### KAISER PERMANENTE

### **Medical Center Hazard and Vulnerability Analysis**

This document is a sample Hazard Vulnerability Analysis tool. It is not a substitute for a comprehensive emergency preparedness program. Individuals or organizations using this tool are solely responsible for any hazard assessment and compliance with applicable laws and regulations.

#### **INSTRUCTIONS:**

Evaluate potential for event and response among the following categories using the hazard specific scale. Assume each event incident occurs at the worst possible time (e.g. during peak patient loads).

Please note specific score criteria on each work sheet to ensure accurate recording.

Issues to consider for **probability** include, but are not limited to:

- 1 Known risk
- 2 Historical data
- 3 Manufacturer/vendor statistics

Issues to consider for **response** include, but are not limited to:

- 1 Time to marshal an on-scene response
- 2 Scope of response capability
- 3 Historical evaluation of response success

Issues to consider for human impact include, but are not limited to:

- 1 Potential for staff death or injury
- 2 Potential for patient death or injury

Issues to consider for property impact include, but are not limited to:

- 1 Cost to replace
- 2 Cost to set up temporary replacement
- 3 Cost to repair
- 4 Time to recover

Issues to consider for **business impact** include, but are not limited to:

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



### **Medical Center Hazard and Vulnerability Analysis**

Issues to consider for **preparedness** include, but are not limited to:

- 1 Status of current plans
- 2 Frequency of drills
- 3 Training status
- 4 Insurance
- 5 Availability of alternate sources for critical supplies/services

#### Issues to consider for **internal resources** include, but are not limited to:

- 1 Types of supplies on hand/will they meet need?
- 2 Volume of supplies on hand/will they meet need?
- 3 Staff availability
- 4 Coordination with MOB's
- 5 Availability of back-up systems
- 6 Internal resources ability to withstand disasters/survivability

#### Issues to consider for external resources include, but are not limited to:

- 1 Types of agreements with community agencies/drills?
- 2 Coordination with local and state agencies
- 3 Coordination with proximal health care facilities
- 4 Coordination with treatment specific facilities
- 5 Community resources

Complete all worksheets including Natural, Technological, Human and Hazmat.

The summary section will automatically provide your specific and overall relative threat.

# HAZARD AND VULNERABILITY ASSESSMENT TOOL NATURALLY OCCURRING EVENTS



			2 FEMINANDATE					
EVENT	PROBABILITY	HUMAN IMPACT	PROPERTY IMPACT	BUSINESS IMPACT	PREPARED- NESS	INTERNAL RESPONSE	EXTERNAL RESPONSE	RISK
	Likelihood this will occur	Possibility of death or injury	Physical losses and damages	Interuption of services	Preplanning	Time, effectivness, resouces	Community/ Mutual Aid staff and supplies	Relative threat*
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 - 100%
Hurricane								0%
Tornado								0%
Severe Thunderstorm								0%
Snow Fall								0%
Blizzard								0%
Ice Storm								0%
Earthquake								0%
Tidal Wave								0%
Temperature Extremes								0%
Drought								0%
Flood, External								0%
Wild Fire								0%
Landslide								0%
Dam Inundation								0%
Volcano								0%
Epidemic								0%
AVERAGE SCORE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%

^ I hreat increases with percentage.

# HAZARD AND VULNERABILITY ASSESSMENT TOOL TECHNOLOGIC EVENTS



			EXIMANENTE®					
EVENT	PROBABILITY	HUMAN IMPACT	PROPERTY IMPACT	BUSINESS IMPACT	ITUDE - MITIG PREPARED- NESS	INTERNAL RESPONSE	EXTERNAL RESPONSE	RISK
	Likelihood this will occur	Possibility of death or injury	Physical losses and damages	Interuption of services	Preplanning	Time, effectivness, resouces	Community/ Mutual Aid staff and supplies	Relative threat*
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 - 100%
Electrical Failure								0%
Generator Failure								0%
Transportation Failure								0%
Fuel Shortage								0%
Natural Gas Failure								0%
Water Failure								0%
Sewer Failure								0%
Steam Failure								0%
Fire Alarm Failure								0%
Communications Failure								0%
Medical Gas Failure								0%
Medical Vacuum Failure								0%
HVAC Failure								0%
Information Systems Failure								0%
Fire, Internal								0%
Flood, Internal								0%
Hazmat Exposure, Internal								0%
Supply Shortage								0%
Structural Damage								0%
AVERAGE SCORE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%

\*Threat increases with percentage.

