

Climate Change & Health

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Health Inequities

“Preventable differences in health outcomes that are the result of the systematic and unjust distribution of social determinants or conditions that support health.”

<http://www.cdc.gov/healthycommunitiesprogram/overview/healthequity.htm>

“Social injustice is killing people on a grand scale.”

WHO 2008



“Climate change is the biggest global health threat of the 21st century.”

The Lancet

“Climate change is affecting agriculture, water resources, human health, and ecosystems on land and in the oceans. We can avert these risks if we take bold, decisive action now.”

Ban Ki-Moon

The Lancet



USDA, Wikimedia Commons



NOAA, Wikimedia Commons



Suat Entom, freedigitalphotos.net

National Climate Assessment

In May 2014, the U.S. Global Change Research Program released the Third National Climate Assessment, the authoritative and comprehensive report on climate change and its impacts in the United States.

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3rd National Assessment on Climate Change, 2014

<http://nca2014.globalchange.gov/report/sectors/human-health>

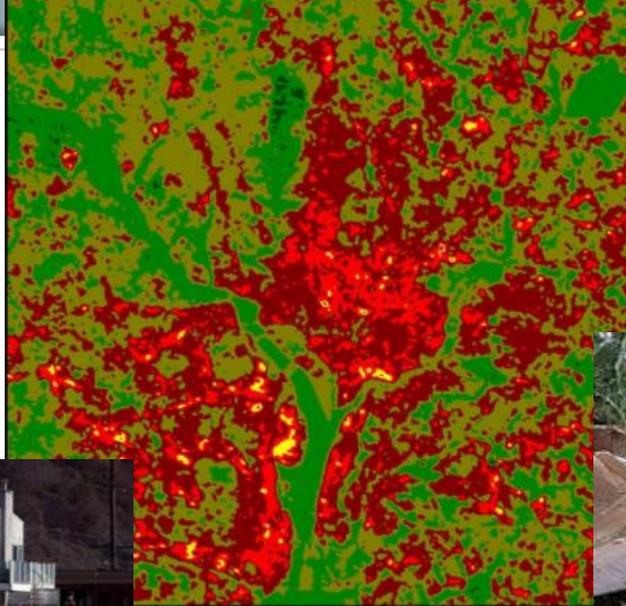


Environmental Impacts

- More extreme temperatures
- Sea level increases
- Stronger hurricanes and storm surges
- Increased precipitation and flooding
- Increased droughts and water scarcity
- More frequent wildfires
- Increased ozone concentrations and diminished air quality
- Increased pollen and natural air pollutants
- Increased range for disease vectors



Local Climate Impacts



WASHINGTON, D.C.: Temperature Map
August 8, 1990

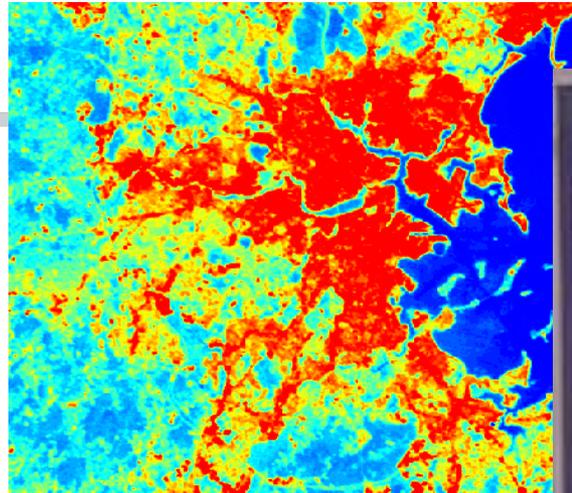
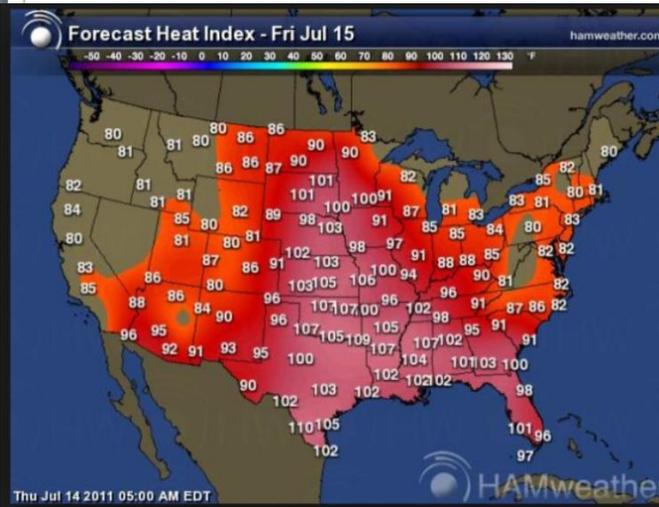
4
60° 65° 70° 75° 80° 85° 90° 95°
Degrees in Fahrenheit

