

NAVAL SAFETY CENTER

SAFETY AND VOLUNTARY PROTECTION PROGRAM HANDBOOK



2021 1ST EDITION



NAVAL SAFETY CENTER



EMPLOYEE SAFETY & VPP HANDBOOK

This SAFETY & VPP HANDBOOK belongs to:

Name: _____

Code: _____

Phone: _____

First Edition
2021

The information contained herein are guidelines, not rules, toward a safer healthier work environment

ORGANIZATIONAL & EMERGENCY RESPONSE INFORMATION

Organization	Phone	
Base Police	444-3333	
Fire & Emergency Medical Services	Emergency	444-3333
	NON Emergency	444-2324 444-2325
Destructive Weather/Hurricane	322-2330	
Base Information	444-0000	
Sewells Point Safety Office (Base Operations Support (BOS) Services)	322-2917 322-2928	
NAVSAFECEN Staff Duty Officer	444-3520 x7097	
Mishap Reporting Line	444-2929	
RMI Help Desk	1-833- NESDNOW (1- 833-637-3669)	

FIRE RESPONSE

- | | |
|--|----------|
| 1. Immediately notify the Base Fire Department and Pull Fire Alarm Box | 444-3333 |
| 2. Evacuate and muster all personnel | |

INJURY – MEDICAL EMERGENCY RESPONSE

- | | |
|---|----------|
| Immediately notify the Base Fire Department | 444-3333 |
|---|----------|

DESK PHONE EMERGENCY RESPONSE SHORTCUT

- | | |
|--|----------|
| Pressing the button to the left of the contact labeled “EMERGENCY” on your desk phone will automatically call Fire & Emergency Medical Services. | 444-3333 |
|--|----------|

NAVSAFECEN Website (Public)

<https://navalsafetycenter.navy.mil/>

NAVSAFECEN Website (CAC Enabled)

<https://intelshare.intelink.gov/sites/nsc/>

Occupational Safety & Health Administration (OSHA)

<https://www.osha.gov/>

Voluntary Protection Program (VPP)

<https://www.osha.gov/vpp>

Risk Management Information (RMI)

<https://afsas.safety.af.mil/>

From: Commander, Naval Safety Center
To: Naval Safety Center Personnel

Subj: SAFETY AND OCCUPATIONAL HEALTH POLICY

1. The Naval Safety Center (NAVSAFECEN) will continually strive to provide a safe and healthful workplace free of recognized hazards. Members of NAVSAFECEN must set the example for all Sailors, Marines, and civilians by making safety a 24/7 priority at work, at home, while riding motorcycles and driving cars, and during recreational activities.
2. Managers and supervisors shall conduct continuous operational risk management; recognize, communicate, and abate hazards; prevent and report mishaps; and implement lessons learned. This shall include inspecting worksites, ensuring a safe working environment, making sure employees are properly trained, and promoting a proactive and predictive safety culture.
3. Personnel shall know and comply with applicable safety rules and regulations, identify and report potential hazards, report injuries, illnesses, mishaps, and near misses to supervisors, and successfully complete applicable training.
4. Everyone has the right to ask questions, report unsafe conditions, stop work when conditions appear hazardous, and actively participate in our command safety program without fear of reprisal, discrimination, or coercion.
5. Our coordinator for this effort is our Occupational Health and Industrial Safety Directorate, whose personnel are always available to provide additional information and assistance to personnel at all levels.



F. R. LUCHTMAN

Table of Contents

PART I – COMMAND STRUCTURE

ORGANIZATIONAL CHART	1
CODE 03 LEGAL OFFICE	2
CODE 05 ADMINISTRATIVE GROUP	2
CODE 07 COMMAND INFORMATION DEPARTMENT	2
CODE 08 BUSINESS MANAGEMENT	3
CODE 10 AVIATION SAFETY DIRECTORATE	3
CODE 20 SHORE SAFETY DIRECTORATE	3
CODE 30 AFLOAT SAFETY DIRECTORATE	4
CODE 40 EXPEDITIONARY WARFARE/ORM SAFETY DIRECTORATE	5
CODE 50 KNOWLEDGE MANAGEMENT & SAFETY PROMOTIONS (KMSP)	6
CODE 90 MISHAP INVESTIGATIONS	6
COMMAND MISSION, VISION, AND GUIDING PRINCIPLES	7
COMMAND GOALS AND OBJECTIVES	9
TRANSLATING THE STRATEGIC PLAN TO TACTICAL EXECUTION	11
LINE OF EFFORT (LOE)	12

PART II- GOVERNING LAWS & REGULATIONS

VOLUNTARY PROTECTION PROGRAM	14
NAVY SAFETY MANAGEMENT SYSTEM (SMS)	22
FEDERAL REGULATIONS	25
DEPARTMENT OF DEFENSE REGULATIONS	26

SECRETARY OF THE NAVY (SECNAV) REGULATIONS	26
OFFICE OF THE CHIEF OF NAVAL OPERATIONS (OPNAV) REGULATIONS	27
HIERARCHY OF SAFETY POLICY	29
PART III- INSPECTIONS	
INSPECTIONS PROCESS MAP	31
INSPECTIONS	32
INDUSTRIAL HYGIENE (IH) SURVEYS	33
BASE OPERATING SUPPORT (BOS)	35
RISK MANAGEMENT	37
JOB HAZARD ANALYSIS (JHA)	40
HIERARCHY OF CONTROLS	41
PART IV- NAVAL SAFETY CENTER PERSONNEL	
REPORTING HAZARDS	43
GETTING INVOLVED IN SAFETY	43
DATA ANALYSIS	44
EMERGENCY ACTION PLAN	49
EMPLOYEE ASSISTANCE PROGRAM	54
PART V- SAFETY PROGRAMS	
CONFINED SPACE (High Risk)	57
CONTROL OF HAZARDOUS ENERGY (High Risk)	65
ELECTRICAL SAFETY (High Risk)	68
ERGONOMICS & MUSCULOSKELETAL HAZARDS	73
FALL PROTECTION (High Risk)	78
FIRE SAFETY (High Risk)	81
FLAMMABLES AND COMBUSTIBLES	83

GENERAL SHIPBOARD SAFETY	85
HOT WORK	90
LADDER SAFETY	91
NON-IONIZING RADIATION	93
MACHINE GUARDING	98
OFFICE SAFETY	101
PERSONAL PROTECTIVE EQUIPMENT (PPE)	104
RESPIRATORY PROTECTION (High Risk)	109
SCAFFOLDING	111
SLIPS/TRIPS/FALLS	114
TOBACCO USE POLICY	116

PART VI- SAFETY AT HOME

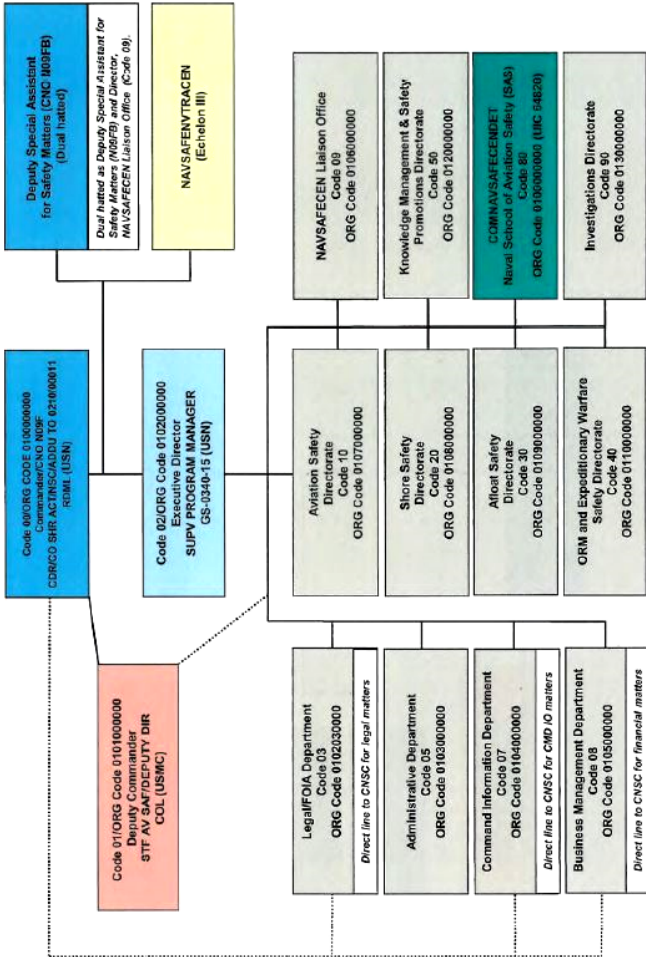
AT HOME	118
FIRE SAFETY IN THE HOME	118
AUTO REPAIR SAFETY	119
FUN IN THE SUN & SURF	122
GRILLING AND COOKING OUT	124
HOLIDAY SAFETY	126
LAWN AND YARD CARE	128
HOME IMPROVEMENT SAFETY	131
SAFE DRIVING	134
SAFE GUN STORAGE AT HOME	140
UNDERGROUND UTILITIES	142

PART VII- EMPLOYEE RIGHTS & RESPONSIBILITIES

EMPLOYEE RIGHTS & RESPONSIBILITIES	144
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PART I - COMMAD STRUCTURE

ORGANIZATIONAL CHART



CODE 03
LEGAL OFFICE

The mission of the Legal Department is to represent and advise the Command on a broad array of legal issues pertaining to the following: Congressional inquiries, international law, ethics, investigations, military justice, and the Safety Privilege. Furthermore, the Legal Department administers the Command's Freedom of Information Act/Privacy Act Program. The Naval Safety Center's Staff Attorney supervises the Legal Department.

CODE 05
ADMINISTRATION GROUP

The Administrative Department directs and coordinates all administrative, security and facility related functions within the command, manages and coordinates military personnel and manpower and serves as the command's Directive Control Point

CODE 07
COMMAND INFORMATION DEPARTMENT

The Command Information Department is the Echelon II level authority responsible for NAVSAFECEN and subordinate commands' effective use of information resources to successfully meet the goals and objectives required for successful delivery of required capabilities. The department manages the alignment of business processes through implementation of enterprise architecture and IT planning procedures, and for the protection of mission critical and mission essential systems through strengthened cyber security management and technical controls.

CODE 08
BUSINESS MANAGEMENT

The Business Management department is responsible for financial, travel, civilian manpower, and supply management for the Naval Safety Center. It is divided into 3 divisions. The finance division is responsible for creating and executing the command budget as well as managing the travel program and civilian payroll. The supply division is responsible for purchasing and contracting along with managing the command property. The manpower division is responsible for all actions regarding civilian personnel from recruiting to resigning/retiring, training, and performance plans.

CODE 10
AVIATION SAFETY DIRECTORATE

The Naval Safety Center's Aviation Safety Programs Directorate includes aircraft operations, aircraft maintenance and material, aviation weapon systems, and aeromedical subject matter experts. The Directorate supports fleet Safety Management Systems (SMS) through policy development, safety assurance programs, analysis of aviation data, and dissemination of safety information through education and training.

CODE 20
SHORE SAFETY DIRECTORATE

The Shore Safety Directorate manages, coordinates, directs and assesses the planning and implementation for Department of the Navy (DON) Safety and Occupational Health (SOH), industrial safety, traffic safety and off-duty safety. The Shore Safety Directorate:

- Is DON's SOH subject matter expert

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- Establishes DON SOH, Industrial Safety, Traffic Safety and Recreation and Off-duty Safety (RODS) policies, doctrines and guidance
- Develops guides, briefs and standard operating procedures for ashore safety programs
- Conducts safety assessments of shore commands
- Monitors shore mishap investigations and reporting procedures
- Collects, evaluates and analyzes mishap and hazard data to identify trends in problem areas to support DON mishap prevention programs
- Supports the Navy Inspector General in conducting Echelon 2 command inspections, area visits and Health and Safety Inspections
- Chairs the Safety Quality Council
- Is the DON liaison for command Occupational Safety and Health Administration issues

CODE 30 **AFLOAT SAFETY DIRECTORATE**

The Naval Safety Center's Afloat Directorate establishes Afloat (surface, subsurface) safety policy, doctrine and guidance; implements, coordinates, maintains, and promotes afloat safety programs, policies, and procedures; maintains direct liaison with operating and material commands, program sponsors and offices to ensure prompt remedial action is taken on factors adversely affecting afloat safety; conducts unit level surface, subsurface Afloat Operational Safety Assessments (AOSAs); supports afloat mishap investigations; provides RMI reporting procedures technical guidance and training; collects and evaluates afloat mishap and hazard data in order to identify significant problem areas and trends in support of afloat

mishap prevention programs; and promulgates afloat trends, policies, procedures, techniques, and lessons learned to operating forces and those with systems safety engineering responsibilities.

CODE 40
EXPEDITIONARY WARFARE/ORM SAFETY
DIRECTORATE

The Naval Safety Center's Expeditionary Warfare/ORM Safety Directorate conducts Expeditionary Operational Safety Assessments (EOSA) is a multi-day event that is neither an inspection nor certification but a command assessment designed to improve mission readiness through identification of unsafe conditions, practices, procedures and to increase the hazard awareness of unit personnel through proper application of risk management to identify how risk is mitigated, transferred or assumed. The vision of an EOSA is to improve the unit's decision-making in a complex environment and the communication of risk at all levels.

In addition to EOSA's the directorate also conducts Navy Airborne Operations Program and Helicopter Rope Suspension Training Assessments, Diving Safety Assessments, Diving Operational Readiness Inspections and High Risk Training Assessments in addition to publishing two semi-annual newsletters; Diving Safety Lines is a newsletter containing information such as summary from past diving safety assessments to assist in mishap prevention programs. Drop Zone is a newsletter containing information such as summary of jump hazards and past airborne easements to assist in mishap prevention programs.

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Upon request, a commander may ask for assistance related to climate/culture through: ORM, High Risk Training, minimally disruptive “Pulse Scan”, Culture Workshop, Tool Control, Material Maintenance Management (3M).

CODE 50 **KNOWLEDGE MANAGEMENT &** **SAFETY PROMOTIONS (KMSP)**

The Knowledge Management and Safety Promotions Directorate (KMSP) provides advanced data analytics, in-depth studies, trend analysis, data visualization, and risk awareness products to the Fleet to promote a culture of excellence across the Navy and Marine Corps. The Operations Research Division conducts studies -- using advanced and predictive data analysis -- and shares its findings Navy and Marine Corp-wide through studies and analysis. Safety Promotions also shares findings as well as lessons from the Fleet in magazines, newsletters, Lessons Learned, and Sanitized Safety Investigation Reports.

CODE 90 **MISHAP INVESTIGATION**

The Naval Safety Center's Investigation Directorate provides onsite and distance investigative support for Navy and Marine Corps mishaps covered under the OPNAV 3750.6 series and OPNAV/MCO 5102.1 series instructions. From initial notification through salvage, investigation, and wreckage and evidence release, highly qualified and experienced Naval Safety Center investigators will guide you through the process. We maintain an extensive contact network of engineering

and subject matter experts who can provide technical expertise during investigations.

COMMAND MISSION, VISION, AND GUIDING PRINCIPLES

Mission:

To preserve warfighting capability, combat lethality and readiness by working with our stakeholders to identify, mitigate, or eliminate hazards in order to reduce unnecessary risk to people and resources.

Vision:

We are the safety conscience of the Navy and Marine Corps charged with identifying insufficiently mitigated risk and policing the Naval Enterprise's risk adjudication processes. We use all available technologies and methods to compile information, identify risk and propose mitigation strategies. We are agile in our processes, capable of flexing to our stakeholder's demands in order to provide world-class customer service. We actively align to the safety management system pillars and principles to accomplish our mission.

Guiding Principles:

- Safety Policy
 - We develop the policies and regulations for the Naval Enterprise providing the fundamental foundations of the safety management system.
 - We are experts in our fields, fluent in all higher guidance in pursuit of providing the best service to our stakeholders.
- Safety Risk Management

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- We capitalize on our staff's diversity of experience to develop experts in all areas of risk management and control across the Naval Enterprise.
- We actively collect data from all available sources to create data-driven recommendations for risk reduction throughout the Naval Enterprise.
- We work with stakeholders to develop effective risk mitigation strategies.
- **Safety Assurance**
 - We identify risk to stakeholders through direct and indirect observation.
 - We monitor stakeholder risk adjudication processes until risks are eliminated, mitigated or formally accepted at the appropriate level.
- **Safety Promotion**
 - We are responsible for providing world-class safety related training to the Naval Enterprise.
 - We communicate with all levels of the Naval Enterprise for the greatest effect.

For more information on the command's current mission, vision, and guiding principles, see the NAVSAFECEN Public Webpage.

COMMAND GOALS AND OBJECTIVES

GOAL #1: Shape the Naval Enterprise toward a Culture of Improved Risk Management.

Objective 1.1: Develop and promulgate OPNAV policies and guidance to establish a baseline Department of the Navy (DON) risk management approach.

Objective 1.2: Develop a risk management-training continuum that ensures all personnel are proficient in the use of risk management techniques.

Objective 1.3: Develop a matrix of standardized elements to assess risk culture during unit assessments.

GOAL #2: Employ Our Subject Matter Experts To Develop Data-Driven Recommendations For The Risk Owners To Mitigate Or Eliminate Their Risk.

Objective 2.1: Effectively use data collected through the Risk Management Information (RMI) program of record, mishap investigations, assessments and Fleet inputs to present decision makers with data driven recommendations to preserve readiness.

Objective 2.2: Implement processes to pair analytics experts in Code 50 with subject matter experts to generate data-driven recommendations to address insufficiently mitigated risk.

Objective 2.3: Refine NAVSAFECEN assessment process to identify and communicate potential hazards and safety climate issues including the collection and retention of standardized data.

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Objective 2.4: Continue to strengthen our ability to capture and steward information, conduct data analysis and disseminate lessons learned and best practices.

Objective 2.5: Assist stakeholders with conducting rigorous mishap investigations and detailed mishap reporting in order to support and inform follow on data analysis.

GOAL #3: Improve The Naval Safety Center's Stewardship of Insufficiently Mitigated Risk throughout the Enterprise to Ensure an Enduring Nature of Mitigation Efforts.

Objective 3.1: Implement formalized procedures for mishap and hazard recommendation tracking to ensure effective mitigations were implemented by the Naval Enterprise.

Objective 3.2: Develop and implement tracking procedures to periodically reassess the effectiveness of migration efforts by the Naval Enterprise.

Objective 3.3: Promote effective communication of risk to senior management and technical authorities to facilitate doctrine, training and systems designs that support the identification and control of hazards.

GOAL #4: Increase Organizational Efficiency And Effectiveness.

Objective 4.1: Develop a proactive Human Capital Strategy that maximizes the use of the Naval Safety Center's resources and leverages effective partnerships to accomplish our mission.

Objective 4.2: Improve internal communications to better align staff to command priorities.

NAVSAFECEN SAFETY & VPP HANDBOOK

Objective 4.3: Evaluate and improve internal processes to achieve our established goals and objectives and better respond to emergent tasking from senior Naval Leaders.

Objective 4.4: Maximize the use of cross-functional teams to meet both internal and external tasking to capitalize on cross-directorate expertise.

TRANSLATING THE STRATEGIC PLAN TO TACTICAL EXECUTION

- The Strategic Planning Team (SPT) develops and monitors annual lines of effort (LOE) to accomplish command goals.
- Command LOEs should involve at least 30% of command in scope and effort. Directors and Department Heads execute LOEs as the Commander's top priorities when determining Directorate/Department resourcing.
- LOEs are executed through plans of actions and milestones (POA&Ms) to provide defined goals and structure to their execution.
- The SPT monitors the progress of the command LOEs ensuring sufficient resourcing to accomplish the expected outcomes of the LOEs.
- LOEs may be created at any time within the annual cycle to address any situation requiring command level resourcing.

NAVSAFECEN SAFETY & VPP HANDBOOK

- The SPT is responsible to the Commander for accomplishing the command goals and objectives.
- The SPT will evaluate the command's vision and goals annually to ensure alignment of effort with the Naval Enterprise's priorities.

LINE OF EFFORT (LOE)

A Line of Effort (LOE) is a method of establishing operational and strategic conditions by linking multiple tasks and missions using the logic of purpose (cause and effect). An LOE creates synergy for a durable campaign and for providing linkage between the command's present and future operations. The command began using LOEs in Fiscal Year 2020 (FY20). Some of the LOEs established since implementation have been:

LOE 20-01 – Complete the Risk Management Information (RMI) Safety Incident Reporting (SIR) rollout on time.

LOE 20-02 – Establish NAVSAFECEN as a center of excellence for modern data analytics to predict and prevent mishaps.

LOE 20-03 – Improve NAVSAFECEN's stewardship of mishap recommendations and hazard report data.

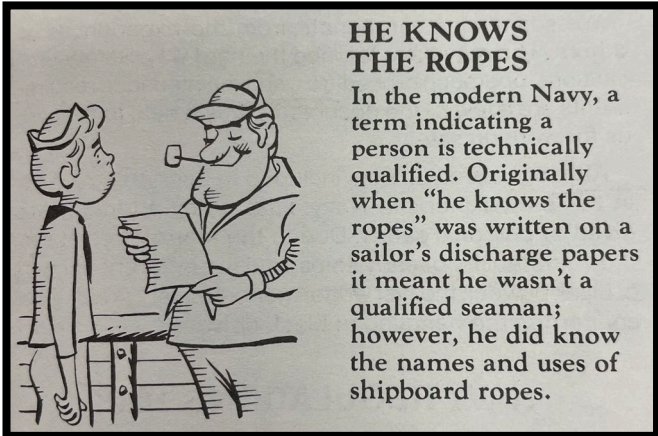
LOE 21-01 - Digital Transformation – Identify and implement innovative digital processes, tools, and applications to enhance business practices and improve overall effectiveness in meeting the Naval Safety Center's mission.

