CalBRACE Step Three: Assessing Public Health Interventions

Many existing resources and programs are available to health departments to prepare for climate change. This step includes identifying and assessing the evidence of effectiveness regarding health interventions. In this emerging field of public health practice, assessing potential interventions is an essential step in the CDC’s BRACE framework. Ensuring effectiveness of existing and new public health measures will help to reduce and prevent climate related health risks.

Identify the most suitable health interventions for the health impacts of greatest concern.

CDPH Resources

- **Air-Quality Interventions Assessment**
  A literature review of health education interventions to protect against the health impacts of increased air pollution.

- **Public Health Impacts of Climate Change in California: Community Vulnerability Assessments and Adaptation Strategies**
  This report comes from the California Department of Public Health Climate Change Public Health Impacts Assessment and Response Collaborative. The primary objective of this community vulnerability assessment, the first in a series, is to identify locations and/or populations with high risk for heat-related illness.

CDC BRACE and Environmental Protection Agency (EPA)

- **Climate and Health Intervention Assessment**: Evidence on Public Health Interventions to Prevent the Negative Health Effects of Climate Change.

- **The Effectiveness and Implementation of 4-Poster Deer Self-Treatment Devices for Tick-borne Disease Prevention**
  This document seeks to provide guidance on one potential intervention activity, and provides a summary of peer-reviewed and grey literature to determine the effectiveness of the 4-Poster self-treatment bait station device for controlling tick populations among white-tailed deer (Odocoileus virginianus) hosts.

- **The Use of Cooling Centers to Prevent Heat-Related Illness: Summary of Evidence and Strategies for Implementation**
  Adaptation strategies illustrative of ways communities can address anticipated,
current, and future climate threats to public health. Specific case studies and strategies are available on Extreme Heat, Water Quality, and Air Quality.

- **EPA Public Health Adaptation Strategies for Climate Change**
  The adaptation strategies provided on this site are illustrative of possible ways communities can address anticipated, current, and future climate threats to public health.

- **CDC’s Policy Analytical Framework**
  A guide for identifying, analyzing, and prioritizing policies that can improve health. The policy analytical framework expands on domains I, II and III of CDC’s Policy Process (Problem Identification, Policy Analysis, and Strategy and Policy Development). The goals of this document are to: Improve the analytic basis for identifying and prioritizing policies that can improve health; and improve the strategic approach to identify and further the adoption of policy solutions.

### State and Local Resources

- **General Plan Guidelines**
  The Office of Planning and Research (OPR) updated the general plan guidelines in 2017. Chapters regarding climate change, equity and resilience, and environmental justice in general plans provide guidance on local planning opportunities to increase resilience to climate impacts.

- **Introducing SB 379: Climate Adaptation and Resiliency Strategies for Safety Elements of General Plans and Local Hazard Mitigation Plans**

- **Silicon Valley 2.0 (Public Health Chapter 3PH.5 Climate Adaptation Strategies Page 286)**
  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.

### Health Equity, Environmental Justice, and Tribal Resources

- **Household accessibility to heat refuges: Residential air conditioning, public cooled space, and walkability**
  This paper explores the distribution of private and public cooling resources and access inequities at the household level in two major US urban areas: Los Angeles County, California and Maricopa County, Arizona (whose county seat is Phoenix). We evaluate the presence of in-home air conditioning and develop a walking-based accessibility measure to air conditioned public space using a combined cumulative opportunities-gravity approach.
Adapt Oakland Greening/ Ecosystem Services Strategy
Green infrastructure, such as trees, living roofs and living walls can provide a host of benefits such as cleaning pollutants from the air and soil, reducing risk of flooding and reducing the heat island effect. Green infrastructure can improve quality of life for residents and will pay back its investment 8 to 1. This site illustrates the adaptation planning steps applied to an ecosystem service strategy with multiple benefits for resilience and public health.

Other Resources

- **Climate Adaptation: the state of practice in the United States**
  This report from the Kresge Foundation highlights 17 case studies from across the country from communities taking action against climate change.

- **Environmental Health Indicators of Climate Change for the United States: Findings from the State Environmental Health Indicator Collaborative** (Supports surveillance as a strategy) Identifies the need to develop public health adaptation strategies and to project the impacts of climate change on human health, indicators of vulnerability and preparedness along with accurate surveillance data on climate-sensitive health outcomes. Analysis discussion on research and development of environmental health indicators for inputs into human health vulnerability assessments for climate change and proposes public health preventative actions.

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