BOMA Canada

2021 Pandemic Guide

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Introduction

Welcome to the BOMA Canada 2021 Pandemic Guide. This document builds on previous BOMA Canada pandemic guides, pandemic work from BOMA Canada committees and draws upon the knowledge of 13 subject matter experts and their colleagues.

We had planned to update the Guide in the spring of 2020; however, we wanted to include as many new learnings from COVID-19 as possible. At the time of publication, this public health crisis is still with us, but hopefully an end is in sight.

There are numerous pandemic-planning publications and templates. The goal of this Guide is to give as much easy-to-read, relevant information to BOMA Canada members as practical. Each section is only a 3–5-minute read, with a liberal use of "at-a-glance" bullet points.

This Guide is meant to be used as a companion piece to the BOMA Canada "Pathway Back to Work" publication (http://bomacanada.ca/pathway-back-to-work/), and BOMA Canada "COVID-19: Evolving Legal Issues". We also suggest reading BOMA International's "Managing Through Pandemics" (https://www.boma.org/BOMA/BOMA/Research-Resources/Publication_Pages/Pandemic_Guide.aspx).

This document does not include a significant amount of detail on building operations. We refer you to the BOMA Canada "Pathway Back to Work" publication where there are detailed sections and checklists on building specific issues including signage, escalators, lobbies, washrooms, food courts, trash, access, water and plumbing...

We believe this Guide will support our members in planning, preparing for and dealing with future pandemics. In some cases our authors use words like "must" or "should." Nothing in this document is absolutely prescriptive, unless mandated by public health or government bodies.

Please send us your feedback, ideas, and questions (info@bomacanada.ca). This Guide has been reviewed for errors and omissions, but if you believe we are incorrect or incomplete on a point, let us know. We will continue to update this Guide in future years to reflect new learnings and new best practices.

Signed,

Benjamin L. Shinewald

President and Chief Executive Officer

Président et chef de la direction

BOMA Canada

What We Learned From COVID-19

In general terms....

Pandemic declarations must be taken seriously. With COVID-19 we learned that pandemics can impact everyone, in both developed and developing countries. COVID-19 has greatly impacted the elderly, low income, racialized and indigenous communities. The death toll can be staggering.

The global economic cost is massive. Millions unemployed, thousands of businesses bankrupt. Government stimulus programs helped, but with substantial increases in public debt.

Science-based communication is critical. We need credible, fact-based messaging to encourage public health measures (mask wearing, social distancing, vaccinations). We can and do adapt. Working from home became the new normal, and the vast majority of us respected public health orders and supported each other.

For the BOMA Canada community...

The disruptive effects may just be beginning. The pandemic accelerated the trend to smarter and healthier buildings, more flexible working arrangements, and increased digitization of the workplace.

Reinforce your culture, your values, and your brand. How you "are seen" to behave during a crisis will be remembered long afterwards.

Have a plan. An emergency management plan (with a pandemic plan) to identify critical business systems and essential personnel will help prioritize resources and increase your effectiveness.

Essential services and supplies can dry up quickly, particularly early in a pandemic. Single points of failure can hobble large parts of your operation. Contingency and back up arrangements are key.

Public health orders can change quickly. Follow these announcements closely, prepare for different scenarios and have a process to communicate and act rapidly. Awareness of how the virus spreads is essential for building management.

Many BOMA members are considered essential workers. Organizations need to take steps to ensure essential workers have the right training and resources to protect their wellbeing. The pandemic lasted longer than we expected. Buildings occupancy rates stayed low for months. Plan for a marathon, not a sprint.

As businesses moved more functions to the cloud and workers migrated to mobile devices, the frequency and cost of cyber threats increased. People adapted to working from home – but with stresses from school closures and caring for elderly parents – vacation and sick leave policies, and employee assistance programs need to be robust.

There is strength and wisdom in community. BOMA members dedicated hundreds of hours participating in webinars and serving on committees, providing valuable advice and support.

Executive Summary

Pandemic Planning & Business Continuity

In Canada best-practice emergency planning uses an all-hazards approach to identify threats to people, property, and operations. Your pandemic plan will explain how to manage pandemic-specific challenges for employees, tenants, and other stakeholders. Identify the possible impact on day-to day-operations, e.g. business critical functions, priorities and changes to needed resources.

Communications

People need to hear what has changed, what you expect of them, how it affects them, care and concern, and your organization's new priorities. Messaging should be timely, accurate, credible, consistent, and relevant. Ensure people understand how to conduct business with you during a lockdown.

HR Employee Health & Safety Considerations

Health and safety protocols should include pandemic-specific information about employee travel, employee absence, return-to-work, vacation policy and workplace accommodation. Informed employees, who feel safe at work, are less likely to be absent. Consider a web-based forum to answer questions about pay, leave, and health and safety.

Information Technology & Cybersecurity

Each of us need to ensure we have the right hardware and software to work from home, know how to access company data and programs, and understand rules and security protocols. The pandemic accelerated the move towards smarter buildings. This may be a competitive edge to attract and retain tenants.

Security & Life Safety

A Security & Life Safety Plan should consider pandemic-threats to building operations, including emotional distress, escalated confrontation, physical harm to people and/or property damage. Many risk factors can come into play when just-in-time resources may be seriously diminished.

Supplies & Suppliers

Recommendations by public health authorities can spiral the demand for critical items such as hand sanitizer and paper towels. Without planning, access to these items may be difficult. Identify critical suppliers and single points-of-failure. Identify backup suppliers and initiate agreements with them. Ensure that critical suppliers have pandemic plans of their own.

