



By Julie King

With the onslaught of the coronavirus pandemic, cleanliness at the gym has never played a more prominent role. What used to be primarily in the background is now front, center, and continual. For health club members and staff, clean equals safe. And safety is king.

Since last spring, clubs across the globe have undertaken comprehensive, and often costly, efforts to optimize air quality and ensure that surfaces are frequently sanitized.

"One legacy of COVID-19 will be raising the bar for sanitizing procedures and air quality in our industry," contends Diane Best, the director of club operations at Chicago's luxury, multipurpose East Bank

Club (EBC). "The pandemic gave us an opportunity to enhance our already thorough and stringent cleaning protocols with a higher level of attention."

Because the virus spreads through airborne droplets—particularly among indoor spaces populated by heavy-breathing exercisers—clubs have embraced additional ways to purify air and improve circulation. Cleaning equipment, accessories, and surfaces also have become a constant in environments dedicated to the hands-on, sweaty activities.

The good news is that 88% of members who have returned to gyms are confident in the safety precautions there, including cleaning regimens, according to IHRSA's The COVID Era Fitness Consumer report. These new protocols for environmental cleanliness not only are bringing members back to clubs, but also are helping position the industry as essential to health promotion.

# Learning About HVAC and Filtration

Experts recommend opening windows and doors to bring in outside air when weather permits, and making adjustments to HVAC and filtration systems to mitigate virus transmission.

### » Exchanges

Even pre-COVID-19, health clubs had been held to higher standards for air quality.

"We have building code requirements that define the percentage of outside air we must bring into our spaces, and the frequency with which we must turn over the air," points out Aaron Moore, the director of operations for VIDA Fitness, a six-club chain in Washington, D.C., and Virginia. "So, health clubs were already committed to proper ventilation and air quality long before the pandemic."  $\rightarrow$ 





## CLEARING THE AIR

One upgrade at VIDA was implementing an air change rate of up to 30 times per hour, or once every two minutes, which exceeds code requirements.

EBC adjusted the fresh-air intake on each air handler to the highest level possible to increase the overall air changes within its 350,000-square-foot facility. The club also pressure-washed all HVAC system coils and replaced all filters to optimize fresh-air intake and overall performance.

#### » Filters

High-efficiency particulate air (HEPA) filters are the gold standard in HVAC systems to

remove contaminants from the air, and upgrading filters is another best practice. Filters have a Minimum Efficiency Reporting Value (MERV) rating, which indicates effectiveness at stopping dust and other contaminants from passing into the air. A higher number is better.

"If your system is capable of it, install MERV 13 or higher rated filters, which have better particulate efficiency," suggests Donaldo Visani, a senior principal and architect at Ohlson Lavoie Collaborative (OLC).

Changing filters more frequently than the manufacturer's recommendation—typically three to six months—also improves air quality. At 43 Degrees North Athletic Club, a 16,000-square-foot facility in Concord, New Hampshire, owner Crystal Reynolds now changes filters monthly, versus her pre-COVID-19 quarterly frequency.

## » Purification systems

Another enhancement at 43 Degrees North as well as at the Adirondack Sports Club in Franklin, Massachusetts, was adding an iWave ionization and air purification solution to their HVAC systems, which works like ultraviolet C (UV-C) light to kill microorganisms at the source.

"UV-C air purifiers harness light technology that effectively destroys bacteria and viruses that pass through the airflow in the HVAC system," explains Paul LeBlanc, the CEO of Zogics, Inc. "Hospitals have used this technology for years to disinfect their facilities, and now we're seeing this in fitness centers to reduce transmission of pathogens."

EBC installed UV-C lighting on select air handlers throughout the club to provide supplemental disinfection. LifeWorks at Southwest General, a 64,000-square-foot, hospital-based facility in Middleburg Heights, Ohio, selected the RGF Guardian system, which uses advanced oxidation technology to purify the air.

"One of the great advantages of being operated by a hospital is that they have very high standards, and the Infection Control team helped us to choose the right products for the club," says executive director Karen Raisch-Siegel.

Stand-alone air purifiers with HEPA filters, such as the XPOWER Air Scrubber, deliver another convenient option, including plug-in, portable machines and wall-mounted units.

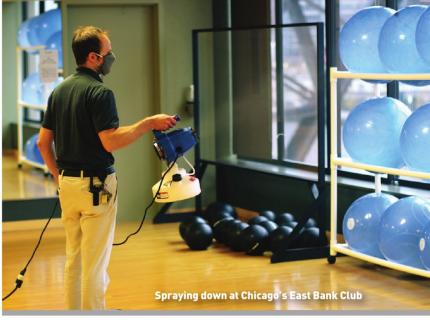
"To better protect our environment, we've cut the coverage capacity of our portable HEPA air filters in half," says Reynolds. "If the unit coverage is listed at 3,000 square feet, we estimated only 1,500 square feet."

