HEAT A MAJOR KILLER

NOAA Watch, Warning, and Advisory Products for Extreme Heat

1. **Excessive Heat Outlooks**: Are issued when the potential exists for an excessive heat event in the next 3-7 days. An **OUTLOOK** provides information to those who need considerable lead time to prepare for the event such as Public Utility Staff, Emergency managers and Public Health Officials.
2. **Excessive Heat Watches:** Are issued when conditions are favorable for an excessive heat event in the next 24-72 hours. A WATCH is used when the risk of an heat wave has increased but its occurrence and timing is still uncertain. A **WATCH** provides enough lead time so that those who need to prepare can do so, such as cities officials who have excessive heat event mitigation plans.

3. **Excessive Heat Warning/Advisory:** Is issued when an excessive heat event is expected in the next 36 hours. This product is issued when an excessive heat event is occuring,is imminent, or has a very high probability of occuring.The **WARNING** is used for conditions posing a threat to life. An **Advisory** is for less serious conditions that cause significant discomfort or inconvenience and if not taken could lead to a threat to life.

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HOW EXCESSIVE CONDITIONS ARE DECIDED

NOAA's Heat alert procedures are based mainly on Heat Index Values. The **HEAT INDEX** sometimes referred to as the apparent temperature is given in degrees Fahrenheit. The Heat Index is a measure of how hot it really feels when relative humidity is factored in with the actual air temperature.

To find the Heat Index temperature look at the Chart on the next page. As an example, if the air temperature is **96 degrees F** and the relative Humidity is **65%,**the heat index-how hot it feels- is **121 degrees F**. The National Weather Service will initiate alert procedures when the Heat Index is expected to exceed 105-110F depending on the local climate for at least 2 consecutive days.

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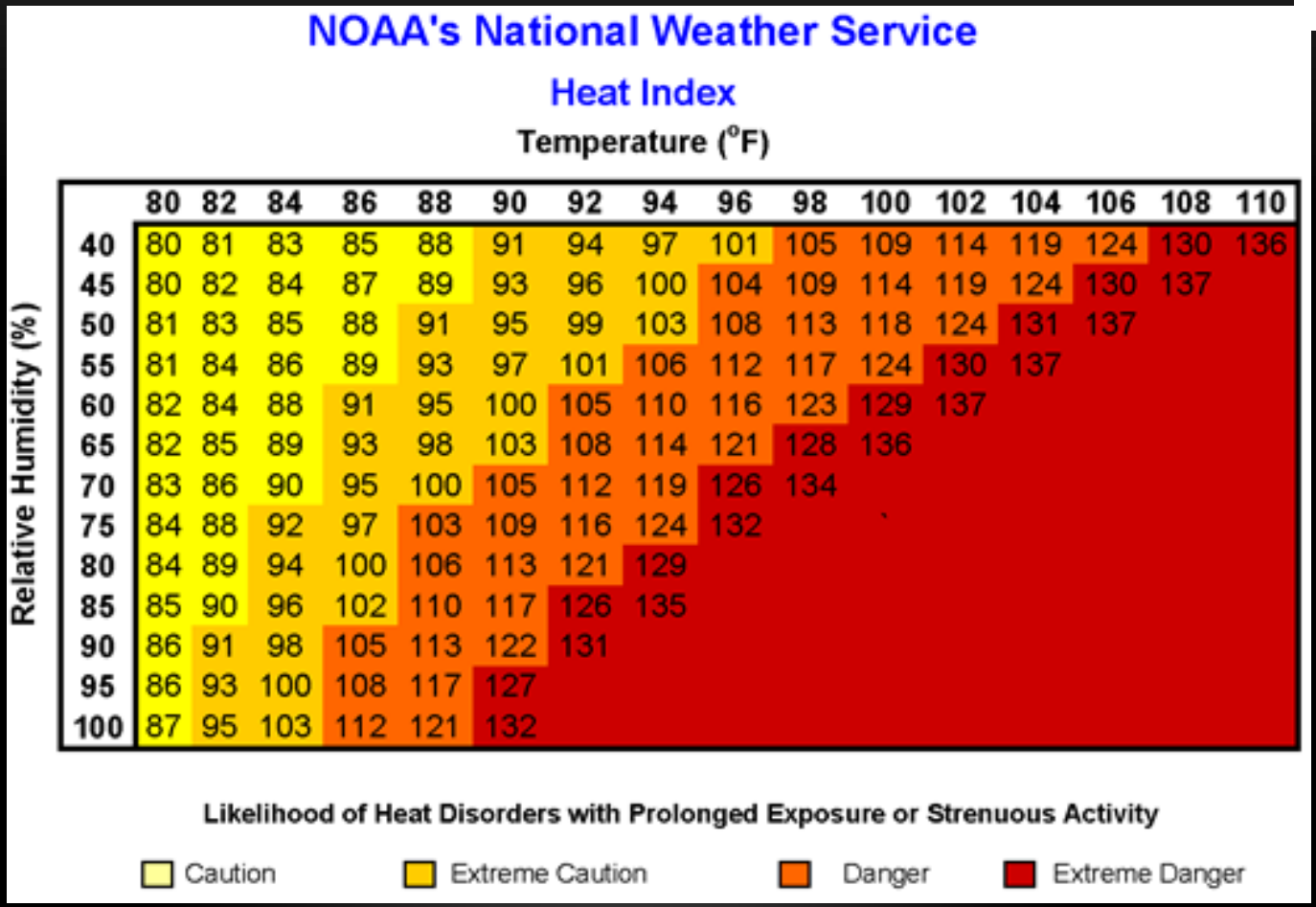
HEAT INDEX CHART



