

From Risk to Readiness

Using Hazard Vulnerability Assessments to Strengthen
Healthcare Emergency Plans

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Welcome to a better HVA experience!

- Our session today will demonstrate:
 - *how to use data sources to aid your HVA process(es)*
 - *how to gain stakeholder engagement across disciplines (and internal partners!)*
 - *how do we avoid a “check-the-box HVA” experience and outcomes*
 - *how do we make practical use of our HVA process and assessment*
 - *the relationship between HVAs, emergency operations plans, training, and exercises*

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Introduction Slide

- Name
- Organization
- Role in that organization
- Your experience with the HVA process

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Emergency Management in 5 Minutes

- Mitigation – reduce risk before an incident
- Preparedness – build capability before an incident
- Response – stabilize the incident and protect life/property
- Recovery – restore, rebuild, and improve

The HVA connects these activities by helping us determine what matters most.

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Where Healthcare Fits

- Healthcare is both a responder and a critical community lifeline
- Disruption can create cascading impacts well beyond the facility
- Community risks become healthcare risks, and healthcare vulnerabilities can become community risks

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So, What is a Hazard Vulnerability Assessment?

- In healthcare and emergency management, a **Hazard Vulnerability Analysis (HVA)** is a systematic process used to identify these hazards and evaluate their potential impact on a facility's operations, patient care, staff safety, and infrastructure.

This analysis assigns a numerical value to each hazard to prioritize planning, mitigation, and resource allocation.

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It Should be much more than a List of Hazards

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What's the process?

The analysis typically follows a structured workflow to ensure all potential threats are evaluated consistently.

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Step #1

Establish Context and Team:

Define the scope of the assessment and assemble a multidisciplinary team^{*}, often including safety officers, clinical leaders, and facility managers.

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*Who is your “team?”

- Both internal and external partners- incl. Board & Community Members, Elected & Appointed officials, donors, patients, referrers, etc.
- Public and Private sector persons/entities (Regional/local EMS, Fire, Law, EMA, mutual aid partners, critical vendors, abutters and even competitors).
- Subject Matter Experts should be included for those elements in which they may be uniquely qualified.

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Step #2

Hazard Identification:

Compile a comprehensive list of potential hazards. This includes reviewing historical data, local emergency management plans, and specific site vulnerabilities.

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What's a "Hazard?"

A **hazard** is defined as a **potential source of harm or adverse health effect** on a person or persons. In the context of occupational safety, a hazard remains present even if the **risk** (the likelihood of harm occurring) is minimized through control measures like barriers or isolation.

In Maine (and universally), hazards occur as:

Natural (Extreme weather/storms, flood, earthquake, tornado & biological)

Technological (HazMat^{*}, incl. CBRN, infrastructure failure & transportation)

Human-Caused (terrorism, civil unrest, criminality & cyber)

^{}KP's HVA toolkit lists HazMat separately, as a standalone, fourth-type of hazard.*

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Data Source to Know

- FEMA National Risk Index
- National Weather Service – Caribou / Gray
- CDC, federal and state, and local Public Health
- USGS Hazard Information
- County and Local Hazard Mitigation Plans
- County Emergency Management
- Healthcare Coalitions

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Step #3

- **Risk Assessment (Scoring):** Evaluate each identified hazard based on specific criteria, primarily **probability** (likelihood of occurrence) and **severity** (potential impact).
- **Prioritization:** Calculate a risk score for each hazard to rank them. High-scoring hazards are designated as priority areas for planning and resource allocation.

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Step #4

- **Gap Analysis and Planning:** Identify the organizations current capabilities and resources. Note gaps in preparedness, and develop or update emergency plans to address the highest risks.

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Your HVA process:

- **Kaiser Permanente Hazard Vulnerability Analysis (HVA) Tool**
 - Assesses hazard in four categories:
 - **Natural**
 - **Technological**
 - **Human-related**
 - **Hazmat events.**
 - The tool calculates risk by evaluating
 - **Probability** (likelihood of occurrence)
 - **Severity** (impact on human, property, and business operations, minus mitigation efforts)

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What's THIRA, and How Might it Help?

- **Threat and Hazard Identification and Risk Assessment**, or THIRA, is a comprehensive, three-step risk assessment process developed by **FEMA**
- The process helps entities understand their unique risks and determine the capabilities needed to address them.
- It is designed to answer three core questions:
 - *What threats and hazards can affect the entity?*
 - *What impacts those threats would have?*
 - *What capabilities are required based on those impacts?*
- **EMA Bonus:** What actions do we take to mitigate, to prevent this from re-occurring?

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What's the real THIRA benefit?

The "POETE" Roadmap

<u>P</u> LANNING	(Your HVA assessment)
<u>O</u> RGANIZING	(Your subsequent action items)
<u>E</u> QUIPPING	(Your investments in the facility and/or "stuff")
<u>T</u> RAINING	(Your investments in people, credentialling, etc.)
<u>E</u> XERCISING	(Your cyclical testing of all the above)

Wash, Rinse, Repeat

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Implementation: From Hazard to Planning Priority

- Hazard: prolonged power outage
- Potential Impacts: generator dependency, fuel, HVAC, elevators, IT/Data access, communications, staffing
- Dependencies: utility restoration, fuel vendors, transportation, public safety
- Questions: How long can we operate? What fails first? What alternatives exist?
- Planning outputs: continuity priorities, fuel/logistics, staffing, communications, mutual aid, exercise objectives

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Key Takeaways

- You do not need to be an emergency manager to participate in an HVA
- An effective HVA is collaborative, evidence-informed, and locally focused
- The score is not the product – the preparedness decisions are the product
- Healthcare risks are connected to the community risks and dependences
- No two facilities are exactly alike; each should have an HVA built for them
- The best HVA is one that changes what you and the organization does next

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Discussion Questions

- What hazards are hardest for your organization to assess?
 - Where do you currently get your risk information?
 - Which community partners should be at the table?
 - What is one HVA finding you could turn into an action this year?
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- Was this session helpful?
 - Are you more confident about the process of conducting an HVA for your organization?

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Thank you for joining us today!

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