COVID-19 Resource Webinar

Risks and Return: A conversation about workplace and property readiness, Part 2

May 13, 2020
Mission Statement

NMHC is the place where the leaders of the apartment industry come together to guide their future success. With the industry’s most prominent and creative leaders at the helm, NMHC provides a forum for insight, advocacy and action that enable both members and the communities they build to thrive.
Webinar Information

- To ensure good sound quality, all attendees will be muted during the webinar.
- To ask a question: type your question in to the Question Box on your control panel. NMHC staff will review and present your question to the speakers at the end of the presentation as time allows.
- Today's presentation is being recorded and the NMHC information will be posted to the website.
- For further information on the topics covered within this webinar, please visit https://www.nmhc.org/.

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Webinar Agenda

- Welcome and Overview
  - Rick Haughey, Vice President, Industry Technology Initiatives
- NMHC COVID-19 Advocacy Update
  - Kevin Donnelly, Vice President, Government Affairs
- Presentations – 10 minutes each
  - Chris McGee, President, The Franklin Johnston Group - moderator
  - Antonia Cardone, Sr. Managing Director, Workplace Strategy & Change Management, Cushman & Wakefield
  - Vincent J. Matarazzo, Commercial Systems Specialist, Building Technologies & Solutions, Johnson Controls
  - Shawn Ryan, Director, Homeland Security Research Program, Office of Research and Development, U.S. Environmental Protection Agency
- Moderated Q&A
- Closing Remarks
# COVID-19 Relief Packages

## Phase 1
- **H.R. 6074**
  - Expanded the Small Business Administration disaster lending program.

## Phase 2
- **H.R. 6201**
  - Expanded emergency family medical and paid sick leave for employees.

## Phase 3
- **S. 3548**
  - Coronavirus Aid, Relief, and Economic Security Act (CARES Act)

## Phase 3.5
- **H.R. 266**
  - Paycheck Protection Program and Health Care Enhancement Act.

## Phase 4
**NMHC Priorities:**
- Emergency housing assistance fund for renter households
- Aligning mortgage forbearance and Federal eviction moratoriums.
- Expand the SBA’s Paycheck Protection Program to include all multifamily businesses
- Liability Shield & Pandemic Risk Insurance Act (PRIA)
NMHC Member Call to Action

Visit NMHC’s COVID-19 Hub or find it directly at nmhc.org/housing-relief
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RECOVERY READINESS
RETURN TO THE OFFICE

NMHC Webinar
May 13, 2020
COVID19 WORKPLACE RESPONSE DASHBOARD

7 Key Factors
1. Inspire through culture
2. Leverage tech to collaborate

‘Renew’
Lagging 10-15% behind

1M people
800M sq.ft.
10k companies

Back to work in China post C19

New tools:
XSF@home
Remote working calculator

WELL LIVING LAB
“It’s not just an office. It’s an eco-system”

SOURCE: CUSHMAN & WAKEFIELD

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LAYERS OF CONTROL
WHERE ARE YOU?

Public Space
Street/Commute

Privileged Space
Building

Private Space
Tenancy

Protocols
Interpersonal agreements

Peers
Colleagues

Personal

Desks

Independent

Cultural control

Corporate control

Landlord control

Municipal control
1. PREPARE THE BUILDING

2. PREPARE THE WORKFORCE

3. CONTROL ACCESS

4. CREATE A SOCIAL DISTANCING PLAN

5. TOUCH POINTS & CLEANING

6. COMMUNICATE FOR CONFIDENCE
SIX FEET OFFICE PRINCIPLES

6 Feet Quick Scan: Analysis of current work environment
6 Feet Rules: A set of simple and clear protocols that put safety first
6 Feet Routing: A visually displayed circulation route
6 Feet Workstation: Addressing distances, surfaces and panels
6 Feet Experience: Change management, training and guidance to operate effectively
WORKPLACE ASSESSMENT
SOCIAL DISTANCING, OCCUPANT CAPACITY, CIRCULATION, TOUCHPOINTS

PANTRY
Distancing: remove stools; consider single use occupancy.
Touchpoints: use gloves to access shared equipment; support with a day porter; pre-packaged food; single use supplies

OPEN SEATING
Distancing: significant furniture reduction: 6 seats can be used simultaneously while respecting distancing.
Touchpoints: disinfectant wipes available for cleaning of surfaces.

