COVID-19 EQUITY SNAPSHOT CLIMATE CHANGE AS A THREAT MULTIPLIER

MAY 26, 2020



The Public Health Alliance of Southern California (Alliance) has launched **"The COVID-19 Equity Snapshot Series"** to support our partners in advancing equity in response to COVID-19. The COVID-19 Equity Snapshots are meant to serve as a consistent, curated resource, aimed at elevating a few in real-time equity-focused resources, tools and best practices (both here in California and nationally).

Before this crisis began, the impact of climate change and climate emergencies was disproportionately felt by low-income communities and communities of color, in particular those communities whose neighborhoods are at greater risk of rising temperatures, toxic pollution, and sea level rise. We know that climate change works as a "threat multiplier," both contributing to and exacerbating poor health outcomes resulting from COVID-19. We must take into account the disproportionate impacts of both COVID-19 and climate change in how we respond and recover from this crisis, creating more resilient, healthy communities that are better prepared to face future public health emergencies.

This snapshot includes analysis, resources, and best practices to assist public health departments in identifying and addressing the multiple equity challenges related to COVID-19 and climate change for frontline communities:

- » Climate Change: A "Threat Multiplier" for COVID-19
- » Framing COVID-19: Centering Climate Action During Response & Recovery
- » Policy Changes to Advance Climate Resilience in Response to COVID-19
- » Equity Spotlight: Slow Streets to Fight COVID-19



CLIMATE CHANGE: A "THREAT MULTIPLIER" FOR COVID-19

As the COVID-19 crisis continues to exacerbate inequities, data shows us some individuals, particularly those individuals with underlying health conditions, like cardiovascular and diabetes-related conditions, as well as asthma and respiratory infections, may be at increased risk of poor health outcomes as a result of COVID-19. In addition, people without the economic and social resources to combat the impacts of COVID-19, including those who are at risk of homelessness, those unable to work from home, and those exposed to the worst impacts of extreme heat, wildfires, floods and increasing air pollution, are suffering the greatest health and economic consequences of this crisis.

The impacts of climate change on health outcomes are well established; those communities living without the resources they need to live full, healthy lives, are the same communities most at risk for the negative impacts of both COVID-19 and climate change. In our previous snapshots, we have discussed how food insecurity and homelessness are major concerns for local jurisdictions during COVID-19. Climate change can exacerbate food shortages and raise food prices during a time when families across the country are facing increased risk of food insecurity. Climate change can also contribute to homelessness for those who have lost their homes to natural disasters, like hurricanes and wildfires.



Source: Andrew J. Challinor et al., Climate Change 2014: Impacts, Adaptation, and Vulnerability (New York: IPCC, 2014)

A history of housing discrimination, from redlining to predatory lending, has pushed low-income people and people of color into communities that are most vulnerable to the negative health outcomes related to climate change. Continued disinvestment has left these same neighborhoods with fewer health reinforcing community conditions, like shade-providing trees, parks and other green spaces, and a high density of heattrapping concrete buildings and asphalt roads. Extreme heat is compounding other environmental risks in these communities, which face higher levels of air and water pollution, and limited access to fresh, nutritious foods and health care. As a result, these communities experience higher rates of asthma, obesity, diabetes, cardiovascular disease and other health issues that put community members at increased risk for COVID-19. The impact of both climate change and COVID-19 will affect everyone. However, those same communities being disproportionately impacted by the COVID-19 crisis will be hit the hardest. These frontline communities, or communities that face the "first and worst" consequences of climate change, face a greater risk for COVID-19 related illness and death. The communities currently facing the worst impacts of rising temperatures will have limited access to cooling spaces as temperatures continue to rise and will breathe dirtier air as smog increases due to climate change. Without addressing underlying factors making the pandemic so destructive, the impact of future health and climate-related disasters will only continue to grow.



Source: https://www.pbs.org/wnet/peril-and-promise/2020/01/ redlined-neighborhoods/



ENVIRONMENTAL JUSTICE & COVID-19

When it comes to environmental justice and COVID-19, we know that a history of racist policies and practices, from redlining to blockbusting to predatory lending, have placed low-income communities of color at greatest risk for the negative health and socioeconomic impacts of climate change, from rising temperatures to increased exposure to air pollution and other toxins. For example, a recent study from the City of Sacramento found that redlined, communities of color were 6 degrees hotter, on average, than other, non-redlined neighborhoods in the same City. These inequities, driven in large part by policy and planning decisions at the local, state and national level, have made low-income communities of color most vulnerable to the multiple health and socio-economic impacts of climate and environmental injustice.

