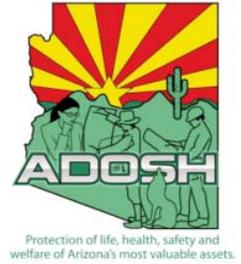


# ADOSH ADVOCATE

Improving  
workplace  
safety &  
health



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

Volume 3 - 2012

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## ADOSH ADVOCATE

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Darin Perkins, Director

## Residential Fall Protection

On March 27, 2012, Governor Brewer signed into law Senate Bill 1441, which established a fall protection standard for residential construction in Arizona. Following adoption by the Industrial Commission of Arizona, the requirements of the new legislation became effective on May 25, 2012. As a result of this new legislation, standards such as 29 CFR 1926.501(b)(10), (b)(11) and (b)(13) are, for all intents and purposes, no longer applicable to residential construction contractors and builders in Arizona. Previous federal OSHA policy directives are also now cancelled for work within the jurisdiction of the Arizona Division of Occupational Safety and Health.

What is required? The easiest way to understand SB 1441 is to break down the requirements based upon major construction trades. The new requirements are applicable to three different groups: 1) framers, 2) roofers, and 3) all trades.

### Framers:



Framers may not work on any top plate, joist, rafter, truss, beam or other structural member until the member is properly braced and supported. Furthermore, when framers are on such structural members, and more than 15 feet above a lower level, fall protection must be provided in the form of scaffolding, or a personal fall protection system (as defined by the regulation). Exception: when the rafters, trusses or joists are 24" or less on center AND the employee is more than six feet from an unprotected side or edge of the structure, fall protection is not required.

During the layout and placement of interior walls, framers exposed to falls of 15 feet or more to the exterior of an open-

sided floor must be protected by guardrails.

When installing starter board, roof sheathing or fascia board on a home that is greater than one story in height with a fall exposure greater than 15 feet, fall protection must be provided in the form of scaffolds, guardrails, or a personal fall protection system. Exception: if the employee is installing these members from within a properly braced gable, no fall protection is necessary

When raising walls greater than 15 feet in height, framers must use cleats or bottom plate straps to prevent wall kick-out or uplift. Anchor bolts alone are insufficient.

### Roofers:



Employees engaged in roofing work (new, re-roof, additions), and solar equipment installation, replacement and repair, must utilize fall protection in accordance with the following:

If the eave is 15 feet or more above a lower level and the roof slope is 4:12 or less, employees must use a personal fall protection system, a catch platform, scaffolds, eave barriers, roof jacks, parapet walls that are 24 inches or more in height, or a safety monitor system.

If the eave is 15 feet or more above a lower level and the roof slope is greater than 4:12 but less than or equal to 7:12, employees must use a personal fall protection system, a catch platform, scaffolds, eave barriers, roof jacks, or parapet walls that are 24 inches or more in height. A safety monitor system is **not** permissible.

Cont'd on page 2

### (Residential Fall Protection, Cont'd)

If the eave height is six feet or greater and the slope is greater than 7:12, employees must use a personal fall protection system, catch platform or scaffold platform. No other forms of fall protection are permissible.



### Requirements for all trades (including framers and roofers):

**All trades** with employees exposed to falls of 15 feet or more must provide fall protection in the form of a personal fall arrest system, a positioning device system, fall restraint, nets, or guardrails (except where otherwise provided with the standards). Exception: where the employer can show that it would be infeasible or create a greater hazard to provide the fall protection, the employer must implement a written fall protection plan. Furthermore, where the work is of short duration, non-repetitive and of limited exposure, fall protection may be temporarily suspended if there is adequate risk control and the work is performed under immediate, competent supervision.

Floor and roof openings (i.e., skylights, stairways, ladder ways, pits, trap doors, manholes, floor holes, etc) that are six feet or more above a lower level must be protected by covers, guardrails, or gated or offset openings.

Wall openings that are more than four feet above a lower level must be protected by railings.

**Fall protection plans:** All residential construction employers who have employees exposed to fall hazards of six feet or more are required to have a written fall protection plan. The plan must be prepared by a qualified person, must be up to date and must be kept on site. The plan must identify all fall hazards of six feet or more and the measures that will be used to reduce or eliminate those hazards. If there is a fall or a near-miss incident, the plan must require an investigation of the incident to determine if changes are needed to the plan to prevent future occurrences.

