



ASPR

ASPR Healthcare and Public Health Risk Identification and Site Criticality (RISC) Toolkit Webinar

January 29, 2019

Access the recorded webinar here:

<https://register.gotowebinar.com/recording/7294835635295782403?assets=true>

Access speaker bios here:

<https://files.asprtracie.hhs.gov/documents/aspr-risc-toolkit-webinar-speaker-bios.pdf>

Access Q&A here:

<https://files.asprtracie.hhs.gov/documents/aspr-risc-toolkit-webinar-qa.pdf>

Shayne Brannman, MS, MA

Director, ASPR's Technical Resources, Assistance Center, and Information Exchange (TRACIE)

ASPR TRACIE: Three Domains



- Self-service collection of audience-tailored materials
- Subject-specific, SME-reviewed “Topic Collections”
- Unpublished and SME peer-reviewed materials highlighting real-life tools and experiences



- Personalized support and responses to requests for information and technical assistance
- Accessible by toll-free number (1844-5-TRACIE), email (askasprtracie@hhs.gov), or web form (ASPRtracie.hhs.gov)



- Area for password-protected discussion among vetted users in near real-time
- Ability to support chats and the peer-to-peer exchange of user-developed templates, plans, and other materials



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1-844-5-TRACIE



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Brittney Seiler, MPA

Public Health Analyst, Division of Critical
Infrastructure Protection, HHS ASPR (Moderator)

Webinar Objectives

- Provide brief overview of the RISC Toolkit
- Describe how users have implemented the RISC Toolkit
- Share success stories and lessons learned from using the RISC Toolkit



ASPR

ASPR's Division of Critical Infrastructure Protection

**Risk Identification and Site Criticality (RISC)
Toolkit Overview**

Imagine If You Could...



Easily understand and visualize your facilities' threat from:

34 External threats/hazards
(e.g., active shooters, flood and more)

33 Internal threats/hazards
(e.g., water or generator failure, supply shortage and more)



Quickly assess **FACILITY-LEVEL**:

- Emergency preparedness
- and resilience
- Physical security
- Cybersecurity
- Critical dependencies



Estimate the **HUMAN, PROPERTY, and BUSINESS** impacts to a facility that may result from a specific threat or hazard

What would you do with the information?
How would you better prepare for what may lay ahead?

Risk Identification and Site Criticality (RISC) Toolkit

Objective, data driven all-hazards risk assessment that can be used to inform:

- Emergency preparedness planning
- Risk Management activities
- Resource investments

Consists of three modules allowing healthcare organizations to:



Identify site-specific threats and hazards

Assess site-specific vulnerabilities

Determine criticality & consequences

All modules use
objective data
sources & industry
standards

RISC Toolkit Design

Designed by ASPR's Division of Critical Infrastructure with input from private sector partners including:



Healthcare & Public
Health Sector
Owners & Operators



Pilot Users




Security & Risk
Experts


Format

- Excel based
- Easy to follow
- Mostly yes/no & multiple choice
- Printable results
- Locally stored data

RISC Toolkit Key Features and Benefits

FEATURES

 Identify critical infrastructure dependencies and interdependencies


 Enable risk trend analysis


 Receive a ranked list (from high to low) of threats, hazards, vulnerabilities, and consequences


 Compare multiple facilities across systems, coalitions, and regions

BENEFITS

 Informs preparedness and response plans; exercises; and trainings

 Provides objective, empirically-based data

 Address cooperative agreement grant guidelines (*though not required by the Hospital Preparedness Program*)

 Gauge the criticality of a facility to the proper functioning of the region/coalition/system as a whole

Three Self-Assessment Modules

Modules can be completed independently & work can be saved/paused at any point during the modules



