Standing Order Training Module

DATE: October, 2007 **STANDING ORDER: Hyperthermia**

PURPOSE

This Standing Order Training Module has been developed to serve as a template for EMS provider training. The intent is to provide consistent and concise information to all providers practicing under a Hospital Base. The content of the Training Module has been developed by your Base Hospital . One hour of SAEMS continuing education credit may be issued following successful completion of the module.

OBJECTIVES: Upon completion of this learning module the participant will be able to:

1. Discuss the role of medical direction related to the use of Standing Orders.
2. List three benefits of Standing Orders.
3. Outline inclusion and exclusion criteria for this Standing Order.
4. Describe the communication process between the field and the receiving facility when a Standing Order is implemented.
5. List the elements of the dispatch radio relay.
6. List two reasons for direct facility (on-line) contact following implementation of a Standing Order.

INSTRUCTIONS:

1. Read the accompanying information, Standing Order, and any additional reference material as necessary.
2. Complete the attached Posttest and return with self addressed envelope to:

   Your Prehospital Manager

3. A SAEMS CE Form will be issued to providers scoring greater than **90%** on the Posttest.
4. Please contact your Prehospital Manager for questions, suggestions, concerns.

SAEMS

Hyperthermia Standing Order Training Module
Test

(October 07)

Name: _____ Date: _____

Contact phone number: _____ Agency: _____
Mailing address:_____

1. Heat cramps/exhaustion should be suspected in a patient who presents with a history of heat exposure, history of increased sweating, decreased fluid intake, and painful muscle cramps following strenuous activity.
   A. True
   B. False

2. "Institute cooling measures" may involve:
   A. Moving the patient out of the heat to a cool environment
   B. Undress patient and cover with moistened towels with ice packs to major pressure point areas (groin, ankles, posterior knees, wrists, and axillas).
   C. Turn up the air conditioning as high as possible.
   D. All of the above.

3. Heat cramps/exhaustion if untreated may progress to heat stroke?
   A. True
   B. False

4. Heat stroke is considered a true life threatening medical emergency as the body's central nervous system temperature regulation has been lost.
   A. True
   B. False

5. You have initiated cooling measures on a 73 y/o male that was found down in his back yard on a hot July Arizona afternoon. He is complaining of muscle cramping to his abdomen and legs. You have started an IV of Normal Saline and have given him a 300 ml fluid bolus. You now notice that he has begun to shiver. Why should you discontinue all cooling measures at this time?
   A. Shivering can lead to seizures.
   B. Shivering will increase the core body temperature.
   C. Uncontrolled shivering will cause nausea and vomiting.
   D. Uncontrolled shivering can only be controlled with Ativan.

Case Study: You are dispatched at 1530 hours to an unconscious 2 y/o male. On arrival you find 2 y/o Nathan lying across the hood of a car in a parking lot. He is extremely flushed and appears to be sleeping. His father is present and is hysterical. Father states he left the sleeping child in the car with the windows rolled up, while he went in the store "for a few minutes," but was delayed an estimated 90 minutes. When he came back he found his son unresponsive and started yelling for help. EMS was called and the temperature outside is 96 degrees with 88% humidity. The child is dressed in a tee shirt, shorts, and a diaper. Primary survey revels: **Airway** patent and lips are bluish gray and tongue is dry, **Breathing** very rapid estimated at 70 and lungs sounds faint but clear, **Circulation** assessed with capillary refill > 3 seconds, skin is hot, pale, dry, and brachial pulse is very rapid and thready at 270. Pulse oximetry is reading "error". FSBS is 82. Tympanic temperature is 107. No past medical history, NKA, on no medications. Child's weight is 30 lbs.

6. Given Nathan's History and your physical assessment findings, what do you think is wrong?
   A. Infectious process
   B. Heat exhaustion
   C. Hypoglycemia with Sepsis
   D. Heat Stroke

7. What is your best immediate treatment?
   A. Move to a cooler environment and begin cooling measures.
   B. Apply O-2 via non-rebreather mask at blow by.
   C. Start an IV and give D-25.
   D. Place on a cardiac monitor and anticipate an order for Adenosine

8. What is Nathan at risk for?
   A. Seizures/brain damage.
   B. Respiratory failure and arrest.
   C. Cardiac failure and full arrest.
   D. All of the above.

9. You have started a large bore IV (18 ga) in the left anticubital of Normal Saline with a buretrol set and will give a fluid bolus of (for credit you must show your math)(answer must be exact):
   A. 273 mls
   B. 310 mls
   C. 260 mls
   D. 360 mls

10. After oxygenating, cooling, and hydration measures had been started, you notice that Nathan has begun seizing. The correct dosage of valium to administer is (for credit you must show your math):
   A. 4.1mg slow IV push
   B. 4.6mg slow IV push
   C. 6.8 mg rectally
   D. A and C are correct