AUTHORIZED PROCEDURES FOR EMT-1 PERSONNEL
ALWAYS USE STANDARD PRECAUTIONS

POLICY
Upon proper training, EMTs may perform all procedures authorized in the EMT Basic Scope of Practice per CCR Title 22, Division 9, Chapter 2.

EMT OPTIONAL SKILLS
- Accreditation for EMTs to practice optional skills shall be limited to those whose certificate is active and who are employed within the jurisdiction of the Marin County EMS Agency by a provider who is part of the Marin County organized EMS system.
- The following optional skills may be performed after the EMT has received training approved by the Marin County EMS Agency.
  - Administration of prepackaged Atropine and Pralidoxime Chloride
  - Administration of epinephrine by *prefilled syringe and/or drawing up* the proper drug dose into a syringe for suspected anaphylaxis and/or severe asthma.
OXYGEN THERAPY PROCEDURE
BLS

ALWAYS USE BODY SUBSTANCE ISOLATION PRECAUTIONS

INDICATION
- Signs or symptoms of hypoxia, e.g., SpO2 < 94%, respiratory distress, ALOC
- Significant trauma or blood loss

EQUIPMENT
- Airway adjuncts
- Pulse Oximetry
- Nasal cannula
- Non-Rebreather mask
- Bag Valve Mask (BVM)
- Suction

PROCEDURE
- Apply appropriate oxygen delivery device
- If pulse oximetry available, titrate SpO2 between 94 - 99%
- Consider the need for assisted ventilation for inadequate breathing

RELATED POLICIES & PROCEDURES
- BLS 1 Routine Medical Care
ADMINISTRATION OF ORAL GLUCOSE BLS PROCEDURE
ALWAYS USE STANDARD PRECAUTIONS

INDICATIONS
- Patients with blood glucose measurement of < 60

EQUIPMENT
- Oral glucose and/or juices that contain sugar (no diet drinks)
- Glucose Paste

PROCEDURE
- Responsive patients with a gag reflex:
  - Give sweetened fluids (orange/fruit juice) to drink
  - Do not use "diet" preparations as they do not contain sugar
- Lethargic patients unable to drink fluids:
  - Place patient in left or right lateral position
  - Place Glucose paste 30 gm PO between the dependent cheek and gum
  - Monitor airway, being prepared to suction if necessary
- Transfer patient to higher level of care as soon as possible
ADMINISTRATION OF EPI-PEN
BLS PROCEDURE
ALWAYS USE BODY SUBSTANCE ISOLATION PRECAUTIONS

INDICATION
- Patients experiencing anaphylactic reaction and/or severe asthma. The following symptoms may be present:
  - Stridor
  - Bronchospasm / wheezing / diminished breath sounds
  - Severe abdominal pain
  - Respiratory distress (nasal flaring or grunting in pediatric patients)
  - Tachycardia
  - Shock (SBP < 100)
  - Edema of the tongue, lips, face
  - Generalized urticaria / hives

PHYSICIAN CONSULT
- Patients presenting with severe asthma
- Necessity for a second EpiPen dose

EQUIPMENT
- Auto injector EpiPen®
- Auto injector EpiPen Jr.®

PROCEDURE
- BLS RMC
- Remove allergens
- Administer appropriate EpiPen®
  - Adult Auto-Injector (0.3 mg IM/ 0.3 ml) (weight >30 kg/ 66 lbs)
  - Pediatric Auto-Injector (0.15 mg IM/ 0.15 ml) (weight <30 kg/ 66 lbs)
- Record time of injection and reassess in 2 minutes
- Monitor airway and be prepared to assist with ventilations if necessary
- A second injection in 5 minutes may be necessary if patient’s condition does not improve.
- Transfer care to ALS personnel as soon as possible

SPECIAL CONSIDERATION
- Training shall include the manufacturer’s instructions as well as demonstration of skills competency every two years after initial training according to Title 22, Div. 9, Chapter 2.
- Training in this procedure is the responsibility of the provider agency who desires to utilize this procedure
TRAUMATIC EMERGENCIES
BLS PROCEDURE
ALWAYS USE BODY SUBSTANCE ISOLATION PRECAUTIONS

