



**U.S. Army**

Installation Management Command

SAFE  
FOR  
WORK

**Safety Brochure**

Spring/Summer Season



**Live**



**Work**



**Train**



**Play**



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## RISK MANAGEMENT PHILOSOPHY

Excerpt from the U.S. Army Combat Readiness Center Website: <https://www.crc.army.mil>

The purpose of the Army has not changed in the past 220-plus years: To fight and win our nation's wars! We train our force to defeat the enemy quickly and decisively with a minimum of losses. Yet a study from our past major conflicts reveals that we have two enemies on the battlefield: them and us. In every modern conflict except Korea, more than 54 percent of the Army's casualties resulted from accidents.

Yesterday's command acceptance of accidents as simply "the cost of doing business" has been replaced by a command climate focused on continuous improvements in safety performance.

Over the past 15 years, the Army safety picture has steadily improved. Since the end of the Cold War in 1989, the Army has had more deployments than in the previous 40 years. This is more than a 13-fold increase in our deployment rate. Yet the Army Safety Program has made significant progress in keeping accidental losses to a minimum.

The Army's safety performance is something we can all be proud of. It is paying huge dividends in preserving the Army's warfighting capability. We have truly reached another milestone in our journey toward world-class performance. But we must not lose sight of one thing: any accidental loss of life is unacceptable.

World-class performance in safety is not losing our nation's most precious resources—its sons and daughters—to an unplanned behavior or condition called an accident. World-class performance is achieved through a combination of proactive leadership, tasks performed to standard, teamwork, effective communications and this process of identifying hazards and implementing controls called risk management.

By firmly fixing risk management into all of the Army's processes—decision making, training management, force protection, personnel assignments, maintenance, et al—we can stop killing soldiers and destroying equipment. It can be done, and we're going to do it. We just need to get on with it. We must get risk management standardized and institutionalized. Simply put, that means that we've got to get into the head space of every leader, every soldier, every civilian, every contractor and make risk management an intuitive part of everything we do.

Safety is not just leaders' business—everyone makes safety happen! We're moving out with efforts to standardize and institutionalize risk management—the key to future safety successes along our journey toward world-class safety performance. **Join the march today!**

Don't let a lack of safety have an adverse effect on you, your family, or your unit!

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## POISON SAFETY CHECKLIST

Each year there are over 14,000 deaths by unintentional poisoning according to recent Centers for Disease Control data. **Half a million children will ingest poisonous household products and medicine this year**, according to the American Association of Poison Control Center's estimates. Protect a child; prevent a tragedy. Adhere to the following safety precautions.

### Medication

#### Be responsible with your medicine.

- Keep medicine out of reach of children. Follow instructions on labels exactly. Heed the cautions, and consider the side effects. Make note of the antidote in case of accidental ingestion. Discard medicine once the illness is over or when the expiration date has lapsed. Buy medicine in child resistant containers.
- Most accidental ingestion of medicine happens with medicine that is not in a child resistant container. Always keep medicine in its original container.

### Household Products

#### Use poisonous household products safely.

- Read product labels carefully. Abide by instructions; be aware of cautions.
- Buy products in child resistant containers.
- Don't stockpile poisonous products. Buy them only for a specific purpose in the quantities required.
- Inspect condition of containers—to include labels. If appropriate, discard product when project is completed. Store poisonous household products safely.
- Place locks on storage sheds, closets, and cabinets. Immediately return products to safe storage after use.
- Keep products in their original containers. Never transfer them to secondary containers like soft drink bottles.

### Safety Procedures

#### Be prepared.

- Post the phone numbers of the local poison control center, your doctor, and any other emergency care providers near your phone.
- Keep a bottle of ipecac syrup, which induces vomiting. Don't administer ipecac syrup without consulting a medical authority first.

## HOUSEHOLD SAFETY

**Know what to do.**

- **Inhaled poison:** Place person in fresh air; avoid breathing fumes, loosen clothing, and open doors and windows. If unconscious, check breathing; begin artificial respiration, if required.
- **In eye:** Remove contact lenses (if worn), flood with lukewarm water from a glass held two to three inches away from eye for 15 minutes. Blink during flooding. Don't rub eye or force it open.
- **Swallowed:** Immediately consult medical authority, telling them product and amount ingested, how long ago it was ingested, and the condition of victim. Be prepared to give milk, water, or ipecac syrup as directed.

**Medicine Cabinet Clutter**

Most medicine cabinets are a haphazard accumulation of half-used and outdated medications that can actually be more dangerous than helpful. If your medicine cabinet fits this description, it's time to do something about it.

Almost all medicines deteriorate with age, particularly when exposed to heat, air, moisture, and light. Ideally, you should discard the "deadwood" from your medicine cabinet once a month. Start your clean up by disposing of the following.

- Any medicine that has changed color, formed a residue at the bottom of the bottle, or is more than 2 years old.
- Aspirins that are crumbly or that give off a vinegary odor.
- Hydrogen peroxide that no longer bubbles vigorously when applied.
- Antiseptic solutions that have become cloudy (unless the label says this is all right) or have a solid residue at the bottom.
- Milk of magnesia that has become caked.
- Ointments (or salves) that have separated, developed spots, or become discolored.
- Nose drops that have become cloudy or have developed a sediment.
- Eye wash or eye drops left over from treating any eye disorder. Fungus growth may develop in these.

**Chemicals do more harm to the eyes than to any other part of the body, be sure to wear eye protection as well as other required protective equipment when handling or working around chemicals.**

**HOME APPLIANCE SAFETY****General Safety Rules for Appliances**

- Never operate an electric appliance while touching a metal object (especially plumbing), standing on a wet surface, or taking a bath or shower. If an appliance falls into water, teach your children not to reach for it.
- Always unplug appliances before cleaning, or repairing, and when not in use.
- Keep cords away from water and heat.
- If you need to use an extension cord, choose the right type. Use a 3-wire cord with a 3-prong plug for appliances that require grounding.
- Don't plug too many appliances into one circuit.
- All appliances should be approved by a recognized testing laboratory such as Underwriters Laboratories (UL).