### How will ADOSH enforce the new requirements?

This is probably the most frequent question currently being asked. In response, the following information should help answer that question:

Although not an all-inclusive list, ADOSH will issue a citation if:

- *Employees are conducting roofing work on a roof with a slope greater than 7:12 and an eave height greater than six feet, where no personal fall protection system, scaffold platform or catch platform is being used.*
- *Employees are conducting roofing work on a roof with a slope greater than 4:12 and less than or equal to 7:12, with an eave height of 15 feet or more, where no personal fall protection system, catch platform, eave barrier, scaffold, roof jacks or parapet wall (at least 24" high) is being used.*
- *Employees are conducting roofing work on a roof with a slope from 4:12 to 7:12 and an eave height from six feet to 15 feet, or a slope of 4:12 or less and an eave height greater than six feet, where no personal fall protection system, catch platform, eave barrier, scaffold, roof jacks, parapet wall (at least 24" high), or safety monitoring system is being used.*
- *Employees are exposed to an exterior fall of 15 feet or more and guardrails or other positive fall protection/restraint is not being used.*
- *Employees are exposed to falls through openings in a floor or roof and the openings have not been covered or guardrails are not in place, or the covers/rails have been installed incorrectly.*
- *An employer with employees exposed to falls of six feet or more does not have a written fall protection plan, or there are deficiencies in the written plan.*
- *Employees have not been trained on the fall hazards to which they are exposed and the methods of protecting themselves.*
- *Employees are raising walls greater than 15 feet in height without the use of cleats or bottom plate straps.*
- *Employees are working from inadequately braced joists, rafters, top plates, trusses, beams or other structural members, or employees are working on such members greater than 15 feet above a lower level without the use of scaffolding or a personal fall protection system.*

Again, the above does not represent an

all-inclusive list but it should provide some guidance on when ADOSH will consider issuing citations.

**A word to the wise:** Although the new regulation may appear to allow the use of a safety monitoring system in every situation – and that is certainly one interpretation – that is not ADOSH’s interpretation. ADOSH will interpret the requirements in the most protective manner possible. Contractors who select a safety monitoring system as the fall protection method of choice for fall exposures greater than 15 feet should do so knowing that ADOSH will, in most cases, likely not agree that it was the only viable option. We will likely not agree that other options were infeasible or presented a greater hazard. Except in certain roofing operations (slope 4:12 or less), the use of a safety monitoring system for fall exposures greater than 15 feet above a lower level should be extremely limited.

Finally, in the words of a long-time friend, “Just because you can, doesn’t mean you should.” I think that saying has application in many areas of life, including a discussion about residential fall protection. For example, just because you can legally have a roofer work along the rake edge of a 4:12 roof, 20 feet above the ground (with an eave height under 15 feet) without anything more than a safety monitor to “prevent” a fall, doesn’t mean you should. Just because you can have a framer working on joists 20 feet above a lower level with no fall protection other than the 24 inches-on-center joists, doesn’t mean you should.

Fall protection has come a long way over the last several years. That being the case, there is seldom a good reason for working without some form of positive protection.

-Darin Perkins, ADOSH Director



## A Thousand Words



### The "Inbox"



We regularly receive questions and comments via e-mail. Following is a selection of some recently received at ADOSH's public e-mail box: [adosh.comments@dol.gov](mailto:adosh.comments@dol.gov)

**Q:** If bathroom facilities are not operable in a workplace, can the employer force the employees to work without them being available?

**A:** Employers must provide restroom facilities and supplies for employee use. If restrooms are not serviceable, then the employer must either bring in temporary restrooms or allow employees to leave the premises when necessary to use an off-site restroom.



**Q:** Can OSHA come on our site and make a surprise inspection, or do you need a complaint to come and inspect?

**A:** ADOSH inspections are conducted for a variety of reasons such as complaints, referrals, emphasis programs (both local and national) and planned inspections. Planned inspections generally occur when an employer is part of an industry which ADOSH has identified as having a higher than normal injury rate. Except in very rare circumstances approved by the ADOSH director, all ADOSH compliance inspections are unannounced, meaning that the employer is not told in advance of the inspection.

**Q:** Does my employer have to supply me with a hardhat? I work for a residential construction contractor and my employer is making me buy my own hardhat.

**A:** Your employer is required to provide you all of the personal protective equipment necessary to perform your job safely and must provide it free of charge. As

an employee of a residential construction contractor, a hard hat would be considered necessary PPE and your employer is therefore required to provide it without cost to you.

### Occupational Fatalities Investigated by ADOSH January - March 2012

- 1) An employee was killed when he fell from a fixed ladder.
- 2) An employee was crushed between conveyor belts on a baggage handling system.
- 3) An employee was crushed when the truck he was driving overturned.

