WEST VIRGINIA EMS SYSTEM	**CCT-RN/Paramedic Treatment Guideline 1202/2202**
Acute Myocardial Infarction	**Page 1 of 3**

Follow **Chest Pain (ACS) Protocol 4202** and **MAMP Protocol 1201/2201,** as applicable, with the following modifications:

A. Patient Assessment.

1. If field/911 response, obtain 12 lead ECG and transmit to accepting facility and/or Medical Command, if possible;
If interfacility transfer, obtain copy of 12 lead ECG and consult with sending personnel regarding type of myocardial infarction.

2. If findings of Inferior Wall infarct (ST elevations in leads II, III, aVf), perform right sided ECG looking for ST elevation in V4R. *ST elevations in V4R would suggest Right Ventricular (RV) infarct.* ***Do not give nitroglycerin to patients with RV infarct since they need preload.***

B. Treatment for Acute ST-Elevated Myocardial Infarction (STEMI) –**[not Inferior Wall MI with RV infarct]**.

1. Ensure that ASA 325 mg PO has been given per **Chest Pain (ACS) Protocol 4202** unless contraindicated.

2. Clopidogrel (*Plavix*) 300 mg PO unless contraindicated.*
*Contraindications include age ≥75, recent or ongoing bleeding, or if interfacility transport for the purpose of emergency coronary artery bypass graft (CABG).

3. If chest pain persists and BP >90 systolic, ensure that nitroglycerin 0.4 mg SL has been given and may repeat every 5 minutes up to 3 doses, per **Chest Pain (ACS) Protocol 4202** unless contraindicated. ***Withhold nitroglycerin if Inferior Wall MI with RV infarct unless directed by MCP.***

4. If chest pain persists and BP >100 systolic, consider morphine 2 mg slow IVP. May repeat every 5 minutes (up to 10 mg total), if chest pain persists and BP >100 systolic.

CCT Class 1*:

5. If chest pain persists and BP >100 systolic, consider nitroglycerin infusion, starting at 5 mcg/min via IV pump. May titrate up by 5 mcg/min every 5 minutes, if needed as long as BP >90 systolic. Max dose: 40 mcg/min. ***Withhold nitroglycerin if Inferior Wall MI with RV infarct.***

(For Interfacility Transfer Only)

6. In consultation with sending and/or receiving physicians, RN may initiate thrombolytic and/or heparin therapy **as directed by physicians**.
Standard heparin dosing is as follows:
Heparin bolus: 60 Units/kg IVP, not to exceed 5000 Units
Heparin drip: 12 Units/kg/hour, not to exceed 1000 Units/hour

7. If heparin, thrombolytics, or other IV drip meds have already been started by sending facility, maintain infusion rate as set by sending facility unless changed by MCP or receiving physician.

8. If not already given, *for patients who are hypertensive (BP >140/80) and do not have any of the contraindications below*, consider metoprolol (*Lopressor*).
Metoprolol 5 mg slow IV push every 5 minutes, up to total of 15 mg, as long as patient remains hemodynamically stable and none of the following contraindications are present. [**Contraindications include signs of heart failure; heart rate <60; BP <120 systolic; signs of CHF including rales/crackles; 1st, 2nd, or 3rd degree heart block; active asthma, or reactive airway disease; or increased risk for cardiogenic shock including age >70.**]

C. Treatment for Acute Inferior Wall MI with Right Ventricular Infarct.

1. Perform those steps in B. above ***except*** for administration of nitroglycerin.

2. If hypotension, consider volume loading with IV 0.9% normal saline boluses of 250 ml each, may repeat up to 1 - 2 liters total, as long as lungs remain clear. Titrate IV fluids to maintain BP >90 systolic.

3. If persistent hypotension not corrected by IV fluids, **Consult MCP** for consideration of vasopressors such as:

CCT Class 1*: dobutamine (*Dobutrex*) 2 mcg/kg/min, titrate up for BP >90 systolic (max. 20 mcg/kg/min), **per direct order by MCP**,

OR

CCT Class 2: dopamine 5 mcg/kg/min, titrate up for BP >90 systolic (max. 20 mcg/kg/min), **per direct order by MCP.**

D. Treatment for Acute Coronary Syndrome (ACS or Non ST-Elevated MI).

1. For interfacility transport, continue any medications that were started by the sending physician, as appropriate.

2. **CCT Class 1:** If not already established, **Consult with MCP** regarding GIIb/IIIa inhibitor:

eptifibatide (*Integrilin*) 180 mcg/kg bolus over 2 minutes, then 2 mcg/kg/min,

OR

tirofiban (*Aggrastat*) 0.4 mcg/kg/min for 30 minutes, then 0.1 mcg/kg/min