

CAPP Report

CIVILIAN ACCIDENT PREVENTION PROGRAM REPORT

Volume 6 Number 7, December 1996

A new mark on the wall

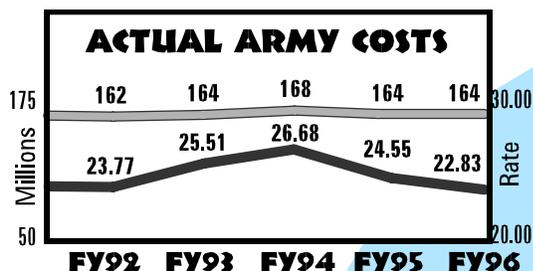
During FY 96, the Army put a new mark on the wall by setting a record low in the rate of civilian lost-time and illness claims per 1,000 civilian employees. While costs have remained the same, lost-time injury and occupational illnesses decreased by a full 7 percent below the 1995 rate.

The number-one cause of lost time remains back injuries caused by improper lifting. The chart (below) gives a breakdown on accident categories.

Civilian lost-time claims are the most accurate method of accident reporting. Civilian employees must submit claims to the Office of Workers Compensation in order to receive compensation for lost-time injuries and occupational illnesses.

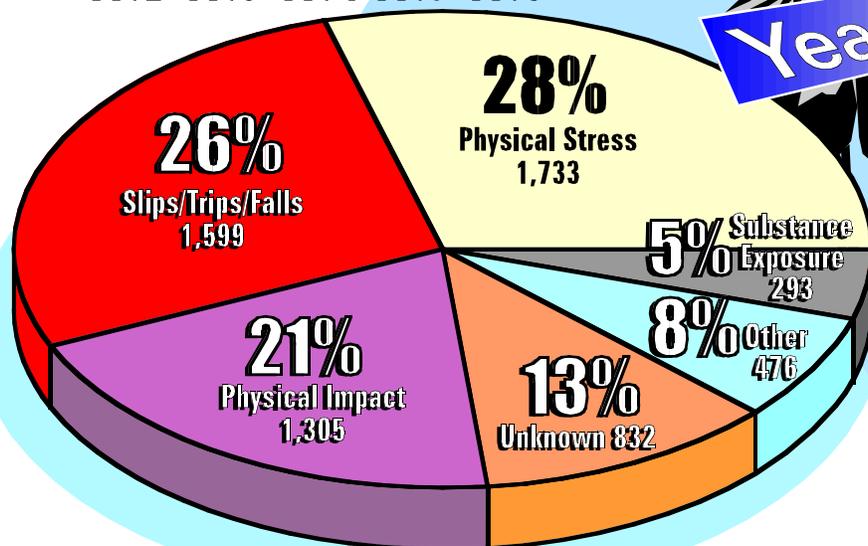
This record didn't just happen; it resulted from hard accident-

prevention efforts at every level of command. Congratulations and keep up the good work! □



**CIVILIAN
LOST-TIME
Claims**

Year End



FY96	3-Yr Avg
22.83 (6,238)	25.59 (7,669)

Back injuries from improper lifting is the #1 Lost-Time Injury.



Confined space: dangerous and deceptive

Recently four Navy employees died in a confined-space accident after entering a 7,500-gallon waste-holding tank without taking routine safety precautions. Three of those who died were attempting to rescue the original fallen employee. The employee, a contractor, entered a marked confined-space tank without testing the space. He didn't ventilate the tank, and he didn't even use his own rescue equipment. Three would-be rescuers rushed to the victim's aid without testing the air or donning appropriate gear. A fourth rescuer was stopped from entering the tank by his quick-thinking dock master, who remembered earlier shipboard confined-space training.

Although contract personnel had attended hazard-awareness training and an 8-hour refresher course, the contractor had been cited several times for an inadequate confined-space program and noncompliance. The contract operation had been shut down less than 3 months before the accident and employees were required to take

additional training before being allowed to resume operations.

There are procedures for testing, entry, observing, and rescue operations in confined spaces. All leaders, including contractors, should ensure their personnel are fully trained on all aspects of these potentially dangerous jobs. In addition, any rescue personnel—including soldiers—should be trained in confined-space rescue requirements and techniques.