*May you live all the days of your life.*  
~Jonathan Swift



### ADOSH's Katherine Gosiger is awarded Safety Professional of the Year

Katherine Gosiger, ASSE Arizona Chapter Membership Chair and Past-President (2007-08), is this year's recipient of the prestigious Arizona Chapter Howard Heideman Safety Professional of the Year (SPY) Award. She was congratulated at the April 6 Chapter technical meeting by Chapter President Larry Gast (left), and by her supervisor, Darin Perkins, Director of the Arizona Division of Occupational Safety & Health (ADOSH). Katherine received the 2011/12 SPY as an acknowledgement of her many years of service to the Arizona Chapter of ASSE and the Arizona safety community. She is a Safety Compliance Supervisor at ADOSH. Congratulations Katherine!

## ADOSH Education and Training Calendar

Registration for each class begins 30 days prior to the date of the class. Most classes are **free of charge** but are subject to change or cancellation without notice. Some classes or seminars listed are not exclusively sponsored by ADOSH and *may* carry a nominal fee to cover the cost of course materials, space rental, etc. **NOTE: The phone number or web address listed for each class is the number participants need to call for registration purposes and may or may not be a direct number to ADOSH or the trainer. Registration Problems? Please call 602-542-1769.**

Date	Time	Class	Address	City	Instructor	Phone	Host
July 3	9 AM - 12 PM	Heat Stress Prevention	1450 N. Hohokum Dr.	Nogales	Ornelas	520-988-0135	Alejandro Barcenas
July 5	9 AM - 12 PM	Forklift Train-the Trainer	2675 E. Broadway Blvd.	Tucson	Ornelas	520-628-5478	ADOSH
July 10	9 AM - 12 PM	Heat Stress & Haboob Safety	800 W. Washington	Phoenix	Mandeville	602-542-1769	Rosemary Montanez
July 11	9 AM - 12 PM	TBA	921 Thatcher Blvd.	Safford	Ornelas	928-428-3250	Clel Flake
July 12	8:30 AM - 11:30 AM	Auto Shop Safety Awareness	399 E. Lower Buckeye Rd.	Avondal	Mandeville	623-333-4714	Russ Ellis
	9 AM - 12 PM	Scaffold & Aerial Lift Safety Awareness	2675 E. Broadway Blvd.	Tucson	Ornelas	520-628-5478	ADOSH
July 13	8 AM - 12 PM	Forklift Train-the-Trainer	800 West Washington	Phoenix	Mandeville	620-542-1769	Rosemary Montanez
July 16 -20	8:30 AM - 4 PM	OSHA Gen. Industry 10/30 Hour	Prescott College	Prescott	Mandeville	602-542-1769	Rosemary Montanez
July 17	9 AM - 12 PM	General Industry Hazard Recognition	2675 E. Broadway Blvd.	Tucson	Ornelas	520-628-5478	ADOSH
July 18	9 AM - 12 PM	Hazard Communication - GHS	2675 E. Broadway Blvd.	Tucson	Ornelas	520-628-5478	ADOSH
July 24	9 AM - 12 PM	Recordkeeping/OSHA 300 Log	1313 S. Mission Rd.	Tucson	Ornelas	520-724-4484	Maria Robinson
July 25	9 AM - 12 PM	Lockout/Tagout Safety Awareness	500 S. Central, Bldg. D, Conf. Room B	Florence	Ornelas	520-866-7920	Ana Escovel
July 27	9 AM - 12 PM	Intro to OSHA for Small Businesses	800 W. Washington	Phoenix	Mandeville	602-542-1769	Rosemary Montanez
July 31	9 AM - 12 PM	Confined Space Safety Awareness	2675 E. Broadway Blvd.	Tucson	Ornelas	520-628-5478	ADOSH
August 1	9 AM - 12 PM	Office Safety	2675 E. Broadway Blvd	Tucson	Ornelas	520-628-5478	ADOSH
August 2	9 AM - 12 PM	Residential Fall Protection	2675 E. Broadway Blvd.	Tucson	Cooper	520-628-5478	ADOSH
August 7	8 AM - 5 PM	Phoenix Safety Summit	300 E. Wigwam Blvd.	Litchfield Park	ADOSH	602-542-1769	Rosemary Montanez
<b>August 8</b>	<b>8 AM - 5 PM</b>	<b>Phoenix Safety Summit</b>	<b>300 E. Wigwam Blvd.</b>	<b>Litchfield Park</b>	<b>ADOSH</b>	<b>602-542-1769</b>	<b>Rosemary Montanez</b>
August 14	9 AM - 11 AM	Hazard Communication & GHS	800 W. Washington	Phoenix	Weberman	602-542-1769	Rosemary Montanez
August 15	9 AM - 12 PM	Small Hand Tool Safety	1450 N. Hohokum Dr.	Nogales	Ornelas	520-988-0135	Alejandro Barcenas
August 16	9 AM - 12 PM	Forklift Train-the-Trainer	2675 E. Broadway Blvd.	Tucson	Ornelas	520-628-5478	ADOSH
	2 PM - 5 PM	Welding Safety	55 S. Priest Drive	Tempe	Mandeville	480-350-2904	Chris Hansen
August 17	9 AM - 12 PM	Online Safety Resources	800 W. Washington	Phoenix	Mandeville	602-542-1769	Rosemary Montanez

