



PSDiver Monthly

Volume Number 5



ISSUE 62

Issue Number 62

May 2009

**2 More PSD
Fatalities**

**When PSD
Teams Clash**

**Avoiding Heat
Related Injuries**

NEWS

EVENTS

**DIVING MEDICINE
ONLINE**

**CONTINUING
EDUCATION**

AND MORE!



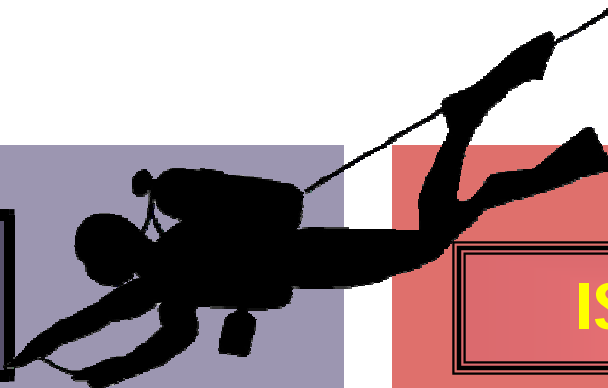
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It is with the deepest regret that we report more PSD fatalities. In May of 2009, our public safety diving community lost two more members. One fatality took place during a body search and recovery operation. The other fatality took place during a training exercise.

Information has been not as readily available on these incidents and we do not have a great deal of information gathered. What we do have is now posted on the PSD Fatality page at www.PSDiver.com.

We lost North Mississippi volunteer firefighter **David Scheffield** on May 20, 2009. David had responded to a drowning call to help look for a A 15-year-old Jr. High School student who drowned while swimming with friends in the Buttahatchie River. The river was high and the current was strong from recent storms. David was searching for the young boy when he suddenly came to the surface and managed to tell surface crews that he was having trouble breathing.

David was immediately pulled from the water and medical care started. He was transported to the hospital where he died of a presumed heart attack.

Video: [Diver Dies on Buttahatchie](#) 5.20.09

On May 17, 2009, we lost **Steven Osburn**, a member of the Santa Cruz County Underwater Recovery Team died while diving at Patagonia Lake State Park. The underwater recovery team was conducting routine training when member Steven Dale Osburn, 58, failed to surface from a dive.

Steven lost contact with fellow divers while at a depth of close to 60 feet. Approximately eight minutes later he was located by another member of the dive team but was unresponsive and was brought to the surface. The diver immediately began to perform CPR on Osburn.

An Air Evac helicopter was called in and continued advanced life support but efforts to revive Osburn were unsuccessful.

We will update our records as we receive more information. If you have information you can share, please send it to us at PSDivermonthly@aol.com

DIVE TEAMS CLASH **- An Editorial Opinion -**

The other day I read an article about two dive teams who argued over who was going to perform a body recovery. The initial responders were a fire department team and the follow-up team belonged to the local sheriff's office.

A witnessed drowning occurred and a 911 call was made. The fire department team responded with divers, boats and a sonar system. They searched the area for almost an hour without success. The sonar operator got a hit and the team was moving to the location to dive the sonar hit when members of the sheriff's office stepped in and told them to stop. They determined that an hour had passed and rescue was not possible so the incident was now a crime scene and SO divers needed to continue.

Now, I know I do not have all of the facts of the story and I know my synopsis is not totally accurate. But it does reflect the problem that occurred that day and it is one that should be considered. This was not a jurisdictional battle like we have seen in the past where a fire department team and a police dive team both respond to the same 911 call then argue about how gets to dive. This event involved two identified dive teams with recognized responsibilities. The fire department team is responsible

for rescue and the SO team is responsible for crime scenes. On the surface that sounds reasonable but, when put into action is a disaster waiting to happen.

The two primary tenants of Public Safety Diving are: "Attempt a rescue for the first hour after initial submersion" and "Treat every drowning like a crime scene. "

When we related these concepts to the event, both were applied – but by two different teams. To me this would be like diving with one fin on. You might get where you want to go but will most likely end up going in circles.

I have used an illustration in the past that applies to this problem. It goes like this: Over the last thirty years in the fire service, the police department has NEVER called us to bring a fire engine and crew to move a body out of a dumpster to a sidewalk so they can work their scene easier. Put that body in the water, especially zero visibility, and that is about all they ask or expect us to be able to do.

When we realized this was our relationship with the police department, we went to them to explain all that our dive team was capable of doing. We have undergone a transformation in training, equipment and mentality and just assumed they knew what we could do but just didn't care. We were SO very wrong.

Since then we have become an underwater investigation team and work with law enforcement to locate, preserve, protect, document and collect evidence underwater. Our police department does not have a team so our fire department dive team works as their underwater extension.

In the event in question both agencies had dive teams. Instead of building a mutual response capability there seems to be a line drawn with little or no room for the two teams to work together. Each is responsible for a single tenant. The fire department accepts responsibility for rescue and the SO for crime scene. But there is no true way to define where one stops and the other stops yet the apparent agreement uses the "Golden Hour" rule.

At what point can we reasonably say a drowning victim is dead. Is it really an hour? Some cold water drowning victims have been resuscitated well over an hour after submersion. OK – so cold water makes a difference. It is summer and the water is warm. How deep are the thermoclines? How much of a difference could that temperature differential make to the possible resuscitation of a victim? I don't know either. But I surely do not want to be the one to tell the mother of a lost child, "Sorry for your loss, we have to stop and let a crime scene team take over. They should be here in another hour or so."

What happens if the team is successful and makes a quick recovery only to discover the indentation of an oar in the side of the face of the victim? What if the victim has a bullet hole between the eyes? Was this still a rescue because an hour had not passed or is it a crime scene? To attempt to separate the two tenants and divide them into two different sets of responsibility and assign them to two different teams is inviting confusion and problems.

The National Incident Management System is partly to blame for this. Who ever thought up the sections for fire service and police diving must have had reasons that had nothing to do with police or fire department diving.

While not altogether true, it looks like the underwater aspect of teams is divided into Law Enforcement and Other. The terminology and language implies NFPA Standards be met but Law Enforcement has nothing to do with NFPA. Each definition implies evidence recovery and we have to wonder why there is duplicity in each definition regarding evidence recovery yet none of that is in the Typing. One could make the argument that Police Diving and Fire Service or other diving are two separate types of diving. The wording certainly implies that one performs evidence and search and recovery dives while the other conducts only rescue.

It is no wonder our PSD community never gets anywhere when we try to develop a national standard. As screwy as

the NIMS wording is even NIMS says **** A national training standard needs to be developed.**

You can follow the links if you want to see for yourself but below are the sections from NIMS I am referring to.

Definitions:

Public Safety Dive Team

Team assists with location and recovery of drowning victims, evidence in criminal cases, and abandoned vehicles and provides safety divers for special events.

Public Safety Dive Team, Law Enforcement (Dive Team)

A Law Enforcement Public Safety Dive Team is a group of law enforcement divers equipped and trained to perform a variety of functions, including evidence search and recovery.

Law Enforcement Resources

[Public Safety Dive Team](#)

Comments:

All teams are described for law enforcement purposes. Many of these teams will be trained and prepared for search and rescue as well. All divers and dive operations will be compliant with current NFPA. 1670 and 1006 guidelines. **** A national training standard needs to be developed.**

Description of Type

Type I – A team of divers and a support team with necessary diving experience as well as law enforcement experience. Teams should be able to respond with all outlined equipment to handle evidence recovery and deep water diving. Team should be self-contained for 24 hours. A dive team leader with experience and training in risk/benefit analysis should be assigned to each dive team. Capable of conducting rescue dives.

Type II – A team capable of responding with all outlined equipment to handle evidence recovery.

Type III – A team with Scuba certification and Public Safety Diving Certification.

Type IV – A team of divers and support team with necessary diving experience as well as explosive/underwater demolition experience. Teams should be able to respond with all outlined equipment to handle evidence recovery and deep water diving. Team should be self-contained for 24 hours. A dive team leader with experience and training in risk/benefit analysis should be assigned to each dive team.

Search & Rescue Resources

[Swift water/Flood Search and Dive Rescue Team](#)

Comments:

Conduct search and rescue operations in all water environments including swift water and flood conditions. Water rescue teams come with all team equipment required to safely and effectively conduct operations. If you agree with me that there is a problem then here is one solution.

ALL Public Safety Dive teams need to recognize and follow BOTH of the NIMS Resource Typing definitions and expectations. The equipment and training requirements are virtually the same so cost should not be an issue. This means that a law enforcement dive team who is the only or primary water response team in a given area must accept the possibility of rescue. How could you not if yours is the only team around?

A fire department team must work with the local LE and adapt surface crime scene preservation, documentation and recovery techniques to the underwater environment. This can be accomplished by taking a specialty class, a PSD certification course or even having your local Crime Scene Specialists teach your diver HOW to handle evidence.

To start a dive operation as a rescue and move to recovery should be a singular event. It should not require one team to stop and another to start. If two teams exist in the same locality they should work together, not divide the water. It should go without saying that the team with

the ability to respond the quickest should perform rescue. It should also go without saying that crime scenes should be handled by those trained to do so. But when the environment is underwater a responding team should be able, capable and trained to do both.

We have discussed this issue before on the PSD discussion group. We have even begun discussion on the particular event that prompted this commentary.

If you would like to participate in group discussions or offer your opinions or thought on this or any other PSD related matter, join our discussion group.

Join our PSDiver and Water Rescue

Discussion Group at:

(Just click the link or copy and paste the url into your browser.)

[Public Safety Divers Forum](http://groups.yahoo.com/group/PSDivers-PublicSafetyDiversForum)

<http://groups.yahoo.com/group/PSDivers-PublicSafetyDiversForum>

Dive Safe.
Mark Philips
Editor / Publisher
PSDiver Monthly
www.PSDiver.com

SPECIAL TO PSDIVER MONTHLY

Preventing Solar Exposure Injuries

By Mark Philips

The time of year is upon us when we switch gears. Where we have been concerned with protection from the cold, we now need to prepare for protection from exposure to the heat from the sun, sunlight, ultra violet rays and warmer temperatures.

