

***Chest Pain or Acute Coronary Syndrome (110)***

<b>Adults</b>	<b>Pediatrics (13 years and under)</b>
<b>Public Safety First Aid Procedures: Only</b>	<b>Public Safety First Aid Procedures: Only</b>
<ul style="list-style-type: none"> <li>Request Fire/EMS</li> <li>Monitor patient closely, anticipate the need to provide High-Performance CPR</li> </ul>	<ul style="list-style-type: none"> <li>Request Fire/EMS</li> <li>Monitor patient closely, anticipate the need to provide High-Performance CPR</li> </ul>
<b>BLS Procedures: EMT's and Paramedics start here</b>	<b>BLS Procedures: EMT's and Paramedics start here</b>
<ul style="list-style-type: none"> <li>Possible Cardiac Origin?</li> <li>Administer oxygen only if SpO2 &lt;94% or if in severe respiratory distress</li> <li>Administer Aspirin 325 mg to Chew.</li> <li>If patient has prescription administer Nitroglycerin 0.4 mg SL May repeat every 3-5 minutes as long as systolic blood pressure &gt; 100mmHg.</li> <li>Request ALS Rendezvous or transport to nearest cardiac facility.</li> </ul>	<ul style="list-style-type: none"> <li>Possible Cardiac Origin?</li> <li>Administer oxygen only if SpO2 &lt;94% or if in severe respiratory distress</li> <li>Request ALS Rendezvous or transport to nearest cardiac facility.</li> </ul>
<b>ALS Prior to Base Hospital Contact: Paramedic only</b>	<b>ALS Prior to Base Hospital Contact: Paramedic only</b>
<ul style="list-style-type: none"> <li>Possible Cardiac Origin? IV, Monitor, 12 Lead.</li> <li>Make early base contact if AMI is suspected or 12 lead advises ***Acute MI***, within 5 minutes of acquisition</li> <li>Administer Nitroglycerin 0.4 mg SL May repeat every 3-5 minutes as long as systolic blood pressure &gt; 90mmHg.</li> <li>If chest pain unresolved and systolic B/P &gt;90 administer opiate pain medication. Fentanyl 50 mcg slow IVP/IO/IM/IN to max dose of 200 mcg.</li> </ul>	<ul style="list-style-type: none"> <li>Possible Cardiac Origin? IV, Monitor, 12 Lead</li> <li>Make early base contact if AMI is suspected or 12 lead advises ***Acute MI***, within 5 minutes of acquisition.</li> </ul>
<b><u>Base Hospital Contact Required</u></b>	<b><u>Base Hospital Contact Required</u></b>
	Base for guidance

110 CHEST PAIN OR ACUTE CORONARY SYNDROME

*Chest Pain (110)*

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(Signature on File)

## ***Chest Pain or Acute Coronary Syndrome (110)***

### **Special Considerations**

Chest pain is a possible symptom of ACS. In silent MI's, common in females, elderly, and diabetics, chest pain may not be present. If the patient exhibits signs of ACS without chest pain or the 12 lead reads acute MI, the patient should still be treated appropriately per this protocol.

1. Rapidly obtain high quality 12 lead ECG, if STEMI Alert transmit to STEMI receiving center and make base contact to notify of STEMI Alert within 5 minutes of acquisition.
2. A copy of the ECG should be delivered to the nurse caring for the patient upon arrival at the Emergency Department and a copy must be included in the patient care record.
3. If patient is having a STEMI and is within 60 minutes of STEMI receiving center see **BYPASSING A STEMI REFERRAL** (Non-PCI hospital). Patients in the metropolitan Bakersfield area with chest pain/discomfort of suspected cardiac origin should be transported to a cardiac receiving facility.
4. If acute MI is suspected with signs of hypoperfusion, administer 250 mL fluid challenge. May repeat one time if patient remains hypotensive. Consult with cardiac facility if patient remains hypotensive. Refer to [Shock/Hypoperfusion Protocol \(124\)](#).
5. If the patient has not taken aspirin and has no history of aspirin allergy or evidence of recent GI bleeding, administer **ASPIRIN** (325mg) to chew. Aspirin administration, even if, prior to patient contact must be documented.
6. Give the patient sublingual nitroglycerin (0.4mg metered dose or gr. 1/150) every 5 minutes for ongoing symptoms, monitor blood pressure and pulse rate between administrations.

### **Contraindications:**

- Suspected or known that the patient has taken sildenafil (Viagra) or vardenafil (Levitra) within the previous 24 hours or tadalafil (Cialis) within the previous 48 hours.
- ALS: Systolic blood pressure less than 90 mm Hg or heart rate less than 50 beats per minute.
- BLS: Systolic blood pressure less than 100 mm Hg or heart rate less than 50 beats per minute. Due to lack of IV access.
- BLS: Not prescribed to patient.

If the patient becomes hypotensive after administration of nitroglycerin, place the patient in shock position. If no improvement within 5 minutes, refer to [Shock/Hypoperfusion Protocol \(124\)](#).

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7. Administer Fentanyl or Morphine when chest pain/discomfort is unresponsive to nitroglycerin. Give the patient 50 mcg of Fentanyl, Slow IVP or 5 mg of morphine, slow IV push, to relieve persistent chest pain/discomfort. Repeat in 2-3 minutes until pain relieved or max dose is reached.

**Contraindications:**

- Allergy or hypersensitivity
  - Heart rate less than 50 beats per minute or blood pressure less than 90 systolic
  - Respiratory depression
8. If the Paramedic believes the patient is suffering an AMI and the 12-lead is not showing “STEMI” the paramedic may call a STEMI receiving center for guidance.