULT & PEDIATRIC

EMT STANDING ORDERS

E

- Routine Patient Care.
- For nausea allow patient to inhale vapor from isopropyl alcohol wipe 3 times every 15 minutes as tolerated.

ADVANCED EMT STANDING ORDERS - ADULT

A

- Consider 500 ml IV fluid bolus for dehydration even if vital signs are normal.
- May repeat 250 ml IV bolus if transport exceeds 15 minutes and patient's condition has not improved.
- Ondansetron 4 mg by PO/IV/IM.

PARAMEDIC STANDING ORDERS - ADULT

P

- Prochlorperazine 5 – 10 mg IV, or 5 mg IM, **OR**
- Metoclopramide 5 mg IV
 - May repeat any of the above medications once after 10 minutes if nausea/vomiting persists.

Antidote: For dystonic reactions caused by EMS administration of prochlorperazine or metoclopramide:

- Administer diphenhydramine 25 – 50 mg IV/IM.

PARAMEDIC STANDING ORDERS - PEDIATRIC

- Consider 10 – 20ml/kg IV fluid bolus for dehydration even if vital signs are normal.
- Ondansetron 2 mg ODT for patients 8-15 kg, 4 mg ODT patients \geq 16 kg **OR**
- Ondansetron 0.1 mg/kg IV (maximum single dose 4 mg).

ADVANCED EMT/PARAMEDIC EXTENDED CARE ORDERS & RN STANDING ORDERS

X

- For motion sickness: administer diphenhydramine:
 - Adult: 25 mg by mouth
 - Ages 2 – 5 years: 6.25 mg by mouth
 - Ages 6 – 11 years: 12.5 - 25 mg by mouth
- May repeat IM prochlorperazine or metoclopramide every 4 - 6 hours as needed. (Paramedic and RN only).

PEARLS:

- To reduce incidence of dystonic reactions, administer prochlorperazine and metoclopramide slowly over 1-2 minutes.
- Use prochlorperazine with caution in women of child bearing ages.

EMT STANDING ORDERS

E/A

Activate EMS

- Routine Patient Care—initial steps identified in Childbirth & Newborn Care Protocol.
- Continue warming techniques during resuscitation efforts.
- If the mouth or nose is obstructed or heavy secretions are present, suction oropharynx then nares using a bulb syringe or mechanical suction using the lowest pressure that effectively removes the secretions, not to exceed 100 mmHg.
- If ventilations are inadequate, or if the chest fails to rise, or the heart rate is less than 100, initiate positive pressure (bag-valve-mask) ventilations at 40 – 60 breaths per minute using room air.
 - Inflation pressures should be individualized to achieve chest rise with each breath. Be aware that bag-valve-mask pop-off valves may deliver inconsistent results.
- After 30 seconds of ventilations, assess heart rate:
 - Auscultate apical beat with a stethoscope or palpate the pulse by lightly grasping the base of the umbilical cord.
- For heart rate <100, reassess ventilatory technique and continue ventilations.
- For heart rate <60 after attempts to correct ventilations:
 - Initiate CPR at a 3:1 ratio (for a rate of 90 compression/minute and 30 ventilations/minute). Minimize interruptions. Reassess every 60 seconds; if not improving, continue CPR with 100% oxygen until recovery of a normal heart rate, then resume room air.
 - When newborn is stabilized see Childbirth & Newborn Care Protocol.

PARAMEDIC STANDING ORDERS

P

- If there is airway or ventilatory compromise due to meconium or other airway obstruction consider endotracheal suctioning using meconium aspirator and/or endotracheal intubation.
- If bag valve mask ventilation is inadequate or chest compressions are indicated, consider intubation using a 3.0 mm or 4.0 mm endotracheal tube. (For an infant born before 28 weeks gestation, a 2.5mm endotracheal tube should be used.)
 - Heart rate and EtCO₂ are the best indicators of whether the tube is properly placed in the trachea.
- Establish IV/IO. Obtain blood sample if possible.
 - If hypovolemia is suspected, administer 10 ml/kg bolus over 5 – 10 minutes.
 - If the heart rate fails to improve with chest compressions, administer epinephrine (0.1 mg/mL concentration) 0.01 – 0.03 mg/kg IV (0.1 – 0.3 ml/kg).
 - IV is preferred route for epinephrine (0.1 mg/mL concentration) — if there is a delay in establishing access, may administer via ETT 0.05 to 0.1 mg/kg.
- If glucose level is <60 mg/dl:
 - Administer dextrose per Pediatric Color Coded Appendix.

PEARLS:

- ALS NOTES: Flush all meds with 0.5 to 1.0 ml 0.9% NaCl and follow all ETT meds with positive-pressure ventilation.

EMT STANDING ORDERS - ADULT & PEDIATRIC

E

Activate EMS

- Routine Patient Care.
- Do not delay transport for patients with obstetrical emergencies, provide early notification to the receiving facility.
- If gestational age is known to be < 20 weeks, transport to closest hospital.
- If gestational age is known to be > 20 weeks or fundus is palpable at or above the umbilicus, contact Medical Control and follow local OB diversion protocol, if available.

For third trimester bleeding

- Suspect placenta previa (placenta is implanted in the lower uterine segment)
- Suspect placental abruption (placenta is separated from the uterine wall before delivery); because hemorrhage may occur into the pelvic cavity, shock can develop despite relatively little vaginal bleeding.
- Do not perform digital examination.
- Place patient in the left lateral position.
- Monitor hemodynamic stability (see Shock Protocol).

For breech birth (presentation of buttock):

- Do not pull on newborn. Support newborn and allow delivery to proceed normally.
- If the legs have delivered, gently elevate the trunk and legs to aid delivery of the head.
- If the head is not delivered within 30 seconds of the legs, place two fingers into the vagina to locate the infant's mouth. Press the vaginal wall away from the infant's mouth to maintain the fetal airway.

For limb presentation:

- Place mother in knee-chest or Trendelenberg position.
- Do not attempt delivery; transport emergently as surgery is likely.

For prolapsed cord:

- Discourage pushing by the mother.
- Place mother in knee-chest or Trendelenberg position.
- Place a gloved hand into the mother's vagina and decompress the umbilical cord by elevating the presenting fetal part off of the cord.
- Wrap cord in warm, sterile saline soaked dressing.

For shoulder dystocia:

- Suspect if newborn's head delivers normally and then retracts back into perineum because shoulders are trapped.
- Discourage pushing by the mother.
- Support the baby's head, do not pull on it.
- Suction the nasopharynx and oropharynx, as needed.
- Position mother with buttocks dropped off end of stretcher and thighs flexed upward. Apply firm pressure with an open hand immediately above pubic symphysis (McRobert's maneuver).
- If the above method is unsuccessful, consider rolling the patient to the all fours position.

For postpartum hemorrhage:

- Vigorously massage fundus until uterus is firm.
- If possible initiate breast feeding newborn.

For cardiac arrest in the pregnant patient (regardless of etiology)

- For patient ≥ 20 week gestation or if the fundus is palpable at or above the level of the umbilicus, apply left lateral uterine displacement (LUD) with the patient in the supine position to decrease aortocaval compression. LUD should be maintained during CPR. If ROSC is achieved, the patient should be placed in the left lateral position. Transport to nearest emergency department.
- See Cardiac Arrest Protocol.

Orders Continue

Orders Continued

ADVANCED EMT STANDING ORDERS

A

- Establish IV access.
- For preterm labor:
 - 20 mL/kg IV fluid may repeat once.

PARAMEDIC STANDING ORDERS

P

- After delivery:
 - Oxytocin 10 Units IM.
 - Note: In multiple pregnancy, do not give until all placentas are delivered.
- Ongoing bleeding after uterine massage and oxytocin administration, consider Tranexamic Acid (TXA):
 - Mix 1 gram of TXA in 50 - 100 ml of 0.9% NaCl; infuse over approximately 10 minutes IV or IO.

PEARLS:

- The amount of bleeding is difficult to estimate. Menstrual pad holds between 5 - 15 mL depending on type of pad. Maternity pad holds 100 mL when completely saturated. Chux pad holds 500 mL. Estimate the amount of bleeding by number of saturated pads in last 6 hours. Consider transporting the soiled linen to the hospital to help estimate blood loss.

PRE-ECLAMPSIA / ECLAMPSIA

Pre-eclampsia/Eclampsia is most commonly seen in the last 10 weeks of gestation, during labor, or up to 48 hours post-partum. It also may occur up to several weeks post-partum.

EMT STANDING ORDERS

E

- Routine Patient Care.
- Ensure quiet environment / dim lights / limited use of siren.
- If pregnant, place patient in left lateral recumbent position.

ADVANCED EMT STANDING ORDERS - ADULT

A

- Establish IV access.

PARAMEDIC STANDING ORDERS - ADULT

P

- For patients in the third trimester of pregnancy or post-partum who are seizing or who are post-ictal:
- Magnesium sulfate, 4 grams IV (mix in 100 mL 0.9% NaCl) bolus over 10 minutes, then consider 1 gram/hr continuous infusion see Seizure Order Set.

Opioid Overdose — ADULT & PEDIATRIC

- Indication: Patients with access to opioids and/or suspected opioid use or abuse.
- Contraindication: Mildly altered mental status with normal respiratory effort and/or no indication of opiate use or access.
- Signs and symptoms can include respiratory depression, apnea, altered mental status and/or pinpoint pupils.
- The primary intervention for opioid induced respiratory depression is basic airway maneuvers and bag-valve-mask ventilation
- Determine and document if bystander naloxone was given.
- Intranasal naloxone may take up to 10 minutes to have effect. Repeat dosing should only be considered after an adequate amount of time has passed for medication effects to be seen.
- If you suspect a poisoning or overdose by any other substance than an opioid see the Poisoning and Overdose Protocol.

EMT STANDING ORDERS

E

- Initial treatment is BLS airway management.
- Routine Patient Care.
- Naloxone should be administered to those with objective signs of hypoventilation from opioid intoxication, as follows:
 - Naloxone 1 mg (1 mL) per nostril (IN) (**Infant and Toddler 0.5 ml**) via prefilled syringe and atomizer for a total of 2 mg **OR**
 - Naloxone 4 mg (0.5 mL) commercially prepared nasal spray.
 - **Adults only:** Repeat every 5 - 10 minutes (maximum 10 mg) until respiratory depression resolves and not necessarily until return of consciousness. **Contact Medical Control for additional pediatric doses.**
 - Monitor the patient for recurrent respiratory depression and decreased mental status.
- * The administration of the initial dose or subsequent doses should be incrementally titrated until respiratory depression is reversed and not necessarily return of consciousness.

ADVANCED EMT STANDING ORDERS - ADULT

A/P

- Naloxone 0.4 – 2.0 mg IV, (0.1 mg/kg pediatric dose IN or IV) repeat every 3 - 5 minutes (maximum 10 mg) until respiratory depression resolves and not necessarily until return of consciousness.
- Naloxone 0.4 – 2.0 mg IM, (0.1 mg/kg pediatric dose) repeat every 5 - 10 minutes (maximum 10 mg) until respiratory depression resolves and not necessarily until return of consciousness.



Patient may become agitated or violent following naloxone administration due to opioid withdrawal/hypoxia.



Patient may have used more than one type of substance use and reversal of the opiate may unmask the effects of other substances which could lead to violence or other signs and symptoms.

**New Hampshire Statewide
Addiction Crisis Line: 211**

PEARLS:

- Capnography may be helpful for monitoring respiratory status and titrating to lowest effective naloxone dose.
- The clinical opioid reversal effect of naloxone is limited and may end within an hour whereas some opioids may have extended release and therefore may have longer durations (e.g., methadone).
- Contraindications to naloxone: normal respiratory effort and/or no indication of opiate use or access.

EMT STANDING ORDERS

E/A

- Routine Patient Care.
- Use ample padding when splinting musculoskeletal injuries.
- Consider the application of a cold pack for 30 minutes.
- Have the patient rate his/her pain from 0 to 10, or use another appropriate pain scale.
 - If there is a language barrier, use self report scale.
- If not contraindicated, consider:
 - Acetaminophen 325 – 1000 mg PO, no repeat **OR**
 - Ibuprofen 400 mg PO, no repeat **OR**
 - Naproxen 500 mg PO, no repeat.
- For moderate to severe pain consult with advanced provider.

PARAMEDIC STANDING ORDERS

P

For mild or moderate pain consider:

- Ketorolac 15 mg IV/IM (no repeat).
- Consider as first line in renal colic.

EMS must be activated to use ketamine for pain management.

For severe pain or pain refractory to above, consider Ketamine:

- 10 – 20 mg IV diluted in 50 – 100 mL 0.9% NaCl or D5W over 10 minutes (no IV pump needed) may repeat every 5 minutes to a total of 40 mg, as tolerated, **OR**
- 25 – 50 mg IM may repeat every 30 minutes, as tolerated.
 - To minimize chance of dysphoric reaction consider starting at lower doses and increasing if needed for analgesia.

Antidote: For dysphoria (emergence reaction) caused by ketamine administer midazolam 1 - 2 mg IV/IM every 5 minutes as needed.

PARAMEDIC EXTENDED CARE ORDERS & RN STANDING ORDERS

X

- May repeat acetaminophen every 4 hours as needed, maximum 4000 mg in 24 hours.
- May repeat ketorolac or ibuprofen (but not both) every 6 hours as needed.
- May repeat naproxen every 12 hours as needed.

EXTENDED CARE ONLY:

- May repeat ketamine as above if patient is awake and oriented, remains in severe pain and evacuation will be prolonged. **Contact Medical Director if possible.**



- Avoid acetaminophen in patients who have taken medications containing acetaminophen within the past 4 hours.
- Avoid acetaminophen in patients with hepatic disease. Use with caution in patients with history of alcohol abuse.
- Medications should be administered cautiously in frail, debilitated, or patients over 65 years of age; lower doses should be considered.
- Use caution for altered mental status, hypoventilation, or hypotension.



Avoid ketorolac in patients with NSAID allergy, aspirin-sensitive asthma, renal insufficiency, pregnancy, or known peptic ulcer disease.



Ketamine is contraindicated in patients unable to tolerate hyperdynamic states such as those with known or suspected aortic dissection, myocardial infarction, and aortic aneurysm.

PEARLS:

- Ketamine should be considered in patients with severe pain, hemodynamic compromise, pain refractory to opiates, patients on chronic opiate treatment (e.g., Methadone, Buprenorphine), and patients with history of substance use disorder.
- Ketamine may cause appearance of intoxication at higher doses. Dysphoria (emergence reaction) may occur as the medication effects wear off.
- Place the patient in a position of comfort, if possible.
- Avoid coaching the patient; simply ask them to rate his/her pain on a scale from 0 – 10, where 0 is no pain at all and 10 is the worst pain they have ever experienced.
- Reassess the patient's pain level and vital signs every 5 minutes.

Pain Management — PEDIATRIC

EMT STANDING ORDERS

E

- Routine Patient Care.
- Place the patient in position of comfort.
- Use ample padding when splinting musculoskeletal injuries.
- Consider the application of a cold pack for 30 minutes.
- If not contraindicated, consider:
 - Acetaminophen 15 mg/kg PO, no repeat **OR**
 - Ibuprofen 10 mg/kg PO, no repeat.
- For moderate to severe pain consult with advanced provider.

PARAMEDIC STANDING ORDERS

P

EMS must be activated to use ketamine for pain management.

For severe pain or pain refractory to above, consider Ketamine:

- 10 – 20 mg IV diluted in 50 – 100 mL 0.9% NaCl or D5W over 10 minutes (no IV pump needed) may repeat every 5 minutes to a total of 40 mg, as tolerated, **OR**
- 25 – 50 mg IM may repeat every 30 minutes, as tolerated.
 - To minimize chance of dysphoric reaction consider starting at lower doses and increasing if needed for analgesia.

Antidote: For dysphoria (emergence reaction) caused by ketamine administer midazolam 0.05 mg/kg IV/IM (max single dose of 2 mg) every 5 minutes as needed.

PARAMEDIC EXTENDED CARE ORDERS & RN STANDING ORDERS

X

- May repeat acetaminophen every 4 hours as needed, maximum 40 mg/kg in 24 hours.
- May repeat ibuprofen every 6 hours as needed.

EXTENDED CARE ONLY:

- May repeat ketamine as above if patient is awake and oriented, remains in severe pain and evacuation will be prolonged. **Contact Medical Director if possible.**



- Avoid acetaminophen in patients who have taken medications containing acetaminophen within the past 4 hours.
- Avoid acetaminophen in patients with hepatic disease. Use with caution in patients with history of alcohol abuse.
- Medications should be administered cautiously in frail, debilitated, or patients over 65 years of age; lower doses should be considered.
- Use caution for altered mental status, hypoventilation, or hypotension.



Ketamine is contraindicated in patients unable to tolerate hyperdynamic states such as those with known or suspected aortic dissection, myocardial infarction, and aortic aneurysm.

PEARLS:

- Ketamine should be considered in patients with severe pain, hemodynamic compromise, pain refractory to opiates, patients on chronic opiate treatment (e.g., Methadone, Buprenorphine), and patients with history of substance use disorder.
- Ketamine may cause appearance of intoxication at higher doses. Dysphoria (emergence reaction) may occur as the medication effects wear off.
- Place the patient in a position of comfort, if possible.
- Avoid coaching the patient; simply ask them to rate his/her pain on a scale from 0 – 10, where 0 is no pain at all and 10 is the worst pain they have ever experienced.
- Reassess the patient's pain level and vital signs every 5 minutes.

EMT STANDING ORDERS

E/A

- Routine Patient Care.
- Prior to calling Poison Control attempt to identify substance, quantity, time/route of exposure and patient information (weight, medications, history, intentional, accidental).
- Contact Poison Control at **(800) 222-1222** as soon as practical.
- Ingested Poison:
 - Consider activated charcoal 25 – 50 grams by mouth if recommended by Poison Control or Medical Control.
- For suspected opiate overdose with severe respiratory depression, see Opioid Overdose Order Set.
- For suspected isolated cyanide poisoning, see Smoke Inhalation Order Set.
- For decontamination/hazardous materials exposure, see Hazardous Materials Policy.
- For hypoglycemia, see Hypoglycemia Emergencies Order Set.
- For seizures, see Seizure Order Set.

PARAMEDIC STANDING ORDERS

P

Suggested Treatments

- Beta Blocker and Calcium Channel Blocker refer to Bradycardia Order Set.
- Dystonic Reaction:
 - Diphenhydramine 25 – 50 mg (Pediatric: 1 mg/kg, max 50 mg) IV/IM.
- Organophosphates, see Nerve Agent/Organophosphate Order Set.
- Suspected Sympathomimetic/Stimulant:
 - Midazolam 2.5 mg IV/IN, may repeat once in 5 minutes; or 5 mg IM, may repeat once in 20 minutes.
- Tricyclic with symptomatic dysrhythmias, (e.g., tachycardia and wide QRS > 100 milliseconds):
 - Sodium bicarbonate 1 - 2 mEq/kg IV.



This protocol is designed to provide general guidelines for treatment. Specific treatments or antidotes may be appropriate as directed by on-line medical control or in consultation with Poison Control.

Signs & Symptoms, which may or may not be present:

- **Acetaminophen:** initially no sign/symptoms or nausea/vomiting. If not detected and treated, may cause irreversible liver failure.
- **Akathisia:** May consist of feelings of anxiety, agitation, and jitteriness, as well as inability to sit still / pacing. This may be induced by antipsychotics, such as haloperidol, or anti-emetics such as prochlorperazine or metoclopramide.
- **Anticholinergic:** tachycardia, fever, dilated pupils, mental status changes. Blind as a bat (blurred vision). Dry as a bone (dry mouth). Red as a beet (flushing). Mad as a hatter (confusion). Hot as a hare (hyperthermia).
- **Aspirin:** abdominal pain, vomiting, tachypnea, fever and/or altered mental status. Renal dysfunction, liver failure, and or cerebral edema among other things can take place later.
- **Cardiac Medications:** dysrhythmias, altered mental status, hypotension, hypoglycemia.
- **Depressants:** bradycardia, hypotension, decreased temperature, decreased respirations, non-specific pupils.
- **Dystonic Reaction:** Neurological movement disorder, in which sustained muscle contractions cause twisting and repetitive movements or abnormal postures. This may be induced by antipsychotics, such as haloperidol, or anti-emetics such as prochlorperazine or metoclopramide.
- **Opiate:** Respiratory depression or arrest, pinpoint pupils, decreased mental states. See Opioid Overdose Protocol.
- **Organophosphates:** bradycardia, increased secretions, nausea, vomiting, diarrhea, pinpoint pupils.
- **Solvents:** nausea, coughing, vomiting, mental status change and arrhythmias. Patient with significant solvent exposure, must be handled gently to reduce the incident of arrhythmia and/or subsequent cardiac arrest.
- **Sympathomimetic/Stimulants:** tachycardia, hypertension, seizures, agitation, increased temperature, dilated pupils, anxiety, paranoia, diaphoresis. Examples are bath salts, cocaine, methamphetamine, ecstasy, ADHD drugs, thyroid meds (rarely), salbutamol.
- **Tricyclic:** seizures, dysrhythmias, hypotension, decreased mental status or coma.

