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Informational Hearing Assembly Health Committee Impacts of Wildfires on Public Health and the Health Care System Date: March 18, 2025 Time: 1:30 p.m. Location: 1021 O Street, Room 1100

PURPOSE OF THIS HEARING

California's climate makes it naturally prone to wildfires. The Legislative Analyst's Office released a publication titled, "*Frequently Asked Questions about Wildfires in California*," which highlighted that starting in the spring, much of the state typically experiences low levels of rainfall and increasingly warm conditions. These conditions begin to dry out vegetation, which makes the state increasingly susceptible to wildfires during the summer and early fall—or even later in years when dry conditions persist through the winter. Some areas of the state face a particularly high risk of severe wildfires due to factors such as the type of vegetation present, the local weather patterns, and the forms and features of land surfaces.

According to a 2022 study titled, "Using wildland fire smoke modeling data in gerontological health research," between 2007 and 2018, 99.5% of California's population lived in a county with at least one smoke wave, or chronic smoke event.

Wildfires have increased in severity over time. Several of the state's largest and most destructive wildfires have occurred in recent years, including the Tubbs Fire (Santa Rosa, 2017), the Camp Fire (Butte County, 2018), the Eaton Fire (Los Angeles, 2025) and the Palisades Fire (Los Angeles, 2025).

Wildfires are fueling a public health crisis, with impacts to air quality, the health care system, and mental health. Climate models predict wildfires will further triple in frequency and severity by 2050. The purpose of this hearing is to provide information and a forum for discussion on the impacts of wildfires on public health and the health care system, as well as possible actions moving forward.

BACKGROUND

Risks of Wildfire Smoke to Human Health. The majority of epidemiological research on the impact of wildfires on human health has concentrated on wildfire smoke and it's emission of particulate matter smaller than 2.5 micrometers in diameter (PM2.5). PM 2.5 can easily lodge in the lungs and enter the bloodstream. In the short term, brief PM2.5 exposure has been shown to

cause spikes in asthma, respiratory symptoms, allergic reactions, strokes, heart attacks, and general hospitalization.

In the long-term, exposure to PM 2.5 has been linked to damage of the heart, lungs, liver, kidneys, and immune system. According to the University of California, Berkeley's Center for Law, Energy, and the Environment (CLEE) report published in 2024 titled, "*Scoping the Public Health Impacts of Wildfire*," PM 2.5 exposure has also been associated with an 8% increase in COVID-19 related mortality, increased incidence of tuberculosis, preterm birth, and elevated measures of risk if experienced at any point of pregnancy.

Emerging research suggests that wildfire-specific PM 2.5 interacts differently with the human body than ambient PM 2.5 associated with vehicular and industrial emissions. These impacts have been attributed to smoke composition: organic matter (such as the wood and forest biomass combusted in wildfires) has high oxidative potential, which is linked to higher levels of inflammation in the body than that caused by other air pollutants. Higher levels of inflammation exacerbate the existing respiratory and immunological effects of PM 2.5 exposure. According to a 2021 study titled, "*Fine Particles in Wildfire Smoke and Pediatric Respiratory Health in California*," wildfire-specific PM 2.5 is about 10 times more harmful to children's respiratory health than ambient PM 2.5 pollution.

Children, the elderly, the disabled, pregnant people, those with chronic health conditions, outdoor workers, firefighters, Indigenous populations, undocumented populations, incarcerated populations, and unhoused populations are the most vulnerable to the ill effects of increases in air pollution.

Impacts of Wildfires on Drinking Water. According to a Purdue University professor in a January 2025 article titled, "*Wildfires May Be Contaminating Los Angeles Water with Harmful Chemicals*," fires can make drinking water, water pipes and storage tanks unsafe. One cause is when high water use from firefighting drains the water system. Damaged and destroyed structures also prompt uncontrolled water leaks. Additionaly, power loss prevents water from being replenished fast enough into the draining water systems. Combined, these factors can depressurize the water system, leaving no water available.

When water is depleted, the system becomes vulnerable to chemical contamination. Drinking water contamination can also result from airborne pollutants and damage to water system infrastructure. Heat can partially melt plastic pipes and water meters, releasing chemicals; smoke can be drawn into water systems; and breaks in the infrastructure can introduce contaminants.

