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SANTA CLARA COUNTY CLIMATE CHANGE PLANNING AND VULNERABILITY ASSESSMENT

Background

"Local Health Departments (LHDs) have a professional and ethical responsibility to address the climate crisis. The role of LHDs is to apply the same foundational public health tools and approaches that are used to address any emergent health crisis, grounded in core public health values such as equity, prevention, and preparedness." --Climate Health and Equity: A Guide for Local Health Departments

As the global climate crisis is upon us with increasing speed, action is needed at all levels of national, state, and local governments to prepare, adapt, and mitigate the impacts to come. In the coming decades, Santa Clara County (SCC) can expect temperature increases of up to 6°F, decreased precipitation by 4-5 inches, sea level rises of up to 66 inches, more frequent heatwaves, and persistent destructive wildfires. These changes will impact SCC residents through increased heat-related illnesses, downstream consequences of drought, food insecurity, molding buildings, lower indoor air quality, and socioeconomic disruption. In response, the Santa Clara County Public Health Department (SCCPHD) is initiating a climate health equity vulnerability assessment (CHEVA) to understand the differing needs of its cities and communities.

Methods

This project focused on the planning/preparatory stage of SCCPHD's climate vulnerability assessment. Specifically, a literature review was conducted to identify best practices for evaluating community readiness and partnering towards community climate resilience. A literature review of local research, data sources, and resources was performed to identify and rank climate indicators. Next, an evaluative tool was created and used to review thirteen city Climate Action Plans (CAPs) across Santa Clara County (2 cities were excluded due to inability to locate CAP). Finally, a Funding Source Matrix List was developed to identify potential revenue sources for future SCCPHD climate resilience and adaptation projects.

Results

The literature review identified several best practices for conducting an equitable CHEVA including building in considerations of equity into surveillance, broad intersectional collaboration across government departments, and intentional community engagement and education. In order to evaluate community readiness for climate action collaboration with SCCPHD, a peer-reviewed and widely implemented Community Readiness Manual was recommended moving forward. For data indicator selection, 25 high-priority and 39 general indicators were identified for SCCPHD to use in longitudinal monitoring of climate and health changes. These indicators were clustered by climate impact category and general indicator type (demographics, health impacts, environmental exposures, and resiliency). Indicator indices were recommended to distill information into fewer discrete categories, allow for appropriate indicator weighting, ensure geographic continuity with other Local Health Departments, and improve accessibility and understanding for the public. Finally, a CAP evaluation tool was developed and used to evaluate 13 CAPs from cities across SCC. Consistently, climate action plans are in general compliance with state regulations and propose greenhouse gas-reducing changes across land use, efficiency, transportation, and waste reduction. Few plans incorporate explicit measures to prioritize vulnerable populations and frontline communities.

Conclusions

The findings of this project support the need for community engagement at every level of planning from assessing and prioritizing community needs, reviewing appropriate indicators, and eventually designing interventions. Recommendations to the currently proposed indicators, include reorganizing indicators by climate change impact category (relevant to our local region) and constructing indices across indicator categories to simplify the presentation of results. Finally, while many CAPs are in compliance with the state regulations they were instructed under, there is limited incorporation of equity considerations in plans, and revision is needed to design interventions to support resilience and protect communities that are expected to experience the worst impacts of the coming climate crisis.

COMMUNITY PARTNER

SANTA CLARA COUNTY
PUBLIC HEALTH DEPARTMENT