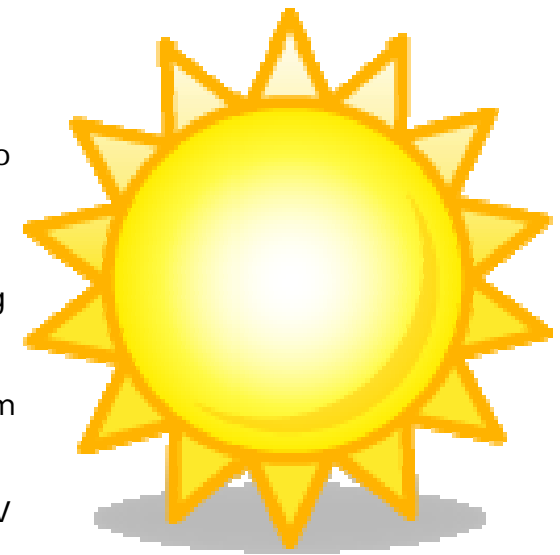
Yes – Summer is here.

After being covered up all winter with long sleeves, sweaters and coats, our natural protection from the sun is degenerated. When the weather gets warmer, we are happy to shed the excess clothing but in doing so sometimes forget that we are more prone to sun related injuries.

The human body has a natural protection from UV rays called “Melanin.” Melanin is the body’s first line of defense against UV rays. Melanin has the ability to absorb dangerous UV rays

<u>Condition</u>	<u>Symptoms</u>	<u>First Aid</u>
Sunburn	Skin redness and pain, possible swelling, blisters, fever, headaches	Take a shower using soap to remove oils that may block pores, preventing the body from cooling naturally. Apply dry, sterile dressings to any blisters, and get medical attention. http://www.fema.gov/hazard/heat/heat_aid.shtm

before they are able to do serious harm to the skin. Melanin is found in different concentrations and colors and depending on the concentrations, will not provide the same amount of protection from one person to the next. Light skin color has less melanin in it to absorb UV rays and will cause that person to be more at risk. However, dark skin is not necessarily an indication of protection either. The reaction of the skin to sunlight influences the production of melanin. Melanin in the skin increases with the exposure to the sun. The skin will become darker over time. This tanning is a defense of the body against UV exposure and can cause skin damage over time.

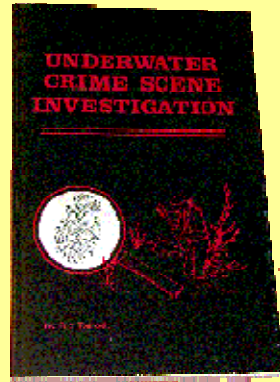


Overexposure to the sun can cause burning. Without appropriate protection, the skin will begin to turn red. The initial redness will be followed by a varied degree of pain. The color and pain may not be immediate and may not

begin to manifest for 2 to 6 hours after the exposure. Once burned, the skin will continue to be red and painful for up to three days. Sunburn may be a first or second degree burn. If severe enough, the skin will begin to peel after two or three days. Minor sunburn will cause mild redness and tenderness. Areas of thin skin like the nose will burn and blister faster.

During winter months, the skin will typically be covered with long sleeves, sweaters and coats protecting the skin from both cold and exposure to what little UV rays are present. During the winter the skin will lose most of the melanin that had built up over the previous summer season creating a higher risk factor for overexposure. At the beginning of summer, the risk of sunburn and more severe sunburn can be the greatest. Sunburn is not caused by heat or sunlight but rather by Ultra Violet rays.

**"Underwater
Crime Scene
Investigation"
By Eric Tackett**



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very hard to find!
We found a small
hoard and have
them here for you!**

***PSDiver Monthly
Subscriber Price***

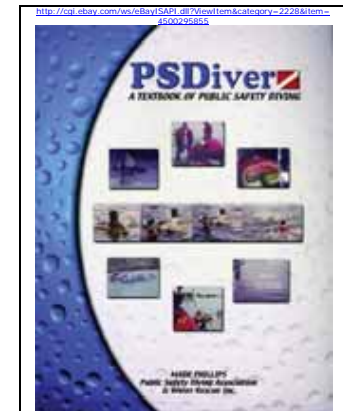
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[On Sale HERE!](#)

There are three types of Ultra Violet rays, UV-A, UV-B and UV-C. UV-A rays cause the skin to age and contribute to skin cancers such as melanoma. UV-B rays cause sunburns and contribute to skin cancers. UV-C rays are the most dangerous but these are blocked by the ozone layer.

One way we can protect ourselves is by using a sunscreen with a SPF of 15 or higher. SPF stands for Sunburn Protection Factor. The SPF of a sunscreen is a laboratory measure of the effectiveness of sunscreen — the higher the SPF, the more protection a sunscreen offers against UV-B. Most standard sunscreens do not offer protection against UV-A rays. Sunscreens are available that offer protection against both UV-A and UV-B rays.

SPF relates to the amount of solar exposure, not time of exposure. Consider the amount of energy present early in the morning as opposed to the energy at noon. SPF is not a measure of time protection so much as it is a relative measure against other products. A sunscreen



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rated at SPF 15 will not provide as much protection as one rated as SFP 30.

Sunscreens work only when they are applied. Sweat, clothing and water can rub off the protection or lessen the coverage. Frequent reapplication may be necessary to maintain full protection.

All team members should wear a hat or cap and sunglasses. Backup and standby divers, surface swimmers, boat operators, line tenders etc. can and should wear caps and sunglasses.

Team members should consider wearing lightweight long sleeve shirts or zippered jumpsuits. Depending on the water conditions and requirements of the team a simple lycra dive skin will provide a full body cover up as well. A ½ mil wet suit works well for this too. When using sunscreens, they should be applied before they are needed.

<u>Condition</u>	<u>Symptoms</u>	<u>First Aid</u>
Heat Cramps	Painful spasms, usually in leg and abdominal muscles; heavy sweating	<p>Get the victim to a cooler location.</p> <p>Lightly stretch and gently massage affected muscles to relieve spasms.</p> <p>Give sips of up to a half glass of cool water every 15 minutes. (Do not give liquids with caffeine or alcohol.)</p> <p>Discontinue liquids, if victim is nauseated. http://www.fema.gov/hazard/heat/heat_aid.shtm</p>

Adequate quantities of sunscreens should be applied 20 to 30 minutes before solar exposure. Weather using a cream or a spray, read the directions and apply accordingly. Remember, if sunlight can find skin, it can burn it. Sunscreens should be reapplied after swimming or as

directed. Consideration should also be given to reflective exposure. Energy reflecting off of the water, sand or pavement will also cause sunburn. Overexposure to UV radiation through sunlight can cause a variety of skin cancers.

Effects of UV Radiation on the Eyes

Though a rare occurrence, it is possible to overexpose the eye to excessive UV radiation over a short period of time. The effect called photokeratitis is like sun burning your eye and will feel like a foreign body or grit is in your eye. There will be sensitivity to light and an excessive amount of tearing. This more commonly occurs if you look too long into the light produced when welding or as snow

blindness. Photokeratitis rarely causes permanent damage but can be very unpleasant.

Long-term exposure to UV radiation can be more serious. The likelihood that you will develop conditions related to long term exposure are slim. However, since it is not known how much exposure will cause damage, you should wear sunglasses rated to block both UV-A and UV-B radiation. Sunglasses with polarized lenses will also cut glare on the surface of the water and help reduce eye fatigue caused by glare.

Other UV Protections and Considerations

As water response teams, we need to be mindful of the inherent dangers out of the water as well as those in the water. We need to protect our team from over exposure to UV rays as well as the heat and humidity generated by the summer sun.

To protect ourselves from excess UV exposure, we can limit our exposure to sunlight. Cloudy days are tricky –



UV rays can penetrate a cloud cover while offering cooler weather and some shade.

Find or create shade for your team. Set up your dive operation in a shaded area if possible. When it is not possible, provide shade when you can. The use of umbrellas, portable covers or make shift awnings will help.

No matter where you are in the world, if you are outside during the day you will be exposed to Ultraviolet Radiation. If we are working on improving a tan, we are exposing ourselves on purpose. If not - without proper planning and preparation, the exposures we subject ourselves to can be harmful.

Heat Injuries

Heat injuries occur when you body temperature rises beyond your body's ability to regulate the excess heat. Heat injuries should be preventable. Sometimes things happen and circumstances beyond our control



get in the way of prevention. The trick is in knowing how to prevent them and recognizing symptoms and minimizing the heat injury when you can't.

The common stages of heat injury, listed in order of severity are:

Dehydration

Heat Exhaustion

Heat Stroke

Dehydration is the easiest heat injury to both prevent and fix. The human body is mostly water. About 75 percent of our weight is from water. Water in our bodies helps everything from blood flow to digestion to lubricating joints and tissues. Without an adequate fluid supply our body systems will begin to fail. Dehydration occurs when more water is leaving our body than is coming in.

We lose body moisture and fluids through breathing, urinating and heat maintenance otherwise known as sweating. When we get hot, our



body perspires in an attempt to cool off. As air passes over the perspiration it evaporates and cools down the skin. The more we perspire, the more fluid we lose. Divers sometimes find themselves having to urinate a bit more often as their body temperature acclimates to the water temperature. Breathing dry, compressed air causes more fluid loss as the lungs work to keep moist.

Surface personnel who are subjected to high temperatures and humidity as well as ground reflected heat will have to work at staying cool and often forget to replenish lost fluids. Factors that contribute to fluid loss include:

- ◆ High temperatures;
- ◆ High humidity;
- ◆ Sun exposure;
- ◆ Excessive activity and exertion;
- ◆ Coffee or other caffeinated drinks;
- ◆ Alcohol;
- ◆ Medications, especially diuretics; and
- ◆ Illness, especially vomiting and diarrhea.

Some studies have found that a sever loss of fluid in the body will cause a drop in blood volume. A loss of blood volume can cause an accelerated pulse, muscle cramps,

dizziness and fatigue. If left unchecked it will lead to more severe heat injuries.

Prevention of dehydration is as simple as drinking fluids. Teams should have a stock pile of water available either in bottles, or water coolers. ALL personnel should be well hydrated and encouraged to drink ample amounts of water. Divers or personnel working at a higher pace should drink a bit more.

