

State of Wisconsin

Hospitals and  
Local Health Departments  
Hazards Vulnerability  
Analysis (HVA)

September 2006

Wisconsin Division of Public Health  
Hospital Emergency Preparedness Program

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## Purpose of the Hazard Vulnerability Analysis (HVA)

Enhanced levels of preparedness must be established based on a Hazard Vulnerability Analysis (HVA) and the level of threat or risk that is probable in relation to hospitals, local health departments and the regions that have been defined for the purpose of preparedness planning. An HVA identifies the disasters or large scale incidents most likely to affect a hospital or a local health department and the surrounding community and the probable impact if those disasters or incidents were to occur.

Health care organizations have always prepared for various disasters. The Joint Commission (JCO) Environment of Care emergency management standards requires this (EC.4.11).

The Elements of Performance for Environment of Care (EC.4.11) state:

1. The hospital conducts a Hazard Vulnerability Analysis to identify events that could affect demand for its services or its ability to provide those services.
2. The hospital established the following with the community:
  - a. Priorities among the potential emergencies identified in the HVA
  - b. The hospital's role in relation to a community-wide emergency management program
  - c. An "all-hazards" command structure within the hospital that links with the community's command structure<sup>1</sup>

In fiscal year (FY) 2005 both the Centers for Disease Control (CDC) Public Health and Human Services and Resources Administration (HRSA) Hospital Preparedness Cooperative Agreements required that public health departments, in conjunction with hospitals and other healthcare entities, law enforcement and other first responders, engage in the development of regional HVAs. The process for conducting these regional HVAs can be found in Appendix A.

CDC mandated the following requirements in the FY 2005 Cooperative Agreement Guidance for state and local public health preparedness programs and all efforts must be made for health departments to coordinate the two programs in this area:

**OUTCOME: Hazard and Vulnerability Analysis**

Jurisdiction-specific hazards are identified and assessed to enable appropriate protection, prevention, and mitigation strategies so that the consequences of an incident are minimized.

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<sup>1</sup> 2008 Hospital Accreditation Standards, The Joint Commission

**Critical Tasks:**

1. Decrease the time to intervention by the identification and determination of potential hazards and threats, including quality of mapping, modeling, and forecasting.
2. Decrease human health threats associated with identified community risks and vulnerabilities (i.e., chemical plants, hazardous waste plants, hospitals, retail establishments with chemical and agricultural supplies).
3. Through partners, increase the capability to monitor movement of releases and formulate public health response and interventions based on dispersion and characteristics over time.

**Measure:**

Recommended courses of action to minimize human health threats associated with identified jurisdiction-specific risks and vulnerabilities.

In summary, the use of regional HVAs will assist hospitals, local health departments and their emergency response partners to prioritize their preparedness efforts and funding. For those regions that identify high-risk scenarios that are predictable and highly probable from their HVAs, changes in the allocation of resources may be necessary to enhance those areas demonstrating the highest need.

## Summary of the Top 5 Hazards by State and by Region

<b>State of Wisconsin</b>	
Pandemic Influenza	84%
Tornado	66%
Cyber Attack	65%
Infectious Disease Outbreak	63%
Ice/Snow Storm	59%

<b>Region 1</b>	
<b>Counties:</b> Douglas, Bayfield, Ashland, Burnett, Washburn, Sawyer, Polk, Barron, Rusk, St. Croix, Dunn, Chippewa, Pierce, Pepin, Eau Claire	
Cyber Attack	76%
Pandemic Influenza	71%
Infectious Disease Outbreak	71%
Major Power Outage	67%
Tornado	62%

<b>Region 2</b>	
<b>Counties:</b> Iron, Vilas, Clark, Forest, Price, Oneida, Langlade, Taylor, Marathon, Wood, Portage	
Pandemic Influenza	84%
Tornado	66%
Cyber Attack	65%
Infectious Disease Outbreak	63%
Ice/Snow Storm	59%

<b>Region 3</b>	
<b>Counties:</b> Florence, Marinette, Oconto, Menomonee, Door, Shawano, Brown, Kewaunee, Manitowoc	
Pandemic Influenza	76%
Ice/Snow Storm	67%
Tornado	62%
Multiple House/Building Fire	62%
Flood	57%

<b>Region 4</b>	
<b>Counties:</b> Buffalo, Trempealeau, Jackson, La Crosse, Monroe, Vernon, Crawford	
Pandemic Influenza	76%
Cyber Attack	72%
Infectious Disease Outbreak	71%
Flood	62%
Multiple Vehicle Highway Crash	52%

<b>Region 5a</b>	
<b>Counties:</b> Juneau, Sauk, Columbia, Adams, Marquette	
Pandemic Influenza	71%
Tornado	71%
Rail Incident	67%
Major Power Outage	62%
Cyber Attack	57%

<b>Region 5b</b>	
<b>Counties:</b> Iowa, Grant, Lafayette, Richland	
Pandemic Influenza	76%
Supply Disruption	76%
Infectious Disease Outbreak	71%
Cyber Attack	71%
Tornado	67%

<b>Region 5c</b>	
<b>Counties:</b> Dodge, Jefferson, Dane, Rock, Green	
Pandemic Influenza	71%
Infectious Disease Outbreak	71%
Cyber Attack	67%
Tornado	57%
Flood	52%

<b>Region 6</b>	
<b>Counties:</b> Waupaca, Outagamie, Waushara, Winnebago, Calumet, Green Lake	
Pandemic Influenza	90%
Cyber Attack	48%
Supply Disruption	48%
Ice/Snow Storm	43%
Multiple Vehicle Highway Crash	43%

<b>Region 7a</b>	
<b>Counties:</b> Sheboygan, Ozaukee, Fond du Lac, Washington	
Tornado	81%
Flood	76%
Pandemic Influenza	71%
Ice/Snow Storm	62%
Multiple House/Building Fire	62%

<b>Region 7b</b>	
<b>Counties:</b> Milwaukee, Waukesha	
Tornado	81%
Flood	76%
Pandemic Influenza	71%
Rail Incident	71%
Ice/Snow Storm	62%

<b>Region 7c</b>	
<b>Counties:</b> Kenosha, Racine, Walworth	
Drought	81%
Pandemic Influenza	76%
Major Power Outage	76%
Civil Disturbance	67%
Cyber Attack	62%
Attack: Toxic Chemicals	62%

## Region 1 Hazards Vulnerability Analysis

**Counties:** Douglas, Bayfield, Ashland, Burnett, Washburn, Sawyer, Polk, Barron, Rusk, St. Croix, Dunn, Chippewa, Pierce, Pepin, Eau Claire

### SEVERITY = (MAGNITUDE - MITIGATION)

EVENT	PROBABILITY	HUMAN IMPACT	PROPERTY IMPACT	BUSINESS IMPACT	PREPARED-NESS	PLAN	INTERNAL RESPONSE	EXTERNAL RESPONSE	RISK
	<i>Likelihood this will occur</i>	<i>Possibility of death or injury</i>	<i>Physical losses and damages</i>	<i>Interruption of services</i>	<i>Preplanning</i>	<i>Integration</i>	<i>Time, effectiveness, resources</i>	<i>Community/ Mutual Aid staff and supplies</i>	<i>Relative threat*</i>
SCORE	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 - 100%
<b>National Planning Scenarios</b>									
Nuclear Detonation – 10-Kiloton Improvised Nuclear Device	1	3	3	3	3	3	3	3	33%
Biological Attack – Aerosol Anthrax	1	3	1	3	2	2	2	3	25%
Biological Disease Outbreak – Pandemic Influenza	3	3	1	3	2	2	2	2	71%
Biological Attack – Plague	1	3	1	3	2	2	2	2	24%
Chemical Attack – Blister Agent	1	3	1	2	2	3	3	3	27%
Chemical Attack – Toxic Industrial Chemicals	1	3	2	2	1	3	2	2	24%
Chemical Attack – Nerve Agent	1	3	1	2	2	3	3	3	27%
Chemical Attack – Chlorine Tank Explosion	1	3	2	2	1	3	2	2	24%
Natural Disaster – Major Earthquake	0	0	0	0	0	0	0	0	0%
Natural Disaster – Major Hurricane	0	0	0	0	0	0	0	0	0%
Radiological Attack – Radiological Dispersal Devices	1	3	3	3	3	3	3	3	33%
Explosives Attack – Bombing Using Improvised Explosive	2	2	2	2	2	2	2	2	44%
Flood	3	1	2	2	1	1	1	1	43%

