What You Should Know about Cal/OSHA, IIPP and Accident Investigations.
Cal/OSHA Organization

Department of Industrial Relations

- Cal/OSHA Standards Board
- Division of Occupational Safety and Health
- Cal/OSHA Appeals Board

Engineering Services

- Enforcement
  - Region I Enforcement
  - Region II Enforcement
  - Region III Enforcement
  - Region IV Enforcement
  - Region V Mining & Tunneling

- High Hazard Enforcement
  - High Hazard North
  - High Hazard South

Consultation Service

- On-Site Assistance
- Voluntary Protection Programs

Health and Technical Services

- Research and Education
- High Hazard Employer Program
Cal/OSHA Program

Standards Board

Appeals Board

DOSH Enforcement

Consultation Service
Cal/OSHA Standards Board

- A seven-member body appointed by the Governor.
- The standards-setting agency within the Cal/OSHA program.
- The Standards Board:
  - Adopts standards at least as effective as federal standards.
  - Has the responsibility to grant or deny applications for variances from adopted standards.
  - Responds to petitions for new or revised standards.
Cal/OSHA Enforcement

◆ Six Regions
  – District Offices Statewide
◆ Respond to Accidents, Complaints and Referrals and Perform Follow-up Inspections
◆ Programmed Inspections
  – Randomly selected industries, or national/local emphasis programs.
  – Inspection of an employer at a multi-employer worksite that was not included in the original programmed inspection.
Cal/OSHA Enforcement

- Inspections may be to a specific area of worksite or wall-to-wall
- Inspections involve injury and illness prevention program evaluation for effectiveness
- Interviewing of employees
- May Issue Citations and Orders
- Establish abatement dates
- Propose Penalties
Cal/OSHA Appeals Board

- A quasi-judicial body appointed by the Governor and confirmed by the Senate.
- Handles appeals from private and public sector employers regarding citations issued by the Division of Occupational Safety and Health for alleged violations of workplace safety and health laws and regulations.
AB 1127 Overview

- Signed October 1999
- Effective Jan. 1, 2000
- Changes 12 California Labor Code Sections
- No Government Entity Exemption
- Title 8 CCR/P&P Changes Sections 334, 336
- Complaint Changes
  - Discrimination - 6 months
  - Employee Representative
  - Priority
Cal/OSHA

**CIVIL versus CRIMINAL**

- **CIVIL**: Cal/OSHA inspections, citations, penalties and warrants (inspection vs search)

- **CRIMINAL**: Any case where the Bureau of Investigation is required to conduct an investigation, and in which there is a serious injury or death, the results of the investigation shall be referred to the appropriate prosecuting authority for possible criminal action.

  - California Labor Code § 6315(g)
Cal/OSHA

- **Bureau of Investigation**
  - Responsible for directing accident investigations in which there is serious injury to five or more employees, death, or request for prosecution by a Division representative. The Bureau is prepares cases for prosecution, including evidence and findings.
  - California Labor Code § 6315(a)
Falls
Trench cave-ins
Electrocutions
Contact w/heavy construction equipment
Multi-employer Worksites

Title 8
Sec 336.10

Title 8
Sec 336.11

Multi-Employer Model
Multi-employer Worksites

On multi-employer worksites, both construction and non-construction, citations may be issued to the following categories of employers when the Division has evidence that any employee was exposed to a hazard in violation of any enforceable requirement:

- Exposing (Employer’s employees)
- Creating (Employer creating hazard, but may not have employees exposed)
- Controlling (Responsible for ensuring safety and health at site)
- Correcting (Responsible for actually correcting the hazard)

- California Labor Code § 6400(b)
Cal/OSHA

◆ Reporting

– In every case involving a serious injury or illness, or death, a report shall be made immediately (within 8 hours) by the employer to the Division by telephone.
  ◆ California Labor Code § 6409.1

– Whenever a state, county, or local fire or police agency is called to an accident involving an employee in which a serious injury or illness, or death occurs, the nearest office of the Division shall be notified by telephone immediately by the responding agency.
  ◆ California Labor Code § 6409.2
The Department of Industrial Relations

was established to improve working conditions for California's wage earners, and to advance opportunities for profitable employment in California.

California Department of Industrial Relations - home page

For more information or to send comments or questions, please e-mail us at info@dir.ca.gov.