The general recommendation for water intake is 8 ounces of water 8 times a day or 64 ounces. This generalization does not factor in excessive heat, exercise or activity. 64 ounces is what is recommended to replace what your body normally loses a day through breathing,

The Heat Index											
Environmental Temperature F°											
	70°	75°	80°	85°	90°	95°	100°	105°	110°	115°	120°
Relative Humidity	Apparent Temperature F°										
0%	64°	69°	73°	78°	83°	87°	91°	95°	99°	103°	107°
10%	65°	70°	75°	80°	85°	90°	95°	100°	105°	111°	116°
20%	66°	72°	77°	82°	87°	93°	99°	105°	112°	120°	130°
30%	67°	73°	78°	84°	90°	96°	104°	113°	123°	135°	148°
40%	68°	74°	79°	86°	93°	101°	110°	123°	137°	151°	
50%	69°	75°	81°	88°	96°	107°	120°	135°	150°		
60%	70°	76°	82°	90°	100°	114°	132°	149°			
70%	70°	77°	85°	93°	106°	124°	144°				
80%	71°	78°	86°	97°	113°	135°					
90%	71°	79°	88°	102°	122°						
100%	72°	80°	91°	108°							
Apparent Temperature	Heat-stress risk										
90°-104°	Heat cramps or Heat Exhaustion possible										
105°-130°	Heat cramps or Heat Exhaustion likely. Heat Stroke possible.										
130° and up	Heat Stroke highly likely.										

<http://www.drprubut.com/sports/humidtxt.html>

waste elimination etc. If we are working outside in heat, we should already know we need more fluids and increase our intake.

A general guide for fluid needs is not easy to develop. Common sense will have to help guide you. But consider, if you already need 64 ounces of fluids just to break even during an average day and you are working hard in hot weather you already know you need more fluids. If you get thirsty, your body has already passed the breakeven stage and is telling you it needs water. Your goal is to not get thirsty. Over hydration is possible to achieve if you go to the other extreme and should be avoided.

As a general rule of thumb, working in the types of conditions being discussed, your personnel should be drinking at least 8 to 16 ounces of water every thirty minutes.

Individuals working harder or being subjected to harsher conditions should be drinking more. Backup and standby divers who are outfitted in dry suits or wetsuits will become overheated much faster than your other team members. They will need to be protected as much as possible. Keeping them well hydrated is the first step.

Sports drinks are not necessarily going to offer better fluid replacement value. Sports drinks will help replace electrolytes that are lost through sweat and fluid loss over time. Electrolytes help

regulate cell and fluid function in the body. When the body suffers electrolyte deficits you will feel a general weakness and possible muscle cramps. Drinking sports drinks in place of water is probably not as effective as drinking water and then adding a sport drink later on. Severe dehydration will typically require an IV drip as part of a medical rehab.

When the body is overloaded to the point it can no longer

self regulate temperature heat related injuries will occur. The length and severity of the overload will determine the severity of the injury. Dehydration is just the first step.

<u>Condition</u>	<u>Symptoms</u>	<u>First Aid</u>
Heat Exhaustion	<p>Heavy sweating but skin may be cool, pale, or flushed. Weak pulse.</p> <p>Normal body temperature is possible, but temperature will likely rise.</p> <p>Fainting or dizziness, nausea, vomiting, exhaustion, and headaches are possible.</p>	<p>Get victim to lie down in a cool place.</p> <p>Loosen or remove clothing.</p> <p>Apply cool, wet cloths.</p> <p>Fan or move victim to air-conditioned place.</p> <p>Give sips of water if victim is conscious.</p> <p>Be sure water is consumed slowly.</p> <p>Give half glass of cool water every 15 minutes.</p> <p>Discontinue water if victim is nauseated.</p> <p>Seek immediate medical attention if vomiting occurs.</p> <p>http://www.fema.gov/hazard/heat/heat_aid.shtm</p>

Heat Exhaustion

Heat exhaustion is the next step of heat injury. Since this occurs after dehydration the

injury becomes progressive and all the issues of dehydration are compounded. Heat exhaustion is a serious and potentially deadly injury and must be recognized and treated immediately. High body temperatures may damage the brain or vital organs and can rapidly progress to heat stroke.

Heat exhaustion can occur most any time but should be expected when working in heat and high humidity. Expecting heat exhaustion will bring prevention. The same efforts used to prevent dehydration will prevent heat exhaustion.

Heat exhaustion can be recognized by symptoms that include excessive sweating and a rapid pulse. Muscle cramping is also likely to occur. If the body temperature exceeds 104°F and is not checked and fluids replaced, coma or seizure may occur and can lead to heat stroke, heart attack and death.



Other signs and symptoms of heat exhaustion

include:

- ◆ Heavy sweating
- ◆ Mild temperature elevations or Low-grade fever
- ◆ Pale, clammy skin
- ◆ Dizziness
- ◆ Fatigue
- ◆ Low blood pressure
- ◆ Weak, rapid pulse
- ◆ Nausea
- ◆ Headache
- ◆ Thirst
- ◆ Muscle cramps
- ◆ Nausea, vomiting
- ◆ Dark urine

When working in heat, it would be a good idea to monitor the condition of your divers, especially those suited in wet or dry suits. Take frequent blood pressure readings and record pulse rates. If either deviates by 20% or more without obvious and actionable cause, put them into rehab immediately. Close monitoring and fluid intake will help prevent this from occurring. If dehydration and heat exhaustion is suspected and it is available, an IV drip will help considerably. However – if heat exhaustion is

suspected, that member of your team needs to be sent home to recover or sent for medical assistance.

Once heat exhaustion occurs, if you are able to avoid heat stroke, you can expect it to take 24 to 48 hours to fully recover. Headache, nausea, and flu like symptoms are to be expected. Drinking lots of fluids and fluids that contain electrolytes will speed the recovery and make you feel better while recovering. If severely dehydrated, "Drink water until you pee." One sure fire way to know when you have replaced enough fluids is when your urine turns clear.

for it to be recognized in time.

Heat stroke is life threatening and should be considered a medical emergency. In heat stroke, the body's ability to regulate heat may fail without warning. The body will no longer produce sweat, core temperatures may be 104° or greater and the pulse rate will be accelerated. Sinus tachycardia is likely to be present as well with pulse rates between 150 and 200. Blood pressure may be low and if heat stroke is not immediately treated, seizures should be expected followed by possible coma. Left untreated for long, organ damage will begin to occur and death can follow.

Heat Stroke

Heat stroke is the worst, final and most deadly stage of heat injury. It is possible that someone experiencing heat stroke moved so quickly to it that they did not exhibit enough symptoms of heat exhaustion

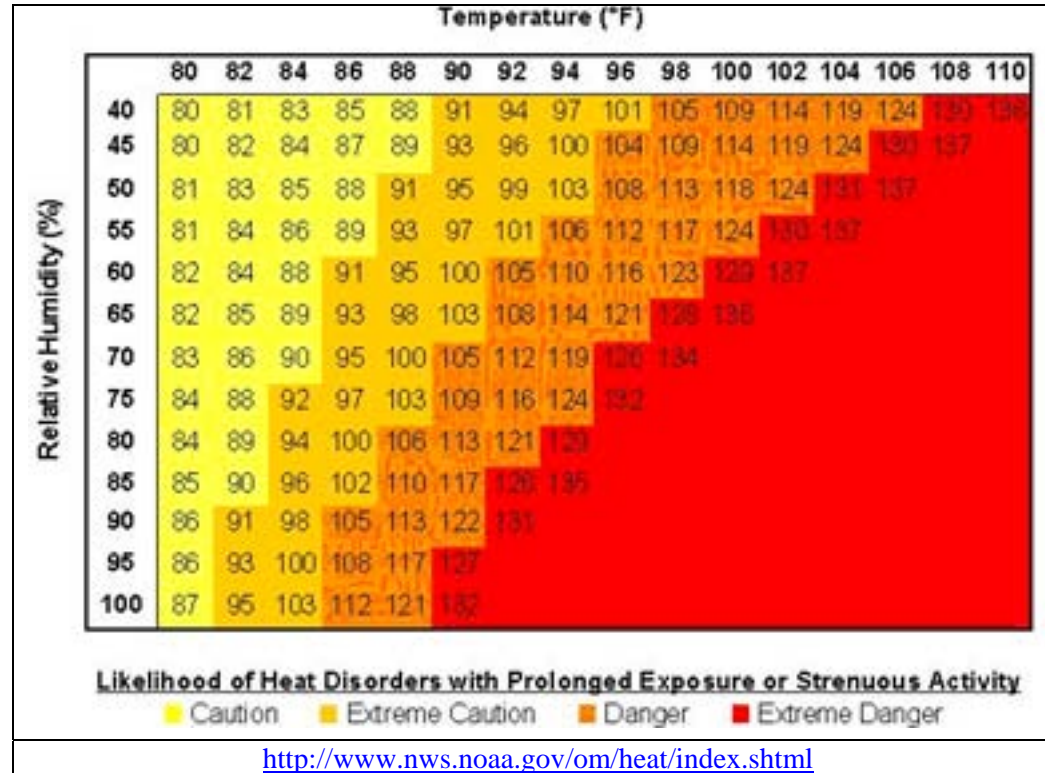
<u>Condition</u>	<u>Symptoms</u>	<u>First Aid</u>
Heat Stroke (a severe medical emergency)	High body temperature (105°+); hot, red, dry skin; rapid, weak pulse; and rapid shallow breathing. Victim will probably not sweat unless victim was sweating from recent strenuous activity. Possible unconsciousness.	<p>Call 9-1-1 or emergency medical services, or get the victim to a hospital immediately. Delay can be fatal.</p> <p>Move victim to a cooler environment.</p> <p>Removing clothing</p> <p>Try a cool bath, sponging, or wet sheet to reduce body temperature.</p> <p>Watch for breathing problems.</p> <p>Use extreme caution.</p> <p>Use fans and air conditioners.</p> <p>http://www.fema.gov/hazard/heat/heat_aid.shtm</p>

The best treatment for heat stroke is to prevent it from ever occurring. Teams must be mindful of themselves as well as others working on site. Standby and backup divers in dry or wet suits should consider staging in water and be

constantly monitored for dehydration or overheating. If conditions are too extreme, wait until a cooler time of day to conduct the mission.

