

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.

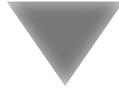
Risk = The level of exposure that a business has to a certain hazard. Higher vulnerability and a frequent natural hazard create higher risk.

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.

HOW TO USE THIS GUIDE

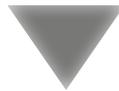
**Consider Key
Business Features**

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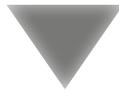
**Identify
Vulnerabilities
and Strengths**

Page 4



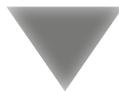
**Select Risk
Reduction
Strategies**

Pages 5 - 6



**Consider
Insurance Options**

Pages 7 - 8



**Useful
Resources**

Page 9

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

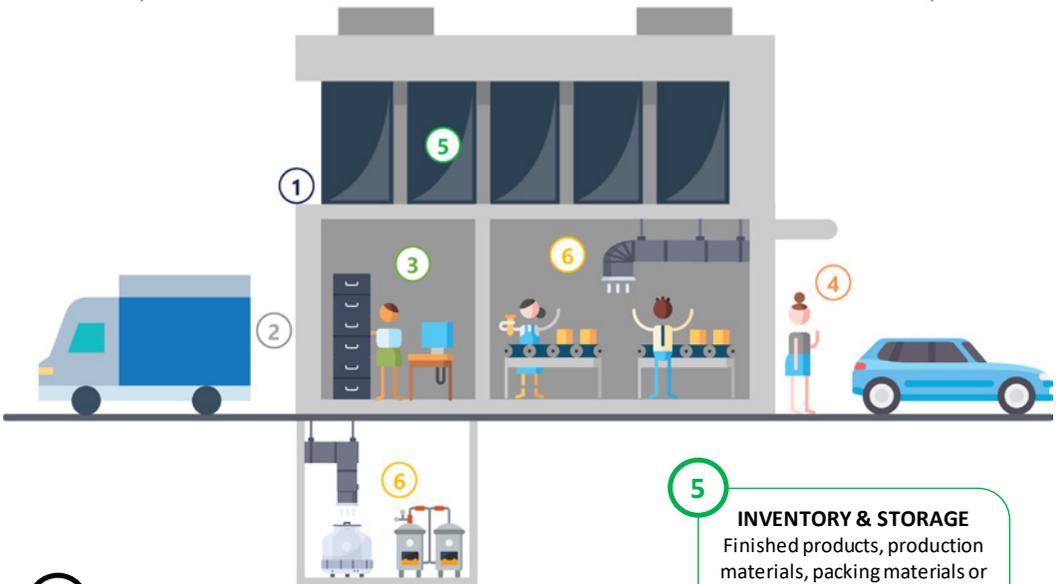
Hazards can damage foundations, walls, windows, roofs. Basements have high flood risk, even without flooding at ground level.

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.

7



7

INSURANCE

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

5

INVENTORY & STORAGE

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

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?

- | | |
|---|--|
| <input type="checkbox"/> Basement | <input type="checkbox"/> Elevated |
| <input type="checkbox"/> Large or old windows, old roof | <input type="checkbox"/> Hurricane-proof windows, shutters, roof |
| <input type="checkbox"/> Near coast or river, in mapped flood zone | <input type="checkbox"/> Located uphill, out of flood areas |
| <input type="checkbox"/> Sources of risk (like trees) near building | <input type="checkbox"/> Structural protection in place on site |

2

ACCESS

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

- | | |
|--|---|
| <input type="checkbox"/> Low-lying roads get flooded | <input type="checkbox"/> Multiple routes of access |
| <input type="checkbox"/> High tree cover over roads | <input type="checkbox"/> Can operate remotely or offsite |
| | <input type="checkbox"/> Easily accessible on foot (good sidewalks) |

3

DOCUMENTS AND RECORDS

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

- | | |
|--|---|
| <input type="checkbox"/> Hard-copies | <input type="checkbox"/> Electronic copies |
| <input type="checkbox"/> Located on-site | <input type="checkbox"/> Stored on "the cloud" and/or offsite |

4

EMPLOYEES AND VENDORS

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

- | | |
|--|---|
| <input type="checkbox"/> Staff do not live locally | <input type="checkbox"/> Staff are trained in hazard response |
| <input type="checkbox"/> Staff may be exposed to natural hazards | <input type="checkbox"/> Redundancy in supply chain |
| <input type="checkbox"/> Rely on third parties | <input type="checkbox"/> Staff/vendor communication protocol |

5

INVENTORY & STORAGE

Where are the items stored? Are any perishable?

