

Sustaining Worker Health

Cultivating a Sustainable Agricultural Workplace

Sept 13, 2004



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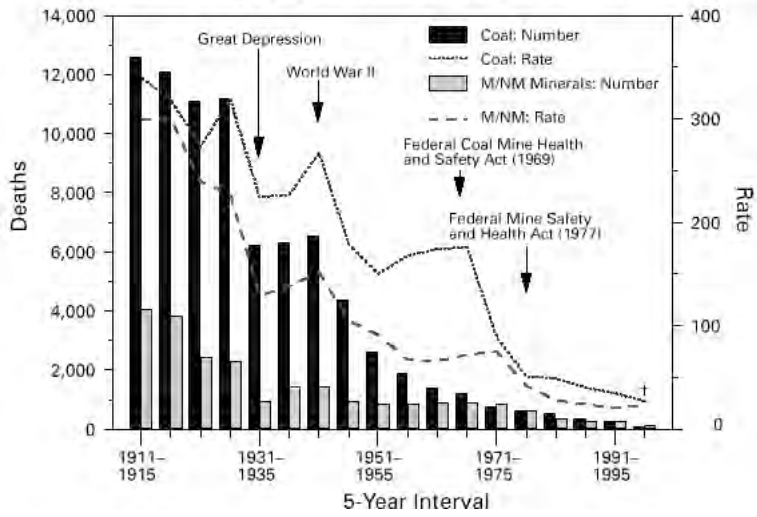
SAFER WORKPLACES



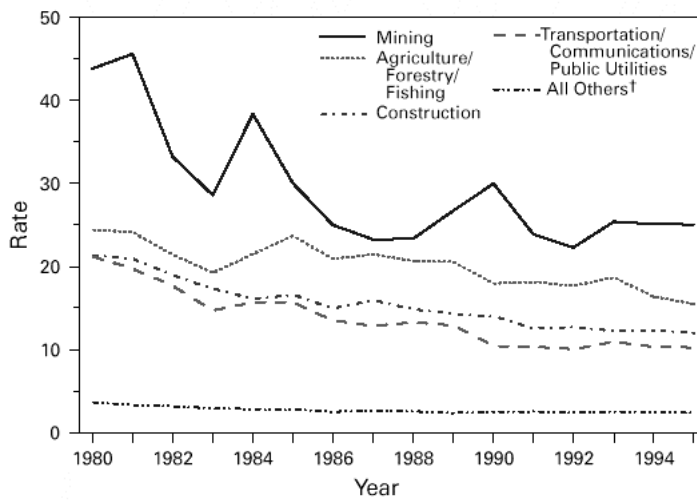
Occupational Safety and Health Act -- 1970

“to assure as far as possible every working man and woman in the nation safe and healthful working conditions”

Number of deaths and fatality rates* in mining coal and metal/nonmetallic (N/NM) minerals, by 5 year interval—United States, 1911-1997



Occupational injury death rates*, by industry division and year—United States, 1980-1995



*Per 100,000 workers.

†Includes public administration, manufacturing, wholesale trade, retail trade, services, and finance/insurance/real estate.

Occupational Safety and Health Standards for Agriculture

- > Roll-over protective structures
- > Guarding of farm field equipment
- > Field Sanitation
- > Cadmium

Other Standards Applicable to Agriculture

- > Temporary labor camps
- > Storage of anhydrous ammonia
- > Logging operations
- > Slow-moving vehicles
- > Hazard communication
- > Retention of DOT markings

Rural Health Improvement Act of 1989

> Medicare Program Changes

- ❖ Hospital payments
- ❖ Rural hospital transition grant program
- ❖ Office of rural health policy

> Public Health Serve Act Programs

- ❖ Rural assignments of national health service corps
- ❖ **Program of education and training in agricultural health and safety**
- ❖ Protection for uninsured and cost-containment

> Remarks of Congressman Obey

“a new focus would be placed on the need to increase programs to help **farmers and agricultural workers** improve their health and safety.”

Food, Agriculture, Conservation and Trade Act of 1990

> “Sustainable Agriculture”

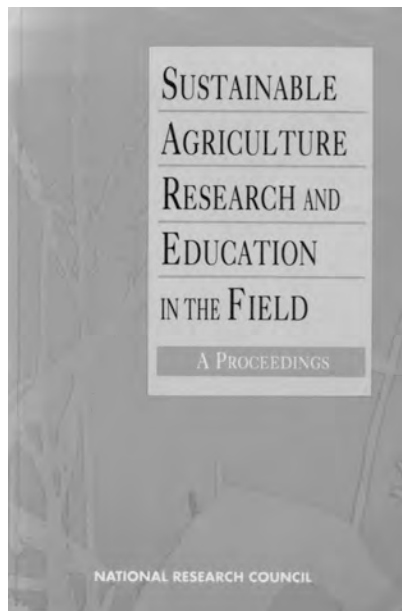
- ❖ an integrated system of plant and animal production practices having a site-specific application that will, over the long term

