



COVID-19 Considerations for Extreme Heat & Unhealthy Air Quality

Updated 6/15/21

General Information

Alameda County is fully aligned with the State of California's reopening plan that went into effect on June 15. As the State resumes normal operations, physical distancing and capacity limitations have been lifted for most business sectors; however, the pandemic State of Emergency remains in place. Visit the state's [Beyond the Blueprint Framework website](#) to learn how COVID-19 precautions and restrictions have changed.

- Extreme heat can increase the risk of heat-related illnesses, such as exhaustion, dehydration, and stroke. Learn more about heat and health preparedness from our Heat Pocket Guide, which is available in six languages.
- Wildfire smoke can irritate your lungs and make you more prone to lung infections, such as those from the virus that causes COVID-19. Get a COVID-19 vaccine as soon as you can. Vaccination against COVID-19 will help protect you from getting infected with COVID-19. Visit [Alameda County's COVID-19 Vaccine website](#) to learn more about available vaccine options and find a vaccination site.
- Cloth and surgical masks used for COVID-19 protection provide very little protection against wildfire smoke. Limit outdoor exercise when it is smoky outside or choose lower-intensity activities to reduce smoke exposure.
- Everyone should continue to follow current COVID-19 precautions, including the use of face coverings. Read the [state's Guidance for the Use of Face Coverings](#).

Cooling & Cleaner Air Centers

- Alameda County Public Health Department (ACPHD) guidance for Cooling Center operations during the COVID-19 pandemic aligns with [state guidance](#). Regardless of vaccination status, prevention measures are still necessary, including the use of face coverings and enhanced cleaning and hygiene. Learn more here: [Guidance for Cooling Centers \(ca.gov\)](#)
- Buildings with HVAC/air filtration can reduce the risk of COVID-19 transmission indoors. In Alameda County, self-reported filtration information is available for Cooling Centers. See self-reported filtration data. **Recommended filtration for facilities is MERV level 11 or above.** Most self-reporting facilities on this list with filtration employ MERV level 8.
- EPA Guidance for Cleaner Air Centers can be found here: <https://www3.epa.gov/airnow/wildfire-smoke/wildfire-smoke-guide-revised-2019.pdf>, Appendix B, page 71 of pdf.
- The EPA offers tips for reducing smoke exposure by creating a clean room in the home: <https://www.epa.gov/indoor-air-quality-iaq/create-clean-room-protect-indoor-air-quality-during-wildfire>.



Unhealthy Air Quality

Determining Air Quality

- Visit www.baaqmd.gov or www.airnow.gov to monitor local air quality. Air quality can change throughout the day. We recommend checking local air quality several times a day and using that information to help plan for the day.
- Federal EPA guidance advises consideration of outdoor event cancellation at AQI of 151 (red) and above. At AQI 300 and above (burgundy) EPA advises cancellation of outdoor events. ACPHD has used this guidance to make recommendations for COVID-19 essential emergency services, such as food distribution, testing, and vaccination sites.

Air Quality Index Levels of Health Concern	Numerical Value	Meaning
Good	0 to 50	Air quality is considered satisfactory, and air pollution poses little or no risk.
Moderate	51 to 100	Air quality is acceptable; however, for some pollutants there may be a moderate health concern for a very small number of people who are unusually sensitive to air pollution.
Unhealthy for Sensitive Groups	101 to 150	Members of sensitive groups may experience health effects. The general public is not likely to be affected.
Unhealthy	151 to 200	Everyone may begin to experience health effects; members of sensitive groups may experience more serious health effects.
Very Unhealthy	201 to 300	Health alert: everyone may experience more serious health effects.
Hazardous	301 to 500	Health warnings of emergency conditions. The entire population is more likely to be affected.

Sensitive Groups

Some people are more likely to get ill from smoke and unhealthy air exposure, including:

- ☐ Children younger than 18 years
- ☐ Adults aged 65 years or older
- ☐ Pregnant women
- ☐ People with chronic health conditions such as heart or lung disease, including asthma and diabetes
- ☐ People with low incomes and limited access to medical care.

Due to additional exposure, unhealthy air quality can affect these groups:

- Outdoor workers
- People experiencing homelessness

Precautionary measures to reduce smoke exposure at COVID-19 food distribution and/or testing and vaccination sites include:

- Adjust service times to avoid worst air quality.



