



BARBARA FERRER, Ph.D., M.P.H., M.Ed.
Director

MUNTU DAVIS, M.D., M.P.H.
County Health Officer

MEGAN McCLAIRE, M.S.P.H.
Chief Deputy Director

313 North Figueroa Street, Suite 806
Los Angeles, CA 90012
TEL (213) 288-8117 • FAX (213) 975-1273

www.publichealth.lacounty.gov



BOARD OF SUPERVISORS

Hilda L. Solis
First District

Holly J. Mitchell
Second District

Sheila Kuehl
Third District

Janice Hahn
Fourth District

Kathryn Barger
Fifth District

October 17, 2022

TO: Each Supervisor

FROM: Dr. Barbara Ferrer, Ph.D., M.P.H., M.Ed.
Director 

**SUBJECT: EVOLVING AND ADVANCING THE BOARD DIRECTED PRIORITY:
ENVIRONMENTAL JUSTICE AND CLIMATE HEALTH (ITEM 6,
BOARD AGENDA OF APRIL 5, 2022)**

This is in response to the April 5, 2022, motion by your Board, directing the Chief Executive Office (CEO) to rename and revise the current Board priority of *Environmental Health Monitoring and Oversight to Environmental Justice and Climate Health*. The motion further directed the Department of Public Health (Public Health) in consultation with CEO, Fire Health HazMat Division, Department of Public Works, Department of Regional Planning, and the Sustainability Office to propose a strategic planning process to operationalize the newly revised Board Directed Priority. Specifically, your Board requested: 1) a planning process and timeline to consult with internal and external stakeholders to develop a long-term, comprehensive Strategic Plan that advances the County's commitment to improving environmental conditions and related health outcomes; 2) a roadmap and analysis of how to create an Office of Environmental Justice and Climate Health in Public Health and how the new office would coordinate with related County initiatives, including recommendations and clarifications regarding the roles and responsibilities of the various efforts to ensure a cogent, purpose-driven approach that maximizes resources in support of the Board Directed Priority; 3) a comprehensive set of policy areas of focus for Board consideration that could be pursued to improve public health outcomes and reduce public health disparities in communities overburdened by pollution exposure and poor air quality; 4) identification of any data surveillance systems, data dashboards or other data needs to understand current environmental health conditions, monitor progress over time, and communicate information with stakeholders; and 5) potential opportunities to coordinate with managed care plans or other entities on reimbursing for mitigation strategies to reduce negative outcomes from environmental hazards and climate change. Public Health was

also asked to identify available existing resources and staffing to support initial efforts and any necessary one-time bridge funding to support consultants to develop and implement the Strategic Plan. The motion underscored the need for the County to coordinate complex, multi-agency environmental responses and to sustain health prevention and promotion activities to empower communities, to reduce toxic emissions, and to improve health outcomes.

INTRODUCTION

The 2016 priority for *Environmental Health Monitoring and Oversight* was established in response to environmental disasters that released harmful toxins into communities near the Aliso Canyon natural gas storage facility, Exide Technologies Battery Recycling facility, and aerospace facilities using hexavalent chromium. The priority also established efforts to address climate change threats to protect communities from adverse health impacts. In each of these areas, Public Health has effectively elevated the urgency of these matters; led community-driven policy change; collected and provided data illustrating health impacts; and communicated health-protective messaging.

Public Health accomplished these activities through community engagement, assessment, analysis, education, and outreach provided by the Environmental Health Division's Toxicology and Environmental Assessment Branch (Branch). This group is the only entity in Public Health specializing in chemical and climate-related threats to health. It contains a complement of skilled specialists in climate health, clinical health, environmental science, project management, research, data analysis, and community engagement, including a medical toxicologist, public health nurses, epidemiologists, health program analysts, research analysts, staff analysts, and industrial hygienists.

Los Angeles County continues to be beset with emerging chemical threats. Recent examples have included the extended formation and release of hydrogen sulfide from the Dominguez Channel in 2021 and the release of carcinogenic ethylene oxide from the Sterigenics facility in the City of Vernon in 2022 and Parter Medical Products facility in Carson. Emissions from events such as these contribute to unnecessary excess risks of cancer and other chronic diseases for Los Angeles County communities. In fact, hundreds of communities in the County continue to be similarly beleaguered by multiple sources of pollution. These same communities burdened by exposure to environmental pollution are also disproportionately at risk from climate threats. Additionally, many of the resulting impacts fall directly on residents living in surrounding communities, and therefore appropriate solutions require coordinated and strategic interdepartmental policies to prevent environmental threats; to promote actions that slow climate change; to reduce health disparities; and to build community resilience. Thus, the County can invest substantially in the promotion of the public's health and well-being through a new Office of Environmental Justice and Climate Health (Office), which will continue to gather community input through a coordinated network of interdisciplinary Community Public Health Teams (CPHTs), develop strategic departmental actions and policies, and partner with communities to implement those policies.

STRATEGIC PLANNING PROCESS TO OPERATIONALIZE THE ENVIRONMENTAL JUSTICE AND CLIMATE HEALTH BOARD-DIRECTED PRIORITY

Public Health conducted key informant interviews with the following public health and County entities to examine related initiatives; to identify programming gaps and overlaps; to determine roles and responsibilities; to review data needs, and to propose policy focus areas:

- Department of Public Health
 - Chronic Disease and Injury Prevention Program (CDIP)
 - Center for Health Equity (CHE)
 - Office of the Chief Science Officer
 - Office of Planning
 - Emergency Preparedness and Response Division (EPRD)
 - Policies for Livable, Active Communities, and Environments Program (PLACE)
- Chief Executive Office (CEO)
- Chief Sustainability Office (CSO)
- Department of Public Works (DPW)
- Department of Regional Planning (DRP)
- Department of Fire Health Hazardous Materials Division (HHMD)

The proposed strategic planning process to operationalize the Board Directed Priority is based on recommendations from the County entities and input from community-based organizations and stakeholders.

