

DECISIONS

SPRING/SUMMER 2014



Surviving Summer

It's not only what you
do, it's how you do it.
carefully

DECISIONS

The Naval Safety Center Magazine for Shore, Ground and Industrial Operations
Spring-Summer 2014 / Vol. 3, No. 1

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COVER PHOTO: Jefferey Easson rides a wave off of Point Mugu during the first Naval Base Ventura County Surf Contest. Easson took first place honors in the military division. *U.S. Navy photo by MC1 Michael Moriatis*

THIS PAGE: David McNiff avoids a puddle during the last stretch of a 23-mile course on the first Hell Fire Fat Tire Bike Race on Camp Pendleton. *Photo By LCpl Sarah Wolff-Diaz*

EDITOR'S NOTE

As the cold air and frozen lakes give way to pollen and lawnmower dust, I start thinking about summertime activities I could squeeze into my weekends. Living on the coastline of Virginia and in proximity to the Blue Ridge Mountains, there are so many opportunities for being outdoors — from swimming in the Chesapeake Bay or Atlantic Ocean, bike riding at the state parks, to cruising the Skyline Drive.

Wherever your job or activities take you this summer — stateside or overseas — keep in mind that having fun is synonymous with being safe. After all, who's better to tell your adventure story than you?

This issue is packed with articles that highlight safety resources and survival stories. They highlight how benign activities in a safe environment can change to a dangerous situation in a matter of seconds ... that your knowledge and skills can impact your ability to manage risks.

The article on page 6 (“It’s All in the Details”) talks about the effort placed on mishap reporting. Speaking of which, an unbelievable report detailed on page 10 (“Could It Really Be ... Quicksand?”) shows that events that may seem unlikely shouldn’t be ignored. The article on page 14 (“Staying Alive to Enjoy the Ride”) talks about training as a critical element in preventing motorcycle mishaps and injuries. In the center of this issue is a map that shows where motorcycle mishaps are happening.

Since we’re on the subject of motor-vehicle safety, in “Life, Future Taken Away” on page 19, the author finds a new role as a designated driver after a friend’s tragic loss. The survival story on page 30 (“A Group Trip I’ll Never Forget”) will make you think twice about heading for the outdoors without the proper gear and training.

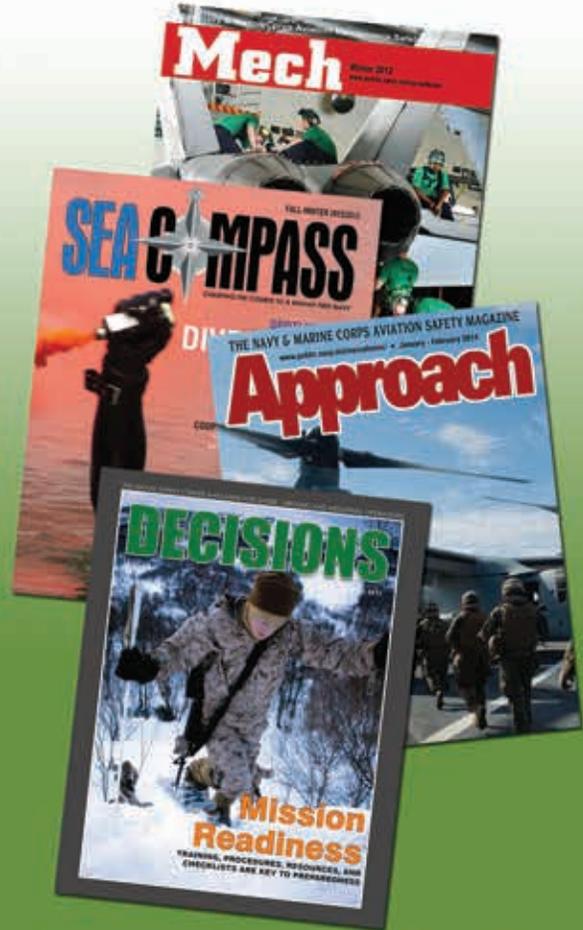
Last and certainly not least check out the best-practice tips on preventing PT- and heat-related injuries, takeaways on near-drowning, lessons learned on boat recreation, and the ORM Playbook for traffic safety. We also have some water-safety resources from the Army Corps of Engineers and the Coast Guard that can make your time outdoors more enjoyable.

Let us know how we’re doing or if there’s anything else we should be offering; we want your feedback. Thank you for sharing your stories and reading our articles.

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Who's Responsible for Managing Risk?

By Joseph Perfetto

The Department of the Navy requires all commands to write up all reportable mishaps. In order to report, they must investigate to determine what's happened and how to prevent similar incidents. The Navy and Marine Corps instructions explicitly state that a hazard and near-miss report is "intended to be submitted when the elimination and control of a given hazard has community-wide implication in reducing mishaps."

Personnel from the Naval Safety Center review all Web Enabled Safety System (WESS) and a majority of the Enterprise Safety Applications Management System (ESAMS) reports. We have learned over time that Navy and Marine Corps personnel — military and civilian — know how to get injured but haven't found too many new ways to hurt themselves. This repetition has introduced a cookie-cutter way of writing reports. Most of the time a generic write up could be used and all that would be required is to change the name.

Two words come to mind when trying to figure out why this is occurring: supervision and accountability. Supervisors own the safety process and employees are responsible for the execution. If an employee is not performing a defined process properly, everyone should stop and ask these questions:

- Why was the process not being followed?
- What should be done to ensure the process is followed?
- Did the supervisor or another employee witness a violation and not correct the action?
- Mishap reports frequently cite complacency as a causal factor. But what causes this complacency?

The following scenario could easily happen at work or home. Put yourself in the place of the supervisor and the employee. What would you do?

An employee uses a 6-foot ladder instead of the required 8-foot ladder. The employee stands on the top rung. (Not authorized.) His justification: "I'm only going to do this one time." A supervisor or another employee witnesses the employee not following the process; neither says anything. The employee does not fall; no injury.

If an individual accomplishes a task without regard to personal safety and does not get injured, the unsafe behavior is reinforced and the individual convinces himself that this behavior is satisfactory. So he takes more risks and increases his chance of a mishap.

The right thing to do

The supervisor or employee who witnessed the violation should have stopped the job on the spot.

“ If an individual accomplishes a task without regard to personal safety and does not get injured, the unsafe behavior is reinforced and the individual convinces himself that this behavior is satisfactory. ”

The process should be reviewed and the proper ladder brought to the job site. If properly trained, the employee using the ladder should have known not to stand on the top two rungs. Did the supervisor or other employee know? The supervisor should know; the other employee may or may not know.

Direct and indirect costs

If the employee's lack of accountability caused a personal injury, there are usually costs beside the pain and suffering of the injured employee. Depending on the injury, a trip to the hospital may be required. Another employee may have to assist in flagging down emergency personnel or drive the injured to the medical facility. Either way the project is stopped. Time is lost.

Bringing the proper ladder into the site from the start — or delaying the project until the proper ladder arrived — would have reduced the chance of an injury. The time lost to retrieve the proper equipment is still less than the time lost due to the injury. Applying operational risk management (ORM) processes would have resulted in the right equipment being available when needed resulting in no lost time.

During this time of fiscal restraint employees may sometimes hear "you need to do more with less." What would you sacrifice for less?

Everyone plays a valuable role

Supervisors should supervise and review processes. Employees are responsible for following the rules and should be held accountable when they don't.

Review processes periodically to ensure they are viable. Modify those that are limited or outdated.

Everyone who sees a safety violation should say something. If you think it is unsafe, most likely it is.

When using ORM, ask yourself, "Does the risk outweigh the reward?" "Who else should know?" Work with the safety officer to submit a hazard report.

Mr. Perfetto recently served as an occupational health and industrial safety specialist at the Naval Safety Center.

It's All in the Details

Minor or major, mishaps deserve the same attention when reporting

By Steve Geiger

Does it really matter how thoroughly a mishap report is written? When it comes to analyzing work-related or off-duty incidents, the details could make a lot of difference in preventing the next mishap.

I review many reports from both the Web Enabled Safety System (WESS) and the Enterprise Safety Applications Management System (ESAMS). The one common theme in the majority of these reports is the lack of investigative rigor.

Writing these reports is actually governed by a couple of instructions, so it's really not optional. *The Navy Safety and Occupational Health Program Manual* (OPNAVINST 5100.23G) states in chapter 14, section 1403: "Shore regions and activities shall conduct a safety investigation of every mishap, major or minor, and handle the investigation as a search for facts as outlined in reference /MCO P5102.1B." Reference 14-2 is OPNAVINST 5102.1D (*Mishap Safety Investigation and Reporting Manual*).

To illustrate my point, read the two reports starting on the next page. Both were pulled from WESS, but they were originally submitted using ESAMS. They show how we sometimes let the severity of a mishap drive the rigor of our investigation.

The first sample illustrates the minimal effort placed on the reporting of this minor mishap. The second sample goes into extensive details that include analysis, findings, corrective actions, training, and recommendations.

Minor mishaps many times have the same causal factors as more severe mishaps. If more effort is placed on in-depth analysis, perhaps there could be more focus on correcting the hazards and conditions that could lead to mishaps.