INDICATION
- For the following traumatic emergencies:
  - Head Trauma
  - Traumatic Paralysis/ Spinal Trauma
  - Eye Trauma
  - Open/ Sucking Chest Wounds
  - Flail or Crushed Chest
  - Tension Pneumothorax
  - Evisceration of Abdomen
  - Extremity Trauma
  - Amputations
  - Pelvic Instability
  - Impaled Objects
  - Burns
  - Trauma in pregnant patients

CONTRAINDICATION
- Patients meeting anatomic, physiologic, high energy transfer and other mechanism of injury on the Marin County Trauma Triage Tool should be transported with ALS level of care.

EQUIPMENT
- Airway management per patients condition
- BP monitor
- Suction

PROCEDURE
- BLS RMC
- Spinal immobilization
- Control bleeding
- Prevent further injuries
- Prepare for early and rapid transport to the appropriate facility
- The following BLS care should be provided for the following injuries:
  - Head Trauma
    - Suction as needed
    - Frequent evaluation of LOC
    - Support airway if emesis occurs
    - Calm/ reassure patient
  - Traumatic Paralysis
    - Frequent evaluation of CSM, neuro checks
  - Eye Trauma
    - Cover both eyes
- **Open/ Sucking Chest Wound**
  - Fowlers position unless contraindicated
  - Occlusive dressing if sucking wound
  - Monitor for tension pneumothorax

- **Flail or Crushed Chest**
  - Splint chest wall if flail with bulky dressing or towel
  - Assist with positive pressure ventilations

- **Tension Pneumothorax**
  - Fowlers position unless contraindicated
  - Remove occlusive dressing if present

- **Evisceration of Abdomen**
  - Cover abdominal wound with moist, bulky dressing
  - Keep patient warm

- **Extremity Trauma**
  - Expose extremity
  - Check/ recheck CSM
  - Dress wound if needed
  - Immobilize extremity
  - Elevate and apply cold pack

- **Amputations**
  - If complete amputation - cover amputated part with dry gauze and place in plastic bag, place bag in cold pack
  - If incomplete amputation - treat as open extremity injury

- **Pelvic Instability**
  - Immobilize

- **Impaled Objects**
  - Supine or shock position
  - Immobilize impaled object so internal end does not move when patient is moved
  - Dress wound without dislodging object
  - Prioritize and treat life threatening injuries
  - Anticipate rapid deterioration

- **Burns**
  - **Thermal/ Electric:**
    - Eliminate source
    - Remove jewelry, but do not remove stuck clothing
    - Expose affected areas
    - Evaluate depth/ surface area
    - Apply dry dressing on any burn involving >10% of body surface area
    - Keep patient warm to avoid hypothermia
  - **Chemical:**
    - Same treatment as above and
    - Remove all clothing
    - Identify chemical if possible
    - Unless contraindicated, brush dry chemicals off and flush affected areas with copious amounts of water
Inhalation:
  - Reevaluate airway frequently

- **Trauma in Pregnancy**
  - Assess for vaginal bleeding
  - Assess for gestational age
  - If gestational age > 20 weeks, tilt backboard to left recumbent position

**SPECIAL CONSIDERATION**
- Consider and evaluate whether the injury resulted from abuse, neglect, assaultive or abusive behavior, suicide, homicide, and/or is the scene of a crime

**RELATED POLICIES/ PROCEDURES**
- Destination Guidelines GPC 4
- Suspected Child, Dependent Adult and/or Elder Abuse GPC 9
MEDICAL EMERGENCIES
BLS PROCEDURES
ALWAYS USE STANDARD PRECAUTIONS

INDICATIONS
- For the following emergencies:
  - Syncope/ Near Syncope/ Fainting
  - Abdominal pain (non-traumatic)
  - Allergic Reaction
  - ALOC
  - Unconscious/ Unresponsive
  - Cardiac Arrest
  - SOB
  - Seizure (active)
  - Post- Seizure (post-ictal)
  - Chest Pain