1) Planning process and timeline to consult with internal and external stakeholders, including but not limited to, local environmental leaders and community-based organizations to develop a long-term, comprehensive Strategic Plan that advances the County's commitment to improving environmental conditions and related health outcomes

Public Health gathered preliminary information to inform a strategic planning process, including research of public health priorities related to the program's work and best practices and successful strategies used elsewhere. Following key informant interviews, a list of stakeholders from each interviewee was gathered and compiled. The list was then augmented with community and stakeholder lists generated through prior environmental justice outreach and engagement efforts associated with the *Community Health Improvement Plan*, the *OurCounty Sustainability Plan*, and the *Center for Health Equity Environmental Justice Focus Area*. This comprehensive list of environmental leaders and community-based organizations will be used in the development of the long-term Strategic Plan that advances the Board Priority.

Public Health will retain a consultant to initiate and manage a planning process to develop the Strategic Plan using stakeholder engagement and analysis of outreach work that has already been completed. The Office has developed a project plan and scope of work drawn from steps outlined by the Public Health's guide, [Key Steps to Conduct Strategic Planning](#). After review and

approval of this plan, a Work Order Solicitation will be released to the Department's Community Engagement Master Agreement List, which includes 75 local organizations with expertise in community outreach and engagement, strategic planning, multi-stakeholder collaboration, group facilitation, and other related and relevant capacities. Under the oversight of the Office, the independent strategic consultant will undertake a nine-month plan (Table 1): to gather and analyze in-depth input from relevant stakeholders, and partners on the goals, activities, roles and responsibilities of the Office; to assemble working groups to define Office goals and objectives; to draft a Strategic Plan; to obtain public comment and broad stakeholder feedback; to finalize and publish the Strategic Plan; and to tee up an implementation process for the new Office; and to extend prevention, response, and information gathering activities through CPHTs.

Table 1.

DEVELOPING A STRATEGIC PLAN: OFFICE OF ENVIRONMENTAL JUSTICE AND CLIMATE HEALTH									
STEPS AND TIMELINE TO DEVELOP STRATEGIC PLAN	MONTH								
Strategic Planning Activities	1	2	3	4	5	6	7	8	9
A) Prepare and gather information	■	■							
B) Conduct analysis		■	■						
C) Develop Strategic Plan framework				■	■				
D) Draft goals, objectives, and strategies					■	■			
E) Review and comment period							■		
F) Analyze comments and revise Strategic Plan								■	
G) Leadership review and approval									■
H) Release Strategic Plan									■

The nine-month plan permits time to orient the independent strategic consultant, gather and analyze pertinent information, and avoid duplicative efforts. The consultant will finalize this timeline, review information gathered to date, and conduct an independent analysis to identify opportunities to fill gaps in stakeholder engagement. The Office will finalize the stakeholder list and additional research on data and policy in preparation for the retention of the consultant. Key informant interviewees cautioned the Office not to overburden community stakeholders with duplicative outreach and engagement conducted previously. As such, the Office will leverage past and existing engagement processes to ascertain perspectives from community partners; determine where landscapes have changed; glean new information and insights from additional engagement; and develop a final map of related initiatives, roles and responsibilities, policy recommendations, and data needs and recommendations.

The consultant will assemble workgroups to develop SMART objectives, and subsequently draft the Strategic Plan for submission to internal and external partners for review. During a 30-day comment period, the consultant will develop implementation plans, and monitoring and tracking mechanisms, after which the final draft will be submitted for Public Health approval. Upon release of the Strategic Plan, the Office will implement any required hiring and onboarding of

staff through the County's budgeting process, execute strategies, monitor and track implementation, and gather data to evaluate the effectiveness of the Strategic Plan.

2) Roadmap and analysis of how to create an Office of Environmental Justice and Climate Health in Public Health and how the new office would coordinate with related County initiatives, including but not limited to, the Center of Health Equity, Climate Resiliency Initiative, Sustainability Office and the Office of Oil and Gas. The framework should provide recommendations and clarifications regarding the roles and responsibilities of the various efforts to ensure a cogent, purpose-driven approach that maximizes resources in support of the Board Directed Priority.

Roadmap and analysis:

The Office will develop a "community-first" approach by partnering with CPHTs to gather neighbor-specific priorities and concerns, disseminate critical information, develop strategies, and actions in frontline communities, including health-promotional policies, presentation of relevant findings, and public communications around environmental justice and climate health. Currently, the Branch partners directly with several intra-departmental programs, including equity-focused programs such as the PLACE program and the Nutrition Education and Physical Activity Program within Chronic Disease and Injury Prevention (CDIP); the Asthma Coalition coordinated by Maternal, Child, and Adolescent Health (MCAH); the Childhood Lead Poisoning Prevention Program (CLPPP); and Substance Abuse Prevention and Control (SAPC). The Branch recently partnered with CDIP to apply for a \$3.5 million CDC grant called "Building Resilience Against Climate Effects." The Branch also works directly with schools to evaluate and control environmental disease burdens. These diverse partnerships will be used in the development of the new Office's strategic plan.