## Region 1 Hazards Vulnerability Analysis

**Counties:** Douglas, Bayfield, Ashland, Burnett, Washburn, Sawyer, Polk, Barron, Rusk, St. Croix, Dunn, Chippewa, Pierce, Pepin, Eau Claire

### SEVERITY = (MAGNITUDE - MITIGATION)

EVENT	PROBABILITY	HUMAN IMPACT	PROPERTY IMPACT	BUSINESS IMPACT	PREPARED-NESS	PLAN	INTERNAL RESPONSE	EXTERNAL RESPONSE	RISK
	<i>Likelihood this will occur</i>	<i>Possibility of death or injury</i>	<i>Physical losses and damages</i>	<i>Interruption of services</i>	<i>Preplanning</i>	<i>Integration</i>	<i>Time, effectiveness, resources</i>	<i>Community/Mutual Aid staff and supplies</i>	<i>Relative threat*</i>
SCORE	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or one	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 - 100%
<b>State, Regional and Local Planning Scenarios</b>									
Multiple Vehicle Highway Accident	3	3	1	1	1	1	1	1	43%
Supply Disruption	2	2	1	3	3	3	3	3	57%
Major Power Outage	3	2	2	3	1	2	2	2	67%
Tornado	3	3	3	3	1	1	1	1	62%
Infectious Disease Outbreak	3	3	1	3	2	2	2	2	71%
Rail Incident	2	2	1	2	3	2	2	3	48%
Ice/Snow Storm	3	2	2	2	1	2	1	1	52%
HazMat Incident	3	2	2	2	1	1	1	1	48%
Explosion	2	2	2	1	2	2	1	2	38%
Mud Slides	0	0	0	0	0	0	0	0	0%
Wildfire	3	1	2	1	1	1	1	1	38%
Fuel Shortage	1	0	1	3	3	3	3	3	25%
Drought	2	0	2	2	2	2	2	2	38%
Major Communications Disruption	2	1	1	3	2	2	2	2	41%
VIP Visit	2	0	0	1	2	1	2	1	22%
Municipal Water Supply Contamination	2	2	1	2	2	2	2	2	41%
Airplane Crash	2	3	2	1	2	2	2	2	44%
Multiple House/Building Fire	1	2	3	1	1	1	1	1	16%
Civic/Sports Events/Music Festivals	1	1	1	1	2	2	1	2	16%
Civil Disturbance	1	1	1	1	3	3	3	3	24%

## Region 2 Hazards Vulnerability Analysis

**Counties:** Iron, Vilas, Clark, Forest, Price, Oneida, Langlade, Taylor, Marathon, Wood, Portage

### SEVERITY = (MAGNITUDE - MITIGATION)

EVENT	PROBABILITY	HUMAN IMPACT	PROPERTY IMPACT	BUSINESS IMPACT	PREPARED-NESS	PLAN	INTERNAL RESPONSE	EXTERNAL RESPONSE	RISK
	<i>Likelihood this will occur</i>	<i>Possibility of death or injury</i>	<i>Physical losses and damages</i>	<i>Interruption of services</i>	<i>Preplanning</i>	<i>Integration</i>	<i>Time, effectiveness, resources</i>	<i>Community/ Mutual Aid staff and supplies</i>	<i>Relative threat*</i>
SCORE	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 - 100%
Dam Failure	1	1	2	3	1	1	1	1	16%
Inland Port Attack	1	1	1	2	1	1	1	1	13%
<b>National Planning Scenarios</b>									
Nuclear Detonation – 10-Kiloton Improvised Nuclear Device	1	3	3	3	3	2	3	1	29%
Biological Disease Outbreak – Pandemic Influenza	3	3	1	3	2	2	3	3	81%
Cyber Attack	3	0	2	3	3	3	3	2	76%
Infectious Disease Outbreak	3	3	1	3	2	1	2	2	67%
Ice/Snow Storm	3	2	2	3	2	2	2	1	67%
Major Power Outage	2	2	2	3	3	3	2	2	54%
Flood	3	2	2	2	1	1	2	1	52%
Explosives Attack – Bombing Using Improvised Explosive	2	3	3	3	1	2	2	1	48%
Multiple Vehicle Highway Accident	3	3	1	1	2	1	1	1	48%
HazMat Incident	3	2	2	2	1	1	1	1	48%
Tornado	2	3	3	3	1	1	2	1	44%
Wildfire	3	1	3	1	1	1	1	1	43%

## Region 2 Hazards Vulnerability Analysis

Counties: Iron, Vilas, Clark, Forest, Price, Oneida, Langlade, Taylor, Marathon, Wood, Portage

### SEVERITY = (MAGNITUDE - MITIGATION)

EVENT	PROBABILITY	HUMAN IMPACT	PROPERTY IMPACT	BUSINESS IMPACT	PREPARED-NESS	PLAN	INTERNAL RESPONSE	EXTERNAL RESPONSE	RISK
	<i>Likelihood this will occur</i>	<i>Possibility of death or injury</i>	<i>Physical losses and damages</i>	<i>Interruption of services</i>	<i>Preplanning</i>	<i>Integration</i>	<i>Time, effectiveness, resources</i>	<i>Community/ Mutual Aid staff and supplies</i>	<i>Relative threat*</i>
SCORE	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 - 100%
Airplane Crash	2	3	2	1	2	2	2	1	<b>41%</b>
Heat Wave	2	2	0	0	3	3	2	2	<b>38%</b>
Multiple House/Building Fire	2	3	3	1	1	1	1	1	<b>35%</b>
Explosion	2	2	2	2	1	1	1	1	<b>32%</b>
Major Communications Disruption (Gen Pub = 2)	1	2	1	3	3	3	3	3	<b>29%</b>
Fuel Shortage	1	1	1	3	3	3	3	3	<b>27%</b>
Radiological Attack – Radiological Dispersal Devices	1	2	2	2	3	3	3	1	<b>25%</b>
Biological Attack – Food Contamination	1	3	1	2	2	3	3	1	<b>24%</b>
Biological Attack – Foreign Animal Disease (Foot and Mouth)	1	1	2	3	2	2	3	2	<b>24%</b>
Biological Attack – Plague	1	3	1	3	2	2	2	1	<b>22%</b>
Chemical Attack – Nerve Agent	1	3	1	2	3	2	2	1	<b>22%</b>
Natural Disaster – Major Earthquake	1	3	2	2	3	2	3	1	<b>25%</b>
VIP Visit	2	0	1	2	1	1	1	1	<b>22%</b>
Municipal Water Supply Contamination	1	3	1	2	2	3	2	1	<b>22%</b>
Biological Attack – Aerosol Anthrax	1	3	2	2	1	2	2	1	<b>21%</b>
Chemical Attack – Blister Agent	1	3	1	1	1	2	3	2	<b>21%</b>

## Region 2 Hazards Vulnerability Analysis

Counties: Iron, Vilas, Clark, Forest, Price, Oneida, Langlade, Taylor, Marathon, Wood, Portage

### SEVERITY = (MAGNITUDE - MITIGATION)

EVENT	PROBABILITY	HUMAN IMPACT	PROPERTY IMPACT	BUSINESS IMPACT	PREPARED-NESS	PLAN	INTERNAL RESPONSE	EXTERNAL RESPONSE	RISK
	<i>Likelihood this will occur</i>	<i>Possibility of death or injury</i>	<i>Physical losses and damages</i>	<i>Interruption of services</i>	<i>Preplanning</i>	<i>Integration</i>	<i>Time, effectiveness, resources</i>	<i>Community/ Mutual Aid staff and supplies</i>	<i>Relative threat*</i>
SCORE	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 - 100%
Chemical Attack – Toxic Industrial Chemicals	1	3	2	2	1	1	2	1	<b>19%</b>
Civil Disturbance	1	1	2	2	2	2	2	1	<b>19%</b>
Mud Slides	1	1	1	1	2	2	2	2	<b>17%</b>
Chemical Attack – Chlorine Tank Explosion	1	3	1	2	1	1	2	1	<b>17%</b>
Civic/Sports Events	1	1	1	1	2	2	1	1	<b>14%</b>
Natural Disaster – Major Hurricane	0	0	0	0	0	0	0	0	<b>0%</b>

