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George Mason University
Center for Climate Change Communication

Public Understanding of the Health Impacts of Climate Change

EPA Webinar
Communicating on Climate Change
And Heat Health
July 22, 2015

Connie Roser-Renouf, PhD



Global Warming's "Six Americas"

SAVING ENERGY AT HOME AND ON THE ROAD

A survey of Americans' energy
intentions, motivations, and

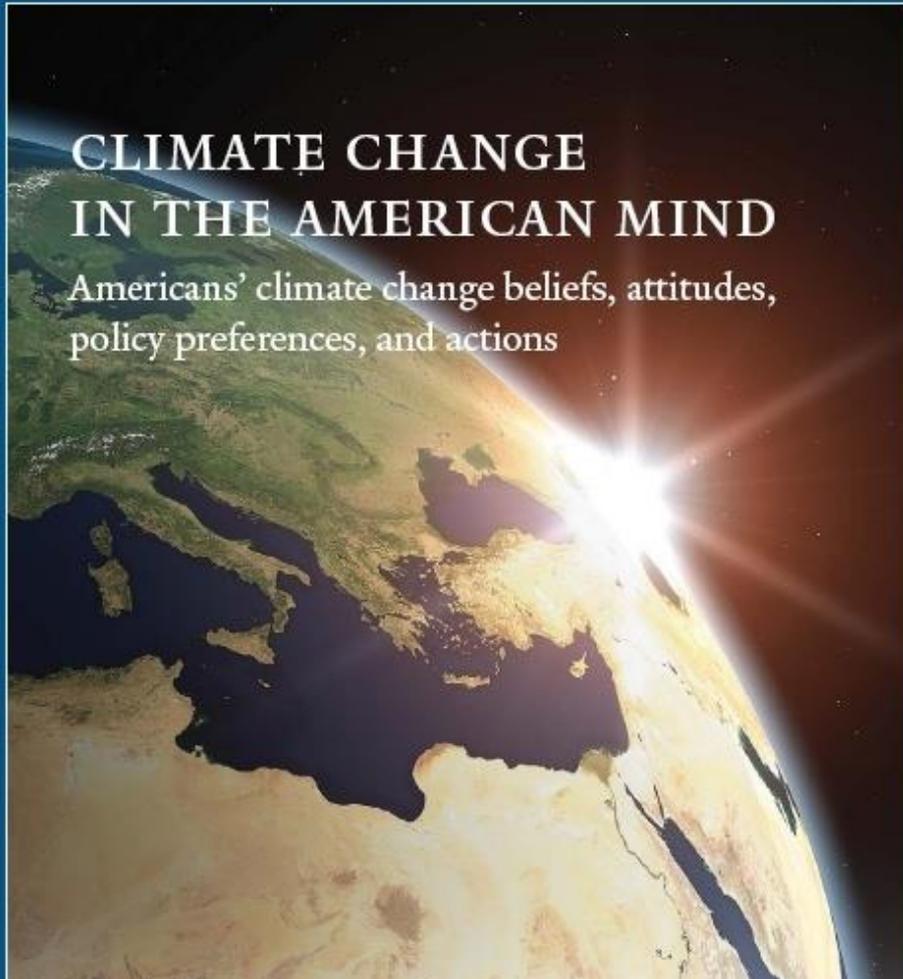


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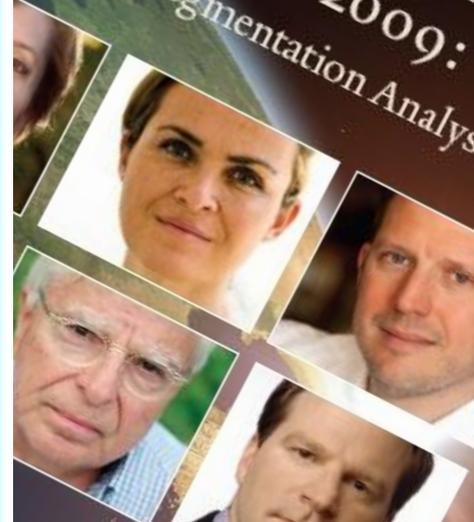
CLIMATE CHANGE IN THE AMERICAN MIND

Americans' climate change beliefs, attitudes,
policy preferences, and actions



Segmentation

GLOBAL WARMING'S SIX AMERICAS 2009: Audience Segmentation Analysis





Global Warming's "Six Americas"

- Nationally representative survey
- Conducted online in Oct. 17-28, 2014
- N = 1,275
- Margin or error = +/-3 percentage points

SAVING ENERGY
AT HOME
AND ON THE ROAD

A survey of Americans' energy
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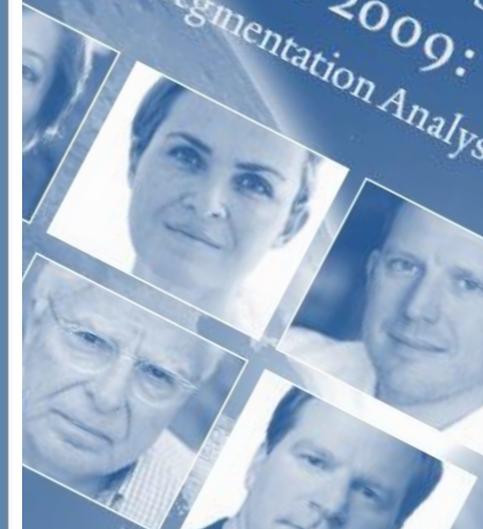
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policy preferences, and actions

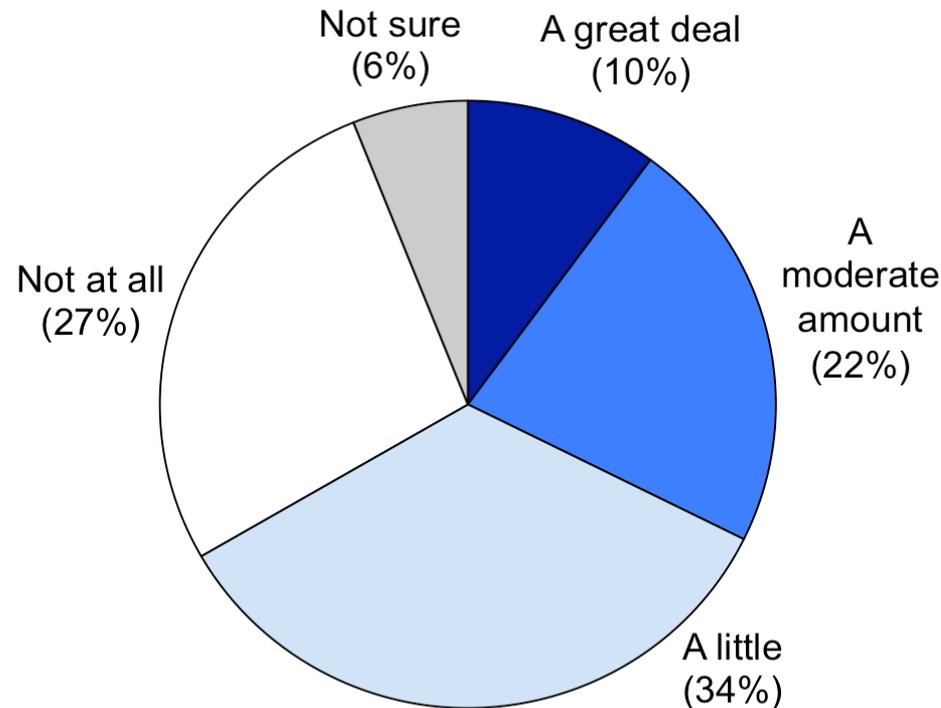


GLOBAL WARMING'S
SIX AMERICAS 2009:
Audience Segmentation Analysis



Only a Small Minority of Americans Have Thought a “Great Deal” About How Global Warming Might Affect People’s Health

“Before taking this survey, how much, if at all, had you thought about how global warming might affect people’s health?”



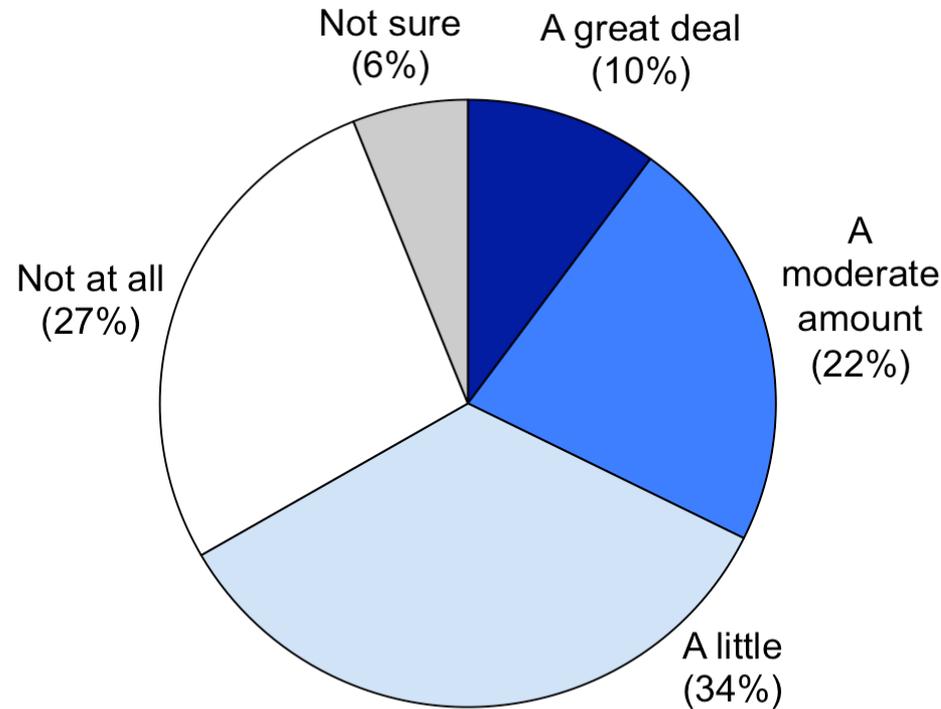
Please answer the following questions about global warming and health...

Base: Americans 18+ (n=1,275). October, 2014.

Only a Small Minority of Americans Have Thought a “Great Deal” About How Global Warming Might Affect People’s Health

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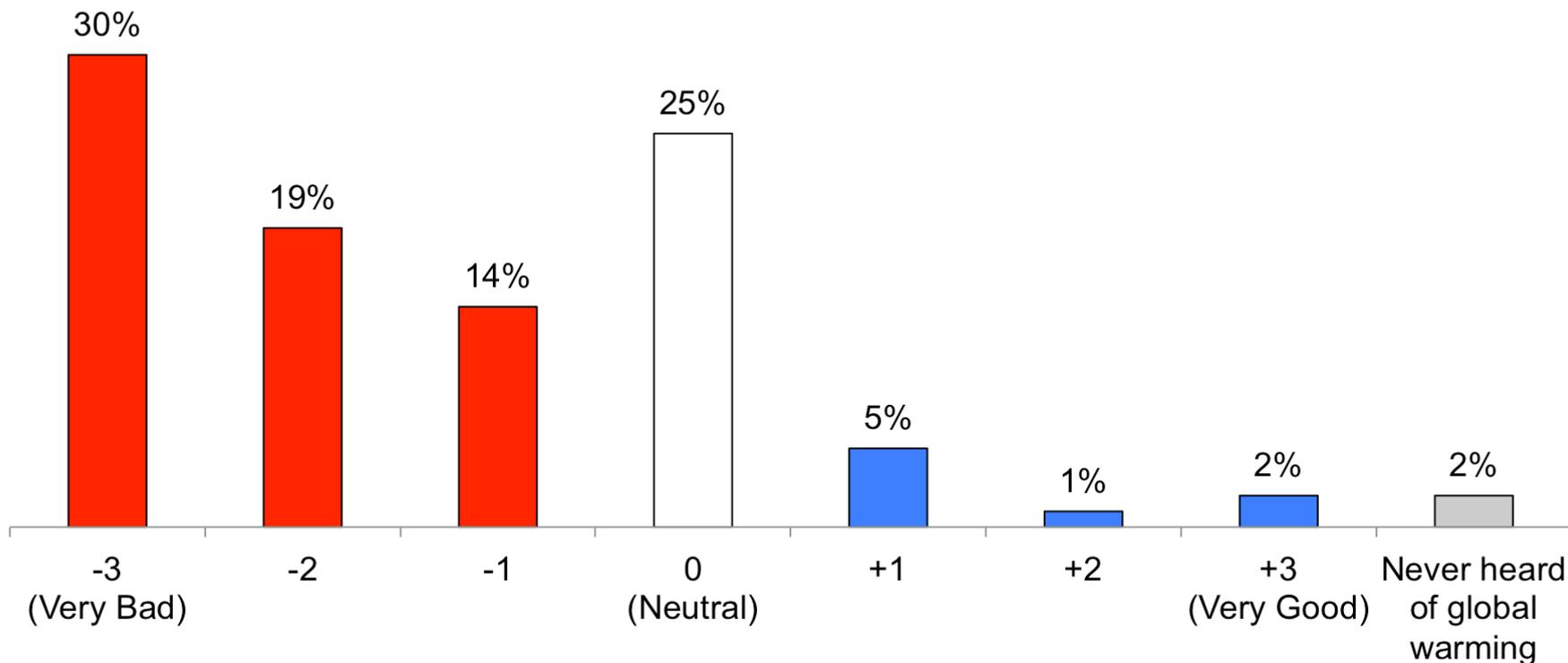
This figure probably overestimates the amount of thought given to the topic.



Please answer the following questions about global warming and health...

Base: Americans 18+ (n=1,275). October, 2014.

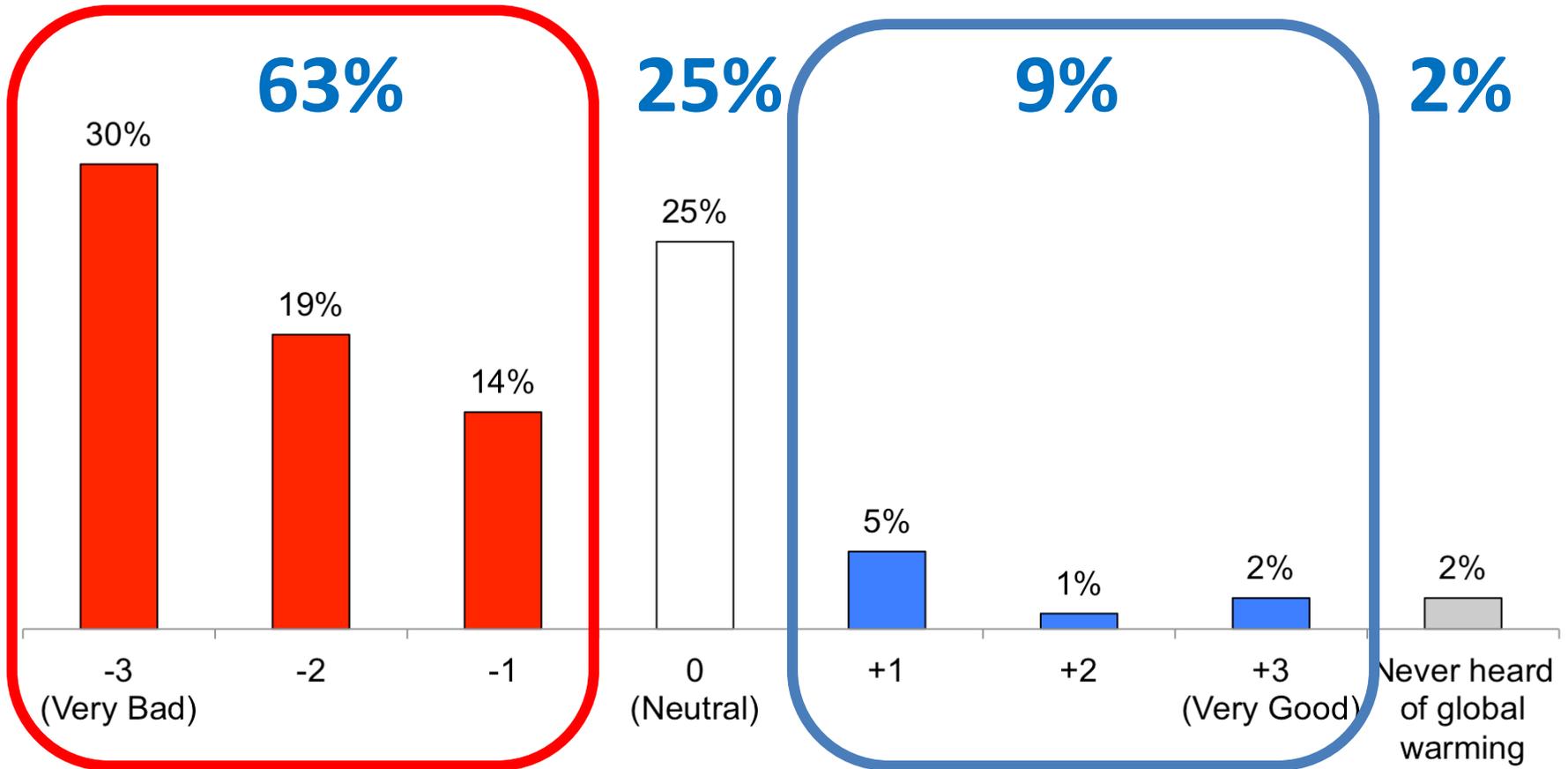
A Solid Majority of Americans Thinks Global Warming Is Bad For the Health of People in the U.S.