Stakeholder interviewees recommended the formation of a prominent Office with the primary function of coordinating community-based County initiatives grounded in a comprehensive, public health-based approach. The Office must build capacity for community engagement through CPHTs, interagency coordination, communications, policy work, and data resourcing, which was a top priority goal identified by all key informants. To achieve these goals, the Toxicology and Environmental Assessment Branch will be reorganized allowing for the establishment of the Office of Environmental Justice and Climate Health while ensuring that the Department is able to effectively respond to environmental emergencies. This new Office requires infrastructure and resources to support these functions, most notably to administer and to manage grants necessary to fund the County's public health-focused environmental justice and climate resilience priorities. During the strategic planning process, the new Office will look at existing staffing and resources— including personnel with experience developing and leveraging policy; technical skills in data analysis and community health program evaluation; grant-writing and administration; and public communications resources and determine, pending the outcome of the strategic plan, any additional personnel resources needed along with potential funding support. Projected Office activities will require coordinated efforts from grant-supported scientific studies and community health planning. Close linkages with the Office of the Chief Science Officer for data needed for policymaking, grant-writing, program evaluation, and publishing will be an important asset for the new Office.

Key functions of the Office of Environmental Justice and Climate Health:

Key functions of the Office will include integration of CPHTs into community engagement and stakeholder coordination. Assessments by CPHTs will inform the Office's policy development, evidence-based health promotion, and data analysis and sharing. CPHTs will then be used to communicate findings, to disseminate information, and to implement Public Health actions. These essential pillars were identified by an internal analysis and key informant interviews. Key informants stressed their needs for science and health-based support and justification to support their efforts. As a result, they emphasized the need for the Office to elevate the urgency of the County's environmental justice and climate health endeavors by acting as convener to prioritize human health as the leading issue. This model can be realized through the following health-promotional functions:

Community Engagement: The Office priorities will be directly informed by the communities they intend to serve. Key informants praised Public Health's past successes in this area, stemming from trust built during extended environmental responses. This capacity has recently diminished due to the COVID-19 pandemic response along with the loss of key staff. To sustain effective community engagement, the new Office will collaborate and work directly with CPHTs to remain apprised of community needs and priorities and to ensure the dissemination of needed information, services, and referrals.

Interagency Coordination: Staff already serve the cornerstone function of liaising between regulatory and government agencies and community members on environmental and climate justice efforts. This role will continue and expand to include convening multi-agency efforts and coordinating policy development and planning for mitigation of environmental hazards before emergencies arise.

Policy: Key informants asked that the Office track, develop, implement, and evaluate both environmental justice and climate policies based on health needs and preferences of historically marginalized communities. The Office will advance change at the local and state level by engaging with residents and workers to identify needed policy and practice changes that reflect community priorities through the CPHTs. Policy work will also include coordinating with other jurisdictions on regional and state policy and developing and sharing best practices on emerging issues.

Data: Key informants agreed the Office should be a purveyor of up-to-date, readily accessible, and actionable data and the Office should prioritize building out this capacity. Key informants recalled Public Health providing data to support their own work and advised that accessing an honest, independent arbiter of data is critical to driving policy and decision-making. Additionally, data on climate-health impacts continues to be a key request from media and non-profit groups. To serve the data needs of underserved communities and the public, the Office will require increased technological capacity.

Communications: Both environmental justice and climate health are complex topics and must be accessible to the general public and at-risk populations. The Office will train its team to become

communications specialists to build awareness, clarify complex data, navigate sensitive topics, and highlight County achievements in environmental justice and climate change as health equity issues. Community engagement will guide the Office in crafting culturally appropriate messages that resonate with communities at highest risk and partner with CPHTs to ensure messages are tailored appropriately and disseminated widely to impacted communities.

Coordination of County Initiatives:

Longstanding collaboration with County, State, and Federal agencies as well as community-based organizations has given Public Health a holistic understanding of environmental justice and climate work across the County, and the ability to analyze health risks and make community-centered recommendations. Consequently, the mission of a new Office will be to coordinate County initiatives to advance environmental justice and reduce adverse health impacts of pollution and climate change in overburdened communities. Key informants indicated that they seek subject matter expertise at the intersection of environmental justice, climate change, epidemiology, and clinical health to justify and to advance their work.

Multiple County departments, offices, centers, and initiatives identified in the Board motion intersect with environmental justice and climate work. Within Public Health: The Center for Health Equity supports programs in implementing a racial equity framework to support programmatic efforts and implements organizational and infrastructure changes that advance more equitable health outcomes; the Office of Planning, Integration, and Engagement addresses environmental justice through the *Community Health Improvement Plan*; and the Policies for Livable, Active, Communities and Environments (PLACE) Program fosters policy change to develop healthy and safe environments.

However, the County lacks a central hub for health-focused environmental justice and climate health goals; similarly, no centralized office currently serves as a repository for health and environmental data to track the development and implementation of environmental justice and climate health policies. No other existing County program or office maintains broad technical expertise in pollution exposure, clinical health impacts of environmental toxicants and climate change, and health benefits of mitigation and adaptation. Likewise, no other existing entity bridges communities to access solutions to adverse neighborhood-level conditions. As such the Office will provide the critical components of scientific analysis and human health evaluation to congruent efforts. The following (Table 2) outlines County environmental justice and climate-related initiatives, roles and responsibilities of the lead agencies, and collaborating functions of the new Office.

