

Recovery Overview

Comprehensive Business Continuity Management (BCM) planning is a vital component of ensuring the successful response to and recovery from a significant business interruption. BCM is comprised of four key components: emergency response (life safety), crisis management & crisis communications, information technology disaster recovery, and business unit continuity planning. The following checklist outlines key parts of an enterprise-wide response and recovery process, including specific measures to address the potential impact of COVID-19.

Before initiating substantive work on a BCM plan, it is prudent to outline a proposed schedule and budget to ensure the strategies and tactics laid out are reasonable relative to established resource allocation parameters. In the current environment, effective planning in any part of the world now must account for the potential impact of the COVID-19 pandemic on the operational status of individual locations, availability of suppliers, vendors, and first responders, as well as employees assigned critical roles and tasks in crisis management, BCM, and disaster recovery. Furthermore, health and safety considerations must be integrated into plan development and implementation – ideally with the direct involvement of your organization’s designated pandemic team, medical department, human resources director or environmental health and safety director.

✓	Recovery Team
<input type="checkbox"/>	Identify a primary and back-up Crisis Manager. Consider the work status (onsite vs. remote) and closely monitor the availability of each of these designated individuals in light of COVID-19 pandemic.
<input type="checkbox"/>	Identify primary and back-up Recovery Management Team Members. Develop a system to continually monitor their availability given the potential impact of COVID-19 at their locations or in their personal lives.
<input type="checkbox"/>	Establish and notify employees involved in recovery and clarify roles.
<input type="checkbox"/>	Communicate recovery action steps to all employees, including those continuing to work at your facilities and those involved in remote working arrangements.

✓	Risks and Hazards
<input type="checkbox"/>	Identify natural-hazard, technological, strategic, and man-made events that may occur.
<input type="checkbox"/>	Calculate the likelihood of occurrence for each event.
<input type="checkbox"/>	Calculate the resulting possible negative impact your facilities, people, and/or operations.
<input type="checkbox"/>	Anticipate and understand the impacts of potential damages to temporary safety shields and partitions, shift scheduling and other work modifications to accommodate COVID-19 related social distancing requirements on workplaces.

✓	Alternate Location
<input type="checkbox"/>	Locate and confirm an alternate recovery location and back-up location. Assess the measures needed to address new workplace safety requirements in areas affected by COVID-19 pandemic.
<input type="checkbox"/>	Develop relationship with recovery vendor (if appropriate), neighboring businesses, and PPE suppliers.
<input type="checkbox"/>	Assess suitability of existing field locations for recovery.
<input type="checkbox"/>	Set aside space for an emergency command center and ensure that it is equipped with necessary PPE for workers and provides adequate spacing for any social distancing measures as required under local government regulations, agencies, such as OSHA, and industry best practices.

✓ Communications	
	Develop plan to communicate both internally and externally (including the media).
<input type="checkbox"/>	Be prepared to reach workers operating remotely, temporarily at alternative facilities, furloughed workers who were expecting to be recalled, and temporary workers hired to address heightened seasonal or COVID-19 related demand.
<input type="checkbox"/>	If able, contract with an Emergency Notification System vendor to aid in rapid internal communications. If unable create an employee phone tree and store copy(s) offsite. Maintain multiple contact information for each employee to ensure they can be contacted if their work status changes (i.e., facility-based, remote, temporary, furloughed, etc.) due to COVID-19 pandemic.
<input type="checkbox"/>	Record and store external emergency contact information (electric, plumber, insurance, etc.). Ensure this information is readily accessible by key crisis and recovery team members working remotely.
<input type="checkbox"/>	Determine plan for re-routing critical existing phone numbers to alternate locations. Verify the ability of those in alternate locations or working remotely to handle the new influx of calls.
<input type="checkbox"/>	Ensure plan includes multiple methods of communication (text, email, satellite phones, cell phone, etc.).

✓ Employees	
<input type="checkbox"/>	Establish plan for emergency payroll.
<input type="checkbox"/>	Develop password-protected online site, email or a voice-recording emergency communication system.
<input type="checkbox"/>	Engage employees with disabilities in emergency planning.
<input type="checkbox"/>	Engage and maintain contact with injured workers, those suffering from COVID-19 and those under quarantine due to COVID-19 exposure.

✓ Technology and Data	
<input type="checkbox"/>	Document technology hardware, software and licensing information.
<input type="checkbox"/>	Develop technical recovery procedures to be followed in the event of an interruption.
<input type="checkbox"/>	Determine and list individuals/vendors to manage technical recovery; be sure to identify back-up support teams who can be available and deployed to your site in light of the pandemic.
<input type="checkbox"/>	Conduct frequent checks on the status of these firms and experts in light of the COVID-19 pandemic.
<input type="checkbox"/>	Determine source for back-up technical resources (Smart phones, PCs, servers, printers, etc.). Carefully monitor their continued availability during the pandemic.
<input type="checkbox"/>	Document critical data to be restored and back-up all data at off-site location.

