

How are health departments using climate data?

Examples from Washington and Oregon

Brendon Haggerty, MURP
PNW Climate Science Conference
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Overview

Context

Clark County, Washington

Climate-ready states and cities - Oregon

Among local health department directors:

77% believe that climate change is happening

61% think their jurisdiction will experience serious public health problems resulting from climate change in the next 20 years

44% think climate change is currently harming people in the U.S.

Source: National Association of County and City Health Officials. (2014). Are We Ready? Report 2: Preparing for the public health challenges of climate change. Available at <http://www.naccho.org/>

Among local health department directors:

19%

Say their department currently has ample expertise to assess potential public health impacts associated with climate change

8%

Say their department currently has sufficient resources to effectively protect local residents from the health impacts of climate change

Source: National Association of County and City Health Officials. (2014). Are We Ready? Report 2: Preparing for the public health challenges of climate change. Available at <http://www.naccho.org/>

What can counties do?

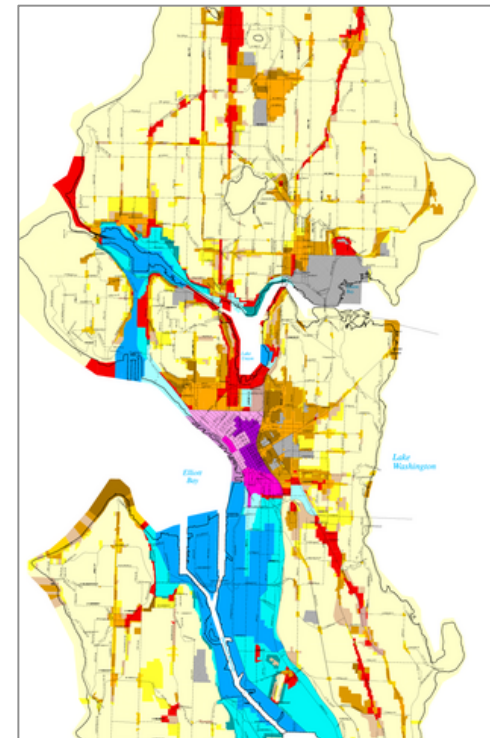
...especially health departments!



Programs



Projects



Policies



Clark County

What can counties do?

The big levers:

Policy

System

Environmental



Clark County

**20-YEAR
COMPREHENSIVE
GROWTH
MANAGEMENT
PLAN
2004 – 2024**

**Adopted SEPTEMBER 2007
Amended ORD2008-12-15
Amended ORD2009-12-15
and ORD2009-12-21
Amended ORD2010-12-12
Amended ORD2011-12-22
Amended ORD 2012-07-16
and ORD 2012-12-20
December 2012**



Expected extreme heat days in Clark County in 2045

Warming scenario	Avg. # of heat days per year	Avg. # of days per heat event	Avg. “feels like” temp on heat days
High	49.9	3.4	109.9
Middle	29.9	2.6	107.7
Low	20.8	2.3	107.1



Policy

Policies from the *Growing Healthier Report*:

1. Determine how Clark County can adapt to and mitigate climate change to protect health
2. Develop plans to mitigate climate change
3. Conserve and preserve resources
4. Prepare for climate change impacts by developing adaptation plans

President's Column



By John Wiesman, MPH, CPH,
Director, Clark County (WA) Public Health

We have a moral imperative to address climate change mitigation and adaptation actions.

I confess, when it comes to addressing climate change, I was a reluctant leader, and it is to fellow reluctant leaders that I write.

As reluctant leaders, we have been focused both on keeping our agencies financially solvent and addressing what we see as immediate threats. Then we ask ourselves, "How the heck are we supposed to take on another issue?"—especially one that can seem to be years away and be so politically divisive that for some who utter the words "climate change," there is a real fear of damaging repercussions.

Foremost, we must face the fact that the human health impacts of climate change are not just "years away"; they are occurring now, and I thank my staff who will not let me believe otherwise. Then we must find a way to lead.

But how do we lead? It helps to (1) know about what we are speaking, which thankfully, does not require becoming a climate scientist; (2) understand the health impacts of climate change in general and at the local level; and (3) incorporate climate change as part of an agency's day-to-day work.

