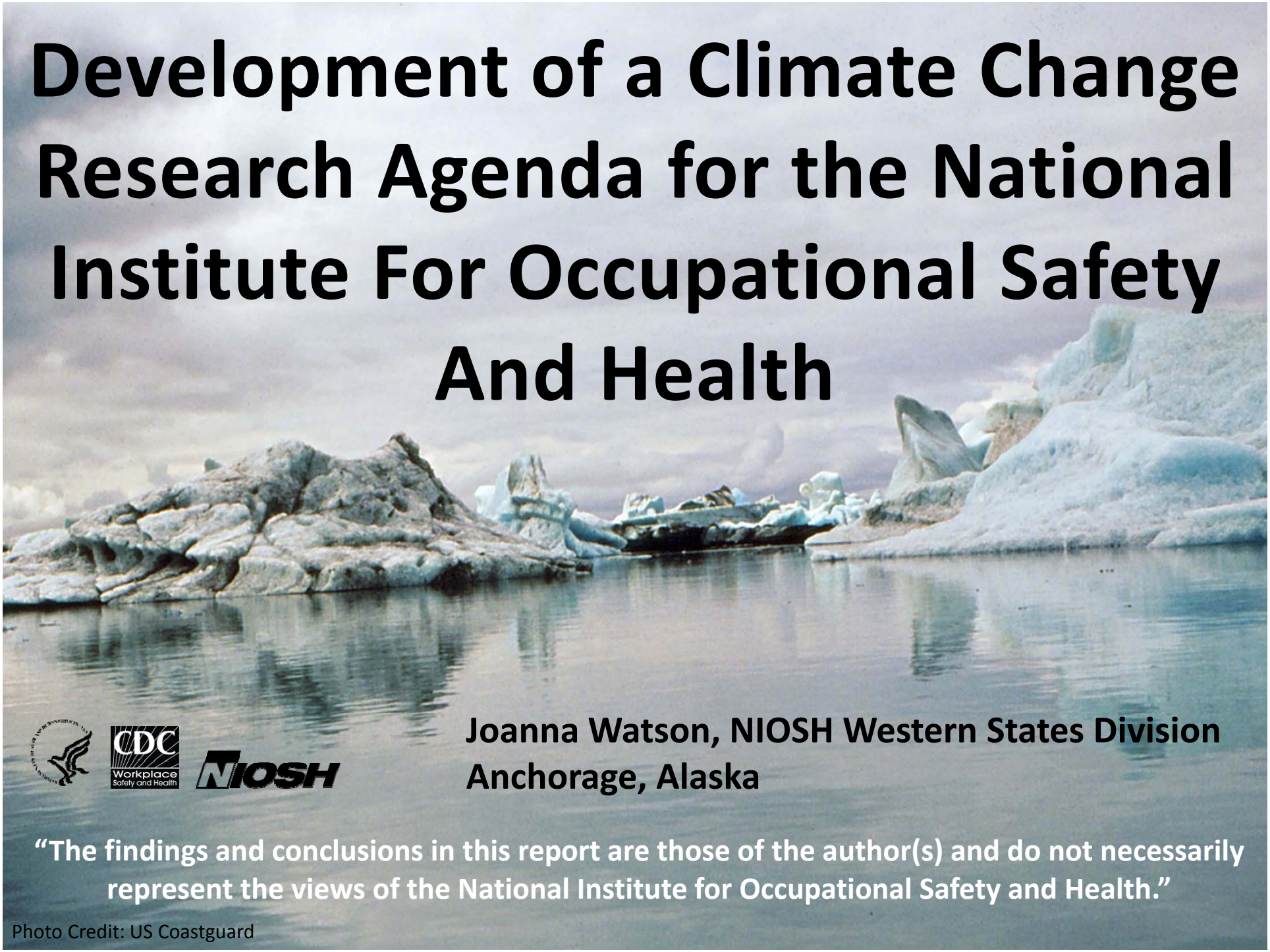
Development of a Climate Change Research Agenda for the National Institute For Occupational Safety And Health

