



# Building Economic Resilience to Disasters: Developing a Business Continuity Plan

March 31, 2014

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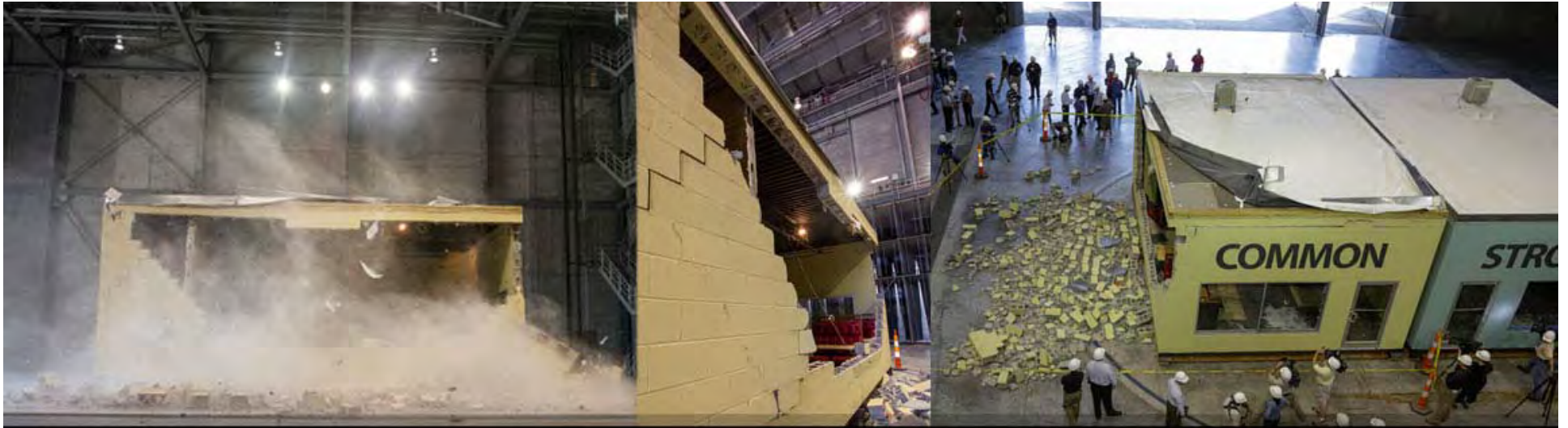
Business Resiliency –  
one important piece of the IBHS plan for  
creating safer, stronger communities



Community







Result: **\$44,769** vs. **\$4,660**

**10 times**  
more damage to  
"Common"  
than  
"Stronger"  
building





# 2012 High Wind Commercial Test

Links to videos:

- <http://vimeo.com/45920765#at=0>
- <http://vimeo.com/45921239#at=3>

# Hail – A Persistent Cause of Loss



# Manufacturing Realistic Hailstones

Link to video

- <http://vimeo.com/60100334>

# 2013 Hail Demonstration

Link to video

- <http://vimeo.com/60091069>



1 in 4 businesses forced to close after a disaster, never reopens.



# If today were ...

- Sunday, October 28, 2012  
**Hurricane Sandy**
- Sunday, August 23, 1992  
**Hurricane Andrew**
- Saturday, May 21, 2011  
**EF5 Tornado in Joplin, MO**
- Wednesday, January 8, 2014  
**WV Chemical Spill**
- Monday, January 27, 2014  
**Atlanta's Snowpocalypse**

# Natural Disasters Wreak Havoc on Small Businesses

- Majority of small businesses operate from a single location, making them more vulnerable compared to larger companies
- Between 60,000 – 100,000 small businesses were negatively impacted as a result of Hurricane Sandy
- Median cost of downtime for a small business due to extreme weather is \$3,000 per day
- 1/3 of small business owners have been personally affected by extreme weather



# Natural Disasters Wreak Havoc on Small Businesses

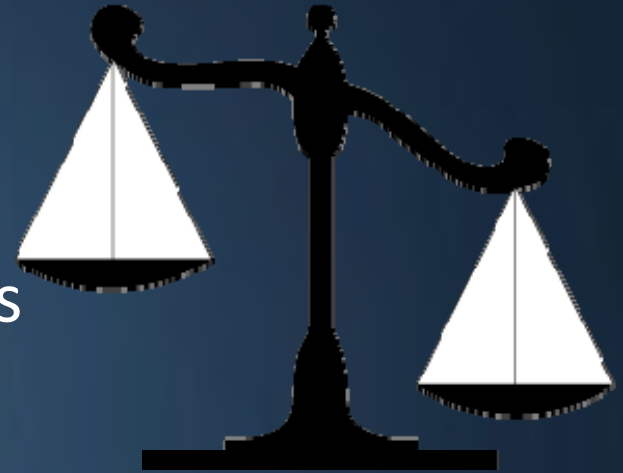
- 57% of small businesses have no disaster recovery plan, and of those that do have a plans, 90% spend less than 1 day per month maintaining them
- Sandy cost 86,000 jobs in November 2012 – manufacturing, retailing, leisure & hospitality industries particularly hit
- Sandy cost the economy more than \$50 billion – the most expensive disaster globally in 2012

# What is Business Continuity?



# Benefits & Value of Business Continuity Planning

- Safeguard human life
- Save property & resources
- Reduce time making critical decisions
- Recover business functions quicker
- Shorten the recovery window
- Ensure customer services & confidence
- Ensure job security
- Increase employee confidence & morale
- Retain share of market





# Hazard & Vulnerability Assessment – Know Your Risks

**Frequency** – The likelihood that the event will occur.

**Severity** – The amount of damage the event is capable of causing your business.

## NATURAL

- Earthquake
- Tornado/Wind
- Hurricanes
- Floods
- Volcanic Eruptions
- Severe Winter Weather
- Wildfire
- Drought
- Sinkholes

## POLITICAL

- Strikes
- Riots
- Civil Disturbances
- Bomb Threat
- Biological Threats
- Nuclear Threat
- Acts of War

## MAN-MADE

- Sabotage
- Product Tampering
- Scandal
- Workplace Violence
- Sexual Harassment
- Fraud / Theft
- Arson
- Terrorist Attack

## TECHNOLOGICAL

- Software Failure
- Hardware Failure
- Power Outage
- Data Corruption
- Cooling System Failure
- Wiring and Cables
- Mechanical Systems
- Communications

## SECURITY

- Privacy
- Viruses
- Hackers
- Data Theft
- Counterfeiters
- Cybercrime

## ACCIDENTS

- Human Error
- Fires/Explosions
- Water Damage
- Building Collapse
- Environmental
- Contamination

## LOSS OF:

- Key Employee
- Senior Leader
- Subject Matter Expert
- Key Supplier/Vendor
- Premises
- Key Equipment

## OTHER THREATS

- Pandemics
- Gas/Water Shortage
- Media Crisis
- Special Events
- Mismanagement
- Product Liability



# Flooding

- Apply waterproof coating to exterior walls.
- Seal wall penetrations including where utilities enter the building.
- Anchor fuel tanks and other storage tanks to prevent flotation.
- Check gutters & downspouts that they are not blocked by debris.