PEARLS:

If possible, provide container/bottles and/or contents to EMS.

Pulse oximetry may NOT be accurate for toxic inhalational patients.

Capnography may be helpful for monitoring respiratory status and titrating to lowest effective naloxone dose. See Capnography Procedure.

Seizures— ADULT & PEDIATRIC

EMT STANDING ORDERS

E/A

- Routine Patient Care.
- If the blood glucose reading is <60 mg/dL, see Hypoglycemia Protocol.
- If midazolam intranasal or diazepam rectal gel (Diastat) has been prescribed by the patient's physician, assist the patient or care giver with the administration in accordance with the physician's instructions.
- If the patient has an implanted vagus nerve stimulator (VNS), suggest that family use the VNS magnet to activate the VNS and assist if required.
 - Swipe the VNS magnet over the stimulator, located in the left chest area, for one second, counting one-one thousand while it's swiped over the chest.
- Note: do not delay medication administration.

PARAMEDIC STANDING ORDERS

P

While seizure activity is present, consider:

- **ADULTS:** Midazolam 10 mg IM (preferred route) every 10 minutes or 5 – 10 mg IV/IN every 5 minutes.
- **PEDIATRIC:** Midazolam 5 mg/mL concentration (IM or IN preferred):
 - 0.2 mg/kg IM/IN (single maximum dose 8mg) repeat every 5 minutes; or
 - 0.1 mg/kg IV (single maximum dose 4 mg) repeat every 5 minutes

For patients in the third trimester of pregnancy or post-partum who are seizing or who are post-ictal:

- Magnesium sulfate, 4 grams IV (mix in 100 mL 0.9% NaCl) bolus over 10 minutes, then consider 1 gram/hr continuous infusion.

PARAMEDIC EXTENDED CARE ORDERS & RN STANDING ORDERS

X

- If patient has missed a dose of seizure medication, is awake, alert and oriented, and can swallow water without gagging or coughing:
 - Administer usual dose of seizure medication, **but not more than one full dose of medication** regardless of how many doses have been missed.
- If there is a moderate to high likelihood of recurrent seizure and prolonged extrication is expected **AND** the patient has not already been administered a benzodiazepine:
 - If patient has prescribed abortive medication that has not been administered:
 - Administer abortive medication as prescribed, **OTHERWISE**
 - Midazolam 5 mg IM.
- **The patient must be transported to a hospital if prophylactic medications are administered.**



Do NOT routinely place an IV/IO for the actively seizing patient (unless needed for other reasons).

PEARLS:

- Do not attempt to restrain the patient; protect them from injury.
- History preceding a seizure is very important. Find out what precipitated the seizure (e.g., medication non-compliance, active infection, trauma, hypoglycemia, poisoning).
- **Status epilepticus** is defined as any generalized seizures lasting more than 5 minutes, or two or more seizures without a return to normal consciousness between seizures. This is a true emergency requiring rapid airway control, treatment (including benzodiazepines), and transport.
- IM/IN is the preferred route for midazolam where an IV has not been previously established.
- IM midazolam should be administered to the lateral thigh.
- Diazepam and lorazepam are not well absorbed IM and should be given IV. · There is an increased risk of apnea with >2 doses of benzodiazepines.

EMT STANDING ORDERS

E

- Routine Patient Care.
- Do not delay transport.
- If positive sepsis screen, notify receiving facility of a “Sepsis Alert.”

PEDIATRIC

- Monitor and maintain airway and breathing as these may change precipitously. · Administer oxygen and continue regardless of oxygen saturation levels.
- Obtain blood glucose reading.

ADVANCED EMT STANDING ORDERS

A

ADULT

- Rapidly administer IV fluid, 30 mL/kg bolus to maintain MAP > 65 mmHg (systolic blood pressure >90 mmHg).
- Patients should be reassessed frequently, with special attention given to the lung examination to ensure volume overload does not occur.

PEDIATRIC

IV fluids should be titrated to attain normal capillary refill, peripheral pulses, and level of consciousness.

- Administer fluid bolus of 10 - 20 mL/kg of IV fluid by syringe push method; reassess patient immediately after completion of bolus and repeat 2 times (max 60 mL/kg), if inadequate response to boluses.

Note: Reassess patient between each bolus for improving clinical signs and signs of fluid overload (rales, increased work of breathing, or increased oxygen requirements).

PARAMEDIC STANDING ORDERS - ADULT

P

ADULT

- If there is no adequate hemodynamic response after initial bolus consider:
 - Epinephrine by push dose (dilute boluses) prepare 10 mcg/mL by adding 1 mL 0.1 mg/mL Epinephrine to 9 mL normal saline, then administer 10-20 mcg boluses (1 – 2 mL) every 2 minutes (where feasible, switch to infusion as soon as practical), AND/OR
 - Continue maintenance fluid concurrently with epinephrine administration, titrate to MAP ≥ 65 mmHg (systolic blood pressure > 90 mmHg).

PEDIATRIC

Contact medical control and consider:

- Additional fluids
- Epinephrine by push dose (dilute boluses) prepare 10 mcg/mL by adding 1 mL 0.1 mg/mL Epinephrine to 9 mL normal saline, then administer 1 mcg/kg boluses (max 10 mcg) every 2 minutes (where feasible, switch to infusion as soon as practical).

Sepsis— ADULT & PEDIATRIC

Orders Continued

IDENTIFICATION OF POSSIBLE SEPSIS

- Suspected infection – YES
- Evidence of sepsis criteria – YES (2 or more):
 - Temperature < 96.8 °F or > 101°F
 - Heart rate > 90 bpm (or above normal for pediatrics, see chart)
 - Respiratory rate > 20 bpm (or above normal for pediatrics, see chart)
 - **ADULT:** Mean Arterial Pressure (MAP) <65mmHg (systolic blood pressure < 90 mmHg)
 - **PEDIATRIC:** Mottled, cool extremities.
 - New onset altered mental status **OR** increasing mental status change with previously altered mental status
 - ETCO₂ < 25 mmHg

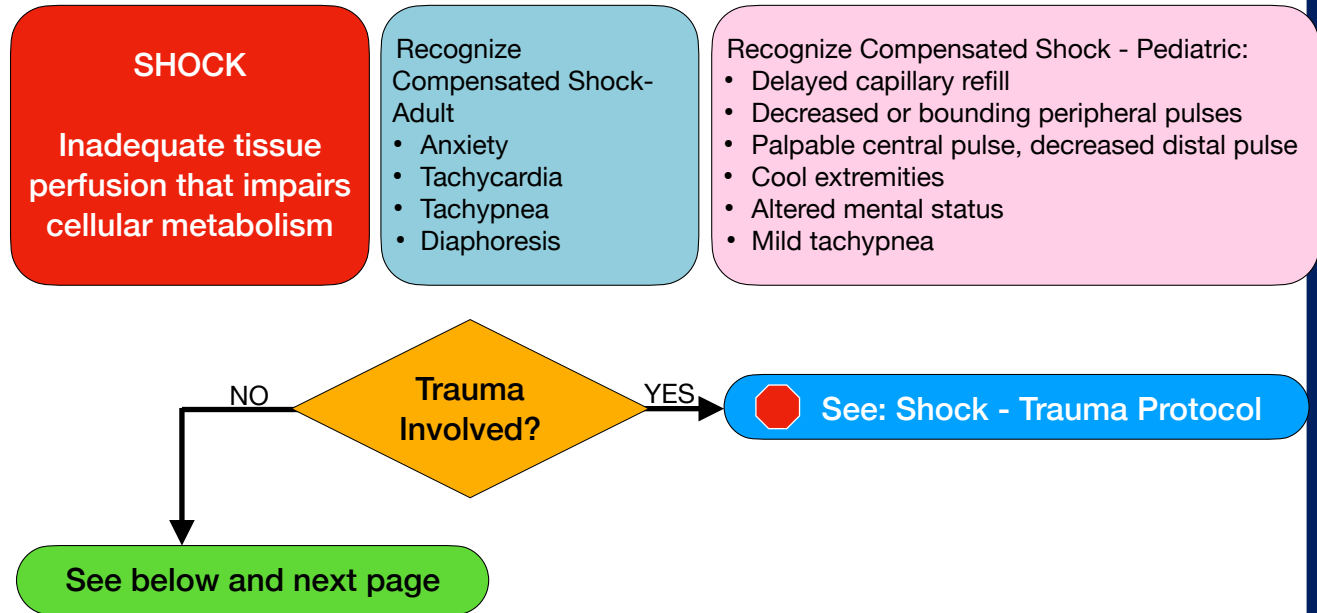
Upper Limit of Pediatric HR and RR

Age	Heart Rate	Resp Rate
0 day - < 3 mon	205	60
≥ 3 mon - < 1 year	190	60
≥ 1 year - < 2 years	190	40
≥ 2 years - < 4 years	140	40
≥ 4 years - < 6 years	140	34
≥ 6 years - < 10 years	140	30
≥ 10 years - <13 years	100	30
≥ 13 years	100	16

PEARLS:

- **Sepsis** is life-threatening organ dysfunction due to a dysregulated host response to infection.
- **Septic shock** is a subset of sepsis in which underlying circulatory and cellular/metabolic abnormalities are profound enough to substantially increase mortality.
- **Sepsis Alert** - Notifies receiving facility that patient may require resuscitation and/or more resource intensive management, may assist with predicting pts who will have poor outcomes without appropriate and timely treatment.
- Provide receiving facility with written documentation that includes time of initial bolus, time of completion of bolus, total volume infused and rate.

Non-Traumatic Shock – ADULT & PEDIATRIC



EMT STANDING ORDERS

E

- Obtain finger stick lactate level (if available and trained).
- $\text{ETCO}_2 < 25 \text{ mmHg}$ OR lactate $> 2 \text{ mmol/L}$ may indicate poor perfusion/shock.

ADVANCED EMT STANDING ORDERS - ADULT & PEDIATRIC

A

ADULT: Administer IV fluid in 250 mL boluses to return the patient to a coherent mental status or palpable radial pulse, not to exceed 2000 mL without consultation with **Medical Control**.
PEDIATRIC: Administer fluid bolus of 10 - 20 mL/kg of IV fluid by syringe push method (may repeat to a maximum 60 mL/kg) to improve clinical condition (capillary refill time ≤ 2 seconds, equal peripheral and distal pulses, improved mental status, normal breathing).

PARAMEDIC STANDING ORDERS - ADULT & PEDIATRIC

P

ADULT: If there is no adequate hemodynamic response after 2,000 mL IV fluid infused consider:
 • Epinephrine by push dose (dilute boluses) prepare 10 mcg/mL by adding 1 mL 0.1 mg/mL Epinephrine to 9 mL normal saline, then administer 10-20 mcg boluses (1 – 2 mL) every 2 minutes (where feasible, switch to infusion as soon as practical), **AND/OR**
 • Epinephrine infusion 2 – 10 micrograms/minute, via pump.
PEDIATRIC: If there is no adequate hemodynamic response after 60 mL/kg IV fluid infused **contact Medical Control**.

Orders Continue

SHOCK TYPES AND CONSIDERATIONS

CARDIOGENIC SHOCK

Primary pump failure
Decreased cardiac output

Norepinephrine infusion 1 – 30 microgram/minute (preferred) via pump, OR Epinephrine infusion 2 – 10 micrograms/minute, via pump.
*For pediatric cardiogenic shock administer fluid bolus of 10mL/kg of 0.9% saline by syringe push method. Repeat bolus per Medical Control.

DISTRIBUTIVE SHOCK

Inadequate blood volume distribution.

Known history of adrenal insufficiency or recent illness, see Adrenal Insufficiency Protocol.
Systemic response to an allergen, see Anaphylaxis/Allergic Reaction Protocol.
Overwhelming response to an infection, see Sepsis Protocol.

HYPOVOLEMIC SHOCK

Insufficient circulating volume.

Abdominal pain with vaginal bleeding see Obstetric Protocol.
Nausea and vomiting see Nausea Vomiting Protocol.
For GI bleeding see Abdominal Pain Protocol.
Heat exposure, see Hyperthermia Protocol.

OBSTRUCTIVE SHOCK

Obstruction of blood flow outside the heart

For cardiac tamponade, rapid transport, treat arrhythmias per Cardiac Protocols.
For spontaneous pneumothorax: consider needle decompression per Thoracic Injury Protocol.
For pulmonary embolism: rapid transport.

Smoke Inhalation/Carbon Monoxide Poisoning – ADULT & PEDIATRIC

EMT STANDING ORDERS

E

- Routine Patient Care.
- Oxygen 100% via non-rebreather mask or BVM.
- Decontamination concurrent with initial resuscitation.
- If a carbon monoxide (CO) oximeter (e.g., Rad-57) is available, obtain carbon monoxide levels.
- If a measuring device is available, obtain atmospheric levels of carbon monoxide (CO) and cyanide (CN).

ADVANCED EMT AND PARAMEDIC STANDING ORDERS

A/P

For a history of smoke exposure with an altered level of consciousness and/or hemodynamic or respiratory compromise, administer, if available:

- Hydroxocobalamin via use of Cyanokit:
 - **ADULT:** as directed in the kit.
 - **PEDIATRIC:** Using vented intravenous tubing, infuse per Pediatric Color Coded Appendix over 7.5 minutes for 100 mL vial set or 15 minutes for 200 mL vial set.
- Depending on clinical response, a second dose may be required.



Oxygen saturation may be inaccurate in patients exposed to carbon monoxide or cyanide.



CO oximeter devices may yield inaccurate low/normal results for patients with CO poisoning. All patients with probable or suspected CO poisoning should be transported to the nearest appropriate hospital, based on their presenting signs and symptoms.



Do not administer other drugs concurrently in same IV as hydroxocobalamin.

Percent CO in Blood	Typical Symptoms
< 10	None
10-20	Slight Headache
21-30	Headache, slight increase in respirations, drowsiness
31-40	Headache, impaired judgement, shortness of breath, increasing drowsiness, blurring of vision
41-50	Pounding headache, confusion, marked shortness of breath, marked drowsiness, increasing blurred vision
>51	Unconsciousness, eventual death if patient is not removed from source of CO

Symptoms: headache, confusion, dyspnea, chest tightness, nausea.

Signs: soot in the nose or mouth, change in level of consciousness, seizure, dilated pupils, coughing, tachypnea and hypertension (early), bradypnea and hypotension (late), shock, vomiting.

PEARLS:

- Smoke is a combination of many dangerous toxins produced by incomplete combustion. Patients exposed to smoke should be considered for carbon monoxide (CO) and hydrogen cyanide (HCN) poisoning.

Sore Throat / Upper Respiratory Infection — ADULT & PEDIATRIC

EMT STANDING ORDERS

E/
A

- Routine Patient Care.
- Stabilize as per other order sets and transport via EMS for:
 - Muffled voice.
 - Drooling.
 - Respiratory Distress.
 - “Sniffing” or “Tripod” positions.
 - Fever and rigors.
 - Severe unilateral sore throat.
 - Bulging of the pharyngeal wall/floor or soft palate.
 - Trismus.
 - Crepitus.
 - Stiff neck.
 - History of penetrating trauma to oropharynx.

PARAMEDIC STANDING ORDERS - ADULT & PEDIATRIC

P

- Supportive care:
 - Over the counter sore throat lozenges or Chloraseptic lozenges as directed on the manufacturer packaging as needed for discomfort.
 - Ibuprofen, 400 mg orally three times daily as needed for discomfort or fever (pediatric: 10 mg/kg/dose, maximum of adult dosing).
 - Acetaminophen, 650 mg orally every 4 hours as needed for discomfort or fever (pediatric: 15 mg/kg/dose, maximum of adult dosing).

PARAMEDIC AND RN EXTENDED CARE ORDERS

X

- **Medical Director authorization required to perform rapid strep testing and treatment.**
 - Perform rapid strep testing for sore throat. See Strep Testing Order Set.



Pharyngeal emergencies are airway emergencies. If there is any doubt about airway stability, transport via EMS without delay.

PEARLS:

- Ill appearing patients who do not meet emergency transport criteria in E/A above should be evaluated in the hospital setting with concern for alternative pathology. Transport may be by private vehicle.
- Most sore throats are viral and will resolve on their own in about 5 days.
- Fever, exudate on tonsils, tender cervical lymph nodes and no cough favor streptococcal pharyngitis.
- Cough, runny nose, conjunctivitis, or hoarseness favor viral pharyngitis.
- Usual reasons for a negative rapid strep test and a positive culture are a variant strep (group B or G) or poor pharyngeal sampling.

EMT STANDING ORDERS

E

- Routine Patient Care.
- Complete the Prehospital Stroke Screening Tool.
 - If Prehospital Stroke screen is positive, complete stroke severity score (e.g., FAST- ED) to determine probability of a large vessel occlusion (LVO).
- Establish Stroke Alert Criteria and notify receiving hospital of “Stroke Alert” with findings from the screening tools, thrombolytic checklist and time last known well (TLKW).
- For symptomatic:
 - Administer oxygen to maintain SPO2 between 94% - 98%;
 - Elevate head of stretcher to 30 ° (unless patient requires spinal motion restriction);
 - Minimize on-scene time; do not delay for ALS intercept;
 - Acquire and transmit 12-lead ECG, if available;
 - Correct glucose if < 60 mg/dL. See Hypoglycemia Protocol.
 - Rapid transport to the most appropriate facility based on the destination guidance utilizing your local stroke plan.

ADVANCED EMT AND PARAMEDIC STANDING ORDERS

A/P

Establish IV (18 gauge catheter & right AC preferred site) and administer 250 ml IV fluid.

Prehospital Stroke Screening Tool

Stroke screen is positive if any abnormal finding in facial droop, arm drift or speech.

Time Last Known Well:	<i>(If patient awoke with symptoms, time last known to be at baseline)</i>		
Prehospital Stroke Scale Examination	Please check:	Normal	Abnormal
Facial Droop: Have the patient smile and show teeth. Normal: Both sides of the face move equally well. Abnormal: One side of the face does not move as well as the other.			
Arm Drift: Have the patient close their eyes and hold arms extended for 10 seconds. Normal: Both arms move the same, or both arms don't move at all. Abnormal: One arm doesn't move, or one arm drifts down compared to the other.			
Speech: Ask the patient to repeat a phrase such as, “You can't teach an old dog new tricks.” Normal: Patient says the correct words without slurring. Abnormal: Patient slurs words, says the wrong word, or is unable to speak.			
Blood Glucose:			

Orders Continue

Stroke — ADULT

Orders Continued

Stroke Severity Score (FAST-ED)

A FAST-ED greater than or equal to 4 is considered high possibility for an LVO

Assessment	Points	Score
F - Facial Palsy (ask the patient to smile)		
No facial droop or only minor paralysis on one side of the face	0	
Partial or complete paralysis of one side of the face	1	
A - Arm Weakness (arms out with palms up for 10 seconds)		
No drift, or both arms slowly move down equally	0	
Arm drift or some effort to lift the affected arm against gravity	1	
No effort against gravity or no movement in one or both arms	2	
S - Speech Change (ask the patient to name 3 common items; ask them to show you two fingers)		
Able to name at least 2 of 3 objects and follow command	0	
Names none, or only 1 of the 3 items correctly	1	
Unable to "show tow fingers" to command	1	
T - Time - When was patient last known well?		
E - Eye Deviation		
Able to look to both sides without difficulty	0	
Able to move eyes horizontally in both directions but with clear difficulty	1	
Gaze is fixed to one side and does not move	2	
D - Denial/Neglect (only do if there is arm weakness AND commands followed)		
Recognizes weakness in their weak arm and recognizes their weak arm	0	
Unable to recognize weakness when asked "Are you weak anywhere?"	1	
Does not recognize own arm when asked "Whose arm is this?"	1	
Total		

ESTABLISH STROKE ALERT CRITERIA

Yes	No	Stroke Alert Criteria — Please check Yes or No:
<input type="checkbox"/>	<input type="checkbox"/>	Blood glucose is or has been corrected to greater than 60 mg/dl?
<input type="checkbox"/>	<input type="checkbox"/>	Deficit unlikely due to head trauma or other identifiable causes?
<input type="checkbox"/>	<input type="checkbox"/>	Positive Prehospital Stroke Screen:
		• and time last known well is less than 4.5 hours OR
		• FAST-ED score is greater than or equal to 4 ANDtime last known well is less than 24 hours.