If personnel on your installation are working in confined areas,

ensure they have—

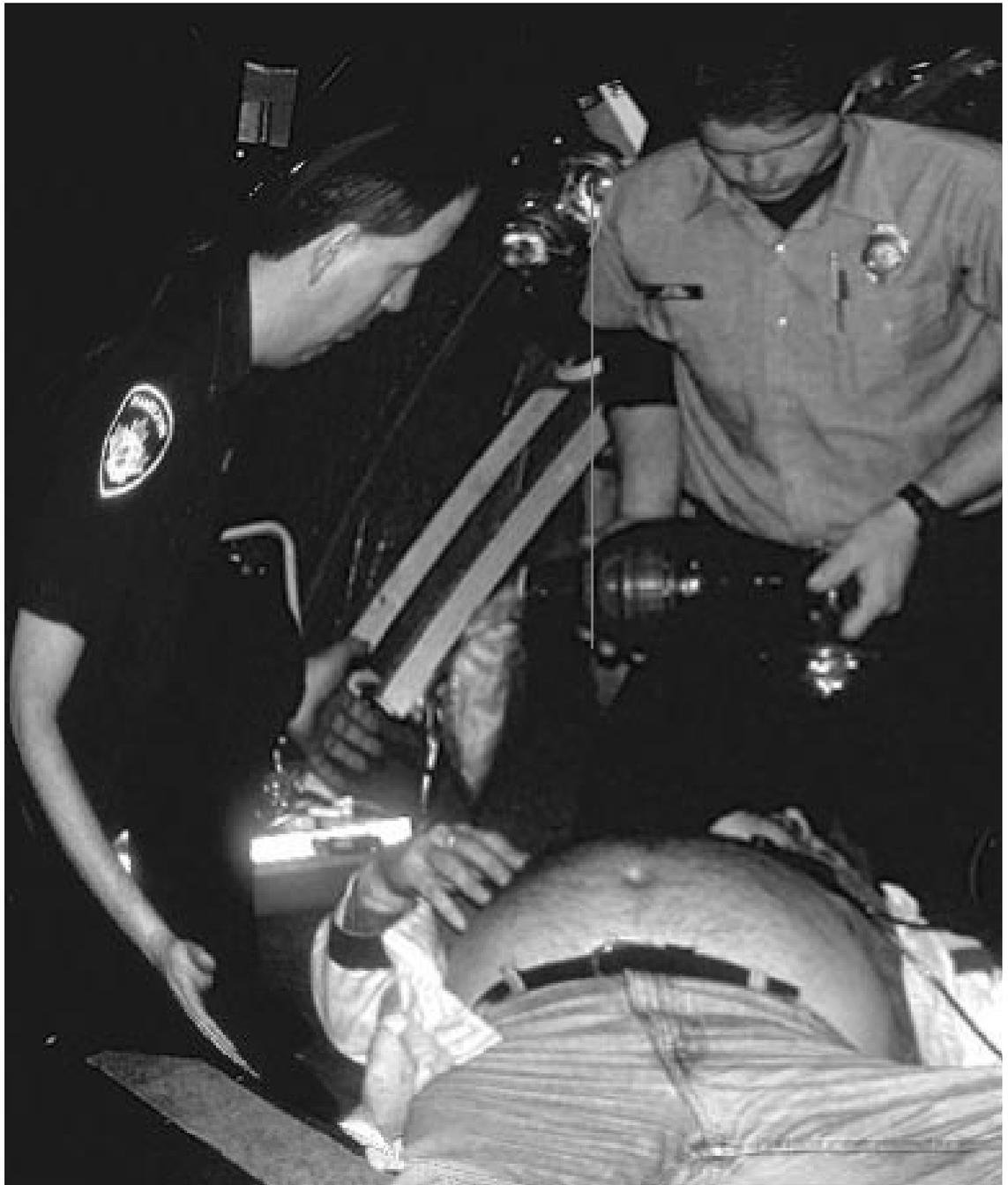
- Trained workers as well as supervisors to recognize hazardous activities.

- Complied with contract requirements and obligations. Stop work if personnel are not in compliance; serve official notice for life-threatening noncompliance.

- Required the appropriate safety standards.

- Certified spaces, issues, and permits.

- Posted the required permit. □



Trans/port missions drive confined-space-entry program

The Transportation Center and School at Fort Eustis has created an excellent confined-space training program (because of their transportation and port missions). They have developed a regulation that sets policy for identification, preparation, testing, and entry into and rescue from confined spaces. In addition, they have implemented an SOP covering entry into tanks, compartments, voids, manholes, vaults, sewers and other confined spaces.

