



## **Interim Guidance: Operating a Weather Relief Center During the COVID-19 Pandemic**

**Updated July 30, 2021**

The following guidance was developed by the San Francisco Department of Public Health (SFPDH) for use by local facilities and will be posted at [COVID-19 and Extreme Weather](#). This interim guidance may change as knowledge, community transmission, and availability and eligibility of vaccines change.

**AUDIENCE:** Organizations and locations operating as a Weather Relief Center. These centers may be opened during an unhealthy air quality event as in the case of wildfires or a cooling site during an extreme heat event. These sites include Community Based Organizations (CBOs), Faith Based Organizations (FBOs), and public buildings. This interim guidance **does not** apply to congregate living settings or overnight emergency shelters.

**BACKGROUND:** Both extreme Heat and poor air quality from wildfire smoke is a public health safety concern. COVID-19 presents additional complications. For the purpose of this document a Weather Relief Center includes both cleaner air sites and cooling centers. This document provides guidance to organizations/building sites who provide temporary respite from wildfire smoke or extreme heat.

SFPDH's Core Guidance for COVID-19 can be found at [sfdph.org/dph/covid-19/core-guidance.asp](https://sfdph.org/dph/covid-19/core-guidance.asp). This is a summary of core guidance about COVID-19, how it is spread, and how to prevent it, including concise information about vaccination, contact tracing, and ventilation. This document will continue to be updated even after many SFPDH documents are retired.

**VACCINES:** [COVID-19 vaccines](#) are effective at protecting you from getting sick even after you have had COVID-19. Vaccination is an important tool to help us get back to normal.

### Prepare

#### **Assess and modify the location to create a safer space**

- At a minimum, cleaner air shelters and **cleaner air** spaces (public spaces where people can seek relief from wildfire smoke), should have central air conditioning with filtration that is medium or high efficiency.
- Cooling sites should have a HVAC and be located in buildings with tall ceilings.
- Adjustments to your Heating, Ventilation and Air Conditioning (HVAC) systems must comply with all applicable building codes.

#### **Simultaneous extreme heat and unhealthy air quality days:**

**Heat response takes precedence over** poor air quality. Air-conditioned filtered air is recommended. However, if your weather relief center is experiencing severe indoor heat, it is acceptable to open windows.

#### **Cleaning:**

Follow the Centers for Disease Control and Prevention (CDC) cleaning and disinfecting guidelines for community facilities, and cleaning facilities if someone is sick. Frequently contacted surfaces like door handles, handrails, counters, seating, bathrooms, and floors should be cleaned at least once a day.



**Supplies:**

- Have extra face coverings available for visitors in need of a mask. Visitor must follow the current health order regarding capacity, social distancing and face coverings.
- Keep your hydration station stocked with cool water.
- Ensure restrooms are stocked with soap and/or hand sanitizer.

**For Personnel:**

- Personnel must follow the current health order regarding capacity, social distancing and face coverings.
- Keep track of who worked each shift in order to facilitate contact tracing in case anyone develops COVID-19.

**For Visitors:**

- Request visitors to voluntarily provide contact information in case someone in the cleaner air site later develops COVID-19 and there is a need to contact them to assess their risk.

**Role of ventilation**

The following summarizes guidance for using air filtration systems to mitigate bad air quality. These guidelines should not replace the specific expertise provided by building safety engineers.

- Buildings without mechanical ventilation systems (HVAC) are not recommended for Cleaner Air Sites.
- Where air quality and filtration can be improved by increasing the level of filter in the HVAC system or by using portable air filtration systems, cleaner air sites should strive to do so.
- Where possible, set building HVAC systems to minimize but not eliminate fresh air intake.

*SFDPH discourages locating Cleaner Air Sites in buildings that don't have functioning mechanical ventilation (HVAC) systems.*

**HVAC Systems:** HVAC system filters typically have a Minimum Efficiency Reporting Value, or “MERV rating,” which ranges from MERV1 to MERV 16. The higher the MERV rating, the more and smaller particles are captured as the air passes through the filter.



- Although the CDC and other trusted sources commonly recommend MERV 13 filters for wildfire



smoke, this is not a simple retrofit. Sites should endeavor to install the highest MERV-rated filter possible; although they may not effectively filter out the smallest and most dangerous smoke particles, they may provide an aesthetic improvement that can be beneficial.

- Regardless of filter ratings, HVAC systems need to have their filters properly fitted and sealed to prevent leakage around filter media. Duct joints and other points in the HVAC system need to be properly sealed to prevent infiltration of smoke.
- In many HVAC systems, the amount of fresh air (and smoke) being brought into the building can temporarily be altered by adjusting the fresh air intake dampers during wildfire smoke event.
  - Adjustments must be made in consultation with a building engineer or HVAC technician to ensure there is an adequate amount of fresh air entering the building for the occupancy.
  - Altering the fresh air intake settings can also alter the building's air pressure balance. Buildings commonly prevent infiltration of outside air by maintaining a slight positive pressure. Improper alterations can draw in outside air through unfiltered openings.
  - Since lower MERV rated filters do not filter out viruses such as SARS-CoV-2, reducing the fresh air intake may undermine any COVID-19 risk mitigation benefits being achieved through the ventilation system operation.
- HVAC systems are commonly designed to “throttle back” when there are lower occupancy levels such as during nights and weekends. During wildfire smoke events systems can be reset to operate continuously to maximize particle removal. This will increase operating costs and potentially shorten the life of HVAC system components and filters.

**Portable Air Cleaners (PACs):** Indoor contaminants can be further reduced by using portable, stand-alone air cleaners.

- To be effective, PACs need to be matched to the size of the indoor space. Depending on the level of filtration and amount of air filtered through portable air filters, sites may need to decrease occupancy or increase spacing to minimize the risk of COVID transmission as fresh air is decreased.
- [The Association of Home Appliance Manufacturers \(AHAM\)](#) maintains a certification program for air cleaners. The AHAM seal on the PAC's box lists Clean Air Delivery Rate (CADR) numbers for tobacco smoke, pollen, and dust.
  - Higher CADR numbers indicate the PAC is capable of filtering greater volumes of air in the same unit of time.
  - For wildfire smoke, units with a tobacco smoke CADR at least 2/3 of the room's area are a good choice.

## Resources

- San Francisco Department of Public Health (SFPDH)
  - <https://www.sfgdp.org/covid19>
- California Department of Public Health
  - [Guidance for Cooling Centers on COVID-19](#)
- Sf72.org



- [Air Quality + COVID-19](#)
- [Extreme Heat](#)
- California Department of Public Health (CDPH)
  - [Guidance for Cooling Centers on COVID-19](#)
  - [Interim guidance for Ventilation, Filtration, and Air Quality in Indoor Environments](#)
- Centers for Disease Control and Prevention (CDC)
  - [Natural Disasters, Severe Weather, and COVID-19](#)
  - [Wildfire smoke and Covid-19 FAQ](#)
  - [COVID-19 Considerations for Cleaner Air Shelters and Cleaner Air Spaces to Protect the Public from Wildfire Smoke.](#)
- American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE)
  - [Guidance for Building Operations During the COVID-19 Pandemic](#)
- California Air Resources Board webpage
  - [Air Cleaner Information for Consumers](#)