## ADOSH Education and Training Calendar (Continued)

Date	Time	Class	Address	City	Instructor	Phone	Host
August 22	9 AM - 12 PM	TBA	1070 W. Calle De Las Casitas	Green Valley	Ornelas	520-628-5478	ADOSH
	9 AM - 12 PM	Warehouse Safety	Show Low City Hall	Show Low	Mandeville	928-532-4100	Cari Bilbie
	1 PM - 4:30 PM	Forklift Train-the-Trainer	Show Low City Hall	Show Low	Mandeville	928-532-4100	Cari Bilbie
August 23	9 AM - 12 PM	Pandemic Flu Preparedness	Show Low City Hall	Show Low	Mandeville	928-532-4100	Cari Bilbie
August 29	9 AM - 12 PM	Hazard Communication & GHS	2951 S. 21st Drive	Yuma	Ornelas	928-373-1138	Diane Robinson
	1 PM - 4 PM	Bloodborne Pathogens	2951 S. 21st Drive	Yuma	Ornelas	928-373-1138	Diane Robinson
August 30	9 AM - 12 PM	Residential Fall Protection	2951 S. 21st Drive	Yuma	Cooper	928-373-1138	Diane Robinson
September 6	9 AM - 12 PM	Violence in the Workplace Prevention	12001 W. Peoria	El Mirage	Mandeville	623-876-4254	Wilson Dunlap
September 7	9 AM - 12 PM	Pandemic Flu Preparedness	1130 W. Warner Rd., Bldg. B	Tempe	Mandeville	602-728-7750	Janet Meza
September 11	9 AM - 12 PM	Hazard Communication & GHS	800 W. Washington St.	Phoenix	Weberman	602-542-1769	Rosemary Montanez
	9 AM - 12 PM	Recordkeeping & OSHA 300 Log	2675 E. Broadway Blvd.	Tucson	Ornelas	520-628-5478	ADOSH
September 12	9 AM - 12 PM	Machine Guarding	2675 E. Broadway Blvd.	Tucson	Ornelas	520-628-5478	ADOSH
September 13	9 AM - 12 PM	Violence in the Workplace Prevention	3000 N. Dysart Rd.	Avondale	Mandeville	623-935-8888	Maureen Hannon
September 14	9 AM - 12 PM	Creating a Safety Culture	800 W. Washington St.	Phoenix	Mandeville	602-542-1769	Rosemary Montanez
September 19	9 AM - 12 PM	Slips, Trips & Falls	2675 E. Broadway Blvd.	Tucson	Ornelas	520-628-5478	ADOSH
	9 AM - 12 PM	Pandemic Flu Preparedness	800 W. Washington St.	Phoenix	Mandeville	602-542-1769	Rosemary Montanez
September 20	1 PM - 4 PM	Emergency Action Planning	800 W. Washington St.	Phoenix	Mandeville	602-542-1769	Rosemary Montanez
	9 AM - 12 PM	Asbestos Awareness	2675 E. Broadway Blvd.	Tucson	Ornelas	520-628-5478	ADOSH
September 25	9 AM - 12 PM	Introduction to Accident Investigation	2675 E. Broadway Blvd.	Tucson	Ornelas	520-628-5478	ADOSH
September 26	9 AM - 12 PM	Forklift Train-the-Trainer	2675 E. Broadway Blvd.	Tucson	Garton	520-628-5478	ADOSH
	9 AM - 12 PM	Hazard Communication & GHS	1971 Jagerson Ave. (MCC)	Kingman	Mandeville	928-757-0894	Lisa Card
	1 PM - 4 PM	Introduction to Accident Investigation	1971 Jagerson Ave. (MCC)	Kingman	Mandeville	928-757-0894	Lisa Card
September 27	9 AM - 12 PM	Residential Fall Protection	1971 Jagerson Ave. (MCC)	Kingman	Mandeville	928-757-0894	Lisa Card
	1 PM - 4 PM	Construction Health Hazards	1971 Jagerson Ave. (MCC)	Kingman	Mandeville	928-757-0894	Lisa Card

NOTES: A mini-lesson, "Water, Rest Shade", focusing on heat stress will be given at the end of each class throughout the spring and summer months. See YOU in class and at the Phoenix Safety Summit!

