

# ADOSH ADVOCATE



## Improving Workplace Safety and Health

<http://www.ica.state.az.us>

Darin Perkins, Director

Spring 2001

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### Recent Events

The Arizona Division of Occupational Safety and Health has always been concerned about the number of occupational fatalities we are required to investigate each year. Our ultimate goal is to see the number of fatalities decrease consistently from year to year. Unfortunately, this does not always happen. The number of occupational fatalities investigated by ADOSH has been steadily increasing over the past four years. In 1997 there were 23 fatalities investigated by ADOSH. In 1998, the Division investigated 26 fatalities. In 1999 another 26 were investigated and this last year, 38 fatalities were investigated by the Division. If this trend continues, we will investigate over 40 occupational fatalities during 2001.

This is extremely alarming and clearly something needs to be done to reverse this trend. There has been much discussion regarding the reasons why the fatality rate has increased so dramatically. There is no single cause. However, no matter what the reasons are, we must do all we can to correct the situation. Zero occupational fatalities should be everyone's goal. ADOSH cannot do it alone. It will take a concerted effort by everyone; employees, employers and the Division to realize this goal. I believe that it is possible to have a year with no fatalities. Certainly, it is possible to make 2001 the best year ever. We

invite any comments or suggestions from the public on what ADOSH can do to make this happen.

\*\*\*\*\*

In our last issue, I wrote about the ADOSH Advisory Committee, their responsibilities and how each member

can be contacted.

The committee held their quarterly meeting on December 6<sup>th</sup>. At that meeting, several issues were discussed and I would like to summarize a couple of them.

\*\*\*\*\*

Ergonomics. This has been a hot topic of late, particularly since Federal OSHA

published their standard in November. That rule became effective January 16, 2001. ADOSH is considering either promulgating our own state standard or adopting the less controversial portions of the federal standard. This will not happen over night and we have asked our Advisory Committee to assist in this process. We welcome public input. Regardless of whether Arizona or the country ends up with an enforceable standard, we strongly encourage all employers to develop and implement ergonomic programs within their workplaces. The injuries are real and there are relatively easy and inexpensive methods of dealing with the underlying hazards.

\*\*\*\*\*

Rebar. State standards require employers to protect employees from the hazard of impalement on rebar. For many years, ADOSH has accepted the mushroom style rebar cap as adequate (cont.)



The Industrial Commission Building at 800 West Washington, Phoenix, AZ.

impalement protection. Federal OSHA as well as several state OSHA programs do not accept these devices (mushroom caps) as impalement protection. They require that other methods be used, such as the larger, square caps with the steel plate inside (California cap). ADOSH is considering changing our policy so that it mirrors the federal requirement. Essentially this would prohibit the use of the mushroom style caps as impalement protection. These caps would still be acceptable as protection against lacerations. We welcome input from affected employers on this issue.

\*\*\*\*\*

The ADOSH Consultation Section, indeed the whole Division, suffered a tremendous loss in early January when Mark Norton, the Tucson Consultation Supervisor, accepted a position with the City of Tucson. Mark worked for ADOSH for over 14 years and will be truly missed. We wish him the best in his new position. Despite this loss, the Tucson consultants remain available to assist employers in southern Arizona. We encourage employers to utilize these services. The section can be reached at 520-628-5478.

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Following a tremendous amount of work by many people, ADOSH has finally been able to correct a long-standing problem. The Division has for many years suffered from high turnover due mainly to significantly below-market salaries. Effective January 1<sup>st</sup>, a special entrance rate of \$40,761 was approved for compliance officers and consultants. We anticipate that the higher salary will reduce turnover as well as encourage potential candidates who would not otherwise have applied for a position, to do so. Anyone interested in applying for a position with ADOSH should contact the ICA's Human Resources Department at 602-542-5559. *Darin Perkins*

For an electronic copy of this newsletter, send an e-mail to [adoshnews@ica.state.az.us](mailto:adoshnews@ica.state.az.us) with the phrase "electronic newsletter" in the subject or body. If you would like to be on the mailing list for a hard copy of this newsletter, send your request to the above e-mail address.

## Recent Fatalities

The following occupational fatalities were investigated by ADOSH between October 1, 2000 and December 31, 2000.

