Florida Department of Transportation

SAFETY ADVISOR

July 2007

Lightning—the Underrated Outdoor Killer

Submitted by: Shanaz Sharifpour

Each year, about 400 children and adults in the U.S. are struck by lightning while working outside, at sports events, on the beach, mountain climbing, mowing the lawn, or during other outdoor activities. About 67 people are killed and several hundred more are left to cope with permanent disabilities. This is more than the average of 65 deaths per year caused by tornadoes or the average of 16 deaths per year caused by hurricanes. Many of these tragedies can be avoided if we learn the following facts:

* **All thunderstorms that produce lightning are dangerous.** Lightning kills more people each year than tornadoes.

* **Lightning often strikes as far as 10 miles away from any rainfall.** Many deaths from lightning occur ahead of the storm because people try and wait to the last minute before seeking shelter.

* **You are in danger from lightning if you can hear thunder.** If you can hear thunder, lightning is close enough that it could strike your location at any moment.

* **Look for dark cloud bases and increasing wind.** Every flash of lightning is dangerous, even the first. Head to safety before that first flash. If you hear thunder, head to safety!

Lightning Safety Awareness

Many people don't act promptly to protect their lives, property, and the lives of others because they don't understand all the dangers associated with thunderstorms and lightning.

In this Issue…

Heat Stress	3
What to do for Fire Ant Stings	5
Have fun this summer-but safely	7
Cryptograms	8
Safety Slogan Entry Form	9
Monthly Themes	10
Safety Slogan Winners	10
Customer Satisfaction Survey	11
July 2007 Calendar	12

continued from page 1

Lightning can strike as far as 10 miles away from the rain area in a thunderstorm. That's about the distance you can hear thunder. When a storm is 10 miles away, it may even be difficult to tell a storm is coming.

IF YOU CAN HEAR THUNDER, YOU ARE WITHIN STRIKING DISTANCE. SEEK SAFE SHELTER IMMEDIATELY!

The first strike of lightning is just as deadly as the last. If the sky looks threatening, take shelter before hearing thunder.

Outdoor-Minimize the Risk of Being Struck

Most lightning deaths and injuries in the United States occur during the summer months when the combination of lightning and outdoor summertime activities reaches a peak. During the summer, we take advantage of the warm weather to enjoy a multitude of outdoor recreational activities. Unfortunately, those outdoor recreational activities can put us at greater risk of being struck by lightning. Activities such as boating, swimming, fishing, bicycling, golfing, jogging, walking, camping, or working out of doors all require us to take the appropriate actions in a timely manner when thunderstorms approach. To reduce the threat of death or injury, those in charge of organized outdoor activities should develop and follow a plan to keep participants and spectators safe from lightning.

Indoor-Things to Avoid

Inside homes, you must also avoid activities which put your lives at risk from a possible lightning strike. As with the outdoor activities, certain activities should be avoided before, during, and after storms. In particular, you should stay away from windows and doors and avoid contact with anything that conducts electricity. You may also want to take certain actions well before the storm to protect property within your homes, such as electronic equipment.

In summary, lightning is a dangerous threat to people in the United States, more likely here in the Sunshine State and particularly in the summer. With common sense, we can greatly reduce the number of lightning injuries and deaths. When thunderstorms threaten, get to a safe place, stay there longer than you think you need to, stay away from windows and doors, and avoid contact with anything that conducts electricity.

The following links on lightning give you additional information:
http://www.lightningsafety.noaa.gov/overview.htm

Reference: National Weather Service

Editor

Shanaz Sharifpour
FDOT Safety Coordinator
shanaz.sharifpour@dot.state.fl.us

Graphics and Design

Nancy J. Lynn
Nancy.lynn@dot.state.fl.us

Marianne A. Trussell
FDOT Chief Safety Officer

This monthly newsletter is produced by the State Safety Office under the supervision of Marianne A. Trussell, the Department's Chief Safety Officer.
For content information, please call the editor at (850) 245-1510
Our internet address is:
www.dot.state.fl.us/safety

Our intranet address is:
Infonet.dot.state.fl.us/safetyoffice/

Yard Work Injuries

Submitted by: Shanaz Sharifpour

Every year hundreds of thousands of people are injured using lawn mowers, and the injuries are often serious. Lawn mower injuries include deep cuts, loss of fingers and toes, broken and dislocated bones, burns, eye injuries, etc. Both users and those who are nearby can be hurt.

