



In case you missed the news, the COVID-19 crisis is over. Vaccines were developed in record time, rollouts were smooth, and only 18 months after the pandemic started, it was all done. And thanks to the miracles of modern science, everyone can now resume their lives and go back to their offices as if March 2020 had never even happened at all.

Yeah, right.

The reality is that as optimistic as we want to be, just about every aspect of our lives, from how we travel to how we shop, has been fundamentally changed forever in the wake of the largest

health crisis of our lifetimes. And despite the declarations of victory, the sad reality is that millions of Americans are still at a risk of contracting the novel coronavirus. While we may be

that there will not be future variants of the virus—including ones that the vaccines in use today are ineffective against. We are in this for the very long haul.

Stadiums and restaurants have been the public flashpoint for the return to normal, but the reality is that office buildings are actually the canary in the coal mine. How the commercial real estate industry responds to the next phase of the pandemic will have major repercussions for decades to come. That's because mishandled approaches to returning to the office will not only imperil millions of lives, but they could affect the long-term viability of people working in office towers, office parks, and other facilities that were purpose-built to house tens of millions of American workers. The real estate industry has taken a beating for the last 18 months, but a failure to adequately ensure the safety of workspaces could be devastating.

Let's look at the numbers. According to the [Pew Research Center](#), only about 20 percent of white-collar American workers telecommuted to their jobs before the pandemic. That number exploded to more than 70 percent in March 2020 when COVID-19 first made its way to North America. Bustling metropolises immediately became ghost towns as tens of millions of people stopped commuting to their offices and many of them actually decamped to more affordable parts of the country. After all, why pay downtown rent if you don't actually have to be downtown? As a result, Manhattan rental real estate prices dropped levels not seen in more than 30 years.

This was a pattern that was repeated all across the country. And as it turned out, people actually liked working from home: according to Pew, most American workers who had been forced to work remotely want to keep it that way.

The fast roll out of vaccines changed everything. When the virus first hit, many scientists predicted that it would be years until an effective inoculation was discovered. After all, no vaccine had ever managed to block a coronavirus, and the development cycle for most medicines on the market today is north of a decade. It's truly miraculous that in under a year no fewer than five pharmaceutical companies managed to develop, test, and produce hundreds of millions of doses of vaccines. As a result of this success, many American companies decided that it was safe to ask their employees to return to their offices.

Unfortunately, simply declaring offices to be safe isn't enough. We've learned a lot about COVID since we were all frantically scrubbing food delivery bags with alcohol wipes in the spring of 2020, but it turns out that surface contamination is an almost negligible factor in the spread of the virus. In fact, fewer than one in 10,000 cases have been traced back to people contracting COVID from touching surfaces. In addition, there have been very few recorded cases of people getting sick from proximity to others in outdoor spaces. Social distancing played a key role in this success, of course, but what we have learned is that the coronavirus is

primarily spread through aerosols in indoor spaces with poor ventilation. And that describes almost all modern office buildings.

systems are responsible for spreading disease. They're not. A year ago, there were some news reports about restaurant customers seated near air conditioning vents getting sick, but it turned out that these were anecdotal stories unsupported by scientific evidence. What *is* true, however, is that many indoor spaces, including office buildings, lack the airflow to dissipate harmful particles.

One of the major reasons for this is that modern office buildings are essentially closed systems, meaning that all air circulation is handled through central HVAC. It is almost impossible to find a modern building where people can open windows and let in fresh air. This is a massive problem when it comes to COVID, because all of the scientific evidence points to fresh air being a key to public safety. In fact, many school systems are recommending that classrooms have open windows and fans to improve ventilation and reduce the risk of virus outbreaks.

This is hardly a new approach. Many of the earliest tuberculosis hospitals in the United States were constructed with large windows and narrow profiles to maximize the flow of fresh air. Of course, this was well before the invention of modern heating and air-conditioning systems, but the principle remains exactly the same: frequent cycling of clean air is one of the most effective ways to prevent pathogen-based outbreaks.

This leaves the owners of office buildings in a serious quandary as businesses increasingly require people to stop working remotely. That's because even approaches such as staggering workdays to prevent full occupancy don't solve the fundamental problem, which is that air that keeps getting cycled over and over again is a public health hazard. And because of the way buildings are constructed today, it is unlikely that property owners are going to suddenly replace their windows with ones that can open to increase the flow of fresh air. Even the use of fans doesn't help very much if it's just the same air being pushed around.

The logical solution is to improve HVAC systems to filter more air, but that's easier said than done. For starters, it can take several months to replace an existing system, and we don't have that luxury of time right now. In addition, it can cost millions of dollars to do a complete system replacement, which is not financially feasible for most property companies. The logical solution is the use of supplemental air purification systems to work in tandem with existing HVAC infrastructures.

In fact, this is exactly what the [CDC is recommending](#) for office buildings. In its roster of approaches to mitigate the risk of COVID, the agency suggests that property managers, “use

Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) recommends the use of mechanical air filters.

As we enter the next phase of the pandemic, we are all still searching for what “normal” actually looks like. For many people, it’s the ability to get on an airplane and visit family, well for others it is as simple as going to a local restaurant. But for tens of millions of us, it is an act that we all once took for granted, going to the office, signifies that life is moving back to the way things were before COVID hit. And in order to make that happen, property owners and managers are going to need to make air quality a top priority.



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