VDH VIRGINIA DEPARTMENT OF HEALTH

Office of Human Resources
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Reviewer: Clinical Quality Improvement Committee

Providing Emergency Care to Persons with Chest Pain

APPLICATION: All employees within the Virginia Department of Health

Policy

In the interest of providing potentially life-saving care aspirin shall be given to persons (16 years of age and older), not allergic to acetylsalicylic acid (ASA), presenting with acute chest pain or prolonged (> 10 minutes) ongoing chest pain or discomfort.

Purpose

The early use of aspirin in persons experiencing acute coronary syndrome commonly referred to as a "heart attack" results in significant reduction in adverse events and subsequent mortality.

It is important for public health staff to know how to manage a person presenting with acute chest pain or prolonged (> 10 minutes) ongoing chest pain or discomfort. If a person 16 years and older presents with chest pain suspected to be a myocardial infarction, it is imperative that the emergency response system (EMS) is activated, the person is properly evaluated, aid is rendered and aspirin is administered (via protocol).

Acute coronary syndrome is characterized as complaints of chest pain or discomfort, which may involve pressure, tightness or fullness; pain or discomfort in one or both arms, the jaw, neck, back or stomach; shortness of breath; feeling dizzy or lightheaded; nausea; and sweating. The American Heart Association advises that the benefits of administering aspirin for persons over 16 years of age with chest pain and not allergic to acetylsalicylic acid (ASA) outweigh the risk of "ingesting what amounts to be one-half of the therapeutic, over-the-counter dose for a headache" (International Liaison Committee on Resuscitation, American Heart Association, 2007)

Procedure

- Each health district shall adopt and implement a procedure for the administration of aspirin in persons who presents with acute chest pain or prolonged (>10 minutes), ongoing chest pain or discomfort.
    - Virginia law does not require the signing of a consent form for an adult to receive treatment.
    - Persons who render emergency care shall not be liable for any civil damages for acts or omissions resulting from the rendering of such care or assistance (The Good Samaritan Law, Code of Virginia §8.01-225).

- The attached standing protocol template lists the basic tasks for persons rendering emergency care to persons experiencing chest pain. These tasks are not listed in any order of priority and will likely be performed in conjunction with others.

- Non-licensed persons rendering emergency care to persons experiencing chest pain can administer aspirin per standing protocol.

Evidence Base

American Red Cross Health Services Protocols. Chest Pain/Pressure. August, 2006 www.redcross.org

Centers for Medicare and Medicaid Services. 2009. Acute Myocardial Infarction/Chest pain; percentage of emergency department ED acute myocardial infarction (AMI patients) or chest pain patients (with probable chest pain) who received aspirin within 24 hours before ED arrival or prior to transfer. *Specifications Manual for Hospital Outpatient Quality Measures*. Baltimore, MD: p 245.

Circulation, Journal of the American Health Association. 2010. Jonathan Epstein, Louis Gonzales, Rita Ann Herrington, Jeffrey L. Pellegrino, Norda Ratcliff, David Markenson, Jeffrey D. Ferguson, Leon Chameides, Pascal Cassan, Kin-Lai Chung, and Adam Singer. *Part 17: First Aid: 2010 American Heart Association and American Red Cross Guidelines.* American Heart Association. 122:S934-S946

Circulation, Journal of the American Heart Association. 2010. Robert E. O'Connor, William Brady, Steven C. Brooks, Deborah Diercks, Jonathan Egan, Chris Ghaemmaghami, Venu Menon, Brian J. O'Neil, Andrew H. Travers and Demetris Yannopoulos. *Guidelines for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care. Part 10: Acute Coronary Syndromes. American Heart Association.*

Circulation, Journal of the American Heart Association. 2012. Jeremy S. Paikin, John W. Eikelboom *Aspirin*. American Heart Association. 125. e439-e442.

Code of Virginia §54.1-2969. Authority to consent to surgical and medical treatment of minors.

