Good afternoon CVEMSA System Stakeholders,

CVEMSA is excited to announce a 60-day public comment period for several treatment guidelines. Please find the attached treatment guidelines and public comment matrix for each.
Public comment will be open through February 20th, 2024. Please provide any comment via the attached matrices and send to personnel indicated below:

8105 Monitoring Transfusion of Blood Products – Willow.Farey@sonoma-county.org

7921 Acetaminophen Administration – Carly.Sullivan@sonoma-county.org

7920 Synchronized Cardioversion – Carly.Sullivan@sonoma-county.org

7802 Major Trauma – Carly.Sullivan@sonoma-county.org

7305 Pain Management – Carly.Sullivan@sonoma-county.org

4014 STAT Ambulance Transfer – Carly.Sullivan@sonoma-county.org

COASTAL VALLEYS EMS AGENCY

STAT EMERGENCY AMBULANCE TRANSFER – Public Comment

POLICY NO: **4014** PAGE 1 OF 2
EFFECTIVE DATE: 12-01-2016
REVISED DATE: 12-01-2016

APPROVED: Bryan Cleaver, EMS Administrator
Dr. Mark Luoto, EMS Medical Director

AUTHORITY: California Health and Safety Code, Division 2.5 EMS

4014.1 PURPOSE

a. In order to facilitate the emergency transport of critical patients between acute care facilities ~~(specifically Emergency Departments)~~ within the Region, the LEMSA has instituted the Stat Ambulance Transfer procedure. The LEMSA defines "Stat" as requiring an immediate response by an ambulance for unstable patients requiring urgent/emergent transportation. In contrast to routine patient transfers, Stat Ambulance Transfer requests will be directed into the 911 priority dispatch system and result in the dispatch of an appropriate ambulance.

4014.2 PROCEDURE

a. A request from an Acute Care Facility ~~ED~~ for a ***Stat Ambulance Transfer*** to the appropriate 911 EMS dispatch center (REDCOM or HFCC) should only be used for acute, unstable patients in need of immediate intervention by a facility offering a higher level of care. The patient categories that this procedure is meant to help are those who need acute medical and/or surgical intervention within 30 minutes or less, examples are:

   1. Patients who need immediate surgical/ trauma services intervention.
   2. Patients who need immediate cardiac intervention.

b. When placing a call to **REDCOM or HFCC** to request a Stat Ambulance Transfer response, you will be asked the following questions by the REDCOM dispatcher:

   1. Are you requesting a Stat Ambulance Transfer?
   2. Is this an emergency cardiac, surgical or trauma patient?
   3. Does the patient need to be transported within 30 minutes or less?
   4. Have you completed all ~~of~~ the necessary transfer agreements (between sending and receiving facilities)?
   5. ~~Is the patient in the ED~~ Where is the patient (floor/unit and room number) now and is the patient ready to be transported?
   6. Are the patient's records, forms, x-rays, medications and/or equipment with the patient now?
   7. Is a hospital staff person going to accompany this patient?

c. Once the above questions are answered appropriately, an Advanced Life Support ambulance will be dispatched to your facility. It is essential that the patient be ready and waiting for immediate transport ~~in the ED~~.

Note: A Stat ALS ambulance cannot replace the higher level of care provided by a Critical Care Transport (CCT) ambulance. If the critical patient requires a higher level of care than a paramedic can provide, a CCT unit should be requested. Requests for CCT transports must be made through the appropriate dispatch/referral center for the CCT provider agency.) Use of a Stat Ambulance Transfer for patients that need a higher level of care during transport will require the sending facility to provide the appropriate staff to accompany the patient during the transfer.

d. This procedure draws from the 911 system ambulance resources in the local EMS system. Requesting a Stat Ambulance Transfer will not result in a fire department response to your facility.