- Get the facts on recently enacted workers' compensation reforms!

NEW Proposed regulation regarding meal and rest periods
NEW Memo rescinding prior administrative opinion letters on rest and meal periods
NEW Hourly wage for exempt computer professionals changes Jan. 1, 2005

Workers' Compensation
- claims settlement, benefits and rehabilitation for job-related injuries and illnesses
- Division of Workers' Compensation forum
- Workers' Compensation Appeals Board forum

Occupational Safety & Health
- safe and healthful working conditions on the job
Division of Occupational Safety and Health

We protect workers and the public from safety hazards by enforcing California’s occupational and public safety laws, and we provide information and consultative assistance to employers, workers and the public about workplace and public safety matters.

Cal/OSHA Program

Public Safety Program

Cal/OSHA Program

The Cal/OSHA Program is responsible for enforcing California laws and regulations pertaining to workplace safety and health and for providing assistance to employers and workers about workplace safety and health issues.

The Cal/OSHA Enforcement Unit conducts inspections of California workplaces based on worker complaints, accident reports and high hazard industries. There are 22 Cal/OSHA Enforcement Unit district offices located throughout the state of California. Specialized enforcement units such as the Mining and Tunneling Unit and the High Hazard Enforcement Unit augment the efforts of district offices in protecting California workers from workplace hazards in high hazard industries.

Other specialized units such as the Crane Certifier Accreditation Unit, the Asbestos Contractors' Registration Unit, the Asbestos Consultant and Site Surveillance Technician Unit, and the Asbestos Trainers Approval Unit are responsible for enforcing regulations pertaining to crane safety and prevention of asbestos exposure.

The Cal/OSHA Consultation Service provides assistance to employers and workers about workplace safety and health issues through on-site assistance, high hazard consultation and special emphasis programs, and develops educational materials on workplace safety and health topics.

Public Safety Program
Division of Occupational Safety and Health (DOSH)

Protects workers and the public from safety hazards through its Cal/OSHA, elevator, amusement ride, aerial tramway, ski lift and pressure vessel programs, and provides consultative assistance to employers.

Alphabetical listing of DOSH programs and services

- Advisory committees
- Amusement rides
- Asbestos Information
- Cal/OSHA enforcement
- Consultation
- Contact us
- Cranes
- Educational resources
- Elevators
- Frequently asked questions about bloodborne pathogens
- Federal OSHA
- How to develop an injury and illness prevention program
- How to file a health and safety complaint
- How to obtain a permit from Cal/OSHA
- How to obtain an on-site Cal/OSHA consultation
- How to obtain educational products
- Partnership programs
- Permits & notifications
- Policy and procedures
- Pressure vessels
Cal/OSHA Consultation Service

- Consultation is a confidential service.
- Separate from OSHA enforcement operations
- OSHA Consultation assistance is free!
- Consultants do not issue citations or penalties
- Goal is best practice, not OSHA-Proof
Employees report near-hits to mgmt.
Near-Hits investigated
Root Causes Found/Fixed
Safety in the job description
Affirmative Defense
System recognizes safe actions
Supervisors confront/correct unsafe actions
Training to recognize/respond to hazards
Routinely finding/fixing hazards
Safety orientation for new hires
Records used to detect patterns/direct future efforts
Clear and concisely written IIPP

Tailgates have doughnuts
Same accident happens over & over
Program never leaves the office
PPE is a cell phone
Elements of an Effective Workplace Injury & Illness Prevention Program (Must Be Written)

✓ Assigns *authority* for implementing the IIPP

✓ Ensures *compliance* with all safety rules

✓ Establishes two-way *communication* on safety issues

✓ Provides for *periodic* safety inspections

✓ *Requires investigation of accidents & injuries*

✓ *Corrects* hazards when observed or discovered

✓ *Specifies* general & job-specific safety training

✓ *Maintains* inspection & training records
Affirmative Defense
(Independent Employee Action)

This defense has 5 elements that an employer must prove by a preponderance of the evidence. Failure to prove any one of the elements negates the defense.