COMMUNITY SPACE
Distancing: significant seat reduction: seats used as workplaces.
Circulation: clockwise internal flow; respect others’ space.
Touchpoints: disinfectant wipes available for cleaning of surfaces.

ENTRY | EGRESS
Distancing: elevator lobby – coordinate entrance and exit to respect social distancing. Consider up and down elevators only; consider pinch points.
Note: freight elevator could be used but creates a pinch point for bathroom access.
Occupant volume: avoid high occupancy and reduce traffic by staggering arrival and departures.
Hygiene: employees to wear masks upon entering and while circulating on the floor. Pick up/disposal of PPE to be available upon entering the space.

CONFERENCE ROOMS
Distancing: capacity reduction: 12 to 5 people.
Circulation: clockwise flow into the conference room; occupants take the furthest seat first; consider queuing protocol prior to entering the room.
Touchpoints: prop doors open (or remove). Shared tech and writing materials only to be used with gloves.

INDIVIDUAL SEATS
Distancing: workstation occupancy reduced for distancing and secondary circulation capacity; clear vertical dividers to be installed between workstations; remove guest seating. Convert large offices to accommodate two desks yet maintain required distance. Doors to be propped open or removed.

BATHROOMS
Occupant Volume: each bathroom to be considered single occupant and possibly unisex. “pinch point for occupants exiting the space.
Hygiene: trash bins placed next to doors. Wear masks.

PINCH POINTS
Indicates friction points with higher traffic volume and proximity to adjacent traffic flow which will need to be considered and resolved.
COMMUNICATE FOR CONFIDENCE
PREPARE FOR A SOFT LANDING

RE-ENTERING THE WORKPLACE

STRATEGIZE USING SURVEY DATA
• Re-entry readiness assessment
• Conduct focus groups
• Change strategy plan
• Communications plan

PREPARE COMMUNICATIONS
• Messaging
• FAQs
• Toolkits and talking points
• Wayfinding and signage
• Welcome guide

TRAINING PLAN
• Online, in-person, take-away training requirements

PLAN TO ENGAGE
• Return to work task force
• Return to work pilot
• Workplace protocol development

STRAEGIZE

COMMUNICATE

TRAIN

ENGAGE
Operation, Upgrade and Air Cleaning of HVAC Systems

Relevant to Coronavirus pandemic

INSPECTION
RISK MITIGATION
MEASUREMENT

The power behind your mission
HVAC SYSTEMS

VRV INDOOR UNITS

PTAC’s

BOILERS

VRF systems

Rooftop units

Custom Air Handler units

Chillers
Johnson Controls Rooftops 3 to 150 ton! 
Highly Featured for Efficiency, Performance, and Safety!

Industry leading range of airflow options
Modulating gas heat
AMCA 511 certified low leak fresh air economizers
Modulating power exhaust
Modulating hot gas reheat for Humidity Control
Smart Equipment controls
Large Filter Racks (PRE & POST FILTRATION)
  Manual Damper
    • 0-25% open or 0-100% open
  Motorized Damper
    • 0-25% open or 0-100% open
CO2 Sensors
Air Cleaning Methods and COVID-19 virus control

- Air Cleaning Methods
  - Filtration – Upgrade to Highest MERV Rating Possible.
  - UV-C - UVGI
  - Bi-Polar Ionization
  - Humidity Levels Between 40% - 60%
  - Coil & Duct Cleaning
  - Increase Outside Air Intake
  - Increase Use of Rooftop and DOAS Equipment
  - Increase Use of VRF and Ductless Products
  - Operate at Positive Pressurization
  - Verify Exhaust Systems are Working Properly
  - Consider Constant or Longer Run Times
  - Measure Indoor Air Quality Levels / Track with BMS System if Possible
  - Monitor Fresh Air Intake to Verify Quality / Have a Method of Quickly Shutting Outside Air in an Emergency
Air Cleaning Methods and COVID-19 virus control

UVGI (Ultraviolet Germicidal Irradiation)

Active line-of-sight technology, meaning that it only affects areas directly exposed to the light source (i.e. the bulbs). This includes the direct airstream and surfaces.