## CHAIN SAW SAFETY

Gasoline and electric chain saws are used to cut firewood, clear land, and trim trees. Chain saws are powerful and efficient tools. They can also be very dangerous, and therefore must be used with great care. There were more than 32,000 chain saw injuries in the U.S. in 2004, according to the Consumer Product Safety Commission (CPSC). Injuries to the legs and knees accounted for about 36% of these injuries. The average chainsaw injury required 110 stitches. “Kickback” is the most serious chain saw hazard. Kickback occurs when the saw touches an object besides what the operator is cutting, such as a branch or twig. Unexpected contact like this can throw the chain saw violently back toward the operator.

### Safety Precautions

- Wear protective clothing, such as a hard hat, safety goggles, hearing protection, close-fitting clothes, leather or kevlar® gloves, and safety shoes.
- Don't work alone.
- Always hold the saw with both hands while cutting.
- Start the saw on clear ground. Don't start the saw while resting it on your leg or knee.
- Let the saw do the work; don't try to force the saw through the cut.
- Avoid kickback. Keep work area clear of branches.
- Never allow someone else to hold the wood as you cut it.
- Fatigue can lead to accidents. Rest often.

**TORNADO SAFETY TIPS**

Each year about a thousand tornadoes touch down in the U.S. Only a small percentage actually strike occupied buildings, but every year a number of people are killed or injured as a result of tornadoes. The chances that a tornado will strike a building that you are in are very small; however, you can greatly reduce the chance of injury by doing a few simple things.

**What Saves Lives**

- When a tornado threatens, take immediate action. Do not delay.
- Stay away from windows, doors, and outside walls. Do not open them.
- In homes and small buildings, go to an interior part of the lowest level—closets, bathrooms, or interior halls. Put as many walls between you and the outside as possible.
- In schools, nursing homes, hospitals, factories, and businesses, go to the pre-designated shelter areas. Interior hallways on the lowest floor are usually best.
- In high-rise buildings, go to an interior small room or hallway.
- Leave areas with high, open-roof enclosures such as auditoriums, gymnasiums, and aviation hangers.
- Leave mobile homes or vehicles, and go to a substantial shelter. If there is no shelter nearby, lie flat in the nearest ditch, ravine, or culvert with your hands shielding your head.

**Conclusion**

***You cannot do anything about the weather, but you can protect yourself and your family from weather-related disasters by being prepared and protected.***





## **LAWN MOWERS**

According to government estimates, injuries resulting from lawnmowers range from 62,000 to 70,000 each year. The Consumer Product Safety Commission (CPSC) predicts that some 10,000 persons will lose fingers or toes while mowing lawns this summer. Follow these tips for safe lawnmower operation.

### **Know Your Mower**

- Read and follow the instruction manual.
- Know how to stop the machine quickly in an emergency.
- Inspect the mower for potential hazards, loose bolts, missing guards, etc.
- Disengage drive and clutch before you start the engine.

### **Fill The Tank Safely**

- Fill the mower outdoors, so vapors won't build up. Never smoke while filling the tank.
- Before refueling, disconnect the spark plug, let the engine cool for a few minutes. Gas spilled on hot engine parts can cause a flash fire.

### **Dress for Safety**

Wear heavy-duty shoes with non-slip soles. Never mow in bare feet or sandals.

### **Clear The Area**

Pick-up sticks, stones, toys, and debris that could be ejected from the mower and cause injury.



## GARDEN SPRAYS SAFETY CHECKLIST

Any chemical pesticide or herbicide available to the home gardener can be used safely without harm to the applicator, family members, pets, or the environment. Simply be aware and knowledgeable about what you are doing, use proper personal protective clothing and equipment, have respect for the chemicals and their effects, and use a little common sense. By following these basic guidelines, you can enjoy healthy lawns and plants without the risk of injury or illness.

### Read and Follow Label Instructions

Pesticide labels contain “signal words” that indicate one of three levels of toxicity. The three levels of toxicity are:

- **CAUTION:** The least toxic chemical pesticides.
- **WARNING:** Mid-level toxicity pesticides.
- **DANGER-POISON:** The most toxic category of pesticides. Only available for purchase and application by a licensed applicator.

**Always use the LEAST TOXIC pesticide available to treat your particular need.**

### Wear Protective Clothing

- Head covering (cap or wide-brim hat).
- Eye protection (when mixing liquid pesticides that carry **WARNING** or **DANGER** signal words).
- Rubber gloves (never use fabric, leather, or paper gloves).
- Long-sleeved shirt.
- Long pants or coveralls.
- Shoes and socks (not sandals or thongs).

### Handling Garden Spray

- Always follow directions when mixing chemicals.
- When filling a spray container, use a funnel to avoid spilling.
- Never hold the container higher than chest level when pouring.
- Divert your head from the container when opening.
- Don't spray on windy days.
- Always wash your hands and face with soap and water before eating, drinking, or smoking.



### **First Aid**

- Check label for symptoms of overexposure and first aid procedures.
- If the chemical contacts your skin, immediately wash with soap and water.
- If the chemical is swallowed and the victim is still conscious, induce vomiting. Keep patient calm. Consult a physician immediately.
- Take the label to the physician.

### **Storage**

- Don't leave any chemicals in spray equipment at the end of the work day.
- Always store garden spray in its original container with the label clearly visible. Never store pesticides in soft drink bottles or food containers, which can be mistaken for food or drink.
- Store pesticides in a dry, secure place out of reach of children and pets.



## **BARBECUE GRILL SAFETY**

Outdoor cooking is very popular. In fact, 66 million Americans cook outdoors regularly, according to the Barbecue Industry Association. You're probably one of those 66 million. Hopefully you will not be one of the people treated in emergency rooms for injuries related to charcoal, propane, and wood-burning grills this summer. As an outdoor cook, you need to avoid injuries by observing some safety precautions.

### **Before Cooking**

- Instruct children on the dangers of a lit grill.
- Choose a safe grilling location away from children's play areas and areas of heavy traffic. The area should be well-ventilated to avoid the danger from carbon monoxide and other combustion byproducts. Never grill inside or even in a semi-enclosed area such as a tent or camper. Always grill on a flat, stable platform.
- Make sure you're not wearing clothing that could contact the fire, such as hanging shirt-tails or dangling strings.
- Never leave a grill unattended.

