Introduction to OSHA

Josh Kelly, CSP, ASP, SMS
OSHA-Authorized General Industry Trainer

OSHA Introduction

- OSHA History and Mission
- Why OSHA is important to workers
- Rights and Responsibilities under OSHA
- The use of OSHA standards
- Explain how OSHA inspections are conducted
- Helpful OSHA safety and health resources

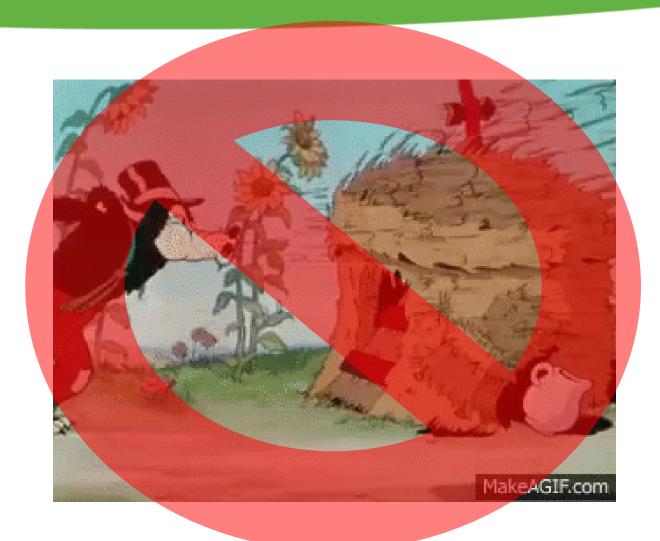
CAUTION

IF YOU THINK OSHA
IS A SMALL TOWN IN
WISCONSIN, YOU'RE
IN TROUBLE





The Big Bad Wolf?.....



Occupational Safety and Health Administration

- Who is covered by OSHA?
 - All employees/employers under Federal Government authority
 - Federal OSHA or through an OSHA-approved state program
- Who is not covered by OSHA?
 - Self-employed
 - Immediate members of farm families that do not employ outside workers
 - Workers covered by other fed agencies (miners, rail, nuclear)
 - State/Local government employees (police, fire, county workers)
 - Some expectations under state programs
 - Professional Athletes

Prior to OSHA

Dawn of Time - 1970

Pre-OSHA History

1870s to 1910

- America in the lead...not in a good way....
 - Little thought or regulation for safety
 - "Harder Work = Higher Gains"
 - Accidents were "cheap"
- Worker and Employer Responses
 - o People quit!
 - O Higher Risk = Higher Pay
 - Unions/Fraternal Organizations
 - Expansion of Insurance Industry
 - Care or jobs given to injured

Comparative Safety of British and American Railroad Workers, 1889 – 1901 (Fatality Rates per Thousand Workers per Year)								
(ratality Rates per mousai	1889	1895	1901					
British railroad workers								
All causes 1.14 0.95 0.89								
British trainmen								
All causes	All causes 4.26 3.22 2.23							
Coupling	0.94	0.83	0.74					
American Railroad workers								
All causes	2.67	2.31	2.5					
American trainmen								
All causes	8.52	6.45	7.35					
Coupling	1.73	1.2	0.78					
Braking	3.25	2.44	2.03					
Source: Aldrich, Safety First, Table 1 and Great Britain Board of Trade, General Report.								

Source: History of Workplace Safety in the United States, 1880-1970

Pre-OSHA History

1910 - 1939

- Small steps in regulatory authority
 - Previous programs/agencies got some power and influence
 - New agencies established
- Federal Employer's Liability Law 1908
 - Increased liability/cost for employers
 - o \$200 -> \$2000
- Workers Compensation Laws
 - European idea, first adopted in New York 1910
 - Workers don't need to sue; compensated at fixed rate
 - Costs became more predicable and created less strife/anxiety
 - o 1911-1921 44/48 states pass law

Steel Industry fatality and Injury rates, 1910-1939 (Rates per million man hours)