- Any organic-based cell exposed to UV-C absorbs it at the molecular level... The organism is now destroyed & ineffective. It is unable to reproduce & unable to infect.

- Cannot be used in occupied areas.

- Effectiveness depends on the UVGI dosage, exposure time, and humidity level
  - Most effective at low RH (<30%) but slightly less effective at higher RH

Image source: https://www.uvdi.com/literature-downloads/

Air Cleaning Methods and COVID-19 virus control

Bi-polar ionization

Active air treatment option that affects contaminants and microbes in the air and surfaces - even hidden surfaces

- Works by flooding the air with millions of both negatively and positively-charged ions that react with microbes
- Ionization causes smaller particles to coalesce into larger particles (because of opposite charges), which enhances the effectiveness of static filters
- Has not shown a dependence on humidity levels
- Can be used in occupied areas
Thank you

Vincent Matarazzo
Johnson Controls International
Vincent.J.Matarazzo@JCI.com
917-886-1783
EPA and CDC’s Reopening Guidance for Cleaning and Disinfecting Public Spaces, Workplaces, Businesses, Schools, and Homes

Shawn Ryan and Gina Perovich
U.S. Environmental Protection Agency
GUIDANCE FOR CLEANING & DISINFECTING
PUBLIC SPACES, WORKPLACES, BUSINESSES, SCHOOLS, AND HOMES

1 DEVELOP YOUR PLAN
DETERMINE WHAT NEEDS TO BE CLEANED. Areas unoccupied for 7 or more days need only routine cleaning. Maintain existing cleaning practices for outdoor areas.
DETERMINE HOW AREAS WILL BE DISINFECTED. Consider the type of surface and how often the surface is touched. Prioritize disinfecting frequently touched surfaces.
CONSIDER THE RESOURCES AND EQUIPMENT NEEDED. Keep in mind the availability of cleaning products and personal protective equipment (PPE) appropriate for cleaners and disinfectants.

2 IMPLEMENT
CLEAN VISIBLY DIRTY SURFACES WITH SOAP AND WATER prior to disinfection.
USE THE APPROPRIATE CLEANING OR DISINFECTANT PRODUCT. Use an EPA-approved disinfectant against COVID-19, and read the label to make sure it meets your needs.
ALWAYS FOLLOW THE DIRECTIONS ON THE LABEL. The label will include safety information and application instructions. Keep disinfectants out of the reach of children.

3 MAINTAIN AND REVISE
CONTINUE ROUTINE CLEANING AND DISINFECTON. Continue or revise your plan based upon appropriate disinfectant and PPE availability. Dirty surfaces should be cleaned with soap and water prior to disinfection. Routinely disinfect frequently touched surfaces at least daily.
MAINTAIN SAFE PRACTICES such as frequent handwashing, using cloth face coverings, and staying home if you are sick.
CONTINUE PRACTICES THAT REDUCE THE POTENTIAL FOR EXPOSURE. Maintain social distancing, staying six feet away from others. Reduce sharing of common spaces and frequently touched objects.

For more information, please visit CORONAVIRUS.GOV
**MAKING YOUR PLAN TO CLEAN AND DISINFECT**

*Cleaning* with soap and water removes germs, dirt, and impurities from surfaces. It lowers the risk of spreading infection.

*Disinfecting* kills germs on surfaces. By killing germs on a surface after cleaning, it can further lower the risk of spreading infection.