Monitor blood pressure and pulse rates. The ONLY way to know if there is a serious change is to have a baseline pressure and pulse rate. These readings should be taken and recorded before any team activity begins.

Team members should be made aware of the potential for heat injury and can monitor their own condition. Thirst is the body's signal that fluids have not been replaced as fast as they have left. Cramps are an indicator of dehydration and a need to rehab. The color of urine turns darker the more dehydrated the body becomes. All these things are symptoms team members can monitor themselves.



Team members should hydrate themselves often. Colas and caffeinated drinks should be avoided and sports drinks provided for later electrolyte replacement. Shade should be used or provided whenever possible and cool down stations set up when possible. Water misters, cool towels, chairs or lounge chairs should be available to team members who are in need of cooling off. When possible, a medical team should be on site and on standby.

When the mission calls for dry or wet suits, team members not involved in the diver rotation should not wear dry or wet suits – even if half off and unzipped.

The best treatment for heat stroke is prevention but when that does not happen, a patient exhibiting signs and symptoms of heat stroke will need rapid cooling. Water

spray and increased air flow to help with evaporative cooling should be used. Any restrictive clothing should be loosened or removed. Cold packs or cloth-wrapped ice packs can be applied to areas where blood flows near the surface of the skin. These will help cool the blood faster. Areas to target are the sides of the neck, groin or arm pits. Ice water baths may be necessary if suitable materials are available on site. Rapid medical intervention with advanced life support capability must be initiated.

Heat stroke is not likely to be an injury that can be treated on site. A victim of heat stroke or even suspected heat stroke should be transported to a hospital for treatment and evaluation.

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http://en.wikipedia.org/wiki/Sunscreen#Measurements_of_sunscreen_protection

Sunlight contains three types of ultraviolet rays: UVA, UVB, and UVC.

http://kidshealth.org/parent/firstaid_safe/outdoor/sun_safety.html

The Stretching Institute - Tips for Training and Playing in the Heat

<http://www.thestretchinghandbook.com/archives/heat-injuries.php>

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http://money.cnn.com/magazines/moneymag/moneymag_archive/1994/08/01/89022/index.htm

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NEWS

Storms cause flooding in Houston area

http://www.upi.com/Top_News/2009/04/29/Storms-cause-flooding-in-Houston-area/UPI-31461241021167/

April 29, 2009

HOUSTON, TX -- Authorities in Houston searched Wednesday for an SUV that witnesses said was swept into a storm drain during a heavy rainstorm. A line of thunderstorms poured nearly a foot of water on the west and northwest portions of Harris County, adding to ground already saturated by previous rains, the Houston Chronicle reports.

Rising water left many motorists stranded and forced the closing of Houston-area schools.

Christopher Jones, 41, said he had just picked up a stranded co-worker Tuesday when he saw a woman in a small



SUV float toward a drainage ditch that runs beneath the Katy Freeway.

Jones said he tried but failed to keep the vehicle from sliding into the ditch.

Police divers who ventured about 300 feet down two huge underground drainage pipes failed to locate the car and driver.

Body of missing diver found

http://www.tbnweekly.com/pubs/clearwater_beacon/content_articles/050309_clw-01.txt

May 3, 2009

CLEARWATER, FL - Clearwater Fire & Rescue divers found the body of a missing diver just after 2 p.m. on Sunday, May 3, about 27 miles offshore in the Gulf of Mexico.

According to the press release, the diver was identified as Michael McQuillen, 29, of Lakeland.

The Clearwater divers were assisting the U.S. Coast Guard and Florida Fish and Wildlife Conservation in the search.

The U.S. Coast Guard announced on May 2 that a search was underway for the diver who was reported missing off John's Pass just before 1 p.m. According to the Coast Guard report, a crewmember aboard the 24-foot

recreational vessel "Lori's Other Half," reported that a diver aboard the vessel had not surfaced from a dive.

Coast Guard officials said McQuillen was reportedly an experienced diver.

Five Clearwater Fire & Rescue divers located McQuillen in approximately 80 feet of water about 20 miles offshore.

No other details are available at this time.

Rising water could delay search for Charleston man in New River

<http://wvgazette.com/News/200905030177>
05/03/2009 By Jim Balow Staff writer

CHARLESTON, W.Va. -- Rescue workers continue to search for a Charleston man who disappeared Saturday morning after his canoe overturned on the New River.

Jody Jones, 31, was last seen about 10:45 a.m. Saturday, as he was being swept downstream by the swift current, said Gary Hartley, chief ranger with the New River Gorge National River. "I would say, based on witness accounts, we feel it's a high probability this is a drowning." Hartley

said. "We won't know for certain until there's a recovery. We've been in contact with his family and extended family."


National Park Service rescue teams have been searching the area since Saturday and will continue to search for

Jones until he is found. "We've never given up on a search in the 10 years that I've been here," Hartley said. However, the search may have to be put on hold if the water level of the river keeps rising. "If the river becomes too high, then it's too dangerous to be on [the river]," Hartley said. "We could have to hold the search until the river level goes back down."

Hartley thinks that Jones's body will be found soon. "Rescue's fall into two categories," he said. "Usually, we find someone in the first hour or two. If we don't find them then, it usually takes

three to five days depending on the water temperature."

However, the rescue window for this time of year is slightly broader, since the water temperature is still cold. "Our probability to find the man is around four to seven days," he said.



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Name Released in Rock River Crash

<http://www.wifr.com/home/headlines/44311042.html>

May 4, 2009



We now know the name of the man who died this morning after crashing his car into the Rock River. Authorities say 36-year-old Jason Ferrell of Rockford.

It happened shortly after 10:30am at the intersection of Kennedy Hill and Route 2 in Ogle County. Authorities say the vehicle was traveling down Kennedy Hill when it apparently lost control and plunged into the river. It took a team of emergency divers approximately 14 minutes to locate the vehicle that was carried downstream about 100 yards. Other factors that might have played a roll in the accident are still being investigated.

Witnesses mowing in the area say that the vehicle appeared to be traveling at a high rated speed. It went through the intersection and right into the river, and was completely submerged and as it was carried down stream by the current.



26 year-old missing persons case solved

<http://station.lu/newsDetails.cfm?id=23736>

5-MAY-09

Germany - Last Friday, as reported on Station.lu, two cars, a Mazda and a BMW, were pulled from the Moselle River near Mertert.



Car Recovered from Moselle

Subsequent investigations by the police have solved a 26 year-old missing-persons case. Two teenage girls from Wasserbillig und Münschecker had disappeared on 3 June 1983 after setting out in a stolen car along the Moselle river and were never found.

A witness at the time reported seeing a car fall into the heavily-flooded Moselle river, but after an exhaustive search, involving police divers, 2 boats and 45-metre chains, civil defence and French and German rescue teams, no trace was found. Over 100 people turned out to search for the missing girls, without success.

Over the following weeks, reports claimed that the girls had been seen in Frankfurt and Berlin. However, a skull

was found in the river above the Trier dam on 29 November 1989 and was thought to be from one of the two girls.

The cars were traced by their registration plates.

Padiham man's drinks 'party trick' ended in drowning

http://www.lancashiretelegraph.co.uk/news/4364567.Padiham_man_s_drinks_party_trick_ended_in_drowning/

13th May 2009

DRY stone waller drowned when a drinking game in the River Calder went tragically wrong five days before Christmas, an inquest heard.

Burnley Coroner's Court heard that Andrew Livesey's 'party trick' was to jump into the Calder at Padiham, from the Burnley Road road bridge, and emerge on the other side.



RIVER: Andrew Livesey jumped into the Calder

But when he attempted the feat on December 20, after a drinking session with friends around various pubs in

Padiham, he never re-emerged from the river, the court heard.

Police divers later

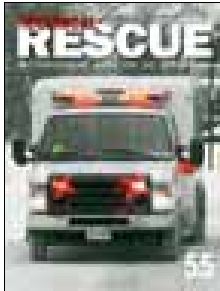
recovered the body of Mr Livesey, 39, of Raleigh Street, Padiham, from the Calder, near Whalley, on New Year's Eve, the inquest was told.

Consultant pathologist Dr Abdul Al-Dawoud said that when he conducted a post-mortem examination he discovered a 'significant' head wound.

Mr Livesey also had more than three times the recommended blood-alcohol driving level in his system, along with traces of ecstasy, added Mr Al-Dawoud.

The inquest heard that Mr Livesey had apparently removed his clothes before he jumped into the Calder from the bridge's parapet.

Craig Atkinson, one of the deceased's friends, said that, although it was dark, he thought he saw Mr Livesey waving at him. "I don't know if it was a wave to say 'I am in distress', but he looked okay," said Mr Atkinson.

	<p>Issue 55 Rope safety, Trauma-Tourniquets, Market Guides, Ontario EMS deals with epilepsy, Surfboards for swift water rescue?, MUCH MORE! http://t-rescue.com</p>
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Friends believed that he would emerge from the river via some stone steps, around a bend in the river, and left to go to a nearby flat. But Mr Atkinson raised the alarm when he had not seen Mr Livesey 10 minutes later, the court heard.



Sean Ormerod, another friend, confirmed that Mr Livesey had jumped into the water before, although the previous occasions had been in the summer when the river's level was not as high.

Mr Livesey's stepfather William Lynch said the deceased was a "strong swimmer" who had "a natural affinity with water". Mr Lynch said he had visited the scene the following day and said that even then the weather was windy and the river level was relatively high.

Recording a misadventure verdict, East Lancashire Coroner Richard Taylor said the combination of the alcohol taken, the head injury, the extreme cold and the nature of the river, had all contributed to Mr Livesey's

death. Mr Taylor added: "He was clearly overcome by the elements as the cause of death given was drowning."

Gruesome catch may solve Thai deaths mystery

<http://www.smh.com.au/world/gruesome-catch-may-solve-thai-deaths-mystery-20090514-b4sz.html>

May 15, 2009 Thomas Bell in Bangkok

Thailand - A MACABRE catch by Thai fishermen could finally solve the mystery over missing victims of a notorious act of repression by the army. A haul of skulls and other body parts has been linked to five shipping containers on the seabed off the southern Chon Buri province.

