The U.S. Army Combat Readiness Center has developed multiple tools to provide leaders information on risk mitigation, all available at https://safety.army.mil, including the following:

- **Army Readiness Assessment Program** — a web-based tool that provides battalion or equivalent commanders with data on their formations’ readiness posture by sampling unit safety climate and culture in five key areas: process auditing, reward systems, quality control, risk management, and command and control.

- **Army Risk Management Information System** — the central repository for all Army mishap data (Class A-D ground, on and off duty; Class A-E aviation). RMIS is designed to give leaders, safety officers and other personnel access to both current and archived mishap reports, with a goal of preventing similar incidents within their formations. Among other functionalities, users may search RMIS for specific mishaps by case number; conduct searches for a given timeframe or accident class; and obtain risk and hazard reports broken down by age, grade, equipment and additional variables. All data retrieved from RMIS is classified For Official Use Only and limited in use to accident prevention.

- **USACRC Lessons Learned** — one-page mishap investigation summaries produced for accident prevention purposes. Summaries contain information protected by DODI 6055.07 under safety privilege and are available only to CAC holders within the .mil network.

- **Ground Risk Assessment Tool** — a mission planning tool developed to augment the military decision-making process. Consisting of five integral parts, it assists users in identifying potential hazards and controls for specified ground missions or activities, both on and off duty.

- **Off-Duty Safety Awareness Presentation** — a highly informative safety presentation containing statistics, contributing factors and other relevant information regarding off-duty mishaps.

Developed for use at battalion level and below, the presentation comes complete with embedded videos and speaker notes that may be used as is or modified to reflect unit-specific mishap trends.

- **Preliminary Loss Reports** — short synopses of recent Army mishaps resulting in Soldier or civilian employee losses that alert commanders, leaders and safety professionals to circumstances affecting readiness. PLRs provide actionable knowledge and real-time information regarding accidental fatalities, both of which are critical in prevention through risk management.

- **Safety Campaigns** — a monthly focus on seasonal and non-seasonal risk management products and tools. Each monthly topic includes supporting videos, graphics and posters, articles and external links for additional resources.

- **Risk Management Magazine** — the official safety magazine of the U.S. Army, published online quarterly. In addition to the online version, the USACRC releases a weekly RM newsletter highlighting a variety of safety articles, posters and videos, seasonal safety campaigns and USACRC tools and programs.

- **Flightfax** — an aviation safety publication published online monthly. It provides leaders a snapshot of Army aviation hazards through analyses of mishaps within the last 30 to 60 days, near-term mishaps, aviation safety issues and historical context via a “blast from the past” feature.
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Mission Statement:  
Meet the intent of the Army Strategy by enabling commanders, leaders and individual Soldiers to build readiness, modernize across the operational spectrum, empower and push processes to the lowest level of authority, and strengthen our alliances and partnerships through education in and application of risk management.

Brig. Gen. Timothy Daugherty  Commanding General, USACRC  
Col. Christopher Waters  Deputy Commanding Officer  
David Parker  Chief of Staff  
Michael Negard  Director, Communication and Public Affairs  
Chris Frazier  Managing Editor  
Blake Grantham  Graphic Design  
Taryn Gillespie  Graphic Design

Spring 2019  RISK MANAGEMENT https://safety.army.mil  3
Aiding Army leaders in predicting when and where the next mishap will happen is at the forefront of the Army’s new Army Safety Management Information System 2.0, said the director of Army Safety.

Brig. Gen. Timothy J. Daugherty, who also serves as commanding general of the U.S. Army Combat Readiness Center, briefed Army National Guard aviation senior leaders recently at the 2019 Army Aviation Mission Solutions Summit in Nashville.

According to Daugherty, the Army’s analytic capability within the current information technology system supporting mishap reporting is woefully substandard. “From an IT structure, you would be unimpressed with our lack of capability, lack of capacity to do very simple analytics,” Daugherty said. “It’s just about getting better, and the concept of doing functional analytics. Additionally, our current system simply does not meet regulatory or statutory requirements to track Army SOH program execution.”

Therefore, the Army’s safety reporting system is receiving a much-needed overhaul. Spearheaded by the U.S. Army Combat Readiness Center, in close collaboration with the Army safety and occupational health community and Army Analytics Group, the Army Safety Management Information System 2.0, or ASMIS 2.0, will not only replace the existing accident reporting system but will add much needed capacities to meet the Army’s evolving and future needs.

ASMIS 2.0 is a groundbreaking family of systems that synchronizes the Army’s new SOH program and transforms it in a revolutionary way to provide an unparalleled level of flexibility within the Army’s SOH community.

“This improved system will mean a win-win for leaders in the field,” Daugherty explained. “It is a modernized, adaptive, cutting edge family of software systems that will effectively support the current and emerging needs of Army SOH, while subsuming all duplicative systems.”

Since 2015, the USACRC solicited input from SOH professionals Armywide on how to define needed criteria of a total Army safety management system through technological and process improvements.

The USACRC also harnessed the technical expertise of the Army Analytics Group, which helped catapult the development of this modern and innovative safety management information system that encompasses the rigorous requirements of SOH specialties.

The effort yielded a revolutionized approach that provides automated capabilities supporting the six program areas of the SOH program. Mishap and near-miss reporting, the first of six applications within ASMIS 2.0, is set to launch later this year.
“In addition to mishap reporting, the other applications include assessments, inspections and surveys; hazard management; SOH training and education; and unified SOH program management,” said John Nelson, program manager for ASMIS 2.0. “An overarching analytic tool will provide commander-centric visibility to critical SOH information through every echelon of the Army.”

An integral component of the new SOH program, ASMIS 2.0 is an expandable and adaptable software application that leverages innovation and cutting-edge technology. In addition, ASMIS 2.0 is the first SOH tool to use advanced intelligence to focus on leading indicators through broad integration of distinctive data with a vast array of authoritative systems and data sources across DoD and other government agencies.

“The ASMIS 2.0 advanced analysis feature utilizes numerous techniques to analyze current data sets to make predictions about future events,” Daugherty said. “This will be a powerful tool that helps leaders make better decisions in the areas of risk management and loss prevention.”

Through the strategic integration of multiple authoritative data sources combined with enhanced data collection capabilities, ASMIS 2.0 enables accurate measurement of loss prevention and results in substantial cost savings to the Army.

“ASMIS 2.0 is a total Army system that will serve the active component, Army Reserve and National Guard, as well as more than 28,000 Department of the Army Civilians,” Daugherty said. “The data collection and management tools provided within ASMIS 2.0 will reduce the user burden, streamline hazard identification and increase accuracy through adaptive input and situational guidance.”

ASMIS 2.0 complies with federal, DoD and Army regulatory requirements and meets the Army’s expanding need for quality data collection and enhanced mishap prediction capability.

“The software we used to build ASMIS 2.0 has the capability of being employed as a common operating platform, bridging DoD and other services’ SOH programs,” Daugherty said. “The resulting cost savings is absolutely a responsible use of Army resources.”
Exertional heat stroke (EHS), exercise-associated hyponatremia (EAH) and other heat-related illnesses (HRIs) are tragic and largely preventable causes of death and disability at Fort Benning, Georgia, and other hot-climate training areas. This spectrum of illnesses has a significant negative impact on training and poses substantial risk to the medical readiness of trainees and Soldiers.

As an emergency medicine physician at Fort Benning, I see firsthand the devastation these illnesses cause. I studied military medicine at the Uniformed Services University and graduated from a top military residency in emergency medicine. I love caring for Soldiers. Upon completing residency in 2014, I moved to Fort Benning, where I quickly realized that despite my training, I was woefully underprepared to care for the volume and severity of EHS and other HRIs we see here.

