



Safety Gram

Protecting Resources Through Better Risk Management

Safety Division's Monthly *Safety Gram* is provided to senior leaders to maintain awareness of mishap trends that directly affect the operational readiness of the Corps. This information should also be disseminated at every level of your command to assist high-risk Marines and Sailors in understanding the impact of the decisions they make every day both on and off-duty.

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July 2014: Mishap Summary

The Mishaps below occurred throughout the USMC from July 1 - 31, 2014, causing serious injury or death to Marines, and/or damage to equipment.

2 July 2014. SNM was involved in a single vehicle motorcycle crash. Service member was traveling on the road when he lost control and crashed into a fence then the side of a house. The servicemember was non-responsive at the scene with severe head injuries. A short time after being flown to a nearby medical center, SNM was pronounced deceased.

4 July 2014. SNM died following a collision between his jet ski and a power boat on a lake.

5 July 2014. A Marine was a passenger in a vehicle with a civilian friend driving when they struck a tree resulting in SNM being ejected from the vehicle. SNM died at the scene. The civilian driver survived.

8 July 2014. While playing intramural soccer, SNM fell on a wall causing injury to his groin. SNM delayed seeking medical treatment until the

following morning, at which time he was admitted for surgery to remove his right testicle.

20 July 2014. An enlisted Marine was traveling west bound on a highway with his wife when he failed to negotiate a curve. The failed turn caused them to tumble down an embankment with a 50 to 70 foot fall. SNM suffered injuries that resulted in his death. His spouse survived the accident with a broken back and severe road rash.

24 July 2014. While commuting to work, SNM was involved in a motorcycle accident, evacuated by ambulance to a local hospital, and pronounced paralyzed from the waist, down. SNM was wearing proper PPE.

Labor Day Safety

Holidays pose the potential for mishaps and hazards, and Labor Day is no exception. Marines and Sailors who are "off the clock" may feel less inhibited in the comfort of their own home, at their vacation destination, or any number of social situations. With the unofficial end of summer occurring over Labor Day Weekend, hazards are abound as Marines usher out the season with one last hurrah comprising of BBQs, water sports, and vacations. The above Mishap Summary reflects the off-duty deaths of six Marines. Any of those things could happen to you! The following quick hits may prove helpful in negating those threats.

Alcohol

Do not drink and drive. Consider alternating alcoholic beverages with water to remain hydrated and manage the amount consumed. Establish a limit to the amount of drinks you'll have and abide by that quantity.

Driving

Prepare your car: have it appropriately inspected and perform necessary maintenance. Know your route, so you aren't distracted by negotiating directions as the driver. Depart early enough so you won't be tempted to speed or drive recklessly in order to arrive at a certain time. Get a good night's sleep the night prior to travel in order to avoid fatigued driving.

Sun

Utilize a sunscreen of at least SPF 15, and wear a hat to help prevent sunburn on your face, ears, and neck. Sunglasses are also crucial in preventing damage to your eyes. Try to shield yourself from excessive sunlight with long, loose clothing, or by spending time in the shade.

Water Sports

Never swim alone. Make certain water quality is safe, whether swimming in a pool, lake, or ocean. When possible, swim in areas protected by a life-guard, or have a person in attendance trained in rescue methods. Boats should be manned by experienced individuals and must be equipped with proper safety equipment. Only boat in approved areas, and do not operate a watercraft under the influence of alcohol.

Practice caution in these regards and others in order to celebrate a safe and happy conclusion of summer!



CARRY THE LOAD

[SAFELY]

Preventing musculoskeletal injuries by practicing safe and effective lifting techniques.

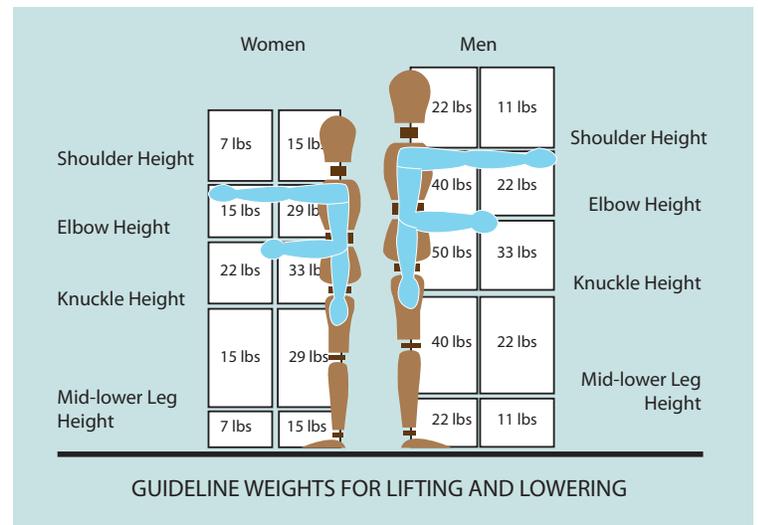
Reaching down and lifting things from the ground is a practice that we as people perform for our entire lives. Children are told to pick up their toys; young athletes scoop up ground balls during practice; boxes full of goods are loaded in and out of cars en route to college, academies, new apartments, and other venues. It's a motion that's been repeated so many times in our lives that most individuals no longer think twice about it.

The danger of that fact of life however, is that lifting, carrying, and handling objects of any weight can easily pose the possibility of injury, if not properly approached. The threats include – but are not limited to – back injuries, other bodily discomfort/injury, potential falls, and dropping the carried load on yourself or others.

According to the US Department of Labor and the Bureau of Labor Statistics, more than one million workers experience back injuries each year, and one quarter of all compensation claims involve back injuries. Lifting loads incorrectly or beyond one's capacity is a very plausible way to experience such musculoskeletal injuries.

