



# Safety Gram



A Publication of Safety Environmental Engineering, Inc.

Winter 2006

## SCAFFOLDING: BAD... BAD ... BAD!

For the year 2004, the leading OSHA violation was **SCAFFOLDING**. The total number of OSHA violations exceeded 8,891, which is 8,891 too many!

OSHA's **1926.451 Standard** covers general safety requirements for scaffolding. Employers are required to protect construction workers from falls and falling objects while working on or near scaffolding at heights of 10 feet or more.

What went wrong? Here is a breakdown:

- Failure to provide fall protection (1,408)
- Failure to provide proper access (1,133)
- Failure to ensure adequate platform construction (1,013)
- Lack of personal fall arrest or guardrail system (569)
- Failure to properly support scaffolding (531)

Above data was compiled for the year 2004 by the National Safety Council in the December issue of their **Safety & Health Magazine (December, 2005)**

## FACT CHECK

Highest number of reported occupational deaths by country, 2002

United States .....	4,716
Japan .....	1,658
Ukraine .....	1,227
Spain .....	1,104
Poland.....	515

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The Safety Gram is published six times a year by Safety Environmental Engineering, Inc. (SEE, Inc.)

SEE, Inc. feels that safety is the foundation of a successful industry.

For more information on any of these topics or how we can help you, feel free to contact us:

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# EDITORIAL

By Bob Woodward  
VP Founder/Editor

## WHAT WILL IT BE FOR 2006?

In case you may not have made any **NEW YEAR'S RESOLUTIONS**, why not search your conscience to see if there isn't some room for improvement in your worksite safety attitudes?

Jimmy Buffet's old song talked about ATTITUDES AND LATITUDES, in which he framed a positive tune path for more meaningful routes to consider.

Maybe all of us should consider ways and means where we can improve something as trite as our personal driving attitudes?

Maybe I can be a little more patient when the green light turns...and give the other the right-of-way when traffic is heavy?

Or maybe I can drive 25 miles per hour in the 25 miles per hour zone, and not assume that I am entitled to a few more miles per hour since I am in hurry and what the heck?

Charity begins at home, so maybe all of our driving attitudes and latitudes need some thought.

And, what about jobsite attitudes and latitudes? Surely they can stand some improvement?

Have a safe 2006, at home, at work, on vacation, and everywhere you go.

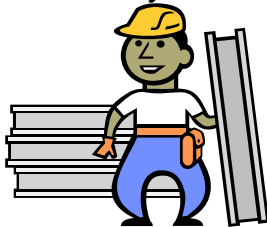


# OSHA'S TOP 10 VIOLATIONS FOR 2005

Depending on who compiles the annual **MOST CITED OSHA VIOLATIONS** varies from source to source, but they usually all contain the same units, as follows:

1. Scaffolding –General Requirement (1926.451)
2. Hazard Communication (1910.1200)
3. Fall protection (1910.1200)
4. Respiratory Protection (1910.134)
5. Lockout/Tagout (1910.147)
6. Powered Industrial Trucks (1910.178)
7. Electrical—Wiring Methods (1910.305)
8. Machine Guarding (1910.212)
9. Electrical—General Requirements (1910.303)
10. Ladders (1926.1053)

Note that of the ten-most-cited, only two categories are from the **OSHA 1926 (Construction Standards)** while the remaining eight were from 1910 (**General Industry Standards**.)



# AVIAN FLU BIRD FLU NOT A HUMAN FLU

You can't pick up a newspaper without seeing a story about the possible plague of avian flu, also known as bird flu, or to be scientifically correct, **influenza A/H5Ni**.

Avian flu is certainly a frightening virus. It kills birds, can infect human beings and has been lethal in about half of the documented case so far in Asia and Indonesia. But so far, it hasn't become easily transmissible from one human being to another, like the common influenza virus that circulates every winter.

**The above-listed article was contained in The Washington Post Magazine, dated December 11, 2005, entitled, KILLER FLU?**



# NEW OSHA QUICK CARDS

Employers will benefit from a new group of **QuickCards** produced by OSHA. Available in both English and Spanish, these reference materials focus on safety and health topics such as demolition and cleanup, hydrogen sulfide, permit-required confined spaces, portable generators, and respiratory protection.

A new OSHA fact sheet pinpoints grounding requirements for portable generators. These new resources can be downloaded from OSHA's **hurricane recovery page**, or can be ordered by calling OSHA's publications office at (202) 693-1888.

