

# So you think your job is killing you- what next?

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# **U.S. Coast Guard in search for 11 missing workers after giant oil rig explodes in the Gulf of Mexico**

**By MAIL FOREIGN SERVICE**

**Last updated at 12:03 PM on 22nd April 2010**

The Coast Guard planned to search by sea and air overnight for 11 workers missing since a thunderous explosion rocked an oil drilling platform that continued to burn this morning. Seventeen people were injured, four critically. Nearly 100 other workers made it aboard a supply boat and were expected to reach shore by late evening. The blast on Tuesday night aboard the Deepwater Horizon rig 50 miles off the Louisiana coast could prove to be one of the nation's deadliest offshore drilling accidents of the past half-century.



# No Survivors Found After West Virginia Mine Disaster

Amy Sancetta/Associated Press

Published: April 9, 2010



An agonizing four-day wait came to a tragic end early Saturday morning when rescue workers failed to find any survivors in an underground mine after a huge explosion earlier this week.

The news at the Upper Big Branch mine about 30 miles south of Charleston brought the death toll to 29 in the country's worst mine disaster in four decades.

# Chile rejoices as all 33 miners are rescued

**October 14, 2010 |**

By Chris Kraul, Los Angeles Times

Reporting from Copiapo, Chile — Chile freed the last of 33 miners from imprisonment nearly half a mile underground late Wednesday, the miracle of a second chance at life made real by the methodical shuttle of a battered red, white and blue rescue capsule willed on by a joyful nation and global audience of hundreds of millions.

When 54-year-old foreman Luis Urzua emerged at 9:55 p.m. from the 28-inch-diameter hole that curved deep into the San Jose mine, it had been 69 days since the miners were trapped...



## **Painter in fatal fall may not have been properly harnessed**

**October 12, 2010**

By Manuel Gamiz Jr., OF THE MORNING CALL

The New Jersey man who fell to his death Sunday while painting a high-tension pole in Upper Macungie Township may not have been properly harnessed, according to a preliminary investigation. Lehigh County Coroner Scott Grim ruled Tuesday that Alontercilio Rodrigues, 38, of Newark died of multiple traumatic injuries and his death was ruled an accident. Grim said Rodrigues was at the peak of the pole, which is about 94 feet, not 75 feet as was initially reported. He was pronounced dead at the scene at 3:11 p.m., Grim said.

**Lack of inspections blamed for fatal accident  
in salt mine**

**Krisy Gashler – The Ithaca JournalBusiness –  
July 28, 2010 - 10:06am**



The March accident at the Cargill salt mine in Lansing, Tompkins County, that killed one worker and injured another was caused by management's failure to adequately inspect its equipment, the federal Mine Safety and Health Administration has concluded. On March 24, contract truck driver Rolland F. Clark was killed when a 150-ton-capacity salt bin collapsed on the truck he was loading.

# LOCAL NEWS

## Explosion at garage kills man

**Barrel blows at K&C Auto Body employee Robert Hill was cutting it open.**

By Robert A. Baker  
Staff Writer

A 77-year-old Syracuse man died following an explosion at a Syracuse auto garage Friday morning.

Robert Hill, an employee of K&C Auto Body Center on Milton Avenue, was preparing 55-gallon steel barrels for disposal outside the garage when a barrel exploded about 11:25 a.m., fire officials said.

Hill, of Emerson Avenue, suffered life-threatening wounds and was taken to University Hospital, said District Fire Chief John Schuster. He

died shortly after at the hospital, said Syracuse fire investigator Lt. Joe Galloway.

Hill was using a plasma cutter to remove the tops and bottoms of the barrels, Galloway said. The heat from the plasma cutter ignited a waste oil mixture inside the barrel, Galloway said.

The garage is located in a triangle formed by Milton and Willis avenues and Erie Boulevard West near the city line with Solway.

Employees of the Pie Shack, a pizza place across Willis Avenue from the garage, heard the explosion. Nihad Tharshir said the building shook. Employees ran out of the store and could see flames across the street near a bay door of the garage.



Syracuse firefighters responded Friday to K&C Auto Body Center at Milton Avenue and Erie Boulevard West, in Syracuse, after a worker was cutting barrels with a blow torch and one of the barrels exploded and killed him.