On a scale from -3 (very bad) to +3 (very good), do you think global warming is bad or good for the health of Americans?

Base: Americans 18+ (n=1,275). October, 2014.

A Solid Majority of Americans Thinks Global Warming Is Bad For the Health of People in the U.S.



On a scale from -3 (very bad) to +3 (very good), do you think global warming is bad or good for the health of Americans?

Base: Americans 18+ (n=1,275). October, 2014.

Nearly One in Three Americans Thinks Global Warming Is Currently Harming the Health of People in the U.S. a “Great Deal” or “Moderate Amount”

The health of Americans is being/will be harmed a great deal/moderate amount...

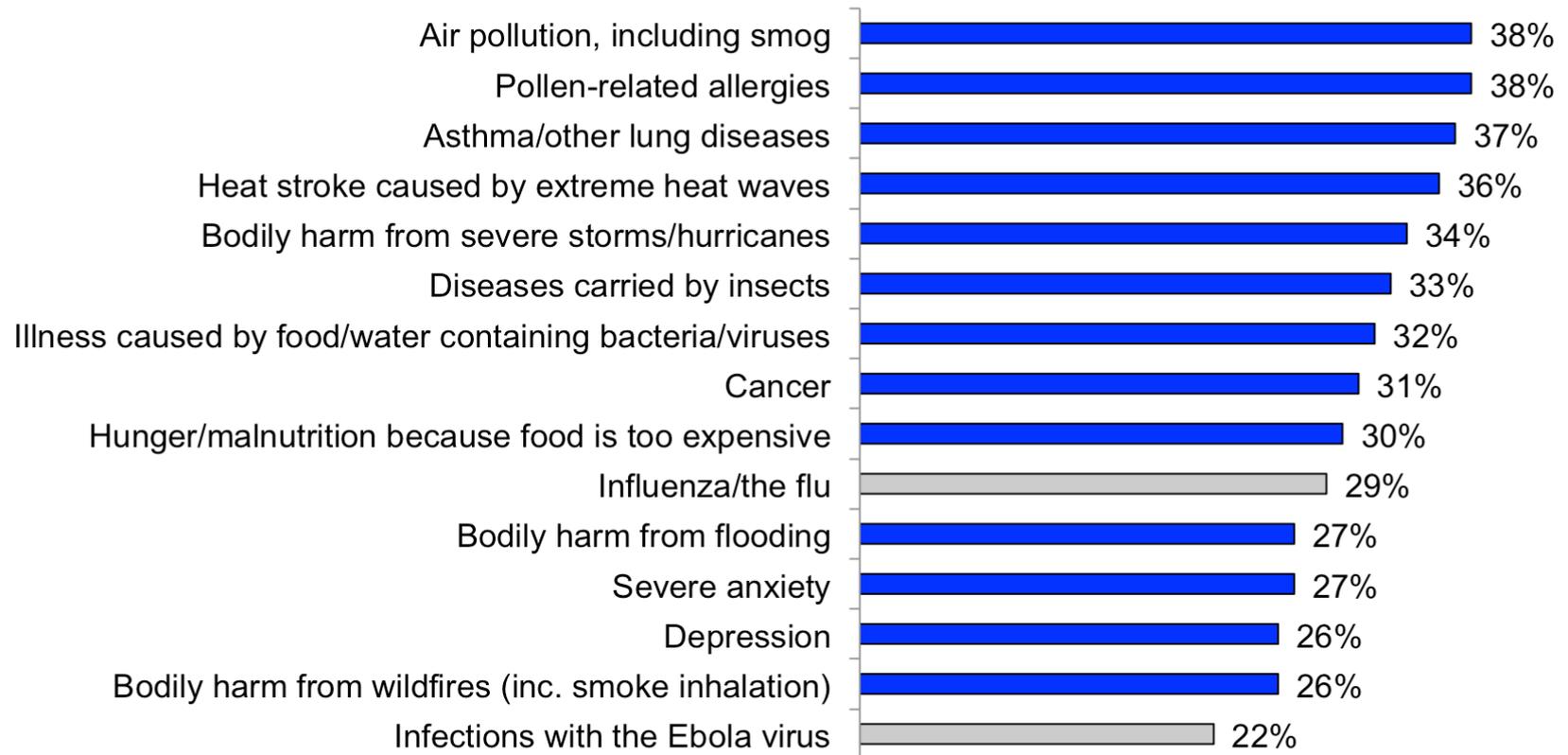


The health of others in my household is being/will be harmed...



Base: Americans 18+ (n=1,275). October, 2014.

When asked in a close-ended question whether climate-related health conditions will increase or decrease over the coming decade, large numbers say they expect increases



Do you think each of the following will become more or less common in your community over the next 10 years as a result of global warming if nothing is done to address it?

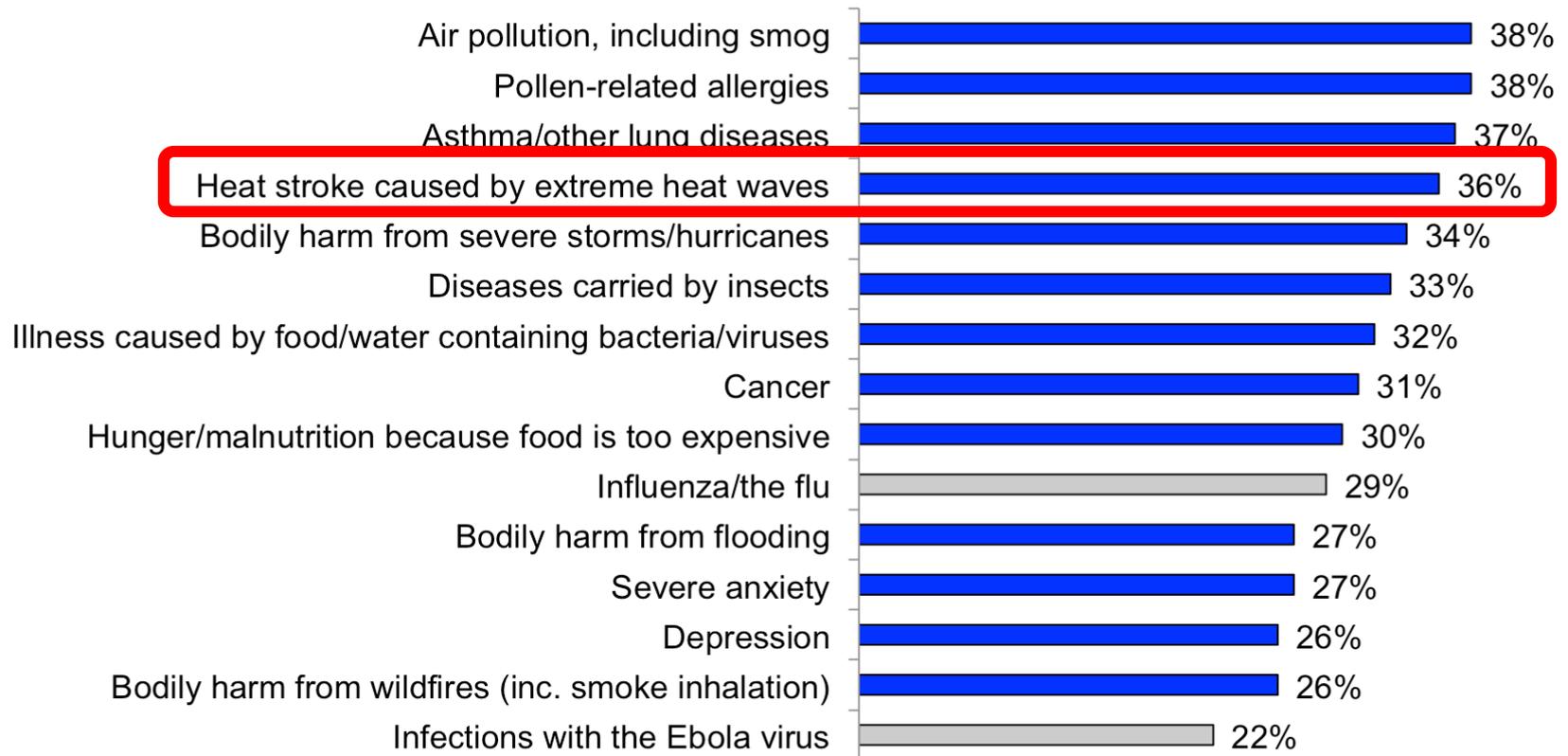
If you're not sure, please provide your best estimate.

Base: Americans 18+ (n=1,275). October, 2014.



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Over a third say they anticipate increases in the number of heat strokes.



Do you think each of the following will become more or less common in your community over the next 10 years as a result of global warming if nothing is done to address it?

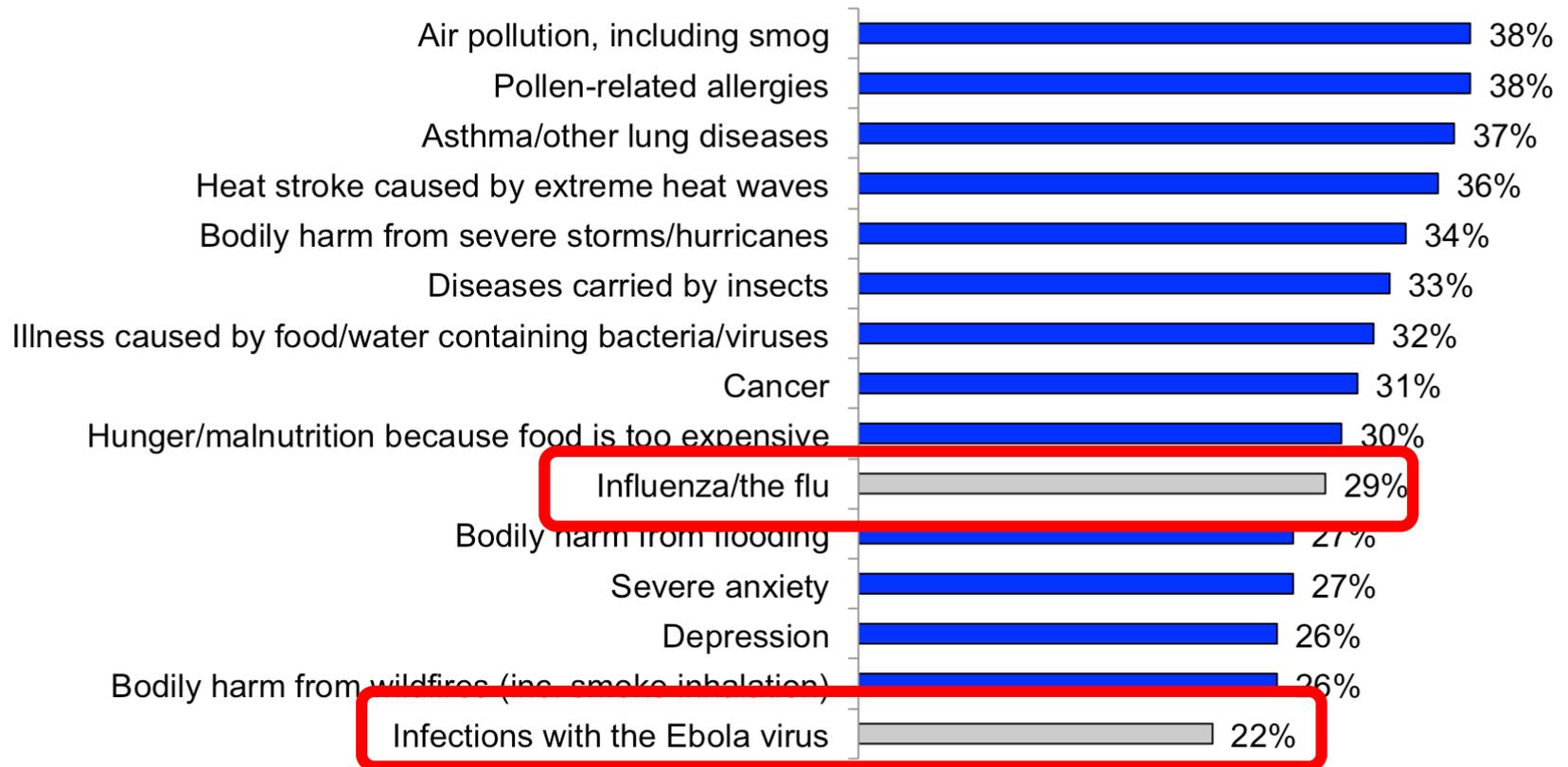
If you're not sure, please provide your best estimate.

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Many also said they anticipate increases in health problems that are *unrelated* to climate change



Do you think each of the following will become more or less common in your community over the next 10 years as a result of global warming if nothing is done to address it?

If you're not sure, please provide your best estimate.

