



4C

George Mason University  
Center for Climate Change Communication

## **Climate Change: Communicating the Public Health Imperative**

Communicating Climate Change as a Critical Public Health Issue.  
Webinar Hosted by the California Department of Public Health  
April 27<sup>th</sup>, 2011

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



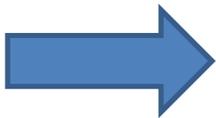
Ecosystems ..... 79



Human Health ..... 89



Society ..... 99



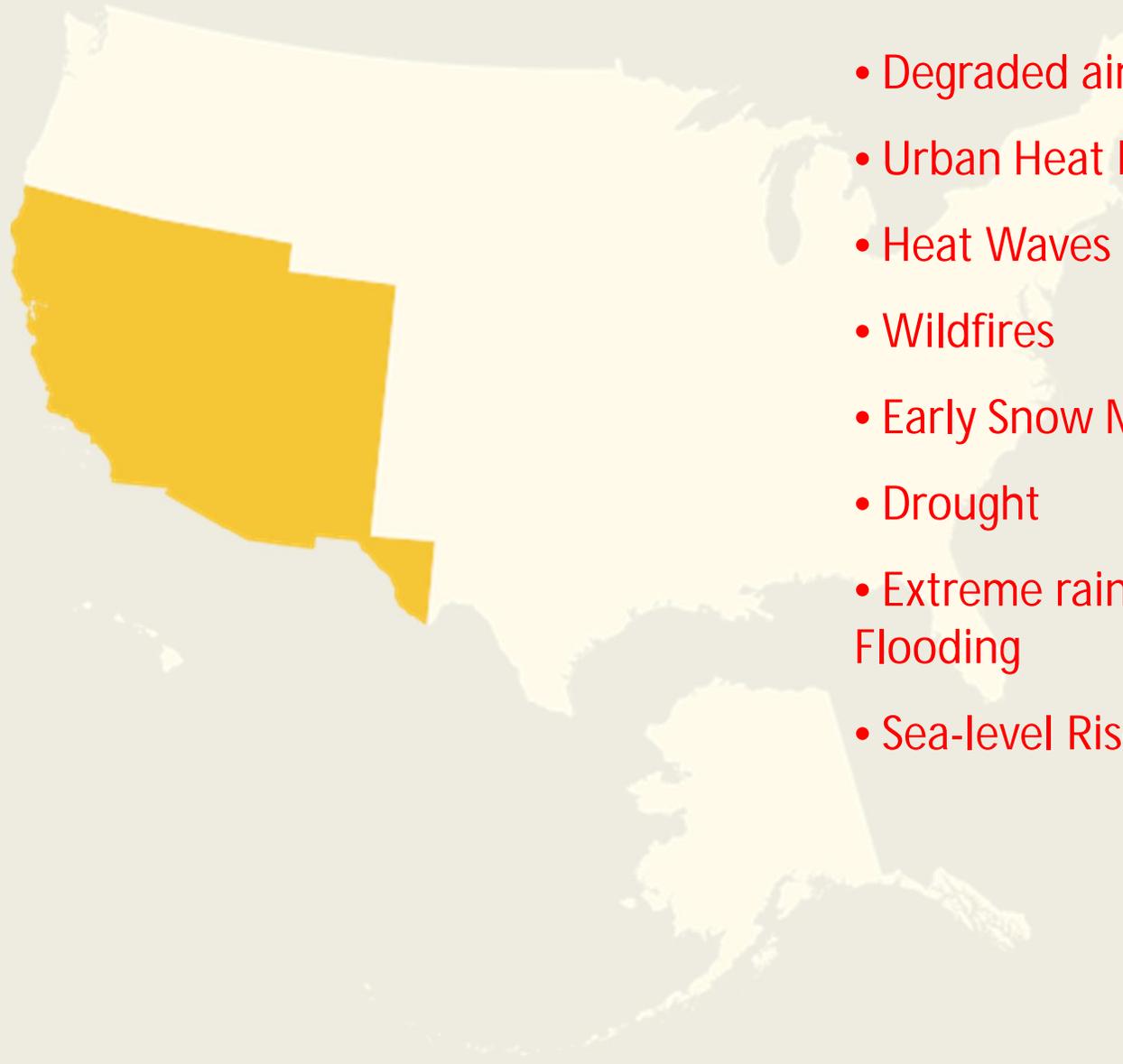
# Key Health Messages

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



# Southwest



- Degraded air quality
- Urban Heat Island
- Heat Waves
- Wildfires
- Early Snow Melt
- Drought
- 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.

