

AESC Safety Conference

Jack Rector
Area Director
Fort Worth Area Office



National Emphasis Programs FY 18

- Combustible Dust
- Federal Agencies (pending)
- Hex Chrome
- Hazardous Machinery
- Lead
- Primary Metals
- Shipbreaking
- Silica
- Trenching & Excavation
- Heat Illness



Regional Emphasis Programs

General Industry FY 18

- Fall hazards in non construction
- Upstream oil & gas industry
- High noise in manufacturing
- Safety & Health in fabricated metals
- Grain handling facilities
- Hazards in Health Care
- Poultry processing facilities
- Heat Illness



Regional Emphasis Programs

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- **Upstream oil & gas industry**
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Oil and Gas NAICS

NAICS	Description
211111	Crude Petroleum and Natural Gas Extraction
211112	Natural gas liquid extraction
211120	Crude Petroleum Extraction
211130	Natural Gas Extraction
213111	Drilling Oil and Gas Wells
213112	Support Activities for Oil and Gas Operations

Enforcement Data - ALL Upstream* and 213112 Contractor Inspections (Fed + State FY 13 – FY 17)

- Total Inspections = **2854 (1644)**
 - Inspections/year - **570 (344)**
- Programmed Inspections..... **1,342 (640)**
- Unprogrammed Inspections..... **1,512 (1004)**
 - Complaint Inspections..... **342 (243)**
 - Fatality/Catastrophe Inspections..... **239 (164)**
 - Follow-Up Inspections..... **46 (38)**
 - Referral Inspections..... **272 (172)**
 - Referral Employer Reported Inspections..... **191 (131)**
 - Unprogrammed Related Inspections..... **374 (230)**
 - All Other Unprogrammed Inspections..... **48 (26)**

* Includes the 3 Oil Patch NAICS 211111; 213111; 213112



Enforcement Data - ALL Upstream* and 213112 Contractor Inspections

- Total Number of Violations..... 3,173 (1,802)
- Percent Violations Classified as SWRU 64.5% (78.4%)
- Violations issued per Inspection..... 2.31 (2.30)
- Total Initial Penalty..... > \$11.6 million
(\$6.5 million)
- Average Initial Penalty per Serious Violation... \$4,100 (\$4,186)

* Includes the 3 Oil Patch NAICS 211111; 213111; 213112



Region 6 Enforcement Data - ALL Upstream* and 213112 Contractor Inspections (Fed + State FY 13 – FY 17)

- Total Inspections = **1722 (978)**
 - Inspections/year - **344 (196)**
- Programmed Inspections..... **1,063 (519)**
- Unprogrammed Inspections..... **659 (459)**
 - Complaint Inspections..... **144 (106)**
 - Fatality/Catastrophe Inspections..... **164 (108)**
 - Follow-Up Inspections..... **23 (19)**
 - Referral Inspections..... **101 (75)**
 - Referral Employer Reported Inspections..... **77 (53)**
 - Unprogrammed Related Inspections..... **140 (90)**
 - All Other Unprogrammed Inspections..... **10 (8)**