## Trainer's Corner

### ADOSH launches 2012 Heat Illness Prevention Campaign.

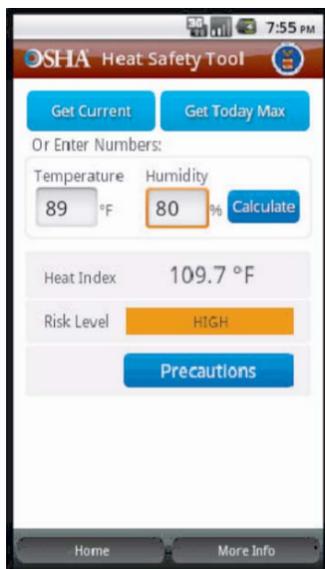
Have you seen the billboards? Flyers? Posters? Employee Handouts? iPhone or Android App? All yours from ADOSH or for the download at:

<http://www.osha.gov/SLTC/heatillness/index.html>. Available in English and Spanish

Two examples of billboards ADOSH has placed in and around the Yuma area.



Heat smartphone App now available for iPhone and Android Market on OSHA's website, [www.osha.gov](http://www.osha.gov)



### Phoenix Regional Safety Summit at the Wigwam Resort

The Phoenix Summit is planned for August 7th and 8th, 2012. As in past Summits a 10 Hour General Industry Class will be offered to the first 40 registrants, and a number of incredible trainers and speakers are gearing up to present two days of safety training.

The Phoenix Summit will include a Keynote Address from Maricopa Chief Medical Examiner Mark Fischione. He will speak about workplace fatalities and the Avian Flu Pandemic emergency preparedness plan that will be implemented in the county and state. Dr. Fischione has worked with the Maricopa Medical Examiner's Office since 1996. He gives all new ADOSH Compliance Officers an orientation to the Forensic Science Center and instructs CSHOs on the autopsy procedures conducted by his department. He is a mesmerizing presenter, a favorite with university students, and will be delivering a 3 hour class for us on Aug. 8th at 8:00 AM.



Another speaker you will not want to miss is Chris Perez who will be speaking on Violence in the Workplace. I attended one of his classes in Flagstaff recently and knew we had to have him at the Summit! His three hour presentation will be given on Aug. 7th beginning at 8:00 AM. You will be glued to your seat as presents serious information in both humorous and poignant styles. Chris Perez is a seasoned criminal investigator and adjunct professor. He investigates sexually motivated crimes, child abuse, and has managed internet based investigations. Additionally Mr. Perez instructs



police personnel on appropriate methods for dealing with people with mental illness, focusing on safe strategies for citizens and police. He has provided instruction and designed protocol for the US Navy inpatient psychiatric services at the San Diego Naval Hospital, specifically dealing with management of assaultive behaviors.

Grossman Burn Center will present a class: "Burned At Work" which will cover the treatment of serious workplace burn injuries and the prevention of burn accidents.

In addition to the 20+ classes scheduled, vendors will be giving Lunchbox Topics - short, concise presentations that you can partake of as you eat your lunch. We are trying to pack every minute full of the best information we can find because we know how busy you are. See you there!

Download your registration form from the ADOSH website, and mail or fax the form to us. Register early to reserve your space in the classes you want to attend. Space may be limited based on response.

-Jenny Mandeville

### ADOSH Consultation welcomes Bill Cooper to the TEAM!



You may have met Bill Cooper when he was a Compliance Supervisor here at ADOSH. Bill comes to the Consultation Section with

practical knowledge of construction hazards and controls. Bill worked with ADOSH for several years starting in 1988. He then spent seven years at SCF Arizona, returning to ADOSH in 2001. Bill is working with employers regarding the new residential fall protection requirements. He will also be at upcoming Safety Summits!

## ADOSH Staff Receive Training on Rope Access Techniques from SHARP Employer, Abseilon USA

ADOSH staff recently received some excellent training from Abseilon USA, a member of the ADOSH SHARP program and experts in the field of rope access. Abseilon's SPRAT-certified technicians (Society of Professional Rope Access Technicians) use rope access systems for operations that would otherwise present a challenge in terms of access: window washing, building maintenance and repair, etc. In addition to the professionals from Abseilon, other instructors included Loui McCurley (SPRAT President-middle), and Reed Thorne, (far right) owner of *Ropes that Rescue*.