> Goals

- ❖ Satisfy human food and fiber needs
- ❖ Enhance . . . the natural resource base upon which the agricultural economy depends
- ❖ Make the most efficient use of nonrenewable resources . . .
- ❖ Sustain the economic viability of farm operations
- ❖ **Enhance the quality of life for farmers and society as a whole**

Sustainable Agriculture Research and Education Act of 1990

- > **“Sustainable Agriculture”**
 - ❖ “Methods of farming that are productive and profitable, conserve natural resources, and protect the environment and the **health and safety of agricultural workers** and consumers”
- > **Research and extension efforts needed to**
 - ❖ Protect the health and safety of farmers, **farmworkers** and consumers



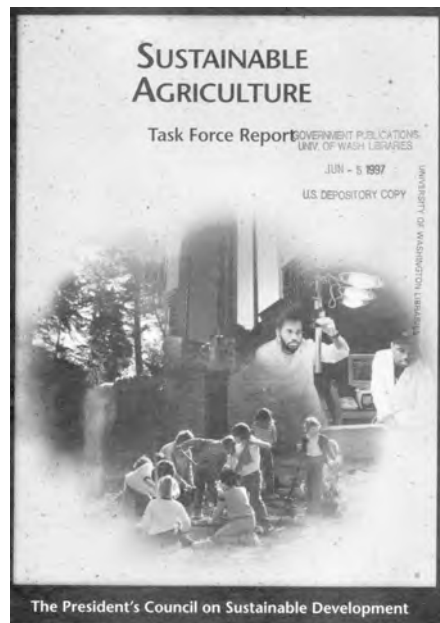
1991 Report National Academy of Sciences

Sustainable Agriculture Research and Education in the Field

“The appropriate measure of a system’s productivity and efficiency is not how much it produces but, rather, the relative value of what it produces compared with what went into producing it.”

-- Charles Hess, USDA

No mention of workplace health and safety

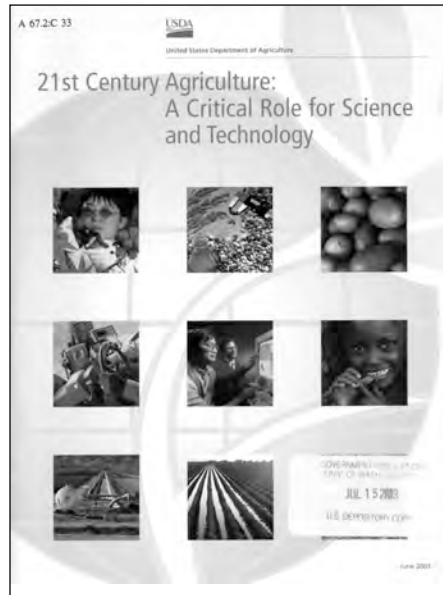


1997 Report

**President's Council
on Sustainable
Development**

**9 policy
recommendations**

**No mention of
farmer or worker
health and safety**



2003 Report 21st Century Agriculture

U.S. Department of Agriculture

Soil Management
Water Management
Pest Management
Nutrient Management
Crop Improvements
Precision Farming
Animals/Livestock
Forestry and Biomass
Aquaculture

21st Century Agriculture A Critical Role for Science and Technology

> Food Security

- ❖ Access by all people at all times to sufficient food for active, health lives.

> Strong public health system

- ❖ Important to success of agricultural development
- ❖ An agricultural labor force in poor health will impact productivity
- ❖ Focus on malaria, tuberculosis, micronutrient deficiencies

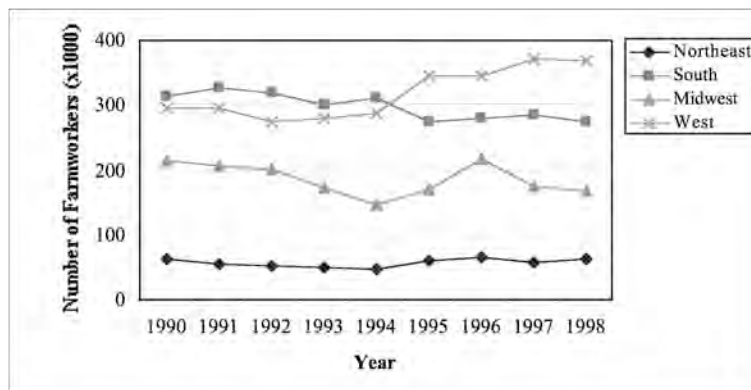
> World Trade Organization

- ❖ Sanitary and Phytosanitary Agreement: mechanism to protect human, animal, and plant health in WTO member countries
- ❖ Biosafety Protocol: Regulatory framework for transboundary movement of living bio-engineered organisms