For a physician and care team to become adept at caring for patients with a certain type of illness, they need to see a high volume of patients suffering from that illness. The fact of the matter is severe cases of EHS and EAH are actually rare, and a civilian physician may only see a few throughout their entire career. The military population is different, however, and Fort Benning is a world of its own.

Fort Benning is home of the Maneuver Center of Excellence. It is one of the largest training posts in the U.S. Army and responsible for conducting Infantry and Armor Basic Combat Training, Infantry and Armor Basic Officer Leadership Courses, Maneuver Captain's Career Course, Airborne School and Ranger School. Also located at Fort Benning are the 3rd Ranger Battalion, 75th Infantry Regiment and 4th Ranger Training Battalion. Many of these training programs involve intensive outdoor activity. It is this volume of high-intensity training,
combined with the high heat and humidity typical of the southeastern U.S., that causes Fort Benning to regularly lead the DoD in the number of HRI cases each year. This high number of patients is also what has afforded the physicians and care teams at Martin Army Community Hospital (BMACH) the volume of experience required to become exceptionally good at caring for them. Over the years, best practices for prevention and management of these disease processes have been developed in many iterations with varying degrees of success. But institutional memory seems to inevitably fade. This is a predictable result of the regular staffing and command changeovers we all love and hate so much about Army life. Thus, what we have inadvertently established is a recurring pattern of tragic death and a renewed interest in management and prevention, followed by a period of improved performance that subsequently dwindles as personnel come and go until another tragic death occurs. I call this “the tragedy loop,” and we’ve been stuck in it too long.

In 2016, the tragedy loop struck again at Fort Benning and we lost a promising young officer in training. In response, clinicians at BMACH once again became heavily engaged in efforts to provide the best possible guidance and clinical care for HRIs. We developed comprehensive clinical protocols that span from point of injury through disposition (“The Benning Protocols”). Our ambulances are uniquely equipped with point-of-care sodium testing, and our emergency department, to our knowledge, is the first in the DoD to protocolize and regularly employ endovascular cooling for severe EHS. But how could we make our progress sustainable? What could we do differently, this time, to attack the larger problem — the tragedy loop itself?

This was the beginning of the “Heat Center” initiative. The answer seemed obvious, once we thought of it. Torches need someone to carry them. In medicine, this responsibility falls to specialty centers. There are trauma centers, stroke centers, cardiac centers, pediatric centers, etc., and as physicians, we know the best ones by name and look to them for best-practice

FYI

If you’re interested in supporting the Heat Center initiative, please contact Maj. Meghan Galer at meghan.galer.mil@mail.mil.
guidelines. Yet no such paragon exists for HRI because no place else in the world sees a volume of patients sufficient to support such an effort. No place but here.

So, what is it that all of these specialty centers have in common? It isn’t just excellence in management. They also, without exception, focus on prevention and clinical research. Management, prevention, research — this was the “triad” we set out to emulate. By focusing on excellence in these areas, would it be possible to end preventable death and disability from HRI at Fort Benning? Resoundingly, yes.

Since the start of this initiative, we have had zero soldier deaths from HRI at Fort Benning despite several soldiers presenting with core temperatures greater than 109 F! A comparison of our HRI statistics from 2017-2018 clearly demonstrate that our catastrophic cases are down despite total number of cases having increased. We believe this is a clear result of our deliberate three-pronged approach.

As stated, excellence in clinical management alone isn’t sufficient. It has to start with prevention. Our annual Fort Benning Heat Forums are a truly collaborative effort that provide an invaluable opportunity to bring medical and non-medical leaders together to review current guidelines and develop best practices for preventing and managing HRIs. Additionally, BMACH clinicians provide regular outreach to units for refresher training and support. The value of establishing and maintaining an open line of communication between medical and non-medical leaders cannot be overestimated. There are a lot of myths out there regarding how to best prevent/treat EHS and EAH, and establishing a dialogue to dispel those myths and exchange accurate information has proven to be of paramount importance.

Research ties it all together. There are entire teams of brilliant and dedicated researchers out there passionate about this very subject. By bringing together the researchers, clinicians, leaders and our high volume of patients, we can advance medicine. Several large-scale heat stroke studies are already in progress, which will significantly improve military readiness regarding HRI. Additionally, we have begun the process of establishing an Office for Clinical Research Support (OCRS). The OCRS will allow us to better facilitate such partnerships, streamline the administrative requirements and turn Fort Benning into a mecca for heat and other clinical readiness research.

The Heat Center initiative is no longer just about Fort Benning; it’s about establishing BMACH/Fort Benning as the torchbearer, so to speak. Mastering mitigation and management strategies for HRI and becoming a sustainable resource for best practices throughout the DoD will improve readiness and save warfighters. This will pay dividends in establishing and maintaining military superiority in inhospitably hot environments. This is how we end the tragedy loop.
Get the tools before the road gets rough.

Driver’s Training Toolbox

https://safety.army.mil
If you put your bike in storage for the winter, hopefully you followed the guidance found in your motorcycle owner’s manual (MOM). If so, your prep time to get your motorcycle road ready will be relatively short, once again following the procedures in your MOM. If you just parked your motorcycle in the corner of your garage or shed, however, you’ll have your work cut out for you. It will probably put a sizeable dent in your wallet too!

For those riders who followed the MOM, your job might be as easy as pulling off the cover, removing any plugs you installed to keep foreign matter out of the exhaust and any other openings, and washing it. Fill the gas tank, change the oil and check the tires for correct pressures and signs of dry rot. If you disconnected the battery, reconnect it following your MOM procedures. If you didn’t put the battery on a trickle charger, you might have problems firing up your bike. Otherwise, it should be ready to ride.

Once your bike is set, it’s time to check your personal protective equipment to make sure it still fits and is in serviceable condition. Those extra pounds you may have put on over the holidays could mean a trip to the bike shop to buy some new gear. This is also a great time to make sure you and your bike are properly licensed and insured. Some of you might have deregistered your motorcycle during the winter. If so, you’ll have to go through the registration and
insurance processes again. Do it early so you can get on the road as soon as the weather breaks.

Your bike and gear are now ready for the road, but what about you? After the winter break, your first trip shouldn’t be from Fort Drum, New York, to Daytona, Florida, for Bike Week. If it’s been more than a few months since your last ride, you might need refresher training. Contact your local safety office to schedule an advanced rider’s course.

If your training is up to date, ease back into shape and knock the rust off your riding skills by practicing. The USACRC has refresher exercises available on the Motorcycle Riding Tips section of its PMV-2 webpage, located at https://safety.army.mil/OFF-DUTY/PMV-2-Motorcycles/Training. While you’re there, download the Street Motorcycle Tips Booklet and review the exercises. The exercises are easy to set up, and performance measures for each are simple to interpret. We strongly recommend you practice with a riding buddy and peer coach one another.

When you begin riding in traffic again, remember lane position is important when you’re on the road. Always position yourself in the lane of travel so you can be seen at the greatest distance possible. You’ll also need to be more diligent with your scanning technique and pay particular attention to the road surface so you can spot any cracks or potholes that developed over the winter. Those of you stationed in colder climates are probably familiar with the pothole that bottoms out your suspension, rattles your eye teeth and leaves you wondering if you damaged your rims.