✓ Operations	
<input type="checkbox"/>	Via a formalized Business Impact Analysis, identify & document critical business functions.
<input type="checkbox"/>	Develop plan to restore critical business functions.
<input type="checkbox"/>	Identify employees responsible for restoring each critical business function. Establish list of back-ups in event designated employees aren't available due to COVID-19 exposure or infection.
<input type="checkbox"/>	Create senior-level crisis management plan (strategic analysis & decision-making).
<input type="checkbox"/>	Develop plan for expedited financial decision-making and disaster cost tracking.
<input type="checkbox"/>	Review insurance coverage and assure it is adequate for all possible disasters.

✓ Supply Chain	
<input type="checkbox"/>	Identify key vendors based on criticality of service, information, &/or material provided.
	Develop plan to communicate with key vendors and suppliers.
<input type="checkbox"/>	Maintain contact with these vendors and suppliers, and continually monitor their resiliency in the face of the COVID-19 pandemic. Identify alternatives based on the potential that COVID-19 might impact their business and continuing operations.
<input type="checkbox"/>	List key clients, suppliers, and critical recovery contacts and store copy(s) offsite. Use this list against and clients, suppliers and contacts in areas directly affected by COVID-19.
<input type="checkbox"/>	Survey key vendors and suppliers as to their response and recovery programming, including preparedness and response to COVID-19 exposures.
<input type="checkbox"/>	Investigate and, if appropriate, develop relationships with alternate suppliers in case primary vendors are unavailable.

✓ Safety	
<input type="checkbox"/>	Assemble disaster recovery kit.
<input type="checkbox"/>	Create and exercise evacuation and shelter-in-place plans. Be sure all facilities are equipped with adequate supplies of hand sanitizers and PPE and that sanitizers are safely secured and stored in fire-protected locations.
<input type="checkbox"/>	Create an emergency shelter plan that includes COVID-19 safety measures.

✓ Testing and Maintenance	
<input type="checkbox"/>	Exercise the disaster recovery and business continuity plan. Include modules with scenarios where the disaster event is coincidental to a COVID-19 outbreak.
<input type="checkbox"/>	Conduct a post-exercise review and report results.
<input type="checkbox"/>	Communicate changes in plan, especially any and all modifications and special procedural requirements arising from COVID-19, to responsible parties (e.g., management, employees, vendors, customers).

Recovery Kit

Preparing several emergency recovery kits and making them easily accessible will help expedite restoration procedures. This checklist provides a breakdown of necessary items to initiate recovery. One of the primary functions of any recovery kit should be protecting the important records and emergency items in order to ensure a smooth reconstruction of vital information and operations following any disaster.

	Included			
Description	Yes	No	Quantity	Task Assigned To
Business Continuity Plan Important Records				
Insurance Policies	<input type="checkbox"/>	<input type="checkbox"/>		
Inventory	<input type="checkbox"/>	<input type="checkbox"/>		
Vital records and equipment inventory	<input type="checkbox"/>	<input type="checkbox"/>		
Critical IT assets	<input type="checkbox"/>	<input type="checkbox"/>		
Contracts	<input type="checkbox"/>	<input type="checkbox"/>		
Employee Contact Information	<input type="checkbox"/>	<input type="checkbox"/>		
Key Vendor Contact Information	<input type="checkbox"/>	<input type="checkbox"/>		
Onsite Contractor Contact Information (Security, Construction, Cleaning and Maintenance)	<input type="checkbox"/>	<input type="checkbox"/>		

Operating System Installation Disks/Software Licensing Keys/Office Supplies				
Software installation downloads	<input type="checkbox"/>	<input type="checkbox"/>		
Software licensing keys	<input type="checkbox"/>	<input type="checkbox"/>		
Hardware serial numbers	<input type="checkbox"/>	<input type="checkbox"/>		
Stamps	<input type="checkbox"/>	<input type="checkbox"/>		
Writing utensils & notepads	<input type="checkbox"/>	<input type="checkbox"/>		
Stapler & staples	<input type="checkbox"/>	<input type="checkbox"/>		
Tape	<input type="checkbox"/>	<input type="checkbox"/>		
Printer paper	<input type="checkbox"/>	<input type="checkbox"/>		
Calculators	<input type="checkbox"/>	<input type="checkbox"/>		
Letterhead	<input type="checkbox"/>	<input type="checkbox"/>		

	Included			
Description	Yes	No	Quantity	Task Assigned To
Emergency Items				
Cash	<input type="checkbox"/>	<input type="checkbox"/>		
Water (one gallon per person, per day)	<input type="checkbox"/>	<input type="checkbox"/>		
Map of the local area and directions to alternate location	<input type="checkbox"/>	<input type="checkbox"/>		
Three day supply of non-perishable food	<input type="checkbox"/>	<input type="checkbox"/>		
Battery powered/crank radio	<input type="checkbox"/>	<input type="checkbox"/>		
Flashlight	<input type="checkbox"/>	<input type="checkbox"/>		
Extra batteries	<input type="checkbox"/>	<input type="checkbox"/>		
First aid kit	<input type="checkbox"/>	<input type="checkbox"/>		
Whistle to signal for help	<input type="checkbox"/>	<input type="checkbox"/>		
Can opener for food (if kit contains food)	<input type="checkbox"/>	<input type="checkbox"/>		
Blankets	<input type="checkbox"/>	<input type="checkbox"/>		
PPE (protective face masks, goggles and gloves)	<input type="checkbox"/>	<input type="checkbox"/>		
Hand sanitizer	<input type="checkbox"/>	<input type="checkbox"/>		