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LOE 21-02 - Risk Management Rebranding – Rebrand Operational Risk Management to Risk Management, resulting in enhanced applicability and relevance to the Fleet.

LOE 21-03 - Safety Professional Development – Develop Safety Professionals throughout the Naval Enterprise by refining and aligning their education and qualification requirements to further enhance support to the Naval Enterprise.

For more information on the current LOEs, see the NAVSAFECEN Public Webpage.



PART II- GOVERNING LAWS & REGULATIONS

VOLUNTARY PROTECTION PROGRAM
(VPP)

The Voluntary Protection Program (VPP) is a program that gives official third-party recognition of the outstanding efforts of employers and employees who have achieved an exemplary occupational safety and health Safety Management System (SMS). In the VPP, employees, management, and OSHA work cooperatively and proactively to prevent fatalities, injuries, and illnesses through a four element system:

To participate, employers must submit an application to OSHA and undergo a rigorous onsite evaluation by a team of safety and health professionals. VPP participants are re- evaluated every five years to remain in the program. VPP participants are exempt from OSHA programmed inspections while they maintain their VPP status but employees still have the right to contact OSHA if issues cannot be resolved internally.

What's in it for me?

The Naval Safety Center is the safety conscience of the Navy and Marine Corps, charged with establishing enterprise wide standards, identifying insufficiently mitigated risk and policing the Naval Enterprise's risk adjudication processes. As the Naval Enterprise's top safety and occupational health command, it is imperative that we lead by example. We must also thoroughly understand what an SMS is and the value as well as application and execution at the different levels and warfare communities. Our Safety Center mission

NAVSAFECEN SAFETY & VPP HANDBOOK

depends on us consistently and uniformly articulating these concepts to the Naval Enterprise.

It is the personal responsibility of every teammate to work safely and look out for each other. OSHA's VPP is designed to help change or strengthen the safety culture through management and employee participation. This allows you the opportunity to have a voice in your safety and participate in safety programs like safety committees, policy councils and safety fairs. It saves lives, reduces costs and allows employees to go home at the end of their workday the same way they came in.

As a NAVSAFECEN employee:

- Know how to report a hazard (see page 43).
- Become involved in safety.
- Ensure you receive the proper training.

Why is NAVSAFECEN participating in VPP?

With the Naval Safety Center providing worldwide expertise and support, we must lead by example and always remember our purpose in all we do. This starts with understanding the core requirements behind Safety and Occupational health, knowing what an SMS is and how it works, and ends with consistent and uniform application and messaging with every interaction we have with the Naval Enterprise.

Actions speak louder than words when it comes to your Safety and Health. In light of this, command management voluntarily participated in the VPP by signing a VPP Management Commitment Statement. Don't get confused about the voluntary part of VPP. It means it is voluntary for organizations to participate in the VPP program. It doesn't mean "employees" have the option to participate "in safety", whether NAVSAFECEN participates in VPP or not, employees still have to follow

NAVSAFECEN SAFETY & VPP HANDBOOK

safety rules and regulations. NAVSAFECEN chose to take ownership of our safety and health by maintaining the VPP requirements and taking ultimate responsibility for worker's safety and health.

As a VPP member WE are committed to:

- Comply with all OSHA regulations
- Maintain and enforce our safety and health programs.
- Identify and correct hazards
- Prepare for emergencies
- Provide safety training

How can managers and employees participate?

Be a leader in safety by getting involved, following safety rules, and reporting hazards and near misses. Use Effective Safety Risk Management on a daily basis. Look out for yourself and fellow employees. Safety leadership and employee-driven safety programs are a cornerstone of VPP.

As a manager:

- Ensure goals and action plans to reduce injuries are set each year.
- Support safety in department safety and OSH Council meetings.
- Support personnel to become involved in safety.

Accountability of your actions.

In VPP, it's not about someone holding you accountable. It's about you holding yourself accountable. Think about it, who can better look out for your safety than you. Do what is right.

What to expect?

Management made a choice and a serious commitment of resources to implement the VPP program. After

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reviewing and accepting our VPP application, OSHA will schedule and onsite review of our program. The onsite review will be conducted by an OSHA VPP Evaluation team which is made up of OSHA personnel as well as Special Government Employees (SGEs), who assist OSHA with VPP Evaluations. The review is generally 1 week long and will consist of an opening conference, document review, personnel interviews, onsite monitoring of work processes, a thorough facility walkthrough, and a closing conference. At the close of each day, the OSHA VPP Evaluation Team will meet with our team to discuss their daily findings, ask any questions they have, and make a plan for the following day.

OSHA's commitment to NAVSAFECEN:

- Site visit every five years to review NAVSAFECEN safety and health programs.

How can managers and employees participate?

- Be a leader in safety by getting involved, following safety rules, and reporting hazards and near misses. Use Effective Safety Risk Management

VPP Elements:

VPP is organized into 4 elements and 38 sub-elements:

Management Leadership and Employee Involvement

- Management Commitment – Upper management must be committed to funding and staffing the VPP. Management must also make an extra effort to get involved in VPP activities such as safety committees and VPP training events.

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- Commitment - Once started, upper and middle management must be committed to achieving VPP recognition.
- Planning – Before starting the VPP a detailed plan must be agreed upon by all parties involved. Managers, employees, employee representatives and imbedded contractors must have a clear understanding of the intent of VPP and how it will be implemented.
- Written Safety and Health Program – All safety and health programs required by the VPP must be in writing and available for review on request.
- Top Management Leadership – Like any successful business plan VPP must be promoted and enforced from the top down. Top management must have a clear understanding of the benefits of VPP.
- Authority and Resources – Top management must commit to providing adequate resources to ensure the success of the VPP. Authority must be given to mid-level managers and supervisors to promote and train all employees on VPP.
- Line Accountability – Managers and employees at all levels must be held accountable for failure to promote and comply with all elements of VPP.
- Contract Workers – Contractors who work a combined total of more than 1000 hours in any quarter must be included in all VPP activities.
- Employee Involvement – Employees at all levels must be willing to accept “ownership” of VPP and continue to support all VPP initiatives.
- Safety and Health Program Evaluation - Trend analysis must be maintained to track the effectiveness of safety and health programs. An annual self-assessment must be conducted to measure success of annual goals and recommendations.

Work Site Analysis:

- Management Understanding – Management must have a clear understanding of VPP goals and how they will be achieved.
- Industrial Hygiene – An effective industrial hygiene program must be in place and must address exposures on the work site. Workers must be trained to recognize industrial hygiene hazards related to their jobs. High noise levels, vapors, gasses, and airborne particulates are examples of industrial hygiene hazards.
- Pre-use Analysis – A pre-use analysis must be conducted on all new or modified processes to detect hazards associated with normal operation. A pre-use analysis may be required even for what may appear to be a simple task such as changing the toner cartridge in the copy machine.
- Hazard Analysis – A hazard analysis must be conducted on all job tasks for the detection of hazards associated with the work performed. Hazards must be reported using proper procedures to ensure adequate corrective measures are taken.
- Routine Inspections - Work areas must be inspected before the start of each shift. Documented monthly work site inspections must be conducted to detect new or uncontrolled hazards as well as follow-up on previous recommendations for corrective action(s).
- Employee Hazard Reporting System – Employees must immediately report hazards to their supervisor, by using the ANYMOUSE system, reporting directly to MCLC headquarters safety office, or by using the enterprise safety application management system (ESAMS).

NAVSAFECEN SAFETY & VPP HANDBOOK

- Accident and Incident Investigations – A thorough investigation must be conducted on all accidents and incidents (including near misses). Investigations must be documented on proper forms and returned to MCLC headquarters safety office immediately. If any, witness statements must be taken.
- Trend Analysis – Trend analysis are conducted by using information obtained from accident/incident reports, safety inspections, hazard reports and hazard analysis. Trend analysis helps to identify problematic re-occurring safety and health issues.

Hazard Prevention and Control

- Certified Professional Resources – MCLC safety office employs a certified safety professional as well as four Degreed Safety Professionals who provide a wide range of professional safety knowledge in order to solve and abate safety and health issues in the workplace. The Base industrial hygienist is used whenever a health issue needs to be addressed.
- Hazard Elimination or Control – Based on OSHA's hierarchy of controls:
 - Engineering Controls are used to engineer the hazards out of the process.
 - Administration Controls can be used to limit the time employees are exposed to a known hazard.
 - Safety and Health rules must be part of employee training. Employees must follow safety and health rules.
 - Personal Protective Equipment can be used as a last resort to protect employees from known hazards.
 - Hazard Control Programs includes written policies and procedures that can be used to train

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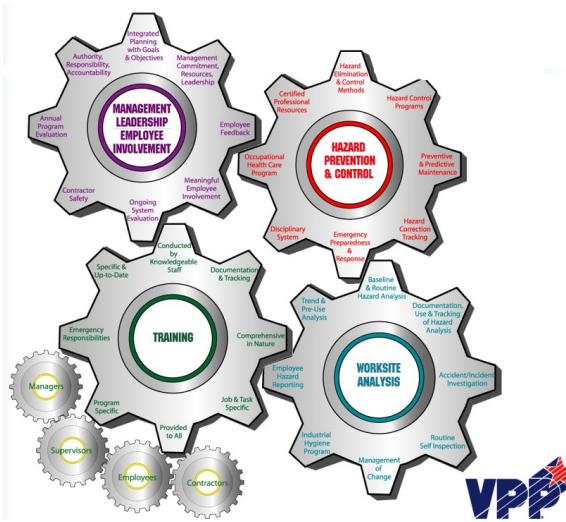
employees on work-related hazards and what they must do to prevent injury.

- Process Safety Management is usually found in manufacturing operations that involve hazardous chemicals or materials.
- Preventive Maintenance is an effective tool in controlling accidents resulting from faulty equipment.
- Hazard Correction Tracking will help ensure known hazards are eliminated.
- Occupational Healthcare Program is mandatory for workplaces that have health exposures such as toxins, airborne particulates, and high noise areas.
- Disciplinary System must be in place and used.
- Emergency Procedures must be posted as required. Employees must be trained on emergency procedures for their work areas.

Safety and Health Training

- A program description must clearly identify the intent and scope of the training.
- Supervisors must receive a minimum of 4 hours safety and health training.
- Employees must receive safety and health training related to the exposures in their work areas.
- Employees must be trained on how to respond to emergencies in the work-place.
- Employees required to use personal protective equipment (PPE) must be trained on how to properly use, care, and store PPE.
- Managers must be trained on and understand the hazards associated with the work-place.

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NAVY SAFETY MANAGEMENT SYSTEM (SMS)

OPNAV M-5100.23 established the requirement for all commands to implement a Safety Management System (SMS), a comprehensive framework that ensures operational readiness through continuous improvement and risk-based decision making processes and procedures. Key to the SMS framework is the use of predictive, standardized, system-oriented, and process-driven approaches to safety management. While a safety manual is an important component of a Safety Management System, it alone does not have the power to protect your command and your personnel. An SMS is a comprehensive and structured means of ensuring that your organization achieves and maintains high standards of safety performance; it is a collection of

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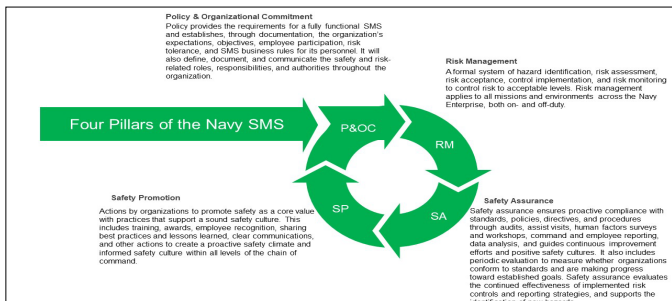
efforts, policies, and strategies that work together to keep your team safe.

The Navy SMS requires approaches that complement and go beyond traditional compliance-based rules and inspections. To move beyond legacy data categories and stove-piped data systems, it also requires using relevant operational, training, and human performance data in new ways that indicate commands, units, and activities at risk of having operational mishaps, before those mishaps occur. The Navy's framework for an SMS contained in OPNAV M-5100.23 is not prescriptive about the design of a particular command, unit, or activity's SMS, nor does it provide specific performance objectives for individual units. The design of a particular command, unit, or activity's SMS, and specific performance objectives for their SMS, will be stated by headquarters commands and that individual command, unit, or activity.

The Navy SMS framework incorporates four pillars that, when working together, generate a top-level SMS.

These pillars are:

- Policy and Organizational Commitment
- Risk Management
- Safety Assurance
- Safety Promotion



as the Chief of Naval Operations (CNO) have prescribed

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a total of 18 minimum required fundamental elements to support the four pillars. These 18 elements are:

- Leadership
- Policy, Procedure, & Documentation
- Personnel Awareness, Education, and Training
- Personnel Participation
- Planning
- Risk Management
- Hazard Identification
- Risk Assessment
- Risk Acceptance
- Control Implementation
- Risk Monitoring
- Change Management
- Safety Performance Monitoring
- Management System Monitoring
- Risk Communication
- Employee Recognition
- Sharing Best Practices and Lessons Learned
- Informed Safety Culture

The use of the four pillars framework for a headquarters command or unit-level SMS is optional. However, all management systems developed and implemented for an SMS must include an iterative continuous improvement cycle and the minimum 18 Navy SMS fundamental elements.

Additional information about the Navy's SMS, including the four pillars, eighteen elements and their expectations can be found in OPNAV M-5100.23.

FEDERAL REGULATIONS



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US CODE Title 29, Section 654 was created from public law 91-596 ss 5, signed DEC 29 1970. This is known as the Occupational Safety and Health Act of 1970. This ACT created the Department of Labor's (DoL) Occupational Safety and Health Administration (OSHA) and was designed "to assure so far as possible every working man and woman in the Nation safe and healthful working conditions and to preserve our human resources."

There are more than 3.1 million federal civilian employees in more than 100 departments and agencies across the country. Each year thousands of these employees are injured, made ill, or die in work-related incidents. To focus on this problem, Section 19 of the Act specifically charges the head of each federal agency with the responsibility to "establish and maintain an effective and comprehensive occupational safety and health program which is consistent with the standards" set by OSHA for private sector employees.

That broad mandate is further defined by Presidential Executive Order 12196 which identifies the responsibilities of agencies and the role of the Secretary of Labor in developing, implementing and evaluating such programs.

The Secretary of Labor is also assigned broad responsibilities under Section 19 of the Act. DoL regulations, 29 CFR 1960, spell out in detail the responsibilities of the Secretary of Labor and of the heads of other federal agencies under the Act and the Executive Order.

DEPARTMENT OF DEFENSE **REGULATIONS**

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Department of Defense Instruction (DoDI) 6055.01 is the Department of Defense's (DoD) Safety and Occupational Health (SOH) program. DoDI 6055.01 implements the provisions of section 668 of Title 29, United States Code (U.S.C.); Executive Order 12196; part 1960 of Title 29, and Code of Federal Regulations (CFR) with a goal of protecting DoD personnel from accidental death, injury, or occupational illness.



DoDI 6055.01 provides the *Responsibilities and Rights for All Personnel* and requires all DoD components to comply with the federal OSHA standards and apply them to military personnel based on the following distinctions:

- Nonmilitary-unique DoD operations and workplaces – Must fully comply
- Military-unique DoD operations/workplaces – Must comply in whole or in part, as practicable.

When military requirements render compliance infeasible DoD Components must apply risk management procedures and communicate them to affected personnel.

SECRETARY OF THE NAVY (SECNAV) REGULATIONS



The Secretary of the Navy Instruction (SECNAVINST) 5100.10 is the Department of the Navy (DoN) Safety Program. It was developed to establish DoN Safety Program policy and assign responsibilities for administering a comprehensive DON Safety Program. SECNAVINST 5100.10 assigns the following:

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- Delegates authority for DoN Safety Program oversight, direction, management, and execution to the Assistant Secretary of the Navy (Energy, Installations and Environment) (ASN (EI&E)).
- Deputy Assistant Secretary of the Navy (DASN) to serve as the principle policy developer for and advisor to ASN (EI&E) on DoN Safety Program matters.
- Chief of Naval Operations (CNO) to ensure implementation of the policies within SECNAVINST 5100.10.
- Office of the Chief of Naval Operations, Special Assistant for Safety Matters (CNO N09F) to provide safety and occupational health expertise and facilitation of access to requisite hazard, lessons learned, mishap, and exposure data.

OFFICE OF THE CHIEF OF NAVAL OPERATIONS (OPNAV) REGULATIONS

Naval Safety Center, under the premise of CNO N09F, developed Office of the Chief of Naval Operations Instruction 5100.23 (OPNAVINST 5100.23), Safety and Occupational Health Program, to implement the requirements of the Occupational Safety and health Act of 1970 as implemented in Executive Order 12196; Title 29 Code of Federal Regulation 1960; and Department of Defense Instructions 6055.01, 6055.04, and 6055.07.



In addition, Chief of Naval Operations Manual 5100.23 (OPNAV M-5100.23) was developed as the Navy's implementing guidance for the management of the safety and occupational health for all Navy ships and

NAVSAFECEN SAFETY & VPP HANDBOOK

shore activities. OPNAV M-5100.23 is the reference document that:

- Directs commands, units, and activities, regardless of warfare community, to comply with the SOH program elements and additional guidance from other applicable policy.
- Provides new policy on Navy safety management procedures, responsibilities and concepts as well as policy for uniquely military equipment, systems, and operations or other special condition.

All Navy SOH instructions, manuals, guidance, and directives must be aligned with policy in the OPNAV M-5100.23.

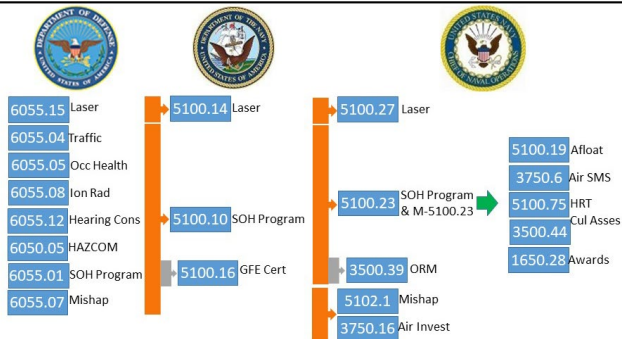
Determinations about whether Navy operations are military-unique may only be made by the Office of the Chief of Naval Operations (CNO) and the CNO Special Assistant for Safety Matters (CNO N09F). This includes approval of deviations, waivers, or alternate SOH standards.

Approval must be provided in writing in the form of an:

- Office of the Chief of Naval Operations Instruction (OPNAVINST)
- Chief of Naval Operations Manual (OPNAV-M)
- Letter signed out by CNO N09F

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HIERARCHY OF SAFETY POLICY

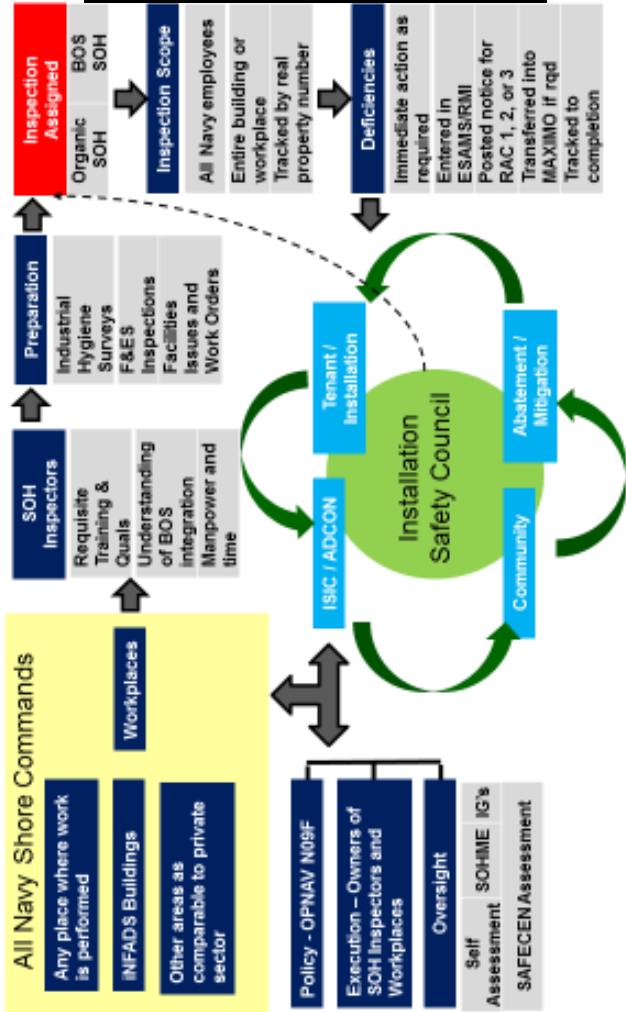


NAVSAFECEN SAFETY & VPP HANDBOOK

<u>DoDI</u>	
DoDI 6055.01	DoD Safety and Occupational Health (SOH) Program
DoDI 6050.05	DoD Hazard Communication (HAZCOM) Program
DoDI 6055.04	DoD Traffic Safety Program
DoDI 6055.05	Occupational and Environmental Health (OEH)
DoDI 6055.07	Mishap Notification, Investigation, Reporting, and Record Keeping
DoDI 6055.08	Occupational Ionizing Radiation Protection Program
DoDI 6055.12	Hearing Conservation Program (HCP)
DoDI 6055.15	DoD Laser Protection Program
SECNAVINST	
SECNAVINST 5100.10	DON Safety Program
SECNAVINST 5100.16	DON Navy Gas Free Engineer Certification and Recertification
SECNAVINST 5100.14	DON Laser Safety Program
OPNAVINST	
OPNAVINST 5100.23	Navy SOH Program
OPNAVINST 5100.19	Afloat SOH
OPNAVINST 5100.27	Laser
OPNAVINST 5100.75	High Risk Training
OPNAVINST 5102.1	Mishap Reporting
OPNAVINST 1650.28	CNO Awards
OPNAVINST 3500.39	Operational Risk Management
OPNAVINST 3500.44	Naval Culture Assessments
OPNAVINST 3750.16	Aircraft Safety Investigation
OPNAVINST 3750.6	Aviation SMS

PART III- INSPECTIONS

INSPECTIONS PROCESS MAP



INSPECTIONS

SOH Inspections

Workplace inspections will encompass the entire building and all Agency and affected personnel workplaces. Therefore, any area where an Agency employee may access or conduct work will be inspected including but not limited to mechanical rooms, roofs, locked areas, etc. This inspection is specifically intended to identify all safety and occupational health related hazards including but not limited to Safety, Fire, Industrial Hygiene, and Facilities related areas. As such inspection results from other safety and health inspection entities (e.g., fire prevention, facilities management specialists, environmental, or zone inspection team participants) may be used to support or even satisfy the Agency workplace inspection requirements, provided they are trained and qualified to recognize the hazards to Agency personnel in those areas and assess from the holistic standpoint. There is no representative sampling of workplaces authorized. Each workplace must be thoroughly inspected.

