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George Mason University
Center for Climate Change Communication

Climate Change: Communicating the Public Health Imperative

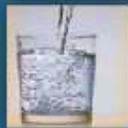
Climate Change as a Public Health Issue:
Communication Lessons & Strategies for Local Health Departments
Los Angeles & Oakland, CA
November 10th & 12th, 2010

Edward Maibach, MPH, PhD

Global Climate Change Impacts in the United States



A State of Knowledge Report from the
U.S. Global Change Research Program



Climate Change Impacts by Sector



Water Resources 41



Energy Supply and Use 53



Transportation 61



Agriculture 71



Ecosystems 79



Human Health 89



Society 99



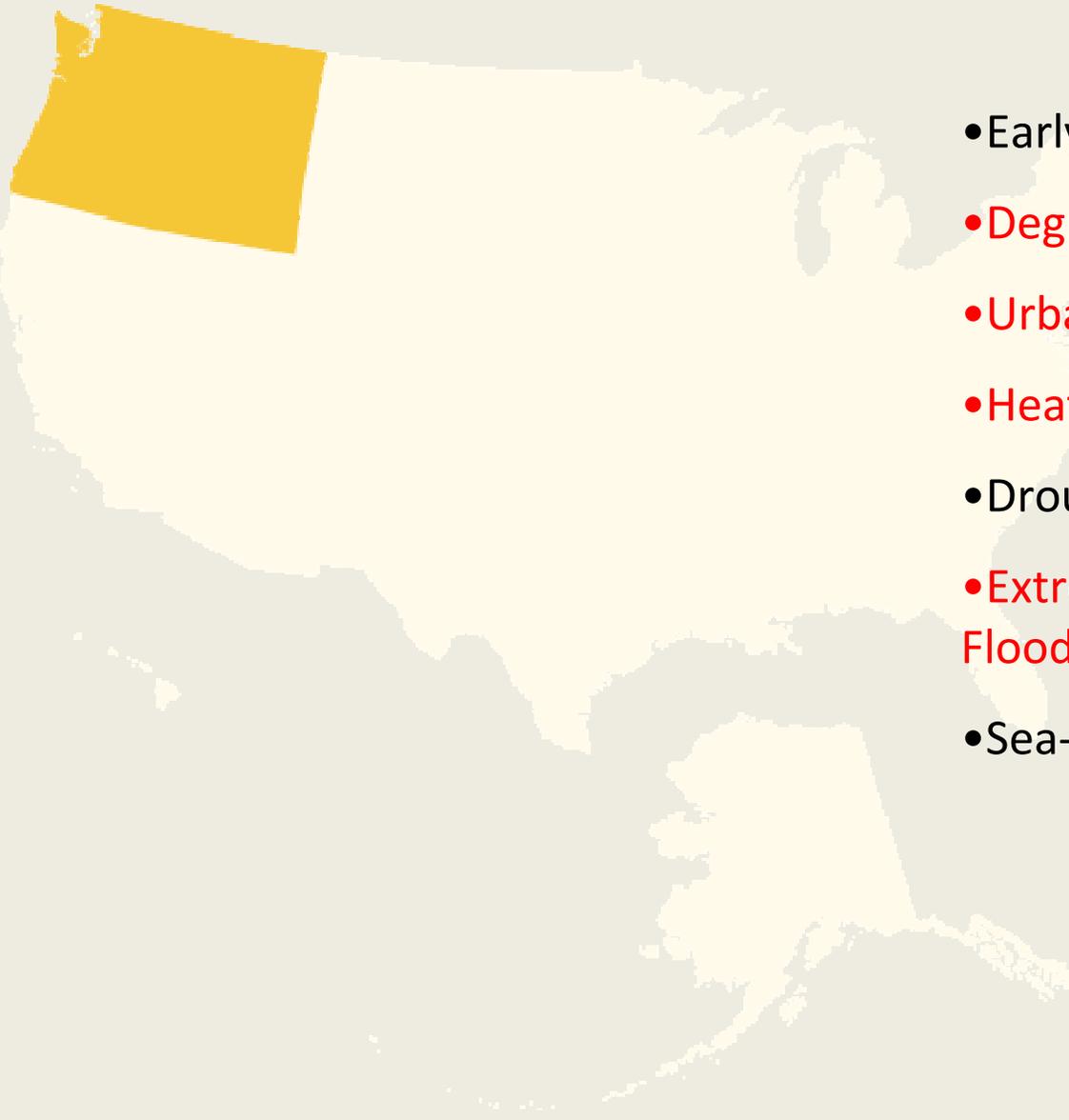
Key Health Messages

1. Increases in the risk of illness & death related to extreme heat & heat waves are very likely. Some reduction in the risk of death related to extreme cold is expected.
1. Warming is likely to make it more challenging to meet air quality standards necessary to protect public health.
1. Extreme weather events cause physical & mental health problems. Some of these events are projected to increase.
1. Some diseases transmitted by food, water & insects are likely to increase.
2. Rising temperatures & CO₂ concentration increase pollen production & prolong the pollen season in a number of plants with highly allergenic pollen, presenting a health risk.
1. Certain groups, including children, the elderly, and the poor, are most vulnerable to a wide range of climate-related health effects.