Sanitation				
Dust/filter masks	<input type="checkbox"/>	<input type="checkbox"/>		
Moist towelettes	<input type="checkbox"/>	<input type="checkbox"/>		
Plastic garbage bags	<input type="checkbox"/>	<input type="checkbox"/>		
Paper towels	<input type="checkbox"/>	<input type="checkbox"/>		
Hazardous/Infectious Materials Disposal (e.g., for disposal of used COVID-19 masks, gloves, PPE)	<input type="checkbox"/>	<input type="checkbox"/>		

Tools				
Duct tape	<input type="checkbox"/>	<input type="checkbox"/>		
Pocket knife	<input type="checkbox"/>	<input type="checkbox"/>		
Wrench or pliers to turn off utilities	<input type="checkbox"/>	<input type="checkbox"/>		
Screwdriver	<input type="checkbox"/>	<input type="checkbox"/>		
Lighter/matches (sealed in plastic bag)	<input type="checkbox"/>	<input type="checkbox"/>		

Grab & Go Kits for Employees				
Medications	<input type="checkbox"/>	<input type="checkbox"/>		
First aid kit	<input type="checkbox"/>	<input type="checkbox"/>		
Cash	<input type="checkbox"/>	<input type="checkbox"/>		
Emergency contact information	<input type="checkbox"/>	<input type="checkbox"/>		
Feminine hygiene products	<input type="checkbox"/>	<input type="checkbox"/>		
PPE (masks, gloves and goggles if appropriate)	<input type="checkbox"/>	<input type="checkbox"/>		
Hand sanitizer	<input type="checkbox"/>	<input type="checkbox"/>		

Hurricane Preparedness

Hurricanes generate a variety of threats to lives and property. The most obvious is the threat posed to buildings, equipment, and people by the high winds which characterize such storms.

This checklist will help you prepare for a hurricane's effect on your business, employees, and community by highlighting activities you should undertake before, during, and following the event. When the National Oceanic and Atmospheric Administration's National Hurricane Center issues a watch or warning, use the time available to begin taking the following steps.

✓ Follow CDC Directed Health Safety Hurricane Protocols for COVID-10	
<input type="checkbox"/>	Encourage employees to perform daily health checks and continue social distancing before, during, and after the storm, especially if they leave the company site to evacuate.
<input type="checkbox"/>	Encourage employees to wear cloth face coverings, as well as have extra face coverings for themselves and family members during the hurricane response.
<input type="checkbox"/>	Direct employees that evacuate to self-quarantine for 14 days upon returning to the area and before coming to the reopened workplace.
<input type="checkbox"/>	Update policies and practices for social distancing, face coverings, frequent handwashing/hand sanitizing, site cleaning/disinfecting in the workplace, how to manage employee illness on-site upon return after storm.
<input type="checkbox"/>	Inspect and maintain the building ventilation system upon return to the workplace.

✓ Before The Storm	
<input type="checkbox"/>	Stay up-to-date on the storm's progress via radio, TV or NOAA Weather Radio All Hazards receiver.
<input type="checkbox"/>	Determine safe evacuation routes inland as well as alternative routes.
<input type="checkbox"/>	Review your Shelter-In-Place plan, making sure your Disaster Kit is fully stocked, fresh batteries & supplies are included, and that any modifications needed to address COVID-19 requirements have been addressed. These include social distancing, the availability and use of PPE and hand sanitizers.
<input type="checkbox"/>	Ensure you have an emergency communication plan in place prior to the storm, evacuation, or threat, and that it addresses any modifications to your work environment arising from the COVID-19 pandemic, such as modified work hours and arrangements, increased number of shifts, greater number of temporary workers to accommodate increased demand, increased sanitation and cleaning staff, and the presence of contract construction workers onsite to install plexiglass partitions and retrofit workspaces to address COVID-19 exposures.
<input type="checkbox"/>	Backup all data on servers and personal computers. If the backup site is within the area that may be affected by the storm, take backup tapes with you in the evacuation.
<input type="checkbox"/>	Turn off all non-critical devices, such as server monitors and workstations and other non-essential electrical equipment.
<input type="checkbox"/>	Check the integrity of the uninterruptible power supply (UPS). Move the UPS to the highest level possible above the floor.
<input type="checkbox"/>	Inspect and make emergency repairs to drains, gutters, and flashing.
<input type="checkbox"/>	Strap or anchor to the roof deck support assembly (e.g., the joists) all roof-mounted equipment such as HVAC units and exhaust vents.
<input type="checkbox"/>	Alert a third party about your company's relocation plan in the event the storm makes your location inaccessible.
<input type="checkbox"/>	Protect/relocate vital records, including your insurance policies.
<input type="checkbox"/>	Install windstorm shutters/plywood over windows and doors.