~~e. Requesting a Stat Ambulance Transfer and then directing the ambulance crew to pick up the patient in a room other than the ED defeats the purpose of this procedure and is inappropriate.~~

COASTAL VALLEYS EMS AGENCY

Pain Management – PUBLIC COMMENT

Policy Number: 7305 Effective Date: January 1, 2020 Review Date: November 2023	Approved: Bryan Cleaver, EMS Administrator Mark Luoto, EMS Medical Director

Authority: California Health and Safety Code, Division 2.5 EMS, Sections 1797.220 & 1797.221

I. Definition

A. Pain in the presence of normal mentation and extrication, movement, or transportation is required which will cause considerable pain to the patient and there are no known contraindications to administering analgesia.

II. Basic Life Support

A. Provide General Medical Care.
B. Place patient in position of comfort without significant manipulation of suspected fractures.
C. Apply cold compress as indicated.

III. Advanced Life Support

Adult

A. Administer Fentanyl 50 mcg – 100 mcg slow IVP (over one minute).
   1. May repeat initial dose every 5 minutes if pain persists.
   2. Max dose 300 mcg.
   3. Fentanyl may also be administered 1.5 mcg/kg IN.
      a. May repeat in 15 minutes
   4. If unable to establish IV, administer Fentanyl 1 mcg/kg IM.
      a. May repeat in 30 minutes at ½ the initial dose.
      b. Max single dose 100 mcg with a max total dose 200 mcg.
   5. For transport times more than one-hour, max total dose 300 mcg regardless of route.
B. Administer Acetaminophen 1000 mg in 100 ml NS over 15 minutes per *procedure guideline 7921 Acetaminophen Administration.*
   1. Do not repeat.

~~Administer Ketamine 0.3 mg/kg in 100 ml NS over 10 minutes per *procedure guideline 7905 Ketamine Administration:*~~
   ~~1. Max single dose 30 mg.~~
   ~~2. If unable to establish IV, administer Ketamine 0.5 mg/kg IN.~~
      ~~a. Max single dose 50 mg.~~
   ~~3. May repeat initial dose once after 15 minutes with a pain score ≥ 5.~~

C. Administer Ketorolac 15 mg IV per *procedure guideline 7906 Ketorolac Administration* for mild to moderate pain.

Pediatric (less than 14 years of age)

A. Administer Fentanyl per the pediatric medication administration guide.
   1. May repeat once.
B. Administer Ketorolac per pediatric medication administration guide.
   1. Do not repeat.
   2. Max dose 15 mg.

1. If unable to establish IV, administer Ketorolac 30 mg IM.
2. Do not repeat.

D. Administer Lidocaine 2% when establishing IO access on a conscious patient.
1. Immediately following placement of the IO needle, administer 0.5 mg/kg 2% Lidocaine (not to exceed 50 mg) slowly through the IO site. Wait approximately 30–60 seconds before flushing with normal saline.
2. In the event a patient regains consciousness and complains of severe pain secondary to the IO insertion, temporarily stop infusing the fluids, and administer 0.5 mg/kg 2% Lidocaine (not to exceed 50 mg) slowly through the IO site. Wait approximately 30–60 seconds before continuing fluid administration.

IV. Special Considerations

A. Monitor patient vitals carefully and ensure patent airway.
B. Use caution in frail and elderly patients.
C. Consider using $EtCO_2$ monitoring with repeated doses.
D. IM administration of Ketorolac may have a variable absorption rate.
E. It is likely that 80% or more of our patients in Coastal Valleys will receive Fentanyl as the primary pain medication. It is effective, easy to administer and titrate, and inexpensive. In children, it can be effectively used IN, thus avoiding IV starts or injections.
F. IN administration of Fentanyl is a useful method in treating pain for adults and children.
G. ~~Ketamine is equipotent to Fentanyl in most studies, but it likely has a higher side effect profile. Primarily it causes nausea, vomiting, and dysphoria, and this is especially true in elderly patients. It can be very helpful in patients using chronic narcotic pain medications. These side effects are minimized if administered over 10 minutes via infusion.~~
~~H. Patients may experience a dysphoric or out of body sensation following administration that may cause fear. Prior to administration explain to the patient that Ketamine is a very effective pain medication and they may feel spacey and experience a brief period of dizziness and/or out of body sensation. Explain to the patient that these symptoms will resolve. This explanation has shown to be very effective in fear reduction following administration.~~
I. Ketorolac will not affect hemodynamics, respiratory function, or alertness. Except in kidney stone patients, it is not as effective as Fentanyl ~~or Ketamine~~. It is therefore most helpful in mild to moderate pain situations, or when you want to avoid narcotic analgesia.

