

## AB 1643 - California Heat Study: Advisory Committee Recommendation for Study

### DRAFT PREPARED FOR MAY 2024 MEETING

#### Recommendation for Scope of Study:

Below is a recommended scope of study for examining the effects of heat on California's workers, businesses, and economy:

- Objective:** The primary objective of the study is to assess the impacts of heat exposure on the health, safety, productivity, and economic well-being of California's workers and businesses, with a focus on identifying evidence-based strategies for heat illness prevention and mitigation. Special attention will be given to understanding and mitigating underreporting of heat illnesses, as well as improving methods for collecting illness data, to provide a more accurate picture of the prevalence and severity of heat-related health outcomes.
- Research Questions:**
  - What is the most accurate definition of heat exposure (i.e., short term & long term) and what are the characteristics of heat exposure that affects workers in different ways?
  - How does heat exposure affect the ~~incidence rates~~ of occupational injuries, illnesses, and fatalities among California workers and how is heat a contributing factor to other illnesses and injuries (i.e., strokes, heart attacks, kidney disease, etc.)? ~~What effect to~~ And, how do geographic environmental risk factors affect different temperatures and humidity levels have on these incidence ~~these~~ rates?
  - What are the barriers to reporting heat-related illnesses, including behavioral, cultural, structural, and linguistic factors, and how can they be addressed to promote more complete and accurate surveillance and data collection?
  - Identify existing gaps in reporting and determine h ~~How can~~ existing data sources, such as workers' compensation claims, medical records, emergency department visits, and mortality databases, can be integrated and analyzed to enhance the identification and characterization of heat-related health outcomes?
  - What are the disparities in heat-related health outcomes among different demographic groups, including workers inability to adequately cool outside of work hours due to cost burden and lack of cooling measures outside of work, occupational sectors, work activity, and geographic regions?
  - What are the most effective evidence-based methods for minimizing the adverse effects of heat on worker health and safety, including engineering controls, administrative measures, and personal protective equipment?
  - What are the most effective community adaptation strategies based on the specific geographic environmental risk factors for worker recovery outside of the workplace during extreme heat events?

- ~~How do workplace policies and practices, such as heat acclimatization programs, hydration strategies, and rest breaks, influence heat-related outcomes?~~

### 3. **Methodology:**

- Conduct a systematic review of existing literature and epidemiological studies to identify gaps and methodological challenges in the surveillance and reporting of heat-related illnesses.
- Utilize quantitative methods, such as data analysis of workers' compensation claims, injury reports, and economic indicators, to quantify the impacts of heat on workers, businesses, and the economy.
- Employ qualitative methods, such as interviews, focus groups, and case studies, to explore stakeholders' perspectives on heat-related risks, mitigation strategies, and policy interventions.
- Evaluate the accuracy, reliability, and validity of different data sources and surveillance systems for capturing heat-related illnesses and injuries, including their sensitivity, specificity, and predictive value.

### 4. **Stakeholder Engagement:**

- Engage with representatives from state agencies, labor unions, business associations, academic institutions, and community organizations to solicit input on study design, data collection methods, and policy recommendations.

### 5. **Deliverables:**

- Prepare interim reports at key milestones to communicate preliminary findings, methodological approaches, and emerging trends.
- Produce a comprehensive final report summarizing the study's objectives, methodology, findings, and recommendations for improving heat illness prevention efforts in California.
- Disseminate study results through peer-reviewed publications, policy briefs, stakeholder workshops, and public outreach campaigns to raise awareness and inform decision-making at the state and local levels.