An Introduction to the HHS Office of Climate Change and Health Equity (OCCHE)

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Research!America Alliance Discussion
August 29, 2022
The IPCC Climate Change 2022 Impacts Report: Why it matters

Large-scale reduction in carbon dioxide pollution key to climate change response, scientists say

Medical Journals Call Climate Change the ‘Greatest Threat to Global Public Health’

An editorial published by more than 200 journals worldwide warned of ‘catastrophic harm to health that will be impossible to reverse.’

WMO update: 50:50 chance of global temperature temporarily reaching 1.5°C threshold in next five years

Tags: Climate

Published 9 May 2022

Press Release Number: 09052022
Health co-benefits from air pollution and mitigation costs of the Paris Agreement: a modelling study

Anil Markandya, Jon Sampedro, Steven J Smith, Rita Van Dingenen, Cristina Pizarro-Irizar, Iñaki Arto, Mikel González-Eguino

Summary
Background Although the co-benefits from addressing problems related to both climate change and air pollution have been recognised, there is not much evidence comparing the mitigation costs and economic benefits of air pollution reduction for alternative approaches to meeting greenhouse gas targets. We analysed the extent to which health co-benefits would compensate the mitigation cost of achieving the targets of the Paris climate agreement (2°C and 1.5°C) under different scenarios in which the emissions abatement effort is shared between countries in accordance with three established equity criteria.

“The health co-benefits substantially outweighed the policy cost of achieving the target for all of the scenarios that we analysed.”

looked forward to 2050 in accordance with the socioeconomic narrative Shared Socioeconomic Pathways 2.

Findings The health co-benefits substantially outweighed the policy cost of achieving the target for all of the scenarios that we analysed. In some of the mitigation strategies, the median co-benefits were double the median costs at a
The Public Health Impacts of Climate Change

Injuries, fatalities, mental health impacts

Asthma, cardiovascular disease

Heat-related illness and death, cardiovascular failure

Malaria, dengue, encephalitis, hantavirus, Rift Valley fever, Lyme disease, chikungunya, West Nile virus

Forced migration, civil conflict, mental health impacts

Respiratory allergies, asthma

Extreme heat

Changes in vector ecology

Water and food supply impacts

Increasing allergens

Environment degradation

Increasing levels

Water quality impacts

Malnutrition, diarrheal disease

Cholera, cryptosporidiosis, campylobacter, leptospirosis, harmful algal blooms

Source: CDC National Center for Environmental Health
Origins of the Office of Climate Change and Health Equity

E.O. 14008 - “Tackling the Climate Crisis”
- HHS mandates (Section 222(d))
  - Office of Climate Change and Health Equity
  - Interagency Working Group to Decrease Risk of Climate Change to Children, the Elderly, People with Disabilities, and the Vulnerable
  - Biennial Health Care System Readiness Advisory Council
OCCHE is situated alongside critical HHS Offices.
Priority 1: Climate & Health Resilience for Most Vulnerable

Priority 2: Climate Actions to Reduce Health Disparities

Priority 3: Health Sector Resilience & Decarbonization

Resilient Health Systems

- Capturing community and health system vulnerabilities and logging adaptation gaps
- Enhancing the resilience of health systems and communities to climate change effects
- Building on existing networks and plans to develop a national plan for health adaptation

Low-Carbon Health Systems

- Coordinating Federal health system greenhouse gas accounting and reduction targets
- Partnership with private health sector to develop an action plan for reductions via incentives, technical assistance, policy guidance, applied research, toolkits, training, use of regulatory authorities as needed, etc.
Where We Need to Be by 2025…

• Every community, health system and provider in every U.S. geography is prepared for both disruptive and chronic climate impacts on its most vulnerable populations.

• Every facility type in the United States is prepared for long-term operation in the face of climate catastrophes.

• Every hospital and health system in the United States is publicly tracking its greenhouse gas emissions and is on a path to net zero by tackling Scope 1, Scope 2 and Scope 3 emissions.