**Threat/Hazard
Assessment Module
(THAM)**



**Rapid Infrastructure
Survey Tool
Vulnerability (RIST-V)**



**Rapid Infrastructure
Survey Tool Consequence
& Criticality (RIST-C)**



Interact in the dashboard to automatically calculate risk







Entire assessment takes approx. **3-4 hours to complete**

RISC Toolkit Modules

 THAM	Likelihood of a threat or hazard occurring	<ul style="list-style-type: none">• Intentional Acts• Natural Hazards• Unintentional Manmade events
 RIST-V	Vulnerability for disruption	<ul style="list-style-type: none">• Resilience• Physical Security• Dependencies• Cyber Security
 RIST-C	Hazard specific consequences & Criticality to the healthcare system	<ul style="list-style-type: none">• Consequence• Criticality

Key Contributors

Easy-to-follow format requiring multiple contributors:

				
	Organizational Leadership	Information Security Officer	Coalition Partners	Organizational Emergency Managers
Knowledge	Insight into facility operations	Cybersecurity & IT	Coalition response plans & procedures	Emergency operations plan & regulatory compliance
Module	THAM, RIST-V, RIST-C	RIST-V	THAM, RIST-V, RIST-C	THAM, RIST-V, RIST-C

RISC Toolkit Results

The dashboard identifies top facility-based risks informed by user responses

Next Steps

- Incorporate results into planning considerations
- Discuss results with coalition partners
- Learn more about risk mitigation in ASPR TRACIE topic collections & RISC Toolkit resources
- Engage with local law enforcement
- Join the [Healthcare & Public Health Sector](#)

We want to hear from you! Email hphrisc@hhs.gov to share feedback & how you use the tool

Additional RISC Toolkit Resources

Type	Description	Resource
Introductory Resources	These high-level resources provide information on how to download the tool and other tips on getting started	<ol style="list-style-type: none">1. Getting Started Guide: Easy to follow instructions on how to download and start using the RISC Toolkit.2. At-A-Glance/Factsheet: A brief overview of the tool and its functionalities.3. Frequently Asked Questions: For additional information and assistance on getting started with the tool, consult the Frequently Asked Questions document.
Technical Resources	A deeper level of information, these resources cover RISC Toolkit components, methodology, and calculations	<ol style="list-style-type: none">1. Reference Guide: A brief introduction to the components of the RISC Toolkit, followed by detailed explanations of the calculations performed within each of the three RISC Toolkit modules.2. THAM Narrative: A technical explanation of the methodology and sources used for the Threat/Hazard Assessment module.

Additional Reference Materials: phe.gov/cip/hphrisc

Questions?

Download & learn more at:
phe.gov/cip/hphrisc

For issues and troubleshooting,
contact the Help Desk: hphrisc@hhs.gov



RISC Toolkit Implementation and Lessons Learned

Scott Cormier, VP EM, EC, Safety

Jeff Butler, Regional EM Officer-IL

Toby Hatton, Regional EM Officer-TX

Stacy Voliva, Regional EM Officer-IN

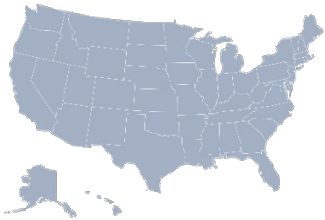
Large Health System Perspective

Clinical Stats

Number of Births — — — · >84k
ED Visits — — — — — >3.1M
Outpatient Visits — — — — >23M
Surgical Visits – Outpatient >400k
Equivalent Discharges — — >1.6M



21 States and the
District of Columbia



More than 22k
Available Beds



34k Affiliated
Physicians



156k Associates





Emergency Management, EC & Safety

Direct Chain of Command Ensures:



Standardization



Optimization



Communication



Top Down Approach

- Standardized EOP
- Began work with release of THAM
- Written into EOP

COMMUNITY INVOLVEMENT

EM 01.01.01 EP 2 - 4: The hospital conducts a hazard vulnerability analysis (HVA) to identify potential emergencies within the organization and the community that could affect demand for the hospital's services or its ability to provide those services, the likelihood of those events occurring, and the consequences of those events. The findings of this analysis are documented. The hospital, together with its community partners, prioritizes the potential emergencies identified in its HVA and documents these priorities. The hospital communicates its needs and vulnerabilities to community emergency response agencies and identifies the community's capabilities to meet its needs. This communication and identification occur at the time of the hospital's annual review of its EOP and whenever its needs or vulnerabilities change.