Air Quality

Develop a filtration strategy based on the impact on your HVAC systems. Technologies to consider are filtration, dilution ventilation, purification, and occupant management systems.

Cleaning & Sanitation

Cleaning affects virtually everyone in your building and requires extra care during a pandemic. Your cleaning tactics should consider building occupancy, traffic patterns, and high-risk populations. Consider hygiene testing to verify sanitization practices.

Legal

There are a number of legal issues that arose during COVID-19 that are evolving on an ongoing basis. Due to the comprehensive nature of pandemic related legal issues we have created a companion piece to this Guide … "COVID-19: Evolving Legal Issues".

Your Pandemic Plan

This section gives basic advice on how to structure your emergency plan and how to plan for a pandemic.

The Difference between an Emergency Plan and a Pandemic Plan

In Canada, best practice emergency planning uses an "all-hazards" approach. An all-hazards emergency plan explains how you will prevent, mitigate, prepare for, respond to, continue essential operations, and recover from all types of threats and hazards, including natural hazards (floods, wildfires, earthquakes, etc.), and human induced hazards (power outages, infectious diseases, etc.).

The plan should use a comprehensive hazard and risk assessment process to identify threats to people, property, and operations. Key elements of an all-hazards emergency plan include, but are not limited to:

- Emergency notification protocols.
- Incident command structure.
- Staff roles and responsibilities.
- Emergency procedures.
- Explanation of the decision-making process.
- Internal/external communications.
- Training and exercise strategies.

A pandemic plan is generally a sub-section of your Emergency Plan. Unlike other types of emergencies which can resolve in days or weeks, pandemics can continue for 18-24 months. They can pose significant risks to health and safety, with major impacts on business operations. Your pandemic plan will explain how you will manage the specific challenges a pandemic creates for employees, tenants, and other stakeholders, and how you will handle changes to business operations.

How to Plan for a Pandemic

Your pandemic plan must be championed by your senior leadership. Issues your senior management team should consider include:

- Short and long-term business objectives (e.g. cash conservation versus growth).
- Budgets, cash flow and financial metrics.
- Strategy, value proposition/brand, and competitive landscape.
- The demand for your goods/services.
- Key internal and external stakeholders.
- Policies and procedures.
- Operations, assets, and infrastructure management.
- Legal and regulatory rights/obligations.

A best practice approach for developing a pandemic plan is to begin with establishing a Pandemic Steering Committee. This committee is responsible for developing the plan. Key departments (e.g. operations, finance/accounting, HR, IT, IR, HSE, security, communications and legal) should be represented on your Pandemic Steering Committee.

Base your plan on guidance documents from recognized public health authorities. References to public health agencies/authorities in this guide refer to the Public Health Agency of Canada, federal, provincial, and municipal levels of government and international agencies such as the Centers for Disease Control and Prevention (CDC) and World Health Organization (WHO).

Promote awareness of your plan before the next pandemic. Tabletop exercises will familiarize your staff with the plan and will help clarify procedures and identify gaps and weaknesses. Look for opportunities to involve important external stakeholders to build collaboration and trust. vvvv

Throughout the pandemic, convene your Pandemic Steering Committee to review implementation of the plan and update or course correct, as necessary.

WHAT WE LEARNED FROM COVID-19

In March of 2020, few companies believed they were ready for a major pandemic, including a significant number that believed the virus would have little or no impact on their business.

For more information on this topic please click on following links:

- World Health Organization https://www.who.int/teams/risk-communication/employers-and-workers?gclid=CjwKCAiAl4WABhAJEiwATUnEF4V-mlY56Oj7OQ8qO0gx7sVDLM1ormZygacHHXTHHkOcRIp9ylsjCxoCumAQAvD_BwE

- Canadian Centre for Occupational Health and Safety https://www.ccohs.ca/outbreaks/and e-course: https://www.ccohs.ca/products/courses/pandemic_plan/

Towards the end of the pandemic, or immediately after, conduct an After-Action Review to discuss:

- Challenges and surprises.

- Lessons learned.

- What worked well

- Areas for improvement

Create an After-Action Report and revise your pandemic plan.

Business Continuity

This section provides a checklist to consider when building pandemic-readiness into your business continuity plan.

Pandemics pose unique challenges to continuity of operations. Your pandemic plan should address how you will continue essential business operations over an extended period, potentially as long as 1-2 years.

Employee Health and Safety

The health and safety of your employees is paramount. They need to understand what your organization is doing to support their physical and mental well-being during the pandemic:

- How will you keep your employees safe and healthy? What steps do you need to take to educate them about the virus and their personal responsibilities?

- How will you manage critical functions if a high percentage of your employees are mentally or physically unwell (or need to devote time to parents or children)?

- Do your HR policies cover pandemic related issues (considering privacy and charter rights)?

- Can you accommodate requirements and concerns around physical distancing?

- What mental health resources are available for employees?

- How will you communicate and obtain feedback (ideas, questions, concerns)?

- Do you have up-to-date personal contact information (cell, email...)?

- What is your business continuity, awareness, engagement, and effectiveness strategy (e-learning modules, videos, team meetings...)?

Operations

One of the challenges of a pandemic is that what is known about the virus evolves over time. Public health advice and government legislation may change over the course of the pandemic, impacting your business:

- What are your business-critical functions?

- What needs to be prioritized? What services could be

stopped for a period of time? How long can they be suspended?

- How will day-to-day business operations change? How will you accommodate stay-at-home orders?

- What tools and resources will you need more (or less) of, for new ways of doing business?

- What is needed to keep people and property safe, healthy, and secure?

- As more work is done remotely, how do you ensure cybersecurity?

- Will all or part of your business be deemed an "essential" service?