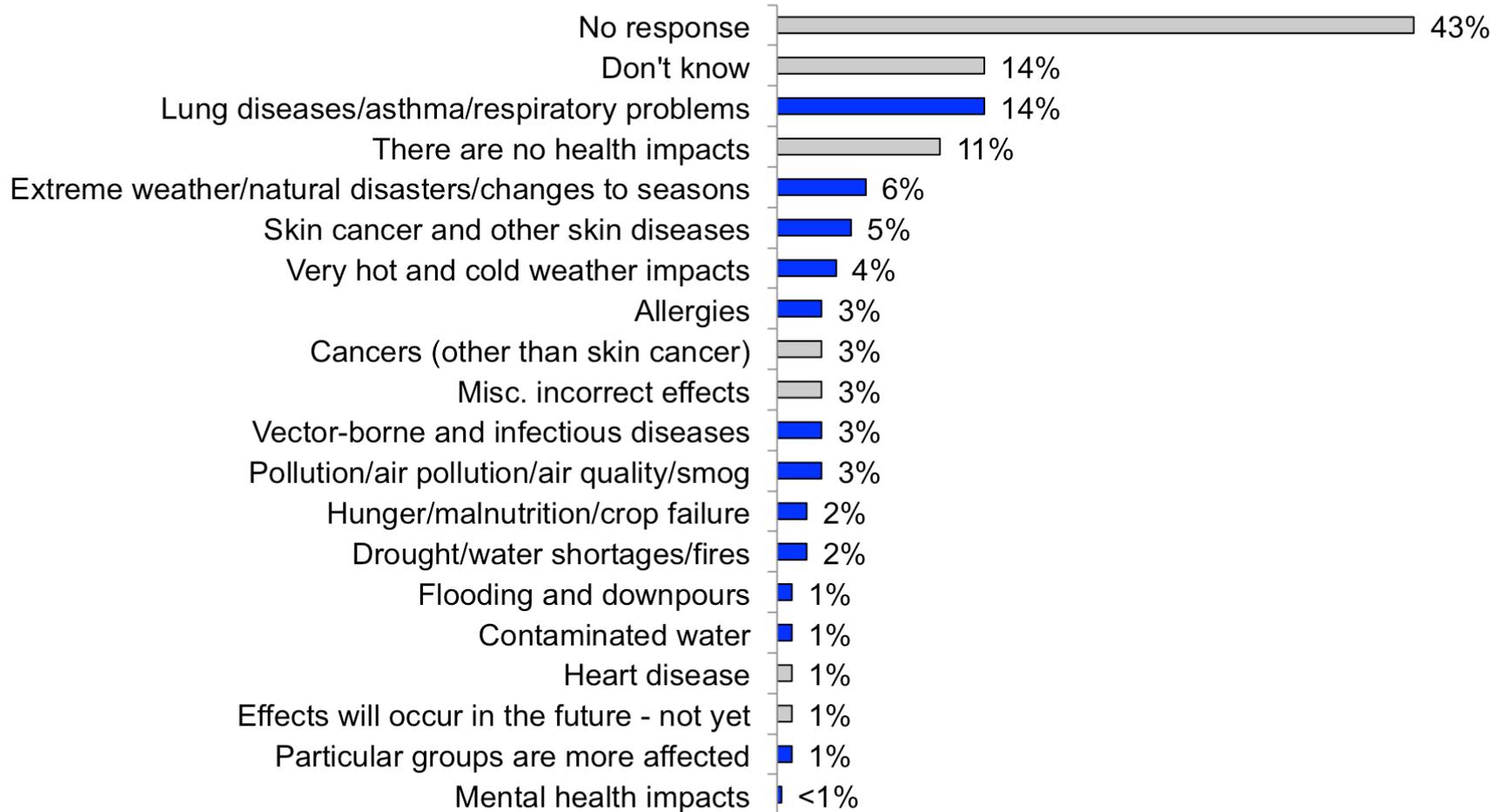
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An open-ended question reveals much less public understanding of climate-related health impacts

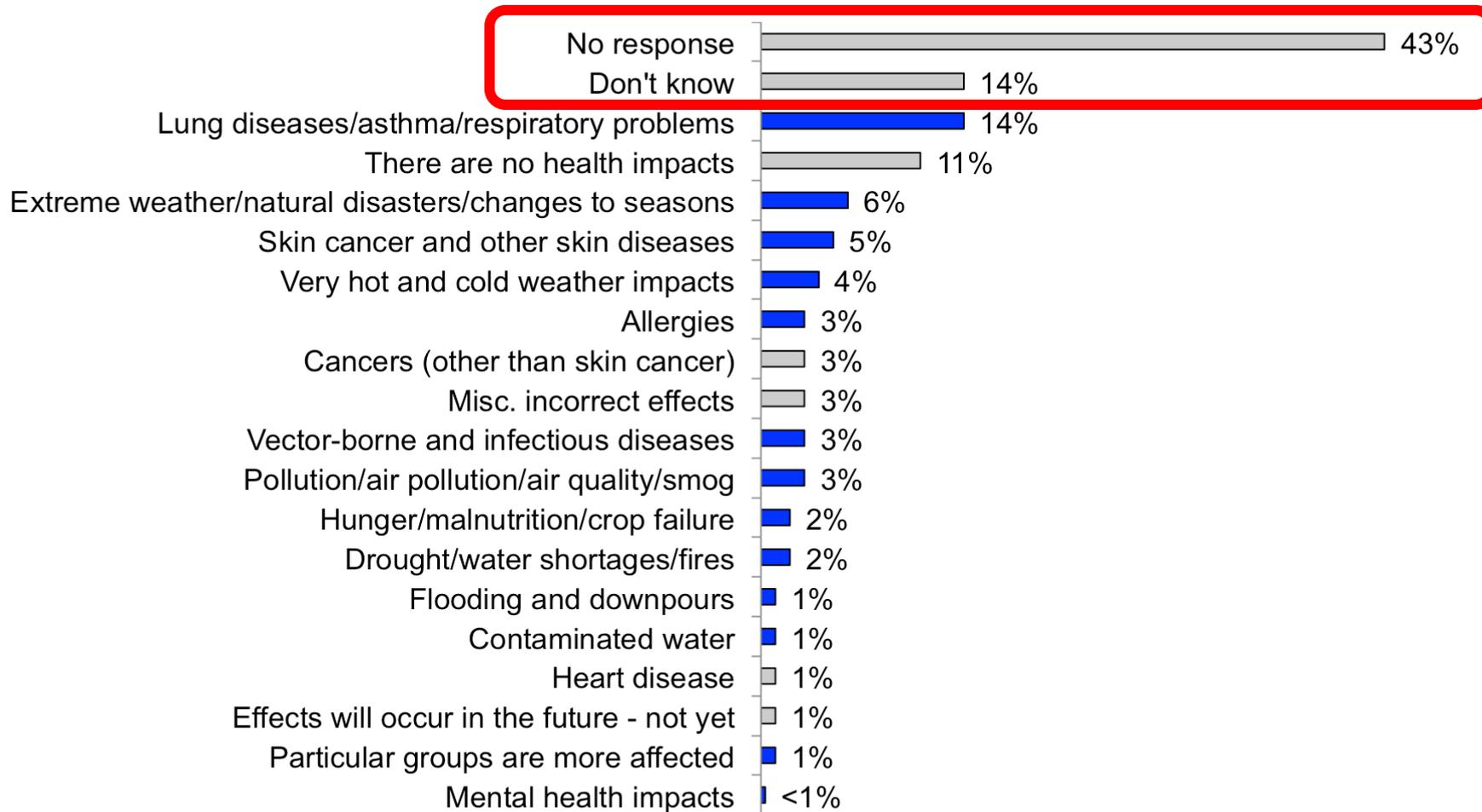
What health problems related to global warming are Americans experiencing?
(Blue = correct response)



In your view, what health problems related to global warming are Americans experiencing, if any? [Open ended, multiple responses accepted, most common responses shown]

Base: Americans 18+ (n=1,275). October, 2014.

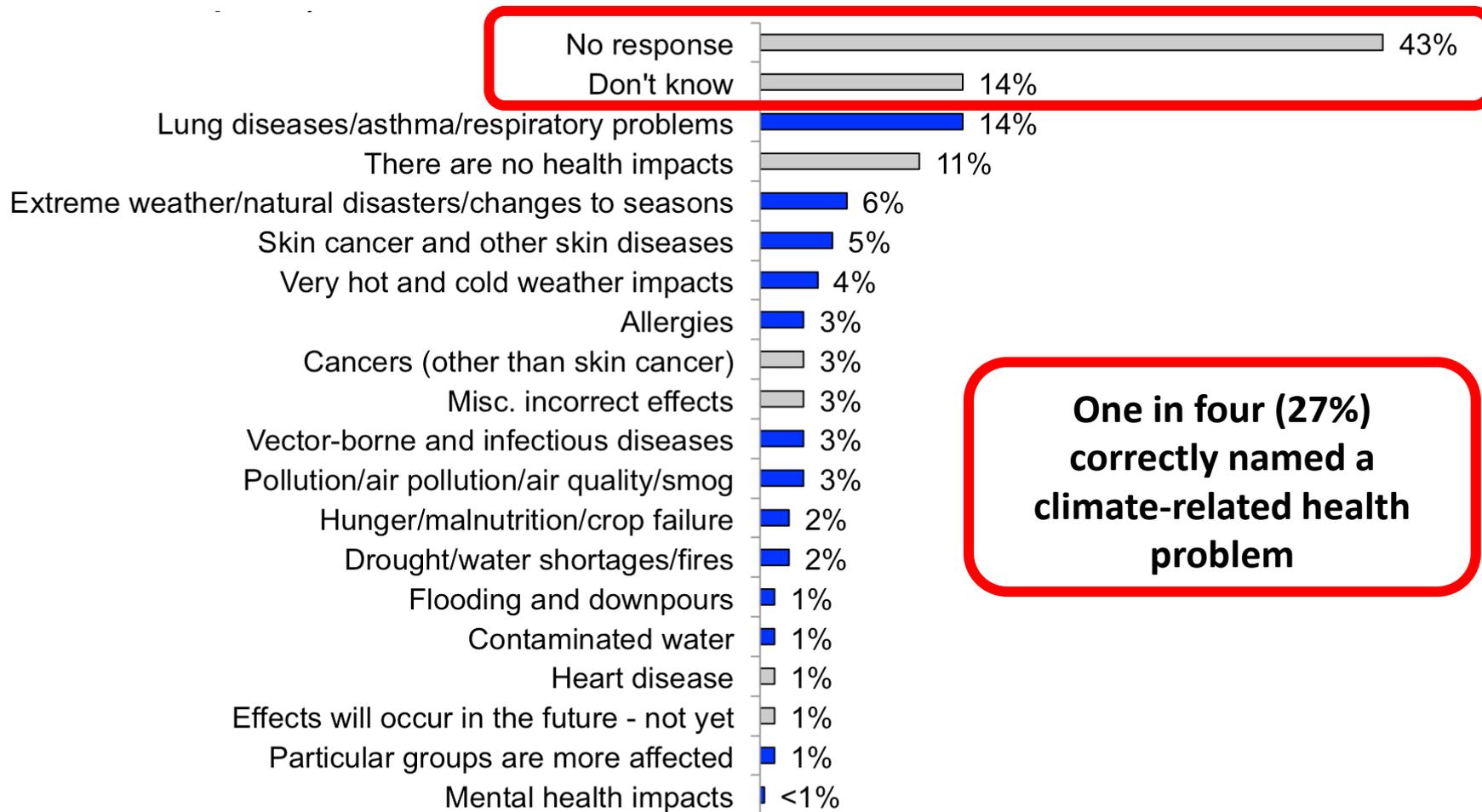
Over half are unable or unwilling to name a health effect of climate change



In your view, what health problems related to global warming are Americans experiencing, if any? [Open ended, multiple responses accepted, most common responses shown]

Base: Americans 18+ (n=1,275). October, 2014.

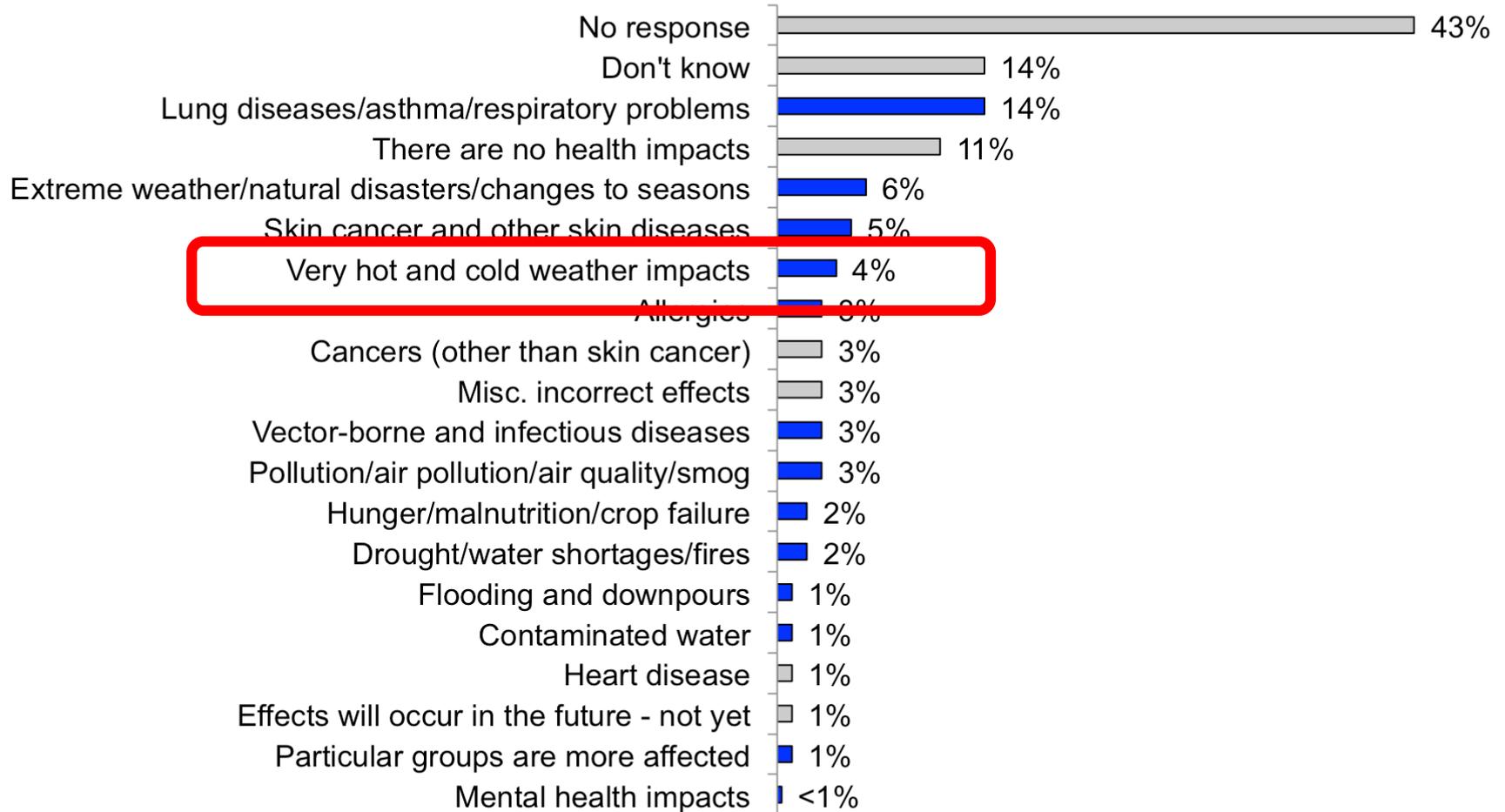
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In your view, what health problems related to global warming are Americans experiencing, if any? [Open ended, multiple responses accepted, most common responses shown]

Base: Americans 18+ (n=1,275). October, 2014.

