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The Navy Region, Mid-Atlantic Public Safety, Virginia Beach Safety Storefront publishes this SafetyGram and widest dissemination within your organization as encouraged. Please post on official bulletin boards and route to your staff. Our web site at [www.nasoceana.navy.mil/safety](http://www.nasoceana.navy.mil/safety) also has lots of additional information to improve your safety posture.

Preventing falls in the work place can be accomplished through monitoring, training, and planning.



*Worker wearing fall protection gear secures safety lanyard. US Navy photo courtesy of Puget Sound Naval Shipyard photographer, William Sparks*

According to the Naval Facility Engineering Command's "Fall Protection Guide/Instructions," falls are the leading cause of injuries and fatalities in the work place. The Guide provides information on how to plan, evaluate, design, and select the most appropriate, safe, and efficient fall protection systems; train personnel to recognize the hazards of falling in the work place and to minimize those hazards; and how to inspect, maintain, store and care for fall protection equipment.

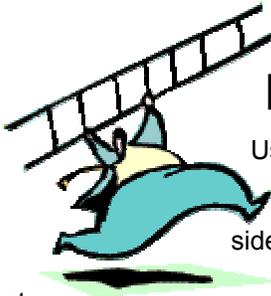
## Fall Protection

Falls are the leading cause of work-related injuries and fatalities. They are the number one cause in construction and are ranked as the second cause in general industry. According to Bureau of Labor Statistics (BLS), most work-related injuries and fatalities are on the decline in contrast, the number of injuries and fatalities from falls continues to rise, accounting for more than 13% of total fatal work injuries. Fatalities from falls increased from 684 in 1996 to 808 in 2001. In the United States, approximately three fatalities from falls occur each working day. Furthermore, thousands of workers suffer injuries due to falls with lost time from work. Half of the fatalities occurred in the construction industry. BLS data shows that fall fatalities from roofs are the most common, followed by falls from scaffolds, ladders, and other surfaces. Aside from tragic loss of life and suffering to victims and their families, workers are very expensive to train and to perform work efficiently. On the average, a single fall fatality costs approximately \$800,000 to \$2,400,000. The average cost of a single injury due to a fall is over \$30,000. Additionally, falls are the most cited violation according to the Occupational Safety and Health Act (OSHA).

Naval Facilities Command has recently published a new guide titled: **DEPARTMENT OF THE NAVY FALL PROTECTION GUIDE FOR ASHORE FACILITIES**. This guide applies to all Navy Ashore Activities where there is a need for a fall protection program to ensure the safety of all personnel (military and Dept. of Navy civilians). It provides information on standards, regulations, and formal criteria for the protection of personnel and workers exposed to fall hazards.

**This Guide can be found at the NAVFAC Safety Web site under guidance at:**

<http://www.navfac.navy.mil/safety/site/Fall/docs/fall03.pdf>. While we're on the subject of fall protection at work let's not forget working at home, which can be just as deadly. Falls from ladders and roofs account for many injuries and death in the home. Use care in selecting the correct type of ladder and know how to use it correctly:



## Ladder Usage

Use the one-to-four (1:4) ratio when using a ladder. To do this, place the ladder so its base is one foot away from what it leans against for every four feet in height to the point where the ladder rests. Place a portable ladder so that both side rails have secure footing. Provide solid footing on soft ground to prevent the ladder from sinking. Place the ladder's feet on a substantial and level base,

not on movable objects. Never lean a ladder against unsafe backing, such as loose boxes or barrels. When you use a ladder for access to high places, securely lash or otherwise fasten the ladder to prevent it's slipping. Be especially careful on windy days. Extend the ladder's side rails at least three feet above the top landing.

When working on a ladder, take precautions so not to slip. Lock a leg around a rung if you need to work with both hands. Do not overreach. Keep your belt buckle between the rails. Do not put one foot on the ladder and the other on an adjacent surface or object.

Never stand on the braces, extension arms or paint shelf. Never use a ladder in a horizontal position as a runway or scaffold. If you set up a ladder or scaffold in front of a door, lock or bar the door. Use ladders to reach parts of equipment you cannot reach from the ground. When getting down step, don't jump, from ladders.

Care should be exercised anytime work is done with a ladder near electrical wires or connections. Keep ladders as far as possible from power lines. Use wood or fiberglass ladders if work must be done near electrical wires and still use caution. Never use an aluminum or metal ladder near power lines.

Take special care when ascending or descending a ladder. Hold on with both hands when going up or down. If material must be handled, raise or lower it with a rope. Always face the ladder when ascending or descending. Never slide down a ladder. Be sure that your shoes are not greasy, muddy or slippery before you climb. Do not climb higher than the third rung from the top on straight or extension ladders, or the second tread from the top of stepladders.

There are other safety precautions that should be taken when working with ladders. Never use makeshift ladders, such as cleats fastened across a single rail. Be sure that a stepladder is fully open and the divider locked before you start to climb it. Do not splice short ladders together. They will not be strong enough. Do not use ladders during a strong wind except in an emergency, and only when they are securely tied. Do not leave placed ladders unattended, especially outdoors, because someone could climb it, especially a child.

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## HEAT STRESS-

Summer is here and we have already felt some of the heat we should expect for several months. With hot days comes risk of heat exhaustion and heat stroke. The Navy Region, Mid-Atlantic Virginia Beach Safety Storefront has posted several articles on its website dealing with the risk of heat stress. You can read them at

[www.nasoceana.navy.mil/safety/Special%20Training/heatstress.htm](http://www.nasoceana.navy.mil/safety/Special%20Training/heatstress.htm)



# Fireworks Safety

## Tips on Choosing Safe Fireworks

It is extremely important to know the difference between a legal consumer firework and a dangerous explosive device. Items such as M-80s, M-100s and blockbusters are not fireworks they are federally banned explosives. They can cause serious injury or even death. Stay away from anything that isn't clearly labeled with the name of the item, the manufacturer's name and instructions for proper use. Here are some more tips to help ensure a safe Fourth of July:

a. Fireworks are not toys. Fireworks complying with strict regulations enacted by the U.S. Consumer Product Safety Commission in 1976 function primarily by burning to produce motion and visible or audible effects. They are burning at approximately the same temperature as a household match and can cause burn injuries and ignite clothing if used improperly.

b. NEVER give fireworks to young children. Close, adult supervision of all fireworks activities is mandatory. Even sparklers can be unsafe if used improperly. Select and use only legal devices. If you choose to celebrate the Fourth of July with fireworks, check with your local police department to determine what fireworks can be legally discharged in your area. ***In the state of Virginia the only permitted consumer fireworks allowed are items such as sparklers, fountains, pinwheels, whirligigs. Specifically prohibited are exploding fireworks such as firecrackers, skyrockets and other fireworks that explode, fire projectiles or rise into the air.***

c. Stay away from illegal explosives. Illegal explosive devices continue to cause serious injuries around the Fourth of July holiday. These devices are commonly known as M-80s, M-100s, blockbusters or quarter-pounders. Federally banned since 1966, these items will not contain the manufacturer's name and are usually totally unlabeled. Don't purchase or use unlabeled fireworks. If you are aware of anyone selling such devices, contact your local police department.

d. Homemade fireworks are deadly. Never attempt to make your own devices and do not purchase or use any kits that are advertised for making fireworks. Mixing and loading chemical powders is very dangerous and can kill or seriously injure you. Leave the making of fireworks to the experts.



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