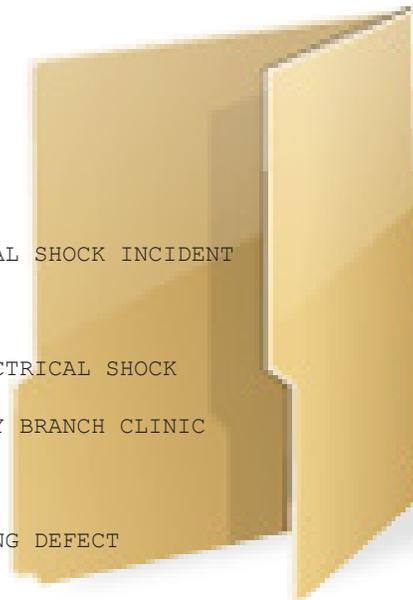
.....
Mr. Geiger is an occupational health and industrial safety specialist at the Naval Safety Center.



“Shore regions and activities shall conduct a safety investigation of every mishap, major or minor, and handle the investigation as a search for facts.”

Mishap Report #1

UNCLAS FOUO//N05102//
CONSOLIDATED NAVAL MISHAP/HAZARD REPORT
POC:
MISHAP INVOLVED:
SHORE/GROUND/SHIPYARD
BRIEF SUMMARY: MEMBER SUBJECT TO MINOR ELECTRICAL SHOCK INCIDENT
1. GENERAL INFORMATION
A. EVENT NUMBER:
B. LOCAL SERIAL NUMBER:
C. NARRATIVE: SERVICE MEMBER RECEIVED MINOR ELECTRICAL SHOCK
(C) NATURE: ELECTRICAL BURNS
(M) INITIAL MEDICAL TREATMENT: NAVAL OR MILITARY BRANCH CLINIC
(N) OFF-SITE TREATMENT AUTHORIZED: NO
(5) CAUSE CODES
(A) CAUSE #1
(1) CAUSE: RELIABILITY OF EQUIPMENT-MANUFACTURING DEFECT
(2) EXPLANATION: MANUFACTURING DEFECT
6. COMMUNITY OF INTEREST: (NONE)
END OF REPORT



Mishap Report #2



UNCLAS FOUO//N05102//
CONSOLIDATED NAVAL MISHAP/HAZARD REPORT
POC:
MISHAP INVOLVED: SHORE/GROUND/SHIPYARD
BRIEF SUMMARY: WORKER INJURED WHILE DISMOUNTING FORK LIFT.
1. GENERAL INFORMATION
A. EVENT NUMBER:
B. LOCAL SERIAL NUMBER:
C. NARRATIVE:
INVESTIGATION AND ANALYSIS:
THE MISHAP OCCURRED AT APPROXIMATELY 11:45 AM ON 8 JUL 2013 AT THE FRONT LOADING DOCK. THE MISHAP WORKER (MW) WAS ASSISTING PART OF A THREE-MAN CREW ASSIGNED TO REMOVE EIGHT PALLETS FROM TWO TRACTOR TRAILERS AND STORE THEM IN THE BUILDING SHED. THE MW IS A 27-YEAR EXPERIENCED CRANE OPERATOR. HE WAS TASKED TO OPERATE THE FORKLIFT TO COMPLETE THE OFF LOAD AND STORAGE. THE MW HAD ASSISTED THE TEAM MEMBERS WITHOUT INCIDENT FOR ABOUT AN HOUR AND HAD MOVED SIX OF THE EIGHT PALLETS WITHOUT INCIDENT. THE MW SET A PALLET ON TO THE LOADING DOCK AND STEPPED OUT OF THE FORKLIFT TO RETRIEVE A PIECE OF DUNNAGE (4X4 WOODEN BOARDS) FROM THE FORKS OF THE LIFT. THE DUNNAGE IS USED TO SUPPORT THE LOAD AND PROVIDE BALANCE ON THE CRATES AS THEY ARE LIFTED WITH THE FORKLIFT FOR TRANSPORT. THE MW STEPPED OUT OF THE FORKLIFT ONTO THE FRONT FENDER IN AN ATTEMPT TO RECOVER THE DUNNAGE FOR THE NEXT LIFT. AS HE STEPPED UP FROM THE WALKING PLATFORM ON THE FORKLIFT DRIVER SIDE ONTO THE FENDER TO RETRIEVE THE DUNNAGE, THE SHOESTRING ON

Continued next page.

HIS LEFT BOOT CAUGHT ON SOMETHING. HE LOST HIS BALANCE AND FELL. THE MW FELL APPROXIMATELY FOUR FEET TO THE GROUND FROM THE FRONT OF THE FORKLIFT ONTO THE GROUND BETWEEN THE LEFT FRONT FORKLIFT WHEEL AND THE FRONT SIDE OF THE LOADING DOCK. THE FALL FROM THE FORKLIFT RESULTED IN INJURIES CONSISTING OF A CUT ON HIS RIGHT LITTLE FINGER (NO STITCHES REQUIRED) AND A LIGAMENT STRAIN TO HIS LEFT KNEE. THE MW REPORTED THE INCIDENT TO HIS SUPERVISOR AND WAS TAKEN TO THE LOCAL BRANCH MEDICAL CLINIC FOR MEDICAL TREATMENT...



RELATIVE TRAINING RECEIVED BY EMPLOYEE:
MONTHLY SAFETY TALKS - RECEIVED 7/25/2013
PPE JOB-SPECIFIC USAGE (OJT BY SUPERVISOR) 7/3/2013
INDIVIDUAL-MANAGING YOUR RISK 4/10/2013
SAFETY STANDDOWN 3/20/2013
ORM TRAINING 7/2/2012
ORM (OJT BY SUPERVISOR) 5/23/2012
NAVY FALL PROTECTION AWARENESS TRAINING FOR END USERS WORKING AT HEIGHTS, AND SUPERVISORS OF END USERS 6/14/2012
SLIPS, TRIPS AND FALLS (OJT BY SUPERVISOR) 4/9/2010
FALL PROTECTION - ANNUAL (OJT BY SUPERVISOR) 11/10/2009
SAFETY ORIENTATION TRAINING FOR EMPLOYEES (INDUSTRIAL) 5/2/2007



FINDINGS OF OTHER SIGNIFICANCE:

1. THE MW HAS COMPLETED ALL REQUIRED SAFETY TRAINING, AND ALL DOCUMENTATION WAS CURRENT AT THE TIME OF THE INJURY.
2. THE FORKLIFT WAS IN TOTAL SERVICEABLE CONDITION AS IT IS NEWLY PURCHASED EQUIPMENT.
3. THE ASSIGNED WORK CREW AND THE MW WERE NOT UNDER ANY TIME CONSTRAINTS TO ACCOMPLISH THE TASK.
4. THE TASK'S RISKS WERE ANALYZED; HOWEVER THE MW'S SUPERVISOR DID NOT VISIT THE WORKSITE PRIOR TO THE MISHAP. THE CREW WAS ONLY ON SITE FOR AN HOUR.



RECOMMENDATIONS:

1. ORM IS A PRINCIPAL PART OF ANY SUCCESSFUL TASK AND ALL MATTERS ASSOCIATED WITH THE TASK MUST BE TAKEN INTO ACCOUNT TO PROTECT THE WORKERS AND JOB SITE.
2. A THOROUGH ASSESSMENT OF EACH TASK MUST BE CONDUCTED PRIOR TO A JOB REQUIRING MATERIAL EQUIPMENT HANDLING. PRECAUTIONS MUST BE TAKEN TO ENSURE THAT NO UNNECESSARY EXPOSURE TO HAZARDS, PARTICULARLY FALLS FROM ELEVATED UNPROTECTED HEIGHTS, ARE OVERLOOKED.
3. RECOMMEND WHEN SIMILAR OFFLOADING TASKS ARE ASSIGNED IN THE FUTURE, INCORPORATE A PROCESS IN THE PROCEDURE THAT REQUIRES ONE OF THE OTHER TWO WORKERS TO ACT AS THE EXTRACTOR OF THE DUNNAGE ONCE THE FORK LIFT AND MATERIAL HAVE BEEN PLACED AS NEEDED THUS ELIMINATING THE NEED FOR THE FORKLIFT OPERATOR TO EXIT THE CAB TO PULL DUNNAGE.



CORRECTIVE ACTIONS:

THE SUPERVISOR REVIEWED THE CIRCUMSTANCES OF THIS MISHAP, OPERATIONAL RISK MANAGEMENT (ORM) PRINCIPLES, AND SITUATIONAL AWARENESS WITH WORK CENTER EMPLOYEES.





WAS THAT INJURY A REPORTABLE MISHAP?

Be aware of the potential need to submit a Web-Enabled Safety System (WESS) report and to provide the Naval Safety Center with a more accurate metric of unreported injuries and occupational illnesses. This process is part of an effort to achieve a more complete reporting of mishaps, which will in turn produce a more accurate picture of how much mishaps cost the military. The DoD IG tasked the Naval Safety Center with closing the gap between medical reports of apparently mishap-related injuries and mishap reports submitted to WESS.

Injury Verification Data Feed

REVIEW

Command-designated representative reviews medical data about traumatic injuries received from the Navy and Marine Corps Public Health Center.



