



INTRODUCTION

Off-duty vehicle crashes continue to be the leading cause of death and injury across the Navy and Marine Corps.

Over the past three years, 75 Sailors and Marines were killed or suffered a permanent and total disability as a result of a motor vehicle crash or vehicle-related incidents occurring during the fall and winter seasons.

Additionally, off duty and recreational activities land hundreds of Sailors and Marines in the ER every year.

The fall and winter seasons come with their own unique safety hazards and it's important we take time to identify and address the associated risks before engaging in an activity or getting behind the wheel, due to shifts in the weather and increased rain and snow.

The Fall and Winter Safety Presentation is divided into two sections, Part I - Fall and Winter Motor Vehicle Safety and Part II - Fall and Winter Recreational, Off-Duty Safety.

Data featured in presentation compiled from Risk Management Information (RMI).

PART I

Addresses the common seasonal factors and conditions during fall and winter that increase driving and travel risks. Provides best practices and recommendations to help DON personnel stay safe on the road.

Topics covered:

Non-Government owned (privately owned / personal use)
Private Motor Vehicles (PMV):

- Four-Wheeled vehicles (PMV-4) cars, trucks, vans
- Two-Wheeled vehicles (PMV-2) motorcycles, mopeds

Pedestrian:

A person hit by a motor vehicle

PART II

Highlights the risks associated with common fall and winter activities and provides best practices and recommendations to help mitigate those risks.

Topics covered:

- Off-Duty (activities performed while not in a duty status or duty location)
- Fire Prevention
- Holiday Activities
- Slips, Trips and Falls
- Fall and Winter Sports

*RMI data current as 15 Sep 2024

*Unless otherwise specified, data pulled from Oct 1 to end of February 2022 - 2024

PART I - FALL AND WINTER MOTOR VEHICLE SAFETY

Between Oct.1 and March 1 over fiscal years 2022 - 2024, 70 Sailors and Marines were killed in motor vehicle-related incidents and another 11 were left with a partial or total permanent disability.

Over that same time frame, there were 481 motor vehicle related incidents where injuries ranged from concussions and neck/back strain, to pelvic, spine or leg fractures requiring surgery and hospitalization.

Of those motor vehicle incidents, 219 were automobile crashes, 245 were motorcycle crashes, and 17 were pedestrian-related.

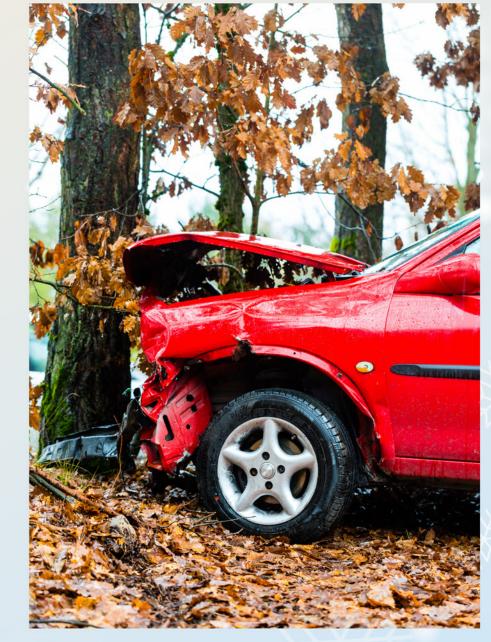


Photo courtesy of Shutterstock

NOTE: Within the Navy's Risk Management Information (RMI) safety reporting system, any recreational, off-road vehicle (ATV, golf cart, motorized dirt bike, etc.), mishap occurring on a public road or crossing is considered a PMV mishap.

- Three- and four-wheeled recreational vehicles are listed as PMV-4.
- Two-wheeled recreational vehicles such as dirt bikes are listed as PMV-2.
- If the event occurs off-road, on a track or at a park, it is reported as a Ground mishap under the Sports, Recreation and Individual Fitness category in RMI.