- Allow for vehicle food pick-up and drive-thru vaccination sites. Car vents or air conditioning can be set to “recirculate” to reduce exposure inside a vehicle.
 - Consider allowing a batch of cars in at one time so the remaining are not idling engines.
- Appointment times should minimize wait times for people without cars.
 - Testing and vaccination sites should reduce wait times to less than 15 minutes.
- Advise individuals most at risk to limit exposure.
 - For food distribution, people most **vulnerable** to adverse health impacts from smoke may be able to ask someone to retrieve food for them. This may require changes to per-person food limits.
 - People experiencing COVID-19 symptoms and unvaccinated persons with a known close contact of someone with COVID-19 should stay home.
- Take precautions to reduce smoke exposure for site staff:
 - Provide N95 masks to site staff working outdoors; ensure masks are fitted properly.
 - Rotate shifts and provide frequent breaks in a cleaner air indoor environment.
 - Do not deploy staff who may be at high risk for health impacts from smoke exposure.

ACPHD RECOMMENDATIONS FOR COVID-19 TESTING, VACCINATION & FOOD DISTRIBUTION SITES			
Air Quality Index	Meaning	Food Distribution Sites	Testing and Vaccination Sites
101 - 150 Unhealthy for Sensitive Groups	Air Quality is Unhealthy for Sensitive Groups. Children, older adults and those w/ breathing or heart issues should limit outdoor activities.	Continue operations with appropriate PPE and protective measures for staff	Consider reducing hours with appropriate protective measures for staff, or moving operations indoors. Reduce wait times to less than 15 min
151 - 200 Unhealthy	Air Quality is Unhealthy. Everyone, especially children, older adults and those w/ breathing or heart issues, should limit outdoor activities.	Consider reducing hours or moving operations indoors	Consider closing or move operations indoors
201- 300 Very Unhealthy	Air Quality is Very Unhealthy. Stay indoors with windows and doors closed to avoid poor air quality.	Consider closing or moving operations indoors	Close
301 - 500 Hazardous	Air Quality is Hazardous. Avoid all activity outdoors. Sensitive groups: remain indoors & keep activity levels low.	Close	Close



Other Resources

Protective Actions for Fire Season

- Air Now: <https://www.airnow.gov/sites/default/files/2020-06/prepare-for-fire-season.pdf>
- ACPHD: <http://www.acphd.org/wildfire-smoke.aspx>

Reducing Exposure to Wildfire Smoke during COVID-19 Pandemic (CDC): https://www.cdc.gov/disasters/covid-19/reduce_exposure_to_wildfire_smoke_covid-19.html

Wildfire Smoke and COVID-19 FAQs (CDC): <https://www.cdc.gov/coronavirus/2019-ncov/php/smoke-faq.html>

Creating a Clean Room (EPA): <https://www.epa.gov/indoor-air-quality-iaq/create-clean-room-protect-indoor-air-quality-during-wildfire>

Wildfire Smoke and COVID-19 resources from CDC:

- https://www.cdc.gov/disasters/covid-19/wildfire_smoke_covid-19.html
- <https://www.cdc.gov/coronavirus/2019-ncov/php/smoke-faq.html>

Monitoring Air Quality Conditions Affected by Wildfire Smoke

Current Data: AirNow: Entering zip code will show current air quality, brief recommendations for protective actions given current air quality, and five-day air quality forecast. <https://www.airnow.gov/>

Notifications: EnviroFlash allows signups to receive air quality notifications via email when an Air Quality Action Day is declared. <http://www.enviroflash.info/>

Twitter Accounts for Up to Date Regional Information:

- Alameda County Fire: <https://twitter.com/AlamedaCoFire>
- Alameda County Office of Emergency Services: <https://twitter.com/AlamedaCoAlert>
- Alameda County Public Health Department: <https://twitter.com/Dare2BWell>
- Bay Area Air Quality Management District: <https://twitter.com/AirDistrict>
- National Weather Service Bay Area: <https://twitter.com/NWSBayArea>

More detailed maps, history, and projections:

- AirNow Fire and Smoke Map: Map includes data layers on air quality from permanent monitors and low-cost sensors and smoke plumes. Additional layers include large fire incidents and satellite detections of fires. <https://fire.airnow.gov/>
- BAAQMD Current & Historical Air Quality Data: Can be viewed on hourly or daily basis. Historical information is available. <https://www.baaqmd.gov/about-air-quality/current-air-quality/air-monitoring-data/#/aqi-highs>



Alameda County Health Care Services Agency

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- National Weather Service Air Quality Forecast Guidance for Northern California: Hour-by-hour predictions for surface smoke. Pull down menu:
<https://airquality.weather.gov/sectors/northcaliforniaLoop.php#tabs>
- Spare the Air Five-Day Air Quality Forecast: Entering city will show air quality forecast. Note that in past major fire events, forecasts have sometimes not predicted full extent of ongoing poor air quality.
<https://www.sparetheair.org/understanding-air-quality/air-quality-forecast>