To Prevent Injuries:

- Wear sturdy shoes
- Use eye protection to shield eyes from dust and flying debris.
- Survey the area before you mow for rocks, sticks, toys and other items that can become dangerous missiles when thrown by your mower blade.
- Keep children and pets well clear when mowing.
- Allow the motor to cool before refueling.

Yard work often involves digging, raking, hoeing, and handling bulky materials such as bagged fertilizers, wood chips, and big, heavy bags of garden refuse. Take precautions to prevent back injuries by using the same safe lifting techniques you use on the job.

Also be careful when using pesticides, weed killers, and other chemicals. Keep them in their original containers, well out of reach of children. Follow directions for mixing, application, and, wearing the required personal protective equipment.

Reference: Business and Legal Reports

Heat Stress

Submitted by: Shanaz Sharifpour

Working in a hot environment, whether it's indoors or outdoors, can put you at risk. Safety goggles can fog, you can become dizzy, or you can lose concentration and become irritable. Eating right, drinking enough water, getting enough sleep, and controlling your weight are critical to avoiding heat exhaustion or potentially deadly heat stroke. Staying cool on the job involves more than holding your temper.

As heat stress and strain go up, fatigue in a worker goes up and increased fatigue can lead to errors in judgment, muscle weakness, and exhaustion.

Heat exhaustion can easily progress to heat stroke if steps aren't taken to cool the victim's internal temperature. Heat exhaustion symptoms include:

- Heavy sweating
- Pale appearance
- Exhaustion
- Weakness
- Muscle cramps
- Headache
- Dizziness
- Nausea and Vomiting

continued on page 4

continued from page 3

Cooling the victim's internal temperature means removing the victim to shade and cooling him or her down with a garden hose or cool shower. Cool liquid, not alcohol or caffeine, should also be given to counteract dehydration.

- Drinking cool, not cold, water is recommended. Cold water can cause stomach cramps.
- Heavy sweating and salt loss can result in heat cramps in the abdomen, arms , legs.
- Rest breaks are vital. Supervisors must be vigilant for signs of heat exhaustion in crews, and call frequent cool down breaks in shade.
- It is also critical that workers get proper training in how to work safely in hot conditions.
- The 80-80 rule is a warning sign for the potential for heat related illness. If the temperature is 80°F or greater and the relative humidity exceeds 80 percent, workers must be especially careful to take steps to avoid heat exhaustion.
- The most physically-demanding tasks should be organized during cooler times of the day.
- Always wear a hat and sunscreen when working outdoors.
- Avoid eating heavy, hot meals in hot weather. Eat right and light.

Heat stroke

With heat stroke, the body loses its ability to control body temperature. Sweating stops and body temperature can rise to fatal levels within minutes. Without emergency treatment, death or permanent disability can easily result.

Signs of heat stroke include:

- Hot, red, dry skin with no sweating
- A temperature of 103°F (40 C) or higher
- Rapid pulse
- Headache
- Dizziness
- Nausea
- Confusion
- Loss of consciousness

Driving in Hot Weather

Driving in hot weather is also hazardous. Vehicles can overheat and break down. Higher temperatures can contribute to tire fires. Drivers can be subject to heat illnesses.

The following guidelines have been recommended:

- Your vehicle should be mechanically ready to handle the road. Check coolant levels frequently and top up as required.
- If you have air conditioning in your vehicle, make sure it is working before the hot weather hits.
- Loss of fluid and minerals from the body through sweating can cause heat illnesses. Symptoms range from fatigue and dizziness to coma and death. Carry a container of water at all times, and drink water often. If you suspect you are becoming ill from the

continued on page 5

continued from page 4

heat, cool off, drink water, and get help. Heat stroke is a serious medical emergency and can result in death.

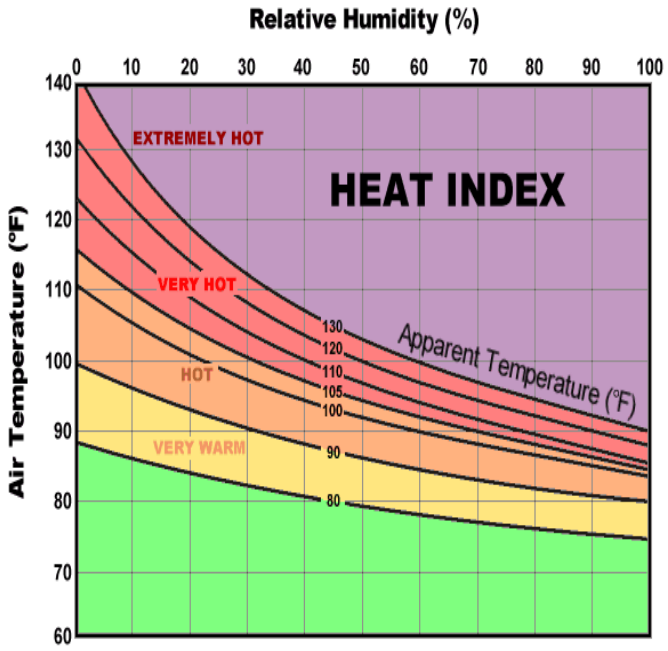
- Be aware of the temperature difference between the cool inside of your vehicle and the hot weather outside. When you step out onto a hot asphalt parking lot, slow down and take it easy. Give yourself time to adjust to the temperature change before you attempt any strenuous work.