<input type="checkbox"/>	Take the following steps so that items outdoors will not blow away or cause damage: - Remove all loose debris. - Anchor or relocate all nonessential equipment to a safe indoor location. - Secure storage of flammable liquid drums, or move them to a sheltered area (but never into main facility areas). Be sure to include the safe storage of any supplies of hand sanitizers which are combustible. - Anchor all portable buildings (e.g., trailers) to the ground. - Secure large cranes and other heavy equipment. - Make sure outdoor signs are properly braced.
<input type="checkbox"/>	Ensure that any employees who volunteer to stay onsite have proper supplies and equipment (e.g., drinkable water, nonperishable food, medical, flashlights, walkie-talkies, PPE, and hand sanitizer). If an official evacuation order is in place, no employees or contract workers should remain behind.
<input type="checkbox"/>	Have cash on hand for post-windstorm needs, such as buying food and supplies, or paying employees and contractors.
<input type="checkbox"/>	Ensure you know which employees are certified in CPR, EMT, etc. Make sure these team members are fully equipped with PPE appropriate for any medical situations or emergencies they may be requested to address.
<input type="checkbox"/>	Repair and fill above-ground tanks with fresh water.
<input type="checkbox"/>	Fill fuel tanks of generators, fire pumps, and all company-owned vehicles.
<input type="checkbox"/>	Remove as many goods as possible from the floor, or ship them out of the facility.
<input type="checkbox"/>	Shut off natural gas supply in order to minimize fire loss.
<input type="checkbox"/>	Disconnect the main electrical feeds to the facility, if possible, to prevent a potential fire caused by short-circuiting of damaged equipment.
<input type="checkbox"/>	Ensure remote access to your company's website so updates about your availability can be made.

✓ During The Storm	
<input type="checkbox"/>	Patrol the property continuously and watch for roof leaks, pipe breakage, fire or structural damage. During the height of a windstorm, personnel should remain in a place that has been identified as safe from wind and flood. Take steps to ensure that location meets any requirements prevent the spread of COVID-19, such as social distancing, adequate supplies of PPE and hand sanitizer for every employee onsite.
<input type="checkbox"/>	Constantly monitor any equipment that must remain online.
<input type="checkbox"/>	During power failure, turn off electrical switches to prevent reactivation before necessary checks are completed.

✓ After The Storm	
<input type="checkbox"/>	Keep listening to radio, TV or NOAA Weather Radio All Hazards to make sure the storm has passed.
<input type="checkbox"/>	Wait until an area is declared safe before entering to secure the site and survey damage.
<input type="checkbox"/>	Procure 24-hour security if needed.
<input type="checkbox"/>	Watch for closed roads. If you come upon a barricade or a flooded road, turn around, don't drown.
<input type="checkbox"/>	Survey for safety hazards such as live wires, leaking gas or flammable liquids, poisonous gases, and damage to foundations or underground piping.
<input type="checkbox"/>	Call in key personnel and notify contractors to start repairs. Make sure safety systems are fully implemented before work is allowed to begin. This means controlling smoking and other open flame sources. Require contractors to share responsibility for establishing fire-safe conditions before and during the job. Contractors should also be required to wear masks and comply with all established federal, state and local safety protocols for preventing the spread of COVID-19.
<input type="checkbox"/>	Begin salvage as soon as possible to prevent further damage: - Cover broken windows and torn roof coverings immediately - Separate damaged goods, but beware of accumulating too much combustible debris inside a building
<input type="checkbox"/>	Clean roof drains and remove debris from roof to prevent drainage problems.
<input type="checkbox"/>	Alert your insurance broker that you have suffered a loss.

✓ Your People	
<input type="checkbox"/>	Have all employees, vendors and client contact information on hand. This includes the ability to contact any and all employees who may be working remotely, especially those in residential or other locations that might be affected by a pending hurricane. It also includes any temporary workers employed at your site due to increased demand for your products or services arising from COVID-19, as well as construction contractors retrofitting work areas to facilitate social distancing and employee protection (such as plexiglass workspace dividers) during the pandemic, as well as maintenance, custodial and cleaning personnel involved in disinfection and other work required to keep workers safe during the pandemic.
<input type="checkbox"/>	Use an Alert Notification System to keep all interested parties posted on status updates and next steps.
<input type="checkbox"/>	During evacuation, have a central point of contact for all employees, and ensure you know where your people are located. In advance of any emergency situations, provide any additional instruction for employees to practice social distancing (as practical given the circumstances), wear masks and other PPE as appropriate to address potential exposure to COVID-19.
<input type="checkbox"/>	During an evacuation, consider your phone lines -- redirection to cell phones, answering service, Google Voice, or backup lines could be critical.
<input type="checkbox"/>	Following the storm, notify all critical people of next steps, based on damage.

In flat areas, storm surges may rush many miles inland. Hurricanes often generate heavy rainfall, which can cause severe flooding over wide areas. Hurricanes also may spawn deadly tornadoes. Flooding and tornadoes may affect areas well inland. You should also prepare for these potential interruptions.

The National Weather Service rates hurricanes by their intensity, using the Saffir-Simpson Hurricane scale of one to five. The scale categorizes storms according to their sustained winds, the storm surges produced, and expected damage.

