



## MISSION STATEMENT

Tidewater Search and Rescue Group, Inc. provides trained personnel who effectively manage, support, and sustain search and rescue operations when requested. This is accomplished through specialized training, constancy of purpose, and continuous improvement.

## VISION STATEMENT

For the search subject, the Tidewater Search and Rescue Group, Inc. will be recognized as the leader in training and management, providing the most professional and effective response to Ground Search and Rescue Incidents.

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## TSAR - New Member Spotlight



### Presenting Mia Calla

1. *Where were you born and where did you grow up?*

Born in Detroit and raised in Grand Rapids, MI

2. *Any military service and/or college?*

7 1/2 years enlisted service U.S. Navy

3. *Where do you currently live?*

Chesapeake, VA

4. *Any family you want to claim? Husband, wife, boy/girlfriend, kids, parents, etc...*

Awesome 9 year old son, Zachary!

5. *How did you hear about TSAR and why did you join?*

I heard about TSAR from a coworker, Frank Beard. I have looked into joining SAR team for years and finally just made the commitment to try and fit it into my hectic life. I am excited to eventually be an asset to the team and do some good with all of the military training I have received over the years.

6. *Have you been on a search yet?*

Unfortunately, no.

7. *What is your favorite TSAR moment/memory?*

Not too many so far... I find that learning more about everyone on the team and watching the diverse personalities come together for a good cause makes me proud to be a new member of the TSAR family.

**Welcome to the team Mia and Zach!**

**\*\*\* Upcoming Training & Events \*\*\***

Date	Activity
October 31 Nov. 1-2	Chippokes Car Parking - Fund Raiser
November 13	General Membership Meeting (GMM)
November 22	Semi Tech, Ropes, Knots, Patient Packaging, Location and Topic to be finalized
December Xmas Party	Date and Location TBA
January 24	TSAR Full Simulation Training Location and Details to follow
<b>VDEM SAR Field Team Member (FM) Training - Newport News City Park (NNCP)</b>	First weekend - Jan 30, 31 March 1 Second Weekend - Feb. 27, 28 March 1 Registration Closes January 9 Sign up: <a href="http://www.vaemergency.com/train/calendar.cfm">http://www.vaemergency.com/train/calendar.cfm</a> This and other state provided training can be found on this web site.

Nathan Brown  
 TSAR Training Officer

*For any additional information on TSAR Training, contact Nathan Brown at [tsarplans@tsar.org](mailto:tsarplans@tsar.org).*

**Signs, Signs, Everywhere Signs** *by Kevin Brewer*

With the influx of new writers for the newsletter, I find myself in a position of writing on other interesting topics in SAR. One of my most personal favorite issues is tracking and the art of tracking; humans, animals, it doesn't matter. They both support each other in making the other just that much more interesting. Tracking or following sign is a science, as well as an art as old as humans walked the earth. Although almost lost with the advent of the modern man and technology, tracking allows the practitioner to literally step into a world where few go and even fewer sustain said skill thus allowing for the lost hiker, hunter, or missing child to be found. There's more to tracking than just following a few obscure, dimpled impressions on the ground, much much more.

Books written on the subject, and there are a number out there, vary on complexity and content. Understandably there are many, many more on animal tracking as that's more of a past time for some, so the market being written to is much broader. Mantracking though is something that is not wide spread in its teaching for various reasons, some of which I will not put into print as the hills have eyes so to speak.

Consider this: you're out at a search that's been going on for a day or so and "everyone" has been out looking for the missing person. You're given a task which puts you into an area where other teams have been through at least once and you come across a partial track which is older than all those made by those looking for the subject, past and present. What I'm referring to here is aging. You do it every day, just not in the context of a woodland setting and in all that leaf and forest decay. The edges are softer due to being exposed to the environment longer than all the others, maybe the discoloration of the ground lends a clue to how long ago the track was made. Just like walking through your house, or through the building where you might work, you can spot something in an area and know instantly if its new or been there a while. There may even be some indications as to who may have left it. Your eyes take in the information of color, dulling, shadows, decay of sorts all in a split second and since it's a world you are very comfortable with you can almost instantaneously summarize and categorize the object or sign in what is probably a very accurate story of what it was you saw. Those same tools and skills need to be applied to the world outside your home and office; specifically out in the wooded setting. Your back yard will work fine as a starting place.