Period	Fatality rate	Injury Rate
1910-1913	0.4	44.1
1937-1939	0.13	11.7

Source: History of Workplace Safety in the United States, 1880-1970

http://eh.net/encyclopedia/history-of-workplace-safety-in-the-united-states-1880-1970/

Shortly Before OSHA

- Prior to 1970 (average per year)
 - ∘ ≈ 14,000 workplace fatalities
 - ∘ ≈ 2.5 million job-related disabilities
 - ∘≈ 300,000 new cases of job-related illnesses







"The OSHA Era" 1970-Present

Occupational Safety and Health Act (OSH Act)

- December 29, 1970
 - President Nixon signs OSH Act

- April 28, 1971
 - OSHA is officially established under the U.S. Department of Labor
 - George Guenther 1st Assistant Secretary of Labor for OSHA



OSH Act General Duty Clause

- Section 5(a) Each employer shall
 - (1) furnish to each employee a workplace which is free from recognized hazards that are causing or are likely to cause death or serious physical harm;
 - (2) comply with occupational safety and health standards declared under this Act.
 - Section 5(b) Each <u>employee</u> shall
 - comply with occupational safety and health standards and all rules, regulations, and orders issued pursuant to this Act which are applicable to his own actions and conduct.

OSHA Mission Statement

 "The mission of OSHA is to save lives, prevent injuries, and protect America's workers."

 "Workers have a right to a safe workplace, and it is the employers responsibility to provide safe and healthy workplaces."

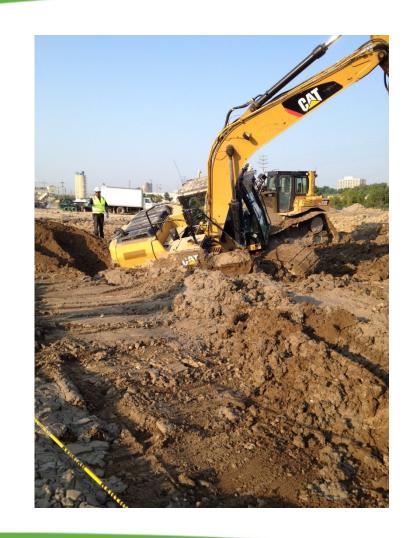


We Are OSHA
We Can Help

OSHA Incident Stats

- 2015: 4,836 workplace fatalities,
 2.9million injuries/illnesses
 - Average: 93 deaths per week or 13 deaths per day
- 2016: 5,190 workplace fatalities,
 3.4million injuries/illnesses
 - Average: 99 deaths a week or 14 deaths a day

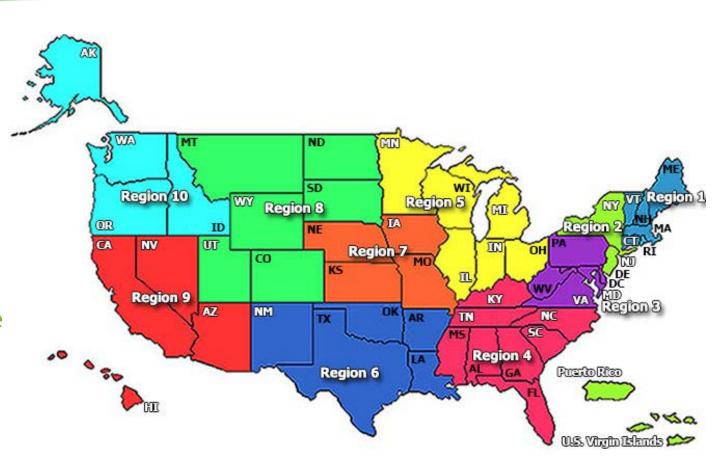
In perspective, only a total of 4,059 Players in The 4 Major Sports (1,696 NFL / 1,200 MLB / 713 NHL / 450 NBA)



OSHA Target Areas

- National Emphasis Areas
 - Machinery, Chemical Safety, Trenching/Excavation

- Regional Emphasis Areas
 - Region 4 <u>Electrical</u>, Landscaping, Poultry Processing, Forklifts, Noise, Food/Beverage Industry Sanitation