### **Cooking With Propane (LP) Gas Grills**

- Read owner's manual and operating instructions carefully.
- Use the exact type of tank and fuel specified.
- Check hoses and valve connections often. Do this by pouring soapy water on the connection points. If bubbles appear retighten connections and test again.
- Transfer and store liquid propane cylinders in an upright position and never where temperatures can reach 125° degrees.
- Whether your grill lights by match or push button igniter, always follow the manufacturer's instructions.

### **Cooking With Charcoal Grills**

- Never start a fire with gasoline.
- If using an electric fire starter, use an insulated indoor/outdoor cord plugged into a ground fault circuit interrupter (GFCI) protected outlet.
- Be sure the ground is dry and you're not standing in water when plugging the starter into an outlet.
- The starter will stay hot for several minutes after use, so place it out of reach of children and on a surface that will not burn.

- **If using instant lighting briquettes:** Spread them into a single layer, making sure they touch at the edges. Light several of them at their edges with a match.
- **If using standard charcoal briquettes:** Stack them in a pyramid to allow air to circulate around them, causing them to light faster. Apply lighter fluid before lighting; wait at least 1 minute before lighting to allow lighter fluid to soak in. Never add fluid to the coals once they've been lit.
- **To control temperature:** The coals are ready for cooking when they are grey in the daylight or glowing red at night. Spread them into a single layer with long-handled tongs.
- **To reduce the temperature:** Raise the cooking grid, spread out the coals, lower the lid, and close the vents halfway.
- **To increase the temperature:** Lower the cooking grid, tap the ashes from the coals, push the coals closer together, place additional coals around the lit ones, and fully open the vents on the grill lid.



## Flare-Ups

Fat from your meat will drip onto the fire. The fire ignites the fat, causing flare-ups. The following tips can help prevent flare-ups.

- Grill low-fat meat.
- Trim excess fat from your meat.
- Place a drip pan beneath the meat to catch fat before it hits the coals.
- Don't place meat directly over heat source.
- Keep cover closed and adjust vents as necessary.

## **HEAT INJURY PREVENTION**

### **Heat Stress**

Heat stress is the buildup in the body of heat generated by the muscles during work and of heat coming from warm and hot environments. When the body becomes overheated, less blood goes to the active muscles, the brain, and other internal organs. Persons experiencing heat stress may get weaker, become tired sooner, and may be less alert, less able to use good judgment, and less able to function.

As strain from the heat becomes more severe, there can be a rapid rise in body temperature and heart rate. Heat exhaustion and heat stroke result when the body is subjected to more heat than it can cope with.

### **Heat Exhaustion Symptoms**

- Slightly higher than normal body temperature, caused by excessive loss of water from the body.
- Pale, moist, and clammy skin.
- Excessive sweating.
- Headaches, perhaps cramps.
- Tiredness and dizziness (possible vomiting).
- Fainting may occur (victim will probably regain consciousness if head is lowered).

### **First Aid for Heat Exhaustion**

- Move victim to shade; elevate feet.
- Loosen victims clothing.
- If victim is conscious, give him cool water to drink.
- Apply cool, wet cloths.
- If victim vomits, do not give any more fluids.
- Transport victim to nearest medical facility as soon as possible.

### **Heat Stroke Symptoms**

- Heat stroke is a life threatening medical emergency.
- High body temperature (106° or higher).
- Skin is flushed, feels hot and dry, due to stoppage of sweating.
- Rapid strong pulse.
- Collapse, unconsciousness, and death may occur if not treated immediately.





### First Aid for Heat Stroke

- Remove bulky clothing from victim.
- Sponge skin with cool water or rubbing alcohol or place victim in cold water until body temperature is lowered.
- Aggressive and quick cooling is critical. Apply ice and cold water to underarms and groin.
- Transport victim to nearest medical facility immediately.

### SUN SAFETY

The sun can be one of the biggest threats to outdoor recreation enjoyment. Too much sun can give you painful sunburn, cause heat exhaustion, or lead to heat stroke. Sunburn may also cause long-term skin damage—even skin cancer. You can reduce the risks of too much sun by following these simple guidelines.

- Build up your exposure gradually.
- Use a sunscreen product.
  - Higher Skin Protection Factor (SPF) ratings provide better protection.
  - Reapply sunscreen after swimming.
- Plan activities to avoid the sun when it's the strongest—from 10 a.m. to 3 p.m.
- Wear a hat and clothing that cover as much of your body as possible.

### Remember

***Sun intensifies when it reflects off sand, water, and concrete.***

***You can get burned even when it's overcast or foggy.*** If you do get sunburned, rinse or soak in cool water or use cold compresses. If you have a mild sunburn with no blisters use a gentle, non-medicated cream. See a doctor for severe, painful sunburn.





### BASEBALL/SOFTBALL

The number of people who play baseball and softball each year is staggering—some estimates exceed 100 million people. Participation ranges from unplanned pick-up games, through church outings and company picnics to semi-pro leagues. Individual physical condition of ballplayers range from totally out-of-condition to physical masterpieces.

Unfortunately, the number of people injured while playing baseball or softball is also staggering—over half a million ballplayers are injured each year. While most will only be inconvenienced for a few days, many will suffer some degree of permanent injury.

What are the leading types of baseball and softball injuries? Hospital records show that strains and sprains, contusions, and fractures lead the way. Most strains and sprains result from ballplayers running the bases. Most contusions happen when players run into each other or are hit by the ball, while the majority of fractures occur when players try to slide into a base or are hit by a pitched ball.

How can injuries be kept to a minimum? The best way is by players knowing and understanding their own physical and skill limits. Most strains and sprains can be prevented by maintaining a good conditioning level and by carefully warming up before playing. Playing by the rules and within one's limits will help prevent contusions and fractures.

### Safety Rules for Baseball and Softball

- Check the playing field for holes, broken glass, rocks, or other dangerous objects.
- Be careful swinging the bat; make sure no one is too close.
- After you hit the ball, don't throw or sling the bat; drop it as you run to base.
- Throw the ball to—not at—other players.
- Wear proper shoes (no metal spikes) and a batting helmet when at bat.
- If you play catcher, wear a face mask, protective cup (if you're a male), chest protector, and shin guards.
- Avoid running over another player to knock the ball loose.
- Call for fly balls so you don't run into another player.
- Be careful chasing the ball, if it goes into the street, look both ways to make sure there are no cars coming before you go after the ball.
- If there is lightning in the area, stop playing and seek shelter other than a tree.