- Wear your sunglasses when driving in sunlight. Sunglasses should be purchased with protection against ultraviolet (UV) radiation.

- Wear sunscreen to prevent sunburn, which can occur while you are driving.

Remember, drink water frequently, even if you don't feel thirsty. Avoid drinks which cause dehydration, such as those containing alcohol and caffeine. Eat foods that are light and easily digested like fruits, salads and vegetables. Don't over-exert yourself when the weather is hot even if you are having a great time.

Have a healthy and safe Summer.



Reference: Centers for Disease Control Prevention (CDC) , and Bongarde

What to do for fire ant stings?

Submitted by: George Nobles

I was pulling weeds from a flower bed about four years ago, when I was suddenly stung by a couple of fire ants. I slapped the ants on my hand, and explained that I would regret not being more alert tomorrow. The neighbor told me if I would go immediately into the house and get the liquid dishwashing soap from the kitchen sink I would be cured. She told me to not wet the affected area, just put a liberal drop of the soap on the bites/stings and rub it in. I rubbed the liquid soap on the bites and forgot about them.

I had been hit by fire ants enough, so I knew it would be terrible tomorrow. That evening at supper I suddenly realized that I could not find the spots where I had been stung.

As an F.D.O.T. employee who is usually out of doors and working about fire ants, I now keep dish liquid in my vehicle. After using the treatment several times since my first encounter, I now know that dishwashing soap is truly a miraculous product. Most any dish soap works and I have found the cheaper the better; the soaps with all those extra additives don't always do as well.

Those with whom I shared my miracle cure have often let me know how amazed they are with how well it works. Why modern medicine has not discovered this cure escapes me. If you are like me, you will be glad to know there is hope. You will be a hero if you pass this information to friends and family.

The fire ant sting is said to be a hymenopteran venom and similar to a bee's sting. I wonder if it would have a similar effect on a bee sting, but haven't ventured to test the theory. I have personally concluded that this remedy can't be an old wives tale cure because fire ants have not been in this country long enough.

Thanks to television documentaries, I have learned that when we failed to introduce the only natural predator of the fire ant, the fored fly, we became destined to be overrun by the pest. Until we find a way of stopping them, at least we have hope for immediate relief.

Note:

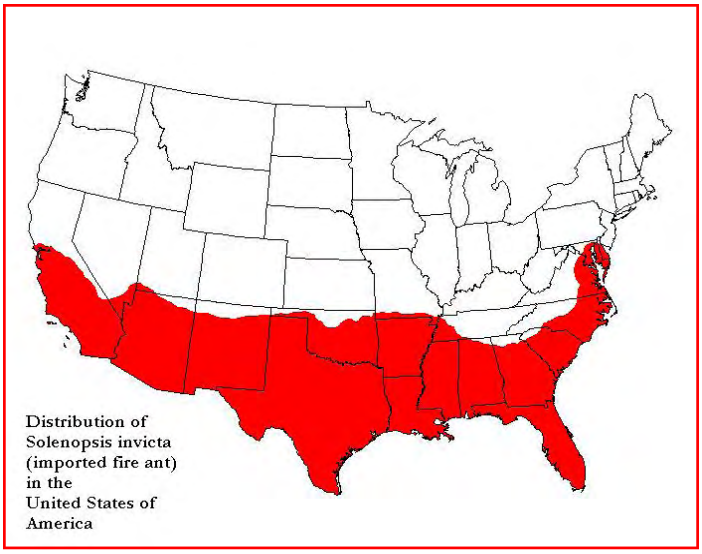
George Nobles is a F.D.O.T. Rail Safety Inspector in Jacksonville, Florida.