Properly preparing your motorcycle, gear and training is the key to safe and enjoyable riding season. For more information about bringing your motorcycle out of winter storage, visit http://www.rider.com/motorcycle_community/tips/tips-for-bringing-motorcycle-out-of-storage.html and https://www.thoughtco.com/getting-your-bike-road-worthy-2399736. Live to ride and ride safe!
On an overcast, zero illumination night, an AH-64E crew departed the forward arming and refueling point. With the instructor pilot in the pilot’s (back) seat and the pilot, a Readiness Level 3 aviator, in the co-pilot gunner (front) seat, they headed to the range to conduct night familiarization gunnery. Tragically, before the end of the training event, both pilots would lose their lives in an avoidable mishap.

Sequence of events
Preparations for the aerial gunnery began weeks prior to the training event. The published operations order outlined the plan to conduct a helicopter gunnery to qualify new aviators through Table VI. The training’s secondary purpose was to conduct familiarization gunnery for newly assigned RL3 aviators to gain experience before an upcoming combat deployment. A waiver was submitted requesting deviation from published procedures to allow RL3 aviators to conduct gunnery tasks under day visual meteorological conditions, assessing these missions as an overall MODERATE risk.

On the day of the mishap, after completing the risk assessment, the IP assessed the mission as an overall LOW risk for a night familiarization fires. The IP was then briefed by the mission briefing officer, who also assessed the mission as LOW, before receiving final mission approval from a company commander. The LOW risk assessment and approval was made under the assumption that the approved waiver authorized the mission to be conducted as it was planned. However, the IP, MBO and company commander assessed the mission without reviewing the waiver. They didn’t understand the limitations the waiver placed on the mission and based their assessment on an assumption.

Following the mishap crew’s fifth engagement of the night, a diving fire rocket engagement, the IP in the pilot’s seat successfully executed the dive recovery and placed the aircraft in a left 47 degree bank to execute a 180 degree turn. During the turn, the CPG passed the battle damage assessment to the range tower, which then gave the sixth target handover. While the CPG was focused inside the aircraft copying the target handover — still in the left turn — the IP diverted his attention to something other than flying the aircraft. Immediately after, the nose started...
pitching down to approximately 9 degrees nose low and the descent rate began to build.

Near the 180 degree point in the turn, the nose had pitched down to 19 degrees nose low and the descent rate reached 4,900 feet per minute. Approximately three seconds later, the IP noticed the unusual attitude and attempted to arrest the descent without pulling the nose up. The aircraft impacted the ground in a nose-low, 11 degree left bank at a 3,900-feet-per-minute rate of descent and 127 knots, resulting in fatal injuries to the crew and destruction of the aircraft.

What can the Army do?

- Leaders must ensure waiver requests properly outline deviations from written procedures and risk mitigation factors are established to ensure the safe execution of the mission. Once the waiver request has been approved, ensure it is disseminated and understood by all personnel participating in the exercise.
- Leaders must ensure a risk assessment and risk mitigation has been conducted in accordance with the unit’s standard operating procedures and ATP 5-19, Risk Management, before briefing and/or approving any mission. They must also ensure restrictions and risk mitigation factors established by approved waivers are annotated in the risk assessment document and understood by participating personnel.
- Leaders must ensure aviators understand the importance of proper airspace surveillance and the hazards associated with distractions while flying.
- Leaders need to emphasize the importance of aircrew coordination principles during the execution of gunnery tasks, highlighting scenarios where one pilot is focused inside the aircraft.
- Leaders must reiterate to pilots in command and instructors the importance of controlling the sequence and timing of target handovers during gunnery tables, especially when maneuvering and operating with inexperienced crewmembers.
The summer vacation and PCS season is fast approaching. That means more individuals, Soldiers and families will be setting out on road trips of all kinds. Statistics indicate that distracted driving due to phone use occurs most frequently during the summer — nearly 10 percent more than any other time of year. In addition to limiting distractions, consider how you can stay safe on the road this summer.

Summer Vacations and PCS Moves

Before you leave

No matter what type of trip you’re taking, start it off right by getting a good night’s sleep beforehand. Working all day and signing out at midnight to begin your leave increases your chances of being involved in a mishap. Operating a vehicle while fatigued can be just as dangerous as drinking and driving. In fact, driving after going more than 20 hours without sleep is the equivalent of driving with a blood alcohol concentration of .08 percent, the point you’re considered legally impaired in the U.S. The AAA Foundation for Traffic Safety estimates that 21 percent of fatal motor vehicle mishaps involve driver fatigue.

One of the top safety tips to avoid a mishap on the road is planning ahead:

• Build time into your trip schedule to stop for food, rest breaks, phone calls or other business.
• Adjust your seat, mirrors and climate controls before putting the car in gear.
• Pull over to eat or drink. It takes only a few minutes.
• Check your route of travel for weather conditions and road construction and plan an alternate route should you need to get off a heavily congested roadway.
• Technology can be an asset if used wisely. Whether you use traditional road maps or GPS navigation, plan which route you’ll take ahead of time. This step lets you know which roads you’ll take along your trip. As you plan ahead, you can research the traffic levels of these roads so you can drive safer.
• If you use GPS, your navigation system may even be able to tell you which roads are under construction. When you avoid driving through construction zones, you greatly reduce your risk of accidents and injury.
• If possible, avoid driving at night, when conditions are more hazardous.
• Before your trip, look into hotels along your route so you don’t have to make too big of a detour for lodging. Additionally, booking a hotel in advance can make stopping at night much easier.
• If your trip is a long one, trade out driving duties. Staring at the open road for hours on end can make a driver drowsy. To avoid falling asleep behind the wheel, switch drivers every few hours if possible. If driving alone, stop at a rest stop or gas station every couple of hours to stretch your legs and take a break.
• Remember, it’s summer and it will be hot out there. Should your vehicle break down, have some water and snacks on hand to tide you over until help arrives. A small cooler with water and snacks could be a lifesaver.

What if your car breaks down?

Getting out of the car at a busy intersection or on a highway to change a tire or check damage from a fender bender is probably one of the worst things a motorist can do. The Insurance Information Institute recommends the following precautions when your car breaks down:

1. Never get out of the vehicle to make a repair or examine the damage on a busy highway. Get the vehicle to a safe place before getting out. If you have been involved in an accident, motion the other driver to pull up to a safe spot ahead.
2. If you cannot drive the vehicle, it may be safer to stay in the vehicle and use a cellphone to summon for help. Standing outside the vehicle in the flow of traffic, under most circumstances, is a bad idea.
3. Carry flares or warning triangles to mark your location once you get to the side of the road. Marking your
vehicle’s location to give other drivers advance warning can be critical. Remember to put on your hazard lights!

4. In the case of a blowout or flat tire, move the vehicle to a safer place before attempting a repair, even if it means destroying the wheel getting there. The cost of a tire, rim or wheel is minor compared to endangering your safety.

Rules for passengers

After cellphones, the leading cause of driver distraction is other passengers.

Reaching toward the back seat, turning to talk, checking on kids or pets in the rearview mirror, or anything else that takes your focus and attention away from the road can be a dangerous distraction. Establishing rules and “zones” can help keep everyone safe and happy on your road trip.

Conclusion

Check out the following link for more advice on where your kids and pets should sit in the vehicle: https://www.youtube.com/watch?v=sB1k4O4Ro88. In addition, here are some tips for your summer road trips, including how you pack your car, https://www.travelers.com/resources/auto/travel/car-packing-tips, and what to include in your roadside emergency kit, https://www.travelers.com/resources/auto/travel/what-to-do-if-your-car-breaks-down. All these valuable tools can help ensure you reach your destination safely.