- Keep vines of exterior walls to avoid cracks in siding.



# Wind, Hurricanes & Tornadoes

- Remove loose objects and accumulated debris from roofs.
- Keep trees and branches at least 7 feet away from exterior building surface.
- Secure garbage cans, outdoor furniture, signs, awnings and tools & replace gravel/rock landscaping with shredded material - they can become windborne debris.
- Equip roll-up and overhead doors with wind locks.





# Severe Winter Weather

- Safe snow removal may reduce the snow load on your roof.
- Make sure gutters, fasteners and downspouts are secured.
- Caulk openings on exterior walls & insulate all accessible pipes.

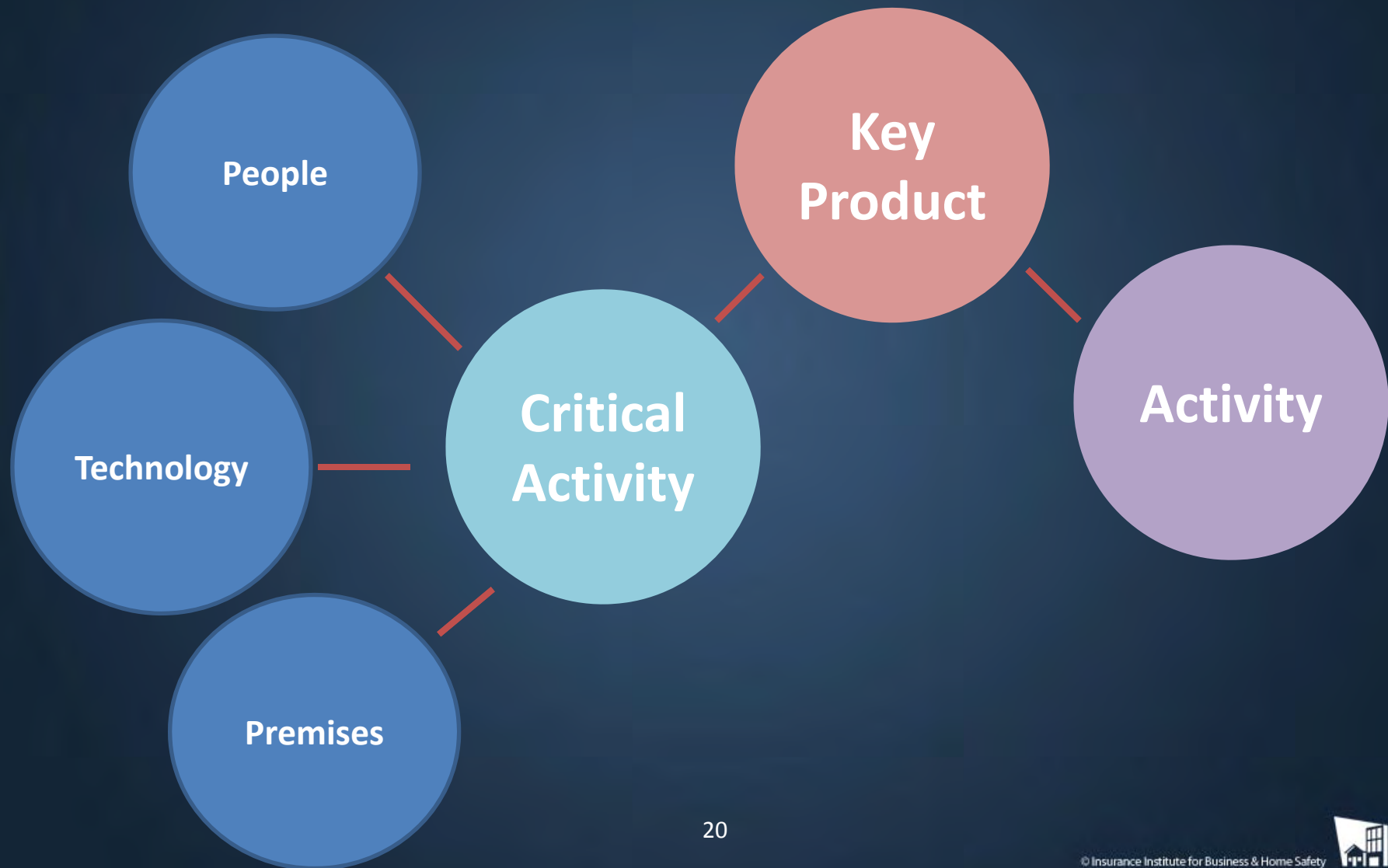


- Have a snow removal plan to provide safe access for employees, customers and suppliers.

# Gathering Information

ADMINISTRATION  
PAYROLL HR ACCOUNTS PAYABLE  
BENEFITS PURCHASING  
& PAYROLL MAILROOM ACCOUNTS RECEIVABLE  
SALES & SHIPPING CUSTOMER  
MARKETING RECEIVING SERVICE


# Know Your Operations





# Know Your Operations including Your Supply Chain





## Know Your Operations

Use this form to identify what business functions are critical to your business' survival. Duplicate the form for each business function. Updated: \_\_\_\_\_  
Next Review Date: \_\_\_\_\_