## Region 3 Hazards Vulnerability Analysis

**Counties:** Florence, Marinette, Oconto, Menomonee, Door, Shawano, Brown, Kewaunee, Manitowoc

### SEVERITY = (MAGNITUDE - MITIGATION)

EVENT	PROBABILITY	HUMAN IMPACT	PROPERTY IMPACT	BUSINESS IMPACT	PREPARED-NESS	PLAN	INTERNAL RESPONSE	EXTERNAL RESPONSE	RISK
	<i>Likelihood this will occur</i>	<i>Possibility of death or injury</i>	<i>Physical losses and damages</i>	<i>Interruption of services</i>	<i>Preplanning</i>	<i>Integration</i>	<i>Time, effectiveness, resources</i>	<i>Community/ Mutual Aid staff and supplies</i>	<i>Relative threat*</i>
SCORE	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 - 100%
<b>National Planning Scenarios</b>									
Nuclear Detonation – 10-Kiloton Improvised Nuclear Device	1	3	3	3	2	3	2	1	<b>27%</b>
Biological Attack – Aerosol Anthrax	2	3	3	3	2	1	1	1	<b>44%</b>
Biological Disease Outbreak – Pandemic Influenza	3	3	0	3	2	2	3	3	<b>76%</b>
Biological Attack – Plague	1	3	2	3	2	1	1	1	<b>21%</b>
Chemical Attack – Blister Agent	1	3	2	3	3	2	3	3	<b>30%</b>
Chemical Attack – Toxic Industrial Chemicals	2	3	3	3	1	1	1	1	<b>41%</b>
Chemical Attack – Nerve Agent	1	3	2	3	1	1	1	1	<b>19%</b>
Chemical Attack – Chlorine Tank Explosion	2	3	3	3	1	1	1	1	<b>41%</b>
Natural Disaster – Major Earthquake	1	1	1	1	1	1	1	1	<b>11%</b>
Natural Disaster – Major Hurricane	0	0	0	0	0	0	0	0	<b>0%</b>
Radiological Attack – Radiological Dispersal Devices	1	1	1	2	2	2	2	1	<b>17%</b>
Explosives Attack – Bombing Using Improvised Explosive	2	3	3	3	1	1	2	1	<b>44%</b>

## Region 3 Hazards Vulnerability Analysis

Counties: Florence, Marinette, Oconto, Menomonee, Door, Shawano, Brown, Kewaunee, Manitowoc

### SEVERITY = (MAGNITUDE - MITIGATION)

EVENT	PROBABILITY	HUMAN IMPACT	PROPERTY IMPACT	BUSINESS IMPACT	PREPARED-NESS	PLAN	INTERNAL RESPONSE	EXTERNAL RESPONSE	RISK
	<i>Likelihood this will occur</i>	<i>Possibility of death or injury</i>	<i>Physical losses and damages</i>	<i>Interruption of services</i>	<i>Preplanning</i>	<i>Integration</i>	<i>Time, effectiveness, resources</i>	<i>Community/ Mutual Aid staff and supplies</i>	<i>Relative threat*</i>
SCORE	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 - 100%
Biological Attack – Food Contamination	1	2	3	3	1	1	2	1	21%
– Agri-business	1	2	3	3	1	1	2	1	21%
Biological Attack – Foreign Animal Disease (Foot and Mouth)	1	2	3	3	1	1	2	1	21%
Cyber Attack	3	1	1	3	1	0	1	2	43%
<b>State, Regional and Local Planning Scenarios</b>									
Multiple Vehicle Highway Accident	3	1	1	1	1	1	2	1	38%
Tornado	3	2	3	3	1	1	2	1	62%
Ice/Snow Storm	3	1	1	2	2	3	2	3	67%
Wildfire	1	1	3	1	1	1	3	2	19%
Multiple House/Building Fire	3	2	3	1	1	1	3	2	62%
Infectious Disease Outbreak	3	3	0	3	1	1	2	1	52%
Civil Disturbance	1	1	2	2	1	2	1	1	16%
Heat Wave	3	3	1	2	1	1	1	1	48%
Flood	3	1	3	2	2	2	1	1	57%
Drought	2	1	3	3	0	0	0	0	22%
Explosion	2	3	3	3	1	1	2	1	44%
Supply Disruption	1	2	0	3	1	1	3	1	17%
Major Power Outage	2	1	1	3	1	2	1	1	32%
Major Communications Disruption	1	1	0	1	1	2	1	1	11%
Fuel Shortage	1	1	0	1	1	2	1	1	11%
HazMat Incident	3	3	1	2	1	1	1	1	48%
Rail Incident	2	2	2	2	1	1	1	1	32%
Civic/Sports Events	2	3	2	1	1	1	2	1	35%

## Region 4 Hazards Vulnerability Analysis

Counties: Buffalo, Trempealeau, Jackson, La Crosse, Monroe, Vernon, Crawford

### SEVERITY = (MAGNITUDE - MITIGATION)

EVENT	PROBABILITY	HUMAN IMPACT	PROPERTY IMPACT	BUSINESS IMPACT	PREPARED-NESS	PLAN	INTERNAL RESPONSE	EXTERNAL RESPONSE	RISK
	<i>Likelihood this will occur</i>	<i>Possibility of death or injury</i>	<i>Physical losses and damages</i>	<i>Interruption of services</i>	<i>Preplanning</i>	<i>Integration</i>	<i>Time, effectiveness, resources</i>	<i>Community/ Mutual Aid staff and supplies</i>	<i>Relative threat*</i>
SCORE	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 - 100%
Airplane Crash	3	2	2	1	1	1	2	1	<b>48%</b>
Nuclear Power Plant	1	1	1	1	2	2	2	1	<b>16%</b>
<b>National Planning Scenarios</b>									
Nuclear Detonation – 10-Kiloton Improvised Nuclear Device	1	3	3	3	3	3	3	3	<b>33%</b>
Biological Attack – Aerosol Anthrax	1	3	3	3	2	3	3	3	<b>32%</b>
Biological Disease Outbreak – Pandemic Influenza	3	3	2	3	2	2	2	2	<b>76%</b>
Biological Attack – Plague	1	3	1	3	3	2	2	2	<b>25%</b>
Chemical Attack – Blister Agent	1	3	1	1	3	3	3	3	<b>27%</b>
Chemical Attack – Toxic Industrial Chemicals	1	3	2	1	2	2	2	2	<b>22%</b>
Chemical Attack – Nerve Agent	1	3	1	2	3	2	2	2	<b>24%</b>
Chemical Attack – Chlorine Tank Explosion	1	3	1	1	2	2	2	2	<b>21%</b>
Natural Disaster – Major Earthquake	1	1	3	3	3	2	3	2	<b>27%</b>
Natural Disaster – Major Hurricane	0	1	0	1	0	3	0	3	<b>0%</b>
Radiological Attack – Radiological Dispersal Devices	1	2	3	3	3	3	3	3	<b>32%</b>
Explosives Attack – Bombing Using Improvised Explosive	2	1	2	1	2	3	2	2	<b>41%</b>
Biological Attack – Food Contamination	1	3	1	2	2	3	2	2	<b>24%</b>
Biological Attack – Foreign Animal Disease (Foot and Mouth)	1	1	2	2	2	3	3	3	<b>25%</b>
Cyber Attack	3	0	2	2	2	3	3	3	<b>71%</b>
<b>State, Regional and Local Planning Scenarios</b>									