Stroke Alert Criteria – If yes to all criteria determine appropriate destination, contact receiving hospital and report a STROKE ALERT with time last known well, FAST-ED score & thrombolytic checklist results.

Orders Continue

Stroke — ADULT

Thrombolytic Checklist - for patients eligible for thrombolytics (t-PA), try to complete the following:

Yes No

Has the patient had any of the following:

- | | | |
|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | 1. Severe head trauma or intracranial or spinal surgery within the past 3 months? |
| <input type="checkbox"/> | <input type="checkbox"/> | 2. Major non-cranial surgery or trauma within 14 days with uncontrolled bleeding (e.g. internal organs)? |
| <input type="checkbox"/> | <input type="checkbox"/> | 3. Spontaneous (non-traumatic) intracranial hemorrhage at any time in the past? |
| <input type="checkbox"/> | <input type="checkbox"/> | 4. Is the patient taking any anticoagulants, including oral or injectable medications? If yes, clarify when last dose was taken (see PEARLS below). |

PEARLS for Anticoagulants::

- Patients may recognize anticoagulants as "blood thinners". Ask about anticoagulants including warfarin (Coumadin or Jantoven), Heparin (IV/IM - including Lovenox), dabigatran (Pradaxa), rivaroxaban (Xarelto), apixaban (Eliquis), betrixaban (Bevyxxa) or edoxaban (Savaysa) and immediately communicate to hospital staff.
- Please note, medication manufacturers are producing new anticoagulants frequently.

PEARLS:

- **Stroke requires time sensitive interventions. Time = Brain.**
- Every minutes of acute stroke = about 2 million neurons lost.
- Transport witness, family or caregiver or obtain witness best phone number for hospital staff to verify time of symptom onset or Time Last Known Well (TLKW).
- TLKW is the last time patient known to be at their neurological baseline. If patient awakes with symptoms, TLKW is time patient was last known to be at their neurological baseline – Ask if patient got up during the night and was at baseline!
- Consider **stroke mimics** including: migraine, hypoglycemia, seizures, intoxication, sepsis cerebral infectious process, toxic ingestion, neuropathies (Bell's palsy), neoplasms, hypertensive encephalopathy.

Syncope — ADULT & PEDIATRIC

EMT STANDING ORDERS

E

- Routine Patient Care.
- Maintain oxygen saturation 94 - 98%.
- Attempt to determine the cause of syncope.
- Perform cardiac monitoring; obtain 12-Lead EKG, if available. If acute coronary syndrome is suspected, refer to Acute Coronary Syndrome Protocol.
- Obtain blood glucose analysis; refer to Hyperglycemia or Hypoglycemia Protocols, if indicated.
- Assess for trauma either as the cause of the syncope or as a consequence of the syncopal event assess for trauma; refer to Spinal Injury Protocol 4.7 if indicated.
- Prevent and treat for shock; see Shock- Non-traumatic or Shock - Traumatic Protocol.
- Consider ALS intercept.

ADVANCED EMT STANDING ORDERS - ADULT & PEDIATRIC

A

- Consider fluids per Shock — Non-traumatic Protocol.

PARAMEDIC STANDING ORDERS - ADULT & PEDIATRIC

P

- Observe for and treat dysrhythmias as indicated.

PEARLS:

- Syncope is defined as a loss of consciousness accompanied by a loss of postural tone with spontaneous recovery.
- Consider all syncope to be of cardiac origin until proven otherwise.
- While often thought as benign, syncope can be the sign of more serious medical emergency.
- Syncope that occurs during exercise often indicates an ominous cardiac cause. Patients should be evaluated at the ED. Syncope that occurs following exercise is almost always vasovagal and benign.
- Prolonged QTc (generally >500ms) and Brugada Syndrome (incomplete RBBB pattern in V1/V2 with ST segment elevation) should be considered in all patients.
- There is no evidence that supports acquiring orthostatic vital signs.
- Syncope can be indicative of many medical emergencies including:

Table of Contents

Acute Coronary Syndrome – ADULT	44
Bradycardia – ADULT	45
Bradycardia – PEDIATRIC.....	46
Cardiac Arrest – ADULT	47
Cardiac Arrest – PEDIATRIC	49
Congestive Heart Failure (Pulmonary Edema) – ADULT	50
Post Resuscitative Care – ADULT & PEDIATRIC	51
Tachycardia – ADULT	52
Tachycardia – PEDIATRIC	54

Acute Coronary Syndrome – ADULT

EMT STANDING ORDERS

E

- Routine Patient Care.
- Obtain 12-lead ECG with baseline vitals within 10 minutes if available and practical; and transmit per local guidelines. See Protocol 6.0 12-Lead EKG Acquisition.
 - If 12-lead ECG indicates a STEMI transport patient to the most appropriate facility in accordance with local STEMI guidelines/agreements. Notify receiving facility of a “STEMI Alert”.
- Administer oxygen only to patients with dyspnea, hypoxia (O₂ sat <94%), or signs of heart failure at a rate to keep O₂ saturation ≥ 94 - 98%.
- Administer aspirin 324 mg by mouth (chewable), unless patient self administered 324 mg within the last 30 minutes.
- Facilitate administration of the patient's own nitroglycerin every 3 – 5 minutes while symptoms persist and systolic BP remains >100 mmHg, to a total of 3 doses.

ADVANCED EMT STANDING ORDERS

A/P

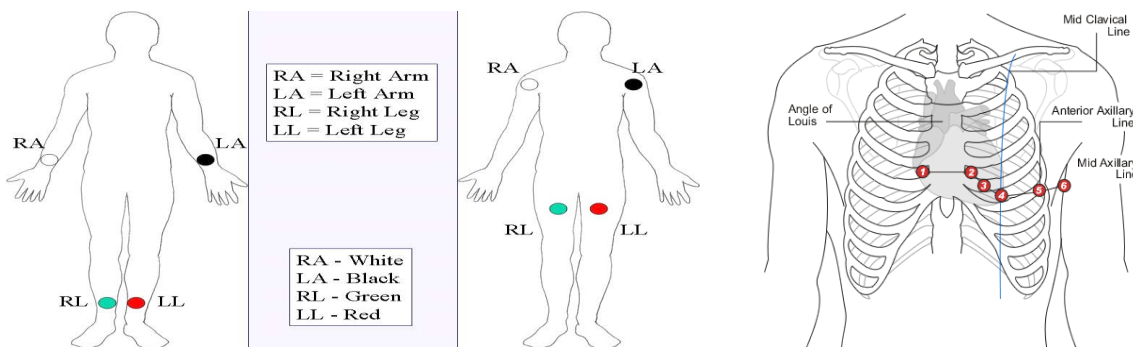
- Establish IV (if feasible, avoid right wrist).
- IV must be established before administration of nitroglycerin.
- Nitroglycerin 0.4 mg SL every 3 – 5 minutes while symptoms persist and if systolic BP remains >100 mmHg.



Avoid nitroglycerin in any patient who has used a phosphodiesterase inhibitor such as: sildenafil (Viagra, Revatio), vardenafil (Levitra, Staxyn), tadalafil (Cialis, Adcirca) which are used for erectile dysfunction and pulmonary hypertension. Also avoid use in patients receiving intravenous epoprostenol (Flolan) which is used for pulmonary hypertension.



Administer nitrates with extreme caution, if at all, to patients with inferior-wall STEMI or suspected right ventricular (RV) involvement because these patients require adequate RV preload.



PEARLS:

- Transmission of 12-lead ECG is critical to the activation of a STEMI system. Transmit any 12-lead ECG that states “Acute MI”, “Meets ST Elevation MI Criteria” or anything similar, or where the interpretation is unclear.
- Early administration of aspirin has been shown to decrease mortality in Acute Coronary Syndrome.
- Administer aspirin to every patient with suspected acute coronary syndrome unless they have:
 - History of anaphylaxis to aspirin, NSAIDs, or
 - Evidence of active gastrointestinal bleeding.
- Patients with acute coronary syndrome (especially women and the elderly) may present with signs and symptoms other than chest pain including shortness of breath, weakness, syncope and nausea.

EMT/ADVANCED EMT STANDING ORDERS

E/A

- Routine Patient Care.
- Consider the underlying causes of bradycardia (e.g., acute coronary syndrome, hyperkalemia, hypoxia, hypothermia).
- **PEDIATRIC:** Begin/continue CPR if heart rate is < 60 bpm with hypoperfusion despite adequate ventilation and oxygenation.
- 12-lead ECG if available.

PARAMEDIC STANDING ORDERS

P

ACLS training OR contact with Medical Control is required for nursing use.

For symptomatic bradycardia:

If hemodynamically unstable:

- Consider atropine 0.5 mg IV every 3 – 5 minutes to a maximum of 3 mg.
- Consider transcutaneous pacing.
- Administer procedural sedation prior to or during transcutaneous pacing, if feasible:
 - Midazolam 2.5 mg IV/IN, may repeat once in 5 minutes; or 5 mg IM, may repeat once in 10 minutes.
- Consider vasopressor:
 - Epinephrine by push dose (dilute boluses) prepare 10 mcg/mL by adding 1 mL 0.1 mg/mL Epinephrine to 9 mL normal saline, then administer 10-20 mcg boluses (1 – 2 mL) every 2 minutes (where feasible, switch to infusion as soon as practical).
- **Contact Medical Control** for expert consultation.

Other Causes:

- For symptomatic beta blocker overdose, consider glucagon 5 mg IV over 3 – 5 minutes.
- For suspected hyperkalemia with ECG changes or symptomatic calcium channel blocker/beta blocker overdose consider:
 - Calcium gluconate (10% solution) 2 grams IV over 10 minutes, with continuous cardiac monitoring, may repeat in 10 minutes if clinical indication persists.

PEARLS:

- Hyperkalemia should be suspected in dialysis or renal failure patients with ECG changes such as tall peaked T waves, loss of P waves, QRS widening and bradycardia.
- When pushed too quickly, glucagon can cause nausea and vomiting.

EMT/ADVANCED EMT STANDING ORDERS

E/A

- Routine Patient Care.
- Consider the underlying causes of bradycardia (e.g., acute coronary syndrome, hyperkalemia, hypoxia, hypothermia).
- Begin/continue CPR if heart rate is < 60 bpm with hypoperfusion despite adequate ventilation and oxygenation.
- 12-lead ECG if available.

PARAMEDIC STANDING ORDERS

P

PALS training OR contact with Medical Control is required for nursing use.

For symptomatic bradycardia:

If hemodynamically unstable:

- Epinephrine (0.1 mg/ml) 0.01 mg/kg (0.1 ml/kg of 0.1 mg/ml) every 3-5 minutes.
- Consider atropine 0.02 mg/kg IV for increased vagal tone or AV blocks, may repeat once (minimum single dose: 0.1 mg; maximum single dose 0.5 mg).
- Consider transcutaneous pacing.
- Administer procedural sedation prior to or during transcutaneous pacing, if feasible:
 - Midazolam 0.05 mg/kg IV/IM or 0.1 mg/kg IN (maximum dose 3 mg), may repeat once in 5 minutes.

Other Causes:

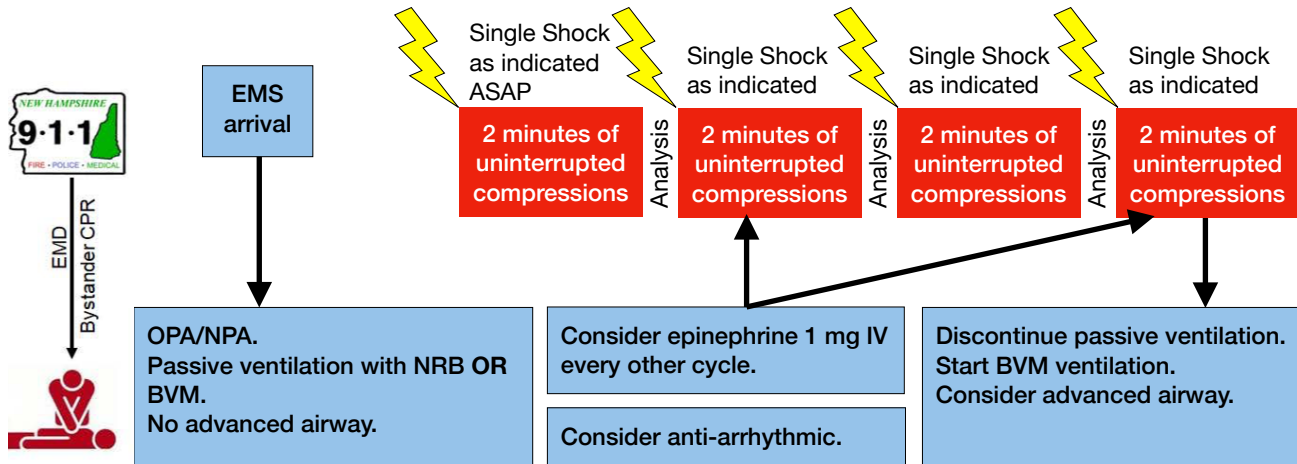
- For hypoglycemia see Hypoglycemia Order Set.
- For symptomatic beta blocker overdose or calcium channel blocker overdose, consider glucagon 0.025 - 0.05 mg/kg.
 - 1 mg IV (20-40 kg) every 5 minutes as necessary.
 - 0.5 mg IV (less than 20 kg) every 5 minutes as necessary.
- For suspected hyperkalemia with ECG changes or symptomatic calcium channel blocker/ beta blocker overdose consider:
 - Calcium gluconate (10% solution) 100 mg/kg IV with a maximum 2 gm/dose over 10 minutes, with continuous cardiac monitoring, may repeat in 10 minutes if clinical indication persists.

PEARLS:

- Combine age specific heart rates with signs of respiratory failure and shock while assessing. If child is asymptomatic, consider no treatment.
- When pushed too quickly, glucagon can cause nausea and vomiting.

Cardiac Arrest — ADULT

- Perform 2 minute cycles of uninterrupted chest compressions.
- Interrupt chest compressions only for rhythm/pulse check and defibrillation.
- Ventilation / Oxygenation options:
 - Apply high flow oxygen via non-rebreather mask (NRB) for passive ventilation **OR**
 - BVM ventilation 1 breath every 10 chest compressions without interrupting compressions.
 - For arrests of non-cardiac etiology, including respiratory and trauma, use BVM ventilation.



EMT STANDING ORDERS

E

- Routine Patient Care—with focus on high performance CPR.
- Immediate chest compressions.
- Use AED as soon as possible, with minimal interruption of chest compressions.
- Continue 2 minute cycles of uninterrupted chest compressions followed by AED analysis and shock for 4 cycles (8 minutes).
- Place an oral or nasal airway.
- Ventilation / oxygenation options during 4 cycles (8 minutes):
 - Apply high flow oxygen via NRB, **OR**
 - BVM ventilation 1 breath every 10 chest compressions without interrupting compressions. Consider advanced airway only if airway patency cannot be maintained using basic maneuvers and adjuncts.
- If using a BVM, monitor capnography, if available, throughout resuscitation to assess high performance CPR quality and to monitor for signs of Return of Spontaneous Circulation (ROSC).
- After 4 cycles (8 minutes):
 - Continue 2 minute cycles of uninterrupted chest compressions.
 - If passive insufflation was used, switch to BVM ventilation.
 - Consider placement of a supraglottic airway without interrupting chest compressions.
- Consider treatable causes: hypoxia, overdose/poisoning, hypothermia, hypoglycemia, and hypovolemia—treat as per specific protocol.
- If ROSC occurs see Post Resuscitative Care Order Set.
- Consider termination of efforts or not attempting resuscitation (see DNR, POLST & Advanced Directives Protocol and/or Resuscitation Initiation & Termination Protocol).

Orders Continue

ADVANCED EMT STANDING ORDERS

A

- Place IV/IO without interrupting chest compressions.
- After the first 2 minute cycle, consider epinephrine (0.1 mg/mL concentration) 1 mg IV; repeat every other cycle.

PARAMEDIC STANDING ORDERS

P

- Defibrillate as indicated at the device's maximum energy.
- After 4 cycles (8 minutes):
ACLS training OR contact with Medical Control is required for nursing use of the following two interventions:
 - Consider endotracheal intubation without interrupting chest compressions.
 - Administer anti-dysrhythmic, per ACLS algorithms.

For refractory ventricular fibrillation consider:

- Changing pad placement from anterior-apex to anterior-posterior
- If second manual defibrillator is available consider Double Sequential Defibrillation Procedure.
- Consider resuscitation for up to 60 minutes from the time of dispatch, including transport for potential reversible causes if no ROSC after initial efforts.

Narrow complex PEA is often due to a mechanical cause including hemorrhage / hypovolemia, tension pneumothorax, massive MI and pulmonary embolism. Consider causes and treat appropriately including:

- IV boluses for suspected hypovolemia.
ACLS training OR contact with Medical Control is required for nursing use of the following intervention:
 - Needle decompression for suspected tension pneumothorax.
- Consider resuscitation for up to 60 minutes from the time of dispatch, including transport for potential reversible causes if no ROSC after initial efforts.

Wide complex PEA is often due to a metabolic cause including hyperkalemia and sodium-channel blocker toxicity. For wide complex PEA consider:

ACLS training OR contact with Medical Control is required for nursing use of the following interventions:

- Calcium gluconate 2 grams IV, OR calcium chloride (10%) 1 gram IV **AND**
- Sodium bicarbonate 1 - 2 mEq/kg IV.

For suspected pre-existing metabolic acidosis or suspected excited/ agitated delirium consider:

- Sodium bicarbonate 1 - 2 mEq/kg IV .

PEARLS:

- It is expected, unless special circumstances are present, resuscitation will be performed on scene until ROSC or termination of efforts. See Resuscitation Initiation and Termination
- Early high performance CPR and early defibrillation are the most effective therapies for cardiac arrest care.
- Minimize interruptions in chest compressions, as pauses rapidly return the blood pressure to zero and stop perfusion to the heart and brain.
- Recognizing the goal of immediate uninterrupted chest compressions, consider delaying application of mechanical CPR devices until after the first four cycles (8 minutes). If applied during the first 4 cycles, the goal is to limit interruptions. Mechanical devices should only be used by services that are practiced and skilled at their application.
- Switch compressors at least every two minutes to minimize fatigue.
- Perform chest compressions while defibrillator is charging and resume compressions immediately after the shock is delivered.
- Depending on your local hospital resources, some refractory ventricular fibrillation patients may benefit from emergent cardiac catheterization. For this small patient population, transportation (ideally with a mechanical CPR device) may be indicated. Transporting these patients directly to the cath lab should be done in collaboration with on-line medical control and interventional cardiology

EMT/ADVANCED EMT STANDING ORDERS

E/A

- Routine patient Care—with focus on CPR.
- Immediate chest compressions.
- Apply AED and use as soon as possible (with minimum interruption of chest compressions). From birth to age 8 years use pediatric AED pads.
 - If pediatric AED pads are unavailable, providers may use adult AED pads, provided the pads do not overlap.
- Monitor capnography, if available, throughout resuscitation to assess and monitor airway placement, CPR quality and to monitor for signs of Return of Spontaneous Circulation.
- Consider termination of efforts or not attempting resuscitation, see DNR, POLST & Advanced Directives Policy and/or Resuscitation Initiation & Termination.
- Consider treatable causes: hypoxia, overdose/poisoning, hypoglycemia, hypothermia, and hypovolemia (treat as per specific protocol).