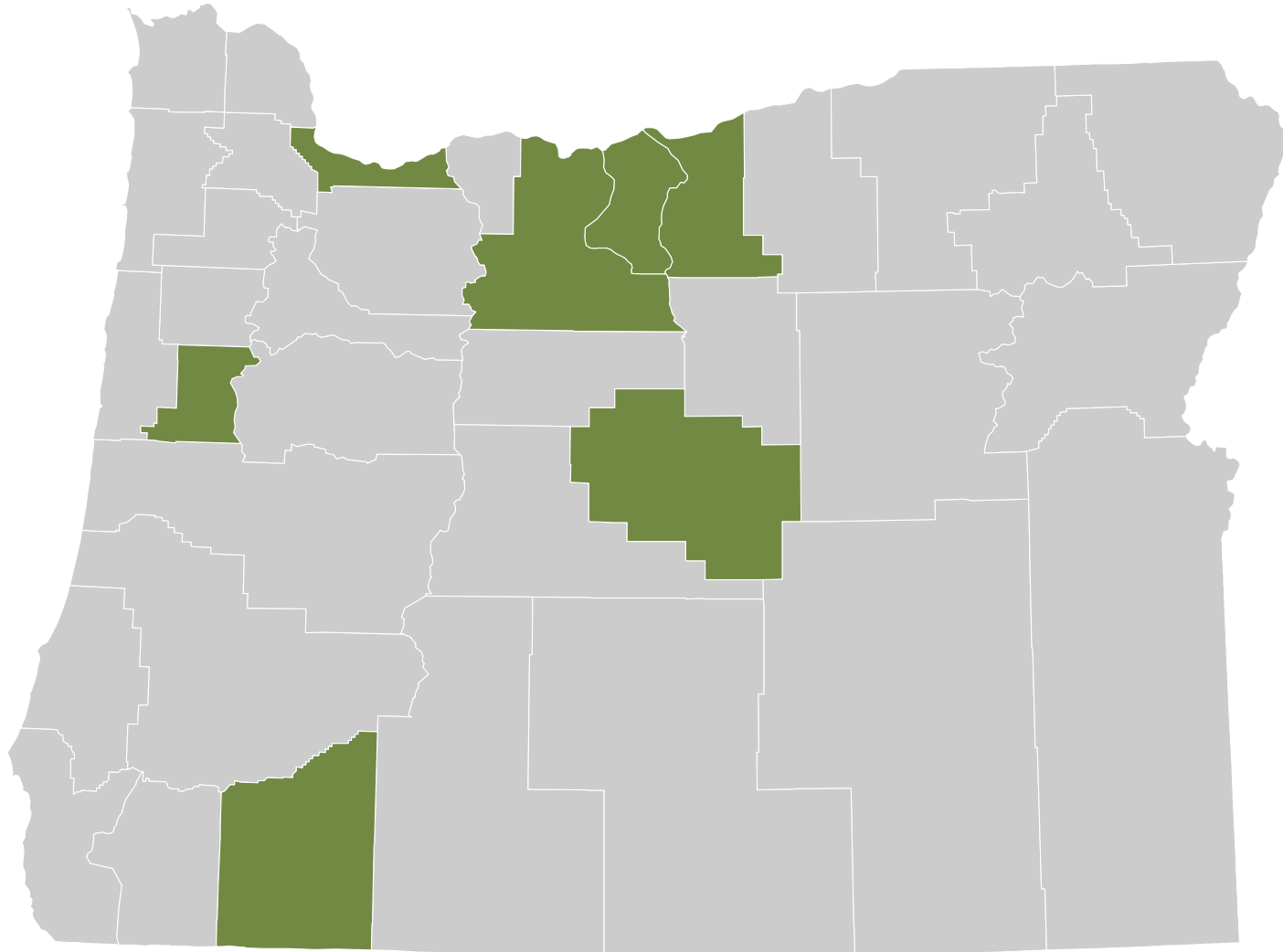
Climate change is simply the long-term shift in the climate of the planet,

measured by changes in weather (temperature, wind patterns, and precipitation), usually over decades. The current warming of Mother Earth is primarily caused by an increase of greenhouse gases (water vapor, CO₂, methane, nitrous oxide, and halocarbons like chlorofluorocarbons). These gases are being emitted into the atmosphere and are trapping the earth's infrared radiation heat from sunlight that is being emitted back into the atmosphere. Over time, these changes to climate have wide-ranging impacts on the earth's ecosystem, such as glacial melt, ocean acidification, poor air quality, and changing vector habitat.