Regional variations

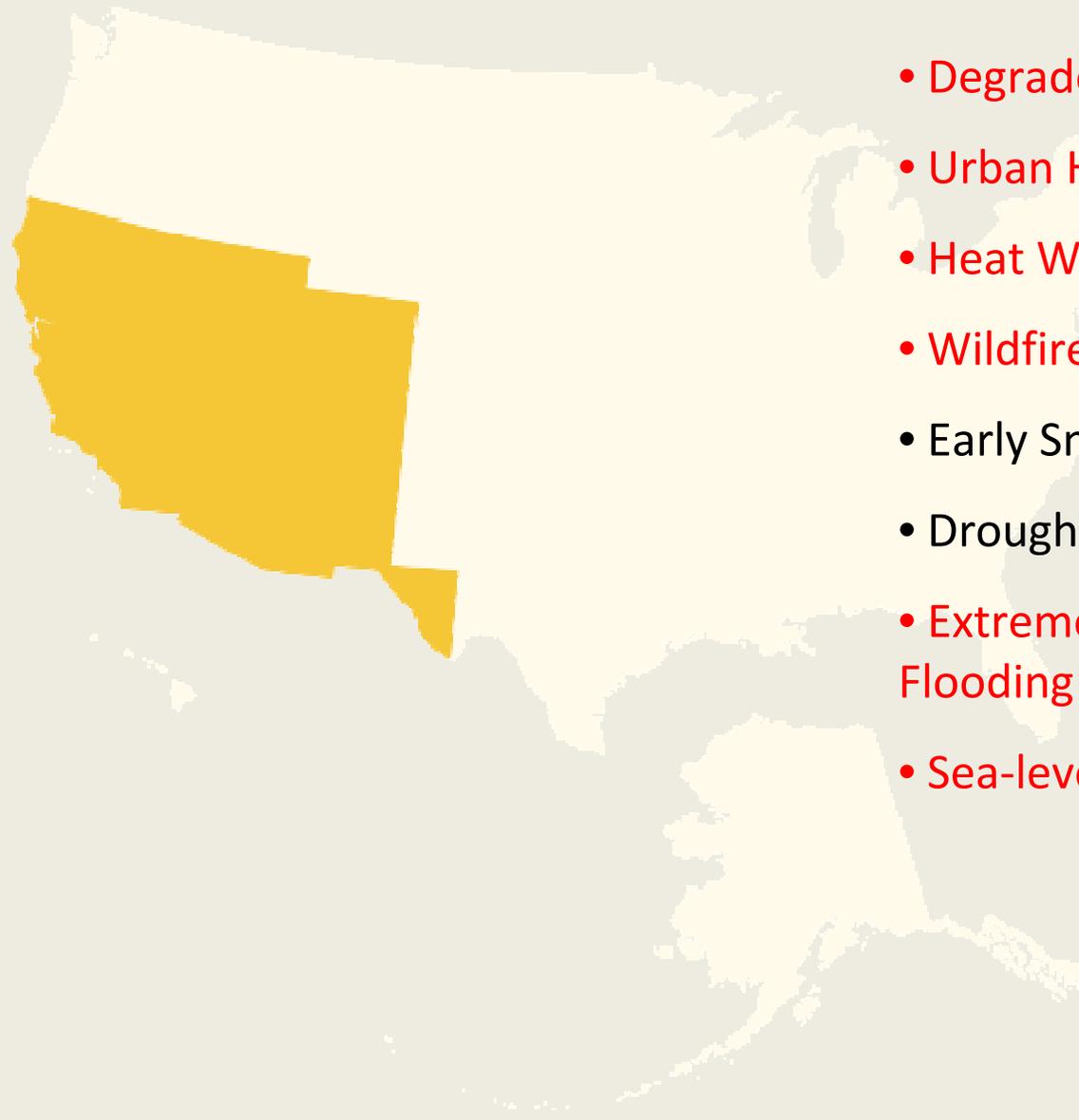


Northwest



- Early Snow Melt
- Degraded air quality
- Urban Heat Island
- Heat Waves
- Drought
- Extreme rainfall/
Flooding
- Sea-level Rise

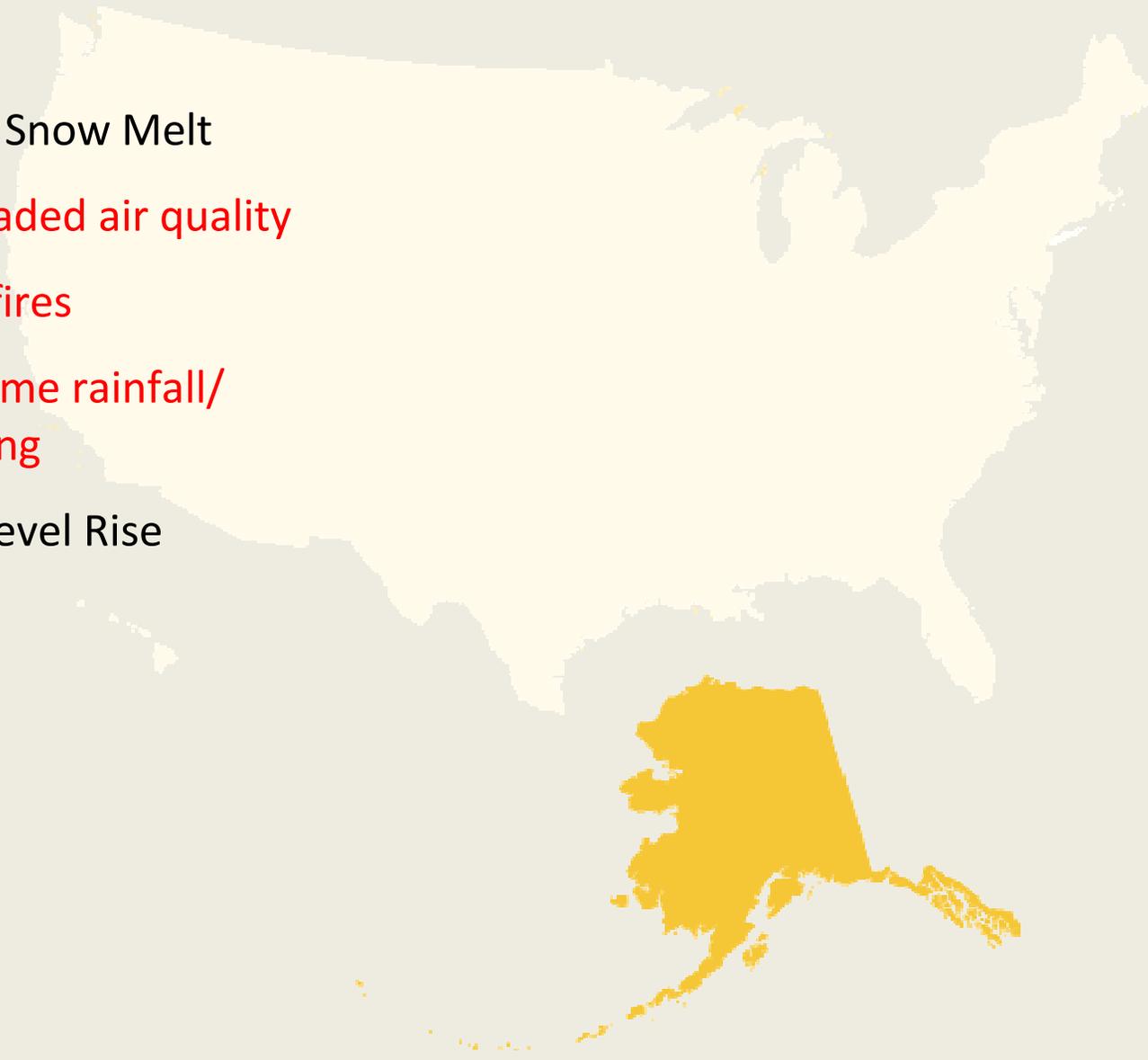
Southwest



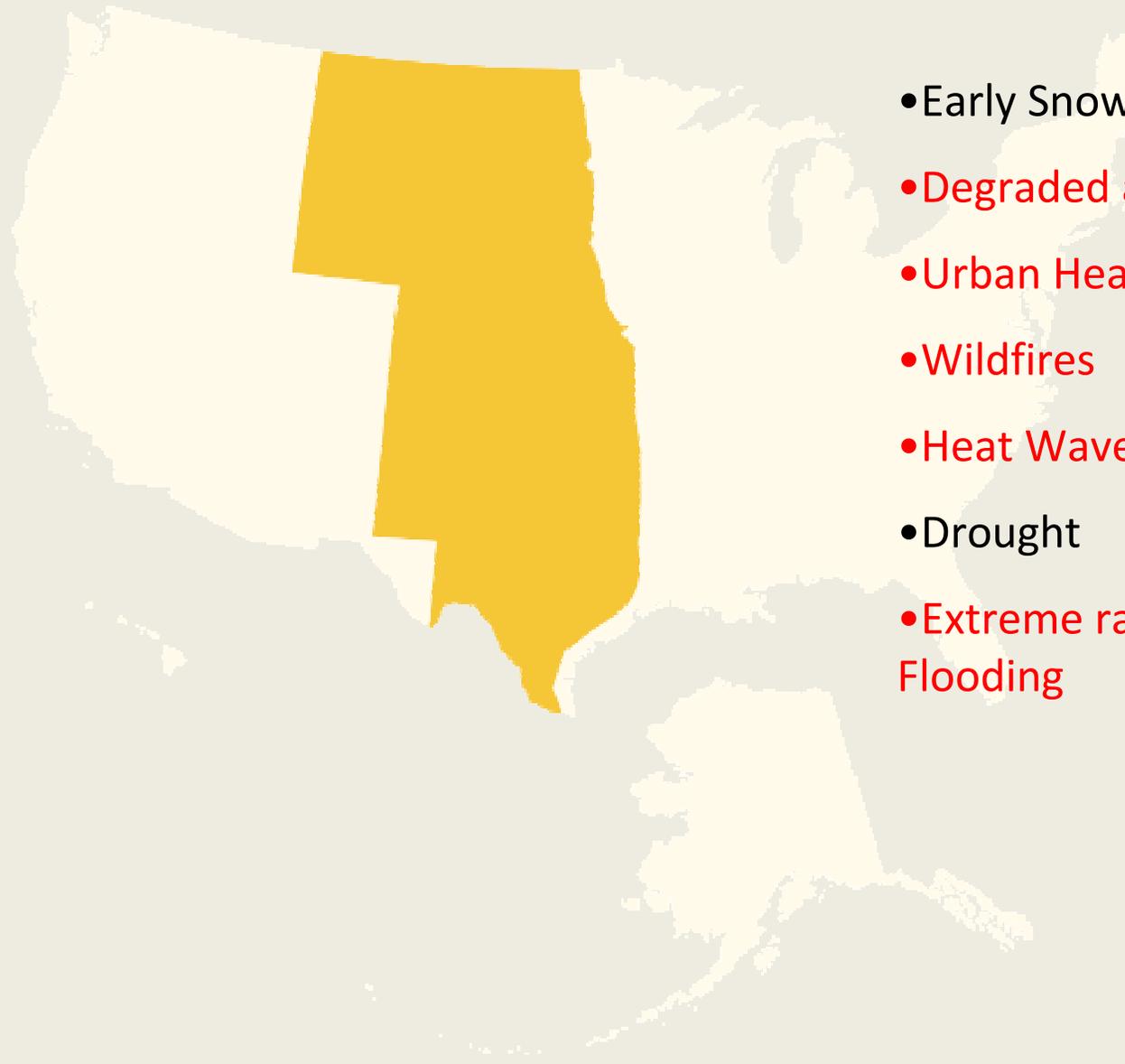
- Degraded air quality
- Urban Heat Island
- Heat Waves
- Wildfires
- Early Snow Melt
- Drought
- Extreme rainfall/
Flooding
- Sea-level Rise