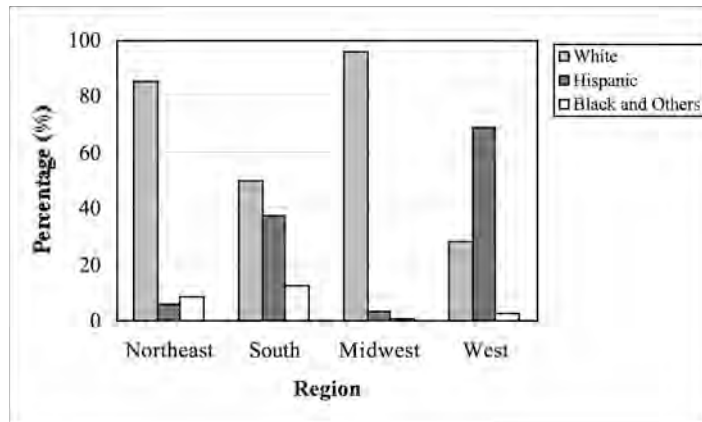
The Hired Farmworker

Number of Hired Farmworkers 1990 -1998



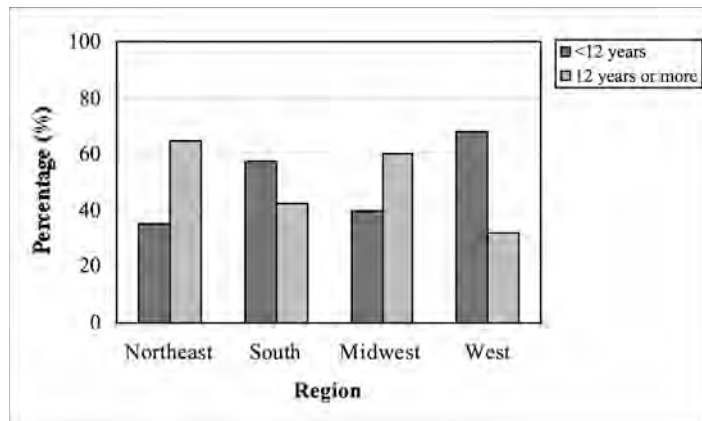
Source: USDA Economic Research Service (data by census region).

Race / Ethnicity 1998



Source: USDA Economic Research Service (data by census region).

Amount of Schooling 1998



Source: USDA Economic Research Service (data by census region).

Musculo-skeletal Disorders



Where we've been

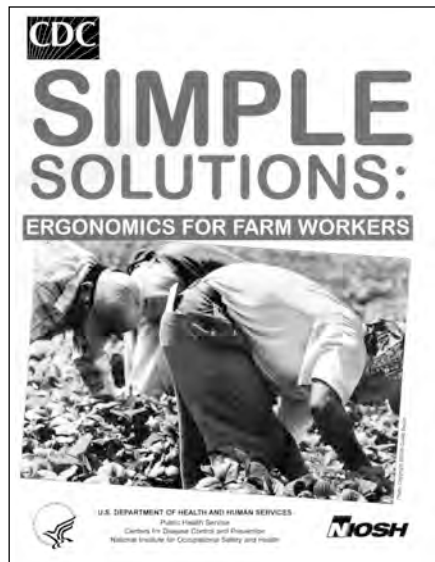


El Cortito



El Cortito (“the short one”)

- > **Origins of the short-handled hoe**
 - ❖ 19th century sugar beet production
 - ❖ Traditional tool used in Japanese gardening
 - ❖ Japanese rotated use with other tools
- > **New workforce from Mexico**
 - ❖ Short-handled hoe unfamiliar
 - ❖ Task specialization
 - ❖ Increased productivity
- > **Health consequences of “stoop labor”**
 - ❖ CA Industrial Safety Board hearings
 - ❖ Degeneration of spine, permanent back injury
 - ❖ Use prohibited in 1975



Where we're going

Simple Solutions

Ergonomics for Farmworkers

- Lifting tool for carrying plant containers
- Weeding stand for plant nurseries
- Smaller picking tub
- A specialized harvest cart for greens
- New rakes for harvesting berries
- Power cutter for woody plants
- Metered liquid applicator

Pesticide-Related Illness



Minimizing Risks of Pesticide Exposure

- > **Worker Protection Standard**
 - ❖ PPE
 - ❖ Restricted Entry Intervals
 - ❖ Worker Training
- > **Cholinesterase Monitoring**
 - ❖ Period blood testing
 - ❖ Workplace evaluations, removal of workers
 - ❖ Cholinesterase Monitoring
- > **Alternative Pest Control Strategies**
 - ❖ IPM, low toxicity pesticides
 - ❖ Organic farming



Traumatic Injuries



Recent Tractor Fatalities in Washington State

- > **16 year-old worker (1999)**
 - ❖ Towing hay baler on two-lane road
 - ❖ Drove on unstable gravel shoulder
 - ❖ No ROPS, no seat belt used
 - ❖ Minimal training
- > **49 year-old orchard worker (2004)**
 - ❖ Tractor pulling sprayer slid down hill, turned over
 - ❖ Worker trapped underneath tractor
 - ❖ ROPS not required in Washington orchards



**Towards a
Sustainable
Agricultural
Workplace**

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