

# **Worker Safety, Patient Safety, Environmental Safety: A Vital Synergy**

**Kathleen Fagan, MD, MPH  
Medical Officer**

**OSHA, Office of Occupational Medicine**

**April 6, 2011**

Disclosure: No conflicts to disclose





# “Good Jobs for Everyone”

Secretary of Labor Hilda Solis

# “Good Jobs are Safe Jobs”

OSHA Asst. Secretary  
David Michaels





<http://www.osha.gov/dep/greenjobs/index.html>



# Green Jobs- Hazards can be common or unusual

- Solar Energy-
  - cadmium telluride exposure
  - falls from roofs
- Wind Energy-
  - falls, crush injuries
  - electrical shocks and burns
- Recycling-
  - lead, mercury, cadmium
  - repetitive motion injuries,
  - back injuries, lacerations
- Weatherization, insulation



# Polyurethane Foam Insulation



Isocyanates are potent lung and skin sensitizers and a leading cause of work-related asthma.

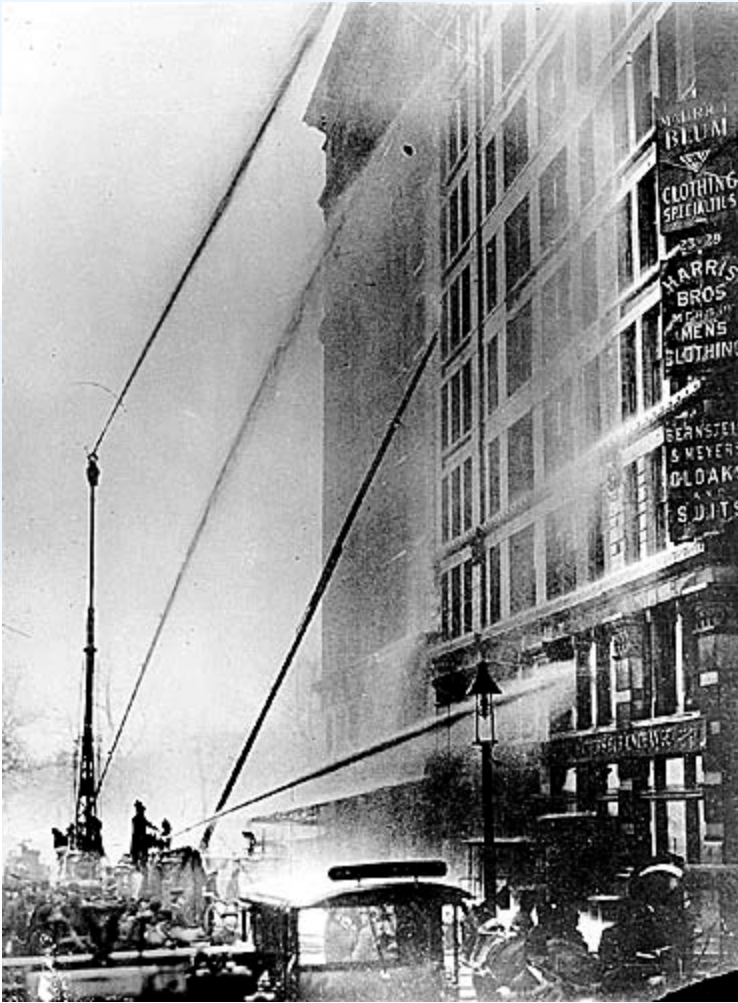


# 100<sup>th</sup> Anniversary of Triangle Shirtwaist Factory Fire

March 25, 1911

146 garment worker died.

Mostly immigrant women,  
ages 16 to 23.



# Health Care Workers: Health & Safety Issues

- Ergonomics
- Protection from exposure to infectious agents
  - PPE
  - BBP standard
- Hazardous Drugs
- Green cleaning chemicals
- Disinfectant Fogging
- Fatigue
- Workplace Violence





OSHA and NIOSH signed into law in December of 1970 and established on April 28, 1971.

# OSHA and NIOSH: Division of Labor

- OSHA sets standards and enforces those standards. *(No research)*
  - Outreach, guidance, compliance assistance
  - OSHA Training Institute; Harwood grants for training.
- NIOSH provides education and training and conducts and funds research.  
*(No enforcement)*
- OSHA and NIOSH – complementary and collaborative



# How can researchers help OSHA?

- Standard setting relies research
- Enforcement relies research



# Standard Setting

- The standard must be ***reasonably necessary*** or ***appropriate***; that is, it must substantially reduce or eliminate ***significant risk (health) or afford a high degree of employee protection (safety)***.
- The standard must be supported by ***substantial evidence*** in the record.
- Standard must be ***technologically feasible***, economically feasible and ***cost-effective***.

# What kind of questions get asked?

- How can the hazard be measured, what is the health outcome, how much does it cost society?
  - “Material impairment to health” – serious outcome, lifetime risk determined by courts to be “acceptable” at 1 per 1000 workers.
- What is the intervention, does it work, is it feasible, how much does it cost? What is the impact on small business?

# Enforcement

- Employers have a general duty to maintain a workplace free of recognized hazards.
- To cite, OSHA must demonstrate:
  - serious hazard
  - employer awareness
  - feasibility of hazard abatement

# Examples of Questions Researchers Can Help Answer:

- Does a particular flooring in hospitals significantly reduce DART rates for slips, trips and falls?
- Does switching to green cleaners decrease incidence of dermatitis and asthma in housekeeping staff? Does use of green cleaners increase musculoskeletal injuries?
- Do training programs increase use of patient lift devices and decrease back injuries?

# How can OSHA help researchers?

- Emerging Issues.
- Office of Occupational Medicine and NIOSH collaborating to track New Etiologies of Occupational Diseases.
- Listen; learn from the research; spread the word; educate our field staff; emphasis programs.



# OSHA's Green Reform Principles

1. Comprehensive workplace safety and health programs.
2. Chemical Safety.
3. NIOSH's Prevention through Design.
4. Good Standards.
5. Enhancing workers' voices in the workplace.



David Michaels at NIOSH Going Green  
Workshop, 12/16/09



Thank  
You!

Kathleen Fagan, MD, MPH  
OSHA Office of Occupational Medicine  
200 Constitution NW, Rm. N3457  
Washington DC 20210  
202-693-2486  
[Fagan.kathleen@dol.gov](mailto:Fagan.kathleen@dol.gov)