According to the SOP, each space is treated as permit space before entry, and each space is evaluated on its own merit at the time of entry. Before allowing entry into a confined space, the entry supervisor must verify and document test results for oxygen content, flammability and toxicity, as well as other potential hazards. The entry supervisor can classify the space as non-permit only if the space clearly demonstrates no serious hazard potential to the worker during the work process. Initial atmospheric test results will be documented in all cases and maintained on file for 1 year.

The SOP designates responsibility for overall management of the confined-space entry program, including maintaining records and permits, gas-monitoring equipment maintenance and calibration, PPE issue and maintenance and rescue and other equipment that supports confined-space entry. The procedures supplement federal occupational safety and health

standards contained in 29 CFR 1910.146 and 29 CFR 1915 relative to confined-space entry and gas-free engineering.



The following are excerpts from the SOP.

The entry supervisor will—

- Know the potential hazards during entry and work.
- Determine if acceptable entry conditions are present prior to entry and maintained throughout the work process.
- Authorize entry and oversee entry operations.
- Terminate entry as required by 29 CFR 1910.46.
- Verify that rescue services are readily available and the means for summoning them are operable.

The following atmospheric test will be conducted prior to entry—

- Percent of oxygen (O₂) not below 19.5 percent or above 23.5 percent.
- Percent of lower flammable limit (LFL) not above 10 percent.
- Carbon monoxide (CO) not above 35 parts per million (ppm).
- Hydrogen sulfide (H₂S) not above 10 ppm.

Before allowing entry into the space, visual inspection should identify noise hazards, fall and entrapment hazards, heat or cold hazards, electrical hazards, biohazards, radiation, high-pressure lines, inadequate lighting, chemicals, hazardous materials and moving machinery.

The SOP also covers ventilation, isolation of hazardous conditions, hot work and confined-space-entry training. □

POC: Mr. Chuck Welcher, Transportation Branch Safety Office, DSN 927-3995 (804-878-5605), e-mail welcher@eustis-emh1.army.mil

From the top

DOD needs your help

The Assistant Deputy Under Secretary of Defense (Safety and Occupational Health), Mr. George W. Seibert, is requesting the support of top management in reducing the rate of serious lost-time injuries and illnesses. A dozen DOD activities have lost-time injury and illness rates exceeding the federal rate of 2.83, and OSHA has targeted those activities for inspection this fiscal year. Two commissaries topped the list with rates of 19.5 and 12.8. One Army depot was listed at 5.2. The Army's share of workers' compensation costs reached \$165,000,000 in 1995*.

An Army depot where employees maintain and overhaul heavy equipment is one of the most dangerous places to work. Unless an aggressive risk-management program is in place, accidents can quickly injure or kill workers. Commissary workers are subject to falls, but lifting incorrectly is a major factor in injuries. Sprains and strains account for approximately 44 percent of lost-time injuries nationally. Forty percent of these involved the back and trunk areas.

Commanders and other leaders can help lower these rates by instituting an aggressive Civilian Resource Conservation Program and encouraging aggressive risk-management programs.

***1995: Department of Labor fiscal year, 1 July 1994 to 30 June 1995)**

More on the reengineering

Training Division changes direction

The Safety Center's Training Division currently provides safety training for the total Army safety team: Career Program 12 safety and occupational health professionals, aviation safety officers and noncommissioned officers and small-unit leaders. Like many organizations in the Army, the Safety Center must do more with less. We face still more personnel reductions in the future and are developing strategies to ensure that quality training is still available to meet identified safety-training needs.

Beginning in FY 98, the Safety Center will no longer be able to conduct safety training. Transition from teaching to the development of training courses is already underway. Part of this transition includes developing computer-based training (CBT), certifying vendors to teach courses and identifying safety training resources.

CBT reduces cost by eliminating travel; it reaches a larger audience and allows students to work at their own pace. Based on MACOM input, the Safety Center is converting four courses to CD-ROM. The first to be converted will be Risk Management, followed by Managing the Civilian Resource Conservation Program, Explosives Safety and Small-Unit Leader's Force Protection.

Some courses will be taught by certified vendors who meet Safety Center training standards and can provide course-completion certificates.

Army organizations will contract directly with certified vendors for on-site courses or send their safety professionals to courses offered by a certified vendor. While all Safety Center courses are not yet available from certified vendors, the list is expanding. Contract costs and individual tuition vary.

In addition, Training Division is developing a safety-training-

resource list of private and public sector safety-training sources. Local sources may save dollars by, again, eliminating travel expenses.