At the <<Emergency Management Committee>>, a multidisciplinary forum, the HVA is analyzed at least on an annual basis, or whenever experiences warrant additional review. Historical experience, geographical location, weather and climate conditions, local hazards, political conditions and populations served are factored into the analysis, and balanced against the facility's mitigation strategies and preparedness activities.

Risk Assessment Tool

The US Department of Health and Human Services provides a Risk Assessment Tool that is composed of 3 Modules: A Threat and Hazard Assessment Module (THAM), A Rapid Infrastructure Survey Tool Vulnerability Module (RIST-V), and a Rapid Infrastructure Survey Tool Consequence Module (RIST-C). THAM is a resource for the HVA process to support facilities in identifying and assessing threats and hazards to facilities, assets, and functions. The THAM can be used in a "stand-alone" assessment approach; however, its greatest value is in conjunction with existing approaches/ tools such as the hospital-focused Hazard Vulnerability Assessment (HVA) required under Joint Commission directives.

Accurate, quantitative risk analysis is necessary to underpin investments in reducing vulnerabilities and building critical infrastructure resilience. Risk analysis includes determination of the probability that a given threat or hazard will occur, the extent to which that threat or hazard can impact performance of a facility, system, or function (i.e., vulnerability), and the consequences of facility, asset, or function degradation or failure, including cascading effects and key internal and external dependencies and interdependencies. The Risk Assessment Tool provides a wide array of objective web-based data sources that can be accessed in a user-friendly and efficient way to support risk assessment activities.

When the HVA is completed, collaboration with local governmental or municipal agencies occurs to assist in defining priorities within the HVA and to ascertain capacities to support the needs of unexpected events. Medical staff review additionally occurs. The HVA process is documented, and kept on file in the <<EC/Safety Committee>> minutes. A copy of the local community HVA is kept on file.

Why use the RISC Toolkit (Toby)

- › Data-driven
- › Standard definition of hazards/threats to match healthcare nomenclature
- › Evidence-based versus subjective opinion

Comprehensive tool

- ›› Single or multiple facilities
- ›› All facets of healthcare continuum



Gathering Information (Stacy)



Internal Partners:

- Risk Management
- Safety and Security
- Finance/Insurance
- Facilities Management



External Partners:

- Local – Homeland Security, Police, Fire, EMS Regional/State- Coalitions, Dept. of Health
- National- FBI, NOAA, USGS, DOT, NRC

Lessons Learned/Tips and Tricks (Jeff)

- Download a local drive version of toolkit
 - » For each individual site- if not using the Risk multi-viewer option
- Provide key partners questions specific to their subject matter expertise ahead of time, to decrease input time.
- Start tool modules (THAM, RIST C, RIST V) through the Dashboard File



Lessons Learned/Tips and Tricks

- › Comprehensive process is made easier by reviewing all questions prior to tool input.
- › Each additional update of tool requires less time after initial information gathering
- › Expect discussion related to evidence based results versus subjective.



Questions

Thank you for all that you do to keep our patients and communities safe!

scott.cormier@medxcelfm.com



Jennifer N. Johnson, MPA

Preparedness Field Assignee: Tennessee Department of Health
U.S. Centers for Disease Control and Prevention
Center for Preparedness and Response
Division of State and Local Readiness