## ERGO CORNER

### ERGO TIP OF THE MONTH:

Use the 20/20/20 Method of reducing stress to your eyes from computer use:

- Every 20 Minutes
- Look 20 feet away (at an object)
- For 20 Seconds

This is just a simple way to reduce eye strain. For more ergo tips, please feel free to give us a call:

SEE, Inc. (703) 273-7333

## FIRE! FIRE! FIRE!

Fairfax County Fire & Rescue responded to a house fire in the 5100 block of Brookridge Place in Fairfax County on December 1, along with 40 City of Fairfax and Fairfax Country firefighters.

The house was vacant, and under renovation, but damage was estimated at \$500,000. The fire was accidental, caused by an overloaded fireplace used by construction workers to keep warm in 25 degree weather. As one on-site Fire Marshall was heard to say: "Every winter, we have over 100 fires on construction sites, where the workers customarily use a discarded 50-gallon barrel to burn debris, to keep themselves warm."



## NEW RULES FROM OSHA

### Personal Protective Equipment

The first quarter of 2006 may be a busy time for OSHA. Its final rule on employer payment for employee personal protective equipment (PPE) is scheduled to come out in March.

Under the proposal, employers would have to pay for all OSHA required PPE with the exception of safety toe shoes, prescription eyewear, and logging boots.

### Respiratory Protection

A final rule on a revision to OSHA's respiratory protection standard is expected in March 2006. The revision would establish "assigned protection factors" for respirators. The numbers would tell how much protection the respirator provides.

### Hexavalent Chromium

OSHA plans on releasing its final rule on hexavalent chromium exposure in January 2006.

### Electrical Safety

A final rule updating Electrical Safety Standards in February 2006 (the first update since 1981).



## THE FUTURE OF ERGONOMICS

Remember when OSHA scrapped the infamous ergonomics rule and said it would issue industry-by-industry voluntary guidelines instead?

Such guidelines were indeed issued for meat packing, poultry processing, retail and nursing homes, but then that initiative fizzled, too.

### Let Industry Do It

It seems OSHA's latest tack is to let industries try to regulate themselves. Paula White, OSHA's director of cooperative and state programs, told the recent annual meeting of the National Safety Council (NSC) in Orlando that the agency has now entered into 29 "national alliances" with industry associations.

Those alliances are aimed at reducing ergonomic injuries among employees through sharing of best practices.

Among industries that have such "national alliances":

- Airlines
- Nursing homes
- Electrical contractors
- Orthopedic surgery clinics
- Telecommunications
- Apparel and footwear

### Does Self-Regulation Work?

Industry regulations is often limited in scope, not ambitious enough and only management-driven. In Europe, voices are being raised for some form of third-party authorization for self-regulation agreements with industry.

This can be achieved through worker representative participation or the addition of a mediator, not an additional regulator, in case of disputes.

## CIRCULAR SAWS RECALLED

The U.S. Consumer Product Safety Commission has announced a voluntary recall of the **Porter-Cable 7-1/4 inch MAG-Saw Circular Saws**.

About 196,000 of the saws have been manufactured by Porter-Cable, of Jackson, Tenn., and they were sold at major home center and hardware stores nationwide from March 2004 through last month for between \$130 and \$160, depending on the model.

The model and serial numbers are located on a label on the top of the saws. Units marked with a "T" have been inspected and are not affected by this recall. "Porter-Cable is written on the side of these saws.

Consumers can call Porter-Cable at 800-949-7930 between 8:00 a.m. and 6:00 p.m. Central Time Monday through Friday, or visit the company's Web site, [www.porter-cable.com](http://www.porter-cable.com)

## WHAT MOST SAFETY TRAINING LACKS...

How do I get employees to pay attention, absorb safety training and actually retain and use it? What keeps them awake?

New research says there are numerous keys:

- **Who** does the training?
- **How** the training is done: storytelling?
- Employers used **videos** in which workers told real-life stories to convey the safety message.
- How effective were the materials? Workers asked for the **videos** and talked about them for weeks.
- Employees want safety training to be **interesting** and enjoyable.
- Fellow employees **walk the walk and talk the talk**, just like their co-workers.
- **Storytelling** is an extremely effective, age-old method of conveying complex information.
- Invite **veteran workers** to speak up during safety training. Ask them ahead of time to think of a situation they faced that fits the subject of the specific training session.
- Train key employees so they can **train their co-workers**

## HEART ASSOCIATION ISSUES NEW CPR GUIDELINES

New guidelines for resuscitating people whose hearts suddenly stop emphasize more and faster chest compressions, with fewer stops to breathe oxygen-rich air into the victim's mouth.

