# Crews Fire sends smoke into San Joaquin Valley: District cautions Valley residents of smoke impacts from wildfires

The Porterville Recorder, Wednesday, July 8, 2020

Smoke from the Crews Fire in Santa Clara County is currently impacting the central and southern portions of the San Joaquin Valley.

Smoke from several other wildfires surrounding the Valley also have the potential to affect air quality over the next few days. As a result, the San Joaquin Valley Air Pollution Control District (SJVAPCD) is issuing a health caution, which will remain in place until the fires are extinguished. Local air pollution officials caution Valley residents to reduce exposure to the particulate matter (PM) emissions by remaining indoors in affected areas.

The Crews Fire began Sunday, July 5, just north of Gilroy, and has already consumed 1,500 acres. While currently affecting Madera, Fresno and Kings Counties, the fire has the potential to impact the entire Valley including the counties of San Joaquin, Stanislaus, Merced, Tulare and Kern.

PM pollution can trigger asthma attacks, aggravate chronic bronchitis, and increase the risk of heart attack and stroke. Individuals with heart or lung disease should follow their doctors' advice for dealing with episodes of PM exposure. Those with existing respiratory conditions, including COVID-19, young children and the elderly, are especially susceptible to the health effects from this form of pollution. Anyone experiencing poor air quality due to wildfire smoke should move indoors, to a filtered, air-conditioned environment with windows closed.

Residents can use the District's Real-time Air Advisory Network (RAAN) to track air quality at any Valley location by visiting myRAAN.com. District air monitoring stations are designed to detect microscopic PM 2.5 particles that exist in smoke. However, larger particles, such as ash, may not be detected. Those who smell smoke or see falling ash in their immediate vicinity should consider air quality "unhealthy" (RAAN Level 4 or higher) even if RAAN displays lower level of pollution.

The public can also check the District's wildfire page at www.valleyair.org/wildfires for information about any current wildfires affecting the Valley. In addition, anyone can follow air quality conditions by downloading the free "Valley Air" app on their mobile device.

For more information, visit www.valleyair.org or call a District office in Fresno (559-230-6000), Modesto (209-557-6400) or Bakersfield (661-392-5500).

#### How to fight the two perils of a California summer: A pandemic meets fire season By Malaika Kanaaneh Tapper

The Fresno Bee, Thursday, July 9, 2020

As Californians continue to battle the coronavirus, they may run headlong into another deadly force.

The state again faces a potentially explosive fire season — but this year, it must balance extinguishing blazes with containing a pandemic.

California's wildfires are growing more extreme, burning bigger and faster. Six of the 10 worst fires in California's history have occurred in the past three years, and 2018's fire season was the deadliest and most destructive on record.

Experts say California is once again heading toward a severe fire season. Winter, with little rain or snow, was followed by a warm spring, and summer promises to be hot and dry. The state's brush has turned to tinder, laying the foundation for fast-moving and destructive wildfires as fall approaches.

"This year, there's the extra dimension of the pandemic," said Daniel Swain, a climate scientist at UCLA.

The coronavirus has forced firefighters to re-evaluate training, alter daily life and change strategies for combating blazes. Physical distancing becomes an obstacle as large fires force tens of thousands of citizens to evacuate and pack into high school gyms, while thousands of firefighters work side-by-side in rustic fire camps to contain the blaze.

"Having hundreds or thousands of firefighters from across the state congregating, that has the biggest risk," said Scott Witt, Deputy Chief, Fire Plan & Prevention for Cal Fire. "Those are the fires that we really want to avoid."

A large fire may mean exposure to the virus. Cal Fire hopes to avoid such a blaze in the first place.

"If we can keep them small and put them out quickly, we also reduce the risk of COVID-19 transmission," said Don Gordon, the Asst. Deputy Director of Cooperative Fire Protection, Training and Safety for Cal Fire.

### Pandemic alters fire fighting

As the pandemic first swept through California, many of Cal Fire's operations were forced to move online. The agency's annual seven-week training academy for all firefighters had to be completed virtually, and defensible space inspections — to determine if residents of vulnerable homes have cleared a 100-foot buffer around their structures — went remote.