* Includes the 3 Oil Patch NAICS 211111; 213111; 213112



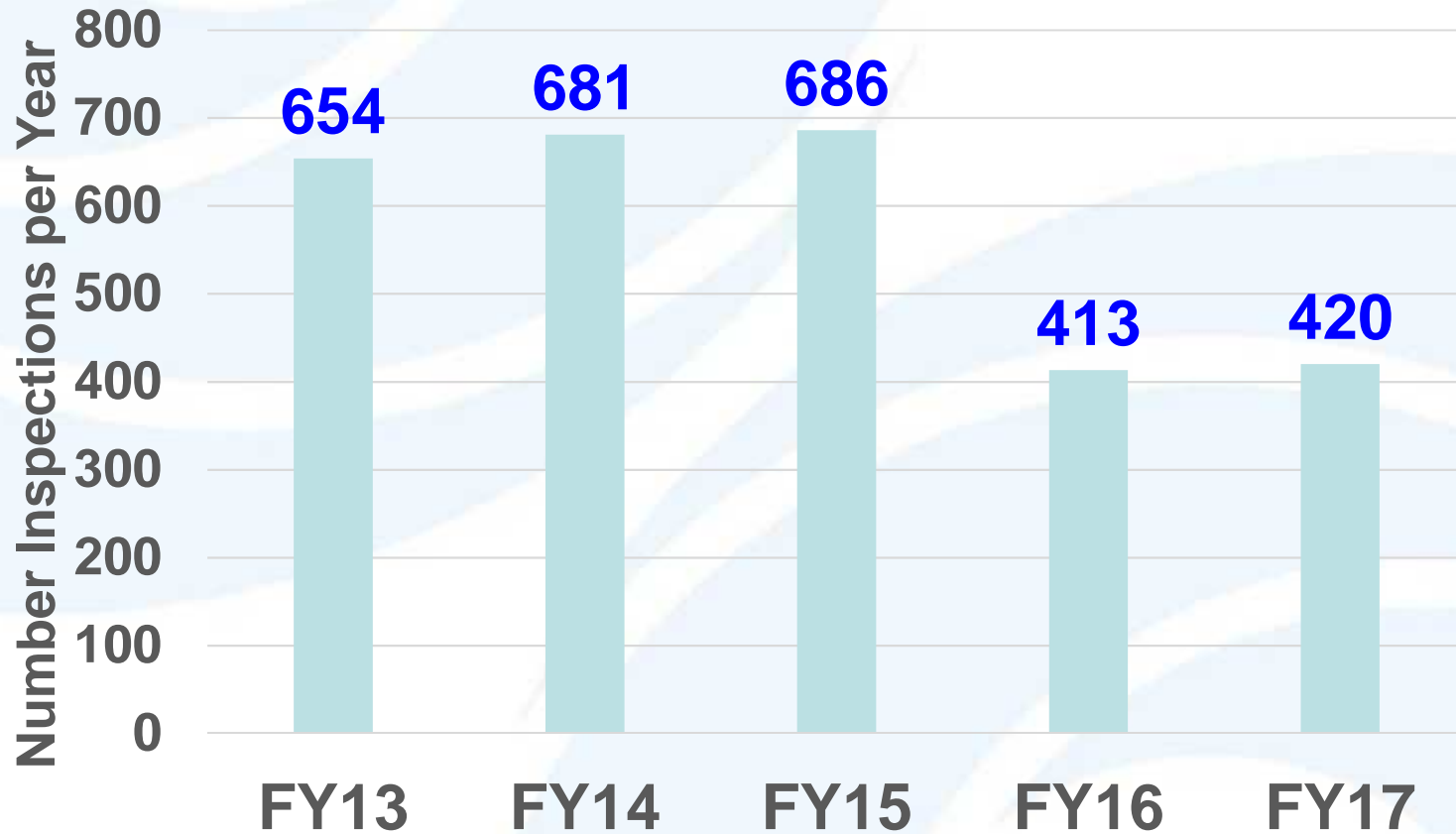
Region 6 Enforcement Data - ALL Upstream* and 213112 Contractor Inspections (Fed + State FY 13 – FY 17)

- Total Number of Violations..... 1,983 (1,091)
- Percent Violations Classified as SWRU66.4% (78.4%)
- Violations issued per Inspection..... 2.38 (2.33)
- Total Initial Penalty.....> \$5.3 million
(\$2.8 million)
- Average Initial Penalty per Serious Violation... \$4,162 (\$4,288)

* Includes the 3 Oil Patch NAICS 211111; 213111; 213112



Number of Inspections per Year ALL Upstream* (Fed + State FY 13 – FY 17)



* Includes the 3 Oil Patch NAICS 211111; 213111; 213112

Oil and Gas Injuries



Region VI – Employer Reported (All Industries)