OSHA Target Areas

Most Cited Violations (2017)

- 1. Fall Protection Use, Misuse, Lack of Use
- 2. Hazard Communication Standard
- 3. Scaffolding
- 4. Respiratory Protection
- 5. Control of Hazardous Energy (Lockout/Tagout)
- 6. Ladders
- 7. Powered Industrial Trucks (Forklifts & Similar)
- 8. Machinery and Machine Guarding
- 9. Fall Protection Training Requirements
- 10. Electrical Wiring Methods, Components and Equipment

















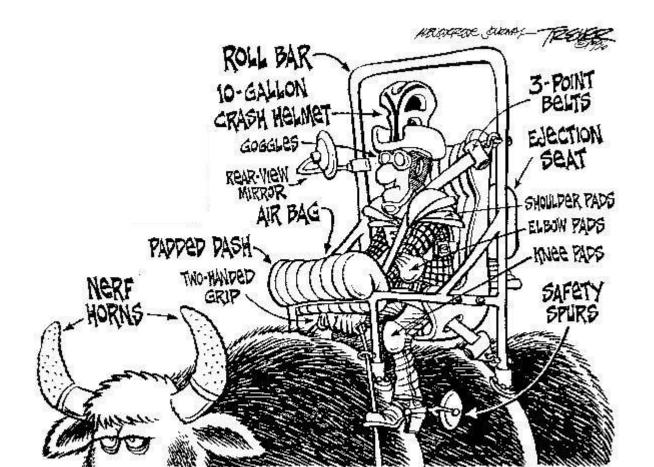




What Does OSHA Do?

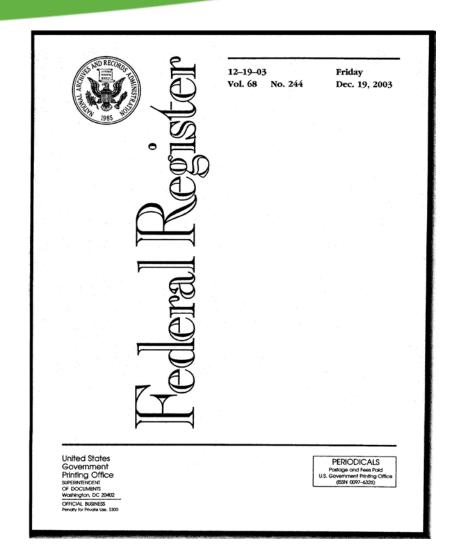
What does OSHA do?

- In their own words...
 - Encourage safety and health in the workplace
 - Develops and enforce standards
 - Monitor injury and illness data
 - Provided assistance, training, and other support programs



What does OSHA do? - Standards

- Write Standards
 - Based upon research, accepted practices, and/or other applicable information
 - Standard drafts are put out for review and comment in Federal Register
 - Finalized standards given an implementation date (usually with significant lead time)



What does OSHA do? - Standards

- Enforce Standards
 - Inspection and Citation
 - Inspection Priority List
 - 1. Imminent Danger
 - 2. Fatal or Catastrophic Events
 - 3. Employee Complaints or Referrals
 - 4. Programmed High-Hazard Inspections
 - 5. Follow-Up Inspections

Oregon OSHA
Excavation
Inspection

Tim Marcum, Compliance Officer

https://youtu.be/0wmcD3aM8X4

State Standards

- Approved State Programs 28
 - OSHA must approve the state
 - Standards must be as stringent as Federal, and can be more stringent

Alaska	lowa	New Jersey	Tennessee
Arizona	Kentucky	New Mexico	Utah
California	Maine	New York	Vermont
Connecticut	Maryland	North Carolina	Virgin Islands
Hawaii	Michigan	Oregon	Virginia
Illinois	Minnesota	Puerto Rico	Washington
Indiana	Nevada	South Carolina	Wyoming

Standards, when there are no standards...