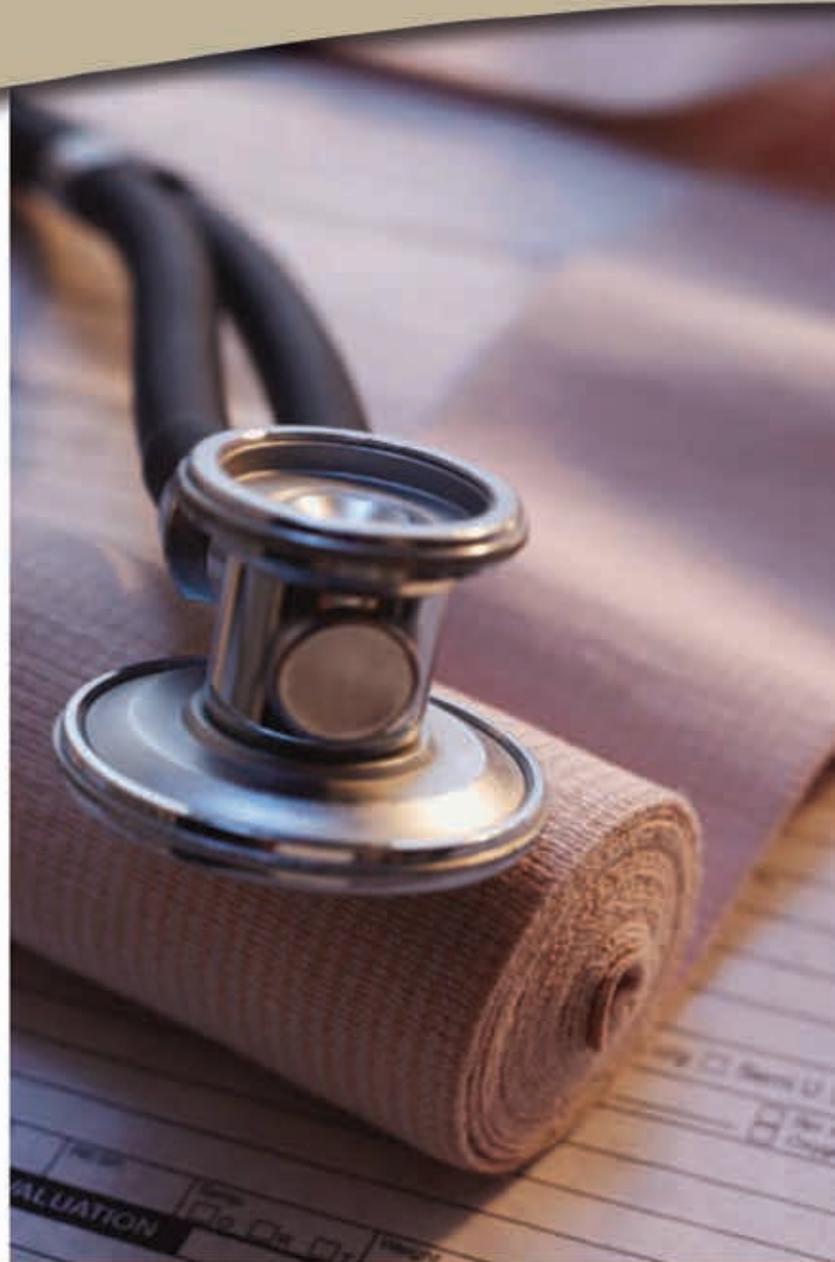
VALIDATE

Reviewer checks whether or not each individual injury constitutes a reportable mishap according to the applicable OPNAV Instructions or MCOs.



ACTION

Reviewer ensures the command submits the required report via the Web-Enabled Safety System.



OPNAVINST 5102.1D/MCO P5102.1B defines on-duty and off-duty mishaps. OPNAVINST 3750.6R defines aviation mishaps. Medical data is selected based on International Classification of Diseases, 9th Revision (ICD-9) injury or illness classification codes and severity (This is an acceptable use of medical data under the Health Insurance Portability and Accountability Act of 1996). Injury Verification Data Feed is provided by the Naval Safety Center and is a component of the Web-Enabled Safety System.

To use this tool, login at <http://www.public.navy.mil/navsafecen/pages/wess/WESS.aspx>. For support, contact the WESS Help Desk using the help request form available online or call (757) 444-3520 ext. 7048 (DSN 564) during normal business hours, Monday-Friday, 0800 to 1630 EST/EDT. Send feedback to NRFK_SAFE_WESShelp@navy.mil.



Could It Really Be... Quicksand?

By John Mapp

One wet and windy day in October, a civilian employee of a Navy activity in Norfolk reported to his local safety office that he had stepped into quicksand. His right leg was wet and covered with sand up to the hip.

The safety office personnel laughed and asked him what really happened. He insisted that he had stepped into some quicksand and had sunk up to the hip. He thought it might be a hazard that should be reported.

“Quicksand? Really? Like in the *Tarzan* movies?” Understandably, the safety folks were still skeptical.

The employee stuck to his story.

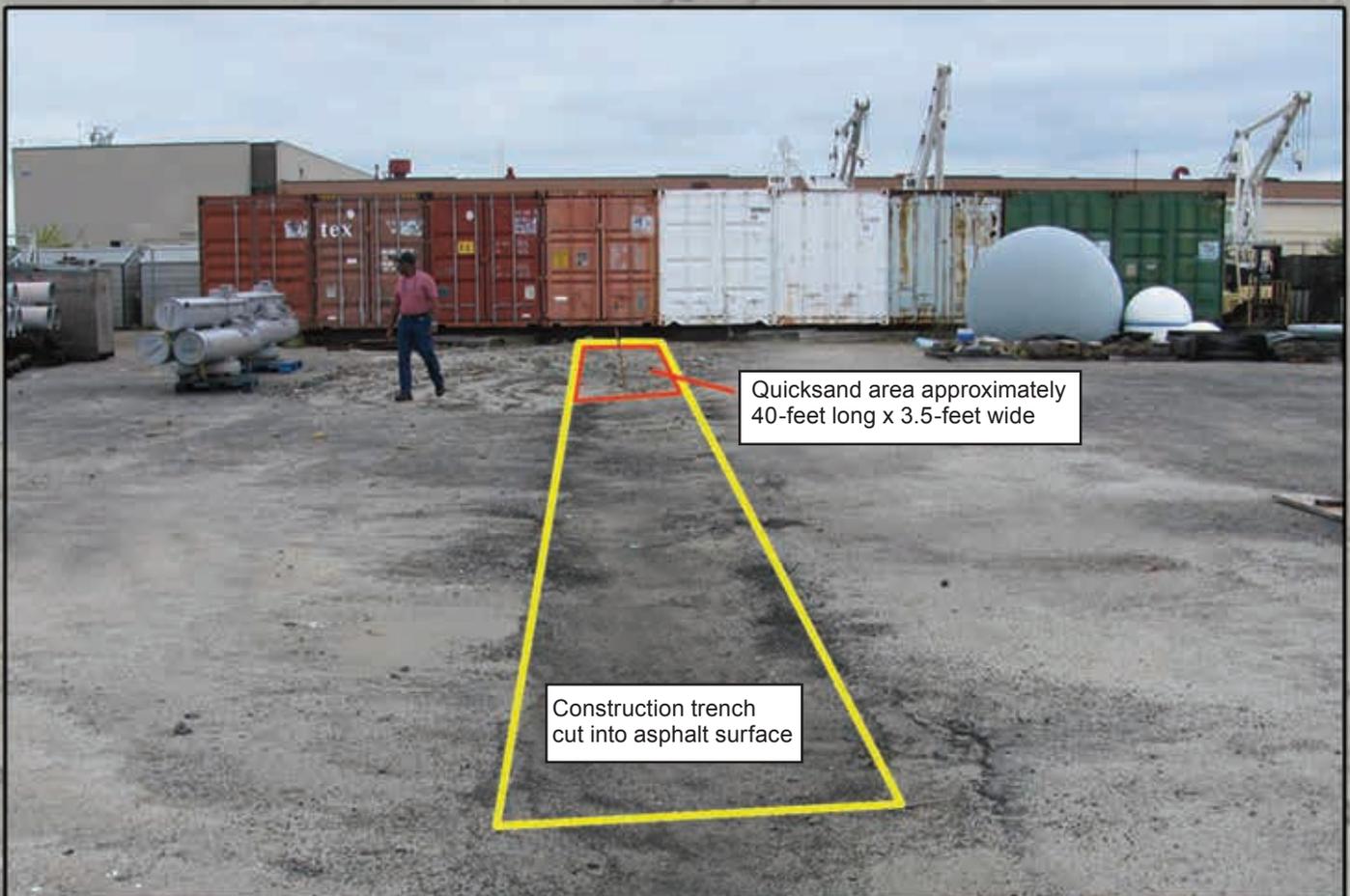
Still dubious, the safety team gathered their inspection gear — including a broom handle for probing the ground — and followed the employee out into the wilds of Naval Station Norfolk. In the container yard west of

the building, they had to swallow their laughter, because there was actual quicksand right where the employee said it was.

Apologies ensued, after which safety personnel investigated the extent of the hazard. The quicksand was confined to the eastern end of a trench, which had been cut through the container yard by contractors putting in water main pipes. The trench had been filled in after the pipe was installed, but a roughly 40-foot-by-3.5-foot area at the eastern end was completely unstable.