ROAD SAFETY - DAYLIGHT SAVING TIME IMPACTS

How the Time Shift Impacts Driving

When Daylight Saving Time ends on Nov. 3, 2024, at 2 a.m., many people will suddenly find themselves commuting in the dark.

- Shorter days, fatigue, compromised night vision, rush hour and impaired drivers are some of the risks we face when driving at night.
- Depth perception, color recognition and peripheral vision can be compromised in the dark, and the glare of headlights from an oncoming vehicle can temporarily blind a driver.
- Night driving is dangerous because, even with high-beam headlights on, visibility
 is limited to about 500 feet (250 feet for normal headlights) creating less time to
 react to something in the road, especially when driving at higher speeds.
- Evening rush hour (between 4 and 7 p.m., weekdays) is a dangerous time to drive due to crowded roadways and drivers eager to get home after work. In winter, it's dark during rush hour, compounding an already dangerous driving situation.
- While we do only one quarter of our driving at night, 50% of traffic deaths occur during the night.

Drive Safely When It Gets Darker

- Aim your headlights correctly, and make sure they're clean
- Dim your dashboard
- Look away from oncoming lights
- If you wear glasses, make sure they're anti-reflective
- Clean the windshield to eliminate streaks
- Slow down to compensate for limited visibility and reduced stopping time

- National Safety Council



Driving Fatigue

The National Highway Traffic Safety Administration (NHTSA) estimates that 100,000 police-reported crashes are caused by driver fatigue with most incidents occurring between midnight and 6 a.m. and 2-4 p.m.

- Fatigue, combined with the overnight shift to evening driving on low-light conditions, can lead to 'drowsy driving' and compromised night vision, increasing the risk of crashes.
- Drowsy driving puts everyone on the road at risk. Losing two hours
 of sleep has the same effect on driving as having three beers, and
 tired drivers are three times more likely to be in a car crash if they
 are fatigued.

The National Sleep Foundation offers this advice:

- Get seven or more hours of sleep a night
- Don't drive if you've been awake for 16 hours or more
- Stop every two hours to rest
- Pull over to a safe location such as a rest stop and take a nap if you're drowsy
- Travel during times you are normally awake

During the FY 22-24 fall and winter seasons, there were at least eight car and motorcycle crash incidents resulting in serious injuries to Sailors and Marines where it was determined that falling asleep at the wheel and fatigue were contributing factors.

Did you know?

37% of respondents, or 103 million people, admitted to falling asleep at the wheel

13% admitted to falling asleep while driving at least once a month

4% admitted to causing a crash by falling asleep while driving

ROAD SAFETY - HOLIDAY TRAVEL

SPEEDING

Speeding was a factor in 29% of all traffic fatalities in 2022, killing 12,151 people. (NHTSA)

Excessive speed:

- Reduces the amount of time the driver has to react in a dangerous situation to avoid a crash
- Increases vehicle stopping distance, and
- Reduces the ability of road safety structures
 (such as guardrails, median dividers, and
 concrete barriers) to protect vehicle
 occupants in a crash.
- A crash is considered speeding-related if the driver was charged with a speeding-related offense or if racing, driving too fast for conditions, or exceeding the posted speed limit was indicated as a contributing factor in the crash.

IMPAIRED DRIVING

More than 830 people died in crashes involving a drunk driver over the 2017 - 2021 Thanksgiving holiday weekends, and 137 drivers involved in fatal crashes on Thanksgiving Eve were drunk.

- Nearly 30 people die every day in crashes involving an alcohol-impaired driver. Drivers impaired by prescription medicines and other drugs increase that number significantly. (CDC)
- Impaired drivers are most frequently on the road after dark – particularly between the hours of midnight and 3 a.m. on weekends. (CDC)
- Tetrahydrocannabinol (THC) the chemical responsible for most of marijuana's psychoactive effects — can impact how a person drives. THC slows reaction time, impairs cognitive performance, and makes it more difficult for drivers to stay in their lane. (NHTSA)

DISTRACTED DRIVING

Distracted driving claimed 3,308 lives in 2022. (NHTSA)

- Distracted driving includes talking or texting on your phone, eating and drinking, talking to people in your vehicle, or fiddling with the entertainment or navigation system.
- Texting: Sending or reading a text takes your eyes off the road for 5 seconds. At 55 mph, that's like driving the length of an entire football field with your eyes closed.
- Any non-driving activity you engage in is a potential distraction and increases your risk of crashing.