- Where there is no specific standard?
 - General Duty Clause "must provide safe workplace"

Example:

- OSHA Ergonomics Standard
 - Passed November 2000
 - Took Effect January 2001
 - Repealed by Congress and Pres Bush March 2001









Letters of Interpretation

- OSHA requirements set by statute, standards and regulations
- Interpretation letters explain requirements and how they apply to particular circumstances,
 - They cannot create additional employer obligations.
 - The letter constitutes OSHA's interpretation of only the requirements discussed.

OSHA Letters of Interpretation for the Process Safety Management (PSM) Standard

(Data from the www.osha.gov web site)

Date of Last Letter/Document Included: 3/7/06

Information Last Updated: 7/8/06

Note: Items are not in exact alphabetical or chronological order.

May 14, 1992

Mr. ChingYeh Shiau, Ph.D.
Professor, National Taiwan Institute of Technology
Department of Chemical Engineering
43 Keeling Road, Section 4
Taipei, 10772, Taiwan
Republic of China

Dear Mr. Shiau:

Thank you for your letter of February 29 requesting information related to Occupational Safety and Health Administration (OSHA) inspection of chemical accidents. Please accept our apologies for the delay in responding.

The Occupational Safety and Health Act (OSH Act) of 1970 (copy enclosed) requires each employer to furnish each of his employees, employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm. Each employer must also comply with occupational safety and health standards promulgated under the OSH Act. With reference to such safety and health standards and to industry guidelines, OSHA investigates chemical accidents which result in employee fatalities and/or multiple injuries in the workplace.

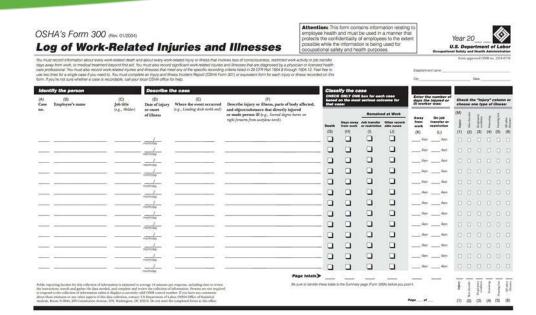
The primary purpose of these investigations is twofold. To determine the cause(s) of chemical accidents which result in exposure of employee(s) to associated safety and health hazard; and to determine whether violations of OSHA safety or health standards related to the accident occurred. Investigations of chemical accidents are conducted at two levels. The OSHA Instruction CPL 2.94 is applicable when OSHA responds to significant chemical accidents with catastrophic or potentially catastrophic consequences. Otherwise, chemical accidents are investigated by OSHA in accordance with Chapter VIII, Fatality/Catastrophe Investigations of OSHA's Field Operations Manual (FOM). Copies of CPL 2.94 and Chapter VIII of the FOM are enclosed for your use.

To eliminate or mitigate the consequences of accidents involving highly hazardous chemicals in the workplace, OSHA developed standards on Process Safety Management (PSM) of Highly Hazardous Chemicals which were published as a Final Rule in the Federal Register, Volume 57, Number 36 on Monday, February 24 this year.

AcuSafe"

What does OSHA do? - Recordkeeping

- Workplaces with 11 or more employees* must maintain records of injuries and illnesses
- Maintained on a calendar year basis
- Records are NOT submitted to OSHA (or BLS) unless requested*
- Data used to monitor trends and determine regulatory, training, and enforcement needs



What is recorded?

- Medical Only Cases
 - Requires treatment beyond first aid
- Restricted Duty Cases
 - Injuries preventing return to normal activities
- Lost Time Cases
 - Injuries preventing return to work
- Fatalities
 - Death



It's not that Ted was a bad guy, he was just all out of "5's."

"Medical Treatment"

 The management and care of a patient to combat disease or disorder.