External Stakeholders

Tenants, clients, contractors, service providers and government agencies will be going through the same issues, at the same time. Consider the impact of these external stakeholders on your organization:

- What will be the impact on building occupancy, retail operations and other services you provide?

- What services and supplies will you need more of, or less of? What contingency plans do you need to put in place? Have critical suppliers developed their own pandemic continuity plans?

- What impact will the reduction in staff in government and regulatory bodies have (permits, approvals, inspections…)?

- Can you seamlessly redirect incoming phone calls?

- What process do you need to understand and implement evolving pandemic guidelines, rules, and regulations?

- What legal obligations do you have to service providers, clients, and others that may be affected? And vice versa.

Financial Considerations

Budgeting will be challenging at both the organization and property management level. Expect the need for financial forecasts to increase. Effective management of budgets, cash and spending are a critical component of pandemic planning:

- Work closely with your tenants and suppliers to anticipate the impact of the pandemic on their organizations and the knock-on effect on your cash flow.

- Look for areas to defer or reduce spending.

- Have contingencies and budgets for pandemic related costs.

- Evaluate government loans, incentives, and support programs.

- Communicate regularly with lenders and shareholders (be transparent).

- Do you need additional e-banking processes and security (payments and receipts)?

WHAT WE LEARNED FROM COVID-19

The duration and impact of this pandemic was much greater than generally anticipated, causing major business and social disruptions. Future pandemic plans need to think big.

For more information on this topic please click on following links:

- Canadian Government https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection/guidance-documents/risk-informed-decision-making-workplaces-businesses-covid-19-pandemic.html

- Canadian Centre for Occupational Health and Safety https://www.ccohs.ca/publications/PDF/businesscontinuity.pdf

Communications

This section provides guidelines for effective internal and external communications during a pandemic.

Effective communications is vitally important during a pandemic. People need to hear:

- What has changed.
- What you expect of them.
- How it affects them.
- Care and concern.
- Your organization's new vision of the future.

Your pandemic plan should include a communications section, including objectives, audiences, key messages/FAQs, platforms, approval process, templates, measurement tools, calendar, and budget.

General Principles

Messaging should be timely, accurate, credible, consistent (across all platforms) and relevant. Consider these general guidelines during a pandemic:

- Communications frequency should increase. People invent their own stories in a vacuum. Regularly update your intranet, website, and social media platforms.
- Repetition is necessary. People need to hear new information many times. Provide information in different forms (video, infographic, text…).
- Tailor the messaging and communications channels to fit the diversity of your workforce.
- Keep high-level messages clear and simple. Highlight 2-3 important messages. Place important information (or summary) at the beginning.
- Focus on facts and be transparent. Trust is essential. Ensure your leadership team models the behaviour they ask of others.
- Ask for input (questions, concerns, comments) on decisions affecting stakeholders.
- Show vulnerability and acknowledge the impact of the pandemic. Express empathy and grief.
- Find a positive frame for messages. People pay more attention to "dos" than "don'ts".
- Emphasize your values, culture, and environmental, social, governance (ESG) commitments.
- Senior leadership must remain visible throughout the crisis.

Internal Communications

Major concerns to address are:

- Does this affect the nature of my job, my work arrangements, and my responsibilities?
- Does this affect my compensation or benefits?
- What is the company doing to protect my health and safety?

Workers want company information to find them and not have to go looking for it. In a pandemic, many employees feel they are missing important company news and don't understand new business objectives.

Provide the same information across several channels and let employees choose. Vary the types of content (video town halls, newsletters, CEO blogs…) and encourage feedback. Provide tangential information (e.g. personal hygiene and safety) and don't assume staff will do their own homework.

Coach and encourage supervisors to be two-way information conduits. Employees get a lot of information from co-workers and their boss. This can be an issue when people work from home.

Reinforce communications etiquette. People not used to new communication modes may need training (writing/proofing an effective email, rules for video conferencing…). Policies may need to be updated to promote appropriate content and respectful behaviour.

Celebrate the positives. Showcase employees who adapt to new ways of working. Acknowledge essential workers (e.g. contract cleaners, security staff...). Help your staff help others in the community (e.g. donation matching). This builds company spirit and reduces stress.

External Communications

With added online communications (recorded, searchable, permanent), be aware of context, content, and tone. It is easy to be seen to be "out-of-touch" with social and economic conditions. Only designated spokespeople should speak on behalf of your organization. Review, communicate, and enforce corporate media and social media guidelines.

Update your website and social media platforms regularly. Structure information so that it is easily found by different stakeholders according to their needs. Ensure that critical communications are pinned at the top of feeds on social media.

Communicate positive steps your organization is taking to stop the spread of the virus and protect employees, tenants, and visitors. Ensure people understand how to conduct business with you during a lockdown and make it easy for them.

Property managers need to communicate what they are doing to keep their facility secure, clean, and safe, to employees, tenants, contractors, and visitors. Also:

- Keep building occupants apprised of hours, building access and security arrangements.

- Appropriate signage should reinforce public health guidelines (e.g. distancing, hand sanitization, masks) and rules specific to your facility.

- Be proactive with tenants in order to understand their occupancy status and plans, issues (e.g. rent) and any special needs. The same with service providers, reach out to understand if they are having issues which may affect your plans.

- Provide contact details on information that you provide and encourage feedback.

WHAT WE LEARNED FROM COVID-19

As communication gravitates away from face-to-face contact, reinforce the need for proper etiquette and increase communications awareness as people move to online platforms

For more information on this topic please click on following link:

World Health Organization: https://www.who.int/teams/risk-communication/employers-and-workers?gclid=Cj0KCQiA96 2BBhCzARIsAIpWEL34WSzUHNQybmPero6 pfpyPkV8t7Ax0yl8YI2InPpzL1Otu0blMQW4a AsLrEALw_wcB

HR Employee Health and Safety Considerations

This section provides advice on HR pandemic policies and protocols, employee education and support.

