Mastering OSHA Compliance



Effective Safety & Health Programs

- Management Commitment
- Employee Involvement.
- Worksite Analysis
- Hazard Prevention and Controls
- Training and Understanding
- Continuous Improvement



Hazard Control

• How do you control what goes on the workplace?

 People will do what you inspect, but necessarily what you expect



The test questions

- Do you have clear rules and expectations?
- How do you know employees understand the rules and expectations?
- Do you have an effective process to discover deviations from expectations?
- Do you have an effective enforcement program?



Common citations

- Lockout
- Electrical hazards
- Machine Guarding
- Powered Industrial Trucks
- Hazard Communication
- Personal protective equipment
- Respiratory Protection
- Safe Exit Routes
- Fire Extinguishers
- General Duty

- Silica
- Noise
- Fall hazards
- Process safety management
- Housekeeping
- Confined space hazards
- Reporting and recordkeeping
- Slings
- Cranes



PPE hazard assessment

Assessment of all jobs/tasks.

Written certification.

Certifying official identified.

Date of last evaluation

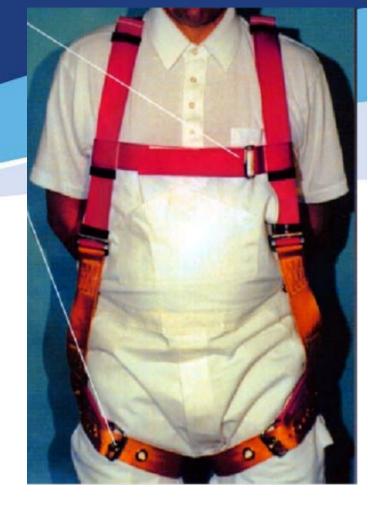


PPE hazard assessment

| | Apron | chemical resistant gloves | face shield | metatarsal safety shoes | safety glasses | leather gloves | hearing protection | HEPA respirator |
|---------------------------|-------|---------------------------|-------------|-------------------------|----------------|----------------|--------------------|-----------------|
| Painter | X | X | X | | X | | | |
| Grinding (abrasive wheel) | | | X | | X | | X | |
| Garbage collection | | | | X | X | X | | |
| Battery maintenance | X | X | X | X | X | | X | |
| Furnace Cleaning | | | X | X | X | X | X | X |
| | | | | | | | | |

Training / Understanding

- When
- What
- How
 - to put on and off, adjust, fit, & wear
- Its limitations
- Proper care, maintenance, useful life, & disposal



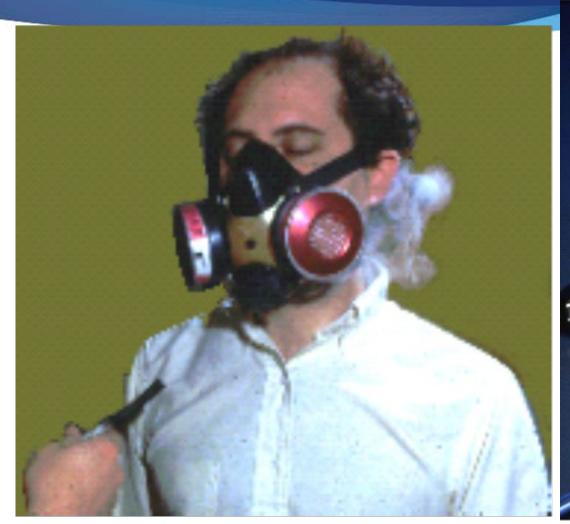


Respiratory Protection Program

- Program Administrator
- Written program selection process
 - Do you know the level of the contaminant?
- Medical evaluation
- Fit test
- Training
- Recordkeeping



