Small Business Risk Reduction to Natural Hazards & Extreme Weather in Rhode Island

A Guide for
MANUFACTURING

SOME THINGS TO KNOW

This guide is targeted at businesses that own or manage brick and mortar, or off-site food preparation and service operations.

- This guide is meant to suggest actions to reduce risk to your business. However, the success of these strategies will be site dependent, and cannot be guaranteed.
- Each business is different; always consult with your local building official before starting a construction project.
- In most communities, if a project costs 50% or more of the value of the structure, "Substantial Improvement" requirements in the building code are triggered. This requires the property to be brought into compliance with the most up-to-date municipal floodplain management code.

IMPORTANT DEFINITIONS

Natural Hazards = Extreme weather events that can cause damage. Examples include hurricanes, floods, blizzards, or severe wind.

Business Features = The many parts that make a business run. By looking at how a hazard affects each feature, you can take focused steps to reduce risk.

Vulnerability = Business features that make your business more likely to be impacted by a natural hazard.

Risk = The level of exposure that a business has to a certain hazard. Higher vulnerability and a frequent natural hazard create higher risk.

Resilience = The ability of a business to "bounce back" after a severe event. It is how much individuals, institutions, and businesses can survive, adapt, and grow no matter the weather events they experience.

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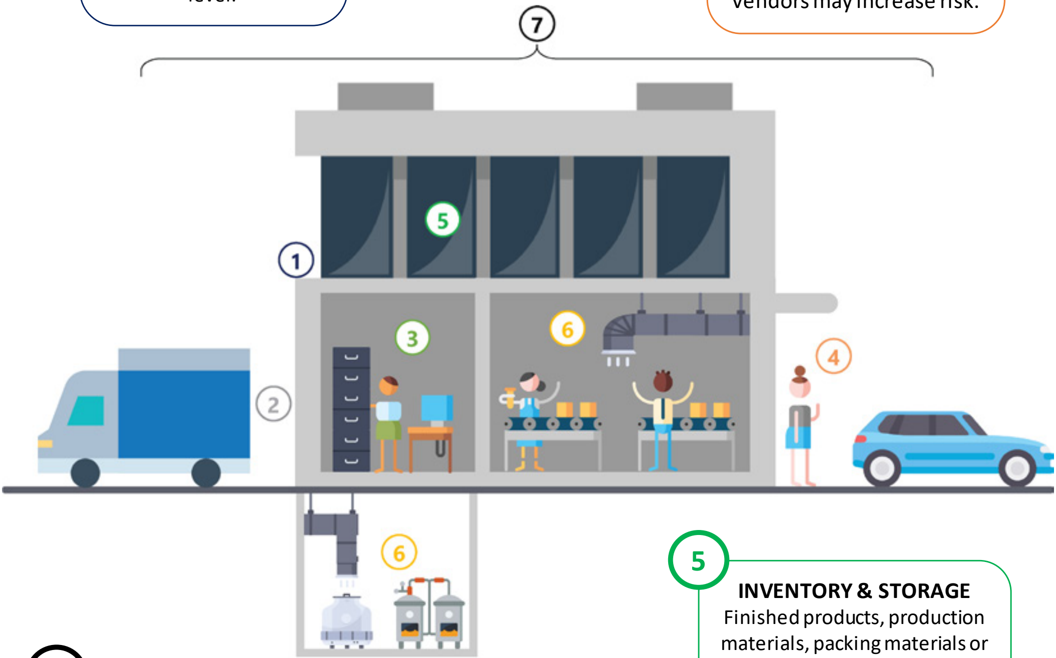
CONSIDER KEY BUSINESS FEATURES

2 ACCESS
Blocked roads may impact employees, customers, and the supply chain.

3 DOCUMENTS & RECORDS
Sales records, product designs, or customer information can be lost by direct damage or damage to IT systems

1 BUILDING STRUCTURE
Hazards can damage foundations, walls, windows, roofs. Basements have high flood risk, even without flooding at ground level.

4 EMPLOYEES & VENDORS
Employees may be unable to access or leave the site during a hazard event. Reliance on third-party vendors may increase risk.



5 INVENTORY & STORAGE
Finished products, production materials, packing materials or chemicals, can be lost to flooding, or outdoor items can become dangerous debris.

