

FPST 2023 – Industrial and Occupational Safety

Syllabus

1

What is Occupational Safety?



2

Occupational Safety

- Protecting the safety and health of people engaged in work or employment through assessing, eliminating/mitigating risk and fostering a safe work environment
- Protecting People, Property, Process, and the Environment

3



Intro to OSHA

FPST 2023

4

OSHA



- The Occupational Safety & Health Administration
- Created by the Williams-Steiger Occupational Safety & Health Act of 1970 (aka – “OSHAct”)
 - Rep. William Steiger (R) of OshKosh Wisconsin
 - Sen. Harrison Williams (D) of New Jersey
- Establishes specific employer and employee responsibilities for workplace safety
- 29 U.S.C. §§ 651-67
- signed into law Dec. 29, 1970 by Richard Nixon
- OSHA the agency formally came into being on April 28, 1971



5

OSHA

- Secretary of Labor
 - Alexander Acosta
- Asst. Secretary for Occupational Safety and Health Administration
 - Loren Sweatt, Acting
- Appointed by the President of the United States
- Confirmed by the US Senate



6

OSHA's Mission

- To save lives, prevent injuries and protect America's workers
- By:
 - Provide for research
 - Establish separate but dependent responsibilities and rights for employers/employees
 - Maintain reporting & recordkeeping system
 - Establish safety training programs
 - Develop & enforce safety standards
 - Evaluate and approve state safety programs
- Through:
 - Strong, fair, and effective enforcement
 - Outreach, education, and compliance assistance
 - Partnerships and other cooperative programs

7

Why is OSHA Important?

- Until 1970, no uniform or comprehensive provisions existed to protect against workplace safety and health hazards.
 - Assumption of risk
 - Contributory negligence
 - Fellow servant rule
- 5,147 workers were killed on the job in 2017. On average, more than 99 a week or more than 14 deaths every day.
- Over 500 fatalities reported in FY 2017
- 1/1/15 – 12/31/17
 - Over 33,000 severe injuries were reported
 - Severe injury
 - a work-related hospitalization, amputation, or loss of an eye

OSHA Makes a Difference

- Worker deaths in America are down—on average, from about 38 worker deaths a day in 1970 to 14 a day in 2016.
- Worker injuries and illnesses are down—from 10.9 incidents per 100 workers in 1972 to 2.9 per 100 in 2016.

8

Who is covered by the OSH Act?

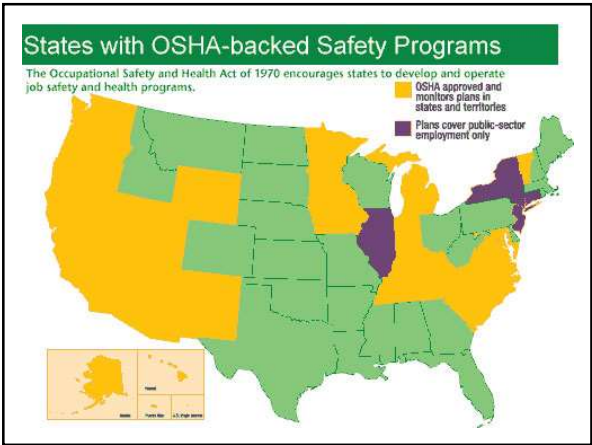
- Private sector employees
 - One or more employees engaged in the business of commerce.
- Coverage is provided directly by federal OSHA or through an OSHA-approved state program
- 26 states operate state plans.
 - State plans are OSHA-approved job safety and health programs operated by individual states instead of by federal OSHA. State plans must provide standards and enforcement programs, as well as voluntary compliance activities, that are "at least as effective as" the federal OSHA program. States with approved plans cover most private sector employees as well as state and local government workers in the state

9

Does not cover

- The self-employed
- Immediate members of farm families that do not employ outside workers
- Employees covered by other federal agencies
 - mine workers (MSHA)
 - certain truckers and rail workers, (DOT)
 - atomic energy workers (NRC)
- Public employees in state and local governments
 - fire fighters, police, and other public servants.
 - Federal workers covered by executive order.