- | | |
|---|---|
| <input type="checkbox"/> Storage in basement or outdoors | <input type="checkbox"/> Storage on upper level |
| <input type="checkbox"/> Refrigerated items on site | <input type="checkbox"/> Storage elevated |
| <input type="checkbox"/> Fuel or chemicals stored on site | <input type="checkbox"/> Minimal storage |

6

BUILDING UTILITIES & SPECIALIZED EQUIPMENT

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

- | | |
|--|--|
| <input type="checkbox"/> Located in basement | <input type="checkbox"/> On upper level, floodproofed or elevated |
| <input type="checkbox"/> Located outdoors | <input type="checkbox"/> Backup power (batteries, generators) & fuel |
| <input type="checkbox"/> Site experiences frequent utility outages | <input type="checkbox"/> Served by municipal water & sewer |

7

INSURANCE

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

- | | |
|--|---|
| <input type="checkbox"/> Standard Insurance Policy | <input type="checkbox"/> Specialized Disaster Insurance |
| <input type="checkbox"/> Not Sure About Insurance Policy | <input type="checkbox"/> Business Interruption & Contents |

SELECT RISK REDUCTION STRATEGIES

Required Investment

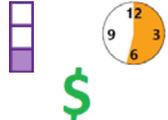
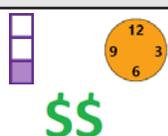
1

Building

| | | |
|--------------------------|---|--|
| <input type="checkbox"/> | <p>Store Protection Materials</p> <p>Store items on-site such as sand bags to reduce flooding, pre-sized plywood to protect windows, or salt for snow and ice.</p> |  |
| <input type="checkbox"/> | <p>Moderate-Cost Risk Reduction Actions</p> <p>Sump pump in basement, backflow-prevention on plumbing, seal exterior walls, install flood gates that close during floods, "hurricane glass".</p> |  |
| <input type="checkbox"/> | <p>High-Cost Risk Reduction Actions</p> <p>Elevate interior floor, floodproof, or elevate entire building above flood level. Upgrade roof to a higher code for wind-load capacity.</p> |  |

2

Access

| | | |
|--------------------------|---|---|
| <input type="checkbox"/> | <p>Partial Operations</p> <p>Identify operations that can be performed (such as product design or online sales) even if access to your site and equipment is not possible.</p> |  |
| <input type="checkbox"/> | <p>Diversify Services</p> <p>Expand the types of services offered to include services that do not require access to your site and equipment.</p> |  |

3

Documents & Records

| | | |
|--------------------------|---|--|
| <input type="checkbox"/> | <p>Protect Documents and Records</p> <p>Store files in protective containers in elevated spaces. Back up records electronically, and store off-site or on the cloud.</p> |  |
|--------------------------|---|--|

4

Employees & Vendors

| | | |
|--------------------------|---|--|
| <input type="checkbox"/> | <p>Third-Party Vendor Resilience</p> <p>Identify backup vendors in case a hazard prevents third-party services from operating.</p> |  |
|--------------------------|---|--|

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.



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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.



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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.



\$\$

6

Utilities & Equipment

Ask About Insurance Coverage

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



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7

Insurance

Staff Time Required



No staff time needed



Overtime needed



Within normal operations



Additional staff or help

Relative Cost

\$

Within normal budget

\$\$\$

Grants may be needed

\$\$

Additional capital needed

Space Required



Minimal space needed



Find space on site



Buy or rent more space

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.

USEFUL RESOURCES

Federal Government

U.S. Small Business Association

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.

FEMA

www.fema.gov/small-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

Rhode Island Commerce Corporation

www.commerceri.com (401) 278-9100
Hosts a Small Business Hotline, where business owners can ask questions and get support:
www.rismallbiz.com (401) 521-HELP

Rhode Island Emergency Management Agency (RIEMA)

www.riema.ri.gov/resources/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 Manufacturers Association (RIMA)

www.rimanufacturers.com (401) 751-0160
Provides advocacy at the federal, state and local levels, and connects members in the industry.

Department of Business Regulation

www.dbr.ri.gov/divisions/insurance/
Online source for answers to insurance questions and for insurance related inquiries.

STORMTOOLS

www.beachsamp.org/stormtools/
An interactive tool to display storm inundation with and without sea level rise scenarios.

RI Coastal Resources Management Council - Coastal Hazard Application

www.crmc.ri.gov/coastalhazardapp.html
Online viewer and worksheet to identify a location's level of coastal hazard.

Local Government

Your local institutions, organizations, and utilities are often the best places to turn.
Identify key staff and contact information:

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 of 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.