Watch for more information as these new strategies mature into quality safety training that will meet the needs of the Army. □

POC: Mr. Dennis Keplinger; Chief, Training Division; DSN 558-3367 (334-255-3367)

Training schedule for FY97

The Safety Center will offer the following courses this fiscal year.

21 - 24 Jan	Fundamentals of Army Accident Prevention
24 Jan - 7 Mar	Aviation Safety Officer Course 97-2
27 - 31 Jan	Risk Management
3 - 7 Feb	Army Accident Investigation Course
10 - 21 Mar	Combat Safety Officer Course (WASP Phase I)
14 Apr - 23 May	Aviation Safety Officer Course 97-3
5 - 9 May	Resource Management for Safety Managers
12 - 16 May	Army Safety Management
24 - 28 May	Aviation Safety Officer Refresher Course
7 - 18 Jul	Aviation Safety Officer Correspondence Course, Phase II
11 - 22 Aug	Aviation Safety Officer Correspondence Course, Phase II



Training vendors

Your local contract representative can help you set up training courses using the vendors (and courses) listed below. They are certified by the Army Safety Center.

■ Alamo Safety Organization, 3946 Starhill Dr., San Antonio, TX 78218 (210-829-7233)

- Aircraft Accident Prevention Course
- Fundamentals of Army Accident Prevention Course
- OSHA General Industry Course
- OSHA Construction Standards
- Accident Investigation Course
- Civilian Resource Conservation Course
- OSHA Compliance Course
- Unit Safety Management Course
- Senior NCO Force Protection Course
- Ground Safety Management Course

■ Green Inc. Safety Services, 1937 Saybrook Ct., Jonesboro, GA 30236 (770-471-7856)

- Fundamentals of Army Accident Prevention
- Accident Investigation
- OSHA Inspection Training and Certification
- Risk Management

■ Training Track One, Inc.; P.O. Box 640; Kresgeville, PA 18333-0640 (610-681-5949)

- Hazardous Materials
- OSHA (Construction Safety, Trenching, Confined Space)

■ Mr. Richard Gale, Sr.; P.O. Box 55; Kresgeville, PA 18333-0055 (610-681-5949)

- OSHA (Construction, Safety Management)
- Hazardous Materials

■ InterTrans Services, Inc., 27 Beach Road, Suite 200; Monmouth Beach, NJ 07750-0130 (908-571-0300)

- Hazardous Materials

■ GDS Communications, Inc.; 2380 Riverdale Dr., N.; Miramar, FL 33025 (954-431-2566)

- Hazardous Materials/Hazardous Waste Course
- Confined Space Course

■ Transportation Safety Institute, P.O. Box 25082, Oklahom City, OK 73125-9967 (405-954-9268) PDierber@snowhill.com

CDL: a driving issue

One question is guaranteed to come up weekly at the Safety Center: Can you waiver commercial driver's license (CDL) requirements? The answer is: No. The Army Safety Center does not have the authority to waive CDL requirements for operators on military installations.

CDL requirements were developed to solve a national problem: Drivers of commercial vehicles were often licensed in several states. Each state had its own requirements, often with no effective means of tracking driving offenses between states. The Commercial Vehicle Act of 1986 mandated that states use federal highway grant moneys to establish licensing programs for commercial motor vehicle operators. Final rules were published in 1988 in the Federal Register (Vol. 53, No. 186), and people have been requesting waivers ever since.

These rules excluded all military personnel from the CDL requirement so long as the operation of the vehicle was for military purposes only. In 1991, the Deputy Assistant Secretary of Defense (Logistics) issued guidance for all services.

The guidance at 49 CFR, Parts 383 and 3912 concerning waivers does not apply to DOD civilian motor-vehicle operators. All civilian operators are required by licensing states to obtain CDLs. Further, civilian operators pay the cost of CDLs out of their own pockets.

There is a single exception—

Civilian vehicle operators who operate government vehicles totally within the confines of any government or military installation and never on a public (numbered) highway will not be required to obtain a CDL. A CDL is required for all off-post trips; even occasional trips to transport personnel or pick up supplies. A CDL is required if the driver has to use a commercial numbered highway to go from one part of an installation to another and even to drive just outside the gate to purchase gasoline.

Further, if a numbered federal, state, city, county, or local road is a thoroughfare through a military or government facility and is accessible to the general public, all DA and contract-employed civilians (except firefighters) must have a CDL.