10

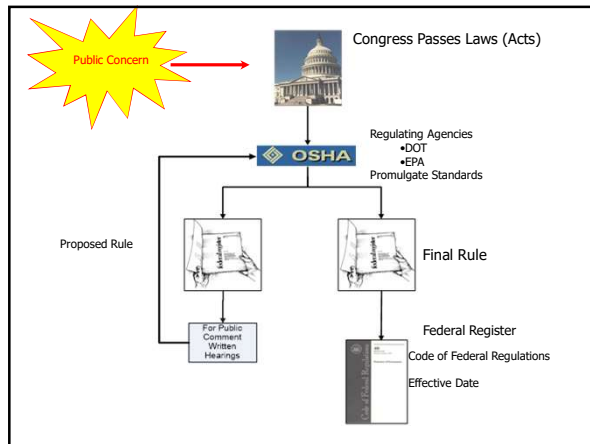


11

Who is covered by OSHA?

Covered by OSHA?	Worker
YES <input checked="" type="radio"/> NO	1. Harry Adams, a miner at Below Ground Inc.
<input checked="" type="radio"/> YES NO	2. Adrian Smith, one of 3 employees of ABC landscaping.
YES <input checked="" type="radio"/> NO	3. Taylor Dell, an accountant in business for herself.
<input checked="" type="radio"/> YES NO	4. Rob Jones, one of 10 carpenters working for Woody, Inc.

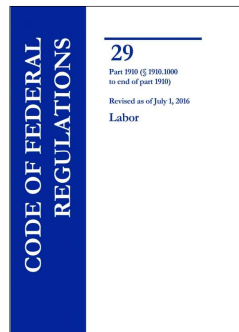
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13

The Code of Federal Regulations

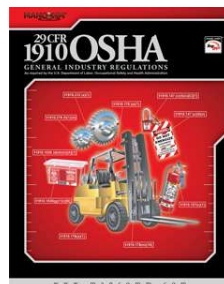
- **CFR consists of 50 Titles:**
- Title 1: General Provision
- Title 2: Reserved
- Title 3: The President
- **Title 29: Labor**
- Title 40: Environmental Protection
- Title 49: Transportation
- Title 50: Wildlife and Fisheries



14

29 CFR 19XX

- 29 CFR 1910
 - General Industry
- 29 CFR 1926
 - Construction
- 29 CFR 1904
 - Recordkeeping



15

29 CFR 19XX

- Everything pertaining to OSHA is located under Title 29, the Department of Labor.
- The numbers 1900-1999 are reserved for OSHA
- 29 CFR 1910.146(c)(2)(ii)(E)
 - “dot”
 - Not “decimal” or “decimal point”

16

OSHA Standards

- **Horizontal Standards**
 - General standards which apply to any employer in any industry.
 - First aid and fire protection standards
 - Lockout/Tagout
 - Confined Space Entry
 - Hazard communication
 - Walking Working Surfaces

17

OSHA Standards

- **Vertical Standards**
 - Vertical Standards are specific standards that are relevant to only one particular industry.
 - 29 CFR 1910 Subpart R
 - General Industry Standard
 - Pulp & Paper
 - Telecommunications
 - Electric Power Transmission & Generation
 - 29 CFR 1926
 - Construction Industry Standards

18

Standards Incorporated By Reference



Standards are drawn from recognized and generally accepted good engineering practices. Examples:

- National Fire Protection Association (NFPA)
- Compressed Gas Association (CGA)
- National Electric Code (NEC)
- American National Standards Institute (ANSI)
- American Society of Testing Materials (ASTM)



19

NFPA Standards

- [NFPA 1](#) Uniform Fire Code
- [NFPA 10](#) Standard for Portable Fire Extinguishers
- [NFPA 11](#) Standard for Low, Medium, and High-Expansion Foam
- [NFPA 12](#) Standard on Carbon Dioxide Extinguishing Systems
- [NFPA 13](#) Standard for the Installation of Sprinkler Systems
- [NFPA 14](#) Standard for the Installation of Standpipe, Private Hydrants, and Hose Systems
- [NFPA 15](#) Standard for Water Spray Fixed Systems
- [NFPA 17](#) Standard for Dry Chemical Extinguishing Systems
- [NFPA 18](#) Standard on Wetting Agents
- [NFPA 22](#) Standard for Water Tanks for Private Fire Protection
- [NFPA 70](#) National Electric Code
- [NFPA 70E](#) Standard for Electrical Safety in the Workplace