## Region 4 Hazards Vulnerability Analysis

Counties: Buffalo, Trempealeau, Jackson, La Crosse, Monroe, Vernon, Crawford

### SEVERITY = (MAGNITUDE - MITIGATION)

EVENT	PROBABILITY	HUMAN IMPACT	PROPERTY IMPACT	BUSINESS IMPACT	PREPARED-NESS	PLAN	INTERNAL RESPONSE	EXTERNAL RESPONSE	RISK
	<i>Likelihood this will occur</i>	<i>Possibility of death or injury</i>	<i>Physical losses and damages</i>	<i>Interruption of services</i>	<i>Preplanning</i>	<i>Integration</i>	<i>Time, effectiveness, resources</i>	<i>Community/ Mutual Aid staff and supplies</i>	<i>Relative threat*</i>
SCORE	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 - 100%
Flood	3	2	2	2	2	2	1	2	<b>62%</b>
Multiple Vehicle Highway Accident	3	3	1	1	2	1	1	2	<b>52%</b>
Supply Disruption	2	2	1	3	3	3	2	2	<b>51%</b>
Major Power Outage	2	2	2	3	2	3	2	2	<b>51%</b>
Tornado	2	3	3	3	2	1	1	2	<b>48%</b>
Pandemic Disease Outbreak	3	3	1	3	2	2	2	2	<b>71%</b>
Rail Incident	2	2	1	2	3	2	2	3	<b>48%</b>
Ice/Snow Storm	3	1	2	1	1	2	1	1	<b>43%</b>
HazMat Incident	2	2	2	2	2	2	1	2	<b>41%</b>
Explosion	2	2	2	1	2	2	1	2	<b>38%</b>
Mud Slides	2	1	1	1	2	2	2	2	<b>35%</b>
Wildfire	2	1	1	1	2	2	1	2	<b>32%</b>
Fuel Shortage	1	2	2	3	3	3	3	3	<b>30%</b>
Drought	2	1	1	1	1	3	1	1	<b>29%</b>
Major Communications Disruption (Gen Pub = 2)	1	2	1	3	3	3	3	3	<b>29%</b>
River Incident	1	1	2	2	2	3	3	3	<b>25%</b>
VIP Visit	2	0	1	2	1	1	1	1	<b>22%</b>
Municipal Water Supply Contamination	1	1	1	2	2	2	2	3	<b>21%</b>
Airplane Crash	1	3	2	1	1	1	1	2	<b>17%</b>
Multiple House/Building Fire	1	2	3	1	1	1	1	1	<b>16%</b>
Civic/Sports Events	1	1	1	1	2	2	1	2	<b>16%</b>
Heat Wave	1	2	0	0	2	2	1	1	<b>13%</b>
Civil Disturbance	1	1	1	1	1	1	1	1	<b>11%</b>

## Region 5a Hazards Vulnerability Analysis

Counties: Juneau, Sauk, Columbia, Adams, Marquette

### SEVERITY = (MAGNITUDE - MITIGATION)

EVENT	PROBABILITY	HUMAN IMPACT	PROPERTY IMPACT	BUSINESS IMPACT	PREPARED-NESS	PLAN	INTERNAL RESPONSE	EXTERNAL RESPONSE	RISK
	<i>Likelihood this will occur</i>	<i>Possibility of death or injury</i>	<i>Physical losses and damages</i>	<i>Interruption of services</i>	<i>Preplanning</i>	<i>Integration</i>	<i>Time, effectiveness, resources</i>	<i>Community/ Mutual Aid staff and supplies</i>	<i>Relative threat*</i>
SCORE	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 - 100%
<b>National Planning Scenarios</b>									
Nuclear Detonation – 10-Kiloton Improvised Nuclear Device	1	3	3	3	3	3	3	3	33%
Biological Attack – Aerosol Anthrax	1	3	3	3	2	3	3	3	32%
Biological Disease Outbreak – Pandemic Influenza	3	3	1	3	2	2	2	2	71%
Biological Attack – Plague	1	3	1	3	3	2	2	2	25%
Chemical Attack – Blister Agent	1	3	1	1	3	3	3	3	27%
Chemical Attack – Toxic Industrial Chemicals	1	3	2	1	2	2	2	2	22%
Chemical Attack – Nerve Agent	1	3	1	2	3	2	2	2	24%
Chemical Attack – Chlorine Tank Explosion	2	3	2	2	2	2	2	2	48%
Natural Disaster – Major Earthquake	1	1	3	3	3	2	3	2	27%
Natural Disaster – Major Hurricane	0	1	0	1	0	3	0	3	0%
Radiological Attack – Radiological Dispersal Devices	2	3	1	3	2	2	2	2	48%
Explosives Attack – Bombing Using Improvised Explosive	2	3	2	3	2	2	2	2	51%
Biological Attack – Food Contamination	2	2	1	3	2	2	2	2	44%
Biological Attack – Foreign Animal Disease (Foot and Mouth)	2	1	2	3	2	2	2	2	44%
Cyber Attack	3	0	2	2	2	2	2	2	57%
<b>State, Regional and Local Planning Scenarios</b>									
Flood	3	2	2	2	1	1	1	2	52%

## Region 5a Hazards Vulnerability Analysis

Counties: Juneau, Sauk, Columbia, Adams, Marquette

### SEVERITY = (MAGNITUDE - MITIGATION)

EVENT	PROBABILITY	HUMAN IMPACT	PROPERTY IMPACT	BUSINESS IMPACT	PREPARED-NESS	PLAN	INTERNAL RESPONSE	EXTERNAL RESPONSE	RISK
	<i>Likelihood this will occur</i>	<i>Possibility of death or injury</i>	<i>Physical losses and damages</i>	<i>Interruption of services</i>	<i>Preplanning</i>	<i>Integration</i>	<i>Time, effectiveness, resources</i>	<i>Community/ Mutual Aid staff and supplies</i>	<i>Relative threat*</i>
SCORE	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 - 100%
Multiple Vehicle Highway Accident	3	2	1	1	2	1	1	2	48%
Supply Disruption	2	2	1	3	3	3	2	2	51%
Major Power Outage	3	2	2	3	2	1	1	2	62%
Tornado	3	3	3	3	2	1	1	2	71%
Pandemic Disease Outbreak	2	3	1	3	2	2	2	2	48%
Rail Incident	3	2	1	2	2	2	2	3	67%
Ice/Snow Storm	3	1	2	2	1	2	1	1	48%
HazMat Incident	2	2	2	2	2	2	1	2	41%
Explosion	2	2	2	1	2	2	1	2	38%
Mud Slides	1	1	1	1	2	2	2	2	17%
Wildfire	3	1	2	1	2	2	1	2	52%
Fuel Shortage	2	2	2	3	2	2	3	3	54%
Drought	2	2	2	2	2	2	1	1	38%
Major Communications Disruption (Gen Pub = 2)	2	2	1	3	2	2	2	3	48%
River Incident	2	1	1	2	1	2	2	2	35%
VIP Visit	1	0	1	2	1	1	1	1	11%
Municipal Water Supply Contamination	1	1	1	2	2	2	2	3	21%
Airplane Crash	2	3	2	1	2	1	1	2	38%
Multiple House/Building Fire	3	2	3	2	1	1	1	1	52%
Civic/Sports Events	1	1	1	1	2	2	1	2	16%
Heat Wave	2	2	0	0	2	2	1	1	25%
Civil Disturbance	1	1	1	1	1	1	1	1	11%

