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Subject: Advisory on the Prevention & Treatment of Heat / Sun Stroke

In the wake of the recent temperature rise in different parts of the country, it is pertinent to take immediate necessary measures in this regard. The objective of this advisory is to sensitize health care authorities to take in-time appropriate actions for preparedness, prevention of heatstroke.

2. Heatstroke is a medical emergency and is a form of hyperthermia in which the body temperature is elevated dramatically and can be fatal if not promptly and properly treated. The body's temperature rises rapidly, the sweating mechanism fails and the body is unable to cool down consequently the body temperature can rise to 106° F or higher within 10 to 15 minutes.

3. The body normally generates heat as a result of metabolism, and is usually able to dissipate the heat by radiation of heat through the skin or by evaporation of sweat. However, in extreme heat, high humidity, or vigorous physical exertion under the sun, the body may not be able to sufficiently dissipate the heat and the body temperature rises. Another cause of heatstroke is dehydration. A dehydrated person may not be able to sweat fast enough to dissipate heat, which also causes the body temperature to rise.

4. Common signs and symptoms of heat stroke include profuse sweating or the absence of sweating, with hot red or flushed dry skin, weakness/lethargy, chills, throbbing headache, high body temperature, hallucinations, confusion/dizziness and slurred speech. Heat stroke can cause death or permanent organ damage or disability if not properly treated in time.

5. Infants, the elderly, athletes and outdoor workers are at high risk for heatstroke. Victims of heatstroke must receive immediate treatment. The following steps are recommended:

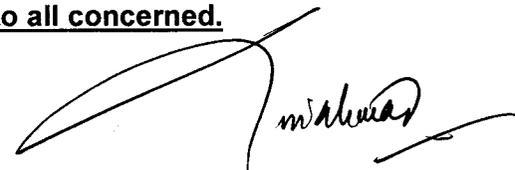
- i. If a person shows signs of possible heatstroke, professional medical treatment should be obtained immediately. The most critical step is the lowering of the temperature of the patients. The patients should be moved to shady area, clothing should be removed and cool tepid water should be applied to the skin while soaking remaining clothes with water.
- ii. Notify the emergency services immediately as severe cases often require hospitalization and intravenous re-hydration.
- iii. Promote sweat evaporation by placing the patient in front of/ under the fan and place ice packs under the armpits and groin.
- iv. If the patient is able to drink liquids, he/she should be given plenty of cool water or other cool beverages that do not contain alcohol or caffeine.

- v. Monitor body temperature and continue cooling efforts until the body temperature drops to 101°F to 102°F (38.3°C to 38.8°C). Antipyretics may be given once the body temperature drops to 101° F or below.

6. Heat/sunstroke is a preventable condition. Common preventive measures which can be taken by the health authorities include:

- i. The public should be educated through awareness messages to drink plenty of water while limiting time in direct sunlight in hot/humid weather or in places with high environmental temperatures, avoid becoming dehydrated and to refrain from vigorous physical activities in hot and humid weather.
- ii. The public should be made aware of early signs/symptoms of dehydration and subsequent evolving signs and symptoms of heat/sunstroke such as muscle cramps, nausea, vomiting, light-headedness and even heart palpitations.
- iii. The persons working under the sun should prevent dehydration and heatstroke by taking time out of the sun and drinking plenty of water/fluids. The patients should avoid use of alcohol and caffeine containing soft drinks and/or tea), which may exacerbate dehydration.
- iv. The public should be encouraged to consume salty foods, wear hats and light-colored, lightweight and loose clothes during the hot/humid environmental conditions.
- v. The health authorities should arrange first aid facilities in case of emergency situation at prominent points with sufficient essential medical supplies. The hospital should be made alert to stockpile enough medical supplies including intravenous fluids during or before anticipated heat wave in the area.

The above 'Advisory' may please be circulated widely to all concerned.



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