Blood circulation for a person in cardiac arrest increases with each chest compression. Pausing for "mouth-to-mouth" resuscitation stops the blood flow through the heart to the rest of the body. The rhythm and momentum then must be built back up.

More than 300,000 Americans die each year of cardiac arrest, when the heart suddenly stops beating. The heart association estimates that more than 95 percent of cardiac arrest victims die before they get to the hospital.

The new guidelines were published recently by the American Heart Association in its journal **Circulation**. They should make cardiopulmonary resuscitation, or CPR more effective and boost survival, doctors said.

Rescuers should give 30 chest compressions then two breaths to all adults, children and infants needing CPR. That is double the previously recommended 15 compressions for every two breaths in adults in the previous guidelines published in 2000.

It also simplifies the technique for children and infants, who previously received one breath for every five compressions.



## **WORKER DIES IN CONSTRUCTION FALL**

A worker was killed December 3<sup>rd</sup> in a fall in a house under construction in the McLean area of Fairfax County, the country police reported.

The man, who was helping put a wall into place at the house in the 2200 block of Glenheather Drive, fell from the second floor to the basement, police said. His name and age were not immediately available.

## **WINDOW WASHER DIES IN FIVE-STORY FALL**

Portland—A window washer plunged five stories to his death as he was working on a downtown office building, officials said.

ELoy Gonzalez Cacho, 31, was planning to rappel from the roof down the wall of Regency Blue Cross Blue Shield building in Portland. But his equipment—either his harness, the rope, carabiner, knots or anchor point—failed him.

## **MAN RESCUED FROM TRENCH**

Rescuers pulled a 65-year-old worker yesterday from a trench at a construction site in the 2100 block of 19<sup>th</sup> street N.W. A D.C. fire and rescue department spokesman said the man was working at the bottom of the trench 15 to 20 feet deep when something fell out of a wall and toppled him.

He also said a trench-rescue team was called to secure the ground before the man could be removed. Rescuers then strapped him to a backboard and pulled him up a ladder and into an ambulance that took him to George Washington University Hospital. The spokesman said the man may have fractured his hip.

## **ROAD WORKER DIES AFTER BEING HIT BY CAR**

A highway construction worker was killed after being struck by a car late Thursday, police said. Moses Limon, 22, was hit about 11 pm on Route 450 near the Capital Beltway, said Cpl. Diane Richardson a Prince George's County Police Spokeswoman.

The driver of a Chevrolet Tahoe crashed into a few cars before hitting Mr. Limon, Cpl. Richardson said. He was arrested and taken to the hospital as a precaution. Charges were pending.

Police were trying to determine whether drugs or alcohol were factors in the crash.

## **TREE WORKER NEAR POWER LINE ELECTROCUTED**

A man was electrocuted yesterday in Vienna when he cut a tree limb that touched a power line, Fairfax County police said.

The man, 34, was hired to trim the tree by the owner of the property in the 2300 block of Gerken Ave. The worker was in a front yard tree and lowering a sawed-off limb with a rope about 6:45 p.m. when the limb hit the power line, said Shelley Broderick, a spokeswoman for the police. The man, who lived in the Fairfax area, was pronounced dead at the scene. His name was being withheld last night pending notification of relatives.

## **THREE INJURED IN CONSTRUCTION FIRE**

Three construction workers were burned, one critically, in a construction accident yesterday. A man working at a Food and Drug Administration construction site in the 10900 block of New Hampshire Avenue accidentally fired a nail gun into an electrical line, setting his clothes on fire, fire department spokesman Pete Piringier said.

The two other were burned while extinguishing the flames. A 22-year-old man was in critical condition with second and third degree burns. A 38-year-old man was treated for first and second degree burns. A 17-year-old was treated for minor burns.

All three were taken to the Wash. Hospital Center's burn unit.

# SUDDEN CARDIAC ARREST (SCA)

**Sudden cardiac arrest (SCA)** is an abrupt disruption of the heart's function that causes lack of blood flow to vital organs. This lack of blood flow results in loss of blood pressure, pulse, and consciousness. Most commonly, SCA is caused by a type of arrhythmia (abnormal heart rhythm) called ventricular fibrillation, or VF.