Four percent cited temperature-related illnesses



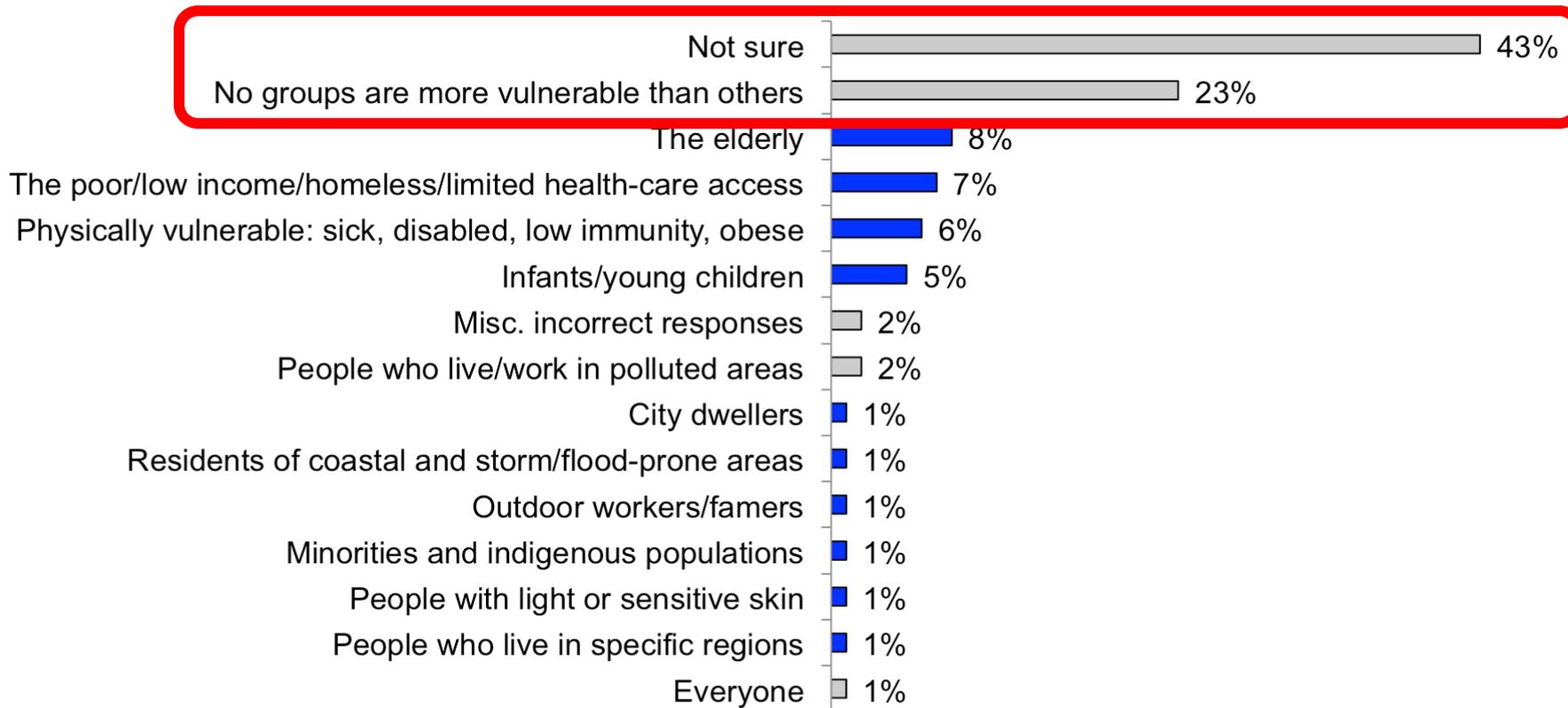
In your view, what health problems related to global warming are Americans experiencing, if any? [Open ended, multiple responses accepted, most common responses shown]

Base: Americans 18+ (n=1,275). October, 2014.

Few Americans Are Aware of the Groups That Are More Vulnerable to Global Warming-Related Health Problems

Which groups or types of Americans do you think are more likely than other Americans to experience health problems related to global warming?

(Blue = correct response)



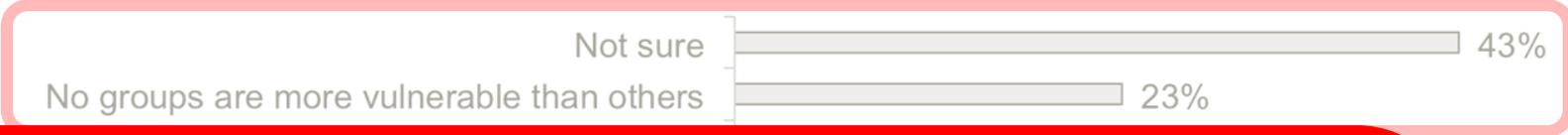
Do you think that some groups or types of Americans are more likely than other Americans to experience health problems related to global warming? (If “Yes:”) Which groups or types of Americans do you think are more likely than other Americans to experience health problems related to global warming? [Open ended, multiple responses accepted, most common responses shown)

Base: Americans 18+ (n=1,275). October, 2014.

Few Americans Are Aware of the Groups That Are More Vulnerable to Global Warming-Related Health Problems

Which groups or types of Americans do you think are more likely than other Americans to experience health problems related to global warming?

(Blue = correct response)



The
Phy

People who lack understanding of the threat are less likely to protect themselves or to support government action that would help to protect them.

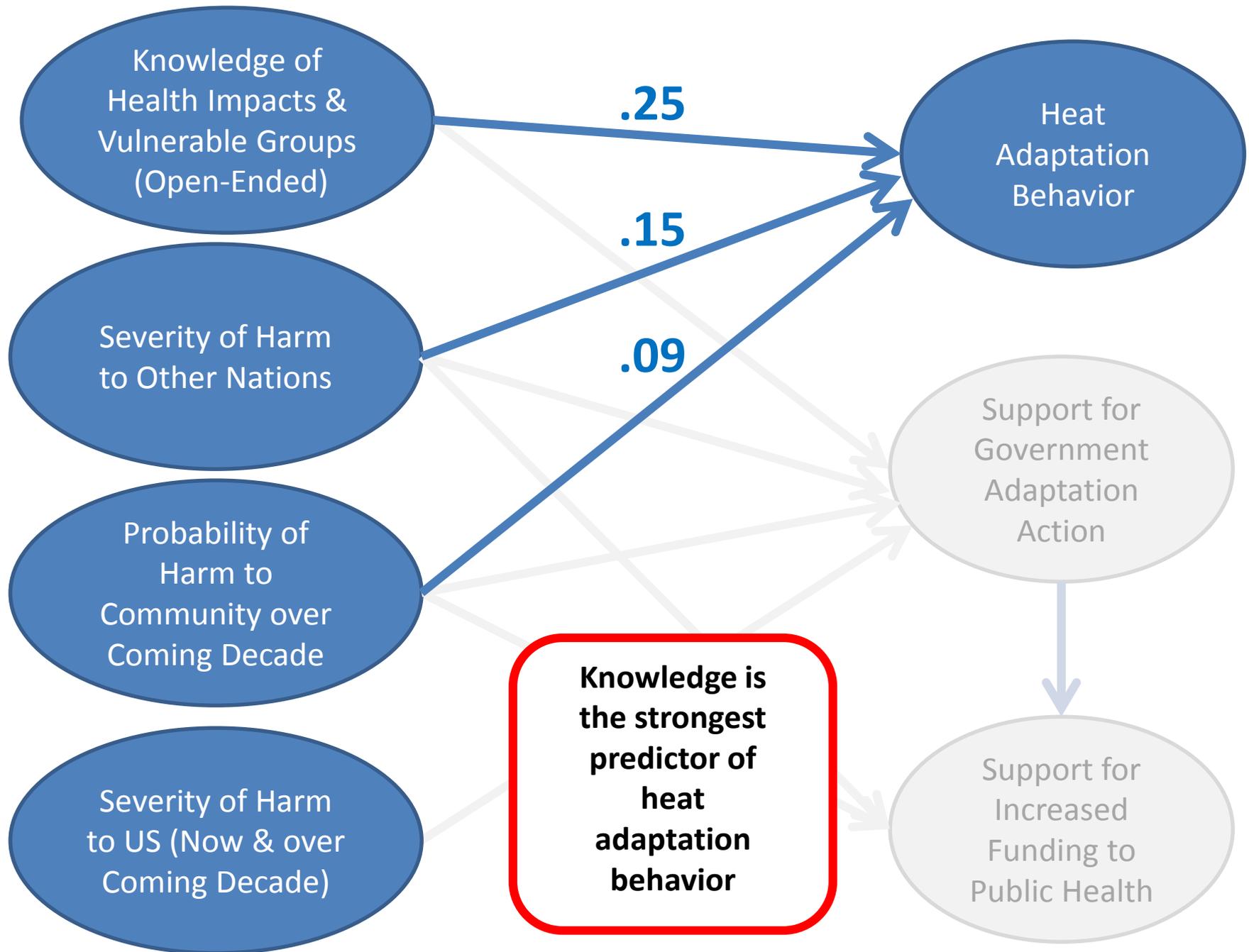
Everyone 1%

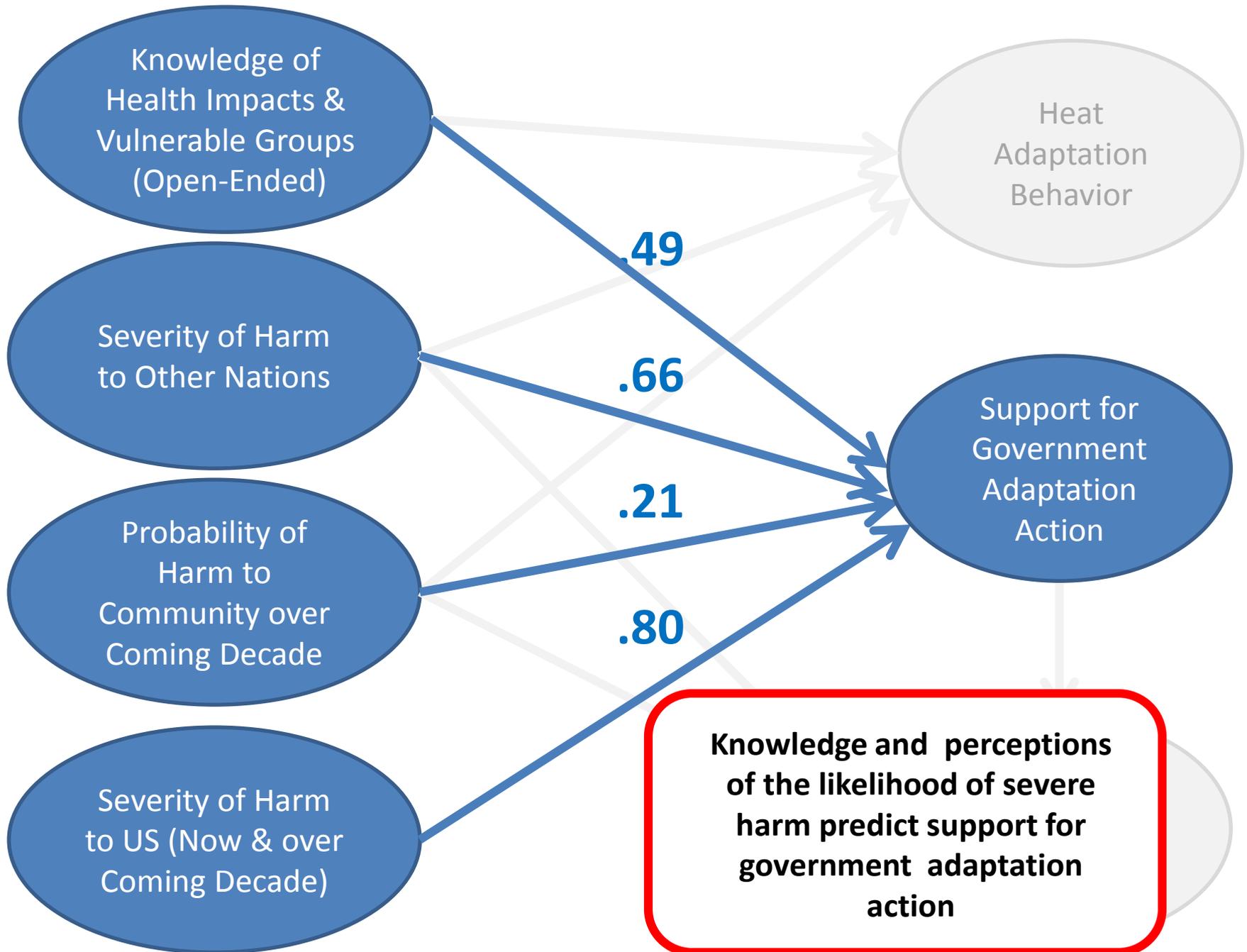
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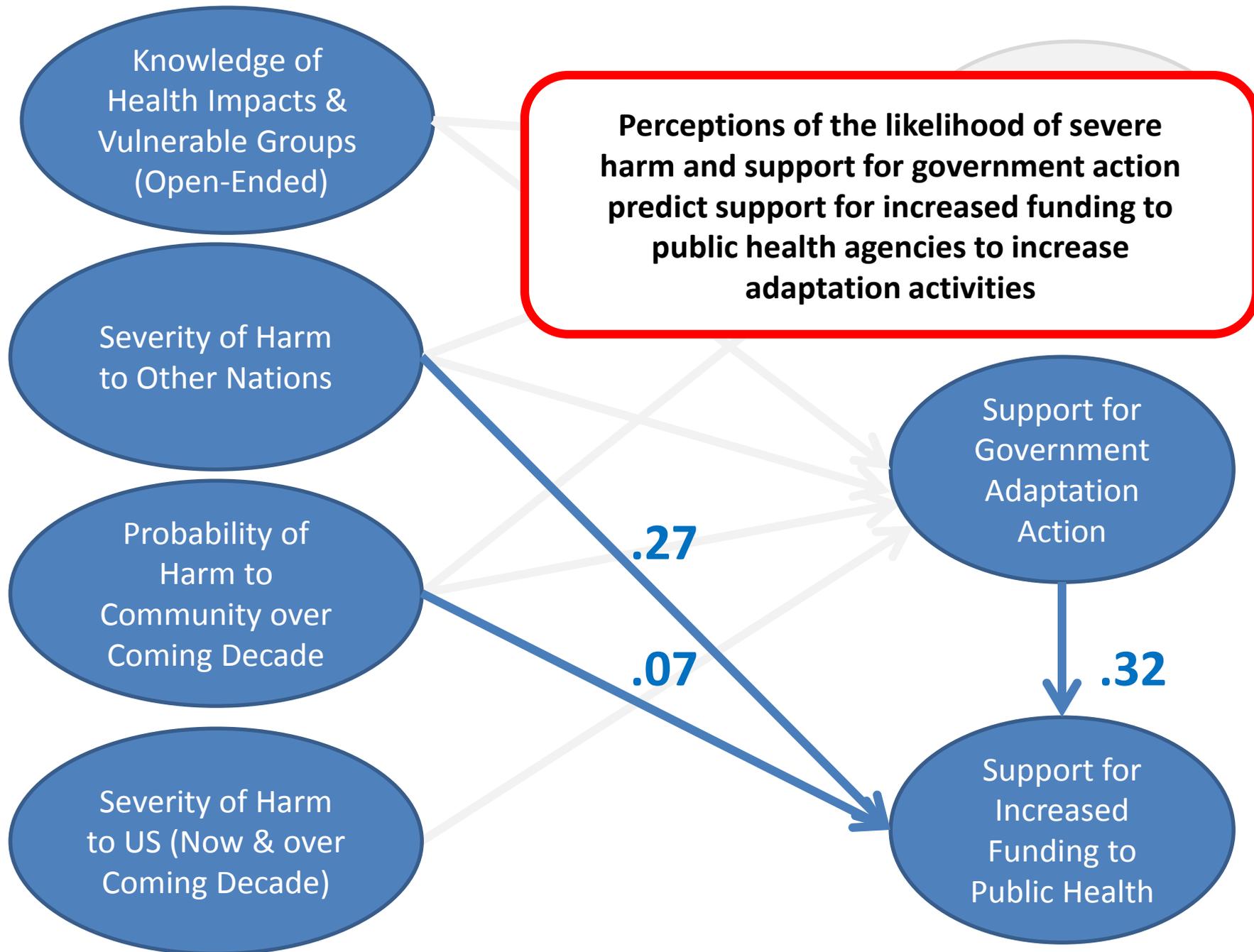