The Syracuse Fire Department and the Occupational Safety and Health Administration are investigating.

# Overview

- How many get sick and injured on the job?
- Why do workers get sick and injured?
- How can workplace injuries and illnesses be prevented?
- What are some barriers to prevention?
- What happens to workers who get sick or injured on the job?

# Workplace Fatalities, Injuries, Illnesses

- 2007 Fatalities

– Overall rate	3.8/100,000
– Agriculture	27.9
– Mining	25.1
– Construction	10.5
– Manufacturing	2.5
– Transportation/warehouse	16.9

# Workplace Fatalities, Injuries, Illnesses

- 2007 Illness and Injury Rates
  - Overall 4.2/100 wrkrs
  - Agriculture 5.4
  - Mining 3.1
  - Construction 5.4
  - Manufacturing 5.6
  - Transportation/Warehousing 6.4
  - Education/Health Services 5.2
  - Leisure and Hospitality 4.5

# How common are work related diseases?

- Estimated each year in the US:
  - 60,000 deaths
  - 860,000 illnesses
- Numbers are only estimates- **underestimates**

**ESTIMATES OF THE TRUE TOLL OF WORKPLACE INJURIES AND ILLNESSES  
COMPARED TO BUREAU OF LABOR STATISTICS (BLS) REPORTS  
2007**

	<b>Estimated 2007 Figures Accounting for Impact of Undercounting Injuries and Illnesses<sup>1</sup></b>	<b>2007 Data Reported by Bureau of Labor Statistics (BLS)</b>
<b>Total Number of Nonfatal Injuries and Illnesses in Private Industry</b>	12.0 million	4.0 million
<b>Total Nonfatal Injury and Illness Case Rate in Private Industry (Cases per 100 workers)</b>	12.6	4.2
<b>Total Number of Injuries and Illnesses Involving Days Away from Work</b>	3.6 million	1.2 million
<b>Case Rate for Nonfatal Injuries and Illnesses Involving Days Away from Work (Cases per 100 workers)</b>	3.66	1.22
<b>Total Number of Musculoskeletal Disorders - Cases Involving Days Away from Work</b>	1,001,280	333,760
<b>Total Number of Estimated Cases of Musculoskeletal Disorders</b>	3,458,334	1,152,778

<sup>1</sup> A detailed comparison of individual injury and illness reports from various reporting systems found that only one in three workplace injuries and illnesses were reported on the OSHA Log and captured by the Bureau of Labor Statistics Survey. This study did not address the number of injuries and illnesses that are not reported to any reporting system in the first place. Thus, this study represents a conservative estimate of underreporting of the true toll of injuries and illnesses. For more details on the study, see the paper by Rosenman, et al, "How Much Work-Related Injury and Illness is Missed by the Current National Surveillance System?" Journal of Occupational and Environmental Medicine, Vol. 48, pages 357-365, 2006.

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# What are occupational diseases?

- Musculoskeletal
  - Arms, neck, back
  - Carpal tunnel syndrome, tendonitis, muscle strain
- Respiratory
  - Pneumoconiosis- dust disease of the lungs
    - Asbestos, silica, coal
  - Asthma
  - Nose and sinus trouble

# What are occupational diseases?

- Neurologic
  - Solvent, metal, pesticide exposure
  - Affect the brain and other nerves
  - Hearing loss
- Cancer
- Heart Disease
- Reproductive disorders
- Stress related illness
- Infectious diseases

# Occupational disease is under-recognized

WHY??

# Why are occupational diseases under-recognized?

- Fear- workers reluctant to come forward
- Lack of knowledge/information
  - Workers, employers, doctors
- Employers hide information
- Employers produce doubt
- MDs don't want to deal with Workers' Compensation
- MDs don't have time
- Lack of Occupational Health resources

# Why don't doctors recognize an occupational injury/illness?

- Can't
- Don't want to
- In a hurry

Why is it important to recognize occupational disease?

