## **Kittitas County Prehospital EMS Protocols**

### SUBJECT: CHEST PAIN AND SUSPECTED STEMI

#### **General Chest Pain Protocol**

- A. If stable, administer O<sub>2</sub> @ 4-6 lpm per nasal Cannula.
- B. If unstable, administer  $O_2$  @ 12-15 lpm per non-rebreather mask.
- C. Establish Cardiac Monitor.
- D. Establish 2 peripheral IVs with **Isotonic Crystalloid** @ TKO.
- E. Establish 12 lead ECG (include printout with PCR).
- F. If 12 lead ECG indicates ST- elevation, myocardial infarction (STEMI).
  - 1. Transport directly to the nearest facility with cardiac Cath lab capabilities.
  - 2. Initiate Heparin protocol.
- G. <u>324 mg of ASA</u> (chewable) if equal radial pulses are present, no aspirin allergy, and have not taken aspirin in the last four hours
- H. Administer **Nitroglycerin** 0.4 mg sublingual or spray q 3 minutes, up to a total of 1.2 mg, unless BP  $\leq$  100 mm Hg systolic. (If hypotension occurs, consider 250 cc fluid challenge.)
- I. If pain unrelieved and BP > 100 mm Hg systolic, administer Morphine 2-5 mg IV initially, followed in 2 mg increments q 5 minutes, up to a total of 20 mg, or until pain is relieved or BP drops below 100 mm Hg systolic. (If hypotension occurs, consider 250cc fluid challenge.)
  - Should respiratory depression occur secondary to Morphine administration, consider Naloxone.
  - If patient is allergic/hypersensitive to Morphine Sulfate, consider Fentanyl 3 mcg/kg, up to 150 mcg in 25 mcg increments.

# 12-Lead Electrocardiogram Variations in **Acute Coronary Syndromes** Non-diagnostic or baselineno abnormalities Suspicious for ischemia—ST segment depressed, T wave may invert Suspicious for injury—ST segment elevated, T wave may invert Suspicious for injury or infarction-ST segment elevated, T wave may invert, abnormal Q wave may be present Suspicion for injury-new onset bundle branch block **AMI Recognition** Limb Leads **Chest Leads** aVR aVL V2 V5 Inferior

### **Adult Heparin Protocol Initial Dosing Chart**

**V3** 

V6

For patients <40kg, give 60 units/kg loading dose. Maximum does is 4000 units

### **Contraindications:**

Heparin should **not** be used in patients:

- with severe thrombocytopenia
- with any uncontrollable active bleeding

| ·           |                      |
|-------------|----------------------|
| Weight (kg) | Initial Loading Dose |
| 40          | 2400                 |
| 45          | 2700                 |
| 50          | 3000                 |
| 55          | 3300                 |
| 60          | 3600                 |
| 65          | 3900                 |
| >65         | 4000                 |
|             |                      |

J. Notify closest Cardiac Cath Lab facility before transporting to confirm willingness to accept patient. If not willing to accept patient, contact next closest Cath Lab and consider air transport as needed.

NOTE: When feasible, ALS units will staff STEMI transfers with a driver and 2 ALS providers.

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