MEHLVILLE FIRE PROTECTION DISTRICT
EMERGENCY MEDICAL SERVICES
GUIDELINES FOR PREHOSPITAL EMERGENCY CARE

SUBJECT: 700.05
CARDIAC EMERGENCIES: HYPERTENSION

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Pre-Hospital Actions:

1. See considerations below.
2. Universal Cardiac Care.
3. Obtain a blood pressure in both arms; repeat blood pressure before and after treatment.
4. Consider:
   a) Administer Nitroglycerine 0.4 mg sublingual. May repeat prn for a maximum of three doses.

Considerations:

A. Hypertensive Crisis: elevated blood pressure with signs/symptoms of end organ dysfunction (brain, heart or kidney). Symptoms of cerebral dysfunction may include: severe headache, nausea, vomiting, altered mental status, blurred vision, diplopia, hemiparesis, seizures and coma. Symptoms of cardiovascular dysfunction may include: chest pain, nausea, diaphoresis, congestive heart failure or pulmonary edema.

B. Hypertensive emergencies: potentially harmful elevation of blood pressure without signs or symptoms of end organ dysfunction.

C. Emergent treatment of uncomplicated hypertension should be delayed until arrival in the Emergency Department.

D. In the presence of pulmonary edema, see Cardiac: Pulmonary Edema.

E. Even in cases of hypertensive emergencies, the BP should not be lowered to normal levels. Rapid reduction in BP below the cerebral, renal, and/or coronary autoregulatory range will result in marked reduction in organ blood flow, possibly leading to ischemia and infarction. In general, the MAP should be lowered by no more than 20-25% in the first hour of treatment. If the patient remains stable, the BP should then be lowered to 160/100 in the next 2-6 hours. Please note the exceptions to this general rule listed below.

- Acute myocardial ischemia
- CHF with pulmonary edema
- Acute aortic dissection: In cases of acute aortic dissection, the SBP should be decreased as rapidly as possible to a goal of 100-110 mm Hg or lower.)

STANDARD PRECAUTIONS MUST BE OBSERVED.