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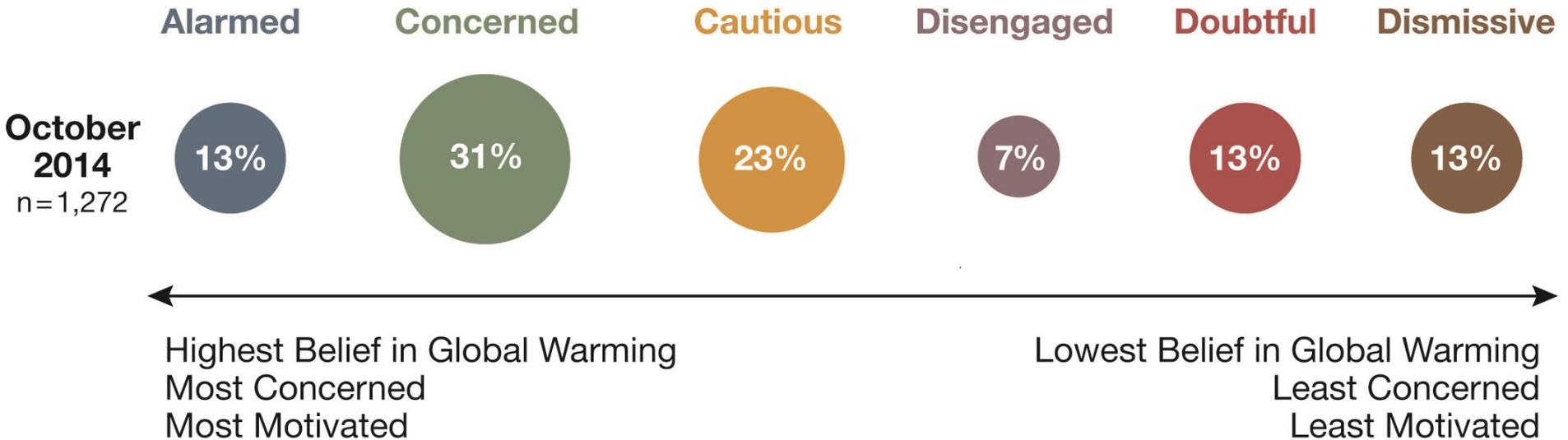




Knowledge and perceptions of the likelihood of severe harm predict support for government adaptation action



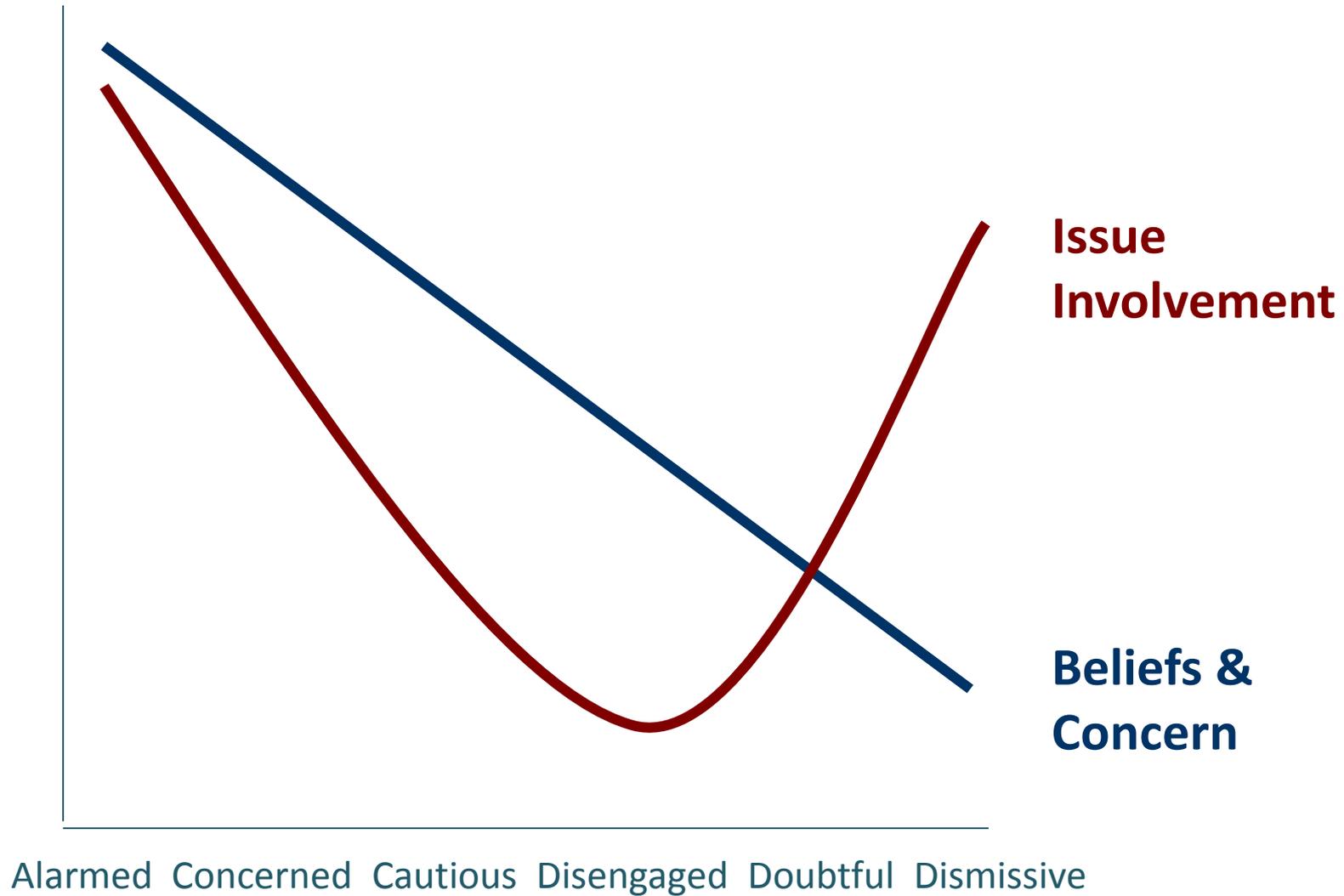
Global Warming's "Six Americas"



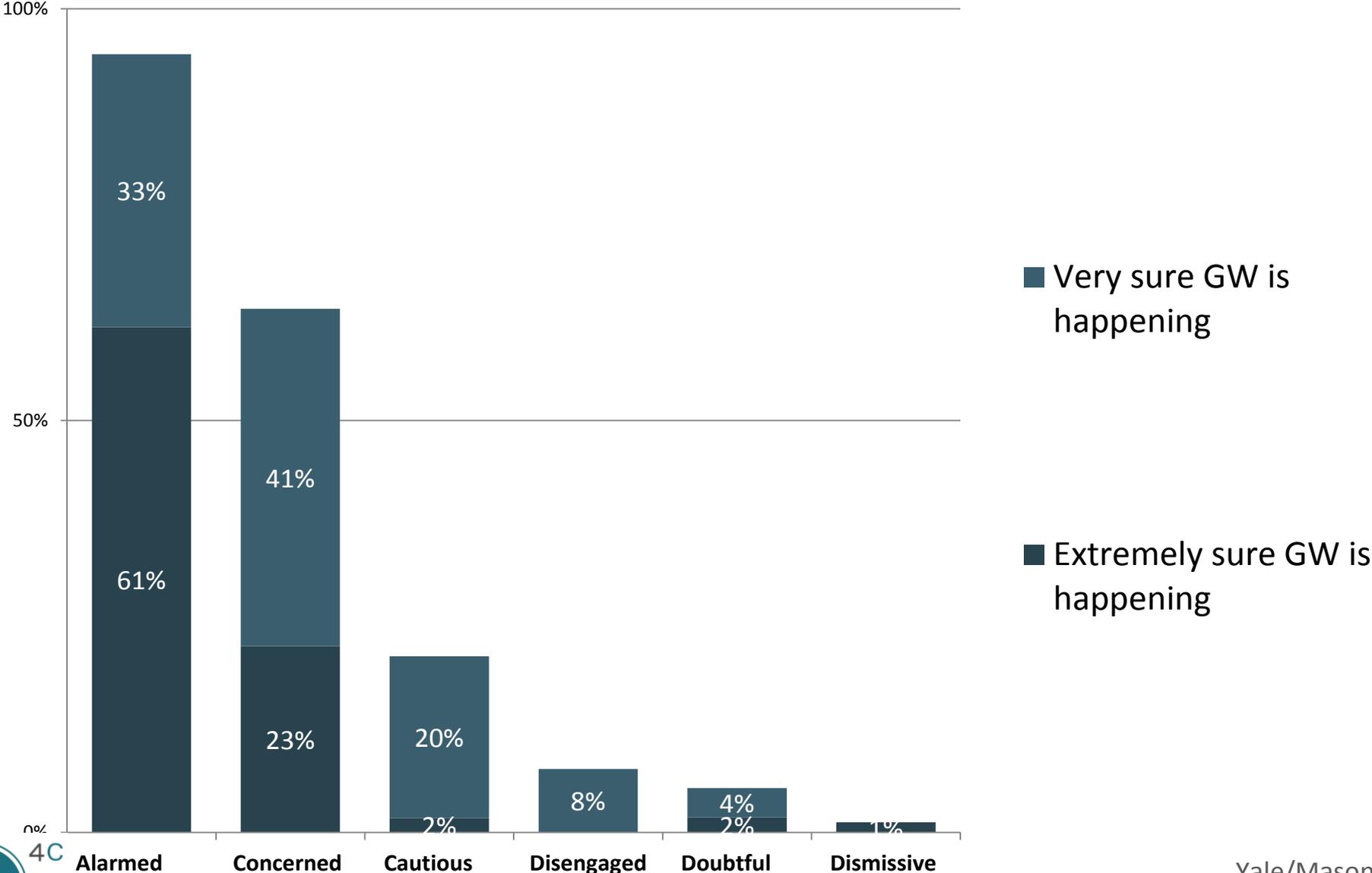
The size of the bubbles shows the proportion of Americans that belonged to each group in Oct. 2014



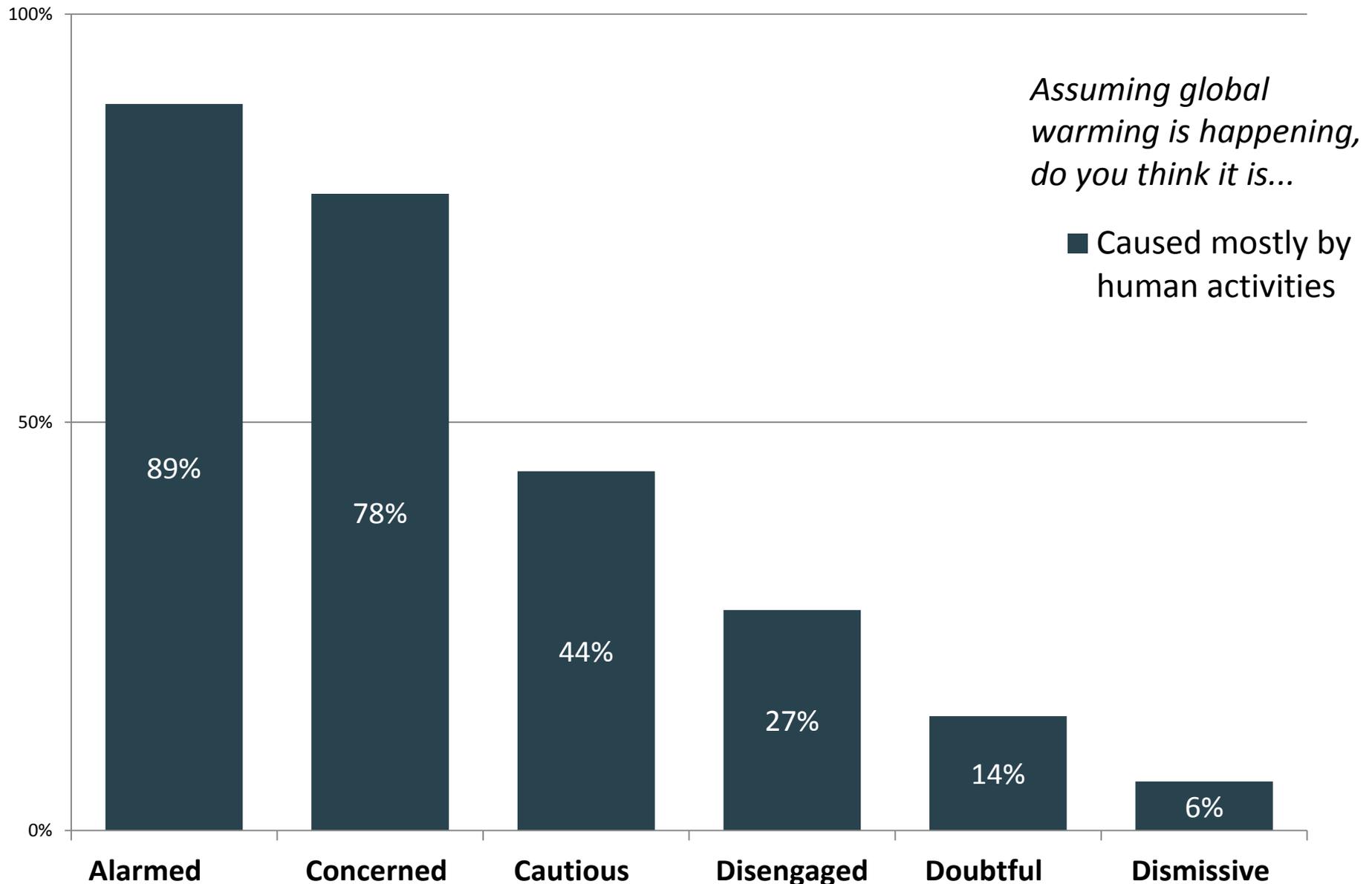
Primary Differences between the Six Groups



