## NIOSH Surveillance Program and Fatality Assessment and Control Evaluation (FACE) Program



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## **Injuries and Fatalities**





### Work-related nonfatal injuries

- Limited information on for minority groups in general
- Race not consistently collected
- For American Indian/Alaskan Native (AI-AN), if available, data limited to race—excludes tribal affiliations

### Work-related fatal injuries

- race information more consistent
- For American Indian/Alaskan Native, still no tribal affiliation information







- Survey of Occupational Injuries and Illnesses (SOII)
  - Bureau of Labor Statistics
  - Employer survey of nonfatal injuries and illnesses
  - Excludes self-employed, workers on small farms, unpaid workers, and personal care workers
- Census of Fatal Occupational Injuries (CFOI)
  - Bureau of Labor Statistics
  - Multi-record system capturing all work-related deaths
  - Includes all worker deaths







- Occupational Injury Surveillance of Production Agriculture (OISPA)
  - NIOSH in collaboration with USDA
  - Farm operator survey
  - Covers adults 20 years of age or older
  - Special OISPA survey covers minority farm operators, including AI-AN
  - Captures only adult work injuries
  - Website http://www.cdc.gov/niosh/topics/ aginjury/m-oispa/default.html







- Childhood Agricultural Injury Survey (CAIS)
  - NIOSH in collaboration with USDA
  - Farm operator survey
  - Covers Youth less 20 years of age or older
  - Special CAIS survey covers minority farm operators, including AI-AN
  - Includes all injuries (i.e., work or non-work)
  - Website http://www.cdc.gov/niosh/topics/ childag/mcais/default.html







### **SOII Estimates**

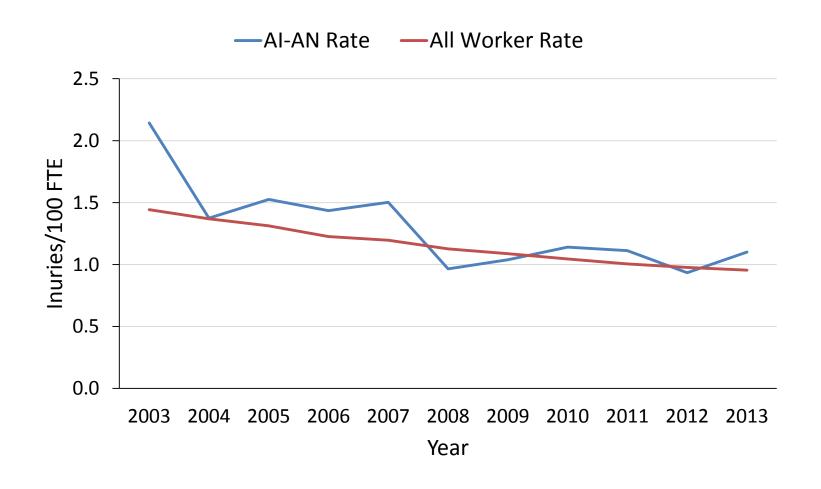
- 917,090 occupational injuries with 1 more days away from work in US in 2013
  - 0.96 injuries/100 fulltime equivalents (FTE)

- 4,850 were to Al-AN
  - 1.10 injuries/100 FTE





# Nonfatal Injuries/100 FTE for AI-AN and All Workers: SOII 2003-2013









### **CFOI Deaths**

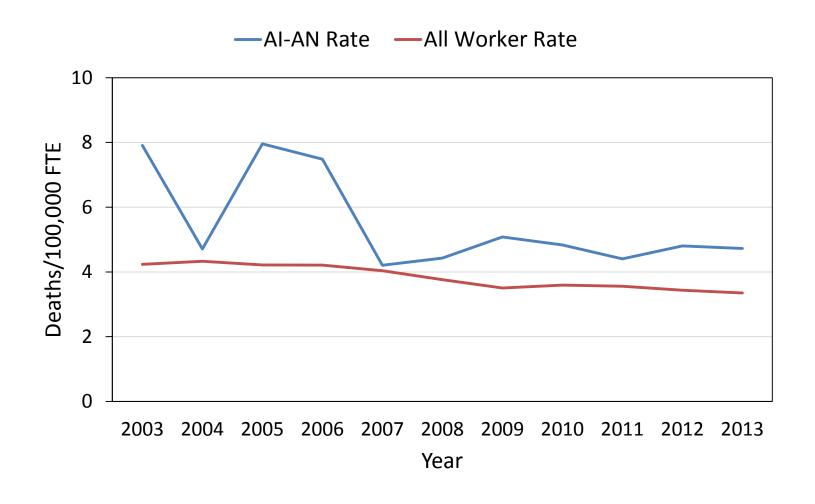
- 4,585 occupational injury deaths in US in 2013
  - 3.4 deaths/100,000 fulltime equivalents (FTE)