Overview: *Key TDH RISC Assessment Themes*

Preparation



Implementation



Analysis

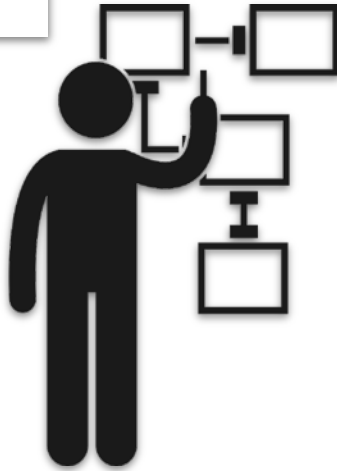


Action



The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

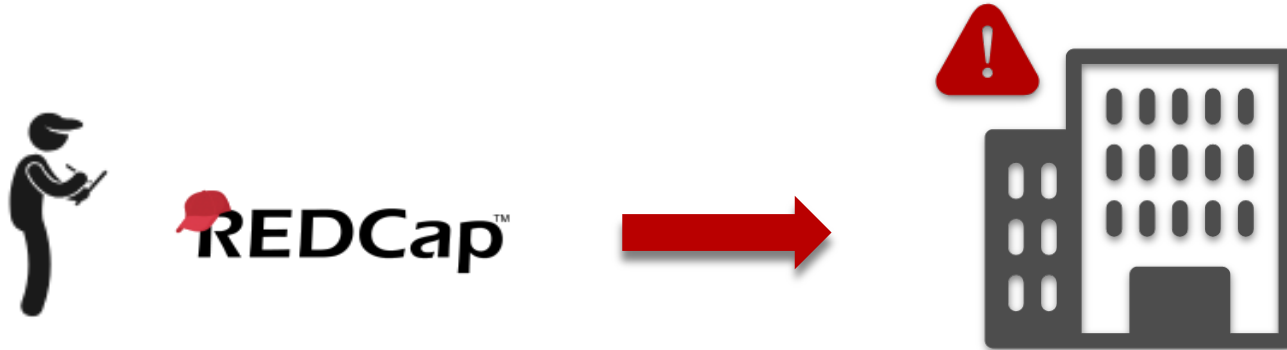
Preparation I



- Participated in HPH RISC toolkit pilot with **11** public health sites
- Designed a data collection and assessment strategy
- Developed a centralized system for support and tracking progress
- Tailoring: Regional vs. Metropolitan Jurisdictions

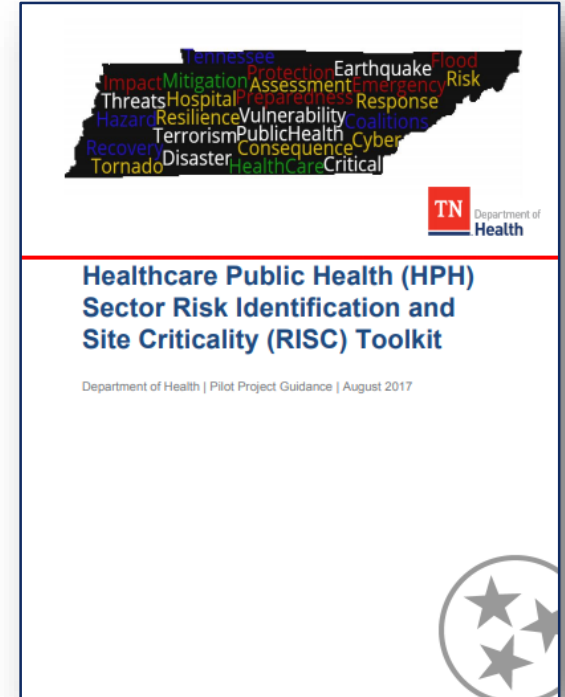
Preparation II

- Completed all regional THAM modules in advance
- Developed and distributed survey link to capture internal hazards
- Developed toolkit guidance for public health regions
- Prepped toolkits before regional distribution

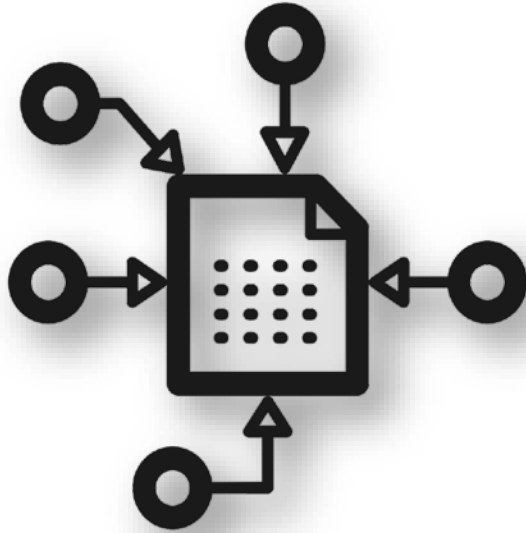


Implementation I

- Toolkits were shared via REDCap™
- A resource repository was created in SharePoint
 - Threat/hazard assessment modules
 - Toolkit guidance documents
 - PDF versions of rapid infrastructure and criticality survey tools
 - Threat/hazard definitions
- Technical assistance provided as needed