7 INSURANCE
Your policies should cover the building, contents, business interruption, equipment, and outdoor items against disasters, including floods.

6 UTILITIES & EQUIPMENT
Damaged equipment and utilities located inside and outside the building can cause long-term disruption or temporary closure.

IDENTIFY VULNERABILITIES AND STRENGTHS

Vulnerabilities	Strengths

1 BUILDING STRUCTURE

How important is the building to operations? How vulnerable is it to damage?

Vulnerabilities	Strengths
❑ Basement	❑ Elevated
❑ Large or old windows, old roof	❑ Hurricane-proof windows, shutters, roof
❑ Near coast or river, in mapped flood zone	❑ Located uphill, out of flood areas
❑ Sources of risk (like trees) near building	❑ Structural protection in place on site

2 ACCESS

Is access essential for customers, employees, others? How often is it blocked?

Vulnerabilities	Strengths
❑ Low-lying roads get flooded	❑ Multiple routes of access
❑ High tree cover over roads	❑ Can operate remotely or offsite
	❑ Easily accessible on foot (good sidewalks)

3 DOCUMENTS AND RECORDS

How are documents stored? Is information management a specific service?

Vulnerabilities	Strengths
❑ Hard-copies	❑ Electronic copies
❑ Located on-site	❑ Stored on "the cloud" and/or offsite

4 EMPLOYEES AND VENDORS

Can employees work remotely? Do you rely on third party vendors?

Vulnerabilities	Strengths
❑ Staff do not live locally	❑ Staff are trained in hazard response
❑ Staff may be exposed to natural hazards	❑ Redundancy in supply chain
❑ Rely on third parties	❑ Staff/vendor communication protocol

5 INVENTORY & STORAGE

Where are the items stored? Are any perishable?

Vulnerabilities	Strengths
❑ Storage in basement or outdoors	❑ Storage on upper level
❑ Refrigerated items on site	❑ Storage elevated
❑ Fuel or chemicals stored on site	❑ Minimal storage

6 BUILDING UTILITIES & SPECIALIZED EQUIPMENT

Can you operate without utilities? Where are utilities and equipment located?

Vulnerabilities	Strengths
❑ Located in basement	❑ On upper level, floodproofed or elevated
❑ Located outdoors	❑ Backup power (batteries, generators) & fuel
❑ Site experiences frequent utility outages	❑ Served by municipal water & sewer

7 INSURANCE

Do you have insurance? Does it cover contents, interruption, or natural disasters?

Vulnerabilities	Strengths
❑ Standard Insurance Policy	❑ Specialized Disaster Insurance
❑ Not Sure About Insurance Policy	❑ Business Interruption & Contents

SELECT RISK REDUCTION STRATEGIES

Required Investment

1 Building

Store Protection Materials
Store items on-site such as sand bags to reduce flooding, pre-sized plywood to protect windows, or salt for snow and ice.
$

Moderate-Cost Risk Reduction Actions
Sump pump in basement, backflow-prevention on plumbing, seal exterior walls, install flood gates that close during floods, "hurricane glass".
$$

High-Cost Risk Reduction Actions
Elevate interior floor, floodproof, or elevate entire building above flood level. Upgrade roof to a higher code for wind-load capacity.
$$$

2 Access

Partial Operations
Identify operations that can be performed (such as product design or online sales) even if access to your site and equipment is not possible.
$

Diversify Services
Expand the types of services offered to include services that do not require access to your site and equipment.
$$

3 Documents & Records

Protect Documents and Records
Store files in protective containers in elevated spaces. Back up records electronically, and store off-site or on the cloud.
$

4 Employees & Vendors

Third-Party Vendor Resilience
Identify backup vendors in case a hazard prevents third-party services from operating.
$

4 (Continued) Employees & Vendors

Emergency Supplies for Employees
Develop abilities to collaborate & schedule without office access to allow for continued operations.

$

"Business Continuity Plan"
Develop a business continuity or emergency plan. Identify needs, educate staff, assign responsibilities and perform drills.

$

5 Inventory & Storage

Protect Inventory
Store inventory in protective containers. Raise items on platforms or upper floors, tie down outdoor inventory, protect hazardous materials.

$

6 Utilities & Equipment

Partner with Other Businesses
Partner with another business to temporarily store items at one-another's sites or to use equipment if either site is compromised.