# Why is it important to recognize occupational disease?

- Catch early and reverse course or prevent progression
- Appropriate evaluation and treatment
- Access to benefits like Workers' Compensation
- Identification of problems for which others are at risk- public health

# Who gets sick and injured at work?

- Traditional high risk work
  - Mining
  - Construction
  - Agriculture
  - Manufacturing
- Remains important but shrinking part of economy

# Who gets sick and injured at work?

- Increasing office and computer based work
- 'Old' Risks in new settings
  - Asbestos abatement, exposure to asbestos in place
  - Hazardous waste work
  - Lead in metals recycling, radiator shops

# Who gets sick and injured at work?

- New risks
  - New chemicals
  - Mold/biologicals
  - Stress and workplace organization
- Globalizing risk
  - Exporting asbestos
  - Electronics industry

# Electronics Industry

- Production facilities
  - Silicon valley
  - Worldwide
- Environmental/community Contamination
- eWaste disposal
  - Flows to developing countries
  - Legal and illegal

# Who gets sick and injured at work?

- Women at work
  - Plastics
  - electronics
- Ethnic disparities
  - Coke ovens
  - Foundry
  - Construction
- Temporary Workers, Day laborers
- Immigrant labor

Why do workers get injured or sick?

# Why do workers get injured or sick?

- Lack of power
- Lack of control over decision making
- Prioritizing short term profits
- Lack of knowledge
- Ignoring the precautionary principle
- Discrimination

# Prevention- Controlling Exposures

- Control the Hazard
  - Substitution
  - Engineering controls
  - Work practices
  - Administrative controls
  - Personal Protective Equipment

Effectiveness

Most



Least









# Sanding with dust mask









# Prevention of back and upper extremity injuries from patient handling

- Primary
  - Intervention before an injury has occurred

# Prevention of back and upper extremity injuries from patient handling

- Primary
  - Ergonomics- fitting the job to the person
  - Engineering controls- lifts
  - Work practices- proper technique
  - Training
  
  - In general eliminating the need for lifting with proper equipment, training, staffing levels, work speed and support

# Prevention of back and upper extremity injuries from patient handling

- Secondary
  - Intervention at an early stage after an injury when it is reversible

# Prevention of back and upper extremity injuries from patient handling

- Secondary
  - Medical
    - Medications
    - Local measures- ice, heat, massage
    - Physical therapy
  - Workplace
    - Same as primary
    - Light or modified duty

# Prevention of back and upper extremity injuries from patient handling

- Tertiary
  - Intervention when injury has become irreversible but further progression can be stopped and some rehabilitation is possible

# Prevention of back and upper extremity injuries from patient handling

- Tertiary
  - Medical
    - Same as secondary
    - Injections
    - Surgery
    - Pain Management
  - Workplace
    - Light or modified duty may be permanent
  - Change jobs or go out of work

# Who has a role/interest in workplace health?

- Workers
  - families
- Unions
- Employers
- Government agencies
  - Department of Health
  - Department of Labor
- Non governmental organizations
- Scientists and other professionals

# Barriers to controlling exposures

# Barriers to controlling exposures

- Lack of knowledge
- Workers scared/fatalistic
- Employers resistant
- No union
- Union no help

# Strategies to control exposures

# Strategies to control exposures

- Worker/Employer/Doctor education
- MD talk to employer
- MD talk to union
- Use of regulatory agencies
  - OSHA
  - PESH
  - NIOSH

# Occupational Safety and Health Administration OSHA

- Sets standards for workplace safety and health
- Enforces the standards
- Public employees- Public Employees Safety and Health PESH

# OSHA Rights

- Right to Know
- Right to refuse hazardous work
- Right to file a complaint
- Right to protection from discrimination or retaliation for using OSHA rights

# Workers' Compensation: The 'Historic Compromise'

- Turn of 20<sup>th</sup> century- some large awards for personal injury
- Business- wanted more predictable and controlled costs
- Labor- wanted rapid and adequate benefits

# Workers' Compensation: The 'Historic Compromise'

- Labor gave up right to sue employer
- No fault system- negligence of employer or worker doesn't matter
- State system-some differences between states
- NY- mixed private and semi-public insurance

# Workers' Compensation: The 'Historic Compromise'

- No connection between WC and prevention
- Employers are under no obligation to remedy health and safety conditions
- Unless there is a contractual agreement-employer has no obligation to continue employing an injured worker