*Continued on Page 4*



# Commander's Commentary

As I write this column, a change is on the immediate horizon and I'm not talking about the national election looming over us. A change in leadership has occurred within the Virginia Search and Rescue Council. For as many years as I've been with TSAR, the VA SAR Council has been chaired by Mr. Bob Koester. For those of you who have never met Bob, he comes out of Charlottesville and was a member of BRMRG and the ASRC for 20+ years. Bob is principal reason behind why there is search data and techniques published on looking for Alzheimer's and ARD's (Alzheimer's Related Disorders) subjects. Recently Bob Koester published a new book called Lost Person Behavior which takes into account the data numbering into the thousands of different lost person types and breaks down statistically where they were found, how far from the LKP or IPP (Initial Planning Point), etc. Well, Bob choose not to run again for VA SAR Council chair, also up for election is the Vice Chair, as well as Treasurer and Secretary. The Chair and Vice chair positions are about to have new blood in them which means that there's no telling what the potential is for the organization. Keep in mind the VA SAR Council is not a response group but an organization made up of you, well not you specifically, but people like you are all members of other search groups throughout the state. Dog teams, Civil Air Patrol, Sheriffs Departments, and even the state. Yes, VDEM is a member of the Council, it is not the management of it. The standards which you are minimally trained to and by which we all are held accountable to were vetted and promoted to VDEM as the standards by which we will operate and was done so by this organization.



So stay tuned for an interesting adventure as the leadership which has accepted nomination to the positions listed takes office and implements their dreams and aspirations for the SAR and Rescue community in Virginia.

Kevin Brewer, TSAR Commander

## Gear Review – Rite in the Rain Pen

### Product Highlights

The Rite in the Rain All-Weather Pen is the ideal ball point pen for use outdoors, with its pressurized ink cartridge and permanent ink. Writes underwater and upside down, and it will write in all weather conditions, even temperatures as low as - 50 F, fine point.

The pen is \$11.95 and available at:

[http://www.backcountryedge.com/rite\\_in\\_the\\_rain-all-weather-pen.aspx](http://www.backcountryedge.com/rite_in_the_rain-all-weather-pen.aspx)



**Signs, Signs, Everywhere Signs** *by Kevin Brewer*

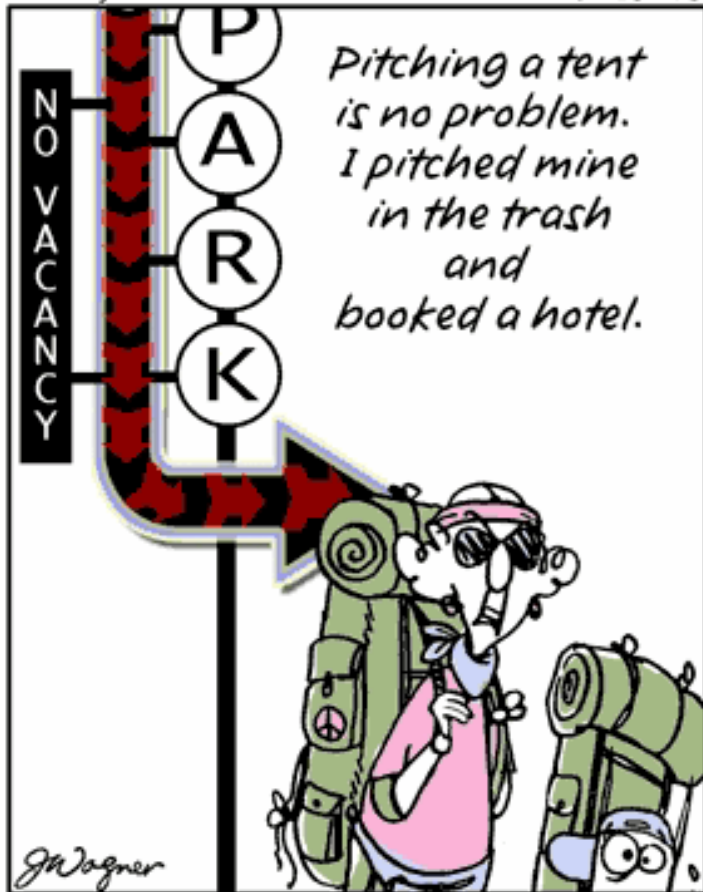
How long does it take for a broken branch to start to discolor in the SE corner of Virginia? Is it the same across Virginia or even the United States? I'll let you work that one out for yourself as practice makes perfect. I'll fill you in on what I've seen while out in other states far from the East Coast if you ask me in person but there's no substitute for proving it to yourself. One thing you can work on this time of year, is to go out and step on the leaves in your yard. Then go back and look at the damage of what your step produced as compared to those undisturbed leaves around it. Hopefully there are even a couple with their own cracks and creases that occurred naturally which you can compare it to. Now leave the leaf in place, mark it and go back each day for a couple of days and see how the aging of the crushing and breaks is progressing. Take baby steps and don't try to do it all in one day or just one set of tracks, yes learn as much as you can each time, but don't get disgruntled by saying "I just don't see it". You actually do, you just don't know it yet. You will intuitively see more each time as you practice.

