



The Opportunity

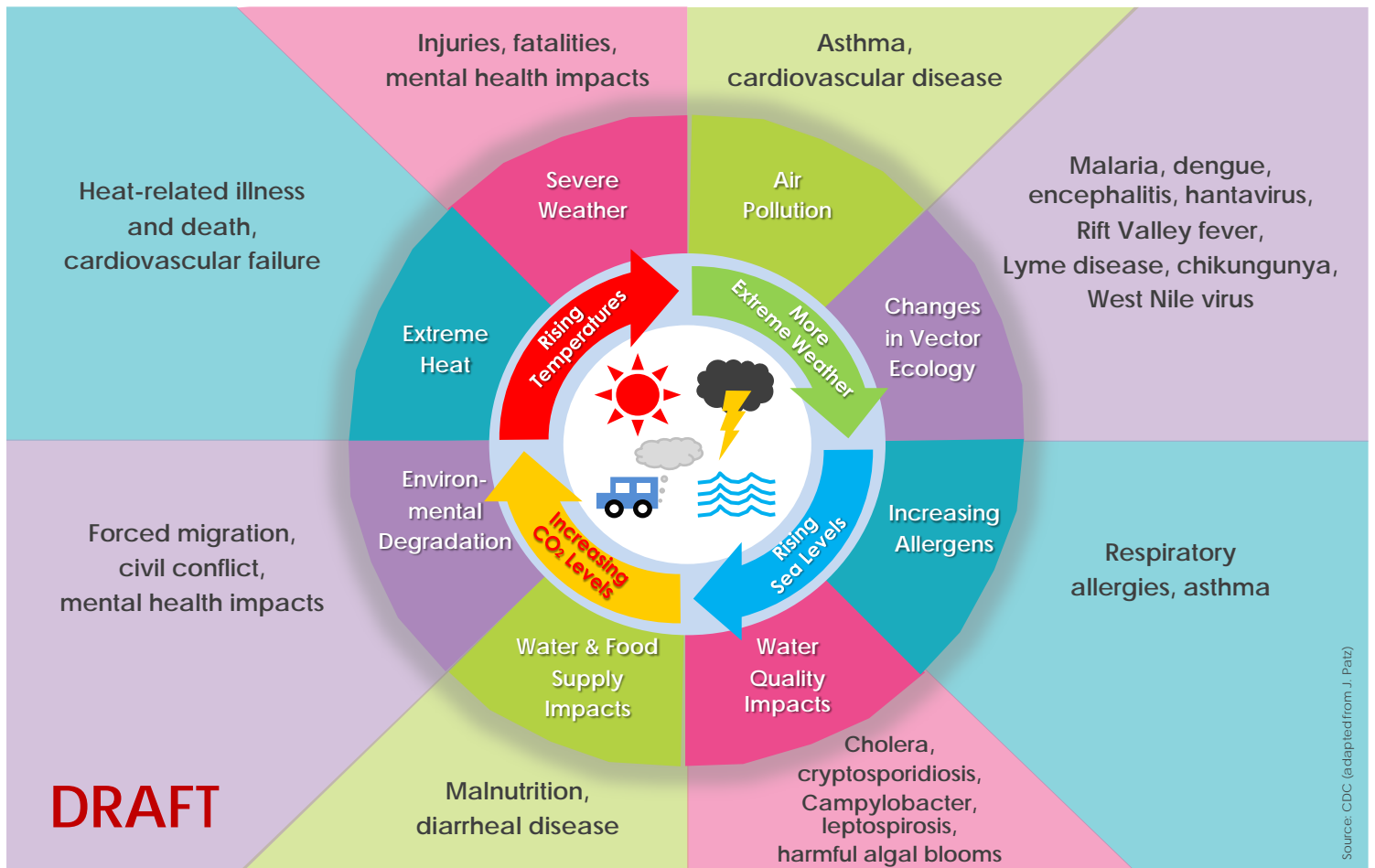
Addressing climate change could represent the greatest opportunity to improve public health in our time.¹ Many actions that help limit climate change also improve the health of our families and communities. Public health engagement in climate change is extremely important to ensure that climate action strategies promote optimal health and reduce health inequities.²

“For public health, climate change is the defining issue for the 21st century.”