All areas and operations of each workplace, including office operations, will be inspected at least annually. More frequent inspections will be conducted in all workplaces where there is an increased risk of accident, injury, or illness due to the nature of the work performed.

For more information on workplace inspections, refer to OPNAV M-5100.23 Chapter B5

Fire Inspections

All inspectable facilities shall be subjected to a fire risk management survey or inspection every year, or as determined by Fire and Emergency Services (F&ES). More frequent inspections are authorized for target

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hazard facilities and or higher authority requirements. Additional inspections are authorized to ensure prompt correction of life hazards and facilities deficiencies.

Fire inspections shall be documented in the F&ES designated reporting system within 7 days upon completion of the inspection.

For more information on fire risk management surveys and inspections, refer to OPNAVINST 11320.23

Facility Inspections

Knowledge of facility condition is critical to an effective facility manager and this knowledge can only be attained by facility inspection. A dedicated inspection effort is vital to properly identify Real Property maintenance and repair deficiencies which will potentially impact mission or degrade plant investment.

Hazard Identification

All hazards identified in the course of an inspection, regardless of inspection type (Fire, Facilities, SOH, etc.), must be documented and tracked to completion with interim controls put in place as applicable meeting the minimum element. Documentation of hazards will occur in ESAMS or the Risk Management Information (RMI) Safety Program Management (SPM) module.

INDUSTRIAL HYGIENE (IH) SURVEYS

Industrial hygiene (IH) surveys are conducted to accurately assess personnel exposures to chemical, physical and biological agents in the workplace; to provide recommendations for their reduction or elimination; recommend controls; and to recommend enrollment in specific medical surveillance programs. Periodic workplace evaluations are made to assure the

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effectiveness of the implemented controls and determine the need for continued medical surveillance. If there is a significant production, process, material or control change for a particular work operation, that operation must be reevaluated.

Workplace evaluations to identify and quantify health hazards are accomplished through IH surveys and will be completed under the supervision of an experienced industrial hygienist. IH technicians or exposure monitors (both military and civilian) may assist in the monitoring portion of a survey as long as technical direction is provided by an industrial hygienist. Under no circumstances will they independently conduct IH surveys, interpret IH data or recommend control methods. Copies of all technical assist visits and/or IH surveys shall also be forwarded to the appropriate Regional IH by the cognizant BUMED activity or the carrier/tender IHO.

Areas Specifically Excluded from IH Surveys

Industrial hygiene personnel that certify Biological Safety Cabinets (BSC) need to be properly trained and equipped. Especially in CONUS, such personnel also need to be accredited under the National Sanitation Foundation (NSF) International Field Certification of BSC Program. Unless personnel are specifically trained, equipped and preferably certified, IH surveys should not include evaluation of BSCs.

BUMED field industrial hygienists and other Navy medicine occupational health personnel do not determine personnel exposures to chemicals from an environmental source (except during spill events where first responder safety is the primary medical concern.

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Navy Medicine assets are not intended, prepared, equipped or funded for assessments of exposures to chemicals from an environmental situation regulated by the EPA. Such situations are best addressed by qualified environmental professionals.

When medical support for environmental issues (other than spills) is requested by Installation Commanders, Naval Facilities Engineering Systems Command (NAVFAC) Public Works Center (PWC), or base tenants, Medical Treatment Facility (MTF) Commanding Officers and Officers-In-Charge need to inform the appropriate Navy Medicine Region Environmental Program Manager (NAVMED REPM) before committing to a response.

For more information on IH Surveys, refer to the Industrial Hygiene Field Operations Manual Technical Manual (NMCPHC-TM6290.91) Chapter 2.

BASE OPERATING SUPPORT (BOS)

Base Operating Support (BOS) services are a function of Commander, Naval Installations Command (CNIC). The safety program enables Base Operating Support (BOS) to fleet, fighter and family by providing general Safety and Occupational Health (SOH), Explosives Safety, Traffic Safety and Recreational Off-Duty Safety (RODS) services to all CNIC installations, including all CNIC personnel and participating personnel assigned to tenant commands of these installations receiving BOS Safety services.

The primary purpose of installation safety is to provide a safe and healthful environment for all assigned personnel while ensuring the fair and equitable delivery of available BOS services necessary to identify and control hazardous exposures and manage risk.

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Risk assessment is the primary process used to determine what services are provided to all commands, units, and activities in the Navy Enterprise.

At a minimum, BOS will conduct an annual risk assessment of all tenants on CNIC installations that include:

- An assessment of commands, units, and activities that have provided identification of organic safety personnel and corresponding MFT responsibilities for these safety personnel.
- Identification of SOH programs needed based on specific tenant MFT and operations.
- Determine the need for program managers or designated SOH personnel for high risk programs such as Energy Control, Electrical safety, confined space, fall, and respiratory protection.
- Listing of what services have been provided in the past and planned services for upcoming year.

A command or activity that provides BOS common service, cross service, and/or unique-service support functions to a Customer is a “BOS safety office” or “supporting activity.” The risk assessment format provided by CNIC Headquarters must be used without modification by all BOS service providers.

The results of the risk assessment will be provided to the tenant, tenant Immediate Superior in Command (ISIC), and BOS ISIC.

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CNIC will provide a brief to the Safety Quality Council on an annual basis detailing the safety performance of BOS including what services were and were not provided to tenants.

The term “customer” (also known as tenant, receiver, receiving, or supported activity) means an employer or agency organization resident on a CNIC installation that receives support services from a BOS safety office. Customers also include special interest category departments within the CNIC organization.

For more information on BOS services, refer to the Base Operating Support Manual (CNIC M-5100.1).

RISK MANAGEMENT

Risk is inherent in all tasks, training, missions, operations, and in personal activities no matter how routine. A frequent contributing cause in task degradation or mission failure is human error, specifically the inability to consistently manage risk. Risk Management reduces or offsets risks by systematically identifying hazards and assessing and controlling the associated risks, allowing decisions to be made that weigh risks against mission or task benefits while assessing their potential impact on operations. As professionals, Navy personnel are responsible for managing risk in all tasks while leaders at all levels are responsible for ensuring proper procedures are in place and that appropriate resources are available for their personnel to perform assigned tasks.

Concepts of Risk Management

Risk Management (RM):

- Is a decision-making tool used by personnel at all levels to increase effectiveness by identifying,

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assessing, and managing risks. By reducing the potential for loss, the probability of a successful mission is increased.

- Increases Navy's ability to make informed decisions by providing a standardized RM process.
- Minimizes risks to acceptable levels, commensurate with mission accomplishment. The amount of risk the Navy may accept in war is much greater than what the Navy may accept in peace, but the process is the same. Correct application of the RM process will reduce losses and associated costs resulting in more efficient use of resources.
- Applies to off-duty activities due to their own diverse set of hazards and risks. RM must be practiced 24 hours a day, 7 days a week, and 365 days a year.

Principles of RM

There are four basic principles that provide the foundation for RM and the framework for implementing the RM process.

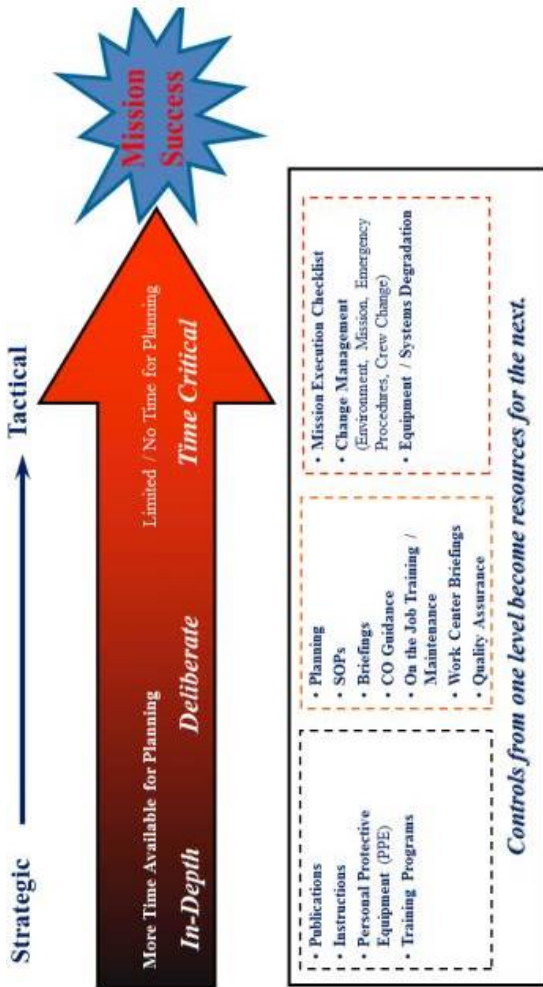
- Accept Risk when Benefits Outweigh the Cost.
- Accept No Unnecessary Risk.
- Anticipate and Manage Risk by Planning.
- Make Risk Decisions at the Right Level.

Levels of RM

The RM process is applied on three levels. The basic factor that differentiates each level is time; that is the amount of time available to dedicate to the preparation and planning of missions or tasks. The three levels of Risk Management are:

- In-depth
- Deliberate
- Time Critical

Relationship between RM Levels



For more information on Risk Management, refer to OPNAVINST 3500.39

JOB HAZARD ANALYSIS (JHA)

A job hazard analysis is a technique that focuses on job tasks as a way to identify hazards before they occur. It focuses on the relationship between the worker, the task, the tools, and the work environment. After you identify uncontrolled hazards, you will take steps to eliminate or reduce them to an acceptable risk level.

You can help prevent workplace injuries and illnesses by looking at your workplace operations, establishing proper job procedures, and ensuring that all employees are trained properly. One of the best ways to determine and establish proper work procedures is to conduct a job hazard analysis. A job hazard analysis is one component of the larger commitment of a safety and health management system.

Supervisors can use the findings of a job hazard analysis to eliminate and prevent hazards in their workplaces. This is likely to result in fewer worker injuries and illnesses; safer, more effective work methods; reduced workers' compensation costs; and increased worker productivity. The analysis also can be a valuable tool for training new employees in the steps required to perform their jobs safely.

For a job hazard analysis to be effective, management must demonstrate its commitment to safety and health and follow through to correct any uncontrolled hazards identified.

HIERARCHY OF CONTROLS

Controlling exposures to occupational hazards is the fundamental method of protecting workers. Traditionally, a hierarchy of controls has been used as a means of determining how to implement feasible and effective control solutions. The idea behind this hierarchy is that the control methods at the top of graphic are potentially more effective and protective than those at the bottom. Following this hierarchy normally leads to the implementation of inherently safer systems, where the risk of illness or injury has been substantially reduced.

Elimination and Substitution

Elimination and substitution, while most effective at reducing hazards, also tend to be the most difficult to implement in an existing process. If the process is still at the design or development stage, elimination and substitution of hazards may be inexpensive and simple to implement. For an existing process, major changes in equipment and procedures may be required to eliminate or substitute for a hazard.

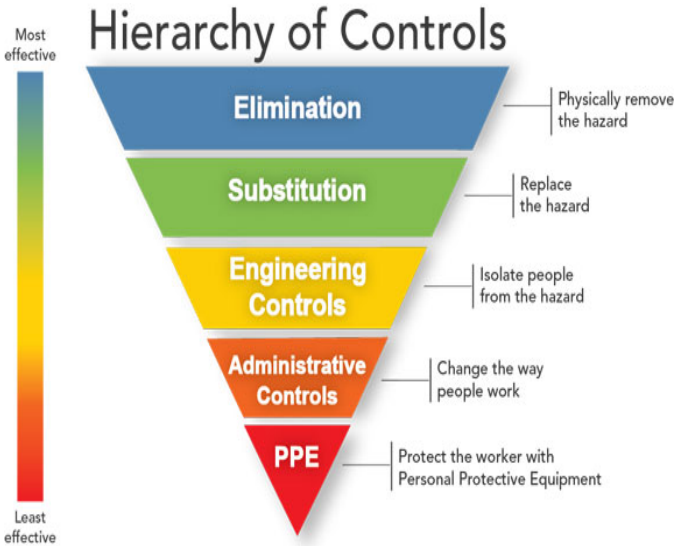
Engineering Controls

Engineering controls are favored over administrative and personal protective equipment (PPE) for controlling existing worker exposures in the workplace because they are designed to remove the hazard at the source, before it comes in contact with the worker. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection. The initial cost of engineering controls can be higher than the cost of administrative controls or PPE, but over the longer term, operating costs are frequently lower, and in some instances, can provide a cost savings in other areas of the process.

For descriptions of engineering control technologies researched by NIOSH, and information on the control details and their effectiveness, visit our Engineering Controls Database. The engineering controls contained in the database are beneficial for users who need control solutions to reduce or eliminate worker exposures. Administrative Controls and PPE

Administrative controls and PPE

Administrative controls and PPE are frequently used with existing processes where hazards are not particularly well controlled. Administrative controls and PPE programs may be relatively inexpensive to establish but, over the long term, can be very costly to sustain. These methods for protecting workers have also proven to be less effective than other measures, requiring significant effort by the affected workers.



PART IV- NAVAL SAFETY CENTER PERSONNEL

REPORTING HAZARDS

Reporting hazards allows NAVSAFECEN to identify and reduce risk in the workplace. This is incredibly important to the safety of all personnel. Accidents will not only cause harm to the personnel involved, but can also impact the overall mission of the Naval Safety Center. That is why emphases are put on minimizing (with the goal of eliminating) safety hazards before they lead to incidents or mishaps.

At NAVSAFECEN, there are a couple different methods of reporting a hazard:

- Report the hazard to your supervisor,
- Report the hazard to the facilities manager,
- Report the hazard to the safety officer,
- Fill-out a paper Anymouse form and submit in a drop box (located throughout SP-91)
- Fill-out an electronic Anymouse and submit online through the NAVSAFECEN public webpage.

GETTING INVOLVED IN SAFETY

Employee involvement is not only a key element in VPP but it is also one of the required elements of the Navy's SMS as well. All NAVSAFECEN personnel must be willing to accept "ownership" of VPP and are encouraged to participate in hazard identification, reporting, and control. At the NAVSAFECEN, it is a common knowledge that safety is everyone's business and all NAVSAFECEN personnel have the right and are encouraged to ask questions, report unsafe conditions,

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stop work when conditions appear hazardous, and actively participate in command safety programs without fear of reprisal, discrimination, or coercion. All employees are passionate about safety and are encouraged to play parts in protecting the team and maintaining fleet readiness. There are several ways NAVSAFECEN personnel can be involved in safety which include:

- Perform an inspection of your cognizant spaces,
- Report hazards, mishaps, and near misses,
- Participate in one of your codes meetings involving safety (AOSA, EOSA, Roundtable, etc.),
- Perform a facilities inspection with the facilities manager,
- Attend training at the Naval Safety and Environmental Training Center (NAVSAFENVTRACEN)
- Produce an analysis product (see the *Data Analysis* section)
- Present a safety topic at the annual Joint Forces Professional Development Symposium (PDS).

DATA ANALYSIS

With the successful completion of LOE 20-02, NAVSAFECEN became established as a Center of Excellence for modern data analytics to predict and prevent mishaps, which aligns to support out guiding principle of Safety Risk Management.

Analysis is the systematic examination of a safety or risk management issue by breaking it into component parts in order to uncover interrelationships to inform decision-making. A large part of NAVSAFECEN's mission is to continuously collect and analyze a wide range of safety-related data to identify hazards and trends and

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proactively communicate systemic risks, lessons learned, and best practices to Navy and Marine Corps stakeholders.

The Naval Safety Center strives to create concise, readable safety lessons to help Sailors, Marines, civilian employees, and their families avoid repeating a mishap. We do our best to tell a story people will remember – that they will recall when going through their normal day – that empowers them to identify hazards, accept "ownership" and responsibility for those hazards in their communities, commands and homes, and take action. Some of the analysis products produced by NAVSAFECEN include:

- In-depth studies of risk predictors using advanced models and large data sets
- Lessons Learned
- Sanitized Safety Investigation Reports
- SOH Grams
- Ship Safety Bulletins
- Approach Magazine
- Mech Magazine
- FLASH
- Safety Assurance Letters

In-Depth Studies of Risk Predictors

Echelon 2 and TYCOM driven analyses of operational risk leverage both mishap data and Naval demographic data in machine learning models to produce actionable insights for senior leaders about specific ships and squadrons. Analyses are tied to the Optimized Fleet Response Plan phases and in collaboration with Fleet stakeholders so that insights generated by the models support timely responses by decision makers. Analyses are presented in professional journal papers and Flag briefs.

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Lessons Learned (LL)

LL products are articles intended to convey a message of how to prevent a future mishap. The content and style of LLs vary and may be based upon a single mishap or hazard, a series of incidents, a general mishap category, or an identified best practice.

Sanitized Safety Investigation Reports

Sanitized Safety Investigation Reports (SSIR) are fully-releasable summaries of safety investigation reports which have been sanitized of safety-privileged information and condensed into a concise, readable, plain-language format. They are intended to convey a clear message to Navy and Marine operators of what happened, why it happened, and how to avoid repeating the mishap. The narrative, causal factors, and recommendations are simplified versions of what was determined by the original investigators and endorsers.

Each of these products is transmitted via email to distribution list contacts in the Navy, Marine Corps, joint services, DOD and other governmental agencies.

All of these Lessons Learned and Sanitized SIRs are available on the “Lessons Learned” pages of the Naval Safety Center’s CAC-enabled website. The subset of Lessons Learned that are not Controlled Unclassified Information (CUI) are also posted on the lessons learned page of the Naval Safety Center’s public website as well.

SOH Grams

Periodically NAVSAFECEN Shore Directorate publishes a Safety and Occupational Health (SOH) Gram. These SOH Grams focus on accident trends and preventive actions, recently identified hazards, seasonal safety awareness and any specific area needing additional emphasis to prevent future mishaps.

FLASH and Ships Safety Bulletins

Factual Lines About Submarine Hazards (FLASH) and Ships safety bulletins are a compilation of technical safety related articles that highlight safety issues regarding boat and ship equipment line up, maintenance, and operation as determined from review of mishap reports and AOSA observations. These products are distributed to submarines and ships.

Approach Magazine

Since 1955 Approach magazine has guided Navy and Marine Corps aviation professionals with information, statistics and a bit of humor. Most of all, Approach has given aviators a place to share stories, misdeeds and adventures, to make us better, safer and more effective.

These first-person "There I was" stories have been the basis for Approach since its inception. This sharing of stories also has bonded naval aviators - past and present - to one another and to the profession itself. Picture yourself with a damaged aircraft, operating in blue water with a pitching deck and enough gas for one, maybe two, approaches, and you have everything needed for a "There I was" story.

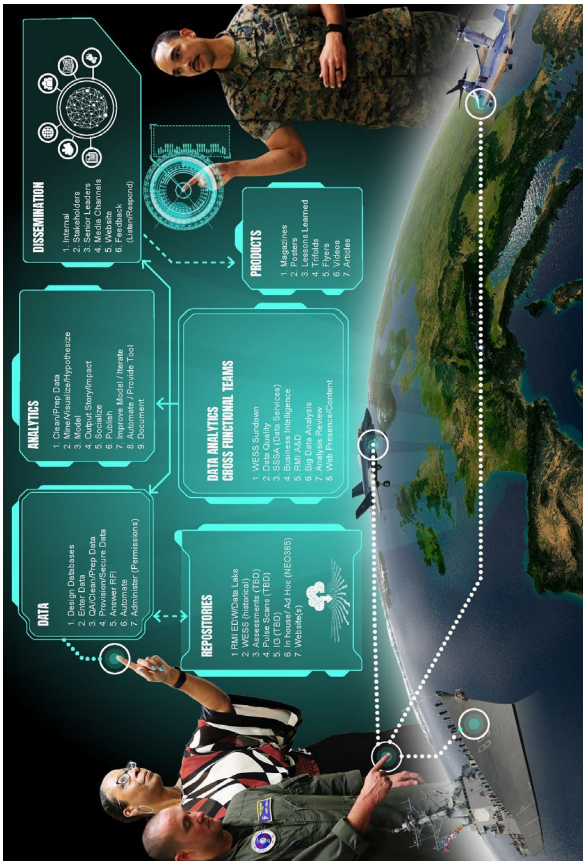
Mech Magazine

Mech magazine was welcomed into the fleet in 1961 as the aviation-maintenance safety magazine for the Navy and Marine Corps. Mech provides stories, information, procedures and most of all, a venue to raise safety awareness among our aviation maintainers. It is written by maintainers for maintainers and is credited as a critical part of a continually improving safety record in naval aviation.

