

# COVID-19 Virtual Town Hall: Preparing for Re-entering Buildings

## May 7, 2020 | Session Overview

### MODERATOR

**Carl Hedde**, Head of Insurance Practice, One Concern and Chair of the NIBS Board of Directors

### PANEL

**Dr. G. Scott Earnest**, Acting Director for the Office of Construction Safety and Health, National Institute for Occupational Safety and Health (NIOSH)

**Thomas H. Phoenix**, Principal, CPL Architects & Engineers, PC; Treasurer, NIBS Board of Directors; Fellow, ASHRAE

**Henry H. Chamberlin**, President & Chief Operating Officer, Building Owners & Managers Association (BOMA)

**Daniel Nichols**, Assistant Director of Fire/Life Safety, Metropolitan Transportation Authority (MTA) Metro-North Railroad

**Pete DeMarco**, Executive Vice President of Advocacy & Research, International Association of Plumbing and Mechanical Officials (IAPMO)

## COVID-19 VIRTUAL TOWN HALL: PREPARING FOR REENTERING BUILDINGS OVERVIEW

On May 7, 2020, the National Institute of Building Sciences held the first in a series of COVID-19 Virtual Town Halls, brought to you by the NIBS Consultative Council. The town hall received more than 1,800 registrants from throughout the building industry, universities, officials representing the federal, local, and state governments and more.

Bringing America back to work will take planning, vision, and expertise. All movement in the direction toward reentering and repopulating buildings, businesses, and transportation systems must follow the health and safety guidelines set forth by the federal government, Centers for Disease Control and Prevention, and World Health Organization.

NIBS President & CEO Lakisha A. Woods gave an overview of the mission of the organization and then introduced the moderator and panelists.

The panel received more than 200 questions. The virtual meeting was also live-streamed through the National Institute of Building Sciences Facebook page. The recorded video was then uploaded to the [nibs.org](https://nibs.org) website, where the whole series of COVID-19-related virtual town halls will be housed. The next town hall is scheduled for Tuesday, May 19, 2020. All speakers noted that this is the information as of today, based on what we know now. We recognize that time and research will continue to adjust next steps.

[nibs.org](https://nibs.org)

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## COVID-19 TRANSFER & MITIGATION PRACTICES

COVID-19 is best spread person-to-person through droplets. These can be inhaled into the lungs. Surfaces and asymptomatic people also easily can transfer the virus.

Exposure control strategies are key. Three major categories of prevention include physical separation, PPE and measures, and decontamination of environmental surfaces.

With regard to mitigation, staying home remains the most effective course of action. If out and about, social distancing and wearing a cloth face covering, which helps slow the spread of the virus, also remain critical.

Decontamination of surfaces is very important, particularly tables, door knobs, light switches, and other high-touch surfaces. All regularly must be cleaned and disinfected. If the surfaces are dirty, they need to be cleaned.

The EPA lists 287 products that can be used for proper disinfection. There are many counterfeit products available. Check state and federal resource websites for the most up-to-date information.

### Site references:

- CDC – Cleaning and Disinfecting Your Facility: <https://www.cdc.gov/coronavirus/2019-ncov/community/disinfecting-building-facility.html>

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- CDC/NIOSH Health and Safety Practices Survey of Healthcare Workers – High-Level Disinfectants: <https://www.cdc.gov/niosh/topics/healthcarehsp/disinfect.html>

- Getting Back to Work: Preparing Buildings for Re-Entry Amid COVID-19: <https://boma.informz.net/BOMA/data/images/Getting%20Back%20To%20Work%20Preparing%20Buildings%20for%20Re%20Entry.pdf>

- U.S. Department of Labor Occupational Safety and Health Administration Guidance on Preparing Workplaces for COVID-19: <https://www.osha.gov/SLTC/covid-19/>

## PREPARING THE WORKPLACE

Every work site should have a COVID-19 safety officer.

Proper hygiene and handwashing, social distancing, and face coverings in public areas remain critical. Seating density must be thinned out, and lobby areas should include more space and less furniture. If possible, extra glazing and directional arrows and floor markings should be utilized.

At a minimum, these rules need to be in place through the end of the year. Employees who come to work should report in staggered form, for example, maybe 30 percent of workers return to work for the first month or so. As much as possible, telecommuting should be in place for employees who can perform their duties from home.

Research is key. Knowing when buildings have been cleaned and disinfected is important. Places of work should undergo regular cleaning and disinfection of work areas and restrooms, and have a systematic cleaning and disinfection procedure that is tracked. This information also should be publicized.

Disinfecting a dirty space is not effective. Simple fogging also is not enough.

With multi-tenant buildings, it's important to coordinate all parties – owners, managers, delivery personnel of mail and packages, and the cleaning crew.

Building personnel should not be in charge of health screening or temperature-taking. This should be done at the tenant level.

### Site references:

- Interim Guidance for Businesses and Employers to Plan and Respond to Coronavirus Disease 2019 (COVID-19): <https://www.cdc.gov/coronavirus/2019-ncov/community/guidance-business-response.html>
- CDC/NIOSH Cleaning and Custodial Services: <https://www.cdc.gov/niosh/topics/cleaners/default.html>

## ELEVATORS

Crowd control will be a real challenge when it comes to reentering the workplace.

A cloth face covering should be utilized in all elevators and public areas.

Elevators also should not exceed more than 4 people at a time, depending on the size of the elevator cab. Expectations must be managed, and social distancing will be required.