1. The employee was experienced in the job being performed.
2. The employer has a well-devised safety program which includes training employees in matters of safety respective to their particular job assignments.
3. The employer effectively enforces the safety program.
4. The employer has a policy of sanctions against employees who violate the safety program.
5. The employee caused a safety infraction, which he or she knew was contra to employer’s safety requirement.
Work Practices + Working Conditions + Actions = Outcomes
Identify the Root Causes?
Who will CalOSHA hold responsible?
Is he protected from the fall hazard?
Employee Injury and Illness Prevention Program

HAZARD CONTROL
"To solve a problem, one must first recognize and understand what is causing the problem."
What is...?

- **Risk** - the potential for adverse effects resulting from work-related activities, events and/or behaviors

- **Accident** - an unplanned event that disrupts the orderly flow of work and involves machinery, work methods, people, materials

- **Incident (Near-hit)** - includes an accident or other event which resulted in or has the potential for causing an occupational injury or illness
Reasons to Investigate Accidents?

- The State Makes Us!
- Our Workers' Comp Carrier Makes Us!
- Our Own Lawyer Makes Us!
- Their Lawyer Makes Us!
- General Contractors/Owners Make Us!
- Our Risk Manager Makes Us!
- CA District Attorneys' Associate Makes Us!
- We Needed to Blame Someone!
Now, the real reasons...

$ Prevent it from happening again
$ Reduce losses
$ Improve quality of the working environment
$ Keep the pace of production
$ Comply with the law
$ Protect workers and raise their awareness
$ Identify out-dated procedures and improve others
$ Maintain a positive business image
$ Create a legal defense
Contributing Factors

- Workplace layout
- Design of tools
- Maintenance
- Environmental
- Human Behavior
- Company Culture
- Lack of Training
- Lack of Experience

- Historical Industry/Trade Practice
- Horseplay
- Cultural and Social Issues
Accident Causes

- Accidents usually are complex
- Three causation levels
  - Direct Cause
    - Energy or hazardous material
  - Indirect Cause
    - Unsafe acts and conditions
  - Basic Causes
    - Management Safety Policies & Decisions
    - Personal Factors
    - Environmental factors
Problem Solving Techniques

- Example: “Root Cause Analysis”
  - Entire chain of events is evaluated to find “root causes” as well as the immediate cause
    - Direct Causes
    - Surface Causes
    - Root Causes
  - Root causes are safety system inadequacies
The "Accident Weed"

Weed out the causes of injuries and illnesses

Direct Causes of Injury/Illness
- Burns
- Cuts
- Strains
- Horseplay
- Create a hazard
- Ignore a hazard
- Fails to report injury
- Fails to inspect
- Fails to enforce
- Fails to train

Surface Causes of the Accident
- Unguarded machine
- Broken tools
- Chemical spill
- Defective PPE
- Untrained worker
- Lack of time
- Too much work

Behaviors
- Inadequate training
- No discipline procedures
- No orientation process
- Inadequate training plan
- No accountability policy

Root Causes of the Accident
- No recognition
- Inadequate labeling procedures
- Outdated procedures
- No recognition plan
- No inspection policy
Accident Investigation Procedures

*Find facts, not fault!!*

**Who** (was involved, else was there, are they)?
**What** (was the condition, equipment, materials involved, known hazards)?
**Where** (did it happen, layout, temperature, environmental conditions)?
**When** (was the accident reported, time, day, date)?
**How** (did it happen, answers clear, ask more questions to ensure clarity of response)?
**Why** (evolves from all the above questions/answers)?
Accident Investigation Procedures

- Require the prompt reporting of all accidents
  - Investigate all accidents
  - "Near-miss" incidents
- Visit the scene with a camera, tap measure, PPE, flashlight
- Conduct interviews
- Gather and record facts
- Evaluate evidence
- Conduct a thorough investigation
Accident Investigation Procedures

- Written documentation
- Action taken to prevent recurrence
- Inform Cal/OSHA of serious injury or death
- Write report with recommendations
- Follow-up
The investigation is not complete until a report is prepared and submitted

Recommended outline:
- Date & Time of Accident
- Location
- Accident Description
- Employees Involved
- Corrective Actions Taken
- Preventive Action Recommendations
- Date Completed
Hazard Correction

- Hazards should be corrected as soon as they are identified
- Review and prioritize hazard correction based on severity
Hierarchy of Control

◆ This hierarchy of control provides an ordered mitigation strategy to remove or reduce the hazard:
  – Elimination
  – Substitution
  – Engineering
  – Administrative
  – Personal Protective Equipment (PPE)
CalOSHA Expectations

- Report a serious accident to the nearest DOSH office within 8 hrs
- Accident investigation is an element in your IIPP
- Your accident investigation identified/corrected appropriate hazards
Remember: Use Accident Investigations to...

