The number of fatal occupational injuries in Arizona during 1998 rose to 71, a 22% increase over the 58 fatalities in 1997. This is a significant increase in work-related fatalities. Almost every industry experienced an increase over 1997, however, the construction industry experienced the largest increase, jumping from eight fatalities in 1997 to 20 in 1998. In contrast, the retail trade industry experienced the only decrease, falling from 13 fatalities in 1997 to six in 1998.

Operators and fabricators continued to be the occupational group with the highest number of fatalities in 1998, accounting for 31 deaths, or 43.7 percent of the total. This represents a 75% increase over the 1997 total.

The leading cause of work-related fatalities in 1998 was highway accidents, accounting for 31 percent (22 deaths) of the total. This figure represents a 175% increase over 1997. An additional four fatalities resulted from employees being struck by vehicles.

The second leading cause of on-the-job deaths, homicides, dropped significantly from the 1997 total. In 1998, eight fatalities were due to homicide, a 57% decrease from the 14 experienced in 1997. Many of the other causes of work fatalities remained fairly stable.

The 35-44 age group experienced the highest number of fatalities, thirty percent, or 21 deaths. The age group with the second highest number of fatalities was the 25-34 year old group with 18 deaths or twenty-five percent. Men recorded ninety-three percent of the total (66 cases) and women seven percent (five cases).

The Arizona Division of Occupational Safety and Health has established a five-year goal to reduce the number of work related fatalities, especially in the construction industry. Let's work together to make a positive impact on the number of fatalities and ensure that all employees go home safely after work! For further information on statistical data, contact the ICA’s Research and Statistics Division at (602) 542-3739.

- Darin Perkins, Director
FATAL ERRORS
On a fall morning, with a light workload ahead of them, four hired drivers working at an auto auction facility jumped on the bumper of a service truck to hitch a ride to an impound lot where they would each find a listed automobile and drive it back to the auction lot.

On this particular morning the driver was traveling faster than usual. He may have been going about twenty miles an hour. The employees on the bumper were talking with each other, unconcerned. They had gone this fast on a rather routine basis. The bumper was wide and there were plenty of handholds.

The driver entered a slight curve and one employee lost his grip on the water cooler he had grabbed as a hand hold. Another employee tried to grab the falling employee, but could not hold him. The falling employee turned around and hit the pavement on his heels. He flipped over, striking his head, then flipped again, striking his head a second time. He then rolled several times eventually coming to rest at the end of a line of vehicles.

Emergency medical help was summoned immediately. The EMT's transported the employee to the hospital where he was listed in serious condition but not concerned in imminent danger. Two days later his heart arrested and he was pronounced dead from his injuries. He was 20 years old, and in robust condition prior to the injury.

Due to this series of actions, this young man met an untimely death. Employees must never ride equipment or vehicles unless they are in a seat provided for the purpose of transporting passengers. A seat belt is Arizona State law, and must be used. A bumper does not provide a seat, or a seat belt. The message is simple, don't ride on anything, unless it has a seat for every rider, and seat belts. What the employer routinely allowed this young man to thoughtlessly do, resulted in his tragic and needless death.

- Ernie Miller

MSD's...A TYPO? NO!
Talk about news!!! For several months, even recent years, businesses have anticipated OSHA’s release of a standard addressing a workplace hazard that has been causing painful, sometimes disabling injuries. And no it doesn’t have anything to do with chemicals, inventories, labeling and data sheets. The acronym MSD stands for, “Musculoskeletal Disorder. This workplace hazard has been the root of a lot of suffering. As the Federal Secretary of Labor, Alexis M. Herman stated, “Real people are suffering real injuries that can disable their bodies and destroy their lives. The good news is that real solutions are available”.