Safety Assurance Letters

Safety assurance letters describe a specific hazard that is introducing increased risk and directs corrective actions to the appropriate stakeholders. Safety Assurance Letters are issued and signed out by the Office of the Chief of Naval Operations, Special Assistant for Safety Matters (CNO N09F).

Data Analysis-Dissemination Model



For more information on the commands analysis guidelines, refer to NAVSAFECENINST 5223.1

EMERGENCY ACTION PLAN

Emergency situations normally arise without warning or time to prepare. Pre-planned responses to general emergency situations that can be anticipated help to bring order to these events and prevent loss of life and property. The first few minutes of any incident are usually the most critical. Proper implementation of these procedures will place the command on the track to the safe and successful resolution of the emergency.

Fire

Steps to take if there is a fire:

- Pull fire alarm and verbally alert others of the fire.
- Report the fire to NAVSTA Norfolk Dispatch 444-3333.
- If the fire is small, you can find the closest fire extinguisher and direct the discharge of the extinguisher at the base of the fire.
- If the fire is too large for a fire extinguisher or has grown rapidly, shut windows and doors (if time permits) and evacuate the building to your designated location. Ensure that you instruct everyone to evacuate. **DO NOT** leave the building without sounding an alarm.
- Once outside, follow directions from emergency personnel.
- **DO NOT** re-enter the building until the all clear is given by your building manager with guidance from emergency personnel.

If you/someone's clothes are on fire

- STOP THE PERSON FROM RUNNING
- DROP THE PERSON TO THE GROUND
- ROLL THEM ON THE FLOOR OR COVER THEM WITH SOMETHING TO SMOTHER THE FLAMES
- CALL EMERGENCY DISPATCH 444-3333



Building Evacuation

Some emergencies may require evacuation of the building. The following actions shall performed in an event that requires the building to be evacuated:

- The muster Point of Contact (POC) will be the individual that has the current building/floor roster.
- Verbal notice will sound the evacuation.
- Seek out and assist disabled persons in your area (if necessary).
- If time permits, turn off power to electrical equipment and secure sensitive materials. Make sure you bring your belongings with you when you evacuate.
- In the event of an emergency, employees shall evacuate by means of the NEAREST available exit. Take note of the wind. Remain upwind if

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possible. (If your primary muster location is in the smoke plume or is being affected by smoke, utilize your back up muster location.) Report to your assigned muster area. Move quickly, safely, calm, and orderly. Muster with the appropriate representative from your code.

- Each code should provide the Administrative Officer with a complete muster sheet for their respective code. All personnel will remain at the designated muster station until the “ALL CLEAR” and re-entry is announced by emergency officials.
- DO NOT re-enter the building until permitted by your building manager after he/she has spoken emergency officials.

Shelter in Place

To “Shelter-in-Place” means selecting an interior room or rooms within the building, or ones with no or few windows, and taking refuge there. In many cases, the Regional Operations Center or the Naval Station Norfolk Emergency Operations Center will announce via Giant Voice, text message, pop up or a combination of all three.

Nature and magnitude of the emergency situation will determine if you are to shelter in place or evacuate. You need to understand and plan for both actions. Training and running drills is important. Know where you are going to go before something happens.

If you are going to Shelter-in-Place you need to alert everyone in the building/floor where you work.

- All Personnel: Upon being directed to shelter in place, shutdown all computers, secure all classified material, close all doors and windows.
- Facilities Manager: Secure air-handling units to prevent biohazards from entering.

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- SDO: Secure building.
- Division Heads: Account for your personnel, if it safe to do so and report the muster to your respective Director.5. Directors/Department Heads: Report muster to Deputy Commander and relay the last known location of any person missing. If Deputy Commander is unavailable notify the Administrative Officer.
- All Personnel Present in the Building: Remain in your division space.
- Admin Personnel/SDO: Assist Deputy Commander with muster.
- SDO: Post guard on inside of all exit doors to prevent persons from entering or departing. Maintain contact with emergency authorities and pass directions accordingly.

Active Shooter

An active shooter is an individual actively engaged in killing or attempting to kill people in a confined and populated area; in most cases, active shooters use a firearm(s) and there is no pattern or method to their selection of victims.

Quickly determine the most reasonable way to protect your own life. Remember that employees are likely to follow the lead of someone that knows what they are doing.

RUN: If there is an escape path, attempt to evacuate the premises. Be sure to:

- Have an escape path and plan in mind. Always have two routes.
- Evacuate regardless if others don't leave.
- Leave your belongings behind. Don't waste time going back.
- Help others escape if possible.

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- Prevent personnel from entering an area where the shooter may be.
- Keep your hands visible. Police/security will easily identify that you don't have a weapon.
- Do not attempt to move wounded people.
- When you are safe call 444-3333 (calling 911 will work, but your call will be directed to the City of Norfolk).
- When possible, move to your building's designated assembly point for accountability.

HIDE: If evacuation is not possible, find a place to hide where the active shooter is less likely to find you. Your hiding place should:

- Be out of view of the active shooter.
- Provide protection if shots are fired in your direction.
- Consider locking yourself in an office or closet.
- To prevent an active shooter from entering your hiding place, lock the door and blockade the door with heavy furniture.
- Call the Naval Station Dispatch at 444-3333, if you cannot talk, just leave the line open so the dispatcher can hear what is going on.
- **DO NOT TRAP OR RESTRICT YOUR OPTIONS FOR MOVEMENT**

If the shooter is nearby, lock the door, silence (or turn off) your cell phone, and turn off any source of noise. Remain quite as long as you can.

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FIGHT: As a last resort, and only when your life is in imminent danger, attempt to disrupt and/or incapacitate the active shooter by:

- Acting as aggressively as possible against him/her.
- Throwing items and improvising weapons.
- Yelling.
- Committing to your actions.

- Actions after Law Enforcement Arrives
- Remain calm and quiet.
- Follow all orders given by security personnel upon arrival.
- Keep your hands visible at all times.
- Avoid quick movement.

- Division/Department Head Actions after Law Enforcement Clears the Scene
- Conduct a 100% telephone muster (voice/text).
- Relay muster to the Administrative Officer within 30 minutes. Provide supplemental updates as needed.

For more information on the commands emergency action plan, refer to NAVSAFECENINST 11090.1

EMPLOYEE ASSISTANCE PROGRAM

Department of the Navy employees are busy juggling work and family and it is not unusual to encounter difficulties with stress, family, relationships, alcohol, work, or other issues which impact their quality of life. The Department of the Navy values its employees and has partnered with the Department of Health and Human

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Services Federal Occupational Health (FOH) to provide a centralized Employee Assistance and Work-Life program for employees and their families.

The Department of the Navy Civilian Employee Assistance Program (DONCEAP) provides a wide range of services to employees and their families. Employees can access services 24/7 through the web at DONCEAP.foh.hhs.gov or by phone 1-844-DONCEAP. A professionally staffed call center will provide answers to questions, research information, link employees to a wide variety of qualified local services, and provide licensed confidential support to help with difficult issues

Services Offered

Some of the services available to employees include:

- Access to licensed counselors who provide in-person, short-term counseling for a wide range of concerns to include relationships, legal, financial, family, substance abuse, depression, parenting, and more
- Assistance with a wide range of concerns to include short-term problem solving, management coaching, or crisis management
- Help when there is an incident or crisis that affects the workplace – psychological first aide, grief groups, consultation, and education
- Access to Work-Life specialists who provide information, resources, and referral to:
 - o Childcare (daycare, preschools, etc.)
 - o Eldercare (assisted living, in-home care, etc.)
 - o Daily Life (relocation, event planning, etc.)
 - o Family (adoption, prenatal, etc.)
 - o Legal and financial (credit and debt, tax tips, identity theft issues, etc.)
- Comprehensive information and resources 24/7 via the web

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- Library of resources including health and wellness articles, presentations, webinars, and podcasts

Who is eligible to use the DONCEAP?

DONCEAP services are available to all Department of the Navy civilian employees and their family members (any legal dependent, regardless of home address, or significant other living in the employee's household).

How much does it cost to access the DONCEAP?

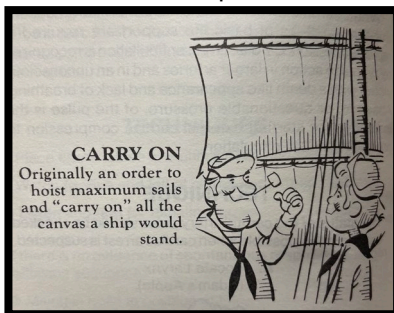
DONCEAP consultation services are provided at no charge to civilian employees and their families. Some fees may apply for additional services beyond the consultation.

Are my interactions with the DONCEAP counselors shared with my supervisor?

DONCEAP services are voluntary and confidential within the limits of the law. Your consultation is protected and is only shared with those who will be providing services to you.

How do I contact DONCEAP

Call 1-844-DONCEAP (1-844-366-2327) or 1-800-262-7848 for hearing impaired to make a confidential appointment with a licensed counselor or to speak with a Work-Life specialist.



PART V- SAFETY PROGRAMS

CONFINED AND ENCLOSED SPACES
HIGH RISK PROGRAM

Work aboard Navy ships brings us into direct contact with confined spaces and enclosed spaces. Let's look at what could be classified as a confined and enclosed space.

A confined space means:

A space, which by design has limited and restricted openings for entry or exit, lacks natural ventilation, and which could contain or produce hazardous contaminants or oxygen deficiencies or enrichment. Confined spaces are not intended for normal continuous occupancy.

- Shipboard confined spaces include: all tanks/voids, fuel tanks, double bottom tanks, cofferdams and similar spaces.
- Ashore confined spaces include: fuel storage tanks, process vessels, boilers, furnaces, sewers, utility tunnels, vaults and similar spaces.

An enclosed space is:

A space, which by its nature or design is of such a shape, depth, or other feature that natural ventilation or the natural movement of air is restricted. Such spaces include open top storage tanks, pits, machinery rooms, pump rooms, magazines, degreasers, dip tanks, trenches and similar spaces.

Hazards

Confined and enclosed spaces can sometimes contain hazardous atmospheres. These hazards include oxygen deficiency, or enrichment,



flammable gases and vapors, and toxic gases and vapors. Tank openings may also be an unguarded edge where fall protection is needed. Personnel should be trained in confined space awareness/hazard recognition.

An oxygen-deficient atmosphere has less than 19.5% oxygen (O₂). Any space with less than 19.5% oxygen shall not be entered. The oxygen level in a confined space can decrease because of work, such as:

- Welding;
- Cutting;
- Brazing;
- Chemical reactions,
- Bacterial action and
- Plain oxidation, (rusting)

An unsafe flammable atmosphere occurs when the concentration of a flammable gas vapor is equal to or greater than 10% of its LEL (Lower Explosive Limit).

Different gases have different flammable ranges. If a source of ignition is brought into a flammable atmosphere, an explosion may result.

Toxic Atmospheres

The following describes toxic atmospheres producing processes:

- Liquids, residues or sludge from material previously stored;
- Toxic materials absorbed into the walls which can give off toxic gases or vapors when they are removed or cleaned;
- Hazardous gases produced by decay or accumulation because they are heavier than air;
- Materials used or produced by the work being performed (for example, cleaning solvents, paints and welding fumes).

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- Materials used or produced by working near a confined space which can enter and accumulate in the space.

Only properly trained and designated Confined Space Program personnel (Gas Free Engineers, Marine Chemists, and Navy Competent Persons) are permitted to certify confined or poorly ventilated enclosed spaces as safe for entry.

If he/she finds the space safe for entry, he/she issues a "Safe for Entry confined space certificate". This certification by the Navy Competent Person must be at least updated every 24 hours.

A copy of the certificate is posted at each point of entry into all confined or poorly ventilated enclosed spaces.

You must personally read and comply with this certificate. Ensure that it is current and determine any restrictions placed on entry/work before entering a confined space or poorly ventilated enclosed space. Remember, placing any part of your body through the opening of a confined space is considered entering the space.

Work in confined and enclosed spaces

- Do not enter or work in or on confined or poorly ventilated enclosed spaces unless a current Confined Space certificate is posted indicating that it is safe to enter.



- Observe all special requirements/precautions that are listed on the confined space certificate and use specific Personal Protective Equipment when required. Ventilation may be required; ventilation is the primary means of controlling or removing unwanted vapors or fumes.
- When personnel work in a confined space or a poorly ventilated enclosed space, someone outside the confined space shall perform frequent checks on the workers inside the confined space.
- Checks shall be made by voice communication, signal, visual contact or electronic means.
- The frequency of checks shall be established as often as necessary to ensure that the safety of the employees in the space is maintained. In no case shall the frequency of checks between someone outside the space and personnel in the space exceed **5 minutes** for confined spaces, or **1 hour** for poorly ventilated enclosed spaces.

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ANTICIPATE and RECOGNIZE HAZARDS that can occur in a confined or enclosed space.

- If you experience symptoms such as lightheadedness, shortness of breath, irritating odor, or stinging eyes, or evacuation signal or order is given, exit the space immediately.
- If you discover someone experiencing trouble in such a space – GET HELP!

IF YOU SEE AN UNCONSCIOUS OR OBVIOUSLY DISORIENTED PERSON IN A CONFINED OR POORLY VENTILATED ENCLOSED SPACE: DO NOT ENTER THE SPACE TO ATTEMPT A RESCUE. CONTACT EMERGENCY MEDICAL SERVICES.



The requirements that govern confined space work can be found in different publications and differ depending on the entity performing the work and the location in which the work is going to be performed. With many different documents and requirements that regulate the program, this has proven to be somewhat confusing for the end user

Naval Safety Center (NAVSAFECEN), along with the Department of Navy GFE Board, has created the check list below to aid

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			29CFR			NAVSEA			OPNAV	
			1910	1915	1926	SAF-010	NSTM 074	STD Item	5100.23	5100.19
Ship's Force	Underway			X			X			X
	Non Ship Repair	Non-Shipboard (Shore)	X			X			X	
		Pier Side					X			X
		Ship Repair				X				
	Ship Repair	Naval Shipyard				X				
		Private Shipyard				X				
Pier Side					X					
Military Members (Non-Ship's Force) & DoN Civilian	Underway			X			X SF May provide			
	Non Ship Repair	Non-Shipboard (Shore)	X		X Construction Only				X	
		Ship Repair		X		X				
	Ship Repair	Naval Shipyard		X		X				
		Private Shipyard		X		X				
		Pier Side		X		X				
Contractor	Underway			X			X SF may provide	X		
	Non Ship Repair	Non-Shipboard (Shore)	X		X Construction Only				X	
		Ship Repair		X				X		
	Ship Repair	Naval Shipyard		X				X		
		Private Shipyard		X				X		
		Pier Side		X				X		

Shore Non-Ship Repair

- Ship's force, military non-ship's force, civilians and contractors - 29CFR1910 and OPNAVINST 5100.23 are the primary regulations for shore confined space for all entities.
- Ship's Force: per NSTM Chapter 074, Volume 3, for shore operations (including ship overhaul and repair at Naval Shore Facilities), NAVSEA S6470-AA-SAF-010, U.S. Navy Gas Free Engineering Program, is the applicable volume. Follow NSTM Chapter 074, Volume 3, requirements or obtain Naval Maintenance Facility (NMF) Gas Free Engineer (GFE) or National Fire Protection Association (NFPA) marine chemist services, if necessary, when pier side for ship's force, enter into confined and enclosed spaces for inspections, preventive maintenance and access to stowage. Ship's Force should not be performing shore non-ship repair work.

NAVSAFECEN SAFETY & VPP HANDBOOK

Ship Repair

- Civilians: 29CFR1915 and NAVSEA SAF-010 are the primary regulations, including non-NMF shore doing shipboard repair work.
- Contractors: 29CFR1915 and NAVSEA Standard Item are the primary regulations.
- Ship's force: NAVSEA SAF-010 and NSTM Chapter 074, Volume 3 are the primary regulations.
- Ship's force will not provide hot work certification to conduct work where DOD civilians or contractors are working in the same space or may be affected by work conducted by ship's force. The afloat GFE must coordinate hot work aboard ship with Naval Maintenance Facility (NMF) GFEs or in advance of specific ship's force evolutions to ensure awareness and coordination of ship's force work. The afloat GFE must follow NMF GFE and NFPA marine chemist guidance.

Underway

- NSTM Chapter 074, Volume 3 is the primary regulation governing confined space work while underway for all entities.
- Contractors: 29CFR 1915 and NAVSEA Standard Items are the primary regulations.
- NMF Personnel: 29CFR 1915 and NAVSEA SAF-010.
- The afloat GFE may provide GFE services to contractor personnel when the ship is located outside U.S. territorial waters. This is solely a last resort to accomplish mission and time critical work and not intended to relieve contractors of the obligation to provide their own Certified Marine Chemist services whenever and wherever possible.

NAVSAFECEN SAFETY & VPP HANDBOOK

There are many potential hazards associated with entry into confined spaces, making it imperative that the correct regulations are followed while performing work in a confined space. Since confined space regulations are not housed in a single document, it is also just as important that you know where to find the applicable regulations for the work being performed. Keep the following takeaways in mind the next time you're planning, performing, or overseeing work within a confined space:

- It only takes one oversight or shortcut to undermine the extensive preparations required for safe confined space entry. Each person involved must understand their roles and responsibilities as well as which standards govern the work being performed and adhere to them.
- Safety culture does not exist without vigilance. While selection from the many NAVSEA, NSTM and OSHA confined spaced entry regulations can be confusing, it is imperative that the correct regulations are selected and followed for the type and location of the confined space. The phrase "The life you save may be your own" applies especially to confined space entry. It is the responsibility of each individual to ensure that only safe, approved practices and procedures are followed when entering confined spaces.

CONTROL OF HAZARDOUS ENERGY

CONTROL

HIGH RISK PROGRAM



The control of hazardous energy, commonly referred to as Hazardous Energy Control (HEC), is required during servicing and maintenance of machinery and equipment (e.g., perform maintenance, repair, construction, installation, removal, adjustment, inspection, modification, testing, and other associated activities). Requirements apply when one or more of these three conditions exist:

- When persons perform energized work.
- Unexpected energizing or movement of machinery or equipment which could cause injury to personnel and/or property damage.
- Release of energy during the maintaining or servicing of such equipment or machinery which could cause injury to personnel and/or property damage.

There are 3 programs used to control hazardous energy:

- Shore (non-shipyard) – Lockout/Tagout (LOTO)
- Shore (shipyard) – Lockout/Tags-Plus (LOTP)
- Shipboard – Tagout User’s Manual (TUM)

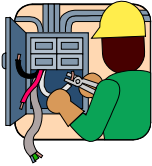
LOTO/LOTP

Lockout must be implemented as part of the overall energy-control program for machinery, equipment, or systems that are capable of being locked out. Lockout of

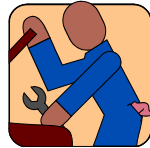
hazardous energy sources is the basic requirement of the HEC program; **all shore hazardous energy sources shall be locked or tagged out by formally trained Authorized Employees (AEs)**. If you are not a trained Authorized Employee (AE), you are an Affected Employee (AFE), that is, **you may be affected by ongoing servicing work**.

Hazardous Energy Sources

There are many forms of energy besides electrical energy that are hazardous and can cause you serious harm, or even death...especially if the machine, equipment, or system is turned on or energy is released unexpectedly while servicing or maintaining equipment.



Additional forms of energy such as mechanical energy (e.g., compressed springs), hydraulic energy (any type of liquid, including water, that is under pressure), and pneumatic energy (gas, including air, that is under pressure) also need to be considered.



Whenever personnel are exposed to any type of energy that can harm them, this energy source becomes a 'Hazardous Energy'.



Don't forget the hidden dangers of stored or residual energy! In addition to turning a machine off and isolating and locking out the energy sources, all stored or residual energy must be relieved, disconnected, bled, restrained, or otherwise rendered safe. Equipment with capacitors,

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springs, elevated machine members, and pressurized fluids or gases may contain stored or residual energy, i.e. hazardous energy.

Gravity is also is an energy that can become a hazardous energy, e.g., an employee is working on the underside of a large diesel generator suspended by chains that are attached to a crane hook, and the generator falls after one of the chains break. The falling generator can render serious injury or even death to the employee working underneath the generator.

Hazardous energy controls are required whenever personnel are in situations like this, e.g., putting wood blocks under the diesel generator and supporting it would be a form of protection to prevent the gravity from injuring or killing the employee.

Commands, units, and activities must not use combination locks for lockout. No two lockout devices (e.g., locks) may have the same key. No more than two keys may exist for any one lock. The Authorized Employee must maintain one key and the supervisor must maintain the other in a location readily accessible to that supervisor in the event of an emergency.

Never attempt to:

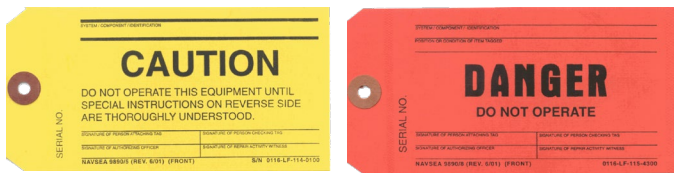
- Remove, modify, or adjust any lock or tag used for the control of hazardous energy,
- Try to start/energize the MES; or
- Attempt to bypass the lock or tag used for the control of hazardous energy as this can injure you and/or the Authorized Employee(s) who installed the hazardous energy control.