According to the American Heart Association, SCA is one of the leading causes of death in the United States, claiming more than one-quarter of a million victims each year (2003 Statistics, [www.americanheart.org](http://www.americanheart.org)). There are more deaths each year from SCA than from breast cancer, prostate cancer, AIDS, house fires, hand guns, and traffic accidents combined.

OSHA states that approximately 400 workplace deaths from cardiac arrest are reported annually. OSHA believes employers should consider use of automated external defibrillators at their work sites to reduce the time to defibrillation, with the goal of improving survival.

## **Following the Chain of Survival**

To make early defibrillation possible, The American Heart Association advocates placing AEDs in targeted public areas, as well as workplaces, so infrequent rescuers can assist victims before trained

medical professionals arrive. An AED is a portable device that analyzes the heart's rhythm and, if necessary, allows a rescuer to deliver an electric shock to an SCA victim. This shock, called defibrillation, may halt the rapid and chaotic heart activity of SCA and help the heart to reestablish an effective rhythm of its own.

When a victim collapses from SCA, rescuers do not know whether defibrillation or CPR is appropriate until an AED is attached and the victim's heart is analyzed. About half of all collapsed victims initially require defibrillation. While roughly half of unresponsive victims need defibrillation, every one of them needs temporary circulatory support with CPR.

## **Legislative Action for Early Defibrillation**

As of now, 11 states have passed legislation that mandate AEDs in one from or another (for example, in schools, state buildings, nursing homes, health clubs, or police vehicles): Arizona, California, Delaware, Florida, Illinois, Louisiana, Nevada, New York, Ohio, Pennsylvania, and Rhode Island. Another nine states (Connecticut, Georgia, Massachusetts, Michigan, New Jersey, North Carolina, Tennessee, Texas, and Virginia) are considering legislation.

# PIXIE THE POOCH

## **Let's hear it for emergency responders!**

They put themselves in harm's way to save others.

And that includes pets, as Pixie the terrier found out.

Pixie had stopped breathing when firefighters pulled her from a Salem home filled with smoke and flames.

Firefighter Richard LeBlanc put his mouth over the dog's mouth to breathe for the dog and revive it. Another firefighter then gave Pixie oxygen.

After treatment at a veterinary clinic, it looks like Pixie will be just fine.

NOTE: Many fire companies are stocking cat – and dog-sized respirator masks so that pets can receive oxygen in such cases.



# PERSONAL PROTECTIVE EQUIPMENT (PPE)

Thousands of people are blinded each year from work-related eye injuries that could have been prevented with the proper selection and use of eye and face protection. Eye injuries alone cost more than \$300 million per year in lost production time, medical expenses, and worker's compensation. (Source: Occupational Safety and Health Administration).

Failure to adequately assess the work place for potential hazards and identify appropriate personal protective equipment (PPE) not only results in thousands of eye injuries each year, it is also responsible for numerous injuries to the hands and arms, torso, feet, and head.

## **PPE Hazard Assessment**

To ensure employees wear appropriate PPE for their work tasks, OSHA's 29 CFR 1910.132 (d) (1) requires that employers perform a PPE assessment to determine whether hazards are present, or likely to be present, that necessitate the use of personal protective equipment. In addition, 29 CFR 1910.132 (d)(2) requires a written certification of the assessment.

## **Hierarchy of Control**

A systematic review of each work task is needed to identify potential hazards. Prior to requiring employees to wear PPE, however, the hierarchy of controls should be utilized to eliminate or reduce the existing hazards(s) to avoid the need for PPE.

The hierarchy of controls states that hazards should be controlled in this preference:

1. Elimination
2. Substitution
3. Engineering Controls
4. Administrative Controls

## **Personal Protective Equipment for Various Exposures**

Once the hazard assessment is complete, appropriate PPE must be selected.