PARAMEDIC STANDING ORDERS

P

- If Return of Spontaneous Circulation occurs see Post Resuscitative Care Order Set.
- If ventilation is adequate with BVM, routine placement of advanced airway can be deferred.
- Placement of an advanced airway during cardiac arrest should not interrupt chest compressions. In this setting, supraglottic airways and ETTs can be considered equivalent.
- For suspected metabolic acidosis, suspected or known hyperkalemia (dialysis patient), or known tricyclic antidepressant overdose, consider sodium bicarbonate 1 - 2 mEq/kg IV.

For Ventricular Fibrillation (VF)/Pulseless Ventricular Tachycardia (VT):

- Defibrillate at 2 J/kg; perform CPR for 2 minutes and recheck rhythm; if still a shockable rhythm, defibrillate at 4 J/kg; perform CPR for 2 minutes; reassess every 2 minutes. Subsequent shocks at ≥ 4 J/Kg, maximum 10 J/Kg or adult dose.

ACLS or PALS training OR contact with Medical Control is required for nursing use past this point:

- If no response after first defibrillation, administer:
 - Epinephrine (0.1 mg/mL concentration) 0.01 mg/kg (0.1 ml/kg) IV **OR**
 - Epinephrine (1 mg/mL concentration) 0.1 mg/kg (0.1 ml/kg) via ETT.
 - Repeat every 3 – 5 minutes.
- If no response after second defibrillation, consider:
 - Amiodarone 5 mg/kg (maximum 300 mg) IV, OR
 - Lidocaine 1 mg/kg (maximum 100 mg).
 - For Torsades de Pointes: magnesium sulfate 25 – 50 mg/kg (maximum 2 grams) IV over 1 – 2 minutes.

For Asystole or Pulseless Electrical Activity (PEA):

- Epinephrine (0.1 mg/mL concentration) 0.01 mg/kg (0.1 ml/kg) IV **OR**
- Epinephrine (1 mg/mL concentration) 0.1 mg/kg (1ml/kg) via ETT
 - Repeat every 3 – 5 minutes.
- Give 2 minutes of CPR, then check rhythm:
 - If asystole or PEA, continue epinephrine and 2 minutes of CPR until:
 - Pulse obtained, **OR**
 - Shockable rhythm obtained, **OR**
 - Decision made to discontinue further efforts.

Congestive Heart Failure (Pulmonary Edema) – ADULT

EMT STANDING ORDERS

E

- Routine Patient Care.
- Place the patient in a semi-sitting or full sitting position.
- Facilitate administration of the patient's own nitroglycerin every 5 minutes while symptoms persist and systolic BP is >140 mmHg.
- Consider Continuous Positive Airway Pressure (CPAP) with maximum 15 cmH₂O pressure support. See CPAP Procedure.
- 12-lead ECG, if available.

ADVANCED EMT STANDING ORDERS

A/P

- Establish IV access.
- For patients with known history of congestive heart failure, consider:
 - For systolic BP of 140 - 160 mmHg: nitroglycerin 0.4 mg SL.
 - For systolic BP of 160 - 200 mmHg: nitroglycerin 0.8 mg SL.
 - For systolic BP > 200 mmHg: nitroglycerin 1.2 mg SL.
 - The above doses may be repeated every 5 minutes until symptomatic improvement or systolic BP of 140 mmHg.
- Assess blood pressure every 3-5 minutes during nitroglycerin administration.



Avoid nitroglycerin in any patient who has used a phosphodiesterase inhibitor such as: sildenafil (Viagra, Revatio), vardenafil (Levitra, Staxyn), tadalafil (Cialis, Adcirca) which are used for erectile dysfunction and pulmonary hypertension. Also avoid use in patients receiving intravenous epoprostenol (Flolan) which is also used for pulmonary hypertension.



Administer nitrates with extreme caution, if at all, to patients with inferior-wall STEMI or suspected right ventricular (RV) involvement because these patients require adequate RV preload.

PEARLS:

- If patient has taken their own nitroglycerin without relief, consider loss of potency due to age.
- Allow the patient to be in their position of comfort to maximize their breathing effort.

EMT STANDING ORDERS

E

- If feasible, acquire and transmit a 12-lead EKG.
- Initial ventilation rate of 10 - 12 BPM for adults and 12 - 20 bpm for pediatric, then titrate to capnography of 35 to 40 mm Hg, if available.
- Titrate oxygen levels to between 94 - 98 % SaO₂.

ADVANCED EMT STANDING ORDERS

A

For post resuscitation hypotension:

- **Adult:** Maintain systolic blood pressure of >90 mmHg OR MAP ≥ 65 mmHg.
 - Administer IV fluid in 250 mL boluses not to exceed 2000 mL.
- **Pediatric:** 1 - 10 years of age: Maintain systolic blood pressure 70 mmHg + (2 x age)
 - Administer fluid bolus of 10 - 20 mL/kg of 0.9% NaCl by syringe push method (may repeat to a maximum 60 mL/kg).

PARAMEDIC STANDING ORDERS - ADULT

P

ACLS training OR contact with Medical Control is required for nursing use past this point:

Consider vasopressor:

- Epinephrine by push dose (dilute boluses) prepare 10 mcg/mL by adding 1 mL 0.1 mg/mL Epinephrine to 9 mL normal saline, then administer 10 - 20 mcg boluses (1 - 2 mL) every 2 minutes (where feasible, switch to infusion as soon as practical).

PARAMEDIC STANDING ORDERS - PEDIATRIC

PALS training OR contact with Medical Control is required for nursing use past this point:

For post resuscitation hypotension:

- Epinephrine (0.1 mg/mL) 0.01 mg/kg (0.1 mL/kg of 0.1 mg/mL) every 3-5 minutes (where feasible, switch to infusion as soon as practical).

- For patients with return of spontaneous circulation after cardiac arrest not related to trauma or hemorrhage who are comatose without purposeful movement, consider transporting to a receiving facility capable of starting induced therapeutic hypothermia.
- If patient meets STEMI criteria transport per your STEMI guidelines/agreements. Notify receiving facility of a "STEMI Alert".

PEARLS:

Avoid hyperventilation as it increases intrathoracic pressures, potentially worsening hemodynamic instability.

EMT/ADVANCED EMT STANDING ORDERS

E/A

- Routine Patient Care.
- 12-lead ECG if available.

PARAMEDIC STANDING ORDERS

P

ACLS training OR contact with Medical Control is required for nursing use.

For symptomatic tachyarrhythmias (other than sinus tachycardia):

If hemodynamically unstable:

- Synchronized cardioversion:
Use the following initial energy doses, then escalate to the next higher energy level if no conversion. Biphasic devices: follow manufacturer's recommendations for dosing.
 - For narrow regular rhythm: 50 – 100J biphasic or 200J monophasic.
 - For narrow irregular rhythm: 120 – 200J biphasic or 200J monophasic.
 - For wide regular rhythm: 100J biphasic or monophasic.
 - For wide irregular/polymorphic VT: 120 – 200J biphasic or 360 monophasic, using unsynchronized defibrillation doses if unable to sync.
- Administer procedural sedation prior to or during cardioversion, if feasible:
 - Midazolam 2.5 mg IV/IN, may repeat once in 5 minutes or; 5 mg IM may repeat once in 10 minutes.

If hemodynamically stable:

For narrow complex tachycardia consider:

- For regular rhythms greater than 150 bpm, perform vagal maneuvers.
 - Adenosine 6 mg rapid IVP, may repeat at dose of 12 mg in 1 – 2 minutes if no conversion.
 - May repeat successful dose if rhythm recurs after conversion.
 - Diltiazem 0.25 mg/kg IV (maximum dose 20 mg) over 2 minutes.
 - May repeat dose in 15 minutes at 0.35 mg/kg (maximum dose 20 mg), if necessary.
 - Consider maintenance infusion at 5 – 15 mg/hour, OR
 - Metoprolol 5 mg IV over 2 – 5 minutes.
 - May repeat every five minutes to a maximum of 15 mg as needed to achieve a ventricular rate of 90 – 100.

For wide complex tachycardia:

- Only for regular rhythm with monomorphic QRS:
 - Consider: adenosine 6 mg rapid IV.
 - May repeat at dose of 12 mg after 1 – 2 minutes if no conversion.
 - May repeat successful dose if rhythm recurs after conversion.
 - Consider:
 - Amiodarone 150 mg IV mixed with 50 – 100 ml of 0.9% NaCl or D5W over 10 minutes.
 - May repeat once in 10 minutes.
 - If successful, consider a maintenance infusion of 1 mg/minute.
 - Lidocaine (considered second-line therapy) 1 – 1.5 mg/kg IV.
 - May repeat once in 5 minutes to maximum of 3 mg/kg.
 - If successful, consider a maintenance infusion of 1 – 4 mg/minute.

For polymorphic Ventricular Tachycardia/Torsades de Pointes:

- Consider magnesium sulfate 1 – 2 grams IV over 5 minutes.

Orders Continue

PEARLS:

- Consider and treat potential underlying causes, e.g., hypoxemia, dehydration, fever.
- Wide complex tachycardia should be considered Ventricular Tachycardia until proven otherwise
- Signs and symptoms of hemodynamic instability:
 - Hypotension
 - Acutely altered mental status
 - Signs of shock
 - Signs of acute heart failure
 - Ischemic chest pain
- Adenosine should be administered rapidly through a proximal (e.g., antecubital) vein site followed by a rapid saline flush.

EMT/ADVANCED EMT STANDING ORDERS

E/
A

- Routine Patient Care.
- 12-lead ECG if available.

PARAMEDIC STANDING ORDERS

P

PALS training OR contact with Medical Control is required for nursing use.

If hemodynamically unstable:

For narrow complex/probable SVT:

- Synchronized cardioversion:
 - 0.5-1 J/kg, if unsuccessful, increase to 2 J/kg.
- Administer procedural sedation prior to or during cardioversion, if feasible:
 - Midazolam 0.05 mg/kg IV/IM, may repeat once in 5 minutes.
- Adenosine 0.1 mg/kg IV (maximum dose 6 mg)
 - Repeat once at 0.2 mg/kg IV (maximum dose 12 mg).
- If adenosine is ineffective, or for wide complex tachycardia:
 - Synchronized cardioversion:
 - 0.5-1 J/kg, if unsuccessful, increase to 2 J/kg.

If hemodynamically stable:

For narrow complex, probable supraventricular tachycardia, or regular wide complex tachycardia (monomorphic QrS ONLY):

- Consider vagal maneuvers.
- Adenosine 0.1 mg/kg IV (maximum dose 6 mg).
 - Repeat once at 0.2 mg/kg IV (maximum dose 12 mg).

For wide complex:

- Contact online **Medical Control** for consideration of amiodarone 5 mg/kg IV (maximum 300 mg) over 20-60 minutes.

PEARLS:

- Consider and treat potential underlying causes, e.g., hypoxemia, dehydration, fever.
- Signs and symptoms of hemodynamic instability:
 - Hypotension.
 - Acutely altered mental status.
 - Signs of shock.
- Probable Sinus Tachycardia:
 - Compatible history consistent with known cause.
 - P waves are present and normal.
 - Variable R-R and constant P-R interval.
 - Infants: rate usually <220/min.
 - Children: rate usually <180/min.
- Probable Supraventricular Tachycardia:
 - Compatible history (vague, nonspecific); history of abrupt onset / rate changes.
 - P waves absent / abnormal.
 - Heart-rate is NOT variable.
 - Infants: rate usually >220/min.
 - Children: rate usually >180/min.
 - Adenosine should be administered rapidly through a proximal (e.g., antecubital) vein site followed by a rapid saline flush.

Table of Contents

Burns/Electrocution/Lightning – ADULT & PEDIATRIC.....	56
Crush Injuries – ADULT & PEDIATRIC	58
Drowning/Submersion Injuries – ADULT & PEDIATRIC.....	60
Hemorrhage Control – ADULT & PEDIATRIC	63
Hemorrhage Control – Intramuscular Tranexamic Acid	65
Shock Traumatic – ADULT & PEDIATRIC.....	66
Spinal Trauma – ADULT & PEDIATRIC	67
Thoracic Injuries – ADULT & PEDIATRIC.....	69
Traumatic Brain Injury (TBI) – ADULT & PEDIATRIC.....	70
Traumatic Cardiac Arrest – ADULT & PEDIATRIC	71

EMT STANDING ORDERS

E

- Routine Patient Care.
- Assess for evidence of smoke inhalation or burns; soot around mouth or nostrils, singed hair, carbonaceous sputum.
- If the patient has respiratory difficulty, altered level of consciousness and /or hemodynamic compromise, see Airway Management Protocols and Smoke Inhalation/Carbon Monoxide Poisoning Protocols.

Thermal

- Stop burning process with water or normal saline.
- Remove non-adherent clothing and jewelry. Do not remove skin or tissue.
- To protect from infection, cover burns with clean dry sterile dressing or sheets.
- Keep patient warm and prevent hypothermia due to large thermal injuries.

Chemical

- Identify agent(s) and consider HAZMAT intervention, if indicated. See Hazardous Material Exposure Policy.
- Consider contacting Poison Control at **800-222-1222**.
- Decontaminate the patient as appropriate.
- Brush off dry powders if present, before washing.
- Scrape viscous material off with rigid device, e.g., tongue depressor.
- Flush with copious amounts of clean water or sterile saline for 10 – 15 minutes, unless contraindicated by type of chemical agent (e.g., sodium, potassium or dry lime and/or phenols).

Electrical/Lightning

- Ensure your own safety; disconnect power source, if feasible.
- Place patient on a cardiac monitor.
- Consider spinal motion restriction for burns due to electric flow across the body.

Assess Extent of Burn

- Determine extent of the burn using Rules of Nine (see next page).
- Determine depth of injury.
- Do not include 1st degree burns in burn surface area (BSA) percentage.

Pain Control

- If a partial thickness burn, 2nd degree is < 10% body surface area:
- Apply room-temperature water or room-temperature wet towels to burned area of a maximum of 15 minutes. Prolonged cooling may result in hypothermia.

ADVANCED EMT STANDING ORDERS - ADULT

A

- Transport time less than 1 hour:
 - Administer warm IV fluids* at 500 mL/Hour.
- Transport time greater than 1 hour:
 - Administer warm fluids* at $1 - 2 \text{ mL/kg} \times \% \text{ burn} / 8 = \text{hourly rate} \times \text{first 8 hours}$.

ADVANCED EMT STANDING ORDERS - PEDIATRIC

- Transport time less than 1 hour:
 - BSA > 20%: 20 mL/kg warm IV fluids*, over 10 – 30 minutes.(Does not need to be on a pump).
 - BSA < 20%: 10 mL/kg warm IV fluids*, over 10 – 30 minutes.
- Consult **Medical Control**:
 - Transport time greater than 1 hour and/or
 - Patient has signs of shock.

* An IO device can be inserted through burned skin as long as the underlying bone has not been compromised.

Orders Continue

PARAMEDIC STANDING ORDERS

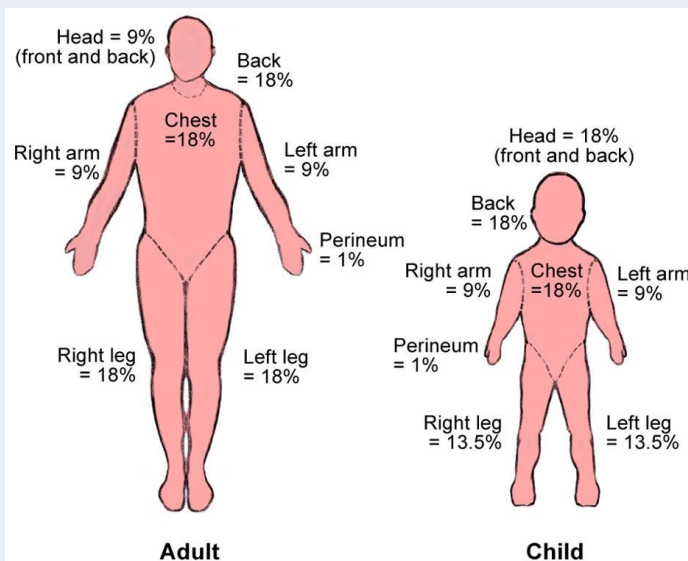
P

- Refer to Pain Management Protocol.

Air Medical Transport Considerations:

- Major burns with greater than 20% BSA and/or inhalation injury with risk of airway compromise.
- Electrocution injuries with loss of consciousness, arrhythmia, or any respiratory abnormality.

	Adult	Pediatric
Head & Neck	9%	18%
Left Arm	9%	9%
Right Arm	9%	9%
Chest	9%	9%
Abdomen	9%	9%
Upper Back	9%	9%
Lower Back	9%	9%
Left Leg	18%	13.5%
Right Leg	18%	13.5%
Genital Region	1%	1%



PEARLS:

- Electrocution/Lightning burns can occur anywhere along the path a current travels through the body. Evident surface burns may only comprise a small portion of the overall burn injury, and an injury's full extent may not be immediately apparent.
- Chemical burns: If 0.9% NaCl or sterile water is not readily available, do not delay, use tap water for flushing the affected area. Flush the area as soon as possible with the cleanest readily available water using copious amounts of water.

Crush Injuries — ADULT & PEDIATRIC

EMT STANDING ORDERS

E

- Routine Patient Care.
- For signs/symptoms of shock, see Shock Traumatic Protocol.
- Identify and treat any severe hemorrhage.
- Perform cardiac monitoring and obtain multiple 12 - lead ECGs, if available.
- Evaluate for additional trauma, potentially masked by other painful injuries.
- Extrication and transport to a Trauma Center is preferred.
- Do not delay transport, consider hospital destination per Trauma Triage and Transport Decision Protocol.
- Consider early ALS and/or Air Medical Transport.

ADVANCED EMT STANDING ORDERS

A

ADULT:

- Initiate IV fluid 500 - 1000 mL bolus, followed by 500 mL/hr infusion (warm preferred), prior to extrication, if possible.

PEDIATRIC

- Initiate 10-20 mL/kg IV fluid bolus, followed by 10 mL/kg/hr infusion (warm preferred), prior to extrication, if possible.

PARAMEDIC STANDING ORDERS - ADULT

P

- Consider pain management, see Pain Management Protocol.
- For significant crush injuries or prolonged entrapment, consider:
 - Sodium bicarbonate 1 mEq/kg (maximum dose of 50 mEq) IV/IO bolus over 5 minutes.
- Consider the following post extrication:
 - Monitor for dysrhythmias or signs of hyperkalemia before and after extrication.
 - If ECG suggestive of hyperkalemia, consider administering the following:

ADULT

- Calcium gluconate 2 grams IV/IO over 10 minutes, may repeat in 10 minutes.
- Albuterol continuous 10 - 20 mg nebulized.

PEDIATRIC

- Calcium gluconate 100 mg/kg IV/IO over 10 minutes with a maximum of 2 gm/dose, over 5 minutes, may repeat in 10 minutes.
- Albuterol by weight: < 25 kg — 2.5 mg | 25 - 50 kg — 5 mg | >50 kb — 10 mg.

EMT, AEMT, PARAMEDIC & RN EXTENDED CARE ORDERS

X

- **ADULT ONLY:** Secondary to initial bolus, consider sodium bicarbonate infusion (Paramedic/ RN only):
 - 150 mEq in 1000 mL D5W at a rate of 250 mL/hr or 4 mL/min.
- In the event that adequate fluid resuscitation is not available, consider applying a tourniquet on the affected limb and do not release until adequate IV fluids and/or medications are available.
- If extrication is prolonged > 1 hour, contact online medical control for additional considerations prior to extricating the patient.

PEARLS:

- **Compression syndrome:** An indirect muscle injury due to a simple, slow compression of a group of muscles leading to ischemic damage and thus causing crush substances to enter the blood. (For example, a patient who fell and has been on the floor for 2 days)
- **Compartment syndrome:** A localized rapid rise of tension within a muscle compartment, which inevitably leads to metabolic disturbances akin to rhabdomyolysis.
- **Crush syndrome:** Also termed rhabdomyolysis, involves a series of metabolic changes produced due to an injury of the skeletal muscles of such a severity as to cause a disruption of cellular integrity and release of its contents into the circulation.
- Causes of mortality in untreated crush syndrome:
 - Immediate: severe head injury, traumatic asphyxia, torso injury with intrathoracic or intra- abdominal organ injury.
 - Early: hyperkalemia, hypovolemia/shock.
 - Late: renal failure, coagulopathy, hemorrhage and sepsis.
- Suspect hyperkalemia if T waves become peaked, QRS prolonger >0.12 seconds, absent P waves, or prolonged QTc. Hyperkalemia may be delayed up to 24 hours after extrication.
- A patient with a crush injury may initially present with very few signs and symptoms, therefore, maintain a high index of suspicion for any patient with a compressive mechanism of injury.