—Margaret Chan,
World Health Organization⁵

Climate Change & Health Impacts

Climate change threatens the health and well-being of California’s diverse population of nearly 38 million people. Climate change impacts health through a variety of environmental changes including more extreme heat, a decline in air quality, more frequent wildfires, increases in allergens, and altered environmental conditions that foster the spread of communicable and other diseases. Climate change also threatens the basic life support systems on which humans depend – our water, food, shelter and security. The resulting human health impacts can include increases in heat illness and death, air pollution-related cardiovascular and respiratory diseases, vector-borne and water-borne diseases, and stress and mental trauma.³ These challenges are disproportionately impacting the state’s most vulnerable populations and require mobilization of communities along with state and national strategies to enhance understanding of climate change and lessen its harm to the health of Californians.⁴



DRAFT

Source: CDC (adapted from J. Patz)

Disproportionate Effects of Climate Change

Climate change poses immense challenges for achieving health equity because, while all Californians are impacted by climate change, populations that are socially and economically vulnerable bear a disproportionate burden. Low-income families, some communities of color, those with existing health conditions such as chronic diseases and mental health problems, children and seniors, the homeless, outdoor workers and farmers, immigrants, tribal nations, and isolated people are most vulnerable to the impacts of climate change.⁶ These are often the same communities where residents are less likely to have air conditioning, more likely to have one or more chronic conditions, and less likely to own cars to escape from natural disasters and extreme heat.⁶

Climate change will magnify existing health inequities.

Climate & Health Co-Benefits

Many strategies for reducing greenhouse gas emissions also have a beneficial effect on health and quality of life. These co-benefits make actions for climate protection a “win-win”. Health benefits include a reduction in obesity, some chronic diseases, respiratory illnesses, injury, and improved community cohesion and mental health.⁷

Co-Benefits of Active Transportation:

- Reducing GHG emissions from transportation by shifting away from automobiles and towards active transportation (walking, biking and using public transportation) is one climate mitigation strategy that can provide additional health benefits through increasing physical activity.⁸

Strategy to Reduce GHG Emissions	Potential Health Co-Benefits
Reduced vehicle miles traveled (VMT) <ul style="list-style-type: none"> ● Active transportation (walking, biking, transit) 	<ul style="list-style-type: none"> ● Increase physical activity ● Reduce chronic disease ● Improve mental health ● Reduce air pollution
Reduce emissions through land use changes <ul style="list-style-type: none"> ● Transit oriented and infill development 	<ul style="list-style-type: none"> ● Increase physical activity ● Reduce chronic disease ● Increase access to services ● Enhance safety
Reduce energy intensity in local food systems <ul style="list-style-type: none"> ● Buy local, farmer’s markets, gardens, reduce consumption of red and processed meats 	<ul style="list-style-type: none"> ● Increase access to healthy and fresh foods ● Reduce saturated fats ● Reduce air pollution ● Increase social cohesion ● Increase resilience
Urban greening <ul style="list-style-type: none"> ● Tree planting, parks, green infrastructure 	<ul style="list-style-type: none"> ● Reduce temperature and urban heat island effect ● Reduce air pollution ● Reduce noise
Reduce residential building energy use <ul style="list-style-type: none"> ● Energy efficiency, weatherization 	<ul style="list-style-type: none"> ● Reduce energy costs ● Promote healthy homes ● Create local green jobs ● Promote cooler communities

Adapted from CDPH’s Climate Action for Health: Integrating Public Health into Climate Action Planning (see link below).

Further Reading:

- Climate Action for Health: Integrating Public Health into Climate Action Planning: http://www.cdph.ca.gov/programs/CCDHP/Document/CAPS_and_Health_Published3-22-12.pdf.

References

¹ Watts N, Adger WN, Agnolucci P, et al. 2015. Health and climate change: policy responses to protect public health. *Lancet*: 386, 1861-1914.

² Rudolph L, Gould S, Berko J. Climate Change, Health, and Equity: Opportunities for Action. 2015. Public Health Institute, Oakland, CA.

³ USGCRP. 2016. The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment. U.S. Global Change Research Program, Washington, DC, 312 pp.

⁴ Portrait of Promise: The California Statewide Plan to Promote Health and Mental Health Equity. California Department of Public Health. 2015.

⁵ Chan M. How Climate Change Can Rattle the Foundations of Public Health. *Huffington Post*. http://www.huffingtonpost.com/dr-margaret-chan/how-climate-change-can-ra_b_5822950.html.

⁶ Shonkoff SB, Morello-Frosch R, Pastor M, Sadd J. The climate gap: environmental health and equity implications of climate change and mitigation policies in California – a review of the literature. *Clim. Change*. 2011;109(1):485-503.

⁷ Gould S, MPH, Dervin K, MPH. Climate Action for Health: Integrating Public Health into Climate Action Planning; 2012.

⁸ Maizlish N, Woodcock J, Co S, Ostro B, Fanal A, Fairley D. Health Co-benefits and Transportation-Related Reductions in Greenhouse Gas Emissions in the San Francisco Bay Area. *American Journal of Public Health* 2013.



©Depositphotos.com/monkeybusiness