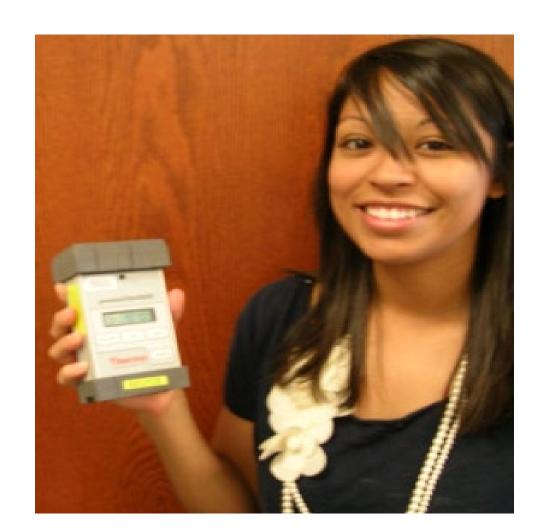
Fit test





How dusty is it?

• It is so dusty that...



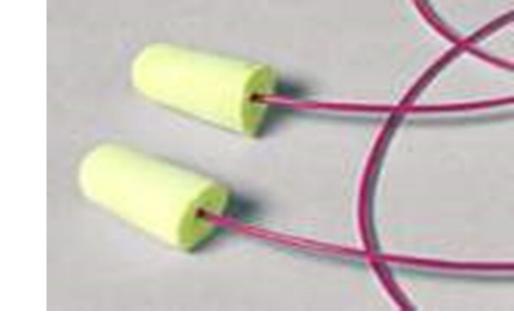


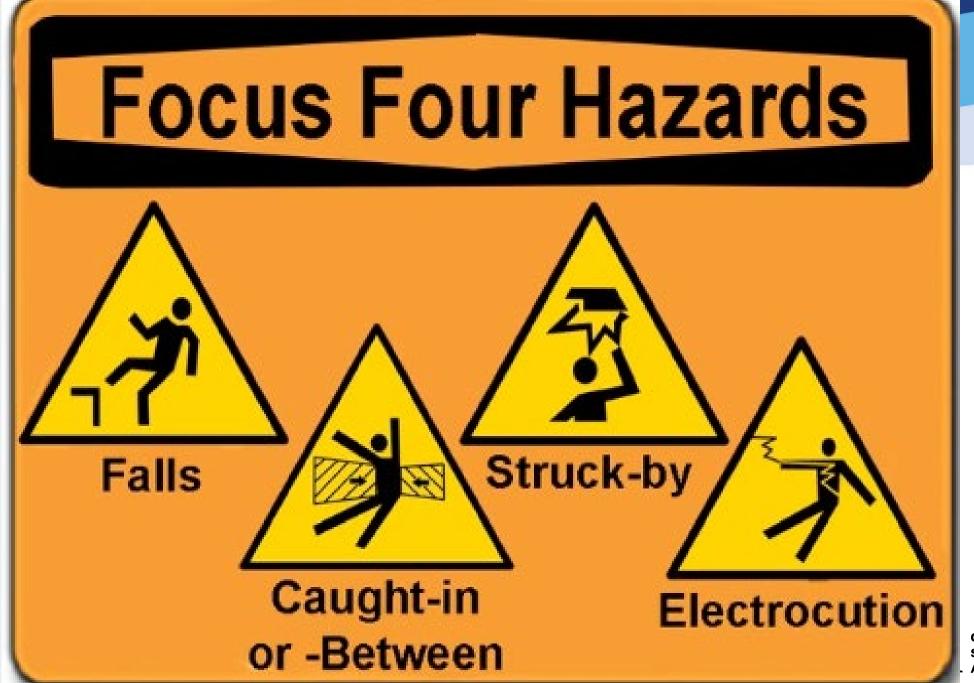
Carbon monoxide fatalities and hospitalizations



Noise - Hearing Conservation

- d. Monitoring
- e. Employee notification above A.L.
- f. Observation of monitoring
- g. Audiometric testing (who, when & evaluation)
- h. Audiometric test requirements (how)
- i. Hearing protectors
- j. Hearing protector attenuation
- k. Training
- l. Access to information and training materials
- m. Recordkeeping