Drowning/Submersion Injuries — ADULT & PEDIATRIC

SUBMERSION: When a patient goes under the water immediately, has a hypoxic cardiac arrest and then cools down. Prognosis considered dismal.

IMMERSION: Patients are in the water with head above water and they continue to breathe while they cool down before they eventually arrest. Prognosis can be good with patients surviving after prolonged CPR.

EMT/ADVANCED EMT STANDING ORDERS

E/A

- Routine Patient Care.
- Victims with only respiratory arrest usually respond after a few artificial breaths are given.
 - Give a few breaths and check for a pulse.
 - Anticipate vomiting.
- For patients in cardiac arrest, provide immediate CPR.
 - Utilize the sequence ABC, not CAB, i.e. start with airway and breathing before compressions.
- Routine use of spinal motion restriction in the absence of circumstances that suggest a spinal injury is not recommended.
- Assess temperature, if unresponsive, obtain esophageal or rectal temperature.
- Due to extremely poor prognosis, providers may consider withholding or terminating resuscitation efforts when:
 - A clear history of prolonged submersion (without prior prolonged immersion), greater than 20 minutes (children may survive despite extended submersion) **OR**
 - Esophageal or rectal temperature is greater than 32° C (89.6° F) with asystole documented in 2 leads **OR**
 - Meets Termination of Resuscitation Criteria, see Resuscitation Initiation and Termination Policy.
- Consider hypothermia, see Hypothermia Protocol.
 - Do not delay urgent procedures such as airway management and IV access. Although hypothermic patients may exhibit cardiac irritability, do not delay necessary interventions.
- Conscious patients who survive any form of drowning are at risk of deterioration and should be transported to the hospital.
- Consider CPAP to supplement the patient's own respiratory effort.

PARAMEDIC STANDING ORDERS - ADULT

P

- ACLS training OR intubation training is required for nursing use.**
- For unconscious patients in distress, consider early intubation.

PEARLS;

- Patients with Stage III or IV hypothermia may benefit from treatment at a facility capable of ExtraCorporeal Membrane Oxygenation (ECMO) or CardioPulmonary Bypass (CPB). Consider air medical transport.
- In hypothermic patients, low levels of ETCO₂ may not be a useful predictor of outcome, due to reduced metabolism.
- Oral and tympanic thermometers do not yield an accurate core temperature for severely hypothermic patients.
- Cold water offers enhanced survival only where the patient becomes cold prior to cardiac arrest.
- There is no need to clear the airway of aspirated water; only a modest amount of water is aspirated by most drowning victims, and aspirated water is rapidly absorbed into the central circulation.
- Unnecessary cervical spine immobilization can impede adequate opening of the airway and delay delivery of rescue breaths.

Orders Continue

HYPOTHERMIA CHART	
STAGE: I	Conscious, shivering
Core Temp	35 to 32°C (95 to 89.6°F)
Treatment:	Warm environment and clothing, warm sweet drinks, and active movement (if possible).
STAGE: II	Impaired consciousness, not shivering
Core Temp	<32 to 28°C (<89.6 to 82.4°F)
Treatment:	Cardiac monitoring, minimal and cautious movements to avoid arrhythmias, horizontal position and immobilization, full-body insulation, active external and minimally invasive rewarming techniques (warm environment; chemical, electrical, or forced- air heating packs or blankets; warm parenteral fluids).
STAGE: III	Unconscious, not shivering, vital signs present
Core Temp	<28 to 24°C (<82.4 to 75.2°F)
Treatment:	Stage II management plus airway management as required; ECMO or CPB in cases with cardiac instability that is refractory to medical management.
STAGE: IV	No vital signs
Core Temp	<24°C (<75.2°F)
Treatment:	Stage II and III management plus CPR and up to three doses of epinephrine (at an intravenous or intraosseous dose of 1 mg) and defibrillation, with further dosing guided by clinical response; rewarming with ECMO or CPB (if available) or CPR with active external and alternative internal rewarming.

EMT STANDING ORDERS - EYE

E

- Routine Patient Care.
- Obtain visual history (e.g., use of corrective lenses, surgeries, use of protective equipment).
- Obtain visual acuity, if possible.
- Assist patient with the removal of contact lens, if applicable.
- Chemical irritants, including pepper spray: flush with copious amounts of water, or 0.9% NaCl.
- Thermal burns to eyelids: patch both eyes with cool saline compress.
- Impaled object: immobilize object and patch both eyes.
- Puncture wound: place rigid protective device over both eyes (e.g., eye shield). Do not apply pressure.
- If the patient cannot close their eyelids, keep their eye moist with a sterile saline dressing.

ADVANCED EMT STANDING ORDERS - EYE

A

- An anti-emetic is strongly recommended for penetrating or blunt eye trauma, consider Nausea Order Set.

PARAMEDIC STANDING ORDERS - EYE

P

- Proparacaine or tetracaine:
 - Apply 2 drops to affected eye; repeat every 5 minutes as needed.
- Consider use of Morgan lens for irrigation.
- Refer to Pain Management Order Set.

EMT, ADVANCED EMT, PARAMEDIC STANDING ORDERS - DENTAL AVULSION

E/A/P

- Routine Patient Care.
- Dental avulsions should be placed in an obviously labeled container with saline-soaked dressing, milk or hanks solution

EMT, AEMT, PARAMEDIC & RN EXTENDED CARE ORDERS - DENTAL AVULSION

X

- If definitive treatment is expected to be greater than 4 hours, an attempt to reinsert the avulsed tooth in its socket should be considered, after rinsing tooth in water or normal saline. If multiple teeth require reinsertion, use the shape and size of dentition on the opposing side to guide you in proper placement.

PEARLS:

- Handle the tooth carefully. Avoid touching the root of the tooth (the part of the tooth that was embedded in the gum) because it can be damaged easily.
- Significant eye injury may be present despite normal vision and minimal symptoms.
- Any chemical or thermal burn to the face/eyes should raise suspicion of respiratory insult.
- Vomiting in connection with blunt or penetrating eye trauma significantly increases intraocular pressure and should be avoided.

Hemorrhage Control — ADULT & PEDIATRIC

INDICATIONS:

- Serious or life threatening extremity hemorrhage in the face of operational considerations that prevent the use of less aggressive hemorrhage control techniques.



STOP THE BLEED[®]

SAVE A LIFE

EMT STANDING ORDERS

E

- Routine Patient Care.
- **Apply direct pressure**, using manual control and/or pressure bandage.
- **Apply limb tourniquet**, if direct pressure is ineffective or impractical and for any traumatic amputation.
 - Apply directly to the skin 2-3 inches above the bleeding site. If bleeding is not controlled with the first tourniquet, apply a second tourniquet side-by-side with the first.
 - Document time of tourniquet application and communicate this clearly with receiving facility.
- **Pack wounds** of groin, neck or axillary injuries not amenable to limb tourniquet.
 - Utilize hemostatic dressing or, if not available, gauze dressing.
- **Junctional tourniquet**
 - If the bleeding site is amenable to use of a junctional tourniquet, immediately apply device following manufacture's guidelines, if available.

ADVANCED EMT STANDING ORDERS

A

- Administer fluids per Shock — Traumatic Order Set.
- Assess pain level and consider pain control measures, see Pain Management Order Set.

PARAMEDIC STANDING ORDERS

P

- Administer tranexamic acid (TXA):
 - Mix 1 gram of TXA in 50-100 ml of 0.9% NaCl; infuse over approximately 10 minutes IV or IO.
- Notify receiving facility of TXA administration prior to arriving.

TXA Indications

- Evidence of significant trauma **AND**
- Evidence or concern for severe external and/or internal hemorrhage **AND**
- Presence of one or more markers of hemodynamic instability.
 - Sustained systolic blood pressure < 90 mmHg.
 - Sustained heart rate > 110 after pain adequately treated **AND**
- Injury occurred within past 3 hours

TXA Contraindications

- Previous allergic reaction to TXA
- Isolated head injury
- Patients who have received or will receive prothrombin complex concentrate (PCCs), factor VIIa, or factor IX complex concentrates.
- Women who are known or suspected to be pregnant with a fetus of viable gestational age (> 24 weeks).

Orders Continue

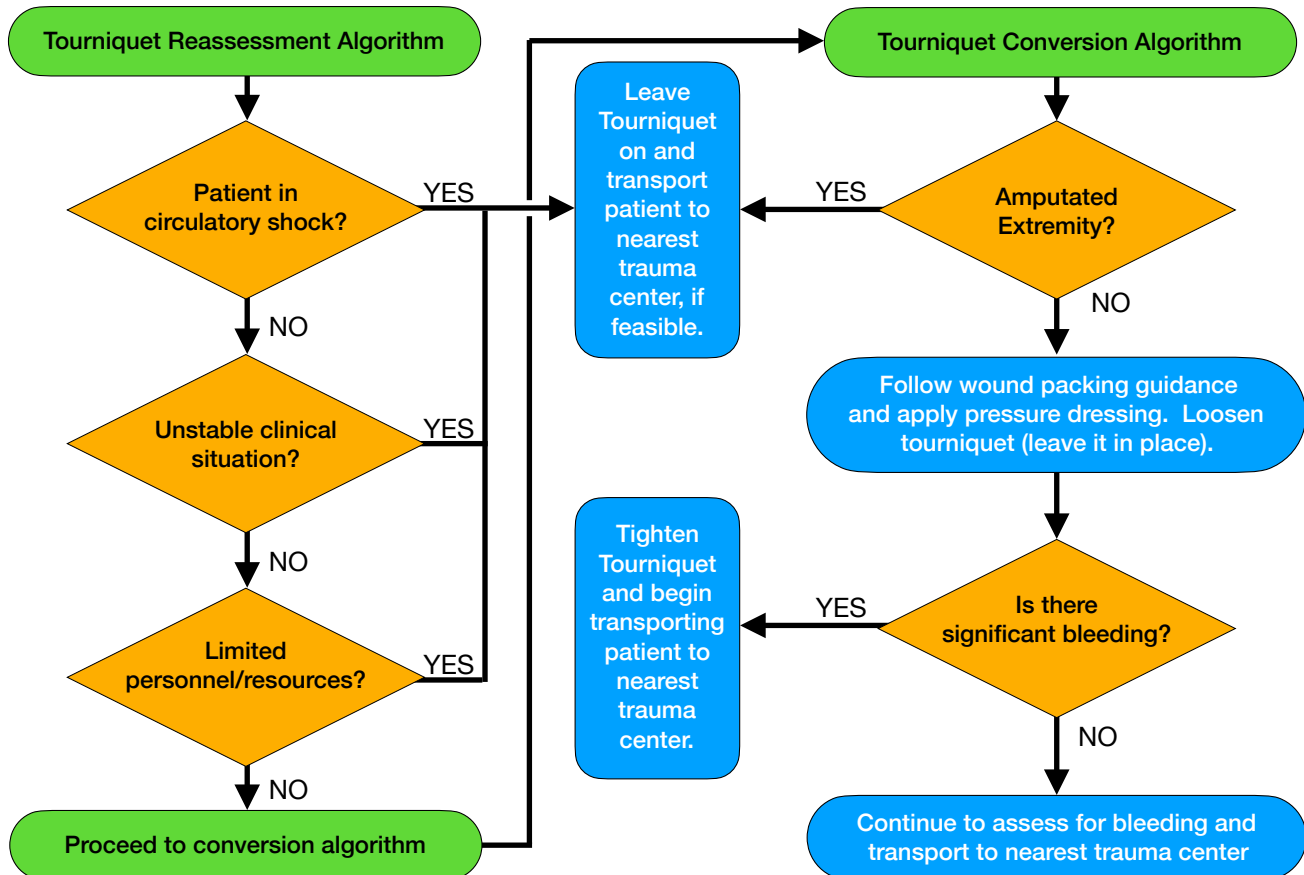
Hemorrhage Control — ADULT & PEDIATRIC

Hemorrhage Control — ADULT & PEDIATRIC

EMT, AEMT, PARAMEDIC & RN EXTENDED CARE ORDERS

X

- **Consult Medical Control**, if feasible.
- If tourniquet has been in place for greater than 6 hours, do not remove.
- If less than 6 hours consider Tourniquet Reassessment and Tourniquet Conversion Algorithms



AMPUTATIONS: Rinse severed part briefly and gently with sterile saline to remove debris then wrap severed part in sterile saline gauze, moisten with sterile saline (do not soak) and place in water-tight container. Place container on ice (do not use dry ice). Do not put part directly on ice. If necessary, use ice packs to provide some level of cooling.



In the event of diminished scene safety (indirect threat, warm zone, etc.), limb tourniquets should be placed as high on the limb as possible and over clothing.



In the absence of a commercial tourniquet (preferred), an improvised device, e.g. cravat with windlass, blood pressure cuff, etc., could be used. The device must be a minimum of 2 inches wide, otherwise it can cut through the skin.

PEARLS:

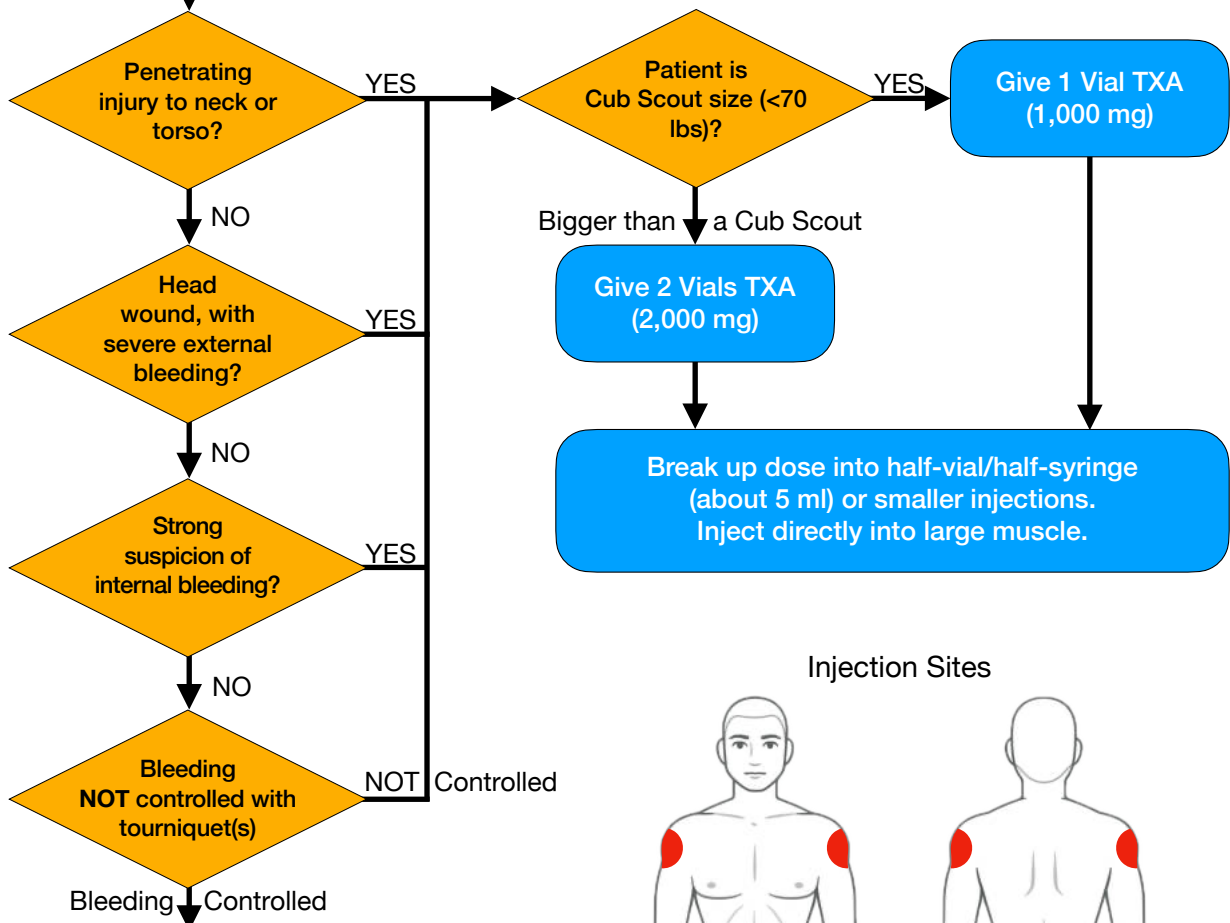
- Tourniquets applied prior to EMS arrival should be evaluated for effectiveness and appropriateness. If tourniquet can be safely removed, remove the tourniquet and apply pressure dressing.
- Do not apply tourniquet over joints.
- Reassess for re-bleeding frequently, especially after any patient movement.
- Delay in placement of a tourniquet for life threatening hemorrhage significantly increases mortality. Do not wait for hemodynamic compromise to apply a tourniquet.
- If feasible, transport patients directly to a Level 1 or Level 2 trauma center and provide earliest possible notification / trauma alert.
- Damage to the limb from tourniquet application is unlikely if removed in several hours.

Hemorrhage Control — Intramuscular Tranexamic Acid

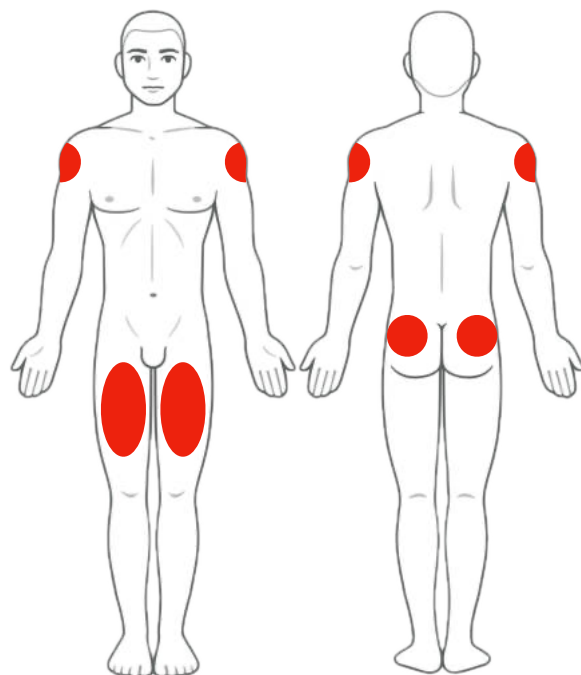
ENTRY CRITERIA:

- Meets criteria for TXA administration in Hemorrhage Control standing order **AND** cannot obtain IV/IO access, **OR**
- Penetrating injury with projectile (bullet, arrow, shot, etc.), **OR**
- High-energy accident such as a rollover ATV accident or fall from COPE equipment **AND** strong suspicion of internal injury,
AND
- Stop-The-Bleed interventions have been completed or are being simultaneously taken, **AND**
- Anticipated EMS arrival time is over 15 minutes.

Intramuscular TXA Algorithm



Injection Sites



About TXA (Tranexamic Acid)

- TXA is a procoagulant — it helps blood clot.
- There is essentially no evidence that TXA causes unwanted clotting, such as Deep Venous Thrombosis (DVT) or Pulmonary Embolism (PE).
- TXA has been shown to reduce death in severe trauma.
- With a significant penetrating injury and a potentially extended time to a hospital, TXA will save lives.

Shock Traumatic — ADULT & PEDIATRIC

SHOCK

Inadequate tissue perfusion that impairs cellular metabolism

Recognize Compensated Shock-Adult

- Anxiety
- Tachycardia
- Tachypnea
- Diaphoresis

Recognize Compensated Shock - Pediatric:

- Delayed capillary refill
- Decreased or bounding peripheral pulses
- Palpable central pulse, decreased distal pulse
- Cool extremities
- Altered mental status
- Mild tachypnea

HEMORRHAGIC SHOCK: Locations of blood loss include the chest, abdomen, pelvis, and multiple long bone fractures. Signs include pale, cool, clammy skin, tachycardia and/or hypotension.

NEUROGENIC SHOCK: May occur after an injury to the spinal cord disrupts sympathetic outflow resulting in unopposed vagal tone. Signs include warm, dry skin, bradycardia, and/or hypotension.