SEATBELTS

Of the 361 people killed in vehicle crashes over the 2021 Thanksgiving weekend, 52% of those killed at night were not wearing their seatbelt and 46% of those killed during the day were not wearing their seatbelt.

ROAD SAFETY - HOLIDAY TRAVEL



Photo courtesy of National Highway Traffic Safety Administration

The Traffic Safety Program, OPNAV M-5100.23 Navy Safety and Occupational Health Manual, CH-3 (B36-1), outlines all policies and requirements for on-and off-duty driving for Navy personnel to include maximum daily driving times, mandatory safety belt use and trip risk management assessments.

When preparing to hit the road for an extended drive, consider the following recommendations:

Plan Ahead: <u>Travel Risk Planning System (TRiPS)</u>* is an on-line, automated risk assessment tool for use prior to going on leave or liberty requiring driving out of the area.

- Prepare your car for winter and keep an emergency kit with you
- Leave early and plan ahead for heavy traffic
- Make sure everyone in the vehicle is buckled up properly no matter how long or short the trip may be
- Put away your cell phone and avoid other distractions while driving
- Drugs and alcohol never mix with driving; If you are planning to drink, designate a sober driver

Practice defensive driving

- Slow down and increase distances between cars.
- Keep your eyes open for pedestrians walking in the road.
- Avoid fatigue Get plenty of rest before the trip, stop at least every three hours, and rotate drivers if possible.

 *https://trips.army.safety.mil

PEDESTRIAN SAFETY

Between Oct.1 and March 1 over fiscal years 2022 - 2024, three Sailors and Marines were killed in pedestrian-related incidents, and another 17 were injured and sustained injuries ranging from concussions and skull fractures to spine and leg fractures requiring surgery and hospitalization.



2022 National Safety Council Statistics - Pedestrian Fatalities

In 2022 alone, one pedestrian was killed every 70 minutes and injured every eight minutes in traffic crashes.

- 78% of pedestrian fatalities occurred in the dark
- 19% occurred in the daylight
- 2% occurred after dusk
- 2% occurred at dawn

The National Safety Council Recommendations:

For Drivers

- Use extra caution when driving in hard-to-see conditions, such as nighttime or bad weather
- Never pass vehicles stopped at a crosswalk. There may be people crossing that you can't see

As a Pedestrian

- Follow the rules of the road and obey signs and signals
- Walk on sidewalks, whenever they are available
- Cross in a well-lit location that has the best view of traffic if a crosswalk or intersection is not available.





Winter Driving Preparedness

Winter weather can make driving conditions more hazardous. Whether it is snow, sleet or ice, it is harder to control or stop your vehicle on surfaces covered with these elements.

Things to have on hand if you are driving in wintry weather:

- A snow shovel, broom and ice scraper
- Kitty litter to help free your vehicle if you get stuck
- Jumper cables, flashlight, warning devices such as a flare
- Blankets for protection against the cold
- Cell phone and cell phone charger, food and necessary medicine
- Full tank of gas



Winter Driving Preparedness

The NHTSA recommends that drivers:

- Stay clear of snow plows
- Stay with your car if you are stopped and stalled in wintry weather
- Be mindful of the risk of carbon monoxide poisoning; clear your exhaust pipe of any snow and run your car only sporadically if stranded
- Check tires monthly and before long road trips
- DO NOT BUCKLE CHILDREN INTO CAR SEATS WHILE THEY
 ARE WEARING WINTER COATS
- Have a mechanic check car batteries, charging systems, belts and other equipment regularly
- Familiarize yourself with technologies included in your vehicle and how they perform in wintry conditions such as anti-lock brakes

Part II - FALL AND WINTER RECREATIONAL AND OFF-DUTY

The fall and winter season can bring about plenty of fun activities. However, year after year, Sailors and Marines continue to injure themselves while participating in off-duty activities.