- For the purposes of Part 1904, medical treatment does not include:
 - Visits to a medical professional solely for observation or counseling
 - Diagnostic procedures
 - x-rays, blood tests, diagnostic prescription medications (e.g., eye drops to dilate pupils)
 - "First aid" as defined in 1904.7(b)(5)(ii)

Recordables

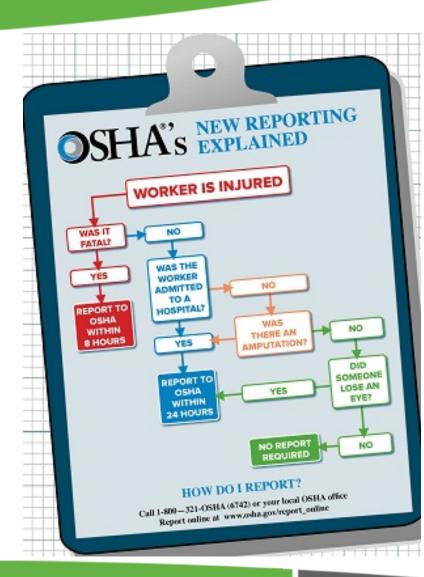
- Restricted Time/Duty
 - "Just because you have a restriction, doesn't mean it is restricted duty"
 - Carpenter broken arm –VS– Accountant broken ankle

- Lost Time
 - Usually very serious cases
 - May involve surgery and/or long-term care

When do you have to notify OSHA?

- As of Jan 1, 2015, employers are required to notify OSHA if...and within...
 - Fatality 8hrs
 - Amputation 24hrs
 - Loss of all or part of body, including fingertip without bone loss
 - Not an avulsion
 - ∘ Loss of Eye − 24hrs
 - Not loss of vision, actual removal of eyeball
 - Hospitalization of 1 Employee 24hrs
 - Actually admitted to hospital, not just a trip to ER

Changed from only requiring notification for a fatality or 3+ hospitalizations.

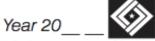


OSHA's Form 300 (Rev. 01/2004)

Log of Work-Related Injuries and Illnesses

to respond to the collection of information unless it displays a currently valid OMB control number. If you have any comments about these estimates or any other aspects of this data collection, contact: US Department of Labor, OSHA Office of Statistical Analysis, Room N-3644, 200 Constitution Avenue, NW, Washington, DC 20210. Do not send the completed forms to this office.

Attention: This form contains information relating to employee health and must be used in a manner that protects the confidentiality of employees to the extent possible while the information is being used for occupational safety and health purposes.



U.S. Department of Labor
Occupational Safety and Health Administration

Form approved OMB no. 1218-0176

You must record information about every work-related death and about every work-related injury or illness that involves loss of consciousness, restricted work activity or job transfer, days away from work, or medical treatment beyond first aid. You must also record significant work-related injuries and illnesses that are diagnosed by a physician or licensed health care professional. You must also record work-related injuries and illnesses that meet any of the specific recording criteria listed in 29 CFR Part 1904.8 through 1904.12. Feel free to use two lines for a single case if you need to. You must complete an Injury and Illness Incident Report (OSHA Form 301) or equivalent form for each injury or illness recorded on this form. If you're not sure whether a case is recordable, call your local OSHA office for help.

Ident	ify the person		Describe t	he case			ify the c										
(A) Case	(B) Employee's name	(C) Job title	(D) Date of injury			CHECK ONLY ONE box for each case based on the most serious outcome for that case:		(F) Describe injury or illness, parts of body affected, and object/substance that directly injured or made person ill (e.g., Second degree burns on injury from each land teach) Away		(F) based on the most or illness, parts of body affected, that case:		ne number of e injured or er was:			"Injur e type		
no.		(e.g., Welder)	or onset of illness	(e.g., Loading dock north end)	and object/substance that directly injured or made person ill (e.g., Second degree burns on right forearm from acetylene torch)	Away On job	(M)			Ssorder	naoery	Suin	sec Su				
					right foreign of from acceptant sorters	Death	from work	or restriction		from work	transfer or restriction	Injur	Skind	Respi	Poison	Mod	
			,			(G)	(H)	(1)	(J)	(K)	(L)	(1)	(2)	(3)	(4) (5 □ □	5) (€ □ [
			month/day			_			ā	days			П	П			
			month/day				_		<u> </u>				_	_	_ ,	_ ;	
			month/day							days			П	Ш		J	
			month/day							days	days						
			month/day							days	days					ם כ	
			month/day							days	days					ם כ	
			month/day							days	days					J [
			month/day							days	days					J [
			month/day							days	days				_ [J [
			month/day							days	days					J [
			month/day							days	days				– [J [
			month/day							days	days				– [
			/_							days	days					J [
			month/day		Page totals												
	orting burden for this collection of infor tions, search and gather the data neede					ese totals t	o the Summary	page (Form 30	(0A) before you po	st it.		Injury	Border	piratory	guinos	ng loss	