EMT STANDING ORDERS

E

- Routine Patient Care.
- Follow appropriate Trauma Protocols.
- Keep patient supine.
- Control active bleeding using direct pressure, pressure bandages, tourniquets (commercial preferred) see Hemorrhage Control Protocol, or hemostatic bandage.
- Keep warm and prevent heat loss.
- Assess blood glucose.
- Do not delay transport; consider hospital destination per Trauma Triage and Transport Decision Protocol.

ADVANCED EMT STANDING ORDERS - ADULT

A

- Administer IV fluid in the form of small boluses (e.g., 250 mL) to return the patient to a coherent mental status or palpable radial pulse.
- In the setting of traumatic brain injury, however, fluids should be titrated to maintain systolic blood pressure greater than 110 mm Hg.
- Total volume should not exceed 2000 mL without consultation with Medical Control. Do not delay transport for IV access.

ADVANCED EMT STANDING ORDERS - PEDIATRIC

- Administer IV fluid bolus 20mL/kg by syringe method (may repeat to a maximum 60 mL/kg) to improve clinical condition (capillary refill time \leq 2 seconds, equal peripheral and distal pulses, improved mental status, normal breathing).

PARAMEDIC STANDING ORDERS

P

- Consider tranexamic acid, see Hemorrhage Control Order Set.
- Consider obtaining a finger stick lactate level (if available and trained).
- If tension pneumothorax is suspected, consider needle thoracostomy. See Thoracic Injury Order Set.
- If cardiac tamponade is suspected, rapid transport and treat arrhythmias per Cardiac Order Sets.

PEARLS:

- For adult patients with uncontrolled external hemorrhagic or penetrating torso injuries: Titrate IV fluids to clinical end points:
 1. Delaying aggressive fluid resuscitation until operative intervention may improve outcome.
 2. Several poor outcomes associated with IV fluid administration have been suggested, including dislodgement of clot formation, dilution of clotting factors, and acceleration of hemorrhage caused by elevated blood pressure.
- Patients should be reassessed frequently, with special attention given to the lung examination to ensure volume overload does not occur.

Spinal Trauma — ADULT & PEDIATRIC

PURPOSE: This protocol provides guidance regarding the assessment and care of patients who have a possible spinal injury.

Patients who have experienced a mechanism of spinal injury (esp. high risk mechanisms. See Warning Box.) require spinal motion restriction (as described further on) and protection of the injury site if they exhibit:

- Midline spinal pain or tenderness with palpation.
- Abnormal (i.e. not baseline) neurological function or motor strength in any extremity.
- Numbness or tingling (paresthesia).
- Sensation is not intact and symmetrical (or baseline for patient).
- Cervical flexion, extension and/or rotation elicits midline spinal pain.

OR

- If they cannot competently participate in the assessment due to one of the following:
- Altered mental status (e.g., dementia, preexisting brain injury, developmental delay, psychosis).
- Alcohol or drug intoxication.
- Unable to participate in assessment (e.g., distracted by significant injuries to self or others).
- Insurmountable communication barriers (e.g., deafness, or hard of hearing, language barrier).

Patients without any of the above findings should generally be transported without the use of a cervical collar or other means to restrict spinal motion. Utilize spinal motion restriction only where, in the professional judgment of the provider, the patient is at high risk for spinal injury as described above or with clear clinical indications of injury (e.g., midline spinal pain or deformity of the spine).

EMT, ADVANCED EMT, PARAMEDIC STANDING ORDERS

E
/
A
/
P

- Routine Patient Care.
- Maintain manual in-line stabilization during assessment.
- Minimize spinal movement during assessment and extrication.
- Self-extrication by patient is allowable if patient is capable.
- A long backboard, scoop stretcher, vacuum mattress, or other appropriate full length extrication device may be used for extrication if needed. Do not use short board or KED device.
- Apply adequate padding to prevent tissue ischemia, minimize discomfort and maintain spinal neutrality after removing helmet or pads.

If patient requires spinal motion restriction:

- Apply a rigid cervical collar.
 - If collar does not fit properly or patient poorly tolerates collar (e.g., due to anxiety, shortness of breath, torticollis), apply soft collar, towel roll and/or padding.
- Allow ambulatory patients to sit on stretcher and then lie flat. Position backboarded patient on stretcher then remove backboard.
- Situations or treatment priorities may require patient to remain on rigid vacuum mattress or backboard including the combative patient, elevated intracranial pressure, see Traumatic Brain Injury Protocol or rapid transport of unstable patient.
- With patient lying flat, secure patient firmly with all stretcher straps and leave collar in place. Instruct patient to avoid moving head or neck as much as possible.
- Elevate stretcher back only if necessary for patient compliance, respiratory function, or other significant treatment priority.
- Patients with nausea or vomiting may be placed in a lateral recumbent position. Maintain neutral head position with manual stabilization, padding/pillows, and/or patient's arm.

Pediatric Patients Requiring a Child Safety Seat

If child requires spinal motion restriction, transport in a child safety seat/device see Pediatric Transportation Policy.

- Apply cervical collar. Use rolled towels/padding if infant/child will not tolerate collar.
- Patient may remain in own safety seat after motor vehicle crash if it meets the 5 criteria listed in Pediatric Transportation Policy.
- If required treatment (e.g., airway management) cannot be performed in a safety seat, secure patient directly to stretcher using padding and pediatric-sized restraints.

Orders Continue

Spinal Trauma — ADULT & PEDIATRIC

Spinal Trauma — ADULT & PEDIATRIC

Orders Continued



Long backboards do not have a role for patients being transported between facilities. If the sending facility has the patient on a long backboard or is asking EMS to use a long backboard for transport, EMS providers should discuss not using a long backboard with the sending facility physician before transporting a patient. If a long backboard is used, it should be padded to minimize patient discomfort.



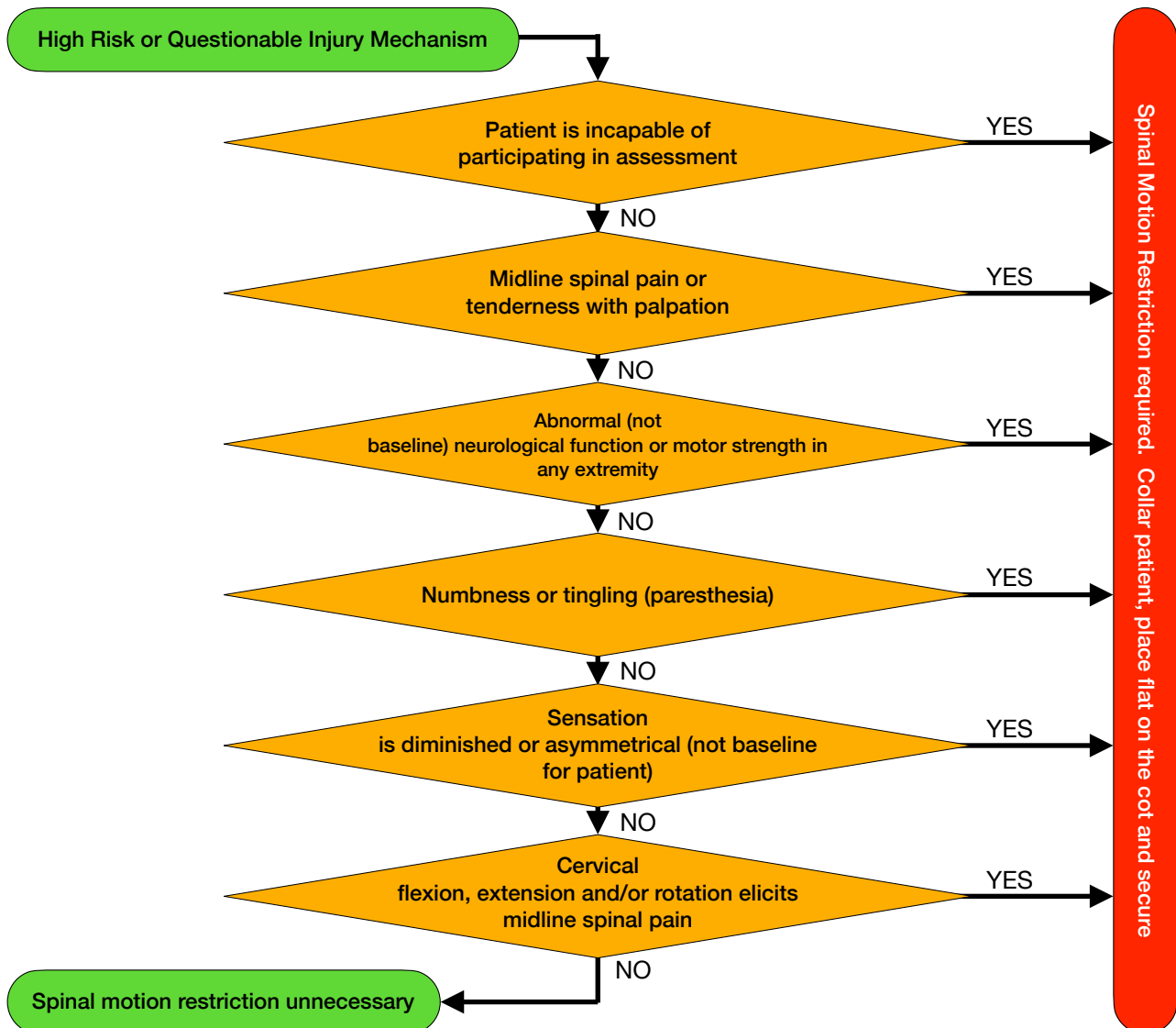
RED FLAG: Mechanisms that indicate a high risk for spinal injury include:

- Motor vehicle crash >60 mph, rollover, ejection (low-speed, rear-end can usually be excluded).
- Falls >3 feet/5 stairs (patient standing with feet 3' above floor).
- Axial load to head/neck (e.g., diving accident, heavy object falling onto head, contact sports).
- Significant injury or mechanism of injury above the clavicle.
- Injuries involving motorized recreational vehicles.
- Bicycle struck/collision.

PEARLS:

- For adult patients with uncontrolled external hemorrhagic or penetrating torso injuries:
 - Titrate IV fluids to clinical end points:
 1. Delaying aggressive fluid resuscitation until operative intervention may improve outcome.
 2. Several poor outcomes associated with IV fluid administration have been suggested, including dislodgement of clot formation, dilution of clotting factors, and acceleration of hemorrhage caused by elevated blood pressure.
- Patients should be reassessed frequently, with special attention given to the lung examination to ensure volume overload does not occur.

Spinal Trauma — ADULT & PEDIATRIC



EMT/ADVANCED EMT STANDING ORDERS

E/A

- Routine Patient Care.
- If in shock, see Shock Traumatic Order Set.
- Impaled Objects:
 - Secure in place with a bulky dressing.
- Open chest wound:
 - Cover with an occlusive dressing or use a commercial device; if the patient's condition deteriorates, remove the dressing momentarily and reapply.
- Flail segment with paradoxical movement and in respiratory distress:
 - Consider positive-pressure ventilation.
 - Do not splint the chest.
- Consider Air Medical Transport.

PARAMEDIC STANDING ORDERS - ADULT

P

- Consider pain management, see Pain Management Order Set.
- In presence of tension pneumothorax*, perform needle decompression using 10 – 16 gauge ≥ 3.00 inch angiocath or any other commercially available device intended for needle decompression. Repeat decompression may be necessary with returned signs of tension pneumothorax.

PARAMEDIC STANDING ORDERS - PEDIATRIC

- Consider pain management, see Pain Management Order Set.
- In presence of tension pneumothorax*, perform needle decompression using 14 – 16 gauge ≥ 2.00 inch angiocath or any other commercially available device intended for pediatric needle decompression. Repeat decompression may be necessary with returned signs of tension pneumothorax.

* Signs and symptoms of Tension Pneumothorax:

- Asymmetric or absent unilateral breath sounds.
- Increasing respiratory distress or hypoxia.
- Increasing signs of shock including tachycardia and hypotension • JVD.
- Possible tracheal deviation above the sternal notch (late sign).

PEARLS:

Needle decompression sites, as trained:

- 2nd intercostal mid-clavicular line.
- 4th to 5th intercostal anterior axillary line.

Traumatic Brain Injury (TBI) — ADULT & PEDIATRIC

EMT STANDING ORDERS

E

- Routine Patient Care.
- If breathing is inadequate, ventilate with 100% oxygen utilizing normal ventilation parameters, maintaining SpO₂ >90%.
- If capnography is available:
 - Ventilate to maintain a capnography reading of 35 – 40 mmHg.
 - Do not hyperventilate unless clear signs of cerebral herniation are present.
 - If signs of cerebral herniation are present, maintain capnography of 30 – 35 mmHg. If capnography is not available, ventilate at the following rates:
 - Adult: 20 breaths per minute.
 - Child: 25 breaths per minute.
 - Infant: 30 breaths per minute.
 - Discontinue hyperventilation when signs/symptoms improve.
- Assess and document pupillary response and Glasgow Coma Scale every 5 minutes.
- Check blood glucose; if hypoglycemic, see Hypoglycemia Order Set.
- For moderate to severe TBI, utilize long backboard for spinal motion restriction and elevate patient's head to help control intracranial pressure (ICP).

ADVANCED EMT STANDING ORDERS - ADULT

A

- Administer 0.9% NaCl (in the form of small boluses, i.e., 250 mL) to maintain systolic blood pressure greater than 110 mm Hg.
- Total volume should not exceed 2000 mL without consultation with Medical Control. Do not delay transport for IV access.

PARAMEDIC STANDING ORDERS - ADULT

P

- Consider intubation if GCS is < 8.
- Consider sedation for patients that are combative and may cause further harm to self and others.
 - Midazolam 2.5 mg IV/IN may repeat once in 5 minutes or; 5 mg IM may repeat once in 10 minutes.

PARAMEDIC STANDING ORDERS - PEDIATRIC

P

- Administer fluid bolus 20 mL/kg; may repeat x2 (maximum total 60 mL/kg) to improve clinical condition (capillary refill time ≤ 2 seconds, equal peripheral and distal pulses, improved mental status, normal breathing).
- Administer fluid in a pediatric patient with normal systolic blood pressure and who has other signs of decreased perfusion including tachycardia, loss of peripheral pulses, and delayed capillary filling time of >2 seconds.
- Consider sedation for patients that are combative and may cause further harm to self and others.
 - Midazolam 0.05 mg/kg IV/IM or 0.1 mg/kg IN (maximum dose 3 mg); may repeat once in 5 minutes.

SIGNS OF HERNIATION (2 or More)



Extensor posturing, lack of motor response to noxious stimuli.

Asymmetric, dilated, or non-reactive pupils.

Decrease in the GCS > 2 points from a patient's best score, in a patient with an initial GCS < 9.

PEARLS:

If intubation or other advanced airway management is required, use extreme caution to avoid hypoxia. Intubation has been associated with worsened outcomes for TBI patients in the prehospital setting.

EMT STANDING ORDERS

E

- Routine Patient Care with focus on continuous manual chest compressions and AED use.
 - Ventilate with BVM, 1 breath every 10 compressions, ensure quality of ventilation with capnography, if available.
- Provide early airway intervention using oral and/or nasal airways and suction.
- Aggressively attempt to control internal and external hemorrhage.
 - See Shock Traumatic Order Set and Hemorrhage Control Order Set.
 - Apply pelvic binder.
 - Align long bone fractures, splint.
- Attempt to maintain spinal motion restriction by minimizing head movement. Do not apply a cervical collar before ROSC.
- Place a supraglottic airway device, see Supraglottic Airway.
- If ROSC occurs, see Post Resuscitative Care Order Set and transport to a Level I or Level II trauma center, if feasible.
- Consider not initiating resuscitation or early termination of efforts if there are obvious signs of death, injuries that are not compatible with life, or if there has been a prolonged downtime. See Resuscitation & Termination Protocol.

ADVANCED EMT STANDING ORDERS - ADULT

A

- Place IV/IO without interrupting chest compressions.
- Administer 500 mL – 1000 mL of IV fluid, repeat as needed. · Epinephrine is NOT recommended in traumatic cardiac arrest.

ADVANCED EMT STANDING ORDERS - PEDIATRIC

- Administer fluid bolus 20mL/kg of 0.9% NaCl by syringe method (may repeat to a maximum 60 mL/kg) to improve clinical condition (capillary refill time \leq 2 seconds, equal peripheral and distal pulses, improved mental status, normal breathing).

PARAMEDIC STANDING ORDERS

P

- Consider early placement of an endotracheal tube without interrupting chest compression. See Airway Management, Orotracheal Intubation, Cricothyrotomy-Percutaneous, or Surgical Cricothyrotomy.
 - Consider leaving supraglottic airway in place, if effective. Monitor placement with capnography.
- Perform bilateral needle chest decompression. See Thoracic Injuries.
- If ROSC consider Tranexamic Acid see Hemorrhage Control Order Set.
- Epinephrine and antidysrhythmics are not recommended in traumatic cardiac arrest

PEARLS:

- If arrest is caused by traumatic brain injury, survival is unlikely and early termination of efforts should be considered.
- Impact brain apnea is a phenomenon that occurs after head trauma causing lack of spontaneous respirations. It may or may not be associated with severe underlying brain injury. This can lead to death if ventilation is not rapidly restored.
- Always remember that a medical cardiac arrest can lead to trauma. For example, a cardiac arrest while driving causing a crash.

Table of Contents

Infectious Disease Control	74
----------------------------------	----

Contact Precautions:

Gown and gloves. (If gown is not available, change outer clothes after patient contact.)
Disinfect all surfaces with bleach or alcohol, as appropriate.
Disinfect care items that touched the patient, such as the stethoscope. Use disposable equipment when available.

Droplet / Airborne Precautions:

Contact precautions plus face mask, preferably N-95 (fitted or non-fitted), and eye covering.

Pox diseases (chicken pox, etc.):

Use contact precautions.

Patient should be sent home, and be isolated from others until able to go home. Individual may return to activities after all lesions have crusted over.

Gastroenteritis (suspected Norovirus):

Patient:

Use contact precautions.

Isolate until 48 hours after symptoms resolve.

Prevention:

Unit:

Cohort unit away from other units until no new cases for 48 hours.

All staff use contact precautions when in unit cohort area.

Fever (over 38° C or 100.4° F):

(If patient has been outside, retake temperature after 15-30 minutes in air-conditioned environment.)

Contact and Aerosol Precautions

Reference: <https://www.cdc.gov/infectioncontrol/basics/transmission-based-precautions.html>.

Table of Contents

Airway Management – ADULT76

Airway Management – PEDIATRIC.....77

Continuous Positive Airway Pressure (CPAP)78

Cryothyroidotomy – Percutaneous.....80

Restraint Procedures – ADULT & PEDIATRIC81

EMT STANDING ORDERS

E/A

- Routine patient care.
- Establish airway patency.
 - Open the airway.
 - Suction as needed.
 - Clear foreign body obstructions.
- Titrate oxygen saturation to 94% - 98%.
- Consider inserting an oropharyngeal and/or nasopharyngeal airway adjunct.
- If patient has a tracheostomy tube, follow the procedure for Tracheostomy Care Procedure.
- Assist ventilations with a bag-valve-mask device and supplemental oxygen as needed.
- For adults in severe respiratory distress (Asthma/COPD/Pulmonary Edema/Near Drowning) consider use of CPAP. See CPAP Procedure.

PARAMEDIC STANDING ORDERS

P

- The appropriate method of airway management should be determined based on patient condition. If basic procedures are deemed inappropriate or have proven to be inadequate then more advanced methods should be used.
- For impending respiratory failure with intact gag reflex or trismus: consider Nasotracheal Intubation, see Nasotracheal Intubation.
- For apnea/respiratory failure or impending respiratory failure with impaired or absent gag reflex: consider intubation. See Orotracheal Intubation.
- If you cannot establish an airway or ventilate:
 - Consider Cricothyrotomy – Percutaneous Procedure.