SLIPS, TRIPS AND FALLS: Holiday Decoration Edition

Risky projects like cleaning your roofs, gutters and hanging seasonal decorations can be especially risky and are best left to the professionals.

Two service members suffered injuries resulting from a fall while hanging holiday lights between 2022 and 2024.

- If working outside, check the weather forecast; never work in inclement weather
- Ensure stepladders have a locking device to hold the front and back open
- Always keep two hands and one foot, or two feet and one hand on the ladder
- Wear slip-resistant shoes and don't stand higher than the third rung from the top
- Keep your work area clear of hazards and immediately clean up spills
- Don't wear loose clothing that can get caught in equipment

SLIPS, TRIPS AND FALLS:

Cold Weather Movement

During the fall and winter season, it is important to be mindful of where you are walking. Freezing temperatures can cause common outdoor surfaces to become very slippery.

Over the 2022 through 2024 fall and winter seasons, as many as seven Sailors and Marines either slipped, tripped or fell while walking on wintry surfaces such as ice and suffered from severe injuries such as skull fractures and concussions resulting in hospital visits and surgery.

Below are some safety tips to keep you upright on your feet:

- Don't overload yourself when carrying heavy items such as gifts, especially on slippery surfaces
- Avoid running cords and wires across common walking areas
- Keep outdoor steps and stairs clear; make multiple trips versus carrying so much that you can't see where you are going



-The National Safety Council

COLD WEATHER PRECAUTIONS

Take care in ensuring that you avoid extremely cold temperatures as much as possible. If they can't be avoided, follow these recommendations to protect from cold stress and illness like hypothermia:

- Wear appropriate clothing
- Wear several layers of loose clothing. Layering provides better insulation
- Tight clothing reduces blood circulation. Warm blood needs to be circulated to the extremities
- When choosing clothing, be aware that some clothing may restrict movement resulting in a hazardous situation
- Make sure to protect the ears, face, hands and feet in extremely cold weather
- Boots should be waterproof and insulated
- Wear a hat; it will keep your whole body warmer. (Hats reduce the amount of body heat that escapes from your head.)
- Carry cold weather gear, such as extra socks, gloves, hats, jacket, blankets, a change of clothes and a thermos of hot liquid



SAFE SNOW REMOVAL

According to the CDC, cold weather can increase heart rate and blood pressure. It can make blood clot more easily and constrict arteries, which decreases blood supply. This is true even in healthy people. It's always a good idea to make sure you are cleared by a medical professional before engaging in any strenuous activity to rule out any underlying medical conditions.

Additional CDC recommendations include:

- Take it slow and stretch out before you begin
- Shovel only fresh, powdery snow; it's lighter
- Push the snow rather than lifting it
- Know the signs of a heart attack, stop immediately and call 911 if you're experiencing any of them, every minute counts
- Pushing a heavy snow blower can also cause injury







RECREATIONAL OFF-DUTY: Fall & Winter Sports and Activities

Football/Flag Football and Rugby

Roughly <u>30 Sailors and Marines</u> suffered concussions, fractures and torn ligaments. One of the most common injuries included ruptured Achilles tendons.

Snow Skiing and Snowboarding

Over the last three years, roughly <u>59 Sailors and Marines</u> were inured while snow skiing and snowboarding. The most common injuries included concussions, broken/fractured clavicles, arms and legs.

Hiking

<u>Five service members</u> sustained serious injuries to include lung contusions, spine and rib fractures from falls while hiking.

In 2022, a service member suffered cold exposure and moderate frostbite after getting lost for nearly 10 hours in deepening snow.