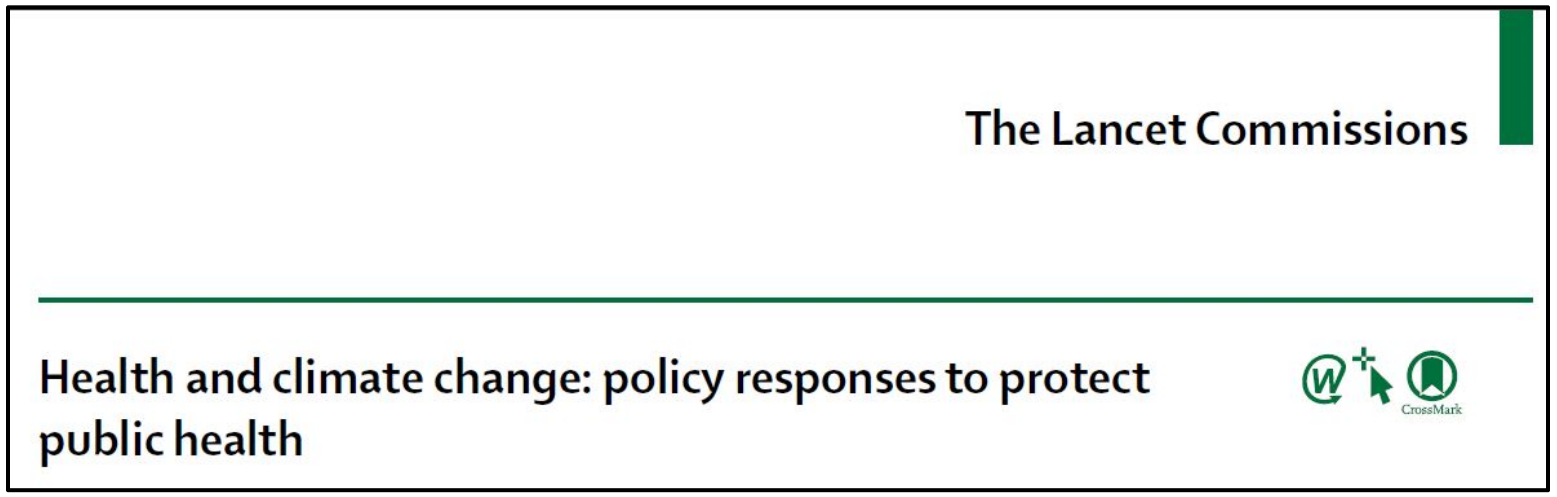


Joanna Watson, NIOSH Western States Division
Anchorage, Alaska

"The findings and conclusions in this report are those of the author(s) and do not necessarily represent the views of the National Institute for Occupational Safety and Health."

Photo Credit: US Coastguard

Climate Change and Human Health



Occupational Impacts

Environmental Change

Societal Response

Types of Worker Hazard

- Amplification of existing hazards
- Known hazards in new situations
- New, unanticipated or unrecognized hazards

Why Workers are Important

- Many of the population are workers
- Workers face unique hazards
- Intervention opportunities