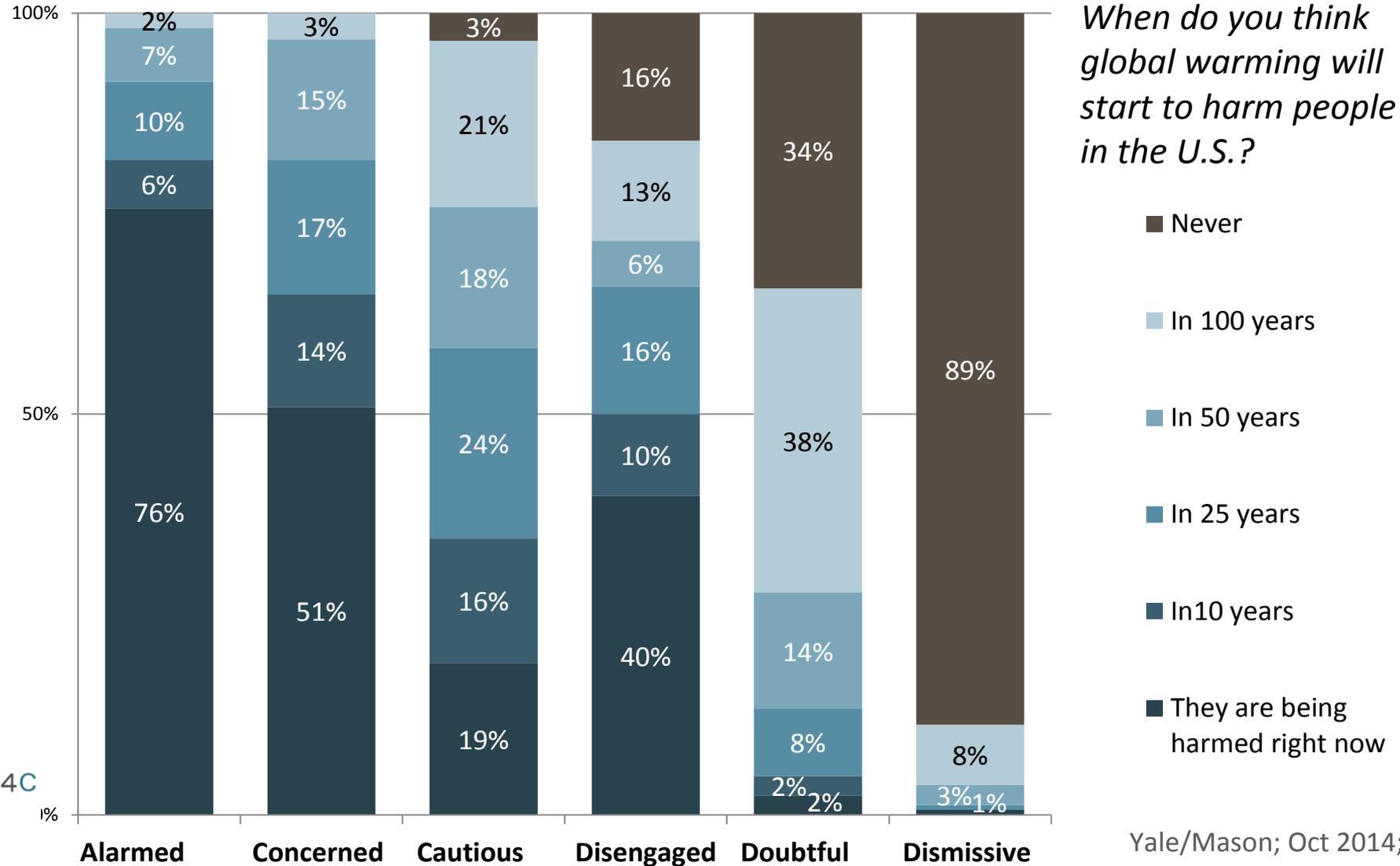
Global Warming Belief Certainty



Understanding of Human Causation

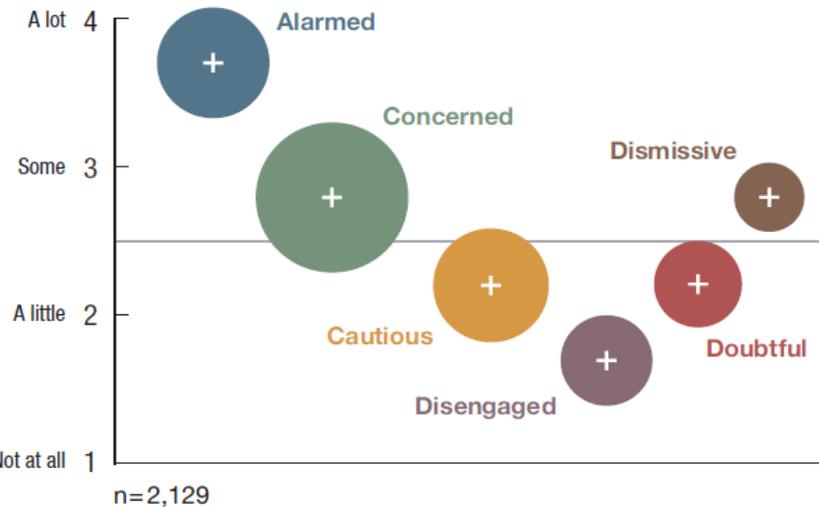


Over three-quarters of the *Alarmed* say people in the U.S. are being harmed now, but close to ninety percent of the *Dismissive* say people will *never* be harmed.

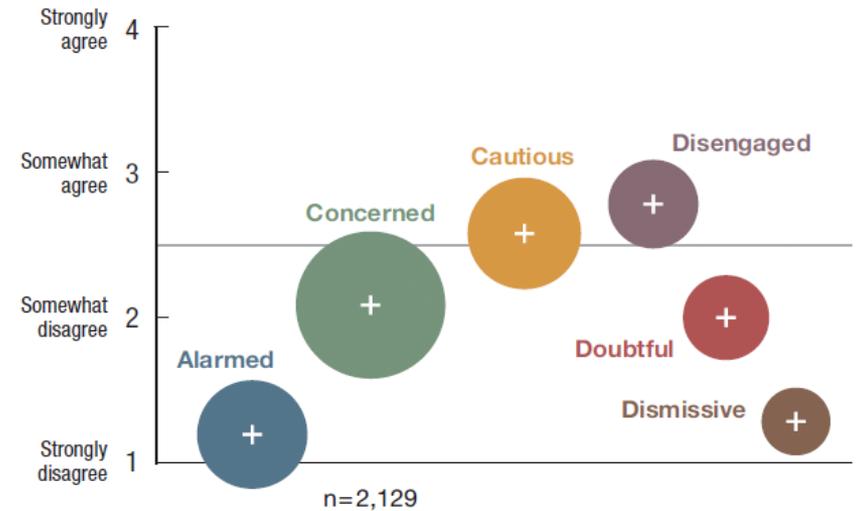


Issue Involvement

How much had you thought about global warming before today?



"I could easily change my mind about global warming"



Low ability, interest, & trust are barriers to communicating about climate change for all Six Americas

	Alarmed	Concerned	Cautious	Disengaged	Doubtful	Dismissive
I have difficulty understanding news reports about global warming.	23%	39%	44%	77%	35%	19%
In general, I don't like to read or hear anything about global warming.	10%	28%	37%	59%	57%	72%
News reporting about global warming is biased.	57%	58%	72%	68%	91%	96%

Three-quarters of the *Disengaged* say they have trouble understanding news on global warming

	Alarmed	Concerned	Cautious	Disengaged	Doubtful	Dismissive
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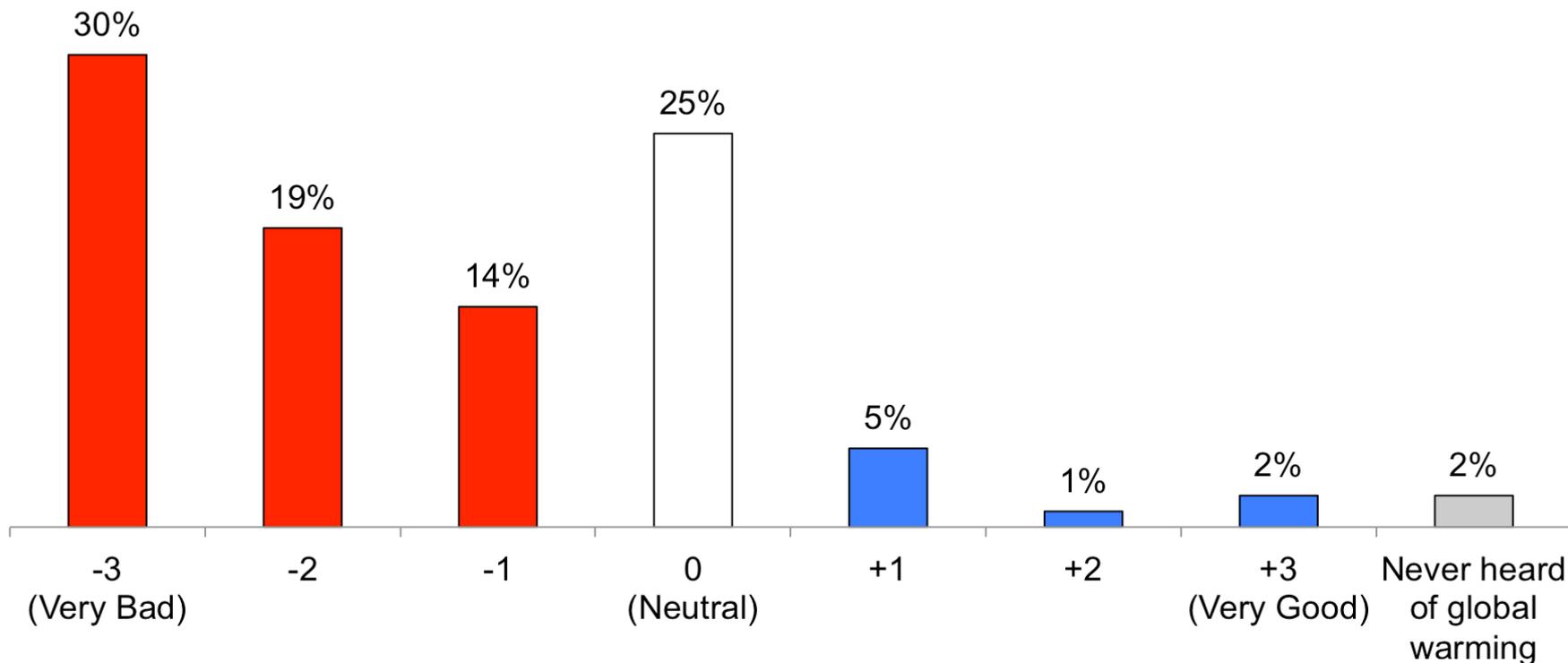
Majorities of the *Disengaged, Doubtful* and *Dismissive* say they don't want to hear about global warming

	Alarmed	Concerned	Cautious	Disengaged	Doubtful	Dismissive
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Majorities of every segment believe news reporting is biased

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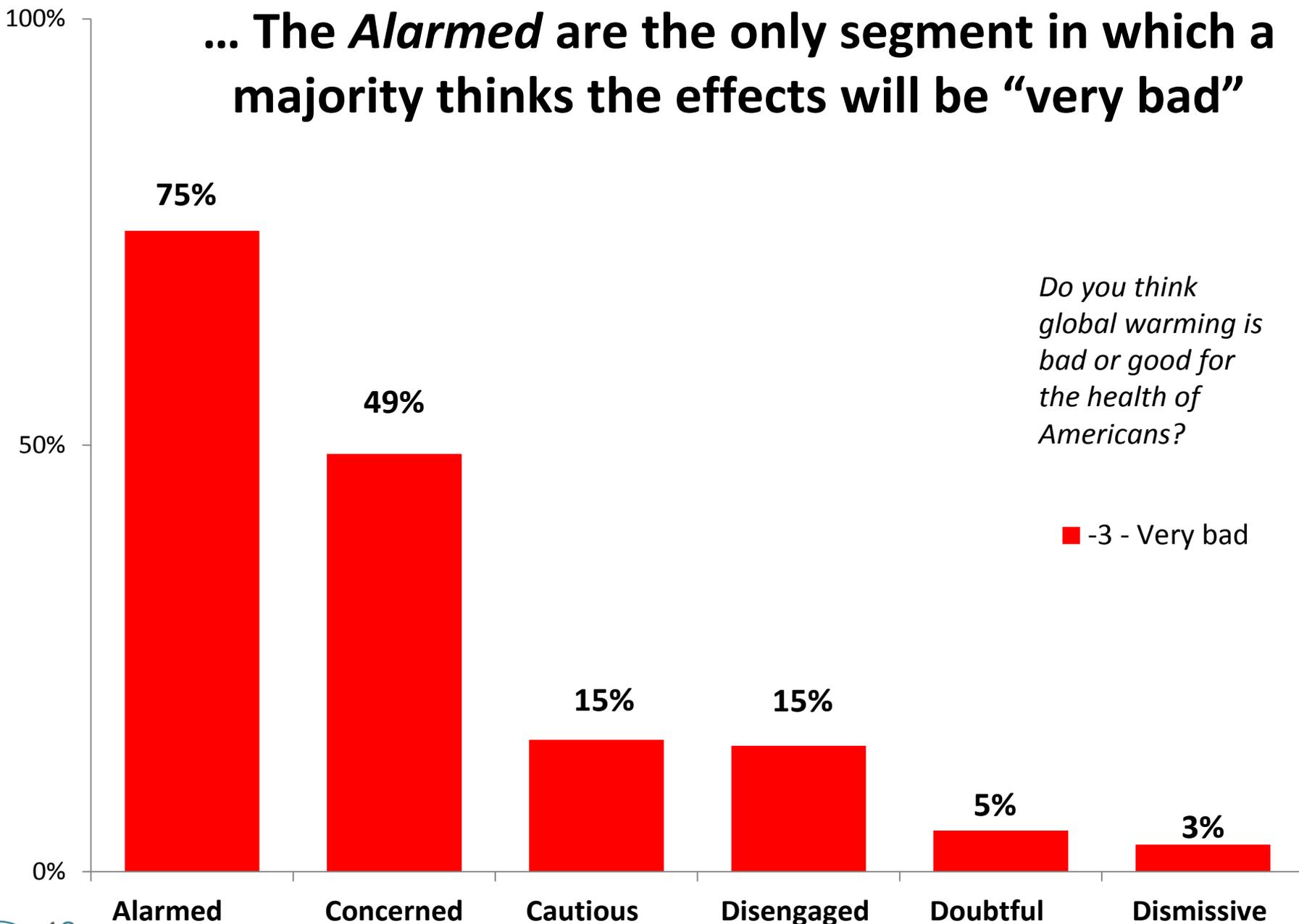
A Solid Majority of Americans Thinks Global Warming Is Bad For the Health of People in the U.S., *but...*



On a scale from -3 (very bad) to +3 (very good), do you think global warming is bad or good for the health of Americans?

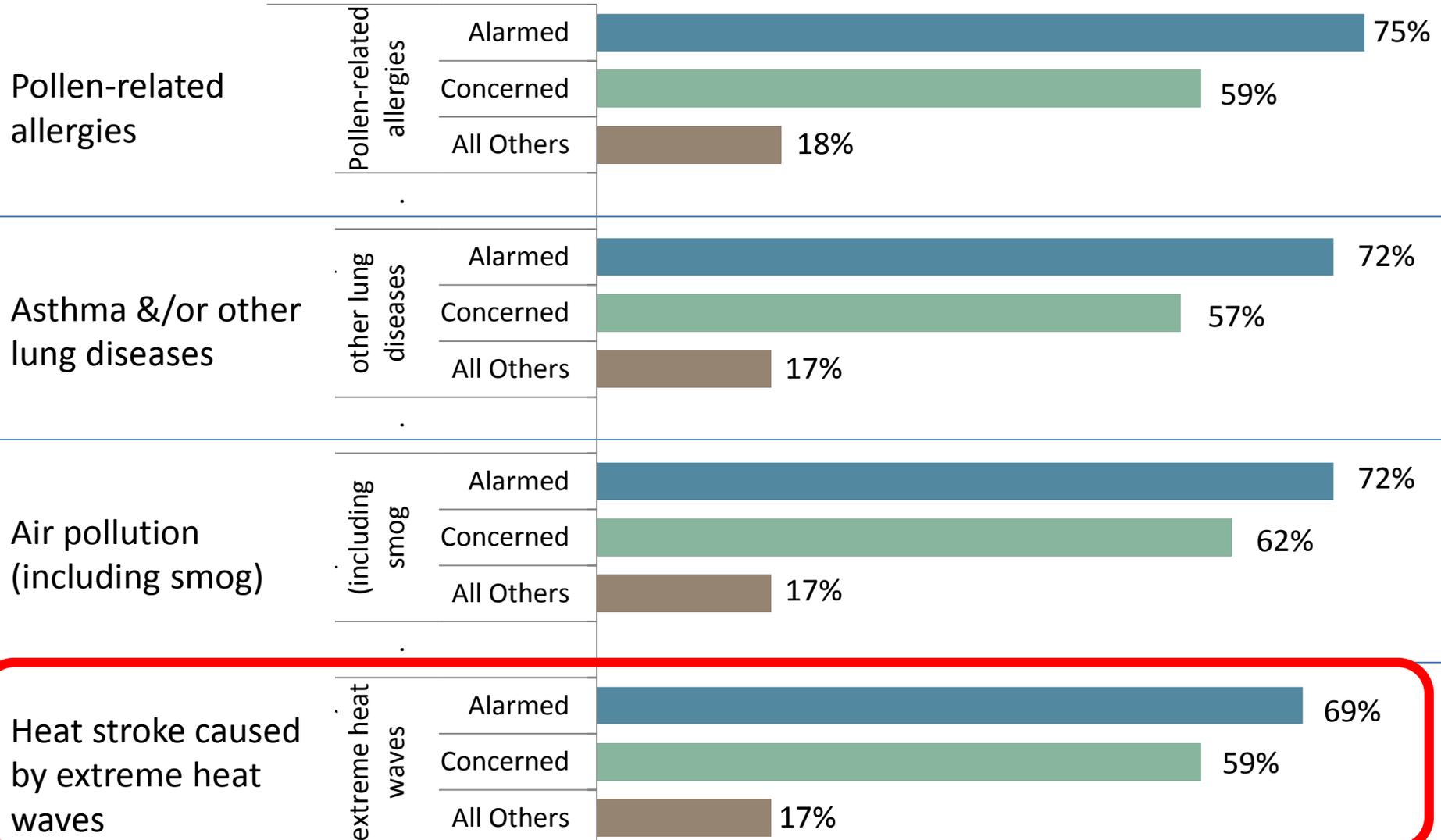
Base: Americans 18+ (n=1,275). October, 2014.

