

# WRHA Emergency Program Acute Coronary Syndrome (ACS) ST Elevation Myocardial Infarction (STEMI) Standing Orders

**These orders are to be used as a guideline and do not replace sound clinical judgement and professional practice standards. Patient allergies and contraindications must be considered when completing these orders.**

**Automatically Activate, if not in agreement cross out and initial**     
  **Activated by Checking Box**

Allergies:     Unknown     No     Yes

Weight: \_\_\_\_\_ kg       Estimated  
 Actual

## REPERFUSION STANDING ORDERS

DATE:    D D M M Y Y Y Y      24 HOUR  
 TIME:    | | | | | | | |

- Oxygen Therapy to maintain saturation GREATER than or EQUAL to 90%
- Establish peripheral venous access x 2
- acetylsalicylic acid 160 mg po, chew and swallow x 1 dose, (if not taken previously within 24 hours), then 81 mg po daily
- If systolic pressure GREATER than 90 mmHg:**
  - nitroglycerin spray 0.4 mg sublingual q5min x 3 doses prn for chest pain
  - nitroglycerin patch \_\_\_\_\_ mg/hr (usual 0.4 mg/hr) for 24 hours x 1 patch
- morphine 2.5 mg IV q5min prn for continued unrelieved chest pain (only to be given if systolic BP is GREATER than 90 mmHg)
- ondansetron 4 mg PO/IV q8h prn for nausea

**NOTE:** Do not give nitroglycerin if sildenafil (VIAGRA) or vardenafil (LEVITRA) was taken within last 24 hours or tadalafil (CIALIS) was taken within 48 hours

**NOTE:** Notify prescriber if a total of 3 doses (7.5 mg) is given

**NOTE: If diagnosis is CERTAIN, arrange immediate appropriate transport to PCI center then call interventional cardiologist. If STEMI diagnosis UNCERTAIN, call local specialist or "SBH outside call cardiologist" to discuss.**

## GENERAL ORDERS

- EKG 12 lead STAT
- EKG 15 lead (RV4, V8, V9) STAT
- EKG posterior leads (V7, V8, V9) STAT
- EKG right sided chest leads (RV3, RV4, RV5, RV6) STAT
- Draw CBC, sodium, potassium, chloride, total CO<sub>2</sub>, urea, creatinine, glucose, troponin, STAT
- Repeat troponin in 2 hours post baseline (Time 0 = first blood sample)
- Vital signs (including oxygen saturations and documentation of ST segments) q15 minutes x 4, q30 minutes x 2, and q1h until discharge or admission. Continue q15 minutes with ongoing chest pain and/or unstable vital signs
- Continuous cardiac monitor with ST segment monitoring
- Mount and analyze initial rhythm strip and prn with rhythm changes
- Review and document ACP status

### Diet

- NPO

### Activity

- Bed rest

## 1. Candidate for Primary Percutaneous Coronary Intervention (PCI)

- Antiplatelet Order  
**Choose ONE only if not previously administered:**
  - ticagrelor 180 mg po x 1 dose STAT (PREFERRED unless contraindicated)
  - OR**
  - clopidogrel 600 mg po x 1 dose STAT
- Anticoagulant Order  
**Choose ONE only:**
  - heparin IV bolus 70 units/kg x 1 dose STAT (maximum dose 10,000 units) (PREFERRED unless contraindicated)  
**Note:** no continuous heparin infusion required
  - OR**
  - enoxaparin IV 0.5 mg/kg x 1 dose STAT

### CRITERIA/INDICATIONS for Primary PCI:

- Patient arrival to SBH WITHIN 100 minutes from EKG diagnosis
- Patient arrival to SBH GREATER THAN 100 minutes AND**
  - Cocaine Use, **OR**       Pulmonary edema, **OR**
  - Contraindication to lytics, **OR**       Recurrent VF/VT, **OR**
  - Cardiogenic shock
- If patient is a PCI candidate with STEMI diagnosis, continue with orders. If No, consider fibrinolysis (see section 2).**
- First arrange immediate transport to SBH Heart Cath lab
- Call SBH paging at 204-237-2053 for interventional cardiology

PHYSICIAN'S SIGNATURE  
(GENERIC EQUIVALENT AUTHORIZED)

MD

FAX SENT

DATE

D D M M Y Y Y Y

24 HOUR

TIME

**ABSOLUTE CONTRAINDICATIONS  
for Fibrinolysis Administration**

- Any known prior intracranial hemorrhage
- Known structural cerebral vascular lesion (i.e. arteriovenous malformation)
- Known malignant intracranial neoplasm (primary or metastatic)
- Ischemic stroke within 3 months (except acute ischemic stroke within 3 hours)
- Suspected aortic dissection
- Active bleeding or bleeding diathesis (excluding menses)
- Significant closed head or facial trauma within 3 months
- Pregnancy or 1 week post-partum

