1. GENERAL INFORMATION

1.1 The designated drill for August 2007 is Geriatric Assessment. Station Officers shall conduct drills in accordance with EMS Operating Guide Procedure 104-03, Addendum 2, *Drills and Instruction Periods*.

1.2 The training materials for these drills have been distributed from EMS Operations via e-mail. Station Commanding Officers shall contact EMS Operations if the materials have not been received.

2. PROCEDURE

2.1 Officers shall prepare for the monthly drill by reviewing the drill and reference materials.

2.2 Officers conducting the drill shall provide the Geriatric Assessment reference material to each member.

3. MATERIALS

3.1 Geriatric Assessment reference material

BY ORDER OF THE CHIEF OF EMS COMMAND
1. DESCRIPTION

1.1 This drill is a didactic presentation that satisfies one (1) hour of mandatory material in the topic of GERIATRICS. The station officer should discuss the points of geriatric assessment that are contained in this drill with the EMT and paramedic crew and then review the scenario with the crew members once section at a time discussing assessment, differential diagnosis and final patient outcome.

1.2 According to the U.S. Census Bureau 2000 figures, the segment of the population aged 65 and older is the fastest growing of all age groups. Geriatric patients aren't just "old adults." They have their own special needs which must be addressed to properly diagnose and treat their various health care problems. Changes to the organ systems of geriatric patients can exacerbate certain illnesses and injuries and affect your physical assessment. Your patient assessment of a geriatric patient needs to be a detailed "investigation" of the patient and their presenting condition.

2. PRIOR TO YOUR ASSESSMENT

2.1 Although the patient assessment algorithm of the geriatric patient will not differ from that of other patients there are differences that you must account for during your investigation.

   - Geriatric patients may have extensive histories with multiple diseases as complicating factors.
   - Older adults may experience difficulties in communicating their exact condition because they may have trouble comprehending what is being asked and gathering their thoughts to express their current problem.
   - As with all adult patients speak directly to the patient. Adults with decisional capacity need to be involved in the decisions involving their health care.
   - Have your partner can speak with the relative or care giver to get their impression of what is wrong.
   - Get down on their level so they are looking directly at you and speak clearly and enunciate your words. Make sure the patient can see you (glasses), hear you (hearing aid) and speak with you (dentures in place). Speak face to face and don’t yell at the patient.
   - Always let the patient know everything you are doing and ask them if it is O.K. before you perform an invasive procedure on them.
   - All medications should be recorded by name, dose and is the patient compliant. If you have the prescription bottles try and compare what is actually in the bottle as compared what is expected to be in the bottle based on the date of the prescription and the dosing regime.
- Medications and prescription bottles look similar. Some elderly patients get confused and either take their spouse’s medications or overdose their own meds.
- If you have the prescription bottles see if the physician’s names are all different. Be aware of the shopping bag full of medications. Different physicians may be prescribing meds without knowing what a previous physician has already prescribed for them.

3. **CUSTOMER SERVICE**

3.1 Always think about customer service when performing a patient assessment, especially on an older adult. They come from a different generation that was more formal. Address the patient by their full name or call them Sir or Ma’am. Do not call an older adult by their first name or any pet names. “Poppy, sweetie or dear,” is too informal when you need to establish a professional rapport with them even during emergent conditions.

3.2 Think twice before taking an elderly adult outside in just their underwear or housecoat. Always provide a clean sheet and or blanket to wrap the patient in. This not only maintains their body temperature but also their dignity.

4. **BODY SUBSTANCE ISOLATION & PERSONAL PROTECTIVE EQUIPMENT**

4.1 When performing any patient assessment each member should take precautions to avoid contact with blood, body fluids and all other potentially infectious materials. Infection control PPE shall be worn by members during all incidents where members could potentially be exposed to blood or other potentially infectious materials. Infection control PPE includes disposable latex gloves, disposable protective gowns, eye shield/face mask or goggles with appropriate mask.

4.2 Members shall wash their hands as soon as possible after the removal of gloves or other personal protective equipment.

5. **PHYSICAL ASSESSMENT**

As you begin your head to toe investigation of the geriatric patient you need to take these factors into consideration:

5.1 Respiratory System
Lung capacity, tissue elasticity and compliance of the chest wall all decrease in the elderly. Cough and gag reflexes diminish with age so the elderly patient has a decreased ability to protect their lower airway from aspiration.