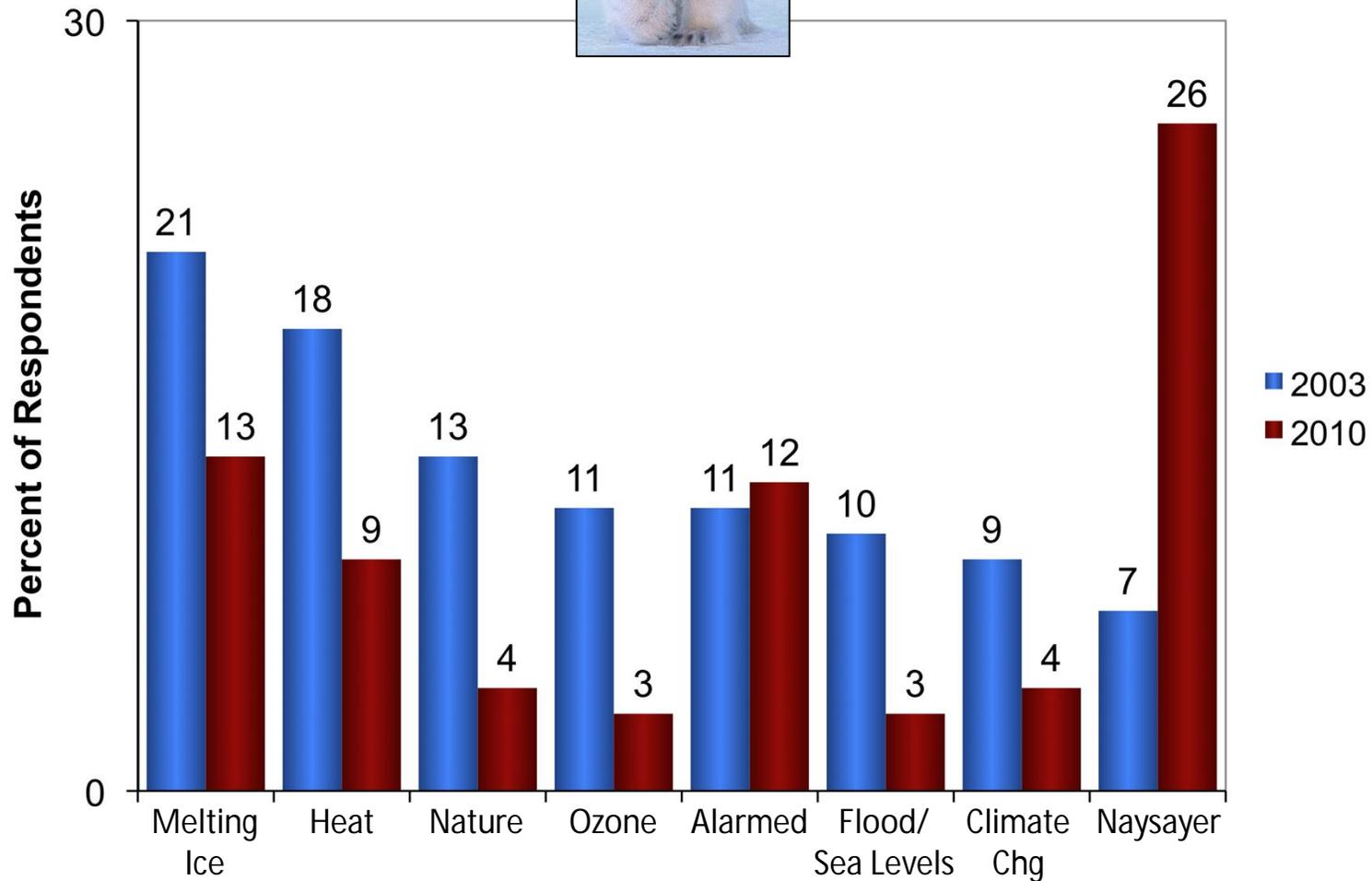
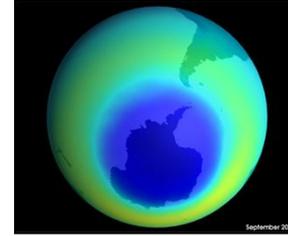
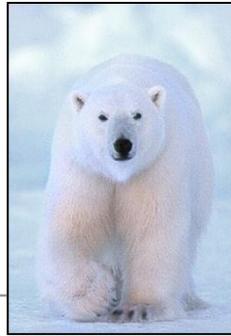


