

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

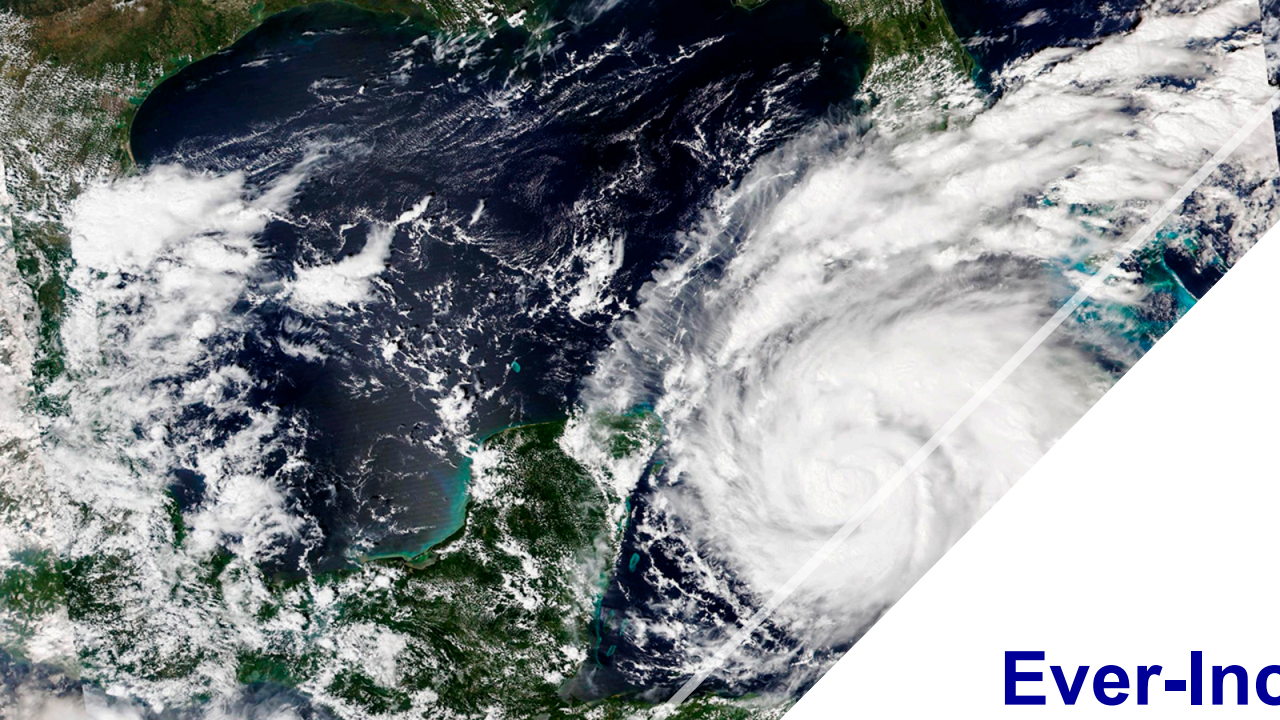
**Kate Weber, MD, Climate and Health Science Policy Fellow**  
**John Balbus, MD, MPH, Acting Director**

**February 6, 2023**



Office of  
Climate Change  
and Health Equity





**Ever-Increasing  
Urgency...**





## Origins of the Office of Climate Change and Health Equity (OCCHE)

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### E.O. 14008 - “Tackling the Climate Crisis”

- HHS mandates (Section 222(d))