Some believe they hold the bodies of pro-democracy protesters killed by the army in 1992. Police divers will examine the containers within the week.

Over the years rumours have suggested the bodies were scattered by aircraft over the jungle or buried at a remote army camp. According to the official



tally, 52 people died when troops opened fire on protesters in Bangkok during "Black May" in 1992. But victims' groups say 357 people are still missing. "Seventeen years on no significant progress has been made in searching for the people reported missing," said Metha Matkhao, of the Campaign Committee for Human Rights. The military government responsible was forced to step down but the issue of the killings remains extremely sensitive because they were never fully investigated.

"The person who ordered the mass killing has not been punished, nor have the others involved ... who are still living a happy life, playing golf, sipping wine and making comments to the media," Mr Metha told the Bangkok Post.

This week relatives presented a letter to the Prime Minister, Abhisit Vejjajiva, who has promised to investigate. "We ask that the Government act quickly on this for the sake of clarity," said Adul Khieoboriboon, the leader of the May Heroes Relatives Group. "We don't hope for much apart from claiming the bones of our relatives."

The fishermen have reportedly been making their grisly haul for several years but were initially reluctant to report it for fear that organised criminals were involved.

Sunai Phasuk, a researcher for Human Rights Watch, urged caution. He said the containers might simply have fallen off a passing ship. "Why doesn't somebody open up

these containers and do away with this myth?" Mr Sunai said.

Pornthip Rojanasunand, the director of the National Forensic Science Institute, said she had been ordered to investigate but required official clearance before beginning her work.

Icy waters take 4th victim

<http://www.theunion.com/article/20090521/NEWS/905209917/1001/NONE&parentprofile=1053>

Swimmers urged to 'stay out and stay safe'

May 21, 2009 By Liz Kellar and Laura Brown

Fire and sheriff personnel converged on the South Yuba River Wednesday to recover the body of a North San Juan man who drowned near the old Highway 49 bridge Tuesday.

It marked the second drowning in area rivers in the past week and fourth this spring. A 51-year-old woman drowned in the Bear River over the weekend.

Timothy Burton confirmed the victim Wednesday was his uncle, Grant Alan Burton, 57. Timothy had been at the river with his son and his uncle when the elder Burton, who went by his middle name, was swept into the current. "I just want to see them get him out," said Timothy, who had been waiting for hours Wednesday with family friend Larry Hawkins.

Rescue crews eventually succeeded at about 1:30 p.m., more than two hours after they got a boat tethered in the river. The family had been at the Burton house getting ready for a fish fry Tuesday afternoon when the trio decided to go to the river to cool off, Timothy said. "We were playing around," he said, pointing to an eddy where the water was calm. "We were having a great time. He started splashing me, so I got out."



Nevada County Consolidated firefighter Phillip Nunnink, left, mans the underwater camera as Nevada County Sheriff's Deputy David Lade, center, watches the monitor and relays instructions to Cpl. Jeff Martin, right, using a snare to retrieve the body of Grant Alan Burton, of North San Juan, Wednesday from the South Yuba River at the Highway 49 bridge. Photo for The Union by John Hart

Timothy said his back was turned and he didn't see what happened next, but his son did. "He went out to the point of the rock and it sucked him under," he said. "My son went, 'Where did Uncle Alan go?'"

The rock in question is well-known to search and rescue

teams, Kimball said. "This is where we lose people," said Nevada County Undersheriff Richard Kimball, who added that alcohol probably was a factor in the accident.

The rock actually rests on several smaller boulders, not on the river bed, and there is a gap that creates an underwater chute. When the river is low, daredevils often swim the chute — but in high water, it acts to create a deadly suction. "He was a good swimmer," Timothy said of his uncle, whom he described as a risk-taker. "He could out-swim me, that's for sure." Timothy climbed around the rocks, then ran to the other side of the bridge, but couldn't see anything, he said.

Park ranger Mike Smittle was just returning from hiking the back canyons when the accident occurred at about 4 p.m. He was on the bridge getting ready to leave when two men on the footbridge high above the river started yelling and pointing upstream, he said. "I could see Tim down by the rocks and he told me his uncle had just gone under and disappeared," Smittle said.

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But he had no better luck locating Alan Burton and immediately called for assistance.

Multiple agencies responded, including the California Highway Patrol airplane and helicopter, Nevada County Search and Rescue, Nevada County Consolidated Fire District's Swift Water rescue team, North San Juan Fire, Placer County's dive team, Grass Valley Fire Department and State Parks and Recreation.

Using a rope system rigged across the river and a battery-operated camera hooked to a long pole, search crews located Alan Burton's body pinned under approximately 10 feet of water at about 7:30 p.m. Tuesday.

Crews had hoped Lake Spaulding upstream could reduce the flow of the river, but it was not possible because water was spilling over the top of the dam. The rescue teams worked until about 9 p.m. but were unable to recover the body that night, Kimball said. "It was just too dangerous,"



he said.

Wednesday, swimmers and divers were positioned downstream as a precaution while a team of three worked in a boat anchored in the hole where Burton's body was pinned.

Nevada County Consolidated firefighter Phillip Nunnink, who located the body Tuesday, was manning the underwater camera again as Deputy David Lade watched the monitor and relayed instructions to Cpl. Jeff Martin, who was working to retrieve the body with a snare. It was a painstakingly slow, dangerous and exhausting task as the three men battled the cold and the current. "There's no way we could have found him without the camera," said Nevada County Consolidated Fire District Chief Tim Fike. "There was no visual, even with a man suspended directly over the water."

Fike urged people to use caution this Memorial Day weekend. "Stay out of the river," he said. "It's running extremely fast and extremely cold right now." "We're going to have every ranger available patrolling the river," said Lt. Jeremy McReynolds, supervising ranger for the South Yuba River State Park.

But that means just six people will be responsible for patrolling 20 miles of river over four days — Friday through Monday. "We'll position people at the crossings to warn people about the conditions," McReynolds said.

"Alcohol is a big contributor to accidents and we do prohibit drinking on the river. We'll make a lot of safety contacts over the weekend and post signs about the dangerous conditions."

Unfortunately, McReynolds said, the rangers can't keep people out of the water. "A lot of times people don't listen to us," he said. "Just stay out and stay safe."

Practicing Swift Water Rescue

Recent deaths and rescues on the Potomac highlight river's danger.

<http://www.connectionnewspapers.com/article.asp?article=329157&paper=70&cat=104>

May 28, 2009 **By Aaron Stern**

About a quarter mile north of the Old Angler's put-in on the Maryland side of the Potomac River, just south of Great Falls, there is a pink and white rope that stretches fifty feet from a rocky outcrop on the shore to a small rocky island in the river. The rope is marked by fluttering pink ribbons and is threaded



Photo by Aaron Stern/The Almanac
Lamont Payne, a member of Fairfax County Fire and Rescue's Swift Water Rescue team, pilots his boat upriver towards Great Falls.

through a neon green hula hoop.

On Thursday, May 22 Lamont Payne, a member of the Fairfax County Fire and Rescue's swift water rescue team threaded his rescue boat up the Class 1 rapid that runs beneath the pink rope. As the boat reached the rope Payne throttled down so that the boat hovered just beneath it. In the bow of the boat Frank Smith, the volunteer chief of the Great Falls (Va.)

Volunteer Fire Department, reached up from a crouching position and grabbed the hula hoop and lifted it from the rope. For several seconds the boat held its place in the rapids and Smith held the hula hoop aloft so that its sides did not come in contact with the rope. "That's hard to do, especially with all this water," Payne said, shouting above the noise of both the boat's motor and the running rapids. That exercise is a common practice for members of the Fairfax and Montgomery County Fire and



Photo by Aaron Stern/The Almanac
As he crouches in the bow of a swift water rescue boat that is in the middle of a Class 1 rapid, Frank Smith, chief of the Great Falls (Va.) Volunteer Fire Department holds a hula hoop in the air, keeping it from touching the pink wire running through it. The training exercise tests the control of both the hula hoop holder and the driver of the boat

Rescue Swift Water Rescue Teams. The team member holding the hula hoop is tested for control skills that translate to holding an injured person immobile during a rescue, said Smith, while the boat driver's skills are tested by keeping the boat still in the middle of churning water surrounded by boulders. "Now you see why I ride with him," Smith said of Payne.

Smith and Payne were among dozens of local rescue authorities and personnel that took part in a demonstration of swift water rescue capabilities just below Great Falls last week to tout the dangers of the Potomac River as summer nears. The annual event has become a spring ritual for officials of the six governmental agencies that oversee the 14-mile stretch of the Potomac River from Great Falls to the Key Bridge, but two recent drownings and a slew of swift



Photo by Aaron Stern/The Almanac

Frank Smith, chief of the Great Falls (Va.) Volunteer Fire Department, is at the bow of a swift water rescue boat as it makes its way up the Potomac River towards Great Falls. Boats used in swift water rescues are generally manned by one driver and one or two rescue spotters who double as spotters who keep lookout for boulders and debris in the river.

water rescues this spring have increased the urgency of educating the public about the dangers of the river

After five people accidentally drowned in the river in 2004 a cooperative initiative between the National Park Service, the United States Park Police, Montgomery and Fairfax County Fire and Rescue Departments, District of Columbia Metropolitan Police Harbor Patrol, and District of Columbia Fire & E.M.S. Squads resulted in zero drownings from 2005 through 2008. "Our good fortune has run out," said Bob Zoldos, Fairfax County Fire and Rescue's Technical Rescue Operations Team Chief.

Last Thursday was and sunny, but the beautiful weather and the calm surface of the Potomac River belied the water's danger, said Kevin Brandt, superintendent of the C&O Canal National Historical Park. Massive currents called hydraulics work beneath the river's surface and can suck swimmers downward. Those hydraulics, cold and swift



Photo by Aaron Stern/The Almanac

Lamont Payne, a member of Fairfax County Fire and Rescue's Swift Water Rescue team pilots his boat away from "Last Chance Point" just beneath Great Falls. "That's the last chance you've got to get out of this water," Payne said of the point's namesake.

water, and the rocks below the surface form a potentially fatal combination, Brandt said. Jim Seavey, chief of the Cabin John Park Volunteer Fire Department later recounted a 14-year-old who went swimming in the seemingly calm water at the Old Angler's put-in 15 years ago. He was sucked under and his body found downriver several days later, but two rescue divers were sent in to search for his body at the Old Angler's put-in and nearly drowned themselves. After that incident Montgomery County changed their regulations to largely restrict rescue divers from moving water, Seavey said. "It proves how treacherous this river is," said Seavey.