# “No-fault” Becomes Adversarial

## ■ Injured Worker

- claims contraverted
- access to benefits slow
- benefits poor

## ■ Physician

- demands to justify every opinion
- pits doctor against doctor

# Consequences for MDs of Adversarial WC

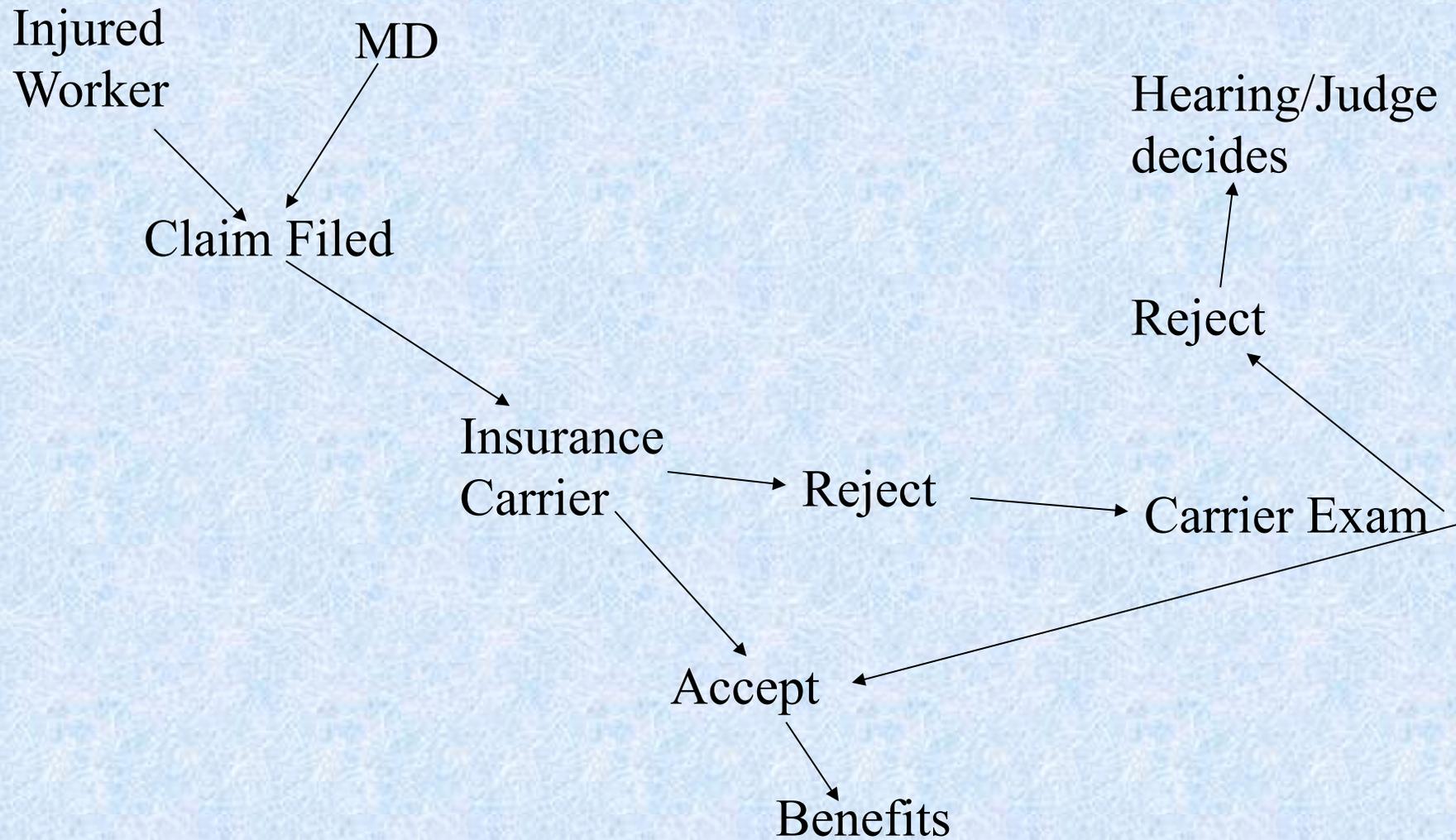
- Paperwork and more paperwork
- Delayed payment
- No Payment
- Testimony in court
- Dissatisfied patients

