Community Resiliency Workshop

Be Informed – Be Prepared
Special Thanks to:

PSEG
Welcome!

• Name and library

• What type of EM – DR – BCM plan do you have?

• How effective do you think it is?

• What would you like to get out of today?
Safety Briefing

• Don will act as the Safety Warden

• Michele will be the *Incident Commander* at the assembly area

• We will meet at _________________

• Michele will issue the *All Clear* when safe to return
In an Emergency You Have Two Choices
General Guidelines

- Establish exit routes
- Place signage and route plans
- Create a Safety Warden program
- Designate assembly/shelter areas
- Train wardens how to clear areas
- Test notification system
- Update management and other stakeholders
- Conduct *After Action* reviews
Be Careful in Choosing Assembly Sites

• Sheltered if possible
• Clearly marked
• Away from traffic flow
• Easy for people with disabilities to navigate
• Away from the media
• Away from ‘the action’
Library Safety Warden Program

- Volunteer function
- Should provide clear guidance
- Ongoing training in 1st aid and traffic control
- One way to track/account for staff and patrons
- Designate an *Incident Commander*
- Invite local fire dept. to observe any exercises you conduct
1. Do you have a written *emergency action plan* as per OSHA directions?
2. Do you have a written evacuation plan?
3. Can you communicate clearly to every part of the facility?
4. Are your communications suitable for people with disabilities?
5. Do you have a designated assembly area outside the facility?
6. Is there signage directing people to this location?
7. Do you have a sheltered assembly area to be used during inclement weather?
8. Do you have marked exit routes?
9. Does your evacuation plan provide for the needs of people with disabilities?
10. Have you practiced an evacuation in the last 12 months?
11. Have you designated an *incident commander*?
12. Have you recruited volunteers to be safety wardens?
13. Have you devised a way of accounting for everyone in the facility?
14. Has your staff received training on how to assist the public in evacuating?
15. Have your safety wardens received training on how to perform their duties?
Type 1 Shelter Exercise – No Internal Threat

• What characteristics would you look for in a shelter-in-place (SIP) location?

• What challenges would you face in securing this location?

• What would help you with making these selections?
Shelter in Place Exercises
Type 2 SIP Exercise – Internal Threat

FEMA and Law Enforcement Guidance:
• Run
• Hide
• Fight

Where to go?
• Easy to find
• Securable
• Out of Sight
Emergency Planning – Shelter-in-Place

1. Do you have a written *shelter-in-place* plan?
2. Does the plan address centralized sheltering?
3. Does the plan address ad hoc/distributed sheltering?
4. Are centralized shelter areas clearly marked?
5. Can the central shelters meet the needs of people with disabilities?
6. Is your shelter area(s) provisioned with essential supplies?
7. Has your staff been briefed on the Run, Hide, Fight model?
8. Have you practiced a sheltering exercise in the last 12 months?
9. Have you designated an *incident commander*?
10. Have you recruited volunteers to be safety wardens?
11. Have you devised a way of accounting for status of the facility?
12. Has your staff received training on how to assist the public in sheltering?
13. Have your safety wardens received training on how to perform their duties?
14. Do you have a way of monitoring/communications with first responders?
15. Have any of your staff received 1st aid training?
Level of Activation?

Plan Activation and Other Response

- Purple: Partial Plan Activation. Limited Disruption.
Workshop Agenda: A **Strategic** Perspective

- Cover Some Background
- Definitions and Terminology
- Developing a Plan
- Reacting to a Crisis
- Recovering from a Disaster
- Restoring Vital Services
- Resuming Operations
- Promoting a Resilient Community
Case Study 1: February – 200X
Gas and Oil Transportation Company

- NE division of a larger company New York Stock Exchange listed company.
- Deliver specialty gas and oil products
- Clients include:
  - Hospitals
  - Manufacturing
  - Food Preparation
  - Retail
  - Many Others
Phone Call At 8:30 PM, Sunday Night

• Experienced driver
• Sudden explosion
• Driver injure - lost both legs
• Security calls “First name on the list.”
• Reports, police, fire and EMS are onsite
• First question: “What should I do next?”
My Friend’s Reaction