## TENNIS

Millions of people will work out this year playing tennis. Approximately 83,000 of them will leave the court injured. Steps to avoid serious injuries begin with a set routine: limber up, stretch out, warm up, play, cool down, and stretch again.



### Proper Equipment Tips

**Racquet:** The racquet selected should have a grip that fits the player's hand. An oversize racquet head makes it easier for beginners to contact the ball; intermediate and advanced players usually prefer a midsize. The key to selecting a good racquet is shock absorption. Recommended racquet types are ones made of vibration-dampening material (fiberglass- graphite and fiberglass-boron composites are best).

**Shoes:** Tennis is a game of quick sprints and rapid turns. Shoes must provide lateral stability. To prevent ankle strain and sprains, the sole must transfer the shear force of twisting away from the ankle. If there is too much sole traction, the foot will pivot, passing the active force on to the ankle. Athletic shoes designed specifically for tennis will help to prevent these injuries.

**Clothing:** Clothing should reflect the sun's rays, allow freedom of movement and permit heat and sweat to escape. You should also protect your eyes from court glare.

## SOCCER

A soccer game is characterized by speed, grace, and skill. Players sprint, kick, and leap. Unfortunately, some players also get hurt. In fact, many thousands of Americans are treated in emergency rooms every year for injuries related to soccer.

Consider the following equipment to help keep your game safe.

### Equipment

**Shirt:** In hot weather, shirts should have short sleeves. They should be light-colored to reflect heat and loose to allow ventilation.

**Pads:** Players should wear shin pads. They don't interfere with movement or ball control. Goalkeepers should wear knee and elbow pads.



## Soccer Injury Breakdown

**Abrasions:** Caused by sliding. Wash with soap and water; expose to air. If infection starts, treat with an antiseptic.

**Lacerations:** Caused by skin being broken by contact with a head, elbow, or shoe. Seek medical attention to suture wound.

**Bruises:** Caused by collisions, kicks, elbows. Apply ice and rest.

**Stitches:** A sharp pain in the side of stomach during exertion. Breathe as deeply as possible until symptoms subside.

**Cramps:** Involuntary contraction in muscle caused by fatigue, improper diet, dehydration, lack of salt, playing without warming up, or a sharp blow. Stop and stretch muscle. If caused by a blow, apply ice and stretch it. If not caused by a blow, apply heat and massage the area.

**Sprains:** Caused by studs hanging in grass while turning, stepping in a depression, landing incorrectly, or stepping on a ball or foot. Apply ice, immobilize, compress with elastic bandage, elevate, and get medical attention.



## JOGGING/RUNNING

As with any outdoor activity, it is important to be aware. Never jog or run any place where you might feel uncomfortable or unsure of your surroundings. It's always a good idea to run with a buddy. Avoid jogging or running at night, since cars cannot see you and it is difficult for you to see the ground.

**Remember roadways are designed primarily for vehicular traffic.** Using sidewalks, bike paths, physical training tracks, and open fields is recommended. **Most important—pedestrian traffic rules apply to individual joggers or runners.**

### DO'S:

- Be in good physical condition.
- Stay away from vehicle traffic where possible.
- Wear proper footwear while running.
- Face oncoming traffic
- Begin a running program gradually.
- Wear reflective clothing if jogging at night.

### DON'TS:

- Run during peak traffic hours.
- Assume right-of-way over vehicles.
- Wear headphones when jogging near traffic.
- Use excessive salt.
- Run with flow of traffic.
- Continue if not feeling well.
- Over exercise.
- Wear plastic or rubber suits.



## Skateboarding

Skateboarding need not be a dangerous sport. Many of the hazards to your children can be eliminated by following these guidelines.

- **Recognize that skateboarding is a sport:** Supply your child with the proper equipment. You wouldn't allow your child to play hockey without a helmet nor would you purchase skis without proper poles and shoes. The same applies to skateboarding. In addition to a good, sturdy board, a skateboarder needs to wear a helmet, knee pads, elbow pads, and padded gloves with wrist supports.
- **Require that your child wear athletic shoes when skating:** Sturdy tennis shoes are recommended.
- **Know the areas in which your child skates:** Skating on city streets, sidewalks, and in shopping malls is prohibited in some areas.
- **Avoid skateboarding on public streets:** Cross streets on foot (not on the board). Teach your child to obey all traffic signals, signs, and regulations. Caution the child about the dangers of cars backing in and out of driveways.
- Prohibit your child from being towed by bicycles, automobiles, or other moving vehicles.
- If skate parks are available, encourage their use when there is adequate supervision. Teach your child to take good care of his equipment. A skateboard needs to be continually checked and maintained just like an automobile.
  - The wheels and bearings must be checked regularly.
  - The trucks (the metal pieces that connect the wheels to the board) must be securely fastened and properly adjusted.



## **BICYCLES**

Bicycle riding has many benefits including exercise, preventing pollution, and saving money. However, sharing the road with motorized vehicles can be extremely hazardous. Follow these rules and tips for safe bicycle riding.

- Obey all applicable traffic regulations, signs, signals, and markings.
- Observe all local ordinances pertaining to bicycle operation.
- Keep right, drive with traffic, not against it. Ride single file.
- Watch out for drain grates, soft shoulders, and other road surface hazards.
- Watch out for car doors opening or for cars pulling out into traffic.
- Don't carry passengers or packages that interfere with your vision or control.
- Be extremely careful at all intersections, particularly when making a left turn.
- Use hand signals to indicate turning or stopping.
- Make yourself visible at night with reflectors and lights.
- Drive a safe bike. Conduct an inspection to ensure its proper mechanical condition.
- Drive your bike defensively; watch for other riders, pedestrians, and automobiles.
- Never hitch a ride on a truck or other vehicle.

## **WATER SAFETY**

### **Swimming**

Swimming is more than just fun. The ability to swim can save your life. American Red Cross statistics reveal that half of all drownings occur within 20 feet of safety. The frightening fact is that 40 percent of the population cannot swim 20 feet and would probably drown attempting to get to safety.