- Identify higher-risk work situations
- Develop preventative strategies
- Provide information to those that can intervene
- Reduce the probability of it happening again
- Develop training sessions
Accident Model Considerations
Accident/Incident/Near-hit Investigations

물론 만일의 사고 모델

Single Cause Model (Post-accident process)

 sede Model (Post-accident process)

Zero-Accident Model (Incident/Near-hit initiated)
Single Cause Theory
"In a chain of events, find and remove the weakest link"

- Event-based model assumes that a single cause sequenced in a chain of events created the accident...
  and
- If that single cause can be identified and eliminate the accident will not be repeated
**Single Cause Theory**

**Example**

A person in a hurry walks through a poorly lit area on a construction site and trips over a piece of wood and suffered a lost time injury.

**Single cause theory solution:**
remove the piece of wood to solve the problem.
Single Cause Theory

Pros

- Linear construction/less complex
- Reduces input/saves work time
- Subjective/plenty of room for intuition
- Provides quicker/cheaper fixes
- Lets Management back simpler solutions
- Routinely cause at supervisory level
- Regulatory accepted approach
Single Cause Theory

Cons

- Post-accident process/not preventative
- Fault finding - often blame injured worker
- Focus on a single cause
- Give little attention to management deficiencies, flaws in safety culture, or contributing factors…
Single Cause Theory

More Cons

- Commonly due to unsafe "employee behavior"
- Promotes subjective approach/pre-judging/not well accepted by workers
- Does not perform well in complex systems
Multiple Factors Model

Pros

- Identifies as many contributing factors as possible
- Gets more people involved with safety
- Systematic/orderly/less subjective
- Locates critical paths/pinpoints fixes in multiple areas
- Increases process/safety knowledge
- More effective w/complex systems/factors
Multiple Factors Theory

Accidents occur when multiple causes act together...

Root Cause Diagram

- Methods
  - NO FALL PROTECTION AVAILABLE
  - DRIVING TOO FAST
  - OPERATOR TRAINING
- People
  - REGULAR FOREMAN SICK
- Materials
  - PROJECT MANAGER PUSHING
- Machinery
  - Tires
  - NOT FOR ACCESS
  - IMPROPER APPLICATION
- Contributing Factors
  - FOREMAN SICK
  - NOT SERVICED

EFFECT

- Unsafe Condition
- Falling Accident
- Unsafe Act
"Zero Accidents" Model

- Examines leading vs. trailing causes of safety performance...

- Process starts with reporting near-hits and investigating for causes before an accident happens
"Zero Accidents" Theory

Pros

👍 Patterns of hazards more easily detected

👍 Shifts organizational/management culture - focus on issues not individuals

👍 Near-hits serve as leading indicators

👍 Results in finding facts, not faults
"Zero Accidents"

More Pros

👍 Generates action items and lists to address hazards and related issues

👍 Results are widely communicated

👍 Participation required in contract specifications with subcontractors
"Zero Accident" Model

Pros

◆ Fosters team building
◆ Provide positive recognition for people/projects
◆ Best practices for Multi-employer worksites
◆ Requires buy-in from top management/owners
"Zero Accidents" Model

Cons

- Needs top management commitment
- Getting past "waste of time" perception
- JSAs and more safety training are norms
- Getting workers to report near-hits
- Leadership/knowledge/communication
- More fact finding/analysis required
- Written reports must cover WWWWHH
Reasons not to report near-hits

- Not wanting to spoil safety record
- Embarrassed
- Not a Snitch
- Doesn't want medical treatment
- Doesn't like "red tape" in filling out forms
- Afraid of his foreman
- Not wanting to lose time
"Zero Accident" Model

Outcomes

- Systematic elimination of hazards
- Documents an effective IIPP
- Creates tailgates based on worksite hazards
- Supports finding/fixing hazards in design/planning phases
- Proactive approach/identifies unsafe conditions before an accident occurs
- Less fear of reporting unsafe conditions