

The COVID-19 pandemic is stubbornly persisting and continuing to generate challenges that will not be going away soon. As the economy has gradually reopened, property teams have continued to develop and implement plans to prioritize public health, with only secondary concerns for associated impacts such as increased costs or energy use.

The pandemic has brought with it a rethinking of indoor air quality (IAQ) in office buildings, particularly the need to bring in additional outside air and utilize higher levels of filtration wherever possible. This shift will likely require more energy at the same time that the industry is striving for greatly increased energy efficiency targets driven by both internal goals and government mandates.

THE CRE PERSPECTIVE



As this difficult environment continues to evolve, the commercial real estate (CRE) industry is faced with an ongoing, constantly shifting challenge of making informed choices that prevent the spread of the virus and place public health first, while continuing to keep an eye on sustainability goals and targets. While the industry knows a lot about how to deal with the pandemic in terms of both people and properties, difficult hurdles remain:

- **Conflicting guidance** – The industry must deal with evolving science, changing virus variants, unknown technologies, and government policies that change rapidly and often conflict by jurisdiction.
- **Unknown consequences** – Whether or not there's consensus on guidance and solutions, we're just at the beginning of understanding the implications for property energy use and greenhouse gas emissions, and the resulting effects on voluntary and mandated sustainability targets and scores.

Property owners and managers can continue to focus on the following high-level recommendations:

- **Stay apprised of the latest developments**
- **Stay in contact with your BOMA local association**
- **Always put health considerations first**
- **Focus on proven solutions**
- **Communicate and demonstrate your plans and actions**

What do we know about COVID-19 transmission?

As the pandemic hit, little was known about how the COVID-19 virus spreads. **The early focus on sanitizing surfaces to avoid transmission was understandable, but we now know that the virus is much more likely to spread by airborne particles rather than by surface contamination.** The Centers for Disease Control and Prevention (CDC) reports, “COVID-19 spreads when an infected person breathes out droplets and very small particles that contain the virus.” Simply put, individuals should avoid breathing in air when close to an infected person. This challenge is further complicated because a significant percentage of infected individuals do not exhibit symptoms.

How can individuals protect themselves and others?

CDC lists six important ways to slow the spread of COVID-19:

- Get a COVID-19 vaccine as soon as you can
- Wear a well-fitting mask that covers your nose and mouth
- Stay six feet apart from others who don't live with you
- Avoid crowds and poorly ventilated indoor spaces
- Test to prevent spread to others
- Wash your hands often with soap and water

What can properties do to reduce virus transmission?

There are a wide variety of initiatives properties have been implementing that are consistent with public health guidance, including following occupancy limits, encouraging mask use in shared spaces, and making hand washing and hand sanitizer convenient. One of the most impactful improvements properties can make is more behind-the-scenes, which is to focus on indoor air quality (IAQ). In general, commercial properties are already known to be good on addressing IAQ, as it's been a topic of interest for a long time prior to worries about COVID. But the virus provides another critically important reason to consider airflow, ventilation, and HVAC systems, to lessen the chances that the virus is being transmitted through the air. **There may be no more important item for property teams to consider than improving a building's clean air changes per hour (ACH).**

Properties have pursued and should continue to adopt an all-of-the-above approach to virus mitigation—do everything that works. There are no guarantees—a single infected individual who sneezes or chooses to go maskless can upend all plans—but all efforts can help reduce the transmission rate.

Is MERV 13 the answer to improving IAQ?

Much has been said during the pandemic about the need to upgrade to MERV 13 air filters in commercial properties in order to increase the likelihood of capturing virus particles. While the benefits are real and potentially significant, it's not always a one-size-fits-all cure-all and there are other factors to consider. **CDC recommends “using the highest efficiency ventilation filters possible, without having detrimental effects on overall HVAC system performance.”** ASHRAE has similar guidance and specifically recommends a minimum filtration of MERV 13, alongside additional recommendations on HVAC operations. MERV 13 is also increasingly a requirement for some building certifications.

However, every building is different, and older buildings in particular may have to juggle competing factors. Unless the building has a state-of-the-art HVAC system, the impacts could be significant—as the level of filtration increases, fans have to work harder, using more energy and increasing operating costs. System upgrades can be extremely costly though sometimes necessary decisions. And the increased energy use can directly conflict with energy and emissions targets, potentially affecting organizational goals, governmental mandates, and even ENERGY STAR scores.

What should properties avoid doing?

A new term was coined in 2020 to capture the near-obsession over COVID risk-reduction practices that may make us feel safer but don't actually do much to reduce risk: hygiene theater. The term arose from the continued focus on disinfectant regimens and elaborate deep cleans long after experts concluded that the virus danger is airborne and rarely transmitted by touching a surface. There is still a place for those activities—and undoubtedly there is value in performing visible tasks to provide reassurance and a sense of security to tenants and the public—but it's important to avoid hygiene theater and prioritize activities that will have the greatest effect.

Similarly, it's important to focus on solutions and technologies that are recommended by experts and avoid jumping at the newest offerings that may be unproven. As a leading example, ultraviolet irradiation can perform a role in disinfection, but with reports of unsafe or ineffective equipment quickly hitting the market, even the CDC felt the need to post guidance to seek consultation with a reputable manufacturer or experienced system designer.

What guidance and resources are available?

We recommend that you go directly to the experts for answers to any additional COVID mitigation or IAQ questions:

- Centers for Disease Control and Prevention
<https://www.cdc.gov/coronavirus/2019-ncov/communication/guidance.html>
- World Health Organization
<https://www.who.int/emergencies/diseases/novel-coronavirus-2019>
- ASHRAE
<https://www.ashrae.org/technical-resources/resources>
- BOMA International
<https://www.boma.org/Coronavirus>

Additionally, there are a growing number of certification programs that have incorporated the latest best practices, including:

- BOMA International - BOMA 360 Performance Program
<https://www.boma.org/360>
- Fitwell - Viral Response Module
<https://www.fitwel.org/viral-response-module/>
- Green Seal – Healthy Green Buildings
<https://greenseal.org/programs/healthy-green-buildings/>
- International WELL Building Institute - Health-Safety
<https://www.wellcertified.com/health-safety/>
- U.S. Green Building Council - Safety First LEED Credits
<https://www.usgbc.org/resources/usgbc-safety-first-covid-19-response-credit-guide>