NOAA's National Weather Service

Heat Index

Temperature (°F)

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

Likelihood of Heat Disorders with Prolonged Exposure or Strenuous Activity

Caution | Extreme Caution | Danger | Extreme Danger

IMPORTANT Since heat index values were devised for shady, light wind conditions, exposure to full sun can increase heat index values by up to 15 degrees. Also strong winds particularly with very hot dry air can be extremely hazardous.

HAZARDS OF EXCESSIVE HEAT

During extremely hot and humid weather the body's ability to cool itself is affected. When the body heats too rapidly to cool itself properly, or when too much fluid or salt is lost through dehydration or seating, body temperature rises and heat related illness may develop.

HEAT-RELATED ILLNESS SYMPTOMS AND FIRST AID

HEAT CRAMPS

Symptoms: Painful muscle cramps and spams usually in the legs and abdomen. Heavy Sweating. Call 911.

First Aid: Apply firm pressure on cramping muscles or gentle massage to relieve spasm. Give sips of water, if nausea occurs, discontinue water.

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HAZARDS OF EXCESSIVE HEAT

HEAT EXHAUSTION

Symptoms: Heavy Sweating Weakness Cool Pale Clammy Skin Weak Pulse Possible Muscle Cramps Dizziness Nausea and Vomiting Fainting Normal Body Temperature possible. Call 911.

First Aid: Move person to a cooler environment. Remove or loosen clothing. Apply cool wet cloths. Fan or move victim to an air conditioned room. Offer sips of water, if nausea occurs discontinue water. If vomiting continues seek immediate medical attention.

HAZARDS OF EXCESSIVE HEAT

HEAT STROKE

SYMPTOMS: Altered Mental State. Possible throbbing headache confusion Nausea Dizziness, Shallow Breathing. High body Temperature(106 degrees or higher). Skin may be hot and dry or Patient may be sweating. Rapid Pulse. Possible Unconsciousness. Call 911.

FIRST AID: CALL 911, Heat Stroke is a **SEVERE MEDICAL EMERGENCY** Summon emergency medical assistance or get the victim to a hospital immediately. Delay can be fatal. Move the victim to a cooler air conditioned environment. Reduce body temperature with water mister and fan or sponging. Use a fan if heat index temperatures are below the high 90's. Use extreme caution. If body temperature rises again repeat process. **DO NOT GIVE WATER.**