Chemicals associated with increased risk of cancer have been found in damaged water systems after wildfires. Sometimes these chemicals, such as benzene, can cause someone to become immediately ill if they drink or use the water. Symptoms can include nausea, headaches and rashes.

Impacts of Wildfires on Behavioral Health. Research is emerging regarding the links between severe wildfire incidence and population-wide harm to behavioral health. The direct societal impacts of wildfires cause extensive detrimental behavioral health risks similar to other disasters. According to the 2024 CLEE report, these include high rates of anxiety, depression, post-traumatic stress disorder (PTSD), and higher rates of suicide. The Camp Fire in 2018,

California's deadliest wildfire on record, left thousands of Paradise residents houseless and forced the closure of a community hospital, generating "community-wide posttraumatic stress."

Those who survived reported widespread distress, grief, and trauma lasting well after the wildfire subsided. People who were forced to evacuate due to the catastrophic fire report multiple types of behavioral health issues, including anxiety, depression, changes to appetite, and post-traumatic stress. Unemployment from wildfire destruction and it's resulting economic instability is responsible for increased levels of depression and anxiety. Conditions such as depression and PTSD often do not set in until six to 18 months after the disaster, typically when emergency services are no longer providing community care. Rates of intercommunity violence and abuse have also been shown to rise after the incidence of fire disasters, which can be linked to the increased societal stress of housing loss and unemployment. These include higher rates of domestic violence, sexual abuse, child abuse, and substance abuse.

Wildfires and Health Inequities. Wildfires exacerbate existing health inequities and disproportionately impact marginalized populations. In a 2018 study titled, "*The unequal vulnerability of communities of color to wildfire*" found that the vulnerability to disaster is the result of the socioeconomic context in which the event occurs. Access to resources and the ability to reduce exposure and recover from wildfire are not uniformly distributed. The study found that communities of color – specifically those census tracts with a majority Black, Latino, or Native American populace – are 50% more vulnerable to wildfires compared to other census tracts. A 2020 study titled, "*The (in)visible victims of disaster: Understanding the vulnerability of the undocumented Latino/a and indigenous immigrants*" noted in its discussion that in California's rural, low-income, and immigrant communities, residents often do not have the required resources to pay for insurance, rebuild, or invest in fire safety, which increases their vulnerability to wildfire. The 2020 study further highlighted that such outcomes have major environmental justice implications, in that certain populations, due to their socioeconomic status, live with a disproportionate share of impacts and suffer greater related health and quality of life burdens.

Impacts on the Health Care System. Wildfires also have an impact on California's health care system. Wildfires can stress the health care system by increasing utilization, stretching bed capacity, and impacting facilities.

Utilization. A 2018 study titled, "*The San Diego 2007 wildfires and Medi-Cal emergency department presentations, inpatient hospitalizations, and outpatient visits: an observational study of smoke exposure periods and a bidirectional case-crossover analysis*" found that respiratory diagnoses, especially asthma, were elevated during the wildfires in the vulnerable population of Medi-Cal beneficiaries. Wildfire-related healthcare utilization appeared to persist beyond the initial high-exposure period.

Facility Operations. A study titled, "*Wildfire Threat to Inpatient Health Care Facilities in California, 2022*" outlined the risks of wildfires to California inpatient health care facilities in 2022. The researchers mapped the locations of inpatient facilities and associated inpatient bed capacities in relation to California Department of Forestry and Fire Protection fire threat zones (FTZs), which combine expected fire frequency with potential fire behavior and computed the distances of each facility to the nearest high, very high, and extreme FTZs. The study found, at the time of their writing, that half of California's total inpatient capacity was within 0.87 miles of

a high FTZ and 95% within 3.7 miles of a high FTZ. Half of the total inpatient capacity in the state was within 3.3 miles of a very high FTZ and 15.5 miles of an extreme FTZ. These findings demonstrate that a high percentage of inpatient health care facilities are at risk for potential operational disruption or evacuation from wildfires.