$

Seal Interior Rooms
Construct or install flood barriers to protect key utilities and equipment. Floodproof equipment if possible.

$$

Backup Power
Acquire/install a backup generator capable of running manufacturing equipment and train staff to operate. Store fuel on-site.

$$

Protect Utilities and Equipment
Raise utilities and essential equipment above flood levels on platforms or upper floors. Waterproof or protect with immovable barriers.

$$

7 Insurance

Ask About Insurance Coverage
Check with your agent about the specifics of your coverage. See the next page for questions to ask.

$

Staff Time Required	Relative Cost	Space Required
No staff time needed	$ Within normal budget	Minimal space needed
Overtime needed	$$$ Grants may be needed	Buy or rent more space
Within normal operations	$$ Additional capital needed	Find space on site
Additional staff or help		

CHOOSING INSURANCE

A business is never completely safe from hazards. Insurance helps to protect the time and money you invest in your business against the worst-case scenarios.

Your insurance agent can provide detailed answers to these questions specific to your business.

What is covered by my business insurance policies?

A standard insurance policy may not cover important situations, like damages caused by floods or losses from business interruption. Talk with your agent about different situations that concern you to see if you're protected.

I rent my workspace. What is covered by my landlord's insurance?

A landlord's insurance policy may or may not cover losses incurred by tenants. Ask for a copy of the insurance policy and bring it to your own agent to review.

Does my standard policy cover business interruption?

You may lose business after a storm if power goes out, if roads are blocked, or if you need to close for repairs. Check with your agent whether lost business is covered or if you should purchase a rider to increase coverage.

What about liability and automobile insurance?

Liability and auto insurance are separate from business insurance and flood insurance. Talk to your agent about other policies you may need and what they cover. For example, auto insurance may partially cover your vehicle(s) for hazard events like severe storms.

What is a hurricane deductible?

Some policies include a separate hurricane deductible. Because hurricanes are rare, you pay less monthly. However, if a hurricane does hit, you will pay more before insurance kicks in. A storm must be hurricane-force when it hits Rhode Island for hurricane deductibles to apply. You may have other weather related deductibles (for example wind or hail). Check with your insurance agent to discuss what deductibles you may have and how they apply to other weather related events.

How do I make filing a claim easier?

Have insurance information and current inventory and equipment lists on-hand. Take photos or videos of your business site and inventory now, BEFORE an event occurs. Then, take photographs/video of any damage before clean-up or repairs. DO NOT make permanent repairs until your insurance company inspects the property. Save all receipts, including those from any temporary repairs.

FLOOD INSURANCE

FEMA offers subsidized flood insurance through the National Flood Insurance Program (NFIP). **You do not need to be in a flood zone, nor do you need to own your building, to purchase flood insurance.**

- One inch of water in a building can cause more than $25,000 in damage.
- Standard insurance typically does not cover flood damage.
- More than 1 in 5 flood claims come from outside high-risk flood zones (and that does not include building owners who were not insured, and therefore could not file claims).
- Flood insurance can pay whether or not there is a Disaster Declaration.
- Disaster assistance must be paid back with interest. The average flood insurance claim is nearly $30,000 and is not required to be repaid.

Can't I just get Disaster Assistance after a flood?
Disaster Assistance is given as a loan, it is not guaranteed, and it needs to be paid back with interest. It is not meant to make you whole again. Don't only rely on emergency assistance, get flood insurance!

Your insurance agent can provide detailed answers to these questions specific to your business.

How do I get flood insurance?
Flood insurance policies are backed by the National Flood Insurance Program (NFIP). You can get a policy through most insurance agents.

Does flood insurance cover the building or its contents?
Contents and building coverage are separate; contents are not covered unless specifically included. Building coverage includes the structure and foundation, building utilities, and walk-in freezers. Contents coverage includes furniture, fixtures, equipment, and stock.

If my landlord has flood insurance, do I need it too?
The landlord may not provide any coverage or may have only building coverage. A renter can purchase its own flood insurance policy.

What is not covered by flood insurance?
Flood insurance policies do not cover everything or all water-related situations and damages. For example, outdoor assets such as landscaping, decks, or vehicles are not covered. Either is business interruption. Additionally, damage from burst pipes, backed-up municipal sewage, or poor site management is not covered.