Getting back to something I eluded to earlier, you may think it silly to go out and leave tracks and then go back and look at them. Well anyone can find their own tracks can't they? Try it sometime, go out into an area like a wooded lot or just in your back yard and walk in a circle, then at the conclusion walk away and come back to where you started. Can you really find your tracks, are you sure that they are your footprints and not those of some woodland critter. How do you know they are yours? What are you seeing which says a human stepped here and it happened when I was out here? Now, can you find the next track, and are you as sure about it as the one you just left?

What I'm describing is a process which can open up all kind of possibilities for you, but be forewarned, once you start down this path, you may find yourself so engrossed that you will never look at the ground the same way again.



Crabby Road 7-15-06



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**TSAR team members, we need your ideas...**

Have an idea for a newsletter topic or section, but no time to write an article? Interested in a piece of gear, but want more info on it before purchasing? Send me your ideas for articles and gear that you'd like reviewed and then watch future newsletters to see your ideas in print. Email them to [renee083@cox.net](mailto:renee083@cox.net).

**\*\*\* 2009 SAREX – Rocky Knob, VA \*\*\***

The May 2009 TSAR monthly training will be held at the 2009 SAREX at the Rocky Knob Recreation Area on May 15 - 17.

This will be a full weekend of searching and classes. Cost for this training will be transportation and your own food for the weekend. FREE camping will be available at the Rocky Knob Mountain Gorge Campground.

Saturday morning will consist of classes and stations, such as probability of detection, sign cutting, map and compass, patient packaging, and this year we will be training on conducting semi technical rescues which will be put on by Black Diamond.

Saturday morning – orientation and classes  
 Saturday afternoon/evening - search simulation  
 Sunday - search simulation

Nathan Brown  
 TSAR Training Officer



*For any additional information on TSAR Training, contact Nathan Brown at [tsarplans@tsar.org](mailto:tsarplans@tsar.org).*

# TSAR Has a New Website!

Have you noticed a new look for TSAR on the web? In mid-October the initial make-over for the TSAR website was completed and published to the internet. The current revisions update the public side of the site while maintaining access to member's only area. Although this is a great start, the work is really only just beginning, so be on the lookout for more additions to the site in the days and weeks to come. Future updates will see the reintroduction of photo albums, a new and improved member's area, and several other features. So take a look around at TSAR's new home on the web and feel free to send comments, suggestions, and requests to Sharon and Nate.





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## Welcome to TSAR!