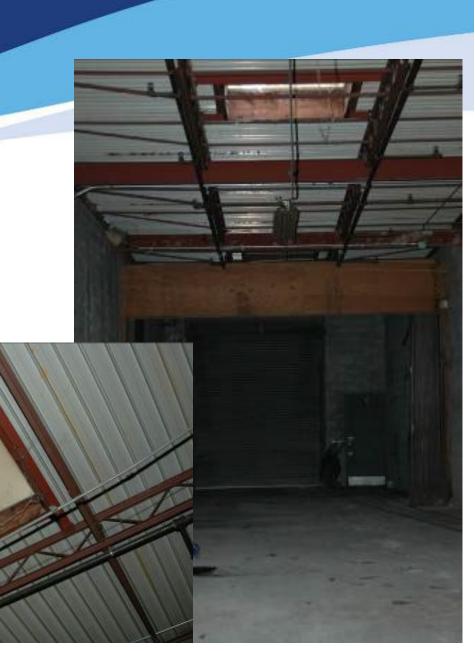
Occupational
Safety and Health
Administration

Fall protection training

- (i) The fall hazards in the area and how to recognize them;
- (ii) The procedures to be followed to minimize those hazards;
- (iii) The procedures for installing, inspecting, operating, maintaining, and disassembling the fall protection systems;
- (iv) The personal fall protection systems and equipment including, proper hook-up, anchoring, tie-off techniques, equipment inspection and storage.







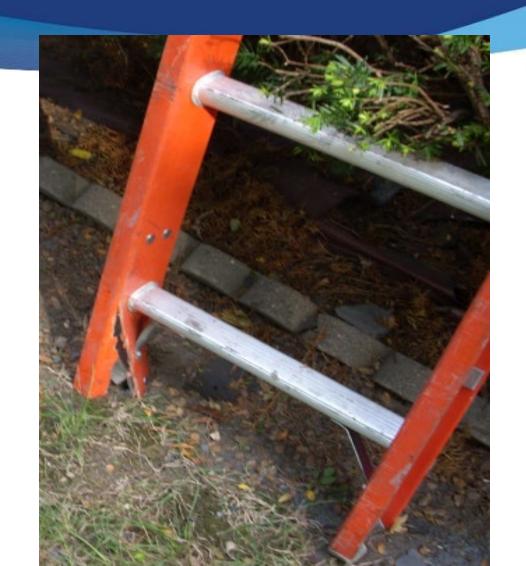
Fall protection proper use

Fall protection v restraint

Swing fall hazard



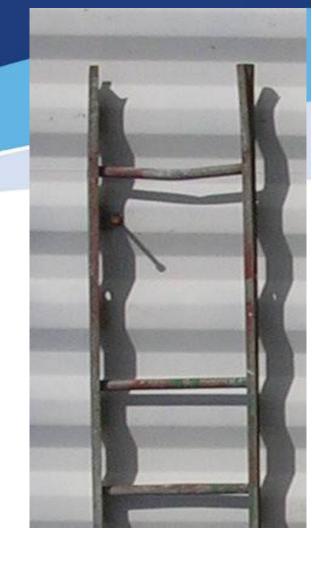
Ladder hazards?





Ladders – Rules to Protect

- Inspected before use
- Removed if damaged
- Secured
- Extend 3 feet above access/roof
- Used properly
- Contact with hazard





Aerial lift

Full body
 harness and
 lanyard must be
 used in aerial
 lifts



Material Handing Fatality



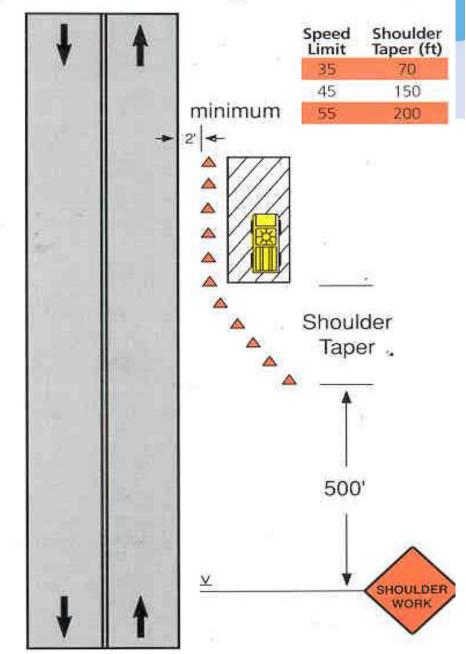
 Forklift loading 20 foot long 16-inch diameter pipe onto truck bed

Appropriate traffic control

 Temporary traffic control in accordance with MUTCD or IDOT.