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For more information on the shore side Control of Hazardous Energy refer to OPNAV M-5100.23 Chapter B24

Control of Hazardous Energy Shipboard

The Navy's program to control hazardous energy shipboard requires ships systems to be tagged out via formal isolation procedures in accordance with the Tag-Out User's Manual (TUM). The requirements of the TUM only applies to equipment tag-outs and instrument labels on all systems and components on naval ships and craft when manned by Ship's Force. Controlling hazardous energy shipboard is very different from the shore side program and does not use locks to isolate hazardous energy and/or protect equipment. The primary means of isolation are Danger and Caution Tags.



Danger tags are used to prohibit the operation or removal of equipment that could jeopardize safety of personnel or endanger equipment, systems or components.

Caution tags are used to provide temporary special instruction(s) or to indicate that unusual action must be exercised to operate equipment. Caution tags must state the specific reason that the tag is installed.

Use of phrases such as "DO NOT OPERATE WITHOUT SUPERVISOR PERMISSION" is not appropriate since equipment or systems are not operated unless permission from the responsible supervisor has been obtained. A caution tag is not used if personnel or

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equipment can be endangered while performing evolutions using normal operating procedures.

Any person having knowledge of a situation requiring tags or labels should request that they be issued and applied.

Tags should:

- Be removed as soon as possible after all line item(s) listing a component are cleared. Only tags not shared with other line items and listed on the TRS may be removed.
- Never be used for component identification or to mark leaks.
- Not be reused, except as authorized for Planned Maintenance System (PMS) procedures.

Never attempt to:

- Remove, modify, adjust, or bypass any danger or caution tag, or
- Try to start/energize Danger tagged MES.

For more information on the Control of Hazardous Energy refer to OPNAV M-5100.23 Chapter XX (Shore) and S0400-AD-URM-010/TUM Tag-out User's Manual (Shipboard).

ELECTRICAL SAFETY **HIGH RISK PROGRAM**

Electricity can cause a multitude of damage to the human body. Each year electrical shocks and fires cause hundreds of deaths. Whenever you work with power tools or on electrical circuits there is a risk of electrical hazards,



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especially electrical shock. Anyone can be exposed to these hazards at home or work.

Workers are exposed to more hazards because job sites can be cluttered with tools and materials, fast-paced, and open to the weather. Risk is also higher at work because many jobs involve electric power tools.

It is obvious that electrical trade workers must pay special attention to electrical hazards because they work on electrical circuits. However, non-electrical trade workers (everyone else) must also pay attention to electrical hazards because we all use electricity in our day to day routines; whether that be plugging in equipment and appliances, turning on the light switches, or using portable electric tools.

Coming in contact with an electrical voltage can cause current to flow through the body, resulting in electrical shock, burns, serious injuries **or even death.**

As a source of energy, electricity is used without much thought about the hazards it can cause. Since electricity is a familiar part of our lives, it often is not treated with enough caution. Voltages as low as 30 volts may be fatal, depending upon the path of the current, whether it passes through the heart, the amount of current, and the length of time the current is flowing. Injuries associated with electrical shock include burns, heart failure and other associated injuries. Also, associated with shocks are falls. Workers on a platform or ladder may fall as a result of the reaction to the initial shock. These falls can result in serious injuries. Always treat electricity with respect and caution.

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EFFECTS OF ELECTRICITY

Current	Reaction
1 milliamp	Faint tingle
5 milliamps	Slight shock disturbing but not painful
6-25 milliamps (women) 9-30 milliamps (men)	Painful shock, lost muscle control, freezing starts, problems with letting go
50-150 milliamps	Extremely painful shock, respiratory arrest, (breathing stops) Severe muscle contractions, flexor muscles may 'hold on', extensor muscles may push away, and death is possible.
1000-4,300 milliamps (1-4.3 amps)	Ventricular fibrillation (heart pumping not rhythmic) muscles contract nerve damage occurs. Death is likely.
10,000 milliamps (10 amps)	Cardiac arrest and severe burns occur. Death is probable.
15000 milliamps (15 amps)	Lowest over-current at which a typical fuse or circuit breaker opens a circuit

Portable Electric Equipment

Portable cord- and plug-connected equipment and flexible cord sets (e.g., extension cords) will be visually inspected for external defects (e.g., loose parts, deformed and missing pins, or damage to outer jacket or insulation) before use on any shift, and for evidence of possible internal damage (e.g., pinched or crushed outer jacket). Cord-and plug connected equipment and flexible cord sets which remain connected once they are put in place and are not exposed to damage need not be visually inspected until they are relocated. If there is a defect or evidence of damage that might expose an employee to injury, the defective or damaged item will be removed from service, and no employee may use it until repairs and tests necessary to render the equipment safe have been made by a qualified electrician.

Adapters to plug 3-prong electrical plugs into 2-prong receptacles are prohibited. These defeat the electrical grounding circuit and can create a hazard.

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Plugging a surge suppressor into a surge suppressor, plugging an extension cord into a surge suppressor, plugging a surge suppressor into an extension cord, and plugging an extension cord into another extension cord are all examples of a daisy chain. The practice of daisy chaining or stringing of extension cords, surge protectors, or uninterruptible power supplies, or going from one cord to several, is prohibited unless approved by local safety authority.

Do not use extension cords to raise and lower equipment.

Extension cords shall not be ran through walls, ceilings, floors, doors, or windows. Do not conceal behind walls, dropped ceilings, or floors. Additionally, they shall not be placed where they will be walked on, nor ran over by equipment. If extension cords must be placed in travel lanes, they must be protected by housings, bridges, or covers approved for such use.

When unplugging an electrical cord, always firmly grip the molded plug body, rather than the power cord itself. Pulling or yanking on the cord damages the conductors and the terminations in the plug.

Electrical Fires

Electronic equipment fires generally occur from electrical short circuits, overloaded circuits, improper use of electrical equipment, overheated motors, and use of flammable liquids in the presence of an electric spark or hot surface as well as paper in contact with an overheated surface.

Arc Flash

An arc flash is the sudden release of electrical energy through the air when a high-voltage gap exists and there

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is a breakdown between conductors. An arc flash gives off thermal radiation (heat) and bright, intense light that can cause burns. Temperatures have been recorded as high as 35,000 °F. High-voltage arcs can also produce considerable pressure waves by rapidly heating the air and creating a blast. This pressure burst can hit a worker with great force and send molten metal droplets from melted copper and aluminum electrical components great distances at extremely high velocities. These and other hazards can be eliminated or reduced by pre-job planning (e.g., job hazard analysis) which must include engineering guidance in understanding the system's operation and review of up-to-date single line and schematic as built drawings. All apparel, tools, and other equipment required for worker safety must be identified and available before beginning the job.

For more information on Electrical Safety, refer to OPNAV M-5100.23 Chapter 35 and Naval Ships Technical Manual Chapter 300.

ERGONOMICS & MUSCULOSKELETAL HAZARDS

Ergonomics is the field of study that involves the application of knowledge about physiological, psychological, and biomechanical capacities and limitations of the human body. This knowledge is applied in the planning, design, and evaluation of work environments, jobs, tools, and equipment to enhance worker performance, safety, and health. Ergonomics is essentially adapting and accommodating the workplace to the worker.

This program seeks to prevent work-related musculoskeletal disorders (WMSDs) and injuries/illnesses by



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identifying, evaluating, and controlling physical workplace risk factors.

WMSDs are defined as a class of disorders involving damage to muscles, tendons, tendon sheaths, and related bones and nerves. They may also be known more specifically as Repetitive Strain Injuries (RSIs), Cumulative Trauma Disorders (CTDs), and Overuse Syndrome. WMSDs result from the cumulative effect of repeated traumas associated with specific physical workplace risk factors. Physical risk factors include but are not limited to:

- Force - The amount of physical effort required to maintain control of equipment or tools or perform a task such as heavy lifting, pushing, pulling, grasping, and carrying.
- Repetition - Performing the same motion or series of motions continually or frequently for an extended period of time with little variation. Examples include prolonged typing, assembling components, and repetitive hand tool usage.
- Awkward or static postures - Awkward postures refer to positions of the body (limbs, joints, back) that deviate significantly from the neutral position while performing job tasks. Overhead work, extended reaching, twisting, squatting, and kneeling are all examples of awkward postures. Static postures refer to holding a fixed position or posture for extended periods of time. Examples include gripping tools that cannot be set down or standing in one place for prolonged periods.
- Vibration - Vibration, such as on the hand and arm, occurs when a specific part of the body comes into contact with vibrating objects such as powered hand tools (e.g., chain saw, electric drill, chipping hammer) or equipment (e.g., wood

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planer, punch press, packaging machine). Whole-body vibration occurs when standing or sitting in vibrating environments (e.g., operating a pile driver or driving a truck over bumpy roads) or when using heavy vibrating equipment that requires whole-body involvement (e.g., jackhammers).

- Contact stress - Results from occasional, repeated, or continuous contact between sensitive body tissues and a hard or sharp object. Examples include resting the wrist on a hard desk edge, tool handles that press into the palms, and using the hand as a hammer.
- Duration - The period of time an action continues or lasts. Duration reflects the length or dose of the exposure and magnifies the other risk factors.

Ergonomics hazards can be prevented by the design of the job or workstation or even tools.

Key things to consider helping prevent ergonomic hazards:

- Awareness of posture
- Diet and exercise
- Stretching
- Plan ahead
- Always use your knees
- Get help for heavy objects
- Ensure pathways are clear
- Never twist when lifting or carrying a load
- Use the right tool

Should you experience pain or cramping while working in awkward positions such as overhead; stop, rest for a moment and try to stretch it out, in addition, report it to your supervisor.

Lifting

Special attention is needed to avoid back injuries associated with manual lifting and handling of parts and materials.

- Size up the load prior to lifting, determine if you need assistance.
- Make sure you can carry the load to the desired location, a clear unobstructed path is necessary.
- Bend the knees, not your back
- Position your feet close to the load,
- Center your body over the load,
- Bend your knees, get a good grip,
- Straighten your legs, to lift the load straight up,
- Let your legs do the work, not your back.
- Do not twist once you have lifted the item
- Set the item down properly, bending your knees
- Always push, not pull. This puts less pressure on the back.

To help prevent injuries, use teams of two or more to move bulky objects and use proper mechanical lifting devices.



The Right Way!



The Wrong Way!

OSHA does not mandate a weight lift limit. Whether an object can be lifted safely is dependent of several

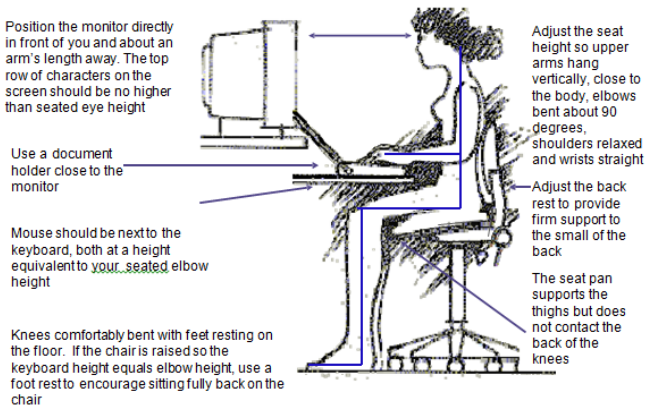
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factors, including its weight, shape, size, and how far it needs to move and the physical conditioning of the lifter. One needs to use good lifting Risk Management (RM). Think about any lift before you execute it and discuss with co-workers and/or your supervisor various lifting options including the use of a hand truck, chain fall, forklift or other mechanical means to help minimize risk of injury.

Sitting

The information in the 'Neutral Posture for Computer Use' figure accommodates 90% of the population. Special considerations may be necessary some workers.

Neutral Posture for Computer Use



For more information on Ergonomics, refer to OPNAV M-5100.23 Chapter 23 and the Navy Ergonomics Program Web Page:

http://www.navfac.navy.mil/products_and_services/sf/products_and_services/ergonomics.html

FALL PROTECTION **HIGH RISK PROGRAM**

Falls from heights are a leading cause of work-related injuries and fatalities. The Navy continues to experience serious fall related mishaps, which lead to reduced readiness and productivity, as well as high medical and compensation costs resulting from these mishaps.

Mishaps involving falls are generally complex events frequently involving a variety of factors. Consequently, requirements for fall protection involve both work procedures and equipment-related issues in order to protect workers from recognized hazards.

Fall protection must be provided to Navy civilians and military personnel exposed to fall hazards on any elevated walking working surface with unprotected sides, edges, roofs, or floor openings, from which there is a possibility of falling four feet or more to a lower level; or where there is a possibility of a fall from any height onto dangerous equipment, into a hazardous environment, or onto an impalement hazard. The Navy has adopted the Occupational Safety and Health Administration (OSHA) thresholds for fall protection; therefore, the four-foot threshold is for general industry, five feet for ship repair operations, and six feet for construction in accordance with the other OSHA industry standards.

There are many potential fall hazard situations ashore and onboard ship. Be especially careful on walkways, deck plates, ladders, elevated platforms and decks and roofs. Ensure surfaces are stable and secure prior to placing your weight on it. If it is not secure you may be subject to a fall.



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There is no minimum time duration that allows exclusion of fall protection requirements; e.g. if a two-minute job requires 15 minutes to establish fall protection.

There is no safe distance from an unprotected side or edge of a roof or floor. The distance alone is ineffective to protect personnel from unprotected sides and edges.

Engineering controls such as safety rails, guardrails, or nets should be utilized to provide suitable guarding from the fall hazard.

Guarding consists of a top rail, intermediate rail, and posts, and should have a vertical height of 42 inches nominal from upper surface of top rail to floor, platform, runway, or ramp level.

Toe-boards may be required whenever beneath the open sides;

- * Persons can pass.
- * There is moving machinery, or,
- * There is equipment with which falling materials could create a hazard.

If these controls are not feasible or practical, then a Personal Fall Arrest System (PFAS) must be utilized by all personnel working near any unguarded edge, 5 feet or more above the next level or solid surface, or, at any distance above water.

In order to check out and utilize Fall Protection equipment you must be authorized and trained in Fall Protection.

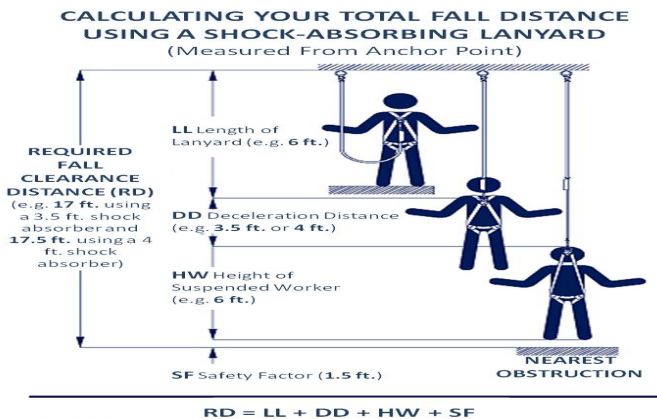
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ABCs of FALL PROTECTION

A is for the **Anchor Point**. 5000 pounds per person attached to it.

B is for the **Body Harness**. Should fit properly with the dorsal (back) D-ring between your shoulder blades. Leg straps should be tight enough to only fit one hand between the strap and your thigh. **Never use someone else's fall protection equipment.**

C is for the **Connecting Device**. The shock absorber end of the lanyard must always be connected to the back D-ring of the harness.



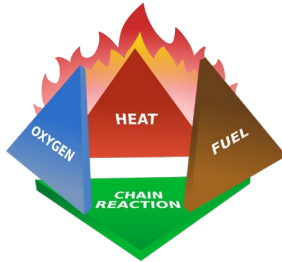
For more information concerning Fall Protection, OPNAV M-5100.23 Chapter 13 and The Navy Fall Protection Guide.

FIRE SAFETY **HIGH RISK PROGRAM**

Fire is one of the most devastating forces known to man. Knowing the basics of fire and how it exists can help you in the event of a fire in your work area.

Fire or combustion refers to the rapid oxidation of fuel accompanied by the production of heat, or heat and light. In order to have combustion you must have the right elements.

There are four elements of fire: oxygen to sustain combustion, sufficient heat to raise the material to its ignition temperature, fuel or combustible material and subsequently an exothermic chemical chain reaction in the material. Each of the four sides of the fire triangle/tetrahedron symbolizes the Fuel, Heat, Oxygen and Chemical Chain Reaction. Fire extinguishers put out fire by taking away one or more elements.



Fires are broken down into classes based upon the origin and what sustains it.

Fire Classes:

- Class A - Ash producing materials; wood, paper, etc.
- Class B - Liquid fuel; gas, oils, solvents, etc,

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- Class C - Electrical
- Class D - Combustible metals
- Class K - fat element, such as cooking oils or fat

If the fire is in the very beginning stages, an extinguisher will likely put it out.

If you discover a fire:

- **Shipboard** immediately notify ships force, activate nearest fire alarm, or, dial 444-3333;
- **Shore side** activate nearest fire alarm, or, dial 444-3333;

Whether shipboard or shore side, perform the following:

- Warn others in the area of the fire,
- Evacuate the area as quickly as possible,
- Muster at the designated area.

If it is already a large fire when discovered, do not attempt to extinguish it, but a fire extinguisher may help you keep the fire back to give you a way out of the building or space. If you need to use a fire extinguisher to evacuate the building or space, ensure you have the right type first; each extinguisher will identify the type of fire it will put out. Then:

USE P.A.S.S.



PULL PIN
AIM AT THE BASE OF FIRE
SQUEEZE HANDLE
SWEEP THE BASE OF THE FIRE

Fire prevention tips include:

- Ensure emergency exits and firefighting equipment are not blocked or hindered.
- Maintain good housekeeping.
- Store flammable and combustible materials properly.

FLAMMABLES AND COMBUSTIBLES

Flammable materials are probably the most common type of substances likely to be encountered here. There are many types of flammable materials: flammable liquids, flammable solids, flammable vapors or gases.

Flammable Gases: These gases burn very rapidly when ignited. Examples are HYDROGEN, ACETYLENE, MAPP GAS, PROPANE, and BUTANE. Obviously, if these gases are released accidentally and ignited by a spark, they could explode or burn violently and injure personnel.

Flammable solids: are solid materials that will readily ignite. Examples are: gunpowder & nitrates.

Flammable liquids: are liquids that will readily ignite. They have a flash point below 100⁰ F. Gasoline, isopropyl alcohol, acetone, mineral spirits, solvents, and thinners are good examples of flammables. Flammable liquids sometimes have a distinctive smell or odor that makes it easy to detect its presence.

Flammable liquids themselves will not burn, but as the liquid evaporates, it gives off vapors that mix with the air to form dangerous gases that can be set off by a small spark.



Gasoline, for example, evaporates at temperatures as low as 45 degrees (Fahrenheit scale) below zero. As the temperature rises, the rate of evaporation increases and more and more vapors are given off. Flammable vapors are usually heavier than air so they collect in the lowest areas they can reach. Without good ventilation to dissipate them, a small spark can set off a big disaster.

Flash point: The lowest temperature at which a sufficient amount of vapor is given off to form an ignitable mixture. Flammable and combustible liquids are classified primarily according to their flash point to indicate the danger they pose as a fire hazard. Flash point is directly related to a liquid's ability to generate vapor.

Combustible liquids (Class II and Class IIIA) have flash points at or above 100°F and below 200°F. Kerosene, diesel fuel, some paints, and hydraulic fluid, are good examples of combustible liquids.

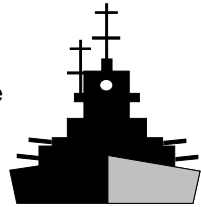
Storage

Flammable and combustible liquids with flash points below 200°F are of particular interest. These materials must be stored in an approved flammable storage locker when not in use.

GENERAL SHIPBOARD SAFETY

Directions

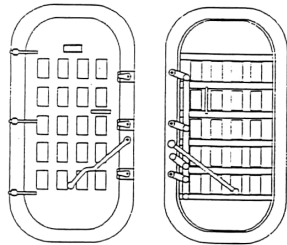
The front end of the ship is the bow. When you move toward the bow, you are going forward, when the vessel is moving forward, it is going ahead. When facing toward the bow, the front-right side is the starboard bow and the front-left side is the port bow. The central or middle area of a ship is amidships. The right center side is the starboard beam and the left center side is the port beam. The rear of a vessel is the stern. When you move in that direction you are going aft, when the ship moves in that direction it is going astern. When looking forward, the right-rear section is called the starboard quarter and the left-rear section is called the port quarter. The entire right side of a vessel from bow to stern is the starboard side and the left side is the port side. The side against the pier is referred to as being inboard; the side away from the pier as outboard.



Hatches and Doors

Hatches on ships and submarines are almost the same as doors on shore structures. Most shipboard hatches have sills that can cause tripping and low clearance that can cause head impacts/injuries if you are not careful.

C. Quick Acting Airtight Door



On some ships the interior is pressurized. As a result, a lot of pressure builds up behind airtight doors and hatches. Take special care when opening and closing

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these doors. Safety is a major concern in whatever you do.

When opening a door or hatch closure, you can protect yourself by:

- Standing on the opposite side from the hinges.
- Loosening the dogs nearest the hinge first.

You will then find it easier to loosen the other dogs, and the door will not hit you if there is pressure within the compartment. The hinges help to keep the door from blowing open. If you are on the hinge side of the door when the door pops open, you will be caught between the door and the bulkhead.



Each closure has a safety device. Some hatches have:

- Stanchions;
- Locking latches,
- Locking or toggle pins.

Both devices use toggle pins to secure them in place. Be sure that the toggle pins are in place at all times when the hatch is open.