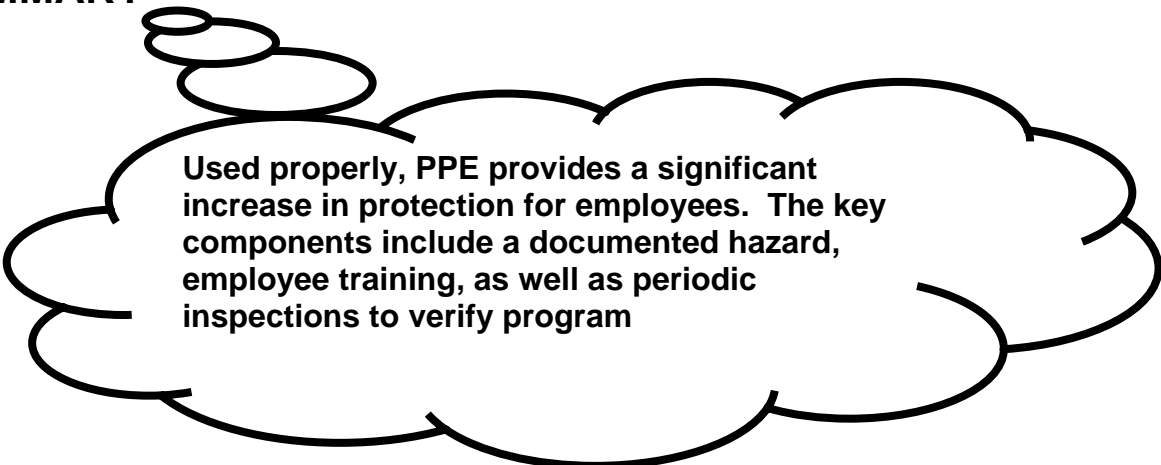
## **Who Pays for PPE?**

During training classes, instructors are often asked whether OSHA requires employers to pay for employee PPE. In an OSHA letter of Interpretation dated August 25, 2004, addressed to Brad Milleson of the Kellogg Company, OSHA states the following: "29 CFR 1910.132 requires employers to provide PPE and ensure its use. However, at the present time, OSHA does not view this section as imposing an enforceable obligation on employers to pay for PPE. Therefore, employees must be afforded the protection of PPE, regardless of who pays." OSHA has initiated rulemaking proceedings to clarify who is required to pay for required PPE.

## **Apparel Policy**

An apparel policy should be included in the PPE procedure. Loose clothing should be prohibited around rotating equipment, and long hair should be tucked under the collar or secured with a hair net. Rings, necklaces, and gloves should not be worn while working around rotating equipment because they may become entangled in the equipment

## **SUMMARY**



**Used properly, PPE provides a significant increase in protection for employees. The key components include a documented hazard, employee training, as well as periodic inspections to verify program**

## THE BENEFITS OF HIRING A SAFETY CONSULTANT

- \* It is very cost effective to hire a safety consultant to take a fresh look at your company policies, training and accident prevention programs.
- \* A professional consultant is not bogged down by your company's internal affairs.
- \* He will not alter reports just to make your company look good.
- \* Reduce overhead cost.
- \* 100 percent business expense (deductible).
- \* Service available either as needed or specified by contract.
- \* Training available for employees when required.
- \* OSHA intervention service available by someone who has experience dealing with the agency, can negotiate on your behalf, and can save you some serious expense, should you be fined.
- \* Pre-OSHA inspection service and recommendations to correct potential problems at your site.
- \* Up to date on safety regulations.
- \* Available to check current safety manual and upgrade as required, or write a new safety manual specific to your company and industry.
- \* Can set up and check OSHA required paperwork for construction subs on the jobsite.
- \* Annual service contracts available for better savings.

***SAFETY ENVIRONMENTAL ENGINEERING (SEE, Inc.) is a 20-year safety consulting veteran, with more than 50 clients in a three-state area (Virginia/Maryland/District of Columbia)***

**Call us, anytime, night or day, regarding details of our safety consulting services:**

**Telephone: (703) 273-7333  
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## FORD ANNOUNCES SAFETY RECALL ON TRUCKS

Ford Motor Co. recently announced a voluntary safety recall on **1994-2002 Ford F-150, Ford Expedition, Lincoln Navigator and Ford Bronco** vehicles to correct a systems interaction that could cause the speed control deactivation switch to overheat and lead to an under hood fire. Ford estimates that there are approximately 3.8 million of these vehicles on the road today in the United States.

The make and model years of affected vehicles include: 1994-2002 Ford F-150s, 1997-2002 Ford Expeditions, 1998-2002 Lincoln Navigators and 1994-1996 Ford Broncos equipped with factory installed speed control.