Author’s note: Tips included in this article are courtesy of Travelers Insurance, the National Safety Council, the Insurance Institute for Highway Safety and the Department of Transportation.
Eyesight is a critical factor that enables us to successfully perform mission tasks during deployments, training or maintenance. The Military Combat Eye Protection (MCEP) Program provides the means to protect our warfighters’ eyesight.

Preserve the ability to Fight

**Your eyesight is at stake**

Although they make up less than 1 percent of the body’s surface, our eyes are disproportionately injured when unprotected. Something as simple as sand blowing in your eyes can take you out of the fight temporarily, while shrapnel from improvised explosive devices and other blast effects to the eyes can make you combat ineffective for a much longer duration and leave you blinded for life. The simple act of putting a transparent impact-resistant shield between your eyes and what’s coming at them can make all the difference in the world and prevent or limit the severity of 90 percent of eye injuries. You wouldn’t go into the fight without body armor and a helmet, so be sure to use your MCEP as well.

**World-class eye armor**

All safety eyewear is not the same. The Army’s Program Executive Office – Soldier certifies all MCEP items to meet or exceed the American National Standards Institute Z87 safety eyewear standard and U.S. military ballistic fragmentation standards, which provides five to seven times greater ballistic fragmentation protection for the eyes than standard Z87-approved eyewear. You need eyewear that has been proven to meet ballistic fragmentation standards. MCEP items meet or exceed these standards, and MCEP-approved eyewear is authorized for use in deployments and military training for ground troops.

**The APEL logo and stamp**

All MCEP-approved eyewear can be found on the Authorized Protective Eyewear List (APEL). The distinctive neon green APEL logo is required to be on all MCEP packaging. In addition, since June 2011, all new MCEP eyewear has the APEL name stamped, printed, embossed or stitched on the left temple or strap. This makes it easy to identify approved eyewear. APEL approval certifies that eyewear has been tested to meet the standard you need to protect your eyes while
performing your mission. While some non-APEL eyewear may meet this standard, most of it does not. You have no way to know, so why risk your eyes and your sight? Use only APEL eyewear for your deployments, training and eye-hazardous military duties.

**Prescription glasses**

If you don’t need glasses to see well, you can use any MCEP device. Warfighters who need glasses require an MCEP device with an approved prescription insert. MCEP devices are tested with prescription inserts to meet the same ballistic fragmentation protection standards. Inserts can be ordered through your local military eye clinic. If you are at an approved deployed location, you can re-order glasses and inserts using G-eyes at https://srtsweb.amedd.army.mil/WebForms/GEyes/Forms/GEyesHomePage.aspx.

Since 2014, all MCEP devices use a single, universal insert. This means you don’t have to order a new insert if you decide to change to a different MCEP model. Only approved MCEP prescription inserts can be used in MCEP eyewear. Using non-approved inserts or taping/gluing lenses into the eyewear puts you at significant risk of an eye injury.

**Purchase from approved sources**

If you buy your own MCEP device, you should purchase it from military clothing sales stores only. In the Army, MCEP is issued in basic training, at central issuing facilities and can be requisitioned through standard supply channels. In current deployments, MCEP is also issued through the rapid fielding initiative.

“YOU WOULDN’T GO INTO THE FIGHT WITHOUT BODY ARMOR AND A HELMET, SO BE SURE TO USE YOUR MCEP AS WELL.”
Use MCEP on and off duty

MCEP provides eye protection both on and off duty.

- **On duty.** While deployed, the rule of thumb is, “Any time your helmet is on, your MCEP should be on.” The Tri-Service Vision Conservation and Readiness Program advocates taking that a step further when deployed: “Any time you are outdoors, your MCEP should be on.” Furthermore, beyond deployment, the train-as-you-fight concept applies. MCEP should be used in all training, just like it would during actual combat or deployment.

- **Off duty.** Many warfighters do not realize the danger of an eye injury doesn’t end when they leave their deployment or training area. Many activities that military members do routinely — grounds-keeping, maintenance and shop work — all present significant potential for eye injury. These activities occur both at work and home. Common home tasks like lawn mowing, weed whacking, auto maintenance and working with power tools are some of the most common sources for eye injuries in U.S. households. In fact, according to an analysis of emergency department visits for eye injuries, home is where 44.6 percent of serious eye injuries now occur, with work-related injuries at 20.3 percent.

**Meeting safety needs**

With the exception of racket sports and paintball, which have specific protective eyewear requirements specified by ASTM International, and some work activities like welding, MCEP eyewear meets the eye protection needs for most other eye hazards. They are even available with laser protection when missions require it. All MCEP lenses (even the clear lenses) also provide at least 99.9% UV protection for an added health benefit.

The Tri-Service Vision Conservation and Readiness Program strongly encourages warfighters to use their MCEP for non-combat, non-deployment and non-training activities where eye hazards exist. That includes home and work. Remember, an eye injury at home is just as much of a threat to your vision as one that happens in the field. Protect the sight to fight!

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**DID YOU KNOW?**

The main difference between safety glasses and regular glasses is their resistance to impact. The American National Standards Institute, which sets standards for safety glasses, requires them to withstand the impact of a quarter-inch steel ball traveling 150 feet per second. You can’t depend on prescription glasses for that kind of protection. Frames stamped with the imprint “Z87” meet stringent standards for strength and heat resistance. Program Executive Office Soldier has an approved list of eye protection for Soldier use at [http://www.peosoldier.army.mil/equipment/eyewear/](http://www.peosoldier.army.mil/equipment/eyewear/)
Join the USACRC community on Facebook. Also, don’t forget to connect with Army safety at these sites:

https://safety.army.mil
The welcome relief from winter’s bitter cold and snow brings with it another significant hazard — the spring and summer severe weather conditions. It is crucial all aviators are familiar with the inherent dangers of severe weather.

Introduction to thunderstorms

Almost every second, on average, a lightning strike between the ground and a cloud occurs in the United States. More than 100 lightning strikes take place every second above Earth where over 44,000 thunderstorms are occurring at any given moment, which presents a significant hazard to aviation and ground operations. Therefore, there is a good chance you’ll encounter a thunderstorm within the next few months. During that encounter, you will face the thunderstorm’s many powerful hazards, including strong winds and wind shears, heavy precipitation, lightning, hail and tornadoes. Are you ready?

The weather forecaster’s definition of a thunderstorm is pretty basic, yet misunderstood by many. A thunderstorm is any local storm with lightning and thunder produced by a cumulonimbus cloud, usually producing gusty winds, heavy rain and, sometimes, hail. However, the only official criterion a weather observer uses to identify a thunderstorm is thunder. That’s all — just thunder, according to the handbook published for observers. Cumulonimbus clouds are vertical columns of cloud mass with rain descending from them, which could potentially be thunderstorms. But technically, until the first thunderclap is heard, it is not a thunderstorm.

Avoiding the thunderstorm in flight

Thunderstorms are laden with myriad unacceptable environmental hazards to aviation. In simpler terms, avoid thunderstorms while flying your aircraft. But how do you do that? The first technique is the old see-and-avoid concept. Look out of the cockpit for signs of convective activity. The following is a short list of things to look for that give evidence of convective turbulence, lightning, hail, downbursts, microbursts and severe wind shears:

- Anvil cloud form approaching
- Darkened color to clouds
- Churning vertical clouds
- Vertical clouds that are growing

The next step is to use the weather radar while airborne. Not every hazard in a thunderstorm is visible on weather radar, including small cloud droplets, fog, ice crystals, or small, dry hail or graupel (granular snow pellets). This list is significant for three reasons. First, if you are using your weather radar to scan your flight path for weather that is
out of visual range (150 to 200 nautical miles), you may paint a group of individual cells and conclude you could visually circumnavigate them. In reality, you may be facing a wall of clouds with embedded thunderstorms. Second, the low reflectivity of the surrounding clouds may not show up on the radar, creating the false impression that there is a "hole" in the clouds. Finally, the anvil portion of a thunderstorm does not appear on radar since it consists primarily of ice crystals.

