

## Emergency Management Plan, including Hazard Vulnerability Analysis (HVA)

<b>Original author's name:</b>	Pkkirisankar Jagannath
<b>Most recent date:</b>	January 12, 2023
<b>Most recent version number:</b>	v1.0
<b>Process owner:</b>	Program Director

## Document History

Version	Date	Revised by	Description
v1.0	January 4, 2023	Pkkirisankar Jagannath	Original Draft
V1.0	January 12, 2023	Kulpreet Singh	Ratified Version

<b>Designated document recertification cycle in days:</b>	[Cycle 30 90 180 <b>365</b> ]
<b>Next document recertification date:</b>	January 12, 2024

**Copyright** © January 12, 2023 22nd Century Technologies

All rights reserved. This document is for internal use only. No part of the contents of this document may be reproduced or transmitted in any form or by any means without the expressed written permission of 22nd Century Technologies.

## 1. What is an HVA plan?

An HVA provides the hospital with a basis for determining the most likely standards and potential demands on emergency services and other resources that could occur during a crisis so that effective preventive measures can be taken, and a coordinated disaster response plan can be developed.

## 2. What is a Hazard Vulnerability Analysis (HVA)?

A hazard vulnerability analysis is a process for identifying the hospital's highest vulnerabilities to natural and man-made hazards and the direct and indirect effect these hazards may have on the hospital and community. An HVA provides the hospital with a basis for determining the most likely standards and potential demands on emergency services and other resources that could occur during a crisis so that effective preventive measures can be taken, and a coordinated disaster response plan can be developed.

According to the Federal Emergency Management Agency (FEMA), there are basic components of a risk assessment:

- hazard identification
- profiling of hazard events
- inventory of assets
- estimation of potential human and economic losses based on the exposure and vulnerability of people, buildings, and infrastructure.

This process generally requires a collaborative effort between community partners. An organization's HVA results should be communicated to emergency response agencies.

Note: You may find the terms "Hazard Vulnerability Analysis" and "Hazard Vulnerability Assessment" used interchangeably.

All hospitals in the United States are required to conduct an HVA. However, it's not just hospitals that can assess vulnerability to environmental and civil risks. Many emergency management organizations and other public service entities benefit from conducting hazard risk assessment. Note that non-healthcare organizations may refer to this process as a Threat and Hazard Identification and Risk Assessment (THIRA). Businesses may conduct an assessment to identify assets at risk and to determine the potential operational and financial impact resulting from a disaster. Regardless of the size and reach of an organization, having a plan in case of emergency is not only responsible but potentially lifesaving.

### 3. Examples of Disaster and Emergency Hazards:

#### a. Natural hazards

- **Meteorological:** Hurricane, Flooding, Tornado, Winter Storm
- **Geological:** Earthquake, Tsunami, Volcano
- **Biological:** Pandemic Disease, Illness

#### b. Technological hazards

- **Information Technology: Lost Data, Loss of Connectivity, Hardware Failure**
- **Utility Outage:** Communications, Electrical Power, Water, Gas
- **Fire/Explosion:** Fire (Structure, Wildland), Explosion (Chemical, Gas)
- **Hazardous Materials:** Radiological Accident, Hazardous Material Spill, Off-Site Incident
- **Chain Interruption:** Supplier Failure, Transportation Interruption

#### c. Human-caused hazards

- **Accidents:** Transportation, Workplace, Rescue, Structural, Mechanical
- **Intentional Acts:** Labor Strike, Workplace Violence, Cyber Attack, Active Shooter, and Other Acts of Terrorism

### 4. What Is the Role of Volunteers in the Hazard Risk Assessment Process?

An HVA should inform communities on preparedness and prioritize its resources. Therefore, the HVA or THIRA processes should initiate community-wide involvement. Community members and stakeholders have a range of expertise and resources and can be called upon to contribute input and perspectives. Community entities may include:

- College/universities and other research organizations
- Emergency management agencies and Emergency Planning Committees

- Hazard mitigation offices
- Fire, police, emergency medical services, and health departments
- Volunteer Organizations Active in Disasters (VOAD)
- Tribal governments
- Independent SMEs and contractors

## 5. How Does an Organization Conduct a Hazard Vulnerability Analysis?

- **Prevention:** Prevent, avoid, or stop imminent threats.
- **Protection:** Protect communities against disaster.
- **Mitigation:** Reduce loss of life and property by lessening the impact of future disasters.
- **Response:** Respond quickly to save lives and meet basic human needs in the aftermath of an incident.
- **Recovery:** Recover following an incident with prompt restoration, strengthening, and revitalization of infrastructure, housing, health, economy, and social structure of communities.

## 6. Review and Revision

The Emergency Management Plan will be reviewed and revised in accordance with the **Emergency Management Plan, including Hazard Vulnerability Analysis (HVA)**.

Recommended: \_\_\_\_\_

Signature

Pakkirisankar Jagannath

Program Manager

Approved: \_\_\_\_\_

Signature

Anil Sharma

CEO