Chest Pain/Acute Coronary Syndrome

The goal is to reduce cardiac workload and to maximize myocardial oxygen delivery by reducing anxiety, appropriately oxygenating and relieving pain. For non-cardiac causes of chest pain refer to appropriate protocol which may include **Pain Management Procedure.**

Pre-Medical Control

MFR/EMT/SPECIALIST/PARAMEDIC

1. Follow **General Pre-Hospital Care Protocol.**
2. Administer oxygen 4 L/min per nasal cannula; titrate to maintain SaO2 ≥ 94%. If pulse oximetry is not available administer oxygen at 4 L/min per nasal cannula.

MFR

3. Assist patient in the use of their own aspirin, chew and swallow if no aspirin or suspected insufficient dose since the onset of chest pain.

EMT

4. Assist patient in the use of their own aspirin, or administer up to 324 mg if available, chew and swallow if no aspirin or suspected insufficient dose since the onset of chest pain.
5. Inquire of all patients (male and female) if they have taken Viagra (sildenafil citrate) or similar erectile dysfunction medications or medications used to treat pulmonary hypertension in the last 48 hours. If yes, DO NOT ADMINISTER NITROGLYCERIN AND CONTACT MEDICAL CONTROL.
6. Assist patient in the use of their own Nitroglycerin sublingual tabs (check expiration date), if available, and if the patient's systolic BP is above 120 mmHg, for a maximum of 3 doses.

SPECIALIST

7. Start an IV NS KVO. If the patient has a BP of less than 100 mmHg, administer an IV/IO NS fluid bolus up to 1 liter wide open, in 250 ml increments and reassess.
8. Administer oxygen 4 L/min per nasal cannula; titrate to maintain SaO2 ≥ 94%. If pulse oximetry is not available administer oxygen at 4 L/min per nasal cannula.
9. Administer aspirin 324 mg PO, chew and swallow if no aspirin or suspected insufficient dose since the onset of chest pain.
10. Inquire of all patients (male and female) if they have taken Viagra (sildenafil citrate) or similar erectile dysfunction medications or medications used to treat pulmonary hypertension in the last 48 hours. If yes, DO NOT ADMINISTER NITROGLYCERIN AND CONTACT MEDICAL CONTROL.
11. Administer nitroglycerin 0.4 mg sublingual if BP is above 100 mmHg. Dose may be repeated at 3 to 5 minute intervals if chest pain persists and BP remains above 100 mmHg. Nitroglycerin may be administered prior to IV placement if the BP is above 120 mmHg.
12. Contact Medical Control.

PARAMEDIC

1. Start an IV NS KVO. If the patient has a BP of less than 100 mmHg, administer an IV/IO NS fluid bolus up to 1 liter wide open, in 250 ml increments and reassess.
2. Administer oxygen 4 L/min per nasal cannula; titrate to maintain SaO2 ≥ 94%. If pulse oximetry is not available administer oxygen at 4 L/min per nasal cannula.

3. Administer aspirin 324 mg PO, chew and swallow if no aspirin or suspected insufficient dose since the onset of chest pain.
4. Obtain 12-lead ECG if available. Follow local MCA transport protocol if ECG is positive for acute ST Elevation Myocardial Infarction (STEMI) and alert the hospital as soon as possible.
5. Do not delay transport.
6. Inquire of all patients (male and female) if they have taken Viagra (sildenafil citrate) or similar erectile dysfunction medications or medications used to treat pulmonary hypertension in the last 48 hours. If yes, DO NOT ADMINISTER NITROGLYCERIN AND CONTACT MEDICAL CONTROL.
7. Administer nitroglycerin 0.4 mg sublingual if BP is above 100 mmHg. Dose may be repeated at 3 to 5 minute intervals if chest pain persists and BP remains above 100 mmHg. Nitroglycerin may be administered prior to IV placement if the BP is above 120 mmHg.
8. If pain persists after up to 3 doses of nitroglycerin, and BP is greater than 100 mmHg, administer narcotic analgesic per MCA selection per **Pain Management Procedure.**
9. Contact Medical Control.

The goal is to reduce cardiac workload and to maximize myocardial oxygen delivery by reducing anxiety, appropriately oxygenating and relieving pain. For non-cardiac causes of chest pain refer to appropriate protocol which may include **Pain Management Procedure.**

- Follow **General Pre-hospital Care Protocol**
- Administer oxygen 4 L/min per nasal cannula; titrate to maintain SaO2 ≥ 94 %. If pulse oximetry is not available administer oxygen at 4 L/min per nasal cannula.

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- Start an IV NS KVO, if the patient has a BP is less than 100 mmHg, administer IV/IO NS fluid bolus up to 1 liter wide open, in 250 ml increments & reassess.

- Administer oxygen 4 L/min per nasal cannula; titrate to maintain SaO2 ≥ 94 %. If pulse oximetry is not available administer oxygen at 4 L/min per nasal cannula.
- Administer aspirin 324 mg PO, chew and swallow if no aspirin or suspected insufficient dose since the onset of chest pain.

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- Obtain 12-lead ECG, if available. Follow local MCA transport protocol if ECG is positive for acute ST Elevation Myocardial Infarction (STEMI) and alert the hospital as soon as possible.
- Do not delay transport.

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- Inquire of all patients (male and female) if they have taken Viagra (sildenafil citrate) or similar erectile dysfunction medications or medications used to treat pulmonary hypertension within last 48 hours.

YES → **DO NOT ADMINISTER NITROGLYCERIN** → **Contact Medical Control**

NO →

- Administer Nitroglycerin 0.4 mg sublingual if BP is above 100 mmHg.
- Dose may be repeated at 3-5 minute intervals if chest pain persists and BP remains above 100 mmHg.
- Nitroglycerin may be administered prior to IV placement if the BP is above 120 mmHg.
- If pain persists after up to 3 doses of nitroglycerin, & BP is greater than 100 mmHg, administer narcotic analgesic per MCA selection per **Pain Management Procedure**.

→ **Contact Medical Control**