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**Is the area indoors?**

- **Yes**: It is an indoor area.
  - **Has the area been occupied within the last 7 days?**
    - **Yes**: The area has been occupied within the last 7 days.
      - **Is it a frequently touched surface or object?**
        - **Yes**: It is a frequently touched surface or object.
          - **What type of material is the surface or object?**
            - **Hard and non-porous materials like glass, metal, or plastic.**
              - Visibly dirty surfaces should be cleaned prior to disinfection. Consult EPA's list of disinfectants for use against COVID-19, specifically for use on hard, non-porous surfaces and for your specific application need. More frequent cleaning and disinfection is necessary to reduce exposure.
            - **Soft and porous materials like carpet, rugs, or material in seating areas.**
              - Thoroughly clean or launder materials. Consider removing soft and porous materials in high traffic areas. Disinfect materials if appropriate products are available.
    - **No**: The area has been unoccupied within the last 7 days.
      - The area will need only routine cleaning.

- **No**: Maintain existing cleaning practices. Coronaviruses naturally die in hours to days in typical indoor and outdoor environments. Viruses are killed more quickly by warmer temperatures and sunlight.

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**Is it a frequently touched surface or object?**

- **Yes**: It is a frequently touched surface or object.
  - **What type of material is the surface or object?**
    - **Hard and non-porous materials like glass, metal, or plastic.**
      - Visibly dirty surfaces should be cleaned prior to disinfection. Consult EPA's list of disinfectants for use against COVID-19, specifically for use on hard, non-porous surfaces and for your specific application need. More frequent cleaning and disinfection is necessary to reduce exposure.
    - **Soft and porous materials like carpet, rugs, or material in seating areas.**
      - Thoroughly clean or launder materials. Consider removing soft and porous materials in high traffic areas. Disinfect materials if appropriate products are available.

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**Is the area outdoors?**

- **Yes**: It is an outdoor area.
  - **Maintain existing cleaning practices.**
    - Coronaviruses naturally die in hours to days in outdoor environments. Viruses are killed more quickly by warmer temperatures and sunlight.

- **No**: Maintain existing cleaning practices.
  - Coronaviruses naturally die in hours to days in outdoor environments. Viruses are killed more quickly by warmer temperatures and sunlight.
Develop Your Plan

1. DEVELOP YOUR PLAN

DETERMINE WHAT NEEDS TO BE CLEANED.
Areas unoccupied for 7 or more days need only routine cleaning. Maintain existing cleaning practices for outdoor areas.

DETERMINE HOW AREAS WILL BE DISINFECTED.
Consider the type of surface and how often the surface is touched. Prioritize disinfecting frequently touched surfaces.

CONSIDER THE RESOURCES AND EQUIPMENT NEEDED.
Keep in mind the availability of cleaning products and personal protective equipment (PPE) appropriate for cleaners and disinfectants.

• Is the area Indoors?
  • Outdoors – maintain existing cleaning practices

• Has the area been occupied within the last 7 days?
  • Unoccupied – routine cleaning
  • Building reopening considerations

• Is it a frequently touched surface or object?

• What type of material is the surface or object?
  • Hard and non-porous
  • Soft and porous
Implement Your Plan

- **Cleaning** with soap and water removes germs, dirt and impurities from surfaces.
- **Disinfecting** with an EPA-approved disinfectant against COVID-19 virus kills germs on a surface.
- Follow the label directions
  - Safety
  - Clean
  - Disinfect
  - Appropriate application
  - Wetted contact time

[https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2](https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2)
Maintain and Revise Your Plan

- Frequency of cleaning and disinfection
  - Consider use of surface/object
  - Follow specific guidance, as appropriate

- Safe practices
  - Hand washing
  - Cloth face coverings
  - Staying home if sick

- Consider other adjustments
  - Social distancing
  - Reducing shared spaces and objects
  - Reducing soft and porous materials, if appropriate

For more information or follow up questions, please send to CESERComms@epa.gov

Shawn P. Ryan, ryan.shawn@epa.gov
Gina Perovich, perovich.gina@epa.gov
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Questions

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www.nmhc.org/covid19