“What do I tell the security guard?”
Action Plan – Part 1

• Notify the management team, especially Operations
• Contact the victim’s family
• Send an executive to the hospital
• Have an executive at the accident scene
• Prepare a statement for Investor Relations
• Prepare a Media Briefing Center for TV, Radio, and Newspapers
• Call a Press Conference
• Retrieve training and maintenance records
• Issue a warning to all other drivers to check their equipment
• Begin inspecting all other trucks and storage tanks
Action Plan - Part 2

- Identify customers that are impacted by the event
- Locate an alternative source of “product” (competitors?) for at least 1 week
- Find trucks equipped to deliver (outsource to competitors?), also for 1 week
- Match drivers with the proper licensees to trucks and product (Workload!)
- Equip drivers with delivery instructions and dispatch them to their routes
- Contact customers and notify them of any delivery changes (re-prioritize)
- Send in a Damage Assessment Team after the police release the site
- Secure the location against vandalism and unauthorized visitors
- Contact insurance company and legal council
- Issue a statement to employees and other stakeholders
All by the Morning
Is Your Library Prepared for Such an Incident?
Case Study 2 – May 2006

Floods Hit New England
Mary Immaculate Nursing Home - 1905
Nursing Home Was Flooded

• Water and sewage filled 18 inches of the ground floor.
• Basement was flooded.
• Elevators were shutdown.
Moving Residents Was a Major Challenge
Their Training Showed!

• The team jumped into action.
• Applied the lessons learned when practicing fire drills.
• Safely moved residents and equipment.
• Left the CEO a chance to “Observe and Manage.”
Major Challenge – A Flooded Parking Lot

05/17/2006
In The Words Of Dr. Pasteur…

“Chance favors the prepared mind.”
What the CEO Noted

The wheeled laundry carts floated.
The Residents Were Safe

What about the staff?
The staff stayed employed:
• On the payroll.
• Kept all their benefits.
• Were fully employed (18 mos).
• All but 1 returned.
When the Building Rehab Was Finished

The Nursing Home was:

- Re-Opened,
- Re-Staffed,
- Ready!
Start With Terminology

Language is confusing and its misuse can be dangerous during a crisis.
American English, World’s Largest Language

• Great for poets and writers.
• Tough on lawyers and international treaties and regulations.
• ISO has dropped the term “stakeholder” and replaced it with “interested party.”
Take the Word - Hazard

• There are approximately 62 synonyms for this term.
• Some of them are:
  ▪ Danger
  ▪ Threat
  ▪ Risk

all of which represent very different concepts.
Hazards: Events That Pose a Danger

A snow storm is a danger.
But not in Miami.
Threats: Events That Pose a Danger to You
Risks Involve Uncertainty

“Something doubtful or not known with total confidence.”

Uncertainty is definable, bounded, and measurable.
Where Risk Comes Into Play

Measurable doubt that carries a consequence.¹

¹ Dr. Frank Knight: University of Chicago - *Risk Uncertainty and Profit* (1921)
Another Term - Resiliency

- Defining resiliency is like nailing Jello to the wall.
Technical Definition

Originally a term used in Material Science

**re-sil-ience**  
[ri-zil-yuh-ns, -zil-ee-yuh-ns]  
Show IPA

**-noun**
1. the power or ability to return to the original form, position, etc., after being bent, compressed, or stretched; elasticity.
2. ability to recover readily from illness, depression, adversity, or the like; buoyancy.
A Good Example
More on Resiliency

Potter Stewart
Associate Justice of the United States Supreme Court

“I shall not today attempt further to define the kinds of material I understand to be embraced within that shorthand description ["hard-core pornography"]; and perhaps I could never succeed in intelligibly doing so. But I know it when I see it, and the motion picture involved in this case is not that.”

*Jacobellis v. Ohio* (1964)
Sometimes It’s Obvious
An Emergent Property

Other examples: Health Safety Quality
One More Term - Community
Communities Take Different Forms

The Librarian’s Disaster Planning and Community Resiliency Workshop 2016
There is the Traditional View
Other Communities – Religious Groups
Political Parties
Ethnic Communities
Common Interests and Hobbyists
Libraries Are a Linchpin of Communities
Some Facts

- **91%** of Americans say they **know where the closest public library is** to where they currently live; among these respondents, most said the closest public library is five miles or less away from their home.