Category One

- **Wind speed:** 74-95 mph (119-153 km/h)
- **Storm surge:** 4-5 feet above normal
- **Damage:** Damage primarily to unanchored mobile homes, shrubbery, and trees along with some coastal road flooding and minor pier damage

Category Two

- **Wind speed:** 96-110 mph (154-177 km/h)
- **Storm surge:** 6-8 feet above normal
- **Damage:** Roofing, door and window damage to buildings; Considerable damage to shrubbery and trees, mobile homes, poorly constructed signs, and piers

Category Three

- **Wind speed:** 111-130 mph (178-209 km/h)
- **Storm surge:** 9-12 feet above normal
- **Damage:** Structural damage to small residences and utility buildings; foliage blown off trees and large trees blown down; mobile homes destroyed

Category Four

- **Wind speed:** 131-155 mph (210-249 km/h)
- **Storm surge:** 13-18 feet above normal
- **Damage:** Extensive damage to doors, windows and lower floors of shoreline houses; total roof failures on small residences; shrubs, trees, and all signs blown down; mobile homes completely destroyed

Category Five

- **Wind speed:** Greater than 155 mph (249 km/h)
- **Storm surge:** generally greater than 18 feet above normal
- **Damage:** Complete roof failure on many buildings and some complete building failures with small utility buildings blown over or away; severe and extensive window and door damage; mobile homes completely destroyed

Know the Terms

Tropical Depression:

An organized system of clouds and thunderstorms with a defined surface circulation and maximum sustained winds of 38 mph (33 knots) or less. Sustained winds are defined as one-minute average wind measured at about 33 feet (10 meters) above the surface.

Tropical Storm:

An organized system of strong thunderstorms with a defined surface circulation and maximum sustained winds of 39–73 mph (34–63 knots).

Hurricane:

An intense tropical weather system of strong thunderstorms with a well-defined surface circulation and maximum sustained winds of 74 mph (64 knots) or higher.

Storm Surge:

A dome of water pushed onshore by hurricane and tropical storm winds. Storm surges can reach 25 feet high and be 50–1000 miles wide. Storm surge is by far the greatest threat to life and property along the immediate coast.

Storm Tide:

A combination of a storm surge and the normal tide (i.e., a 15-foot storm surge combined with a 2-foot normal high tide over the mean sea level created a 17-foot storm tide).

Hurricane/Tropical Storm Watch:

Hurricane/tropical storm conditions are possible in the specified area of the watch, usually within 48 hours. Tune into NOAA Weather Radio, commercial radio, or television for information.

Hurricane/Tropical Storm Warning:

Hurricane/tropical storm conditions are expected in the specified area of the warning, usually within 36 hours of the onset of tropical storm force winds. Complete storm preparations and immediately leave the threatened area if directed by local officials.

Extreme Wind Warning:

Extreme sustained winds of a major hurricane (115 mph or greater), usually associated with the eye wall, are expected to begin within an hour. Take immediate shelter in the interior portion of a well-built structure.

Short-Term Watches and Warnings:

These warnings provide detailed information about specific hurricane threats, such as flash floods and tornadoes.

Flood Preparedness

Floods are one of the most common and widespread of all disasters and continue to grow in frequency and severity. Businesses are more likely to flood than burn down, so having a thorough preparation and response plan is vital to ensure resiliency and recovery.

The following checklist will help keep your business afloat even if the worst happens. Many businesses have found that they may be able to save between 20% and 90% on the cost of stock and movable equipment by taking action to prepare in advance of flooding. The following resources and tools will help mitigate your risk and protect not only your business but also the most critical element of your business – your people.

✓ Before the Flood	
<input type="checkbox"/>	Establish an evacuation plan that includes specific evacuation procedures, including routes and exits. Review disaster recovery plan with team, and key employees.
<input type="checkbox"/>	Incorporate the impact of any operations and workforce modifications arising from COVID-19 that may be present at your facilities, such as an increase in temporary workers, changes to or increases in shift schedules, increase in numbers of employees working remotely or on modified schedules, as well as workers quarantined due to COVID-19 exposure or infection.
<input type="checkbox"/>	Consider the potential increase in construction contract workers at your facilities for the installation of COVID-19 related safety partitions or modified workspaces.
<input type="checkbox"/>	Take all necessary steps to prevent the release of dangerous chemicals that might be stored on your property, including highly combustible supplies of hand sanitizer - locate main gas and electrical shut-offs and anchor all fuel tanks
<input type="checkbox"/>	Postpone any receipt of goods -- deliveries, couriers, etc.
<input type="checkbox"/>	Contact insurance broker, discuss policy, etc.
<input type="checkbox"/>	Establish emergency communication method (Alert Notification System, phone tree, etc.); identify meeting place and time for all key employees in Crisis Management Team, and ensure location has been modified or retrofitted as appropriate to accommodate any social distancing requirements, as well as equipped with adequate supplies of PPE and hand sanitizers; create voicemail for when evacuated, or out of office, etc.
<input type="checkbox"/>	Update disaster recovery kits and begin crisis backup procedures.
<input type="checkbox"/>	Maintain accurate inventory of product on site.
<input type="checkbox"/>	Use plugs to prevent floodwater from backing up into sewer drains, or install flood vents/or flood proof barriers.
<input type="checkbox"/>	Stay tuned to local media and community messaging.