Off-Road and Recreational Vehicles – All-Terrain Vehicle (ATV), Dirt Bike, Dune Buggy, Golf Cart and Go-Kart

More than <u>20 Sailors and Marines</u> were injured in ATV, Dirt Bike and similar off-road, recreational vehicle-related activities or crashes over the past three fall and winter seasons.

RECREATIONAL OFF-DUTY Safety Tips

Whether you are learning to snowboard for the first time or a pro at flag football, keep the following safety tips in mind:

- Get in shape for the season and the sport! For example, don't wait until the week or the day before a ski trip to get in shape! A regular exercise routine will help reduce fatigue and injury
- If participating in a high-risk sport such as snowboarding or driving an ATV, don't skip proper instruction, especially if you are a beginner
- Be aware of your environment and the weather
- Wear appropriate gear and protection related to the sport
- Even with the cooler weather, it is essential to remain hydrated



- Skip the overconfidence and participate according to your skill and fitness level
- Do not participate in ANY sport alone; always have a buddy standing by in the event of injuries





HOME HEATING FIRES: BY THE NUMBERS

2,270 deaths

10,200 injuries

374,000 fires

10 Trillion
dollars in damage

The numbers to the left reflect the national estimates in 2022 for residential building fires and losses.

Although trending downward since the 1980s, heating fires remained the second leading cause of home fires in 2021.

In 2021, an estimated 32,200 home heating fires were reported to fire departments in the United States. These fires caused an estimated 190 deaths, 625 injuries and \$44.2 million in property loss.

Did you know?

Home portable heater fires were only 3% of all home heating fires annually for 2017-2019, but they accounted for 41% of fatal heating fires in homes.

HOLIDAY COOKING FIRES: BY THE NUMBERS

100 deaths

2,350injuries

178,600 fires

522.5 Billion

dollars in damage

The numbers on the left represent holiday cooking fires in 2022. Cooking is the leading cause of home fires and home fire injuries.

Most "fire-related injuries" are burns. In fact, approximately every 60 seconds someone in the U.S. sustains a burn injury serious enough to require treatment.

A service member was cooking dinner for Christmas Eve using a pressure cooker. After the meal completed, they went to release the pressure of the appliance. The service member was burned with steam and hot water on their stomach due to the pressure not being completely released from the pressure cooker before removing the cover.

Did you know?

In 2023 alone, seven service members suffered from burns while cooking or grilling at home during the fall and winter seasons.

FIRE PREVENTION TIPS

Don't allow a fire to steal the joy away from the holiday season with these tips:



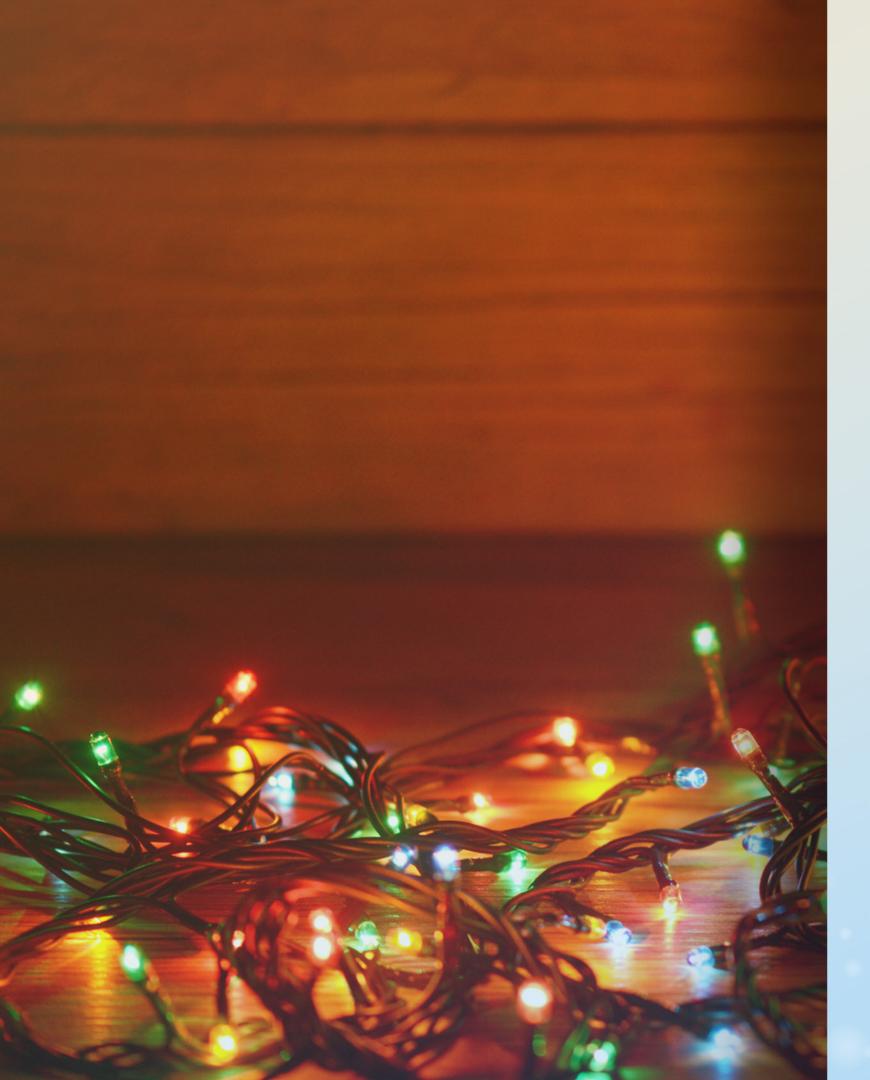
Home Heating Fire Prevention Tips

- Keep anything that can burn at least 3 feet from all heat sources including fireplaces, wood stoves, radiators, space heaters or candles.
- Never use an oven to heat your home.
- Turn space heaters off when leaving the room or going to bed.
- Maintain heating equipment and chimneys by having them cleaned and inspected each year by a professional.

Cooking Fire Prevention Tips

- Keep a fire extinguisher on hand
- Keep flammable items away from the stove
- Check your food regularly, remain in the kitchen, and use a timer

-The National Fire Protection Agency



HOLIDAY DECORATING SAFETY

Decorating for the holidays is a sure-fire way to get yourself in the mood to enjoy the holidays. Unfortunately, around this time of year, emergency rooms are full of people who injure themselves while decorating. Follow these tips to avoid injuring yourself while decorating for the holidays:

- Replace light sets that have broken or cracked sockets, frayed or bare wires, or loose connections
- Follow the package directions on the number of light sets that can be plugged into one socket
- If using an artificial tree, check that it is labeled "fire resistant"
- Place your holiday decor at least 3 feet away from fireplaces, radiators and other heat sources, making certain not to block doorways
- Turn off all lights and decorations when you go to bed or leave the house
- Don't wear loose clothing that can get caught in equipment

SMOKE AND CARBON MONOXIDE DETECTORS

During the holidays, around three out of five fire deaths happen in homes without working a working smoke detector. A key part of a home fire escape plan starts with a working smoke detector.

- Working smoke and carbon monoxide alarms give early warning of danger and are the most important ways to prevent fatal fires and CO poisoning.
- Carbon monoxide detectors detect increasing levels of carbon monoxide in a building or home. Carbon monoxide is the leading cause of poisoning deaths in the U.S.