**Many MDs opt out of participating!**

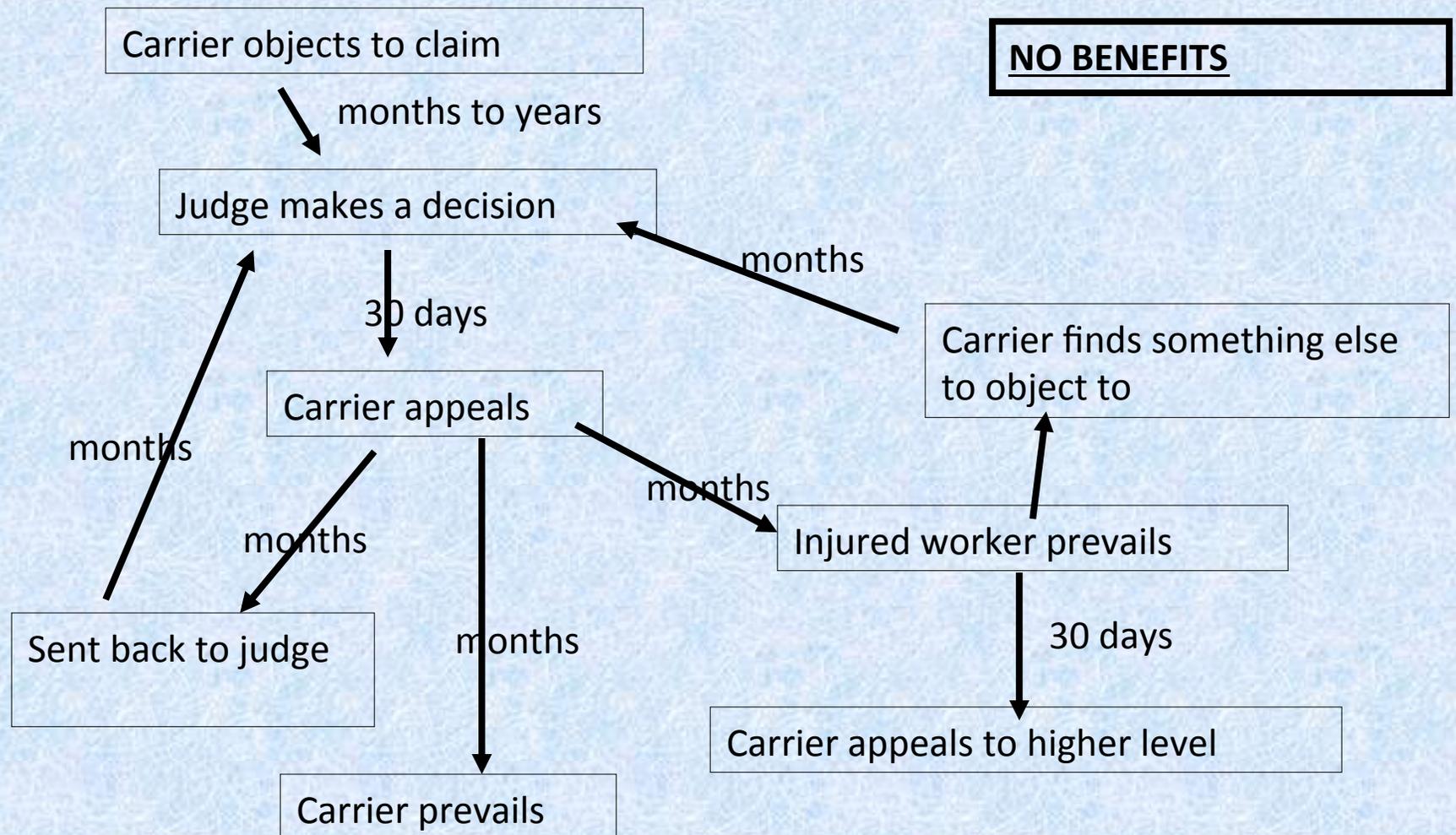
# Workers' Compensation Benefits

- Medical Costs
- Lost Income
  - Disability level determines benefits
- Rehabilitation
  - VESID connection
- Disfigurement/Loss of function
  - scheduled awards
  - extremities, face

# WC Process



# The WC Process



# Workers' Compensation Fraud

- Worker fraud grossly overemphasized
- Many injured workers do not even file WC claims
- Employer and Insurer fraud grossly underemphasized