Big Ass Fans offers a new Clean Air System that integrates either ion or UV-C technology with its overhead fans. The system has been independently verified to kill 99.99% of SARS-CoV-2—the virus that causes COVID-19—as well as other airborne pathogens, while safely neutralizing allergens, odors, and fumes.

#### » Combined air and surface infection control

The unique airPHX unit uses patented, non-thermal plasma technology to immediately destroy germs and viruses that enter it, while releasing safe levels of gas-phase hydrogen peroxide that continues to disinfect the air and surfaces in large areas.

"AirPHX provides hospital-grade disinfection, and case studies of real-world installations show typical pathogen reductions of over 90% in the air and 95% on surfaces," reports company COO Jeffrey Kilduff. "The self-contained units are easily installed using a supplied wall-mounting bracket and hardware, require very little maintenance, and use the electricity equivalent of a 60-watt light bulb."



Raisch-Siegel

## Sanitizing Surfaces

Although transmission of COVID-19 now is considered less likely from surfaces, health clubs still must maintain strict cleaning protocols to promote safety, and, in part, to visually reinforce their commitment to maintaining a clean environment.

#### » Wipes and disinfectant spray

Providing hand sanitizer and incorporating touchless features—such as check-in, lockers, soap dispensers, and paper towels—throughout the facility are the basics in surface sanitization.

Gym wipes, like those from Athletix, are a familiar method of cleaning equipment and accessories, but clubs need to augment supplies and make them broadly available. Zogics provides The Cleaning Station, an all-in-one solution for dispensing disinfecting wipes and hand sanitizer, with a built-in trash receptacle and storage for masks and gloves.

As an economical option to wipes, GymValet is a compact holder for a disinfectant spray bottle and a microfiber towel that attaches to any machine for maximum convenience.

Regarding disinfectants, clubs should use those that are on the EPA List N, which are designated for use against SARS-CoV-2. Available at Zogics, Petra-1, and other suppliers, common disinfectants include quaternary ammonium compounds, hypochlorous acid, and alcohol-based.

Due to COVID-19, EBC now makes its cleaning products in-house, and distributes them throughout the facility along with microfiber towels.

"We changed our cleaning agents to PURECLEAN and PureSan, two patented, electrolyzed water solutions that are more powerful than chemicals, FDA-approved, EPA-registered, and Green Seal-certified," notes Best.

At VIDA Fitness and 43 Degrees North, members pick up their own one-ounce bottle of disinfecting solution and a microfiber towel upon check-in.

#### » Electrostatic sprayers

These devices deliver electrically charged disinfecting droplets that are actively attracted to surfaces for comprehensive, wrap-around coverage. Easy to use, they come in various units: handheld, backpack, and rolling, and save facilities time with efficient, widespread application.

EBC has incorporated these machines into its daily and nightly cleaning routines, and VIDA Fitness staff uses them throughout the day to disinfect equipment. At 43 Degrees North, the facility closes twice per day to open multiple exterior doors and to perform electrostatic application.

"We were already known for being clean, but the improvements we've made have earned very positive feedback from members, and even have brought us new members," says Reynolds.

#### » ULV atomizers

Unlike electrostatic sprayers, ULV atomizers do not electrically charge the solution.

"The technology uses ultra-low volume (ULV) cold atomizing, which provides the same result as electrostatic systems, but with a higher capacity, killing 99.99% of any pathogen, including coronavirus," explains LeBlanc.

Plus, ULV atomizers can be adjusted for various droplet sizes based on the surfaces being treated.

#### **Great Expectations**

Throughout the pandemic, clubs have had to take on significant expenditures to deliver even greater cleanliness and safety.

"This is definitely not profitable short-term," acknowledges Reynolds. "We see this as a long-game investment, and have embraced it as new and better ways to serve our members."

Indeed, the high standards for air quality and cleanliness in health clubs are here to stay, even post-COVID. "We're in a new era of disinfecting," observes LeBlanc. "There's now an expectation from members that gyms will maintain and further enhance their cleaning protocols throughout their facilities."

Kilduff agrees. "The world has forever changed, and will continue to focus on heightened ways to disinfect air and surfaces."

According to Moore, the future remains bright. "Health clubs are part of the solution to the pandemic, and we're continually moving more toward wellness, and not just fitness. These disinfecting procedures are going to cement clubs as safe, clean, and healthy for years to come." -

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