Ford has worked closely with the National Highway Traffic Safety Administration to investigate the issue, having found that brake fluid may leak through the speed control deactivation switch into the speed control system electrical components, potentially corroding them. In rare cases, the corrosion in the electrical components can lead to increasing resistance and higher electrical current flow through the system. Together, these conditions

could lead to overheating and, possibly, a fire at the switch. This interaction is the result of the proximity and orientation of the speed control components in the recalled vehicles.

In response, Ford will install a fused wiring harness between the speed control deactivation switch and the speed control mechanism of affected vehicles. This will act as a circuit breaker, eliminating the electrical current to the switch in the rare event of increased current flow through the switch.

“Our customers can be confident that this action will prevent a speed control deactivation switch fire,” said Ray Nevi, assistant director, Ford Automotive Safety Office. “Our investigation was complex because the root cause turned out to be a system interaction rather than a single component and we had very few confirmed incidents to analyze. Despite this complexity, our solution effectively addresses the cause.”

Ford is currently acquiring sufficient fused wiring harnesses to repair customers' vehicles. Until replacement parts are available, customers are instructed to take their vehicles to a dealership to have the speed control deactivated. Owners of affected vehicles will be notified by mail immediately.

Customers may get further information at [www.genuineservice.com](http://www.genuineservice.com) or by calling (888)222-2751.

# SIGNAGE REQUIREMENT: Non-English-Speaking Employees

## **QUESTION:**

With the increase in workers speaking English as a second language, are there any OSHA **standards** for requiring signage in various languages?

## **ANSWER:**

There is no “clear-cut” OSHA standard that specifically states a facility should have signage in various languages.

However, OSHA Standard 1910.145 (e) (2) does state “The wording of any sign should be easily read and concise. The sign should contain sufficient information to be easily understood.”

The ANSI standard for safety signs (**ANSI Z7535.2-2002** and **Z535.4, Annex B—or both**) directly addresses the “selection of additional languages for safety signs,” whereby “If it is determined that additional languages are desired on a safety sign...formats should be considered.”

This standard adds: “The use of symbols is strongly encouraged in order to better communicate the sign’s hazard information across language barriers.”

**NOTE:** This interpretation was contained in the November (2005) issue of the National Safety Council’s *SAFETY & HEALTH* Magazine.

For copy of entire magazine story on this language issue, call/write:

SEE, Inc. at (703) 273-7333

## SAFETY TIPS...TIPS...TIPS

In an emergency, use cell phones. In emergencies, using your cell phone or two-way radio wisely can save lives, according to **REACT International**, a Suitland, MD-based volunteer network of radio emergency communication teams. REACT suggests you take the following steps in an emergency:

- 1) Immediately tell 911 dispatchers exactly where you are located. Include the state, since your call may reach a distant 911 center. This enables emergency help to reach you quickly. Be aware of mile markers, exits, crossroads, landmarks, etc. as you travel, to help in an emergency.
- 2) Next, tell what is wrong. Are there injuries, fire, people trapped? This allows the right kind of help to respond initially.

- 3) Then, tell who is calling. Give your cell number so dispatchers can call back if your call is disconnected. Remember, few 911 centers see cell numbers displayed. They must rely on you. Memorize your cell phone number.
- 4) Emergency two-way radio calls are very similar. Broadcast the above information repeatedly. Substitute your name, call sign, etc. for the cell number.
- 5) Remember, REACT volunteers, police or others often can hear you when you cannot hear them. They must rely on you. In bad condition, they may have to piece together your message. Keep it the same each time. Broadcast it repeatedly.

## Preventing Forklift Accidents

Construction workers are injured and killed every year in accidents involving forklifts. Operators who do not wear seat belts often are killed when they are crushed or thrown out of a lift that overturns. Personnel working from elevated platforms have been killed when a forklift overturned or shifted, resulting in a fatal fall.

To prevent these accidents, the St. Louis-based **American Society of Concrete Contractors** offers the following tips to forklift operators. Follow these ten primary safety guidelines:

- 1) Be familiar with the operator manual.

- 2) Know the weight of the load and the lifting capacity of the forklift.
- 3) Be aware of surroundings, including travel path conditions.
- 4) Do not engage in speeding.
- 5) Do not hoist personnel on the forks, pallets or non-approved platform.
- 6) Do not round corners without sounding the horn.
- 7) Do not travel with a load that obscures the operator's line of sight along the travel path.
- 8) Do not work without seat belts.
- 9) Do not exceed the lift's rated capacity.
- 10) Do not allow additional riders for which the lift was not designed.