## Region 5b Hazards Vulnerability Analysis

Counties: Iowa, Grant, Lafayette, Richland

**SEVERITY = (MAGNITUDE - MITIGATION)**

EVENT	PROBABILITY	HUMAN IMPACT	PROPERTY IMPACT	BUSINESS IMPACT	PREPARED-NESS	PLAN	INTERNAL RESPONSE	EXTERNAL RESPONSE	RISK
	<i>Likelihood this will occur</i>	<i>Possibility of death or injury</i>	<i>Physical losses and damages</i>	<i>Interruption of services</i>	<i>Preplanning</i>	<i>Integration</i>	<i>Time, effectiveness, resources</i>	<i>Community/ Mutual Aid staff and supplies</i>	<i>Relative threat*</i>
SCORE	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 - 100%
<b>National Planning Scenarios</b>									
Nuclear Detonation – 10-Kiloton Improvised Nuclear Device	1	3	3	3	3	3	3	3	<b>33%</b>
Biological Attack – Aerosol Anthrax	1	3	3	3	2	3	3	3	<b>32%</b>
Biological Disease Outbreak – Pandemic Influenza	3	3	2	3	2	2	2	2	<b>76%</b>
Biological Attack – Plague	1	3	1	3	3	2	2	2	<b>25%</b>
Chemical Attack – Blister Agent	1	3	1	1	3	3	3	3	<b>27%</b>
Chemical Attack – Toxic Industrial Chemicals	1	3	2	1	2	2	2	2	<b>22%</b>
Chemical Attack – Nerve Agent	1	3	1	2	3	2	2	2	<b>24%</b>
Chemical Attack – Chlorine Tank Explosion	1	3	1	1	2	2	2	2	<b>21%</b>
Natural Disaster – Major Earthquake	1	1	3	3	3	2	3	2	<b>27%</b>
Natural Disaster – Major Hurricane	0	1	0	1	0	3	0	3	<b>0%</b>
Radiological Attack – Radiological Dispersal Devices	1	2	3	3	3	3	3	3	<b>32%</b>
Explosives Attack – Bombing Using Improvised Explosive	2	1	2	1	2	3	2	2	<b>41%</b>
Biological Attack – Food Contamination	1	3	1	2	2	3	2	2	<b>24%</b>
Biological Attack – Foreign Animal Disease (Foot and Mouth)	1	1	2	2	2	3	3	3	<b>25%</b>
Cyber Attack	3	0	2	2	2	3	3	3	<b>71%</b>
<b>State, Regional and Local Planning Scenarios</b>									
Flood	3	2	2	2	1	1	1	1	<b>48%</b>
Multiple Vehicle Highway Accident	3	3	1	1	1	1	1	1	<b>43%</b>
Supply Disruption	3	2	1	3	3	3	2	2	<b>76%</b>

## Region 5b Hazards Vulnerability Analysis

Counties: Iowa, Grant, Lafayette, Richland

**SEVERITY = (MAGNITUDE - MITIGATION)**

EVENT	PROBABILITY	HUMAN IMPACT	PROPERTY IMPACT	BUSINESS IMPACT	PREPARED-NESS	PLAN	INTERNAL RESPONSE	EXTERNAL RESPONSE	RISK
	<i>Likelihood this will occur</i>	<i>Possibility of death or injury</i>	<i>Physical losses and damages</i>	<i>Interruption of services</i>	<i>Preplanning</i>	<i>Integration</i>	<i>Time, effectiveness, resources</i>	<i>Community/ Mutual Aid staff and supplies</i>	<i>Relative threat*</i>
SCORE	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 - 100%
Major Power Outage	2	2	2	3	2	3	2	2	<b>51%</b>
Tornado	3	3	3	3	1	1	1	2	<b>67%</b>
Pandemic Disease Outbreak	3	3	1	3	2	2	2	2	<b>71%</b>
Rail Incident	2	2	1	2	2	2	2	2	<b>41%</b>
Ice/Snow Storm	3	1	2	2	1	2	1	1	<b>48%</b>
HazMat Incident	2	1	1	1	1	1	1	2	<b>25%</b>
Explosion	2	2	2	1	2	2	1	2	<b>38%</b>
Mud Slides	2	1	1	1	3	2	2	2	<b>38%</b>
Wildfire	2	1	1	1	2	2	1	2	<b>32%</b>
Fuel Shortage	1	2	2	3	3	3	3	3	<b>30%</b>
Drought	2	1	3	3	2	3	3	3	<b>57%</b>
Major Communications Disruption (Gen Pub = 2)	1	3	3	2	1	1	1	3	<b>22%</b>
River Incident	2	2	2	2	1	1	1	2	<b>35%</b>
VIP Visit	2	1	1	1	1	1	1	2	<b>25%</b>
Municipal Water Supply Contamination	1	3	2	2	2	2	2	3	<b>25%</b>
Airplane Crash	1	3	2	1	3	3	1	1	<b>22%</b>
Multiple House/Building Fire	1	3	3	1	2	2	1	1	<b>21%</b>
Civic/Sports Events	3	1	1	1	3	3	1	1	<b>52%</b>
Heat Wave	3	2	1	1	3	3	1	3	<b>67%</b>
Civil Disturbance	2	2	2	2	1	1	1	2	<b>35%</b>

## Region 5c Hazards Vulnerability Analysis

Counties: Dodge, Jefferson, Dane, Rock, Green

### SEVERITY = (MAGNITUDE - MITIGATION)

EVENT	PROBABILITY	HUMAN IMPACT	PROPERTY IMPACT	BUSINESS IMPACT	PREPARED-NESS	PLAN	INTERNAL RESPONSE	EXTERNAL RESPONSE	RISK
	<i>Likelihood this will occur</i>	<i>Possibility of death or injury</i>	<i>Physical losses and damages</i>	<i>Interruption of services</i>	<i>Preplanning</i>	<i>Integration</i>	<i>Time, effectiveness, resources</i>	<i>Community/ Mutual Aid staff and supplies</i>	<i>Relative threat*</i>
SCORE	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 - 100%
<b>National Planning Scenarios</b>									
Nuclear Detonation – 10-Kiloton Improvised Nuclear Device	1	3	3	3	3	3	3	3	33%
Biological Attack – Aerosol Anthrax	2	3	2	3	2	2	2	2	51%
Biological Disease Outbreak – Pandemic Influenza	3	3	1	3	2	2	2	2	71%
Biological Attack – Plague	1	3	1	2	2	2	2	2	22%
Chemical Attack – Blister Agent	1	3	2	2	2	2	2	2	24%
Chemical Attack – Toxic Industrial Chemicals	2	2	2	2	1	1	1	1	32%
Chemical Attack – Nerve Agent	1	3	2	2	2	2	2	2	24%
Chemical Attack – Chlorine Tank Explosion	2	2	2	2	1	1	1	1	32%
Natural Disaster – Major Earthquake	1	2	3	3	3	3	2	2	29%
Natural Disaster – Major Hurricane	0	0	0	0	0	0	0	0	0%
Radiological Attack – Radiological Dispersal Devices	1	2	3	3	3	3	3	3	32%
Explosives Attack – Bombing Using Improvised Explosive	3	3	2	1	2	2	2	2	67%
Biological Attack – Food Contamination	2	2	1	2	2	2	2	2	41%
Biological Attack – Foreign Animal Disease (Foot and Mouth)	1	2	3	3	2	2	2	2	25%
Cyber Attack	3	1	2	3	2	2	2	2	67%
<b>State, Regional and Local Planning Scenarios</b>									
Flood	3	2	3	2	1	1	1	1	52%
Multiple Vehicle Highway Accident	3	2	1	1	1	1	1	1	38%

## Region 5c Hazards Vulnerability Analysis

Counties: Dodge, Jefferson, Dane, Rock, Green

### SEVERITY = (MAGNITUDE - MITIGATION)

EVENT	PROBABILITY	HUMAN IMPACT	PROPERTY IMPACT	BUSINESS IMPACT	PREPARED-NESS	PLAN	INTERNAL RESPONSE	EXTERNAL RESPONSE	RISK
	<i>Likelihood this will occur</i>	<i>Possibility of death or injury</i>	<i>Physical losses and damages</i>	<i>Interruption of services</i>	<i>Preplanning</i>	<i>Integration</i>	<i>Time, effectiveness, resources</i>	<i>Community/ Mutual Aid staff and supplies</i>	<i>Relative threat*</i>
SCORE	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 - 100%
Supply Disruption	2	2	1	3	2	3	2	2	48%
Major Power Outage	2	2	2	3	2	2	2	2	48%
Tornado	3	2	3	3	1	1	1	1	57%
Pandemic Disease Outbreak	3	3	1	3	2	2	2	2	71%
Rail Incident	2	2	1	2	1	1	2	1	32%
Ice/Snow Storm	3	1	2	2	1	1	1	1	43%
HazMat Incident	2	2	2	2	1	1	2	2	38%
Explosion	2	2	2	2	2	2	2	2	44%
Mud Slides	1	1	1	1	2	2	2	2	17%
Wildfire	2	1	2	1	1	2	2	1	32%
Fuel Shortage	2	2	2	3	2	2	2	2	48%
Drought	2	1	2	3	2	2	2	2	44%
Major Communications Disruption (Gen Pub = 2)	2	2	1	3	2	2	2	2	44%
River Incident	1	1	1	1	3	3	3	3	24%
VIP Visit	2	0	1	1	1	1	1	1	19%
Municipal Water Supply Contamination	2	2	1	2	2	2	2	2	41%
Airplane Crash	1	2	1	1	1	1	1	1	13%
Multiple House/Building Fire	2	2	2	2	1	1	1	1	32%
Civic/Sports Events	2	2	1	1	1	1	1	1	25%
Heat Wave	2	2	1	1	2	2	2	2	38%
Civil Disturbance	1	1	1	1	1	1	1	1	11%