NIOSH Activities

2009 Developed a Conceptual Framework

2014 Established Climate Change Workgroup

2015 Established Climate Change Initiative

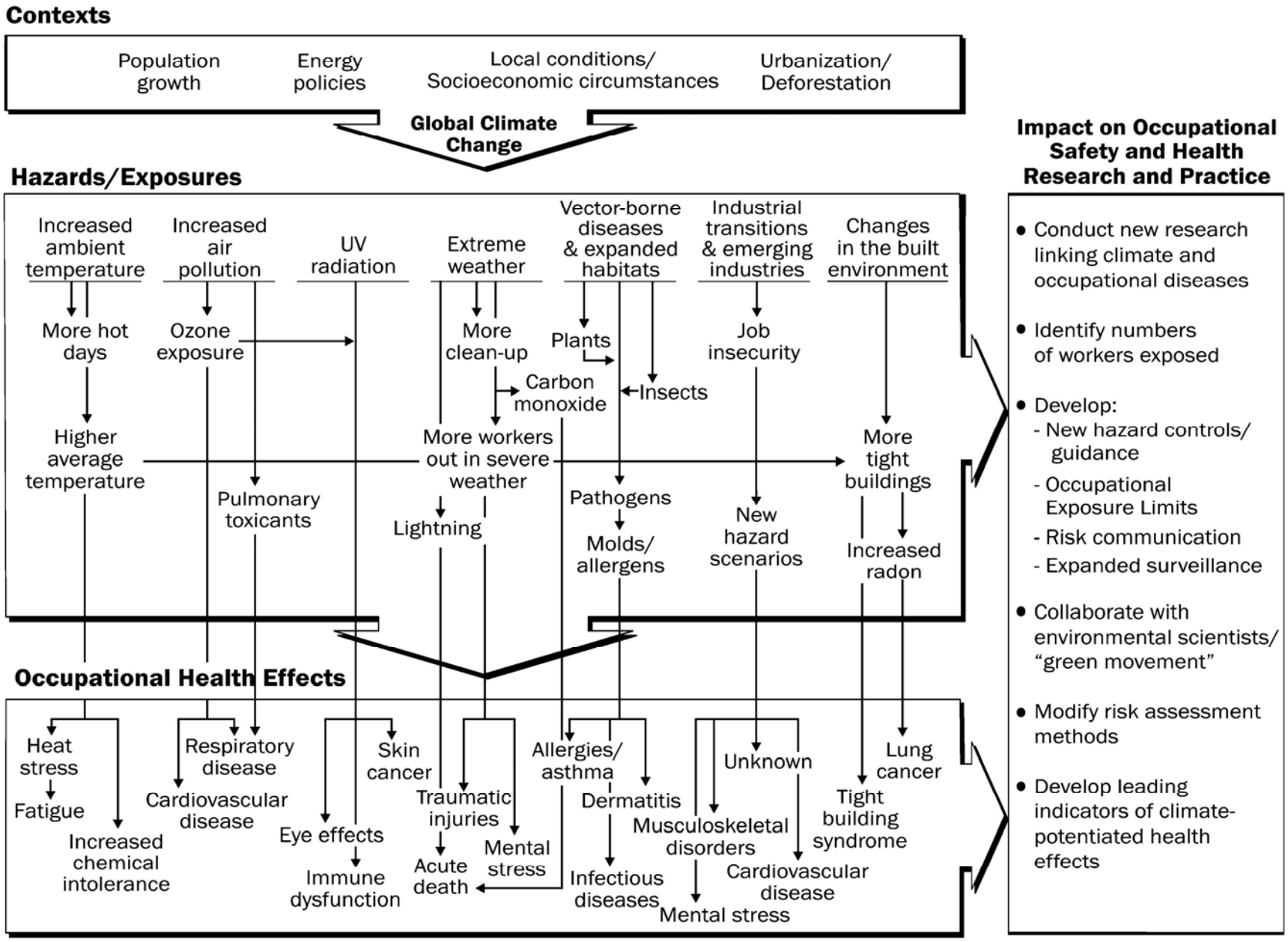


FIGURE 1. Conceptual framework of the relationship between climate change and occupational safety and health