Table 2. ENVIRONMENTAL JUSTICE AND CLIMATE HEALTH RELATED INITIATIVES

County Entity	Related County Initiatives and Programs	Agency Role(s) and Responsibilities	EJCH Office Collaboration
OTHER COUNTY DEPARTMENT INITIATIVES			
Chief Sustainability Office	<ul style="list-style-type: none"> OurCounty Sustainability Plan Climate Vulnerability Assessment Just Transition Task Force Sustainability Council Climate Change and Health Equity 	<ul style="list-style-type: none"> Lead Coordinating Entity Provides policy support and guidance 	<ul style="list-style-type: none"> Provide technical assistance and data Implement and report on EJCH actions
Department of Public Works	<ul style="list-style-type: none"> County Office of Oil and Gas Oil Well Cleanup Pilot Program Equity in Infrastructure Initiative Climate Vulnerability Assessment 	<ul style="list-style-type: none"> Oversight and central communication for oil and gas operations Coordinating/implementing agency 	<ul style="list-style-type: none"> Contribute health perspective to drive decision-making Provide technical assistance Provide health and environmental data, including impacts attributable to infrastructure
Department of Regional Planning	<ul style="list-style-type: none"> Green Zones Initiative Industrial Use Task Force Climate Action Planning Oil Well Ordinance Revision 	<ul style="list-style-type: none"> Lead implementing and permitting agency 	<ul style="list-style-type: none"> Review Countywide plans to provide health perspective Provide environmental data to support land use and ordinance decisions Advocate for health protections and community engagement Review discretionary use documents for health impacts Implement strategies for mitigation and prevention of climate threats
LA County Fire Health Hazardous Materials Division	<ul style="list-style-type: none"> Toxic Investigations Chemical Inventory 	<ul style="list-style-type: none"> Lead implementing and /or permitting agency 	<ul style="list-style-type: none"> Review health implications of hazardous releases Communicate health risks to the public Review and analyze enforcement data
PUBLIC HEALTH PROGRAM COLLABORATORS			
Center for Health Equity	<ul style="list-style-type: none"> Environmental Justice Focus Area 	<ul style="list-style-type: none"> Capacity builder 	<ul style="list-style-type: none"> Thought partner in program visioning and planning Link to partners, organizations and community

County Entity	Related County Initiatives and Programs	Agency Role(s) and Responsibilities	EJCH Office Collaboration
			<ul style="list-style-type: none"> • Ensure alignment with the Center for Health Equity Action Plan • Utilize the CHE networks to share communication or information on EJCH
Policies for Livable, Active Communities and Environments (PLACE Program)	<ul style="list-style-type: none"> • Healthy Design Workgroup • Tree Planting 	<ul style="list-style-type: none"> • Lead convening agency • Lead agency for built environment work 	<ul style="list-style-type: none"> • Provide technical assistance • Collaborate on place-based projects with nexus to EJCH
Office of Planning, Integration, and Engagement	<ul style="list-style-type: none"> • Community Health Improvement Plan • Community Prevention and Population Health Task Force 	<ul style="list-style-type: none"> • Lead development and oversight agency 	<ul style="list-style-type: none"> • Leverage and expand community partners established through the CHIP • Align strategies with CHIP • Consult on strategic planning and resource development • Solicit input from Task Force on plans, programs, and community engagement
Emergency Preparedness and Response Division	<ul style="list-style-type: none"> • Health Hazard Assessment and Prioritization • Extreme Heat • Prepare for, respond to, and recover from environmental emergencies 	<ul style="list-style-type: none"> • Public Health Emergency response • Ensure residents are prepared for emergencies 	<ul style="list-style-type: none"> • Provide technical assistance for identification, control, and cleanup of wide-scale biological and chemical threats • Respond to acute threats through established partnerships with first responders • Provide health impacts of toxicological exposures, environmental disasters, and health inequities • Provide data interpretation, public messaging, and clinical assessment
Environmental Health Division	<ul style="list-style-type: none"> • Enhancing Public Health Codes • Prepare for, respond to, and recover from environmental emergencies 	<ul style="list-style-type: none"> • Enforcement of Title 11 and 12 • Discretionary Land Use approvals • Rapid Response to Environmental Threats 	<ul style="list-style-type: none"> • Provide technical assistance to regulatory agencies • Provide data and health perspective to drive health protective decision-making • Provide technical assistance for identification, control, and cleanup of biological and chemical releases

Public Health will continue its unified response to acute threats and emergency incidents through Environmental Health's Emergency Response Team (Strike Team), the Office, and the Emergency Preparedness and Response Division (EPRD), which customarily partner with first responders. As acute incidents occur, the Office will provide as-needed technical guidance, data interpretation, public messaging, and clinical assessment along with engaging with regulatory agencies and responsible parties to ensure communities impacted are informed. The Office will also train Community Field Services staff, CPHTs, nurses, Environmental Health staff, and EPRD staff on environmental justice and climate health considerations before, during, and after responses.

The Office is poised to fill the science and health gap and to elevate the urgency of all County initiatives. The Office will serve as a convener of the County's environmental justice and climate change efforts by prioritizing health as the lynchpin to unify existing initiatives and stakeholders. Combining technical expertise with a community-centered approach, the Office will create a foundation for local, timely, and accessible health data; provide health-based approaches to policy and planning; and unite County agencies, community partners, and other stakeholders to implement health-promotional interventions in the changing landscape of environmental hazards.