**Framing the issue properly is important because...**

*...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



Abstract

vs.

Concrete



## 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)

## Reason #3:

**Many actions taken to deal with climate change improve our health independent of climate change.**

How?

1. Cleaner energy choices → cleaner air and water → healthier people.
2. Better community design (active transportation options, green space, walking trails) → more physical activity → reduced obesity, heart disease & cancer.
1. Encouraging produce consumption (instead of meat & high-fat dairy) → reduced heart disease & cancer.

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 CO<sub>2</sub> 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



# Conveying the Human Implications of Climate Change

*A Climate Change Communication Primer for Public Health Professionals*

**Edward Malbach, MPH, PhD**  
Center for Climate Change Communication  
George Mason University

**Matthew Nisbet, PhD**  
School of Communication  
American University

**Melinda Weathers, MA**  
Center for Climate Change Communication  
George Mason University

## Chapter 1

### Why Should Public Health Professionals Communicate About Climate Change?

- 1.1 Climate change is a serious threat to the public's health and wellbeing worldwide.
- 1.2 The health of Americans is already being harmed by climate change, and it's likely to get worse in the not too distant future.
  - 1.2.1 *Illness and death from extreme heat.*
  - 1.2.2 *Injury, illness, and death from extreme precipitation*
  - 1.2.3 *Vector-, food-, and water-borne disease*
  - 1.2.4 *Respiratory problems and disease*
- 1.3 Many public health officials are aware of these risks, but the public is not.
- 1.4 Public health professionals have an obligation to prevent climate change from harming human health, to the extent possible. This requires, at a minimum, effectively informing the public and other decision-makers about the risks.



## Chapter 2

### With Whom Should Public Health Professionals Communicate About Climate Change?

- 2.1 News organizations, journalists, community media outlets, and prominent bloggers
- 2.2 Decision-makers in government, business, and non-profit organizations
- 2.3 Other professionals whose work is — or will be — affected by climate change
- 2.4 The public, and various segments therein
  - 2.4.1 *Vulnerable communities and at-risk populations*
  - 2.4.2 *Global Warming's Six Americas*

## Chapter 3

# How Should Public Health Professionals Communicate so as to be Most Effective?

### 3.1 Getting the message right

- 3.1.1 *Frame the issue as a human health problem — rather than as an “environmental problem” — to help the public and other decision-makers consider and engage in the issue of climate change.*
- 3.1.2 *Localize the issue.*
- 3.1.3 *Emphasize the immediate health benefits — i.e., the “win-wins”— associated with taking action.*
- 3.1.4 *When possible, make or reinforce four key points.*
- 3.1.5 *Use the fundamentals of good communication.*

# Getting the message right

- 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.*
  - *We need to start taking actions now to protect the health of our community's most vulnerable members – including our children, our seniors, people with chronic illnesses, and the poor – because our climate is already changing and people are already being harmed. {Our top priorities for protecting people's health from climate change are..}*
  - *Taking action creates a “win-win” situation for us because, in addition to dealing with climate change, most of actions will also benefit our health in other important ways too.*