- Advance warning signs
- Channeling devices
- Barriers

Shoulder Work (2' – 15' From the Edge of Pavement)



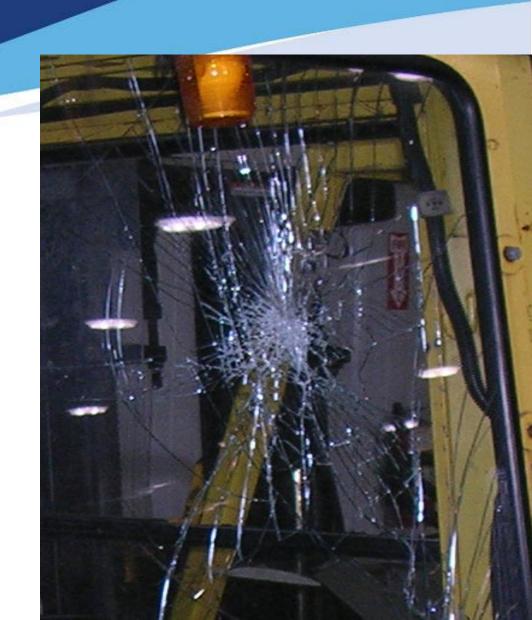
Powered Industrial Vehicles

Training

Evaluation

Inspection

Removed from service until safe



How is your enforcement?

- 1910.176(a): safe clearances was not allowed for aisles doorways and wherever turns were made and aisles were not kept clear with no obstructions that could create a hazard:
- 1910.178(n)(1): All traffic regulations were not observed. A safe distance was not maintained approximately three truck lengths from the truck ahead, and the truck was not kept under control at all times:
- 1910.178(n)(8): Under all travel conditions the truck was not operated at a speed that would permit it to be brought to a stop in a safe manner:



machine guarding assessment

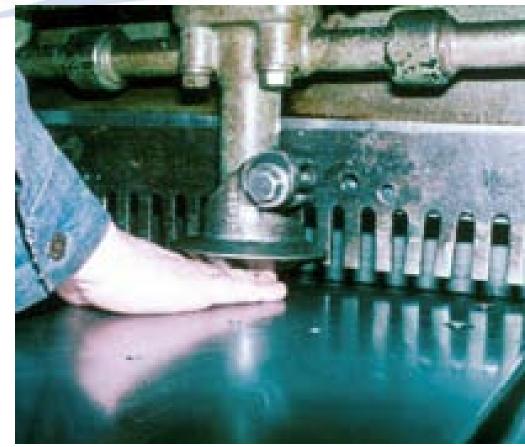






Amputation NEP

 Complaints and referrals alleging potential exposures to amputation hazards that could result in injury must be handled by an inspection.





Protection





Lockout

- Written program
 - Group lockout
- Specific procedures
 - Energy sources
 - Method of isolation
 - Verification
- Training
- Periodic Inspection



hazard communication program

- Management responsibility for program
- Develop list of hazardous chemicals
- Label hazardous chemical containers
- Manage Safety Data Sheets
- Procedures for training exposed employees
- Address the hazards of non-routine tasks
- Procedures for Multi-employer workplaces



Health Hazard Carcinogen Mutagenicity Reproductive Toxicity Respiratory Sensitizer **Target Organ Toxicity** Aspiration Toxicity

Flame



- Flammables
- **Pyrophorics**
- Self-Heating
- **Emits Flammable Gas**
- Self-Reactives
- **Organic Peroxides**