- 35 were to Al-AN
  - 4.7 deaths/100,000 FTE





# Fatal Injuries/100,000 FTE for AI-AN and All Workers: CFOI 2003-2013







### **Minority OISPA Estimates**

- 2,029 lost time injuries on minority operated farms in 2008
  - 36.8 injuries/10,000 adults workers

- 1,057 were on farms operated AI-AN
  - 95.2 injuries/10,000 adult workers





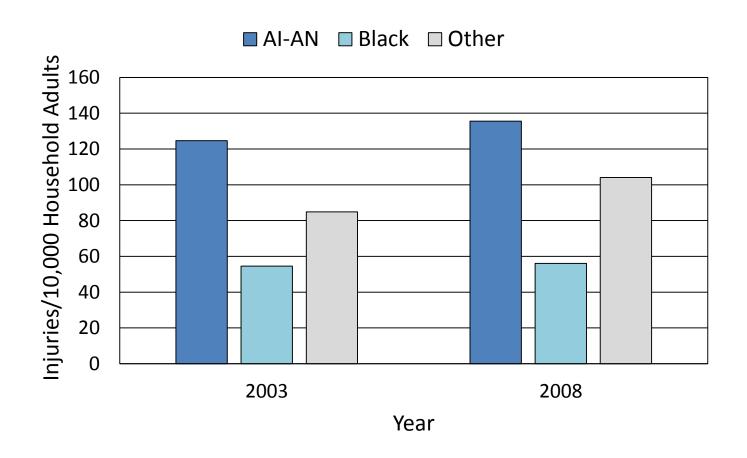
### **Minority OISPA Estimates**

Household adults accounted for 74% (1508 injuries) of the lost time injuries on minority operated farms in 2008

AI-AN operated farms accounted for the 56.9%
 (858) of these household adult injuries



# Lost-time Farm Injuries/10,000 Household Adults on Minority Operated Farms: 2003, 2008



Source: NIOSH Minority Occupational Injury Survey of Production Agriculture







### **Minority CAIS Estimates**

- 516 lost time injuries on minority operated farms in 2008
  - 6.3 injuries/10,000 Youth

- 310 were on farms operated AI-AN
  - 8.3 injuries/10,000 Youth





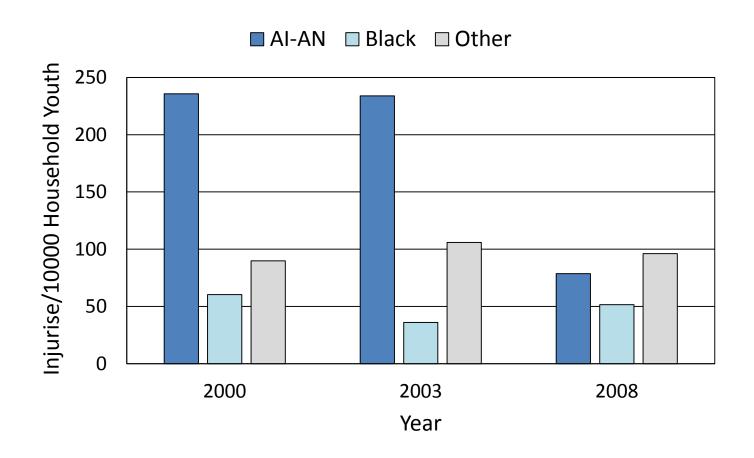
### **Minority CAIS Estimates**

 Household youth accounted for 56% (291 injuries) of these lost time injuries on minority operated farms in 2008