Having the right provisions in place for the health, safety, and wellbeing of your people in a pandemic is critical. We recommend having a Safety Protocols Guide to standardize and communicate responsibilities, and protocols that your employees must adopt. It should follow guidance from public health agencies. Consider:

- Assigning someone in your organization to be the key liaison between your organization and public health authorities.

- Establishing a cross-functional committee that meets on a regular basis to discuss evolving pandemic protocols, strategies for reintegrating back into the physical workplace, regional nuances, etc.

- Whether employees are site-essential or if they can effectively work from home. What are the exposure and health risks to your employees? Which personnel have a lot of contact with the general public?

Think about how to adapt services and processes using social distancing:

- Avoid face-to-face meetings whenever possible. If an in-person meeting is required, keep the meeting short and select a large meeting room.

- Use of personal protective equipment.

- Choose remote network technologies/devices to communicate with others (e.g., virtual/online).

- Modify, delay, or cancel in-person workshops and training sessions.

- Leave gaps between shifts and ventilate workspaces between shifts.

HR Policies & Protocols

When developing your health and safety protocols, include pandemic-specific information pertaining to:

- Employee Travel – follow government/public health guidelines.

- Employee Absence:

  - Follow public health guidelines for employees experiencing symptoms, who have had close contact or potential exposure to the pandemic related illness.

  - Encourage employees with pandemic related symptoms (or exposure) to stay home. Note, health authorities discouraged employers from asking for doctor's notes during COVID-19 as it might discourage sick people from staying home.

  - Develop procedures for employees who fall ill at work (following public health guidelines).

- Employee Return to Work – follow public health guidelines and determine what type of medical clearance you will require before the individual is able to return to work.

- Vacation policy, review and update if needed (e.g., vacation carry-over).

- Workplace Accommodation policy, such as modified duties, altering work location or scheduling, providing time-off, changing workstations, providing equipment, and other measures designed to assist employees overcome barriers and remain productive on the job.

Education/Support

Informed employees, who feel safe at work, are less likely to be absent:

- Consider a web-based employee forum to answer questions and address concerns about pay, leave, and health and safety.

- Provide training, education and materials about

business-essential job functions and employee health and safety, including proper hygiene practices and the use of personal protective equipment (PPE) in the workplace.

- Make information available in formats for individuals with sensory disabilities and/or limited English/French proficiency.

- Provide information and/or training to support employees with mental health issues/concerns and to manage pandemic stress. This includes distress related to personal or family illness, life disruption, grief related to loss of family, friends or coworkers, and loss of routine support systems. Provide options for support and counselling.

- Regularly communicate with employees and emphasize available resources, e.g., training and support.

- Engage with your Employee Assistance Program to arrange counselling, training and resources on mental health and resiliency in a pandemic.

Equip your managers with the "policies and protocols" document and ensure they can effectively execute it.

Immunizations

Organizations should create positive messaging to reinforce that we all have a responsibility to get vaccinated. Here are some supporting strategies:

- Make it Easy – provide employees time off to get vaccinated.

- Keep it Positive – accentuate the positive outcomes and repeat messaging from public health authorities.

WHAT WE LEARNED FROM COVID-19

Promote employee mental health supports. Infected employees have expressed feelings of anxiety about having potentially exposed others in the workplace.

For more information on this topic please click on following link:

World Health Organization: https://www.who.int/campaigns/connecting-the-world-to-combat-coronavirus/healthyathome/healthyathome---mental-health?gclid=Cj0KCQiA962BBhCzARIsAIpWEL3Q0gRNmL64mEsMIrVBakn2UUoTCvKKNeyfw10yxvGQxiernjXBO08aAnULEALw_wcB

Information Technology

This section provides some IT advice before initiating working from home, discusses steps to mitigate the rising cybersecurity threat, and the continuing move to make buildings smarter.

For Chief Information Officers (CIOs) and their teams, COVID-19 accelerated the transition to an increasingly digital workplace. Many of these trends will continue, however ongoing consideration of issues created by future pandemics should include:

- Cybersecurity and single points of failure.

- Hardware/software requirements due to work-from-home measures.

- Cloud based tools and applications, and scalability.

- Help desk capacity and online FAQs and support.

All of us need to ensure we have the right hardware and software to work from home, know how to access company data and programs, and understand rules and security protocols:

- Be prepared to work from home. Know how to login remotely, change your password, and access work related data, emails, and applications. Bring your laptop home in case you suddenly need to work remotely.

- Make sure non-company devices are approved for use and set up with appropriate software, access, and security. Your company should have a process to transfer calls (and voicemail) from your work number to a company cell phone (or provide a home landline).

- Your help desk may be overwhelmed. Understand the priority system for requests. Your intranet site should have a list of common IT issues and how to resolve them.

Cybersecurity

As organizations adapted to different ways of working during a pandemic, they faced increasing cybersecurity threats. Ongoing updates of cybersecurity protocols and plans should include pandemic related scenarios.

During COVID-19 many companies shifted virtually everything to the cloud, leveraging third-party service providers to provide on-demand and scalable work solutions. Smart phones and laptops are now a business-staple, and the concept of 'bring your own device' has become widely adopted.

Cyber fatigue often lulls us into complacency. We are constantly reminded to create strong passwords and update them regularly, never click on suspicious emails, don't trust password reset functions, be careful with public Wi-Fi and notify others if hacked… Good digital safety habits are critical.