Depending on the precipitation type and its movement, recognizable thunderstorm patterns will show where the hazards are. It’s important to know what to avoid on our radar screens (see the graphic above).

- Avoid a target with a dry intrusion (drier air being sucked into the thunderstorm) giving it a V or U shape. There are several reasons for this. Severe thunderstorms have dry air mixing in the middle altitudes which can create an intrusion. Hail rising and descending in a thunderstorm would also appear as a missing area cut out from the storm.

- Avoid a target with a hook or bow shape. Hook shapes are indicative of rotations taking place within severe thunderstorms. This is a strong clue to ground weather observers that hail and tornadoes are possible.

- Avoid a target with protruding “fingers.” Like a hook, a finger shows strong possibilities for tornadoes and hail.

- Avoid a target with an asymmetric coloring and shape. Remember, severe storms created by wind shear aloft will tilt to one side. This gives shapes and colorings that are not even or concentric.

- Avoid a target with an arrow shape. Again, this is indicative of a storm with tilt and the possibility of severe hazardous weather.

- Avoid a target with scalloped edges. Scalloped edges show turbulent motions taking place within the cloud. There is also a good chance for hail here.

- Avoid a target with changing shapes. Rapidly growing shapes show rapid motions taking place within the cloud. Turbulence will almost always take place under these conditions.

- Avoid a target with a few VIP Level 1 dots showing nearby. Many times, hail falls outside of the thunderstorm. Checking the winds at altitude and correlating it to the side of the storm that hail will fall should help identify that potential hazard.

### Flying techniques to remember

Publications from the FAA and USAF give aviators numerous tips and techniques to help with the occasional encounter with a thunderstorm — some of which are important enough to repeat again.

- Don’t fly over thunderstorms. Storms can grow rapidly through your altitude, producing severe turbulence. Also, hail can shoot through the top of the thunderstorm in clear air above and fall downwind.
- Don’t fly under the anvil, where hail damage and lightning can occur.
- Don’t fly into virga, where turbulence is likely.
- Avoid all thunderstorms by 20 miles or more since lightning and hail have been known to extend that far from the clouds.
- Weather warnings are for thunderstorms defined as “severe.” These storms produce three-quarter-inch hail, tornadoes or 50-knot wind gusts. A lot of damage can occur in thunderstorms that are not flagged by warnings or a SIGMET (significant meteorological report).

If you have to penetrate:

- Go straight. Don’t turn around.
- Avoid the altitudes with temperatures of plus/minus 8 C.
- Don’t chase altitude. Hold your attitude and watch airspeed.
- Use all anti-icing equipment.
- Turn all lights in the cockpit on full and lock shoulder harnesses.

### Conclusion

Thunderstorms are one of nature’s most hazardous phenomena. They can impact aviation from wind shears, lightning, heavy precipitation, tornadoes and severe turbulence. Knowing how to recognize and avoid thunderstorms and their hazards is one of the most important lessons of aviation weather training. Think safety and fly safe.
The Army is a broad representation of our nation and not immune to distracted driving. Data over the last several fiscal years indicates an increase in distracted driving mishaps among Soldiers with 27 confirmed cases. These mishaps, however, are just the tip of the iceberg. As reporting tools continue to improve, the data will reveal that fact.

What is distracted driving?
Distracted driving is any activity that diverts attention from driving, including talking or texting on your phone, eating and drinking, talking to people in your vehicle, and fiddling with the audio, entertainment or navigation system. Texting is the most alarming distraction. Sending or reading a text takes your eyes off the road for five seconds. At 55 mph, that’s like driving the length of an entire football field with your eyes closed. You cannot operate a vehicle safely unless the task of driving has your full attention. Any non-driving activity you engage in is a potential distraction and increases your risk of crashing.

Some sobering stats
• Distracted driving accounts for about 25 percent of all motor vehicle crash fatalities.
  • In 2015, 391,000 injuries were caused in distracted driving-related accidents. In that same year, distracted driving was cited as a major factor in 3,477 traffic deaths.
  • Nine people in the U.S. are killed each day as a result of crashes involving a distracted driver, according to the Department of Motor Vehicles. Since there is no way to test for distracted driving after an accident occurs, it’s widely believed the number of crashes, injuries and fatalities caused by distracted driving are vastly underreported.
  • It takes only three seconds after a driver’s attention has been diverted from the road for a crash to occur.
  • Driving distracted is compared to drunk driving since it follows the same psychological pattern: When drivers get away with driving distracted, they then continue to practice this bad habit until a crash occurs or they are caught and suffer consequences.
  • More than 80 percent of drivers admit to blatantly hazardous behavior while driving, such as changing clothes, steering with a foot, painting nails or even shaving.

Types of distracted driving
The National Highway Traffic Safety Administration identified three types of driver distractions:
• Visual tasks, such as something as simple as checking a navigation system, which causes a driver to divert his or her attention from the road.
• Manual tasks, which is something that requires a driver to remove one or both hands from the steering wheel, such as reaching for a drink or cellphone.
• Cognitive tasks, which is causing a driver’s mind and focus to wander to something besides the task of driving.

Contributing factors
• NHTSA found that those who eat or drink while driving are 80 percent more likely to get into an accident.
• The largest cause of distracted driving crashes (62 percent) is a driver being lost in thought or letting their mind wander. Keeping your mind on the road is just as important as keeping your eyes on it.
• Unsurprisingly, cellphone use is the second largest cause of distracted driving; 14 percent of distracted driving-related deaths comes from cellphone use (as of 2015).
• Advanced technology in vehicles contributes to distracted driving; 53 percent of drivers believe that if car manufacturers incorporate “infotainment” dashboards and hands-free technology into vehicles, it must be safe to use.
• When a driver is listening to a conversation or music, the brain power he or she dedicates to driving decreases by 40 percent.

Cellphones
• Texting while driving results in 400 percent more time with a driver’s eyes off the road and increases the chance of an accident by 23 times.
• About 660,000 drivers use their cellphones while driving during daylight hours, creating a large potential for crashes and fatalities.
• According to the Centers for Disease Control and Prevention, drivers who reported frequent
texting while driving also proved to be more likely to ride with a driver who’d been drinking, more likely to drink and drive, and less likely to wear a seat belt.

• An AAA poll revealed that while 94 percent of drivers acknowledge the vast dangers of texting and driving, 35 percent of those polled admitted to still committing the act.
  • According to the National Safety Council, cellphone use while driving leads to 1.6 million crashes annually.
  • Texting while driving is six times more likely to cause an accident than driving under the influence of alcohol.
  • 1 out of every 4 traffic crashes that occur in the U.S. are caused by cellphone usage.
  • Each day, 11 teens die as a result of texting and driving.

The science behind distracted driving
• David Greenfield, founder of the Center for Internet and Technology Addiction, cited that one reason it’s so hard to stay away from electronic devices while driving is because of the smartphone’s addictive nature.
  • An incoming text, email or social media update on our smartphones results in an increase in dopamine to the brain, which is a chemical that attributes to the feeling of arousal, leading to a compulsion to check your phone, even if doing so will knowingly put you in danger.
  • Each time an individual operates their phone while behind the wheel without a suboptimal outcome, it reinforces the idea that it’s safe to do so and that person can successfully multitask again and again, according to the University of Alabama at Birmingham’s distracted driving research lab director, Despina Stavrinos.