Just over 166,000 defensible space inspections have been completed in the past year, said Christine McMorrow, a spokeswoman for Cal Fire.

Meanwhile, as the virus ravages California's prisons, the state's inmate firefighter labor supply — a force of about 2,200 — has become an uncertainty.

California has released 3,500 inmates during the pandemic, and will free approximately 3,500 more people starting this month. Cal Fire is down to 77 from 90 fire crews in the north state this year.

Firefighter inmates, who are paid \$2 a day, plus \$1 an hour when fighting an active fire, need to be trained. Cal Fire and the California Department of Corrections must race against the clock to prepare new inmates to fill the empty spots.

In July, The Sacramento Bee reported that state prison officials had placed 12 of California's 43 inmate fire camps on lockdown after a massive outbreak of COVID-19 in a Northern California prison that serves as the training center for fire crews.

Just 30 of the state's 77 inmate crews will be available to fight blazes in the north state as long as the lockdown lasts, prison officials previously told The Bee.

"How are we going to work together to reduce or mitigate the risk of transmission of COVID, but recognizing, at the same time, we have a mission: Put this fire out," Gordon said. "We cannot *not* fight this fire."

COVID-19 guidelines for fire response vary between agencies and districts — a potential stumbling block for on-the-ground firefighters containing a blaze outside of their normal jurisdiction.

A high-wire coordination act is playing out between Cal Fire, the Office of Emergency Services, the U.S. Forest Service and other agencies across the state. Communication in advance of fire season is key: "So there isn't confusion, or consternation, on the front line," Gordon said.

Cal Fire determined its set of high-level guidelines for when a fire breaks out in its jurisdiction.

"We're going to have temperature checks when we go into incident bases, or when strike team leaders have a group of engines, they're going to self-monitor and make sure that their firefighters aren't exhibiting symptoms of COVID-19," Gordon said.

"But, as you can imagine," Gordon continued, "there are a lot of complexities that come into this when we start looking at big fires."

#### How to evacuate

California officials must prepare for a worst-case scenario: a catastrophic blaze amid the pandemic.

When thousands of residents fled the Camp Fire in 2018, a norovirus swept through the crowded evacuation shelters, sickening more than 200 people.

With the coronavirus still raging through California, densely populated evacuation centers could again provide a stage for the rapid spread of disease.

One hundred thousand people may need to evacuate at once, fleeing to overcrowded community centers or gymnasiums, experts said.

"How do you maintain social distancing in that context?" Swain said.

Cal Fire is grappling with how to reduce viral transmission amid a dangerous blaze.

"Where are we going to put them, where we can spread them out, where we can maintain safety?" Gordon said.

Officials hope to disperse evacuees to more sites, and to towns and cities farther from the disaster. They are evaluating campus dormitories, county fairgrounds, and hotels as potential shelters.

Faith Kearns, a researcher at the University of California Institute for Water Resources, worries that, as in many natural disasters, the burden of living in crowded shelters during the pandemic will fall disproportionately on lower income communities and communities of color.

"A lot of people who can afford it go to hotels, or go stay with family or friends," Kearns said.

Yet those who have friends or family members nearby who can house them also must worry about spreading the virus to elderly relatives, Kearns said. "You're supposed to be isolating, and then you have to go stay with your parents?"

In addition, the smoke from a large and protracted burn can hover over a community for days, clouding skies and choking streets. This could compound the risk of the coronavirus.

"Air pollution and smoke amplify the symptoms and the spread of these kinds of diseases," Swain said.

#### The risk to those battling blazes

A large fire doesn't just increase residents' vulnerability to the pandemic — thousands of firefighters also pour in from across the state to put it out. During the pandemic, such a mission could be doubly dangerous.

A large fire could bring as many as 5,000 responders to a base, and "they're all being congregated together, " Gordon said.

Thousands of firefighters might live for days or weeks at a time in a camp. COVID-19 could spread rapidly.

"People are living partially outdoors, in close physical proximity with limited personal hygiene," Swain said.

"How do you feed them, how do you address lodging, how do you how do you address briefings?" Gordon said.

Cal Fire is preparing to adjust its fire camp strategy. Instead of gathering everyone in a fire camp together each morning as usual, fire agencies may broadcast morning briefings over video call.