In commercial buildings, cyber threats exist not only through regular computer systems, but also through internet-connected building systems such as elevators and HVAC systems, amongst others.

Here are some organizational tactics to strengthen cybersecurity during a pandemic:

Zero-Trust policy

We can no longer verify and validate an individual within the walls of an office building or ensure that they are using corporately controlled and secured devices. As a result, everything should be set by default to zero trust, unless appropriate authorization and verification is completed.

Are you who you say you are?

Enforcing strong passwords and multi-factor authentication is critical to defend your organization from credential stuffing (credentials stolen to gain unauthorized access) and phishing attacks.

Remote access – No remote desktop protocol

With a remote workforce, organizations are in a race to ensure users have access to systems and applications remotely. We do not recommend making remote desktop

protocol (RDP) accessible directly via the Internet. Protect access with virtual privacy networks (VPNs) and multi-factor authentication.

Ongoing monitoring and detection

Analyze user behaviour for your accounts and your third-party service providers and other forms of suspicious data patterns in real-time so that potential cybersecurity threats can be addressed through a combination of user behaviour anomaly detection (UBAD) and network detection and response (NDR) tools.

Cloud access security brokers and gateways

Protect employees using mobile devices and working remotely by using cloud access security brokers (CASB) and cloud security gateways (CSGs). CASB and CSG solutions can help control and enforce secure access to cloud applications and prevent mobile devices from accessing harmful content on the internet.

Smarter buildings

The pandemic accelerated the move towards smarter buildings. Technology that was once "nice-to-have" is being implemented to create healthier, pandemic-ready buildings. This may be a competitive edge in attracting and retaining tenants:

- Touch-free entry systems can be set up to interface with access cards and personal devices. This may save some money spent on surface sanitization. It also allows you to monitor the number of people entering the building.

- Occupancy sensors can be connected to elevators, doors, and turnstiles to limit entry once capacity limits are reached (connected to digital signage to let people know what is going on). These sensors also can link into lighting controls, notify cleaning staff, and allow you to turn parts of your facility's plant off and on.

- Cleaning systems are becoming less labour intensive with robot vacuums, auto scrubbers and automated washroom systems.

As this technology is integrated into a building analytics system, it can be a springboard to zero carbon.

WHAT WE LEARNED FROM COVID-19

The majority of cyberattacks were enabled using stolen remote desktop protocol (RDP) credentials. Companies must continue to invest in remote-friendly technologies and employee-accessible digital resources so that staff at all levels can work remotely.

Security and Life Safety

This section outlines some considerations to deal with safety and security issues in a pandemic.

Most large organizations have a form of a Security & Life Safety Risk Management Plan ("Plan") which aligns corporate policies with building operations and compliance requirements. This Plan results from a holistic assessment of any threats or hazards that may affect the property, leading to decisions on appropriate countermeasures to mitigate risks or to establish better methods to respond to them. This assessment should also include pandemic risks to building operations, where property managers and their duty-of-care are on the frontline.

In parallel, there are benefits to gaining a better understanding of the incident management system used by federal or provincial authorities applicable to your jurisdiction. Ideally, their methodology should be integrated into your overall Emergency Plan.

Plan input should engage property management with their in-house or contract teams, including security, property, operations, maintenance, engineering, and cleaning staff. The Plan should consider pandemic risk factors that may contribute to emotional distress, escalated confrontation, physical harm to people, or property damage. The principles of Security and Life Safety Risk Assessment are:

- What is likely to bring significant harm to persons or damage to the property?

- Vulnerabilities specific to likely risks at the property.

- Consideration of potential consequences by not mitigating or failing to better prepare for the identified risks.

Many risk factors can come into play when "just-in-time" resources or services may be seriously diminished, including public emergency services. Plan so that security personnel deployment, training, physical equipment, personal protective equipment, security systems, and procedures can be put into place ahead of an incident.

The Plan will help keep everyone on the same page, recognizing that it is unreasonable to expect to prevent all harm or property damage:

- Have a clear process for security personnel to immediately communicate emergencies or crisis incidents. Have templates for detailed incident reports (attach all relevant evidence, e.g. video images). Statistics and trends should be discussed regularly.

- Provide guidelines on issues that must be communicated on a 24/7 basis, affording tolerance for 'over-reporting' by security personnel.

- Have a clear chain of authority and a decision-making process that allows for quick thinking and reasonably considered procedural innovation during challenging conditions.

- As the pandemic subsides, chronicle findings and actions, which will be useful in any later external examination of your response during an event. Your Plan will demonstrate management's due diligence.

Here is a partial list of issues and considerations for your Plan:

- Meet weekly with your security operations team to review pandemic-related issues and concerns, including prioritizing "calls-for-service", incident report completion, protocols for infected persons, first-aid response and supplies, radio communications, video management procedures/privacy issues, access control, fire evacuation or shelter-in-place protocols.

- Plan for absences and keep your team informed of new health and safety directives. Work with law enforcement and monitor social media for threats, rumours, local crime trends, and social unrest. Don't hesitate to notify police of suspicious activity.

- Provide an orientation program for temporary or replacement security personnel assigned to the

property. Give all staff a digital incident management guide.

- Encourage frequent incident management drills, or table-top exercises in collaboration with property management, security personnel and other stakeholders.

- Security personnel must be vigilant in sanitizing shared equipment. Stagger employee entry and exits to promote social distancing.

- Ensure that all required licenses, first aid/CPR and other certifications are kept up to date.

- Have protocols for security patrols and surveillance of property surroundings/ perimeter, entrances (doors & locks) and exits, loading docks/parking, interior space, and retail storefronts & kiosks. This includes oversight of fire & life safety equipment and systems and key supplies.

