



FPST 1213 Fire and Safety Hazard Recognition

Duties and Authority

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Review

Historical Fires

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Great Chicago Fire of 1871



- Chicago – 300 fatalities, 18,000 buildings destroyed, 100,000 people homeless.
- Increased fuel sources allow for rapid progression
 - Wood construction
 - Stored flammables for cold months
 - Flammable liquids on river
- Insurance Companies
- "Great Rebuild"



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Iroquois Theater Fire



- Chicago, Illinois – Dec. 30, 1903
- Over 600 fatalities
- 5-Week old Building
 - 2,000 Occupants
 - "Fireproof"
- Show Curtains
- 27 Exits Hidden by Curtains
- No Lights
- Exit Paths blocked or unfinished



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Triangle Shirtwaist Fire



- March 25, 1911
- 146 Workers Killed
- 8-10th Floors of Asch Building in Manhattan
- One Fire Escape that failed
- Locked Exits
- Public Outrage

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Review



- 1968: Fire Research and Safety Act
- 1973: "America Burning" Report
 - Establish a U.S. Fire Administration
 - More Emphasis On Prevention
 - Fire Service Needs Better Training
 - More Public Education
 - The Design And Materials Of Our Environment Presents Hazards
 - The Fire Protection Features Of Buildings Need To Be Improved
 - Important Areas Of Research Are Being Neglected
 - The Need For Scientific Fire Data
- 90 total recommendations

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History



- 1973: America Burning Report
- Fire Prevention & Control Act – 1974
 - United States Fire Administration
 - National Fire Academy
 - National Fire Data Center

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The Station Nightclub Fire



- 462 people in attendance
 - 100 dead
 - 230 injured
- 4,500 square feet building
- NIST and NFPA findings
 - Hazardous mix of building contents
 - The inadequate capability to suppress the fire during its early stage of growth
 - The inability of the exits to handle all of the occupants in the short time available

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The Station Nightclub Fire




- Great White Tour Manager
 - Plead Guilty to 100 Counts of Involuntary Manslaughter, 15 Years in Prison
- Nightclub Owner
 - Plead No Contest, 15 Years in Prison, 11 Years Suspended, and 500 Hours of Community Service
- As of August 2008, \$175 million in settlement agreements had been paid.

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Collaborative Bachelor's Degree Program of Fire Protection and Safety
Engineering Technology between Southwest Jiaotong University and
Oklahoma State University, U.S.A.




How is all this loss avoided?

Deaths
Injuries
Financial

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Inspection Programs




- “a fire that does not occur is the one that is most easily controlled”
- The ultimate goal of fire and safety inspection programs

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Duties and Authority



- All levels of government have created fire inspection and code enforcement organizations with the authority to manage certain programs. It is their duty to accomplish the goal of protecting lives and property from uncontrolled fires and other hazards.

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Inspectors



- What is an inspector?
 - Code enforcers
 - Handle citizens complaints related to fire and life safety
 - Interpret and apply adopted codes and standards
 - Perform fire and life safety inspections of new and existing structures

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Inspectors



- Building Department
 - Review and approve alterations
 - Issue permits
- Fire Department
 - Inspection responsibility not always assigned
- Code Enforcement Department
 - Parking
 - Weed abatement

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Fire Inspectors



- Knowledge, Skills, and Abilities
 - AHJ
 - Entity that has the legal backing to enforce code
 - NFPA 1031 *Standard for Professional Qualifications for Fire Inspector and Plan Examiner*
 - Level I, II and III
 - Training conducted by
 - International Code Council (ICC)
 - NFPA
 - National Fire Academy (NFA)
 - American Code Enforcement Association (ACEA)
 - Continuing education

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Duties and Authority



- Accomplished by:
 - Determining occupancy loads for single-use buildings;
 - Participating in legal proceedings involving fire and life safety code issues;
 - Verifying water supply fire flow capacity to determine the ability of water supply systems to provide the required level of protection;
 - Apply fire and life safety code requirements to complex situations;
 - Analyze and recommend modifications to fire and life safety codes;
 - Evaluate code compliance in the manufacture, storage, and use of flammable and combustible liquids, gases, and hazardous materials;
 - Etc.