As Brandt spoke on Thursday morning a group of kayakers suited up and pushed off towards Great Falls. Kayaking is permitted above and below the falls, though kayakers who wish to shoot falls must speak with State of Maryland officials and sign a release form, according to Montgomery County Fire and Rescue officials. Swimming in the Potomac River Gorge — also referred to as the Mather Gorge — is forbidden, and as several boats hauled various media representatives in their boats towards the falls Thursday morning several teenagers loitered at the edge of 20-foot tall cliffs along the Maryland side of the river. Cliff jumping off the C&O Canal National Historical Park's Billy Goat Trail is common for local high

school students, said Payne, while at least half of the swift water rescue rescues that are performed are actually for injured hikers along both sides of the river.

Sonar Used To Detect Hurricane Ike Debris In Texas Bays And Lakes

<http://www.fema.gov/news/newsrelease.fema?id=48569>

May 29, 2009 Release Number: 1791-498

» [More Information on Texas Hurricane Ike](#)

TEXAS CITY, Texas -- With most of the debris removed from public roads and highways in areas affected by Hurricane Ike, the push now is to complete cleanup operations in bays and lakes along Texas' upper Gulf Coast, officials from the Federal Emergency Management Agency (FEMA) and the Governor's Division of Emergency Management (GDEM) said Friday.

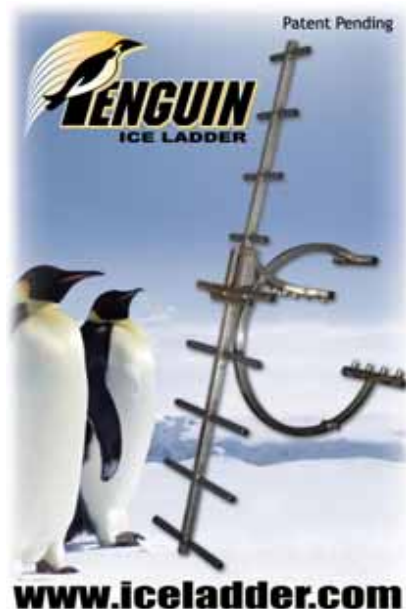
When Hurricane Ike blasted Galveston Island and Bolivar Peninsula on Sept. 13, 2008, countless volumes of debris ended up floating or submerged in the Galveston Bay system and area lakes, including splintered wood, chunks of concrete and broken glass from homes and businesses.



Also deposited in the water were stoves, refrigerators and other household appliances; beds and mattresses; vehicles, boats, barges and much more. "You only have to look at a map, and the placement of communities affected by Ike, to see why so much debris from Galveston Island and Bolivar Peninsula ended up in the bays," said Kelly Huck, supervisor of FEMA's Debris Group. "Anything you can imagine in a household went into the water."

A good deal of the debris became embedded in the silt and mud of the bays' floors, including a 70-foot steel-hulled shrimp boat that crews will attempt to free near Goat Island - once they locate equipment capable of handling such a job.

To expedite the cleanup mission, state contractors are using technology to pinpoint submerged debris. Utilizing side-scan sonar, the state's contractors are mapping sunken debris throughout the Galveston Bay system as well as in Clear Lake and Sabine Lake.



In all, the state is scanning more than 357,000 acres of submerged land for Ike-created "wet debris," debris of any kind that is floating or below the water's surface. Using sonar, the contractors can search large areas quicker than they could with divers alone, while not putting divers at unnecessary risk.

FEMA's debris specialists are working side by side with the Texas General Land Office (GLO), which has jurisdictional authority over the state's submerged lands and thus is the primary applicant for FEMA Public Assistance grants to help pay for the cleanup work. The FEMA specialists also are monitoring the operations on land and on the waterways.

"Cleaning up wet debris from our bays and lakes is a massive, time-consuming and costly undertaking," said Joan Haun, the GDEM's state coordinating officer for the Ike recovery effort. "Federal grants for this work will provide vital financial assistance to the state."

To date, nearly 85 percent of the 357,000 acres has been surveyed and 55 percent of the identified wet debris has



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been removed. (The GLO has said the removal of wet debris from areas eligible for federal assistance in the Gulf of Mexico is complete).

The U.S. Army Corps of Engineers cleared federally maintained navigable channels such as the Intracoastal Waterway and the area ship channels within weeks of the disaster, while the U.S. Coast Guard and the Environmental Protection Agency took charge of the swift cleanup of hazardous debris in area waters.

Meanwhile, debris removal is progressing in Galveston Bay, Trinity Bay, East Bay and West Bay, as well as the two large lakes.

"FEMA strongly supports the state's efforts to ensure eligible waters are cleared of debris as soon as possible and no longer present a health and safety threat to the public," said Federal Coordinating Officer Brad Harris.

FEMA leads and supports the nation in a risk-based, comprehensive emergency management system of preparedness, protection, response, recovery, and mitigation, to reduce the loss of life and property and protect the nation from all hazards including natural disasters, acts of terrorism, and other man-made disasters.

More:

[FEMA Obligates \\$2 Million To Texas City For Debris Operations](#)

A diver who found statue worth \$100,000 in river

[http://www.freep.com/article/20090531/NEWS01/905310480/1003/NEWS/A+diver+who+found+statue+worth+\\$100+000+in+river](http://www.freep.com/article/20090531/NEWS01/905310480/1003/NEWS/A+diver+who+found+statue+worth+$100+000+in+river)

May 31, 2009 JIM SCHAEFER • FREE PRESS STAFF

Last winter, some fishermen along the Detroit River noticed a sunken Jeep near the foot of Alter Road. Detroit Police divers like Sgt. Michael Carpenter are sent to check out such things. Along the way, they sometimes make grim discoveries.

Earlier this month, Carpenter swam down into the depths near the Jeep and felt a hand and a head sticking out of the muck near the vehicle. But these body parts weren't human.



SUSAN TUSA/Detroit Free Press

Sgt. Michael Carpenter, 44, of Harrison Township and Sgt. John Fisette, 42, of Macomb Township pulled "The Nude," a bronze statue stolen from the Grosse Pointe War Memorial eight years ago, from the Detroit River earlier this month. The statue of Harriet Whitney Frishmuth is worth about \$100,000.

And today, nearly eight years after someone stole a bronze Harriet Whitney Frishmuth statue worth about \$100,000, "The Nude" has been returned to her home at the Grosse Pointe War Memorial.

Carpenter tells how it went down.

QUESTION: When you say you felt the statue, what did you feel?

ANSWER: I could tell it was a statue ... a lawn ornament, maybe.

Q: Could you tell what you were touching?

A: It felt like a hand and a head.

Q: Had that been me ... it would have scared the living bejesus out of me.

A: Well, we kind of had an inkling that there was a statue in there. One of the guys that saw the car said there was a statue (on the riverbed near the Jeep).

Q: Could you tell it was something special?

A: Not initially. ... Because what we were hoping for was just some old cement statue. ... We were going to stick it in front of our trailer here as a decoration.

Q: You have a dive-team trailer?

A: It's on Belle Isle.

Q: OK. So you were gonna use it as a lawn ornament. When did you know it was something special?

A: When I saw that it was bronze.

Q: What went through your mind?

A: They ain't gonna let us keep this. (Laughs.)

Q: So what happened with it next?

A: One of the guys took a picture with his camera phone and forwarded it to the guy at the historical society. He said that looks like the statue that was stolen from the war memorial.

Q: Any idea how the heck the thing got in the river?

A: Speculation. The rumor was that they were stealing these statues and shipping them to the Middle East. And they were smuggling them out of Canada. ... They might have been trying to transfer it to a boat ... whoops! Splash, in it goes.

Q: Now that you know what it's worth, do you wish you'd just have put the thing in your car and driven it home?

A: (Laughs.) Nah.

Q: That would have been a hell of a thing to try to pawn.

A: Yeah, I know. Put that on eBay, they'd catch me right away. (Laughs.)

Public Safety Divers Doing Public Safety Work!

Diving for debris at Long Lake

<http://www.theolympian.com/localhighlight/story/866651.html>

LACEY: Volunteers in event 'never come up empty-handed'

The Olympian | • Published May 31, 2009

LACEY– A skateboard, a Rainier beer bottle and a “Star Wars” Stormtrooper Pez dispenser were among the varied items pulled from the depths of Long Lake on Saturday by volunteer scuba divers.



[Click for larger photo](#)

Three volunteer divers – Scott Eastman, Ryan Kelly and Steve Sutton – took part in what has become an annual tradition to clean up the Long Lake Park swimming area. Eastman, also a scuba diving instructor and a Lacey police sergeant, has participated in the Long Lake dive for five years, he said.



[Click for Photo Gallery:](#)

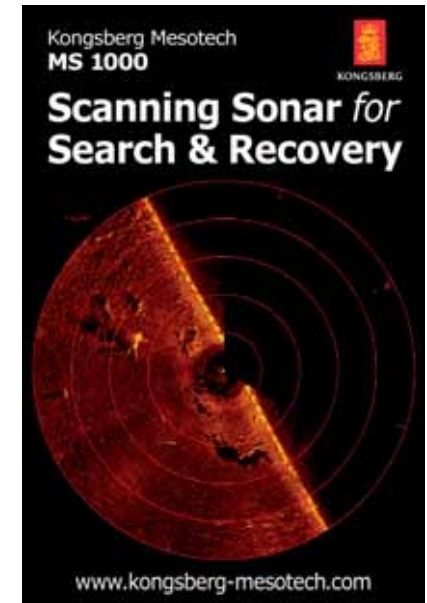
Garbage and debris removed from the swimming area is stored in a building on site and will be picked up and disposed of by city maintenance staffers, said Jenny Wilson, a recreation supervisor with Lacey Parks and Recreation. “We try to keep it as clean as we can so that they are in a safe swimming environment,” Wilson said.