Office of Climate Change and Health Equity

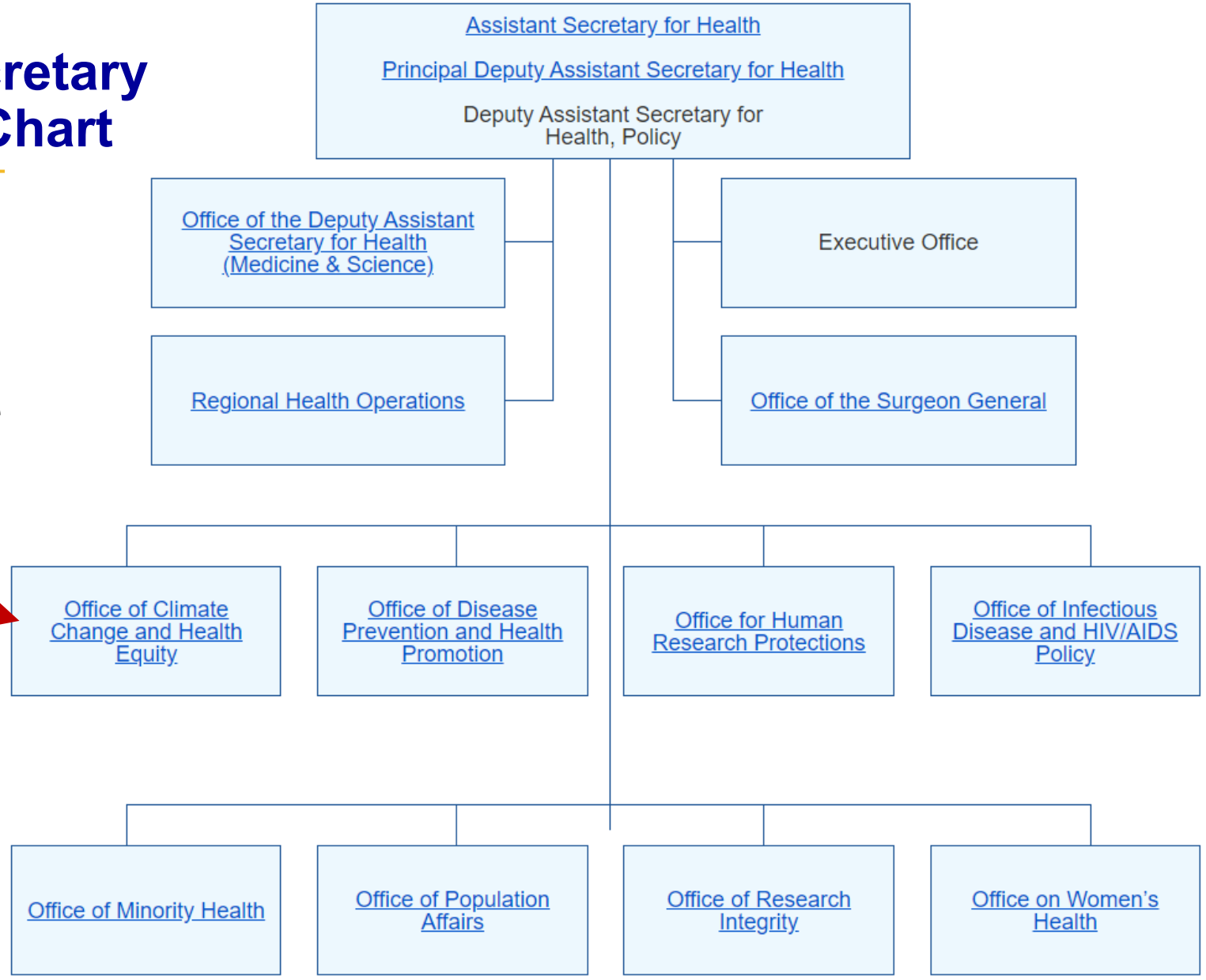
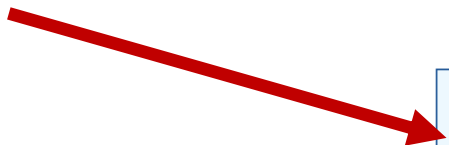
Interagency Working Group to Decrease Risk of Climate Change to Children, the Elderly, People with Disabilities, and the Vulnerable