Implementation II



- 13 Emergency Response Coordinators oversaw HPH RISC assessments of health offices in each region
- Varied methods of completing survey tools were used:
 - Virtual
 - In-person
 - Group Discussions

Implementation III

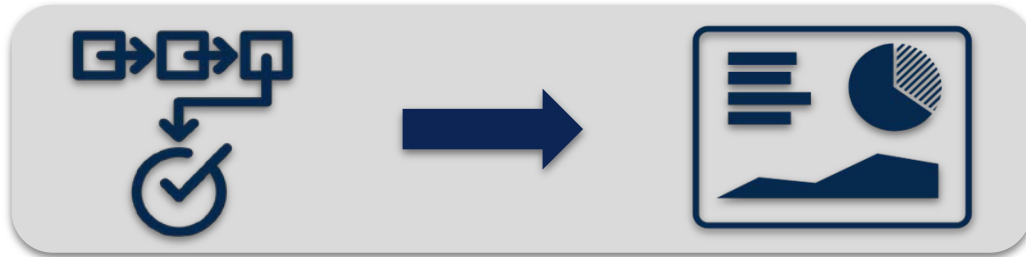
Key stakeholders involved include:

- Regional and County Health Directors
- Emergency Response Coordinators
- Regional Hospital Coordinators
- Healthcare Coalitions
- State and Local Law Enforcement
- Information Security Officers
- State and Local Emergency Management



Analysis I

- Compiling assessment data for regional and statewide analysis
- Developing regional and metropolitan RISC profiles
- Data visualization for reporting
- Process evaluation



Analysis II: Lessons Learned

Successes

- **107** RISC assessments
- Multiple levels of risk analysis
- Centralized data repository
- Time saved on future assessments



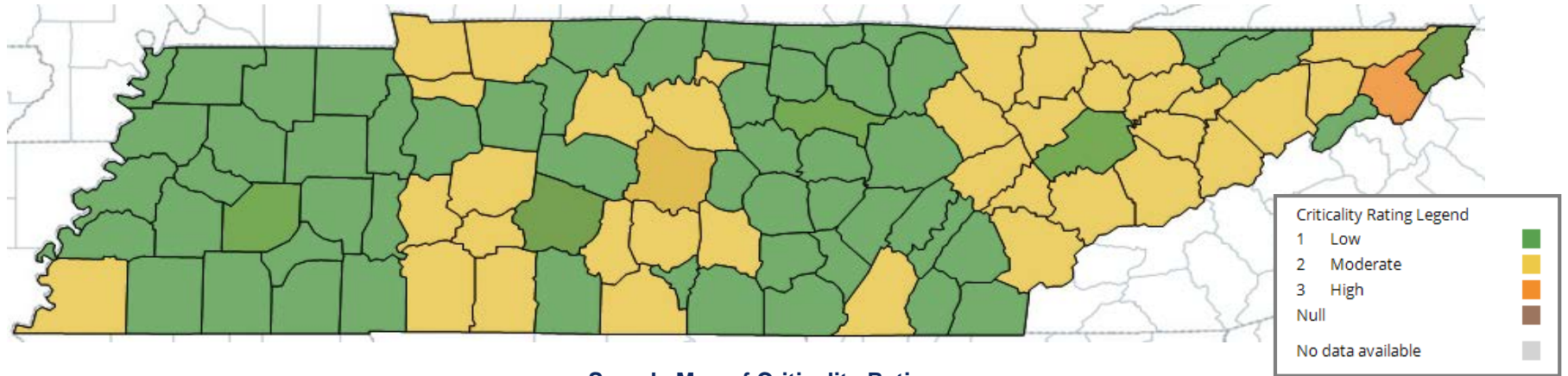
Challenges

- Lengthy surveys
- File sharing
- Limited social vulnerability elements



Action I

- Data Visualization
- GIS - Mapping RISC Results
- Creating RISC Dashboards



Sample Map of Criticality Ratings

Action II

- Incorporate social vulnerability data
- Information-sharing
 - Regional Healthcare Coalitions
 - State and local emergency management
 - Community partners
 - Federal partners
- Develop recommendations:
 - Public health risk mitigation strategies
 - Planning, training, and exercises



Thank You!