- Security personnel should help monitor compliance with pandemic guidelines and inform management of deficiencies.

- The security team should adopt a "reasonable" customer-service orientation with the public. Provide training to deal with people with disabilities, emotional distress… and practice de-escalation for confrontational situations which might arise in a pandemic.

- Prioritize communication with public emergency services for any serious incident, clearly understanding the limitations of your team compared to law enforcement.

- If a full or partial property lockdown is foreseen, the following link will lead you to a helpful checklist: http://bomacanada.ca/wp-content/uploads/2020/04/2020-04-02-COVID-19-BOMA-Toronto-Extended-Building-Closure-Checklist-FINAL.pdf

With any third-party security contractor - review:

- The entire Security Contract and any issues or concerns, with a sign-off on property procedures.

- Any difference between respective pandemic policies and procedures (e.g., how they intend to maintain staff levels or provide extra personnel).

- All security personnel licenses, mandatory completed training, and first-aid certifications. Confirm insurance coverages. Have a process to ensure these requirements are always up-to-date.

- Security personnel uniforms, deportment, personal protective and other equipment.

Also:

- Consider any union contract imperatives that may affect your expectations.

- Agree to meet weekly with the Contract Site Supervisor and at least monthly with the Contract Account Manager.

- Ensure that all 24/7 emergency contact numbers are up-to-date.

- Develop separate agreements with other third-party security service providers, to ensure priority access to additional personnel if required.

Consider engaging a professional Security & Life Safety Risk Management consultant to assist you with your plan and implementation.

WHAT WE LEARNED FROM COVID-19

Social issues such as increased transient populations, protests (in and adjacent to properties) and resistance to public health orders reinforced the need for appropriate in-house training in de-escalation techniques and cooperation with law enforcement.

Supplies and Suppliers

This section gives advice on what supplies to have on hand, the need to identify critical suppliers and weak links in your supply-chain early on.

The COVID-19 pandemic shed light on many untested parameters within pandemic and business continuity plans. For example, there were early shortages of needed materials as suppliers had their own supply-chain issues. Some integrated suppliers sidestepped this by ramping up manufacturing capacity.

Early in a pandemic, public health authorities will recommend personal safety measures. These recommendations can spiral the demand for critical items such as hand sanitizer, hand soap, paper towels, and specific disinfectants. Without careful planning, access to these items may be difficult.

Hand Sanitizer

Understand what to buy, how to store it and where to place it:

- Ensure the product has at least 60% alcohol content for effective virus control.

- Ensure the product is approved by the Public Health Agency of Canada.

- Consider expiry dates when deciding to stockpile. Shelf life can range between 1-3 years depending on the product and storage conditions.

- Because of the alcohol content, it should be stored away from high temperatures and flames to reduce fire hazard.

- Position dispensers at building entrances and exits (including service entrances and exits). Also consider placement for people with disabilities.

- Consider the capacity of dispensers (and refillable dispensers), so that the sanitizing agent does not frequently run out. In a larger building, you may want to store a few extra dispensers, to be used as necessary. Theft of hand sanitizer was an issue early on.

- Place dispensers in mechanical and electrical penthouse rooms, elevator machine rooms, main janitor service rooms, etc. Third party contractors move from building to building.

We recommend signage reminding people to thoroughly and frequently wash their hands.

Supplies & Equipment

Additional pandemic supplies you may wish to keep on-hand include:

- Tissues.

- Garbage containers for used tissues.

- Disposable disinfectant wipes.

- Additional cleaning supplies.

- Additional washroom waste receptacles.

- Additional waste receptacles for disposable masks and/or gloves.

- Signs/Signage (maximum occupancy, social distancing, traffic flow, pick up...).

- Temporary barriers and screens.

Supplier Considerations

In planning for a pandemic, identify your critical suppliers and any "single points of failure" (i.e., vendors who, if they fail to deliver their goods or services, could negatively affect your business).

Review your service provider agreements to determine if you can use alternative suppliers if there is a supply disruption. Identify backup suppliers and initiate agreements with them. Ensure that "single point" vendors are aware of your strategy and understand it will only be implemented if they are unable to meet minimum performance standards.

WHAT WE LEARNED FROM COVID-19

Plan early, react and digest information about the changing dynamic to begin sourcing suppliers who are able to deliver high-demand products before shortages render them inaccessible.

Ensure your critical suppliers have pandemic plans of their own. Ask for details about their planning:

- What does their plan include? Have they tested their pandemic plan? When was it last updated?

- Have they identified their critical suppliers? Have they identified backup suppliers?

- How have they trained staff? How will they handle a diminished workforce?

- How will they handle restricted transportation?

- Where does your company rank on their priority list? How will they communicate with you and how frequently?

- Do they have the ability to divert product to alternate warehouses?

- Can they adopt local procurement strategies in case of border restrictions or closures (e.g., manufacture chemicals locally versus getting them from international suppliers)?

Distributors with diverse locations and capacity often have greater ability to ensure product delivery. The larger your supplier's vendor base, the better ability they have to secure supply.

Also consider that governments may direct critical items to prioritized service providers (e.g., hospitals) and that other agreements may supersede your agreements.

Air Quality

This section discusses various air filtration technologies to help improve air quality and occupant safety in your facility.

Air quality concerns (e.g. the spread of infected respiratory droplets) during a pandemic mean that heating, ventilation, and air conditioning (HVAC) systems will continue to be a focus area. These systems provide indoor air quality to maintain comfort, dilute and remove contaminants from indoor air, and provide proper building pressurization.