- **93%** of Americans say that **it would be easy to visit a public library in person** if they wanted to, with 62% saying it would be “very easy.”
Libraries Pay for Themselves

According to another study focusing on Indiana communities, any money used to support libraries has a high payback.

Specifically, this study shows $2.38 in direct economic benefit for each dollar spent on libraries and associated services.
In a Crisis, Libraries Are Friendly Alternatives

- Power?
- Warmth?
- WiFi?

Workshops Courtesy of PSEG
More Than Just Power

Access to I.T. Equipment?  Reliable Information?  Support?
Importantly – Specialized Services

*Easy to Find!*

*Accommodate Special Needs*

*Familiar!*

*Low Income*

*Minority Populations*

*Elderly*

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The Digital Divide

A majority of public libraries, (67%), report that they are the only free source of computer and Internet access for the communities they serve.

Reference:

Perceptions of libraries, 2010 : context and community : a report to the OCLC membership

Read more
Custodians of Community History

- Artifacts
- Oral History
- Images
- Printed Material

Some material may not warrant a museum – but it tells the story of that community.
Protection of Art Treasures

www.daydaypaint.com

www.velvetpaintings.com - Quality you can feel.
The Importance of Small Businesses

• There are approximately 27.5 million U.S. small businesses (99.7%)
• They employ half of the private sector workforce.
• Pay 44% of total U.S. private payroll.
• Generated 65% of net new jobs over the past 17 years.
• Create more than half of the nonfarm private GDP.
• Hire 43% of high tech workers (scientists, engineers, computer programmers, and others).
• Are 52% home-based and 2% of franchises.
• Made up 97.5% of all identified exporters
• Produced 31% of U.S. export value in FY 2008.
• Produce 13 times more patents per employee than large firms.
Reopening Businesses is KEY to Resiliency

“40% of businesses affected by a natural disaster **never reopen.**”

Source: Insurance Information Institute
Some Vital Services You Can Provide

- No cost meeting space.
- Access to power to charge phones.
- Steady stream of trusted, reliable information.
- Reconnecting with customers.
Needed Support for 1st Responders

An opportunity to handle family concerns and other personal matters.
Projects an Image of Normalcy to Citizens

Reengagement with people you know.

Helps cope with new demands.

Similar to the *Waffle House Index*.

Value of seeing movie houses, and barber shops reopen.
What About A Library Index?

People look for indicators that the ‘world’ is returning to normal.

- Waffle House Case Study.
- Barber shops reopening.
- Libraries lending books
Why Does This Provide a Calming Effect?

Partial answer: they are a *permanent* part of the community
A Form of Psychological First Aid

Psychological vs. Medical “Footprint”

In a disaster, the size of the psychological “footprint” greatly exceeds the size of the medical “footprint.”

Source: Shulz JM, et al., Behavioral Health Awareness Training for Terrorism and Disasters, Miami Fl, DEEP Center, 2003
And Their Value is Being Recognized

Libraries distinguished themselves during superstorm Sandy and gained the respect of public officials, NGOs, and general citizens.
Pivotal Role of Libraries in a Crisis

This term and concept was developed by Michele P. Stricker, Deputy State Librarian Lifelong Learning, New Jersey State Library
Let’s Talk About Risk
Question: “Are All Risks Negative?”

- **Downside risks**: you experience a negative result.