Distracted driving laws
• As of June 2017, 47 states and the District of Columbia ban texting while driving.
  • 15 U.S. states and the District of Columbia ban drivers from using handheld phones as of June 2017.
  • While many states are enacting laws against texting and driving, the effectiveness of these laws requires further study, according to the CDC.

The consequences
• In Alaska, texting and driving can result in a whopping $10,000 fine.
  • The median fine for a first-time texting-and-driving offense is $100.
  • In 2012, a Massachusetts teen was convicted of homicide as a result of a texting-and-driving accident leading to a fatality. The teen served a year in jail.
  • In 2016, a 17-year-old in Anchorage, Alaska, was sentenced to a year in prison for criminally negligent homicide after killing a 27-year-old mother of two in a distracted-driving collision.
  • In 2011, a California woman was sentenced to six years in prison after killing a 23-year-old driver, colliding with her car at 85 mph because she was distracted by using her cellphone.

Distracted driving is a complex issue that has demanded the attention of law enforcement and safety officials nationwide. Don’t become a statistic. Fight against distracted driving to keep our roads safe and to set a good example for other drivers!
“THE MEDIAN FINE FOR A FIRST-TIME TEXTING-AND-DRIVING OFFENSE IS $100.”
Soldiers depend on leaders to have the knowledge, skills and ability to lead and instruct classes that deal with all forms of safety. When it comes to weapons safety, we have to be the subject matter experts. Attentive leadership and an effective weapon safety program are pivotal components to reducing accidents.

In my opinion, the accidental discharge of a weapon does not exist. A firearm is only as safe as the person handling it. For a weapon to fire, one must load rounds into it and, at some point, pull the trigger. An accidental discharge is the result of poor weapons handling, inattention to detail and lack of training and discipline. It’s important that Soldiers do not take weapon safety lightly. And it’s just as important that leaders lead by example and enforce the standards.

Soldiers should know and understand the characteristics of the weapon (privately owned or assigned) they’re using. Unless you’re a licensed gunsmith or if it’s within your military duties to perform direct support maintenance, do not modify or try to change the configuration of a weapon.

Doing so could result in major malfunctions and possibly render your weapon useless. When handling any weapon, make sure you know its safety features and capabilities. It’s a good idea to read the owner’s manual or sign up for a safety class.

Even though your firearm may have a safety device, don’t assume it will always work. I’ve often heard the misconception, “It won’t fire. The safety is on.” Another phrase that makes me cringe is, “It’s not loaded.” How many “unloaded” firearms have resulted in the death or serious injury of someone? As a cardinal rule, don’t load your weapon until you’re ready to use it and always treat it as if it is loaded.

A good way for leaders to ensure Soldiers understand firearms safety is to have them explain their weapon’s safety features, its loading and unloading procedures and how to perform immediate action on it should it malfunction. Once Soldiers understand and successfully execute these simple tasks, the likelihood of an accidental discharge will decrease.
When storing weapons, keep them in a lockable container, inaccessible to others. It’s also a good idea to use a locking device on your weapon. For those residing on an installation, it’s mandatory to register privately owned weapons with the provost marshal’s office. Soldiers can keep weapons in their living quarters; however, if they live in the barracks, their weapons need to be stored in the arms room. Refer to Army Regulation 190-11, Chapter 4, for more guidance on storage.

So what are the chances of an accidental discharge occurring at home? What happens when a child finds a firearm? Parents have the responsibility to practice weapons safety at home. A good time to introduce weapons safety to children is when they show an interest in toy guns. Children watch television and may be inclined to know what a firearm would really do or how it works. Don’t just tell your child guns are dangerous. This alone may excite their curiosity. Sadly, this exact situation happened a few months ago at my neighbor’s house and resulted in the accidental death of a teenager.

Parents who take the time to teach, practice and demonstrate the functional use of a firearm will ensure the safety of their children to a greater extent than those who don’t. Children need to know what to do if they find a firearm. Constantly reinforce that firearms are not toys and at no time should be treated as such.

A leader’s (and parent’s) role never stops when it comes to firearm safety. You don’t ever want to be in the situation where you say to yourself, “If only I provided more training or talked to my Soldier or child about the use of firearms.”


\[
\text{Remember to always THINK when dealing with firearms:}
\]

- **T**reat every weapon as if it’s loaded.
- **H**andle every weapon with care.
- **I**dentify the target before you fire.
- **N**ever point a weapon at someone unless you intend to use it.
- **K**eep the weapon on safe and your finger off the trigger until you’re ready to fire it.
C

ommon sense. Sometimes it isn’t as common as we’d like to think. Failure to follow established standing operating procedures — or to just review and update them regularly, especially after an accident — can result in avoidable tragedy.

Washing a helicopter is not an inherently dangerous task; however, moving one can be. It isn’t every day you hear about someone being run over by a helicopter, but several years ago on a typical September day, a Soldier in Kuwait was run over by a towed Black Hawk. We might be tempted to call this event a fluke, but just six weeks earlier, in July, another Soldier from a different unit was run over on the same airfield in an eerily similar incident. In that case, the Soldier decided to approach the aircraft from the left to speak with someone riding in the cabin while it was being towed. The Soldier lost situational awareness of his proximity to the rotating wheel and his trouser leg got caught by it, pulling his left leg inboard of the turning wheel. The aircraft then ran over his ankle, causing a 90-degree break and dislocating his kneecap.

Members of the unit responsible for the injured Soldier in the September mishap were aware of the earlier incident. How did it happen again so soon?

**Details of the accident**

In the September incident, a Soldier was riding in the cabin of the UH-60 while it was being towed down the flight line from the wash rack to the maintenance hangar. He was not an official member of the towing crew; nevertheless, he decided to hitch a ride to avoid the long walk down the ramp from the tower to the maintenance hangar.

The tug driver conducted the towing brief, but stated he did not see the Soldier board the aircraft. That’s understandable since the towing bar is hooked to the tail wheel to pull the aircraft backward, hence the helicopter stabilator completely blocks the tug driver’s view of the cabin when he’s looking toward the aircraft. Furthermore, the tug driver was looking backward to ensure clearance while moving the aircraft.

The Soldier was sitting on the cabin floor with his legs dangling out the right side of the aircraft. The cabin floor was wet from the aircraft wash so he shifted his position forward to a drier part of the floor. The turning wheel caught his trouser leg, pulling him from the aircraft and under the main landing gear, which rolled over his lower left leg, crushing it, and separating the sole from the bone of his right foot.

**Why did this accident happen?**

The real question is why this Soldier was in the helicopter in the first place. The SOP dictates only the individual controlling the brakes should be in a towed aircraft. Was there appropriate supervision?
Should appropriate procedures have been updated or more strongly reinforced after the previous mishap?

As leaders, we are responsible for identifying hazards and implementing control measures to mitigate risks. After the July incident, leadership directed that wing walkers remain at their stations outside the rotor tip caps. If anyone needed to speak with an individual inside the aircraft, they would need to get the attention of the tug operator to bring the aircraft to a complete stop before proceeding inboard. The Naval Air Ambulance Detachment, co-located in Kuwait, was directed by its SOPs to have wing walkers equipped with whistles to alert the tug driver since he is facing away from the aircraft during towing operations.