National Fire Protection Association Recommendations:

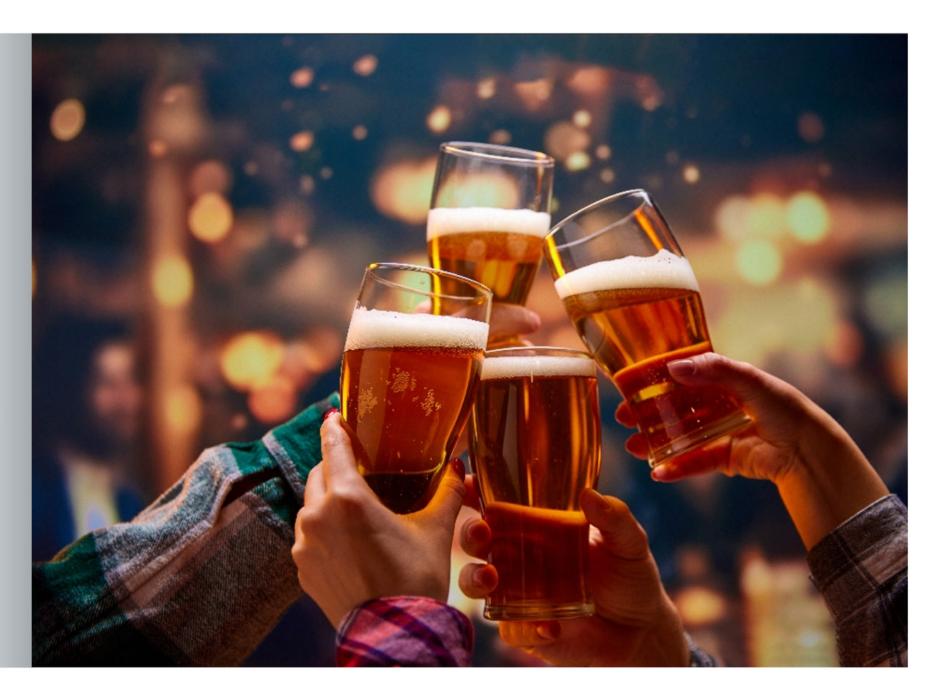
- Install smoke alarms on every level of your home, inside bedrooms and outside sleeping areas on the ceiling or high on the wall
- Test smoke alarms monthly
- · Replace smoke alarms that are 10 or more years old
- Use special alarms with strobe lights and bed shakers for people who are hard of hearing or deaf



DRINK RESPONSIBLY

As many of us look forward to holiday celebrations, it is also a time in the year to remember when people are more likely to drink beyond their limit.

- November 2021: A service member was riding a motorcycle at dusk while under the influence and crashed the motorcycle. The service member suffered from a brain injury, coma and eventually died resulting from their injuries.
- February 2023: Service member was drinking and found unconscious. Service member placed on respirator and was later determined to be suffering the effects of alcohol poisoning.



DRINK RESPONSIBLY

To enjoy a safe holiday celebration, consider these tips and drink in moderation:

If you choose to drink:

- Pace yourself. Avoid binge-drinking and spread out the consumption of your drinks. Try to only consume one drink per hour
- Use non-alcoholic drink spacers. Consider drinking water between each alcoholic beverage to ensure that you do not overindulge
- Have a taxi or other ride-share information available as part of your plan to ensure that you do not get behind the wheel after drinking

In 2021, a service member was drinking at home and wandered into their neighbor's house uninvited. The service member was attacked and left with broken ribs, a broken nose and two days SIQ.



AND LASTLY...

While those of us at NAVSAFECOM encourage you to incorporate safety into your dance routine as you spread good holiday cheer, please keep these poor souls in mind as you celebrate the season:

 In 2021, a service member was dancing and attempted to lift up another person. Actions resulted in broken fibula (lower leg), and SIQ for approximately four days



CONTACT US:



- www.navalsafetycommand.navy.mil
- (757)444-3520 x.7050
- NAVSAFECOM_PAO@us.navy.mil

The Naval Safety Command is requesting leaders, managers and supervisors across the naval enterprise take time over the next few months to routinely discuss seasonal activities, their associated risks and ways they can minimize risk in everything they do throughout the FY25 fall and winter seasons.

Fall and winter safety media products to help raise awareness on the risks for common fall and winter season will be released weekly on our social media channels and via our public website at https://www.navalsafetycommand.navy.mil

Check back often and let us know how we can help!