If you or any member of your family doesn't know how to swim, there is no better time to learn than right now. Here are just a few of the common sense swimming rules that can save your life or the life of a loved one.

- Never swim alone, even if you are an experienced swimmer.
- Swim only at supervised areas.
- Never swim when exhausted, overheated, or immediately after eating.
- Before diving, make sure the water is deep enough.
- Don't depend on a tube or inflated toy for buoyancy.
- Whenever a storm approaches, get out of the water.
- Don't swim in extremely cold water.
- Don't consume alcohol and swim.





### Water Skiing

Nearly 17 million Americans water ski each year. Twelve percent of water ski fatalities are by drowning. Many of those could be prevented by skiing with effective flotation devices and knowing how to swim. Safe skiing precautions include the following.

- Ski in a familiar area.
- Know the locations of standing timber, sandbars, and shallow water obstacles so you can avoid them.
- Ski in water that is at least five feet deep.
- Just as a towline connects the skier to the boat, the line of communication joins the boat driver and skier. Know water-skiing hand signals.
- Use a rear-view mirror and an observer to spot the skier.
- Don't consume alcohol or use medications which can adversely affect your balance, judgment, and reaction time.
- Ski with a snug-fitting Type III Coast Guard approved life jacket.

### Recreational Boating

Powerboating and sailboating can be very enjoyable spring and summer activities. Follow these guidelines to ensure safe boating.

**Float plan:** Tell someone where you are going and when you will be back, what your boat looks like, and other identifying information that will make finding your boat much easier should the need arise.

**Weather:** Always check the weather and water conditions before leaving shore. Take a radio with you and listen to updated weather reports.

**Fuel:** Check to make sure you have enough gas. Use the “one-third rule” in fuel management. Use one-third of the fuel to go, one-third to get back, and one-third in reserve.

**Tools and spare parts:** Carry a few tools and some spare parts, such as a spark plug, and learn how to make minor emergency repairs. A great many rescue cases are caused by minor breakdowns which the operator should have been able to repair.

**Life jackets:** Make sure you have one on board for each individual in the boat. Make sure they are accessible. Encourage everyone to wear a life-jacket. Set an example by wearing yours.

**Safety equipment:** In addition to having a lifejacket for each person, you should also carry flares, a horn or whistle, a strong flashlight, a first-aid kit, and a bailing bucket or pump. Check state and Coast Guard requirements for what your size and type of vessel requires.



**Loading the boat:** Check the capacity plate to determine the load limits. Although there might be seats enough for four people, many small boats will only carry two or three people. The load makes a critical difference in the stability of a small boat. Overloaded boats can capsize.

**Alcohol and drugs:** Operating a boat while intoxicated is illegal and dangerous. Alcohol and drugs reduce judgment and the ability to react. The sun, wind, vibration, and noise increase the debilitating effects of alcohol and drugs.

### **Early Spring Boaters**

Early spring boaters and fishermen are reminded that cold waters at this season of the year can be especially dangerous to those who fall overboard, even though they may be expert swimmers. Many spring drowning deaths can be attributed to “hypothermia”—the numbing effect cold water has on the limbs and body. No matter how good the swimmer is, he can drown if the cold water immobilizes his arms and legs and prevents him from swimming or otherwise getting out of the water. Loss of body heat in cold water occurs two to four times faster than in air.

### **Safety Pointers to Springtime Boaters and Fishermen**

In the Spring, wear one or two suits of thermal underwear and other suitable clothing. The type of wet suits worn by scuba divers is also excellent protection against cold water.

If you should suddenly find yourself in cold water from capsizing or a fall from a boat, do not try to remove your clothing. While rapid wetting decreases the insulating properties of clothing, it will help retain some body heat by reducing the flow of water over your body. Clothing can also trap and hold air which will add to your natural buoyancy.

Get out of cold water as fast as possible. Normally the Red Cross advises staying with a swamped or capsized boat, but exceptions to this rule are: when the water is very cold; or the accident occurs near a hazard such as rapids or falls.

Swim to the nearest point of safety—shore or another boat—with or at right angles to the current.

A victim taken from cold water should be brought into a warm room as quickly as possible. Remove wet or frozen clothing, and anything that is constricting. Warm the victim rapidly by wrapping in warm blankets or placing in a tub of water that is warm but not hot to the rescuer’s hand or forearm. If the victim is conscious, he should be given hot liquids, but nothing containing alcohol.





## Coast Guard Personal Flotation Device (PFD) Categories

### TYPE I

- Has more than 20 lbs. of buoyancy. Designed to turn an unconscious person in the water from a face downward position to a vertical or slightly backward position.
- Recommended for offshore cruising.
- Acceptable for all size boats.
- Must be in serviceable condition and readily accessible.

### TYPE II

- Has at least 15.5 lbs. of buoyancy.
- Designed to upright unconscious persons.
- Recommended for closer, inshore cruising.
- Available in four sizes  
**ADULT:** over 90lbs  
**YOUTH:** 50-90lbs  
**CHILD:** under 50lbs and  
**INFANT:** less than 30lbs

### TYPE III

- Has at least 15.5 lbs. of buoyancy.
- Designed to keep a conscious person in a vertical or slightly backward position.
- Has less turning ability to allow a comfortable design for active water activities, such as water skiing.
- Recommended for in-water sports or on lakes.

### TYPE IV

- Has at least 16.5 lbs of buoyancy.
- Designed to be thrown to a person in the water, rather than worn.
- Acceptable for boats under 16 feet and required as an additional device on crafts over 16 feet in length.

### TYPE V

- Designed for specific purposes, such as sail boards, work vests, and deck suits.
- Hybrid vests are Type V vests. A hybrid has foam flotation combined with an inflatable chamber.
- The foam flotation provides a minimum of 7.5 lbs. of buoyancy, which is enough to keep the wearer's nose above the water line.
- The inflatable chamber can be activated from the water and brings the buoyancy to a minimum of 22 lbs. the same as a Type I.
- When not inflated, it's compact and easy to wear.
- However, it's not as rugged as Type I and care should be exercised not to puncture the inflatable chamber. A hybrid must be worn to be considered a legal PFD.