Yep. Quicksand. Just like in the *Tarzan* movies.

A safety inspector used a yellow tape to mark off a four-foot tag on the broom handle. He then pushed effortlessly into the loose soil in the trench; the broom handle never reached the bottom.

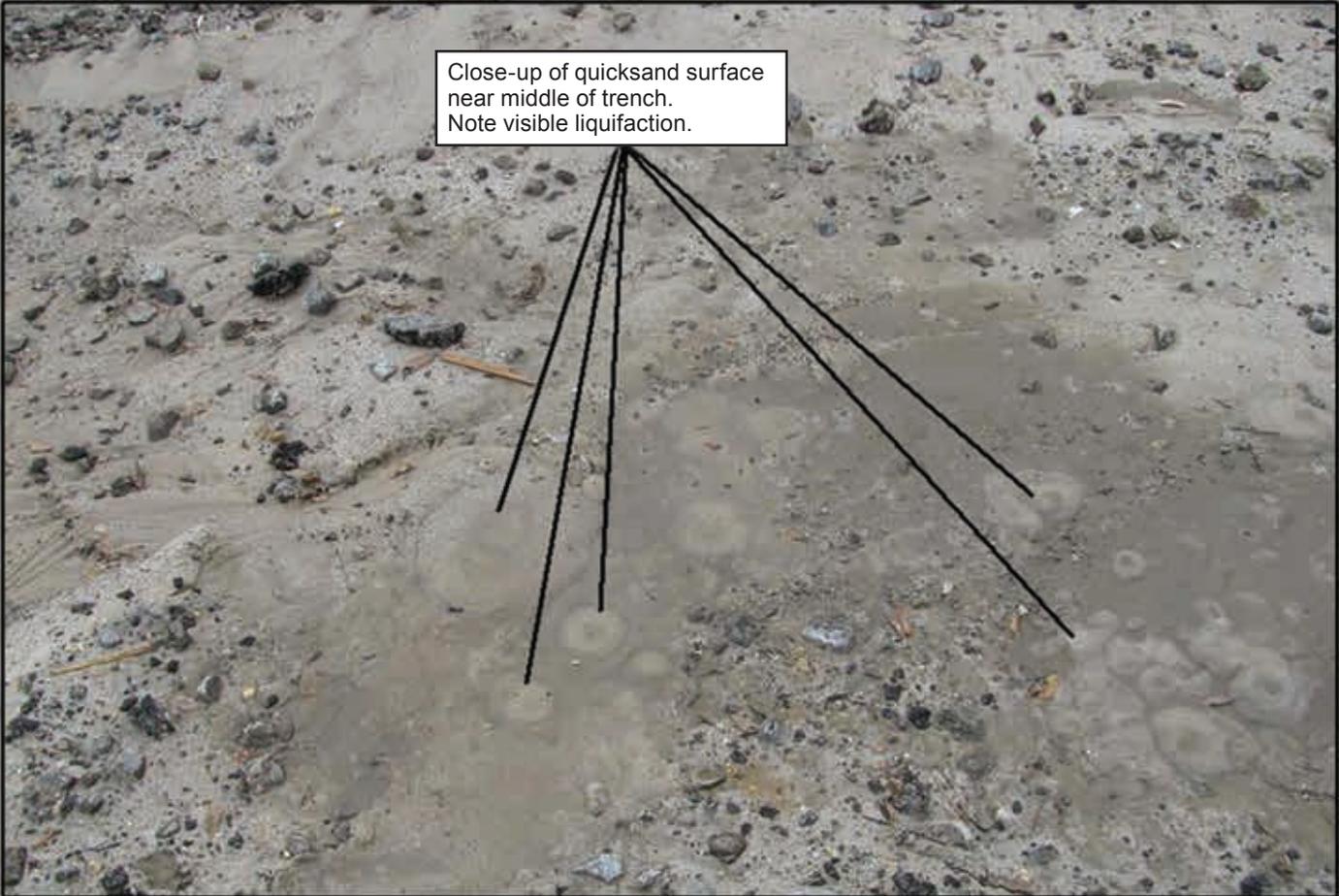




“Quicksand? Really? Like in the *Tarzan* movies?”

They now had a dilemma: What to do about a quicksand hazard in their AOR (area of responsibility)? This sort of thing wasn't covered in any of the many safety courses they had taken. The optimal solution would have been to cover the hazard with solid wood or metal to prevent anyone from falling — or driving — into the quicksand. Unfortunately, there were no handy, man-portable objects nearby with which to cover the hazard.

Our heroes improvised warning barriers out of some large bits of broken pallets, several hundred feet of the yellow “Caution” tape, and the remains of a can of orange marking paint they found nearby. They notified the local Naval Facilities Engineering Command safety



Close-up of quicksand surface
near middle of trench.
Note visible liquifaction.



Reference image test pole:
Tape at the 4-foot mark.

office and had the contractor responsible for installing the water main piping correct the issue in short order. Subsequent investigation determined that the trench in which the water main had been installed under the container yard had not been properly backfilled. The loose soil under the water pipe had subsided under the recent heavy rains, and the unsupported pipe had ruptured, allowing water under pressure to flow into the soil. Mix upwelling water with loose soil and, voila, you get quicksand.

Damages for this near-mishap were limited to the employee's wet pants and shoe, plus the near-terminal

level of chagrin on the part of the safety personnel who had doubted the original report.

Regardless of how unlikely they may seem, it is unwise to doubt hazard reports. The safety office didn't believe there was quicksand in the container yard right up to the point where they watched their test pole sink effortlessly into the goop. To their credit, they acted as if the report was true, even though they didn't believe it. But they still have to put up with a lot of "I told you so" from the employee who'd reported it.

.....
Mr. Mapp is a safety specialist at the Norfolk Naval Shipyard.



Testing depth: Note that pole extends 4-foot into ground. Pole never touched the bottom.



Time-Critical Risk Management

Because conditions can change with little or no warning, being ready allows you to manage that change and minimize risks associated with it.

- A - Assess the situation.
- B - Balance resources.
- C - Communicate to others.
- D - *Do and Debrief* the event.

Scan the code with your smartphone to visit the ORM web page. Data rates may apply.
<http://www.public.navy.mil/navsafecen/pages/orm/ORM.aspx>
U.S. Marine Corps photo





Staying Alive to Enjoy

By MCC (SW/AW/EXW) David Rush

Although great strides have been made in motorcycle safety gear and training programs in recent years, Sailors and Marines continue to get injured and, in extreme cases, lose their lives while riding motorcycles.

Naval Safety Center data shows that motorcycle injuries and deaths have decreased in the last five years, but there is still room for improvement.

In 2013, there were 17 Sailor motorcycle fatalities, a dramatic decrease from the 33 fatalities in 2008. Nonetheless, one fatality is too many according to CDR Leo Murphy, Commander, Pacific Fleet safety officer.

“Even when riders wear the proper safety equipment and complete the mandatory training and refresher courses, motorcycle riding remains an inherently dangerous mode of transportation,” said Murphy. “Riding motorcycles is a high-risk activity. The risks are inherent to riding and cannot be feasibly eliminated. The best preventive measure that a rider can take is to increase their riding skill level. That is best accomplished through training provided by professional instructors. Statistically, there is a direct correlation with the training the Navy provides and a reduction in motorcycle mishaps.”

He emphasized the importance of maintaining a high level of alertness and proficiency in order to avoid becoming a statistic.

“Riding a motorcycle is not like riding a bike. It is better to learn the necessary skills to safely handle a motorcycle on a designated road course, than learning through ‘trial by fire’ on public streets,” Murphy said. “Preventive training pays, especially for inexperienced riders who are most at risk during the first year of riding. Rider skills training is the best tool we have in preventing motorcycle mishaps”

In addition to increasing the necessary skills needed to get safely to and from your destination, being in positive control regardless of level of experience and type of motorcycle is vital, according to Murphy.

“First, those who choose to ride must understand the risks they are assuming. Once that fact is acknowledged, a rider can then develop effective risk management practices. Risk management is an essential part of safe riding and lessons learned from motorcycle mishaps highlight this fact. Riders must recognize their skill level and develop a ride plan that limits themselves to within their safe operating limits.”

All Sailors know how to implement operational risk management (ORM) to their jobs at sea and shore. The same applies to risk management when riding a motorcycle.

“This limit might be daytime group rides only or not riding on highways, or some other self-imposed limitation on when, where, and how a rider will ride,” said Murphy. “Understanding your limitations and determining the risks you are willing to accept will

the Ride

define safe riding and should be done before you get on a motorcycle. The use of sound risk management practices, rider vigilance, and training reduces the probability of motorcycle mishaps.”

Even when military personnel receive training, obey the rules of the road, and wear PPE, that doesn't necessarily mean that others on the road will have the same level of alertness. Everyone behind the wheel of motor vehicles needs to pay attention to what's around them.

“In Hawaii we call that ‘Aloha Spirit.’ It's sharing the road, slowing down, and not falling into lazy habits like not using turn signals. Recognize that mirrors in a car still allow for blind spots and to ensure a space is clear best practice is to turn your head and look into the blind spot.”

That doesn't always happen and it leads to life ending consequences.