Alaska

- Early Snow Melt
- Degraded air quality
- Wildfires
- Extreme rainfall/
Flooding
- Sea-level Rise



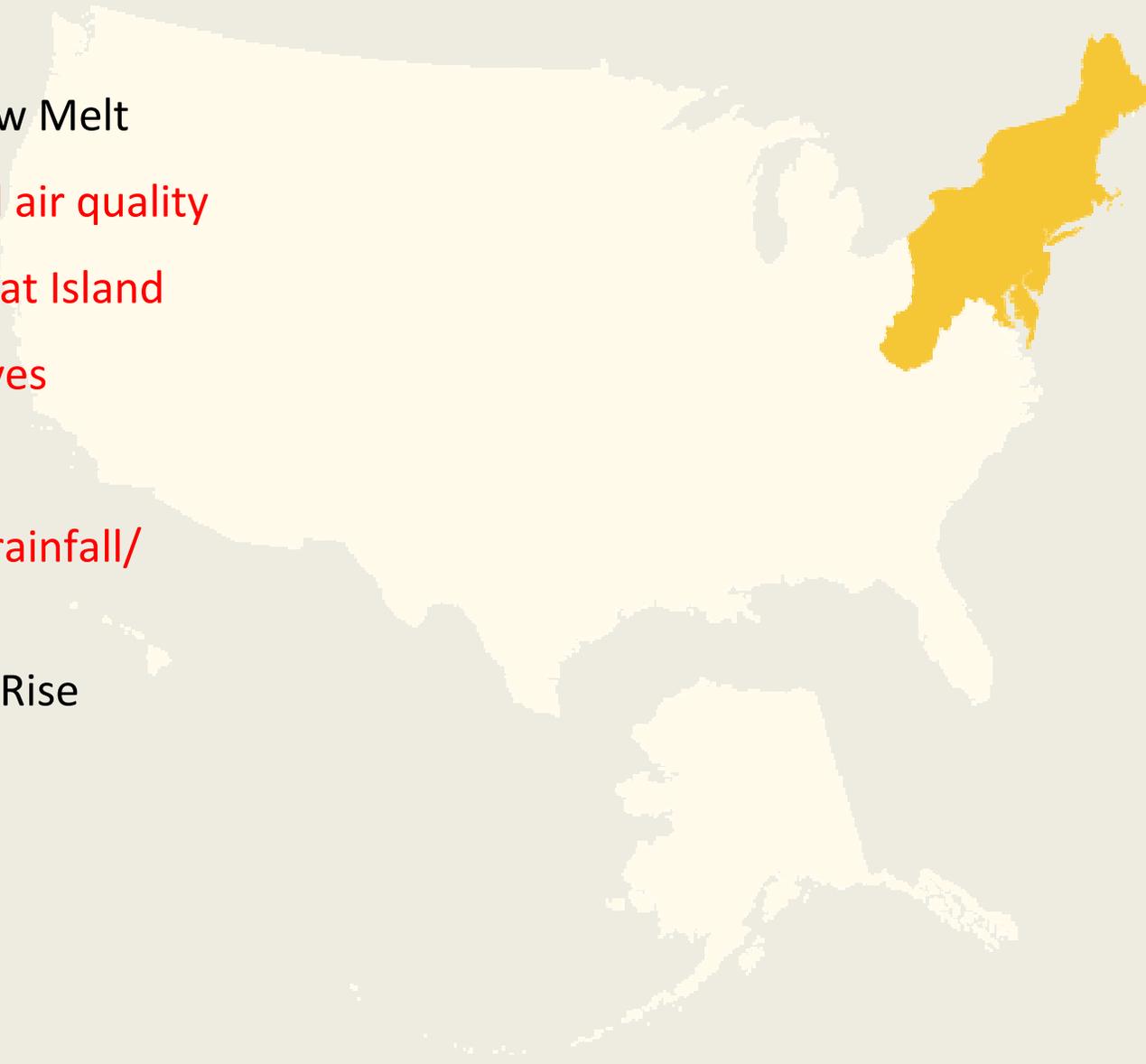
The Great plains



- Early Snow Melt
- Degraded air quality
- Urban Heat Island
- Wildfires
- Heat Waves
- Drought
- Extreme rainfall/
Flooding