Watertight scuttles have a safety device known as a bracing link assembly. Make sure that the bracing link assembly is in good operating condition. When exiting a compartment through a scuttle, do not grab hold of the scuttle to pull yourself through. If the bracing link assembly fails to lock, the scuttle will fall on your head or fingers, causing considerable injury.

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A door catch is installed for each shipboard door. When a door is to be left open for a period of time, use the door catch. The movement of material and personnel could cause the door to slam shut. A door slamming shut will damage the door's gasket and can seriously injure a person. Most personnel injuries are not caused by the closure's design, but rather by an individual's carelessness.

Be careful to not damage the knife edge or gasket of any hatch or scuttle. Damage to these areas could compromise the ships watertight integrity.

Ladders (Stairs)

Movement between decks requires the use of ships ladders.

- These ladders serve the same purpose as stairs on shore structures,
- However, ladders on ships are much steeper than stairs, with much smaller and narrower treads.
- Overhead bars are usually located at the top and bottom of ladders to assist you in using the ladders.
- Handrails or chain rails are usually on each side. Ascend the ladders slowly to prevent slipping and possible injury.
- Ascending/descending ladders too quickly can result in falls causing serious injuries, including bruises or abrasions to your shins, knees and head.

NOTE: Hand lines, slings, tackles of adequate strength, or carriers such as tool bags with shoulder straps shall be provided and used to handle tools, materials, and equipment so that employees will have their hands free when using ship's ladders and access ladders.

Passageways

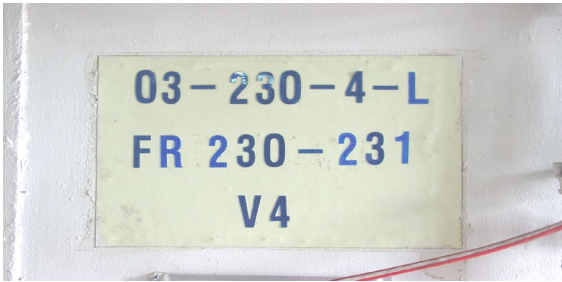
Passageways on ships are equivalent to hallways on shore. Most passageways are relatively narrow, with numerous protruding objects that can snag clothing or cause impacts.

Never run or move quickly through passageways. Always yield to ship personnel when passing through tight passageways.

Observe and follow normal traffic flow patterns in fore/aft and port/starboard passageways.

Ship Compartmenting and Numbering

Knowing how a ship is compartmented is crucial for navigating its vast interior, and most importantly, so that you can get off the ship in a quick and timely manner in the event of an emergency situation.



Each compartment of the ship is stamped with a series of alphanumeric numbers, known as "bull's-eyes," which give information on where you are, and what that compartment's function is.

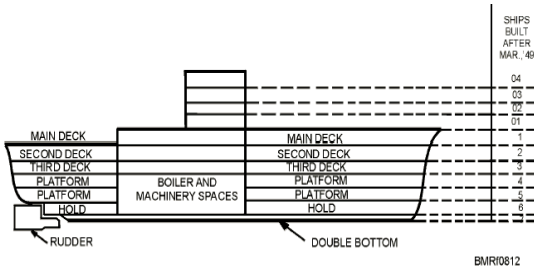
The information is given in the following order: **deck number, frame number, relation to the centerline of**

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the ship, and compartment usage. Each of these parts is separated by a hyphen.

Decks

The main deck is numbered deck 1. Decks above the main deck are numbered 01, 02, 03, etc. and are referred to as levels.



Below the main deck, there are the second, third decks, etc. (remember, on a carrier the hangar deck, the one below the flight deck, is the main deck.).

Frames

Frame numbers tell you where you are in relation to the bow of the ship; the numbers increase as you go aft. The frame number of a given compartment is the frame number of the forward bulkhead. For our example (on the previous page) we are at Frame 230.

Compartments

The third number in the bull's-eye reflects compartment numbers in relation to the ship's centerline. EVEN numbers are to PORT, and ODD numbers are to STARBOARD.

The numbers increase as you travel outboard.

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The last letter stamped on the compartment number indicates the compartment use. (For our example “L” indicates ‘Living Space’).

Compartments located on the ship’s centerline carry the number 0. Compartments to starboard are given odd numbers, and those to port are given even numbers.

Access closures are numbered in the same manner as compartments, except that the letter designating the compartments use is omitted (example: 2-175-3).

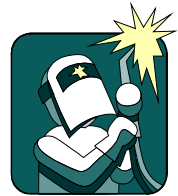
ENSURE YOU HAVE A FLASHLIGHT AVAILABLE IN THE EVENT OF POWER LOSS OR FAILURE.

HOT WORK

“Hot work” is defined as:

All flame heating, welding, torch cutting, brazing, plasma cutting and gouging, and air carbon arc gouging or any work that produces heat, by any means, of

400° F (204°C) or more; or in the presence of flammables or flammable atmospheres, use of ignition sources such as spark or arc producing tools or equipment, static discharges, friction, impact, open flames or embers, and non-explosion proof lights, fixtures, motors, or equipment.



Hot Work Containment

When hot work produces sparks, slag, dross, weld splatter, fire stream, or grinding dust, an appropriate containment must be fabricated to isolate these hazards from other workers, combustibles, equipment etc.

Fire Watch

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All hot work is subject to the requirements of posting a qualified fire watch. When hot work may create temperature increases on a wall, bulkhead or other separating structure, which could cause a fire hazard on the opposite side of the structure (such as when insulation is present), a fire watch must be established on the side opposite to where the hot work will be conducted.

Communication must be established to permit the fire watch to convey the development of fire or other hazardous conditions on the hot work operator on the opposite side of the structure.

The effects of fire can be devastating, resulting not only in destruction of property and possible injury to personnel, but the loss of mission readiness and the need for expensive reevaluating, investigating and retraining.

Through professionalism awareness and conformance to Navy and local instructions, you can greatly reduce the risk of these types of fires occurring.

LADDER SAFETY

All ladders must be maintained free of oil grease and other slipping hazards. Whether you use a ladder at work or at home, the following requirements should be followed for ladder safety. You should inspect the ladder prior to use. Ensure there are not any damaged or missing rungs, cleats or steps, also look for corrosion or decay of any ladder parts. Ladders must be used only on stable and level surfaces to help prevent accidental movement.

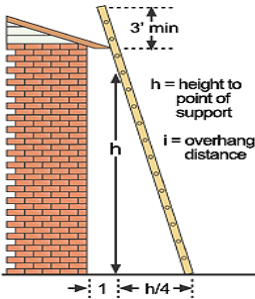
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You should make 3 point contact with the ladder, and must always face the ladder when ascending or descending the ladder. Do not carry materials while you climb.

Ladders placed in areas such as passageways, doorways, or driveways, or where they can be displaced by workplace activities or traffic must be secured to prevent accidental movement, or a barricade must be used to keep traffic or activities away from the ladder.

Wood ladders must not be coated or painted with any opaque covering, except identification or warning labels on one face of a side rail.

When portable ladders are used to gain access to upper landing surfaces, the side rails must extend at least 3 feet above the landing surface. Ensure the ladder is secured. Use 4-1 rule.



Use non-self-supporting ladders at an angle where the horizontal distance from the top support to the foot of the ladder is approximately one-quarter of the working length of the ladder.

Do not use metal ladders near electrical lines, hot rails, or where potential contact with electrical power sources may occur.

Stepladders are rated into 3 basic types:

- Type I - Industrial, Heavy Duty;



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- Type II - Commercial, Medium Duty;
- Type III - Household, Light Duty.

Stepladders are weight rated also; ensure the weight rating of the ladder is never exceeded.

Stepladders are equipped with a metal spreader or locking device, to hold the front and back sections in an open position when the ladder is being used. Check to ensure it is functional.

Never use the cross bracing on the rear section of stepladders for climbing unless the ladders are designed and provided with steps for climbing on both front and rear sections.

Never use the last step or the top of the stepladder as a step. You could easily fall.



NON-IONIZING RADIATION

Non-ionizing refers to forms of radiation, which do not have sufficient energy to cause ionization of atoms or molecules. Typically, examples include the electromagnetic emissions radiated by lasers, radiofrequency (RF), and microwave sources.

LASER

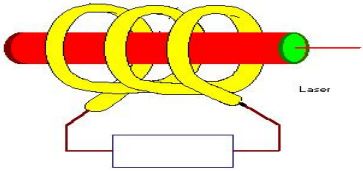
Light Amplification by Stimulated Emission of Radiation

Laser devices are classified according to their beam power output.

Laser light is energy that has amplified to extremely high intensity by a process call “stimulated emission”.

What is produced is a highly directional beam of light. Not all lasers are red. There are variations in color based on the frequency they operate at.

Lasers are classified by the strength of the beam, or power output.



Classes of Lasers:

- Class I lasers such as those used in CD and DVD players are inherently safe for direct beam viewing and are considered eye safe with no adverse health effects.
- Class IM lasers, same as Class I with the exception that lasers is safe but without the use of magnifying optics (these should have a warning label to state such)
- Class II lasers, such as those used in printers, pointers, and range finders emit power up to 1 mill watt and should have a caution label.
- Class IIM lasers, same as II with the exception that lasers are unsafe for viewing when optical aids are used.
- Class III lasers are classified as either Class IIIR, IIIa, (CAUTION OR DANGER) or Class IIIb (DANGER). The distinction between a Class IIIR (CAUTION) and IIIR (DANGER) is dependent upon the laser's irradiance or radiant exposure

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and whether it is greater than the maximum permissible exposure (MPE). Class IIIa lasers emit power from one to five mill watts and Class IIIb lasers run from five to five-hundred mill watts.

- Any laser with a power output greater than five-hundred mill watts is a Class IV laser. Class IIIb and Class IV lasers always carry a DANGER label.

Laser pointers, available at any office supply store, are categorized as Class II, IIM or IIIR (CAUTION).

While laser beams are typically associated with injuries to the eyes or skin, there is also a potential for accidents from dazzle, startle or “flash blinding” of people who are performing critical tasks such as flying or driving.

Staring directly into the beam for extended periods of time (greater than 10 seconds) or viewing the beam with a magnifying glass can cause eye damage, since the laser beam can exceed the maximum permissible exposure limit (PEL) for eyes.

Given the potential for accidents or injuries, the following precautions and recommendations should be followed:

- ❖ Be aware of irresponsible uses of pointers.
- ❖ Never stare into the beam of a laser pointer if directed at you.
- ❖ Never allow children to use a pointer unsupervised.
- ❖ Never aim a laser pointer at people (including yourself).
- ❖ Do not point laser pointers at mirror-like surfaces.
- ❖ Do not purchase a laser pointer if it does not have a caution or danger sticker on it identifying its classification.

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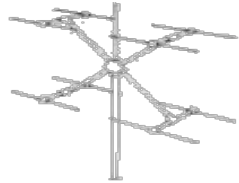
While a formal laser safety program is not warranted for most laser pointers, everyone, and especially the owner and users of these devices, should be aware of the hazards of improper use.

Radio Frequency Hazards (RF Radiation)

RF is also known as non-ionizing radiation. This type of hazard is where energy is transmitted through airspace in the form of electromagnetic waves.

Electromagnetic waves sources include:

- Radio frequency (RF) radiation.
- Microwaves.
- Infrared, visible, and ultraviolet light.
- Laser radiation.



RF radiation is emitted from the following types of equipment:

- Radar.
- Communications equipment (transmitting antennas).
- Heat sealer machines.

Exposure hazards

- Heating of the body (RF radiation heats in the same way that microwave ovens heat food).
- Harmful heating of body tissue is a possibility where there is exposure to RF fields above the maximum recommended exposure levels).
- Susceptible body area affected.
- Eyes/Testicles.
- May cause shocks and burns.

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- May cause premature activation or electro-explosive devices.
- May cause arcs which could ignite nearby flammable material.

Because of the very nature of electromagnetic radiation, you may not know you're in danger until it's too late. RF radiation is invisible and far-reaching. Immediate effects can be death, unconsciousness, or visible RF burns on exposed skin.

Note: Ship radar peak power may reach a million watts or more. Therefore, you must remain aware of the RFR hazards that exist near radar transmitting antennas. These hazards are present not only in front of an antenna but also to its sides and sometimes even behind it because of spillover and reflection. Exposure to excessive amounts of RFR frequency can produce bodily injuries ranging from minor to major (like how food is cooked in a microwave). The extent of the injuries depends on the RFR frequency at the time of the exposure. At some frequencies, exposure to excessive levels of radiation will produce a noticeable sensation of pain or discomfort to let you know that you have been injured. At other frequencies, you will have no warning of injury. If you suspect any injury, tell your supervisor and seek medical attention.

For ship repairing and shipbuilding work on or in the vicinity of radar or radio sources, the following applies:

- No employees other than radar or radio repairmen shall be permitted to work on masts, king posts or other aloft areas unless the radar or radio is secured or otherwise made incapable of radiation. In either event, the radar or radio shall be appropriately tagged.
- Testing of radar or radio shall not be performed until the employer can schedule such tests at a

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time when no work is in progress aloft or personnel can be cleared from the danger area according to minimum safe distances established for and based on the type, model, and power of the equipment.

- Check in with the ships quarter deck before working aloft.

Many effects of exposure may not be immediate. The soft tissues of the body are the most susceptible to RF and are damaged easily.

Cataracts are one of the most common signs of exposure.

For males, the reproductive organs also are susceptible to damage. Long-term exposure to both sexes can cause degenerative diseases of internal organs and connective tissues in the joints.

For more information concerning Non-Ionizing Radiation OPNAV M-5100.23 Chapter 22

MACHINE GUARDING

Machines and equipment have many different types of hazards that cannot be eliminated therefore Machine Guarding is needed for controlling these hazards and protecting personnel.

Moving machine parts have potential for causing severe workplace injuries such as crushed fingers or hands, amputations, burns, or blindness and even death. Safeguards are essential for protecting workers from these needless and preventable injuries.

A good rule to remember is:

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“Any machine part, function, or process which may cause injury must be safeguarded. When the operation of a machine or accidental contact with it can injure the operator or others in the vicinity, the hazards must be either eliminated or controlled.”

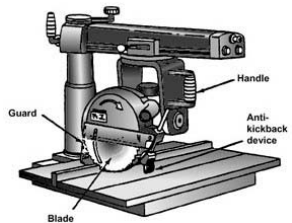
Safety guards must never be removed when a tool is being used. Guards, as necessary, should be provided to protect the operator and others from the following hazards:

- Point of operation.
- In-running nip points.
- Rotating parts, and
- Flying chips and sparks.

For all machines, equipment, or systems that are electrically “hard wired” in, whenever guards are removed and actions such as changing out grinding wheels, band-saw blades, table-saw blades, cut off wheels, etc. are to be performed, the equipment must be locked out under the Hazardous Energy Control prior to performing these actions. (**See Control of Hazardous Energy Section**).

Here are some examples of the more common types of equipment used along with their guards.

- Radial Saws must be equipped with a hood that encloses the saw blade and the arbor ends. The lower section of the hood must be hinged so it rises and falls, adjusting itself automatically to the thickness of the material as the saw passes through it. An anti-kickback



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device or hold-down wheels must also be installed on saws used for ripping.

- **Table Saws** must be equipped with a hood that covers the blade and automatically adjusts itself to the thickness of the material upon which it rides. The hood covers the part of the saw blade exposed above the material and is adaptable to cover tilted blades. When ripping, table saws must be provided with a spreader to prevent the wood's internal stresses from clamping down on the saw blade and an anti-kickback device must be installed to prevent the stock from possible kickback. SAW STOP devices should be installed.
- **Angular Grinders:** Right angle head or vertical portable grinders shall have a guard that covers at least 180 degrees of the wheel, located between the wheel and operator. Other portable grinders shall have a guard that covers at least 180 degrees.

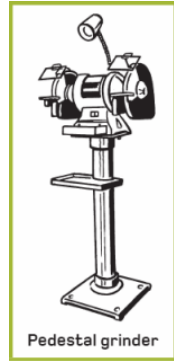


Pedestal/Bench Grinders have specific requirements such as:

- Angular exposure of the grinding wheel periphery and sides for safety guards shall not exceed 90 degrees, and the exposure shall begin at a point not more than 65 degrees above the horizontal plane of the wheel spindle.
- Adjustable **tongue guards** shall be installed and adjusted to a maximum distance of **1/4 inch** from the wheel.

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- **Work rests** shall be kept adjusted closely to the wheel with a maximum opening of **1/8 inch** to prevent work from jamming between the wheel and rest.
- Tool rest shall be removed when using wire or buffing wheel.
- Chip guards shall be installed and utilized.



Before installation, all abrasive wheels shall be inspected and sounded (ring test) to check for damage. Ring test does not apply to small wheels 10 cm. (4 in.) diameter and smaller.

Ensure the wheel speed is rated for the equipment.

Finally, in addition to the guards installed on the equipment, the proper personal protective equipment must also be used to prevent injury.

OFFICE SAFETY

Office safety is often overlooked by people because, in part, it is not viewed as an “industrial area”. The truth of the matter is that employees are injured in office type settings every year throughout the nation. Some of those injuries are, sometimes, quite debilitating to the employee. It is important that you realize that there are many potential hazards in an office environment.



Falls are the most common office accident, accounting for the greatest number of disabling injuries. Examples

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of unsafe **acts** that often lead to office falls are walking, climbing ladders, leaning back in chairs until the front rollers or legs are off the ground, and using a chair or stack of boxes in place of a ladder.

Examples of unsafe **conditions** leading to office falls include:

- Wet floors,
- Ice melt pellets,
- Open desk or file drawers,
- Loose carpeting,
- Routing of electrical cords/wires in walking areas,
- Objects stored in halls or walkways,
- Inadequate lighting.

Fortunately, all of these conditions and acts that lead to falls are preventable.

To prevent these accidents, keep floors clean, dry and free of refuse. Also, make sure they're in good repair.

Telephone and electrical cords should not be placed where you or your co-workers could trip over them.

Where collision hazards at blind corners exist, properly angled mirrors could be installed to eliminate this hazard. Never lean back in office chairs.

Replacement or repair of defective chairs will reduce the number of falls from chairs. Chairs with wheels or casters should have 5 legs, as they tend to be more stable. Chairs **MUST NEVER** be used as steps or ladders.

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Stairs can be made safer by equipping them with anti-slip treads, approved handrails and adequate lighting. Promptly contact your facility custodian for any burned-out light bulbs in your work areas.

Whether seated at your desk or walking, you should be aware that hurrying can produce similar results. Always walk in designated aisles-avoid taking shortcuts.

Striking against an object can also cause many office injuries. These accidents result when employees do not notice open desk or file drawers and other office equipment.

Striking against sharp burrs on metal filing cabinets and office equipment can cause injuries.

- These burrs may also tear or damage clothing; they can be eliminated by filing the rough metal edges.

Splinters and loose veneer on desks and chairs can produce similar results.

- Repairs to chipped or broken furniture should be made immediately.

Workers being struck by objects are usually attributed to falling equipment. Tape dispensers, hole punches, CD containers and calculators, for example, should not be placed near the edges of desks, filing cabinets or tables because these items can slide onto the floor.

If filing cabinet is unbalanced, with heavier material in the top drawers, it could easily fall over when drawers are pulled out. Anchor or secure file



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cabinets and storage cabinets in accordance with manufactures instructions. When closing drawers in desks or filing cabinets make sure your hands, with the fingers brought into the palm, are held against the drawer face to avoid catching your fingers in the pinch point.

Personnel may also sustain injuries when caught in or between machinery and equipment.

Always use the handle when opening or closing the spring-loaded doors, windows and some office machinery. These items are similar hand-traps.

Strains from overexertion often disable employees. These injuries usually occur when employees move heavy or awkward loads. By avoiding sudden movements and getting help for heavy tasks, you can avoid a serious strain or back injury. (**See Ergonomics Section**).

Many times, unsafe conditions can be recognized and corrected before they lead to serious injuries. Take a few moments each day to walk through your work area. You will be surprised how many unsafe conditions can exist.

PERSONAL PROTECTIVE EQUIPMENT **(PPE)**

The best method of protecting personnel from exposure to hazards in the workplace is to eliminate the hazard. When this is not possible, substitution or engineering controls must be implemented to eliminate or minimize hazard exposure. When elimination and engineering controls are not feasible, or unable to reduce the hazard to an acceptable level of risk, Personal Protective Equipment (PPE) is the last resort.

NAVSAFECEN SAFETY & VPP HANDBOOK

The required PPE at most industrial and construction areas include hard hat, safety glasses with permanently attached side shields, safety shoes, and hearing protection. Hearing protection should be on your person at all times to be worn as necessary.

Your PPE must be maintained in good working condition in order for it to protect you properly. You are responsible for the use and maintenance of your PPE. If it becomes damaged or no longer serviceable, have it replaced.

Don't assume you will be able to get the PPE you need at your destination - take it with you! Determine what personal protective equipment you will need well in advance.

You must observe and comply with all posted safety signs requiring PPE (hard hats, safety glasses, safety shoes and hearing protection, etc.). See posted signs on facilities for PPE requirements. If a facility area is not posted, you must have your PPE in your possession and use it if in the vicinity of potential hazards.



Hardhats – Hardhats are provided to you at NAVSAFECEN. Hardhats will provide moderate protection against falling objects. Wearing of baseball caps under your hard hat is prohibited. A kerchief or bandanna can be used under hard hats **AS LONG AS** it is worn **SMOOTHLY** on the top of the head. Caution should be taken to avoid bunching up of the material, which could cause pressure points and affect the

NAVSAFECEN SAFETY & VPP HANDBOOK

helmet's ability to work as desired. To assure the best possible fit, a ratchet suspension and/or a chinstrap should be used. If utilizing a cold weather liner in the hard hat, the liner must be specifically designed to be compatible with the protective properties of the hard hat. Do not modify the shell or suspension of the hardhat. This will compromise the integrity of the protection. Inspect hard hat for cracks and defects, only then replace when there is damage. Hard hats cannot be worn backwards (bill to the rear) unless the sticker in the hard hat shows a reverse donning emblem such as below.