... The *Alarmed* are the only segment in which a majority thinks the effects will be “very bad”



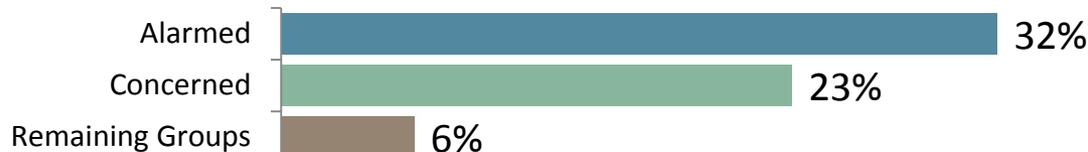
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In the close-ended measures, close to 70% of the *Alarmed* said heat strokes will increase, *but...*

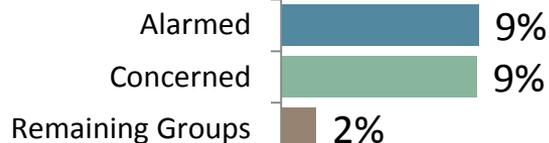


... In the open-ended question, less than 10 percent of the *Alarmed* mentioned heat-related illnesses

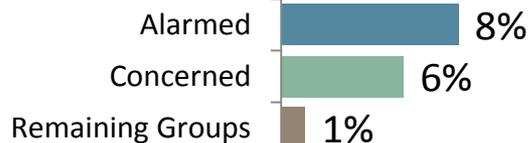
Lung diseases, e.g., asthma, COPD & respiratory problems



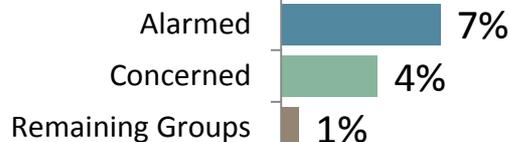
Skin diseases, including skin cancer



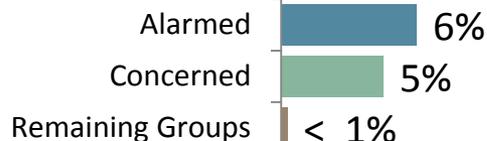
Allergies



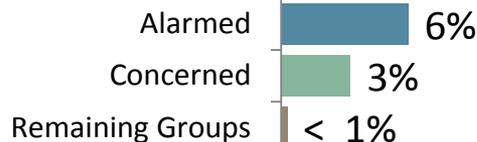
Heat-Related Illnesses, e.g., heat strokes



Vector-borne, tropical & infectious diseases



Injuries & death

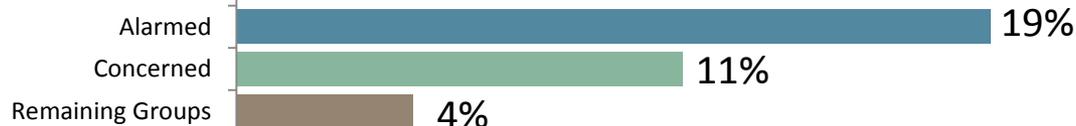


Economic & demographic characteristics associated with vulnerability are recognized by less than a quarter of any segment, including the *Alarmed*

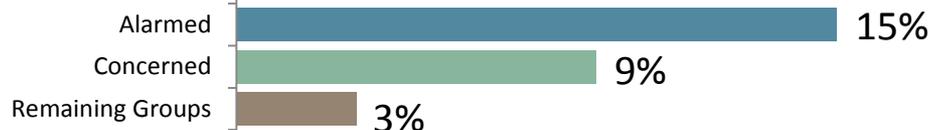
Poor, homeless and uninsured people



Seniors



Sick, disabled, obese people & those with weak immunity



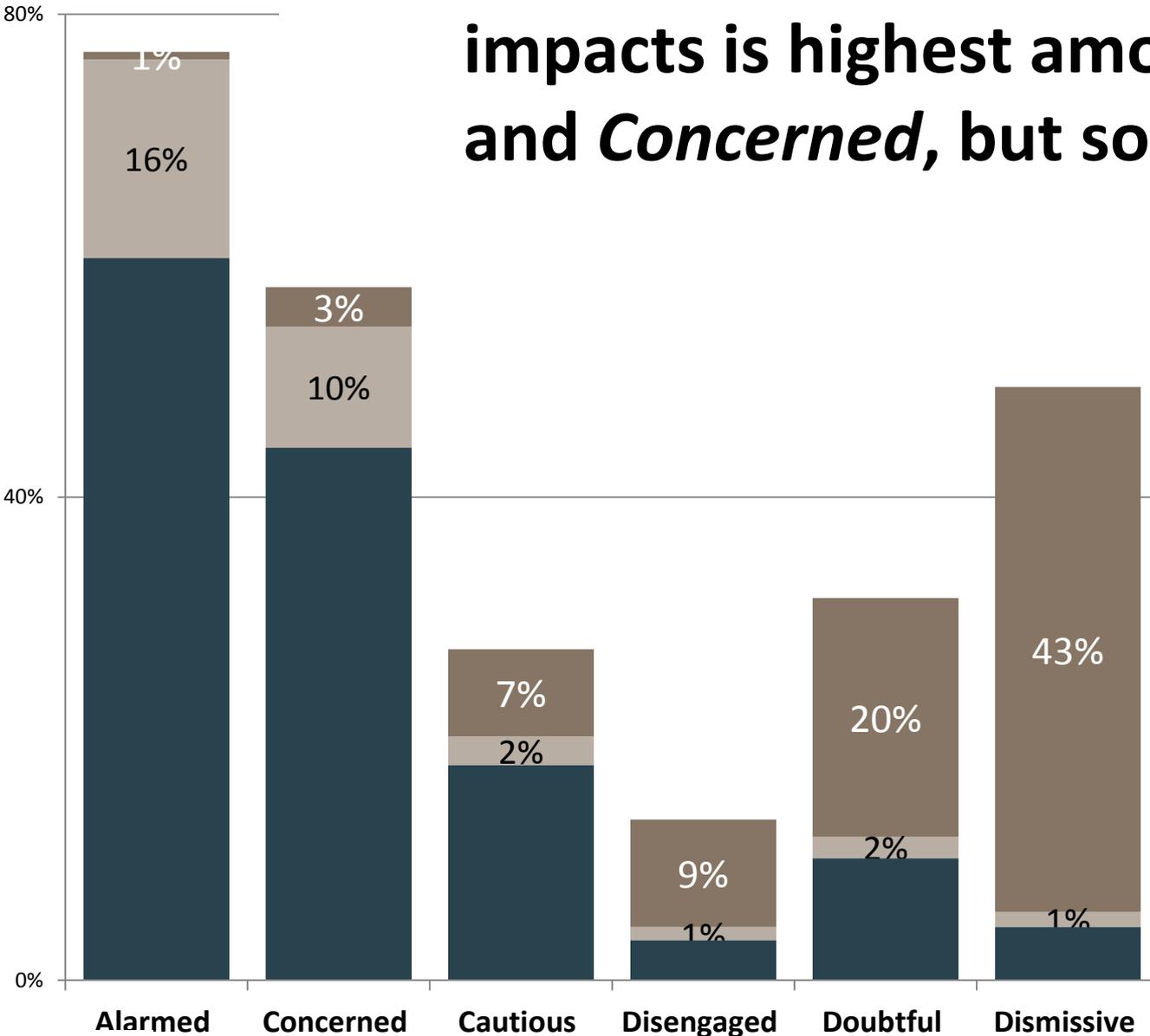
Children & babies



Outdoor workers & farmers



Accurate understanding of health impacts is highest among the *Alarmed* and *Concerned*, but so is inaccuracy

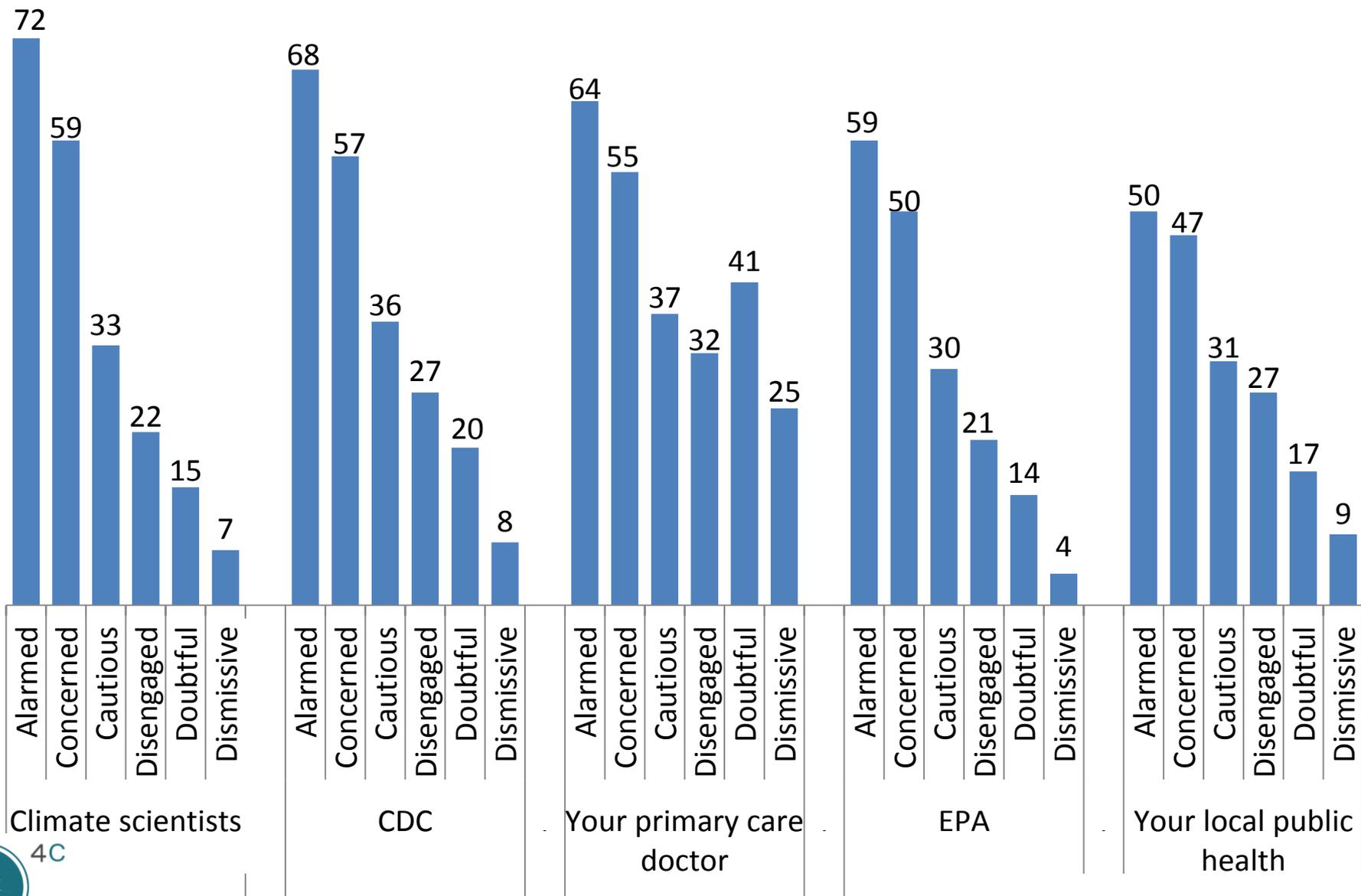


In your view, what health problems are Americans experiencing from global warming, if any?

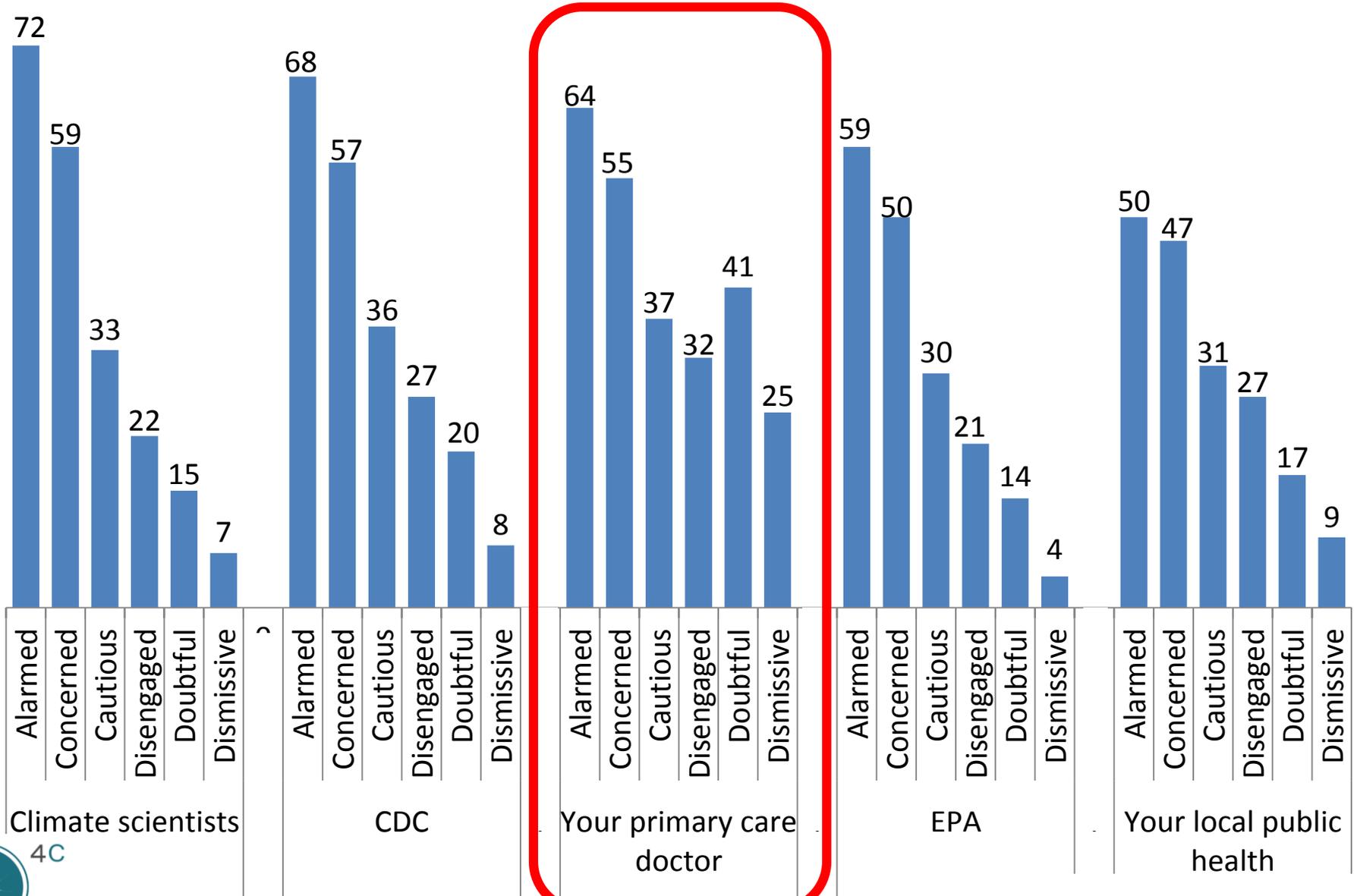
- There are no health problems from global warming
- Inaccurate health problem
- Accurate health problem



Trust in sources of information on health problems related to global warming varies widely by segment



Physicians are trusted sources across segments

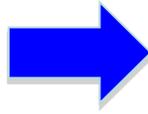


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Instructions: "Please use the green highlighter pen to mark any portions of the essay that you feel are especially clear or helpful, and use the pink highlighter pen to mark any portions of the essay that you feel are especially confusing or unhelpful."