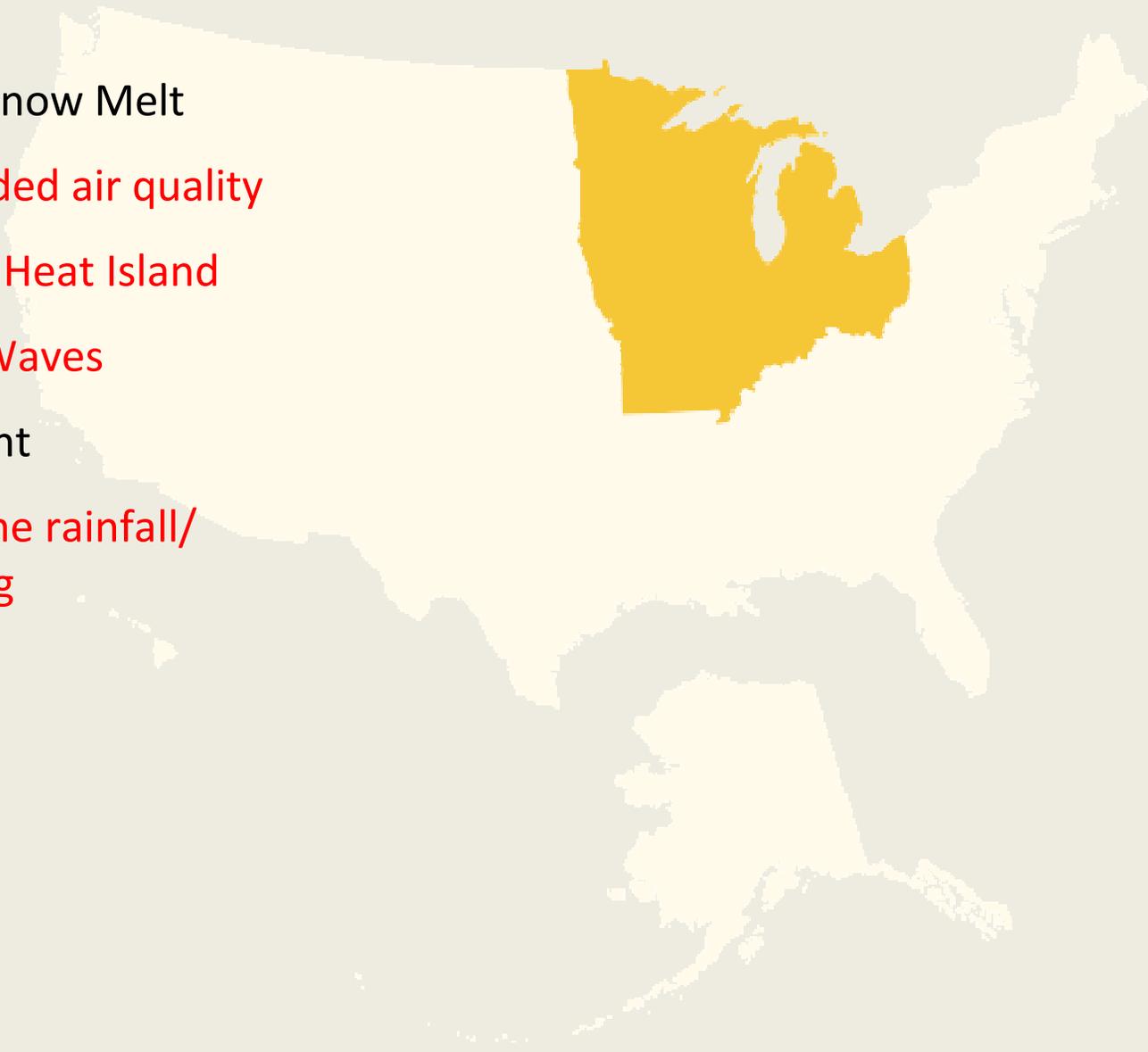
Northeast

- Early Snow Melt
- Degraded air quality
- Urban Heat Island
- Heat Waves
- Drought
- Extreme rainfall/
Flooding
- Sea-level Rise



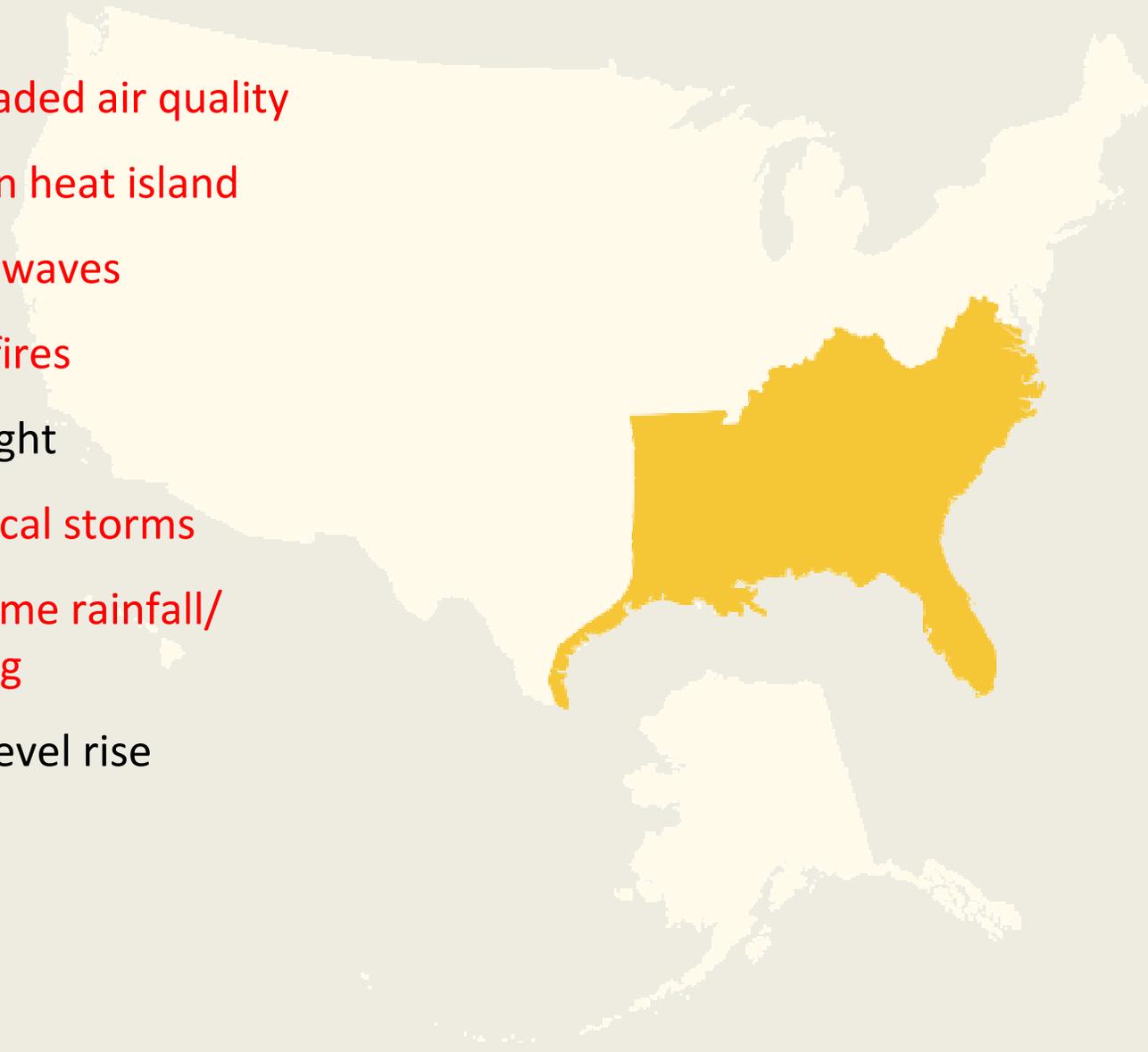
Midwest

- Early Snow Melt
- Degraded air quality
- Urban Heat Island
- Heat Waves
- Drought
- Extreme rainfall/
Flooding



Southeast Atlantic and Gulf Coast

- Degraded air quality
- Urban heat island
- Heat waves
- Wildfires
- Drought
- Tropical storms
- Extreme rainfall/
flooding
- Sea-level rise



Why should public health agencies be communicating about climate change?

Three compelling reasons



Climate change is bad for people.



“We need to... convince the world that humanity really is the most important species endangered by climate change.”

—Margaret Chan, MD, Director-General, World Health Organization



“Climate change is one of the most serious public health threats facing our nation. Yet few Americans are aware of the very real consequences of climate change on the health of our communities, our families and our children.”

—Georges Benjamin, MD,
Executive Director
American Public Health Association

Reason #1:

The health of Americans is already being harmed by climate change, and it is likely to get much worse if we don't take action, now.

What actions?

- Adaptation: Protecting people from harm associated with changes in the climate that can't be avoided
- Mitigation: Limiting further changes in the climate

Reason #2:

Framing climate change as a human health & wellbeing issue – rather than a plants, penguins & polar bears issue – can help decision-makers and the public more effectively engage with the issue.