AI-NA operated farms accounted for the 57.0%
 (166) of these household youth injuries



# Lost-time Farm Injuries/10,000 Household Youth on Minority Operated Farms: 2000, 2003, 2008



**Source**: NIOSH Minority Childhood Agricultural Injury Survey







### **Minority CAIS Estimates**

- More information on nonfatal injuries to youth on Al-AN and other minority operated farms are available in:
  - Hendricks KJ [2014]. Youth on racial minority operated
     U.S. farms, 2008: Demographics and injuries. J Safety
     Research 51:81-86.
  - NIOSH [2014]. Racial Minority Operated Farms, 2008:
     Youth, Injuries, and Safety. DHHS (NIOSH) Publication
     No. 2014-111. Cincinnati, OH: National Institute for
     Occupational Safety and Health.





# The NIOSH Fatality Assessment and Control Evaluation (FACE) Program





### The NIOSH FACE Program

- Started in 1982
- Case-based approach to fatality surveillance
- Over 2,700 investigations done by NIOSH or State partners - few AI-AN events investigated
- Approach and techniques are applicable to variety of injury and fatality circumstances







### The NIOSH FACE Program

- Relies on onsite fatality investigations
- Reflects public health approach
  - Etiology of injury is multifaceted
  - Injury is preventable
  - Focus is on not placing blame
- Collects data about circumstances and contributors to fatal injuries through field investigations
- Promotes effective prevention measures at the workplace level







### **FACE Program Components**

 NIOSH FACE – Fatality Investigation Team receives cases identified from state and federal agencies in:

NC, SC, PA, TN, VA, WV, MD, OH

 State Based FACE – identifies case through state-level surveillance systems

CA, IA, KY, MA, MI, NJ, NY, OR, WA





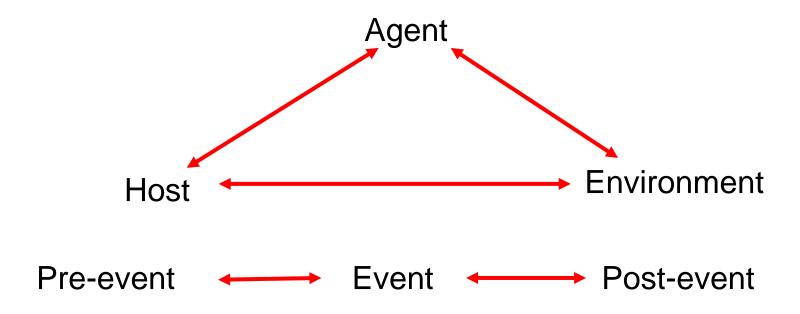
### **Other FACE Specialty Areas**

- Fire Fighter injury-related and medical deaths
  - Have been conducting since 1998
  - <a href="http://www.cdc.gov/niosh/fire/">http://www.cdc.gov/niosh/fire/</a>
- Law Enforcement Officer motor vehicle-related deaths
  - Began in Fall of 2013



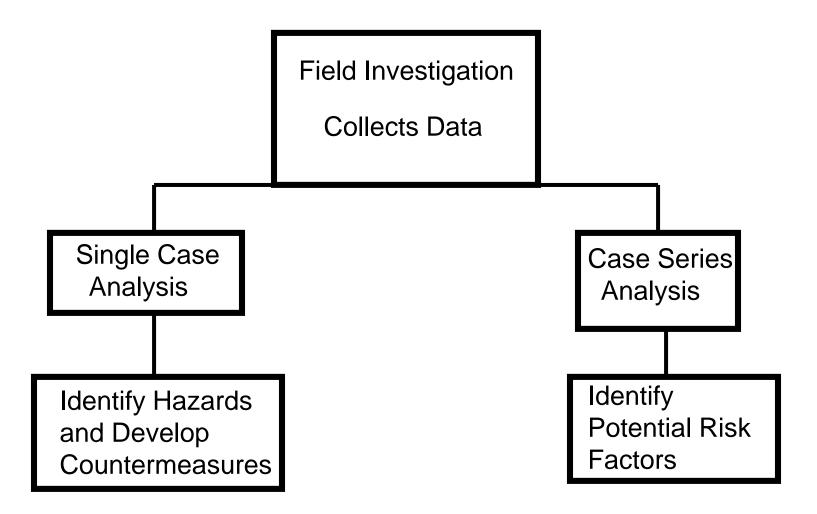


### **FACE Methodology**





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### **FACE Information Sources**

