Agenda

NIOSH Overview

Climate Change and Workers

NIOSH Climate Change Initiative

Research Needs

The findings and conclusions in this presentation have not been formally disseminated by the National Institute for Occupational Safety and Health and should not be construed to represent any agency determination or policy. Mention of company trade names or products does not constitute endorsement by the Centers for Disease Control and Prevention.
9,000 U.S. workers sustain disabling injuries

16 die from a work injury

137 die from work-related illnesses
Origin of NIOSH

Occupational Safety and Health Act of 1970 created OSHA and NIOSH

U.S. federal agency that conducts research and makes recommendations to prevent worker injury and illness

NIOSH Mission

To provide leadership in research to prevent work-related illness, injury, disability, and death.

Department of Health and Human Services
Centers for Disease Control and Prevention
National Institute for Occupational Safety and Health
Occupational Safety and Health

Regulation/Enforcement/Consultation

Department of Labor (DOL)

Mine Safety and Health Administration (MSHA)

Occupational Safety and Health Administration (OSHA)

Research/Recommendations

Department of Health and Human Services (HHS)

Centers for Disease Control and Prevention (CDC)

National Institute for Occupational Safety and Health (NIOSH)

Department of Health and Human Services
Centers for Disease Control and Prevention
National Institute for Occupational Safety and Health
NIOSH

Joined CDC in 1973
NIOSH Locations

- Washington, DC
- Atlanta, GA
- Spokane, WA
- Cincinnati, OH
- Morgantown, WV
- Pittsburgh, PA
- Anchorage, AK
- Denver, CO
NIOSH Programs

- Epidemiology and surveillance
- Field studies
- Laboratory research
- Exposure measurement
- Control technology
- Protective equipment
- Training
Climate Change and Workers

Amplification of existing hazards

New, unanticipated, or unrecognized hazards

Changes in how we respond to climate change
Why Workers are Important

Workers are often at higher risk

Workers face unique hazards

Intervention opportunities

Department of Health and Human Services
Centers for Disease Control and Prevention
National Institute for Occupational Safety and Health
Climate Change and Workers

- Temperature Extremes
- Air Pollution
- Extreme Weather
- Wildland Fires
- Vector-borne and Other Infectious Diseases
- Changes in Built Environment
- Industrial Transitions
NIOSH Activities

2009
Developed a Conceptual Framework

2014
Established Climate Change Workgroup

2015
Established Climate Change Initiative
NIOSH Climate Change Workgroup

Charter

Ensure current, emerging, and anticipated worker safety and health issues associated with climate change are appropriately identified and prioritized, and to determine the most important actions to address these issues.
There is strong evidence that climate change is and will present occupational safety and health (OSH) hazards.

Numerous critical research questions need to be resolved to better characterize and understand how OSH may be associated with climate change events.

Workers should be included as a core component of all climate change related public health initiatives.
Work Group Accomplishments

• Developed internal report and draft research agenda

• Intramural project funded:
  • *Identifying Workers and Facilities Likely to be Impacted by Severe Weather Events Stemming from Climate Change: a Geospatial Approach*

• Established comprehensive reference database on climate change

• Published peer reviewed and professional association papers

• Launched NIOSH Climate Change Web Site

• Presentations at National/International conferences
Interagency Activities

• USGCRP Interagency Special Report on the Impacts of Climate Change on Human Health
• OSH contribution to DHHS Adaptation Plan
• DHHS Work Group
• Interagency Environmental Justice WG
• NIEHS, EPA
• International – IRSST, PAHO

Activities coordinated with CDC’s Climate and Health Program
OSH inclusion in the Interagency Climate Change and Human Health Report
Communicating our Findings

The National Institute for Occupational Safety and Health (NIOSH)

NIOSH Science Blog

Climate Change and Occupational Safety and Health

NIOSH Science Blog

Journal of Occupational and Environmental Hygiene

Advancing the Framework for Considering the Effects of Climate Change on Worker Safety and Health


Department of Health and Human Services
Centers for Disease Control and Prevention
National Institute for Occupational Safety and Health
NIOSH Climate Change Initiative

Mission: Protect workers from the adverse impacts of climate change

1. Identify current, emerging, and anticipated worker safety and health issues
2. Increase awareness of occupational hazards resulting from climate change
3. Use research findings to develop recommendations, guidance and policies
NIOSH Climate Change Initiative Objectives

• Promote and coordinate innovative intramural and extramural research
• Support and help facilitate other NIOSH initiatives with climate change implications
• Establish and communicate research priorities
• Recommend appropriate policies to NIOSH Leadership
Objectives - Continued

• Collaborate with agencies and organizations involved with climate change
• Participate on standard setting and technology development committees
• Maintain an inventory of intra- and extra-mural Climate Change projects/initiatives
• Develop guidance documents, publications, and other products pertinent to climate change and OSH
Research Priorities

• Characterize who is impacted and how
  • Surveillance
  • Targeted data collection
  • Leading indicators

• Determine controls and guidance
  • Transfer existing knowledge
  • Identify new interventions

• Research to Practice
  • Disseminating information/risk communication
  • Influencing policy
Challenges

• Defining “climate change related”
• Estimating burden
• Identifying emerging hazards
• Communicating importance of workers
Conclusions

• Considerable research needs
• Existing evaluation and control strategies often apply
• Continuous reassessment
• Involve stakeholders and leverage resources
• Workers should be included in public health and climate change activities
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