3) Comprehensive set of policy areas of focus for Board consideration that could be pursued to improve public health outcomes and reduce public health disparities in communities overburdened by pollution exposure and poor air quality.

The Office will centralize support for the Board Offices and CEO and to engage directly with frontline communities to track, evaluate, and adapt current policies to address public health. In this role, the Office will work with CPHTs to develop comprehensive approaches that promote health by addressing intertwined threats of pollution and climate hazards.

Public Health solicited input from existing community-based organizations and stakeholders engaged in ongoing environmental and climate work to inform preliminary policy areas of focus that will further be explored as part of the strategic planning process. Additionally, policy areas identified through prior outreach and engagement efforts for the *Community Health Improvement Plan*, the *OurCounty Sustainability Plan*, and the Center for Health Equity *Environmental Justice Focus Area* were also incorporated. During the strategic planning process, a comprehensive set of policies will be developed with further input from stakeholders.

Policies for Board consideration are compiled into four categories: 1) Land Use, Site Remediation, and Redevelopment Policies, 2) Local Monitoring and Surveillance, 3) Health Promotion, and 4) Climate Threat Protections.

Land Use, Site Remediation, and Redevelopment Policies

The Office will promote community-based holistic health policies to mitigate/eliminate the impacts of multiple pollution sources in highly burdened communities and in populations at greatest risk for disease such as children, elderly, chronically ill, and those facing socioeconomic stressors. The approaches will be integrated into decision-making for initial siting, permitting,

and regulatory enforcement of industrial facilities, with emphasis on evidence-based health impacts of multiple pollution sources and extreme heat. Policy areas in this section include:

- Enhanced protections in land use standards for communities exposed to *cumulative* pollution sources, including emissions from new and emerging industries and business practices
- Implementation of DRP's Green Zones Ordinance, an important policy tool to protect communities disproportionately burdened by pollution sources
- Health-focused analyses to inform health and safety protections for communities within 500 feet of industrial sites, including oil and gas operations
- Climate mitigation in land use policies to support urban heat island reduction, including through increasing tree canopy, reducing impervious surface coverage, and increasing reflective surfaces
- Develop housing standards to mitigate impacts of outdoor pollution, indoor air quality, indoor temperatures

Local Monitoring and Surveillance Policies

The Office will promote policies to comprehensively monitor and analyze local air quality to determine health impacts from cumulative pollution sources. Local monitoring is also a component of the CSO plan to minimize the exposure of vulnerable populations to harmful pollution. Policy areas in this section include:

- Comprehensive countywide monitoring policies that account for multiple sources of pollution in the siting, permitting, and enforcement of environmental regulations
- Fence-line monitoring for industrial sites, prioritized by facility size, type of emissions, and proximity to sensitive populations
- Local pipeline monitoring, leak detection, local oversight, preventive maintenance, and testing at oil and gas facilities
- Mandates for community notification and emergency plans from all industrial facilities to relay understandable and accessible health and safety information to fence-line communities
- Best practices for accessible and understandable health and monitoring data to community members
- Comprehensive monitoring of environmental conditions surrounding oil and gas facilities before and during anticipated phase-out
- Comprehensive monitoring of climate-driven health outcomes, including those related to heat, air quality, wildfires, and flooding

Health Promotion Policies

Human health is the most important, and curiously the most lacking, component of most environmental policies. Vulnerable populations in environmental justice communities are poorly served by existing State and regional policies. The Office will promote policies that align with goals of the CHE, County Sustainability Plan, and the County Strategic Plan, where feasible, given the robust engagement to develop these related goals and objectives. Policy areas in this section will include:

- Health protective noise and vibration standards
- Local mitigation measures identified in discretionary land use permits

- Enhanced authority for the Health Officer to take immediate action against local threats to the health and safety of the public, including toxic releases from industrial sites and transportation of hazardous chemicals through residential areas
- Enhanced occupational standards to protect lower-wage workers from hazardous conditions, including protecting workers on-site toxic releases (e.g., Sterigenics) from heightened risk for heat-related illness by adopting an occupational heat illness prevention standard for indoor environments
- Standards for community notification regarding significant exposures to environmental hazards.

Climate Threat Policies

Climate change threatens short-term and long-term health, and requires a multi-faceted, cross-sectoral approach not only to protect the public from health impacts, but also to promote actions that slow climate change and improve health and equity. Ongoing work includes urban heat island reduction, monitoring climate-driven health outcomes, and strengthening occupational standards to protect workers from heat exposure. Extreme heat is the most tangible impact of climate change in the County, impacting health, disrupting energy grids, and incurring other social and economic costs. Extreme heat also contributes to larger, more frequent, and more destructive wildfires and worsens air quality.

The Office will advance policies in coordination with partners to ensure that all communities are prepared for and resilient to these immediate climate impacts and their associated health risks in the short term, while guiding local policies to reduce greenhouse gas emissions and support healthy and sustainable community design in the long-term, especially in historically overburdened and under-resourced areas. Policies proposed here will address climate change as a health equity issue, drawing from recent planning efforts, including the OurCounty Sustainability Plan; a scan of reports and policy and program innovations in other communities; and a series of stakeholder engagement activities, including two virtual workshops and one-on-one outreach, during the development of Public Health's draft Climate Change and Health Equity Report. The climate policy agenda will be further developed during the strategic planning process and through ongoing engagement leveraging the CPHTs.