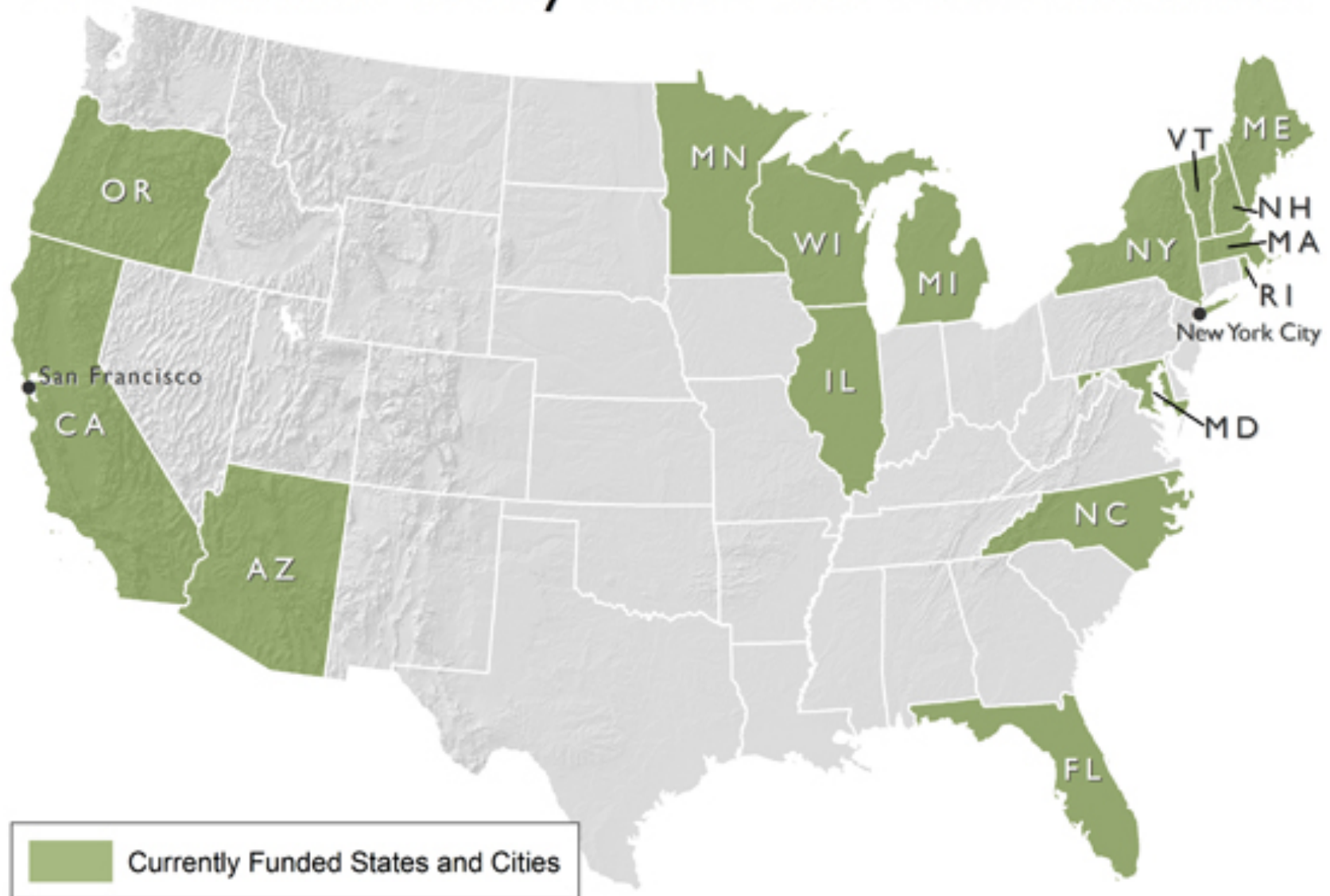
The health effects are basic public health. In the United States, public health practitioners are primarily concerned with health issues related to heat stress, air pollution, infectious disease, including water-, food-, vector- and rodent-borne diseases, extreme weather, and flooding. The threats vary by region, and the American Public Health Association's *Climate Change: Mastering the Public Health Role, a Practical Guidebook* is an excellent resource.¹