20

29 USC 654 Section 5(a)(1)

- General Duty Clause
 - The Employer shall furnish each employee ...a place of employment which are **free from recognized hazards** that are **causing or are likely to cause** death or serious physical harm to his employees. *(emphasis added)*
 - Whenever OSHA does not have a specific written regulation to address a workplace hazard, they will cite an employer using the General Duty Clause.
 - A "catch-all"

21

Employer Responsibilities

- Provide a workplace **free from recognized hazards** and comply with OSHA standards
- Provide **training** required by OSHA standards
- Keep **records of injuries and illnesses**
- Provide medical exams when required by OSHA standards and provide workers access to their exposure and medical records
- **Do not discriminate** against workers who exercise their rights under the Act (Section 11(c))
- Post OSHA citations and hazard correction notices
- **Provide and pay for most** PPE

22


Employee Responsibilities?

- 5(b)
 - “Each employee shall comply with occupational safety and health standards and all rules, regulations, and orders issued pursuant to the Act which are applicable to his own actions and conduct.”

23

Worker Rights Under OSHA?

- Employees have a fundamental right to:
 - A safe and healthful workplace
 - Know about hazardous chemicals
 - Report injury to employer
 - Complain or request hazard correction from employer
 - Training
 - Hazard exposure and medical records
 - File a complaint with OSHA
 - Participate in an OSHA inspection
 - Be free from retaliation for exercising safety and health rights



24

Employer Responsibilities *(cont.)*

REPORTING AND RECORDING CHECKLIST

Employers must:

- ✓ Report each worker death to OSHA
- ✓ Report each work-related hospitalization, amputation, or loss of an eye
- ✓ Maintain injury & illness records
- ✓ Inform workers how to report an injury or illness to the employer
- ✓ Make records available to workers
- ✓ Allow OSHA access to records
- ✓ Post annual summary of injuries & illnesses

25

OSHA compliance is the
minimum acceptable standard

Equivalent to getting a “D” in this
course

26

Workplace Inspections

- Authority
- Normally notice is not given
- Employee’s representative must be informed



27

Workplace Inspections

- Enter any factory, plant, establishment, construction site, or other areas of the workplace or environment where work is being performed.
- Inspect and investigate during regular working hours any such place of employment and all pertinent conditions, structures, machines, apparatus, devices, equipment, and materials.
- Inspect and investigate at other times any such place of employment and all pertinent conditions, structures, machines, apparatus, devices, equipment, and materials.
- Question privately any employer, owner, operator, agent or employee during an inspection or investigation

28

Notice of Inspections

- OSHA generally conducts inspections without advance notice. In fact, anyone who alerts an employer in advance of an OSHA inspection can receive a criminal fine of up to \$1,000, or a six-month jail term or both.
- Under special circumstances, OSHA may give the employer advance notice of an inspection—but no more than 24 hours.

29

Notice of Inspections

- These special circumstances include:
 - Imminent danger situations
 - Inspections that must take place after regular business hours, or require special preparation
 - Cases where OSHA must provide advance notice to assure that the employer and employee representative or other personnel will be present
 - Situations in which OSHA determines that advance notice would produce a more thorough or effective inspection

30

OSHA Inspection Priorities

- **Imminent Danger** or any condition where there is reasonable certainty that a danger exists that can be expected to cause death or serious physical harm immediately.
- **Catastrophes and fatal accidents** resulting in the death of any employee or the hospitalization of **three or more** employees.

31

OSHA Inspection Priorities

- **Employee complaints** involving imminent danger or an employer violation that threatens death or serious physical harm.
- **Referrals** from other individuals, agencies, organizations, or the media.
- **Planned, or programmed, inspections** in industries with a high number of hazards and associated injuries.
- **Follow-ups** to previous inspections.

32

Inspection Process

- A typical OSHA on-site inspection includes four stages:
 - Presentation of inspector credentials
 - An opening conference
 - An inspection walk-around
 - A closing conference

33

Opening Conference

- In the opening conference, the compliance officer:
 - Explains why OSHA selected the establishment for inspection
 - Obtains information about the establishment.
 - Explains the purpose of the visit, the scope of the inspection, walk-around procedures, employee representation, employee interviews, and the closing conference
 - Determines whether an OSHA funded consultation is in progress or whether the facility has received an inspection exemption.
 - If so, the compliance officer usually terminates the inspection

34

Records Review

- The compliance officer checks posting and recordkeeping practices, including whether the employer has:
 - Maintained records of deaths, injuries, and illnesses;
 - Posted OSHA's Summary of Work-Related Injuries and Illnesses (OSHA 300A) from February 1 to April 30.
 - Prominently displayed the OSHA "It's The Law" poster (OSHA 3165).
- The compliance officer also examines records, where required, of employee exposure to toxic substances and harmful physical agents.