**What is Rope Access?** Rope Access applies practical ropework to allow workers to access difficult-to-reach locations without the use of scaffolding, cradles or an aerial work platform. Rope access technicians descend, ascend, and traverse ropes for access and work while suspended by a harness or a work seat. The support of the rope eliminates the likelihood of a fall. Rope access workers use a back-up fall arrest system as an additional means of support. This system is usually achieved by using two ropes – a working line and a safety line. The most common applications for modern rope access include inspection, surveying, maintenance, and construction on bridges, dams, wind turbines, towers, buildings, geologic slopes, and industrial plants.  
from: [www.abseilon.com](http://www.abseilon.com)



(Above) *Ropes That Rescue's* Reed Thorne, inspects the equipment on Abseilon's Michael Duran, a Level 2 Tech, while Van Nielson looks on, prior to Duran's descent. Thorne's RTR trained the Techs from Abseilon and RTR maintains a RA training center in the red rocks of Sedona. Thorne has a great website to visit at: [www.ropesthatrescue.com](http://www.ropesthatrescue.com)

Right: SPRAT (Society of Professional Rope Access Technicians) President Loui Mc Curley explains the equipment used for Rope Access and the need to certify technicians to ensure consistency in safe Rope Access practices. More info at [www.sprat.org](http://www.sprat.org). McCurley has work-ed in Rescue since 1985 which evolved into her love of Rope Rescue and the founding of SPRAT.



Abseilon's President Renee Piposar and VP Ken Piposar gather in the shade with Ground Techs Van Nielsen (on right) and Joshua Slater.



Above: The Abseilon Crew prepares and instructs ADOSH for a descent and rescue demonstration on a seven-story building . The SPRAT Certified Techs use rope access systems for window washing operations and other difficult access projects. Ground Crew Supervisor Steve Johnson in bright yellow vest on left.



Left and above: The exercise was supervised by Level 2 Lead Tech Ricky Dillman (red helmet) while Michael Duran descended. A terrific demo that was smooth from beginning to end!

## OSHA's HCS and THE GLOBALLY HARMONIZED SYSTEM (GHS)



OSHA's Hazard Communication Standard was first enacted in 1983; however, recent changes have brought the regulation more in line with international standards with the implementation of the Global Harmonizing System, or GHS for short. Implementing the Global Harmonizing System (GHS) helps ensure improved quality and consistency in the classification and labeling of all chemicals. This in turn improves an employee's ability to quickly understand critical safety information. The GHS improves hazard communication by specifying communication elements, such as signal words, pictograms and precautionary statements, which are used on container labels or Safety Data Sheets.

### HAZARD CLASSIFICATION:

Hazard Classification is the process of assigning a chemical or mixture to a hazard or danger category based on its health and physical hazards. To better communicate the specific information needed by chemical workers, the GHS has created multiple classes of hazards. There are 16 classes of physical hazards and 10 classes of health hazards. The physical hazards include: explosives, flammable gases, aerosols, oxidizing gases, gases under pressure, flammable liquids, flammable solids and self-reactive substances and mixtures. The health hazards include: acute toxicity, skin corrosion & irritation, serious eye damage or eye irritation, respiratory or skin sensitization and germ cell mutagenicity. Other health hazard classes include carcinogenicity, reproductive toxicology, specific target organ toxicity from a single exposure, specific target organ toxicity from repeated exposures and aspiration hazard. The new flammability category will now be Category 1, 2, 3 and 4: Category 1 is the most extreme flammability rating and a Category 4 is the least flammable, actually it is a combustible, (but that word will no longer be used for the purposes of this section of the standard)

### CONTAINER LABELS:

Container labels will provide information on the relevant hazard classifications of the chemical. The labels, which conform to the GHS, may be quite different from the traditional labels you may be accustomed to seeing, so it is important to become familiar with them and the important information they deliver. As part of the GHS, chemical manufacturers and importers are required to provide a label that includes a pictogram(s), harmonized signal word(s), hazard statements and precautionary statements for each hazard class and category.

**PICTOGRAMS:** The GHS symbols have been incorporated into pictograms for use on the GHS label. Pictograms include the harmonized hazard symbols plus other graphic elements, such as borders, background patterns or colors which are intended to convey specific information\*. Where a transport pictogram appears, the GHS pictogram for the same hazard should not appear.

### SIGNAL WORDS:

There are two signal words that appear on GHS container labels. The words "Danger" or "Warning" are used to emphasize hazards and indicate the relative level of severity of the hazard.

### HAZARD & PRECAUTIONARY STATEMENTS:

The Hazard Statement for an eye irritant may be "Causes eye irritation" while the Hazard Statement for a substance with acute inhalation toxicity may be "Toxic if inhaled."

### SAFETY DATA SHEETS:

Required by OSHA's original Hazard Communication Standard, Material Safety Data Sheets have been the comprehensive source of safety information about specific chemicals. Unfortunately, these documents came in a wide variety of styles and formats making them hard to read and understand quickly. As part of the Globally Harmonized System, they are now called "Safety Data Sheets" and have a uniform format that allows employees to obtain concise, relevant and accurate information more easily. All Safety Data Sheets will have the following 16 sections, in specific order, so workers will always know which section will provide which data no matter what chemical you are referencing.