Studies show it takes a person four to eight seconds to react to an emergency — two to four seconds to recognize something is wrong and two to four seconds to do something about it. No one can react fast enough to yell, “Stop!” to the tractor driver until it’s too late. The main landing gear is at the forward edge of the cabin area and in two seconds, even at a slow walking speed, it will roll half to a full cabin length.

It is important to note that when an aircraft is being towed backward, the entire cabin area is a danger zone because the wheel is turning toward the cabin instead of away from it. This is counterintuitive and doesn’t register with those who don’t have much experience with aircraft beyond riding in the back as a passenger.

**Conclusion**

The September incident boils down to indiscipline. The wing walkers were trying to help out a buddy by giving him a ride and disregarded the pre-towing brief administered by the tug driver, the noncommissioned officer in charge of the towing crew. This accident occurred on the day the Soldier was to fly home on leave. Consequently, this was the end of his deployment, taking him out of the fight for months. The Soldier had emergency surgery and endured a long rehabilitation. The good news is he did fully recover.

Incidents like this are painful reminders why safety discipline is such an important part of our daily lives as Soldiers. We should be proactive in identifying hazards and always learn something from the mistakes of others. When we fail to learn from others, we frequently end up learning those hard lessons for ourselves. Evidently, lessons were not learned because two weeks later, a third towing accident occurred at the same airfield at night by a transient unit heading to Iraq.

**Prevention tips**

- A 2028 should be submitted for all airframe operators’ manuals with a warning to mandate that no one is to ride in a towed aircraft except the individual on the towing team appointed to ride brakes.
- Unit SOPs should dictate that wing walkers should be equipped with whistles to alert the tug driver because he cannot hear vocal commands above the engine noise of the tug and aircraft running up on the ramp.
- Unit SOPs should dictate that wing walkers are to prohibit pedestrians from approaching the aircraft while it is in motion.
- The NCOIC should conduct a towing safety briefing before towing the aircraft and reiterate the warning about no passengers during towing operations.

Editor’s note: The article above was written while the authors were both deployed to Kuwait with Headquarters Company, 2nd Battalion, 211th General Support Aviation Battalion, West Jordan, Utah.
While the vast majority of leaders and Soldiers understand what I’m about to share, many others fail to comprehend this simple fact: Mission accomplishment should never be achieved at the expense of curtailing safety standards. Risk management, enforcement of safety practices and proper planning are as common to our profession as a pair of boots. There are times, however, when certain individuals make a personal decision to bypass the established procedures to save a little bit of time.

Recently, I decided to visit my unit to observe operations as they prepared for a convoy movement to the range. Prior to departing for the afternoon, I made sure to confirm the formation time and location for my early visit the following day. Much to my surprise, as I drove to the location, the first march unit was heading in the opposite direction en route to the range. A quick glance at my watch revealed they were 45 minutes ahead of schedule. This situation immediately made me feel uneasy because rushing to complete a task is often a contributing factor identified during accident investigations.

Upon arriving at the designated location, I immediately made my way toward the remaining vehicles. I quietly observed the convoy commander give his safety briefing while I conducted a visual inspection of the vehicles. I quickly noticed two vehicles were missing fire extinguishers. Also, during the briefing, the convoy commander failed to indicate the convoy traveling speed, catch-up speed and to remind the assistant drivers to enforce the use of seat belts at all times. I patiently waited for him to complete his briefing. When he asked if anyone had questions, I shared my observations, after which he provided the missing information.

While the drivers returned to the motor pool to secure the fire extinguishers, the remaining Soldiers began to load up in the trucks. Out of the corner of my eye, I noticed too many Soldiers heading to the rear of one of the trucks. I made my way over there to see what was happening.

As I rounded the corner at the back of the vehicle, I saw the assistant driver directing a Soldier to climb into the cargo area. I counted the number of Soldiers already onboard and realized that with this additional Soldier, they now had excess personnel and not enough vehicles to transport them. I halted the Soldier and reminded the assistant driver of the maximum capacity. The assistant driver quickly conceded that he was aware of it, but due to the first group’s hasty departure, they now had excess personnel and not enough vehicles to transport them.

I returned to speak with the convoy commander and informed him of the situation. He acknowledged that by rushing the departure of the first vehicles, the remaining number of Soldiers was higher than the number of available seats. After discussing a few possible courses of actions, it was obvious the only viable option to maintain the schedule and avoid unnecessary risks would be for me to transport the additional Soldier in my private motor vehicle. Even by doing so, we still needed to coordinate for the Soldier to be picked up at range control because PMVs are not allowed to enter any of the range areas.

In the end, we were able to complete the necessary coordination and ensure the Soldiers safely reached the range to complete the weapon qualification while making sure the additional Soldier was not exposed to unnecessary risks. This whole experience served as an important reminder to those involved. Even the smallest, most insignificant shortcut can have a detrimental effect on the overall mission and place individuals in situations where the possibility of a mishap is increased rather than mitigated.
It was early morning when I arrived at work for a 24-hour shift as the section leader at Marine Corps Air Station Miramar Aircraft Rescue and Firefighting. After taking care of some routine tasks around the office and meeting with the departing section leader, I gathered my notes and headed outside to hold morning formation. The day was going smoothly and time seemed to fly by. That was about to change.

About lunchtime, I received a call from the wife of one of our Marines who was assigned to the Wing. She told me her husband, who we'll call Cpl. John Doe, was involved in a motorcycle mishap. He had been approaching a stop sign at about 5-10 mph when he lost control of his motorcycle and fell. Doe was wearing his personal protective equipment, but he failed to secure the chinstrap on his helmet. As he tumbled to the ground, his helmet came off, allowing his unprotected head to strike the road.

When military police arrived on the scene, Doe was bleeding from the ear and became combative. First responders took the injured Marine to a local hospital, where he was rushed into surgery due to a brain hemorrhage. Doctors placed Doe in a medically induced coma to keep him relaxed and planned to monitor him throughout the night. We were told his chances of survival would be better if he made it through the night. Unfortunately, the surgeon returned shortly afterward and told us Doe was brain dead. He was then placed on artificial life support until his parents could arrive at the hospital.

Prior to riding any motorcycle while on active duty, service members must complete all training requirements. Doe had completed all of his Marine Corps required training to operate a motorcycle on base. In addition, he had received numerous briefs on motorcycle riding, proper PPE and training. I had even gone as far as telling my section Marines that if I saw them riding unsafely, I would contact the MPs and see if we could revoke their on-post driving privileges.

When it came to riding, Doe did almost everything right. But the one thing he failed to do — connect his chinstrap — likely cost him his life. According to the National Highway Traffic Safety Administration's National Center for Statistics and Analysis, helmets saved the lives of an estimated 1,859 motorcyclists in 2016. For a helmet to provide its full protective capabilities, though, riders must wear them correctly, ensuring it is properly secured to the head. Doe was already wearing his helmet. The second or two it would have taken him to fasten it securely would have kept this respected Marine in the fight and his family, friends and fellow service members from grieving his senseless death.
I was finishing a long day of lake patrol when I heard a voice over the radio say, “There has been a report of a potential drowning.” Immediately, my body went numb. All I could think was, “Please don’t let it be true.” At the time, I’d spent four years as a park ranger for the U.S. Army Corps of Engineers and, unfortunately, seen the same scenario replayed repeatedly — lives lost from both carelessness around the water and lack of education concerning water safety.

According to the Centers for Disease Control and Prevention, drowning is one of the leading causes of unintentional deaths in the United States. It’s estimated that 10 people die each day as a result of drowning. Sadly, a large portion of those victims are would-be rescuers. Before attempting to rescue someone, always keep in mind Reach, Throw, Row and Don’t Go.