# Occupational Health Clinical Centers

- Syracuse
- Canton
- Binghamton
  
- For information call 315-432-8899

# Who has a role/interest in workplace health?

- Workers
  - Protect health
  - Protect job
- Unions
  - Protect members' health
  - Protect members' jobs
  - Defend officers'/union power and position
  - Follow policy of International Union

# Who has a role/interest in workplace health?

- Employers
  - Healthy and productive workforce
  - Run profitable business
  - Outcompete other businesses

# Who has a role/interest in workplace health?

- Government agencies
  - Set and enforce standards/laws to protect workers
  - Protect business from undue burdens
- Non governmental organizations
  - Advocate for worker safety and health
  - Maintain funding and purpose

# Who has a role/interest in workplace health?

- Scientists and other professionals
  - Use science/medicine as guide to practice
  - Money, power, prestige
- Lawyers
  - Make companies pay for harming workers
  - Defend companies against injury and illness claims
  - Money, power, prestige

# Non Governmental Organizations

- COSH groups- Committees for Occupational Safety and Health
  - Labor based coalitions with OSH professionals
  - Technical assistance
  - Advocacy
- Injured Workers Organizations
  - Advocate for injured workers

# Popcorn workers' lung

- 1999 Young healthy nonsmoker diagnosed with serious lung disease: bronchiolitis obliterans
- Treating doctor reported to State DOH
- 10 cases identified
- Work in plant mfg diacetyl, a butter flavoring added to popcorn
- Sentinel health event
- What next?

# Popcorn workers' lung

- OSHA contacted
  - 2000-2001 Inspected plant twice- no sampling and no violations found
  - Alliance with Popcorn Board
    - Allow OSHA to send hazard info to mfg
    - Gave Board input into Hazard information bulletin
    - No bulletin ever issued

# Popcorn workers' lung

- NIOSH
  - 8/00 Plant investigation
    - Sampled and found high diacetyl levels
    - Health assessment found high prevalence of respiratory symptoms and diagnoses, and obstructive lung disease
  - 12/00 Made interim recommendations
    - Respirators pending engineering controls
  - 9/01 notified workers at the plant
- What next?

# Popcorn workers' lung

- NIOSH widens scope of investigation
  - 6 investigations at 10 microwave popcorn facilities- similar findings
  - Animal studies-“most dramatic cases of cell death ever seen”
  - Issued an alert to all businesses using diacetyl with recommended control measures

# Popcorn workers' lung

- Injured Workers
  - Workers' Compensation claims
  - Lawsuits against manufacturers 2004 and 2006
  - So far more than \$100 million awarded

# Popcorn workers' lung

- Unions

- Who's at risk?

- Flavoring mfg
    - Popcorn mfg
    - Butter    cheese cake mixes and flour
    - Cookies and crackers    candy    chocolate
    - Flavored oils and syrups
    - Potato chips frosting

# Popcorn workers' lung

- Consumers
  - 2006 Bronchiolitis obliterans diagnosed in man who ate two bags of microwave popcorn a day for 10 years