Exclamation Mark



- Irritant (skin and eye)
- Skin Sensitizer
- **Acute Toxicity**
- Narcotic Effects
- Respiratory Tract **Irritant**
- **Hazardous to Ozone** Layer (Non-Mandatory)

Gas Cylinder



Gases Under Pressure

Corrosion



- Skin Corrosion/Burns
- Eye Damage
- Corrosive to Metals

Exploding Bomb



- **Explosives**
- Self-Reactives
- **Organic Peroxides**

Flame Over Circle



Oxidizers

Environment

(Non-Mandatory)



Aquatic Toxicity

Skull and Crossbones



Acute Toxicity (fatal or toxic)



Employee training

- Methods and observations used to detect a release of a hazardous chemical
 - (monitoring, odor, visual appearance)
- The physical and health hazards of chemicals in the work area.
- The measures employees can take to protect themselves
 - (specific procedures, work practices, emergency procedures, and ppe)
- The details of the hazard communication program
 - (labeling, MSDS's, and how to obtain and use the information.



Hazard Communication update

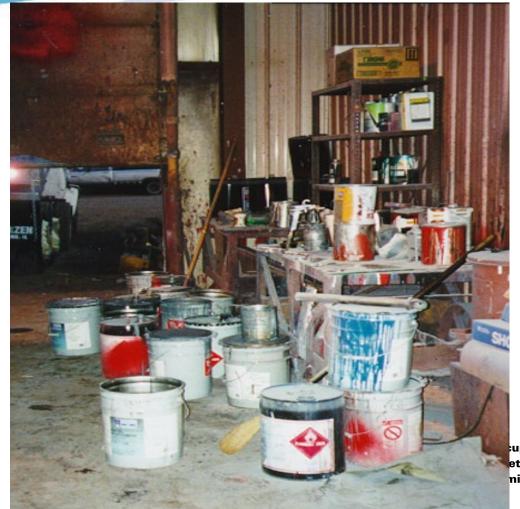
- Adding hazard classes in Appendix B (physical hazards) will give more complete and detailed information about:
 - Flammable gases expanding hazard categories
 - Desensitized explosives
 - Aerosols including additional hazard category

Timetable for compliance effective July 16, 2024.

| Compliance Date | Requirement(s) | Who | | | |
|---|---|--|--|--|--|
| 18 months after publication | Update labels and SDSs for substances | Chemical manufacturers, importers, distributors and employers | | | |
| 24 months after publication date | Update workplace labels, hazard communication program and training as necessary | Employers | | | |
| 36 months after publication | Update labels and SDSs for mixtures | Chemical manufacturers, importers, distributors and employers | | | |
| 42 months after publication | Update workplace labels, hazard communication program and training as necessary | Employers | | | |
| Transition Period - July 19, 2024 to the effective completion dates noted above | May comply with either 29 CFR 1910.1200 (this final standard), or the previous (2012) standard, or both | Chemical manufacturers, importers, distributors, and employers | | | |

Chemical storage and use

- Flammable or combustible liquids shall be stored in tanks or closed containers.
- 1910.106(e)(2)(ii)



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Flammable liquid storage

- The quantity of liquid that may be located outside of an inside storage room or storage cabinet in a building or in any one fire area of a building shall not exceed:
- 25 gallons of Category 1 flammable liquids in containers
- 120 gallons of Category 2, 3, or 4 flammable liquids in containers

• 660 gallons of Category 2, 3, or 4 flammable liquids in a single portable tank.