- [Home](#)
- [VOLUNTEER!](#)
- [About Us](#)
- [Group Information](#)
- [Lost But Found](#)
- [Photo Gallery](#)
- [Member Area](#)
- [SAR Links](#)

Upcoming Events

31 Oct-2 Nov - Chippokes Car Parking

6 Nov - BOD Meeting

13 Nov - GM Meeting

22 Nov - Training (Loc TBD)

[Calendar](#)

Tidewater Search and Rescue (TSAR) is an all-volunteer Search, Rescue and Recovery organization. TSAR provides specially trained professional volunteers to find lost or missing people in wilderness, rural or disaster environments. We train and employ Ground Support, Sign Cutters, and Search Management teams in a wide variety of environments and weather conditions, including farmland, wilderness, and urban areas. We deploy our resources when requested throughout Virginia and adjacent States including WV, PA, MD, NC and DE. We can assist in rescue and recovery operations conducted in the aftermath of man-made or natural disaster. TSAR is formally recognized by the Virginia Department of Emergency Management (VDEM) as a state resource for search, rescue and recovery operations. TSAR is a non-profit 501(c)(3) organization.



TSAR Combined Federal Campaign Number - 76808  
 TSAR United Way Number - South Hampton Roads - 1248

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Please contact the [TSAR Webmaster](#) with suggestions or corrections on this site.

# TSAR Search Report

Recently, three of our TSAR members, Alfredo Hay, Rick Sylvia, and Peter McClintock (GARD) participated in a search for Earl Funk in Albemarle County. Below is an article summarizing those search efforts and also Mr. Funk's obituary, in which his family thanks all those who participated in the search.

## Albemarle Deputies Explain Search and Rescue Efforts

Story from WVIR-TV NBC29

When a Staunton man vanished in the woods of rural Albemarle last month, the Albemarle County Sheriff's Office launched a massive search effort. Sadly, search teams found the missing man, Earl Funk, dead two weeks later.

The search for Funk consumed 11 days, 5,000 man hours and cost \$250,000. But no matter how extensive a search is, an exact science is used to ensure success. The sheriff's office says there's a lot more to its search and rescue efforts than meets the eye, even when it's being watched as carefully as the recent hunt for Funk.



Searches start at the last-known place a subject was seen, and with the help of GPS and bloodhounds, teams go quadrant by quadrant looking for clues.

As more information is found, it's entered into a computer system and the search parameters narrow. "It all comes together like a puzzle, and each person has a specific job and without that you're not able to get a true search," said Sgt. Bobby Shiflet with the sheriff's office.

The sheriff is not mandated or given extra funding to conduct the searches. Some 40 trained reserve deputies who volunteer their time saved the sheriff's office \$25,000 in the search for Funk.

Reported by Jenn McDaniel

## Earl F. Funk

October 13, 2008

STAUNTON — Earl Franklin Funk, 49, of 231 Orchard Road, Staunton, was found Saturday, Oct. 11, 2008, in Shenandoah National Park following a two-week search. He was born Aug. 28, 1959, in Augusta County, a son of Janice (Scrogam) Funk of Staunton and the late Robert Earl Funk.

Mr. Funk was a carpenter. He was a member of Greenville Baptist Church.

In addition to his mother, family members include a sister and brother-in-law, Kathryn (Funk) and Scott Miller of Mount Sidney; two brothers and a sister-in-law, Robert Warren Funk and Daniel Harold and Tamara Funk, all of Staunton; a stepdaughter, Renee Clark of Staunton; two nieces, Dorothy Propst and Daphne Propst Davidson; three nephews, Robert Baird Funk, Joseph Harold Funk and Jonah Robert Funk; and a number of aunts and uncles.

A memorial service will be conducted at 7 p.m. Thursday, Oct. 16, 2008, in Greenville Baptist Church by Chaplain Don Macnicoll.

Honorary pallbearers will be Mark Reed, Mark Showalter, Rusty and Regina Baber, Danny Ralston, Ed Funk, Doug Love, Neil Baber, Ron Morris, Sonny Garrison and Terry Rose.

**The family would like to express their gratitude to all those individuals and organizations who dedicated their time and effort to search for their son, brother, uncle, and friend.**

In lieu of flowers, memorials may be sent to Search and Rescue of Earl Funk, Shenandoah National Park, 3655 U.S. Highway 211, E., Luray, VA 22835.