*Section 1: Product and Company*

*Section 3: Composition/Information on Ingredients*

*Section 5: Firefighting Measures*

*Section 7: Handling and Storage*

*Section 9: Physical and Chemical Properties*

*Section 11: Toxicological Information*

*Section 13: Waste Disposal Considerations*

*Section 15: Regulatory Information*

*Section 2: Hazards Identification*

*Section 4: First Aid Measures*

*Section 6: Accidental Release Measure*

*Section 8: Precautions to Control Exposure/Personal Protection*

*Section 10: Stability and Reactivity*

*Section 12: Ecological Information*

*Section 14: Transport Information*

*Section 16: Other Information*



### PERSONAL PROTECTIVE EQUIPMENT:

Of course, always wear the proper protective equipment specified by the container label or Safety Data Sheet. This often includes wearing gloves, protective clothing and goggles with a face shield. Respiratory Protection may also be required to avoid breathing in hazardous vapors. If you are unsure about the required PPE for any chemical, stop and ask your supervisor.

### EFFECTIVE DATES:

**December 1, 2013:** Employers must train employees on the new label elements and SDS format.

**June 1, 2015:** Chemical manufacturers, Importers, Distributors and Employers must comply with all modified provisions of this final rule, except Distributors may ship products labeled by manufacturers under the old system until December 1, 2015.

**June 1, 2016:** Employer's must update alternative workplace labeling and hazard communication programs as necessary, and provide additional employee training for newly identified physical or health hazards.

\*For more information on GHS and for images of pictograms go to: <http://www.osha.gov/dsg/hazcom/ghs.html>

ARIZONA SHARP/VPP NEWS



Employees of Big W Sales posing for a photo with their newly awarded SHARP letter. Big W Sales is the most recent addition to our growing SHARP program. Although the facility is small, the management and employees demonstrated through an onsite audit why they hold safety in the highest regard as their programs and training met or exceeded the ADOSH/OSHA standards. Congratulations to the staff of Big W Sales!



ADOSH Director Darin Perkins presents the VPP Re-certification letter to Honeywell Aerospace Phoenix Sky Harbor Site Leader Mr. Bill Hunter. This was Honeywell Airport site's fourth successful VPP recertification audit. ADOSH wants to congratulate all the staff at Honeywell for a job well done!



Congratulations to Hamilton Sunstrand for recently receiving their VPP Re-certification. Employees look on as ADOSH Consultation, Education and Training Supervisor Babak Emami (left) presents the VPP Star Plaque to Hamilton Sunstrand's General Manager Tod Brindlinger (right). This is the company's second VPP recertification!

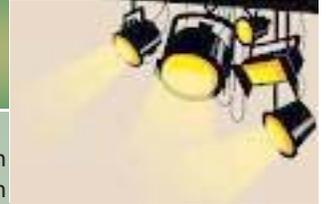
*"If you are going to achieve excellence in big things, you develop the habit in little matters. Excellence is not an exception, it is a prevailing attitude." --Colin Powell*

Arizona VPP Star participants attended the Region IX VPPPA Conference held this year in Monterey, California and pose for a photo with Assistant Director and VPP Coordinator Jessie Atencio. The photo includes employees from the following Arizona VPP Star companies who participated in the conference:

- Raytheon,
- Cintas,
- Mesquite Power,
- Johns Manville,
- and Honeywell.



## VPP Spotlight - Special Devices, Incorporated



### Selecting Fashions for Living

Discussions regarding personal protective equipment (PPE) selection to safeguard workers have taken me to facilities across the US, Europe, Southeast Asia and to sophisticated test facilities like the Health and Safety Laboratory in England. A common theme for safety professionals in all these locations was to ensure that an effective hazard analysis was completed in combination with a realistic exposure assessment before PPE was considered or selected.

### **Hazard Analysis and Risk Assessment**

The hazard analysis should identify potential process or work environment hazards not adequately addressed by engineering or administrative controls. The following considerations should be included in the hazard analysis process:

- a) Do involve workers in the hazard analysis and PPE selection process
- b) Do become familiar with potential process hazards
- c) Do include a review of mishaps and experience from similar industries
- d) Do select PPE that exceeds the minimum required to protect workers
- e) Do update PPE selection criteria when changes impact the process
- f) Do not overlook relevant standards and PPE specifications and limitations
- g) Do not overlook ergonomics and worker ability to perform tasks with PPE

### **PPE, the First Option?**

Unfortunately, some companies are too quick to outfit workers with PPE and overlook low-cost administrative or engineering solutions that can eliminate PPE. Another error companies sometimes make with PPE selection is over-protection or under-protection – both may have serious consequences. For example, one laboratory mandated >480 minute permeation rate solvent resistant gloves for tasks that called for gloves suitable for incidental splash resistance. After workers dropped several expensive instruments, the laboratory reconsidered their initial approach. Recognizing that PPE may create additional hazards for workers (e.g., heat stress; reduced mobility, reduced dexterity, impaired vision or hearing), the selection process must balance the protection provided and the potential impact on worker productivity.

