COVID-19 & Indoor Air Quality Ventilation Tips

Wondering how you can improve indoor air quality to reduce COVID-19 transmission? Here are some simple things to consider. California employers are also required to review the CDPH Interim Guidance for Ventilation, Filtration, and Air Quality in Indoor Environments and become more familiar with these strategies to improve ventilation in their business under the updated Cal/OSHA COVID-19 Prevention Emergency Temporary Standard.

Reduce Risk by Improving Indoor Air Quality
Since indoor air quality can play a key role in the transmission of airborne viruses, Californians should follow these tips to improve their indoor air quality. In general, being outdoors is safer than being indoors when it comes to COVID-19 transmission. In poorly-ventilated indoor environments, exhaled virus particles can remain airborne and “build up,” where they can be inhaled and infect others. Good ventilation helps reduce virus accumulation and transmission. Californians can improve indoor air quality by opening doors and windows, using fans to bring fresh air inside, optimizing mechanical ventilation (or HVAC) systems, and using portable air cleaning devices.

Open Doors and Windows, Use Fans to Bring Fresh Air Inside
Does your space have windows and doors that open to the fresh air? Keep those windows and doors open as much as possible when weather and safety considerations allow. Also, use portable fans to increase the effectiveness of open windows. For example, fans can be placed near or in open windows pointing outward, to exhaust room air to the outdoors. This exhausting of air can also help draw in fresh air from other open windows and doors. If fans are used, position them so air does not blow from one person to another (as this could promote virus spread). For the same reason, don’t operate ceiling fans unless necessary for thermal comfort of building occupants.
Optimize Your Mechanical Ventilation (or HVAC) System
If your space has a mechanical heating, ventilation, and air conditioning (or HVAC) system, keep it running at full capacity, regardless of the time of day or the outside air temperature, to the extent feasible. This is done by setting the fan on the system’s thermostat to the “ON” position instead of “AUTO.” This will cause the system's fan to bring in outside air continuously. Your HVAC system serves two purposes: it brings fresh outside air in, and also circulates air through filters to remove particles. Be sure to install high quality air filters in your system; MERV 13 or greater are best if your system can handle it. Be sure to perform all routine maintenance on your ventilation system. Employers: contact and involve maintenance staff and/or ventilation professionals to help you do these things.

Purchase Portable Air Cleaning Devices as Needed
Use portable air cleaning devices (PACs) as needed when opening windows and doors and improving your mechanical ventilation system aren’t possible, or to supplement these measures. These devices circulate air through high quality air filters (much like your HVAC system does). Choose a device that is appropriately-sized for your space.¹ You may need multiple devices if your space is large. Place your portable air cleaners toward the center of your space, close to where people gather, but only if they don’t pose a tripping hazard. Avoid placing devices in unused corners of rooms or beneath tables, as they will not effectively clean the air. Be sure to select an air purifier that is certified for ozone and electrical safety by the California Air Resources Board.

¹ Follow the Clean Air Delivery Rate (CADR) “2/3” rule: PACs should have a CADR at least 2/3 of the room’s floor area.