Before Lifting

Prior to performing the task of lifting items, it's important to take heed of several considerations. First, one should consider whether the item must be lifted manually, or with the aid of equipment, such as a dolly, handtruck, or even something as large as a forklift. If it's deemed necessary or safe to lift on your own, make a point to determine roughly how heavy it is. You can accomplish this by pushing the items on the floor to gauge whether it's a manageable load for you. Prior to lifting, you should also evaluate whether you have sufficient room to lift and maneuver the item, and whether you have the space to position yourself appropriately before lifting. In terms of whether the load is of a suitable weight, the accompanying graphic from the Scottish Centre for Healthy Working Lives provides an estimate of safe weights to carry, depending on your body type and the height at which you're hoisting the object. Weights have been converted from kilograms to pounds, and all measurements are relative, depending on an individual's strength.



Lifting

Once you've determined the object is light enough to lift, that its size or shape shouldn't prove awkward to handle, and that the area is clear of obstructions in lifting the item and carrying it, you should stand as close as possible to the object. Standing with your feet shoulder-width apart, you should then squat down, bending your knees while keeping the angle of your back upright. Grasp the object, making certain that your grip will be secure and comfortable, and then use your legs to lift the object in a smooth motion. The item should be held close to the body with your elbows tucked in, and you should avoid twisting with your upper body, shifting your legs accordingly in order to change directions.

Even when an object is large enough to require two individuals, all of the above items should be put into practice. Helping hands do not reduce the requirement to lift in a safe and efficient manner. Even light loads can cause injuries if handled improperly.

When placing or lowering the object, a similar practice should be utilized as when lifting the item. One should keep their back upright and straight, while squatting and engaging leg muscles to gently set the object down in a smooth motion. Retain this posture when rising, as injury can occur even in the absence of a weighted item.



Mishap Hindsight



20/20

An anonymous Marine submitted the below summary of a recent motorcycle accident he experienced. The recap of this incident provides insights to the preventative measures that could have been implemented, and those that were taken, enabling him to stand and walk away from this mishap.

During one of my recent holiday weekends I spent several days on a great motorcycle tour of West Virginia and western Pennsylvania. The weather was great – very comfortable for this time of year – and the roads were wonderful; twisting through the hills all the way. West Virginia is a beautiful state and the state parks I camped in were very nice.

At about 0830 on the morning of day three, I was riding on US 50 a little east of Grafton, WV. The skies were clear and the sun was making strong shadows. Due to the dark patches on the road, I took it easier on the many curves, as my visibility of the upcoming stretch was reduced. As I started up a several hundred-yard long straightaway with good visibility, a small deer appeared out of the shadow in front of my bike. I had a moment to swerve a little, but hit it anyway, probably at about 35 mph. All I remember is going down (low side) sliding for a moment, and then pulling myself into a fetal position to keep my arms and legs from flailing. After I tumbled sideways – all the while wondering when I would stop – I carefully stood up next to the bike and found that I hadn't broken anything. I paced out impact-to-stop at about 50 yards.

The bike had bent handlebars and a few minor things broken off the left side, on which it had slid.

I sustained minor road rash on my hands and a very bruised (but not broken) right hand.

Damage to my clothing included right shoulder and elbow ripped away to my pads with skid marks across the back, material on both knees ripped open to the pads, gloves torn through in a couple of spots, and helmet rash through the outer shell into the foam core.

I have take-aways from my accident, serving as a form of “hindsight ORM”:

1. Light conditions and the presence of deer were the major safety issue.

- In preparation for my trip I had done a complete maintenance cycle on the bike, and had performed the normal safety checks (tire pressure, lights, chain slack, etc.) that morning. The bike was in perfect condition.
- Road surface was clean and dry.
- If the deer was larger, I might have seen it earlier (this one was no higher than my front wheel).
- It may have been beneficial to wait until later in the morning – perhaps even just an hour – until the sun was at a higher angle.
- I slowed down because of the light conditions, but just being there at that time of day was the major problem.

2. My safety gear did its job.

- The jacket was made of mesh and was colored a loud, “safety” yellow. It had CE-approved elbow and shoulder pads (which I'd taken out when I bought it and inspected). As I had judged the manufacturer's back pad to be too thin, too soft, and not high or wide enough, I supplemented it with a better pad from one of my other jackets. Doubling them up made the jacket fit a little tighter, but still comfortably.
- When I stood up from the crash I looked up and down the road for traffic. When I saw the first vehicle, I waved my arms not to flag him down but to make sure he didn't hit the bike, which would possibly cause another accident. He stopped and we chatted for a minute while I checked again for injuries. About a minute after he stopped, I heard a large truck coming from the opposite direction (over a hill). When I saw the truck, I waved my arms again for the same reason. He stopped in time. When I talked to him he stated that if I hadn't been wearing the brightly colored jacket, he probably wouldn't have seen me.
- My helmet was DOT and SNELL-approved full face. The road rash started on the high part of the visor and ended just about where my temple is – wearing through the shell into the foam core.
- My pants were nylon and vented for summer wear. I had pulled the original knee pads out of them because while they were substantial enough in thickness, they were too narrow and really didn't offer enough protection to the area immediately around my kneecaps. They also slid around too much in the pocket provided for them. I had also replaced these with more substantial pads from another outfit I own.
- Bottom line: had I not been wearing well-designed clothing *with pads*, I probably would not have a working elbow and two kneecaps right now.
- Total cost (new) of my gear: less than \$400 dollars. Effective gear doesn't have to be expensive. It just has to be looked at critically for the protection it provides.