V. Base Orders

A. If pain persist, contact Base Hospital for any repeat doses exceeding max dose.

VI. Contraindications

A. Sensitivity to the medication.
B. Ketorolac is contraindicated in major trauma patients and abdominal pain.

VII. Cross Reference

Last Modified: December 2023

A. General Medical Care — Policy No. 7001
~~B. Ketamine Administration — Policy No. 7905~~

	Acetaminophen Administration	Policy No. 79**
C.	Ketorolac Administration	Policy No. 7906
D.	Burns	Policy No. 7801
E.	Major Trauma	Policy No. 7802

COASTAL VALLEYS EMS AGENCY

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Major Trauma – PUBLIC COMMENT

Policy Number: 7802 Effective Date: January 1, 2020 Review Date: November 23, 2021	Approved: Bryan Cleaver, EMS Administrator Mark Luoto, EMS Medical Director

Authority: California Health and Safety Code, Division 2.5 EMS, Sections 1797.220 & 1797.221

I. Definition

A. Major trauma is any injury that has potential to cause disability or death.

II. Basic Life Support

A. Provide General Medical Care.
B. Do not delay transport.
C. Early trauma center notification for patients meeting Trauma Triage Criteria per *treatment guideline 7803 Trauma Triage.*
D. Consider spinal motion restriction per *procedure guideline 7909 Spinal Motion Restriction.*
E. Remove or cut away patients clothing:
   1. Cover patient with blanket to maintain body temperature and privacy.
F. If significant bleeding present, refer to *treatment guideline 7805 Uncontrolled Bleeding/Amputation and 7910 Hemostatic Agents.*
G. If suspected fracture present:
   1. Pulses distal to the suspected fracture should be checked before and after movement or stabilization.
I. Provide pain management:
   1. Stabilize suspected fractures in patients position of comfort.
   2. Apply cold compress if indicated.

III. Advanced Life Support

A. Establish IV.
   1. Consider second IV when time allows.
B. Consider pain management per *treatment guideline 7305 Severe Pain.*

Adult

A. Treat suspected shock in patients with:
   1. Significant mechanism of injury.
   2. Skin signs are pale cool, and diaphoretic.
   3. SBP < 90 mmHg.
      a. Administer NS fluid bolus 250 ml IV as needed to maintain SBP 90 mmHg.
         (1) Max 1 L judiciously.
         (2) Warm fluids preferred.
      b. Consider administering Tranexamic Acid for suspected hemorrhagic shock per *procedure guideline 7907 Tranexamic Acid Administration.*
B. Head injury with evidence of herniation:
   1. Ventilate patient to maintain capnography between 30 mmHg to 35 mmHg.
   2. Consider sedation if patient is combative, extremely agitated, or clenched (trismus) per *treatment guideline 7002 Sedation.*

Pediatric (less than 14 years of age)

A. Treat suspected shock in patients with:
   1. Significant mechanism of injury.
   2. Skin signs are pale, cool, and diaphoretic.
   3. SBP is less than age appropriate parameters.
      a. Administer NS fluid bolus 20 ml/kg IV to maintain age appropriate SBP.
         (1) Do not repeat.
         (2) Warm fluids preferred.

IV. Special Considerations

A. Expedite transport; on-scene time should be less than 10 minutes in the absence of prolonged extrication.

B. Studies indicate that trauma patients receiving excessive amounts of ~~more than 750 ml~~ NS before going to the operating room may have worse outcomes. Fluid replacement should be administered judiciously to maintain a BP.

