Level One STEMI Protocol

Assessment and Indications
- CP or equivalent on arrival to ED, onset of symptoms < 24 hrs
- 12 lead EKG handed to MD within 10 min
- ST Elevation > 1 mm in 2 or more contiguous leads

Initial Management
- Activate emergency transport team (in-the-door to out-the-door goal < 30 min)
- Contact Minneapolis Heart Institute® at 612-863-3911 to page cardiologist for a Level One STEMI
- NPO, place hands-free defibrillator pads, 2 IVs, draw labs to include troponin and lactate
- Aspirin: 324 mg PO (81 mg chewable tabs X 4) OR 300 mg PR

Give Antiplatelet (choose one):
  - 1st Choice: Ticagrelor: 180 mg, PO (chewed) or via NG/OG OR
  - 2nd Choice: Clopidogrel: 600 mg, PO or via NG/OG
- Heparin: 60 U/kg (max 4,000 U) IVP, loading dose
- Nitroglycerin: 0.4 mg SL, prn
- Morphine Sulfate: 2-4 mg IVP, prn
- Oxygen: to maintain SpO2 > 92%
- If Zone 2, or transfer to the cath lab is expected to be > 90 min,
  Thrombolytic: ½ dose TNKase IVP
- Consider CXR if condition warrants (send film with patient)
- Remove patient’s clothing and place in gown (DO NOT delay transport)

"Guidelines are not meant to replace clinical judgment or professional standards of care. Clinical judgment must take into consideration all the facts in each individual and particular case, including individual patient circumstances and patient preferences. They serve to inform clinical judgment, not act as a substitute for it. These guidelines were developed by a Review Organization under Minn. Stat. §145.61 et. seq., and are subject to the limitations described at Minn. Stat. §145.65."

This information is intended only as a guideline. Please use your best judgment in the treatment of patients.
Level One STEMI Contraindications to \( \frac{1}{2} \) Dose Thrombolytic (TNK)

**Inclusion Criteria**
- Symptoms at least 30 minutes and less than 12 hours
- ST Elevation at least 1 mm in 2 or more contiguous leads
- Expected transfer time to the cath lab is greater than 90 minutes

**Absolute Contraindications**
- Any prior ICH
- Known structural cerebral vascular lesion (e.g. AV malformation)
- Known malignant intracranial neoplasm (primary or metastatic)
- Ischemic stroke (< 3 months) – *except* acute ischemic stroke within 4.5 hr. – *For ACUTE ISCHEMIC STROKE refer to STROKE PROTOCOL*
- Suspected aortic dissection
- Active bleeding or bleeding diathesis (excluding menses)
- Significant closed-head or facial trauma (< 3 Months)
- Intracranial or intraspinal surgery (< 2 months)
- Severe uncontrolled hypertension – unresponsive to emergency therapy (SBP >180, DBP >110)
- [For streptokinase: prior treatment within the previous 6 months]
- Patient is On Oral Anticoagulant Therapy
  - Warfarin (Coumadin)
  - Dabigatran (Pradaxa)
  - Rivaroxaban (Xarelto)
  - Apixaban (Eliquis)
- Cardiac arrest patients – traumatic or prolonged CPR (> 10 Minutes)
- None

**Relative Contraindications**
- History of chronic, severe, poorly controlled hypertension
- Significant hypertension on presentation (SBP >180, DBP >110)
- History of prior ischemic stroke (> 3 months)
- Dementia
- Known intracranial pathology not covered in Absolute Contraindications
- Major surgery (< 3 weeks)
- Patients with epidural anesthesia
- Recent internal bleeding (within 2 to 4 weeks)
- Non-compressible vascular punctures
- Pregnancy
- Active peptic ulcer
- None