

# ENVIRONMENTAL HEALTH AND SAFETY

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## Confined Spaces Can Kill!

A confined space is any area characterized by the following two conditions:

1. Existing ventilation is insufficient to remove dangerous air contamination and/or oxygen deficiency that may exist or develop.
2. Ready access or egress for the removal of a suddenly disabled employee is difficult because of the location and/or size of the opening and the space.

Of the confined space deaths reported annually, two-thirds are people who attempt to rescue an unconscious individual but are overcome by the hazardous atmosphere. These are mostly employees who are not familiar with the hazards of confined spaces and their company's confined-space entry procedures. At a minimum, the following elements should be part of your confined space program.

Processes of biological activity, decomposition of natural materials, oxidation, percolation of vapors and structural leaks can cause the production and accumulation of toxic and/or flammable gases. Available oxygen levels can become seriously depleted or displaced through these same processes.

When the atmosphere becomes contaminated with harmful gases or lacks oxygen, the exposed worker may not immediately feel the effects. A false feeling of euphoria or well being is a common side effect to such exposure. Many of the gases have no odor or color. Only through the use of appropriate monitoring instruments can employees be certain that the atmosphere is safe to enter. In addition, proper maintenance of the confined space meter is essential. Pre-calibration and alarm levels should be conducted, ideally before each entry. Batteries, sensors and extension line should be in good working order.

Most confined-space operations at your facility will require only the use of the entry log form. Those with special hazards are considered "permit required confined spaces" and require a supervisor's authorization before entry. The purpose of the entry log or permit is to ensure that necessary precautions (lockout/tagout, ventilator, standby person, harness/winch, barricades, etc.) are taken before entry is made.

Clearly state your company's emergency and rescue procedures. Do you have appropriate people trained in CPR/first aid? Do you have people approved to wear self-contained breathing apparatus? Are your employees trained and comfortable to be designated as approved emergency rescuers? If not, you can coordinate with your local fire department as the designated emergency rescue team.

Per the Communication Standard, employees have the right to clearly understand the hazardous properties of the toxic and flammable contaminants they may encounter in confined spaces. It is the responsibility of departmental supervisors to ensure that appropriate training resources are made available to all employees who enter confined spaces; that each employee has available all protective equipment needed to conduct the job safely; and that each clearly understands how to use such equipment. It is the responsibility of all employees engaged in confined-space activities to follow all procedures and instructions. Employees and supervisors should receive training in confined-space operations at least once a year. Programs may be presented by departmental supervisors, EH&S staff and/or off-campus representatives. Additionally, new employees assigned to work in confined spaces should receive this information as part of their initial orientation.

**Daphne Thaug, CIH**

## **Campus Safety**

### **Cell Phones: To Ban or Not to Ban**

Wireless phones have become so ubiquitous; they can be heard ringing insistently in restaurants, in commuters' briefcases and in pockets of soccer moms and dads everywhere. But should drivers join the wireless-phone mania? Some countries have banned the use of handheld phones while driving, but no U.S. jurisdiction has followed suit. Lawmakers and public policy gurus are grappling with tough questions: Should U.S. laws be passed that limit phone use in vehicles? Would such laws be followed or enforced? Are there already laws that could be applied to phone misuse? Do phones' usefulness outweigh—or at least equal—the risk of driver distraction?

"The cell phone... has a valid use, and there are a number of reasons not to regulate it. It does things other than distract," says Stephanie Faul, communications director for the AAA Foundation for Traffic Safety. "There are problems associated with cell-phone use. But is it a problem for which there is a legislative solution? I think there's a strong argument to be made the answer seems to be no."

The wireless industry has worked aggressively to promote the safe use of car phones through a national campaign entitled "Safety: Your Most Important Call." It also urges the use of "hands free" phones in vehicles, and is working to standardize equipment in cars and on phones to allow hands-free use of any wireless phone.