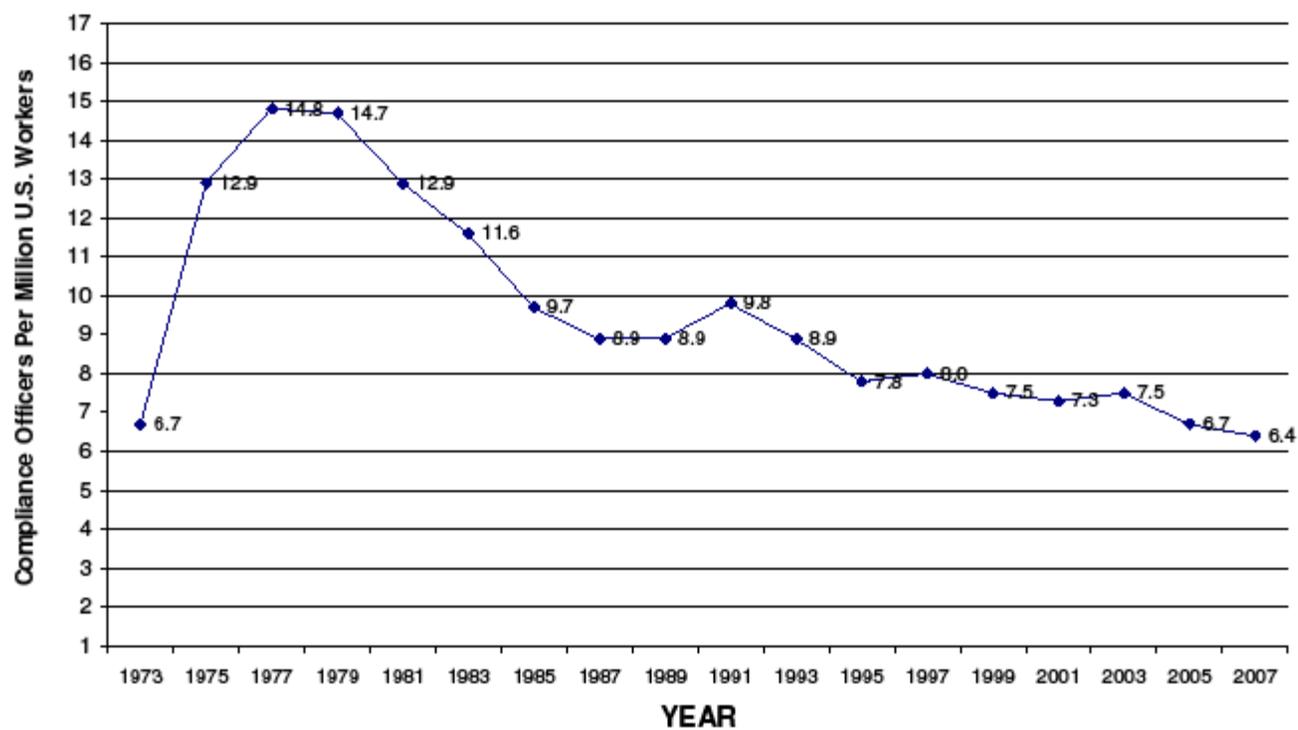
# Popcorn workers' lung

- Unions
  - 2006 Petitioned OSHA for temporary emergency standard
  - Supported by many occ health scientists and clinicians
  - Delineated at risk workers and recommended actions