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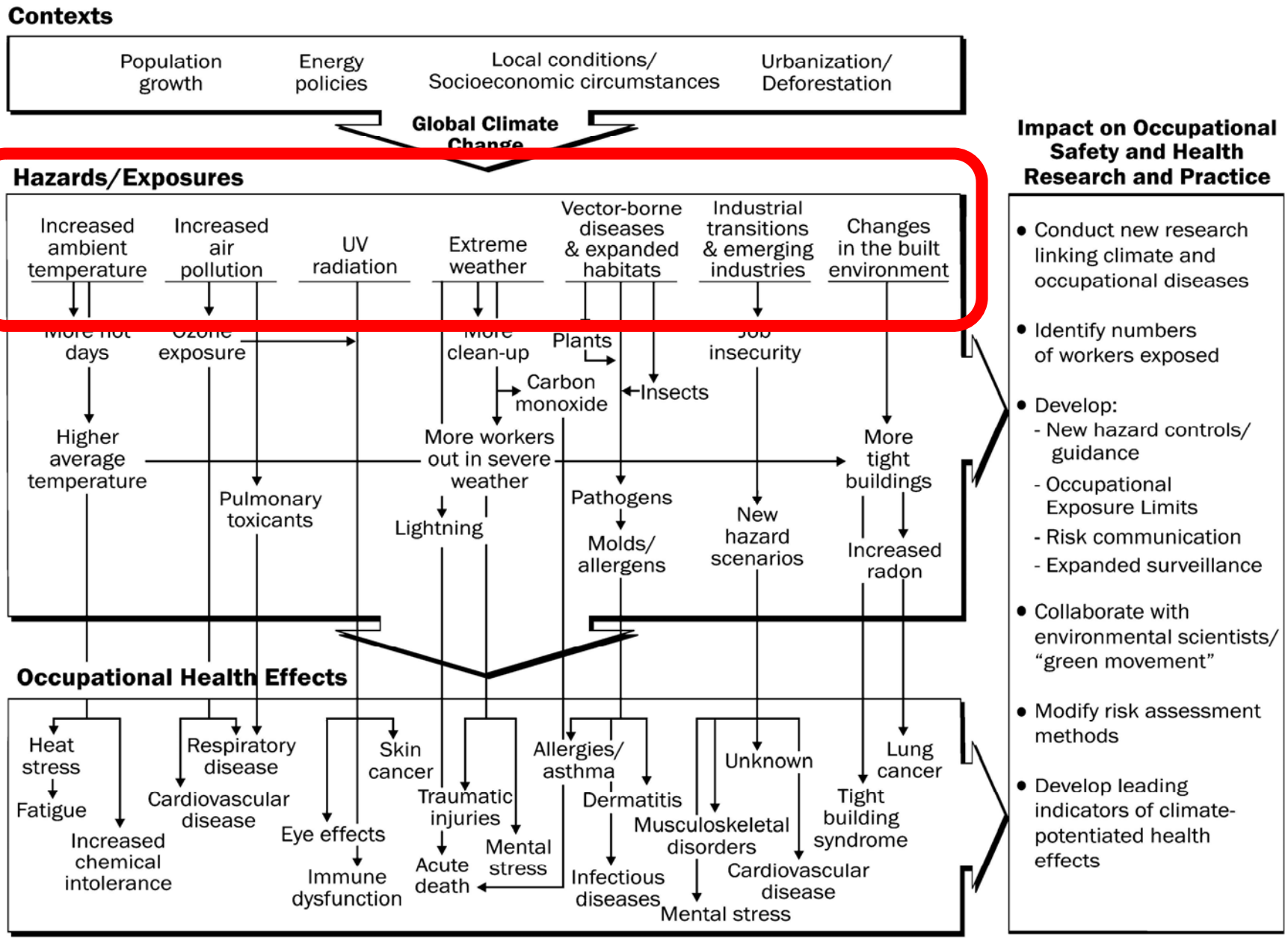