35

Inspection Walk-around

- After the opening conference, the compliance officer and accompanying representatives proceed through the establishment, inspecting work areas for potentially hazardous working conditions.
- The compliance officer will discuss possible corrective actions with the employer.
- OSHA may consult, at times privately, with employees during the inspection walk-around.

36

Inspection Walk-around

- An inspection walk-around may cover only part of an establishment – particularly if the inspection resulted from a specific complaint, fatality, or catastrophe, or, is part of a local or national emphasis program.
- Other inspections may cover the entire facility, “wall to wall.”
- Trade secrets observed by the compliance officers are kept confidential.
- Federal employees who release confidential information without authorization are subject to a \$1,000 fine, one year in jail, or both, and removal from office or employment.

37

Inspection Walk-around

- Some apparent violations detected by the compliance officer can be corrected immediately.
- The compliance officer records such corrections to help evaluate the employer’s good faith for compliance.
- Apparent violations that have been corrected may still serve as the basis for a citation, notice of proposed penalty, or both

38

OSHA Citations

- Citations inform the employer and employees of:
 - Regulations and standards the employer allegedly violated.
 - Any hazardous working conditions covered by the OSH Act’s general duty clause.
 - The proposed length of time set for abatement of hazards.
 - Any proposed penalties
- The employer must post a copy of the citation for 3 days



39

Penalties

- Only the OSHA area director has the authority to tell the employer what penalties the agency will propose.
- OSHA has up to six months following an inspection to issue a final report.
- After reviewing the full inspection report, the OSHA area director will:
 - a) Issue citations without penalties.
 - b) Issue citations with proposed penalties.
 - c) Determine that neither are warranted.

40

Other than Serious

- A violation that has a direct relationship to job safety and health, but probably would not cause death or serious physical harm.

41

Serious Violations

- A violation where there is substantial probability that death or serious physical harm could result and that the employer knew, or should have known, of the hazard.

42

Repeat

- A violation of any standard, regulation, rule, or order where OSHA finds a substantially similar violation during a re-inspection.

43

Willful

- A violation that the employer intentionally and knowingly commits or a violation that the employer commits with plain indifference to the law. The employer either knows that what he or she is doing constitutes a violation, or is aware that a hazardous condition existed and made no reasonable effort to eliminate it.

44

Citation Penalties

UNITED STATES
DEPARTMENT OF LABOR

Occupational Safety and Health Administration

OSHA ▼ STANDARDS ▼ TOPICS ▼ HELP AND RESOURCES ▼

OSHA Enforcement / OSHA Penalties

OSHA Penalties

Below are the maximum penalty amounts, with the annual adjustment for inflation, that may be assessed after Jan. 15, 2020. (See OSHA Memo, Jan 10, 2020).

Type of Violation	Penalty
Serious Other-Than-Serious Posting Requirements	\$13,494 per violation
Failure to Abate	\$13,494 per day beyond the abatement date
Willful or Repeated	\$134,937 per violation

State Plan States

States that operate their own Occupational Safety and Health Plans are required to adopt maximum penalty levels that are at least as effective as Federal OSHA's.

For More Assistance

OSHA offers a variety of options for employers looking for compliance assistance.

The On-Site Consultation Program provides professional, high-quality, individualized assistance to small businesses at no cost.

OSHA also has compliance assistance specialists in most of our 85 Area Offices across the nation who provide robust outreach and education programs for employers and workers.

45

Adjustments to Proposed Penalties

- The agency may adjust a penalty downward depending on the employer's good faith (demonstrated efforts to comply with the *OSH Act*), history of previous violations, and size of business.
- When the adjusted penalty amounts to less than \$100, OSHA does not propose any penalty.
- For serious violations, OSHA may also reduce the proposed penalty based on the gravity of the alleged violation. No good faith adjustment will be made for alleged willful violations.