• **AND every OpDiv at HHS is contributing meaningfully to these goals…**
HHS Climate Adaptation & Resilience Plan

**Five+ Priority Actions**

1. Expand existing climate change-related public health and biomedical research activities;

2. **Improve HHS responses to the climate crisis;**

3. Develop climate-resilient grant policies at HHS;

4. Workplace optimization and effective space management for climate resilience; and

5. Promote sustainable and climate resilient operations at HHS facilities.

**Plus HHS Climate Literacy!**

- Link to plan:
Overview Driver Diagram for OCCHE

**PRIMARY DRIVERS**

1. Set the *Vision and Agenda (V)*
2. Build the *Evidence Base (EB)*
3. Train the *Workforce (TW)*
4. Develop *Communities of Practice (CoP)*
5. Mobilize *Resources (R)*
6. Strengthen *Incentives and Standards (IS)*
Looking Back at Year One of OCCHE…

2021
• Office of Climate Change and Health Equity (OCCHE) established (V)
• National Academy of Medicine Action Collaborative (CoP)
• Extreme Heat Interagency Working Group (CoP)

2022
• Federal Health Systems Learning Network (CoP)
• HHS Climate Change and Health Equity Working Group (CoP)
• Leveraging internal HHS funding for evaluation and training activities (TW)
• Climate and Health Outlook (EB)
• White House-HHS Healthcare Sector Climate Pledge (CoP)
• OCCHE Webinar series on federal supports (TW;R)
• Supporting CDC and AHRQ with technical assistance on new analyses and tools (EB)
• Partnering with regions on summits and pilot projects
Climate and Health Outlook

Welcome to the third edition of the Climate and Health Outlook from the Department of Health and Human Services (HHS) Office of Climate Change and Health Equity (OCCHE). The Climate and Health Outlook is an effort to inform health professionals and the public on how our health may be affected in the coming months by climate events and provide resources to take proactive action. This edition expands beyond extreme heat to include additional climate-related health hazards.

U.S. Seasonal Forecast for Health: July 2022

Regional health forecasts for heat, wildfire, drought, and hurricanes

Northern Great Plains: Counties in Nebraska (9), Wyoming (9), Montana (6), and South Dakota (3) are projected to have more than 5 heat exceedance days in July 2022. Drought is expected to persist in Montana and Wyoming while also slightly expanding in South Dakota and Nebraska.

Northwest: Counties in Idaho (15), Oregon (6), and Washington (3) are projected to have more than 5 heat exceedance days in July 2022. Drought is projected to persist in Washington and Oregon while also slightly expanding in Idaho.

Southwest: Counties in Colorado (26), Utah (23), Arizona (9), New Mexico (9), Nevada (12), and California (10) are projected to have more than 5 heat exceedance days in July 2022. Drought is expected to persist in Arizona and California while also slightly expanding in Nevada.

Southern Great Plains: Counties in Kansas (12), Oklahoma (3), and Arkansas (1) are projected to have more than 5 heat exceedance days in July 2022. Drought is expected to persist in Kansas and Oklahoma while also slightly expanding in Arkansas.

Southeast: Counties in Texas (12), Florida (1), and North Carolina (5) are projected to have more than 5 heat exceedance days in July 2022. Drought is expected to persist in Florida and North Carolina while also slightly expanding in Texas and South Carolina.

Midwest: Counties in Missouri (9) are projected to have more than 5 heat exceedance days in July 2022. Drought is expected to persist in Missouri while also slightly expanding in Illinois and Indiana.

Southwest: Counties in Arizona (9), New Mexico (9), Nevada (12), and California (10) are projected to have more than 5 heat exceedance days in July 2022. Drought is expected to persist in Arizona and California while also slightly expanding in Nevada.

Southern Great Plains: Counties in Kansas (12), Oklahoma (3), and Arkansas (1) are projected to have more than 5 heat exceedance days in July 2022. Drought is expected to persist in Kansas and Oklahoma while also slightly expanding in Arkansas.

Southeast: Counties in Texas (12), Florida (1), and North Carolina (5) are projected to have more than 5 heat exceedance days in July 2022. Drought is expected to persist in Florida and North Carolina while also slightly expanding in Texas and South Carolina.

Drought/Heat Wave

Floods

Wildfire

Smoke from wildfires can impact health hundreds of miles from the fire. Developed with data from the Centers for Disease Control and Prevention, National Oceanic and Atmospheric Administration, and National Interagency Fire Center.