## Region 6 Hazards Vulnerability Analysis

Counties: Waupaca, Outagamie, Waushara, Winnebago, Calumet, Green Lake

### SEVERITY = (MAGNITUDE - MITIGATION)

EVENT	PROBABILITY	HUMAN IMPACT	PROPERTY IMPACT	BUSINESS IMPACT	PREPARED-NESS	PLAN	INTERNAL RESPONSE	EXTERNAL RESPONSE	RISK
	<i>Likelihood this will occur</i>	<i>Possibility of death or injury</i>	<i>Physical losses and damages</i>	<i>Interruption of services</i>	<i>Preplanning</i>	<i>Integration</i>	<i>Time, effectiveness, resources</i>	<i>Community/ Mutual Aid staff and supplies</i>	<i>Relative threat*</i>
SCORE	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 - 100%
<b>National Planning Scenarios</b>									
Biological Disease Outbreak – Pandemic Influenza	3	3	1	3	3	3	3	3	90%
Cyber Attack	2	0	2	3	2	3	2	3	48%
Explosives Attack – Bombing Using Improvised Explosive	2	2	2	1	2	2	2	2	41%
Nuclear Detonation – 10-Kiloton Improvised Nuclear Device	1	3	3	3	3	3	3	2	32%
Biological Attack – Plague	1	3	1	3	2	2	2	2	24%
Chemical Attack – Nerve Agent	1	3	1	2	2	2	2	2	22%
Chemical Attack – Chlorine Tank Explosion	1	3	1	2	2	2	2	2	22%
Radiological Attack – Radiological Dispersal Devices	1	2	2	2	2	2	2	2	22%
Chemical Attack – Blister Agent	1	3	1	1	2	2	2	2	21%
Chemical Attack – Toxic Industrial Chemicals	1	3	1	1	2	2	2	2	21%
Biological Attack – Foreign Animal Disease (Foot and Mouth)	1	1	2	2	2	2	2	2	21%
Biological Attack – Aerosol Anthrax	1	3	2	2	1	1	2	1	19%
Biological Attack – Food Contamination	1	2	1	2	1	2	2	1	17%
Natural Disaster – Major Earthquake	0	2	3	3	3	3	3	3	0%
Natural Disaster – Major Hurricane	0	0	0	0	0	0	0	0	0%
<b>State, Regional and Local Planning Scenarios</b>									
Supply Disruption	2	1	1	3	3	3	2	2	48%
Multiple Vehicle Highway Accident	3	3	1	1	1	1	1	1	43%

## Region 6 Hazards Vulnerability Analysis

Counties: Waupaca, Outagamie, Waushara, Winnebago, Calumet, Green Lake

### SEVERITY = (MAGNITUDE - MITIGATION)

EVENT	PROBABILITY	HUMAN IMPACT	PROPERTY IMPACT	BUSINESS IMPACT	PREPARED-NESS	PLAN	INTERNAL RESPONSE	EXTERNAL RESPONSE	RISK
	<i>Likelihood this will occur</i>	<i>Possibility of death or injury</i>	<i>Physical losses and damages</i>	<i>Interruption of services</i>	<i>Preplanning</i>	<i>Integration</i>	<i>Time, effectiveness, resources</i>	<i>Community/ Mutual Aid staff and supplies</i>	<i>Relative threat*</i>
SCORE	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 - 100%
Ice/Snow Storm	3	1	2	2	1	1	1	1	43%
Major Power Outage	2	1	1	3	2	2	2	2	41%
Tornado	2	2	3	2	1	1	1	1	35%
Infectious Disease Outbreak	2	3	1	2	1	1	1	1	32%
Airplane Crash	2	3	2	1	1	1	1	1	32%
HazMat Incident	2	2	1	2	1	1	1	1	29%
Explosion	2	2	2	1	1	1	1	1	29%
Fuel Shortage	1	1	1	3	3	3	3	3	27%
Heat Wave	1	2	1	2	3	3	3	3	27%
Rail Incident	2	1	1	1	1	1	1	1	22%
Major Communications Disruption	1	1	1	3	2	2	2	2	21%
Municipal Water Supply Contamination	1	2	1	2	2	2	2	2	21%
Drought	1	1	1	1	2	2	2	2	17%
Civil Disturbance	1	2	2	2	1	1	1	1	16%
Flood	1	1	2	2	1	1	1	1	14%
Wildfire	1	1	2	1	1	1	1	1	13%
Multiple House/Building Fire	1	1	2	1	1	1	1	1	13%
Mud Slides	0	0	0	0	0	0	0	0	0%

## Region 7a Hazards Vulnerability Analysis

Counties: Sheboygan, Ozaukee, Fond du Lac, Washington

### SEVERITY = (MAGNITUDE - MITIGATION)

EVENT	PROBABILITY	HUMAN IMPACT	PROPERTY IMPACT	BUSINESS IMPACT	PREPARED-NESS	PLAN	INTERNAL RESPONSE	EXTERNAL RESPONSE	RISK
	<i>Likelihood this will occur</i>	<i>Possibility of death or injury</i>	<i>Physical losses and damages</i>	<i>Interruption of services</i>	<i>Preplanning</i>	<i>Integration</i>	<i>Time, effectiveness, resources</i>	<i>Community/ Mutual Aid staff and supplies</i>	<i>Relative threat*</i>
SCORE	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 - 100%
Tornado	3	3	3	3	2	2	2	2	<b>81%</b>
Flood	3	2	3	3	2	2	2	2	<b>76%</b>
Biological Disease Outbreak – Pandemic Influenza	3	3	1	3	2	2	2	2	<b>71%</b>
Rail Incident	3	2	2	3	2	2	2	2	<b>71%</b>
Ice/Snow Storm	3	2	3	3	1	1	1	2	<b>62%</b>
Multiple House/Building Fire	3	1	3	3	1	1	2	2	<b>62%</b>
Infectious Disease Outbreak	3	2	1	2	1	2	2	2	<b>57%</b>
Chemical Attack – Nerve Agent	2	1	2	2	3	3	3	3	<b>54%</b>
Major Power Outage	2	2	1	3	2	2	3	3	<b>51%</b>
Cyber Attack	2	1	2	3	2	2	2	2	<b>44%</b>
Chemical Attack – Toxic Industrial Chemicals	3	3	1	1	1	1	1	1	<b>43%</b>
Multiple Vehicle Highway Accident	3	3	1	1	1	1	1	1	<b>43%</b>
Fuel Shortage	2	1	1	3	2	2	2	2	<b>41%</b>
HazMat Incident	2	1	1	2	1	2	2	2	<b>35%</b>
Nuclear Detonation – 10-Kiloton Improvised Nuclear Device	1	3	3	3	3	3	3	3	<b>33%</b>
Drought	3	0	1	3	0	0	0	3	<b>33%</b>
Radiological Attack – Radiological Dispersal Devices	1	3	2	3	3	3	3	3	<b>32%</b>
Chemical Attack – Chlorine Tank Explosion	2	2	1	2	1	1	1	1	<b>29%</b>
Biological Attack – Foreign Animal Disease (Foot and Mouth)	1	1	2	3	3	3	3	3	<b>29%</b>
Chemical Attack – Blister Agent	1	1	2	2	3	3	3	3	<b>27%</b>