The impact of heat on health outcomes is well established. Even small increases in temperatures are associated with increased rates of illness and death. Temperature extremes can also worsen chronic conditions, including cardiovascular, respiratory, and diabetes-related conditions, all of which make individuals more susceptible to COVID-19 related infection and death. Poor health outcomes are exacerbated by "urban heat islands," areas with little tree cover, less green space, more buildings and more heat absorbing concrete and asphalt, which tend to be more prevalent in lower-income neighborhoods and neighborhoods of color. A recent study confirmed that low-income families who are least able to afford air conditioning, are at greater risk of the health impacts of rising heat. The COVID-19 pandemic, which has forced the closure of libraries, malls and public spaces where people without air conditioning might otherwise go to stay cool, has placed those families at even greater risk of illness and death.

Extreme heat further contributes to and exacerbates the impact of other climate-related events, like rising pollution and longer and more intense wildfires. During extreme heat episodes, when energy demand for air conditioning surges, air pollution worsens from power plants. In addition, changes in climate that create warmer, drier conditions, increase the severity and frequency of wildfires, like those we have experienced here in California. Increased wildfires can likewise worsen air quality and further contribute to adverse health effects as well as a greater risk of displacement for those without the resources to more quickly recover, making it more difficult for individuals to safely practice social distancing and abide by other public health orders in both the short and long term. These climate factors exacerbate individual and community-level conditions that place individuals at further risk for the negative health impacts of COVID-19.

A recent analysis by The Guardian found that polluted areas of the United States are among those hit hardest by COVID-19. In addition to inequitable exposure to heat, Black and Latinx people are also more likely to live near sources of pollution, like freeways, heavy industry, or waste disposal sites that exacerbate poor health outcomes. The Environmental Protection Agency found in a 2018 study that Black residents face the highest impact of particulate air emissions compared to the overall population; nonwhite communities have a 28 percent higher exposure, and communities living in poverty face a 35 percent higher exposure compared to the overall population.



Source: Business Insider (https://www.businessinsider.com/photos-stay-at-home-order-reduced-los-angeles-notorious-smog-2020-4)

Research shows that communities of color and lower-income communities bear the brunt of air pollution in the United States. These impacts are amplified by the COVID-19 pandemic. A recent research study from the Harvard T.H. Chan School of Public Health, has found a positive association between air pollution and higher COVID-19 death rates. According to the study's authors, **coronavirus patients in areas that had high levels of air pollution before the pandemic, are more likely to die from the infection than patients in cleaner parts of the country**. The study also found that higher levels of dangerous particles in the air known as PM 2.5 were associated with higher death rates from the disease. This is not the first study to link air pollution to worse health outcomes during a public health emergency. A 2003 study found that patients with SARS, a respiratory virus closely related to COVID-19, were 84% more likely to die if they lived in areas with high levels of pollution. Air pollution is known to weaken the immune system, compromising people's ability to fight off

infection. Other environmental pollutants have also been tied to elevated risk of viral infections of the respiratory tract.

Climate change intensifies the potency of extreme weather events and continues to exacerbate poor health outcomes. Jurisdictions that work with frontline communities to align policies and investments to improve climate resiliency and address environmental injustice, will also address inequities that contribute to disproportionate outcomes during climate and public health emergencies. The map of American air pollution Daily average small particulate matter (PM2.5) concentration in 2014



Source: Washington Post (https://www.vwashingtonpost.com/business/2019/10/23/air-pollution-is-getting-worse-data-show-more-people-are-dying/)

FRAMING COVID-19: CENTERING CLIMATE ACTION DURING RESPONSE & RECOVERY

This week's framing tip come from the FrameWorks Institute.

"We need sound climate policy to be a pillar of the recovery effort. To get it, we need be in sync with the current public mood, which is focused on protection, preparedness, safety, and health. Connect any "ask" to current challenges and insights.

Offer solutions - and even ask for bold changes - but avoid sounding idealistic. An overly optimistic tone always risks sounding utopian, but in this moment, it can seem particularly out of touch."