PROCEDURES
- BLS RMC
- Reassure patient
- Transfer care to ALS unit as patient condition warrants
- **Syncope/ near syncope/ fainting:**
  - Evaluate for need of spinal motion restriction if significant mechanism of injury
- **Abdominal pain** (non-traumatic):
  - Nothing by mouth
  - Prepare for vomiting
  - Check bilateral BP, pedal pulses
- **Allergic reaction:**
  - Loosen clothing
  - Advise patient to self-administer **EpiPen** (or equivalent) or provider to administer epinephrine per policy
- **ALOC/Unconscious/ Unresponsive:**
  - If altered, place patient in recovery position
  - Assess blood glucose (BG)
  - If BG < 60 or immeasurable and patient can swallow, give sweetened drink or administer **Glucose paste** per policy
  - Ventilate with positive pressure devices
  - If opioid overdose is suspected, provide rescue breaths and administer **Narcan Nasal Spray**
    - Record time of administration and place patient in recovery position
    - May repeat every 2-3 minutes until patient responds. Multiple doses may be required.
    - If no pulse, follow Cardiac Arrest algorithm (below)
- **Cardiac Arrest:**
  - Place patient supine on firm surface and remove patient shirt
  - CPR
- Attach A.E.D.
- Suction as needed
- If ALS arrival time is longer than time to transport to the closest facility, begin transport and consider rendezvous with ALS unit enroute if appropriate.
- Consider field determination of death

**SOB/Airway Obstruction:**
- Position of comfort, usually upright
- Allow patient to self-administer any inhaled medications
- Consider different causes of SOB with pediatric patients

**Seizure (active):**
- Protect patient from injury (move furniture, etc.)
- Consider possible treatment of diabetic patient (see ALOC)
- If febrile seizure, initiate cooling measures

**Post-Seizure (post-ictal):**
- Follow above treatment on seizures
- Frequently evaluate patient’s level of consciousness and anticipate recurring seizures
- Suction as needed

**Chest Pain:**
- Limit patient’s physical activity
- Administer ASA 162-325 mg (chewable) if no known allergy, even if patient has taken daily ASA dose.
- Allow patient to self-administer own Nitroglycerin (NTG) as directed by their own physician only if SBP > 100

**Psychiatric Patient:**
- Protect self, others from combative or violent behavior
- Prepare for rapid changes in behavior due to possible ingestion of poisons, alcohol and drugs. If possible, bring ingested substances to hospital for analysis.

**RELATED POLICIES/ PROCEDURES**
- Administration of Oral Glucose BLS PR 3
- Administration of EpiPen Procedure BLS PR 4 and BLS PR 4A
- Administration of Narcan Nasal Spray BLS PR 11
- Chest Pain / Acute Coronary Syndrome BLS 2
- Determination of Death First Responder BLS, BLS 5
ENVIRONMENTAL EMERGENCIES
BLS PROCEDURES
ALWAYS USE STANDARD PRECAUTIONS

INDICATION
- For the following environmental emergencies:
  - Near Drowning
  - Bites/ Stings (animal/ snake)
  - Heat Injuries
  - Cold Injuries
  - Localized cold injuries

EQUIPMENT
- Airway management per patient condition
- BP monitor
- Suction
- Dressings
- Cold packs
- Hot packs