## **FISHING**

Follow these simple rules to make your fishing trips safe and enjoyable.

- Fish hooks can catch anglers as well as fish, so fishermen should carry needle nose pliers, wire cutters, and a pocketknife in tackle boxes. Always keep hooks in covered containers.
- When casting, anglers should make certain there is room to do so without hooking someone else. Always look before casting and use an overhead cast while in a boat with others.
- If you go on a fishing trip alone, leave word where you will be and when you plan to return. However, it is much safer to fish with a companion.
- Stay away from water where there are swimmers, water skiers, and skin and scuba divers.
- Along the shore, wade cautiously to avoid slipping on hidden rocks or stepping unexpectedly into deep water.
- Learn how to hold a fish properly while extracting a hook. Many species of fish have sharp teeth or fins that can cause painful hand wounds.
- If you snag yourself deeply with a hook, cut off the line, bandage the wound, and go immediately to the nearest doctor or hospital. Don't risk further injury trying to remove a deeply imbedded hook.
- When fishing in channels or rivers, never tie your boat to channel buoys, they are traffic markers and must be kept clear.
- Never stand up in a boat while fishing, and always have an approved PFD for every person.

### CAMPING

Prepare for your outing in the wild with a few simple preparations.

**Clothing:** Cotton is a light, comfortable fabric that is cool, durable, and suitable for warm weather wear. Wool is a snug, rugged material that is appropriate for cooler weather. Unlike cotton, wool will keep you warm even if it becomes wet.

**Footwear:** The shoes you wear should match the conditions you expect. For easy walking over short distances, athletic shoes may be fine. Hiking boots (combat boots are a good substitute) that are strong enough to give your ankles support, sturdy enough to withstand miles of wear, and light enough to be worn all day are essential.

**Food:** Pack dried, canned, or fresh food. With fresh food, be sure you have the capability of storing it so it won't spoil. Never depend on "living off the land" by hunting or fishing. Bring food in case the fish aren't biting or game is scarce.

**Essential survival gear:** Pack a pocketknife, flashlight, matches in a waterproof case, a compass, a "space" blanket, rain gear, bug spray, flares, whistle, and a canteen of water.

**First aid kit:** The kit should include bandages, splints, aspirin, disinfectant, soap, and calamine lotion.





## SAFE LIFTING TIPS

Follow these safe lifting tips to prevent back injuries.

- Crouch as close as possible to the object you are going to lift.
- Don't lift beyond your strength. Get help if needed.
- Get solid footing. Place your feet 8 to 12 inches apart.
- Grip firmly with your fingers underneath the load whenever possible.
- Keep your arms straight and your back as straight up and down as possible.
- Lift gradually. Avoid jerky motions.
- Lift by using the strong leg muscles. This takes strain off the back muscles.
- Shift the position of your feet to avoid twisting motions.
- Put things down by reversing the lifting methods.

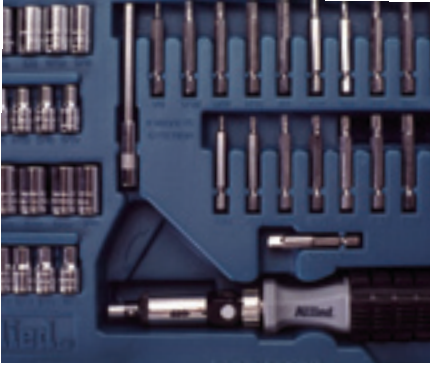
## MECHANICS SAFETY CHECKLIST

If you do your own home or automobile repairs and maintenance, think safety before you tackle a job. Often you may not have the proper tools or equipment and you may be tempted to take shortcuts.

**Don't risk injury:** If you misuse a hand tool, or use a defective tool, you may risk suffering a serious injury such as:

- The loss of eyes and vision, or puncture wounds from flying chips.
- Slivers from concussion tools.
- Severed tendons and arteries from cutting tools.
- Broken bones and contusions from slipping wrenches.





## Hand Tools

To avoid accidents, follow these four safe practices when using hand tools.

- Select the right tool for the job.
- Keep tools in good working condition.
- Use the right tool for the job.
- Keep tools in a safe place.

## Working Under Automobiles

- Use jack stands and blocks instead of just jacks.
- Use hoists and lifts instead of manhandling heavy loads.



## LADDER SAFETY

Each year there are more than 160,000 emergency room-treated injuries in the U.S. relating to ladders. Rules for the safe use of ladders are as follows.

### Rule #1:

#### *SELECT THE RIGHT LADDER FOR THE JOB*

- Make certain the ladder is strong enough for its intended use.
- Choose a ladder that's long enough so you can work comfortably.
- Avoid metal ladders when there's a chance of contact with a source of electric current. Metal is a conductor of electricity.

### Rule #2:

#### *INSPECT THE LADDER BEFORE YOU USE IT*

- Look for loose or damaged rungs, steps, rails, or braces.
- Repair or replace loose or missing screws, hinges, bolts and nuts, or other hardware.

- Make certain safety arms can be locked in place.
- Be sure straight ladders have safety feet.
- Never use a defective ladder.

**RULE #3:*****SET UP YOUR LADDER WITH CARE***

- If you must set up a ladder in a traffic area, use a barricade or guard to prevent unexpected collisions. Lock or block any nearby door that opens toward you.
- Keep the area around the ladder base uncluttered.
- Position your ladder base on a solid, level surface.
- When you use a step ladder, make sure it's fully open and its spreader is locked.
- Position a straight ladder at a four-to-one ratio—that means the base of your ladder is one foot away from the wall or other vertical surface for every four feet of the ladder's length to the support point. Many ladders will have a diagram pasted to its side which can assist in proper placement.
- When you use a ladder to climb onto a roof or platform, allow your ladder to extend at least three feet beyond the roof edge or other support point.
- To avoid shifting, tie down straight ladders as close to the support point as possible.
- Never use a ladder against an unstable surface.

**RULE #4:*****CLIMB AND DESCEND LADDERS CAUTIOUSLY***

- Face the ladder and hold on with both hands.
- If you need tools, carry them in a tool belt or raise and lower them with a hand line.
- Don't take a chance on slipping—check ladder rungs and the bottoms of your shoes for slippery substances.