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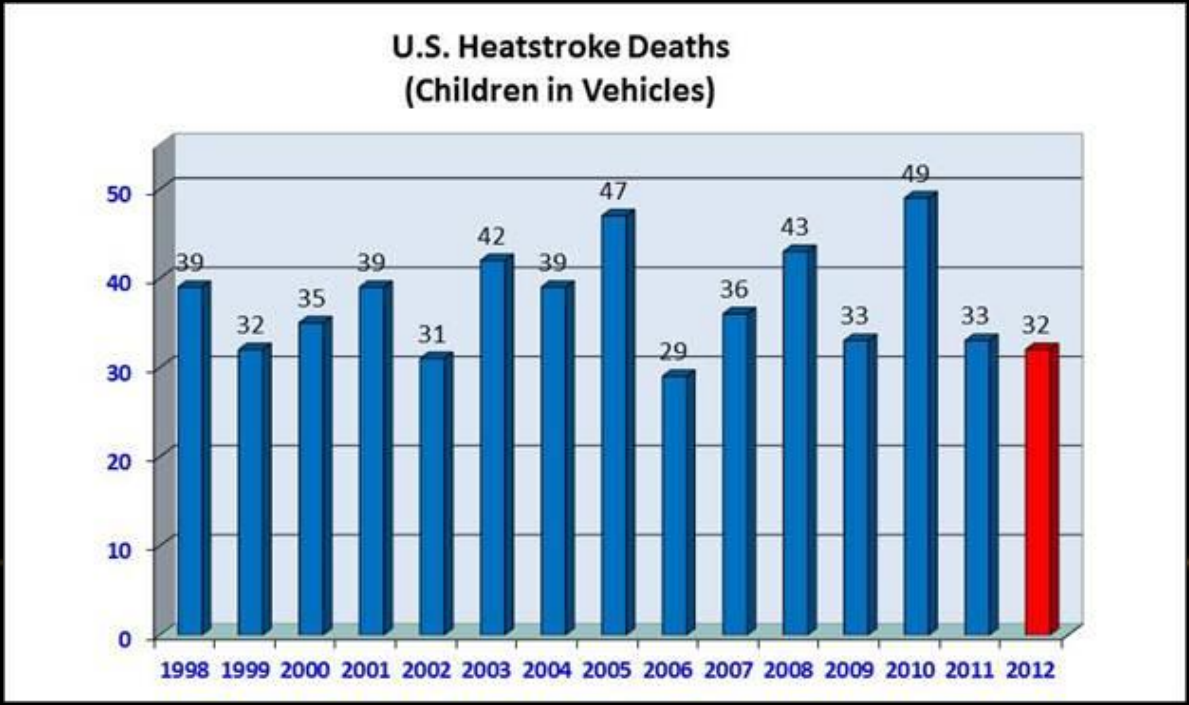
Never Leave Children Disabled Adults or Pets in Parked vehicles

Each year dozens of Children and untold Numbers of pets left in vehicles die from **HYPERTHERMIA**. **Hyperthermia** is an acute condition that occurs when the body absorbs more heat than it can handle. **Hyperthermia** can occur even on a mild day. Studies have shown that the temperature inside a parked vehicle can rapidly rise to a dangerous level for children pets and even adults. Leaving the windows slightly open **does not significantly decrease the heating rate**. The effects can be more severe on Children because their bodies warm at a faster rate than Adults.



Weather-Ready Nation
Saving Lives and Livelihoods

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HOW FAST CAN THE SUN HEAT A CAR?.

The suns short wave radiation(yellow in figure below) heat objects that it strikes. For example a dark dashboard or seat can easily reach temperatures in the range of 180 degrees to over 200 degrees F. These objects(dashboard) heat the adjacent air by conduction and convection and also give of long wave radiation(red n figure below) which is very efficient at warming the air trapped inside a vehicle.

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SAFETY TIPS CONCERNING CHILDREN

1. MAKE SURE YOUR CHILDS SAFETY SEAT AND SAFETY BUCKLES ARE NOT TOO HOT,ESPECIALLY IF VEHICLE HAS BEEN IN THE SUN.

2. NEVER LEAVE CHILDREN UNATTENED IN A VEHICLE EVEN WITH THE WINDOWS DOWN.
3. TEACH CHILDREN NOT TO PLAY IN OR AROUND CARS.

4 ALWAYS LOCK CAR DOORS AND TRUNKS EVEN AT HOME AND KEEP KEYS OUT OF CHILDRENS REACH.

5 ALWAYS MAKE SURE CHILDREN HAVE LEFT THE CAR WHEN YOU REACH YOUR DESTINATION.DO NOT LEAVE SLEEPING INFANTS IN THE CAR EVER.

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SAFETY TIPS FOR ADULTS

1. **Slow Down**: Reduce or eliminate or reschedule strenuous activities until the coolest time of the day.
2. **Dress for summer:** Wear light weight-Light colored clothing to reflect sun heat and sunlight.
3. **Put less in your inner fires**: Foods like meat and other proteins that increase metabolic heat production also increase water loss.
4. **Drink plenty of water,non-alcholic and decaffeinated fluids**: Your body needs water to keep cool. Drink plenty of fluids even if you do not feel thirsty.
5. **During excessive heat periods spend more time in air-conditioned places**: Air Conditioned homes and other buildings markedly reduces danger from the heat. If you can not afford a air conditioner locate a shelter in your community.
6. **Don't get too much sun**: Sunburn reduces your ability to dissipate heat.
7. D**o not take salt tablets: Unless** directed by Physician.