Condolences may be sent to the family at [www.henryfuneralhome.net](http://www.henryfuneralhome.net).



## November is American Diabetes Month

Diabetes is a disease in which the body does not produce or properly use insulin. Insulin is a hormone that is needed to convert sugar, starches and other food into energy needed for daily life. The cause of diabetes continues to be a mystery, although both genetics and environmental factors such as obesity and lack of exercise appear to play roles.

There are 20.8 million children and adults in the United States, or 7% of the population, who have diabetes. While an estimated 14.6 million have been diagnosed with diabetes, unfortunately, 6.2 million people are unaware that they have the disease. By managing diabetes, high blood pressure and cholesterol, people with diabetes can reduce their risk.

Since 1987 the death rate due to diabetes has increased by 45%, while the death rates due to heart disease, stroke, and cancer have declined.

- Keeping blood glucose, blood pressure, and cholesterol in control can make a difference in reducing your risk for heart attack or stroke.
- Annual dilated eye exams and routine foot exams and blood pressure checks can prevent blindness, amputations, heart disease, kidney disease, and strokes.
- The ADA is the source for diabetes information. Call 1-800-DIABETES (342-2383) or visit [www.diabetes.org](http://www.diabetes.org) for information and materials.

### DIABETES COMPLICATIONS (Data Source: Centers for Disease Control and Prevention)

<b>Heart disease and stroke</b>	<ul style="list-style-type: none"> <li>• Heart disease and stroke account for about 65% of deaths in people with diabetes.</li> <li>• The risk for stroke and death from heart disease is 2 to 4 times higher among people with diabetes.</li> </ul>
<b>Kidney disease</b>	<ul style="list-style-type: none"> <li>• Diabetes is the leading cause of kidney failure, accounting for 44% of new cases in 2005.</li> <li>• In 2005, 46,739 people with diabetes began treatment for end-stage renal disease.</li> </ul>
<b>Amputations</b>	<ul style="list-style-type: none"> <li>• More than 60% of nontraumatic lower-limb amputations occur in people with diabetes.</li> <li>• In 2004, about 71,000 nontraumatic lower-limb amputations were performed in people with diabetes.</li> </ul>
<b>Blindness</b>	Diabetic retinopathy causes 12,000 to 24,000 new cases of blindness each year making diabetes the leading cause of new cases of blindness in adults 20-74 years of age.

### PREVENTING OR DELAYING DIABETES COMPLICATIONS

#### Remember the ABCs

**A is for Average Glucose** - Average Glucose (eAG) or an A1C measures how well a person is managing their diabetes over time. It is important to keep their eAG less than 154 mg/dl or A1C less than 7%.

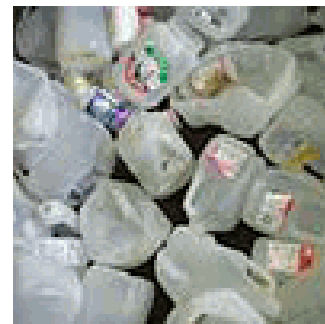
**B is for Blood pressure.** High blood pressure makes the heart work too hard and can cause damage to the kidneys and eyes.

**C is for cholesterol.** Bad cholesterol, or LDL, builds up and clogs arteries, leading to heart attacks and strokes.

## GOT MILK? By Rick Sylvia

In preparation for this article, I went on-line and looked up a list of acronyms for POD. Some of my favorites are: Pay Or Die, Passed Out Drunk, Payable On Death, and of course, we can't deny many people's favorite, Post Orgasmic Disgust. But in this article, we'll stick with the more relevant definition - Probability of Detection.

All joking aside, it's a serious topic and a subject's life could depend on accurate POD estimations. We need all resources to be proficient in determining POD, which can be a tricky undertaking. Here, we'll discuss a method that may make it easier.



First, let's take a quick look at why POD is relevant to a successful search. POD data is used in a variety of ways, and is critical to the execution of the mission. POD can influence the mission managers in the areas of determining which areas need to be re-searched, which types of resources and specific individuals to use in that task area, and provides input into the long term planning and re-planning of the search. All of those have a direct impact on finding the subject as quickly as possible. And, to our benefit, POD can be used to justify actions taken and used as part of a defense in the event of litigation against the search team.