Programmatic/policy work in this section will include:

- Improved ability to stay cool inside homes by promoting and strengthening: (a) housing habitability standards related to maximum interior temperature for multifamily dwellings; (b) home weatherization services; and (c) energy assistance services
- Improved utility and accessibility of cool public places for refuge during heat waves including: (a) Policies for siting new cooling centers within at-risk populations; (b) New model of resilience centers/hubs providing expanded resources to community members; (c) Free transportation to cooling and resilience centers; (d) Public-private partnerships for non-traditional cool spaces (e.g., museums, movie theaters, malls); and (e) Minimum standards and best practices for amenities, programming, and accessibility of cooling centers for people and pets
- Early warning notification system for populations at risk for heat and smoke events

- Public programs to encourage community members to check on friends and family during heat events (e.g., New York City’s “Be A Buddy” Program)
- Implementing tree planting and residential tree giveaway programs for County unincorporated areas to prioritize underserved communities with low tree canopy coverage
- “Clean air” shelters equipped with filtration to be advertised during smoke events

4) Identification of any data surveillance systems, data dashboards or other data needs to understand current environmental health conditions, monitor progress over time, and communicate information with stakeholders

Data is the most complex scientific component of environmental justice and climate work. Existing Public Health work on environmental justice and climate health has involved executing small- and large-scale surveys, surveillance, epidemiological assessments and geographical inequity evaluations to collect and analyze data, monitor progress, and develop recommendations regarding the use and deployment of public health resources. Epidemiologists and data analysts also conduct analyses of multiple, large datasets such as morbidity/mortality data, hospital/emergency department data, birth registry data, and cancer registry data to provide evidence-based public health information.

Current work on environmental justice and climate change utilizes existing data sources and collects data to describe health impacts, create data visualization tools, and share data in reports, social media messaging, presentations, and webpage content. While these scattered data sources are well established, the ability to readily access clear, comprehensive, and understandable health and environmental data is lacking. Key informants voiced that they want the Office to establish a centralized dashboard of where the public and stakeholders can find easily interpretable data on local health impacts of environmental and climate events and trends.

Expanding data collection, increasing capacity for analysis, and improving accessibility of data are central themes across County and Public Health plans. At the County level, the *County Strategic Plan 2016-2021* highlights the importance of sharing and publishing more data (III.4.2), and the 2023-2027 Strategic Plan currently in development is expected to equally hinge on strong data. Los Angeles County’s *OurCounty Sustainability Plan*’s short-term Action 145 directs DPH to “Develop a climate-related health equity data initiative that includes collection and dissemination, builds stakeholder capacity, and drives decision-making,” expected to be completed by 2025.

Vision for the Data Capabilities of the Office of Environmental Justice and Climate Health.

The Office will establish a network of community-informed data to guide evidence-based decision-making, to underpin policymaking, and to enhance intervention design and other activities, in consultation with the Department’s Chief Science Officer. CPHTs will fulfill a foundational role in the new Office’s data work, by functioning as a key resource for identifying community data needs as expressed by residents, community-based organizations, faith-based organizations, and service providers; for learning from the community about how data could be best presented and disseminated; and for sharing data back with the community and providing

technical assistance to increase its use. Improved data capabilities will include expanded surveillance, upgraded data infrastructure, and analytical capabilities to position the Office to advise Public Health and partners on real-time decision-making for health promotion and long-term planning.

To be responsible to stakeholders including, but not limited to, community partners, the media, and the general public, the Office will work in collaboration with the Chief Science Officer:

- Build a web-based data dashboard to serve as a central information hub, featuring layperson-friendly data visualizations. This platform will allow any interested person or organization to access needed information without the need to make formal requests to Public Health.
- Develop capacity to conduct data-driven health assessments and targeted studies in response to requests from partner organizations, stakeholders, and community members.
- Provide timely, periodic (i.e., annual, semi-annual) reports and briefings on relevant topics, such as toxic exposures, industrial pollution, heat-related illness, and other environmental impacts, to raise awareness, drive public discourse, and influence programmatic and policy decisions.

Data Needs for the Office of Environmental Justice and Climate Health.

The Office must expand capacity to collect data and link data from other sources to analyze and disseminate existing data in interactive, easily accessible formats. Like many other jurisdictions, Los Angeles County is hampered by outdated systems for collecting and reporting data; difficulties assimilating data streams originating from different entities and on different timelines; and a lack of internal training in up-to-date data science.

To meet the needs of the public and our partners, the Office identified the following data needs:

- *Web-Based Data Dashboard.* All key informants desired interactive data and maps on a web-based dashboard to improve accessibility of data. A data dashboard would include data visualizations of the up-to-date data on heat-related illness and chronic disease by Service Planning Area. The dashboard would serve as a key asset for education and outreach by the CPHTs. A comprehensive dashboard could also serve as a clearinghouse for accessing additional local, State, and non-profit data reports, maps, and visualization tools.
- *Surveillance Systems.* Public Health utilizes hospital syndromic surveillance to monitor emergency department data for certain health conditions, such as heat-related illness, allowing for near real-time assessments of the impacts of extreme heat events. To make efficient and effective decisions to respond to emerging threats, environmental disasters, and hazardous public-health exposures, syndromic surveillance should collect more data through additional reporting of hospital data and health outcomes, as well as increased analytical capabilities to provide forecasting and predictive analytics.
- *Data Infrastructure and Analytics.* Public Health can connect different data sources and analyze large volumes of disparate data faster and more accurately using modern data science skills and tools. Silos can be broken down through aligning tools and ideas, including the adoption of an enterprise data strategy, standards, architecture requirements and procedures to solve data and technology problems. The Office will engage with other Public Health programs, as well as state

and local agency partners to align activities on data modernization plans and progress for mutual benefit.