✓ During the Flood	
<input type="checkbox"/>	Life safety is paramount.
<input type="checkbox"/>	Begin next phase of your business continuity plan.
<input type="checkbox"/>	Send non-critical staff home.
<input type="checkbox"/>	Raise elevators to the second floor and turn off. Move valuable records and equipment to the second floor.
<input type="checkbox"/>	Stay tuned to local media – evacuate when required.
<input type="checkbox"/>	Take cell phones, charger, critical hardware, and emergency kits with you.
<input type="checkbox"/>	Unplug electrical items before leaving.
<input type="checkbox"/>	Consider your business phones and redirection to cell phones, an answering service, or Google Voice.

✓ After the Flood	
<input type="checkbox"/>	Listen for news reports to learn whether the community's water supply is safe to drink.
<input type="checkbox"/>	Avoid floodwaters; water may be contaminated by oil, gasoline, or raw sewage – water may also be electrically charged from underground or downed power lines.
<input type="checkbox"/>	Be aware of areas where floodwaters have receded, roads may have weakened and could collapse under the weight of a car.
<input type="checkbox"/>	Clean and disinfect everything that got wet, mud left from floodwater can contain sewage and harmful chemicals.
<input type="checkbox"/>	Implement disaster recovery plan, and monitor local authorities' communication.
<input type="checkbox"/>	Contact employees via determined method of communication and discuss next steps.
<input type="checkbox"/>	Contact your insurance broker.

✓ Your People	
<input type="checkbox"/>	Ensure you have an emergency communication plan in place prior to the storm, evacuation, or threat.
<input type="checkbox"/>	Have all employees, vendors, and client contact information on hand.
<input type="checkbox"/>	During evacuation have a central point of contact for all employees, and ensure you know where your employees are located, especially given the potential for modifications in work arrangements made to address issues and requirements arising from the COVID-19 pandemic.
<input type="checkbox"/>	Following the flood, notify all critical people of next steps, based on damage.

Helping to Mitigate your Risk for Flood Interruption:

Do You Know the Terms?

Flood Watch

Flooding is possible. Tune into NOAA Weather Radio, commercial radio, or television for information.

Flash Flood Watch

Flash flooding is possible. Be prepared to move to higher ground; listen to NOAA Weather Radio, commercial radio, or television for information.

Flood Warning

Flooding is occurring or will occur soon; if advised to evacuate, do so immediately.

Flash Flood Warning

A flash flood is occurring; seek higher ground on foot immediately.

Driving Flood Facts

The following are important points to remember when driving in flood conditions:

- Six inches of water will reach the bottom of most passenger cars causing loss of control and possible stalling.
- A foot of water will float many vehicles.
- Two feet of rushing water can carry away most vehicles including sport utility vehicles (SUVs) and pick-ups.

Power and Generator Checklist

It is likely nearly all businesses will lose power, at least for a period, following a catastrophic event. Since every organization has different power needs, it is important to know and understand your risk as well as your building's power requirements. The following checklist highlights some of the steps that should be taken in order to effectively recover from any power outage. Planning should consider potential health and safety issues if power outages and restoration affect proper HVAC functioning and air circulation, which are key elements of workplace-related protection against COVID-19.

✓ Before a Power Outage	
Ensure your emergency preparedness kit includes the following items:	
<input type="checkbox"/>	Flashlights with batteries.
<input type="checkbox"/>	Battery or hand-crank powered Emergency Weather Radio.
<input type="checkbox"/>	Avoid candles due to the inherent fire hazard.
<input type="checkbox"/>	Cell phone chargers and battery chargers, including multiple cords for different phones.
<input type="checkbox"/>	If possible, have a land-line, non-cordless telephone in your office that does not operate on a VOIP network. Often a fax line can serve this purpose.
<input type="checkbox"/>	Create a personnel policy that dictates which staff members should report and those that should remain home. Make sure all employees are aware of the policy.
<input type="checkbox"/>	If security at your location is a concern, ensure that your alarm/security systems have proper battery backup systems, and that telephone connectivity to your monitoring service isn't reliant on power
<input type="checkbox"/>	Ensure all sensitive electronic equipment is protected by a power strip surge protector
<input type="checkbox"/>	Ensure all Uninterruptible Power Supply (UPS) devices are functional and tested regularly
<input type="checkbox"/>	Inspect all critical equipment such as sewer ejector pumps, HVAC condensate drain pumps, and any pumps that provide protection from flooding in low-lying areas. Ensure those pumps are part of the emergency power plan.
<input type="checkbox"/>	Fuel up any critical equipment including company vehicles, back-up generators, etc.; fill any spare gas cans in the event of a prolonged outage and resulting gas shortage.
✓ Get Expert Advice	
<input type="checkbox"/>	Contact a local certified electrician or restoration contractor to assist in determining your power needs
<input type="checkbox"/>	Work with your electrician to make a list of all items that would need to be powered by a generator or other alternate power source. Consider: - Power needs for cooling equipment in server rooms and other sensitive equipment areas - If exterior lighting or HVAC Systems are part of the recovery plan, how are those needs different and how are they part of the plan? - Record the starting and running wattage required for each item on the list.
<input type="checkbox"/>	In order to better facilitate emergency power requirements, be sure to ask your electrician the following questions and note the information for future use: - What phase is your electrical service? Single or Three Phase? - What voltage is your service? 208v, 240v or 480v? - Is your power requirement for a Wye or Delta generator? - How many amps do you need to power? - What size generator is required? - How many feet of cabling are required to power the generator?
<input type="checkbox"/>	Does your building have a power transfer switch? If no transfer switch has been installed, you will need to consider options – hardwire or spider box?
<input type="checkbox"/>	Determine where a generator should be placed on premises, particularly in a multi-tenant building.
<input type="checkbox"/>	Determine how you will recover from different power outage scenarios. Consult a business continuity partner that can walk you through your options. Will you always just need a generator, or should you consider a full mobile office recovery?