The American Society of Heating, Refrigeration, and Air-Conditioning Engineers (ASHRAE) has published a position paper relevant to pandemic planning. ASHRAE notes that many infectious diseases are transmitted through inhalation of airborne infectious particles termed "droplet nuclei" which can be disseminated through building ventilation systems. See https://www.ashrae.org/file%20library/about/position%20documents/pd_infectiousaerosols_2020.pdf

It recommends considering dilution ventilation, specific in-room flow regimes, room pressure differentials, personalized and source capture ventilation, filtration, and ultraviolet germicidal irradiation (UVGI) in a pandemic. We recommend that building owners/managers work with professionals to understand your site conditions, proper installation and operations, and system limitations.

Four technologies to consider are Filtration, Dilution Ventilation, Purification and Occupant Management Systems.

Filtration

Develop a filtration strategy based on space utilization. Upgrading filtration without understanding the impact on HVAC systems could harm equipment and may reduce the ventilation rate (resulting in higher risk of airborne disease transmission). When upgrading your building's filtration system, work with engineers and consider the potential impact on air flow, equipment life and maintenance. ASHRAE provides a step-by-step approach in their building readiness guide on how to assess and upgrade filters.

Dilution Ventilation

Dilution of indoor contaminants by outdoor air ventilation is one of ASHRAE's recommended strategies to reduce the risk of airborne disease transmission. However, it is important to combine this ventilation with appropriate filtration and pressurization controls. Increasing the amount of outdoor air can put stress on the heating and cooling operation of the HVAC system, which will increase energy consumption, and may reduce equipment life. Introducing a higher level of outdoor air pollution may decrease indoor air quality, which should also be considered.

Purification

UV-C radiation, when applied properly, can inhibit the reproduction of micro-organisms. Combining ultraviolet germicidal irradiation (UVGI) with proper filtration & ventilation strategies can further reduce the risk of indoor airborne disease transmission. Proper PPE is required in handling and maintaining UVGI equipment.

Ensure operation and maintenance schedules for HVAC systems are in place, performed and monitored before a pandemic. During a pandemic, air control strategies may need to be altered and/or isolated if an area in your building is potentially impacted by infectious particles. An example of a pandemic air control would be utilizing 100% outdoor air, highly filtered in potentially infectious areas.

ASHRAE recommends the principle of "Equivalent Outdoor Air" to evaluate the combined effectiveness of different air cleaning technologies as part of building re-occupancy planning.

Occupant Management

Many Smart Buildings have occupant management systems that provide deep insights into occupant behaviours. A well-designed occupant management platform leverages technology such as video analytics, real time locating systems (RTLS), people counting and thermography imaging, etc. Designed and implemented properly, this system could serve as the first line of defense in supporting pandemic risk management. For example, monitoring the use of mandated masks, detecting elevated body temperature, and adherence to proper physical distancing. We recommend that building owners/managers work with engineers and Master System Integrators (MSI) when exploring the potential of deploying occupant management technologies.

WHAT WE LEARNED FROM COVID-19

Engineers and contractors can help you understand your site conditions, proper installation and operations and system limitations, which can save you money, lead to more effective HVAC operations, and help you prepare for the next pandemic.
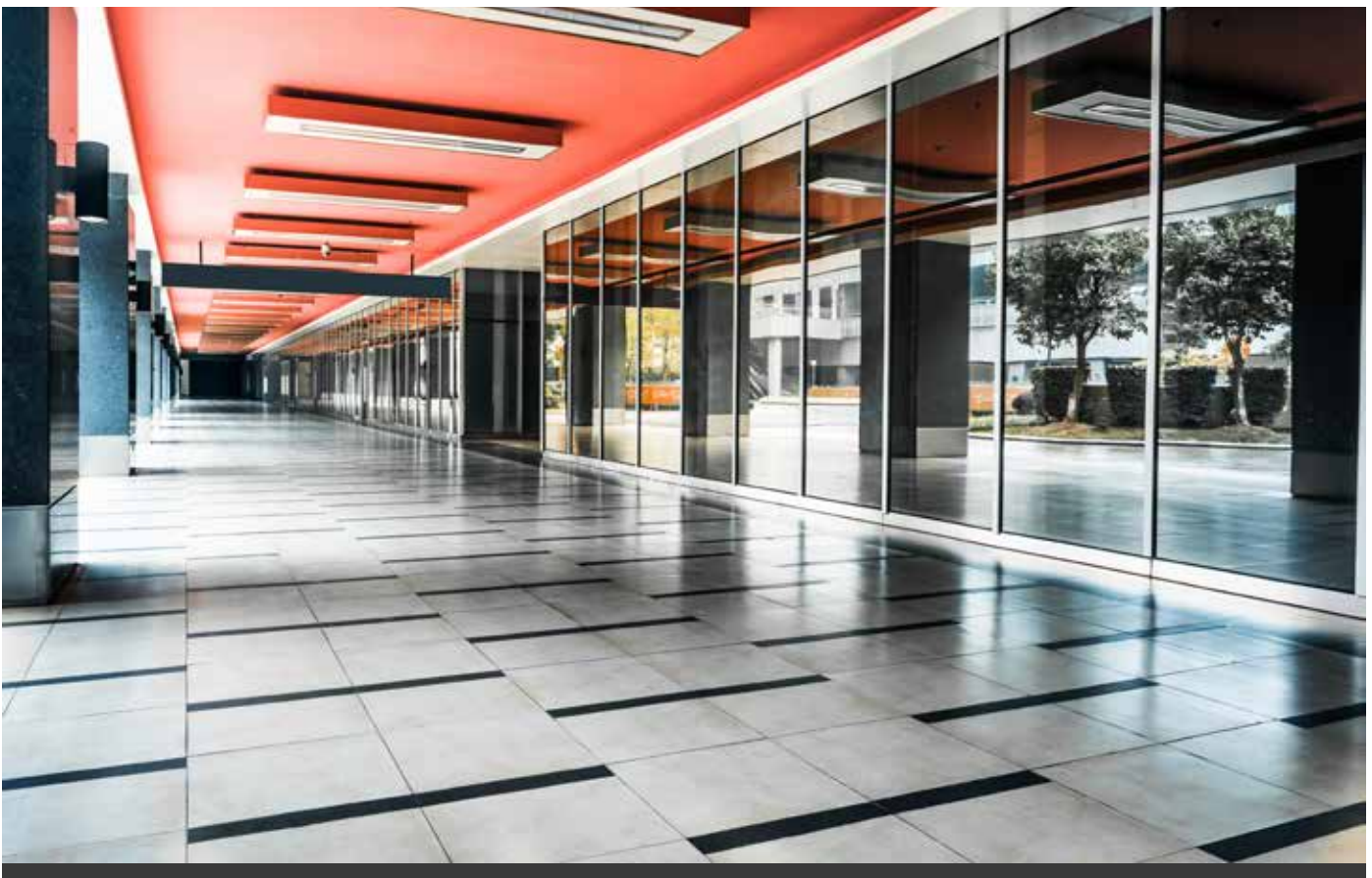
Cleaning and Disinfection