- In FY 2017 there were 2,678
 - Of the 2,678 there were 573 (21%) were inspected
- In FY 2018 there were 1,452
 - Of the 1,452 there were 289 (20%) were inspected



Compare the NAICS for FY 2017

Drilling Oil and Gas Wells NAICS 213111

67 (3%)

- 10 (2%) Inspected
- 18 (27%) Amputations
- 54 (81%) Hospitalizations

Drilling Activities for Oil and Gas NAICS 213112

168 (6%)

- 26 (5%) Inspected
- 45 (27%) Amputations
- 135 (80%) Hospitalizations



Compare the NAICS for FY 2018

Drilling Oil and Gas Wells NAICS 213111

45 (3%)

- 8 (3%) Inspected
- 14 (31%) Amputations
- 38 (84%) Hospitalizations

Drilling Activities for Oil and Gas NAICS 213112

84 (6%)

- 16 (6%) Inspected
- 25 (30%) were Amputations
- 66 (79%) were Hospitalizations

Region VI Hospitalizations

Area Office	FY 17	FY 18
Austin	5	2
Baton Rouge	18	11
Corpus Christi	24	7
Dallas	4	4
El Paso	13	24
Fort Worth	5	6
Houston North	4	3
Houston South	4	3
Lubbock	81	27
Little Rock	0	0
Oklahoma City	22	15
San Antonio	9	2
Total	189	104



Region VI Amputations

Area Office	FY 17	FY 18
Austin	2	1
Baton Rouge	5	2
Corpus Chisti	4	5
Dallas	3	0
El Paso	6	5
Fort Worth	4	1
Houston North	4	2
Houston South	3	2
Lubbock	23	16
Little Rock	1	0
Oklahoma	4	5
San Antonio	4	0
Total	63	39



Oil and Gas Fatalities



Region VI Fatalities by NAICS FY 17

NAICS	Description	Fatality
211120	Crude Petroleum Extraction	0
211130	Natural Gas Extraction	0
213111	Drilling Oil and Gas Wells	6
213112	Drilling Activities for Oil and Gas Operations	19
Total Fatalities		25



Region VI Fatalities by NAICS FY 18

NAICS	Description	Fatality
211120	Crude Petroleum Extraction	0
211130	Natural Gas Extraction	0
213111	Drilling Oil and Gas Wells	5
213112	Drilling Activities for Oil and Gas Operations	9
Total Fatalities		14



Oklahoma & Lubbock, TX

- 2017 Fatalities OK – 3
- 2018 Fatalities OK – 11

- 2017 Fatalities Lubbock – 11
- 2018 Fatalities Lubbock - 1



2017 Oklahoma (3)

- Oct 6. – Employee crushed between gin pole truck and mud pump.
- May 30 – Employee struck in head when chain snub line broke.

2018 Oklahoma (11)

- Nov. 27 – employee struck by high pressure valve during fracturing.
- Dec. 21 – Workover rig overturned with employee in derrick.
- Jan 22 – Five workers killed during drilling operations.
- April 3 – Worker fell from rig appx. 60 ft.



2017 Lubbock, TX

- Dec. 10 – Ran over by truck twice
- Feb. 2 – Fall from substructure
- June 9 – Struck in chest from flying debris
- June 29 – Struck in head by debris from explosion
- July 8 – Heat
- August 31 – Struck by traveling block



Region VI Fatalities

FY 2017

Caught In or Between	3	12%
Falls	3	12%
Heat	2	8%
Other	3	12%
Struck By or Against	14	56%

FY 2018

Caught In or Between	1	8%
Explosion	4	31%
Falls	2	15%
Other	1	8%
Struck By or Against	5	38%
Valve Rupture	1	8%



“Fatal Four” responsible for more than half of the fatalities investigated

- Falls
- Struck By
- Electrocution
- Caught-in/between

Eliminating the Fatal Four Would save hundreds of worker’s lives every year!