U.S. Department of Labor

Occupational Safety and Health Administration

Form Approved OMB no. 1218-0176

Summary of Work-Related Injuries and Illnesses

All establishments covered by part 1904 must complete this Summary page, even if no work related injuries or illneses occured during the year. Remember to view the Log to verify that the entries are complete and accuratebefore completing this summary.

Using the Log, count the individual entries you made for each category. Then write the totals below, making sure you've added the entries from every page of the Log. If you had no cases, write "0".

Employees, former employees, and their representatives have the right to review the OSHA Form 300 in its entirety. They also have limited access to the OSHA Form 301 or its equivalent. See 29 CFR Part 1904.35, in OSHA's recordkeeping rule, for further details on the access provisions for these forms.

Number of	Cases		grafi (A) Walio Harabata (Salah	e 2000
Total number of deaths	Total number of cases with days away from work	Total number with job trans restriction	fer or oth	tal number of her recordable ses
0	23	56		34
(G)	(H)	(1)		(J)
Number of	Days			- 3
otal number of day	rs	Total numb transfer or	er of days of job restriction	
668		3167		
(K)		(L)		
Injury and	Illness Type	s		and the same of th
otal number of (M)				
1) Injuries		113 (4)	Poisonings	
2) Skin disorders		0 (5)	Hearing Loss	0
(3) Respiratory of	onditions	O (6)	All other illness	ses 0

Establishment information	
Your establishment name	
Address	
Industry description (e.g., Manufacture of motor truck Educational Services	trailers)
Standard Industrial Classification (SIC), if known (e.g. 8221	, 3715)
North American Industrial Classification (NAICS), if kn	nown (e.g., 336212)
Employment information (If you don't have the worksheet on the back of this page to estimate)	hese figures, see the
Annual average number of employees	7013
Total hours worked by all employees last year	9383927
Sign here	
Knowingly falsifying this document may res	ult in a fine
I certify that I have examined this document and that to	o the best of my knowledge the
entries	FKILI 705
Company executive	Title
	1/23/2017
Phone	Date

Post this summary page from February 1 to April 30 of the year following the year covered by the form.

What does OSHA require?

Employer Responsibilities – 10,000ft View

- Employers must
 - Assess workplace and determine hazards
 - Decide which standards apply and how
 - Follow applicable standards
 - Provide and record training, medical surveillance, hazard monitoring, etc
 - Pay for training, monitoring, PPE, etc.



"Excuse me, Sir, but me and the rest of the work force think this dress code probably violates OSHA rules."

Worker Responsibilities

- Employees must:
 - Read the OSHA poster
 - Follow the employer's safety and health rules
 - Follow safe work practices for your job, as directed by your employer
 - Wear or use all required gear and equipment
 - Report hazardous conditions to management (or OSHA if employer does not fix)
 - Cooperate with OSHA inspectors



Job Safety and Health IT'S THE LAW!

All workers have the right to:

- A safe workplace.
- Raise a safety or health concern with your employer or OSHA, or report a workrelated injury or illness, without being retaliated against.
- Receive information and training on job hazards, including all hazardous substances in your workplace.
- Request an OSHA inspection of your workplace if you believe there are unsafe or unhealthy conditions. OSHA will keep your name confidential. You have the right to have a representative contact OSHA on your behalf.
- Participate (or have your representative participate) in an OSHA inspection and speak in private to the inspector.
- File a complaint with OSHA within 30 days (by phone, online or by mail) if you have been retaliated against for using your rights.
- See any OSHA citations issued to your employer.
- Request copies of your medical records, tests that measure hazards in the workplace, and the workplace injury and illness log.