**BUSINESS FUNCTION:** \_\_\_\_\_

Priority:  Extremely High  High  Medium  Low

Employee in charge: \_\_\_\_\_

Timeframe or deadline: \_\_\_\_\_

Money lost (or fines imposed) if not done: \_\_\_\_\_

Obligation:  None  Legal  Contractual  Regulatory  Financial

<p><b>Who performs this function?</b> (List all that apply)</p> <p>Employees: _____</p> <p>Suppliers/vendors: _____</p> <p>Key contacts: _____</p> <p><small>(For additional space, use the Notes area below)</small></p>	<p><b>What is needed to perform this function?</b> (List all that apply)</p> <p>Equipment: _____</p> <p>Special Reports/Supplies: _____</p> <p>Dependencies: _____</p> <p><small>(For additional space, use the Notes area below)</small></p>
<p><b>Who helps perform this function?</b> (List all that apply)</p> <p>Employees: _____</p> <p>Suppliers/vendors: _____</p> <p>Key contacts: _____</p> <p><small>(For additional space, use the Notes area below)</small></p>	<p><b>Who uses the output from this function?</b> (List all that apply)</p> <p>Employees: _____</p> <p>Suppliers/Vendors: _____</p> <p>Key Contacts: _____</p> <p><small>(For additional space, use the Notes area below)</small></p>

**Brief description of how to complete this function:**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Workaround methods:**

\_\_\_\_\_

\_\_\_\_\_

**Notes:**

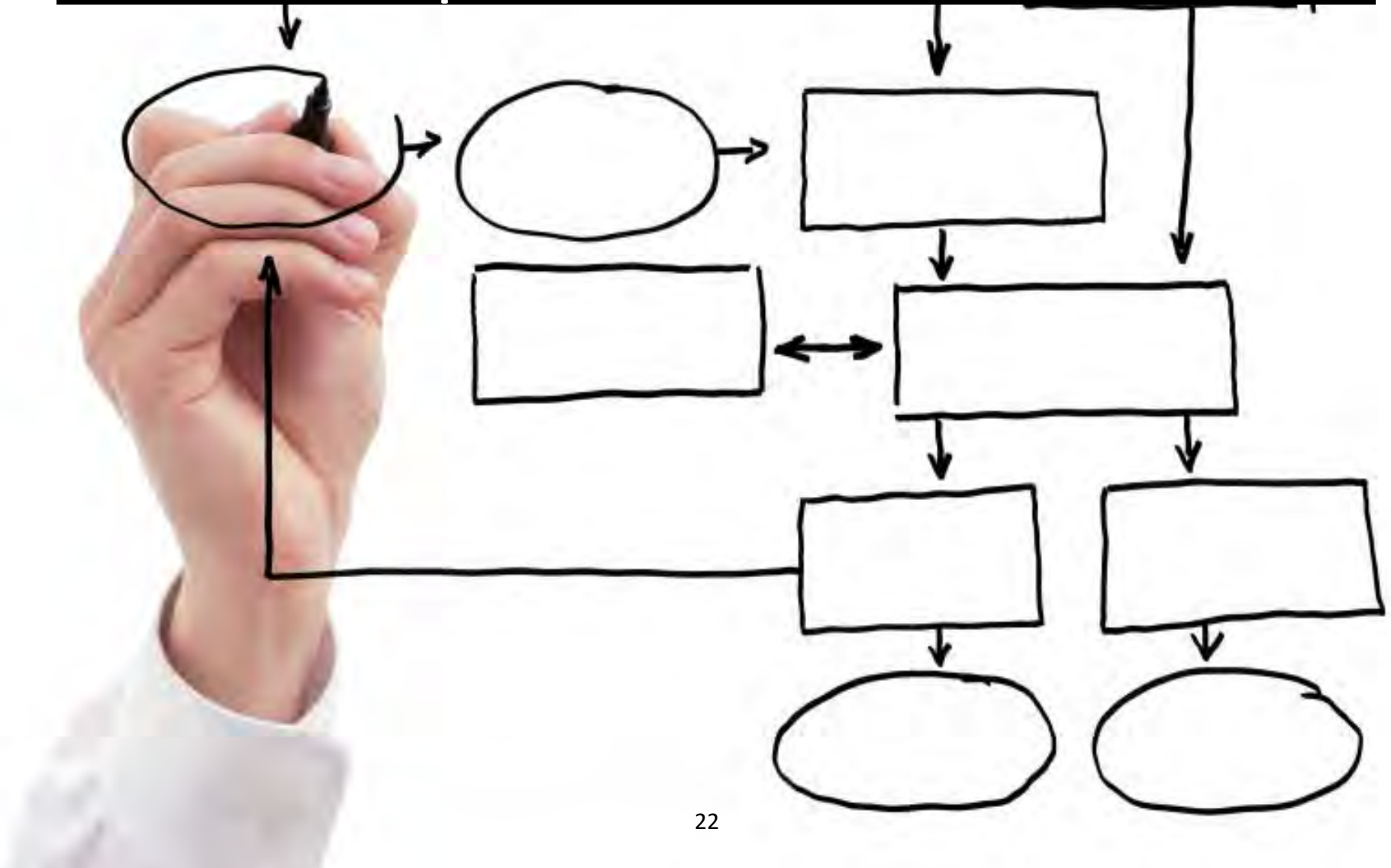
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\_\_\_\_\_

OFB-EZ is a program of the Insurance Institute for Business & Home Safety  
Download this document at [disastersafety.org/ofb-ez](http://disastersafety.org/ofb-ez)

# Critical Business Functions – Develop Workaround Methods



# Know Your Employees



## Know Your Employees

Use this form to record information about all employees, including the business owner so that each person can be contacted at any time. Duplicate the form for each employee.

Updated: \_\_\_\_\_  
Next Review Date: \_\_\_\_\_

**EMPLOYEE NAME:** \_\_\_\_\_

Position/title: \_\_\_\_\_  
Home address: \_\_\_\_\_  
City, State, ZIP: \_\_\_\_\_  
Office phone: \_\_\_\_\_ Ext. \_\_\_\_\_ Alternate phone: \_\_\_\_\_  
Home phone: \_\_\_\_\_ Mobile phone: \_\_\_\_\_  
Office e-mail: \_\_\_\_\_  
Home e-mail: \_\_\_\_\_  
Special needs: \_\_\_\_\_

**Certifications:**

First Aid  Emergency Medical Technician (EMT)  CPR  Ham Radio  
 Other: \_\_\_\_\_  
 Special licenses: \_\_\_\_\_