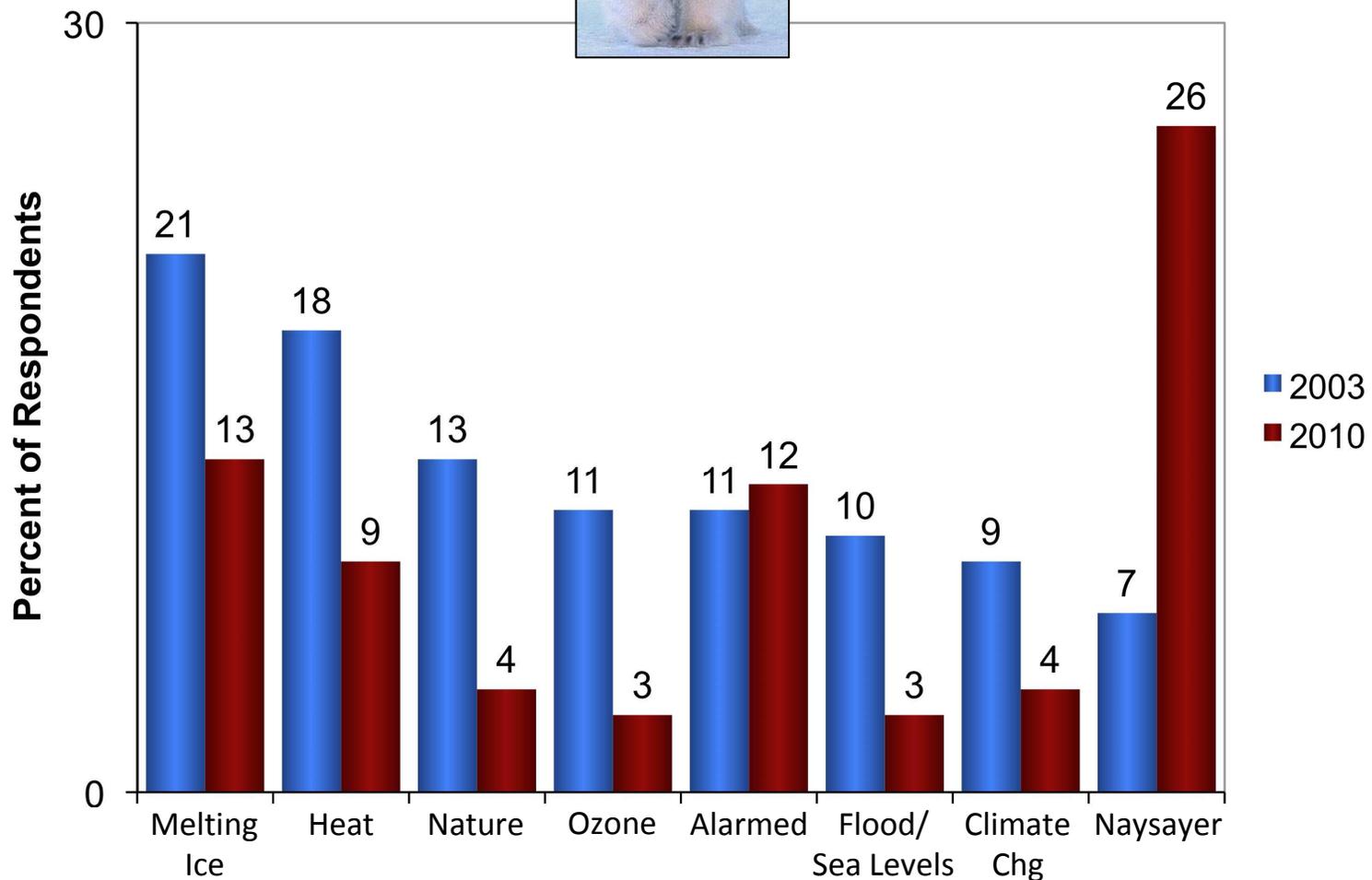
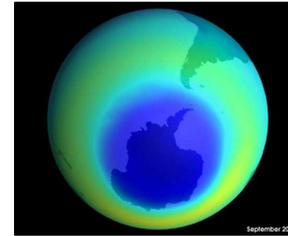
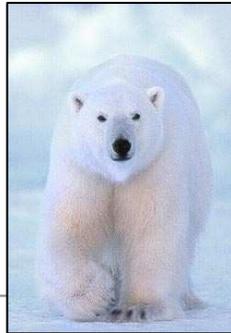


Framing the issue properly is important because...

...framing is a process by which we enhance the impact of our communication by linking our messages and recommendations to audience members' deeply held values and beliefs.

Americans care more about people – especially children, the elderly, and other vulnerable members of society – than they care about “the environment” (i.e., the non-human world).

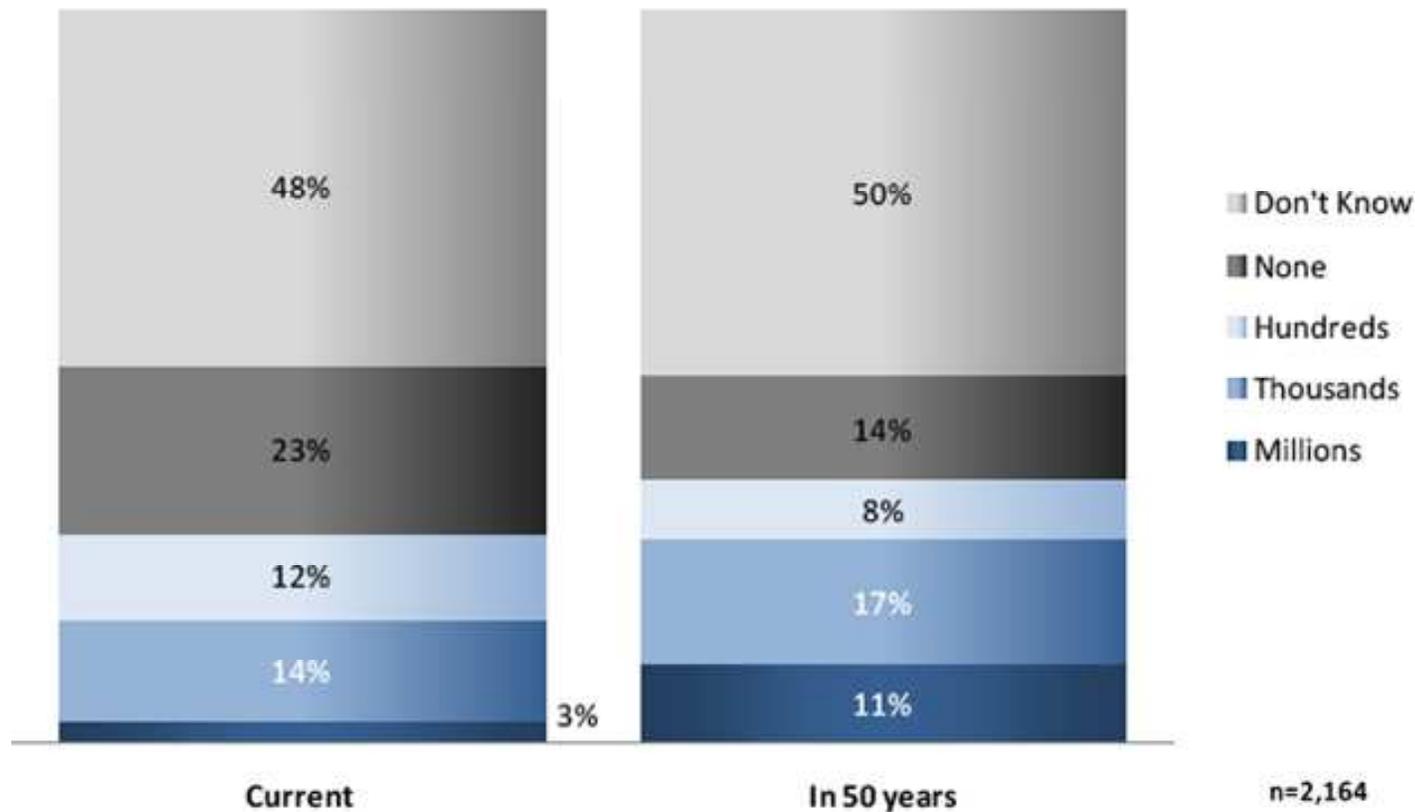
American Images of Global Warming



U.S. perceptions of current and future deaths resulting from global warming.

