

New Hampshire THIRA/SPR Webinar Series

Part 2: THIRA Step 1 – Identify the Threats and Hazards of Concern



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Resources

- U.S. Department of Homeland Security
- Federal Emergency Management Agency
- National Preparedness Directorate
- National Training and Education Division
- Texas A&M Engineering Extension Service (TEEX)
- National Emergency Response and Recovery Training Center (NERRTC)
- New Hampshire Homeland Security and Emergency Management
- Comprehensive Preparedness Guide, 3rd Ed. (May 2018)



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Target Audience

- Law Enforcement
- Fire Service
- Hazardous Materials (HazMat) Responders
- Emergency Medical Services
- Emergency Management
- Public Works
- Health Care
- Public Health
- Governmental Administration
- Public Safety Communications
- Public Elected Officials
- Private Sector and Non-Government Offices*
- Military*

*As requested by host agency



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Learning Objectives

- Review the first step in the THIRA process
- Identify categories of threats and hazards
- Identify sources of threat and hazard information
- Identify factors to consider for selecting threats and hazards
- Identify community threats and hazards
- Identify the threats and hazards that most challenge a core capability



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THIRA Process

- The THIRA is a three-step risk assessment completed every 3 years.



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Step 1 of the THIRA Process



- Three Categories
 - Natural
 - Technological
 - Human-Caused
- Two Factors
 - Likelihood
 - Impact on at least 1 of the core capabilities
- Develop scenarios that would challenge the State's core capabilities prior to requesting out-of-state assistance
 - Details should include location, magnitude, time/date, general impacts on the population



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Categories of Threats and Hazards

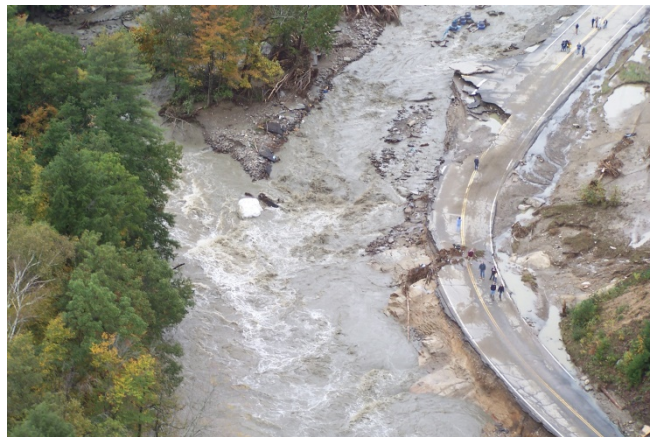
- Natural Hazards: acts of nature



Hurricane Sandy: Oct 2012



Winter Storm: Hampton Beach, January 2013



Floods: Alstead, October 2005



Windstorm damage: Grafton County, October 2017



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Categories of Threats and Hazards

- Technological Hazards: accidents or the failures of man-made systems and structures



Traffic accidents



Bridge collapse



Dam failure



Nuclear accident: Japan, March 2011



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Categories of Threats and Hazards

- Human-caused incidents: the intentional actions of an adversary



Boston Marathon Bombing: April 2013



Active Shooter: Parkland HS, FL, February 2018



Cyberattack



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Categories of Threats and Hazards

Natural	Technological	Human-caused
Avalanche	Dam failure	Active shooter incident
Drought	Hazardous materials release	Armed assault
Earthquake	Industrial accident	Biological attack
Epidemic	Levee failure	Chemical attack
Flood	Mine accident	Cyber-attack against data
Hurricane/Typhoon	Pipeline explosion	Cyber-attack against infrastructure
Space weather	Radiological release	Explosives attack
Tornado	Train derailment	Improvised nuclear attack
Tsunami	Transportation accident	Nuclear terrorism attack
Volcanic eruption	Urban conflagration	Radiological attack
Winter storm	Utility disruption	



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Threat and Hazards

- A single threat or hazard may most challenge more than one core capability

Community A identifies the threat or hazard that presents the **greatest challenge** to each core capability.

A single threat or hazard may most challenge multiple core capabilities	Earthquake	Cyber Attack	Flood	Active Shooter	Hazmat Release - Chemical
	Presents the greatest challenge to:				
	Operational Coordination	Intelligence and Information Sharing	Public Information and Warning	Interdiction and Disruption	Access Control and Identity Verification
	Risk Mgmt. for Protection Programs and Activities	Forensics and Attribution	Planning	Screening, Search, and Detection	Physical Protective Measures
	Risk and Disaster Resilience Assessment	Cybersecurity	Supply Chain Integrity and Security	Threats and Hazards Identification	Long-term Vulnerability Reduction
	Critical Transportation		Community Resilience	On-scene Security, Protection, and Law Enforcement	Environmental Response/Health & Safety
	Fatality Management Services		Logistics and Supply Chain Management		Public Health, Healthcare, and EMS
	Fire Management and Suppression		Mass Care Services		Situational Assessment
	Mass Search and Rescue Operations		Operational Communications		Health and Social Services
	Infrastructure Systems		Economic Recovery		
Natural and Cultural Resources		Housing			



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Sources of Threat/Hazard Information

- Consult multiple sources of information
- Examine the conditions that would allow their local threats and hazards of concern to take place
- Consider experiences of similar or surrounding communities
- Consult with experts and scientists



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Factors for Selecting Threat or Hazard

- Consider two key factors:
 - The **likelihood** of a threat or hazard affecting the community
 - Determine whether is likelihood is large enough to consider
 - Helps in understanding capability requirements and prioritizing investments
 - Only consider the events most realistically likely to occur
 - Consider additional sources such as hazard mitigation plans or historical data
 - The challenge presented by the **impacts** of that threat or hazard on the community should it occur (1/500 year incident)
 - Identify and select threats/hazards that have impacts that most challenge the community and its capability
 - Different incidents present different types of challenges
 - Include as many impacts as needed to most challenge each of the 32 Core Capabilities



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Impacts

- FEMA has provided a list of 30 standardized impacts that affect each of the Core Capabilities.

Standardized Impact Estimates			
Impact Category	Estimate	Impact Category	Estimate
1 Affected Healthcare Facilities And Social Service Organizations		16 People Requiring Evacuation	
2 Animals Requiring Shelter, Food, And Water		17 People Requiring Food and Water	
3 Businesses Closed Due To The Incident		18 People Requiring Long-Term Housing	
4 Customers (Without Communication Service)		19 People Requiring Medical Care	
5 Customers (Without Power Service)		20 People Requiring Rescue	
6 Customers (Without Wastewater Service)		21 People Requiring Shelter	
7 Customers (Without Water Service)		22 People Requiring Temporary, Non-Congregate Housing	
8 Damaged Natural And Cultural Resources And Historic Properties		23 People With Access And Functional Needs (AFN) Affected	
9 Exposed Individuals (Hazmat-Related Incidents)		24 People With AFN (Requiring Accessible Shelter)	
10 Fatalities		25 People With AFN (Requiring Accessible Long-Term Housing)	
11 Hazmat Release Sites		26 People With AFN (Requiring Temporary, Non-Congregate Housing)	
12 Jurisdictions Affected		27 People With AFN (Requiring Evacuation)	
13 Miles Of Road Affected		28 People With AFN (Requiring Food and Water)	
14 Partner Organizations Involved In Incident Management		29 People With Limited English Proficiency Affected	
15 People Affected		30 Structure Fires	



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Summary

- Reviewed Step 1 of the THIRA process
- Reviewed categories of threat and hazard
- Identified sources of threat and hazard information
- Discussed factors for selecting threats and hazards



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