Journal of the American Institute of Cardiology. 2013. *ACCF/AHA Guideline for the Management of ST-Elevation Myocardial Infarction: A Report of the American College of Cardiology Foundation/American Heart Association Task Force on Practice Guidelines* January 29, 2013, Vol. 61, No. 4

Mayo Clinic. January 9, 2010. *Chest Pain: First Aid*. www.Mayo.Clinic.com

Attachment A - Standing Protocol for Providing Emergency Care to Persons with Chest Pain

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Policy Administration

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Reviewer: Joanne Wakeham — 5/5/15
Joanne Wakeham, RN, PhD, Director, Public Health Nursing — Date

Approver: David H. Trump — 6/10/2015
David H. Trump, M.D., MPH, MBA, Chief Deputy Commissioner for Public Health and Preparedness — Date

Attachment A
[Insert Health District Name]
STANDING PROTOCOL FOR PROVING EMERGENCY CARE to PERSONS WITH CHEST PAIN

1. If a person (16 years of age and older) presents complaining of acute chest pain or prolonged (> 10 minutes) ongoing chest pain or discomfort, **call 911** to **activate the EMS system** immediately. Remain calm and request help from other staff, if available.

2. Assure the client's airway is open and that breathing and circulation are adequate. Be prepared to initiate CPR if the person becomes unresponsive.

3. Initiate oxygen therapy (if available in clinic):
   - Nasal cannula – 4 liters/minute (no order needed)
   - Clinician's order required
     - Nasal cannula >4 liters/min
     - Non-rebreather mask – 10-15 liters/minute

4. Position the person in a semi-upright position with knees bent (if possible); loosen tight clothing.

5. Obtain a brief targeted history while observing the individual's demeanor, skin color and temperature, presence of diaphoresis, shortness of breath, and nausea and vomiting.

6. Assess: vital signs (pulse, blood pressure, respiratory rate); pain (severity, using 0-10 scale (0 being no pain to 10 being the most severe pain), location/radiation (substernal, epigastric, radiation to arm(s), jaw, etc.), and quality (sharp, stabbing, pressure, etc).

7. Contraindications to aspirin use include: allergy to aspirin, signs/symptoms of a stroke (altered level of consciousness, numbness, paralysis, facial droop or slurred speech) history of gastrointestinal (GI) bleed or signs of active bleeding within last 24 hours, bleeding gums, black or tarry stools, or recent surgery (within 14 days).

8. Administer one tablet of chewable, non-enteric coated aspirin (ASA) 325 mg, if no contraindications (see below). May use 4 – 81 mg tablets of chewable aspirin.
   - **Do not use** enteric-coated aspirin.
     - If noncoated aspirin is unavailable, enteric-coated tables can be used but should be chewed to achieve a rapid effect.
   - **Do not use** Ibuprofen or Acetaminophen

9. If the individual has been prescribed nitroglycerin, s/he may self administer 0.4 mg sublingual and repeat as directed in 5 minutes for a total of 3 doses.
   - **Do not** allow the person to take nitroglycerin unless the systolic BP is >90 mm Hg and the heart rate is between 50 and 100 bpm, **or** if s/he has a recent history of taking one of three drugs for male impotence or to enhance libido such as Levitra®, Viagra®, or Cialis®.

- Recheck blood pressure within two (2) minutes of administration and record any changes in the person's condition.

10. If possible, obtain a list of other medications the individual is taking, to include anticoagulants. Obtain past medical history including but not limited to previous heart attack or myocardial infarction (MI), diabetes, GI bleed, hypertension, or recent surgery. Report off to EMS upon arrival.

11. Document in chronological order, date and times of assessments, vital signs, interventions and medications administered during this event in the client's medical record.
    - If the person is not a health department client with an existing medical record, document care provided on the VDH Short Encounter form, locally approved emergency care form, or progress note. File in the miscellaneous file, adhering to the agency's medical record retention policy.

12. Notify immediate supervisor or her/his designee of event as soon as possible.

Approved by:

_____ Date _____

Health Director/Licensed Prescriber