**Local Emergency Contact**

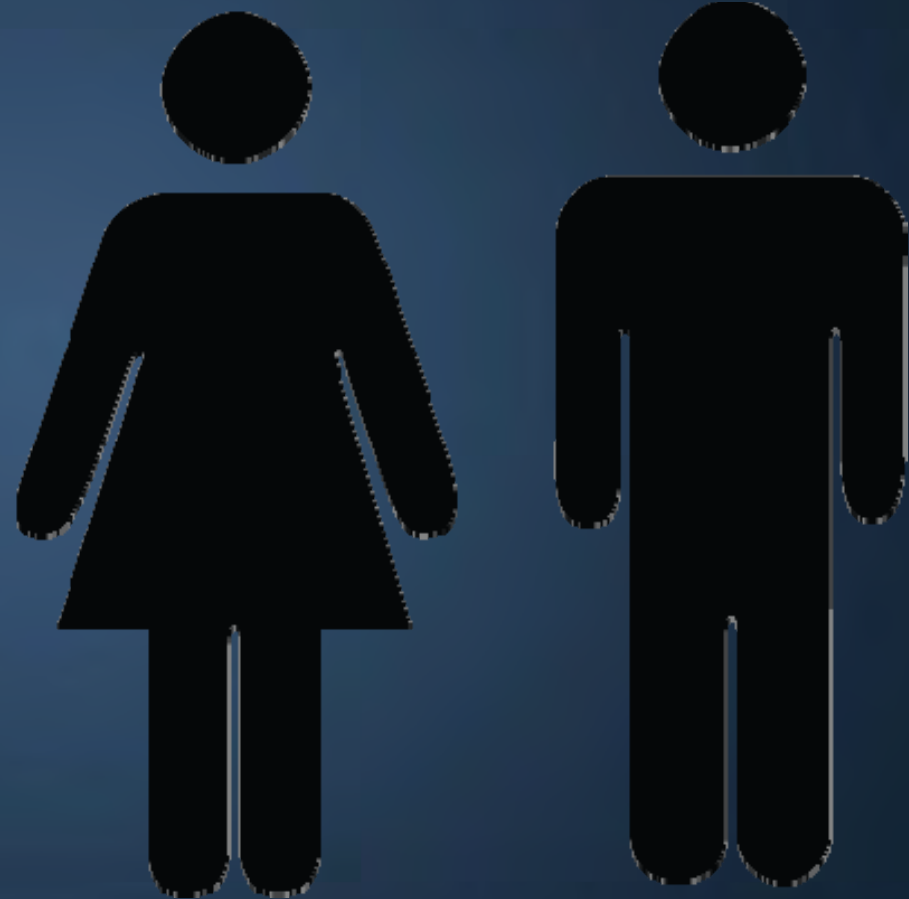
Full name: \_\_\_\_\_  
Relationship: \_\_\_\_\_  
Home phone: \_\_\_\_\_ Mobile Phone: \_\_\_\_\_  
E-mail: \_\_\_\_\_

**Out of State Emergency Contact**

Full name: \_\_\_\_\_  
Relationship: \_\_\_\_\_  
Home phone: \_\_\_\_\_ Mobile Phone: \_\_\_\_\_  
E-mail: \_\_\_\_\_

Notes: \_\_\_\_\_  
\_\_\_\_\_

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# Know Your Key Customers, Contacts, Suppliers & Vendors



## Know Your Key Customers, Contacts, Suppliers and Vendors

Use this form to record information about your current suppliers, those you could use as an alternate choice and your key customers and contacts. Duplicate the form for each contact.

Updated: \_\_\_\_\_

Next Review Date: \_\_\_\_\_

### CONTACT TYPE:

- Current Supplier/Vendor     Back-Up Supplier/Vendor     Key Customer/Contact

Company /Individual Name: \_\_\_\_\_

Account Number : \_\_\_\_\_

Materials/Service Provided: \_\_\_\_\_

Street Address: \_\_\_\_\_

City, State, Zip: \_\_\_\_\_

Company Phone: \_\_\_\_\_

Website: \_\_\_\_\_

### Company Representative

Primary Contact: \_\_\_\_\_

Title: \_\_\_\_\_

Office Phone: \_\_\_\_\_

Mobile Phone: \_\_\_\_\_

E-mail: \_\_\_\_\_

Alternate Contact: \_\_\_\_\_

Title: \_\_\_\_\_

Office Phone: \_\_\_\_\_

Mobile Phone: \_\_\_\_\_

E-mail: \_\_\_\_\_

Notes: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

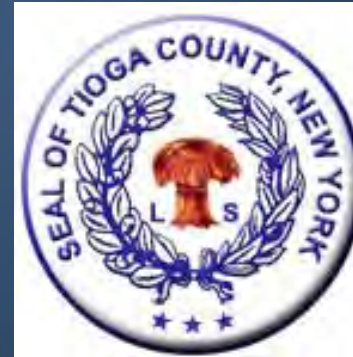
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# Have a Communication Plan for Your Employees



- Call Tree
  - Landline
  - Mobile
  - Text
  - Email
- Call-in Number
  - Employee Emergency Wallet Card
- Social Media (Facebook, Twitter, LinkedIn, etc.)
- Company Intranet
- 3<sup>rd</sup> Party Emergency or Mass Notification Systems

# County Emergency Information





# Have a Communication Plan for Customers, Suppliers & Key Contacts

## Customers

- Sign on business door
- Updates on Company website
- Provide status of pending orders, delivery schedules, alternate arrangements

## Suppliers & Vendors

- Arrange alternate delivery methods

## Creditors

- Payment arrangements



# Know Your Information Technology & Vital Records



## Know Your Information Technology

Use this form to list the computer equipment, hardware and software, vital records and your back up processes that you will need to fulfill your critical business functions. Duplicate the form for each item or record.

Updated: \_\_\_\_\_

Next Review Date: \_\_\_\_\_

### TYPE:

Computer Equipment/Hardware  Computer Software  Vital Records

Item: \_\_\_\_\_

Title and Version/Model Number: \_\_\_\_\_

Serial/Customer Number: \_\_\_\_\_

Registered User Name: \_\_\_\_\_

Purchase/Lease Price: \$ \_\_\_\_\_

Purchase/Lease Date: \_\_\_\_\_

Quantity (equipment) or Number of Licenses (software): \_\_\_\_\_

License Numbers: \_\_\_\_\_

Technical Support Number: \_\_\_\_\_

Primary Supplier/Vendor: \_\_\_\_\_

Alternate Supplier/Vendor: \_\_\_\_\_

Notes: \_\_\_\_\_

Name of vital record: \_\_\_\_\_

Name of Business Function Vital Record Supports: \_\_\_\_\_

Type of Media: \_\_\_\_\_

Is It Backed Up? \_\_\_\_\_

How Often is it Backed Up? \_\_\_\_\_

Type of Media for Backup: \_\_\_\_\_

Where is it Stored? \_\_\_\_\_

Can the Record be Recreated? \_\_\_\_\_

Notes: \_\_\_\_\_

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# Know Your Finances



## Know Your Finances

Use this checklist to consider and plan for your business' financial needs in the event of a disruption.