Jennifer.N.Johnson@tn.gov

Discussion with Presenters

Q&A



Contact Us

RISC Tool: www.phe.gov/Preparedness/planning/RISC

RISC Tool Questions: HPHRISC@hhs.gov

ASPR's Technical Resources, Assistance Center, & Information Exchange:



asprtracie.hhs.gov



1-844-5-TRACIE



askasprtracie@hhs.gov

Gathering Information

Who are your partners in preparedness?



Internal Partners: Risk Management, Safety and Security, Finance/Insurance and Facilities Management



External Partners: Local – Homeland Security, Police, Fire, EMS Regional/State-Coalitions, Dept. of Health, National- FBI, NOAA, USGS, DOT, NRC



Lessons Learned/ Tips and Tricks

Download a local drive version of the toolkit for each individual site - if not using the Risk Multi-viewer option.

Key Partners Questions

Provide key partners questions specific to their subject matter expertise ahead of time, to decrease input time.

Tool	Section	Section Name	Recommended Consultants		
			Primary	Secondary	Tertiary
RISTV	1.1.1	General	Safety Officer	REMO	
RISTV	1.1.2	General	Safety Officer	REMO	
RISTV	1.1.3	General	Safety Officer	REMO	
RISTV	1.1.4	General	Safety Officer	REMO	
RISTV	1.1.5	General	Laboratory Director	Safety Officer	REMO
RISTV	1.1.6	General	Safety Officer	REMO	
RISTV	1.1.7	General	Safety Officer	REMO	
RISTV	2.1.1	Business Continuity	Chief Financial Officer	Chief Operations	Chief Executive Officer
RISTV	2.1.2	Business Continuity	Chief Financial Officer	Chief Operations	Chief Executive Officer
RISTV	2.1.2.1	Business Continuity	Chief Financial Officer	Chief Operations	Chief Executive Officer
RISTV	2.1.2.2	Business Continuity	Chief Financial Officer	Chief Operations	Chief Executive Officer
RISTV	2.1.2.3	Business Continuity	Chief Financial Officer	Chief Operations	Chief Executive Officer
RISTV	2.1.2.4	Business Continuity	Chief Financial Officer	Chief Operations	Chief Executive Officer
RISTV	2.1.2.5	Business Continuity	Chief Financial Officer	Chief Operations	Chief Executive Officer
RISTV	2.1.2.6	Business Continuity	Chief Financial Officer	Chief Operations	Chief Executive Officer
RISTV	2.1.2.7	Business Continuity	Chief Financial Officer	Chief Operations	Chief Executive Officer
RISTV	2.1.2.8	Business Continuity	Chief Financial Officer	Chief Operations	Chief Executive Officer
RISTV	2.1.3	Business Continuity	Chief Financial Officer	Chief Operations	Chief Executive Officer
RISTV	2.1.4	Business Continuity	Chief Financial Officer	Chief Operations	Chief Executive Officer
RISTV	2.1.5	Business Continuity	Chief Financial Officer	Chief Operations	Chief Executive Officer
RISTV	2.1.6	Business Continuity	Chief Financial Officer	Chief Operations	Chief Executive Officer

Start tool modules

(THAM, RIST C, RIST V) through the Dashboard File

1. ALWAYS start from the Dashboard.
2. Select which tool you wish to complete. Once finished with each module, you will be prompted to save the file.
3. Then go back to the Dashboard to complete the next module.