“Tragically, two fatal motorcycle mishaps occurred when the drivers failed to see and turned into the rider. Changing the driving habits of motorists and motorcyclists alike will help decrease the number of motorcycle accidents. Motorcyclists are reminded to make sure that they are visible to motorists, and that they strictly follow the rules of the road,” said Murphy.

As for Sailors and Marines who intend on riding “two up,” training isn't just recommended, it's mandatory.

“Motorcycle riders must complete the two mandatory courses within 60 days after declaring intent to ride and then complete refresher training every three years,” said Murphy. “In fact, COMPACFLT policy directs service members who have not completed the required training to cease riding until all training is completed. Failure to do so is a violation of a general order. The training is designed to make you safer; why not want that and take advantage of it?”

CMDCM (SW/AW) Paul Kingsbury, Command Master Chief of the Naval Safety Center, echoes Murphy's sentiments.

“Each mishap has an impact on the Sailor, their command and their peers. When a Sailor is involved

in a serious crash resulting in injury or fatality their parents, siblings, spouse, children and other relatives are affected,” said Kingsbury. “A deceased Sailor will never have to deal with the personal repercussions of their death. A Sailor who suffers life-altering injuries puts additional burdens of health care and financial loss onto those same family members.”

“Also, the Sailor's command loses an asset, a piece of the team, a watchstander, a subject-matter expert, an influential leader. In some cases, this gap cannot be filled by the command and can result in the department or command unable to be fully mission capable,” Kingsbury said.

“The loss of a Sailor also means other Sailors have to fill that void. Someone has to pick up the duties and responsibilities; someone has to stand the extra watch. The death or loss of a Sailor also has a psychological and emotional impact on the Sailors at the command,” Kingsbury added.

In order to help minimize the possibility of injury, Kingsbury emphasizes the need for both beginning and experienced riders to take the risks seriously.

“Riding a motorcycle has unique risks. Although PPE does provide some amount of protection, the high speeds, instability and exposure to the open environment motorcycle riders are exposed to makes the impacts of any crash much more severe.”

Bottom line according to Kingsbury is that there's nothing better than consistently applying proper techniques and lessons learned to enjoy the road safely.

“Training and experience are the best methods of preventing mishaps,” Kingsbury said. “Command leadership should ensure that a proactive and healthy motorcycle-safety program is in place and that Sailors who ride are taking advantage of the training provided on our installations world-wide. I would also encourage newer riders to ride with more experienced Sailors until they have gained the experience they need to reduce the hazards of riding.”

MCC Rush is with Navy Public Affairs Support Element West, Detachment Hawaii.

FY13/14 Navy/Marine Corps Motorcycle Fatalities

(as of March 5, 2014)



Map courtesy of The National Atlas of the United States of America® (Modified)

Italy = Japan



Register



Train



Enjoy



FY14 Motorcycle Fatalities (as of March 5, 2014)
 Navy = 11 Marine Corps = 4

FY09-FY13 Motorcycle Fatalities

FY	Navy		Marine		Navy/Marine	
	No.	Rate*	No.	Rate	No.	Rate
2008	33	9.32	25	12.28	58	10.40
2009	14	3.94	14	6.53	28	4.91
2010	13	3.63	9	4.19	22	3.84
2011	16	4.53	16	7.51	32	5.65
2012	20	5.84	15	7.18	35	6.35
2013	17	5.02	14	6.89	31	5.72
TOTAL	122	5.43	97	7.21	219	6.10

*Rate/100,000 personnel per year

2013 Summer Season Fatal Mishaps
 May 24 - Sept. 2, 2013

Navy Mishaps

- 29 Aug PMV-2 (Naples, IT) E-5 died in a motorcycle mishap.
- 16 Aug PMV-2 (Los Angeles, CA) E-5 died in a motorcycle mishap.
- 15 Aug PMV-2 (San Diego, CA) E-5 motorcyclist died as a result of hitting a stopped vehicle on an interstate.
- 06 Aug Off-Duty/Rec (Jacksonville, FL) E-4 found deceased in his apartment pool.
- 03 Aug PMV-2 (Charleston, SC) E-4 died due to injuries sustained in a single-vehicle motorcycle mishap.
- 03 Aug PMV-4 (Naples, Italy) E-5 died from injuries sustained in an automobile mishap.
- 29 Jul PMV-2 (Jacksonville, FL) E-6 died from injuries in motorcycle accident.
- 28 Jul Ped (Cadiz, Spain) E-3 died after he stepped onto a highway and was struck by a vehicle.
- 13 Jul PMV-4 (Newport News, VA) E-3 rear seat passenger killed in a single-vehicle accident. USAF driver was also killed.
- 09 Jul PMV-4 (Crawfordville, GA) E-4 was killed when her vehicle was hit by a train.
- 23 Jun Off-Duty/Rec (Appling, GA) O-1 drowned while swimming in a local lake.
- 16 Jun PMV-4 (York, AL) Two O-2s were killed and three O-2s were injured when their vehicle collided with a parked vehicle.
- 02 Jun PMV-2 (Jacksonville, FL) E-4 died in a single-vehicle motorcycle mishap.
- 31 May PMV-4 (Norfolk, VA) E-4 died on 17 June from injuries sustained in a motor vehicle mishap.
- 26 May Off-Duty/Rec (Yokosuka, Japan) E-5 died after falling from an apartment balcony.

Marine Corps Mishaps

- 02 Sep PMV-2 (Santa Ysabel, CA) E-3 died in a multiple-vehicle motorcycle mishap.
- 18 Aug PMV-2 (Los Angeles, CA) E-5 died in a motorcycle mishap.
- 18 Aug PMV-2 (San Diego, CA) E-5 motorcyclist died as a result of hitting a stopped vehicle on an interstate.
- 10 Aug PMV-2 (Oceanside, CA) E-4 died from injuries after losing control of motorcycle, striking curb and fence post.
- 01 Aug PMV-4 (Eden Prairie, MN) E-4 passenger died in a single-vehicle mishap.
- 06 Jul Ped (Honolulu, HI) E-3 died after he exited a vehicle on interstate and was struck by another passing vehicle.
- 30 Jun PMV-2 (Albany, GA) E-5 killed when his motorcycle struck a tractor trailer.
- 29 Jun PMV-4 (Camp Pendleton, CA) E-5 killed after striking a tree stump and a telephone pole.
- 16 Jun PMV-4 (Palo Verde, CA) E-4 was killed in a head-on collision.
- 26 May Off-Duty/Rec (Wittenberg, MO) E-4 killed in an ATV mishap.

Stay up-to-date with mishap data. Visit the Naval Safety Center statistics home page at http://www.public.navy.mil/navsafecen/pages/execsummary/mishap_summaries.aspx

Legend:
 PMV-4: private motor vehicle
 PMV-2: motorcycle
 Off-Duty/Rec: off-duty/recreation

Note:
 Ped indicates pedestrian or bicyclist struck by vehicle.



MANAGE RISK. ENSURE SUCCESS. COMPLETE THE MISSION.

Ready to Drive?

Owning and operating a car is a big responsibility. Whether you're 20 or 60, driving laws are the same. The Department of the Navy wants you to heed its traffic safety regulations. OPNAV Instruction 5100 and Marine Corps Order 5100 both serve one purpose: to establish policy and guidance for motor vehicle/motorcycle operators, passengers, bicyclists and pedestrians.

Sailors face and overcome many hazards as they go about their daily lives. One that proves fatal far too often: the roadway. We've lost too many Sailors as a result of preventable crashes. When you travel, think of where you want to be and where your family will want you to be when it is over. Practice risk management. Do your part - fill out a risk assessment via TRiPS and have your supervisor review it. Once you are aware of driving risks, you can more easily manage them. Get started today at <https://trips.safety.army.mil/navy/login.aspx>.

We've listened to your feedback and you will see a whole new TRiPS soon! Visit the Naval Safety Center website for updates and look for notices and ALSAFE messages this spring.

Before you get behind the wheel and head out on the long and winding road, remember your driver responsibilities: be a safe driver, and protect your passengers and other motorists.



OPNAV INSTRUCTION 5100.12J
NAVY TRAFFIC SAFETY PROGRAM



MARINE CORPS ORDER 5100.19F
MARINE CORPS TRAFFIC SAFETY PROGRAM (DRIVESAFE)

Life, Future

Taken Away

By Richard L. Cruikshank

Although accident videos warn, “It could happen to you,” some people haven’t experienced the loss of a friend or a loved one to an automobile accident.

I wish I were one of them.

The event I’m about to share with you shaped my habits for the rest of my life and gave me a new sense of perspective and appreciation. At the time, it seemed insignificant. The next day, however, after I heard all the details and had time to reflect, it had a huge impact.

I had rushed to the emergency room with my pregnant wife, who was having serious contractions. In the ER, I ran into a friend I hadn’t seen in about four months. He was sitting in a wheelchair. I quickly asked if he was OK as we hurried by. He told me he’d been in a car accident but didn’t elaborate. He just gave a small smile and congratulated me on the upcoming birth of my child.

I was consumed with the events surrounding me, and shortly thereafter, was once again the father of a girl. At that point, I didn’t realize that as I celebrated this new addition to our brood, my friend’s family had just been taken away.