W N S

<http://employees.oneonta.edu/baumanpr/efa/Images/Urban%20Heat%20Island%20Map%201990.jpg>



Heat



**THIS BUILDING
IS OPEN TODAY AS
A DESIGNATED
COOLING CENTER
UNTIL 8:00PM**

FOR MORE INFO CALL
(661)868-1000 OR (800)510-2020

California Heat Wave Ends With a Death Toll Near 25



Iran Khan/The Los Angeles Times, via Associated Press

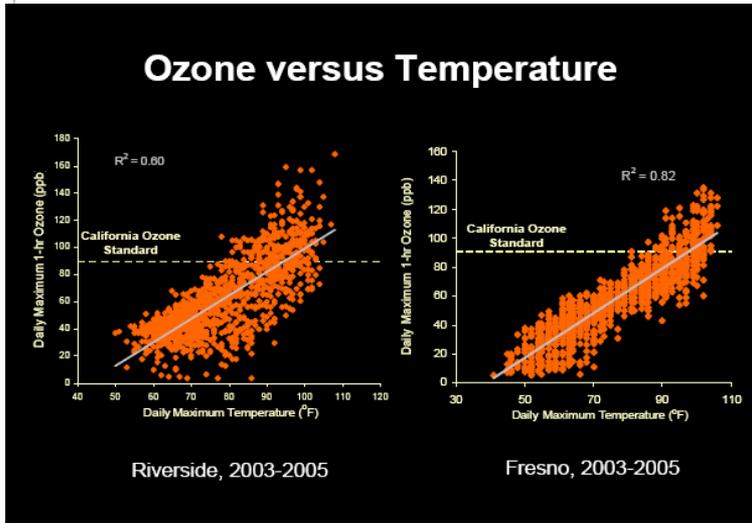
Gary Cochran worked on the roof of Trinity Lutheran Church last week in Victorville, Calif.

By JENNIFER STEINHAUER

Published: September 7, 2007



Air Pollution



(Los Angeles Times)



Ozone health-related costs now: \$6.5B

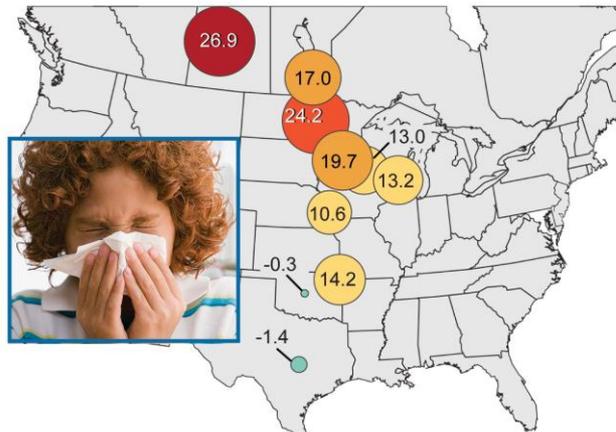
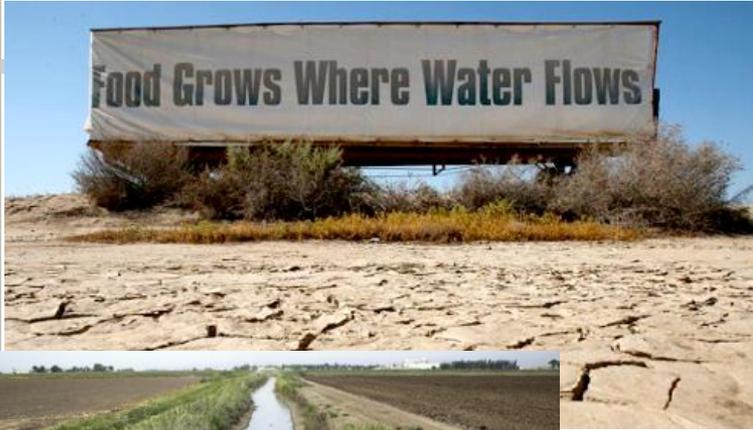