Updated: \_\_\_\_\_

Next Review Date: \_\_\_\_\_

### Overall Business Needs

Have you worked with your bank to set up a line of credit for your company? \_\_\_\_\_

Who is responsible to activate it and who has access to it? \_\_\_\_\_

How much cash would be needed to survive a 3-day, 5-day, 10-day, or longer shutdown? \_\_\_\_\_

For what purpose is the cash needed? \_\_\_\_\_

Will you have that cash on hand? \_\_\_\_\_

Who would make the decision to utilize the cash? \_\_\_\_\_

Who would have access to the cash? \_\_\_\_\_

Do you have sufficient cash to pay for various additional services that might be needed, such as janitorial or security services? \_\_\_\_\_

Do you have a company credit card that could be used for emergency purchases? \_\_\_\_\_

Who is authorized to use the credit card? \_\_\_\_\_

Will you be able to pay your bills/accounts payable? \_\_\_\_\_

Do you have procedures in place to accommodate a business disruption? \_\_\_\_\_

Will you be able to continue to accept payments from customers/accounts receivable? \_\_\_\_\_

Do you have procedures in place to accommodate a business disruption? \_\_\_\_\_

Have you identified an alternate location where you can work? \_\_\_\_\_

### Human Resources

In the event of a widespread disaster, how will payroll be handled? \_\_\_\_\_

If your business is forced to shut down temporarily, will some or all employees continue to be paid? \_\_\_\_\_

For how long? \_\_\_\_\_

Will they be able to use their sick and/or vacation time without restriction? \_\_\_\_\_

Are there union considerations? \_\_\_\_\_

Have your employees been made aware of your policies that will be in place during a disruption? \_\_\_\_\_

If banks are closed, will your business provide payroll-cashing services? \_\_\_\_\_

What is your business' policy on cash advances, check cashing, and employee loans? \_\_\_\_\_

Will your employees be expected to work overtime? \_\_\_\_\_

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~~Project:~~

~~An assignment w/ a start and end~~

Ongoing Process

# Know When to Update Your Plan

- Have my business' risks or hazards changed?
- Has my business added new departments, products, or services?
- Have the priority levels of my documented business functions changed?
- Has my business added or changed any suppliers/vendors, key contacts or key customers?
- Is the contact information up-to-date for existing suppliers/vendors, key contacts and key customers?
- Have I updated information on specialized equipment needed to resume each business function?



# Know When to Update Your Plan

- Have there been any staffing changes?
- Does my company telephone call list need to be updated to reflect new staff personal/emergency contact information?
- Are the right responsibilities assigned to the right staff?
- Can I put in place any new protection devices, safeguards or procedures to reduce my business' risks and hazards?
- Are work-around or secondary methods written and documented in a manner that my employees can understand and act on them?
- Have I reviewed my insurance coverage with my agent?









# Test your Plan with Various Types of Exercises

- Scenario-Based Tabletop Exercise
- Building Evacuation Exercise
- Notification Exercise
- Alternate Site Exercise
- Full Activation Exercise
- Pandemic Tabletop Exercise
- Work-from-Home Plan Exercise



# Know Where To Go For Help



**THE EASY WAY TO PREPARE YOUR BUSINESS FOR THE UNEXPECTED.**

## Know Where To Go for Help

Your relationship with your community and outside agencies can strengthen your ability to protect your employees and property and return to normal operations. Maintain a channel of communication with community leaders, public safety organizations such as the police, fire and emergency medical services, government agencies, utility companies, and others. Working together with outside agencies can be beneficial because they can provide a wealth of information to help you recover quickly from a disaster.

Refer to the resources below for more information about implementing disaster safety recommendations to help you prepare for and recover from natural or other types of disasters.

### Insurance Institute for Business & Home Safety

In addition to providing this free business continuity tool kit, IBHS provides free disaster preparedness and property protection guidelines, recommendations and projects for small businesses. The Institute also offers post-disaster recommendations on repairing and rebuilding to make your building(s) stronger and safer the next time a disaster strikes.

<http://disastersafety.org>

### American Red Cross

Among other disaster preparedness and response services, the Red Cross offers a number of preparedness training programs and resources for workplaces, families, and individuals.

[www.redcross.org](http://www.redcross.org)

### Business Civic Leadership Center – Disaster Help Desk

The BCLC Help Desk is designed to enhance community economic recovery after a disaster. The Help Desk provides on-the-ground coordination of information among businesses, local chambers of commerce, NGOs, government responders, and disaster recovery specialists.

<http://bdc.uschamber.com/site-page/disaster-help-desk-business>

### DisasterAssistance.gov

Provides information on how you might be able to get help from the federal government before, during and after a disaster. If the President of the United States makes help available to individuals in your community after a disaster, you can visit this site to apply online.

<http://www.disasterassistance.gov>

OFB-EZ is a program of the Insurance Institute for Business & Home Safety  
Download this document at [disastersafety.org/ofb-ez](http://disastersafety.org/ofb-ez)

### Federal and Local Emergency Management Agencies

Even the largest, most widespread disasters require a local response. Local emergency management programs are the core of the nation's emergency management system.

<http://www.fema.gov/regional-operations/state-offices-and-agencies-emergency-management>

### Internal Revenue Service–Disaster Assistance and Emergency Relief for Businesses

The IRS offers audio presentations about planning for disaster. These presentations discuss business continuity planning, insurance coverage, record keeping and other recommendations for staying in business after a major disaster.

<http://www.irs.gov/Businesses/Small-Businesses-&Self-Employed/Disaster-Assistance-and-Emergency-Relief-for-Individuals-and-Businesses-1>

### Small Business Administration

The U.S. Small Business Administration provides loans, loan guarantees, contracts, counseling sessions and other forms of assistance to small businesses following a disaster.

<http://www.sba.gov/>  
<http://www.sbaonline.sba.gov/services/disasterassistance/disasterpreparedness/>

### Small Business Development Centers

The SBDC assists small businesses with financial, marketing, production, organization, engineering and technical problems, as well as feasibility studies.

<http://www.sba.gov/content/small-business-development-centers-sbdc>  
<http://www.asbdc-us.org/>

# Additional FREE Resources

**Red Cross  
Ready Rating™  
Program**



**FEMA**

Continuity Planning Guidance



  
**Ready®**

Prepare. Plan. Stay Informed.