Local safety offices should be able to answer any of your questions concerning these requirements. If not, they should go up their chain to the higher command. We, at the Safety Center, are also here to answer safety questions, but we urge you to let the system work. □

POC: Mr. Al Brown, Product Development Branch, DSN 558-3989 (334-255-3989)

What you don't hear can hurt you

Even though noise-related hearing loss is preventable, it remains one of the most prevalent occupational health hazards in the Army. Unfortunately, it doesn't get the attention it deserves. Safety officers need to get the word out that soldiers' hearing must be protected to ensure the mission is protected. Soldiers and commanders naturally respond to stresses that threaten life or mission. Quite often, noise—a routine training or battlefield component—may go unnoticed, even "enemy" movements in brush, certain communications, or the loading of enemy weapons.

Noise-related hearing loss can be temporary or permanent. Temporary loss may be associated with ringing in the ears. It is usually noticed when a soldier returns to quarters or goes into a quiet area after being exposed to loud noises. Speech may sound muffled to the affected soldier and harder to understand. Usually hearing returns to normal within a few hours or by the next day.

Permanent hearing loss usually occurs after repeated exposure to loud noise, but in this case, the hearing does not return to normal. In its early stages, high-pitched sounds, such as crickets, wire being cut or personnel moving through grass, may go unheard. The ability to understand speech is usually unaffected in a quiet atmosphere but is dramatically reduced in the presence of background noise, such as static on a radio or when more than one person is speaking.

If noise exposure continues and the hearing loss progresses, a

soldier won't be able to detect an enemy threat. A soldier with normal hearing can detect footsteps in leaves at 100 meters, a voice at 180 meters, and a riflebolt closing at more than 1,000 meters. A soldier with temporary hearing loss may not hear footsteps in leaves before one-half meter, a voice before 32 meters, and the sound of a closing riflebolt before 46 meters. The soldier with a hearing loss may be in imminent danger.

Noise is hazardous to hearing if one has to raise his or her voice in order to be heard at distance of 3 feet or less. Hearing protection is

necessary; it is the only way to protect hearing during training exercises.

To protect hearing, soldiers should use properly fitted earplugs, noise muffs or sound-attenuating helmets. Hearing protection is available to all soldiers, but except for the spongy, roll-between-your-fingers earplugs, they are not a one-size-fits-all item. Most have to be fitted by trained medics or audiologists, who teach soldiers how to use personalized hearing protection. □

POC: LTC David Chandler; Medical Center; Landstuhl, Ger.; DSN 486-8545 or 06371-1657

Macho myths debunked

Myth: Being around noise toughens your eardrums and raises tolerance to loud sounds.

Fact: Exposure to noise does not toughen your ears or increase your tolerance for loud sounds. Noise causes hearing loss. This can be prevented during hazardous noise exposure by using authorized hearing protection, such as earplugs, noise muffs, or helmets.

Myth: Only noise made by machinery or weapons causes hearing loss.

Fact: Any sound, if it is loud enough, can cause hearing loss. Symphonic music or rock and roll can be just as damaging as occupational noise, given the same level of exposure.

Myth: If I lose my hearing, the military will give me a hearing aid that will return the lost hearing.

Fact: Sometimes hearing aids can help; however, hearing is never returned to normal. Just ask anyone who uses a hearing aid!

Myth: I've already lost my hearing; I don't have to wear hearing protection.

Fact: Exposure to noise can make an existing hearing loss worse. Hearing protection is especially important for someone with existing hearing loss.

Myth: Noise is not really a serious hazard.

