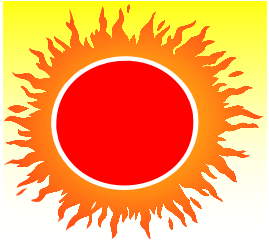
GOVERNOR GRANHOLM HAS DECLARED MAY 30Th AS HEAT AWARENESS DAY IN MICHIGAN

Tolls of Extreme Heat

- Heat kills by taxing the human body beyond its abilities.
- 170 people succumb to the demands of heat on an annual basis.
- In the disastrous heat wave of 1980, across the nation more than 1,700 people died.



Contributing Factors

- Stagnant air conditions in cities add the stress of pollution.
- Sunburn can significantly retard the skin's ability to shed excess heat.
- Alcohol and certain medications can limit the ability to remove excess heat.

What to Look For

- Excessive Heat Outlooks - available on the web at:
  http://www.hpc.ncep.noaa.gov/heat_index.shtml
  http://www.cpc.ncep.noaa.gov/products/predictions/hi_610.html
- NOAA National Weather Service (NWS) **Excessive Heat Watches**, **Heat Advisories**, and **Excessive Heat Warnings**.
  Heat Advisory – Issued when the Heat Index (HI), which combines the effects of high temperatures and relative humidity, is expected to be at least 100° for 3 hours or more.
  Excessive Heat Warning – Issued when the HI is expected to be at least 110° for 3 hours or more.

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Actions to Prevent Heat Disorders

- **Hydrate -** Drink plenty of water!
- **Educate -** Know the latest temperature and heat index forecasts and values. Know the warning signs of heat illness and how to stay cool.
- **Act quickly when heat illness is suspected -** Seek medical attention immediately for any of the following warning signs; cramping, rapid pulse, excessive sweating, red hot skin, nausea, dizziness and/or confusion.
- **Take it easy -** Especially between the hours of 11 am and 6 pm, avoid over exertion. Take breaks at least hourly in the shade or in an air conditioned location.

First Aid for Heat Disorders

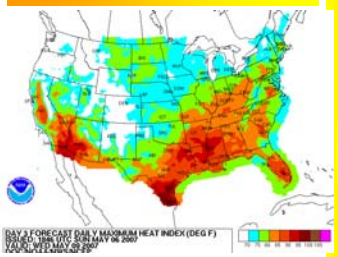
Heat Disorder	Symptoms	First Aid
Sunburn	Redness and pain. Swelling of skin, blisters, fever, and headaches.	Ointments or a dry sterile dressing. Severe cases should be seen by physician.
Heat Cramps	Painful spasms of muscles. Heavy sweating.	Firm pressure on muscles, or gentle massage. Give sips of water. If nausea occurs, discontinue use.
Heat Exhaustion	Heavy sweating, weakness, skin cold, pale, and clammy. Thready pulse. Fainting and vomiting.	Get victim out of sun. Lay down and loosen clothing. Apply cool wet cloth. Give sips of water, unless nausea occurs. If vomiting continues, seek medical attention.
Heat Stroke	High body temperature (106° or higher). Hot dry skin. Rapid and strong pulse. Possible unconsciousness.	Summon emergency medical assistance immediately. Move victim to a cooler environment and reduce body temperature with a cool bath or sponging. Do not give fluids.

Facts of Extreme Heat

- Michigan has had eight heat related deaths since 1993.
- Thousands of heat related illness and hospitalizations in that same time period.
- Michigan recorded two heat deaths in 2004 and three heat deaths in 2005 (the last year's that statistics are available from the State of Michigan)
- Most heat related deaths occur in people's place of residence.
- Most heat related deaths occur in people over the age of 40.
- Males account for about two-thirds of heat related deaths.
- Every location in Michigan has experienced 100 degree heat sometime in the past.
- Metro Detroit experiences about twelve 90+ degree days per year.
- Southern Lower Michigan experiences seven to twelve 90+ degrees days per year.
- Northern Lower Michigan and the Upper Peninsula experiences about five 90+ degree days per year.

Did You Know?

Since HI values were devised for shady, light wind conditions, exposure to full sunshine can increase HI values by up to 15° F.



Heat Index Chart

Relative Humidity (%)

Air Temperature °F

°F	40	45	50	55	60	65	70	75	80	85	90	95	100
110	136												
108	130	137											
106	124	130	137										
104	119	124	131	137									
102	114	119	124	130	137								
100	109	114	118	124	129	136							
98	105	109	113	117	123	128	134						
96	101	104	108	112	116	121	126	132					
94	97	100	103	106	110	114	119	124	129	135			
92	94	96	99	101	105	108	112	116	121	126	131		
90	91	93	95	97	100	103	106	109	113	117	122	127	132
88	88	89	91	93	95	98	100	103	106	110	113	117	121
86	85	87	88	89	91	93	95	97	100	102	105	108	112
84	83	84	85	86	88	89	90	92	94	96	98	100	103
82	81	82	83	84	84	85	86	88	89	90	91	93	95
80	80	80	81	81	82	82	83	84	84	85	86	86	87

Heat Index (Apparent Temperature)

With Prolonged Exposure and/or Physical Activity

Extreme Danger
Heat stroke or sunstroke highly likely
Danger
Sunstroke, muscle cramps, and/or heat exhaustion likely
Extreme Caution
Sunstroke, muscle cramps, and/or heat exhaustion possible
Caution
Fatigue possible

This publication is available on-line at your local NOAA NWS web site

Provided by NOAA National Weather Service offices serving Michigan and the Michigan Committee for Severe Weather Awareness