Preparedness Planning for Your Business

**Big Business - Small Business  
Emergency Management  
Mentorship Program**

Helping Small Businesses Prepare,  
Prevent, and Respond to Emergencies



# Insurance will Help you **AFFORD** to Recover

- Business Income & Extra Expense
- Contingent Business Interruption
- Supply Chain
- Services Interruption/Off Premises Power
- Interruption by Civil or Military Authority

- Extra Expense
- Equipment Breakdown
- Cyber Risk
- Key Man





# Common Excuses for NOT Planning

- We thought it would never happen to us
- We had more important things to think about
- We thought we were too small to need a plan
- We backed up our computers and thought that was enough
- We didn't know where to go for help
- We thought we had no risk
- It takes too much time
- It takes too much money





# Paper Plans Still Important

## How important are paper-based BC plans?

55.6% Essential

24.8% Quite Important

19.7% Not Important

- As backup in case electronic copies are unavailable. Conversely, electronic versions should be available as backup to paper copies. Neither is "better" than the other on their own.
- No electricity - no computers - no business. Hence, paper copies of the BC plan as reference documents are very important.
- Have various copies in all media formats. Paper copies at work, home, trunk of car, including copies in the cloud, company server, etc.

Continuity Central Survey – August 2013





# Promote Employee Awareness

- Business Continuity Facebook page or on Company Intranet
- Newsletters featuring BC articles
- Lunch-n-Learn meetings
- Posters & Flyers
- Contests
- Training Videos
- Preparedness Campaigns
- Email Reminders & Alerts
- Business Continuity Day





# Promote Personal Preparedness

- Basic necessities - download a copy of the Recommended Personal Emergency Preparedness Supply List ([ready.gov](http://ready.gov))
- Contact information for family members, neighbors, doctors, dentists, utility providers



*In the event of an emergency, you should store at least one gallon of water per person per day. This single bottle of water will hopefully get you on your way.*

- Copies of important documents (birth certificates, marriage license, insurance policies, medical history, etc.)
- Create a plan using a free online tool and/or mobile app

# Avoid Business Continuity Pitfalls

- Closely-Guarded Secret
- Outdated
- Lack of Buy-In
- A Book of Lists
- Not Prioritized
- Untested
- Based on a Specific Scenario



# Disaster Planning Made Easier



Prepared by the Insurance Institute for Business & Home Safety (IBHS), which is an independent, nonprofit, scientific research and communications organization supported by the property insurance industry. The Institute works to reduce the social and economic effects of natural disasters and other risks on residential and commercial property by conducting building science research and advocating improved construction, maintenance and preparedness practices.

**THE EASY WAY TO PREPARE YOUR BUSINESS FOR THE UNEXPECTED.**



[DisasterSafety.org/open-for-business](http://DisasterSafety.org/open-for-business)

OFB-EZ Know Your Risks

OFB-EZ Know Your Operations

OFB-EZ Know Your Employees

OFB-EZ Know Your Key Customers, Contacts, Suppliers and Vendors

OFB-EZ Know Your Information Technology

OFB-EZ Know Your Finances

OFB-EZ Know When to Test Your Plan

OFB-EZ Know Where To Go for Help

Your Plan Stage Scenario

OFB-EZ Know When to Test Your Plan Table Top Exercise: Power Outage Scenario

OFB-EZ Know Where To Go for Help

OFB-EZ Know When to Test Your Plan Table Top Exercise: Power Outage Scenario

OFB-EZ Know Where To Go for Help







Where building safety research leads to real-world solutions.

Risks FORTIFIED Commercial Public Policy Research Media Center Blog Videos Members-only

- Earthquake
- Flood
- Freezing Weather
- Hail
- High Winds
- Hurricane
- Lightning
- Tornado
- Wildfire

Open for Business®  
Commercial Maintenance

## 12 Ideas FOR 2014

### Putting Business Protection into Practice: Twelve Ideas for 2014

#### BLOG



[Twelve Ideas for Better Protecting Your Business](#)

#### FREEZING WEATHER



[Preventing Frozen Pipes](#)

Frozen pipes are one of the biggest risks of property

Search DisasterSafety.org...



Enter your ZIP Code below

# Commercial Maintenance



## Proper Maintenance and Timely Repairs: How to Protect Your Business from Storm Damage

We've all heard the expression, "take care of your body and your body will take care of you." As a business owner, you should apply this wisdom to your commercial building and the premises around it. While it is easy to see physical damage that can be caused by large storms, Mother Nature also is slowly and consistently breaking down your buildings' defenses against future weather conditions. The specific weather conditions your building is exposed to, coupled with your maintenance plan, play a large part in the strength and longevity of your building and your resulting bottom line.

Here are a few examples of severe weather conditions that can damage properties:

- Expansion and contraction due to seasonal temperature swings and daily temperature fluctuations can create leaks in sealants, gaskets, and some building materials.
- UV exposure from sun, as well as snow, rain, drought, hail and sleet, can degrade roofs and wall systems.
- Salt crystals in coastal locations can corrode window metals, lead rain in northern locations also can eat away at some metals.
- Degraded wind storm-resistance can cause failure on normal wind speeds, components making the

### STAYING A STEP AHEAD

The following guidelines from Business & Home Safety (BHS) life inspection and identify what is important periodically to a business, and quickly inspect it. A thorough inspection around water drainage system building penetration seals and the perimeter grounds. It takes to get outside to identify the weather is mild and you're previous systems prior to the



## Commercial Generators: An integral part of any business preparedness plan

Generators are an integral part of the preparedness planning process for businesses of every size and can greatly reduce business disruption when normal power is interrupted.

Power outages resulting from unpredictable weather, man-made or natural disasters, or site-specific events can disrupt your business operations. The Insurance Institute for Business & Home Safety's (IIBHS) Open for Business™ program is a comprehensive disaster planning tool to assist you in reducing the potential for loss and recovering quickly should a disaster strike, no matter what the cause.

One important consideration in your developer/business continuity plan is the purchase, operation and maintenance of a generator. This fact-book enables you to continue operating some or all of your electronic equipment and lights and minimize business interruptions. This article will provide basic information about generators, however it is not intended to be a comprehensive guide for using generators. Always consult the manufacturer's instructions for complete information.