V. Base Orders

A. Additional administration of NS requires base hospital consult and physician approval.

VI. Contraindications

A. Traction splints are contraindicated for suspected pelvic fractures.

1. The use of pelvic binder or sheet may be used to stabilize.

B. Ketorolac is contraindicated and shall not be administered to major trauma patients.

VII. Cross Reference

A. General Medical Care	Policy No. 7001
B. Severe Pain	Policy No. 7305
C. Uncontrolled Bleeding/Amputation	Policy No. 7805
D. Sedation	Policy No. 7002
E. Tranexamic Acid Administration	Policy No. 7907
F. Hemostatic Agents	Policy No. 7910
G. Trauma Triage	Policy No. 7803
F. Spinal Motion Restriction	Policy No. 7909

COASTAL VALLEYS EMS AGENCY

Synchronized Cardioversion – PUBLIC COMMENT

Policy Number: 7920 Effective Date: July 1, 2023 Review Date: July 1, 2025	Approved: Bryan Cleaver, EMS Administrator Mark Luoto, EMS Medical Director

Authority: California Health and Safety Code, Division 2.5 EMS, Sections 1797.220 & 1797.221

I. Principles

A. Purpose: To provide guidelines on the indications and procedure to provide synchronized Cardioversion.
B. Indications:
   1. Unstable patient with a wide or narrow complex tachycardia, Dyspnea, and an SBP < 90mmHG per *treatment guideline 7102 Dysrhythmias.*
C. Equipment:
   1. Cardiac monitor with pacing capabilities.
   2. Compatible adhesive pads and appropriately sized for the patient.

II. Scope — Paramedic

III. Basic Life Support: None.

IV. Advance Life Support:

A. Location:
   1. Chest wall in anterior/posterior position, or,
   2. Chest wall in sternal apex position.
B. Procedure:
   1. Confirm Rhythm using cardiac monitor.
   2. Place pads appropriately according to manufacturer recommendations.
   3. Confirm monitor is placed in cardioversion mode.
   4. Consider sedation per *treatment guideline 7002 Sedation if patient is awake and aware.*

Adult	Pediatric (less than 15 years of age)
A. Escalating synchronized cardioversion per the manufacturer's recommendations.	B. If patient is unresponsive 1. Escalating synchronized cardioversion: a. Start at 0.5 to 1 Joules/kg. b. If no change, repeat cardioversion 2 Joules/kg.

V. Special Considerations: None.

VI. Base Orders: None.

VII. Contraindications: None.

VIII. Documentation on the EMS patient care report (PCR) shall include:

A. Indications for performing the procedure.
B. Any improvements post procedure.
C. Complications.

COASTAL VALLEYS EMS AGENCY

Administration of Acetaminophen – PUBLIC COMMENT

Policy Number: 7921 Effective Date: TBD Review Date: TBD	Approved: Bryan Cleaver, EMS Administrator Mark Luoto, EMS Medical Director

Authority: California Health and Safety Code, Division 2.5 EMS, Sections 1797.220 & 1797.221

I. Principles

A. Purpose: To provide guidance on the administration of Acetaminophen for pain.
B. Indications: Mild to Moderate pain.

II. Scope: Paramedic.

III. Basic Life Support: None.

IV. Advance Life Support:

A. Administer Acetaminophen per *treatment guideline 7305 Pain Management.*
   1. 1000 mg in 100 ml NS IV infusion over 15 minutes.
      a. Do not repeat.

V. Special Considerations: None.

VI. Base Orders:

A. For transports greater than 30 minutes may consider administration of Acetaminophen for antipyretic effects with base approval.

VII. Contraindications:

A. Known or suspected Liver Failure or Liver Transplant.

VIII. Documentation on the EMS patient care report (PCR) shall include:

A. O_2 Saturation.
B. Temperature within 15 minutes of administration.
C. Pain scale with each set of vital signs.
D. Patient weight.
E. Dosage.