Biennial Health Care System Readiness Advisory Council



# Office of the Assistant Secretary for Health Organizational Chart

**OCCHE is situated alongside critical HHS Offices**



## Office of Climate Change & Health Equity (OCCHE)

Priority 1: Climate & Health Resilience for Most Vulnerable

Priority 2: Climate Actions to Reduce Health Disparities

Priority 3: Health Sector Resilience & Decarbonization



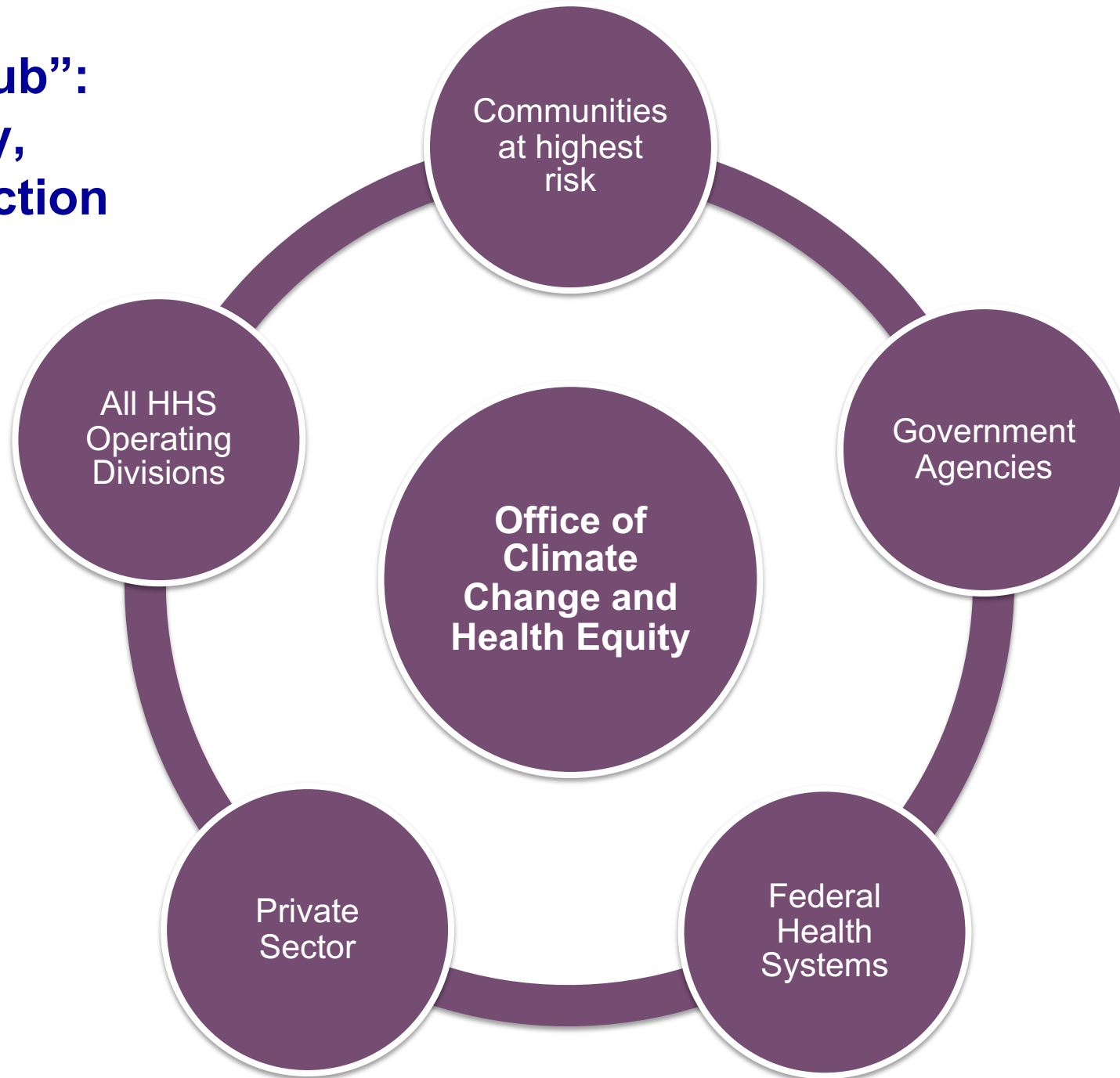
### Resilient Health Systems

- 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.

# The OCCHE “Hub”: Setting Strategy, Coordinating Action



# Vision for Climate Health and Equity

In the next 5 years, communities and the healthcare organizations that serve them are transformed...

- Every community, health system and provider in every U.S. geography is prepared for both disruptive and chronic climate impacts on its most vulnerable patient populations.
- Every healthcare institution is prepared for long-term operation, and can support community resilience, in the face of climate catastrophes (emphasis on safety-net providers).
- 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.
- Public sector investments to reduce greenhouse gas emissions and fossil fuel dependence address improvement of health and health equity.
- *All HHS Operating Divisions and other relevant agencies are contributing toward these goals...*

## Highlights of the Last Year (OCCHE and HHS)

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### *Launches*

- WH-HHS Healthcare Sector Climate Pledge (102 signees)
- HHS Climate Change and Health Equity Working Group (all OpDivs)
- National Academy of Medicine Climate Collaborative
- Office of Environmental Justice (OASH)
- Extreme Heat Interagency Working Group
- Federal Health Systems Learning Network (VA, DoD, IHS)

### *Learning*

- Six RFIs across HHS (NIH, AHRQ, CMS (2), OASH, SAMHSA; synthesis coming soon)
- Collaboration with HHS regions on state, territorial, tribal and local listening sessions
- Numerous Department-wide webinars and education sessions
- NIH Climate Change and Health Initiative Strategic Framework

### *Supports*

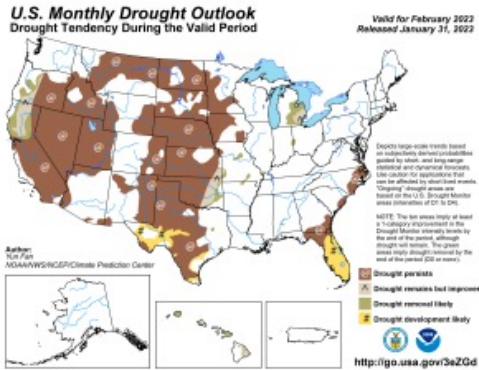
- LIHEAP expansion (ACF)
- Updated ASPR resources and tools (e.g., TRACIE, National Health Security Strategy)
- OCCHE Climate and Health Outlook
- AHRQ Decarbonization toolkit
- OCCHE compendium and webinar series on federal financial supports
- Ongoing CDC Climate and Health/BRACE programming



## Healthcare Sector Pledge (announced by WH and HHS 4/22/22)

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1. “At minimum, reduce organizational emissions by 50% by 2030 (from a baseline no earlier than 2008) and achieve net-zero by 2050, publicly accounting for progress on this goal every year.
  - a) Share publicly our strategies for reducing on-site emissions (where relevant addressing sources related to on-site energy usage, waste anesthetic gases, vehicle fleets and refrigerants).
2. Designate an executive-level lead for our work on reducing emissions by 2023 and conduct an inventory of Scope 3 (supply chain) emissions by the end of 2024.
3. Develop and release a climate resilience plan for continuous operations by the end of 2023, anticipating the needs of groups in our community that experience disproportionate risk of climate-related harm.”