We want to hear from you! Please send your feedback on ways to improve the Climate and Health Outlook to ocche@hhs.gov.
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U.S. Seasonal Forecast for Health: July 2022
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**Regional Forecasts**

**Northern Great Plains:** Counties in Nebraska (9), Wyoming (9), Montana (8), and South Dakota (3) are projected to have more than 5 heat exceedance days in July, 2022. Drought is expected to persist in Montana and Wyoming while also slightly expanding in South Dakota and Nebraska.

**Northwest:** Counties in Idaho (15), Oregon (6), and Washington (3) are projected to have more than 5 heat exceedance days in July, 2022. Greater than 25% of the Northwest—primarily southern Oregon and Idaho—is in moderate to exceptional drought and expected to persist. Above normal wildfire potential projected for parts of eastern Washington and Oregon.

**Southwest:** Counties in Colorado (26), Utah (23), Arizona (15) New Mexico (15), Nevada (13), and California (10) are projected to have more than 5 heat exceedance days in July, 2022. A dry climatology precludes any prospects for drought improvements, except across the lower Four Corners region where an anticipated robust Monsoon season may yield some drought improvements. Above normal wildfire* potential projected for much of northern California and Nevada.

**Midwest:** Counties in Missouri (6) are projected to have more than 5 heat exceedance days in July, 2022. Soil moisture has decreased considerably across the Mississippi Valley and central Corn Belt, increasing vulnerability to short term drought.

**Southeast and Caribbean:** The Atlantic basin is forecasted to have an above-average hurricane season. Counties in Georgia (29), South Carolina (16), Virginia (16), North Carolina (16), Alabama (9), Arkansas (8), Kentucky (2), Louisiana (2), Mississippi (1), Florida (1), and Tennessee (1) are projected to have more than 5 heat exceedance days in July, 2022. Drought conditions are projected to improve, except in the lower Mississippi Valley, where drought is expected to persist. Above-normal wildfire* potential projected for coastal regions in North Carolina, South Carolina, Georgia, and Florida.

*Smoke from wildfires can impact health hundreds of miles from site of the fire.

**Drought/Heat Wave** **Flood** **Wildfire** **Hurricane**

We want to hear from you! Please send your feedback on ways to improve the Climate and Health Outlooks to ocche@hhs.gov
The forecast

County-level risk factors

The health effects
Webinar Series: Accelerating Healthcare Sector Action on Climate Change and Health Equity

• Past topics include:
  ▪ Resources and supports from the DOE
  ▪ Financing from the USDA, HUD, and Treasury
  ▪ Emergency preparedness with the ASPR and FEMA

• Upcoming:
  ▪ EPA tools like ENERGY STAR® Portfolio Manager
  ▪ Introduction to Agency for Healthcare Research Quality’s Decarbonization Toolkit *(will launch in autumn)*
  ▪ International perspectives with United Nations Framework Convention on Climate Change and Race to Zero

View past sessions and register for upcoming events: https://bit.ly/3zep1hH
HHS announces new office of environmental justice
OCCHHE Agenda for the coming year….

• Coordination of federal climate change and health equity programming
  ▪ HHS Climate Change Planning
  ▪ Launch of Interagency Working Group on Vulnerable Populations
  ▪ Adaptation Gap Analysis
  ▪ Regional Partnerships
• Expanded engagement with communities, including tribes
• Continued development of the Climate Health Outlook
• Sustaining momentum of White House/HHS Health Sector Climate Pledge
  ▪ Organizations can sign on until October 28 to be recognized in an event around COP27
• Continuing partnership with federal health systems and rolling out tools for private sector in support of health sector decarbonization and resilience
Office of Climate Change and Health Equity

Communities at highest risk

All HHS Operating Divisions

Government Agencies

Private Sector

Federal Health Systems

The OCCHE “Hub”: Setting Strategy, Coordinating Action
In conclusion

- Climate change is compounding existing stressors and health disparities;
- Climate change impacts and solutions are integral to the HHS mission
- OCCHE is uniquely dedicated to addressing this challenge
Thank you!

Contact us: OCCH@hhs.gov

Visit us online and sign up for our listserv at www.hhs.gov/ocche