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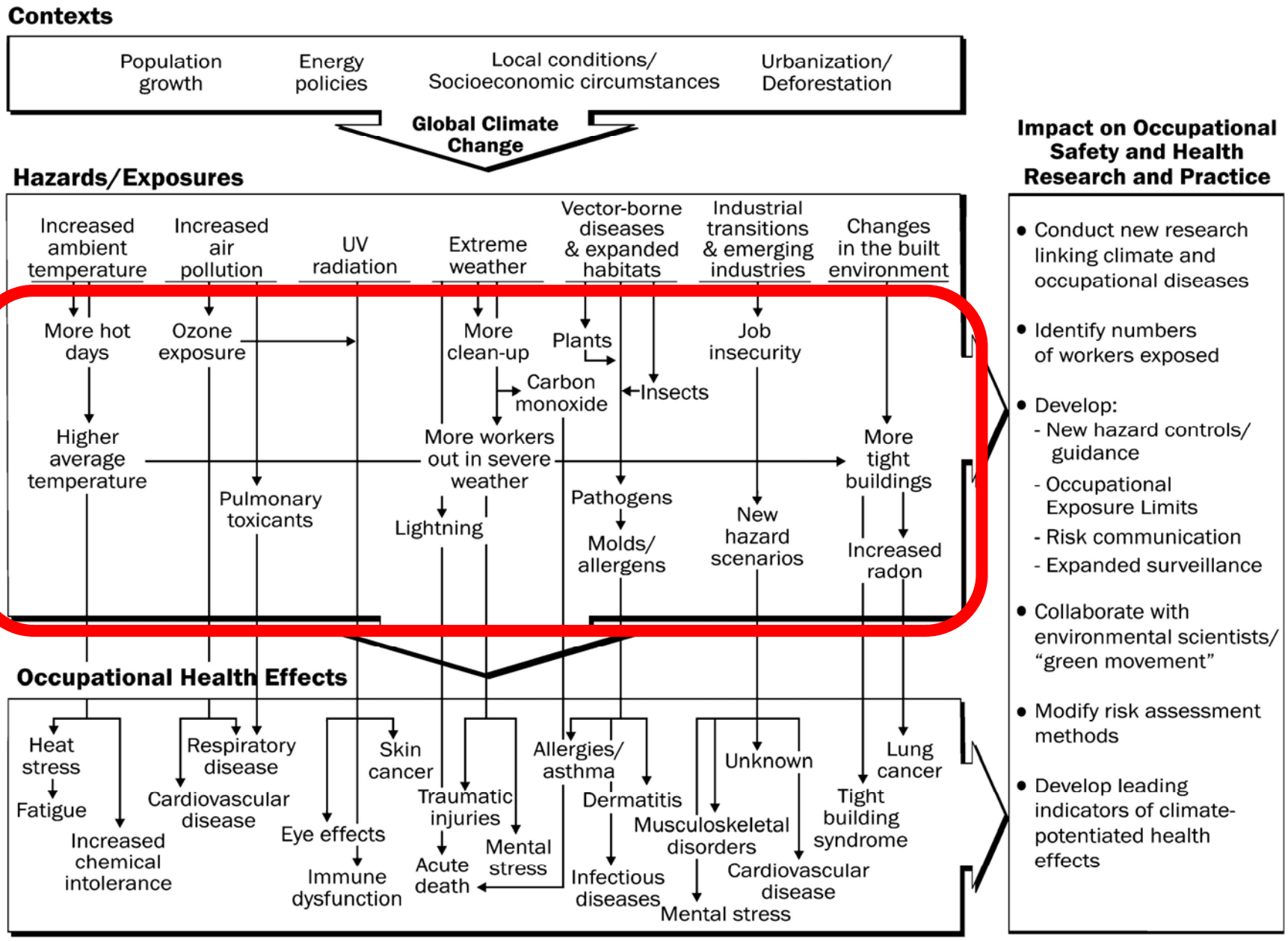
Hazards / Exposures

ENVIRONMENTAL CHANGE

- Increased ambient temperature
- Increased air pollution
- UV radiation
- Extreme weather
- Vector-borne diseases & expanded habitats

SOCIETAL RESPONSE

- Industrial transitions & emerging industries
- Changes in the built environment