Photo: Tudor Van Hampton / ENR

Flooding



Drought



Southwest Fisheries Science Center, NOAA Fisheries Service



Vector-Borne & Infectious Diseases



Mental Health Impacts



The Climate Gap



Active Transportation Co-Benefits

- Reductions

- Air pollution
- Noise
- Infrastructure costs
- Community severance
- GHG emissions



- Increases

- Physical activity
- Social capital



- Reductions

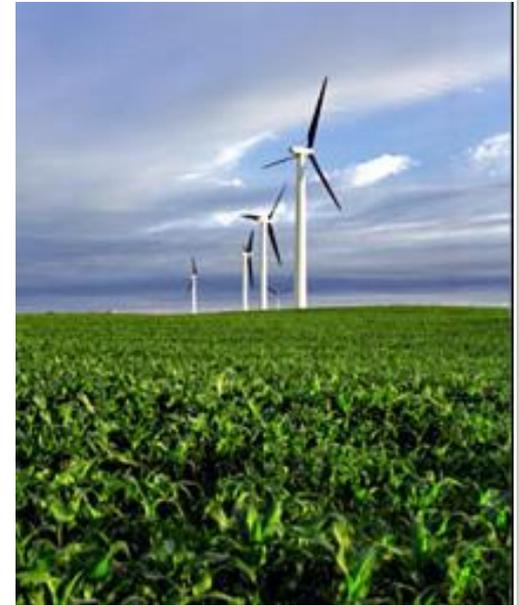
- Respiratory disease
- Cardiovascular disease
- Diabetes
- Depression
- Osteoporosis
- Cancer Stress

- Avoidable increases

- Bike/ped injuries

Co-Benefits of Energy Efficiency & Clean Energy

- Reductions
 - Air pollution
 - Household & outdoor
 - Mold
 - Fuel poverty
- Improve indoor environment
 - Better ventilation
 - Decrease moisture
 - Improve lighting
 - Well-being/comfort
- Reduce
 - Asthma
 - Respiratory disease
 - CVD
 - Allergy



Co-benefits of Sustainable, Local Food Systems

- Reductions
 - GHG emissions
 - Pesticide use
 - Synthetic fertilizer use
 - Food miles
 - Antibiotic use
 - Water pollution
 - Soil erosion
 - Biodiversity loss
 - Meat consumption
 - Unsustainable H2O consumption
 - Increases
 - Access affordable healthy food
 - Rural community strength
 - Agricultural land preservation
- Reductions
 - Obesity
 - Cardiovascular disease
 - Cancer (breast, prostate, colorectal)
 - Type II Diabetes
 - Antibiotic resistance
 - Pesticide illness



Land Use Co-Benefits

- Urban greening
 - Places to be active
 - Healthy food access
 - Reduce storm water run-off
 - Decrease flooding risk
 - Replenish groundwater
 - Improve aesthetics
 - Reduce crime
- Reduce heat island effect
 - Reduce heat illness risk
 - Decrease energy consumption
 - Lower energy costs
 - Reduce air pollution



Co-harms



Climate Change and Health

- Climate change effects the systems on which human life depends – air, water, food, shelter, security– and has direct impacts on health & well-being
- Climate change disproportionately impacts vulnerable populations and disadvantaged communities and increases health inequities.
- Co-benefits offer many opportunities to simultaneously improve health, equity, and address climate change
- There are many opportunities for land conservation advocates to contribute to the transformative solutions required.

Current Climate Policies with Health Co-benefits:

- Support AB32 and the fuels cap;
- Support aggressive targets and regional plans through SB 375;
- Make cap and trade revenues benefit those who face the greatest impacts – SB535;
- Support zoning and land use policies that allow agricultural production in urban and suburban areas;
- Support the EPA Clean Power Plant rules;
- Support local communities fighting fracking, oil refinery and export expansion and transport;
- Support regional and local Climate Action Plans, Urban Forestry Master Plans, Parks and Rec Master Plans that increase park and green infrastructure in low-income communities.

Thank you!

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