✓ During a Power Outage	
<input type="checkbox"/>	Turn off and unplug all electrical equipment to avoid damage from power spikes when electrical service is resumed.
<input type="checkbox"/>	Leave one light turned on so you'll know when the power comes back on.
<input type="checkbox"/>	Never run a generator inside or connect a generator to the electrical system unless prior steps have been taken to ensure it is safe to do so.
<input type="checkbox"/>	Ensure you know your generator's fuel consumption rate and set up regular fuel deliveries ahead of time to ensure you never run out.
<input type="checkbox"/>	Do not touch any downed electrical power lines and keep your employees away from them. Report downed lines to the appropriate officials in your area.
<input type="checkbox"/>	Leave doors closed on office refrigerators and freezers as much as possible during outages. Food will keep much longer if the doors are left closed.
<input type="checkbox"/>	<p>Make sure the generator you receive includes the following:</p> <ul style="list-style-type: none"> - Transportation to your building site - The appropriate amount of Cam Lock Cabling (standard is 250' unless more is requested) Pigtails to connect the generator - Starter fuel for the first few days of recovery - A set of operating instructions - A walk through of the basic operating instructions with your vendor
<input type="checkbox"/>	<p>Follow these steps to prevent generator theft:</p> <ul style="list-style-type: none"> - Place the generator in a well-lit area - Install security cameras at the generator site - Consider running a metal ring into the ground and securing the generator with a chain - If you have to store the generator on its trailer, secure the trailer by chaining the wheels, defensive parking (surrounding with other cars, etc.), and removing the hitch - Chain or padlock the generator to other heavy equipment

Securing Idle Facilities

COVID-19 is an unprecedented event creating social and economic challenges that are impacting nearly every industry. Social distancing has led to the curtailment of operations, reduction in active staff, or the full idling of many businesses. Facilities that will be idled temporarily still require many of the property loss protection measures as if they were functioning under normal conditions, including any and all appropriate measures to protect these facilities in the event of a hurricane.

Even during periods of downtime, it is imperative to continue the maintenance of your critical equipment, fire protection/alarm systems, surveillance and backup power supplies to safeguard against any existing or new fire loss exposures that may develop. Maintaining all these systems also will help ensure that you are fully prepared when your facility resumes operation.

✓ General Measures	
<input type="checkbox"/>	Check all entrances periodically to assure that locks, hinges, frames, doors and windows are in good repair. This should include skylights, roof hatches, fences and gates. Pay attention to openings leading to areas having large quantities of combustibles.
<input type="checkbox"/>	If former employees have had access to keys to any entrances or sprinkler control valves, the locks should be rekeyed.
<input type="checkbox"/>	Deactivate employee card readers to provide access to the site for all employees who have been laid off or furloughed.
<input type="checkbox"/>	Check exterior doors weekly to assure they are in good repair and that their locks are operating properly.
<input type="checkbox"/>	All exterior doors subject to unauthorized entry should be closed and locked.
<input type="checkbox"/>	All exterior doors not designated emergency exits should be equipped with dead bolt locks having a throw of at least 1 in. (25 mm).
<input type="checkbox"/>	Emergency exits should be secured to prevent outside entry.
<input type="checkbox"/>	The buildup of trash, soiled work rags and other combustible debris should be strictly controlled and removed prior to a pending hurricane.
<input type="checkbox"/>	Dumpsters, trash cans and any combustible trash should not be stored against buildings or under canopies.
<input type="checkbox"/>	Security guards, maintenance personnel and any others who will have relatively unsupervised access to the facility should be carefully chosen.
<input type="checkbox"/>	Security personnel should be closely supervised and be included in any hurricane planning and related exercises.
<input type="checkbox"/>	Records should be audited periodically to reduce the risk of incendiarism from someone with relative freedom throughout the property.
<input type="checkbox"/>	Keep fire sprinkler protection in service.
<input type="checkbox"/>	All sprinkler control valves larger than 1.5 in. (40mm) or controlling more than five sprinklers should be locked in the wide-open position using sturdy locks, chains, or other security devices resistant to breakage except by bolt cutters. Breakaway or combination locks should not be used.
<input type="checkbox"/>	Inspect sprinkler control valves weekly (or more frequently if needed) to check for improperly or unauthorized closed valves. If the inspection would draw unwanted attention, the check may be done visually from a reasonable distance.
<input type="checkbox"/>	The exterior of the buildings and the adjacent grounds should be maintained.
<input type="checkbox"/>	Any boilers, air tanks, or pressure vessels where the jurisdictional inspections are due during this closure should be conducted and operating certificates obtained. Any code violations should be addressed immediately.