Incorporating climate change into day-to-day work requires political

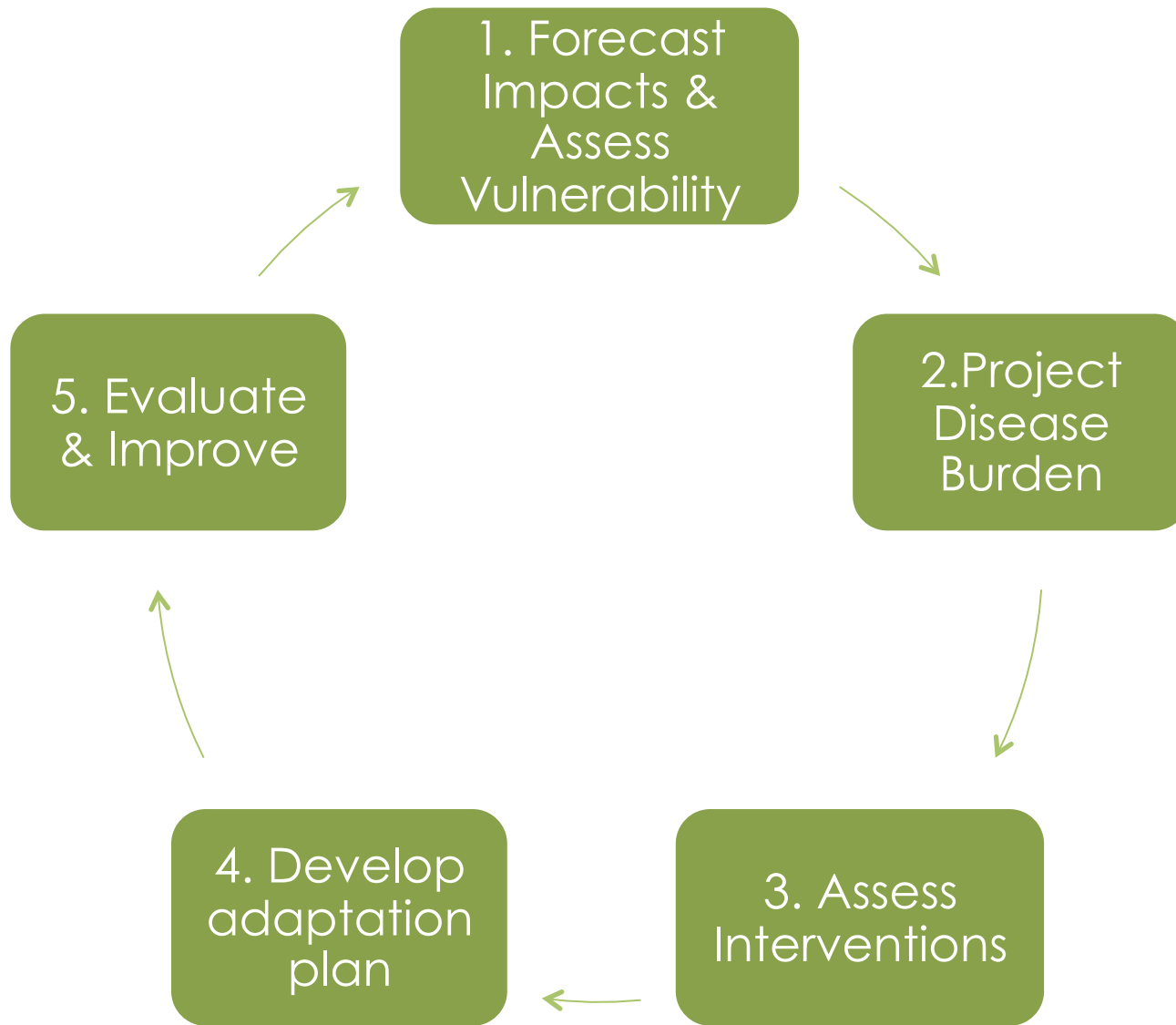
Benton, Crook, Jackson, Multnomah, North Central