- An employee, who was riding on the back of a forklift, was killed when a stack of large pipes being lifted by the operator fell over the top of the forklift, striking the victim in the head.
- The owner of a company was killed while operating a forklift. The load he was lifting was too heavy, causing the forklift to tip forward. A custom made counterweight sitting on the rear of the lift slid forward, striking the victim in the back of the head and neck.
- An employee standing on the metal frame of a building, 14 feet above ground, was killed while pulling a long piece of metal flashing up onto the roof. The flashing came in contact with an overhead power line, shocking the employee. The employee fell to the ground, striking his head on the concrete.
- An employee working in an excavation was killed when the excavation collapsed.
- An employee operating a drilling rig was killed when the rig tipped over, crushing the cab and employee.
- An employee riding on the tailgate of a pickup was killed when he fell off, striking his head on the ground.

## Congratulations

To our newest VPP Star participant, Honeywell, Aerospace Services Military Repair and Overhaul Center. The company's commitment to the safety and health of its employees was apparent as The Arizona Division of Occupational Safety and Health, VPP team recommended the facility for inclusion as a VPP Star Participant. The team reviewed company programs and inspected all areas of the facility. Mike Harris - Site General Manager, Donald Huth - Operations Excellence Leader and Nicol Carver - Environmental Engineer were a few that worked diligently to realize this award. Honeywells injury and illness rates indicated a proactive approach by management to maintain a safe workplace and allow the VPP team to include this facility as the 8th STAR member in Arizona. *Ken Gaut*



From left to right : Gay Conrad Kruglick - ICA Commission Chairman, Mike Harris - Site General Manager, George Nguyen - Sky Harbor Honeywell General Manager, Jim Tiedlet - Aerospace Services President.

## Confined Space

Don't get caught in a bind, know your Permit-Required Confined Space Entry standard, 29 CFR 1910.146 prior to entry!

Air Monitoring, Air Monitoring, Air Monitoring!! This is the single most important element of the standard. Always make sure your air monitoring instruments are of a reliable brand and that they are calibrated prior to and after each use. The atmosphere in the space must be tested for the following elements in the following order:

- 1 OXYGEN: 19.5% - 23.5% (20.9% is preferred)
- 2 FLAMMABLE Gases & Vapors : i.e. Methane, Hydrogen Sulfide, Natural Gas, etc.
- 3 TOXIC Air Contaminants: i.e. Carbon Monoxide, Hydrogen Sulfide (see 29 CFR 1910.1000 - air contaminant standard)

VENTILATION must be provided to reduce or eliminate the air contaminants and should be used, if for nothing else, at least as a means of providing cooling for the personnel in the confined space. This can be accomplished by the use of a high powered air blower specific for confined spaces.

COMMUNICATION is the next step. The use of some kind of headset

for voice communication, a device to indicate a color code system from the confined space entrant out to the outside attendant, or rope system if there are not any configuration issues. Check with a consultant on other methods. Lighting may also be an issue!

**RESCUE** set up is also important. A proper rescue set up consists of personal protective equipment, a tripod mechanical retrieval system, a body harness (already donned by the entrant), alerting your rescue team or municipal emergency services, and an outside attendant with communication equipment. Be sure to hold practice rescue drills at least yearly.

An **ENTRY PERMIT** must be issued prior to entry and must be completely filled out and factual. Complete air monitoring testing results must be on the permit, as well as entry times, day, duration of the entry, P.P.E., work being conducted, authorizing person's signature, attendant, entrants, location, acceptable entry conditions and emergency rescue information.

**TRAINING** is always a given in any standard. All affected personnel must receive and demonstrate competency with the requirements of the standard and with the employer's written policies & procedures on Permit-Required Confined Space Entry.

For additional requirements, look in the OSHA Standard at 29 CFR 1910.146 "Permit-Required Confined Spaces" or contact the ADOSH Consultation Section today.

*Steven Weberman*

*Correction to winter 2001 article titled "Get The Lead Out" by Steven Weberman. The article was referring to the OSHA 29 CFR 1910.1025 Lead standard and not the OSHA 29 CFR 1910.134 Respiratory Protection standard.*

## A Fatal Lack of Training

One morning last spring, an employee operating a forklift was making a turn in the aisle of a manufacturing facility. The employee was turning to the right with forks raised about 4 ½' above the floor. A second employee, walking down

a converging aisle, failed to see the forklift turning and was struck in the chest by an empty pallet on the forks, knocking him backwards. He fell, striking his head on the concrete floor. The injuries from his fall proved fatal a week later.