Now please think about the human health effects of global warming. (Please choose the answer corresponding to your best estimate.) Worldwide, how many people do you think ...

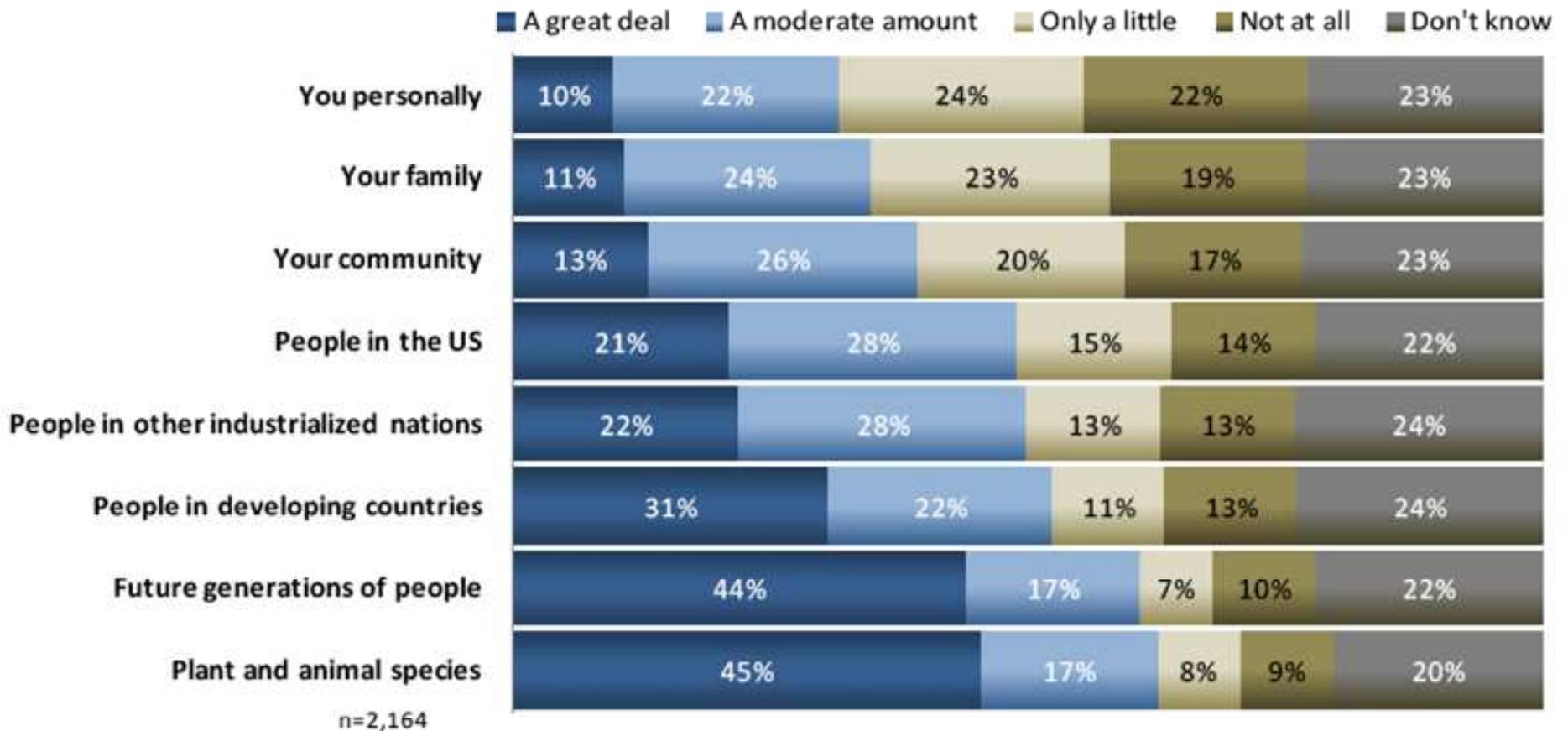
- **Currently die** each year from global warming?
- **Will die** each year 50 years from now due to global warming?



Source: Leiserowitz, Maibach & Roser-Renouf (2009): Climate Change in the American Mind

U.S. perceptions of who will be the most harmed from global warming.

How much do you think that global warming will harm ...



Source: Leiserowitz, Maibach & Roser-Renouf (2009): Climate Change in the American Mind

How can we frame climate change as a public health issue?

1. By focusing people on a previously unconsidered angle of the problem that we all care deeply about...our health.

1. By shining a light on the local health impacts of an abstract global problem, thereby making the problem more concrete.

1. By calling the question of how local adaptation needs will be met, again making the problem more concrete and actionable.

1. By engaging new voices and partners in the dialogue (e.g., pediatricians, health advocacy organizations, PTAs, AARP)

Abstract

vs.

Concrete



Reason #3:

Climate change adaptation and mitigation actions can improve public health independent of the health impacts associated with climate change.

(Co-benefits!)

How?

1. Creating active living communities (green space, walking trails, traffic calming)

1. Promoting active transport (walking, riding, mass transit).

1. Encouraging and enabling (local) produce consumption rather than animal consumption.

1. Cleaning up our energy choices, thereby cleaning our air and water.

Instead of this



We get this

Instead of this



We get this

Instead of this



We get this

Instead of this



We get this

Instead of this



We get this



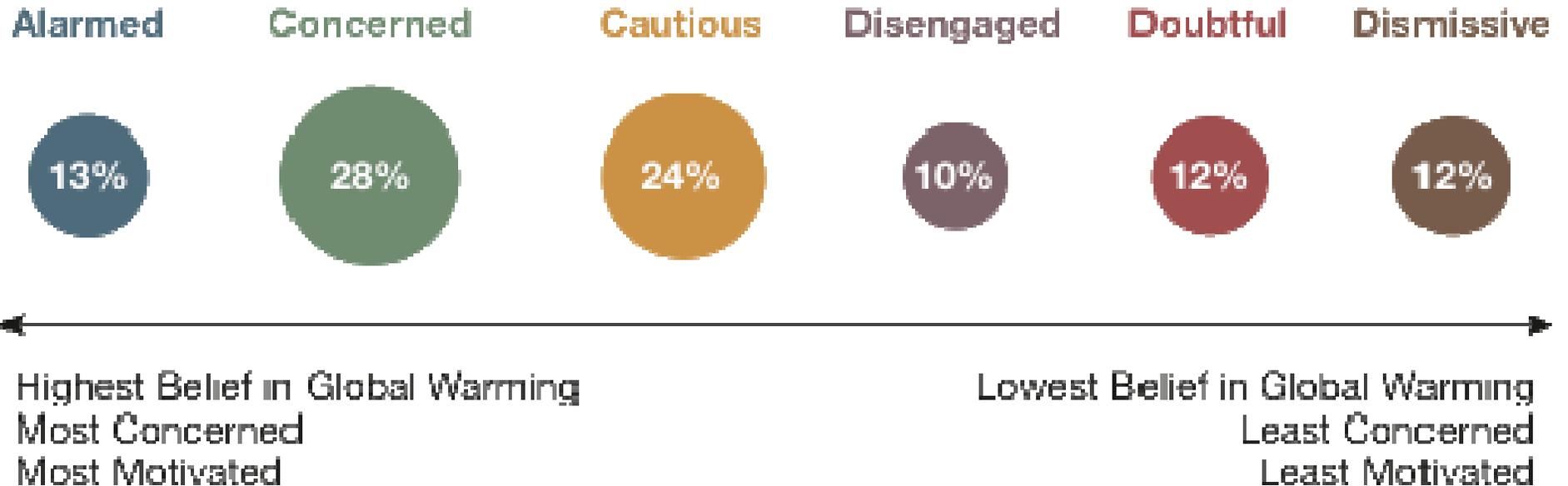
- Lower CO₂ Emissions
- Reduce Urban Heat Island Effects
- Increase Physical Activity
- Less Osteoporosis
- Fewer Injuries
- Lower Air Pollution
- Lower Infrastructure Costs
- Increase Social Capital
- Less Depression
- Increase Happiness