- -On-site Investigation
- -Employers
- -Witnesses
- -Co-workers
- -OSHA Compliance Officer or W&H Investigator
- -Other Investigators
- -Police, Fire, EMS Records
- -Coroner or Medical Examiner Reports







### **FACE Investigative Report**

- Summary
- Recommendations
- Investigation
- Contributing Factors
- Cause of death
- Recommendations and Discussion







### **FACE Report**



FACE Report Number 2012-02

January 12, 2015

### Hispanic worker falls from residential roof - North Carolina

#### SUMMARY

On April 19, 2012, a 37-year-old Hispanic male laborer fell approximately 13.5 feet from a residential roof to a concrete driveway; he died immediately from his injuries. The laborer was working with a crew of eight Hispanic workers for a construction subcontractor replacing shingles on a roof accessed by a ladder. At the time of the incident, five workers were on the roof, including the laborer who was out of sight of his coworkers working on the garage side of the home. When the incident occurred, the co-workers heard the laborer hit the ground, rushed to his aid, and called 911. Emergency Medical Services were dispatched to the incident and the laborer was pronounced dead at the scene.

#### CONTRIBUTING FACTORS

Key contributing factors identified in this investigation include:

- 13-foot plus fall distance and concrete surface
- 10/12 roof pitch
- 25-foot working length of fall arrest system lifeline
- Fall arrest system lanyard connection point
- Fall arrest system anchorage method
- Worker's level of experience / lack of training

#### RECOMMENDATIONS

NIOSH investigators concluded that, to help prevent similar occurrences, employers should:

- Develop, implement, and enforce a comprehensive, safety program
- Ensure that all employees working at heights are provided with fall prevention training that complies with OSHA standards, in a language and at a literacy level that they can comprehend
- Ensure that all employees are provided with properly assembled and maintained fall
  protection systems when exposed to fall hazards







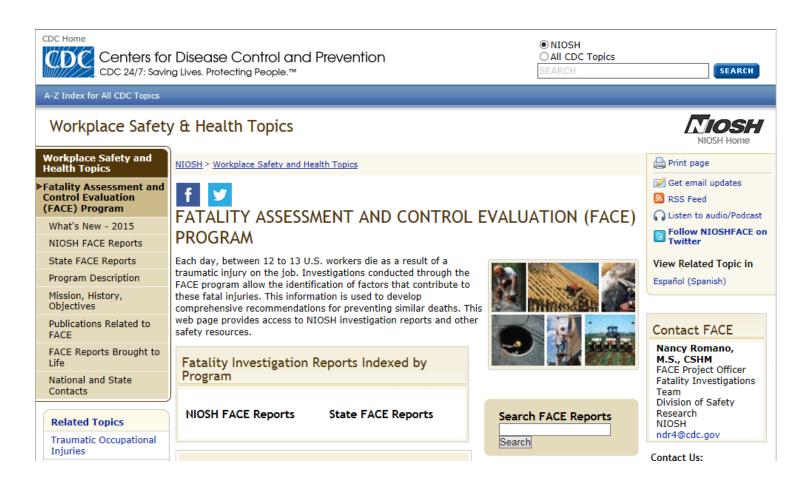
## How FACE Fosters Actions to Better Protect Workers?

- Monitors deaths and formulates solutions
- Publicizes problem and specific solutions
- Outreach to encourage prevention measures





### **NIOSH FACE Web Page**



http://www.cdc.gov/niosh/face/







### For more information

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The findings and conclusions in this presentation are those of the author and do not necessarily represent the views of the National Institute for Occupational Safety and Health.