### Who is at high risk in the counties projected to have drought in February?

As indicated in the map to the left, **1,083 counties** across **26 states** are projected to have persistent/remaining drought or drought development in February. In these counties, the total population at risk is **109,253,219 people** and, of those, **1,325,890 people** work in agriculture. Of these counties:

- 360 (33%)** have a high number\* of people aged 65 or over, living alone.
  - 364 (34%)** have a high number of people living in rural areas.
  - 210 (19%)** have a high number of people living in poverty.
  - 129 (12%)** have a high number of people with frequent mental distress.
  - 78 (7%)** have a high number of adults with asthma.
  - 401 (37%)** have a high number of people without health insurance.
  - 513 (47%)** have a high number of uninsured children.
  - 137 (13%)** have a high number of Black or African American persons.
  - 227 (21%)** have a high number of people with severe housing cost burden.
  - 210 (19%)** have a high number of people in mobile homes.
  - 176 (16%)** have a high number of people with one or more disabilities.
  - 255 (24%)** are identified as highly vulnerable by CDC's Social Vulnerability Index.
- \*"A high number" indicates that these counties are in the top quartile for this indicator compared to other counties.




Figure. The National Weather Service Climate Prediction Center's Monthly Drought Outlook is issued at the end of each calendar month and is valid for the upcoming month. The outlook predicts whether drought will persist, develop, improve, or be removed over the next 30 days or so. For more information, please refer to [drought.gov](http://drought.gov).




For February, drought is expected to improve over northern California and west-central Oregon, and to persist over the rest of the West, northern Rockies, and Great Plains, with potential drought development over parts of southern and western Texas. Existing drought is expected to improve in parts of eastern Texas to northern South Carolina, Oklahoma, and Arkansas. Drought improvement is favored across much of the Mississippi, Tennessee, and Ohio Valleys. Existing drought conditions across the Southeast are expected to persist with drought development likely throughout the Florida Peninsula by the end of the month. In Hawai'i, drought improvement or removal is anticipated across the Islands.

Drought can have direct and indirect impacts on health—increasing incidence of illness among people living in the affected area and worsening mental health outcomes as livelihoods are challenged.

#### Drought Affects Health in Many Ways

Drought increases the risk for a diverse range of health outcomes. For example:

-  Low crop yields can result in rising food prices and shortages, potentially leading to **malnutrition**.
-  Dry soil can increase the number of particulates such as **dust and pollen** that are suspended in the air, which can irritate the bronchial passages and lungs.
-  Dust storms can spread the fungus that causes coccidioidomycosis (**Valley Fever**).

-  If there isn't enough water to flow, waterways may become stagnant breeding grounds for **disease vectors** such as mosquitos as well as viruses and bacteria.
-  Drought's complex economic consequences can increase **mood disorders, domestic violence, and suicide**.
-  Long-term droughts can cause **poor-quality drinking water** and leave inadequate water for hygiene and sanitation.

## Previously Used CHO Vulnerability Indicators

- **Aged 65 or over, living alone** (*heat, wildfire, drought, spring flooding, hurricane*)
- **People with diabetes** (*heat*)
- **Adults with coronary heart disease** (*wildfire, spring flooding*)
- **Adults with asthma** (*wildfire, drought*)
- **People without health insurance** (*heat, wildfire, drought, spring flooding, hurricane*)
- **Children without health insurance** (*heat, wildfire, drought, hurricane, spring flooding*)
- **People employed in construction** (*heat*)
- **Living in rural areas** (*heat, hurricane, drought, spring flooding*)
- **Living in poverty** (*heat, wildfire, hurricane, drought, spring flooding*)
- **High energy burden** (*heat, hurricane, spring flooding*)
- **HHS emPOWER** (*heat, wildfire, hurricane, spring flooding*)
- **Living in mobile homes** (*heat, wildfire, hurricane, drought*)
- **High housing cost burden** (*heat, hurricane, drought, wildfire, spring flooding*)
- **Poor tree cover** (*heat*)
- **Highly vulnerable using CDC SVI** (*heat, wildfire, hurricane, drought, spring flooding*)
- **% Black or African American** (*heat, hurricane, drought, spring flooding*)
- **Mental distress** (*heat, wildfire, hurricane, drought, spring flooding*)
- **One or more disabilities** (*hurricane, wildfire, drought, spring flooding*)