His name was Adai (pronounced ah-day), and he was from Haiti. We’d been friends for more than a year. He was working hard to become a U.S. citizen, and joining the Navy was his path to citizenship. He was a proud father and husband.

When I met him, Adai’s family was living in Haiti. Every dollar he earned went to them or to savings to help get them to America. He’d started as a deckhand, but what he really wanted to be was a Navy corpsman. He befriended the ship’s corpsman and volunteered to help him in his spare time. Months later, after hundreds of hours volunteering, Adai put in paperwork, with a recommendation from the ship’s corpsman, to change his job classification. Two or three months later, he was approved to attend school to become a corpsman.

Everything for this hardworking man in his mid-20s was finally lining up. While in school, he received

permission for his family to move to America. He also became a U.S. citizen. Adai was fulfilling his dream and it seemed as if nothing could stop him.

Immediately after graduating from corpsman school, Adai, his seven-month-pregnant wife and seven-year-old daughter got into their vehicle for the 14-hour drive home. Adai preferred to drive after dark when there was less traffic on the road. They traveled eight hours through the night before checking in at a hotel. The next night, they resumed their trip. About an hour away from their destination, a car crossed the median and struck them head on. In an instant, a drunk driver took the lives of Adai’s daughter, his wife of almost nine years and their unborn child.

To this day, I think about that moment I saw Adai in the hospital. Consumed with happiness over the impending birth of my daughter, I never considered what was going on in the lives of the people around me. Then there was Adai, who was struggling with the loss of his family. He had to have been full of questions. “Why did this happen to me? What will I do?” Still, through all of that, he forced a smile and congratulated me on my moment of happiness.

Adai deserved so much more, but a bad decision by a man on his way home from a bar changed everything. This accident was completely preventable.

More than 15 years later, I find myself still asking questions. I, too, wonder why this happened to Adai. I also wondered why the drunk driver lived but my friend’s family died. Sadly, I know Adai will never get the answers to those questions.

That day in the emergency room changed my life. I soon began training on the hazards of drinking and driving. I stopped being an enabler and started offering to be a designated driver. No one should have to lose a friend or a loved one to a preventable accident.

Mr. Cruikshank, a retired Sailor, is an occupational safety and health specialist for the Army Corps of Engineers, Far East District.



Being Smart About Getting Fit



U.S. Navy photo by MC2 Tim D. Godbee

By LCDR William Best

Physical readiness is more than just being able to pass a fitness test or wearing proper running shoes. Each year a significant number of Marines and Sailors get injured or become ill during physical training. These medical conditions range from relatively minor issues such as sprained ankles to serious events like cardiac arrest and several have resulted in deaths. Preventing these injuries and knowing what to do if something goes wrong are key components of physical readiness.

Below are some best practices we've collected from actual PT-related mishap investigations. Preparation and knowledge are the keys to safety during physical training. Be ready!

.....
LCDR Best is a mishap investigator in the Shore/Ground Safety Programs Directorate.



U.S. Navy photo

1

Know yourself.

Know your physical limits and speak up if you are not feeling well. Hydrate before, during, and after your workout. Make sure you are properly dressed and equipped for the physical activity in which you are participating. Warm up before you exercise. Conduct a proper cool down after you exercise.



U.S. Navy photo photo by MCC Jerry Woller

2

Know how to get help.

Know the location of the nearest phone in case you need to contact emergency personnel. When commands hold PT at remote locations, event organizers should have a cell phone or radio available to contact help if needed.



U.S. Navy photo by MC2 Ace Rheaurme

3

Know your environment.

Review the weather forecast before exercising outdoors. Consider moving your exercise session indoors if the weather is bad.



U.S. Navy photo by MC2 John O'Neill

5

Know CPR.

If you are not qualified in administering CPR, consider taking a CPR certification class. CPR can mean the difference between life and death when waiting for emergency medical personnel to arrive.



U.S. Navy photo by MC3 Eric Lockwood

4

Work out with a buddy.

A workout partner can provide encouragement and help you seek medical assistance if required.

6

Be prepared to direct emergency personnel once they arrive.

Experience from PT-related mishaps has taught us that first responders aren't always able to determine the location of the casualty - especially if many personnel are in the area.



U.S. Navy photo by MC3 Elizabeth Thompson

The Heat is On ...

As summer months approach, California's beautiful weather begins to produce warmer and warmer temperatures. This leads into the most dangerous season of the year for both military and civilian members of MCIWEST-MCB Camp Pendleton.

From Marine Corps Base Camp Pendleton Safety Office

Heat-related injuries are a significant occupational and recreational risk when appropriate preventive measures are not factored in. Whether you're working or playing in the heat, you must make risk management your first assessment tool to minimize life-threatening injuries.

Heat injuries are preventable if you are aware of common signs and acute symptoms:

- Dizziness
- Headaches
- Nausea
- Cramps
- Fatigue
- High Body Temperature
- Confusion/Disorientation
- Vomiting
- Convulsions
- Unresponsiveness

Several factors — when combined with heat — can increase the risk for a heat-related injury: climate, work intensity and duration of activity. It is important to monitor the weather and dress appropriately. Avoid overdressing and ensure adequate hydration prior to working or playing in the heat.

Prevention of heat injuries includes planning work activities, exercise and breaks when exposed to heat for long periods of time.

It is also important to remain hydrated by drinking adequate amounts of water. If your urine gets dark yellow, that is a sign of dehydration and you need to start drinking water immediately. Extreme dehydration warrants immediate medical attention. Little or no urination (or urine that is dark in color) is a sign of extreme dehydration, which can lead to you becoming a heat casualty and can even lead to death.

Marine Corps Installations Command West-MCB Camp Pendleton Order 6200.4 amplifies requirements aboard MCB Camp Pendleton relating to operations and training. It also includes command requirements for flag-warning designators and periodic weather testing.



MCIWEST-Marine Corps Base Camp Pendleton's Safety Center offers newsletters that are tailored to various summertime activities.

<http://www.pendleton.marines.mil/StaffAgencies/SafetyCenter.aspx>.





If your urine gets dark yellow, that is a sign of dehydration and you need to start drinking water immediately. Extreme dehydration warrants immediate medical attention. Little or no urination (or urine that is dark in color) is a sign of extreme dehydration.

Land Ho!

By LCDR Keith Schroeder

It was the perfect way to kick off the summer: spending a week in the outer banks of North Carolina with my family to celebrate my son's first birthday. What was even better was that I was taking my boat with me to take advantage of the outstanding tuna fishing off the coast of North Carolina.

Life jackets: check.
Emergency signals kit: check.
First aid kit: check. Charts and navigation equipment: check.
All systems go.

The trip down was uneventful. My dad and I pulled into the Oregon Inlet Fishing Center on a sunny Saturday afternoon and got the boat settled in to its temporary slip until our first fishing trip. Because of weather and family events, we planned the first trip for Tuesday morning.

Everyone knows that the early bird catches the worm; the same holds true for fisherman catching fish. We planned to leave the marina at 0530 and follow the

big charter boats out to the fishing grounds. Sunrise that morning would be at 0620, which meant that we would be pulling out in the dark. No big deal, right? I had been on other boats heading out of the same marina on half a dozen other trips with no problems. That had been almost two years prior. To mitigate the risk of navigating the channel, I would follow one of the locals out.

0500 Tuesday: My crew and I arrive at the boat right on time and get ready for the much anticipated trip. After loading up the supplies and checking out the boat one last time, we were ready and waiting for the charter boats to start heading out.

If you aren't familiar with Oregon Inlet in North Carolina, it is located 70 miles south of Virginia Beach. It allows travel between the Intracoastal Waterway and the Atlantic Ocean. If you were to locate it on the NOAA nautical chart, you might be surprised by the fact that there are no aids to navigation depicted to define the navigable channel. A closer inspection will reveal Note C which states the following, "The aids in Oregon Inlet are not charted because they are moved frequently. Hydrography in Oregon Inlet is not shown due to its continually shifting nature. Shoaler depths can be expected off the centerline." This shifting nature



combined with the swift currents and stiff breezes keep Oregon Inlet firmly planted in the list of top five most dangerous inlets in North America.”

We got underway right at 0530. There is almost no light, due to a cloud layer and the fact that the sun wouldn't come up for almost an hour. I fell in behind a charter boat and started to follow him out. As we cleared the marina, I realized that in addition to the buoys not being depicted on the chart, they were unlit.

With the help of my crew, we sighted the first navigation buoy. The guy in front of me was obviously more comfortable and slowly pulled away. We passed the second buoy, and the distance to my lead was still increasing. The guy in front of me started his turn into the channel. We passed the third buoy, and I followed suit, making a turn to port. In less than one boat length, my 8-ton boat came to a complete stop on top of a sandy shoal. My crew was launched from their seats, and I was thrown forward in to the windscreen. Engine alarms sounded as both engines have shuddered to a halt due to the props getting bogged down in the sand. “What the heck?” I wondered.

We surveyed the scene and assessed the situation. No one appeared to be seriously injured, although I was bleeding from a cut on my chin. The boat was completely stopped and firmly run aground. At least

we knew we wouldn't sink. We broke out the first aid kit and dressed the cut on my chin.