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Duties and Authority



- Inspection Categories
 - Page 18
- Procedures to ensure compliance
 - Notification
 - Follow-up inspection
 - Sanction
 - Citations, fines, court summons
 - Prosecution
 - Courts involved

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Duties and Authority

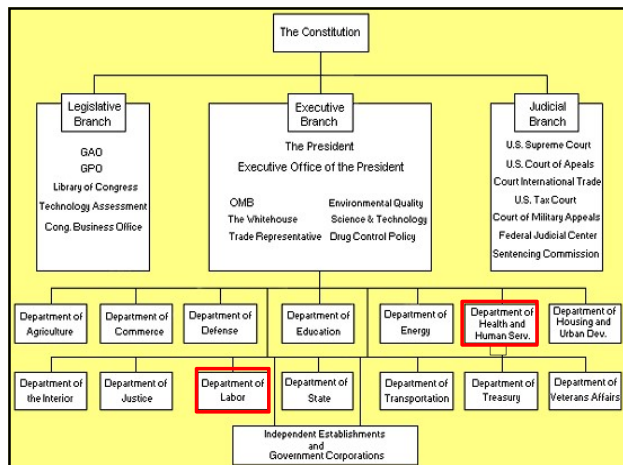


- Inspectors are given the authority to perform his or her duties based on the laws adopted by the AHJ or regulations established by the private sector organization.
- Authority is granted via legislation at the Federal or State level.
 - p. 27
- Public Sector inspectors are authorized to issue citations, issue a summons and even arrest individuals

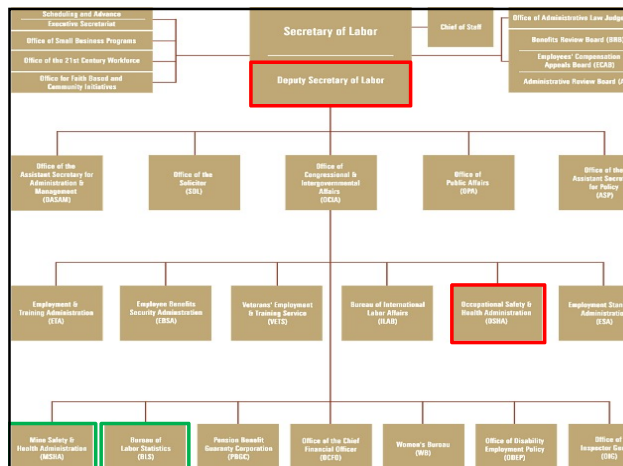
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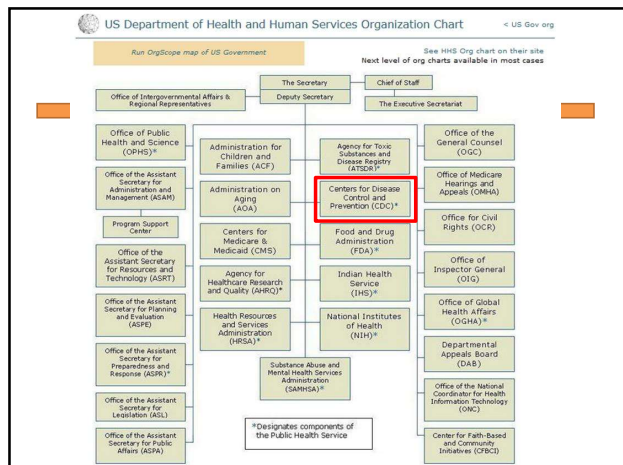
Collaborative Bachelor's Degree Program of Fire Protection and Safety Engineering Technology between Southwest Jiaotong University and Oklahoma State University, U.S.A.



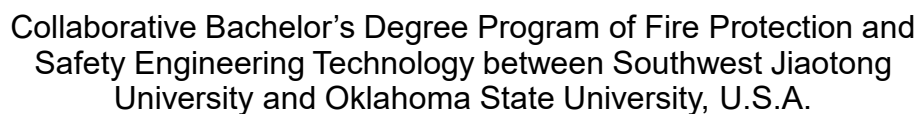
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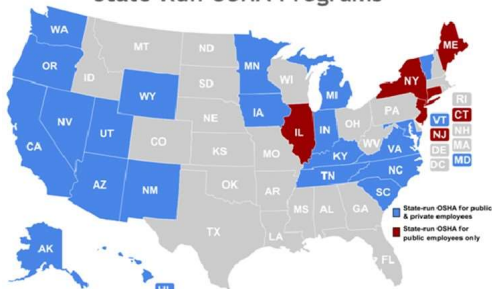
OSHA Structure

- DOL - Secretary of Labor
- Assistant Secretary of Labor for OSHA
 - Investigation and prosecution
- 10 Regional Offices
 - Area Offices in each region
 - Area Director



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State-Run OSHA Programs



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Duties and Authority

- Model fire codes grant the AHJ right of entry as often as necessary to perform an inspection or to execute any duties authorized by the fire code.
- Not always a given. Certain protections are afforded a business owner
 - Parts of facility not open to the public require an administrative warrant
- Inspecting is not the same as gathering evidence
 - A search warrant must be issued to gather evidence

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Duties and Authority



- Misfeasance vs malfeasance vs nonfeasance
 - p. 33
- Policies and Procedures
 - All organizations should have them
 - Public Sector – ensure proper application of law
 - Private Sector – ensure compliance with the law
 - Development
 - Say what you are going to do
 - Implementation
 - Do what you say
 - Maintenance
 - Periodic review and revision