Several operational disruptions resulted from the January 2025 wildfires. The Eaton Wildfire destroyed the AltaMed Health Services clinic in Pasadena. The fires also resulted in the temporary closures of several hospitals, operated by many providers including but not limited to at least eight AltaMed clinics, seven Kaiser Permanente offices, at least fifteen University of California, Los Angeles Medical Center clinics, some Cedars-Sinai Medical Center outpatient offices and facilities, and some Providence Health Care doctors' offices.

The study "*Wildfire Threat to Inpatient Health Care Facilities in California, 2022*" stated that hospital evacuations are a difficult undertaking due to the limited number of alternate facilities to which patients can be evacuated, and the potential loss of access to emergency care that accompanies even temporary closure of facilities. In addition to hospitals and clinics, other types of health care facilities are affected by wildfires. The long-term care facility patient population is at high risk during evacuation; previous research demonstrates increased mortality during and after nursing home evacuations. Involuntarily hospitalized patients in behavioral health facilities have special security needs during wildfire contingencies, further adding to the complexity of evacuation.

In the context of the January 2025 wildfires, the California Hospital Association stated that general acute care hospitals expressed that there were challenges with placing Medi-Cal members into facilities outside of the county they reside in, particularly when discharging individuals to skilled nursing facilities. These challenges were associated with delays in discharge while providers worked with health plans in addressing administrative issues such as prior authorization and out-of-network placement.

State Response. In response to the Southern California wildfires and Governor Gavin Newsom's proclaimed State of Emergency and executive orders issued in early January, state departments including but not limited to the Department of Managed Health Care (DMHC), the Department of Health Care Services (DHCS), and the Department of Public Health (DPH) took steps to support Californians in the wake of the wildfires.

DMHC. On January 9, 2025, DMHC issued an All Plan Letter (APL) directing health plans to make sure plan members impacted by the wildfires in Southern California can continue to access all medically necessary health care services, including prescription drugs. The APL directed all health plans licensed by DMHC with members and/or providers in Los Angeles and/or Ventura counties to do the following:

- 1) Provide a toll-free telephone number for impacted plan members and providers to call for answers to questions, including questions about the loss of health plan identification cards, access to prescription refills, and how to access health care services;
- 2) Prominently display on the health plan's website information describing how impacted members can continue to access care, and how members and providers can contact the plan for more information;

- 3) Suspend prescription refill limitations and permit impacted members to refill their prescriptions at out-of-network pharmacies at ordinary in-network cost-sharing;
- 4) Allow impacted members to obtain new prescriptions at out-of-network pharmacies;
- 5) Allow members to replace medical equipment or supplies;
- 6) Allow members to access care from appropriate out-of-network providers if in-network providers are unavailable due to the State of Emergency, or if the member is outside the area due to displacement. Further, ensure members in such instances are not subject to more than their ordinary in-network cost-sharing for such services; and,
- 7) Reduce or remove unnecessary barriers to the efficient admission, transfer and discharge of plan members at hospitals (including non-contracted hospitals) that have been or may be impacted by the State of Emergency.

On February 6, 2025, the California Medical Association (CMA) sent a letter in response to DMHC's APL. CMA highlighted that, while the APL directed health plans to ensure that patients have access to medically necessary care and prescription drugs, it only "encouraged" them to implement additional administrative flexibilities, such as relaxing requirements around prior authorization and referrals, and extending claims filing deadlines. CMA stated that while some plans have implemented such measures, many have not. CMA urged DMHC to exercise its authority to require plans to implement certain administrative flexibilities, including: suspending prior authorization requirements and extending existing prior authorizations; extending timely filing requirements; extending timeframe to dispute overpayment requests; suspending medical records requests; allowing services in alternative settings; and expediting enrollment requirements.

