

## CalBRACE Step One: Assess Impacts and Vulnerabilities

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A climate change and health vulnerability assessment allows health departments to understand likely climate impacts and the people and places in their jurisdictions that are more susceptible and more resilient to adverse health impacts associated with climate change. This assessment of people and place vulnerability can be used to select and implement targeted public health interventions to reduce the burden of public health impacts.

For a specific geo-location identify:

- Scope of the most likely climate impacts or exposures such as heat, wildfire, air quality, drought, sea level rise and flooding,
- Potential health outcomes associated with those climatic changes, and
- Populations and locations most vulnerable to the health impacts.

### CDPH Resources for California

- **[Climate Change and Health Profile Reports](#)**  
A county-level summary of current and projected risks from climate change and potential health impacts to inform efforts to address climate change and public health in the unique counties and regions of California.
- **[Climate Change and Health Vulnerability Indicators for California](#)**  
Indicators for California counties to assess climate exposures, population vulnerability to climate change impacts and adaptive capacity. Data is in an Excel file with state, county, and census tract geographies as well as a narrative in PDF format.
- **Climate and Health Profile and Vulnerability Slides**  
A PowerPoint template to adapt for an overview of local climate change and public health threats and vulnerabilities, as well as interventions and strategies for preparation and building resilience. The presentation can be customized and presented to stakeholders to frame the climate change and health planning conversation and local priorities.
- **Public Health Impacts of Climate Change in California: Community Vulnerability Assessments and Adaptation Strategies\***

- [California Environmental Health Tracking Program \(CEHTP\)](#)  
Environmental health data and information publicly available through a web-based data query system, state-of-the-art data displays, and innovative web tools and services.

## Local Vulnerability Assessments

- [2015 Climate Change Vulnerability in Contra Costa County: A Focus on Heat](#)  
This report describes the vulnerability of different communities in Contra Costa County to the health impacts of climate change, with a focus on extreme heat events, or heat waves. The first part of the report describes the various health impacts of climate change that are expected to occur in Contra Costa County. The second part of the report focuses on extreme heat, which is the factor that will likely have largest impact on county residents. A series of maps help identify areas of the county that are more vulnerable to heat waves by showing differences in the social, health, economic and environmental characteristics between communities.
- [San Mateo County Sea Level Rise Vulnerability Assessment](#)  
An example of a public health department collaborating and contributing to a county climate vulnerability assessment. See Page 98 for the Public Health Chapter.
- [Silicon Valley 2.0 \( Public Health Chapter 3PH.2 Vulnerability Assessment Summary Page 274\)](#)  
A comprehensive set of climate adaptation strategies to help improve the climate resilience of these assets. Priority strategies are presented in order by sub-asset and the climate variable addressed, and followed by a set of other strategies for consideration.
- [Stanford Community Health Assessment 2016](#)  
The Healthy Community Collaborative of San Mateo County (HCC) and the Santa Clara County Community Benefit Coalition (CBC) developed this assessment to serve as a tool for guiding policy and program planning efforts. For hospital partners, it also assists in developing community benefit plans pursuant to California State Senate Bill 697, as well as assist in meeting IRS requirements for Community Health Needs Assessment and Implementation Strategies pursuant to the 2010 Affordable Care Act (Section §1.501(r)(3)).
- [Heat Vulnerability Atlas, San Diego County](#) 2012  
The purpose of this atlas is to describe areas of San Diego County where residents are at increased risk for heat-related illness. These maps may assist public health professionals in formulating and implementing plans to prevent or ameliorate bad health outcomes during heat-related emergencies.

## Health Equity, Environmental Justice and Tribal Resources

- [\*\*Social Vulnerability to Climate Change in California\*\*](#)  
A climate vulnerability index to indicate the social vulnerability of a region's population to climate-related harm. The index combines 19 indicators into one overall climate vulnerability score and includes factors specifically related to climate impacts, such as air conditioner ownership, childhood obesity, percentage of tree cover, pre-term births, workers in outdoor occupations, and others.
- [\*\*California Heat Assessment Tool \(CHAT\)\*\*](#)  
*- in development-* A decision-support tool for city, county, and state practitioners involved in public health and local planning efforts to better prepare for extreme heat in the future. This online, interactive tool will support the inclusion of extreme heat and its impact on human health into long-term policy and planning decisions in California. Developed by Four Twenty Seven for California's Fourth Climate Assessment Portfolio.
- [\*\*Tribal Climate Health\*\*](#)  
Pala Band of Mission Indians hosts this site for the development and distribution of online trainings, a resource clearinghouse, and other capacity-building tools that will help tribal health and environmental professionals across the nation prepare their communities for the public health impacts of climate change.
- [\*\*Tribal Climate Change Guide\*\*](#)  
This site lists tribal and government resources and programs that focus on health-related issues and climate change. This page includes numerous resources from tribal climate change adaptation plans.
- [\*\*Equity in Building Resilience in Adaptation Planning\*\*](#)  
For deepening work around incorporating intersectionality in equitable adaptation planning, the National Association for the Advancement of Colored People (NAACP) provides a sample list of indicators/measures of vulnerability and resilience in terms of infrastructure, community/population characteristics, systems, policies, programs/services, protocols, and governance/decision making. The indicators *span the impacts of climate change including shifts in agricultural yields, sea level rise, and extreme weather.*

## CDC Guidance

- [\*\*Assessing Health Vulnerability to Climate Change: A Guide for Health Departments\*\*](#)  
Guidance for health departments to assess local vulnerabilities to health hazards associated with climate change.

- [\*\*Climate Models and the Use of Climate Projections: A Brief Overview for Health Departments\*\*](#)  
A guide from the CDC on how to use climate model data.
- [\*\*CDC/ American Public Health Association \(APHA\) Fact Sheets\*\*](#)  
These two-page documents provide a summary description of specific climate change exposures, health risks and susceptible populations.
  - [Rainfall and Drought](#)
  - [Flooding and Waterborne Disease](#)
  - [Air Quality](#)
  - [Extreme Heat](#)
  - [Insects and Ticks](#)

## State of California Resources

- [\*\*Cal-Adapt\*\*](#)  
This site provides access to the climate change data and information produced by the State of California's scientific and research community. The data available on this site offer a view of how climate change might affect California at the local level. Here you can work with visualization tools, access data, and participate in community sharing to contribute your own knowledge. Cal-Adapt was developed as a key recommendation of the 2009 California Climate Adaptation Strategy.
- [\*\*The State Adaptation Clearinghouse\*\*](#) from the Integrated Climate Adaptation and Resiliency Program (ICARP) is a centralized source of information and resources to assist decision makers at the state, regional, and local levels when planning for and implementing climate adaptation projects to promote resiliency across California.

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