Combustible dust

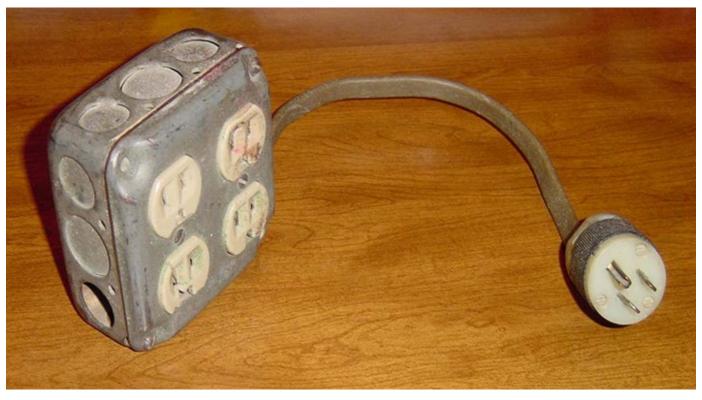
Housekeeping

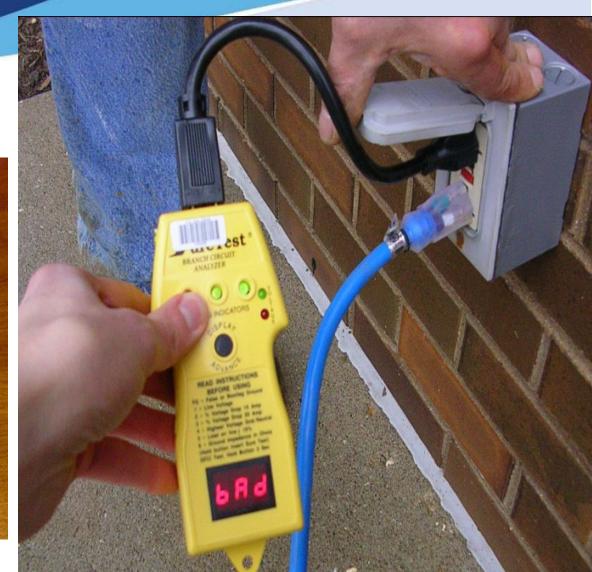
Return air without protection

Deflagration propagation protection

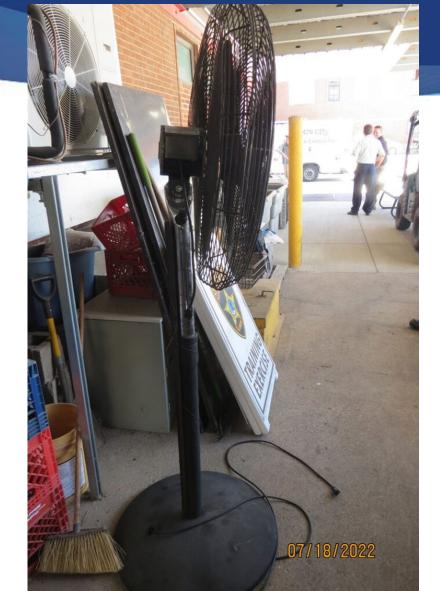


Have you checked your electrical equipment?





Electrical hazards









Power lines

 Maintain a minimum of a 10-foot clearance from power lines.

 Additional 0.4 inch for every 1 kV over 50 kV.



Sure looks nice out. Where is the hazard?



Servicing an irrigation well



Two employees asphyxiated in 8x8x8 concrete pit



Confined space entry

 Document air monitoring results prior to entry into any confined space

Rescue practice





2025 National Emphasis Programs

- Fall
- Heat
- Excavations
- Amputation hazards
- Lead
- Silica
- Hexavalent chrome

- Warehousing
- Combustible dust
- Shipbreaking
- Primary metals
- Process Safety Management



2025 Regional Emphasis Programs

- Powered industrial vehicles
- Noise
- Grain handling
- Food manufacturing
- Tank cleaning

- Building renovation
- High rise building
- Wood pallet manufacturing



Warehousing NEP

- Reducing exposure to common hazards:
 - powered industrial vehicle operations
 - material handling/storage
 - walking-working surfaces
 - means of egress
 - fire protection
- Heat and Ergonomic hazards.



Fire extinguisher training

- Where portable fire extinguishers are provided
- The employer shall provide an educational program to familiarize employees with the general principles of fire extinguisher use and the hazards involved with incipient stage fire fighting.