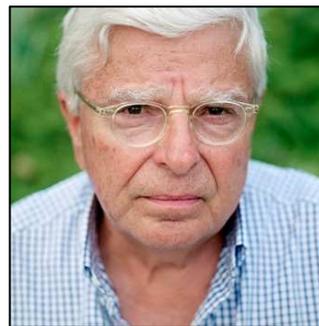
Who could/should you be targeting with information about the public health implications of climate change?

- Internal public health audiences
- News media, community media, bloggers
- Decision-makers in government, business & NGOs
- Other professionals whose work is – or will be – affected by climate change (e.g., ag., transport, land use, housing, energy)
- General public (and various segments therein)

Global Warming's Six Americas



Proportion represented by area

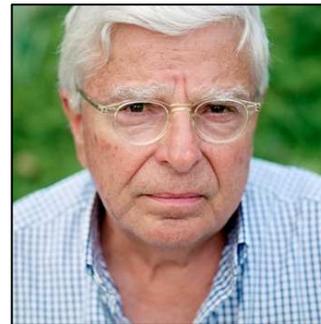


“If you could ask an expert on global warming one question, which question would you ask?”

What can the US do to reduce global warming?

How do you know that global warming is occurring?

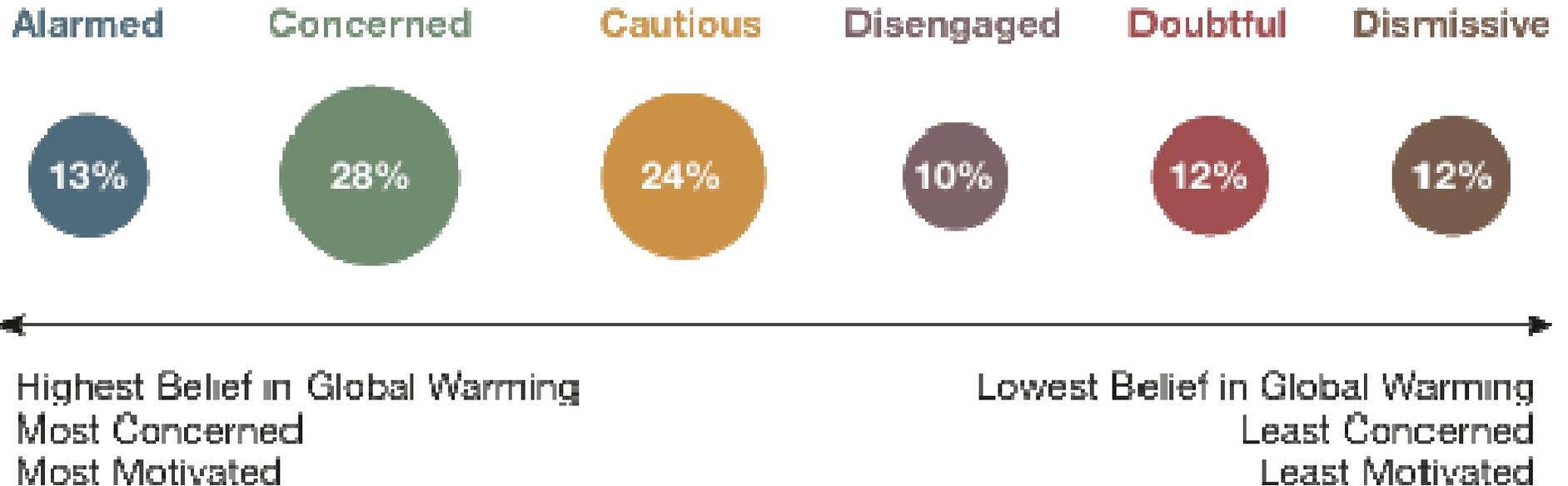
What harm will global warming cause?



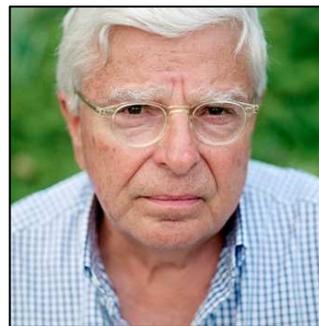
Getting the message right

- Frame on human health by telling simple, compelling (yet accurate) stories about how climate change harms peoples' health.
- Localize the risks to the extent possible.
- Emphasize the immediate health co-benefits associated with taking action against climate change.
- Key messages:
 - *Climate change is real and human-caused. This is the consensus of over 95% of the world's leading experts.*
 - *Climate change is bad for our health, and for the health of our community, in a number of serious ways.*
 - *Taking action against climate change creates a “win-win” situation because, in addition to dealing with climate change, most recommended actions will also benefit our health in other important ways too.*
 - *Most importantly, we need to start making decisions and taking actions now that will help us adapt to unavoidable changes in our climate, so that we can prevent as much harm to people's health as possible.*