ADMINISTRATION

# HHS announces new office of environmental justice

BY ZACK BUDRYK - 05/31/22 1:33 PM ET





# Environmental Justice Index

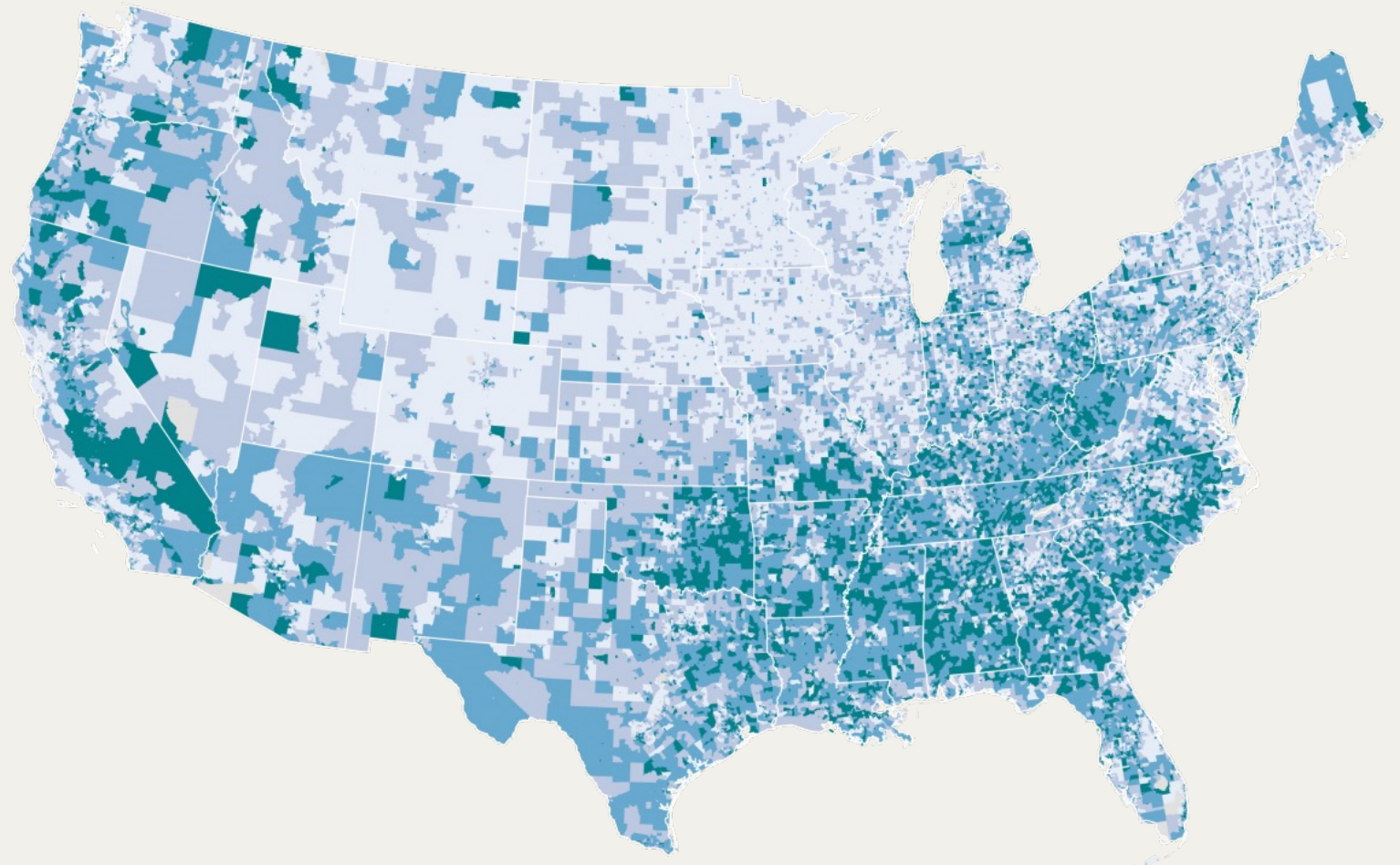
## HHS Tool Scores Communities for Cumulative Health Impact Risks

Aug. 11, 2022, 4:57 PM



The Office of Environmental Justice partnered with CDC-ATSDR to release the Environmental Justice Index.

The Index is the first National, place-based tool designed to measure the cumulative impacts of environmental burden through the lens of human health and health equity.