## 3.2 Getting the message out

- 3.2.1 *Strengthen the knowledge base — and the ability to work across program areas — within your own health department.*
- 3.2.2 *Create a section — or simply post information — on your website about climate change and human health.*
- 3.2.3 *Contact news media outlets in your area.*
- 3.2.4 *Partner with other local organizations to draw attention to the health impacts related to climate change.*
- 3.2.5 *Use regional meetings to create news attention.*
- 3.2.6 *Issue coalition statements that frame news coverage.*
- 3.2.7 *Write opinion-editorials and guest columns that reach readers directly.*
- 3.2.8 *Issue a scientific report or study on local/regional health impacts and cultivate press coverage.*
- 3.2.9 *Develop contexts and opportunities for communities to discuss, learn, connect, and plan.*
- 3.2.10 *Use social media to encourage public participation in the dialogue.*
- 3.2.11 *Identify, recruit, and train opinion leaders.*
- 3.2.12 *Request permission to testify at routine city/county council meetings and dedicated public hearings on relevant projects (e.g., transportation projects, housing projects, etc.).*

# Global Warming:

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

[Insert your name here]

[Insert your organization's name here]

This 30 minute "lunch & learn" style  
presentation can be downloaded at:  
[www.climatechange.gmu.edu](http://www.climatechange.gmu.edu)



# Climate Communications: Public Health Framing Opportunities in California

BreAnda Northcutt

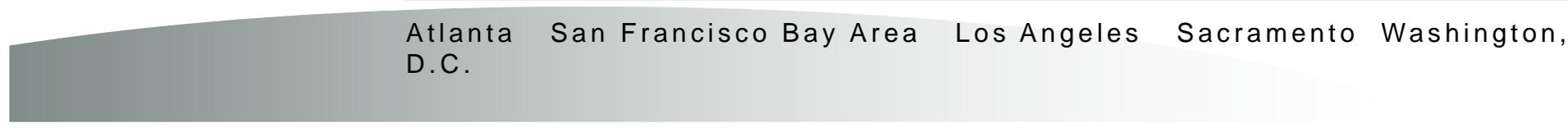
[breanda@catercommunications.com](mailto:breanda@catercommunications.com)

April 2011

**CATER** Communications

---

Atlanta San Francisco Bay Area Los Angeles Sacramento Washington,  
D.C.



# Opportunities for Public Health

---

- *72% of Californians trust public health organizations on climate change issues*
- *No on 23 campaign got more votes than any other race on the ballot*
- *Many existing campaigns can be slightly tweaked to incorporate climate*
- *All Californians care about public health and the environment*



CATER Communications

Atlanta San Francisco Bay Area Los Angeles  
Sacramento Washington, D.C.

# What is Climate Change?

---

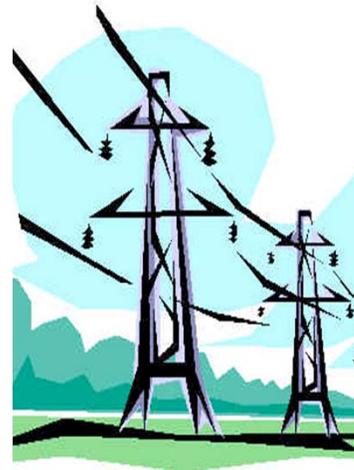
*Climate change is caused by pollution that traps heat*



Transportation 40%



Industrial 20%



Electricity 35%

CATER Communications

Atlanta San Francisco Bay Area Los Angeles  
Sacramento Washington, D.C.

# What is Climate Change?

---

*The majority of California's GHG pollution comes from transportation (40%)*



Cars/Trucks



Fuel



Vehicle Miles Traveled

CATER Communications

Atlanta San Francisco Bay Area Los Angeles  
Sacramento Washington, D.C.

# :: Connect the Dots ::

---

Driving = More Pollution



Walking = Less Pollution

CATER Communications

Atlanta San Francisco Bay Area Los Angeles  
Sacramento Washington, D.C.