Introduced in 1983 as bulky, costly, car-mounted models, wireless phones have evolved to palm-sized portables. Price—both for phones and service—has plummeted. By 2000, 80 million Americans are expected to own wireless phones. With highway congestion ever increasing and time at a premium, many drivers see wireless phones as a means to claim some "free" time. The National Highway Traffic Safety Administration's 1997 report on the safety implications of wireless technologies, including phones, reports that 85 percent of phone-owners make calls while driving. More than 27 percent use their phones during half or more of their trips.

But whether phone use leads to more crashes is much harder to gauge. Few states' crash-reporting systems note whether phone use was a factor. Studies of the issue are in their infancy. Probably the most cited study was in the *New England Journal of Medicine* in February 1997: Canadian researchers concluded that phone use while driving quadrupled the risk of a collision, a multiple equal to the risk posed by driving while drunk. But phones have proven to be lifesavers as well. CTIA presents "Wireless Samaritan" awards yearly to people whom have used cell phones to stop crimes and help in other emergencies.

In the U.S., more than a dozen state legislatures have considered limiting the use of car phones in the past year, but no bill has passed. If a state were to pass such legislation, some question whether or how enforcement could occur. Most states have laws against reckless or careless driving, which could be applied to dangerous phone use. Motorists must be made aware of the risk presented by phones and other activities while they are on the road.

**Sandy Graham—Traffic Safety**

### **Safety—Your Most Important Call**

- Get to know your phone and its features
- Use a hands-free device
- Position your phone within easy reach
- Let the person you're talking to know that you're driving; suspend the call in heavy traffic/hazardous

weather

- Do not take notes or look up phone numbers while driving
- Place calls when you are not moving or before pulling into traffic
- Do not engage in stressful/emotional conversations that may divert your attention from the road
- Use your phone to call for help or to assist in emergencies.

## **Shed Some Light on Your Workplace**

**A prescription of optimal workplace lighting would be splendid. Unfortunately, there's no such thing, according to John Bachner, director of communications for the National Lighting Bureau.**

**The Illuminating Engineering Society does recommend minimum safe lighting levels in various settings, but "minimum" is far from optimum—and then there's lighting quality. "If there's a standard person doing a standard task in a standard space," Bachner says, "you can have a standard light. There are answers—but they are unique to the workplace, the work and the worker."**

**Some go further than minimum lighting. "I work at a drawing board with a Luxo light designed back in the 1930's," says Connecticut architect MacKenzie Gordon. "It has an 8-inch circular fluorescent lamp with an incandescent in the middle. With its articulating arms, I have it 6 inches above my work or 4 feet away. The adjustability is terrific." Gordon questions workstation lighting designs. "Usually they put a bookshelf up and hide the lights behind a valance. As long as you don't move, it's fine. But people are not designed to stay frozen in one position."**

**Physical comfort aside, Gordon says lighting is an important factor of morale. And he believes the standard, uniformly bright office doesn't do much for employee morale. "I really would de-emphasize ceilings of fluorescents, except as absolutely needed. Uniformity palls; as long as it's not 'black' outside individual work spaces, an office is far more interesting architecturally when it relies on task lighting."**

**It's hard to dispute the idea that bad lighting hurts productivity and safety. But what's bad lighting? Veiling reflections—the image of a window or fluorescent obscuring the screen—can be a total work-stopper to someone keying in data at a computer. Yet Bachner notes, that same type of light may be ideal for a factory worker eyeballing painted surfaces for smoothness. Fortunately, there now are experts certified to design the best light for each worker. Even better, using them can be highly cost effective.**

**David E. Shapiro**

**Today's Supervisor**

### **Carpal Tunnel Syndrome Cases Continue to Decline**

**The good news bears repeating: For the third year in a row, lost workdays from carpal tunnel syndrome have declined, according to the Bureau of Labor Statistics. But the bad news is that carpal tunnel syndrome continues to be a serious problem for workers. In 1996, carpal tunnel syndrome cases required more time off work to recuperate (25 days) than any other injury, even amputations and fractures (20 and 17 days respectively). The incidence of carpal tunnel syndrome reached its peak in 1993, when the BLS reported 41,000 cases. By 1996, a drop to 29,900 had taken place.**