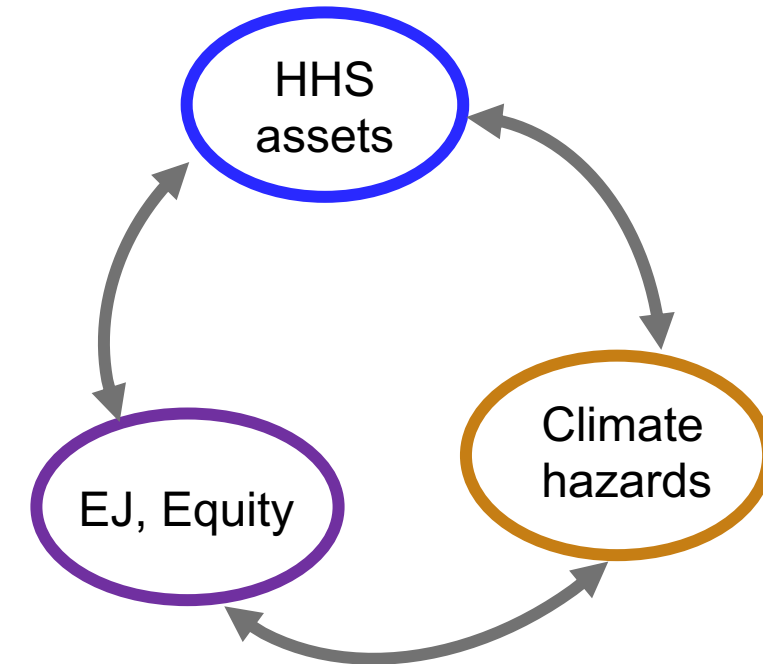


# EJI indicators

Overall Environmental Justice Rank		
Social Vulnerability	Racial/ Ethnic Minority Status	Minority Status
	Socioeconomic Status	Poverty
		No High School Diploma
		Unemployment
		Housing Tenure
		Housing Burdened Lower-Income Households
		Lack of Health Insurance
		Lack of Broadband Access
	Household Characteristics	Age 65 and Older
		Age 17 and Younger
		Civilian with a Disability
	Housing Type	Speaks English "Less than Well"
		Group Quarters
Environmental Burden	Air Pollution	Mobile Homes
		Ozone
		PM2.5
		Diesel Particulate Matter
	Potentially Hazardous & Toxic Sites	Air Toxics Cancer Risk
		National Priority List Sites
		Toxic Release Inventory Sites
		Treatment, Storage, and Disposal Sites
		Risk Management Plan Sites
	Built Environment	Coal Mines
		Lead Mines
		Recreational Parks
	Transportation Infrastructure	Houses Built Pre-1980
		Walkability
		High-Volume Roads
	Water Pollution	Railways
		Airports
	Health Vulnerability	Pre-existing Chronic Disease Burden
Asthma*		
Cancer*		
High Blood Pressure*		
Diabetes*		
		Poor Mental Health*

## Examples of OCCE data and analytics

- Partnership across HHS, federal government and private sector in assembling information on a range of climate hazards, environmental justice and health equity indicators, and HHS Human Services assistance
- Collaborate on developing climate and health surveillance reports
  - *AHRQ report on heat-related illness (2022)*
- Provide technical assistance in assessing health risks associated with climate hazards
  - *Ongoing SAMHSA collaboration in addressing relationship between mental health services and climate hazards*
- Publish series of Climate Health Outlooks with health forecast associated with extreme heat, wildfire, hurricane and drought



# Near-term Strategic Priorities for OCCHE

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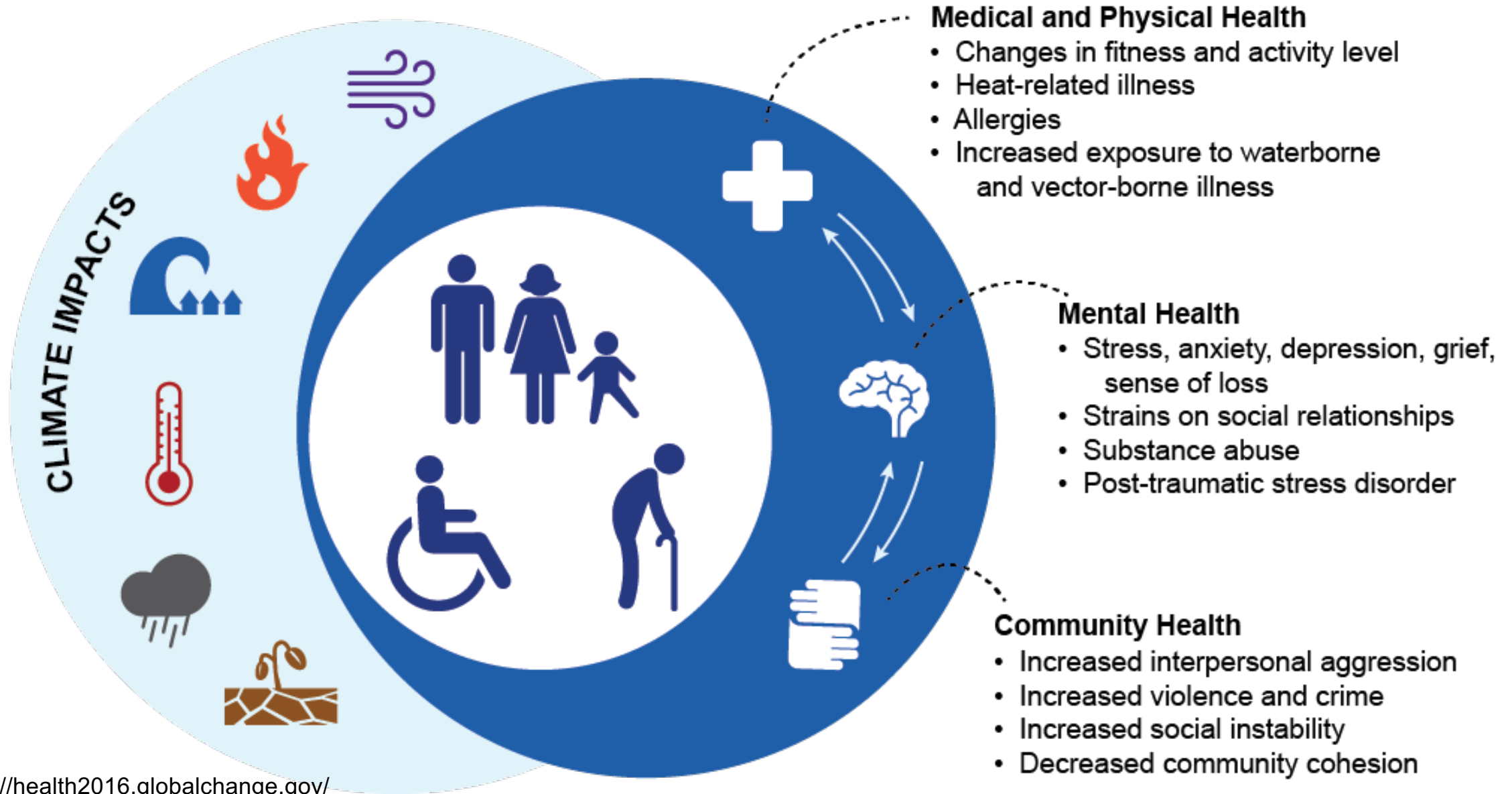
## *Direct OCCHE Actions*