- *Rapid Assessments.* Rapid assessments can be used to quickly gather input from community members during disasters, acute environmental hazards and climate threats. Rapid assessments include reviewing existing data and conducting community-based surveys, interviews and listening sessions. A new Office will increase the capacity of Public Health to conduct rapid assessments for guiding protective actions and effective communication, placing communities at the center of the public health response.

The Office will require technological enhancements to develop secure data lakes, data pipelines, and data workflows to produce reliable, quick, and accurate data for reporting and sharing of internal and external data, dataset-linkage, map creation, spatial analysis, and predictive modeling. Public Health is creating a new Information Management and Analytics Office headed by a Chief Data Officer to meet growing data science and epidemiology needs of the Department. However, the Information Management and Analytics Office will rely primarily upon epidemiologists, research analysts and subject matter experts embedded in programs across the Department, highlighting the critical importance of data capacity within the new Office of Environmental Justice and Climate Health.

Data-Related Feedback from Stakeholders.

Interest in data on environmental justice and climate-related health impacts is rapidly escalating. The media, public at-large, community-based organizations, non-profits, County departments, and other government agencies look to Public Health to describe the nature and scale of current climate- and pollution-related health impacts. Key informants perceive the Office as scientific, technical, and medical experts on environmental justice and climate change, providing data and data-informed guidance to drive policy and decision-making to protect health.

Stakeholders desire not only a bank of accessible data, but also seek detailed data on health impacts of environmental and climate events for real-time decision-making and long-term planning.

Most importantly, data must be understandable. To illustrate, community stakeholders who participated in listening sessions during the development of Public Health's Climate Change and Health Equity Report noted that they wanted data sharing to be "available on publicly accessible websites, in multiple languages, and on different platforms (websites, apps, print materials, public service announcements, etc.). Both macro and micro data should be accessible and tailored for specific communities."

Data must be tailored for specific communities adversely impacted by environmental justice and climate change, and be accessible to community-based organizations, school districts, and others. A March 2020 letter to the Board from the director of the local non-profit Climate Resolve urged the County "to conduct and publicly release annual studies on the impact of extreme heat on mortality and morbidity [in the county]." Key informants desire the Office to conduct epidemiological studies and special projects to collect environmental and health data in areas impacted by toxic exposures, climate change, and other emerging threats. Additional data

collection and monitoring will generate the evidence base for public health interventions and policy change.

5) In consultation with the Alliance for Health Integration, explore potential opportunities to coordinate with managed care plans or other entities on reimbursing for mitigation strategies to reduce negative outcomes from environmental hazards and climate change (e.g., air filters, upgrades of central heating, ventilation, and/or air conditioning (HVAC) systems, etc.). Such a program should not only begin to protect residents from the significant pollution risks but would also begin to offer at-risk residents a proactive opportunity to improve the infrastructure of their homes as temperatures rise.

Certain populations (e.g., older adults, low-income communities, people with chronic conditions such as heart disease, diabetes, and respiratory disease such as asthma) are at higher risk for illness and require advanced medical care in our changing climate. In LA County, heat and respiratory-related emergency department visits are increasing due to higher temperatures and more frequent heat waves, worsening particle pollution, ozone, wildfire smoke, and drought. These health outcomes strain the resources of our healthcare system and increase healthcare costs.

Evidence shows that home modifications can have significant health protective effects, reduce strain on the healthcare system, and provide an opportunity to improve home infrastructure while reducing buildings' carbon footprint. These modifications include passive methods such as building weatherization, shades and light filters on windows, and cool and green roofs; and active modifications such as electric air filters, heating ventilation and air conditioning (HVAC) systems, and heat pumps. To be sustainable, active home modifications should be carbon neutral or contribute to mitigation (e.g., building decarbonization).

Historically, funding for weatherization and home modifications has come from sources such as the California Low Income Home Energy Assistance Program (Cal LIHEAP) and the California Weatherization Assistance Program (CWAP). Relatively recent studies have shown favorable cost-benefit outcomes related to home environment modifications. The Oak Ridge National Laboratory evaluated the savings to investment ratio of the national Weatherization Assistance Program (which serves low-income households) and found cost-savings associated with improved health outcomes, such as reduced thermal stress and fewer asthma-related emergency department visits. A Green and Healthy Homes Initiative (GHHI) pilot program in Contra Costa County, California focusing on asthma remediation saved Contra Costa Health Plan (CCHP) \$3,500 per member. GHHI obtained funding from CCHP by making the business case based on findings from pilots in other areas, which were replicated.

In LA County the most prominent reimbursement mechanisms for home environment modifications (known as In Lieu of Services, or ILOs) are through an innovation in California's Medicaid (Medi-Cal) program, called CalAIM, and through Medicare Advantage (MA) Plans. CalAIM authorizes reimbursement for environmental accessibility adaptations and asthma remediation; most LA County Medi-Cal Health Plans will reimburse for both types of Community Supports by July 2023. Since 2019, Medicare Advantage plans have been authorized (but not required) to cover Special Supplemental Benefits for the Chronically Ill (SSBCIs),

which can include home modifications. SSBCI coverage varies widely both by benefit and health plan but is increasing. More robust implementation data will drive adoption of both Medi-Cal and MA Plan coverage of ILOs. Despite increased reimbursement for home modifications, no LA County medical plan explicitly covers air conditioning, despite extreme heat being the region's most acute climate-driven threat. By comparison, Anthem's Medicare and Medicaid products in Virginia have both listed air conditioners as a covered benefit since 2018. While there is no publicly available data on how many eligible individuals have utilized the air conditioning benefit in Anthem Virginia's Medicare Advantage and Medicaid products, both plans continue to renew and offer this benefit to their beneficiaries on an annual basis.