Oil and Gas Violations



Top Ten Violations

Most frequently cited OSHA regulations during FY 2017 inspections

1. Fall Protection
2. Hazard Communication
3. Scaffolding
4. Respiratory Protection
5. Lockout/Tagout
6. Ladders
7. Powered Industrial Trucks
8. Machine Guarding
9. Fall Protection – training req.
10. Electrical – Wiring Methods



Top 5 violations – 211120 – Crude Petroleum Extraction

1.	1904.39(a)(2)	Reporting fatalities, hospitalizations, amputations, and losses of an eye as a result of work-related incidents to OSHA.
2.	1910.106(h)(7)(i)(a)	Precautions shall be taken to prevent the ignition of flammable vapors
3.	1910.119(e)(3)(v)	The employer shall perform an initial process hazard analysis (hazard evaluation) on processes covered by this standard.
4.	1910.119(o)(2)	The compliance audit shall be conducted by at least one person knowledgeable in the process.
5.	1910.1200(e)(1)(ii)	The methods the employer will use to inform employees of the hazards of non-routine tasks.....



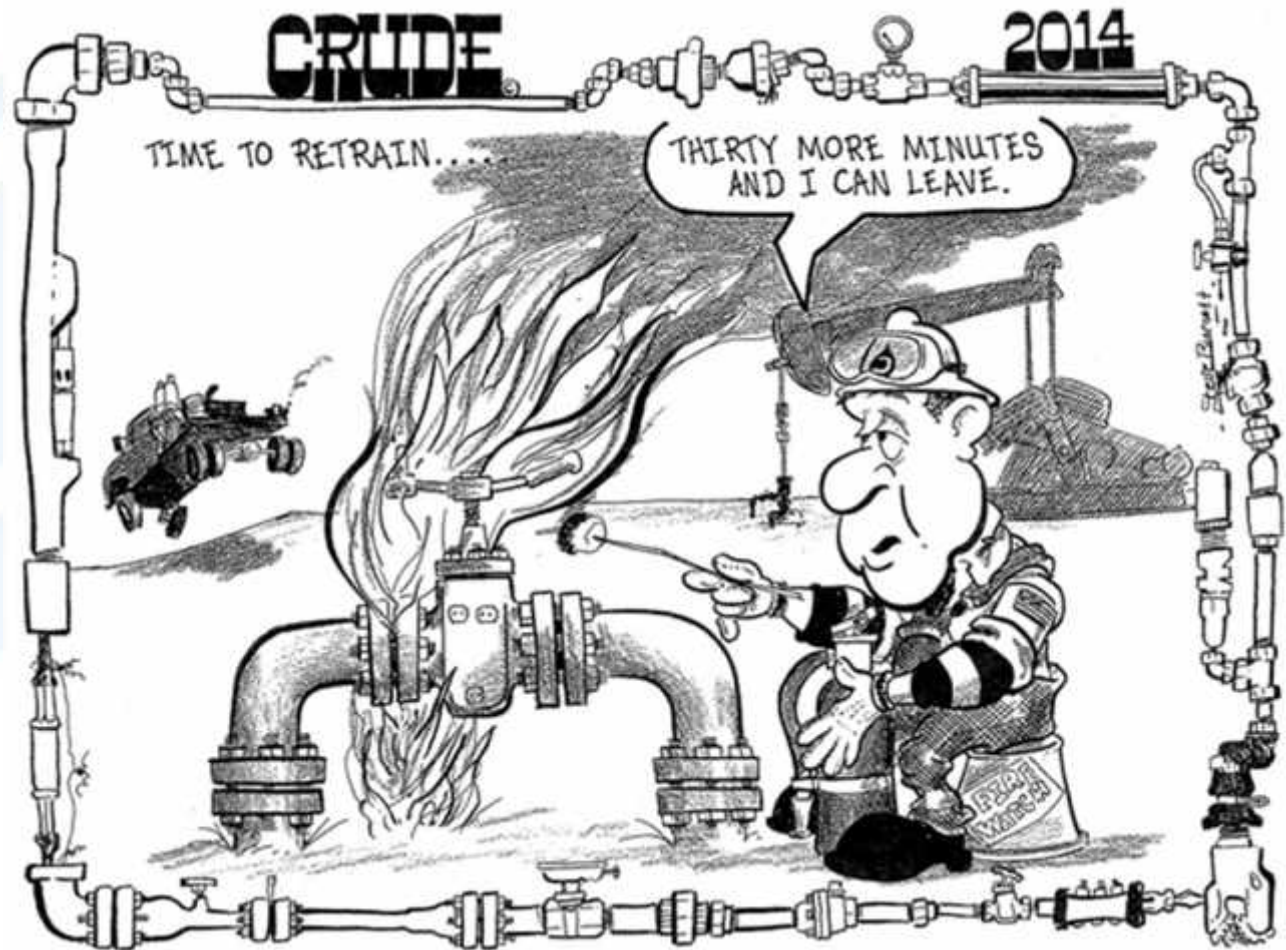
Top 5 violations – 213111 – Drilling Oil and Gas Wells