Monitoring Transfusion of Blood Products PUBLIC COMMENT DRAFT

POLICY NO: 8105

EFFECTIVE DATE: 04-01-24

APPROVED: Bryan Cleaver, EMS Administrator — Dr. Mark Luoto, EMS Medical Director

AUTHORITY: California Health and safety Code, Division 2.5 EMS, Sections 1797.172 & 1797.221

Purpose:

1. To provide a mechanism for Paramedics to monitor the transfusion of blood products during interfacility transports.

Policy:

1. Paramedics:

Only those Paramedics who have successfully completed training program(s) approved by the Coastal Valleys EMS Agency Medical Director on monitoring infusion of blood products will be permitted to monitor them during interfacility transports.

2. ALS Ambulance Providers:

Only those ALS Ambulance providers approved by the Coastal Valleys EMS Agency Medical Director will be permitted to provide the service of monitoring infusion of blood products during interfacility transports from hospital(s) within their service area.

3. Patients:

Patients that are candidates for paramedic transport will have pre-existing blood product transfusions in peripheral lines Coastal Valleys EMS Agency does not authorize EMS personnel to start, hang or otherwise initiate the transfusion of blood products.

Principles:

1. Patients in hemorrhagic shock may need to be transferred to a tertiary care or trauma center with blood/blood product transfusions in process as part of emergency resuscitation.

2. Blood products include packed red blood cells (PRBCs), whole blood, fresh frozen plasma (FFP), platelets, cryoprecipitate, and prothrombin complex concentrates.

3.. Transfusion reactions are defined as follows:

a. **Allergic reaction**: hives or itching only, without signs of anaphylaxis.

b. **Anaphylaxis**: allergic reaction with angioedema, wheezing, respiratory distress, vascular instability, vomiting, diarrhea and/or shock. Rash may or may not be present.

c. **Hemolytic transfusion reaction**: life threatening reaction that may present with fever, headache, back pain, nausea, hypotension, and pain at the transfusion site.

d. **Volume overload**: may develop pulmonary edema and respiratory distress.

Guidelines:

1. Before accepting responsibility for the patient:

a. Confirm with a nurse or physician from the sending facility, that the name on the patient's arm band and blood bank number on the blood transfusion form is the same as the name and blood bank number on the unit(s) of blood product which is (are) infusing.

b. For uncrossmatched blood products (Which will not have a patient name) confirm the uncrossmatched blood product transfusion is for the patient being transferred. A patient identification band must be present prior to transfer.

2. Document in the ePCR the physician order for the blood product(s) to be transfused, which shall include the following:

a. Type of blood product being transfused.
b. Rate of the transfusion
c. Name of the transferring/ordering physician
d. Any adverse reactions and treatments provided to the patient during transport.

3. Monitor all patients continuously during transport with a cardiac monitor and a noninvasive blood pressure monitor, documenting vital signs every 15 minutes.

4. For patients with suspected transfusion reactions (including hemolytic reactions, allergic reactions, anaphylactic reactions, and volume overload):

a. Stop the blood product transfusion.
b. Disconnect the IV tubing (do not flush tubing) and flush the port.
c. Initiate care per applicable Treatment Guideline
d. Provide the remaining blood product and tubing to the receiving hospital.

5. Document volume of blood product transfused and any suspected transfusion reaction on the ePCR. Communicate any reaction and interventions taken to the receiving facility staff.

6. All cases for which this policy is implemented will be audited by the EMS provider agency and reports sent to the Coastal Valleys EMS Agency monthly.

7. The receiving emergency department staff will be responsible for communicating any transfusion related adverse events to the sending facility.

8. During transfer of care from the sending facility to the transport paramedic, blood products shall be disconnected from infusion pumps and manual drip rate(s) set by sending medical team. Use of portable infusion pumps during transport is permissible if the paramedic has documentation of training and proof of competency in the use of the equipment on file with the ALS ambulance provider. In this case, the use of an infusion pump during transport must be included in the sending physician orders.