Sierra – Sacramento Valley EMS Agency Treatment Protocol	C-6
Chest Discomfort/Suspected Acute Coronary Syndrome (ACS)	
Approval: Troy M. Falck, MD – Medical Director	Effective: 06/01/2022
Approval: Victoria Pinette – Executive Director	Next Review: 05/2025

- **Common symptoms associated with ACS include, but are not limited to:**
  - **Dyspnea/SOB**
  - **Palpitations**
  - **Diaphoresis**
  - **Nausea/vomiting**
  - **Lightheadedness/near-syncope/syncope**
  - **Upper abdominal pain or heartburn unrelated to meals**
  - **Discomfort in the throat or abdomen may occur in pts with diabetes, women & elderly pts**
- **Fleeting or sharp chest pain that increases with inspiration & lying supine is unlikely to be ACS related.**
- **Pt assessment, treatment & transport destination determination should occur concurrently.**

BLS

- Assess V/S, including SpO_2
- O_2 at appropriate rate if hypoxemic (SpO_2 <94%), short of breath, or signs of heart failure or shock
- P-Q-R-S-T

Aspirin
- 160 - 325 mg chewable PO (anticoagulant use is not a contraindication to administration)

ALS

- Cardiac monitor
- 12-lead EKG as soon as possible (prior to nitroglycerin administration)
  - Criteria for ST Elevation Myocardial Infarction (STEMI):
    1. Machine readout: 'Meets ST Elevation MI Criteria', 'Acute MI', 'STEMI' (or equivalent)
    2. ST elevation in 2 or more contiguous leads
  - For pts with suspected ACS, serial 12-lead EKGs should be obtained if the pt's clinical status changes or if EKG changes are noted on the monitor, and every 15 mins if transport times are long

- IV/IO at appropriate time during treatment
  - Administer 250 mL NS fluid boluses to maintain SBP >90
  - Do not administer fluid if signs of heart failure

If discomfort persists following initial 12-lead acquisition:

Nitroglycerin
- 0.4 mg SL (tablet or spray), repeat every 5 mins if discomfort persists
- Do not administer if SBP <100,
- Use with caution for pts with suspected inferior MI (establish vascular access prior to administration)
- Consult with base/modified base hospital prior to administration if pt takes erectile dysfunction or pulmonary hypertension medication

SEE PAGE 2 FOR ADDITIONAL ALS TREATMENT & PT DESTINATION

Chest Discomfort/Suspected Acute Coronary Syndrome (ACS)

ADDITIONAL ALS TREATMENT & PT DESTINATION

If discomfort persists following one or more EMS administered nitroglycerine doses:

Fentanyl
- 25 mcg slow IV/IO
- May repeat every 5 mins if discomfort persists (maximum cumulative dose: 200 mcg)

Morphine Sulfate
- 2 mg slow IV/IO
- May repeat every 5 mins if discomfort persists (maximum cumulative dose: 20 mg)

ⓘ Do not administer fentanyl or morphine to pts with any of the following contraindications:
- Systolic BP <100 - Hypoxia or RR <12 - ALOC or evidence of head injury

ⓘ If administering fentanyl & morphine to the same pt, maximum cumulative dose: 100 mcg fentanyl & 10 mg morphine

For current or potential nausea/vomiting:

Zofran (Ondansetron)
- 4 - 8 mg slow IV/IO, IM or ODT
- May be administered concurrently with fentanyl or morphine to reduce potential nausea/vomiting

STEMI Criteria Met? — NO → **Transport to Closest Facility**

YES

Both STEMI Criteria Met? — NO → **Contact closest facility for destination consultation**
- Transmit 12-lead to closest facility if able

YES

≤45 min to STEMI Receiving Center (SRC) — NO → **Contact closest facility for destination consultation**

YES

Any of the following criteria met?
- CPR in progress
- Unmanageable airway
- Unstable v-tach

YES → **Contact closest facility for destination consultation**

NO

Transport Directly to SRC
- Transmit 12-lead to SRC if able
- Advise SRC of "STEMI ALERT"

STEMI Pt Notes

- When possible, any 12-lead meeting STEMI criteria shall be transmitted within 10 mins of first STEMI positive 12-lead.
- Scene time for STEMI pts should be ≤10 mins.
- When possible, obtain & relay to the receiving hospital the name/contact information of an individual who can make decisions on behalf of the pt.
- Always relay pertinent medical directives (DNR, POLST, etc.) to the receiving hospital.