Generators are an integral part of the preparedness planning process for businesses of every size and can greatly reduce business disruption when normal power is interrupted. At the same time, using a generator poses certain risks that must be addressed for safe operation, including fire, damage to electrical equipment, and even injury or death to those operating the generator or working in the building where it is being used. Proper ventilation is a critical element for reducing the risk of carbon monoxide poisoning from a generator's engine exhaust.

In addition to safety concerns, proper maintenance is critical to avoid the failure of a generator when it's needed most. The time to maintain a generator is well before a major storm or disaster strike; when professional assistance may be unavailable, power lines are down, and access roads are blocked. To gain the greatest business continuity benefits, while minimizing associated risks, it's important to purchase a generator that is properly designed and sized for your business needs. Once purchased and properly installed, put procedures in place to ensure regular maintenance and that all safe operating practices are followed. Business and building owners should always operate and maintain generators in accordance with the manufacturer's recommendations.

### CHOOSING A GENERATOR AND RELATED SUPPLIES

Before purchasing an electrical power generator, consider what else critical equipment that must be operable when normal power is interrupted. Other considerations include:

- How often does the business lose power and for how long?
- What are the most likely sources of power outages?
- The Open for Business™ vulnerability assessment will help you to identify the events that could interrupt business operations. These factors will help to determine the size and type of generator to buy.

One threshold question facing the business owner is whether to purchase a portable or back-up generator or to choose a permanent or standby generator. A portable generator is a relatively small machine, which is usually rated no higher than 15 kilowatts and 240 volts, and is intended to be moved and activated for temporary use at a location where utility-supplied electric power is not available. A standby generator, in contrast, is a back-up electrical system that is permanently installed and will operate automatically through the use of a transfer switch, which senses a power loss, commands the generator to start, and then transfers the selected electrical load to the generator.

### FACTS ABOUT PORTABLE GENERATORS

- Portable generators are less expensive to purchase and install than permanent (standby) generators. Without a supplemental fuel supply, they have a relatively short run-time and may need to be refueled several times a day during a prolonged power outage.



## Don't let severe winter weather put your business in a deep freeze!

In 2011, early snowstorms in the East and West caught many business owners by surprise. Autumn is the best time for businesses to begin preparing for the onset of freezing temperatures, snow and ice that may damage commercial property and interfere with daily operations. Milder fall temperatures make it easier to inspect your premises and conduct routine maintenance and repairs which can help prevent costly damage and a lengthy shutdown.

The following checklist from IIBHS will help you identify your winter weather maintenance/repair priorities and includes links to articles that provide greater detail about specific tasks.

### ROOFS AND GUTTERS

Find out how strong your roof is and its capacity for snow.

Recent snowfalls have resulted in roof collapses on businesses from Arizona to New England. Fall is a good time to have your roof inspected to find out if it's adequately designed to withstand the snow falls that can realistically be expected in your area. A structural engineer can determine the maximum loads your roof can withstand, as well as provide practical solutions to improve roof strength. Learn more about preventing roof collapse at [disasterready.org/training\\_winter/making-roof-risk-free](#).

Inspect gutter hangers, spikes, fasteners, seams, gables and downspouts, for securement. Heavy snow or ice can cause gutters to weaken and sag, leading them to break away from the building and allow for water intrusion.



Your gutters may be severely damaged if you don't secure them before heavy snow falls.

- Inspect gutters for debris, vegetation, accumulation of granules from all of the materials listed above and add to the loads on the gutters to detach and increase the risk of roof damage. The most effective way to clear the roof kits available at hardware stores reduce the labor involved.

- Take action to prevent for ice dams are ridges of ice that form on the roof or around drains and prevent draining off the roof. The water that "seeps" can leak into the building to walls, ceilings, insulation and ice dams prevention involves sealant sources that are installed under the roof and/or include top floor or attic ceilings. In the winter should create and implement maintenance plan that involves the roof drainage system for prevention, sweeps, gutters and do any obstructions that can lead to more about preventing ice dam freezing, [www.bch.com/preventing-ice](#)



## How to Navigate Stormy Weather: EMERGENCY PREPAREDNESS AND RESPONSE PLANNING

MANY BUSINESSES ARE NOT PREPARED TO RESPOND TO A MAN-MADE OR NATURAL DISASTER. STATISTICS SHOW THAT, OF THE BUSINESSES THAT CLOSE BECAUSE OF A DISASTER, AT LEAST ONE IN FOUR NEVER REOPENS. SMALL BUSINESSES ARE PARTICULARLY AT RISK BECAUSE THEY MAY HAVE ALL OF THEIR OPERATIONS CONCENTRATED IN ONE LOCATION THAT IS DAMAGED OR DESTROYED. THAT IS



and many other types of natural hazards can avoid notice and be tracked, which allows for preparedness planning. But even if that is not the case, the steps identified here will help a business more resilient and better able to survive an event that happens without warning.



## Data Protection: A Vital Part of Business Protection

Information and information technology (IT) are the lifeblood of most businesses and must be included in any business continuity plan. Failing to take the necessary steps to protect data and data equipment from weather and other causes of loss leaves your business vulnerable. Take time now to review systems you have in place to protect your data and the equipment your employees use to create, receive, transmit and store information.

Even though most businesses correct systems without vital records and critical information, much of which is created and recorded electronically, many business owners may not know where the information is digitally located and stored. Some businesses also may have important current and historical documents that are only available in paper form. Without proper planning, these vital records may be damaged or lost in the event of a weather event or other disaster strike. At the same time, the loss of critical data and information brings commerce activity to a standstill and ultimately can cause the business to fail. This reinforces the need to have systems in place to protect and retrieve your data as part of your business continuity plan.

### THE NEED FOR PLANNING

Many situations can wreak havoc on IT systems, often resulting in time consuming and difficult attempts to create the stored information. Even if the inability to access data is temporary, it could reduce your competitive edge, damage your reputation and result in the loss of new and existing customers.

### WHY YOUR SYSTEM IS AT RISK

Your business continuity plan should include steps to protect and/or back up all aspects of the IT system, including hardware, software, data and connectivity. Different hazards may target different parts of an IT system. It is important to consider everything from a total power interruption to the physical destruction of the facility.

### HELPFUL DEFINITIONS

Hardware: peripheral devices such as monitors, printers, scanners, external hard drives and keyboards.

Software: programs that enable applications to run or operate on your computer systems.

Data: information stored and saved on your computer such as files, folders, and multimedia.

Connectivity: movement of data from one source to another including wireless computing, network cables and modems.