Innovations to reimburse mitigation strategies to reduce negative health outcomes from environmental hazards and climate change require further study to demonstrate local success. The identification of data points, indicators, and intermediary outcomes that are linked to successful health outcomes and statistically associated with reduced healthcare system utilization in LA County communities is key to increasing adoption rates of reimbursement for ILOs (and expansion of specific home modifications) among local health plans. The County is in a strong position to facilitate reimbursement for home environment modifications through the Department of Health Services, LA Care Health Plan, and existing Public Health clinics, the Community Health Worker Outreach Initiative, and the CPHTs. A consultant with health services research expertise should develop recommendations for a pilot or demonstration project to assess feasibility, accessibility, and cost-benefit of health plan reimbursement for home environment modification strategies in LA County, and identify resources needed for implementation.

AVAILABLE EXISTING PUBLIC HEALTH RESOURCES AND STAFFING TO SUPPORT INITIAL EFFORTS AND NECESSARY ONE-TIME BRIDGE FUNDING

To effectively lead the County's efforts to reduce health impacts of environmental pollution and climate change, the Office will function as a multi-disciplinary taskforce that empowers community members and provides comprehensive data, health recommendations, policy solutions, and mitigation strategies to address historic and contemporary government decisions that place sensitive populations in proximity to environmental hazards. To accomplish these goals, the following resources are required:

- 1. One-time bridge funding to support the development and implementation of a Strategic Plan.** To fulfill the directive from the County's Board of Supervisors, the Office of Environmental Justice and Climate Health will require a one-time funding of \$250,000 from the Provisional Financing Uses budget unit, to secure independent strategic consultants to support the development of a public-facing Strategic Plan. The consultants will engage with community-based organizations and stakeholders to ensure that plans and policies manifest best practices (with particular attention to community engagement); synergize with other County priorities; leverage available resources; and advance environmental justice and climate resilience. The Strategic Plan will set a vision for the Office's leadership across County departments, outlining recommended

partnerships, resources, and opportunities for influence. It will guide Public Health's leadership in County efforts to plan and secure funding for equitable and climate resilient programs.

2. **Increased staffing to support growth of the Office of Environmental Justice and Climate Health.** The Board provided three staff in 2014 to begin concerted efforts to address environmental justice and neighborhood health disparities. In 2016, after three unprecedented environmental emergencies threatened the health of entire communities, the Board added 17 staff to prevent and respond to environmental incidents, specifically ramping up clinical (i.e., public health nursing) and analyst infrastructure. Actions to return communities to normal have lasted many years, with staff providing long-term consultation and technical assistance to agencies performing site cleanup and mitigation. These response activities have not sufficiently enabled a focus on prevention strategies. Moreover, in recent years, the Division has reallocated Toxicology and Environmental Assessment resources to assist with COVID-19 response and other non-environmental justice related Board directives.

Hiring challenges have made it difficult to fill vacancies in a timely manner. Public Health is actively recruiting to fill existing vacancies but returning to a fully trained staff may require a year or more to achieve. The Department currently has active open competitive job postings for the Staff Analyst and Industrial Hygienist items. Both exams are open and continuous. Public Health has submitted for approval to fund two additional positions through the Public Health Infrastructure Grant to support community outreach, risk communication and grant management. Once the strategic plan has been completed, the Department will evaluate if additional staffing resources are needed.

3. **Contract support.** Discretionary funding is needed to contract services that are critical to preventing or mitigating imminent public health hazards. A dedicated contingency fund or approval through the Provisional Financing Uses budget unit, of \$500,000 annually will ensure that funds are available to contract with environmental consulting companies which allows the County to expand its reach and expertise. The contractors would conduct assessments, carry out sampling operations, provide remediation services as recommended by the Department, prepare public-facing reports, and/or implement on-the-ground interventions for both environmental justice and climate health. These types of intermittent support are key for the County to access the best available science to support health-protective decision-making.
4. **Increased General Funding to support continued responses to environmental pollution as established by the 2016 Priority.** The current Environmental response activities are funded through Public Health's General Fund allocation. The funding is

provided to prevent, respond to, and recover from environmental threats; engage community partners; leverage the authorities of local, State, and federal regulatory agencies; and promote policy change to prevent environmental health threats and reduce risks to community members. During emergencies, discretionary funding or approval through the Provisional Financing Uses budget unit is needed to contract services that are critical to preventing or mitigating imminent public health hazards. Additionally, supplies and equipment to support incident response are often needed. A dedicated contingency fund of \$500,000 will ensure that funds are available to respond to public health emergencies.

5. **Amend Title 8 of the Los Angeles County Code.** Work with County Counsel to add a new section under Title 8 to allow for cost recovery of Public Health investigations related to releases that constitute an imminent or substantial endangerment to public health.

Public Health will work with CEO to support implementation of the Office. If you have any questions or would like additional information, please contact Liza Frias at (626) 430-5100.

BF:lf

c: Fire Health Hazardous Materials Division
Department of Public Works
Chief Sustainability Office
Alliance for Health Integration