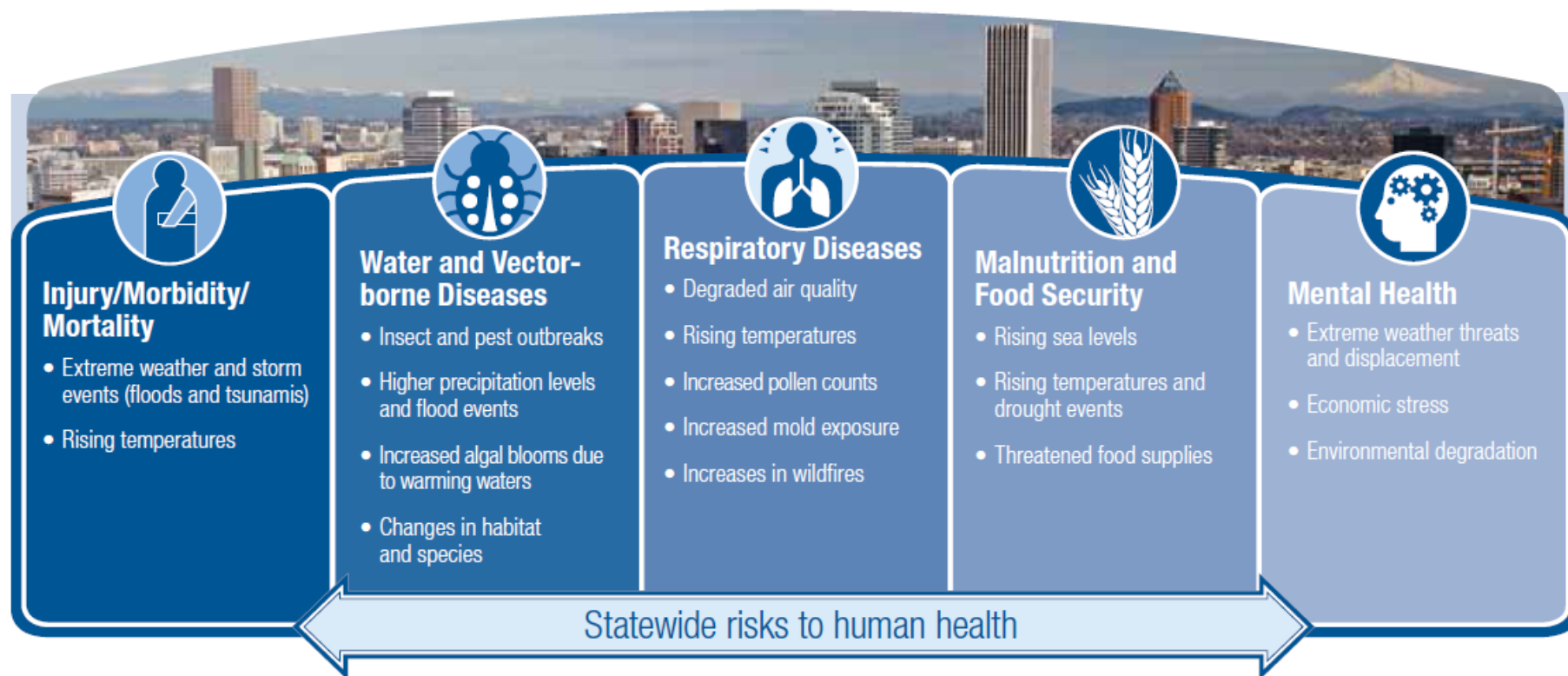


CDC Climate Ready States and Cities Initiative



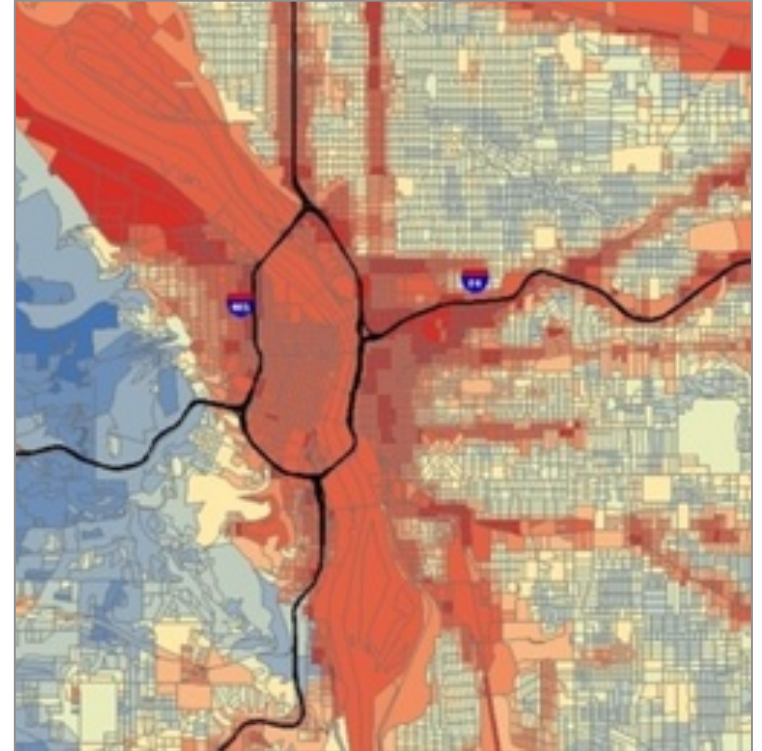
BRACE Framework





How Oregon counties used data

- Baseline, not projections
- Direction, not magnitude
- Outreach and education, not "big levers"
- Interventions based on best practice or expert opinion, not evidence



BRACE Framework