EMT STANDING ORDERS

E/A

- Routine patient care.
- Establish airway patency.
 - Open Airway.
 - Consider patient positioning by placing padding under shoulders to ensure sternal notch and ear are at the same level.
 - Suction as needed.
 - Clear foreign body obstructions.
- If patient has a tracheostomy tube see Tracheostomy Care.
- Consider additional help.
- For respiratory distress:
 - Administer high concentration oxygen (preferably humidified) via mask positioned on face or if child resists, held near face.
 - Titrate oxygen saturation to 94% - 98%; observe for fatigue, decreased mentation, and respiratory failure.
 - For children with chronic lung disease or congenital heart disease, maintain or increase home oxygen level to patient's target saturations.

Note: Pulse oximetry is difficult to obtain in children. Do not rely exclusively on pulse oximetry. If child continues to exhibit signs of respiratory distress despite high oxygen saturation levels, continue oxygen administration.
- For respiratory failure or for distress that does not improve with oxygen administration:
 - Assist ventilations at rate appropriate for child's age. Reference Pediatric Color Coded Appendix.
 - If unable to maintain an open airway through positioning, consider placing an oropharyngeal and/or nasopharyngeal airway.
- Determine if child's respiratory distress/failure is caused by a preexisting condition.
 - For Allergic Reaction/Anaphylaxis, refer to the Allergic Reaction/Anaphylaxis Standing Orders.
 - For Asthma/Reactive Airway Disease/Croup, refer to the Asthma/Bronchiolitis/Croup Standing Orders.
- For pediatrics in severe respiratory distress due to asthma consider use of CPAP. See CPAP Procedure.

PARAMEDIC STANDING ORDERS

P

- The appropriate method of airway management should be determined based on patient condition. If basic procedures are deemed inappropriate or have proven to be inadequate then more advanced methods should be used.
- If feasible, place an orogastric tube to decompress the stomach.
- If you cannot establish an airway or ventilate, see Cricothyrotomy Percutaneous Procedure.

Pediatric Respiratory Distress

- Child is able to maintain adequate oxygenation by using extra effort to move air.
- Signs include increased respiratory rate, sniffing position, nasal flaring, abnormal breath sounds, head bobbing, intercostal retractions, mild tachycardia.

Pediatric Respiratory Distress

- Hallmarks of respiratory failure are:
- Respiratory rate less than 20 for children <6 years old.
 - Respiratory rate less than 12 for children <16 years old.
 - Respiratory rate >60 for any child.
 - Cyanosis, marked tachycardia or bradycardia, poor peripheral perfusion, decreased muscle tone, and depressed mental status.



Respiratory distress in children and infants must be promptly recognized and aggressively treated as patient may rapidly decompensate.

Continuous Positive Airway Pressure (CPAP)

EMT STANDING ORDERS

E/A

INDICATIONS

Spontaneously breathing patient in severe respiratory distress due to Asthma/COPD/ Congestive Heart Failure/Pulmonary Edema, Pneumonia or Drowning.

ABSOLUTE CONTRAINDICATIONS (Do not use)

- Cardiac/Respiratory arrest.
- Agonal respirations.
- Unable to maintain their own airway.
- Vomiting and/or active upper GI bleed.
- Respiratory distress secondary to trauma.
- Suspicion of pneumothorax.
- Pediatric patient who is too small for the mask sizes available.

RELATIVE CONTRAINDICATIONS (Use cautiously)

- Unable to follow commands.
- Agitated or combative behavior.

PROCEDURE

1. Ensure adequate oxygen supply for CPAP device.
2. Managing patient anxiety is extremely important. Reduce patient anxiety by coaching and minimize external stimuli as much as possible.
3. Place patient in upright position. Apply pulse oximetry, capnography nasal capture device and ECG as available and trained.
4. Choose appropriate sized device mask for patient, assemble the CPAP device, attach to oxygen supply and insure oxygen is flowing (follow manufacturer's directions for preparation for your particular device).
5. Place mask over face and secure with straps until minimal air leak.
6. Adjust Positive End Expiratory Pressure (PEEP) to 5 - 15 cmH₂O to effect for patient condition.
7. If device allows, titrate oxygen level to oxygen saturation of 94 – 98%.
8. Recheck mask for leaks and adjust straps as needed to minimize air leaks.
9. Reassure anxious patient.
10. Monitor pulse oximetry, capnography and ECG as available and trained.
11. If patient stabilizes, maintain CPAP for duration of transport and notify receiving hospital to prepare for a CPAP patient.
12. If patient begins to deteriorate, discontinue CPAP and assist respirations by BVM with PEEP valve.
13. Document CPAP procedure, including time and provider. Document serial pulse oximetry and capnography readings to demonstrate effects.

If a commercial device is not available you may consider using a BVM with PEEP valve:

1. Apply nasal cannula at 15 lpm.
2. Attach PEEP valve to BVM at desired PEEP level (5 – 15 cmH₂O).
3. Attach oxygen to BVM at least 15 lpm and ensure flow.
4. Maintain continuous mask seal on patient to deliver CPAP.



Keep in mind that CPAP uses large volumes of oxygen.

Procedure Continues

PARAMEDIC STANDING ORDERS

P

ADULT:

Consider administering anxiolytic:

Midazolam 2.5mg IV, may repeat once in 5 minutes, OR

Midazolam 5mg IM/IN, may repeat once in 5 minutes.

PEDIATRIC:

Consider administering anxiolytic:

Midazolam 0.05 mg/kg IV (single max dose 2.5mg), may repeat once in 5 minutes, OR

Midazolam 0.1 mg/kg IM/IN (single max dose 5mg), may repeat once in 5 minutes.



Administer benzodiazepines with caution in elderly patients or those with signs of hypercarbia or respiratory fatigue.

Cricothyroidotomy — Percutaneous

PARAMEDIC STANDING ORDERS

P

USE OF THIS PROCEDURE REQUIRES EXPLICIT MEDICAL DIRECTOR AUTHORIZATION.

INDICATIONS:

Inability to adequately oxygenate and ventilate using less invasive methods including BVM, supraglottic airways and endotracheal intubation.

EQUIPMENT:

- Commercially prepared percutaneous cricothyrotomy device (preferred) **OR**
- 16G or 18G IV cannula and 3.5mmID endotracheal tube adapter.
- Chlorhexadine wipes (or other available antiseptic prep).
- Bag-valve-mask.

PROCEDURE:

(May vary slightly with different devices)

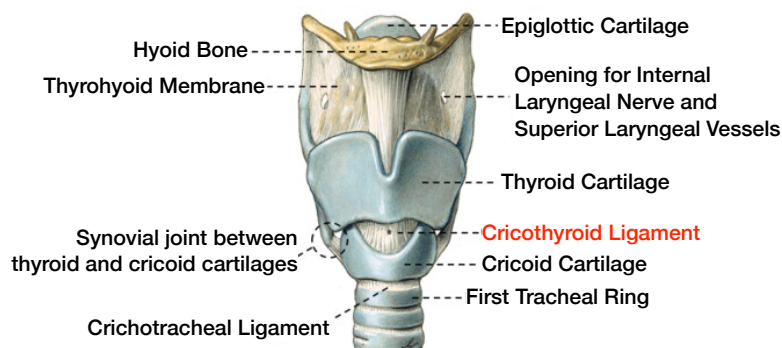
1. Position the patient supine and extend the neck as needed to improve anatomic view.
2. Prepare neck with Chlorhexidine or other available antiseptic prep.
3. Using non-dominant hand, stabilize larynx and locate the following landmarks: thyroid cartilage (Adam's apple) and cricoid cartilage (solid ring below the thyroid cartilage). The cricothyroid membrane lies between these cartilages.
4. Insert needle bevel through soft tissue and cricothyroid membrane at 90° angle while aspirating with syringe.
5. As soon as air is freely aspirated stop advancing the needle as this indicates entry into the trachea.
6. Direct the needle tip inferiorly by modifying angle to 60° from the patient's head.

If using Commercial Device:

7. Advance the assembly until the stopper is in contact with the skin.
 - Note: If air is not freely aspirated and the stopper has contacted the skin the stopper may need to be removed in order to reach the trachea. Be aware that if the stopper is removed there is increased risk of perforating the posterior aspect of the trachea.
- 7a. Remove the stopper while holding assembly firmly in place.

If using IV Cannula:

7. Advance the assembly approximately 1/4 inch.
8. Hold the needle firmly in place and advance only the plastic cannula off the needle into the trachea until the flange rests on the neck. Carefully remove the needle and syringe.
9. Secure cannula in place with neck strap. **If using IV cannula:** attach 3.5 mmID endotracheal adapter to end of IV cannula.
10. Inflate cuff if one is present.
11. Apply BVM with waveform ETCO₂ (if available) and ventilate the patient.
12. Confirm placement by assessing for bilateral lung sounds and presence of quantitative and qualitative ETCO₂ (if available).
13. Frequently reassess placement and continuously monitor ETCO₂ (if available).



Laryngeal Anatomy

- Your goal is to pierce the **Cricothyroid Ligament** with the device, then direct the device down toward the lungs while advancing the catheter.

Restraint Procedures — ADULT & PEDIATRIC

EMT/ ADVANCED EMT STANDING ORDERS – ADULT & PEDIATRIC

E/
A

INDICATIONS

Scouting America personnel should not restrain patients unless there is an immediate threat of harm to the patient or others. Scouting America personnel should await professional assistance whenever safely possible.

Patients who are a potential harm to themselves or others, or interfere with their own care and lack the ability to refuse care under the Refusal of Care Protocol may be restrained to prevent injury to the patient or crew and facilitate necessary medical care. Restraining must be performed in a humane manner and used only as a last resort.

PROCEDURE

1. Request law enforcement assistance, as necessary.
2. When appropriate, attempt less restrictive means of managing the patient, including verbal de-escalation.
3. Ensure that there are sufficient personnel available to physically restrain the patient safely.
4. Restrain the patient in a lateral or supine position. No devices such as backboards, splints, or other devices may be placed on top of the patient. Never hog-tie a patient. In order to gain control, the patient may need to be in a prone position, but must be moved to supine or lateral position as soon as possible.
5. The patient must be under constant observation by medical personnel at all times. This includes direct visualization of the patient as well as cardiac, pulse oximetry, and quantitative waveform capnography monitoring, if available.
6. The extremities that are restrained should have a circulation check at least every 15 minutes. The first of these checks should occur as soon possible after restraints are placed.
7. Documentation should include the reason for the use of restraints, the type of restraints used, the time restraints were placed, and circulation checks.
8. If a patient is restrained by law enforcement personnel with handcuffs or other devices that medical personnel cannot remove, a law enforcement officer should accompany the patient to the hospital in the transporting ambulance. If this is not feasible, the officer MUST follow directly behind the transporting ambulance to the receiving hospital.

PARAMEDIC STANDING & MEDICAL CONTROL ORDERS - ADULT

P

Anxiety Management (Anxious, apprehensive, but not aggressive) Goal is safe and compliant.

- If patient has own anxiety or agitation medications, consider administering those medications in accordance with the prescription instructions.

Contact Medical Control to consider:

ADULT

- Midazolam 10 mg IV/IM/IN, may repeat once in 10 minutes to a total of 20 mg, **OR**
- Ketamine: 4 mg/kg IM rounded to nearest 50 mg, maximum dose 500 mg, repeat 100 mg IM in 5-10 minutes.

PEDIATRIC

- Midazolam 0.2 mg/gk IM/IN, maximum single dose 8 mg, (or 0.1 mg/kg IV maximum single dose 4 mg) repeat every 5 minutes if needed, **OR**
- Ketamine 4 mg/kg IM rounded to nearest 25 mg, maximum dose 250 mg, repeat once in 5-10 minutes

Restraint Procedures — ADULT & PEDIATRIC

Procedure Continues

Restraint Procedures — ADULT & PEDIATRIC

Procedure Continued



The patient must be under constant observation by medical personnel at all times. This includes direct visualization of the patient as well as cardiac, pulse oximetry, and quantitative waveform capnography monitoring, if available.



Continued patient struggling against restraints may lead to hyperkalemia, rhabdomyolysis, and/or cardiac arrest. Chemical restraint may be necessary to prevent continued forceful struggling by the patient.



Excited/Agitated Delirium is characterized by extreme restlessness, irritability, and/or high fever. Patients exhibiting these signs are at high risk for sudden death.



Medications should be administered cautiously in frail or debilitated patients; lower doses should be considered.



Placing a patient in prone position creates a severe risk of airway and ventilation compromise and death.

PEARLS:

- There is an increased risk of apnea with >2 doses of benzodiazepines.
- Causes of combativeness may be due to comorbid medical conditions or due to hypoxia, hypoglycemia, drug and/or alcohol intoxication, drug overdose, brain trauma.
- Verbal de-escalation is the safest method and should be delivered in an honest, straightforward, friendly tone avoiding direct eye contact and encroachment of personal space

Table of Contents

Epi-Pen and Inhaler Availability Policy	84
Laboratory Testing and Prescription Policy	86
Licensed Personnel	87
Medication Definition	88
Medication Administration Policy	89
Non-Prescription Medication Administration Policy	91
Medication Administration Officers	92
High Risk Medications	93
Variable Dose Medications	94
Schedule I Controlled Substances	95

Epi-Pen and Inhaler Availability Policy

Readily Available Epi-pens and Inhalers

This policy implements the following new state statutes:

170-E:61 Availability of Epinephrine Auto-Injector. – The recreational camp nurse or, if a nurse is not assigned to the camp, the recreational camp administrator shall maintain for the use of a child with severe allergies at least one epinephrine auto-injector, provided by the child or the child's parent or guardian, which shall be readily accessible to the recreational camp staff caring for children requiring such medications.

170-E:63-a Availability of Asthma Inhalers. – The recreational camp nurse or, if a nurse is not assigned to the camp, the recreational camp administrator shall maintain for the use of a child with asthma at least one metered dose inhaler or a dry powder inhaler, provided by the child or the child's parent or guardian, which shall be readily accessible to the recreational camp staff caring for children requiring such medications.

with consideration for the following pre-existing state statute:

318:42 Dealing in or Possessing Prescription Drugs. –

It shall be unlawful for any person who is not a licensed pharmacist in a pharmacy registered in accordance with the provisions of this chapter to manufacture, compound, dispense, sell, offer for sale or have in possession any prescription drug as defined in RSA 318:1, XVII, provided that this section shall not prevent the following:

I. Persons from possessing prescription drugs dispensed to them pursuant to a lawful prescription or who are acting as an authorized agent for a person holding a lawful prescription. For purposes of this section, an authorized agent shall mean any person, including but not limited to a family member or caregiver, who has the intent to deliver the prescription drug to the person to whom the prescription drugs are lawfully prescribed.

Limited guidance has been provided regarding the implementation of these new laws, and their interaction with pre-existing pharmacy law. It is the interpretation of the Medical Director that:

- The readily accessible epinephrine auto-injectors or asthma inhaler (device) must be either the participant's prescribed device or a medical staff provided device, **AND**
- Use of a device on one individual that was prescribed for another individual violates NH RSA 318:42, **BUT**
- Under life-threatening circumstances, any available device may be used and such use is governed under NH RSA 627:3 (Competing Harms).

Given the above interpretation, the Scouting America – New Hampshire policy on readily available epinephrine auto-injectors and asthma inhalers is as follows:

- Participants who possess a device on their person for their own use in accordance with NH RSA 170-E:59 or NH RSA 170-E:63 have a readily available device.
 - Units with participants who possess their own device should, when possible, provide an adult leader trained on the use of the device to assist the participant if needed.
- For participants who are prescribed a device but are not authorized to personally possess the device:
 - The unit should provide adult leadership trained on the use of the device who shall ensure that they are in possession of the device and readily available to assist the participant at all times while under the supervision of unit personnel (this duty may be spread across multiple adult leaders, as needed).
 - Camp staff that provides supervision at times when unit supervision is not required will be trained on the use of these devices by the Medical Director or their designee.

Policy Continues

Epi-Pen and Inhaler Availability Policy

Policy Continued

- The participant's device should be provided to camp staff when the participant arrives at a location where camp staff provides supervision and be returned to the unit personnel when the participant departs.
- Camp medical staff shall have a camp-provided epinephrine auto-injector (both adult and pediatric if working with youth in the Cub Scout program) and an albuterol inhaler readily available when performing their duties as camp medical staff, subject to availability of the devices.
 - At all times, while camp is in session, at least one medical staff member who is available to respond to emergencies must be equipped as above.
 - For licensed EMT-P, LPN, RN, APRN, PA, MD or DO injectable epinephrine delivered by syringe may be substituted for an epinephrine auto-injector.
- The Camp Nurse or Medical Director may authorize and may provide devices to non-medical camp staff who have been trained in the proper use of the devices when it is deemed in the best interest of safety, and subject to the availability of the devices.

Laboratory Testing and Prescription Policy

Laboratory Testing

Laboratory testing in the camp setting is above and beyond the services usually offered by a camp. We choose to offer these services because it enhances both the health and welfare of our campers by providing fast, efficient medical care as well as minimizing the negative impact on the camping experience that removal to a formal medical care facility would have on the participant.

However, we are not the participants primary care providers nor are we a formal medical care facility, and we do not wish to intrude on or impose upon those domains. For this reason, no laboratory testing, whether point-of-care or send-out-testing will be performed without the express permission of the parent or guardian of a minor participant. If the parent or guardian does not wish to grant permission for us to provide these services in the camp setting, the minor camper will be entered into the formal medical system. The same applies to adults, who must provide consent for these services to be provided in the camp setting.

Send-out-testing will not be performed without the involvement and permission of the primary care provider. Because send-out-testing rarely returns results in the same day, the primary care provider must agree that the send-out testing will be ordered in their name, and that they will ensure follow up with the patient for any results that may require additional medical care or treatment. **If the primary care provider is unwilling to agree to these terms, or a primary care provider cannot be determined for the minor or adult participant, send-out-testing may not be ordered by camp medical staff.**

Prescriptions

Prescribing medication in the camp setting is above and beyond the services usually offered by a camp. We choose to offer these services because it enhances both the health and welfare of our campers by providing fast, efficient medical care as well as minimizing the negative impact on the camping experience that removal to a formal medical care facility would have on the participant.

However, we are not the participants primary care providers nor are we a formal medical care facility, and we do not wish to intrude on or impose upon those domains. For this reason, no prescription will be provided without the express permission of the parent or guardian of a minor participant. If the parent or guardian does not wish to grant permission for us to provide these services in the camp setting, the minor camper will be entered into the formal medical system. The same applies to adults, who must provide consent for these services to be provided in the camp setting.

When permitted in these standing orders, prescriptions may be called-in to a local pharmacy under the license of the medical director. For minor participants, their unit leader is the closest surrogate for the parent or guardian available in the camp site. Unit leadership is responsible for picking up the prescription for minor participants. Unit leadership will coordinate payment for the prescription with the parent or guardian and may be provided a copy of the participant's insurance card and other necessary information from the medical record to facilitate this process, **but only with the express permission of the parent or guardian.** Adult participants are responsible for picking up their own prescription.

All prescriptions provided under these standing orders must be returned to camp medical staff and entered into the med-call system. They will be administered by camp medical staff until the camper departs, at which time any remaining medication will be returned to the unit leader or adult participant, as appropriate.

Licensed Personnel

Personnel are considered licensed in the State of New Hampshire, and for all purposes under these standing orders, as follows:

Physician:

Holds a degree as an MD or DO, **AND**

Holds a valid, unrestricted, State of New Hampshire medical license, **OR**

Holds a State of New Hampshire Camp Physician License (<https://www.oplc.nh.gov/sites/g/files/ehbemt441/files/inline-documents/sonh/camp-license.pdf>).

Physician Assistant:

Holds a valid, unrestricted, State of New Hampshire physician assistant license.

Nurse Practitioner:

Holds a valid, unrestricted, State of New Hampshire nurse practitioner license.

Registered Nurse or Licensed Practical Nurse:

Holds a valid, unrestricted, State of New Hampshire nursing license, **OR**

Holds a valid, unrestricted, nursing license in a nurse licensure compact state: <https://www.ncsbn.org/nurse-licensure-compact.htm>.

EMS Provider:

Holds a valid, unrestricted, State of New Hampshire EMS license.

Important:

Licensure is the authority to practice delegated by the state. It is a legal authority.

Certification is proof of training and proficiency on a certain skill set.

Licensure is required to operate under these standing orders – certification DOES NOT grant any privileges under the standing orders.

Medication Definition

Medication Definition

Code of Federal Regulations, Title 21, 210.3 defines a drug product as follows:

Drug product means a finished dosage form, for example, tablet, capsule, solution, etc., that contains an active drug ingredient generally, but not necessarily, in association with inactive ingredients. The term also includes a finished dosage form that does not contain an active ingredient but is intended to be used as a placebo.