How can I lower my premium?
Flood insurance cost is related to the level of flood risk. Risk reduction actions can lower premiums. Your community can also take steps to lower premiums.

My business is not in a flood zone. Do I need flood insurance?
A large percentage of flood damage happens outside of FEMA-designated floodplains. If your business is outside of a FEMA flood zone, flood insurance is generally inexpensive. Assess your risk and talk to your agent to make an informed decision.

For more information visit **floodsmart.gov.**

USEFUL RESOURCES

Federal Government

U.S. Small Business Association (SBA)

www.sba.gov/funding-programs/disaster-assistance R.I. District Office (401) 528-4561

Provides low-interest loans to help businesses recover from declared disasters.

Federal Emergency Management Agency (FEMA)

www.fema.gov/assistance/businesses or www.ready.gov/business

Provides resources & information to help businesses prepare for disasters.
Subsidizes insurance, available to businesses through most insurance agencies.

State Government and Tools

Rhode Island Commerce Corporation

www.commerceri.com (401) 278-9100

Get connected to a business engagement specialist today. We're here to help.
www.commerceri.com/business-assistance/small-business/

Rhode Island Emergency Management Agency (RIEMA)

www.riema.ri.gov/planning-mitigation/resources-businesses/preparing-good-business

24-hour/7 days a week: (401) 946-9996

Organizes emergency response efforts at a state level. RIEMA has programs in preparedness, mitigation, response and recovery.

Rhode Island Builders Association (RIBA)

www.ribuilders.org (401) 438-7400

A not-for-profit organization that works to provide support to those in the building industry by providing educational opportunities, and enhancing relationships.

Rhode Island Department of Business Regulation (DBR)

www.dbr.ri.gov/insurance-overview (401) 462-9520

Online source for answers to insurance questions and for insurance related inquiries.

STORMTOOLS

https://stormtools-mainpage-crc-uri.hub.arcgis.com/

An interactive tool to display storm inundation with and without sea level rise scenarios.

RI Coastal Resources Management Council CRMC)

www.crmc.ri.gov/coastalhazardapp.html

A first step to educate and increase understanding of present and future coastal hazard risks.

Local Government

To identify key staff and contact information visit: www.sos.ri.gov/divisions/civics-and-education/your-government

Municipal Emergency Management Agency ______________________________

Fire Department (non-emergency) ______________________________

Floodplain Coordinator ______________________________

Building Official ______________________________

Chamber of Commerce ______________________________

Utility Company (ex. gas or electric) ______________________________

ADDITIONAL CONSIDERATIONS

Historic Structures

For historic properties, consult the following resources:

- "Keeping History Above Water" - created by the Rhode Island-based Newport Restoration Foundation to help protect historic resources from climate hazards. **www.historyabovewater.org**
- FEMA "How-To" Guide #6 (FEMA 386-6) - provides comprehensive guidance to historic property owners. **www.fema.gov/media-library/assets/documents/4317**
- Check with your local building official about your specific location. Also, coordinate with the State Historic Preservation Officer and the local Historic District Commission.

Americans with Disabilities Act Compliance

Before implementing a risk reduction project consider how it will affect access for people with physical disabilities. Structural changes may require that additional efforts be taken to maintain ADA compliance. Talk to your local building official about your plans before proceeding.

Elevating Buildings and Pedestrian Access

Elevating a building or installing floodwalls may lead to a loss of visibility or access, affecting your ability to attract customers. Identify protection options that avoid this outcome, and contact your local building official to clarify state and local requirements. Note that some business operations can occur in the lower section of an elevated building on a temporary basis.

What if I Rent?

Businesses that do not own their space can still perform many risk reduction actions, including buying flood insurance, planning and preparing, and performing some minor site alterations. At your next lease renewal, add a provision that rent does not need to be paid if the site is inaccessible or unusable during a hazard event. Discuss property protection with you landlord - they don't want their building empty and their tenants damaged, either!

What Should My Employees Know?

Consider having all employees become certified by ServSafe. Visit www.rifoodsafety.org for more information on the certification program. Employees should also be aware or the proper protocols with any crisis management plans, food safety plans, and other emergency plans that are set in place. It is important that employees understand and are aware of the different requirements, such as storage temperatures and shelf life, of perishables to prevent spoiled food from being served.

NOTES

For more information
http://climatechange.ri.gov