### POWER DISRUPTIONS

The interruption of the power supply can take on many forms: surges, spikes, brownouts and blackouts. The briefest and most common disturbances such as power or voltage surges are virtually inevitable and can be damaging. While often lasting only a millisecond, these surges can cause the voltage in electronic circuits from a few hundred to as much as several thousand volts, potentially damaging sensitive IT and other electronic equipment. For information about the use and maintenance of surge protectors, see IIBHS article on protecting commercial properties from power surges at [http://www.insurance.org/commercial\\_maintenance/protecting-commercial-properties-from-power-surges](#).


Back-up power plays a critical role in the protection of IT systems. In the short term, and as a complement to surge protectors, an uninterruptible power supply (UPS) provides near-instantaneous protection from power interruptions for a relatively short period. The typical period of 15-20 minutes is enough time to properly shut down protected equipment or bring an auxiliary power source online. This will provide a bridge to save data and issue shutdown commands to the operating system until power resumes normally or a secondary power source is provided.

Over the long-term, an emergency power generator allows for the operation of some or all electronic equipment and lights and can greatly reduce business disruption when normal power is interrupted. The use of a generator poses certain risks that





# IBHS ZIP Code Web-based Tool



Enter your ZIP Code below to discover the risks you face.

## Zip Code Risk Search Results

### SEARCH RESULTS

ZIP CODE = 13905

FLOOD

HIGH WINDS

WINTER WEATHER

WILDFIRE

## Freezing Weather

Winter weather can cause a number of problems ranging from water leaks to burst pipes and roof collapses. All homes and businesses potentially can be at risk from damage during prolonged periods of freezing temperatures or in the case of heavy snow accumulations. Falling temperatures also mean increased fire dangers linked to the use of heating devices. Rising fuel costs and environmental concerns have resulted in a rise in the use of alternative heating devices, which can pose increased property risks if not properly installed and maintained.

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### Advice for Staying Safe and Warm

In many areas the temperatures are plummeting. If you are at home and without power, IBHS offers guidance for using alternative heating devices.



### Build a Plan for a Power Outage

How to safely keep the heat and lights on during a power outage.



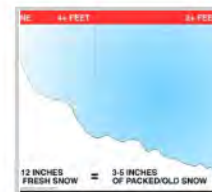
### Disaster Planning: There's an App for That

The new Know Your Plan app gives you the mobile power and organization to help keep your family and your home safer during a disaster.



### Installing Weather Stripping & Seals

Find out how both weather stripping and caulking can reduce your energy bills, as well as your winter weather risks.



### Prevent Roof Collapse on Homes

Guidance for understanding how much snow is too much.



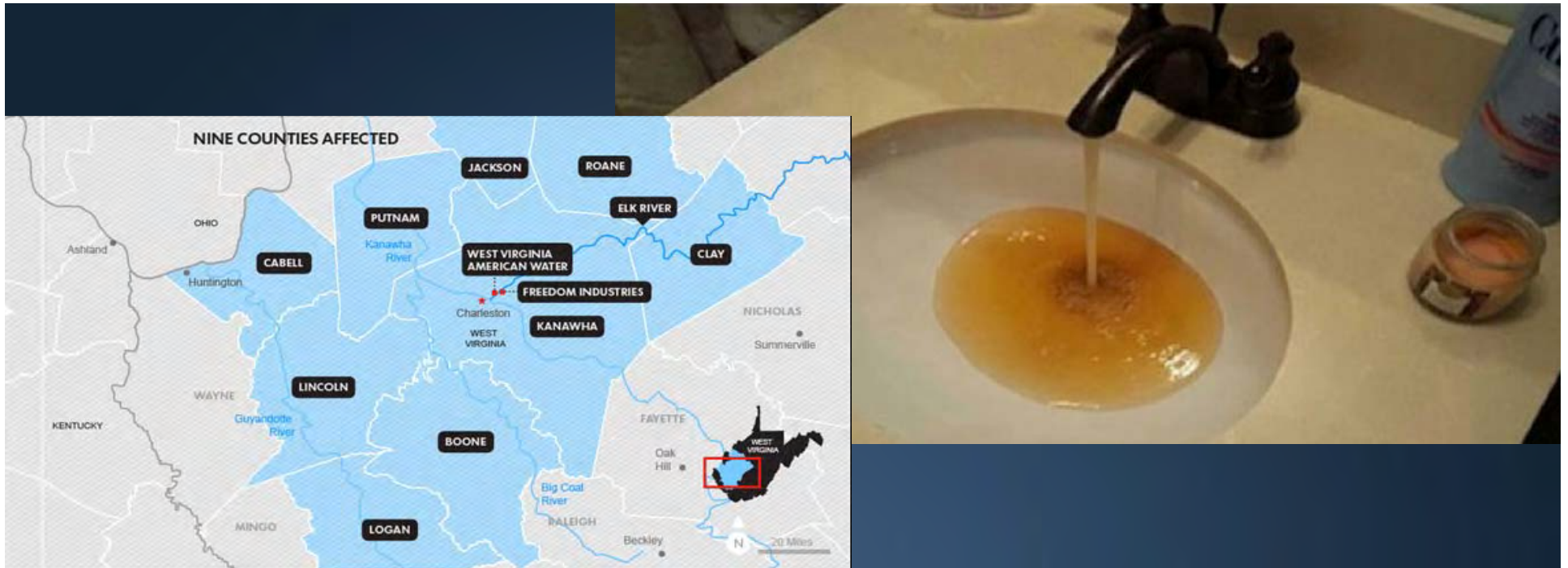
### Preventing Frozen Pipes

Frozen pipes are one of the biggest risks of property damage when the temperature drops.



# Are you ready for tomorrow?

- Monday, October 29, 2012  
**Hurricane Sandy**
- Monday, August 24, 1992  
**Hurricane Andrew**
- Sunday, May 221, 2011  
**EF5 Tornado in Joplin, MO**
- Thursday, January 9, 2014  
**WV Chemical Spill**
- Tuesday, January 28, 2014  
**Atlanta's Snowpocalypse**



- 75,000 gallons of Crude MCHM leaked into the Elk River in Charleston, WV
- 100,000 customers (or 300,000 people) of the Kanawha Valley Water Treatment Plant in 9 counties were told not to drink, bathe, cook or wash clothes with tap water
- All businesses with a health permit were instructed to close
- “Do Not Use” order lasted from Thurs, Jan 9 until Fri, Jan 17

*Thank you*



*Questions?*

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