Based upon the above federal definition, a “prescription medication” or “non-prescription medication” for purposes of compliance with NH He-C 4003.39 Administration of Medication is interpreted as follows:

Prescription Medication: Any substance bearing a prescription label from a pharmacy, or administered in accordance with the order of an independent medical practitioner, regardless of route of administration and regardless of whether the substance could be legally obtained without a prescription.

Non-Prescription Medication: Any substance that contains an active ingredient based upon the manufacturer’s original packaging but which can be purchased without a healthcare providers order or prescription.

Supplements and foods, even if they are believed to have a therapeutic effect or are marketed to the public as having a therapeutic effect, are not considered medications. However, nothing in this policy prohibits treating a supplement or food as a medication when requested by a parent or guardian, or when medical staff determines that handling a supplement or food as a medication is in the best interest of health and safety.

Examples:

Medication: Displays “Drug Facts” and an active Ingredient.

MUST be treated as a medication.

Supplement: Displays “Supplement Facts” and no active Ingredient.

Does **NOT** need to be treated as a medication.

Food: Displays “Nutrition Facts” and no active Ingredient.

Does **NOT** need to be treated as a medication.

Drug Facts	
Active ingredient (in each chewable tablet) Loratadine 5 mg	Purpose Antihistamine
Uses temporarily relieves these symptoms due to hay fever or other upper respiratory allergies: <div> runny nose itchy, watery eyes sneezing itching of the nose or throat </div>	
Warnings Do not use if you have ever had an allergic reaction to this product or any of its ingredients. Ask a doctor before use if you have liver or kidney disease. Your doctor should determine if you need a different dose. When using this product do not take more than directed. Taking more than directed may cause drowsiness. Stop use and ask a doctor if an allergic reaction to this product occurs. Seek medical help right away. If pregnant or breast-feeding, ask a health professional before use. Keep out of reach of children. In case of overdose, get medical help or contact a Poison Control Center right away.	
Directions ■ chew or crush tablets completely before swallowing. adults and children 6 years and over chew 2 tablets daily; not more than 2 chewable tablets in 24 hours children 2 to under 6 years of age chew 1 tablet daily; not more than 1 chewable tablet in 24 hours children under 2 years of age ask a doctor consumers with liver or kidney disease ask a doctor	
Other information ■ phenylethanolamines: contains phenylalanine 1.4 mg per chewable tablet ■ safety sealed: do not use if the individual blister unit imprinted with Children's Claritin® is open or torn ■ store between 20° to 25°C (68° to 77°F)	
Inactive ingredients aspartame, citric acid anhydrous, colloidal silicon dioxide, D&C red No. 27 aluminum lake, FD&C blue No. 2 aluminum lake, flavor, magnesium stearate, mannitol, microcrystalline cellulose, sodium starch glycolate, stearic acid	
Questions or comments? 1-800-CLARITIN (1-800-252-7484)	

Supplement Facts	
Serving Size: 2 Gummies	
Amount Per Serving	% DV
Calories	25
Total Carbohydrate	6 g 2%
Total Sugars	5 g 10%
Includes 5 g Added Sugars	9%
Sodium	15 mg <1%
Melatonin	10 mg 1
PURE Zzzz™ Blend	30 mg 1
Chamomile (Matricaria recutita L.) flower extract, lemon balm (Melissa officinalis L.) leaf extract, lavender (Lavandula officinalis Chaix) flower extract	
* Percent Daily Values (%DV) are based on a 2,000 calorie diet. † Daily Value not established.	

10 MG MELATONIN
 DRUG-FREE
 FREE OF GELATIN
 FREE OF HIGH-FRUCTOSE CORN SYRUP

Nutrition Facts	
About 12 servings per container	
Serving size	4 tablets
Amount per serving	
Calories	60
% Daily Value	
Total Fat 0g	0%
Sodium 0mg	0%
Total Carbohydrate 15g	5%
Total Sugars 15g	
Includes 15g Added Sugars	30%
Protein 0g	
Not a significant source of Sat. Fat, Trans Fat, Cholest., Dietary Fiber, Vitamin D, Calcium, Iron, and Potas.	
INGREDIENTS: DEXTROSE (D-GLUCOSE), MALTODEXTRIN, CITRIC ACID, MAGNESIUM STEARATE, MICROCRYSTALLINE CELLULOSE, NATURAL & ARTIFICIAL ORANGE FLAVOR, ASCORBIC ACID, YELLOW #6.	

Medication Administration Policy at Council Events

The Scouting America – New Hampshire medication administration policy is developed to ensure proper and safe administration of medications at Scouting America – New Hampshire events and events of its subsidiary units. This policy is to be used at all Scouting America – New Hampshire events that involve an overnight stay, even if such events do not meet the New Hampshire Health and Human Services definition of a youth recreation and skills camp.

Although individual units are recommended to comply with this policy, they may develop their own unit-based policies for medication administration at unit-based events. Unit-based events are defined as an event where participation is limited to Scouting America members registered with the same chartered organization. Notwithstanding this definition, a unit based event may invite other Scouting America or outside personnel as expert instructors or support staff and remain a unit-based event.

This policy is based upon the following Youth Recreation and Skills Camp Rules issued by the New Hampshire Department of Health and Human Services:

He-C 4003.39 Administration of Medication.

- (b) Prescription medications [except Epi-pens and inhalers] and non-prescription medications other than topical substances shall be administered to campers only by authorized staff and only in accordance with the applicable medication order.

He-C 4003.40 Training for YRC Staff.

- (a) Prior to administering prescription or non-prescription medication to any camper, YRC staff shall:
- (2) Complete and document training on medication safety and administration delivered by a physician, an APRN, an RN, or an LPN practicing under the direction of an APRN, RN, or physician; or
 - (3) Successfully complete a nationally-recognized course on medication safety and administration having standards that are no less stringent than the Academy of Pediatrics on-line course: Medicine Administration in Early Education and Child Care.

And based upon the following Scouting America Medication Use in Scouting Guidelines:

The Scouting America's guiding principles for the safe use of medications include:

- All medication is the responsibility of either the individual taking the medication or that individual's parent or guardian.
- An adult leader, after obtaining all the necessary information and permission, can agree to accept the responsibility of making sure a youth takes the necessary medication at the appropriate time, but the Scouting America does not mandate or necessarily encourage the leader to do so.
- Scouting America council camps may have their own standards and policies regarding the administration of medications.
- State or local laws that are more limiting than camp policies supersede any Scouting America guidance and must be followed.

Medication Administration Officers

At events where medications are required to be maintained and administered by event medical staff, the medical staff will provide med-call services to administer medications to participants. At events where medications are to be retained by individual units, units may set their own policies for medication administration consistent with law and Scouting America policy.

Policy Continues

Compliance Philosophy

At events where units control and administer their own medications, units may set their own compliance philosophy. At events where medications are required to be maintained and administered by event medical staff, the following compliance philosophy shall apply:

If a youth member does not comply with taking their medications as prescribed on the MAR, the medication administration officer will initiate the youth member's unit-based medication assistance plan (if the youth member has one), and notify event medical staff regarding one of the following outcomes:

1. A unit-based medication assistance plan has been initiated with the youth and has been successful, **OR**
2. The unit-based medication assistance plan has been ineffective, and the youth remains unmedicated, **OR**
3. The youth has no assistance plan and remains unmedicated.

If the youth remains unmedicated, the event medical staff will instruct the unit leadership to contact the youth's parent or guardian and instruct them to come to the event. The parent or guardian must either:

1. Bring the youth into compliance with their medication regimen AND develop an assistance plan satisfactory to the unit and event medical staff for continued compliance OR remain on-site to ensure their youth's compliance (first event only), **OR**
2. Remove their youth from the event.

Except under emergency circumstances endangering life, limb or safety, event medical staff and unit based staff will **NOT** force youth to take medications against their will.

Preparation of the Medication Administration Record (MAR) and Medications

The parent or guardian should complete the MAR for youth and adults should complete the MAR for themselves with the information regarding the participant's prescriptions as described on the prescription bottle label.

Sealed pill dose-packs are strongly recommended for participants whose daily regimen contains three or more medications. This is an important error prevention precaution for patients with complex medication regimens.

Medication must be in the original pharmacy containers – either a pill bottle or other container with an original, unmodified pharmacy applied label or a sealed pill dose-pack packaged by a pharmacy. No other containers are acceptable, including daily dose pill boxes. **Medications that arrive for the event in non-original containers will be rejected by event medical staff.** This will result in the individual being unable to attend the event if they cannot be properly medicated using medications that are in their original pharmacy containers.

Non-prescription medications being administered under order of a medical provider must have an original, unmodified pharmacy applied label indicating the provider's prescribed indication, dose, and interval. These medications will be administered as if they were prescription medications. Other "as-needed" non-prescription medication will be administered by medical staff in accordance with these standing orders **only**.

Non-Prescription Medication Administration Policy

Non-Prescription (Over-the-Counter) Medication Administration

Council medical personnel who possess a license that authorizes the administration of medications are authorized to administer the following non-prescription (over-the-counter) medications:

- Acetaminophen (Tylenol)
- Antibiotic Ointment (Bacitracin, Neosporin)
- Bismuth Subsalicylate (Pepto-Bismol, Kaopectate)
- Calamine Lotion
- Calcium Carbonate (Tums, Rolaids)
- Cetirizine (Zyrtec)
- Cough Drops
- Diphenhydramine (Benadryl)
- Fexofenadine (Allegra)
- Hydrocortisone 1% (Cortisone)
- Ibuprofen (Advil, Motrin)
- Loratadine (Claritin)
- Phenylephrine (Sudafed PE)
- Polyethylene Glycol (Miralax)
- Pseudoephedrine (Sudafed)

Administration of the above over-the-counter medications are subject to the following restrictions:

- Good judgement must be used that the condition the medication is intended to treat is likely to be present in the individual being medicated and the dosing is reasonable given the individual's medical conditions and other medications.
- The medication may only be used for the indication(s) on the manufacturer's packaging.
- The medication must be dosed in accordance with the manufacturer's packaging.
- If dosing instructions are not available for a particular age or weight group, that group cannot receive the medication under this policy.

For purposes of the above restrictions, "manufacturer's packaging" includes any printed information on the actual container (i.e. bottle), outer packaging (i.e. box), package insert, official company website of the manufacturer specific to the medication, or any other information directly referenced by any of the previous sources.

Nothing in this policy shall be construed to restrict the use of an over-the-counter medication in accordance with an order or prescription from a medical provider not withstanding the manufacturer's indications or instructions.

Nothing in this policy shall be construed to prevent the use of an over-the-counter medication in accordance with these Patient Care Standing Orders, not withstanding the manufacturer's indications or instructions.

The existence of this policy shall neither mandate nor guarantee the presence of any of the listed medications at any particular location.

Medication Administration Officers

Medication Administration Officers will be either:

1. An MD, DO, APRN, PA, RN, LPN or EMT who holds either an active, unrestricted license to practice issued or recognized by the State of New Hampshire or a Camp Physician License, **OR**
2. A registered adult leader who has completed the American Academy of Pediatrics online course: Medicine Administration in Early Education and Child Care.

Medication administration officers are approved by the Council Medical Director or their designee. Medication administration officers become adjunct medical staff for the duration of their unit's participation in the event.

Medication administration officers may be camp staff, other camp volunteers, or unit leadership.

Medication administration officers will administer medication to their unit members in the manner prescribed on the Medication Administration Record (MAR).

Unit-Embedded Medication Administration Officers

Medication Administration Officers who are members of a unit attending the event are "Unit Embedded Medication Administration Officers".

Individual units attending Scouting America – New Hampshire events are encouraged to provide one or more adult leaders to serve as unit-embedded medication administration officers, under the supervision of the event Camp Health Officer (CHO). Units are encouraged to provide 24/7 coverage. If no medication administration officer is present during med-call, all medications will be required to be administered by event medical staff, which may result in delays.

When appropriate storage conditions can be maintained, **AND** the unit has 24/7 coverage with a unit-embedded medication administration officer, the unit-embedded medication administration officer(s) may store their unit's medications with the unit, rather than in the central medication storage location.

AT ALL TIMES, medications stored with the unit must be kept:

- Locked, with a key or combination accessible **ONLY** to the medication administration officer(s). Trunk locks with standard keys and other locking mechanisms with "universal" keys are **NOT** acceptable locking devices for purposes of this policy, **OR**
- Physically in the possession of the unit-embedded medication administration officer, such as in a pocket or daypack that remains in the possession of the medication administration officer.

High Risk Medications

High Risk Medications

Certain medications are high risk because of the combination of variable dosing and high potential for dangerous side effects when incorrectly dosed.

The following medications are considered high risk and must be administered in accordance with this policy:

- Insulin
- All Schedule II - V controlled substances.
- Heparin (including low molecular weight heparin)
- Enoxaparin
- Warfarin
- Direct oral anticoagulants
- Chemotherapeutic agents

EXCEPT IN LIFE THREATENING EMERGENCY, all high risk medications require an independent double-check of the dosing and route of administration of the medication.

The independent double-check will be conducted as follows:

- Individual 1 will prepare the medication for administration based upon the ordering physician's instructions.
- Individual 2 will independently calculate the dose of the medication into the units of administration which are able to be visually confirmed (milliliters, tablets, etc.) **NOT** milligrams, units or other non-visualizable measurement quantities. Individual 2 will then view the medication prepared by individual 1 and determine that individual 1's preparation of the medication is correct.

To ensure this review is independent, there will be **NO** discussion of the dose of the medication between individual 1 and individual 2 until the above process is complete. This includes no discussion of the non-visualizable quantity. For example: it is prohibited to say "the Scout needs 5 units of insulin." The dose must be independently verified from the order of the prescribing provider by both individual 1 and individual 2, **WITHOUT DISCUSSION BETWEEN THEM.**

After this independent check of the dose preparation is completed, the route of administration will be confirmed by both individual 1 and 2. Only then may the medication be administered.

Individual 1 must be:

- A parent, adult unit leader, or adult camp staff member, who is familiar with the dosing and administration of the medication, **OR**
- The participant themselves, including a minor participant, **IF** the minor participant has a signed authorization from **BOTH** the parent and the prescribing provider attesting to his or her ability to independently dose and administer the medication, **OR**
- An MD, DO, PA, APRN, RN, LPN, LVN, or Paramedic licensed to practice in the State of New Hampshire **AND** on the paid or volunteer medical staff of the camp.

Individual 2 must be:

- An MD, DO, PA, APRN, or RN licensed to practice in the State of New Hampshire **AND** on the paid or volunteer medical staff of the camp. LPNs, LVNs and Paramedics may **NOT** be individual 2.

Variable Dose Medications

Variable Dose Medications

To help prevent errors, medications with variable dosing will have the variable dosing prescribed **IN WRITING** by the prescribing provider in a fashion that minimizes calculation by camp medical staff. Tabular format is required. If the prescribing provider feels that a tabular format is not appropriate, the order must be approved by the camp medical director.

For example, an insulin sliding scale will be provided as follows:

Glucose Level	Units of Regular Insulin
150-200	2 units
201-250	4 units
251-300	6 units
301-350	8 units
351-400	10 units
401 or higher	12 units and transport to hospital

The following orders must be converted into a tabular form by the prescribing provider and signed by the prescribing provider before the medication is accepted by camp medical staff:

“Insulin response to elevated glucose: 150-200, give 2 units; 201-250, give 4 units; 251-300, give 6 units; 301-350, give 8 units; 351-400, give 10 units, above 400, give 12 units and transport to the hospital.”

“In response to glucose elevated above 150 give two units regular insulin for every 50 mcg/ml of glucose (or fraction thereof) above 150. Maximum dose, 12 units. If maximum dose is indicated, transport to the hospital”

Schedule I Controlled Substances

Schedule I Controlled Substances

Rationale:

- While the US Congress has decided to defund enforcement of marijuana and marijuana analogue use and possession, and
- While many states (including New Hampshire) have medicinal and/or recreational marijuana laws permitting the possession and use of marijuana,
- Congress has **NOT** repealed laws prohibiting the possession and use of marijuana and its analogues and derivatives, and
- Federal law supersedes state law,
- Therefore marijuana use and possession remains illegal, even though its use and possession have been “decriminalized” at the state and federal levels.

Policy:

Based upon the above rationale, no DEA Schedule I substance, including marijuana or marijuana analogues or derivatives, will be possessed by or administered by Scouting America – New Hampshire medical staff. This includes tetrahydrocannabinol (THC), cannabidiol (CBD), and any other derivative of marijuana, in any form, including but not limited to smokeable, vapeable, tablets, liquid, or “gummies”.

Participants in Scouting America – New Hampshire programs who are using Schedule I substances must:

- Have a signed order from a healthcare provider stating that the Schedule I substance is medically necessary, **AND**
- Self-administer this medication or, if a minor, have the medication administered by a parent or by unit leadership, and who shall be the sole possessor of the medication for the duration of the event, **AND**
- The individual or the medication administrator shall **NOT** be medical staff.

Nothing in this policy exempts Schedule I medications or the individuals administering said medications from other medication possession and administration requirements applicable to the activity being conducted, including the Medication Administration Officer policy **EXCEPT** that such individual shall **NOT** be medical staff.

Table of Contents

Supplemental Resources98

Revision History99

Supplemental Resources

Metered Dose Inhaler Training:

<https://www.youtube.com/watch?v=tp479j15x6Q>

<https://www.youtube.com/watch?v=fHYTz-ZoRLw>

Auto-injector Training:

<https://www.youtube.com/watch?v=EN83hen4D-Y>

Medication Administration in Early Care and Education Settings:

<https://www.aap.org/Medication-Administration-in-Early-Care-and-Education-Settings-2024>

Revision History

Revision	Date	Summary of Changes
2022-01	04/17/2022	Initial publication.
2023-01	06/24/2023	<p>Added: Airway Management – ADULT. Airway Management – PEDIATRIC. Cryothyroidotomy – Percutaneous. Continuous Positive Airway Pressure (CPAP). Document Table of Contents. Section Dividers with Tables of Contents.</p> <p>Edited: Routine Patient Care (corrected severe hypoxia from 93% to 90%). Restraint Procedures duplicated into new procedures section. Medical Administration Officers – PILOT PROGRAM (changed “Camp Medical Officer” to “Camp Health Officer” and “CMO” to “CHO”).</p> <p>Typographic corrections: Signature page. Routine Patient Care. Asthma, COPD, RAD, Bronchiolitis, Croup. Behavioral Emergencies. Childbirth & Newborn Care. Hyperglycemia. Hyperthermia. Hypothermia. Nausea or Vomiting. Obstetrical Emergencies. Opioid Overdose. Pain Management – ADULT. Pain Management – PEDIATRIC. Poisoning/Overdose. Seizures. Sepsis. Non-Traumatic Shock. Stroke – ADULT. Syncope. Acute Coronary Syndrome. Bradycardia – ADULT. Bradycardia – PEDIATRIC. Cardiac Arrest – ADULT. Cardiac Arrest – PEDIATRIC. Post Resuscitative Care. Tachycardia – ADULT. Tachycardia – PEDIATRIC. Burns/ Electrocutation/Lightning. Crush Injuries. Eye & Dental Injuries. Hemorrhage Control. Shock Traumatic. Spinal Trauma. Thoracic Injuries. Traumatic Brain Injury. Traumatic Cardiac Arrest. Medication Administration Policy.</p>
2025-01	06/24/2025	<p>Added: Non-Prescription (Over-the-Counter) Medication Administration Policy. Laboratory Testing and Prescription Policy.</p> <p>Edited: Medication Administration Officer program change from pilot program to formal policy.</p>
2025-02	07/09/2025	<p>Added: High Risk Medications Policy. Variable Dose Medications Policy. Schedule I Controlled Substances Policy.</p> <p>Edited: Medication Administration Officer Policy – Added unit-based medication administration officer specifications and unit-based storage requirements. Reordered the policy to accommodate these changes.</p>
2025-03	7/11/2025	<p>Added Hemorrhage Control – Intramuscular Tranexamic Acid. Medication Definition.</p> <p>Edited: Document rebranded for Scouting America. Removed copy of Restraint Procedure from medical standing orders. Updated link to AAP medication administration course.</p>



July 11th, 2025