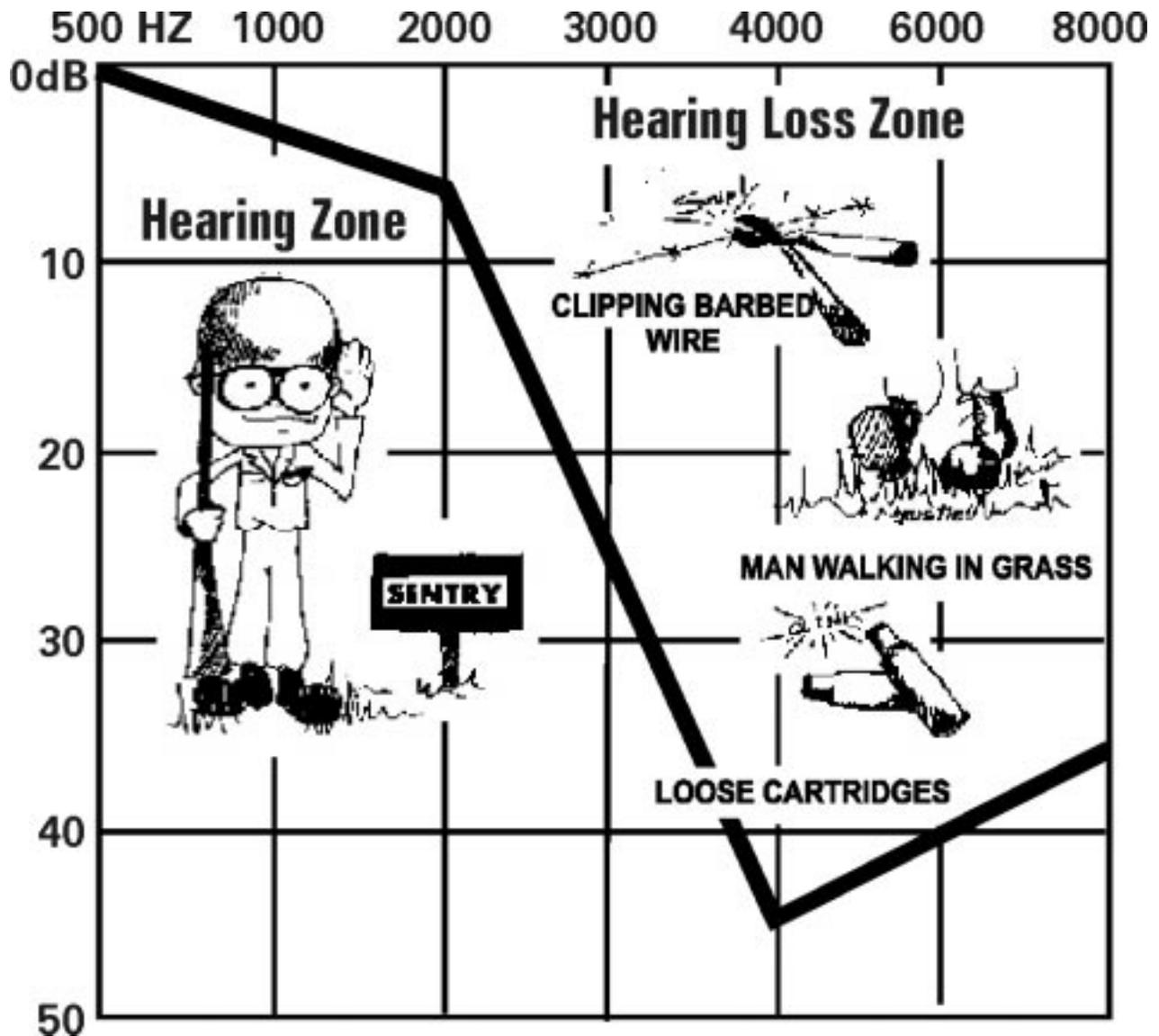
Fact: More soldiers are exposed to noise than any other single occupational health hazard. One in 10 soldiers has a hearing loss that, under some combat conditions, makes hearing verbal communications or warning sounds difficult or impossible.

Myth: Hearing loss due to noise is temporary; it always comes back.

Fact: Most of us have experienced temporary hearing loss because of noise. Repeated exposures cause permanent damage that cannot be repaired. This means permanent hearing loss.

What does a soldier with a high-frequency hearing loss MISS?

HIGH PITCHED COMBAT SOUNDS MAY NOT BE HEARD



Practically all noise-caused hearing loss that soldiers develop occurs during routine training exercises, not in combat.

On the net

Question to our readers: Do you want to see the *CAPP Report* on the web? Respond by e-mail to safetnews@rucker-usasc.army.mil.

Resources

Lab Safety in Janesville, Wis., has 25 safety techs on line to answer questions. The service is free. The Lab Safety web site is at <http://www.labsafety.com>. In addition, Lab Safety has an automated fax service covering such topics as bloodborne pathogens, forklift-operator training, respirator fit-testing requirements and procedures, hazcom standards and safety resources and hot lines. (Thanks to Mr. Joe Teeples, Fort McCoy Safety Office for this tip.)