Instead of the "sky's the limit"

"Bold climate solutions can drive recovery. The climate change movement has long been calling for a massive transformation of our energy infrastructure, housing and transportation systems through public investment in renewable energy, energy efficiency and low-carbon transportation. We've been asking for vital innovation, like green finance. Now is the time to push forward on these priorities - and into a more resilient, more sustainable, and more socially connected future."

Let's try "prepare for the big stuff"

"The COVID-19 crisis has shown how vital it is that our governments are prepared to protect us from harm - and to take action even when the threat feels distant. As part of our recovery measures, we must step up our ability to handle problems stemming from climate disruption. As just one example: we know extreme weather events are ahead, because a warmer ocean fuels stronger storms. We can see this threat to health, safety, and economic prosperity. Now is the time to get ready for what lies ahead."

POLICY CHANGES TO ADVANCE CLIMATE RESILIENCE IN RESPONSE TO COVID-19

Policy changes that center climate impacts for vulnerable communities will be critical throughout the response and recovery phases of the COVID-19 crisis. In particular, local health departments should be prepared for the potential impacts of climate change and climate emergencies on public health orders related to COVID-19. Health department preparation for climate related emergencies should consider the increased impact on individuals who are least able to safely relocate or shelter in place. Below are a few policies and practices that jurisdictions can support as we work towards a future with a more climate resilient public health infrastructure:

- 1. Engage with frontline communities to include their voice in all climate adaptation and COVID-19 response and recovery plans;
- 2. Conduct community vulnerability assessments in partnership with frontline communities; use a data mapping tool that considers climate impacts, like the Healthy Places Index (HPI), to support your jurisdiction in directing resources to communities most vulnerable to the impacts of COVID-19;
- 3. Prioritize the protection of essential facilities that provide health care, food, and emergency shelter; advocate for the development of climate resilience centers that support communities in accessing resources and services during climate and public health emergencies;
- 4. Departments should consider public health guidance, like physical distancing guidelines, in preparation for the compounding impacts of COVID-19 and climate-related emergencies; CDPH has issued guidance for expanded cooling centers during COVID-19 that can be used as a model for other climate-related emergency preparation;
- 5. Support investments in climate resilient infrastructure to support communities in preparing for, and adapting to, existing and anticipated climate-related risks;
- 6. Expand open space for active recreation and transportation; use an equity lens that prioritizes expansion of active transportation and recreation initiatives, green space and tree canopy in priority communities;
- 7. Prioritize economic opportunities for frontline communities that work to bolster resilience to public health emergencies and mitigate the impacts of climate change, as well as avoid displacement.

EQUITY SPOTLIGHT SLOW STREETS TO FIGHT COVID-19

The Alliance "Equity Spotlight" is intended to highlight in real-time efforts from Cities and Counties both in California and nationwide, that are working to advance equity in response to COVID-19. The Spotlights are meant to showcase (not promote), these efforts for departmental consideration and adaptation. The Alliance strongly recommends that any department wishing to launch similar efforts ensure efforts comply with the most recent local, state, and federal laws, policies and guidelines.

In April, the City of Oakland announced the launch of one of the nation's most robust "slow streets" initiatives. The initiative aims to restrict access to vehicle traffic on nearly 74 miles of city street, or 10% of the City's street network. These types of initiatives create more outdoor space and safer corridors for pedestrians and bikers during the shelter in place order.

The City of Oakland acknowledges that COVID-19 has exacerbated long-existing inequities in the City related to park and open space access and has implemented the program with an equity lens in mind; this includes an emphasis on implementing "slow streets" in areas of the City with the least access to and most need for safe spaces for outdoor recreation and active commuting, in addition to limited police enforcement of the initiative.

Across the country, jurisdictions are beginning to implement similar initiatives and many are planning for the changes to become permanent. The City of Los Angeles announced the launch of a similar "slow streets" pilot initiative last week in Del Rey and Sawtelle.



QUESTIONS ABOUT ADVANCING EQUITY IN RESPONSE TO COVID-19?

Advancing Equitable Communications: Equity Workgroup Member Question

"Can you share examples of PSAs with a strong equity frame that are intended to share health related messages with communities most impacted by COVID-19?"

PSAs developed for communities most impacted by COVID-19 will include representation and framing led by the communities themselves. The Alliance has compiled this resource page with a few examples of equity-centered PSAs and tips for creating PSAs in your own jurisdictions.