**One interesting finding from BLS is that women experience more carpal syndrome cases than men do. Female workers represented almost 79 percent of the lost-time cases that resulted from carpal tunnel syndrome in 1996—but they suffered only one-third of all injuries and illnesses. One source of gender disparity with carpal tunnel syndrome may be that women are more likely to work at lower-paid jobs, such as typing pools, garment shops and other jobs that traditionally have high rates of carpal tunnel cases.**

Nowadays, most workers have probably heard of carpal tunnel syndrome. But unless they have firsthand experience with it they may only associate it with data-input workers wearing wrist braces. In reality, carpal tunnel syndrome is a serious condition affecting workers across many occupations. To understand carpal tunnel syndrome it is important to understand what carpal tunnel syndrome is. Carpal is simply the Latin word for wrist, which provides mobility and flexibility between the forearm and the hand. At the top of the wrist are the carpal bones; the bottom contains a band of ligaments across the base of the palm. Within this structure is a small, flexible opening through the wrist—the carpal tunnel—which serves as a conduit for several blood vessels, tendons and two major nerves (the median and the ulnar). Carpal tunnel syndrome occurs when the band of ligaments in the wrist expands, putting pressure on the median nerve. Symptoms of the disorder include numbness and tingling in the thumb, index and middle finger that gets worse at night and even wakes sufferers up; pain running from the shoulder to the wrist that makes it impossible to grasp and lift; loss of the fine motor control, pinch and dexterity; and burning pain in the wrist and finger. A positive trend—and possibly one of the reasons for the decline in reported carpal tunnel cases—is the way companies are starting to embrace solutions to the problem.

Sarah Wortham

OSHA Up-To-Date, August 1998

## Certified Used Oil Recycling Center Locations

Jiffy Lube—#1200

2880 North Garey Avenue

<http://www.csupomona.edu/~ehs/ftp/Newsletter%20Winter%202000.htm>

3/19/2003

Pomona, CA 91767

(909) 596-6899

Kragen Auto Parts—#1498

355 West Holt Avenue

Pomona, CA 91768

(909) 469-0099

Pep Boys—# 616

336 East Holt Avenue

Pomona, CA 91767

(909) 623-3476

Valvoline Instant Oil Change

348 East Foothill Blvd.

Pomona, CA

(909) 596-5505

Firestone Store—#7168

303 S. Diamond Bar Blvd.

Diamond Bar, CA 91765

(909) 861-4140

Pathfinder Chevron

21324 E. Pathfinder Blvd.

Diamond Bar, CA 91765

(909) 861-7112

Performance Shell

206 S. Diamond Bar Blvd.

Diamond Bar, CA 91765

(909) 861-3300

Tri Valley Tire Outlet Inc.

121 Diamond Bar Blvd.

Diamond Bar, CA 91765

(909) 522-6798

Firestone Store—#7170

860 Nogales Avenue

Walnut, CA 91789

(626) 965-2224

Jiffy Lube—#674

856 North Nogales

Walnut, CA 91789

(626) 965-4798

Kragen Auto Parts—#1513

18724 Amar Road

Walnut, CA 91789

(626) 965-6012

Master Lube—#102

308 N. Lemon

Walnut, CA 91789

(909) 598-3881

Lee's Chevron Service

390 N. Lemon

Walnut, CA 91789

(909) 594-3987

Mobil Express Lube

762 N. Nogales Street

Walnut, CA 91789

(626) 965-6032

City of Claremont Recycling

590 West Bonita

Claremont, CA 91711

(909) 626-4211

([http://www.ciwmb.ca.gov/usedoil/\\_private/footer.htm](http://www.ciwmb.ca.gov/usedoil/_private/footer.htm))