

**1 Symptoms suggestive of ischemia or infarction**

**2 EMS assessment and care and hospital preparation**

- Assess ABCs. Be prepared to provide CPR and defibrillation
- Administer aspirin and consider oxygen, nitroglycerin, and morphine if needed
- Obtain 12-lead ECG; if ST elevation:
  - Notify receiving hospital with transmission or interpretation; note time of onset and first medical contact
- Provide prehospital notification; on arrival, transport to ED/cath lab per protocol
- Notified hospital should mobilize resources to respond to STEMI
- If considering prehospital fibrinolysis, use fibrinolytic checklist

<p><b>3 Concurrent ED/cath lab assessment (&lt;10 minutes)</b></p> <ul style="list-style-type: none"> <li>• Activate STEMI team upon EMS notification</li> <li>• Assess ABCs; give oxygen if needed</li> <li>• Establish IV access</li> <li>• Perform brief, targeted history, physical exam</li> <li>• Review/complete fibrinolytic checklist; check contraindications</li> <li>• Obtain initial cardiac marker levels, complete blood counts, and coagulation studies</li> <li>• Obtain portable chest x-ray (&lt;30 minutes); do not delay transport to the cath lab</li> </ul>	<p><b>Immediate ED/cath lab general treatment</b></p> <ul style="list-style-type: none"> <li>• If O<sub>2</sub> sat &lt;90%, start <b>oxygen</b> at 4 L/min, titrate</li> <li>• <b>Aspirin</b> 162 to 325 mg (if not given by EMS)</li> <li>• <b>Nitroglycerin</b> sublingual or translingual</li> <li>• <b>Morphine</b> IV if discomfort not relieved by nitroglycerin</li> <li>• Consider administration of <b>P2Y<sub>12</sub> inhibitors</b></li> </ul>
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**4 ECG interpretation**

**5 ST elevation or new or presumably new LBBB; strongly suspicious for injury**  
**ST-elevation MI (STEMI)**

**6 Start adjunctive therapies as indicated**  
**Do not delay reperfusion**

**7 Time from onset of symptoms ≤12 hours?**

>12 hours

≤12 hours

**8 Reperfusion goals:**  
Therapy defined by patient and center criteria

- **FMC-to-balloon inflation (PCI) goal of ≤90 minutes**
- **Door-to-needle (fibrinolysis) goal of 30 minutes**

**9 Non-ST-elevation ACS (NSTEMI-ACS)**  
Determine risk using validated score (ie, TIMI or GRACE)

**10 ST depression or dynamic T-wave inversion, transient ST elevation; strongly suspicious for ischemia and/or high-risk score**  
**High-risk NSTEMI-ACS**

**11 Troponin elevated or high-risk patient**  
**Consider early invasive strategy if:**

- Refractory ischemic chest discomfort
- Recurrent/persistent ST deviation
- Ventricular tachycardia
- Hemodynamic instability
- Signs of heart failure

**Start adjunctive therapies** (eg, nitroglycerin, heparin) as indicated  
See AHA/ACC NSTEMI-ACS Guidelines

**12 Normal ECG or nondiagnostic changes in ST segment or T wave; low-risk score**  
**Low-/intermediate-risk NSTEMI-ACS**

**13 Consider admission to ED chest pain unit or to appropriate bed for further monitoring and possible intervention**