### **Fit Factor**

Surveys suggest workers are much more likely to comply with PPE that is comfortable and fashionable. Manufacturers are aware of this and often follow consumer fashion and sporting apparel trends for the latest styles. When workers at one facility were provided equally protective choices for trial use, the PPE selected by a majority of the workers was described as comfortable and fashionable. When a supervisor introduced PPE bearing the logo of popular sports teams, the supervisor reported the work area no longer had issues with workers using PPE properly. Comfort and style should not be overlooked as both have a significant impact on worker compliance with PPE use.

### **PPE Selection Resources**

OSHA provides excellent resources for the development of PPE programs and the PPE selection process (e.g., CPL 02-01-050; OSHA 3151) and a call to the ADOSH Consultation and Training Team can save a lot of headaches. In addition, many PPE manufacturers provide professional assistance and guidelines addressing the intended use and potential limitations of PPE. Involving the work team in the PPE selection process can also provide significant benefits for companies. A recent example at Special Devices, Incorporated, included a Safety Captain that researched and introduced passive hearing protection to address a potential impact noise hazard. When companies combine available resources with comfort and style issues in the selection process the likelihood of a successful outcome increases.

### **Conclusion**

Selecting fashions for living should; 1) connect workers to the PPE (e.g., corded ear plugs make access and use easier); 2) allow workers to express individuality with acceptable company approved options; 3) consider that cool PPE, or what my daughter would describe as “sick,” is more likely to be used. The right answer will not always be a fully encapsulated suit or a >480 minute permeation break-through time. Selecting fashions for living involves finding a balance between the potential risk, PPE protection factors and real-world fit, form and function.

Contributed by J K Shaver, SH&E Director - Special Devices Incorporated, Mesa, AZ

# 2012 ADOSH Regional Safety Summit Phoenix At the Wigwam Resort 300 East Wigwam Blvd. Litchfield Park, Arizona 85340



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**KEYNOTE SPEAKER**

**Dr. Mark Fischione**  
Maricopa Co. Chief Medical Examiner  
**Workplace Fatalities and Preparing for Pandemic Flu**  
Wednesday Aug. 8 8:00-11:00 AM

Tuesday August 7: 8:00 -11:00 am

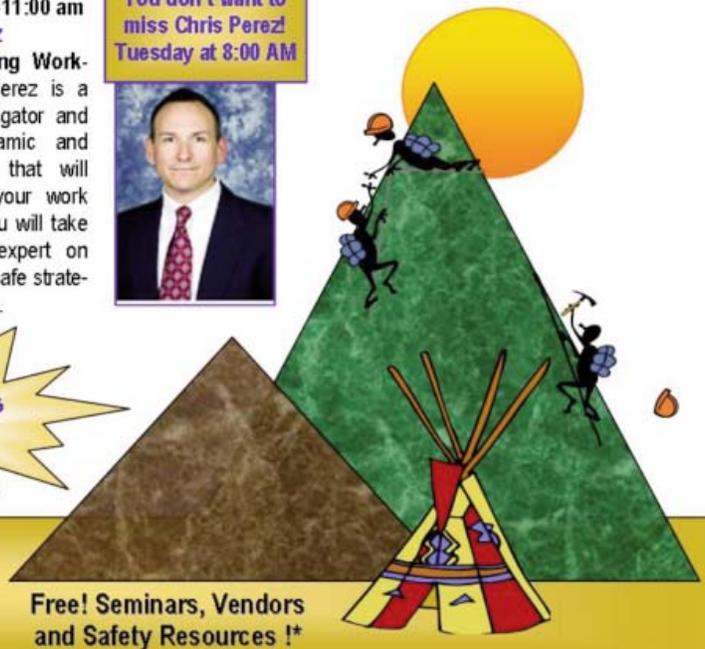
**MR. CHRIS PEREZ**

**Detecting and Preventing Workplace Violence.** Mr. Perez is a seasoned criminal investigator and adjunct professor. A dynamic and fascinating presentation that will change how you see your work place, and the actions you will take to preserve life. An expert on assaultive behaviors and safe strategies for citizens and police.

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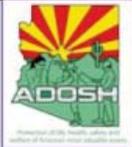


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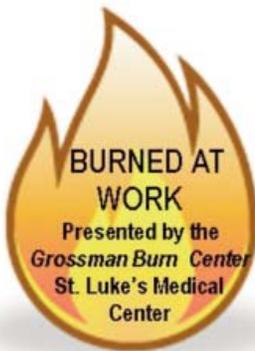
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