- **Upside risks**: you do not **fully** realize the *upside potential* of a venture.
4 Risk Management Techniques

- Risk Avoidance
- Risk Transfer
- Risk Mitigation
- Risk Acceptance
Applying Risk Management Concepts

Impact

Probability

Low

High

Low

High

Reduction

Avoid

Accept

Transfer/Share
Dealing with the Avoidable and Unavoidable

<table>
<thead>
<tr>
<th>Probability</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduction</td>
<td>Accept</td>
</tr>
<tr>
<td>Avoid</td>
<td>Transfer/Share</td>
</tr>
</tbody>
</table>

- Foreseeable and Avoidable
- Unforeseeable
Applying Risk Management Concepts

<table>
<thead>
<tr>
<th>Reduction</th>
<th>Avoid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-train Staff</td>
<td>Fire Works Factory</td>
</tr>
<tr>
<td>Lack of Operational Knowledge</td>
<td>Lack of Operational Knowledge</td>
</tr>
<tr>
<td>Patron Accidents and Lawsuits</td>
<td>Water Problems</td>
</tr>
<tr>
<td>Transfer/Share</td>
<td>Purchase Liability Insurance</td>
</tr>
<tr>
<td>Frequent Paper Jams in Copiers</td>
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The Librarian’s Disaster Planning and Community Resiliency Workshop 2016
Black Swans – Never Saw It Coming!

Black Swans:
A term created by MIT economist and former derivatives trader Nassim Taleb, a black swan event is one that's *highly improbable and unforeseen.*
Black Swans – The Book, Not the Movie!
We Have Recently Experienced Two

The 9/11 attacks on DC and NYC.

Superstorm Sandy.
Other ‘Black Swan’ Events Under Study

EMP Strike

“Dirty Bomb”

Asteroid/Comet Strike

Coronal Mass Ejection
Solar storm of 1859

The Solar Storm of 1859 — known as the Carrington Event[1] — was a powerful geomagnetic solar storm during solar cycle 10 (1855-1867). A solar coronal mass ejection hit Earth's magnetosphere and induced one of the largest geomagnetic storms on record. The associated "white light flare" in the solar photosphere was observed and recorded by English astronomers Richard C. Carrington (1826–1875) and Richard Hodgson (1804–1872).

Studies have shown that a solar storm of this magnitude occurring today would likely cause more widespread problems for a modern and technology-dependent society.[2][3] The solar storm of 2012 was of similar magnitude, but it passed Earth's orbit without striking the planet.[4]

Carrington Flare

From August 28 to September 2, 1859, numerous sunspots were observed on the Sun. On August 29, southern aurorae were observed as far north as Queensland, Australia.[5] Just before noon on September 1, the English amateur astronomers Richard Carrington and Richard Hodgson independently made the first observations of a solar flare.[6] The flare was associated with a major coronal mass ejection (CME) that travelled directly toward Earth, taking 17.6 hours to make the 150 million kilometre (93 million mile) journey. It is believed that the relatively high speed of this CME (typical CMEs take several days to arrive at Earth) was made possible by a prior CME, perhaps the cause of the large aurora event on August 29, that "cleared the way" of ambient solar wind plasma for the Carrington event.[7]

Because of a geomagnetic solar flare effect ("magnetic crochet")[8] observed in the Kew Observatory magnetometer record by Scottish physicist Balfour Stewart and a geomagnetic storm observed the following day, Carrington suspected a solar-terrestrial connection.[8] Worldwide reports on the effects of the geomagnetic storm of 1859 were compiled and published by American mathematician Elias Loomis, which support the observations of Carrington and Stewart.
Grey Swans – You Should Know Better

Grey Swans:
Events for which there is no historical precedents – but the indicators were present and they should have been foreseen.
Global Impact of BC/CM Standards

2016 Projections

Figure 3: The Most Likely Global Risks 2016: A Regional Perspective

Source: Global Risks Perception Survey 2015.
Note: Respondents were asked to select the three global risks that they believe are the most likely to occur in their region. For legibility reasons, the names of the global risks are abbreviated; see Appendix A for the full name and description. Oceania is not displayed because of the low number of respondents.

Exercise 1: Threat Assessment

1. Write down 3 threats that can severely impact your library.
2. We will ask you to tell us what you put on your list.
3. If it has already been said, just skip over it.
4. Let’s see how many different threats we come up with.
Your Comments and Observations?
Best Answer Ever!

“Sharks in a tornado. Sharknado. Simply stunning.”
—Fin
Now, what if I asked you to add to your list and gave you an extra 10 mins?

Could you come up with more possible threats?