## Region 7a Hazards Vulnerability Analysis

Counties: Sheboygan, Ozaukee, Fond du Lac, Washington

### SEVERITY = (MAGNITUDE - MITIGATION)

EVENT	PROBABILITY	HUMAN IMPACT	PROPERTY IMPACT	BUSINESS IMPACT	PREPARED-NESS	PLAN	INTERNAL RESPONSE	EXTERNAL RESPONSE	RISK
	<i>Likelihood this will occur</i>	<i>Possibility of death or injury</i>	<i>Physical losses and damages</i>	<i>Interruption of services</i>	<i>Preplanning</i>	<i>Integration</i>	<i>Time, effectiveness, resources</i>	<i>Community/ Mutual Aid staff and supplies</i>	<i>Relative threat*</i>
SCORE	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 - 100%
Biological Attack – Plague	1	3	1	3	3	2	2	2	25%
Natural Disaster – Major Earthquake	1	1	1	2	3	3	3	3	25%
Supply Disruption	1	1	1	2	3	3	3	3	25%
Explosives Attack – Bombing Using Improvised Explosive	1	3	2	1	2	2	3	2	24%
Civic/Sports Events/Music Festivals	2	1	1	1	1	1	1	1	22%
Biological Attack – Food Contamination	1	3	1	3	2	2	1	1	21%
Mud Slides	1	1	1	1	3	3	2	2	21%
Municipal Water Supply Contamination	1	2	1	2	2	2	2	2	21%
Inland Port Attack	1	1	2	3	1	2	2	2	21%
Explosion	1	1	3	2	1	2	2	1	19%
Major Communications Disruption	1	1	0	3	2	2	2	2	19%
Airplane Crash	1	3	2	1	2	2	1	1	19%
Biological Attack – Aerosol Anthrax	1	1	1	1	2	2	2	2	17%
Wildfire	1	1	1	1	2	2	2	2	17%
Dam Failure	1	1	1	1	1	2	2	2	16%
Civil Disturbance	1	1	2	2	1	1	1	1	14%
VIP Visit	1	1	1	2	1	1	1	1	13%
Natural Disaster – Major Hurricane	0	0	0	0	0	0	0	0	0%

## Region 7b Hazards Vulnerability Analysis

Counties: Milwaukee, Waukesha

### SEVERITY = (MAGNITUDE - MITIGATION)

EVENT	PROBABILITY	HUMAN IMPACT	PROPERTY IMPACT	BUSINESS IMPACT	PREPARED-NESS	PLAN	INTERNAL RESPONSE	EXTERNAL RESPONSE	RISK
	<i>Likelihood this will occur</i>	<i>Possibility of death or injury</i>	<i>Physical losses and damages</i>	<i>Interruption of services</i>	<i>Preplanning</i>	<i>Integration</i>	<i>Time, effectiveness, resources</i>	<i>Community/ Mutual Aid staff and supplies</i>	<i>Relative threat*</i>
SCORE	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 - 100%
<b>National Planning Scenarios</b>									
Nuclear Detonation – 10-Kiloton Improvised Nuclear Device	1	3	3	3	3	3	3	2	32%
Biological Attack – Aerosol Anthrax	1	3	2	3	2	2	2	2	25%
Biological Disease Outbreak – Pandemic Influenza	3	3	1	3	2	2	3	3	81%
Biological Attack – Plague	1	2	0	2	3	3	2	3	24%
Chemical Attack – Blister Agent	1	1	0	1	1	1	1	1	10%
Chemical Attack – Toxic Industrial Chemicals	2	2	2	1	1	1	1	1	25%
Chemical Attack – Nerve Agent	1	2	1	3	2	2	1	1	19%
Chemical Attack – Chlorine Tank Explosion	2	3	2	2	1	1	1	1	35%
Natural Disaster – Major Earthquake	1	3	3	3	3	3	1	1	27%
Natural Disaster – Major Hurricane	0	0	0	0	2	2	2	2	0%
Radiological Attack – Radiological Dispersal Devices	2	2	3	3	3	3	3	3	63%
Explosives Attack – Bombing Using Improvised Explosive	2	2	2	2	1	1	1	1	32%
Biological Attack – Food Contamination	2	2	1	3	2	2	2	2	44%
Biological Attack – Foreign Animal Disease (Hoof and Mouth)	2	1	2	3	2	2	1	1	38%
Cyber Attack	2	1	3	3	2	2	2	2	48%
<b>State, Regional and Local Planning Scenarios</b>									
Flood	2	1	3	3	1	1	1	1	35%
Multiple Vehicle Highway Accident	3	3	3	1	1	1	1	1	52%

## Region 7b Hazards Vulnerability Analysis

Counties: Milwaukee, Waukesha

### SEVERITY = (MAGNITUDE - MITIGATION)

EVENT	PROBABILITY	HUMAN IMPACT	PROPERTY IMPACT	BUSINESS IMPACT	PREPARED-NESS	PLAN	INTERNAL RESPONSE	EXTERNAL RESPONSE	RISK
	<i>Likelihood this will occur</i>	<i>Possibility of death or injury</i>	<i>Physical losses and damages</i>	<i>Interruption of services</i>	<i>Preplanning</i>	<i>Integration</i>	<i>Time, effectiveness, resources</i>	<i>Community/ Mutual Aid staff and supplies</i>	<i>Relative threat*</i>
SCORE	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 - 100%
Supply Disruption	1	3	1	3	3	3	3	3	30%
Major Power Outage	2	2	1	3	2	2	1	1	38%
Tornado	2	2	2	2	1	1	1	1	32%
Pandemic Disease Outbreak	2	3	1	3	3	3	3	3	60%
Rail Incident	2	2	2	3	2	1	1	1	38%
Ice/Snow Storm	3	1	2	2	1	1	1	1	43%
HazMat Incident	3	2	2	2	1	1	1	1	48%
Explosion	2	2	2	2	1	1	1	1	32%
Mud Slides	0	0	0	0	0	0	0	0	0%
Wildfire	1	1	2	1	1	1	1	1	13%
Fuel Shortage	1	1	1	2	3	3	3	3	25%
Drought	2	1	1	2	1	1	2	2	32%
Major Communications Disruption	2	1	1	3	2	2	2	1	38%
River Incident	2	1	2	1	1	1	1	1	25%
VIP Visit	3	1	1	1	1	1	1	1	33%
Municipal Water Supply Contamination	3	3	3	3	2	2	2	2	81%
Airplane Crash	2	3	3	2	1	1	1	1	38%
Multiple House/Building Fire	3	2	3	3	1	1	1	1	57%
Civic/Sports Events	3	1	1	3	1	1	1	1	43%
Heat Wave	2	2	2	2	1	1	1	1	32%
Civil Disturbance	2	3	3	3	2	2	2	1	51%

## Region 7c Hazards Vulnerability Analysis

Counties: Kenosha, Racine, Walworth

### SEVERITY = (MAGNITUDE - MITIGATION)

EVENT	PROBABILITY	HUMAN IMPACT	PROPERTY IMPACT	BUSINESS IMPACT	PREPARED-NESS	PLAN	INTERNAL RESPONSE	EXTERNAL RESPONSE	RISK
	<i>Likelihood this will occur</i>	<i>Possibility of death or injury</i>	<i>Physical losses and damages</i>	<i>Interruption of services</i>	<i>Preplanning</i>	<i>Integration</i>	<i>Time, effectiveness, resources</i>	<i>Community/ Mutual Aid staff and supplies</i>	<i>Relative threat*</i>
SCORE	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 - 100%
Drought	3	1	3	2	3	3	3	2	<b>81%</b>
Biological Disease Outbreak – Pandemic Influenza	3	3	1	3	2	1	3	3	<b>76%</b>
Major Power Outage	3	2	1	3	3	3	2	2	<b>76%</b>
Civil Disturbance	3	2	2	2	2	2	2	2	<b>67%</b>
Chemical Attack – Toxic Industrial Chemicals	3	3	3	3	1	1	1	1	<b>62%</b>
Cyber Attack	3	1	1	3	2	2	2	2	<b>62%</b>
HazMat Incident	3	3	3	3	1	1	1	1	<b>62%</b>
Major Communications Disruption	3	1	1	3	2	2	2	2	<b>62%</b>
Fuel Shortage	2	1	1	3	3	3	3	3	<b>54%</b>
Multiple Vehicle Highway Accident	3	3	2	2	1	1	1	1	<b>52%</b>
Tornado	3	2	3	2	1	1	1	1	<b>52%</b>
Ice/Snow Storm	3	2	2	2	1	1	1	1	<b>48%</b>
Explosives Attack – Bombing Using Improvised Explosive	2	2	2	2	2	2	2	2	<b>44%</b>
Flood	3	1	2	2	1	1	1	1	<b>43%</b>
Civic/Sports Events/Music Festivals	3	2	1	2	1	1	1	1	<b>43%</b>
Chemical Attack – Chlorine Tank Explosion	2	3	2	3	1	2	1	1	<b>41%</b>
Rail Incident	2	3	3	3	1	1	1	1	<b>41%</b>
Biological Attack – Food Contamination	2	3	1	2	1	1	2	2	<b>38%</b>
Infectious Disease Outbreak	3	1	1	2	1	1	1	1	<b>38%</b>
Multiple House/Building Fire	2	2	3	3	1	1	1	1	<b>38%</b>
Nuclear Detonation – 10-Kiloton Improvised Nuclear Device	1	3	3	3	3	3	3	3	<b>33%</b>