This emblem can typically be found on the sticker.



Eye and face protection – Eye and face protection can help you avoid injury from flying dirt and debris, radiation burns from various welding operations and chemical splashes.



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Some specific jobs like grinding operations require additional protection such as face shields. In addition, chemical goggles and welding shields may be needed. NNSY has a sight conservation program where you are provided with all required protective eyewear, whether prescription or not.

Sunglasses or dark shaded safety glasses are prohibited from being worn inside the ship or shops. Only clear lenses are authorized in these locations. Contact the Code 106 sight conservation program manager for more information.

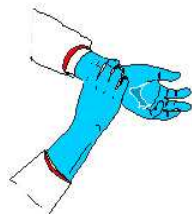
Foot protection – Foot protection can prevent injuries caused by dropping objects on feet, contacting electrical equipment, slick surfaces and punctures. Ensure you have the right type of shoe for the type of work you perform.



Electricians should wear electrical hazard rated shoes only. These, too, are available in the NNSY Safety Shoe Store.

Hand protection - Gloves should be worn when handling rough or abrasive material. Gloves should not be worn when operating moving machinery or rotating equipment. The glove could be snagged by the moving equipment and draw you into it.

Cut resistant gloves are also available for personnel that use sharp tools, i.e., knives, box cutters, etc., or have to handle materials/items with sharp edges. There are different categories of cut



NAVSAFECEN SAFETY & VPP HANDBOOK

resistance. Contact the Code 106 PPE Program Manager for a hazard assessment and proper selection of cut resistant gloves. Compatible chemical resistant, rubber gloves should be worn when working with chemicals.

NOTE: Selection of the wrong glove can result in serious injury. The IH Survey and the Safety Data Sheet (SDS) are sources for proper personal protective equipment selection information.

Hearing Protection – Areas of the shops and shipboard spaces such as engineering have high noise levels that may require hearing protection. Normally these noise levels will only be present when machinery is active. However, ship repair activities generate numerous noise hazards. Hearing loss is usually very gradual. Usually you do not notice until it is too late that you have incurred hearing damage. Always wear hearing protection in noise hazard areas. Observe all signs indicating the need for hearing protection.

How do I know if I need hearing protection?

As a general rule of thumb, if you can't carry on a conversation in a normal tone of voice with a person at arm's length, you are in a noise hazard area.

Some processes (including grinding, flame spraying, carbon arc cutting, and abrasive blasting) require double hearing protection. Example: (plugs and muffs).



**Ear plugs
preformed**



**Ear plugs
disposable**



Bands



Ear Muffs

Personal Flotation Devices (PFD)

Personal Flotation Devices (PFD) will be worn in open boats or when directed by the person in charge of any boat. They will also be worn by all personnel working over the water or on floats, rafts, camels, and when working outboard of lifelines, bulwarks, or on the open decks of barges and in all similar circumstances where there is a hazard of falling into the water.



Those working at elevated positions over water will wear safety harnesses with attached lifelines, except that personnel working from aerial work platforms above the water will wear Personal Flotation Devices (PFD) and unhook their lanyard while over water.

Personal Flotation Devices (PFD) will be Coast Guard approved.

For more information concerning Personal Protective Equipment, OPNAV M-5100.23 Chapter 20

RESPIRATORY PROTECTION

Many occupational commands, units and activities expose personnel to air contaminants that can be hazardous, if inhaled. Elimination or control of exposures to air contaminants must be accomplished through the use of effective engineering controls. When engineering controls are not feasible or do not effectively control air contaminants, the command, unit, or activity work center must implement a respirator protection program and

NAVSAFECEN SAFETY & VPP HANDBOOK

personnel must use respiratory protection to protect personnel from air contaminants.

Processes, such as painting, sanding, welding, grinding, etc., and materials personnel work with, such as paint, glue, solvents, cleaners, etc., create airborne hazards such as dusts, mists, fumes, vapors, or fibers. If you are performing these or similar processes and/or using these materials, or similar materials, you very likely are required to use or have some ventilation and/or wear respiratory protection.

You must be clean shaven when wearing tight fitting respirators. The respirator has to make a seal in order to adequately protect you.

Temporary ventilation can be requested through Shop 99 and respirators are available to trained and qualified personnel through tool rooms.

Ventilation is the first choice in preventing and reducing exposures.



Voluntary Use of Respirators

When respirators are not required, the voluntary use of respiratory protection is allowed if the respirators are issued and controlled by the Respiratory Protection Program Manager (RPPM) and these criteria are met:

- National Institute for Occupational Safety and Health (NIOSH) approved filtering face pieces may be issued, for voluntary use, without medical screening and fit testing when the contaminant of concern to the employee is a particulate. Annually provide respirator users with the information relating to the limitations



stated on the respirator approval label.

Personnel may not supply their own respirators.

- When the contaminant of concern to the employee is a gas or vapor, NIOSH approved elastomeric respirators equipped with appropriate chemical cartridges may be issued for voluntary respirator use. All elements of the respiratory protection program must be met, including medical screening and fit-testing.
- Hooded respirators are also permitted for voluntary use. All elements of the respiratory protection program must be met.
- Surgical masks are not respirators and are not allowed except for U.S Food and Drug approved surgical masks available for patients in hospital or clinic waiting rooms.
- Issuance of voluntary use respirators must not be used as a justification for avoiding further evaluation of health hazards.

For more information concerning Respiratory Protection, OPNAV M-5100.23 Chapter 15

SCAFFOLDING

Scaffolding is used in many industrial and construction processes. We sometimes take for granted that it will support the loads we place on it. Most scaffolding is made up of relatively simple materials such as; pipes, clamps and stage boards or system scaffolds, prefabricated sections that connect to each other.

Scaffold systems if not used correctly, have the potential for serious injury.

The craft of erecting, modifying, and dismantling scaffolding requires extensive knowledge, training and

NAVSAFECEN SAFETY & VPP HANDBOOK

experience to do it safely. Therefore, the act of modifying scaffolding by unauthorized personnel is a serious offense.

Never attempt to move mobile scaffolding systems while personnel are onboard.

While working on scaffolding, be alert to unsafe practices that might reduce the structural integrity of the scaffold or put personnel at risk.

SCAFFOLD INSTALLATION INSPECTION TAG

Supervisor, John Brown

Contact # 396-0000 Tag # 001

ONE (1) PERSON WITH TOOLS = 250lbs WHEN CALCULATING MAXIMUM WEIGHT LOAD

Light Duty: A maximum of 1,000 lbs distributed load per work platform (4 people or 3 people and 250 lbs. of equip. spread evenly)

Medium Duty: A maximum of 2,500 lbs distributed load per work platform (10 people or 8 people & 500 lbs. of equip. spread evenly)

Equipment Duty: A maximum of 1,500 lbs distributed load such as intended to support major equipment in addition, up to two (2) people.

Contractor: _____

Engineered Scaffold:
Personnel and/or load capacity information: _____

TWD#: _____

Prior to accessing scaffold, users see back of tag for additional information and required pre-use checks.
This scaffold meets the requirements of IPI 9911-450 (latest revision), contract requirements, or TWD instructions.

Bill Wright 012345 03/13/12
Scaffold Builder Badge # Date

Joe Inspector 098765 03/13/12
NNSY Scaffold Badge # Date
Competent Person

NOTE:
Scaffold installed For X-57
lagging removal

This scaffold shall be inspected within the first five (5) working days of every month. For more information, refer to IPI 9911-450 (latest revision).

INSPECTIONS

NAME / BADGE #	DATE (MM/DD/YY)	SAT
Doe 099887	04/03/12	SAT
Spector 011223	05/01/12	SAT
Doe 099887	06/04/12	SAT

Required Pre-use Checks:

- Inspection tag is signed and up to date
- Verify load rating is sufficient for work being performed
- No ladder deficiencies such as loose attachments or damaged/missing rungs
- Swing gates installed/working properly
- No unsecured or missing deck planks
- No unsecured or missing toe boards
- No missing, loose, or damaged guardrails
- No excessive tools, equipment, or debris on work platforms

Users shall remove all tools, unused material, and debris when shift is finished

Users shall ensure that loads are distributed evenly on the work platforms. A void point loading equipment or material.

If any deficiencies are found notify shop 64 Supervisor listed on front of tag.

Prior to use

All users shall read and comply with all inspection tags and signs prior to using or climbing on scaffolding. Do not use the scaffolding if it is not tagged with an inspection/installation tag. Prior to using or climbing on scaffolding, each user shall:

NAVSAFECEN SAFETY & VPP HANDBOOK

- The Inspection tag is signed and up to date (within the first five working days of every month).
- The load rating is sufficient for the work being performed.
- There are no ladder deficiencies such as loose attachments or damaged/missing ladder rungs.
- Swing gates are installed and working properly.
- There are no unsecured or missing deck planks.
- There are no unsecured or missing toe boards.
- There are no missing, loose, or damaged guardrails.
- There are no excessive tools, equipment, or debris on work platforms.

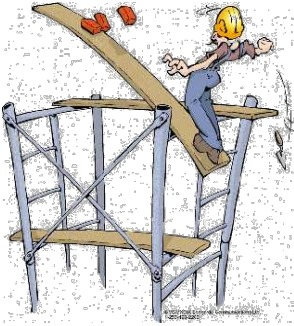
Should anyone encounter any of these or other conditions that may be deemed unsafe, they should contact their supervisor and/or the cognizant supervisor whose name and phone number are on the front of the tag.

Personnel are reminded that modifications to scaffolds are to be accomplished only by qualified personnel that are trained in the proper design and installation of platforms and scaffolds.

Scaffold Ladder Safety

All users should be aware of the posted weight limits on ladders prior to accessing any scaffold (e.g. 250 lbs, 300 lbs, 350 lbs, etc). In addition, the following rules apply:

- Face the ladder as you climb up or down.
- Use both hands and maintain a secure grip on the rails or rungs.
- Do not carry materials while you climb. Use a pass bag to pull them up.



SLIPS, TRIPS AND FALLS



Slips, trips, and falls account for one of the largest number of injuries today.

Slips can happen anywhere, when you are least expecting them.

- Wear slip resistant footwear when appropriate.
- Shorten your stride when crossing wet surfaces.
- Slow down, use caution and watch where you are going.
- Wet shoes on a dry floor can be just as slippery as dry shoes on a wet floor.
- Icy, snowy surfaces should be cleared, salted or sanded.

NAVSAFECEN SAFETY & VPP HANDBOOK

Housekeeping should always be stressed in the work place

- Good housekeeping will prevent a large number of trips and falls. Keep your work area clear of debris, trade litter, obstacles, and spills.
- Cleanup oil, water and other spills right away. If the area cannot be dried immediately, rope off the area and post warning signs.
- Ensure aisles and passageways doorways are not cluttered with debris or blocked as they prevent personnel from safely exiting in an emergency.
- Clean jobsites are safer jobsites.

Trips can occur whenever your foot strikes an object and your momentum causes you to be thrown off balance and fall. Falls injuries can range from a minor injury to more serious injury, depending on circumstances. Whenever there is a change in walking surfaces (roadway, sidewalk, etc.), trash, trade debris, crane tracks, train tracks, rail switches, curbs, and even elevator thresholds, or any other uneven surface, are all potential trip hazards.

Some housekeeping factors to consider:

- Poor lighting can impair vision and increase likelihood of tripping. Use a flashlight when necessary. Keep a flashlight in your tool-bag at all times when aboard ship.
- Keep trash and clutter off walkways, stairs and passageways.
- Keep cords, hoses, and wire properly contained and covered so they are not hazards. Aboard ship, services should be routed off the deck.
- Be alert for uneven surfaces such as potholes, speed bumps, platforms, and doorways, cover

NAVSAFECEN SAFETY & VPP HANDBOOK

plates, soft patches, curbs, and elevator thresholds.

Most importantly, if you recognize any of these hazard items, do something about it to protect others. While you may have recognized and avoided the hazard, the next person may not be so observant or lucky. Look out for your fellow workers by taking action. Guard the area, notify supervision and document the hazard in RMI.

Also, pay attention when you're walking. Don't engage in text messaging on your cell phone that will distract you from a hazard when walking. If you need to send a text message **STOP** walking, and get in a safe place.



TOBACCO USE POLICY

Tobacco use is not permitted within NAVSAFECEN (Building SP-91) nor within 75 feet of the building.

Tobacco use is prohibited within government owned and leased vehicles.

Tobacco use is permitted at the gazebo located behind Building SP-91 with appropriate metal containers provided. The gazebo must prominently display tobacco

NAVSAFECEN SAFETY & VPP HANDBOOK

use warnings and availability of tobacco cessation programs.

During inclement weather, tobacco users may seek shelter in the gazebo or their private vehicles.



Electronic cigarettes/vapors are treated the same as tobacco cigarettes and employees must follow the same rules listed above.

For more information on the commands policy on tobacco use, refer to COMNAVSAFECENINST 5100.2 Tobacco Prevention Program.



PART VI- SAFETY AT HOME

AT HOME

Safety begins at home. Almost every topical area discussed in this handbook can be applied at home in some form or other, off the job just as easily as on the job. The concept of safety and being safe is an attitude towards yourself, the task you perform, and others. As we approach day to day life, and become increasingly aware of the hazards that exist around us,
Think.....**SAFETY FIRST.**



FIRE SAFETY IN THE HOME

- Install smoke detectors, and check them once a month. Change batteries at least once a year.
- Also install carbon monoxide detectors if gas appliances or other combustion related appliances such as wood burning stove are in the home.
- Read and follow the rules for where to install them. You should have at least one on each floor.
- When you buy smoke detectors, look for a label from Underwriters Laboratories (UL) or Factory Mutual (FM).
- Keep a list of emergency numbers near your telephone. But remember that if a fire breaks out, don't call the fire department or 9-1-1 from

NAVSAFECEN SAFETY & VPP HANDBOOK

inside. Get out and call from a cell phone or a neighbor's house.

- Devise and practice a fire-escape plan for your family and home.
- After a fire, stay out of the building until firefighters give the OK to return.
- Keep portable heaters at least three feet away from flammable materials. Don't leave them on when you leave your house.
- Don't smoke in bed or when you're getting sleepy. Neglected cigarettes are a major cause of fires.
- When cooking, make sure that the handles on pots, sauce pans and frying pans don't hang over the edge of the stove.
- If grease catches fire, cover it with a metal lid, then turn off the burner.
- Keep matches and lighters out of the hands of children. The best place would be locked.
- If an appliance or wall outlet smokes, smells or gives off sparks, have it checked and/or repaired immediately.

AUTO REPAIR SAFETY

Most automobiles need maintenance or servicing at regular intervals. Some of us choose to perform that maintenance ourselves. Here are some helpful hints to ensure a safer evolution:

- Use the right tools for the job. Sockets, wrenches and screwdrivers should be the exact size, not "close enough."



NAVSAFECEN SAFETY & VPP HANDBOOK

- Protect your hands from solvents and gasoline by wearing protective gloves.
- Be prepared to clean up spills, and know how to dispose of flammable rags.
- Wear protective equipment, especially leather work gloves and goggles, to protect yourself from metal chips, cuts and scrapes.
- If you are putting your car up on ramps, make sure they are sturdy and follow the directions for how to set the car's emergency brake and transmission, and how to chock the other set of wheels. Don't improvise ramps.
- If using a jack, do not rely on the jack alone. Place the vehicle on jack-stands prior to crawling underneath it. Chock the wheels too.
- Review the precautions for working with gasoline if you are doing any work on your fuel tank, fuel lines or carburetor.
- Check your owner's manual before servicing your car. Some new cars have specific instructions or prohibit servicing.
- Whenever you change the oil, take time to check your battery for damage such as cracks, corrosive materials and loose wires.

Jump Starting

Check your owner's manual before jump-starting your car or using it to jump-start another car. Some new cars have specific instructions or prohibit jump-starting.

- Make sure you have a pair of jumper cables that are free of rust and corrosion and have no exposed wires. (Never use electrical tape to cover exposed wires.)
- Make sure you buy a battery that is recommended in your car owner's manual.
- Never throw an automobile battery in a garbage dumpster or leave it in a parking lot, especially if

it is cracked or damaged. Take it to a service station and have it disposed of properly.

- Never jump-start your battery if your car's fluids are frozen.
- When buying a new battery, make sure that its terminals are sturdy and large enough to allow the clamps of a pair of jumper cables to attach easily when jump-starting.
- Always call a professional if you think there might be trouble you can't handle, or you can't remember how to jump-start a vehicle.

Jump Start Steps

- If it is OK to jump-start, attach the jumper cables correctly.
- Clamp one cable to the positive (+ Red) terminal of the dead battery. Don't let the **positive cable** touch anything metal other than the battery terminals.
- Connect the other end of the positive cable to the positive terminal of the good battery.
- Connect one end of the negative (- Black) cable to the negative terminal of the good battery.
- Connect the other end of the negative cable to metal on the engine block on the car with the dead battery. Don't connect it to the dead battery, carburetor, fuel lines or moving parts.
- Stand back and start the car with the good battery.
- Start the stalled car.
- Remove the cables in reverse order.
- Wear a pair of splash-proof, polycarbonate goggles with the designation Z-87 on the frame. This certifies that your goggles are meant for activities such as automotive repair.

Batteries contain sulfuric acid, which gives off flammable and explosive gas when a battery is charged or jump-started. Never smoke or operate anything that may cause a spark when working on a battery.

FUN IN THE SUN & SURF

Protect your skin: Sunlight contains two kinds of UV rays -- UVA increases the risk of skin cancer, skin aging, and other skin diseases. UVB causes sunburn and can lead to skin cancer. Limit the amount of direct sunlight you receive between 10:00 a.m. and 2:00 p.m. and wear a sunscreen with a sun protection factor containing a high rating such as 15. Drink plenty of water regularly and often even if you do not feel thirsty.



Your body needs water to keep cool

- Avoid drinks with alcohol or caffeine in them. They can make you feel good briefly but make the heat's effects on your body worse. This is especially true with beer, which dehydrates the body.
- Watch for signs of heat stroke: Heat stroke is life-threatening. The victim's temperature control system, which produces sweating to cool the body, stops working. The body temperature can rise so high that brain damage and death may result if the body is not cooled quickly. Signals include hot, red, and dry skin; changes in consciousness, rapid, weak pulse, and rapid, shallow breathing. Call 9-1-1 or your local EMS number. Move the person to a cooler place. Quickly cool the body by wrapping wet sheets around the body and fan it. If you have ice packs or cold packs, place them on each of the victim's

wrists and ankles, in the armpits and on the neck to cool the large blood vessels.

- Watch for signals of breathing problems and make sure the airway is clear. Keep the person lying down. Wear eye protection: Sunglasses are like sunscreen for your eyes and protect against damage that can occur from UV rays. Be sure to wear sunglasses with labels that indicate that they absorb at least 90 percent of UV sunlight. Wear foot protection: Many times, people's feet can get burned from the sand or cut from glass in the sand.

Spinal Injury Prevention

- Don't dive headfirst into any unknown water. Remember, the beach ocean floor may change its shape constantly.
- In shallow water, don't dive headfirst towards the bottom into oncoming waves.
- In shallow water, don't stand with your back to the waves.
- Don't jump or dive from a cliff, pier, jetty or bridge.
- Avoid bodysurfing, body-boarding or surfing straight "over the falls." Ride the shoulder. During a body-board or surfing "wipe out," keep your hands out in front of you. Don't dive straight to the bottom.
- While bodysurfing, always keep at least one arm out in front of you to protect your head and neck. Don't swim near piers or breakwaters. The currents here may be very strong, even for the best of swimmers.



Stay clear of boats. They take time to change direction, and they may not even see you.

Swim parallel to the shore. If you swim out too far, you may be too tired to swim back. Open water is usually much colder than a pool, so don't swim out too far.

GRILLING AND COOKING OUT

Here's how to make sure that starting a fire or getting burned isn't on the menu.

- Keep your grill at least three feet away from your house, porch, shed, trees or bushes.
- Use starter fluid that is made especially for barbecue grills. Follow the instructions about how to apply and light it.
- Don't squirt starter fluid on a fire after you've already tried to start it.
- Never use gasoline to try to start or restart charcoal. Gasoline is incredibly explosive and dangerous.
- If you have a gas grill, make sure you read and follow the instructions about how to use and store it.
- Make sure the valves work and that you are completely familiar with how to use them and with their purpose. Make sure they are off when you aren't using the grill.
- Store gas cylinders outside and keep them away from buildings.



NAVSAFECEN SAFETY & VPP HANDBOOK

- If your gas grill needs repairs, take it to an authorized dealer or repair shop.
- Keep children away from the grill both while you are cooking, and after you finish while the grill is still hot and when hot coals remain.
- Don't leave lit grills unattended.

Turkey Fryers

Turkey fryers have fast become a trend in innovative cooking at get togethers, and holidays. However they have some inherent hazards associated with their operation. Here are some tips to help ensure a safe operation.

- Fryers should always be used outdoors a safe distance from buildings and other materials that can burn.
- Never use fryers on wooden decks or in garages. Don't use them under eaves or overhangs.
- Use fryers on a flat surface to keep from tipping.
- Never leave the fryer unattended. Most units do not have thermostat controls. If you are not careful, the oil will continue to heat until it catches fire.
- Never let children or pets near the fryer.
- Do not overfill the fryer. Doing so may cause the oil to catch fire from the burner. The fryer must be large enough to hold the oil and the turkey with room between the oil and the top of the fryer.
- Lids and handles can become extremely hot. Use well-insulated pot holders or oven mitts when handling any part of the aluminum pot.
- Wear safety goggles to protect your eyes in case of oil spatter.