Although the total number of people who use the park is not known, it is busy in the summer, she said. The Long Lake Park swimming area has an L-shaped dock with swimming ladders, and the swimming area boundary is marked by a rope with buoys.

About 10 a.m. Saturday, Eastman, Kelly and Sutton began to strap on their gear, including wet suits, fins and air tanks, before wading into the water from the shore.

Sutton chose to enter the lake from the dock. For Kelly, of Lacey, who received his diver certification this month, it was his first freshwater dive. Sutton, of Tumwater, took part in the cleanup five years ago as a novice diver. Since then, Sutton has explored other Northwest waters, the Caribbean and the Red Sea off the Sinai Peninsula, he said. Kelly sought his diver certification after an inspiring first dive in Hawaii, he said.

Holding yellow mesh bags, the three divers entered the lake and began their search for debris. “We never come up empty-handed,” Eastman said.



The divers also found plastic Starbucks cups, a blue swimming cap, chewing gum, a cell phone, golf balls, a Miller beer can, a blue towel and a green plastic hat emblazoned with "Happy New Year." Eastman surfaced wearing the hat, which likely was left behind by one of the hundreds of people who took part in this year's polar bear plunge at the same location on New Year's Day.



On that day, the water temperature was 38 degrees. On Saturday, it was nearly 30 degrees warmer. Wilson said the park is open all year, although lifeguards are not on duty until June 27.

Water's Oxygen Content Fingers Mob Murder Weapon

http://www.designnews.com/blog/Made_by_Monkeys/11480-Water_s_Oxygen_Content_Fingers_Mob_Murder_Weapon.php

June 1, 2009

The oxygen content of water helped forensic engineer Ken Russell, who writes the **Calamities Column** for Design

News, identify a possible murder weapon disposed of by monkeys, in this case of a hit ordered by the head of the New England La Cosa Nostra. There was no prosecution for 15 years until police divers, acting on testimony from one of the suspected killers, recovered two pistols from Canada Pond in Rhode Island.

Ken was asked whether either the .32-caliber automatic or .38-caliber revolver could have spent 15 years underwater. With the help of an electron microscopy expert, replicas of the insides of the two gun barrels were made for study under the scanning electron microscope.

The inside of the .38-caliber pistol was badly corroded. The inside of the .32-caliber barrel was nearly pristine, as shown in the photo of the replica, above.



The determining factor in corrosion rates of steel is not temperature, acidity or saltiness, and, moreover, composition of the steel is only a minor factor (except for stainless steel). Oxygen content of the water is the crucial factor. At Ken's request, divers measured the oxygen content in the

region of the pond where the guns were recovered. The water was saturated with oxygen, and the corrosion rate of the steel could be estimated at about 1/100 inch per year.

Ken concluded that the badly corroded .38-caliber gun had spent 10 or 20 years in the lake — a possible weapon in the murder case. The .32-caliber gun had spent, at most, about a year under water. So, perhaps, the evidence in another yet-to-be-solved case, that coincidentally found its way to a popular dumping ground?

This article appears in its entirety in the [Calamities Section](#) of Design News.

Car drives off jetty, 1 dead

http://www.themercury.com.au/article/2009/06/01/76865_tasmania-news.html

June 01, 2009 LINDA SMITH



TWO Tasmanian men died and two more were lucky to escape uninjured after two bizarre fatal incidents at the weekend.

A fishing trip ended tragically when a car went off a jetty at Eaglehawk Neck late on Saturday night, killing the 34-year-old male driver, of Derwent Park. His two male passengers managed to free themselves from the sinking car but were not able to free the trapped driver.

In the state's North-East, a man, believed to be an 18-year-old from Rushy Lagoon, was found dead in a car that had burnt out in the middle of a paddock near Gladstone about 1am yesterday.

Inspector Dave Wiss of Bellerive Police said the cause of the Eaglehawk Neck incident was still being investigated. He said the red 1987 Toyota Corolla was driven off the end of the jetty "at some speed" about 11.15pm with three men inside.

There did not appear to be any skidmarks on the jetty. The car hit the jetty lip, flipping on to its roof before sinking. The



two men, who were not seriously injured, swam to shore and sought help from a local resident, who contacted police.

The car was pulled from the water by police about 3am, with the driver's body still inside. Insp Wiss said police from Sorell and Nubeena attended the scene, along with forensics and police divers. He said police did not believe the death was suspicious and had not ruled out the involvement of alcohol or drugs. "There are certainly a number of avenues of inquiry to be checked out," he said. "At this stage, we're looking at it as a fishing trip gone wrong." Insp Wiss said the two surviving men had been interviewed by police and the matter had been referred to the coroner.

Anyone who saw a red Corolla in the Eaglehawk Neck area prior to the accident is asked to call Bellerive Police or Crime Stoppers on 1800 333 000.



Innovative Dive Equipment Inc.
PO Box 1142
Boca Raton, FL 33429
(561) 210-7513
www.InnoDive.com

Meanwhile, police are working to identify the remains of a man burnt in a car in the state's North-East.

Fire crews were called to a fire at Rushy Lagoon, about 8km outside Gladstone, at 1.10am yesterday and found a car fully engulfed in flames. Police said it appeared the man had driven off Mayfield Rd and into a paddock, where his silver Kia sedan became wedged in a 50cm-deep ditch.

It is not known how long the vehicle had been there before the fire started, and there appeared to be no crash damage.

After the fire was put out, a body was discovered in the front seat and it is believed to be an 18-year-old man from Rushy Lagoon. Disaster victim identification procedures are being used to formally identify him.

INFORMATION YOU CAN USE

Hurricane Preparedness Week: May 24 - 30, 2009
<http://www.fema.gov/news/newsrelease.fema?id=48508>

Evacuating With Your Pets

Release Date: May 26, 2009

Release Number: 1791-492

» [More Information on Texas Hurricane Ike](#)

TEXAS CITY, Texas -- Family pets should never be left behind in an evacuation. As families in evacuation areas prepare for hurricane season, they also need to plan for the family pet, according to state and federal emergency management officials.

Decide now where you and your family will stay if local officials call for an evacuation. Many hotels or shelters may not allow pets. Prepare an emergency kit for each pet in a waterproof, easy-to-carry container. Families evacuating in their own vehicles can use this check list:

- A secure pet carrier, cage or crate, plus leash and collar or harness for each pet
- Muzzle (Anxiety and stress can cause any pet to bite. A muzzle serves to protect both the pet and other people.)
- An up-to-date identification tag on your pet's collar and proof of ownership, such as a picture of you with your pet
- Veterinary records and medications, such as flea or heartworm treatment, along with emergency contact information
- One week's worth of food and water for each

pet, including dishes, spoon and a can opener


- Written feeding and medication instructions, including what NOT to feed your pet
- Clean-up supplies: paper towels, newspaper, kitty litter with pan and scoop for cats, sealable bags for disposing of waste, wet and dry wipes and hand sanitizers
- Pet toys, bedding and treats

If you will need transportation assistance during an evacuation, dial 2-1-1 in advance to add your name to the Transportation Assistance Registry.

For more information on care for household pets and livestock during evacuation and sheltering, see:

Texas State Animal Resource Team (TXSART):
www.txsart.org

Texas Animal Health Commission Web site:
www.tahc.state.tx.us

<p>Submersible Systems, Inc. 800-648-3863</p>	<p>Comparing Spare Air to a pony system? Find out why Spare Air is the better choice.</p>
	<p>Spare Air Saved My Life... Real life stories of how Spare Air emergency air system saved the day!</p> <p>21 ways YOU can run out of air? Bet you can't name 6!....</p>

FEMA leads and supports the nation in a risk-based, comprehensive emergency management system of preparedness, protection, response, recovery, and mitigation, to reduce the loss

of life and property and protect the nation from all hazards including natural disasters, acts of terrorism, and other man-made disasters.

FOUND ON THE WEB

Race To Preserve The World's Oldest Submerged Town: Pavlopetri, Greece

<http://www.sciencedaily.com/releases/2009/05/090512093635.htm>

ScienceDaily (May 13, 2009) — The oldest submerged town in the world is about to give up its secrets — with the help of equipment that could revolutionise underwater archaeology.

The ancient town of Pavlopetri lies in three to four metres of water just off the coast of southern Laconia in Greece. The ruins date from at least 2800 BC through to intact buildings, courtyards, streets, chamber tombs and some thirty-seven cist graves which are thought to belong to the Mycenaean period (c.1680-1180 BC). This Bronze Age phase of Greece provides the historical setting for much Ancient Greek literature and myth, including Homer's Age of Heroes.

Underwater archaeologist Dr Jon

Henderson, from The University of Nottingham, will be the first archaeologist to have official access to the site in 40 years. Despite its potential international importance no work has been carried out at the site since it was first mapped in 1968 and Dr Henderson has had to get special permission from the Greek government to examine the submerged town.

Although Mycenaean power was largely based on their control of the sea, little is known about the workings of the harbour towns of the period as archaeology to date has focused on the better known inland palaces and citadels. Pavlopetri was presumably once a thriving harbour town where the inhabitants conducted local and

long distance trade throughout the Mediterranean — its sandy and well-protected bay would have been ideal for beaching Bronze Age ships. As such the site offers major new insights into the workings of Mycenaean society.

The aim of Dr Henderson's project is to discover the history and development of Pavlopetri, find out when it was occupied, what it was used for and through a systematic study of the geomorphology of the area establish why the town disappeared under the sea.



The ancient town of Pavlopetri lies in three to four meters of water just off the coast of southern Laconia in Greece. (Credit: Image courtesy of University of Nottingham)

Dr Henderson, from the Underwater Archaeology Research Centre (UARC) in the Department of Archaeology, said: "This site is of rare international archaeological importance. It is imperative that the fragile remains of this town are accurately recorded and preserved before they are lost forever. A fundamental aim of the project is to raise awareness of the importance of the site and ensure that it is ethically managed and presented to the public in a way which is sustainable and of benefit to both the development of tourism and the local community."