1.	1910.305(g)(2)(iii)	Flexible cords and cables shall be connected to devices and fittings so that strain relief is provided
2.	1910.212(a)(1)	Types of guarding. One or more methods of machine guarding shall be provided to protect the operator and other employees
3.	1910.305(b)(1)(i)	Conductors entering cutout boxes, cabinets, or fittings shall be protected from abrasion, and openings through which conductors enter shall be effectively closed.
4.	1910.151(c)	...suitable facilities for quick drenching or flushing of the eyes and body shall be provided within the work area for immediate emergency use.
5.	1910.1200(f)(6)	the employer shall ensure that each container of hazardous chemicals in the workplace is labeled, tagged or marked with....



Top 5 violations – 213112 – Support Services for Oil Gas

*Violations are the same as 213111



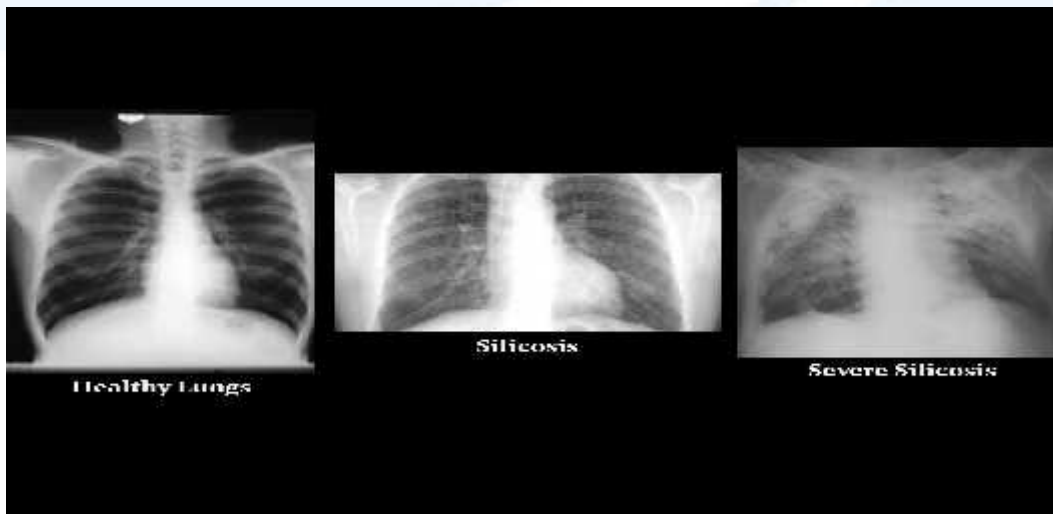
OSHA Updates

- Silica
- Fall Stand down
- Safe and Sound Week
- Workers Memorial Day
- Heat Stress




Silica Standard

- About 2.3 Million people in the U.S. are exposed to silica at work.
- Workers who inhale crystalline silica particles are at an increased risk of developing serious silica-related diseases including :
 - Silicosis (an incurable lung disease)
 - Lung Cancer
 - Chronic COPD
 - Kidney Disease



Silica Standard

- To better protect workers, OSHA has issued two new respirable crystalline silica standards.
 - **Construction:** enforcement began September 23, 2017.
 - **General Industry & Maritime:** enforcement will begin June 23, 2018.