✓ Backup Power Supplies
Continue to inspect and maintain backup generators in accordance with NFPA 110.
Run standby generators weekly for about 30 minutes.
Exercise the transfer switches on a regular basis.
Routine maintenance should include general inspections to look for fuel, oil, coolant or exhaust leaks from the engines that may need attention.
Diesel fuel also needs to be tested periodically, and starting batteries need to be inspected and tested under load.
Conduct a full-load test during which all electrical loads are transferred to the standby generators prior to reopening.
Maintain and test your video surveillance equipment on a routine basis.

✓ External Security
Maintain and illuminate the exterior and entrances.
Use motion-activated lighting near doors and windows.
Do not allow signs to block the view of the building.
Many buildings have basement entries that are hidden from view. These should be secured with locking ground-level doors.
Ladders, external stairways and fire escapes allowing access to roof should be secured.

✓ Internal Security
If possible maintain your internal security force at your sites; include them in hurricane planning and related exercises.
Expand their round duties to include fire stairwells and include visual checks of the fire sprinkler control valves.
Train security personnel on where utility shutoffs are for sprinkler systems and potable water to mitigate water losses in the event of an accidental leak.
Maintain all burglar and fire alarm systems.
Keep and update your current list of all individuals that have access to keys and change locks periodically.

✓ Community Awareness and Cooperation
Keep owner/management informed of problems.
Be aware of individuals who may be disgruntled or likely to cause damage to property through arson or vandalism.
Be aware that vandalism may precede arson!
Appoint a person to be a liaison with law and fire officials.
Work with law enforcement officials to educate remaining staff on recognizing unusual activities.

✓ Invite Fire Department to Tour Site
Conduct a pre-fire planning session to coordinate emergency action plan in the event of a fire at the facility.
Familiarize fire department personnel with sprinklers and alarms that are in service.
Make sure the fire department has keys for easy access or knows where to meet on-site security staff.

Table-Top Exercise

Exercising is a key step in preserving a viable recovery plan. One popular way of starting a testing program is a table-top exercise. This approach is cost effective and focuses on your employees and their specific recovery tasks. This checklist will guide you through steps and suggestions to plan and facilitate a successful table top exercise.

✓	Item	Description
<input type="checkbox"/>	Identify team for table top exercise	Be sure key decision makers are involved, whether they are participants, or their absence is written into the scenario.
<input type="checkbox"/>	Establish a crisis command center	The location of the table top exercise – conference bridges are recommended for remote parties to dial into. All information gathered will also be stored in this location.
<input type="checkbox"/>	Log all activities	Appoint a scribe to document actions and open items for later review.
<input type="checkbox"/>	Determine scenario	In doing so, be creative but practical. Take your risk assessment into consideration, and consider what will be appropriate based upon time allotted for this exercise.
<input type="checkbox"/>	List assumptions	This includes closed roadways, key personnel that are absent, extent of damage and outages, expected duration of outages, etc. Include complications that could arise from a COVID-19 outbreak in the cities and states where your facilities are located.
<input type="checkbox"/>	Rules for the exercise	Clearly define which actions will be taken vs. assumed since there isn't time to do each step in real-time as would be actioned in a recovery.
<input type="checkbox"/>	Split the scenario into sessions	Make these time-appropriate for the overall time of the exercise. After each session the participants/observers will review and document what was learned. With each session you can pose a new list of assumptions.
<input type="checkbox"/>	What critical business functions were affected?	From the assumptions, the participants should identify which functions are crippled, and how to meet recovery time objectives for each function. This will help you prioritize which areas should be prioritized for recovery.
<input type="checkbox"/>	Vendors	Will your third party vendors: phone service, IT, data back-up facilities, onsite construction, maintenance and cleaning/disinfection contractors, etc, be involved in this exercise? If so, make sure you provide them with adequate notice related to their responsibilities in the exercise. If not, write into the rules how vendors will be simulated.
<input type="checkbox"/>	Time frame	At the beginning of each session, clearly define the number of hours participants have to work on each session as well as how much time passes in 'exercise time' compared to 'real time'.
<input type="checkbox"/>	Talking points for each session	After each session and list of assumptions is presented, have your team(s) ask/answer these questions: - What should happen now? - What do we know at this point? - What decisions do you have to make? - Who and how do we need to contact? - What documents/information are available to you? - What are the next steps?
<input type="checkbox"/>	Post-exercise review	Once you have completed the exercise, conduct a review before dismissing participants. Consider these questions: - Did this exercise confirm actions required at each phase of the crisis timeline? - Did this exercise identify procedures for escalation and the declaration process during a crisis? - Were all gaps, new ideas, and recommendations for improvement identified and documented?
<input type="checkbox"/>	Next steps	Build on what you've learned by making appropriate changes and clarifications to your written plan. Establish a date to complete another testing exercise. It is recommended that you minimally test your recovery plan on an annual basis.

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