- Connect health sector to opportunities created by IRA, tracking uptake and supporting them on their journey
- Update OCCHE Federal Resource compendium
- Re-launch Sustainable and Climate Resilient Facilities toolkit
- Communicate supports for Medicaid recipients
- Complete international procurement agreements
- Support development of local resilience hubs (place-based initiatives)
- Develop and socialize measures of decarbonization and resilience (includes SDOH measures)
- Continue existing initiatives (pledge, Million Hearts Collaborative, federal health system learning network, Climate and Health Outlook)

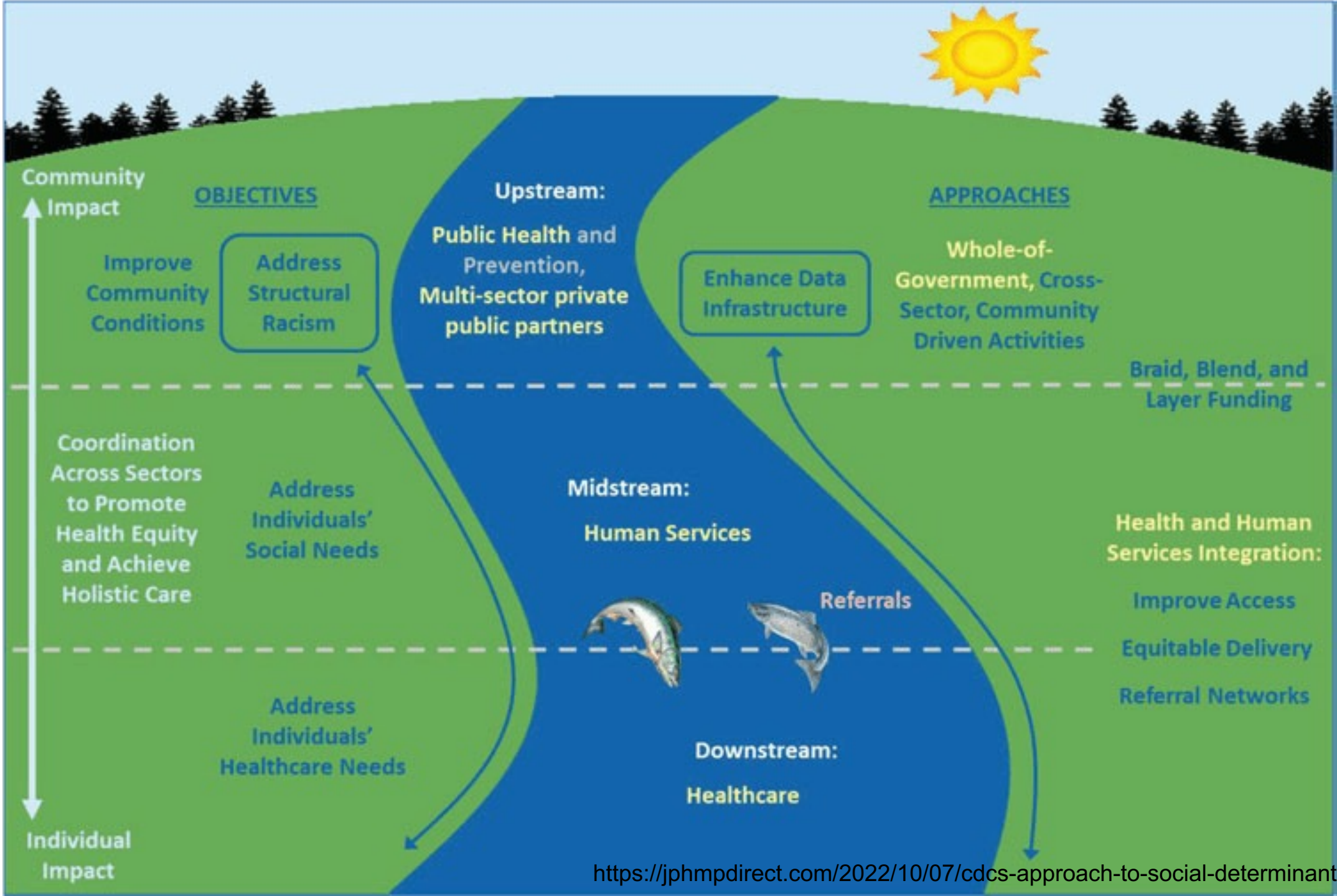
## *Leverage through Other Divisions/Agencies*