What if I gave you another hour, or a full day – could you come up with more threats?
A Near Infinite Number of Threats Face Us

They generally differ based on their probability of occurring.
12 Categories of Risk

1. Weather Related
2. Environmental Issues
3. Accidents – Human Actions
4. Communicable Diseases
5. Regulatory Compliance
6. Technology Related Concerns
7. Non-Weather Natural Hazards
8. Inaccurate Information
9. Political and Civil Unrest
10. Organizational Changes
11. Task/Job Specific Activities
12. Other Types of Risks
Combine Threats Categories w/ Risk Techniques

Categories of Potential Threats

1. Weather Related
2. Environmental Threats
3. Accidents and Human Actions
4. Communicable Diseases
5. Regulatory Compliance Issues
6. Technology Related Concerns
7. Non-Weather Natural Hazards
8. Inaccurate Information
9. Political or Civil Unrest
10. Organization Changes
11. Task Specific Issues
12. All Other Threats
How Can Risks Affect Your Operation

Focus on the *most common* consequences and direct your budget to leverage the greatest benefit.

### Possible Impacts
- Staff Issues/Competency/ Licensing
- Worksite/Facility Issues
- Damaged Communications
- Regulatory Violations
- Environmental Damage
- Loss of Production Infrastructure
- Loss of Technical Infrastructure
- Loss of Utilities/External Services
- 3rd Party Vendor/Supplier Issue
- Organizational Changes
- Financial and Budget Issues
- Reputation/Brand Value Damage
- Loss of Vital Records/Data Sources
- Disrupted Transportation/Logistics
- Other Task-Specific Disruptions
New Concept: Risk Appetite
**Coping capacity** is the ability of a system (natural or human) to respond to and recover from the effects of stress or perturbations that have the potential to alter the structure or function of the system.
A Balanced Approach

- Reduction
- Avoid
- Accept
- Transfer/Share
Aggressive Risk Appetite

The library is very accepting of risk
- Small budget for risk *mitigation* and *transfer*.
- Many innovative programs and “new” offerings.
Conservative Risk Appetite

The library is risk averse!
- Small budget for risk mitigation and transfer.
- Might manifest as a reduction in standard services.

Unavoidable Risks
Low Coping Capacity
Impact
The Risk Profile Will Change for Each Risk

Facility Concerns
- Reduction
- Avoid
- Library is an older facility with a weak roof and poor infrastructure
- Accept
- Transfer/Share

High Crime Area
- Reduction
- Hire a security firm to provide 24 x 7 coverage
- Avoid
- Transfer/Share
- Arrange for a low deductible on insurance policies

Severe Weather
- Reduction
- Avoid
- Facility is co-located within the town’s Safety Complex
- Transfer/Share
- DPW shares the parking area
- Accept

Civil Suite
- Reduction
- Avoid
- Transfer/Share
- Arrange for a low deductible on insurance policies

Workshops Courtesy PSEG
A More Refined Model – 5 x 5

Legend
- **Urgent – Avoid if Possible**
- **Important – Take Action**
- **Of Concern – Address Soon**
- **Noteworthy – Accept Risk**

**NOTE:** Focus on Impact
Exercise 2: Services and Dependencies

1. Choose 1 vital services that your library currently offers.

2. List what support you depend on to offer these services, for example:
   - Internet Access – Requires:
     - Working electrical outlets
     - Access to external Internet services
     - Virus free computers
     - I.T. savvy staff members
     - Room with tables, chairs, lamps
     - Other?
Share Your Results?

Lessons learned
Step 3: What Risk Treatment Technique?

Hurricane Rating = 12

Which risk treatment technique should you choose?
• Accept – not an option
• Avoid – not an option
• Reduce – limited capability
• Transfer – reduce financial exposure
The Good News

The mitigation strategy for one risk often takes care of two or more threats. For example:

- Communications system for fire.
  - Workplace violence
  - Approaching storm
  - Haz-Mat event
  - Lost child, etc.
Don’s 1st Law of Preparedness Payback

“You get the most benefit from the 1st thing that you do.”