This past November Federal OSHA released a proposed rule that addresses the problems related to how a worker fits their job or how the job, tools and tasks fit them. Some of these job related injuries are caused by overexertion or repetitive motion. A buzz word that has become fairly well known is “carpal tunnel syndrome” caused by repetitive motions. But did you know that back injuries are also considered to be a musculoskeletal disorder? Both of these serious, very painful injuries, often require lengthy recovery times and therefore are expensive workers’ compensation claims. Implementing measures to effectively manage the situations that give rise to these types of injuries could generate $9 billion annually in claims cost savings in the United States.

Ergonomic injuries can affect both men and women, in all types of work environments. Given the wrong set of working conditions, anyone from the factory worker to the office employee can be subject to an ergonomic or physical, stress-related injury.

What is interesting about the nature of injuries of this sort is that initially the pain is just a minor ache. However, left untreated, this minor ache can evolve into a serious, even permanent disabling injury possibly requiring one or more surgeries to correct the problem. Additionally, it often takes a long time to recover. The average number of days away from work for serious injuries is four days, but for an MSD it is seven days. Carpal tunnel syndrome injuries result in an average of 25 days away from work for recuperation; much more time than for an amputation or fracture.

- Linda Christopherson

The proposed rule identifies six elements for a full ergonomics program: management leadership and employee participation, hazard information and reporting, job hazard analysis and control, training, MSD management and program evaluation. The program is job based which means that it is specific to the jobs where the MSD risks exist or there are similar jobs exposing employees to the same hazard.

Some very interesting, even unique provisions have been proposed to expand the flexibility for employers in applying the standard. Employers would have the option of exercising a “Quick Fix”. A grandfather clause has been included too. The intent is to not burden the employer but to be a standard that is truly “performance oriented”; do what is necessary and be effective in correcting the hazard or reducing its risks.

Take a look at the Federal OSHA Internet site at “www.osha.gov” and look at the many articles in the Press Kit section. Here in Arizona once this proposed rule becomes a Final Rule on the federal level, we will have six months to adopt an equally protective standard for the employees in our state. We welcome the opportunity to reduce these risks of serious, often disabling injuries and we will assist you in every way we can to create a safe work environment around the Ergonomic MSD issues.

- Linda Christopherson

Congratulations
The City of Scottsdale has recently completed their three year re-evaluation effort for continuation in the VPP STAR program.

ADOSH is very happy to have the City of Scottsdale continue in the VPP program. For information on how to become a VPP STAR site, contact Henry Marquez at (602) 542-1695 or e-mail to henry.marquez@osha.gov
Q. If I have to wear a respirator and I have a beard, I was told I can put vaseline on my beard to help maintain a seal between the face piece and my face. If I do that is it a violation of ADOSH standards?

A. First of all facial hair that interferes with the fit of a face piece on a respirator is in violation of ADOSH standards. Respirators are designed for maximum efficiency and that goal cannot be achieved or the protection cannot be provided unless there is a tight seal between the face piece and the user's face. With this in mind, beards and other facial hair can reduce the effectiveness of the respirator substantially. Facial hair is defined as "more than one days growth." When an employee has facial hair that meets this definition it is interfering with the sealing surface of the respirator and it constitutes a violation of OSHA standards and citations may be issued. Products such vaseline are petroleum based, and can have a detrimental effect on components of the respirator and thus may not be used to help achieve a good seal.

Q. Are the end rails on a scaffold considered part of the guardrail system? If they are missing is it a serious violation or non serious?

A. There are two questions here. First, end rails are considered part of the guardrail system, as are the midrails. 1926.451(g)(4)(i) states "Guardrails systems shall be installed along all open sides and ends of platforms. Guardrail systems shall be installed before the scaffold is released for use by employees other than erecting/dismantling crews." All too often inspectors see scaffolds where the employer did a fabulous job of guarding the open sides but left the end rails off, resulting in citations. Second, to determine the seriousness of the violation the potential fall distance would have to be considered. For example, if the fall distance is greater than ten feet above ground then the violation would be classified as serious. If the distance were less than ten feet it would most likely be classified as non serious, unless the employee could fall onto equipment, impalement or other similar hazards.