Additional Information

The venom of a fire ant sting causes stinging and swells into a bump. They can be very irritating and painful at times, especially when stung repeatedly by several at once. The bump is often at risk of becoming infected. Some people are sensitive to the venom and experience anaphylaxis, which requires emergency treatment. Signs of anaphylaxis can include dizziness, nausea, sweating, low blood pressure, headache, and shortness of breath. If the fire ants can be brushed off before they inject their venom, pustules will not form. For all victims, immediately applying a solution of half bleach and half water can reduce pain, itching, and pustule formation. An antihistamine or topical corticosteroids may help reduce the itching. Rubbing aloe vera juice also reduces itching if applied immediately.

Few home remedies actually succeed in eliminating fire ant colonies. Many household products are said to control fire ants. The list includes chlorine bleach, ammonia, gasoline, various detergents, and drain cleaners. They are not labeled for control of any type of pest, and some are dangerous to pets, children, wildlife, groundwater and surface water. Some home remedies do kill a few fire ants, but they generally only cause the ants to move to another location.

http://www.extension.org/fire+ants/faqs



Distribution of Solenopsis invicta (imported fire ant) in the United States of America

Have Fun This Summer — but Safely

Submitted by: Shanaz Sharifpour

Ah, the many joys of summer: swimming, boating, camping, picnics and barbecues, and fireworks, to name some of the most prominent activities. But every one of these entails risks that can turn fun to tragedy. Here are some tips for having a safe summer.

Coping with the Heat

By now the dangers of exposing the skin to too much sun have been well publicized. However, it can't hurt to remind everyone of the importance of preventing cancer by the use of sunscreen, of increasing exposure gradually, scheduling outdoor work before 10 a.m. or after 2 p.m., and shading the face and the neck.

Gasoline Woes

No, not just the price at the pump but the even higher price paid by anyone careless with the use and storage of gasoline. To avoid those woes, the National Fire Protection Association offers numerous tips, including:

- Use gasoline only as motor fuel, never as a stain remover or for cleaning oily/greasy equipment or parts.
- Store it only in clearly marked containers approved for flammable liquids. (Store all such liquids outside your home, preferably in a locked, detached shed.)
- Transport gasoline only in approved sealed containers, never glass jars or open containers.
- Before refueling equipment, turn it off and let cool completely; then extinguish smoking materials, and wipe up spills immediately. On the boat, shut down all motors, fans, and heating devices before refueling. Make sure the gas nozzle is grounded to the fuel intake; don't overfill the tank; and ventilate with the blower for several minutes before starting the motor.

continued on page 7

continued from page 6

- Never use gasoline to start a charcoal fire in the grill — which should be kept at least 10 feet from the house or anything else that could ignite, such as your car or dry vegetation.

Enjoying Your Swim

Whether at the pool, lakeside, or "by the beautiful sea" a few precautions will ensure your safety and make for pleasant play. For example:

- Although adults may safely swim alone in a pool, children should not — and it's best for neither to swim alone elsewhere.
- The chemicals used in home pools can spontaneously combust if contaminated with organic materials such as gasoline or motor oil. They should be used and stored according to the manufacturer's specifications, and kept outside of the home in a dry place and away from any heat source or flame.
- At the beach, obey all posted rules and directions from a lifeguard. At the shore, be aware of tides and undertow.
- Get out of the water immediately if thunder and lightning appears.
- Never dive into the water if you don't know what may "lie beneath."

- Avoid horseplay.
- Don't rely on tubes and other buoying devices to keep children safe if they don't know how to swim.

Food Facts

Picnics and barbecues abound throughout the summer months as occasions for good company as well as good food. But improper handling, cooking, and storing of food can result in devastating illnesses — as can insufficient cleanliness. Here are a few reminders:

- Hands should be cleaned frequently, preferably with hot, soapy water or, when away from home, with clean, disposable washcloths and paper towels. Cleanse after handling raw meat, using the bathroom, changing diapers, or handling pets.
- Food should be kept very cold until time to cook or eat it raw. Raw meat should be securely wrapped to keep its juices from contacting other foods.
- Proper cooking requires enough time and a high enough temperature to kill harmful bacteria that cause illness. Use a thermometer with a gauge that shows the right inside temperature for different types of meat.
- Keep perishable foods in an insulated cooler packed with ice or icepacks; set it out of you car trunk and out of the sun if possible.
- If take-out foods won't be eaten within 2 hours, chill them in your own refrigerator before packing in the cooler.
- Food may not be safe to eat if left out of the refrigerator for more than 2 hours — more than 1 hour if the temperature is 90 degrees or higher. Pack leftover perishables back on ice when eating is finished — or throw them out if you have any doubts.