PROCEDURE
- BLS RMC
- **Near Drowning**
  - Consider spinal motion restriction
  - Keep patient warm
  - Prepare to log-roll if vomiting occurs
  - Frequent evaluation of lung sounds
- **Bites/ Stings**
  - Restrict patient physical activity
  - Immobilize extremity
  - Apply cold pack to site
  - Advise patient to self-administer EpiPen (or equivalent) or provider to administer epinephrine per EMS Agency approved policy
  - Observe for allergic reactions and refer to Medical Emergencies Procedures BLS PR 6
- **Animal Bites**
  - Apply appropriate dressing
  - Re-evaluate size of swelling every 5-10 minutes
- **Snake Bites**
  - Identify or provide description of snake if seen
  - Do not use ice or apply constricting bands
  - Remove rings, bracelets, or other constricting items from all extremities
  - Limit patient’s movement as much as possible
  - Mark extent of affected area, noting time on skin
  - Immobilize extremity in a position of comfort and monitor distal pulses
▪ **Heat Injuries**
  ▪ Move to a cool environment and remove clothing
  ▪ Rapid cooling measures:
    ▪ Apply wet towels and promote cooling by fanning
    ▪ Apply cold packs to axilla and groin
  ▪ BLS RMC; treat hypoglycemia per policy
  ▪ Replenish electrolytes by mouth if able to swallow
  ▪ Recheck vital signs frequently
  ▪ Transport all patients rapidly, even if in cardiac arrest

▪ **Cold Injuries**
  ▪ Remove wet clothing and patient from cold environment
  ▪ Apply warming measures with blankets, heaters, etc. If patient is no longer shivering be less aggressive with re-warming efforts and minimize stimulation of patient.

▪ **Localized Cold Injuries**
  ▪ Gently remove clothing from injured area
  ▪ Cover area with sterile dressing
  ▪ Avoid direct contact with affected area
OBSTETRICAL/ GYNECOLOGY EMERGENCIES
BLS PROCEDURE
ALWAYS USE BODY SUBSTANCE ISOLATION PRECAUTIONS

INDICATION
- Patient reports or demonstrates vaginal bleeding and imminent delivery (need to bear down, pushing, have urge for bowel movement)

EQUIPMENT
- OB Kit

PROCEDURE
- BLS RMC
- Calm/ reassure patient
- Save and transport any passed tissue
- **Vaginal bleeding:**
  - Supine or shock position, if pregnant place in left lateral position
  - Observe for development of shock
  - If immediately post-partum, consider fundal massage
- **Imminent delivery:**
  - Prepare sterile/ clean area for delivery
  - Assist with delivery
  - Keep baby and mother warm
  - Prepare for possible multiple births
  - Prepare for possible childbirth related complications
  - Assess for possible neonatal resuscitation

CRITICAL INFORMATION
- Prepare for rapid transport in both situations

DOCUMENTATION- ESSENTIAL ELEMENTS
- Time and onset of pain and bleeding
- Gravida and Para
- APGAR score at 1 and 5 minutes

### APGAR SCORE

<table>
<thead>
<tr>
<th>Sign</th>
<th>0</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart rate (bpm)</td>
<td>Absent</td>
<td>Slow (&lt;100)</td>
<td>≥100</td>
</tr>
<tr>
<td>Respiration</td>
<td>Absent</td>
<td>Slow, irregular</td>
<td>Good, crying</td>
</tr>
<tr>
<td>Muscle tone</td>
<td>Limp</td>
<td>Some flexion</td>
<td>Active motion</td>
</tr>
<tr>
<td>Reflex irritability</td>
<td>No response</td>
<td>Grimace</td>
<td>Cough, sneeze, cry</td>
</tr>
<tr>
<td>Color</td>
<td>Blue or pale</td>
<td>Pink body with blue extremities</td>
<td>Completely pink</td>
</tr>
</tbody>
</table>

RELATED POLICIES/ PROCEDURES
- Neonatal Resuscitation Policy P 2
NERVE GAS AUTO-INJECTOR
PROCEDURE
ALWAYS USE BODY SUBSTANCE ISOLATION PRECAUTIONS

INDICATION
- Exposure to nerve/chemical agents (Sarin, Suman, Tabun, Vx) exhibiting signs and symptoms that may include the following:
  - S.L.U.D.G.E.M.
    - Salivation
    - Lacrimination
    - Urination
    - Defecation
    - Gastrointestinal pain and gas
    - Emesis
    - Miosis