DHCS. DHCS implemented key administrative flexibilities to protect Medi-Cal members in affected regions of the state. The actions taken by DHCS included the following:

- Simplified Medi-Cal enrollment and renewal processes to allow families to quickly secure or maintain Medi-Cal coverage by allowing for self-attestation for residency and income if documentation is missing, and verification deadlines are extended. Local county offices have prioritized Medi-Cal applications and any case restorations for affected Medi-Cal members, who are encouraged to contact their local clinic navigators or local county office if assistance is needed to resolve eligibility issues.
- 2) Waived prescription signature requirements for Medi-Cal members. Released a provider alert to allow for early refill authorizations and emergency override of existing utilization management and prior authorization controls to facilitate expedited access to medications and pharmacy products to ensure timely care; and,
- 3) Prioritized member transfers if moving out of Los Angeles or Ventura counties: Medi-Cal members who are displaced for an unknown amount of time may contact either their former county of residence or the new county to assist with transferring the case on a permanent or short-term basis.

Medi-Cal managed care plans that operate in the areas subject to the emergency, including L.A. Care Health Plan, Health Net, Molina Healthcare, Gold Coast Health Plan, Kaiser Permanente,

Anthem, Blue Shield of California Promise Health Plan, Senior Care Action Network, and Positive Healthcare California (AIDS Healthcare Foundation), activated their emergency response protocols. Protocols included deploying care management teams to conduct member outreach, especially for high needs populations; waiving prior authorization requirements; working to provide transportation to care; and ensuring members do not face any out-of-pocket costs for getting care from out-of-network providers, as needed.

DHCS further sought federal approval from the Centers for Medicare & Medicaid Services for several other flexibilities including but not limited to allowing clinics to deliver care in alternative settings, such as mobile clinics or temporary locations, when primary facilities are damaged or inaccessible; authorizing full reimbursement for services provided in temporary care settings, including shelters and hotels; expediting and streamlining Medi-Cal provider enrollment and reimbursement, extending timelines for fair hearing requests and benefit reinstatements, flexibilities for long-term services and supports, and extensions for reporting and claiming requirements.

DPH. DPH implemented waivers and flexibilities to support Californians as recovery continues across the region. DPH has waived all fees for the replacement of certificates of birth, death, marriage and dissolution of marriage records for any individual or family who lost these items as a result of the fires. According to DPH, efforts are being made to ensure individuals who need replacements are able to receive them quickly and at no cost.

DPH oversees hospitals, skilled nursing facilities, and other care access points across the state to ensure patients have access to safe and reliable care. Blanket approval was issued for healthcare facilities in Los Angeles and Ventura Counties to quickly add bed capacity and services to their licenses. This approval also allowed facilities to set up additional beds in areas not traditionally used for patient rooms. These measures were designed to enable more rapid and expanded coverage by increasing the ability to serve residents and patients impacted by the fires. Guidance is being provided through All Facilities Letters for these locations on how to submit additional waiver requests. These waivers are designed to support all facilities experiencing fire and windstorm related surges in capacity, as well as those dealing with staff shortages due to impacted personnel.

Impacts to the health care workforce. In addition to impacting access to care, wildfires impact the workers who are part of the healthcare system. High call volumes strained emergency services workers and road closures made it difficult to transport patients, supplies, and workers. While impacts to healthcare workers due to evacuations or home losses in some cases made it difficult to ensure adequate staffing, many workers continued to assist with patient care and evacuation orders despite their own challenges.

Impacts to firefighters. Wildland firefighters perform a variety of tasks to suppress fires, including operating fire engines (which provide water to crews working near the fire), constructing firelines (clearing burnable vegetation to prevent the spread of fire), holding or "containing" a fire, mop-up (extinguishing fires by applying water), and conducting firing operations (setting intentional fires to reduce the flammable vegetation fuel for a fire to consume). Occupational exposure to wildfire smoke can have both short-term and long-term negative health effects. Research on wildland firefighters has reported decreases in lung function,

increases in systemic inflammation, and an estimated higher risk of lung cancer and cardiovascular disease mortality.

Impacts to outdoor workers. Outdoor workers employed in sectors such as agriculture, construction, and landscaping face disproportionate health risks associated with wildfires given the smoke exposure. Further, wildfires often disrupt their ability to work, resulting in lost income. As the UCLA Latino Politics and Policy Institute points out, residents of Latino neighborhoods are three times more likely to be employed in these sectors than residents of white neighborhoods.

Impacts to the local public health workforce. The local public health workforce holds a number of responsibilities in terms of wildfire response.