### Site reference:

- National Association of Elevator Contractors Coronavirus (COVID-19) Tools and Resources: <https://www.naec.org/resources/covid-19-tools-and-resources.html>

## HVAC SYSTEMS

Companies ideally should perform an audit of the HVAC system, making improvements where necessary with regard to filtration and disinfection.

Adequate flow of fresh air must be provided and optimized. If possible, increase outdoor air ventilation and reduce recycled air flow.

Humidity kept in the 40% to 60% range may be ideal.

According to research, this is the range in which viruses cannot grow fast. In colder climates, you may have to add humidity or moisture to air streams or spaces. However, this comes with its own set of problems.

There is no right or wrong answer, but research suggests

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viruses do not live and grow well within this range of humidity.

With regard to UV lights or other types of disinfectants, there also is no solid guidance. UV light is a very effective disinfectant – it's a clear way to kill bacteria and potential microorganisms. But it's not perfect.

For UV light to be completely effective, air must be exposed to the light for a certain amount of time. Hanging a UV light inside an individual air system won't work very well.

Every HVAC system needs to be individually assessed. There's no one size fits all; there's no magic bullet.

## Site references:

- ASHRAE Pandemic COVID-19 and Airborne Transmission Emerging Issue Brief: <https://www.ashrae.org/file%20library/technical%20resources/covid-19/eiband-airbornetransmission.pdf>
- ASHRAE COVID-19 (Coronavirus) Preparedness Resources: <https://www.ashrae.org/technical-resources/resources>
- American Council of Engineering Companies of New York COVID-19 Resources and Information: <https://acecny.org/news/492154/COVID-19-Resources-and-Information.htm>

## WATER SYSTEMS

It is critical to flush the water systems of all buildings that have been shut down, due to the coronavirus. The stagnant water needs to be safely released and replaced with fresh utility water.

The biggest problem with stagnant water is Legionella, which manifests like COVID-19 and targets the same risk populations. And while Legionella is hard to contract, it has the same high mortality rate.

Plumbers and licensed water systems operators must turn off the water heating system, if it is still running. This will begin the water flushing process. It is possible to test the system after flushing to determine whether disinfection is needed.

Operators also must go through and refill all floor and sink traps. When don't operate, traps can evaporate and sewer gases can come back in.

Water systems operators must perform a thorough walk-through of the building and seek out every water-using device. All fixtures that use water or appliances that are hooked up to a water line must be flushed and disinfected. This includes water stations, ice machines, and even decorative water systems like outdoor water fountains.

## Site references:

- IAPMO COVID-19 Resources for Plumbing and Mechanical Industry Workers: <https://www.iapmo.org/ibu/whats-new/coronavirus-resources>
- Tips and Recommendations for the Safe and Efficient Flushing of Plumbing Systems in Buildings: [https://www.iapmo.org/media/23921/flushing\\_stagnant\\_plumbing\\_systems.pdf](https://www.iapmo.org/media/23921/flushing_stagnant_plumbing_systems.pdf)
- Purdue University Center for Plumbing Safety – Flushing Plans: <https://engineering.purdue.edu/PlumbingSafety/resources/flushing-plans>

## TRANSPORTATION

Many of the cleaning and disinfection processes that have begun on the nation's subway systems and railways are first-time-ever processes.

Cleaning needs to be accomplished in concert with disinfection.

Social distancing and face coverings remain the best ways to avoid virus transfer. Conductors also are giving regular announcements and monitoring the situation.

Commuters and riders must remain mindful of their social distancing responsibilities. The new normal will require more time and patience, particularly with the management of existing infrastructure.

Follow guidance in your bus terminal, metro, subways, and rail stations.

## Site references:

- MTA COVID-19 Resource Center – For MTA Employees: <https://new.mta.info/covid-19/employees>
- MTA Essential Service During the Coronavirus Pandemic: <https://new.mta.info/precautions-against-coronavirus>

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## WHAT IF AN EMPLOYEE CONTRACTS COVID-19?

If an employee is diagnosed with COVID-19, each organization should have a plan and reporting process in place. The local health department will have more information on what to do, should this take place.

The affected employee(s) should be sent home, and the employee's space and any areas the employee may have been in contact with should be closed down. Open outside doors and window, if possible, to increase air circulation. Wait 24 hours before cleaning and disinfecting.

All areas and equipment used by the employee must be properly cleaned and disinfected.

Those who were not in contact with the employee may immediately and safely return to work after disinfection. A health professional or COVID-19 point of contact will have to decide when it's safe for the employee to return to the workplace.

### Site reference:

- Interim Guidance for Businesses and Employers to Plan and Respond to Coronavirus Disease 2019 (COVID-19): <https://www.cdc.gov/coronavirus/2019-ncov/community/guidance-business-response.html>

## FIRE EVACUATION PROTOCOL

Building management and companies now much reevaluate fire and emergency evacuation plans.

Individuals no longer can be jammed in elevators, stairwells, or lobbies, in the event of an emergency.

Management will need to step in and manage the process of fire evacuations or other building emergency evacuation.

A new fire evacuation plan must be put into place and relayed to your team. In the event that teams are staggered, each person must be knowledgeable on the new procedure.

Safety culture is key.

### Site references:

- National Fire Protection Association Responds

to the Coronavirus: <https://www.nfpa.org/Codes-and-Standards/Resources/Standards-in-action/NFPA-responds-to-the-coronavirus>