If your company is in the process of instituting safety and health programs you have no doubt questioned what a good program entails and you've probably received a multitude of opinions. I guess opinions are like "elbows": most have at least one. So with that I guess I'll nudge mine in. Although this newsletter is obviously not large enough to discuss every aspect of a program, here are some which should be included.

- Management commitment to the program.
- Goals and objectives with review dates established to assess progress.
- Employee involvement with a method to voice concerns.
- Self-inspection and hazard assessment procedures.
- Disciplinary measures.
- Outside contractor hazard awareness procedures.
- Follow up procedures to address concerns.
- Listing of individuals responsible for completing tasks.
- Initial as well as follow up training.
- Award programs to recognize individuals and groups promoting the welfare of the company.

The above is by no means an all-inclusive list. Each workplace is different and may require different programs such as hazard communication, lock out/tag out, bloodborne pathogens or confined spaces, just to name a few. However, these are some basic ideas that might help you put together a program that can be beneficial to employers and employees alike. The important thing is to not only establish a program, but follow it!

For assistance in establishing a program, please contact the ADOSH consultation section at (602) 542-1769 in Phoenix or (520) 628-5478 in Tucson. A multitude of literature is available including the "OSHA Handbook for Small Businesses" which describes methods for lowering injuries. You can also access information on the internet at http://www.osha.gov

- Ken Gaut

Partner With ADOSH
New Ways of Working
**ADOSH Education and Training Calendar**

Registration for each course begins no earlier than 30 days prior to the date of the course. Location address and time of course will be determined at time of registration.

<table>
<thead>
<tr>
<th>DATE</th>
<th>COURSE</th>
<th>LOCATION</th>
<th>TRAINER</th>
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<tbody>
<tr>
<td>April 12, 2000</td>
<td>Back Injury Prevention</td>
<td>Tucson</td>
<td>Linda Christopherson</td>
<td>(520) 320-4229</td>
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<tr>
<td>April 17, 2000</td>
<td>Excavation Safety Awareness</td>
<td>Tucson</td>
<td>Linda Christopherson</td>
<td>(520) 320-4229</td>
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<td>April 18, 2000</td>
<td>Scaffold Safety Awareness</td>
<td>Phoenix</td>
<td>Joe Gates</td>
<td>(602) 542-1641</td>
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<td>April 19, 2000</td>
<td>OSHA &amp; Medical Establishments</td>
<td>Phoenix</td>
<td>Fernando Mendieta</td>
<td>(602) 542-1640</td>
</tr>
<tr>
<td>May 2, 2000</td>
<td>Forklift Train-the-Trainer</td>
<td>Tucson</td>
<td>Linda Christopherson</td>
<td>(520) 320-4229</td>
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<tr>
<td>May 17, 2000</td>
<td>OSHA &amp; Medical Establishments</td>
<td>Prescott</td>
<td>Fernando Mendieta</td>
<td>(602) 542-1640</td>
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<tr>
<td>May 23, 2000</td>
<td>Excavation Safety Awareness</td>
<td>Bullhead City</td>
<td>Joe Gates</td>
<td>(602) 542-1641</td>
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<tr>
<td>May 23, 2000</td>
<td>Confined Space Safety</td>
<td>Yuma</td>
<td>Linda Christopherson</td>
<td>(520) 320-4229</td>
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<td>June 20, 2000</td>
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<td>Phoenix</td>
<td>Joe Gates</td>
<td>(602) 542-1641</td>
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<td>June 21, 2000</td>
<td>Confined Space Entry</td>
<td>Phoenix</td>
<td>Mendieta &amp; Christopherson</td>
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<td>June 28, 2000</td>
<td>Excavation Safety Awareness</td>
<td>Tucson</td>
<td>Linda Christopherson</td>
<td>(520) 320-4229</td>
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</tbody>
</table>

Trainers may also be contacted by e-mail at: linda.christopherson@osha.gov  joe.gates@osha.gov and fernando.mendieta@osha.gov

**Dates are subject to change**

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ADOSH  
800 West Washington Street  
Phoenix, AZ  85007