**RULE #5:*****USE YOUR COMMON SENSE WHEN YOU WORK ON LADDERS***

- Hold on with one hand.
- Never reach or lean too far to either side .
- To maintain your balance keep your belt buckle between the ladder rails.
- Don't climb higher than the second tread from the top on a stepladder or the third rung from the top on a straight ladder.



## **TRIP PLANNING CHECKLIST**

Planning your trip will make for a pleasant experience and give you peace of mind. Failure to do so could ruin your entire outing.

### **Automobiles**

The car should have a thorough safety and mechanical inspection by a mechanic. Items to be checked include:

- Steering
- Brakes and brake lining
- Tires, including the spare, for tread depth (smooth tires reduce driving control and can blow out at high speeds)
- Windows should be cleaned, inside and out to ensure clear view for the driver
- Windshield wipers, plus fluids
- Lights and turn signals
- Exhaust systems
- Alignment
- Battery, plus posts and cables
- Belts and hoses
- Coolant level
- Oil
- Brake fluid level
- Transmission

Be prepared for an emergency by putting together an emergency repair kit. The kit should contain:

- Spare belts and hoses
- Spare tire and jack parts
- Lug wrench
- Flashlight with extra batteries
- Wrenches
- Phillips and flat head screwdrivers
- Extra spark plugs and spark plug wrench
- Locking pliers
- Extra fuses
- Tire puncture sealer
- Electrical tape and wire
- Fire extinguisher
- Jumper cables
- Flares or reflective triangle
- Oil, coolant, and other engine fluids
- Extra windshield wiper blades.

### **NEVER LEAVE HOME WITHOUT**

- Driver's license
- Duplicate car keys
- Vehicle registration
- Insurance cards (medical and vehicle)
- Medical contacts and information
- Names, addresses, and phone numbers of close neighbors and relatives.



## HOTEL FIRE SAFETY

As a member of the military community you are sure to find yourself traveling often. Because PCS and TDY travel frequently places you in unfamiliar cities and hotels, awareness of fire safety rules may save your life. These rules apply to people in individual hotel rooms and to those attending meetings and seminars in conference rooms.

- Always check the location of the closest exit to the room. You should know exactly how many doors are between your room and the exit. You might have to crawl to this exit in a dark or smoke-filled corridor.
- If there's a fire alarm or warning call from hotel management, don't stop to gather personal belongings or work papers. Just get out as quickly as possible. Take your room key. You may find it necessary to retreat to your room.
- Before you open the door to the corridor, put your palm against it and touch the knob. If cool, open the door slowly with your foot braced against it. (This helps you slam the door shut if you discover fire or smoke).
- If the door is hot, do not open it. Soak blankets or towels in water and pack them around the door.
- If you must crawl to an exit door, stay close to the wall to avoid being trampled by others who may have panicked.
- Wait by the window to be rescued. Stay close to the floor to avoid breathing smoke. To increase ventilation, open or break the window (if you don't see smoke or flames rising past the window).
- Don't jump from the upper floors of a burning building. Wait for the fire fighters to rescue you. Let them know you're there by waving towels or coats out of the windows.





## NIGHT DRIVING

Most driving is done during the day. Most accidents happen at night. In fact, more than half of all traffic fatalities occur at night. The death rate based on vehicle miles is nearly three times as great as during the day.

We must recognize that night driving presents special hazards. The chief danger of course is reduced visibility, but the condition of the vehicle and driver may also create potential problems. Dirty windshields, worn windshield wipers, and dirty, inoperative or misaligned headlights reduce your visibility and can also make your vehicle less visible to others.

Driving when you are tired can be just as dangerous as drinking and driving. Fatigue from lack of sleep, over exertion, or too many hours of steady driving can be disastrous. Because more accidents happen at night, additional precautions should be taken when driving at night. Night driving precautions include the following.

- Prepare your car for night driving. Clean headlights, taillights, signal lights and windows (inside and out) once a week, more often if necessary.
- Have your headlights properly aimed. Misaimed headlights blind other drivers and reduce your ability to see the road.
- Don't drink and drive. Not only does alcohol severely impair your driving ability, it also acts as a depressant. Just one drink can induce fatigue.
- Avoid smoking when you drive. Nicotine and carbon monoxide in cigarette smoke hamper night vision.
- If you have any doubt, turn your headlights on. Lights will not help you see better in early twilight, but they'll make it easier for other drivers to see you. Being seen is as important as the ability to see.
- Reduce your speed and increase following distances. It is more difficult to judge other vehicle's speeds and distances at night.
- Don't overdrive your headlights. You should be able to stop inside the illuminated area.
- When following another vehicle, keep your headlights on low beams so you don't blind the driver ahead of you.
- If an oncoming vehicle doesn't lower beams from high to low, avoid glare by watching the right edge of the road and using it as a steering guide.
- Make frequent stops for light snacks and exercise. If you're too tired to drive, stop and get some rest.
- If you have car trouble, pull off the road as far as possible. Warn approaching traffic at once by setting up reflecting triangles near your vehicle and 300 feet behind it. Turn on flashers and the dome light. Stay off the roadway and get passengers away from the roadway.

## SEAT BELT SAFETY

**According to the National Highway Traffic Safety Administration, of the 31,910 vehicle occupants killed in crashes in 2001, 60 percent were not wearing a safety belt.** Safety belts saved 13,274 lives in 2001, and if all vehicle occupants over age 4 had been wearing safety belts, 7,334 more lives could have been saved. All states but one currently have enacted seat belt use laws.

### U.S. Army Requirement

All drivers and passengers in vehicles are required to wear seat belts while traveling on or through military installations. Military members are required to wear safety belts at all times in a moving motor vehicle.

### Seat Belt Facts

- Seat belts spread impact forces over the entire body.
- Seat belts stop you gradually, rather than abruptly.
- Lap and shoulder belts reduce moderate to fatal injuries by 57%.
- The majority of injuries and fatal crashes occur at speeds under 40 mph and within 25 miles of home.