Global Warming's Six Americas



Proportion represented by area



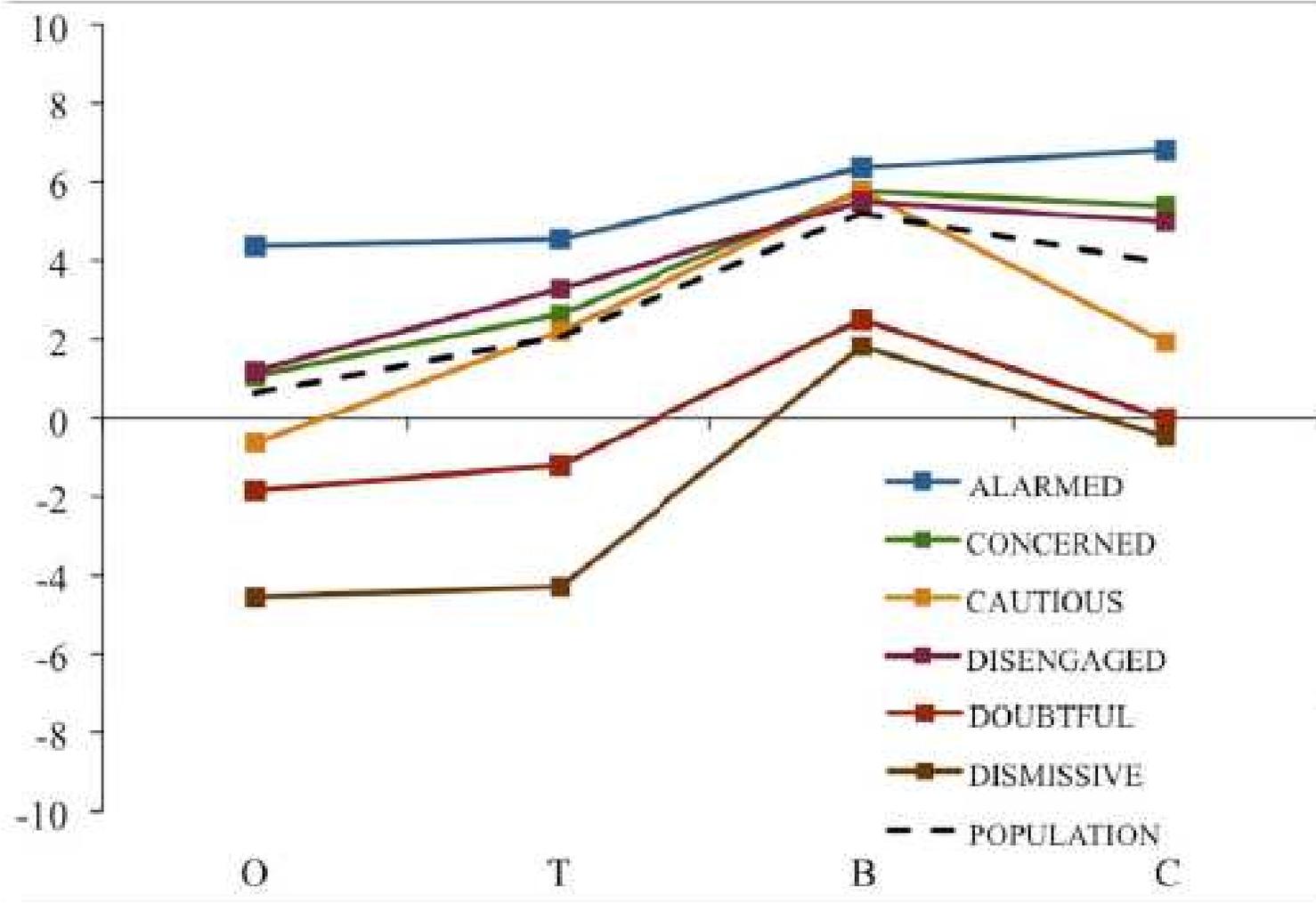


Figure 6 Essay evaluations by section (opening, threat, benefits, closing)

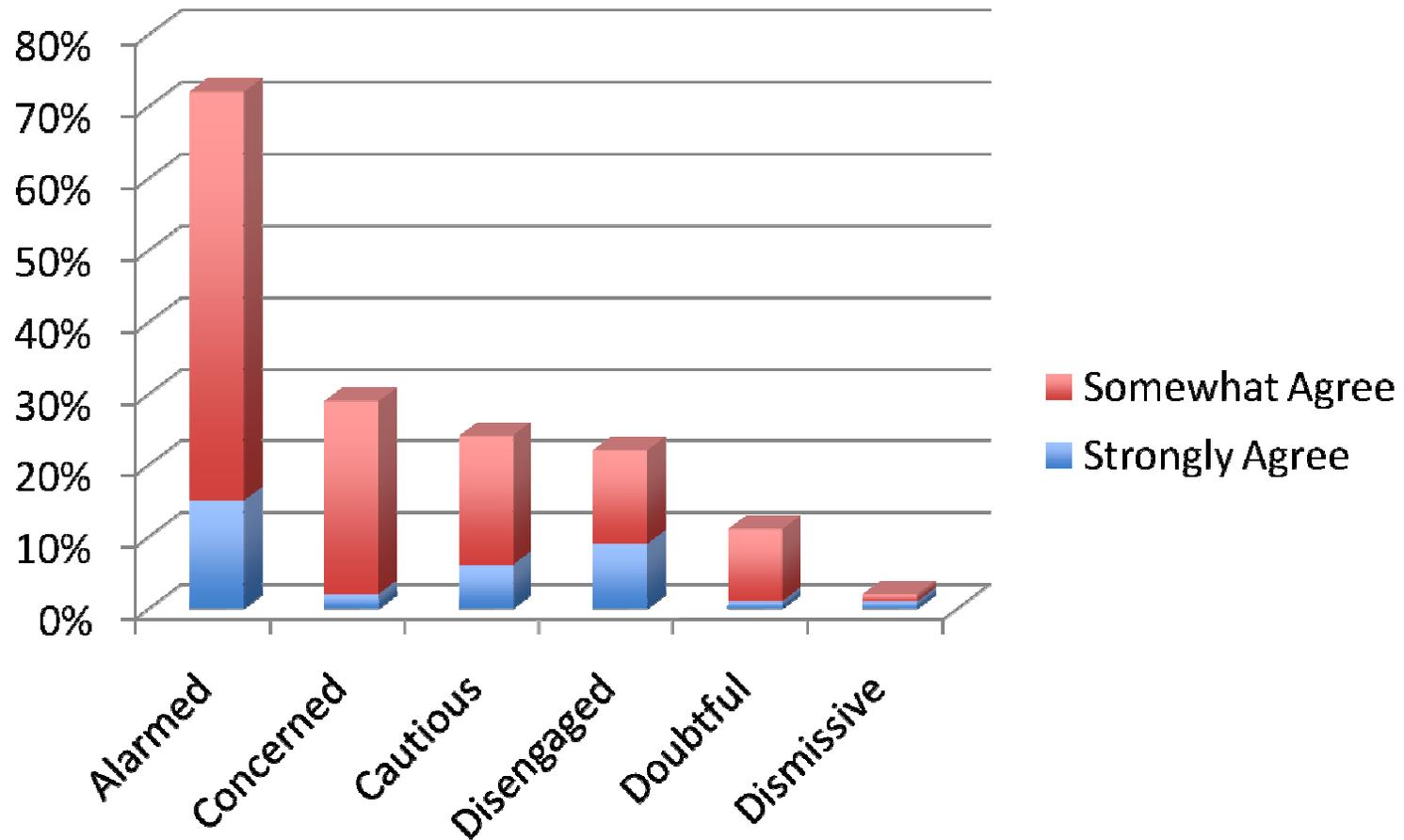
Getting the message out: some basic + advanced options

- Strengthen the knowledge base within your own organization.
- Add content to your website.
- Contact local news media – professional & citizen journalists, weathercasters, bloggers.
- Partner with other local organizations to draw attention.
- Request permission to testify at city/county council mtgs.
- Hold a public meeting to engage concerned citizens.
- Use regional or national events to create local news attention
- Write op-eds and letters to the editor
- Conduct a study of local impacts and issue a report
- Use social media – Twitter, Facebook – to encourage public participation in the dialogue
- Identify, recruit and train informal opinion leaders

Going beyond messages

- Help members of your target audiences “experience” climate change.
 - Show them where and how climate change is harming people in your community – or in nearby communities – now.

“I have personally experienced the effects of global warming.”



Source: Leiserowitz, A., Maibach, E., & Roser-Renouf, C. (2010) *Global Warming's Six Americas, January 2010*. Yale University and George Mason University. New Haven, CT: Yale Project on Climate Change.

Going beyond messages

- Find ways to engage citizens in adaptation planning.
- Helping people think in concrete terms about the current and potential future harms, and how to avert them – and having them discuss the options with others in the community – presents an important opportunity for public health organizations to make the global local, and make the abstract concrete, thereby expanding and heightening public engagement.

This 30 minute “lunch & learn” style presentation can be downloaded at:
www.climatechange.gmu.edu

Global Warming:

Why Public Health Professionals Care,
and Why You Should Too.

[Insert your name here]

[Insert your organization's name here]