# Popcorn workers' lung

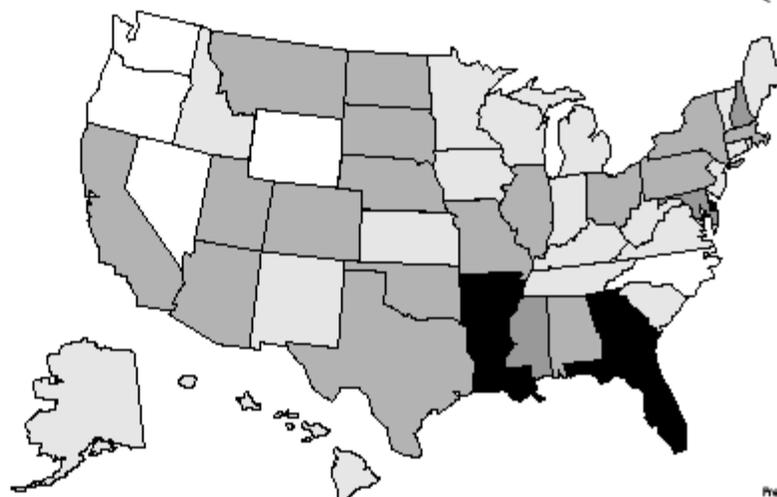
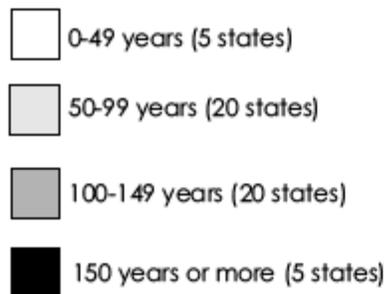
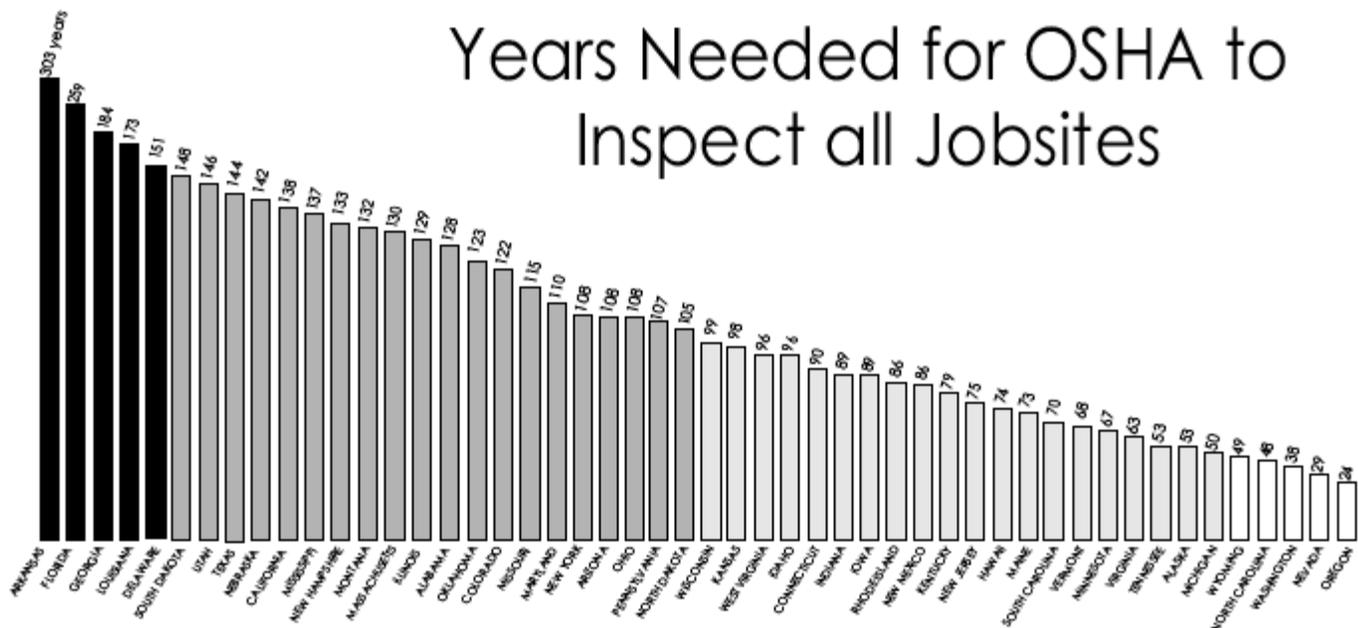
- Unions recommended (2006)
  - Permissible exposure limit
  - Medical surveillance
  - Air monitoring
  - Respiratory protection
  - Notification of at risk workers and employers
  - Inspect and cite under general duty clause
  - Begin rulemaking for permanent standard

Federal OSHA Compliance Officers Per Million U.S. Workers, 1973 - 2007\*



\*Compliance officers from U.S. Department of Labor and OSHA Directorate of Enforcement Programs includes CSHO's and their supervisors. Employment data from Current Population Survey.

# Years Needed for OSHA to Inspect all Jobsites



Source: U.S. Department of Labor, Bureau of Labor Statistics, "Employment and Wages Annual Averages, 2007" and Occupational Safety and Health Administration IMS data on worksite inspectors FY 2008.

Prepared by the AR-CIO

# Popcorn workers' lung

- Corporations
  - 1993 funded animal study showing respiratory tract injury with diacetyl exposure- never published or reported
  - 2007 Some popcorn makers removed diacetyl voluntarily
  - Flavor and extract mfg organization- recommended reductions in butter flavorings

# Popcorn workers' lung

- Corporations
  - Oppose OSHA standard
    - Not enough data to regulate
    - Some are already phasing out
    - Limit to bronchiolitis obliterans- only proven lung issue
    - Don't regulate naturally occurring diacetyl (beer and wine)
    - Don't regulate kitchens and end users (tortilla mfg)

# Popcorn workers' lung

- OSHA
  - January 21, 2009 issued advance notice of rulemaking- intent to promulgate a standard

# Popcorn workers' lung

- Questions
  - Could OSHA have regulated diacetyl without a specific standard?
  - Why was OSHA so slow to act?
  - What might explain the differences between NIOSH and OSHA's approach?
  - What was the role of legal action in the process?
  - What role did the unions play?
  - What role did the employers play?