This poster is available free from OSHA.

Contact OSHA. We can help.

Employers must:

- Provide employees a workplace free from recognized hazards. It is illegal to retaliate against an employee for using any of their rights under the law, including raising a health and safety concern with you or with OSHA, or reporting a work-related injury or illness.
- Comply with all applicable OSHA standards.
- Report to OSHA all work-related fatalities within 8 hours, and all inpatient hospitalizations, amputations and losses of an eye within 24 hours.
- Provide required training to all workers in a language and vocabulary they can understand.
- Prominently display this poster in the workplace.
- Post OSHA citations at or near the place of

the alleged violations.

FREE ASSISTANCE to identify and correct hazards is available to small and mediumsized employers, without citation or penalty, through OSHA-supported consultation programs in every state.



1-800-321-OSHA (6742) • TTY 1-877-889-5627 • www.osha.gov

Worker Rights

- Have a safe work environment
- Ask OSHA to inspect their workplace
- Receive information and training
 - In language you can understand
- Get copies of results
 - Air Samples/Other Testing, Medical Records, Etc
- Allowed to review injury/illness records
 - Privacy rules still apply
- Be protected against retaliation



OSHA Inspections

Workplace Inspection

- Every establishment under OSH Act jurisdiction is subject to inspection
- Conducted by CSHO
 - Compliance Safety and Health Officer
- Usually no advance notice is given



Inspection Process

- CSHO displays credentials
- Opening Conference
- Walkaround Inspection
- Closing Conference



Opening Conference

- Explains purpose of visit
- Provides copy of complaint if available
- Employees may attend if employer approves

Inspection

- Refusals or interference may result in Federal Marshal warrant and assistance
- Purpose is to identify and eliminate hazards
- Documents/Records/Etc may be reviewed
 - "...evaluated to determine the employer's good faith."
- May point out needed corrective actions
 - Shows good faith to fix it then!

Inspection

- Pictures or video may be taken
- Air, surface, or other samples may be collected
- Trade Secrets and other Competitive Advantages kept confidential
- Employee Rep may participate in inspection process
- Employees may be interviewed privately
 - Employee Rep may be present upon employee request
 - CSHO may request written statements

Closing Conference

- Following inspection, CHSO will
 - Describe any apparent violations or other pertinent issues found
 - Discuss both employer and employee rights
 - Discuss any further visits or actions that may be needed
- CSHO will NOT discuss any citations or fines
 - Citations or fines, if assessed, will come later

After the Visit

- OSHA may or may not issue citations
 - Citations inform employer and employees of the regulations and standards allegedly violated and of the proposed time for abatement
 - Employer must post a copy of each citation at or near place where violation occurred, for 3 days or until violation is corrected, whichever is longer

OSHA Assistance and References

Contact OSHA

- OSHA Website www.osha.gov
- OSHA Emergency Hotline 1-800-321-OSHA
- Contact Regional or Area Offices

References & Resources

OSHA Worker Fatalities Report

- Report of fatal events/basic details for each year
- Updated throughout the year
- https://www.osha.gov/dep/fatcat/dep_fatcat.html

BLS Census of Fatal Occupational Injuries (CFOI)

- Analysis and characterization of events
- Data for each year released near end of following year
 - 2015 data released Dec 16, 2016
 - Previously would release in Aug or Sept then revise as needed
- http://www.bls.gov/iif/oshcfoi1.htm#2014

Summary

- OSHA helps save lives and prevent injuries
- OSHA balances a cooperative approach with traditional enforcement
- OSHA standards are the enforceable requirements for worker safety and health
- Inspections are OSHA's way to ensure compliance
- OSHA offers various means of assistance

Contact Info

Josh Kelly, CSP, ASP, SMS

OSHA-Authorized General Industry Trainer

Office Direct: 770-453-1419

Cell: 770-295-8115

jkelly@pdengineers.com