5.2 Cardiovascular System
Aging of the heart muscle can decrease cardiac output, effect the ability to increase heart rate and increase the likelihood of dysrhythmias. Blood vessels also lose their elasticity and are more likely to be affected by arteriosclerosis and atherosclerosis. These changes can lead to an increased risk of hypertension and a decrease in organ and peripheral perfusion.
5.3 Nervous System
Geriatric patients can experience decreased sensory perception, decreased motor reaction time and changes in balance and coordination. This may lead to increased injuries. Changes in mental state may be longstanding and progressive due to chronic disease, such as Alzheimer’s disease or a prior CVA. A sudden change in mental state should indicate a serious underlying problem.

5.4 Musculoskeletal System
Aging commonly causes a loss of muscle mass and an increased risk for osteoporosis. This may lead to changes in posture, mobility and balance. Musculature in general is decreasing and is often coupled with stiff, inflexible joints, as well as arthritis. Movement is slower and can be painful. Do not force joints and be careful when moving the patient to stairchairs or stretchers. Remember that less significant mechanism of injury (MOI) may adversely affect geriatric patients more than other patients. A fall from a standing height may be debilitating to the elderly patient.

5.5 Digestive System
Poor nutrition can exacerbate a geriatric patient’s condition. Bleeding from the upper GI tract (esophagus and stomach) may result in vomiting blood. Blood that has been exposed to digestive secretions has the “coffee grounds” appearance. Bleeding in the lower GI tract can lead to red blood in the stools, blood from an upper GI source will result in the dark, tarry stools.

5.6 Urinary System
Enlarged prostate gland in men can cause the blockage of urine flow making urinary tract infections more likely. Women are also at risk for UTI. The elderly may not have a fever with severe infection. Overwhelming infection may occur leading to septic shock.

5.7 Integumentary System
Skin will usually be thinner and more fragile. The patient are easily bruised and wounds take longer to heal. Be careful when taking a blood pressure, applying/removing tape, bandaging, starting IV or saline locks. Perspiration decreases, making heat related emergencies more likely.

5.8 Immune System
The immune system function decrease with age and effects the body’s ability to respond to infection.
6. **SCENARIO**

6.1 You are dispatched to a sick in a private house. Upon arrival a health care aide meets you and escorts you to the patient who is seated next to a window. She is an 86 year old female. The health aide informs you she has been running a low-grade fever since yesterday and is not acting like her normal self. The physician has requested she be transferred to the hospital to be evaluated.

- Patient appears to be a frail, weak, elderly woman.
- Alert, airway open and clear, adequate chest rise and volume. Strong rapid radial pulse slightly irregular.

6.2 The health care aide is just filling in for the day and has no other information. Patients medical records at the home indicates the patient has a history of atrial fibrillation, congestive heart failure, diabetes and hypertension. She is prescribed digoxin, Vaseretic, Vytorin, ezetimibe and pioglitazone (Actos). The patient tells you she has been feeling weak and hasn’t had much of an appetite. Her last meal was a bowl of soup yesterday for lunch.

- Pulse 110, strong, irregular, BP 164/94, Respirations 22, regular, Skin, warm, pink, dry, SaO₂ 93 % on room air.

6.3 Physical exam shows patient has tenting of the skin and warm to the touch, dry mucous membranes, diminished breath sounds bilaterally with rales at the right base only. Slightly irregular heartbeat, no pedal edema.

- Vitals remain the same as above. EKG is atrial fibrillation with no ectopy. Pupils PERLA. The home aide tells you she, “Just tested her sugar” and it was 178 mg/dL

6.4 **BLS treatment**

High concentration oxygen 15 LPM via non-rebreather
Request ALS assistance
Transport in semi—Fowlers position or position of comfort

ALS treatment
IV NS

Hospital diagnosis: Right lower lobe pneumonia diagnosed by chest radiograph. She is admitted for treatment with IV antibiotics and is discharged back home on the fifth day.
7. **CONCLUSION**

7.1 The main points to remember in assessing the geriatric patient are:

- Geriatric patients are likely to suffer from concurrent illness.
- Aging can affect an individual’s response to illness or injury.
- Social and emotional factors may have a greater influence on health in geriatric patients.

Normal physiological changes and underlying acute and chronic illness may make evaluation of an ill or injured geriatric patient a challenge.

**REFERENCES**


**Prepared By:**
Staff Compilations
Bureau of Training EMS Academy

**Reviewed and Approved By:**