First light has started to show and we saw what had happened. In the dark, I had missed the fourth buoy, which marked the real entrance to the channel. I had turned approximately 50 feet early and placed us in about 6 inches of water.

I called Tow U.S., and three hours later the boat was back in her slip and I was headed to the emergency room for eight stitches to my chin and lip. I was glad that my injury was the worst damage experienced that morning.

I can easily see what led to this accident. I'd been overconfident in my abilities to safely navigate my boat. I tried to run a treacherous inlet for the first time in two years in the dark. My desire to get to the fishing grounds early drove me to disregard the associated risks and put my crew and my boat in danger. No fish is worth that. Had I waited 50 more minutes, I would have had the light of day on my side and avoided the whole situation.

During the rest of the trip, we made five more passes through the inlet, all during the day, with no more excitement. All in all, it was a humbling experience that reminded me of my own limitations.

.....
LCDR Schroeder is VAW-125's safety officer.

Photo by David A. Harvey for the National Geographic Society

Are You Next?

**Expect the Unexpected
Wear Your Life Jacket**



US Army Corps
of Engineers®

www.CorpsLakes.us/AreYouNext



As the weather gets warmer, water revelers will head out to enjoy swimming, diving, and boating. If you plan to be at a beach or lake this summer, take precautions for yourself, friends and family so everyone can have a great time.

Swimming & Diving

The Center for Disease Control (CDC) reports that more than 3,400 people in the United States drown each year. Drowning is the second leading cause of accidental deaths for persons 1-14 years of age and the sixth leading cause for all ages. Most drowning victims had no intention of being in the water. It is important that you and your family learn to swim well since most people drown within 10-30 feet of safety.

- Never rely on toys such as inner tubes and water wings to stay afloat.
- Don't overestimate your swimming skills.
- Swim only in designated areas.
- Never swim alone.
- Watch small children. CDC data shows an average of more than 800 children under the age of 15 drown each year. Thousands of others are treated in hospitals for submersion accidents, accidents which leave children with permanent brain damage and respiratory health problems. Children have a natural curiosity and attraction to water. Remember, it only takes a few seconds for a small child to wander away.
- Never dive into lakes and rivers. Every year, diving accidents result in thousands of people suffering paralyzing spinal cord injuries and many of them die before they reach the hospital. Hidden dangers lurk beneath the surface of the water, even in shallow water, including current, rocks and debris.

Boating

- Take a safe-boating course.
- Check your boat for all required safety equipment.
- Consider the size of your boat, the number of

passengers and the amount of extra equipment that will be onboard. Don't overload the boat.

- If you will be in a power boat, check your electrical system and fuel system for gas fumes.
- Follow the manufacturer's suggested procedures before starting up the engine.
- Wear your life jacket – don't just carry one on board.
- Leave alcohol behind to increase your safety and decrease your risk.
- Check the weather forecast.
- File a float plan with a member of your family or friend.

Alcohol

More than half of the people who were injured in a boating accident consumed alcohol prior to their accident and 20 percent of them didn't live to tell about it.

Being intoxicated is not necessary for alcohol to be a threat to your safety. Just one beer will impair your balance, vision, judgment and reaction time, thus making you a potential danger to yourself and others.

Research shows that four hours of boating, exposure to noise, vibration, sun glare, and wind produce fatigue that makes you act as if you were legally intoxicated. If you combine alcohol consumption with this boating fatigue condition, it intensifies the effects and increases your accident risk.

Water Survival

If you fall in the water, in any season, you need to know cold water survival skills. Many of our nation's open waters are mountain fed, and water temperatures even in late summer can run low enough to bring on hypothermia under certain conditions.

Boaters should dress for the water temperature, not the air temperature. Cold-water immersion causes many boating-related fatalities. It follows four stages, starting with cold shock, followed by swimming failure, then hypothermia, and finally post-rescue collapse. Most

cold-water drowning fatalities are attributed to the first two stages.

The initial shock of cold water causes involuntary gasping making it hard to catch your breath. Many people hyperventilate, faint, and drown before they are able to calm down their breathing.

The longer you are exposed to cold water, the more you lose the ability to move your extremities. If you aren't been able to get out of the water in 5-15 minutes, stop moving. Movement will deplete your energy faster and increase heat loss.

Hypothermia is a condition in which the body loses heat faster than it can produce it. Violent shivering

develops which may give way to confusion and eventually cardiac arrest or unconsciousness.

- Dress warmly with wool clothing. If you've fallen into the water, don't discard clothing. Clothing layers help provide some warmth that may actually assist you in fighting hypothermia. This includes shoes and hats.
- Your life jacket will help hold heat into the core areas of your body and enable you to easily put yourself into the HELP (Heat Escape Lessening Posture), which draws your limbs into your body and keep armpits and groin areas protected from unnecessary exposure (a lot of heat can be lost from those areas, as well as the head).



Watch small children. Photo by Cpl Ryan Walker



Never dive into lakes and rivers. U.S. Navy photo

Wear your life jacket – don't just carry one on board.

Photo by John W. Williams



Don't overestimate your swimming skills.

Photo by LCpl Matthew Bragg

ONLINE RESOURCES

U.S. Army Corps of Engineers Water Safety Program

<http://watersafety.usace.army.mil/AreYouNext.pdf>

American Red Cross water-safety tips

<http://www.redcross.org/prepare/disaster/water-safety>

How to Survive a **Near**

By Jeremy Knauff



Short of being burned alive, I can't imagine a more terrifying way to die than drowning. It is often a shockingly slow process that gives you plenty of time to realize exactly what's happening — something I've nearly experienced several times.

All of my near-death experiences with drowning were the result of exhaustion. One time I bit off more than I could chew and tried to swim across a rock quarry. A few other times, ocean currents pulled me out to sea and I had to swim harder and longer than I had planned.

As my energy dwindled and muscles cramped, my head slowly crept closer to the surface of the water. All it would have taken was one unexpected wave, a bad cramp, or panic to end it all. Fortunately, I can usually keep it together so I managed to think my way through the problem. You can do the same.

Know the signs.

The first step is realizing the signs before it's too late. Most people think drowning victims flail their arms, yell for help, and then get rescued by a sexy lifeguard running in slow motion to catchy theme music. That only happens in the movies or on television. In real life, people usually drown with little or no commotion because they either don't realize or aren't willing to admit they are in serious trouble.

Starting off strong, some swimmers venture farther than they should, only to realize they don't have the energy to make it back. Those perfect Olympian strokes quickly become weak and erratic, eventually degrading into a pathetic doggie-stroke your toddler would be embarrassed to perform in swim class at the local YMCA.

Before long, they become winded and lack the energy to stay afloat, which begins a nasty downward spiral: weakness leads to slower, shorter strokes, which leads to difficulty breathing, which leads to lactic acid build up, which leads to more weakness, which leads to even slower shorter strokes ... you get the idea. By this point, they are usually out of breath and unable to call out for help.

Drowning

Roll over and float on your back.

I've been there more than once. It sucks. But there is a solution, and it's simple.

In this position, your nose and mouth will be high in the water, enabling you to get plenty of oxygen, and your muscles will have a chance to rest. If necessary, you can backstroke from this position. Since you'll be using different muscles, you will seem to have a new burst of energy — just don't over do it. You don't want to find yourself in the same situation again.

Mr. Knauff is a contributor for "How to Survive It," a blog offering tips on survival, self-reliance, prepping, self-defense, and safety.

Photo courtesy of howtosurviveit.com

A Group Trip I'll Never Forget

The trek up to the ranger station took just over two days.