- **Reach.** If someone near you is drowning, first try reaching out to him or her with something near you such as a pool toy, branch, fishing pole or anything sturdy. Remember not to lean too far over and keep your feet firmly planted where you are standing to prevent yourself from falling in and also becoming a victim.

- **Throw.** If the person is too far out to reach, throw something to them. Make sure you throw something that floats (e.g., a pool toy, life preserver, throw cushion, ring buoy, etc.). If possible, it is best to tie the object to something secure to pull in the victim.

- **Row.** If reaching and throwing are not feasible and you have access to a boat, you can row to the victim.

- **Don’t Go.** Unless you are a trained professional in water rescue (e.g., a trained lifeguard), never go in after a victim. A drowning person will try to climb on top of the rescuer, forcing them under the water in an effort to stabilize themselves and get air.

There are a few rules everyone should remember when swimming or boating. First, never swim alone. We aren’t invincible, and you never know what will happen. Nobody plans to drown, and it only takes seconds. A drowning person doesn’t make a lot of noise. Try gasping for air and screaming and you’ll see it doesn’t work very well.

Second, know your limits. It only takes enough water to cover a person’s nose and mouth for them to drown. So many times we try to be the cool guy and push or exceed our capabilities. I have seen too many bodies pulled from the water as a direct result of pushing limits and taking unnecessary risks.

The most important thing any of us can remember is to wear a personal flotation device. I have never seen a drowning victim that was wearing a PFD. There are many types of PFDs available for water-based activities. Choosing not to wear one should never be an option. The difference between choosing to use a PFD and going without could be your life. Nobody is waterproof, so always wear your PFD!

Following simple rules and using good judgment around water will save your life and possibly the lives of others. Don’t end up drying out in the morgue.
"It’s estimated that 10 people die each day as a result of drowning.”
ON-DUTY FATAL MISHAPS

ACV
- A 24-year-old Corporal and a 21-year-old Specialist assigned to 1st Armored Division, Fort Bliss, Texas, died in an Army combat vehicle mishap 22 January 2019 near Dona Ana Range Complex at 1946 local. The Soldiers were traveling in an RV-Stryker convoy of three when Chalk 3 rear-ended Chalk 2 at a stop sign.

AMV
- A Specialist assigned to Operation Atlantic Resolve died in an Army motor vehicle mishap 13 January 2019 at the Grafenwohr Training Area, Germany, during wash rack operations. The Soldier was standing to the rear side of a Light Equipment Transporter trailer when the vehicle began to reposition. The Soldier was pinned beneath the trailer axle and sustained fatal injuries as a result.

Non-tactical Vehicle
- Two U.S. Army Central Command Soldiers died in a Non-Tactical Army motor vehicle mishap 5 March 2019 in Kuwait at 0915 local. The Soldiers were in a leased vehicle that was struck broadside by a civilian truck entering the main roadway. A third Soldier riding as a passenger was evacuated for his injuries. All three Soldiers were wearing seat belts.

OFF-DUTY FATAL MISHAPS

PMV-4
- A 19-year-old Private First Class assigned to the XVIII Airborne Corps, with assignment at Joint Base Lewis-McChord, Washington, died in a PMV-4 mishap 5 January 2019 near Kent, Washington, at 1825 local. The Soldier was traveling southbound on an interstate highway when his vehicle crashed.

- A 20-year-old Specialist assigned to 3rd Infantry Division, Fort Stewart, Georgia, died from injuries he suffered in a PMV-4 mishap 7 January 2019 near Newnan, Georgia, at 2215 local. The Soldier was traveling on the interstate when his vehicle left the road and crashed for unknown reasons. He was evacuated to a hospital and died three days later following removal from life support equipment.

- A 25-year-old Specialist assigned to III Corps, Fort Hood, Texas, died in a PMV-4 mishap 12 January 2019 near El Paso, Texas, at 1232 local. The Soldier was on PCS leave when his vehicle reportedly entered the median and crashed. He was wearing a seat belt.

- A Specialist assigned to 1st Armored Division, Fort Bliss, Texas, died in a PMV-4 mishap 14 February 2019 in Ozona, Texas, at 2224 local. The Soldier was a passenger in a vehicle driven by another Soldier when it struck the rear of a semitractor-trailer on an interstate highway.

- A Private assigned to 2nd Infantry Division, Republic of Korea, died in a PMV-4 mishap 5 March 2019 in Bryan County, Georgia, at 0530 local. The Soldier was driving his pickup while on leave when he lost control and the vehicle overturned. He was reportedly not wearing a seat belt and was thrown from the vehicle.

- A 20-year-old Private First Class assigned to U.S. Army Alaska died in a PMV-4 mishap 15 March 2019 near Willow, Alaska, at 1130 local. The Soldier was riding in a vehicle operated by another Soldier when the driver lost control on icy road conditions and collided with a vehicle in the opposing lane.

- A 31-year-old Specialist assigned to 82nd Airborne Division died in a PMV-4 mishap 25 March 2019 in Fort Bragg, North Carolina, at 1730 local. The Soldier was the driver of a vehicle that collided with
an oncoming vehicle. He was reportedly not wearing a seat belt.

**PMV-2**
- A Soldier assigned to 82nd Airborne Division, Fort Bragg, North Carolina, died in a PMV-2 mishap 10 March 2019 in Fayetteville, North Carolina, at 0200 local. The Soldier was riding his motorcycle when it was struck by an approaching sedan. The civilian motorist was charged in the mishap.

- A 24-year-old Specialist assigned to White Sands Missile Range died in a PMV-2 mishap 23 March 2019 in Las Cruces, New Mexico, at 1748 local. The Soldier was reportedly riding his motorcycle at a high rate of speed when he collided with a vehicle at a highway exit. He was wearing personal protective equipment and had completed basic rider training.

**Pedestrian**
- A Major in the U.S. Army Reserve Command died in a pedestrian mishap 7 February 2019 in Sandy, Utah, at 1240 local. The Soldier was traversing a marked crosswalk when he was struck by a vehicle traveling more than 60 mph.

- A 19-year-old Private assigned to 1st Cavalry Division, Fort Hood, Texas, died in a pedestrian mishap 14 February 2019 near Edinburg, Texas, at 2300 local. The Soldier was standing next to her disabled vehicle along an interstate highway when she was struck by a passing motorist.

- A 19-year-old Private assigned to the Texas Army National Guard died in a pedestrian mishap 2 March 2019 in Gladewater, Texas, at 1822 local. The Soldier exited his vehicle to access a mailbox when his vehicle was struck by a pickup truck that drifted onto the shoulder. The Soldier was subsequently struck by his own vehicle.

**Privately Owned Weapon**
- A Sergeant First Class died in a privately owned weapon mishap 9 February 2019 in Colorado Springs, Colorado, at 1530 local. The Soldier was handling or cleaning his privately owned handgun at his residence when he was struck by a discharged round.

**Sports and Recreation**
- A Sergeant assigned to 69th Air Defense Artillery Brigade, Fort Hood, Texas, died in a boating mishap 21 January 2019 on Belton Lake at 1500 local. The Soldier was fishing with another individual when their boat capsized and he failed to resurface. His body was later recovered.

- A U.S. Military Academy Cadet died 27 February 2019 from injuries suffered in a skiing mishap several days earlier on the Victor Constant Ski Slope in West Point, New York. The Cadet was wearing a ski helmet when he was discovered unresponsive at the base of a tower. He was posthumously promoted to Second Lieutenant.
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