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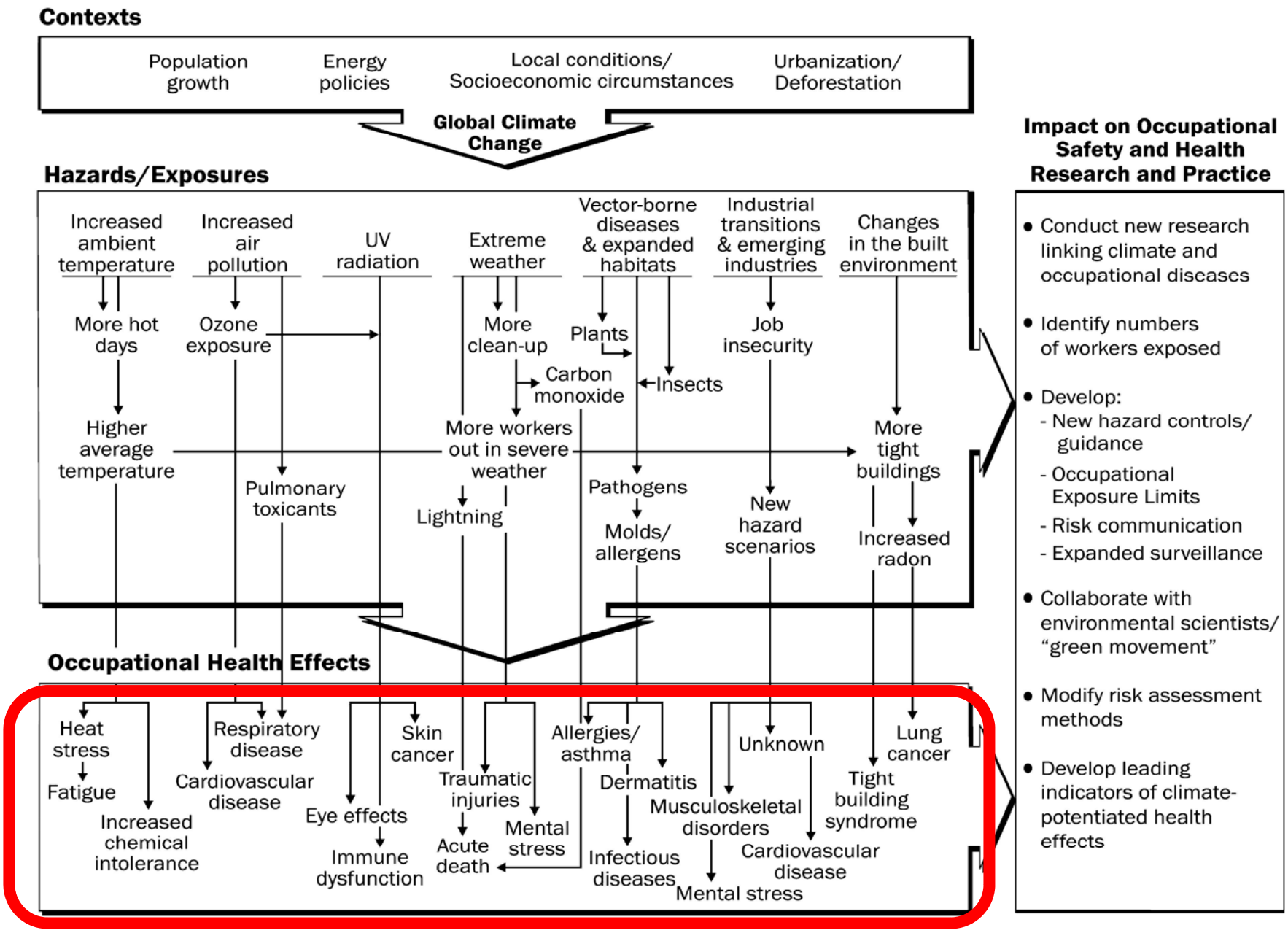

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NIOSH Climate Change Workgroup

Aim

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.

NIOSH Climate Change Workgroup

Workgroup Conclusion

There is strong evidence that climate change is and will present occupational safety and health hazards and numerous critical research questions need to be resolved regarding specific hazards, sentinel events, risk assessment and preventive actions.

Workgroup Outcomes

- **Establishment of a Climate Change Initiative**
- **Draft strategic research agenda**

NIOSH Climate Change Initiative

Mission: Protect workers from the adverse impacts of climate change

1. Increase awareness of occupational hazards resulting from climate change
2. Establish research priorities
3. Promote and support research
4. Use research findings to develop recommendations, guidance and policies

Strategic Research Agenda

Information Sources

- Conceptual framework
- Literature review
- Participation in federal interagency activities
- Consultation with stakeholders

Findings

- Research is needed!
- Unclear definition of ‘climate change related’
- Some research is underway
- Limited data on burden

Research Priorities

Who is impacted? How are they impacted?

- Surveillance
- Targeted data collection

Identify control measures

- Transfer/use existing knowledge
- Identify new interventions and controls

Research to Practice

- Disseminating information
- Influencing policy making

Challenges

- Defining ‘climate change related’
- Estimating burden
- Identifying emerging hazards
- Communicating importance of workers

Conclusions

- Lots of research needs
- Limited information available
- Determining burden is a top priority
- Research priorities need regular reassessment

Call to Action

- Occupational safety and health should be a core component of climate change related public health
- Everyone has a role to play
- Need to just make a start!

THANK YOU!

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