There are failures on several levels when there is a forklift accident. Training is usually the first. In this case, neither the operator nor the victim had been adequately trained on forklift safety. Virtually every employee on any job site can drive a car. Forklifts operate, in principal, similar to a car. There is a strong temptation to jump on the forklift and start banging and clanging. The similarity is only on the surface. Forklifts are very different and only a thorough training class can impress the differences on employees (and employers).

Forklift operators have a huge responsibility. Operators must be trained to recognize all hazards and to constantly be looking out for unwary pedestrians. They must also be trained to properly handle loads so they don't injure bystanders or product by dropping objects from the forks. A forklift has no soft spots. It is all cast iron and forged steel. If it hits a human, at any speed, it is going to cause pain and permanent damage. There is no forgiveness in a forklift.

Forklift operator safety training is required by law. The training has to be equipment specific and must include a demonstration of practical ability to operate the specific equipment. Trainees must also demonstrate that they have learned the training lessons included in the program.

Is OSHA tough about this? Yes we are! The accident noted above resulted in a training citation for the employer that carried the maximum penalty allowed by law. If this employer fails to train his employees and a similar situation is found during a future inspection, the penalty could be as high as \$70,000.00.

You can buy a good small forklift for about half that! We mean to be tough. Forklifts operators must be trained.

(Construction sites are no longer exempt from these requirements. Training is required!)

*Ernie Miller*



## Since You Asked

**Question:** Can the cross bracing on scaffolding be used as part of the guardrail system?

**Answer:** The answer to this question is yes. Cross bracing may be used as either a mid rail or a top rail within certain parameters. 29 CFR 1926.451(g)(3)(xv) states that "cross bracing is acceptable in place of a mid rail when the crossing point of the two braces is between 20 inches (0.5 m) and 30 inches (.08 m) above the work platform or as a top rail when the crossing point of the two braces is between 38 inches (0.97 m) and 48 inches (1.3 m) above the work platform. The ends at each upright shall be no more than 48 inches (1.3 m) apart."

**Question:** Can employees use a stairway that has not had the treads or pans filled in for access to upper and lower levels of the building?

**Answer:** Under certain conditions, such a stairway can be used. The stairway would have to be equipped with a properly configured hand rail on all open sides and the guidance provided in CFR 1926.1052(b)(1) would have to be followed. This standard prohibits foot traffic on these types of stairs unless the stairs are fitted with secured temporary treads and landings long enough to cover the entire tread and/or landing area.

*Carlos Rodriguez*

If you have a question concerning on the job safety and health and would like to see it printed, please feel free to contact Carlos at [carlos.rodriguez@osha.gov](mailto:carlos.rodriguez@osha.gov)

## 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 the time of registration. Course information can also be viewed on the Industrial Commission's web site at [www.ica.state.az.us/Adosh/training.htm](http://www.ica.state.az.us/Adosh/training.htm) From this site interested parties may e-mail instructors to register or obtain additional information. All ADOSH classes are free of charge and are subject to change or cancellation.

Date	Course	Location	Trainer	Phone
April 3	Construction Safety Management	Avondale	Joe Gates	602-542-1641
April 11	Confined Space Entry	Phoenix	Fernando Mendieta	602-542-1640
April 19	Excavation Safety Awareness	Yuma	Joe Gates	602-542-1641
April 24	Construction Safety Management	Prescott	Joe Gates	602-542-1641
May 10	Forklift Train The Trainer	Phoenix	Joe Gates	602-542-1641
May 17	OSHA in The Medical Office	Avondale	Fernando Mendieta	602-542-1640
May 22	OSHA in The Medical Office	Globe	Fernando Mendieta	602-542-1640
May 22	Excavation Safety Awareness	Globe	Joe Gates	602-542-1641
May 23	Respiratory Protection	Globe	Fernando Mendieta	602-542-1640
June 12	Excavation Safety Awareness	Phoenix	Joe Gates	602-542-1641
June 13	Respiratory Protection	Phoenix	Fernando Mendieta	602-542-1640
June 21	Forklift Train The Trainer	Tucson	Sue Oliva	520-320-4229
June 28	Excavation Safety Awareness	Tucson	Sue Oliva	520-320-4229

Trainers may also be contacted by e-mail at [joe.gates@osha.gov](mailto:joe.gates@osha.gov) and [fernando.mendieta@osha.gov](mailto:fernando.mendieta@osha.gov) and [sue.oliva@osha.gov](mailto:sue.oliva@osha.gov)

Dates are subject to change

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