- Co-develop and support actions from every OpDiv (comprehensive departmental CCHE strategy/OCCHE-TAC)
- Support CMS Emergency Prep rule updates
- Support launch of EP section in forthcoming QIO Statement of Work (potential work on decarbonization in future)
- Clarify statutory authority for CMS and FDA action
- Customize data collection platform (EPA Portfolio Manager) for future use

# Impact of Climate Change on Physical, Mental, and Community Health

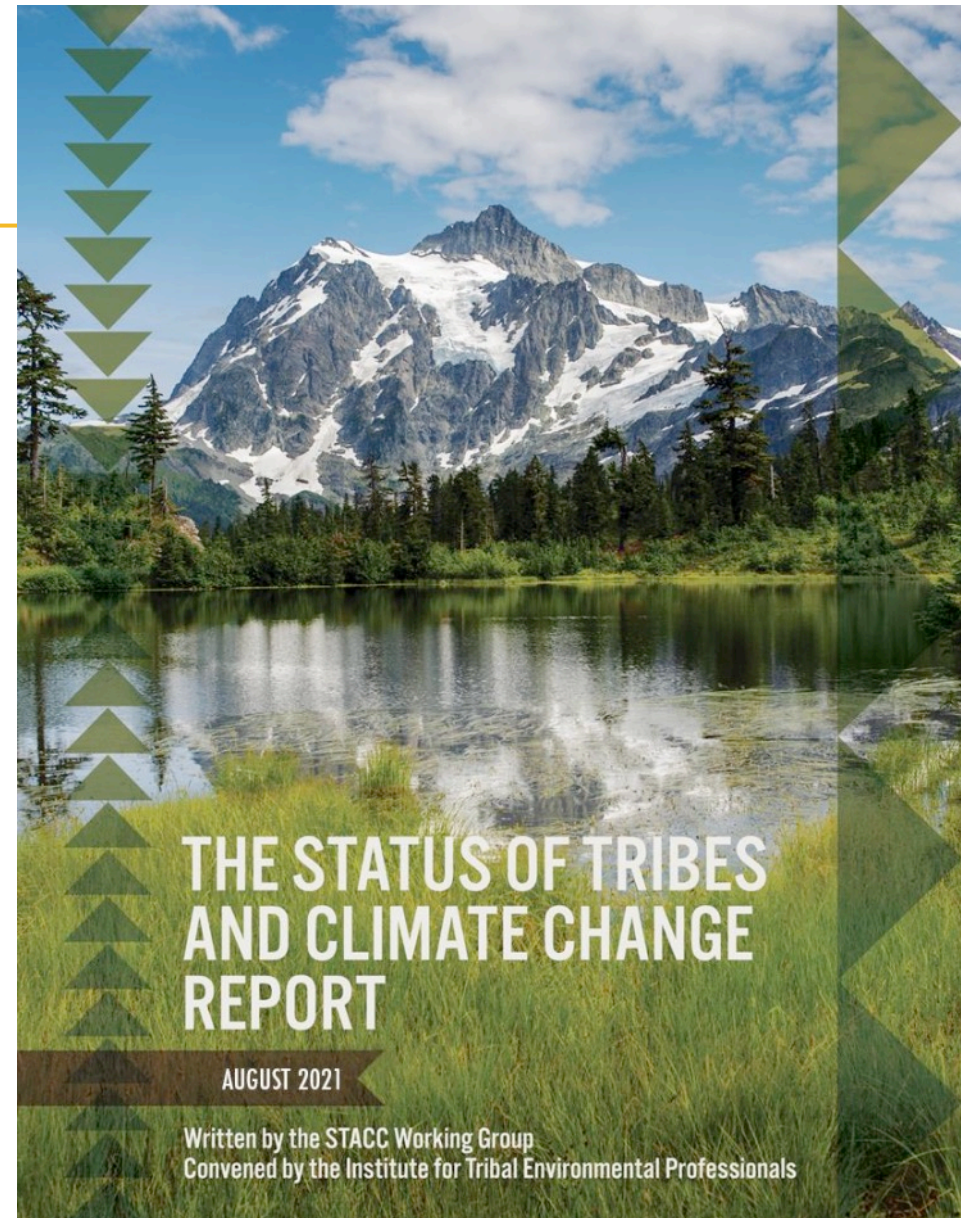






## Some learnings from tribal plans

- Unity of water and food resources and health and wellbeing
- Enhanced data and monitoring of air quality, warnings for heat, etc.
- Cooling, housing improvements
- Special care to the elderly and those with chronic diseases





**OASH**

Office of  
Climate Change  
and Health Equity



**Thank you!**

**Contact us: [OCCHE@hhs.gov](mailto:OCCHE@hhs.gov)**

**Visit us online and sign up for our  
listserv at [www.hhs.gov/ocche](http://www.hhs.gov/ocche)**