📁 AIS Answers to Risk Questions 2018	6/13/2018 8:25 AM	File folder	
📁 Data	11/2/2018 11:27 A...	File folder	
📁 Manuals	6/13/2018 8:25 AM	File folder	
📁 Reports	6/13/2018 8:25 AM	File folder	
📄 HPH_Risk_Dashboard	1/4/2019 7:39 AM	Microsoft Excel M...	164 KB
📄 HPH_RISTC	9/25/2018 8:36 AM	Microsoft Excel M...	493 KB
📄 HPH_RISTV	8/1/2018 1:07 PM	Microsoft Excel M...	1,780 KB
📄 HPH_THAM	8/1/2018 10:51 AM	Microsoft Excel M...	5,032 KB
📄 Risk Multi-Viewer	10/31/2017 9:43 A...	Microsoft Excel M...	1,939 KB

Risk-Ranking of Threats/Hazards Info

Provide an identifier (e.g., name) for the facility

Date: 1/4/2019 19:56

Instructions:
 1. Complete THAM
 2. Complete RIST-V
 3. Complete RIST-C

External Threats/Hazards Start THAM Start RIST-V Start RIST-C

	Threat/Hazard	T Threat	V Vulnerability	C Consequence	T x V	R Risk	Risk Category
1	Cyber	4.0					
2	Thunderstorm (Lightning)	3.0					
3	External Chemical HAZMAT Exposure, Highway	2.7					
4	Damaging Wind	2.2					
5	Hail	2.2					
6	Property Crime	2.0					
7	Violent Crime	2.0					
8	Flood	1.8					
9	External Chemical HAZMAT Exposure, Railway	1.7					
10	Subsidence (Sinkhole)	1.7					
11	Flash Flood	1.3					
12	Tornado	1.1					
13	Information Theft	1.0					
14	Extreme Cold	0.9					
15	Annual Influenza Epidemic	0.8					
16	Space Weather	0.7					
17	Drought	0.6					
18	Snow Fall/Blizzard	0.6					
19	Extreme Heat	0.5					
20	Wildfire	0.5					
21	Active Shooter	0.4					
22	External Chemical HAZMAT Exposure, Pipeline	0.4					
23	Landslide	0.4					

Lessons Learned/Tips and Tricks

Comprehensive process is made easier by reviewing all questions prior to tool input.

5 Cybersecurity Management Profile

5.1 Identify

5.1.2 Asset Management

5.1.1.1 How frequently are physical IT devices and systems and back ups within the organization inventoried?

- At least semiannually (twice per year)
- Annually (once per year)
- Biannually or longer (every two years or more)
- Inventory of physical IT Devices, systems, and backups is not conducted

5.1.1.2 How frequently are IT software platforms and applications and back-ups within the organization inventoried?

- At least semiannually (twice per year)
- Annually (once per year)
- Biannually or longer (every two years or more)
- Inventory of physical IT Devices, systems, and backups is not conducted

5.1.1.3 Are IT resources (e.g., hardware, devices, and software) prioritized based on their classification, critically, and business value?

- Yes
- No

5.1.1.4 Has a compliance audit been conducted of all identified primary and back-up critical IT assets?

- Yes
- No

It Gets Easier

Each additional update of tool requires less time after initial information gathering.



Data-Driven, Evidence Based

Expect discussion related to evidence based results versus subjective opinion.

Results - Sector Criticality Menu Help

Facility: Ascension Texas Ministry
Date: 1/4/2019 10:49

Sector Criticality Rating

1



Sector Criticality Ratings

Rating	Category	Description
1	Low	Loss of function at the facility would have minimal impact on the Healthcare and Public Health Sector or regional level HPH Sector functions and services. The services provided by the facility could be readily and quickly replaced by other
2	Moderate	Loss of function at the facility would have a small impact on the Healthcare and Public Health Sector or regional level HPH Sector functions and services. Services may be delayed or patients may need to travel farther than usual to receive
3	High	Loss of function at the facility would have a substantial impact on the Healthcare and Public Health Sector or regional level HPH Sector functions and services. Certain critical or specialty functions may be unavailable or delayed for multiple
4	Very High	Loss of function at the facility would have a critical impact on the Healthcare and Public Health Sector or regional level HPH Sector functions and services. Treatment capacity may be significantly reduced and services may be delayed for