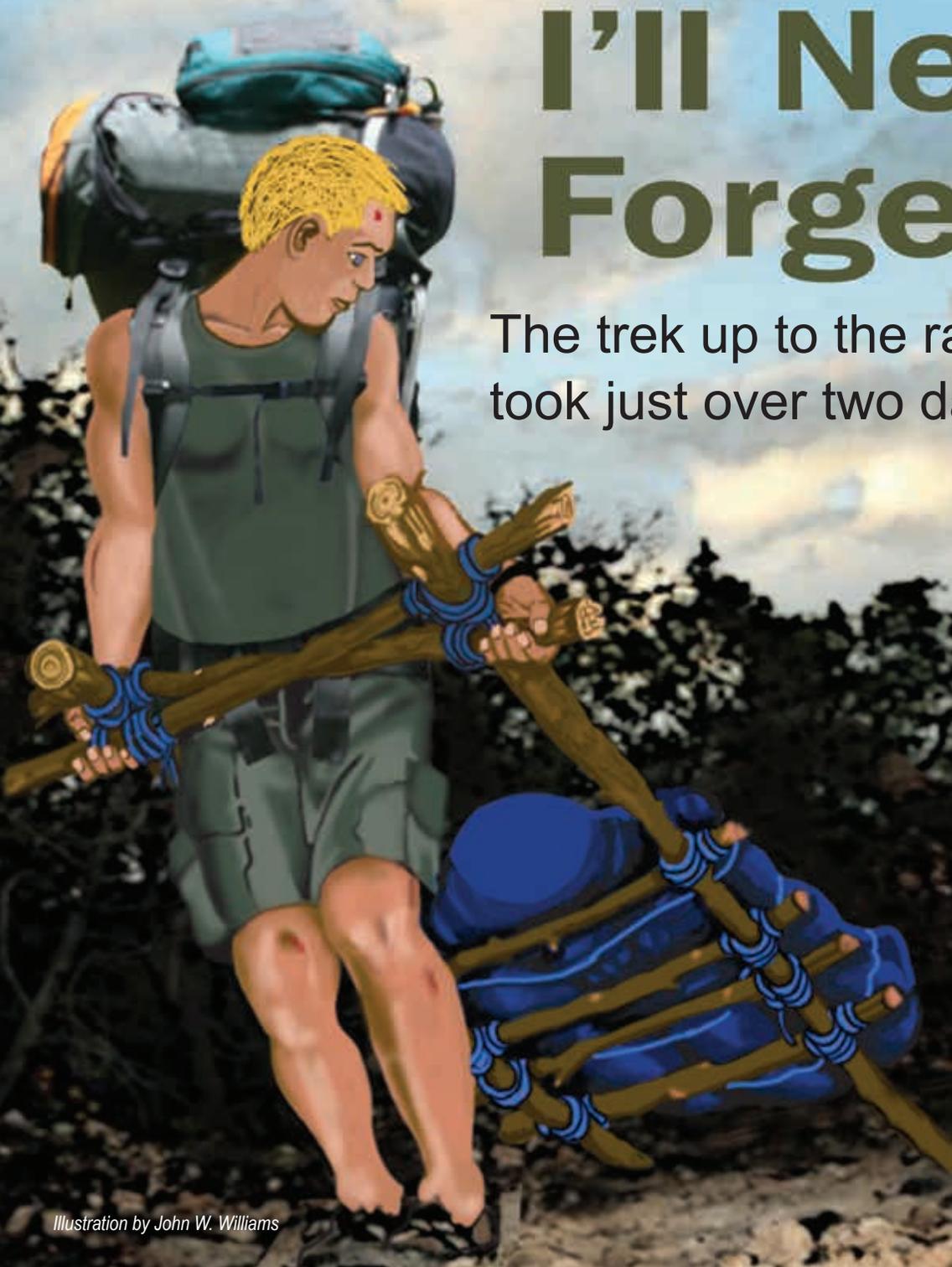


Illustration by John W. Williams

Anonymous

I have gone on many adventures — desert, woodland, mountain, sub-arctic, ocean, and white-water — as an alumnus with an outdoors group and as a Boy Scout. I also served 12 years as a corpsman with the Marines.

When I was 18 years old, I had just graduated from high school. My military service would not start until Desert Shield/Desert Storm. This particular trip was with an outdoors group on the Boundary Waters, a canoeing wilderness. I flew from Chicago into Missoula, Montana, where I worked logging for a month before setting off on my trip.

The week I was to leave for the trip, I fell ill with vomiting, diarrhea and a low-grade fever. Despite this I reported to the lodge on schedule. The first three days we had various training: canoe handling, portaging, mountaineering, and climbing/rappelling. We also had to pass physical fitness and swim tests before we could go out into the field. I managed all this while still being ill and managing to hold down very little that I ate or drank.

I almost didn't make the trip due to my illness escalating to a cardiac episode brought on by an electrolyte imbalance. The instructors now had a decision to make: send me home or let me continue on the trip. They called my parents in Chicago, and after my talking with them assured the instructors I would be okay to press on. Reluctantly and with restrictions placed on my level of activity, the instructors agreed. After the first week I was fully recovered and able to do everything asked of me.

The group trip was to involve canoeing, trail portage, mountaineering, climbing/rappelling, a solo challenge, and a physical fitness challenge. We didn't plan for a tornado, hail/lightning storm, a whitewater rescue and extrication of an injured participant.

In the second week of our trek, we pulled off the river at a cliff base where we tied up our canoes. We took a short hike to the cliff and drew straws for the initial ascensions. Along with a female participant and an instructor, I got to go first. Our ascent was relatively easy with no surprises. The surprise came later in the day after we had been climbing and rappelling for several hours. The sky turned green, hail the size of golf balls came down and the lightning rolled in. We tied ourselves in, sat on our packs and life vests so we weren't grounded and waited the storm out. It was during this storm that — about three miles away — we saw a tornado form and blow through the forest in under five minutes. To this day it is one of the most awesome sights I have ever seen.

In our third week while on the river, we encountered level-4 rapids; we were not prepared for them and had not been trained to traverse rapids. Because of the currents, we could not get off the river. The instructors entered the rapids first and we watched how they handled them. The second group followed (including our youngest participant, who was 15 years old). While traversing the rapids (he was in the duffer position, center with no paddle), a pack went over the side of their canoe. Our youngster tried to grab it, but between the weight of the pack and current, he fell out of the canoe. The current carried him a couple hundred feet before he was pulled into a tumbling eddy. The current was rolling from the river bottom and kept him tumbling against the rocks. From several hundred feet away, I could see his helmet pop up from the water surface and disappear further down the river. He was now being tumbled into the rocks with no protection to his head.

My group paddled hard for the rapids and his location. I had secured a rope to my climbing harness and vest. I made certain my helmet was tight to my head and chin. I went over the side of our canoe before reaching his position and swam hard across the current so that I would intercept him. I managed to get a hold of him and pull him from the eddy. The rope had been fastened to a cross beam in the canoe and then the rear paddler's climbing harness. The paddlers had to make sure that they would pass us in the current and not hit us. They paddled furiously, and as the current pulled them past us the slack in the rope disappeared and we were pulled violently ahead. I pulled our victim into my chest and held his head above water as best I could; there was an avulsion in his scalp, I could see his skull and an impact fracture. I'm not sure just how far we were towed by the canoe, maybe a couple hundred yards before being able to make it to a river bank.

My injuries consisted of several contusions to my legs, ribs and back, but no broken bones. I also had signs of early hypothermia. At the river bank we made sure to keep our young victim stable and began to splint his neck and spine. There didn't appear to be any broken bones in his extremities; however, the head injury was now bleeding profusely and brain tissue was visible. Our instructors were nowhere to be seen.

Once we had immobilized our victim as best as possible, we moved up the bank and began treating for shock and hypothermia. We applied bandages to the head injury and gingerly fastened them in place. Bruising around the eyes was becoming visible and a trickle of blood and clear fluid was running from his nose. He went into respiratory arrest. I immediately began



Photo illustration by John W. Williams

In our third week while on the river, we encountered level-4 rapids; we were not prepared for them and had not been trained to traverse rapids.

rescue breathing and that is how our instructors found us. After several minutes of rescue breathing, he began breathing shallowly on his own and I was able to stop. His heart rate was slow and irregular. With the instructors' help, and while the rest of the group kept an eye on our victim, we constructed a travois. Having removed his wet clothes and after bundling him in sleeping bags, we secured him to the travois.

Six of us, including an instructor, chose to head out with the travois to a ranger station about 20 miles away. Besides the instructors, I was the only certified first aid/CPR/trauma provider in the group, so I went. The rest of the group and another instructor stayed behind at the river bed and watched for any help. The trek up to the ranger station took just over two days. I can't say with any certainty how many times we had to provide CPR and rescue breathing.

We made it to the ranger station and the victim was extricated by helicopter. This event was what made me decide to become a corpsman. I developed a love for medicine and trauma support. I wish I could say he survived. After emergency surgery, he remained in a coma for six weeks and one night suffered multiple cerebral hemorrhages. From the trauma he suffered to his head, he had developed several aneurysms that all let go at the same time. His death was swift and he felt no pain. Out of respect for his and his family's privacy I haven't revealed his name. This was more than 20 years ago, yet I can still feel the water, can clearly see his body tumbling in the eddy and remember the desperation of the trek to the ranger station. I'll never forget.

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USCG Data



Every 2-1/2 Hours

Someone Is Injured or Killed in a Boating Accident¹

Chance of Drowning In a Boating Accident

While Wearing a Life Jacket

1 in 66



With No Life Jacket

1 in 11²

U.S. Boat Owners

Who Say They³...



42.60%

Have Ever Taken a
Boating Safety Course



63.40%

are "Very Experienced"

Boating Accidents

Attributable to Operator Error,
Poor Judgement, or Inexperience



56.9%⁴

¹ U.S. Coast Guard Recreational Boating Statistics 2012, based on 758 fatalities and 3081 injuries.

² U.S. Coast Guard Recreational Boating Statistics 2012, based on 70% percent of 758 boating accident victims drowning, and of those, 84% percent were not reported as wearing a life jacket, compared to 4588 total accidents.

³ U.S. Coast Guard 2011 National Recreational Boating Survey

⁴ U.S. Coast Guard Recreational Boating Statistics 2012, based on accidents attributable to operation of vessel/alcohol use, drug use, excessive speed, failure to ventilate, improper lookout, operator inattention, operator inexperience, rules of the road infraction, sharp turn, starting in gear, loading of passengers or gear, improper anchoring, improper loading/weight distribution, overloading, people on gunwale, bow or transom

Heat Injury Prevention Word Find

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

Courtesy of Marine Corps Base Camp Pendleton Safety Office

BLACKFLAG
CRAMPS
DANGEROUS
DEATH
EXHAUSTION
FATIGUE
HEAT
HYDRATE
LIGHTCOLOR

MILITARY
PREVENT
RECREATION
REST
RISK
SYMPTOMS
WATER
WEATHER
WORK