**RELATIVE CONTRAINDICATIONS  
for Fibrinolysis Administration - Call Interventional Cardiologist**

- Systolic blood pressure GREATER than 180 mmHg or diastolic blood pressure GREATER than 110 mmHg (irrespective of whether blood pressure lowers after presentation)
- History of chronic severe, poorly controlled hypertension
- History of prior ischemic stroke GREATER than 3 months, dementia or known intracranial pathology not covered in contraindications
- Traumatic or prolonged (GREATER than 10 minutes) CPR or major surgery (LESS than 3 weeks)
- Recent (within 2 to 4 weeks) internal bleeding
- Active peptic ulcer
- Current use of anticoagulants: higher the INR, higher risk of bleeding
- Non-compressible vascular punctures

**FIBRINOLYSIS/ENOXAPARIN CONTRAINDICATIONS**

- Refer to contraindications for fibrinolytics as above
- Allergy or hypersensitivity to heparin, pork products or to enoxparin
- Heparin-induced thrombocytopenia within the previous 100 days

# WRHA Emergency Program

## Acute Coronary Syndrome (ACS)

### ST Elevation Myocardial Infarction (STEMI)

### Standing Orders

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#### REPERFUSION STANDING ORDERS

#### GENERAL ORDERS

### 2. Candidate for Fibrinolysis, Non Primary PCI Candidates

**FIBRINOLYSIS CANDIDATE IF LESS THAN OR EQUAL TO 75 YEARS OF AGE**

**Anticoagulation Step 1:**

enoxaparin 30 mg IV bolus immediately before tenecteplase (TNK)

**Fibrinolytic Agent:**

tenecteplase (TNK) \_\_\_\_\_ mg IV over 5 seconds  
**(Maximum Dose = 50 mg) x 1 dose**

**Tenecteplase (TNK) Dosing Table**

Pt Weight (kg)	TNK (mg)	Volume TNK to be given
LESS than 60	30 mg	6 mL
60 to 69	35 mg	7 mL
70 to 79	40 mg	8 mL
80 to 89	45 mg	9 mL
90 or GREATER	50 mg (MAX DOSE)	10 mL

**Anticoagulation Step 2:**

enoxaparin \_\_\_\_\_ mg (1 mg/kg) subcutaneous q12h x \_\_\_\_\_ doses  
 (usual 2 doses but only give 1 dose if CrCl less than 30 mL/min)

Weight	Dose	Weight	Dose
<input type="checkbox"/> 40-49 kg	40 mg	<input type="checkbox"/> 90-149 kg	100 mg (Max dose)
<input type="checkbox"/> 50-69 kg	60 mg	<input type="checkbox"/> GREATER than 149 kg:	Use unfractionated heparin
<input type="checkbox"/> 70-89 kg	80 mg		

**Antiplatelet:**

clopidogrel 300 mg po x 1 dose

**FIBRINOLYSIS CANDIDATE IF GREATER THAN 75 YEARS OF AGE**

NO enoxaparin IV BOLUS

**Fibrinolytic Agent:**

tenecteplase (TNK) \_\_\_\_\_ mg IV over 5 seconds  
**(Maximum Dose = 50 mg) x 1 dose**

**tenecteplase (TNK) Dosing Table**

Pt Weight (kg)	TNK (mg)	Volume TNK to be given
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70 to 79	40 mg	8 mL
80 to 89	45 mg	9 mL
90 or GREATER	50 mg (MAX DOSE)	10 mL

**Anticoagulation:**

enoxaparin \_\_\_\_\_ mg (0.75 mg/kg) subcutaneous q12h x \_\_\_\_\_ doses  
 (usual 2 doses but only give 1 dose if CrCl less than 30 mL/min)

Weight	Dose	Weight	Dose
<input type="checkbox"/> 40-49 kg	30 mg	<input type="checkbox"/> 95-149 kg	80 mg (Max dose)
<input type="checkbox"/> 50-69 kg	40 mg	<input type="checkbox"/> GREATER than 149 kg	Use Unfractionated Heparin
<input type="checkbox"/> 70-94 kg	60 mg		

**Antiplatelet:**

clopidogrel 75 mg po x 1 dose

See contraindications for fibrinolysis on back of page

**Patient is a candidate for Fibrinolysis:**     Yes     No

If yes administer fibrinolysis. *Then*, MD to follow steps listed:

1. Arrange immediate transfer for coronary angiography;
2. Call "SBH Outside Call Cardiologist" (204-237-2053) to discuss patient destination;
3. Complete Cath Lab referral form and send with patient;
4. Instruct ambulance to page interventionalist (204-237-2053) if ongoing pain 30 minutes from SBH.

If no then MD to contact interventional cardiologist on call to discuss case.

**Pre tenecteplase TNK**

Neuro Assessment (Baseline)

**Post TNK**

Neuro Assessment q1h x 2 from bolus, then q4h x 24 hours

EKG 12 lead 1 hour and 8 hours post-fibrinolytic bolus

1 hour at \_\_\_\_\_

8 hour at \_\_\_\_\_

**ADDITIONAL ORDERS:**

LESS THAN OR EQUAL TO 75 Years of Age

GREATER THAN 75 Years of Age

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