"The very best thing you can do to protect a company is to protect the workers who are, in effect, the heart and soul of that company. The two go together."

–Michael Mangum
National Asphalt Pavement
Association program director



Silica Standard Dates

- General industry and maritime employers must comply with all requirements of the standard by June 23, 2018
EXCEPT:
- Hydraulic fracturing operations in the oil and gas industry must implement engineer controls to limit exposures to the new PEL by June 23, 2021.
- Medical Surveillance must be offered to employees who will be exposed at or above the action level for 30 or more days starting on June 23, 2020.
- Until June 23, 2018, general industry and maritime employers must limit employee exposure to respirable crystalline silica to the previous PELs:
 - 29 CFR 1910.1000 Air contaminants



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Silica Standard Requirements

- Assess employee exposure to silica, if it may be at or above $25\mu\text{g}/\text{m}^3$
- Protect workers from respirable silica exposures above permissible exposure limit (PEL) ($50\mu\text{g}/\text{m}^3$)
- Limit workers' access to area where they could be exposed above the PEL
- Use dust controls to protect workers when above the PEL
- Provide respirators to workers when dust controls cannot limit exposures
- Use housekeeping methods that do not create airborne dust
- Establish and implement a written exposure control plan
- Offer medical exams – including chest X-rays and lung function tests
- Train workers on work operations that result in silica exposure
- Keep records of exposure measurements



Silica Resources



NIOSH:

<https://www.cdc.gov/niosh/topics/silica/default.html>

OSHA NIOSH Alert:

https://www.osha.gov/dts/hazardalerts/hydraulic_frac_hazard_alert.html

OSHA Silica Fact Sheet:

<https://www.osha.gov/pls/publications/publication.athruz?pType=Industry&pID=192>

OSHA Clinicians page:

<https://www.osha.gov/dts/oom/clinicians/index.html>

OSHA etool: <https://www.osha.gov/dsg/etools/silica/index.html>

Video: <https://youtu.be/HAByllzQSuU>



National Safety Stand-down



**National Safety
STAND-DOWN**
TO PREVENT FALLS IN CONSTRUCTION

MAY 7-11, 2018

Stop Falls Stand-Down

- Plan a toolbox talk or other safety activity
- Take a break to talk about how to prevent falls
- Provide training for all workers

For more information:
www.osha.gov/StopFallsStandDown
#StandDown4Safety • (800) 321-OSHA (6742)

U.S. Department of Labor Occupational Safety and Health Administration Centers for Disease Control and Prevention OSHA TOSH Safety Pays. Falls Cost.

- What? – A Safety Stand-Down is a voluntary event for employers to talk directly to employees about safety.
- Who? - Anyone who wants to prevent hazards in the workplace can participate!
- When? – May 7-11, 2018.
- How? - Companies can conduct a Safety Stand-Down by taking a break to have a toolbox talk or another safety activity such as conducting safety equipment inspections, developing rescue plans, or discussing job specific hazards.

<https://www.osha.gov/StopFallsStandDown/index.html>



SAFE + SOUND



What Is Safe + Sound Week?

A nationwide event **AUGUST 13-19, 2018** to raise awareness and understanding of the value of safety and health programs that include management leadership, worker participation, and a systematic approach to finding and fixing hazards in workplaces.

Why Participate?

Safe workplaces are sound businesses. Successful safety and health programs can proactively identify and manage workplace hazards before they cause injury or illness, improving sustainability and the bottom line.

Who Is Encouraged to Participate?

Organizations of any size or in any industry looking for an opportunity to show their commitment to safety to workers, customers, the public, or supply chain partners should participate.