## Region 7c Hazards Vulnerability Analysis

Counties: Kenosha, Racine, Walworth

### SEVERITY = (MAGNITUDE - MITIGATION)

EVENT	PROBABILITY	HUMAN IMPACT	PROPERTY IMPACT	BUSINESS IMPACT	PREPARED-NESS	PLAN	INTERNAL RESPONSE	EXTERNAL RESPONSE	RISK
	<i>Likelihood this will occur</i>	<i>Possibility of death or injury</i>	<i>Physical losses and damages</i>	<i>Interruption of services</i>	<i>Preplanning</i>	<i>Integration</i>	<i>Time, effectiveness, resources</i>	<i>Community/ Mutual Aid staff and supplies</i>	<i>Relative threat*</i>
SCORE	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 - 100%
Radiological Attack – Radiological Dispersal Devices	1	2	2	3	2	3	3	2	27%
Natural Disaster – Major Earthquake	1	3	3	3	2	2	2	1	25%
Biological Attack – Plague	1	3	0	3	1	2	3	3	24%
Biological Attack – Foreign Animal Disease (Foot and Mouth)	1	1	3	2	2	2	2	3	24%
Inland Port Attack	1	1	1	1	3	3	3	3	24%
Supply Disruption	1	2	2	2	2	2	2	2	22%
Municipal Water Supply Contamination	1	2	2	2	2	2	2	2	22%
Biological Attack – Aerosol Anthrax	1	2	1	2	2	2	2	2	21%
Chemical Attack – Nerve Agent	1	1	0	2	3	3	2	2	21%
Explosion	1	3	3	3	1	1	1	1	21%
Dam Failure	1	1	2	1	2	2	2	2	19%
Chemical Attack – Blister Agent	1	1	1	1	2	2	2	2	17%
VIP Visit	1	1	1	1	2	2	2	2	17%
Airplane Crash	1	3	1	1	1	1	1	1	14%
Mud Slides	1	1	1	1	1	1	1	1	11%
Wildfire	1	1	1	1	1	1	1	1	11%
Natural Disaster – Major Hurricane	0	0	0	0	0	0	0	0	0%

# Attachment A: The Development of Regional HVAs

## Instructions for Completing the Hospital and Local Health Departments HVA

This document is a sample Hazard Vulnerability Analysis tool that was developed by the Region 4 Pilot Study group. It can be used to evaluate the potential events and the resulting response among the following categories, using a 1 -2 - 3 scale. Participants are to assume that each incident occurs at the worst possible time (e.g. during peak patient loads, weekends, after hours, etc.).

**Purpose:** To complete a Regional Hazards Vulnerability Analysis so that hospitals and local health departments in the region are aware of the high risk scenarios that may occur.

### **Instructions:**

1. **HIGHLY RECOMMENDED:** meeting participants should include hospitals, local health departments and emergency management at a minimum.
2. Distribute the Region 4 HVA as a template OR have a small group review this template HVA and “score” it for the uniqueness of your region<sup>2</sup>.
3. Read through the following definitions of the headings of the columns on the HVA first:

Issues to consider under **Probability – likelihood that this will occur** include, but are not limited to:

- Know Risk
- Historical Data

Issues to consider for **Human Impact - possibility of death or injury** include, but are not limited to:

- Potential for staff death or injury
- Potential for patient death or injury
- Potential for death and injury in the community

Issues to consider for **Property Impact – physical losses or damages** include, but are not limited to:

- Cost to replace

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<sup>2</sup> The participants in the “HVA Pilot Project” all concurred that having the HVA “completed” beforehand was an excellent idea, since it allowed the group to have more time for discussion and changing values than trying to create the entire HVA form scratch. The group also felt that there might be little need to change the “National Planning Scenarios” across the state. The FBI played a major role in the “scoring” of the National Planning Scenarios.

- Cost to set up temporary replacement
- Cost to repair
- Time to recover

Issues to consider for **Business Impact – interruption of services** include, but are not limited to:

- Business interruption
- Employees unable to report to work
- Customers unable to reach facility
- Company in violation of contractual agreements
- Imposition of fines and penalties or legal costs
- Interruption of critical supplies
- Interruption of product distribution
- Reputation and public image
- Financial impact/burden

Issues to consider for **Preparedness – pre-planning** include, but are not limited to:

- Status of current plans
- Frequency of drills
- Training and competency

Issues to consider for **Plan - integration** include, but are not limited to:

- Regional planning
- Knowledge of other responders' plans
- Joint exercises
- Knowledge of alternate sources for critical supplies/services/personnel

Issues to consider for **Internal Resources – time, effectiveness, resources** include, but are not limited to:

- Types of supplies on hand/will they meet need?
- Volume of supplies on hand/will they meet need?
- Staff availability
- Coordination with MOUs
- Availability of back-up systems
- Internal resources ability to withstand disasters/survivability

Issues to consider for **External Resources – Community/ Mutual Aid Staff and supplies** include, but are not limited to:

- Types of agreements with community agencies

- Coordination with local and state agencies
  - Coordination with proximal health care facilities
  - Coordination with treatment specific facilities
  - Community resources
  - Historical response
4. Other meeting participants that are to be invited should include law enforcement, fire departments, EMS, HazMat teams, local officials and other interested emergency response partners.
  5. The HRSA Project Coordinator is to facilitate the meeting logistics.
  6. The HRSA Regional Board will identify a person from a hospital, who is willing to facilitate the HVA process, using the HVA template.
  7. The group also felt that there might be little need to change the scoring of the “National Planning Scenarios” across the state. The FBI played a major role in the “scoring” of the National Planning Scenarios. These national planning scenarios were compiled by the Department of Homeland Security to be the minimum number necessary to test the range of response capabilities and resources. Other hazards were inevitably omitted, but are included in the State, Regional and Local Scenarios.
  8. Sub-scenarios are highly encouraged under each major scenario to make the scenario specific, e.g. under Scenario 31: HAZMat Incident, the region may identify several plants, areas or highways that are most likely the site of a HAZMat incident.
  9. The group is encouraged to identify at least 5 major High Risk Scenarios that all participants agree upon.
  10. Test the completed worksheet for “realism” as it relates to your Region. The “mathematical scoring” is only a tool. There should be a “reality check.”
  11. Since the completed worksheet was distributed to the participants prior to meeting, the group should discuss the scenarios in order to make changes as needed. (During the pilot study, it was found helpful to discuss the scenarios in groups of five versus discussing scenarios one-by-one)
  12. It is encouraged to have a laptop and projector displaying the electronic version of the HVA so that any changes can be made during the discussion. It is helpful for all to see the results<sup>3</sup>.
  13. The group should feel free to add additional State, Local or Regional scenarios, but keep in mind that you are looking for scenarios with significant Regional impact so do not get caught up on smaller events.

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<sup>3</sup> The person inputting the data from the discussion should “practice” sorting the data so that it can be displayed in descending order.

14. Identify scenarios not in the top 5 that the group may need to work on further to be better prepared.
15. Determine from the group how often they believe they need to reconvene to up-date the HVA<sup>4</sup>.
16. The group should have access, if available, to their neighboring regions HVAs, especially for those organizations that a relocated on the boundaries of other regions.
17. The group and each organization need to determine which of the identified hazards need further attention for planning purposes even if these are not within the incidents of highest priority.
18. Once all regions have completed their HVA, there will be a state-wide summary of the incidents, most likely to occur, for each region. This will be especially helpful for organizations that sit on the boundaries of various regions or serve large geographic areas.

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<sup>4</sup> The JCAHO Elements of Performance for EC.4.10 states that 1) The hospital conducts an HVA to identify potential emergencies that could affect the need for its services or its ability to provide those services 2) The hospital establishes the following with the community: priorities among the potential emergencies identified in the HVA