This section offers ideas for fit-for-purpose cleaning during a pandemic, helping to ensure your facility is clean and safe and optimizing your cleaning costs.

Cleaning is a major expense (affecting virtually everyone in your building) and requires extra care and attention during a pandemic. Having a cleaning plan based-in science and tailored to your building will lower risk, demonstrate your duty of care, and optimize cleaning costs and effectiveness.

As you adjust your cleaning service, understanding the nature of the pandemic will help develop effective and efficient protocols. How is the virus transmitted? How infectious is it? How long can it live on surfaces? How robust is it?

Public health agencies publish cleaning and disinfection guidelines. These include proper process, chemicals, and equipment. For example, surfaces must be cleaned before sanitization (a virus can hide under a speck of dust). Ask your cleaners to review these periodically because recommendations can change.

Ask in-house or third-party cleaning specialists to explain (and sign-off on) their pandemic cleaning process, training, and tools. Examine supply chain and staffing issues faced by you and your service provider. The go-forward plan should be scalable, accounting for periods of low occupancy, pre-occupancy, and re-occupancy. Other items to discuss include:

- Cleaning risks and challenges in your facility.
- Pandemic-specific cleaning specifications/KPIs/ protocols.
- Reprioritized work loading and manpower schedules.
- Flex work-loading options and budgets.
- Adjusted quality control (QC) and reporting

Elements that will influence your cleaning tactics are:

- Building occupancy and traffic patterns.
- High-risk populations in your building (e.g., medical offices).
- Public health guidelines and community infection rates.

You may need additional resources for touchpoint cleaning and sanitization during the day:

- Have a schedule for, and checklist of, high-traffic touchpoints.
- Make sure day porters are visible and seen cleaning (near elevators, lobbies, and entrances) during peak traffic periods to help instill confidence.

As occupancy rates decrease, look at the what, why, where, when and how of your nighttime cleaning. Task and frequency-based protocols should be replaced by fit-for-purpose, performance-based cleaning schedules. Cleaners shouldn't be cleaning and recleaning vacant, already clean spaces – wasting money.

Before reducing evening cleaning staff:

- Review your stacking plan, vacant space, cleanable square footage and apply standard cleaning productivity rates for most area and room-types.
- Ensure that staff can be recalled as needed. Ask your contractor to retain key/experienced people who know your building.
- Don't reduce supervisory staff, they are needed to ensure the right deployment of resources.
- Don't reduce your service provider's overhead, incentivize them to perform.

Ask for proof that frontline cleaners have been trained in proper safety techniques so that they don't inadvertently spread contamination through poor practices or improper tools (also, they are vulnerable).

Consider hygiene testing. Surfaces that look clean, may not be hygienic. While ATP swabs and/or biomass imaging technology do not specifically identify a virus, they can

tell you if a surface has been sanitized to acceptable/safe levels. Test results should be shared with cleaning staff to improve cleaning practices, followed by retesting.

Do not ask your regular cleaning staff to conduct decontamination activities in the event of a known infection. Hire an expert who can provide an incident site-risk assessment, pre-disinfect, conduct forensic cleaning (with professional disinfection) and a post-site assessment.

Consider ways to reduce your cleaning requirements in high-traffic areas:

- Shut down interactive touch screens.

- Provide hand sanitizer and signage adjacent to door handles and elevator buttons.

- Consider technology, such as anti-microbial shields, UV, automated washroom systems...

Tell tenants, employees, and visitors about your enhanced cleaning measures. For example, hygiene test results can support messaging and provide proof-points that your surfaces are safe.

If you don't have the expertise or time to review/ audit pandemic related cleaning protocols, consider an independent third-party cleaning advisor to support you.

What we learned from COVID-19. Frequent touchpoint cleaning is recommended to mitigate surface transmission.

For more information on this topic please click on following links:

Government of Canada: https://www.canada.ca/en/public-health/services/publications/diseases-conditions/cleaning-disinfecting-public-spaces.html

Acknowlegdements

For further information about the guide, please contact:

BOMA Canada
1 Dundas Street West, Toronto
Ontario, Canada M5G 1Z3

info@bomacanada.ca

Ce rapport est disponible en français.

BOMA Canada
www.bomacanada.ca