For these reasons, we as searchers need to take POD seriously and learn to be better estimators. Bottom line... as stated earlier, the subject's life could depend on it!

We've all heard and used the standard Milk Jug analogy in terms of POD.... "Out of 100 milk jugs, how many do you think you would have found in your Task area"? *Milk Jugs? I'm not looking for Milk Jugs, I'm looking for a person!* Actually, no. You're looking for clues with the person being the ultimate clue, but we'll discuss that at another time. But the question becomes, *how should you determine how many milk jugs you would have found?*

In my short career as a SAR volunteer, it has become painfully obvious that the Virginia SAR community struggles with mindset continuity on this subject. It's a topic that has come up over and over in the trainings I've attended, both within TSAR, the State FTM class, and my on-line research and learning, and on missions. And yet, while on searches, the FTL will ask for POD input at the end of a task, and get opinions that have as much as a 50 point spread.

In fact, on a task at my last search, the low was 30 and the high was 80! Why such a large inconsistency? I think it's because there are many factors to consider, and it's difficult to lump them all together into a single numerical value. Surely, there's a better way!

And, I think there is (*imagine that!*) While browsing the internet for various SAR subjects, I ran into a site that provides what seems to be an excellent way to provide the estimates with some consistency. While I have no expectations that TSAR or the ASRC will adopt this method based on this newsletter article, I do think it's worth discussion among ourselves so that we, as individuals, will have a better idea of how to objectively "guesstimate" POD. It's still a guess, but it's now a structured guess.

The POD determination method comes from S.E.T.T.L.E.R. (Strategic Educational and Tactical Training for Law Enforcement Resources), and uses a business card size cheat sheet listing 10 areas of consideration. These areas are: Weather, Terrain, Vegetation, Hazards, Tactics, Lighting, Sweep Widths, Resource Experience, Area Size/Time, and Instincts/Variables.

The process is simple. Each of the 10 categories gets assigned a subjective value from 1-10, and then the sum of all areas is taken to get your POD. Breaking the process down into smaller bites allows the person to focus on specific aspects of the search, which is easier than trying to guess at the POD from a higher level. But, you still have to evaluate each of the 10 areas and provide a realistic number. For that, there are some guidelines. The following are examples only. For details, go to the following web site - <http://podfactoring.org/> - and spend some time with the downloads or demos.

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Rather than going into all these details, I'd like to just give a few examples of how to rate the various categories. Let's start with Terrain. Flat terrain will get a 10, while rolling hills should only rate between a 4 to 9. Hilly and steep terrain will rate between 1 and 4, depending on the severity of the slope.

In terms of vegetation, a paved search surface will get a 10. Mowed lawns and dirt will rank between 5 and 9, while knee high vegetation can rank between 3 and 4. Thick vegetation rates a 1 or 2.

In terms of Resource Experience, a well trained team of seasoned SAR volunteers can rank between 5 and 10. The less trained the volunteers, the lower the number will dip. Lower numbers can also occur for personality conflicts and other factors that destroy team cooperation and cohesion.

The examples above should begin to provide some guidance on how to rank the categories. For further details and more in depth discussion, I'll refer you to the web site listed above. Again, my goal is simply to introduce our team (at least the newer members of the team who may not have seen this method before) to this concept so that we can be better judges of POD when asked for input by a Team Lead. Our number may vary greatly from the rest of the team, but we'll have the advantage of being able to defend our numbers with some structured logic.... or so the theory goes.

And finally, until the next newsletter, I'd like to say to the TSAR family, POD! (*Peace Out, Dawg!*)

<b>S.E.T.T.L.E.R. POD Factoring</b>	
<b>Weather</b>	<b>Terrain</b>
<b>Vegetation</b>	<b>Hazards</b>
<b>Tactics</b>	<b>Lighting/Detectability</b>
<b>Sweep Widths</b>	<b>Resource Training/Experience</b>
<b>Area Size/Time</b>	<b>Instinct and Variables</b>

The forest is to me the sweetest college...wisdom doth here in all its branches grow...