Rather than one or two sites to house all the thousands of firefighters, the agency hopes to disperse them across many locations. Planners are working to identify and designate multiple new sites in each county – for example, fairgrounds, schools and campgrounds.

"In the past, where we might have only needed to use one of those facilities... now we might pull two or three of those into use, to be able to spread people out and keep the threat low," said Scott Witt, Fire Plan Deputy Chief at Cal Fire.

The agency could also lean on aerial firefighting resources — Cal Fire operates the largest fleet of firefighting aircraft in the world.

Those include its new fleet of Fire Hawks, a helicopter that can quickly deploy firefighters and 1,000 gallons of water, an improvement over the slower Vietnam War-era Super Hueys. The retrofitted Black Hawk military choppers, which are stationed at McClellan Airport but can be deployed to any of Cal Fire's

22 other air bases, are equipped to allow pilots to fly missions at night and are faster at responding to incidents, officials said.

"Aircraft is a really important tool in our kit," McMorrow said. "We will be absolutely using our aviation fleet for aggressive firefighting this summer. Our goal is to keep 95 percent of fires that break out to under 10 acres."

Swain, the climate scientist, hopes that California avoids the convergence of the pandemic and a catastrophic wildfire through an abundance of caution and a healthy dose of luck.

"But it only takes one spark in the wrong place, at the wrong time," he said.

## The Climate FWD How Wildfires Make Covid More Dangerous

By Julia Rosen and Henry Fountain The New York Times, Wednesday, July 8, 2020

As the coronavirus continues its assault on the United States, it's easy to forget about other hazards. But public health officials warn that it would be a mistake to ignore a related threat: wildfire smoke.

"There is the strong potential for interaction between these two different types of disasters," said Sarah Henderson, senior environmental health scientist at the British Columbia Centre for Disease Control. The danger is particularly high in Western states, where Covid-19 case numbers are rising.

There are several ways that smoke exposure could make the pandemic worse, Dr. Henderson said. "When your immune system is overwhelmed by particles, it's not going to do such a good job fighting other things, like viruses," she said.

Scientists fear that the immune effects of smoke may even linger for months. A recent study in Montana found that smoky summers led to more severe flu seasons the following winter.

Smoke particles can also gunk up the hairlike cilia that clean our lungs, making it harder to clear out viruses. And both smoke and Covid take a toll on the body's respiratory and cardiovascular systems. "It's kind of a double whammy," said Dr. Henderson, who holds a Ph.D. in environmental epidemiology.

Together, these interactions could increase the number of people who contract Covid and make the disease more severe in those who do get sick, she said.

In an editorial in the American Journal of Public Health, Dr. Henderson offered a sense of the potential consequences by applying what scientists have learned about the effect of air pollution on mortality from SARS, which is caused by another type of coronavirus, to a smoke event like the one that engulfed Seattle in the summer of 2018. The results suggested that if the same smoke episode had occurred in the spring of 2020, Covid case numbers and deaths in Washington State would have been roughly 10 percent higher.

It's not possible (or ecologically appropriate) to extinguish all wildfires, so we often have little choice but to cope with smoke. Experts say preparation is key, particularly for vulnerable individuals like children, older people, expectant mothers and those with underlying health conditions.

Community clean air shelters, which offer respite from smoke in normal years, are now risky because of the pandemic. So, public health officials advise staying home as much as possible, something we're all too good at by now, with windows and doors closed.

If your house has forced air, the U.S. Centers for Disease Control recommends installing a filter that will scrub out harmful particles (with a MERV rating of 13 or higher) and setting your system to "recirculate." If not, select one room of your home, ideally the coolest one, and use a portable air cleaner. These can be purchased or else improvised by stacking a furnace filter behind a box fan.

While cloth face coverings can help prevent the spread of Covid, they don't offer protection from smoke. Only properly fitting N95 respirator masks filter out dangerous particles, and those remain in short supply in many places. Instead, Dr. Henderson recommends tracking changes in smoke conditions, which can vary as the wind shifts. "Take advantage of those periods where it's not smoky to get fresh air," she said. "But then, when it is smoky, batten down the hatches."