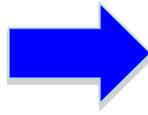
Global warming is a threat to people's health & wellbeing.

Framing statements



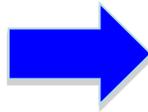
Our health will suffer if we don't take action.

Risk/threat statements



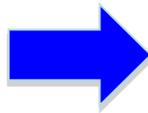
Our health will benefit if we do take action.

Benefit statements



Conclusion.

Framing statements



Global Warming is a Threat to Peoples' Health & Wellbeing

Most people agree with the sentiment that "good health is a great blessing." Although not yet widely known, global warming poses a very real threat to the health and wellbeing of Americans and other people around the world. Experts at the World Health Organization say that global warming is already leading to an increase in the rate of some diseases and is causing many deaths. If our government and other governments around the world do not soon take steps to limit global warming, a growing number of people will be killed. Conversely, if our government and other governments around the world do take steps to limit global warming, a growing number of people's health and wellbeing will likely improve in the future.

Our health will suffer if we do not take action.

Global warming can harm people in many ways, including more extreme weather patterns, rising sea-levels – all of which can harm the quality of life. Global warming also leads to increasing rates of disease and death. According to the U.S. Centers for Disease Control and Prevention, every region of the United States will experience more children who will become more likely to get sick or die from their illness. An increase in droughts caused by the change in weather patterns will also lead to more deaths. New infectious diseases (such as malaria) that were previously eradicated from the United States will become an increasing problem.

Our health will benefit if we do take action.

According to a recent study published in the journal *Environmental Health Perspectives*, global warming – by making our cities more efficient, by making our cities more livable, by improving the quality and safety of our air, and by making our energy sources cleaner – will help American children and adults to breathe easier and safer to get around on our roads and will help people consume more fruits and vegetables. These actions will help people maintain a healthy lifestyle and will play an important role in limiting global warming.

Conclusion:

Peoples' health is dependent on the health of our planet. Global warming offers America an opportunity to make choices that are healthier for us, and for our climate.

Framing climate change as a health issue can be effective in reaching all segments, including the Dismissive

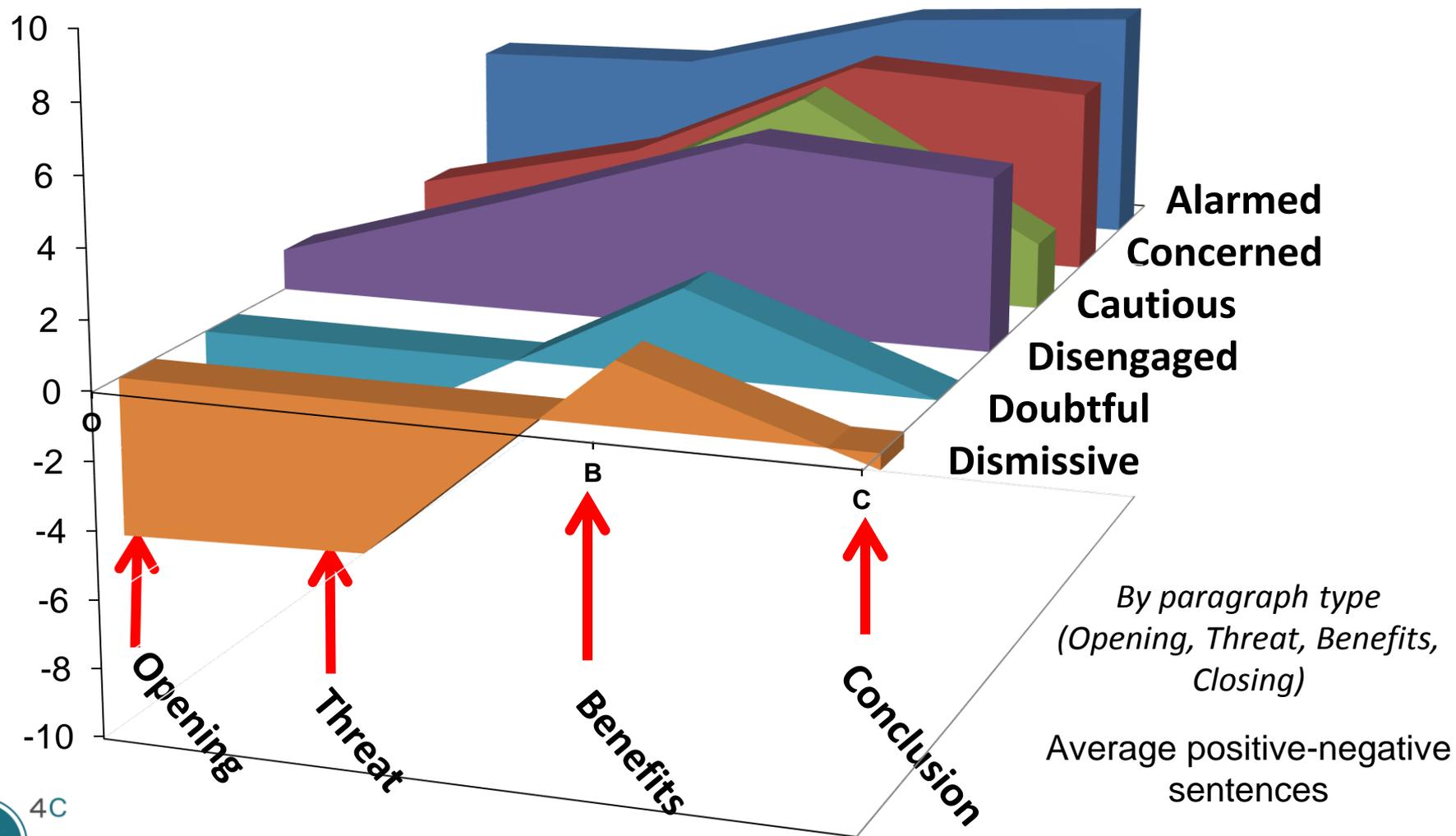
Global Warming is a Threat to Peoples' Health & Wellbeing

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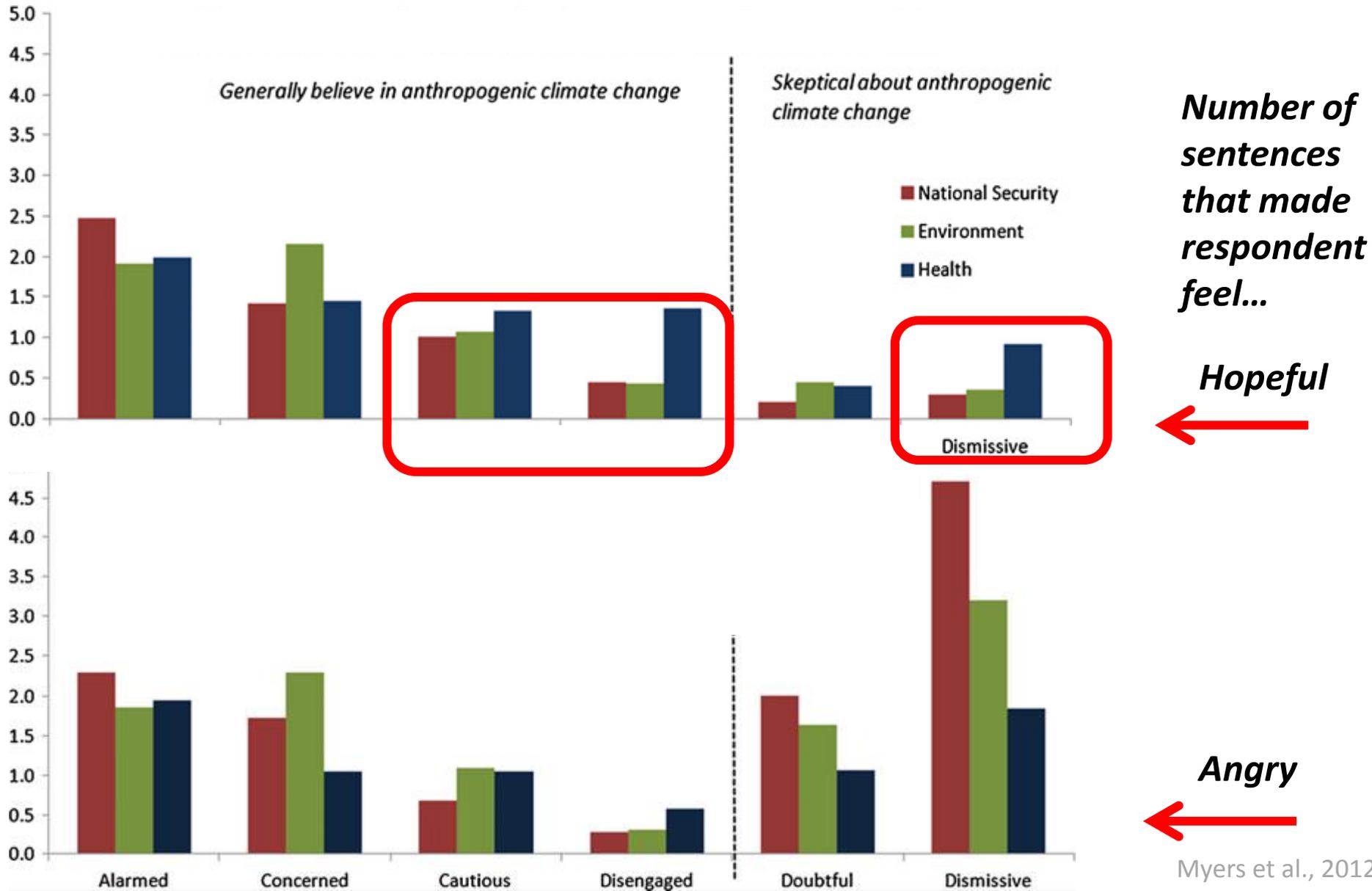
Our health will suffer if we don't take action:

Global warming can harm people both directly and indirectly. Directly, global warming causes more extreme weather patterns including more frequent heat waves, more violent storms, and rising sea-levels – all of which can lead to people being harmed or killed. Indirectly, global warming harms the quality of our water, air and food, and our ecosystems, all of which can lead to increasing rates of disease and death. If we do not act now to limit global warming, experts at the U.S. Centers for Disease Control and Prevention say that global warming will harm people in every region of the United States. As a result of the poor air quality caused by global warming, children will become more likely to develop asthma, and the asthma they suffer from will be more severe; adults who have heart and lung diseases will become more likely to be hospitalized or die from their illness. An increasing number of extreme heat waves, floods, storms, fires and droughts caused by the changes in our climate will lead to more people being injured or killed.

Messages about health benefits of climate action were positively received across segments



Health framing elicited more hopeful feelings from *Cautious, Disengaged & Dismissive*



Number of sentences that made respondent feel...

Hopeful

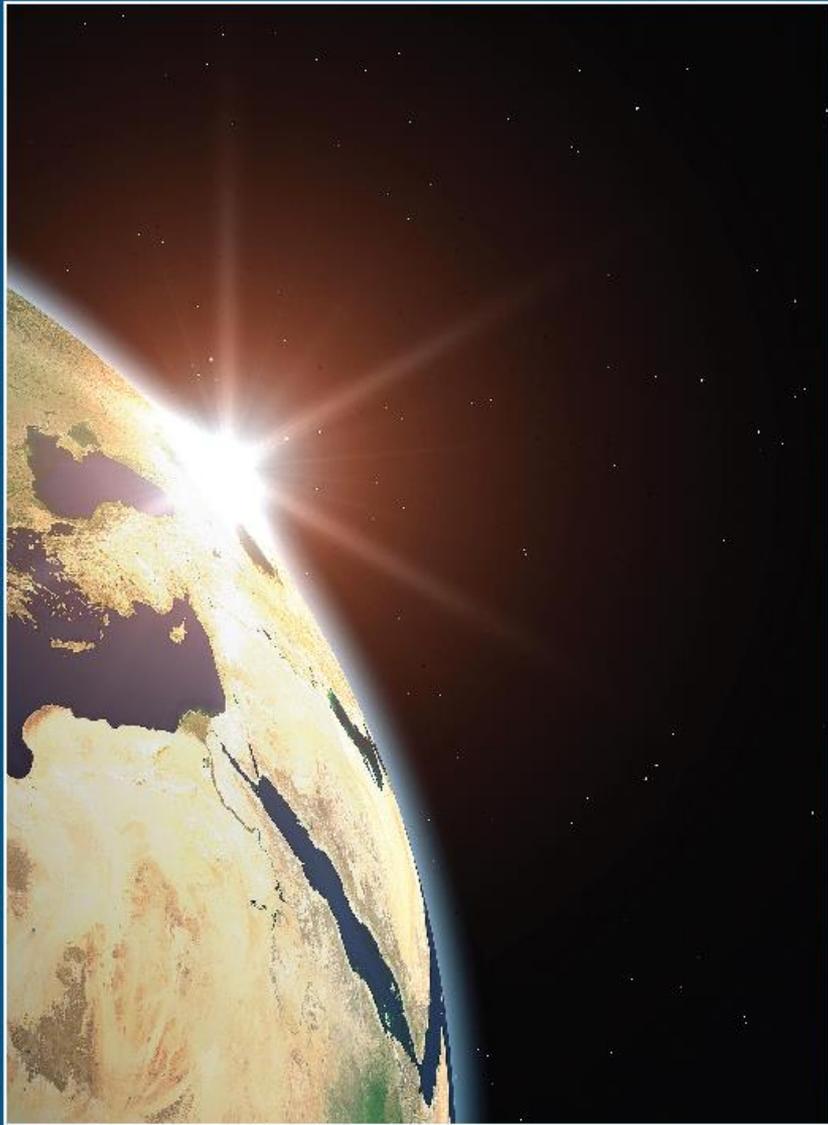


Angry



Conclusions

- Americans' understanding of the health impacts of climate change – including the effects on heat-related illness – is very shallow.
- Even the most concerned Americans (the *Alarmed*) show little understanding of the health effects of climate change.
- People who understand the health impacts of global warming are more likely to be taking action to protect themselves during extreme heat, and are more likely to support action by elected officials and public health agencies to protect the public.
- Medical professionals are well-positioned to increase people's understanding of the health effects of global warming.
- Framing global warming as a public health issue is likely to engage segments of the public that are skeptical about climate change or disengaged from the issue.



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who make this research possible,
including the Grantham Foundation for
the Protection of the Environment, the
Surdna Foundation, and the 11th Hour
Project.*

<http://climatechange.gmu.edu>
<http://research.yale.edu/environment/climate>