NAVSAFECEN SAFETY & VPP HANDBOOK

- Keep an ABC multi-purpose dry chemical fire extinguisher nearby.
- Never use water to extinguish a grease fire.

ALWAYS follow the manufacturer's directions.

HOLIDAY SAFETY

Christmas holidays are time for joy and family. But also may be a time of sorrow and regret. Christmas holidays are deemed the most inherently dangerous than any other. Follow these tips to ensure you and your families have a safe and happy holiday:

Lights/Decorations - Indoors or outside, use only lights that have been tested for safety by a recognized testing laboratory which indicates conformance with safety standards. Decorate your tree using only UL (Underwriter's Laboratory) approved lights and cords. Before using lights outdoors, check labels to be sure they have been certified for outdoor use.

- Check each set of lights, new or old, for broken or cracked sockets, frayed or bare wires, or loose connections, and throw out damaged sets.
- Use no more than two standard-size sets of lights per single extension cord.
- Never use electric lights on a metallic tree. The tree can become charged with electricity from faulty lights, and a person touching a branch could get shocked.
- Never run an electrical cord under a carpet.
- For added electric shock protection, plug outdoor electric lights and decorations into circuits protected by **ground fault circuit interrupters** (GFCIs). Portable, outdoor GFCIs can be purchased where electrical supplies are

sold. A qualified electrician can install GFCIs permanently to household circuits.

- Use only non-combustible or flame-resistant materials to trim a tree.
- Choose tinsel or artificial icicles made of plastic or nonleaded materials. Lead is toxic if ingested by children.
- Metal tinsel ingested by pets can be deadly due to injury of their gastrointestinal system.
- In homes with small children, take special care to avoid decorations that are sharp or breakable.
- Keep trimmings with small removable parts out of the reach of children to prevent the child swallowing or inhaling small pieces. Avoid trimmings that resemble candy or food that may tempt a child to eat them.

Wear gloves to avoid eye and skin irritation while decorating with spun glass "angel hair" and keep out of reach of small children and pets. Follow container directions carefully to avoid lung irritation while decorating with artificial snow sprays.



Trees: If purchasing fresh cut trees or greens, carefully inspect the needles. If they're brown or break easily, the greenery isn't fresh and poses a greater fire risk.

When purchasing an artificial tree, look for the label "Fire Resistant." Although this label does not mean the tree won't catch fire, it does indicate the tree will resist burning and should extinguish quickly.

LAWN and YARD CARE

Every year many people are injured or maimed due to lawn equipment accidents. Injuries consist of burns, cuts, being struck by flying objects, and even electrocution. Most of these accidents are preventable. Lawn equipment operators should follow the safety precautions found in the owner's manual. Following these simple safety steps may prevent most lawn equipment accidents.



Before mowing the lawn:

- Make sure the lawn equipment is in good working order. If hard to start, take it to a lawn equipment shop and have it tuned-up or fixed.
- Check to make sure the cutting blade is sharp and not damaged. Damaged blades can come out of balance and be slung from the lawn equipment.
- Disconnect the spark plug before placing hands or any part of the body under the lawn equipment or before turning it up to look under it.
- If the blade or grass chute needs to be cleared, stop the lawn equipment. Never adjust, clear obstructions, or place any part of your body under running lawn equipment.
- Check the gas and oil. If the gasoline is left over from last summer it will need to be changed.
- Make sure the emergency stop or shut off switch is working and not damaged. Never tape the shut off handle down so you can run the lawn equipment without holding it. This is a highly dangerous practice!
- Check the wheels and make sure they roll easily and will not come loose while mowing. They may need lubrication.

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- Check the throttle for free travel through its full range of movement. Adjust, or have it adjusted, if needed.
- Make sure that the guards that prevent objects from flying out from under the blade area are in place. If missing or damaged **DON'T USE THE LAWN EQUIPMENT!**
- Make any additional checks and services found in the operator's manual.
- Check the area that you plan to cut. Pick-up rocks, sticks, glass, or other debris. These items become missiles when struck by the lawn equipment blade. Rocks and other items have been known to come from under the blade area with such force that they have the power of a rifle bullet.
- Dress properly for the job at hand. Wear leather top shoes or boots. Canvas or cloth top shoes provide little, if any protection. Long pants are a necessity. Eye protection and hearing protection also.
- Make sure the grass is dry. Wet or damp grass can damage the lawn equipment or cause an accident during mowing.

Let the cutting begin

- Don the appropriate clothing and PPE (leather shoes or boots, safety glasses, hearing protection).
- Start the lawn equipment in a safe area, away from children and other people.
- Make sure that children and other people are a safe distance from the area you are cutting. Never allow children or young teenagers to operate lawn equipment.

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- When cutting hills or slopes cut across the slope and not up and down the slope. Slopes that are steeper than 10% should not be cut by a power mower. The chance of slipping is too great and if you slip you can be run over by the lawn equipment.
- If you need to add more gasoline, stop the lawn equipment and let it cool for 20 minutes or longer. The hot engine could ignite the gasoline fumes or any gasoline that might be spilled.
- Empty any grass catcher bag or device often. The weight of the grass could cause the lawn equipment to over-turn or make it difficult to operate.

Cleaning up

- Allow the lawn equipment to cool for at least 20 minutes. This is a good time to rake or clean up other areas of the yard.
- After disconnecting the spark plug wire, clean off any build-up of dirt or grass from the lawn equipment. It only gets harder to do later.
- Once the lawn equipment is cooled fill the oil and gasoline levels to the recommended marks.
- Make sure that you close the lid tightly on the gas can before you put it away. Never store gasoline or other flammables in a storage shed that is connected to or close to the house.
- Service the lawn equipment as if preparing for cutting grass. Any problems found while you were cutting the grass should be fixed now or as soon as possible.

Remember -- *taking time to do the job right and safely will save time and make the job go faster!*

HOME IMPROVEMENT SAFETY

Home improvement projects often call for risky practices and accidents can happen. You need to be especially careful when you're working at heights; with power tools or sharp blades; with heavy, awkward, or toxic materials; or with electricity or natural gas. Think about the Big Picture: It simply isn't worth it to do your own home improvements if you run a high risk of seriously injuring yourself.

By employing proven safety techniques, you can greatly reduce your risk of danger or injury. Here are a few very important practices and rules:

- Tackle only those tasks that you feel safe handling. For example, if you're uncomfortable on the roof because it is too high or steep, leave the roof repairs to a professional. The same holds true with jobs that require specialized tools.
- Keep a tidy work area to avoid creating your own hazards. Don't allow power cords to tangle. Pick up and properly store power tools, sharp tools, or dangerous materials that might cause injury. Pull all nails from old lumber.
- Keep tools and supplies away from the reach of small children. For more about child safety.
- Dress for safety. In other words, don't work in your flip-flops and shorts. Sturdy clothing, work boots, and gloves will protect you. And wear safety glasses whenever you use power tools, hammers, or other striking or cutting tools.
- Read the owner's manual! When using power tools, be sure to follow all precautions stated in the manual. Always unplug the tool before servicing or adjusting it and when you're finished with the task at hand. Be sure the tool works

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properly and is equipped with proper safety guards.

- Keep drill bits, blades, and cutters sharp. Dull tools require extra force and can bind, making the tools dangerous.
- Protect electrical tools with GFCI receptacles. When working with corded power tools outdoors, be sure they're plugged into a receptacle that is protected by a ground-fault-circuit interrupter (GFCI). In the event of a short, a GFCI will shut off the circuit instantaneously.
- When using a ladder, position it on a flat, firm surface. As you climb or reach, keep your weight centered. Do not lean out to one side; keep your hips between the rails; never stand on the top two rungs. When using an extension ladder to reach the roof, extend at least two rungs above the eaves. This way, you can hold onto the ladder as you step onto the roof.
- Don't go up on the roof in bad weather or if your roof has a pitch steeper than 5 in 12. Pitch expresses the angle of a roof's slope. To find a roof's pitch, measure how many inches it rises vertically for each 12 inches of horizontal "run," or distance. A 6-in-12 pitch rises 6 inches vertically for every 12 horizontal inches of run.
- Do your own electrical work only if you have the necessary knowledge. Be sure to shut off the power before working on a circuit. Use a circuit tester to make sure a circuit is not active after you have shut off the power. (Sometimes more than one circuit is wired through an electrical box.) Never work on a live circuit, fixture, outlet, or switch. For more about shutting off the power, see *How to Turn Off Your Home's Electricity*.
- Think twice before working on gas pipes. This is a job that's usually best left to a professional

technician. If you have the know-how to do your own work, test for leaks by brushing a solution of soapy water onto connections. Escaping gas will create bubbles. Remember that gas is explosive! Never use a flame or a match to test for leaking gas.

- Equip your garage or workshop and your home with fire extinguishers. Every home should have two working A-B-C fire extinguishers. Be sure they're large enough to handle home fires; they need to be rated a minimum size of "2A10BC" on the label. Periodically check them to be sure they are fully charged.
- Protect yourself against exposure to hazardous chemicals and materials. Many varnishes, strippers, solvents, preservatives, adhesives, and other products used to accomplish projects contain hazardous ingredients. Pay attention to all label warnings, including instructions about proper ventilation. For some materials or situations, a certified respirator is a must.
- Dust and fibers can be hazardous to breathe. When sanding wood or wallboard joint compound, wear a dust mask. Never sand, scrape, or dislodge surfaces that you suspect to contain asbestos; doing so can put highly hazardous fibers into the air. For a complete report on how to identify asbestos and deal with this hazard.
- Know how to handle lead-based paint. Test surfaces before sanding or stripping. (Test kits are available in most home-improvement centers.) Before removing even a small quantity of lead-based paint, seal off the work area with duct tape and plastic sheeting. Always wear a respirator, gloves, and protective clothing. Vacuum the area only with a particulate vacuum

cleaner designed for the job (these can be rented). **Pregnant women and children should not be in the house or at the work site until all dust is removed.** Consider hiring a professional to strip large surfaces covered with lead-based paint.

- Keep a good first-aid kit on hand. You can buy a first-aid kit that is endorsed by the American Red Cross at The Red Cross Shop.

SAFE DRIVING

Don't drink and drive. If you plan to drink, plan your transportation in advance. Every year, 23,000 people die because someone else didn't follow this rule.

Texting while driving: In 2011, each day in the United States, more than 9 people are killed and more than 1,153 people are injured in crashes that are reported to involve a distracted driver. **23% involves cell phones.**

1. Distracted driving is driving while doing another activity that takes your attention away from driving. Distracted driving can increase the chance of a motor vehicle crash.
2. There are three main types of distraction:
 - Visual: taking your eyes off the road;
 - Manual: taking your hands off the wheel; and
 - Cognitive: taking your mind off of driving.



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Distracted driving activities include things like using a **cell phone, texting**, and eating. Using in-vehicle technologies (such as navigation systems) can also be sources of distraction. While any of these distractions can endanger the driver and others, **texting while driving is especially dangerous because it combines all three types of distraction.**

5 Seconds: The minimal amount of time your attention is taking away from the road when you're driving and texting. Your vehicle travels the length of a football field in 5 sec before your eyes get back on the road.

With the longest times of distracted driving activities:
Text messaging makes up 23 times more likely than:
Dialing - 2.8 times
Reaching for a device - 1.4 times
Talking/Listening - 1.3 times



Here are some more basic rules of the road:

- ❖ Don't drive if you are tired.
- ❖ Keep your cars running well. Make sure your tires,



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brakes, headlights and taillights, and turn signals are all working perfectly.

- ❖ Obey the speed limit. In rain, snow, fog and darkness, slow down.
- ❖ Don't drink alcohol or become distracted.
- ❖ Stay aware of the drivers around you. If you see an erratic driver, don't get angry -- get away from them. Watch out for other drivers who are weaving, going too fast or too slow and ignoring signals. If someone like this is behind you, turn off as soon as you can and let them move on.
- ❖ Be careful at intersections. The average American driver is mediocre. Don't assume others are going to do the right thing.
- ❖ Keep your children in car safety seats, and know how to install the seats.

Drive defensively. Obey the rules and be predictable. Know how to get where you're going. This will help you avoid being distracted by having to look for street names or hard-to-see landmarks.

- If you have to turn, get in the correct lane well in advance; don't wait until the last minute.
- Always use your turn signals in traffic and when getting on or off a highway.
- When passing, check your mirrors but don't trust them entirely-look over your shoulder, too. Be patient.
- Leave a little early so you aren't in a hurry.
- Don't get emotional. Driving somewhere is a neutral task like anything else.
- The goal is to arrive safely.

Idiot drivers are a hazard, but don't take them personally.

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- **Think... SAFETY+FIRST** at home, at work, and on the road, and stay safe.
- Use caution at turns. Use your signals.
- Many things can distract you while you drive. Pull over if you have to eat, talk on a cell phone, or write notes. Use cell phones with caution. Pull over if you can, or limit your calls to emergencies.
- If your car has an Anti-lock Braking System (ABS) and you must brake because of an obstacle, be sure to press the brake pedal and hold, and gently steer around the obstacle.

Don't tailgate, and if someone is tailgating you, stay calm and let them pass. Under good conditions, the two-second rule provides enough distance between cars. Increase this distance to three or four seconds when it is raining, snowing or foggy.

“Cage the rage. Arrive alive.” Don't tailgate, weave in and out of lanes without signals, or follow too close. It's better to be late, than not to arrive at all because of an accident.

Seatbelts

Always wear your seat belt. Insist that passengers wear theirs as well. A person who is not wearing their seatbelt can become a hazard to others during an accident.

- Always wear both the lap belt and shoulder belt. The lap belt should be positioned across the upper thighs and the shoulder belt should be across the chest.
- Never slip the shoulder belt behind your body. Without the shoulder belt support you may be thrown into the dashboard or steering wheel during an accident.

NAVSAFECEN SAFETY & VPP HANDBOOK

- Never wear the shoulder belt under your arm. If it is improperly positioned during impact, you may suffer broken ribs.
- Be sure the belt fits snugly against your body.
- Pregnant women should wear their seatbelts.
- Avoid holding objects in your hands while driving. They may be driven into your chest or face during an air bag deployment. Move the front seats back. During an accident this may help prevent injuries from air bag deployment or keep you from hitting an object in front of you. You should be at least ten inches from the airbag and seated toward it.
- Children under the age of 12 should always ride in the back seat.
- Children in safety seats should ride in age- and size-appropriate seats. Child seats should never be placed in the front seat.

Motorcycle Safety:

In more than two-thirds of the car and motorcycle crashes, the driver of the car causes the wreck, not the motorcyclist. Most of the time, the driver didn't see the motorcycle. Here are some tips for motorcyclists to help you stay visible.



- Don't assume a driver can see you. The primary precautions are: helmets with retro-reflective materials; bright, contrasting clothing; fluorescent vests.

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- In 23 states, motorcyclists must keep their headlight on at all times. It is a good idea everywhere and it is required on all Naval Installations.
- If you can't see a driver's face in his rear-view mirror, he can't see you, either. Be aware of the blind spot.
- Use your turn signals, don't make sudden moves.
- The most likely situations for a wreck:
 - ✓ A car turning left in front of you.
 - ✓ A driver changing lanes or turning when you are in his blind spot.
 - ✓ Road hazards (potholes, standing water, and railroad tracks) that make drivers do something sudden or unexpected.
- Be cautious at areas where there is loose sand gravel and debris such as leaves and pine straw.
- Be extremely careful crossing on metal objects such as railroad tracks, metal cover plates, deck grids such as on bridges, etc.
- Attend a Motorcycle Rider Course to develop good riding habits and defensive actions.
- Wear a quality helmet and eye protection.
- Wear leather or other thick, protective clothing.
- Choose long sleeves and pants, over-the-ankle boots, and gloves.
- Remember – the only thing between you and the road is your protective gear.

Constantly search the road for changing conditions.

Use Search, Evaluate, Execute strategy (**SEESM**) to increase time and space safety margins.

- Give yourself space and time to respond to other motorists' actions.

NAVSAFECEN SAFETY & VPP HANDBOOK

- Give other motorists time and space to respond to you.
- Use lane positioning to be seen; ride in the part of a lane where you are most visible.
- Watch for turning vehicles.
- Signal your next move in advance.
- Avoid weaving between lanes.
- Don't ride when you are tired or under the influence of alcohol or other drugs.
- Know and follow the rules of the road, and stick to the speed limit.

RIDE SMART

RIDE SAFE

SAFE GUN STORAGE AT HOME

Don't dismiss the need to store guns safely. The consequences can cause serious injury or death. Follow these guidelines to keep firearms away from all children and unauthorized persons:

1. Always remove ammunition from guns.
2. Assure no unauthorized persons have access to your weapons.
3. Place ammunition in a locked location, separate from guns. When deciding where to store ammunition, remember to select a secure place that is out of sight and reach of children.
4. Secure unloaded firearms with a gun lock, gun alarm or other type of tamper-proof device. These might render the gun inoperable.
5. Store unloaded guns in a gun cabinet, safe, or locked gun vault. Remember to place a locked storage case where children can't find it.



6. Keep gun storage keys away from the “every day” keys.

Storing Guns for Home Defense

Home defense guns, by their nature and purpose, are generally kept loaded and readily available to only the authorized user(s). One of the best options for storing a home defense gun is a quick access safe. These safes are relatively compact and can be secured out of sight pretty much anywhere in your house. However, because these safes are small, they can also be carried away. You will want to secure the safe to something larger to make it more difficult for criminals and children to pick it up and walk away with it. Most models can be bolted to the wall or floor for extra security. Small, quick access safes work well for storing your handgun when you aren't able to keep it on your person. Some versions have traditional keypad locks, while the more expensive biometric safes use fingerprint recognition to keep unauthorized hands off your weapon.

Storing your home defense weapons requires a delicate balance of easy accessibility and suitable security. Determining that balance is an extremely personal decision. No matter where or how you decide to store your home defense gun (or guns), you should have a plan in place before you encounter a threat. Just like your family should have a plan to follow in case of a fire, you should also have a plan for what to do if someone breaks into your home. Include plans of retreat, when to shelter in place, and how to communicate with other family members. Be sure to communicate your home defense strategies with your loved ones, including your children. It also isn't a bad idea to give your plan a dry run to work out the kinks and make sure everyone is on the same page.

Key Points for Children to Remember

Practice the following four simple steps with your young children:

1. STOP
2. DON'T TOUCH
3. LEAVE THE AREA
4. TELL AN ADULT



UNDERGROUND UTILITIES

As a homeowner working around your own home, digging can be dangerous if you don't check first for underground wiring or cables. There can also be other underground utilities such as natural gas, water or sewer lines. Most cities and large utility companies offer a free service that helps make the excavating process safe.

Before you dig, the public is encouraged to notify utility companies to prevent personal injury, property damage, and damage to buried services during excavation. Anyone who will be doing any digging-- planting a tree, to building a fence, to digging a foundation--should call first.

National Utility Number; Dial 8-1-1.

In Virginia call Miss Utility; Dial 1-800-552-7001.

In North Carolina; Dial 1-800-632-4949

Dig With C.A.R.E. Keep Virginia Safe!

Marking Colors

-  Electric
-  Gas-Oil
-  Communication
-  Water
-  Sewer
-  Temporary Survey
-  Irrigation
-  Proposed Excavation



Call Miss Utility @ 811

PART VII- EMPLOYEE RIGHTS & RESPONSIBILITIES

EMPLOYEE RIGHTS & RESPONSIBILITIES

Workers' Rights under OSHA

All workers have the right to the following:

- A Safe Work Place.
- Participate in the NAVSAFECEN safety and health program.
- Be protected from imminent danger in the workplace.
- Be trained in hazard recognition and safe work practices.
- Representation when work areas are inspected.
- To be informed of unsafe or unhealthful conditions in their work place.
- Request a special inspection of their workplace if they feel that an unsafe or unhealthful condition exists. They can notify their supervisor or submit an Anymouse to document the condition.
- Review actions recommended correcting a suspected unsafe or unhealthful condition.
- Request a higher command review of the proposed corrective action.
- Refuse to work if imminent danger exists or they believe imminent danger exists.
- Be free from reprisal or retaliation by their supervisor or other managers because they exercised any right under the OSHA, DoDI or OPNAV program such as providing reports of unsafe or unhealthful conditions, accidents, injuries, or deaths.
- Any employee, who reasonably believes that an activity or condition is unsafe, is expected to

NAVSAFECEN SAFETY & VPP HANDBOOK

stop or refuse work without fear of reprisal by management or co-workers and is entitled to have the safety concern addressed prior to proceeding with the assigned work.

Workers' Responsibilities

All workers have the responsibility to:

- Attend scheduled OSHE related training.
- Follow safety rules and use safe work practices so that they do not endanger themselves, their co-workers or infringe upon the rights of other workers.
- Report unsafe or unhealthful conditions, which pose a hazard to themselves or others.
- Comply with NAVSAFECEN requirements that are communicated verbally or written, and in instructions, manuals, technical orders, operating procedures, and specifications, etc. in the performance of assigned tasks.
- Use protective clothing or equipment in accordance with the OPNAV and NAVSAFECEN requirements when required.
- Report job conditions or supervisory direction that conflicts with established safety guidance/training.
- Report accidents, injuries, and potential accidents to your supervisor, Anymouse submission (Online or Paper form), or the Mishap Reporting Line at 444-2929.

EMERGENCIES SHOULD BE IMMEDIATELY REPORTED BY CALLING 444-3333.