There are, of course, numerous other factors that can help ensure a safe and healthy summer — including use of insect repellents, availability of first-aid materials, wearing sunglasses as appropriate, and using extreme caution in the use fireworks. Adequate attention to these and the foregoing tips should provide a lot of protection and result in a lot of fun. Enjoy your summer and be safe.

Reference: Business & Legal Reports, Inc.

Cryptograms

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
						Y																			

G G

C B Y U J K B K Y B K X A V B R M N H K C R H S

J I D R V W H K R K J S B M H G B C B J B R M

I V S R H J U .

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
															W						S				

P V

W X B Q H B T Y O X O X M S L X V Y D H B P

P

J F B L N E Y O X K H H I X V Y W M B Y H Q

Y O X J M A .

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
															X						A				

I N H I L G H K I E I C I Q I O D G R O G U E K K O

H C K O H S E B V O F S R Q D S S E G .

Solutions to June Cryptograms

Physical exertion can help work off tension and anger.

Make a list of items to bring inside in the event of a storm.

Summer's a great time to be more active,
but being outdoors also presents added risks.

Safety Slogan of the Month Entry Form

You are encouraged to submit safety slogans applicable to the month safety theme.

Slogans are judged on originality and relevance to the month's theme (there are two themes each month).

You may also email your slogans to shanaz.sharifpour@dot.state.fl.us or nancy.lynn@dot.state.fl.us.

In the subject line of your email please write ***"Safety Slogan Entry".***

Due to publishing requirements all entries should be received **two months** in advance

Please Print

Safety Slogan for the month of _____

_____

_____

_____

_____

_____

_____

_____

Name: _____

Location/Office: _____

District: _____

Safety Hot Line

Local (850) 245-1543
SunCom 2005-1543

You can now report hazards by telephone.

You can stay anonymous.

Everything is confidential.

Action will be taken and you will be notified within 30 days.

MONTHLY THEMES FOR 2007

January:	**Back Injury Prevention and Safety Meetings**
February:	**Fall Protection and Traffic Safety**
March:	**Laboratory and Office Safety**
April:	**Hazardous Materials and Blood Bourne Pathogens**
May:	**Respiratory Protection and Tool Safety**
June:	**Materials Handling and Managing Stress**
July:	***Heat Stress and Outdoor Hazards***
August:	**Work Zone Safety and Safety Committees**
September:	**Fitness/Nutrition and Bicycle/Pedestrian Safety**
October:	**Fire Protection and Personal Protective Equipment**
November:	**Vehicle Safety and Ergonomics**
December:	**Holiday Safety and Electrical Hazards**

Safety Slogan Winners

Reduce your stress
and
beat the heat.
Drink a cool glass
of water
and
take a shady seat.

Donna Mosier
Chipley Environmental
Management Office

To avoid bites, stings, and
annoying
flying things
Wear repellant in
good measure for your
increased outdoor
pleasure.

Donna Mosier
Chipley Environmental
Management Office

Safety Advisor Customer Satisfaction Survey

We are interested in your opinion. In order to better serve your needs, please take a moment to fill out this brief questionnaire.
Send to:

Local Fax: 850 245-1554

Via US Postal Service (or inter-office mail) to the address shown below.

Attention: Industrial Safety
Florida Department of Transportation
605 Suwannee Street, MS 53
Tallahassee, Florida 32399-0450

Survey Questions	Yes	No
Are the Safety Advisor topics relevant to your day to day job?		
Have you ever used the Safety Smart website?		

What would you suggest to improve the suitability of the Safety Advisor to your needs or to improve the overall quality? (Please be specific)

_____

_____

_____

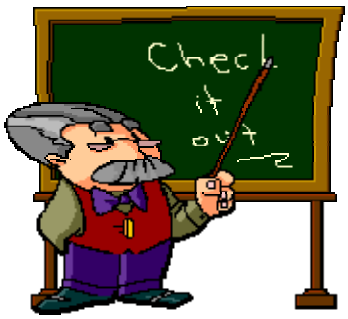
Do you have any questions regarding Industrial Safety programs and/or operations? Please feel free to include your questions or comments.

_____

_____

_____

Get More from Safety Smart Online



http://floridadot.safetysmart.com/SSOL/enterprise/

July 2007

Heat Stress and Outdoor Hazards

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4 Independence Day	5	6 Payday	7
8	9	10	11	12	13	14 New Moon
15	16	17	18	19	20 Payday	21
22	23	24	25	26	27	28
29	30 Full Moon	31				

HAVE A SAFE FOURTH OF JULY.

BUCKLE UP.

DON'T DRINK AND DRIVE.

USE CAUTION WHEN USING FIREWORKS.