<table>
<thead>
<tr>
<th>Mild Symptoms</th>
<th>Severe Symptoms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blurred vision, miosis</td>
<td>Strange or confused behavior</td>
</tr>
<tr>
<td>Excessive, unexplained teary eyes</td>
<td>Severe difficulty breathing or copious airway secretions</td>
</tr>
<tr>
<td>Excessive, unexplained runny nose</td>
<td>Severe muscular twitching and general weakness</td>
</tr>
<tr>
<td>Increased salivation, drooling</td>
<td>Involuntary urination and defecation</td>
</tr>
<tr>
<td>Chest tightness / difficulty breathing</td>
<td>Convulsions</td>
</tr>
<tr>
<td>Tremors / muscular twitching</td>
<td>Unconsciousness</td>
</tr>
<tr>
<td>Nausea / vomiting</td>
<td></td>
</tr>
<tr>
<td>Unexplained wheezing / cough</td>
<td></td>
</tr>
<tr>
<td>Acute onset of stomach cramps</td>
<td></td>
</tr>
<tr>
<td>Tachycardia or bradycardia</td>
<td></td>
</tr>
</tbody>
</table>

CONTRAINDICATION
- Not to be administered as a prophylactic to nerve agents

EQUIPMENT
- Duodote or Mark I

PROCEDURE
- For MILD symptoms of exposure:
  - Administer one (1) injection into the mid-lateral thigh if patient experiences two or more MILD symptoms of exposure. Wait 10-15 minutes for medication to take effect.
  - If after 10-15 minutes the patient does not develop any of the SEVERE symptoms listed above, no additional injections are recommended.
  - If at any time after the first dose, the patient develops any of the SEVERE symptoms, administer two (2) additional injections in rapid succession.
  - Transport
- For SEVERE symptoms of exposure:
  - Immediately administer three (3) injections into the mid-lateral thigh in rapid succession.
  - Transport
SPECIAL CONSIDERATION

- Medical Directors shall coordinate all training activities for those providers opting to carry Auto-Injector kits.
- Training shall include following of the manufacturer’s instructions as well as:
  - Indications for self / public administration
  - Demonstration of skills competency every two years after initial training according to Title 22, Div. 9, Chapter 2.
BLOOD GLUCOSE MONITORING
BLS PROCEDURE
ALWAYS USE STANDARD PRECAUTIONS

INDICATIONS
- Patients with ALOC and / or suspected hypoglycemia as indicated by the following symptoms:
  - Diabetic history
  - Abnormal or combative behavior
  - Pale, moist skin

EQUIPMENT
- Glucometer
- Lancet
- Test strip
- Alcohol pad
- Gauze pad/bandage

PROCEDURE
- Turn glucometer on and insert test strip
- Clean fingertip with alcohol pad. Gently squeeze fingertip to promote blood flow
- Pierce fingertip with lancet
- Apply blood sample to test strip
- Record results
- If blood glucose is < 60 or immeasurable, treat patient according to Administration of Oral Glucose Policy, BLS PR 3.
ADMINISTRATION OF NARCAN NASAL SPRAY
BLS PROCEDURE
ALWAYS USE STANDARD PRECAUTIONS

INDICATIONS
- Patients with ALOC and suspicion of overdose as indicated by the following symptoms:
  - Overdose history or drug paraphernalia at scene
  - Pale, moist skin
  - Unable to respond
  - Respirations and/or pulse is slow, erratic, or absent
  - Pinpoint pupils

EQUIPMENT
- Narcan Nasal Spray
- BVM

PROCEDURE
- Establish unresponsiveness; if pulseless and apneic start CPR
- Place in supine position and tilt head back
- Administer Narcan Nasal Spray
  - Insert tip of nozzle into one nostril until fingers are flush with skin/nose
  - Press firmly to fully depress the plunger
- Place patient in recovery position
- Record time of administration
- Narcan Nasal Spray may be repeated every 2-3 minutes (alternate nostrils) if patient remains unresponsive
- Monitor airway, suction as needed
- If no response to Narcan, begin CPR
- Transfer patient to higher level of care as soon as possible
- Document type of overdose, if known