One of public health's key responsibilities is messaging. In the case of the 2025 Los Angeles wildfires, the Los Angeles County Department of Public Health (LADPH), developed large amounts of guidance documents, translated into multiple languages, on cleanup and recovery topics for residents. LADPH Emergency Preparedness and Response (EPRD) developed alert and preparedness messages with healthcare facilities, working with emergency medical services.

For emergency management, LADPH's Health Facilities Inspection Division (HFID), (which the California Department of Public Health (DPH) contracts with to implement State regulations in LA County), implemented crisis mitigation plans to address emergency management within healthcare facilities under the regulatory authority of CDPH/HFID. Their plan, aligned with similar statewide plans, establishes an internal response structure which assigns roles and responsibilities for adherence to applicable DPH policies and procedures during emergency evacuations.

In terms of working to ensure residents and business owners could return to their homes safely, LADPH conducted shelter assessments and communicated information to establishments that are public health permittees, such as restaurants. LADPH staff also assisted with repopulation efforts and re-opening of facilities that were closed due to fire or loss of power.

LADPH staff were stationed at Disaster Resource Centers, offering critical information, guidance, and support to residents affected by the wildfires. They answered questions about health risks, cleanup safety, and available resources to help communities recover. In addition, LADPH staff were present at impacted area checkpoints where residents reentered their neighborhoods, which provided residents with expert advice, written guidance, and fire-safety toolkits that include personal protective equipment (such as respirators, gloves, goggles, and Tyvek suits). LADPH also worked with County libraries to offer respirators and health information at several County library sites near impacted areas.

As communities across the state continue to experience and recover from wildfires, the Legislature can continue to provide resources for those affected and work to monitor and mitigate both the short-term and long-term impacts on public health and the healthcare system.

Prior Legislation.

SB 945 (Alvarado-Gil) of 2024 would have required the California Department of Public Health (DPH), the Department of Forestry and Fire Protection (CAL FIRE), the Wildfire and Forest Resilience Task Force, and the California Air Resources Board (CARB) to coordinate and integrate existing wildfire smoke and health data from local, state, and federal agencies. Further would have required DPH, in consultation with those agencies, to create, operate, and maintain a statewide integrated wildfire smoke and health data platform. SB 945 was held in the Senate Appropriations Committee.

AB 619 (Calderon, Chapter 412, Statutes of 2021) requires DPH to develop a plan, with recommendations and guidelines, for counties to use in the case of a significant air quality event caused by wildfires and other sources. Requires a county, in the next update of its emergency plan, to addresses the recommendations and guidance developed by DPH.

AB 836 (Wicks, Chapter 393, Statutes of 2019) establishes a program for retrofits of air ventilation systems to create community clean air centers, prioritizing areas with high cumulative smoke exposure burden

SB 160 (Jackson, Chapter 402, Statutes of 2019) requires a county to integrate cultural competence, as defined, into its emergency plan upon the next update to its emergency plan, as specified. Additionally requires a county to provide a forum for community engagement in geographically diverse locations in order to engage with culturally diverse communities, as defined, within its jurisdiction. Authorizes a county to establish a community advisory board for the purpose of cohosting, coordinating, and conducting outreach for the community engagement forums.

SB 901 (Dodd, Chapter 626, 2018), allocated an additional \$1 billion from the Greenhouse Gas Reduction Fund to fire prevention and recovery.

Related Legislation.

AB 1003 (Calderon) of 2025 requires DPH's plan as established in existing law to provide recommendations and guidelines to use in the case of a significant air quality event caused by wildfires or other sources to be completed on or before June 30, 2026, posted on the DPH's website within 7 days of completion, and distributed within 14 days of completion to specified local and state entities and officers. Requires the county-specific plan required by existing law to further incorporate a process to conduct outreach and communicate to the public and with key stakeholders specified information about the plan. Requires, after a county-specific plan or a regional multicounty plan is approved by the county's board of supervisors, a copy of the plan to be distributed to specified local officers and to the local and state public health directors. Requires DPH to post a copy of each county-specific plan or regional multicounty plan after a plan is adopted by each county within 14 days of receiving each plan.

SB 223 (Alvarado-Gil, 2025) is identical to SB 945 of 2024.