



POLICY: 554.09  
 TITLE: Coronary Ischemic Chest Discomfort

EFFECTIVE: 10/21/20  
 REVIEW: 10/2025  
 SUPERCEDES:

APPROVAL SIGNATURES ON FILE IN EMS OFFICE

**CORONARY ISCHEMIC CHEST DISCOMFORT**

- I. AUTHORITY  
 Health and Safety Code, Division 2.5, California Code of Regulations, Title 22, Division 9
- II. PURPOSE  
 To serve as a patient treatment standard for EMRs, EMTs, and Paramedics within their scope of practice.
- III. PROTOCOL  
 Characterized by: Substernal chest pain; chest or epigastric discomfort, heaviness, squeezing, burning or tightness; pain radiating to, or isolated to jaw, shoulders, arms or back; nausea; diaphoresis; dizziness; dyspnea; anxiety or back pain. Patient may have history of coronary artery disease. Up to 1/4 of coronary ischemia (Acute Coronary Syndrome) patients may have no chest discomfort at all-- this is more common in the elderly and diabetics.  
  
 Risk factors are more important than the pattern of chest discomfort. Prior history of ischemic heart disease, cigarette smoking, hypertension, high cholesterol, diabetes, and recent cocaine/amphetamine abuse are the strongest risk factors.

**EMR STANDING ORDERS**

**Patient Assessment** Circulation, Airway, Breathing, assess vital signs q 5 minutes and report findings to incoming Advanced Life Support providers

**Oxygen Administration** Provide oxygen if appropriate and be prepared to support ventilations with BVM.

**EMT STANDING ORDERS**

**Note** Must perform items in EMR standing orders if applicable

**Pulse Oximetry** Report initial reading to paramedic if applicable

**Mentation** If Altered Level of Consciousness check blood sugar and refer to 554.31 Altered Level of Consciousness

**Aspirin** 324 mg chewed PO unless taken within past 6 hours or has allergy to ASA

**Nitroglycerin** EMT's may assist a patient with their prescribed sublingual NTG. 0.4 mg sublingual (if systolic BP > 100). May repeat every 3 minutes to a max of 3 total doses (including patient administered doses). Contact Base Hospital before administering nitroglycerin to patients taking Viagra (Sildenafil) within the past 6 hours.

**PARAMEDIC STANDING ORDERS**

**Note** Must perform items in EMT standing orders if applicable

**Cardiac Monitor** 12 Lead EKG – If interpretation results reveal \*\*\*ACUTE MI/SUSPECTED\*\*\* or manufacturer equivalent, expedite transport to SRC as directed if transport time is less than 60 minutes. Transmit 12-Lead EKG (if capable) to SRC upon immediate recognition. It is preferable to obtain 12 lead prior to Nitro administration or transport. Repeat post-treatment if patient symptomatic and condition permits.

<b>Nitroglycerin</b>	0.4 mg sublingual (if systolic BP > 100). May repeat every 3 minutes to a max of 3 total doses. Contact Base Hospital before administering nitroglycerin to patients taking Viagra (Sildenafil) within the past 6 hours.
<b>IV/IO Access</b>	TKO. 250ml fluid challenge if systolic BP is <90mm/Hg. Repeat until BP improves
<b>Pain Management</b>	If after 3 total doses of Nitroglycerin patient continues to experience pain refer to policy 554.44 Pain Management

#### Clinical PEARLS

- Intravenous access is preferred over Intraosseous unless patient is unstable
- Secure airway with simplest technique, i.e. BLS airway unless unable to manage
- The use of capnography is highly recommended in all Respiratory patients and during Analgesic use.
- Patients in Amador, Calaveras and Mariposa counties meeting STEMI criteria shall be transported to closest facility if transport time to STEMI receiving facility is > 60 minutes and there are not contraindications to Thrombolytics
- EMS shall acquire 12 lead EKG on any suspected cardiac patient within 10 minutes of patient contact. If unable to obtain within 10 minutes the reason for delay shall be documented in the Patient Care Report.