*Edward Thurlow, (1781-1829) English Poet*

**Search  
And  
Rescue**

# Submersion Incident and Management by Brad Bennett, TSAR Medical Officer

## Background:

Submersion injuries are a significant cause of death and disability in children, second only to accidental trauma. At least one third of survivors sustain moderate to severe neurologic sequelae. Although no uniform classification for submersion injuries exists, drowning is usually defined as death from asphyxia within 24 hours of submersion in water. Near drowning refers to survival (even if temporary) beyond 24 hours after a submersion episode.

Submersion injuries may be further classified as cold-water or warm-water injuries. Warm-water drowning occurs at water temperatures of 20°C or higher, and cold-water drowning occurs at water temperatures of less than 20°C. Some references include very-cold-water drowning, which refers to submersion in water at temperatures of 5°C or less.

Additional classification may include the type of water in which the submersion occurred, such as fresh-water and salt-water submersion injury. The distinction between fresh-water and salt-water submersion injury, however, is primarily academic, as initial treatment is not affected by water type.

## Mortality/Morbidity:

More than 1500 children die in the United States each year from submersion injuries. For every drowning death in this country, an estimated 4 additional hospitalizations and 14 emergency department visits are due to submersion injuries. It is also estimated that approximately 1 in 8 males and 1 in 23 females experience some form of water-associated accident but never seek medical attention. Boating and related water sports, combined with alcohol consumption, increase both the likelihood and severity of submersion injuries. Risk-taking behaviors, especially in males, are similarly associated with increased morbidity and mortality. As early resuscitation is associated with improved outcomes, many studies have attempted to determine clinical, laboratory, or other variables to identify which patients would benefit from resuscitative efforts. Although no individual characteristics have been found to predict survivability, the Orlowski score has been found to identify the likelihood of neurologically intact survival. In using the Orlowski score, 1 point is given for each item; scores of 2 or less are associated with a 90% likelihood of complete recovery, and submersion-injury patients with scores of 3 or more have only a 5% chance of survival. The items in the Orlowski score are as follows:

1. Age 3 years or older
2. Submersion time of more than 5 minutes
3. No resuscitative efforts for more than 10 minutes after rescue
4. Comatose on admission to the emergency department
5. Arterial pH of less than 7.10

Anecdotal reports of survival exist for children with moderate hypothermic submersion (core temperature <32°C), but most persons experiencing cold-water submersion do not develop hypothermia rapidly enough to decrease cerebral metabolism before severe, irreversible hypoxia and ischemia occur.

## Pathophysiology:

Submersion injury occurs when a person is submerged in water, attempts to breathe, and either aspirates water (wet drowning) or has laryngospasm without aspiration (dry drowning). Although most patients with submersion injury have aspirated a small amount of water or gastric contents into their lungs, approximately 10-15% of patients have become asphyxiated without evidence of aspiration. The most important contributory factors to morbidity and mortality from near drowning are hypoxemia and a decrease in oxygen delivery to vital tissues. The pathophysiology of near drowning is intimately related to the multiorgan effects of hypoxemia. CNS damage may occur because of hypoxemia sustained during the drowning episode (primary injury) or may result from ongoing pulmonary injury, reperfusion injury, or multiorgan dysfunction (secondary injury), particularly with prolonged tissue hypoxia.

## Prevention:

Many factors contribute to submersion incidents. These include poor judgment, inability to swim, fatigue in rough waters, panic, drug and alcohol abuse, and many others. Surprisingly, what is not so well known by the general public or consistently promulgated are the rules and suggestions by which submersion incidents might be avoided. The following is advice for anyone who is going to be near the water or who is responsible for others who will be vulnerable to a submersion episode:

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1. Learn to swim. This is most important for children and teenagers, who are frequently in the water and often place themselves in precarious situations. It is also important for adults, particularly those who may need to self-rescue, such as surf swimmers, scuba divers, and river rafters. However, do not let swimming lessons create a false sense of security, particularly with children. Small children who learn to swim do not necessarily have the physical strength and decision-making abilities to support themselves in a critical rescue situation. If you would supervise a child who doesn't know how to swim, continue to supervise him or her if they do know how to swim. Toddlers are at greatest risk for near-drowning.
2. Do not tolerate horseplay in or around the water. This includes diving from heights into shallow water or water of unknown depth.
3. Avoid solo swimming; use the buddy system, so that someone is always on the alert to help a companion in need.
4. It is never safe to cross thin ice; one should be particularly careful during the spring thaw.
5. Alcohol and recreational drugs have no place anywhere near the water. It takes only a brief lapse of common sense to ruin a person's life forever.
6. Surround all pools and swimming areas, where possible, with fences. Maintain the water level in a pool as high as possible (e.g., close to the ground surface) to allow a person who reaches the edge to pull himself out.
7. Never place non-swimmers in high-risk situations: small sailboats, whitewater rafts, inflatable kayaks, and the like.
8. When boating or rafting, always wear a properly rated life vest (jacket) with a snug fit and a head flotation collar.
9. In a kayak or raft traversing whitewater, wear a proper helmet.
10. Know your limits. Feats of endurance and demonstrations of bravado in dangerous rapids or surf are foolhardy.
11. Learn how to properly cross flowing streams of natural water. Do not attempt to cross a flowing stream where the water is above your knees.
12. Be prepared for a flash flood. In times of unusually heavy rainfall, stay away from natural streambeds, arroyos, and other drainage channels. Use a map to determine your elevation and stay off low ground or the very bottom of a hill. Know the location of high ground and how to get there in a hurry. Absolutely avoid flooded areas and unnecessary stream and river crossings.
13. Abandon a stalled vehicle in a flood area.

#### **Prehospital Medical Care:**

Success or failure of initial basic life support provided at the scene of the accident is the most important determinant of outcome.

As in any rescue initiative, initial treatment should be geared toward ensuring adequacy of the airway, breathing, and circulation, with attention given to cervical spine stabilization if the scenario suggests spinal trauma.

The patient should be removed from water as soon as possible.

Initiate rescue breathing immediately, even while the patient is still in the water, if necessary and feasible.

Chest compressions are not effective in the water and waste valuable time.

The Heimlich maneuver has not been shown to be effective in removing aspirated water.

Debris visible in the oropharynx should be removed with a finger-sweep maneuver.

Higher pressures may be required for ventilation because of the poor compliance resulting from pulmonary edema.

Supplemental oxygen, 100%, should be administered as soon as available. The degree of hypoxemia may be difficult to determine on clinical observation.

Assess and treat for hypothermia.

Sources: eMedicine ([www.emedicine.com](http://www.emedicine.com)); Healthline – Medicine for the Outdoors ([http://www.healthline.com/blogs/outdoor\\_health/](http://www.healthline.com/blogs/outdoor_health/))

**FROM THE PAGES OF:****Lost Person Behavior****A Search and Rescue Guide on Where to Look – for Land, Air and Water****By Robert J. Koester**

Chapter 6. Lost Person Myths and Legends

**Lost persons will turn in the direction of their dominant hand.**

This belief has been around for a long time. The idea is that right-handed subjects will bear to the right and left-handed subjects will bear to the left. Therefore, a lost person's direction of travel can be predicted by his dominant hand. The belief stems from the fact that among Americans 67% prefer to turn right and 85-95% are right handed. Put the two together and it would appear right-handedness causes right turns. This is a common mistake to make when looking at two distinct variables that covary.

Two SAR studies have directly reported on handedness. Both Koester and Silverstein found it does not predict the direction dementia subjects are found. Syrotuck also reported the same observation. It appears that several other factors override any effect the dominant hand may have. These could include conscientious choices, terrain features, path of least resistance, moving away from irritants, or leg length. However, this does not mean that handedness does not influence people when they are forced to make an equal choice.

\* If you are serious about SAR theory and/or management, then you should get yourself a copy of this book and keep it close by. Theresa Crossland

**Have a Safe and Happy  
Thanksgiving!!!**