Listed below are additional internet addresses you may want to surf. All begin with <http://>

Army Home Page:
www.army.mil/

USAREUR Safety:
divsafety@ladtfrear.lad.army.mil

State of Vermont Safety
Information Resources:
hazard.com/

Emergency Response and
Research Institute:
[www.emergency.com/
hzmtpage.htm](http://www.emergency.com/hzmtpage.htm)

Canadian Training Materials Co.:
www.sas.ab.ca/biz/christie/

The American Society of Safety
Engineers: www.asse.org/

The National Safety Council:
www.nsc.org/nsc/

Industrial Hygiene and Safety
News (online): www.ishn.com/
CHPPM home page: [chppm-
www.apgea.army.mil/trng/](http://chppm-
www.apgea.army.mil/trng/)

Bureau of Labor Statistics:
www.bls.gov/

ACGIH home page:
www.ACGIH.org/

ATSDR:
atsdrl.atsdr.cdc.gov:8080/ □

Semitrailer cannot always follow its tractor's tracks

Hitching M872 semitrailers to certain 5-ton trucks can take drivers on hair-raising rides—or worse. Using the M818-, M931-, or M932-series 5-ton tractor-trucks as prime movers for the M872 40-foot dual purpose semitrailer raises several safety concerns. Safety officers need to get the word out to commanders who may be using this combination. Problems can be created by brake air volume, payload, fifth-wheel height, load height, axle loading and braking, and off-highway operations.

Brake air volume

The air system capacity of the M818- and M931/M932-series tractors is marginal for towing the M872 semitrailer. These tractors may not have adequate air supply for the M872 during high brake usage, such as on hilly terrain or stop-and-go operations.

Payload

The maximum towed load of the M818- or M931/M932-series tractors is 37,500 pounds. Since the M872's curb weight varies and its allowable 7,000- to 8,000-pound ISO container holds up to 7 tons, it is very easy to inadvertently overload the 5-ton-M872 combination.

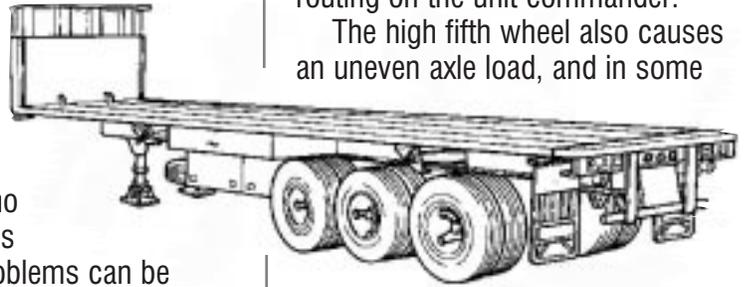
Fifth-wheel height

The wheel height on these prime movers causes the M872 to ride nose high, resulting in an unsafe load height and inadequate axle

loading and braking.

A tall load will cause further problems, and the fifth-wheel height and the smaller diameter wheels on the semitrailer cause a bed angle that raises the front end of the semitrailer even higher. Vehicle operators must ensure their vehicles and loads will clear overhead obstructions along their routes. The lack of a ladder in basic issue items of both of these vehicles makes it difficult for the driver to measure his load; this places responsibility for loading and routing on the unit commander.

The high fifth wheel also causes an uneven axle load, and in some



cases, the forward semitrailer axle is barely on the ground. This really pushes the limits for safe braking in an already marginal braking condition.

Off-highway operations

Off-road operations will greatly shorten semitrailer life. The M872 is an on-highway vehicle designed to operate no farther forward than the Corps rear area. The 5-tons operate in areas where the semitrailer was not made to go. Pushing the limits causes suspension failures, frame cracks, and other vehicle damage that shortens the trailer's useful life.

TACOM weapons system managers and the TECOM HQ test manager have concurred with the above information. For full details, see SAFERSK, Safety/Risk Management Forum, subject: Safety Concerns with 5-ton Tractors Towing M872 Semitrailers from sparrers@eustis-emh1.army.mil. □

POC: Mr. Robert A. Price, Ft. Eustis, VA 23604-5456, DSN 927-4751 (804-878-4751)

Fitness not just for soldiers anymore

The Surgeon General addresses health benefits of physical activity

More than 60 percent of adults do not get enough exercise to stay healthy, according to a new report put out by the Office of the Surgeon General. In addition, the report indicates that one quarter of all adults get no exercise at all. Further, inactivity increases with age and is more common among women than men and among those with lower incomes and less education. The major findings of the report bring together, for the first time, the results of decades of research on physical activity and health. These findings include the following—

- People who are usually inactive can improve their health and well-being by becoming even moderately active on a

regular basis.