General duty violations

Exposed employees

Serious hazard

Employer knowledge

Feasible method to control hazards



Ergonomic stressors

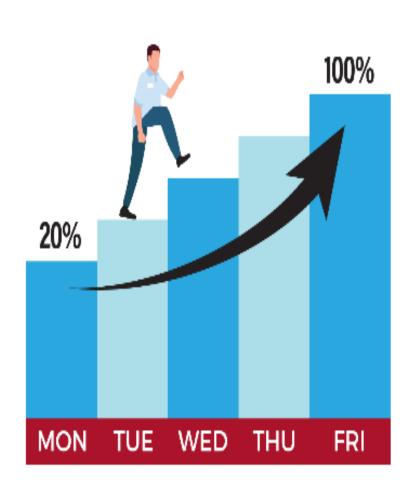
Employees were required to manually lift pork product boxes, averaging 52 pounds, from the palletizing conveyor onto pallets from the floor level up to 9 product tiers in height. The frequency and duration of lifts, weights of the products, repetitive motions, and postures exposed employees to the risk of low back injuries.

Damaged storage systems

Employees were exposed to struck-by and crushing hazards when conducting warehouse tasks at and/or near pallet rack storage systems that were damaged due to forklift impacts. The storage racking systems had damaged/deflected upright columns that included, but were not limited to the columns and racking components of the following storage racks: 03-31-35-02-01, 03-32-32-02-01, 02-20-31-02-02, 04-34-28-02-01, 02-29-17-02-01.

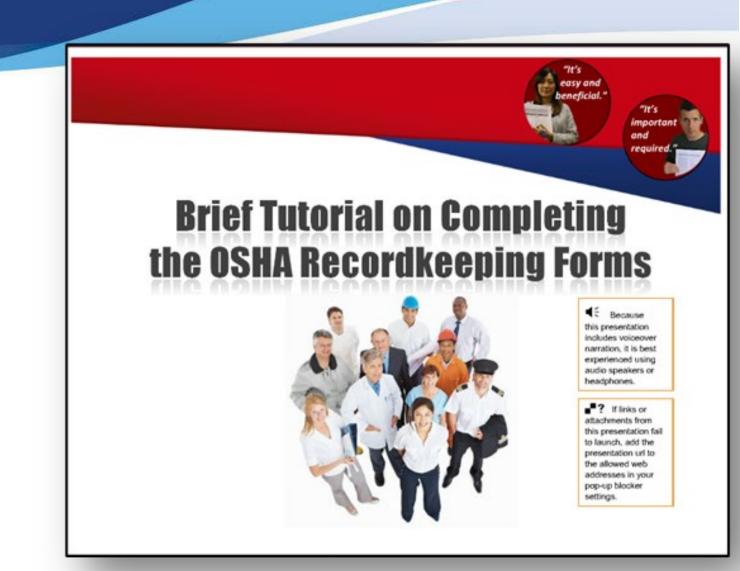
Heat Illness Prevention

- Written Heat Illness Prevention Program
- Plan to acclimatize new workers
- Water intake plan
- Know signs of heat illnesses
- Management ensures check on workers
- Plan for emergencies
- Understanding



OSHA Recordkeeping

- **1**1, 20, 100
- OSHA 300
- OSHA 300A
- OSHA 301



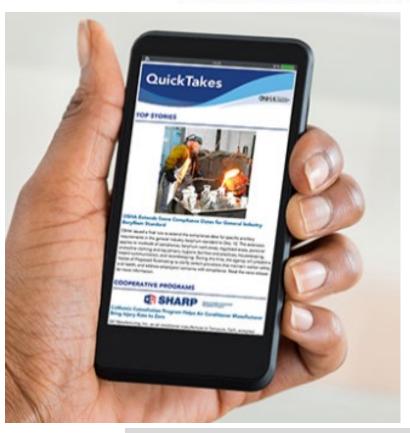


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OSHA QuickTakes



- Free OSHA e-newsletter delivered twice monthly to more than 382,000 subscribers
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