The submerged buildings, courtyards, streets, tombs and graves, lie just off a sandy stretch of beach close to an area popular with holiday makers and campers. Under threat from tourism and industry the remains are being damaged by boats dragging their anchors, inquisitive snorkelers on the hunt for souvenirs and the growth of marine organisms which are also taking their toll degrading the fragile 3,500 year old walls.

The survey, in collaboration with Mr Elias Spondylis of



the Ephorate of Underwater Antiquities of the Hellenic Ministry of Culture, will be carried out using equipment originally developed for the military and

offshore oilfield market but looks set to transform underwater archaeological survey and recording.

Dr Henderson and his team will carry out a detailed millimeter accurate digital underwater survey of the site using an acoustic scanner developed by a major North American offshore engineering company. The equipment can produce photo-realistic, three dimensional digital surveys of seabed features and underwater structures to sub-millimetre accuracy in a matter of minutes.

Dr Henderson said: "The ability to survey submerged structures, from shipwrecks to sunken cities, quickly, accurately and more importantly, cost effectively, is a major obstacle to the future development of underwater archaeology. I believe we now have a technique which effectively solves this problem."



Joining the team will be Dr Nicholas Flemming who discovered the site in 1967. The following year he led a team from the University of Cambridge who surveyed the area with hand tapes. The archaeological material — pottery, figurines, obsidian and small finds — they collected belong to the Early Helladic, Middle Helladic and Late Helladic period (c. 2800–1180 BC). A systematic assessment of the finds recovered at the time is currently being undertaken by Dr Chrysanthi Gallou at The University of Nottingham.

Guardian Full Face Mask
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[Ocean Technology Systems](#)

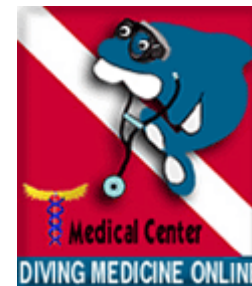


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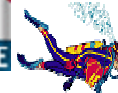
The project has received funding from the Institute of Aegean Prehistory (INSTAP), The University of Nottingham and the British School of Archaeology at Athens but it is still £10,000 short of the amount needed to carry out the main archaeological survey.

Four annual fieldwork seasons are planned. This May and June the team will carry out a full underwater survey. Between 2010 and 2012 there will be three seasons of

underwater excavations. After a study season in 2013 the findings of Dr Henderson’s research will be published in 2014.



Diving Medicine Online
 Comprehensive information about diving and undersea medicine for the non-medical diver, the non-diving physician and the specialist.
<http://www.scuba-doc.com>



Carbon Monoxide

Carbon monoxide poisoning is a rare cause of problems when diving, it does occur when there is contaminated air in recreational diving tanks. CO poisoning is the leading cause of poisoning deaths in the U.S. (about 8600 deaths per year) and is easily missed unless health care providers are especially vigilant.

The most commonly observed result related to CO poisoning is neurological dysfunction; abnormalities in the cardiac, pulmonary and renal organ systems do occur. About 14% of patients sustain permanent brain damage, and delayed neurological sequelae do occur 3-21 days later in about 12% of people.

CO risk factors include:

- Pre-existing cardiovascular disease
- Age greater than 60 years
- An interval of unconsciousness (longer the higher the risk)
- Little association with COHgb (carboxy hemoglobin)

Carbon Monoxide signs:

- Tachycardia (rapid pulse)
- Tachypnea (rapid breathing)
- Retinal venous engorgement (as seen through an ophthalmoscope)
- Ekg conduction defects
- COHgb greater than 20%

Carbon monoxide in diving is the product of incomplete combustion of hydrocarbons and is usually from compressors and cigarette smoking. In addition to the effect on the hemoglobin molecule, it has a toxic effect on the cytochrome A3 system. Prevention requires periodic air sampling. The maximal allowable level is 20 ppm (0.002%)

EVENTS

DAN Offers Training for PSDivers

Diving First Aid for Professional Divers to be offered at select DUI events

DURHAM, NC – For the past few years, Divers Alert Network® ([DAN](#)®) has joined Diving Unlimited International (DUI) on the road for several DUI DOG Rally and Demo Days events. DAN hits the road with DUI once again in 2009, with a special offering added for Public Safety Divers.

At DUI events that include a special day for Public Safety Divers, DAN will offer training in its [Diving First Aid for Professional Divers](#) program. The course will be offered the day before the DUI event starts.

Designed for professionals who dive as part of their job description, Diving First Aid for Professional Divers includes the three required elements of the DEMP course (Oxygen First Aid for Scuba Diving Injuries, AEDs for Scuba Diving and First Aid for Hazardous Marine Life Injuries), along with workplace CPR and first aid (based on guidelines provided by the US Occupational Safety and Health Administration).



The days of dragging your fins in and out of the water are finally over!

1-877-FlipFin

OmegaAquatics.com

Participation in the Diving First Aid for Professional Divers course requires an affiliation with a public safety or scientific diving organization, commercial diving company or an aquarium. As proof of affiliation, participants will also be asked to provide a letter from the qualifying entity, outlining their diving role. The cost to complete the course at the DAN-DUI Public Safety Day events is \$100, and registration is required.

"We're looking forward to the chance to get together with Public Safety Divers," says Eric Douglas, DAN Director of Training. "Not only to conduct training that can be of value to them, but also to tell them about all the resources they have available through DAN. We know a lot of these guys are funding themselves, and so comprehensive courses like the Professional Divers course and learning about resources like the [Oxygen Grant Program](#) can be a great opportunity for them."

DAN will be offering the Diving First Aid for Professional Divers course at the following DUI Demo Days events:

- **Black River Falls, WI June 11 (deadline: May 29)**
- **Seattle/Tacoma, WA August 27 (deadline: August 14)**
- **Manatee Springs, FL November 12 (deadline: October 23)**

For information on Diving First Aid for Professional Divers, or to register for any of the DAN-DUI events, please visit

www.diversalertnetwork.org or call (800) 446-2671 ext.555.

National Underwater Robotics Challenge NURC 2009

Saturday, June 13 7:00p to Sunday, June 14 4:00a
at [Chandler High School Pool](#), Chandler, AZ
Students from AZ and CA grade schools, high schools, community colleges and universities will challenge underwater robots of their own creation on a competition called "Mount Terror: Fire Under Ice". The event is organized by APASE and it is free and open to the public. The organizers have created a scenario where robots will be put to test and complete tasks. [read more](#)



EnergyOcean 2009

June 16 – 18, 2009

www.energyocean.com/2009

Rockport, Maine – Samoset Resort

Chaminade University

June 22-26, 2009

Underwater Forensic Investigation

3140 Waialae Avenue Honolulu, Hawaii 96816
(808) 735-4711 or toll-free (800) 735-3733

Illinois SAR Conference (ISARC)

August 21 – 23

<http://www.illinoissar.org/Conference.htm>

ISARC will be held at Rend Lake Resort & Conference Center in Whittington, IL. Conference agenda and activities should be posted on the web site by May 1.

SARCon 09

Oct. 15-18, 2009

<http://www.clackamas.us/sheriff/sarcon/z>



Northwest SARCon is a search and rescue conference developed for emergency responders and their supervisors, including: sheriff's deputies, SAR team members, SAR volunteers, police officers from state and municipal agencies, firefighters, military and national guard personnel and Emergency Medical Services crews. At the conclusion of the conference, participants will have received hands-on training and participated in discussions on topics related directly to the conduct of search and rescue missions.



PSDiver Monthly Continuing Education

PSDM-CE-62: Heat Injuries

Match the following left column to the corresponding right column

1	Heavy sweating but cool skin	A	Dehydration
2	Hot, Red dry skin	B	Sun Burn
3	Skin Redness & Pain	C	Heat Exhaustion
4	Heavy sweating but cool skin	D	Heat Stroke
5	Fainting, Dizziness	E	Sun Exhaustion
6	Nausea	F	Food Poisoning
7	High Body Temp		
8	Low Blood Pressure		

(9) Heat Stroke begins to show at apparent temperature of ____ and above

- (a) 100
- (b) 112
- (c) 130
- (d) 150

(10) Heat exhaustion usually takes ____ hours to completely recover from

- (a) 12 to 24
- (b) 18 to 36
- (c) 20 to 24
- (d) 24 to 48

(11) A heat stroke victim may have body temperature of ____ or above.

- (a) 105
- (b) 110
- (c) 112
- (d) 115

(12) The best treatment for heat stroke:

- (a) Prevention
- (b) Immediate cooling
- (c) Call 911
- (d) Ice water bath

TEAM DISCUSSION TOPICS:

1. Discuss the team procedure for dealing with heat related exposure.
2. Determine if your team provides rehab methods for changing weather temperatures.
3. Discuss a summertime dive operation regard to the average length of time of a dive mission and the steps you currently take to care for and protect your team from heat related injuries.
4. Discuss alternative ways to provide protection to your team members and possible alterations or modifications to your team operating procedure to accommodate changes.
5. In the event of a suspected heat stroke injury to one of your team members, discuss possible means of immediate care that can be started on a dive site using only what is currently available in your gear bags or on your truck.



We welcome all agencies to participate, For details,
email PSDiverMonthly@aol.com

These training agencies have recognized PSDiver
Monthly as a valued addition to their programs and
Continuing Education requirements.

Public Safety Diving Association

(PSDA) recognizes and approves the
PSDiver CE program. Each month's Q&A
program credits 1 CEU for renewal up to
a maximum of 3 CEUs from this source
for each year's renewal.



ERDI Recognizes and
supports the PSDiver
Monthly CE Program.
Contact your ERDI
Instructor for details.

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Continuing Education Editor: [Chuck Elgin](#)

For advertising and sponsor rates, please email:
psdivermonthly@aol.com

WHAT DO YOU DO?

You are driving in a car
at a constant speed.

On your left side is a 'drop off' (The ground is 18-
20 inches below the level you are traveling on),
and on your right side is a fire engine traveling
at the same speed as you.

In front of you is a galloping horse which is the
same size as your car & you cannot overtake it.

Behind you is another galloping horse. Both
horses are also traveling at the same speed as
you.

What must you do to safely get out of this highly
dangerous situation?

... Get your drunk ass off of the merry-go-round.