Suggestion:

Start with communications capabilities
State Hazard Mitigation Plan


NJOEM Programs

State of New Jersey 2014 State Hazard Mitigation Plan

The State of New Jersey's Hazard Mitigation Plan (HMP) captures historic disaster experiences, and reflects the natural and human-caused hazards New Jersey faces, based on current science and research. The State HMP outlines a strategy to reduce risks from hazards, and serves as the basis for prioritizing future project funding.

All States are required to have a Federal Emergency Management Agency (FEMA)-approved hazard mitigation plan to be eligible for disaster recovery assistance and mitigation funding. The State HMP fulfills this requirement and provides direction and guidance on launching hazard mitigation projects. The State HMP must be reviewed, updated and submitted to FEMA for approval at least once every 3 years in order to maintain eligibility for FEMA grant programs.

NOTE: The files are in Adobe PDF, which require Adobe Acrobat Reader to view and print.

2014 State Hazard Mitigation Plan - Chapters

- Cover and Title Page
- Table of Contents
- Acronyms List
- Executive Summary
- References
- Section 1 - Introduction
- Section 2 - Planning Process
- Section 3 - Coordination Local Planning
The 22 Threats Recognized by the State

- Coastal Erosion
- Dam Failure
- Levee Failure
- Drought
- Earthquake
- Flood
- Hurricane
- Tropical Storm
- Nor’easter
- Severe Weather
- Hazardous Substances
- Animal Disease
- Civil Unrest
- Crop Failure
- Cyber Attack
- Economic Collapse
- Fishing Failure
- Wildfire
- Nuclear Hazards
- Pandemic
- Power Failure
- Terrorism
Example: One Solution – Multiple Risks
A Communication Challenge
A $40 Solution to a $30,000 Problem
A Few Low Cost Investments to Consider

• Hurricane clips can cost around $30 for 20 clips.

• Toilet backflow blockers can prevent problems when sewers become flooded.
Shutters – Not Just for Decoration
Elevate Electrical Outlets
Track Your Roofs and Pipes in the Winter

Ruptured pipes are the second most common cause of insurance claims in America.

Actively manage snow build-up.

The Federal Alliance for Secure Homes (FLASH) reports that 50 dollars spent on insulation materials can save you over $500 in repairs.
Exit Signs and Evacuation Routes

Locate EXIT signs waist height or lower to avoid blockage by smoke

Talk to your town DPW about having evacuation route signs near the library.
A Few Other Tips

Hotels and unrented stores can be useful alternative worksites. Work with your local real estate people.

If you can’t afford a generator, try to fund the necessary wiring for one.

Build a relationship with a local equipment rental agency (and security) so you are not “new customers” during an emergency.
If Near a Flood Plain – Elevate!

Question: What is a 100 year flood?
End of the Theory Section (For Now)
I Hope This Clears Up Some of the Confusion
The Big Picture
Let’s Go to Your Workbooks!

Workbook Organization

- Section 1: the Resilient Library
- Section 2: the Library’s Role in the Community
- Section 3: Threat Management and Risk Control
- Section 4: Pre-Crisis Planning
- Section 5: Various Plans
  - Emergency Response and Crisis Communications
  - Disaster Recovery
  - Continuity Plans
  - Community Resiliency
Different Types of Plans

Emergency Response Plans
• Leave
  ▪ Returning for personal items?
• Stay
  ▪ 2 Different types of SIPs?

Crisis Communication Plan
• Onsite Personnel
• Other Stakeholders
• Media
• General Community
• Your Overall Policy
  ▪ Interviews
  ▪ Social Media Postings/Video?
Managing the Media

How would your staff respond to media inquiries?

As the *media contact* – do 5 things:

1. Acknowledge the event
2. Express *genuine* sympathy and concern
3. Commit to finding the truth
4. Set a time for follow up
5. Give an update on operations

Release prepared (templates) briefing documents
Notification System
Organizational Details...

Let’s review pages 4 to 9

Glance at Appendix B page 10
Emergence Response Organizational Structure

https://training.fema.gov/nims

Many other course are available at no charge.

May count as CEUs!

Popular with C.E.R.T. programs.