- Physical activity need not be strenuous to achieve health benefits.

- Greater health benefits can be achieved by increasing the amount (duration, frequency, or intensity) of physical activity.

Regular physical activity is better than even the most perfect food. Performed most days of the week, it reduces the risk of developing or dying from some of the leading causes of illness and death in the United States. It reduces the risk of dying prematurely or of dying from heart disease. It reduces the risk of developing diabetes, high blood pressure, and colon cancer. It helps reduce high blood pressure and also reduces feelings of depression and anxiety and helps in weight control. In addition, regular physical activity helps build and maintain healthy bones, muscles, and joints, and it promotes psychological well-being.

To avoid soreness and injury, exercisers should start out slowly and build gradually to give the body time to adjust to the new activity.

People with chronic health problems (heart disease, diabetes or obesity), or who are at high risk for these problems, should first consult a physician before beginning a new exercise program. Men over age 40 and women over age 50 should consult a physician before beginning a vigorous exercise program.

More information is available from the Centers for Disease Control and Prevention; 4770 Buford Highway, NE; Atlanta, GA 30341-3724. The CDCP's toll-free number is 888-CDC-4NRG or 888-232-4674. The web address is <http://www.cdc.gov>. □

The high cost of low exercise

Millions of Americans suffer from illnesses that can be prevented or improved through regular physical activity. The Surgeon General report showed that—

- 13.5 million Americans have heart disease.

- 1.5 million suffer from heart attacks in any given year.

- 8 million have adult-onset or non-insulin dependent diabetes.

- 95,000 are newly diagnosed with colon cancer each year.

- 250,000 suffer from hip fractures each year.

- 50 million have high blood pressure.

- More than 60 million (one third of the population) are overweight.

What's moderate in physical activity?

- Washing and waxing a car for 45 to 60 minutes.
- Washing windows or floors for 45 to 60 minutes.
- Playing volleyball for 45 minutes.
- Playing touch football for 30 to 45 minutes.
- Gardening for 30 to 45 minutes.
- Walking 1-3/4 miles in 35 minutes (20-minute mile).
- Shooting baskets (basketball) for 30 minutes.
- Bicycling 5 miles in 30 minutes.
- Dancing fast for 20 minutes.
- Pushing a stroller 1« miles in 30 minutes.
- Raking leaves for 30 minutes.
- Walking 2 miles in 30 minutes (15-minute mile).
- Water aerobics for 30 minutes.
- Swimming laps for 20 minutes.
- Bicycling 4 miles in 15 minutes.

Hot tip on cool stuff

ANSI has hot line

The American National Standards Institute (ANSI) now has an answer line to field questions on standards-related issues, including the many voluntary safety standards ANSI publishes. Call 212-642-4900 for ANSI-related questions.

ASSE publishes resource guide

The American Society of Safety Engineers (ASSE) 1996-1997 Resource Guide is available for safety and health professionals. It contains information on—

- ASSE's new customer service department, web page and fax-on-demand service.
- Proactive programs: governmental affairs, intersociety relations and professional recognition.
- Publications, audio-visual training courses and CD-ROM training.
- Standards for the safety profession.
- Seminars, symposiums and self-study programs.
- CSP Refresher Guide and ANSI standards.

For a free copy of the 46-page guide, contact ASSE's customer service department at 847-768-3413.

ASSE announces conference

details

ASSE will hold its 36th Annual Professional Development Conference and Exposition in New Orleans, June 16 - 19, 1997. Seminar topics include—

- Global Safety Management
- The Drive to Zero Accidents in Construction
- Our Biggest Asset—The Safe Employee
- Social Dynamics of Occupational Safety
- Fall Protection—The Engineered Solution

For more information and registration information, contact ASSE's customer service department at 847-699-2929 or use ASSE's fax-on-demand service at 800-380-7101. □

The big squeeze

Resources being what they are these days, we need to make the most of what we have. This especially applies to our publications and the dollars it takes to produce them. To help us make every *CAPP Report* count, please let us know if your address needs correcting, or if you don't want to receive future copies. Contact Ms. Sharrel Forehand with your changes at: DSN 558-2062 (334-255-2062); e-mail, forehans@rucker-usasc-army.mil; fax, DSN 558-2266 (334-255-2266; or Commander, U.S. Army Safety Center, ATTN: CSSC-SIM, Bldg. 4905, 5th Ave., Fort Rucker, AL 36362-5363.



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