## WET ROADS

Summer showers can be tricky. They cause wet roads, soft shoulders, reduced visibility, and mud splattered lights and windshields. Slippery roads lengthen stopping distances. The first change to make in your driving when it starts to rain is to **SLOW DOWN.**

Even just a little rain creates considerable hazard. The rain water mixes with the oil and grease residue, and creates a slippery film on the road. The more it rains the more this film is going to be washed away, but don't wait for this to happen. Slow down as soon as it starts to rain.

Be wary of center lines and lane markings. They can be much slicker than the rest of the road when wet. Take extra care when crossing railroad tracks. They are very slippery when wet. You can't drive if you can't see. So make sure your windshield wipers are in good working order. Keep the blades clean and replace worn blades without delay. A combination of safe driving procedures and properly maintained equipment is your best insurance against rainy driving hazards.





## MOTORCYCLE SAFETY

The first concern of every motorcyclist, especially inexperienced ones, should be safety. According to a study conducted in California, motorcyclists involved in accidents took no evasive action, or in the few cases where something was done, it was the wrong action. That is why attending a training class is so important. Follow these rules for safe motorcycle operation.

- If you are a beginner motorcyclist, enroll in a motorcycle training course. Many of the accidents occurring today involve novice riders. If you are not properly trained to correctly react to hazardous or emergency situations, you may never get a second chance.
- Ride your motorcycle as though you were invisible to other highway users. Chances are the motorist really does not see you. **50% of all accidents involving motorcycles are the result of an automobile making a left turn directly into the path of an oncoming motorcycle.** And, in most instances, the automobile driver said that he never saw the motorcycle.
- Take positive steps to increase your visibility to other motorists. Keep your headlight on at all times; and have your bike, riding clothes, and helmet marked with light colored fluorescent or reflective materials. Maintain the proper lane position and use your directional signals.
- Maintain a safe following distance. Traffic accidents caused by motorcyclists are usually the result of following too closely. The greater the distance between you and the car ahead, the more time you have to react to hazards or obstructions in the road.
- Carry passengers only after you become a thoroughly experienced rider.
- Be sure the motorcycle is legally equipped and maintained in safe operating condition.
- Ride in the left track, that is, to the left of the grease strip in your lane of traffic unless you intend to turn right. The left track position assures better visibility, more evasive escape room and encourages the motorist to pass properly. A motorcycle is not permitted to share lane position with any other vehicle, including another motorcycle.
- Be in top mental condition before operating a motorcycle. Coordination and concentration are essential to safe operation.
- Do not lend your bike to a buddy. Many motorcycle accidents occur on borrowed machines. Due to manufacturers having different methods of mounting controls and inconsistencies in control location between name brands, every rider will not be familiar with every motorcycle. Also, will your insurance cover possible claims arising from your borrowed motorcycle's accident or could you be held criminally liable in case of a serious accident or injury?

- Observe all traffic laws. The motorcyclist must look for and be prepared to evade other vehicles. Always anticipate the unexpected so you are alert to control any situation that may arise.

**Remember, almost 70% of the stopping power is in the front brake.** This is due to the fact that front brake shoes are larger and the front wheel does not have to overcome inertia caused by the chain, drive sprocket or transmission. General rules for braking are as follows.

### Rule #1:

#### USE THE FRONT BRAKE!

This is the brake that does most of the work. Braking confidently, progressively and hard on the front wheel is a critical skill and should be practiced on a regular basis and under safe conditions. Do this on your own and with a passenger as the extra weight affects your stopping distance.

As you brake, do not stiffen your arms—instead grip the bike with your legs leaving your arms free and relaxed.

### Rule #2:

**HARD, HEAVY BRAKING SHOULD ALWAYS BE DONE WHEN THE MOTORCYCLE IS UPRIGHT AND TRAVELING IN A STRAIGHT LINE!**

### Rule #3:

**AVOID LOCKING UP THE WHEELS!**

**Remember, when it's two wheels versus four, your skill and know-how are your best—and maybe your only—protection. Shouldn't you take whatever measures possible to increase your survivability?**



## ALL TERRAIN VEHICLE (ATV) SAFETY

An ATV is a motorized off-highway vehicle designed to travel on three or more low pressure tires. ATVs are used for both recreational and work vehicles. ATVs are fun to drive but can be very dangerous. Follow these rules for safe ATV operation.

**Who should drive it:** Typically, children under 12 are unable to safely operate an ATV as they have not developed the necessary size, strength, logic, motor skills, and perception.

**Stability:** Although the stability of all ATVs is low, 4-wheeled ATVs have better stability than 3-wheeled.

**What to wear:** Wear protective gear: helmet; eyewear; long sleeve shirts, long pants; gloves; and boots.

**Where to ride:** ATVs are difficult to control on pavement. They are best suited for trails and off-road riding.

**How to ride:** A passenger seriously impairs the driver's ability to shift weight; steer and control the vehicle. Most fatal accidents occur after dark and before dawn. Check your lights, slow down, and avoid unfamiliar terrain. Maintain a safe speed and ample distance between vehicles. Use hand signals for stopping, slowing down, and turning. Don't drive the ATV so fast that you are compromising control. Stunt driving should be left to professionals, not everyday ATV operators.



## **FIREWORKS SAFETY**

To help you celebrate the fourth of July and other holidays safely, the Consumer Product Safety Commission (CPSC) and the National Council on Fireworks Safety offer these safety tips.

- Always read and follow label directions.
- Have an adult present.
- Ignite fireworks outdoors.
- Have water handy.
- Never experiment or attempt to make your own fireworks.
- Light one at a time.
- Never re-ignite malfunctioning fireworks.
- Never give to small children.
- Never throw fireworks at another person.
- Never carry fireworks in your pocket.
- Never shoot them in metal or glass containers.
- Store in a cool, dry place.
- Comply with local laws and ordinances.



### **Injuries and Fatalities**

- Since 1968, fireworks fatalities have ranged from 0 to 14 per year.
- About 57% of emergency room-treated fireworks injuries occur in July, according to CPSC data.
- More than half the injuries occur at home.
- About 93% are treated or examined and released without treatment.
- The most common injury associated with fireworks is thermal burns, accounting for about 53%.
- Other injury types are contusions and abrasions (16%), lacerations (8%), foreign body (5%), and puncture (3%).
- About 40 cases annually result in amputation.





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