How to Participate

Participating in Safe + Sound Week is easy. To get started, select the activities you would like to do at your workplace. Some organizations might want to host a public event.

<https://www.osha.gov/safeandsoundweek/>



Workers' Memorial Day

April 28, 2018

Every year, events are held across the country to remember workers who have died on the job and honor them by continuing to fight for improved worker safety. Please click on the map below to find one near you. All events listed are free and open to the public.

<https://www.osha.gov/workersmemorialday/index.html>



Heat Stress Campaign



The work can't get done without them.



- In 2016, **39** workers died from heat exposure. **220** Since 2011
- More than **4,110** workers were injured from heat related illnesses. **21,350** since 2011
- Acclimate!



Heat Stress Campaign

OSHA Heat Safety Tool

Get Current Get Today Max

Or Enter Numbers:

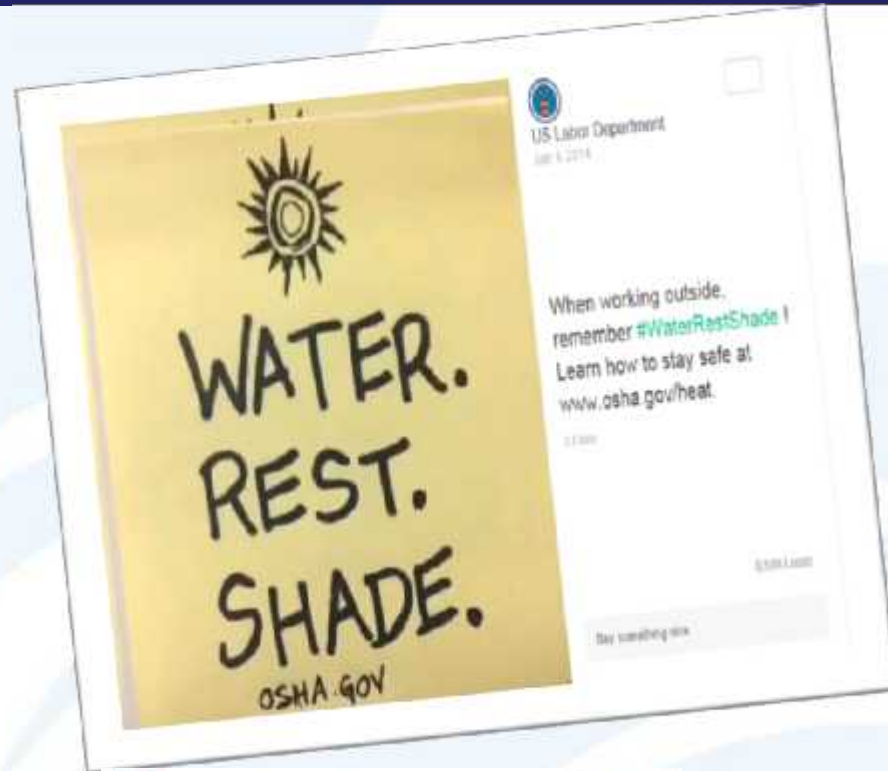
Temperature 89 °F Humidity 80 % Calculate

Heat Index 109.7 °F

Risk Level HIGH

Precautions

Home More Info



US Labor Department
@USDOL Follow

It's a cruel, cruel summer! Try #OSHA's app to calculate heat index in your area and prevent heat illness on the job: ow.ly/yUB7w

Reply Retweet Favorite More



April is Distracted Driving Month

- **From the National Safety Council:**

Distracted driving is a public health issue that affects us all.

- Motor vehicle fatalities are up 6 percent from 2015

- Over 40,000 people died last year

- Cell phones
 - Dash board infotainment
 - Evolving voice commands

- Sign up for our free materials at

- nsc.org/ddmonth



November 7, 2000



November 7, 2000

- Marks the last non fatality day on Texas roads!



October 2015

- Marks the Deadliest month in Texas with 356 fatalities.





Working Together, We Can Help

www.osha.gov

800-321-OSHA (6742)