# :: Connect the Dots ::

---

Shipping = More Pollution



Locally-grown, fresh produce = Less pollution

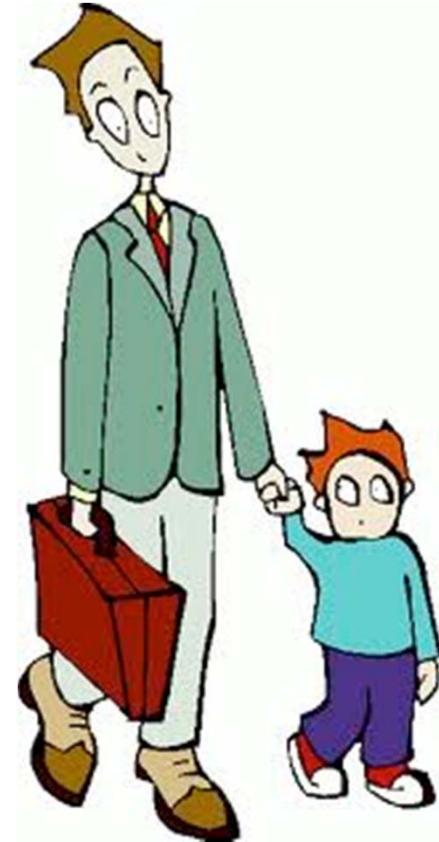
CATER Communications

Atlanta San Francisco Bay Area Los Angeles  
Sacramento Washington, D.C.

# :: Connect the Dots ::

---

Commuting = More Pollution



Living Close to School/Work = Less Pollution

**CATER Communications**

Atlanta San Francisco Bay Area Los Angeles  
Sacramento Washington, D.C.

# The Benefits of Co-benefits

---

*Transportation-related behavior changes  
can significantly **improve public health**  
**AND lessen climate change***



CATER Communications

Atlanta San Francisco Bay Area Los Angeles  
Sacramento Washington, D.C.

# Less Pollution, and ...

---



- *Better health*
- *Stronger heart*
- *Weight loss*
- *More nutritious*
- *Support 'local'*
- *Eat for season*
- *Healthy living*
- *Quality of life*
- *Improved safety*

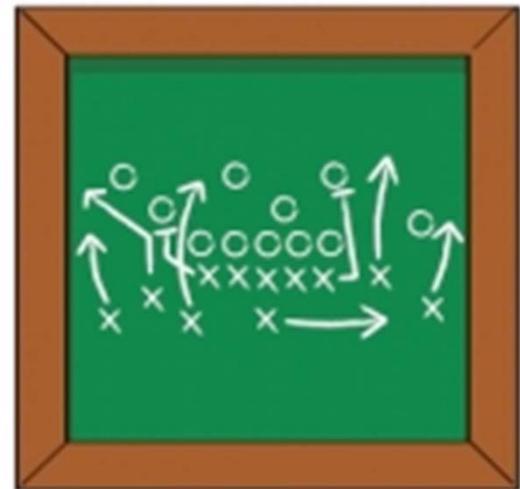
**CATER Communications**

Atlanta    San Francisco    Bay Area    Los Angeles  
Sacramento    Washington, D.C.

# Next Steps

---

- *Identify existing campaigns*
- *Determine co-benefits*
- *Develop supplemental messages*
- *Create tactical opportunities*
- *Re-engage campaign with new messages and tactics*



CATER Communications

Atlanta San Francisco Bay Area Los Angeles  
Sacramento Washington, D.C.

# Suggested Tactics

---

- *Traditional Media (more formal)*
  - *Submit an op-ed to your local paper*
  - *Offer a health official for a live radio broadcast*
  - *Ask your local TV station to host a regular “Live Healthy” segment*
  - *Reach out to your local editorial board, request a meeting*
  - *Work with alternative media publications, offer profile opportunities (i.e. News & Review, city social magazine, etc.)*



# Suggested Tactics (continued)

---

- *Social Media (more informal)*
  - *Create profiles if you haven't already*
  - *Post photos of good behavior*
  - *Highlight local farmers markets*
  - *Create vlog of good behavior*
  - *Encourage workers to spread messages through their social networks*



[www.vocidalweb.it](http://www.vocidalweb.it)

CATER Communications

Atlanta San Francisco Bay Area Los Angeles  
Sacramento Washington, D.C.

# Suggested Tactics (continued)

---

- *Add supplemental messages to materials*
  - *Walk more: lose weight AND pollute less*
  - *Improve web resources*
  - *Where possible, incorporate climate messages into paid advertising*

# Conclusion

---

- *Health messengers are influential*
- *Use existing campaigns*
- *Connect the dots between climate and health*
- *Use the power of co-benefits*
- *Engage traditional & social media*