46

Criminal Penalties

- An employer who is convicted in a criminal proceeding of a willful violation of a standard that has resulted in the death of an employee may be fined up to \$250,000 (or \$500,000 if the employer is a corporation) or imprisoned up to six months, or both
- A second conviction doubles the possible term of imprisonment



47

Contesting a Citation

- Informal conference request may be made prior to deciding to contest
 - Obtain a better explanation of the violations cited
 - Obtain a more complete understanding of the specific standards which apply
 - OSHA authorizes its area directors to reach settlement agreements with employers that adjust citations and penalties to avoid prolonged legal disputes.
 - OSHA must conduct an informal conference requested by an employer within a 15-working-day contest period

48

Contesting Cont...

- Negotiate and enter into an informal Settlement Agreement
 - Could involve changes to citations, penalties, or abatement dates.
- Discuss ways to correct the violations
- Discuss problems with the abatement dates
- Discuss problems concerning employee
- Resolve disputed citations/penalties

49

Reviews of Notices of Contest

- Notices of Contest may be reviewed by the Occupational Safety and Health Review Commission (OSHRC).
- The commission is an independent federal agency created by the OSH Act to decide contested OSHA citations and penalties.
- It is not associated with OSHA or the Department of Labor.



50

Reviews of Notices of Contest

- The commission will assign an administrative law judge to hear the case.
- The administrative law judge may:
 - Find the contest legally invalid and disallow it, or
 - Set a hearing for a public place near the employer's workplace.
- The employer and the employees have the right to participate in the hearing.
- From there, appeals would go to the U. S. Court of Appeals.



51

Recordkeeping

52

OSHA Recordkeeping Requirements 29 CFR 1904

- OSHA's reporting and recordkeeping regulations require employers to:
 - Maintain records in each establishment of occupational injuries and illnesses as they occur, and make those records accessible to employees.
 - Keep injury and illness records and post from February 1 through April 30 an annual summary of occupational injuries and illnesses for each establishment
 - A company executive must certify the accuracy of the summary

53

OSHA Recordkeeping Requirements 29 CFR 1904

- To be considered work-related, there must be a significant degree of aggravation to a preexisting injury or illness
- In addition, cases arising from eating food and drinking beverages, blood donations, and exercise programs do not need to be recorded
- Common cold and flu cases also do not need to be recorded
- There are specific criteria for determining when mental illnesses are considered work-related and when cases should be recorded if employees are traveling or working at home

54

Employer Requirements

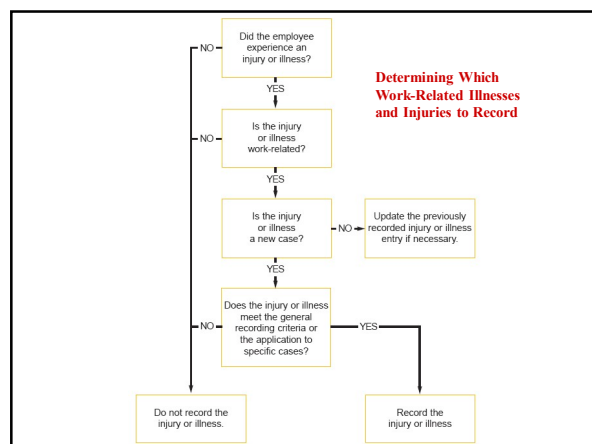
- Record any fatality regardless of the length of time between the injury and the death
- Provide, upon request, pertinent injury and illness records for inspection and copying by any representative of the Secretaries of Labor or HHS, or the state during any investigation, research, or statistical compilation
- Comply with any additional recordkeeping and reporting requirements in specific OSHA standards

55

OSHA Form 300

- Employers must log injuries and illnesses on recordkeeping forms, and must keep the log current and retain them for five years at each establishment.
- Logs must be available for inspection by representatives of OSHA, HHS, BLS, or the designated state agency within four hours of the request.
- Employers are required to update logs to reflect any changes that occur.
- Employers must withhold the names of individuals with sensitive injuries such as sexual assaults, HIV infections, and mental illness

56



57

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(NIOSH)

- National Institute for Occupational Safety and Health
- A research agency specializing in occupational health and safety problems
- NIOSH recommends new standards or changes in existing standards
- NIOSH recommendations are not law
 - OSHA sets the legal standards
 - May choose to use the NIOSH recommendation as the reasonable standard and make it law

61