# HAZARD AND VULNERABILITY ASSESSMENT TOOL HUMAN RELATED EVENTS



			PERMANENTE®					
EVENT	PROBABILITY	HUMAN IMPACT	PROPERTY IMPACT	BUSINESS IMPACT	PREPARED- NESS	INTERNAL RESPONSE	EXTERNAL RESPONSE	RISK
	Likelihood this will occur	Possibility of death or injury	Physical losses and damages	Interuption of services	Preplanning	Time, effectivness, resouces	Community/ Mutual Aid staff and supplies	Relative threat*
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 - 100%
Mass Casualty Incident (trauma)								0%
Mass Casualty Incident (medical/infectious)								0%
Terrorism, Biological								0%
VIP Situation								0%
Infant Abduction								0%
Hostage Situation								0%
Civil Disturbance								0%
Labor Action								0%
Forensic Admission								0%
Bomb Threat								0%
AVERAGE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%

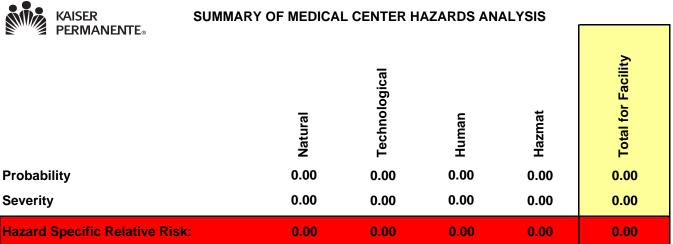
<sup>\*</sup>Threat increases with percentage.

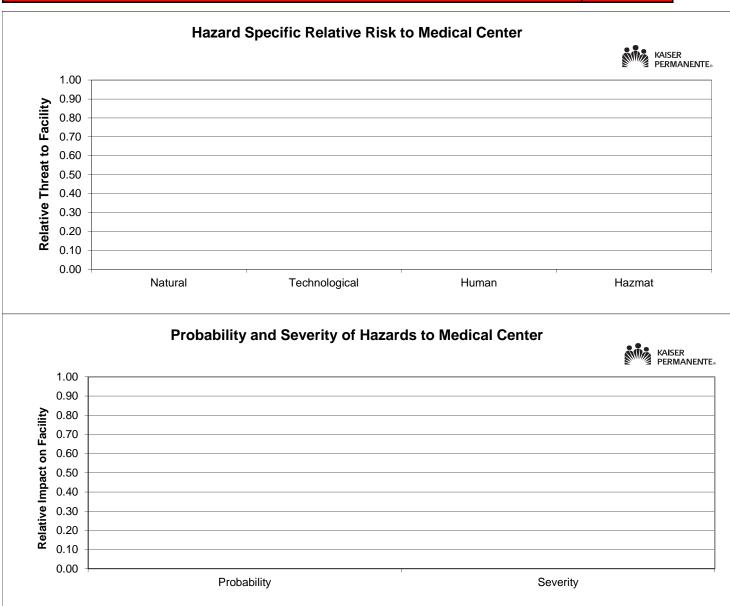
### HAZARD AND VULNERABILITY ASSESSMENT TOOL EVENTS INVOLVING HAZARDOUS MATERIALS



					IITUDE - MITIG		S 2 PE	RIVIAINENTE®
	PROBABILITY							
EVENT		HUMAN IMPACT	PROPERTY IMPACT	BUSINESS IMPACT	PREPARED- NESS	INTERNAL RESPONSE	EXTERNAL RESPONSE	RISK
	Likelihood this will occur	Possibility of death or injury	Physical losses and damages	Interuption of services	Preplanning	Time, effectivness, resouces	Community/ Mutual Aid staff and supplies	Relative threat*
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 - 100%
Incident (From historic events at your MC with >= 5 victims)								0%
Small Casualty Hazmat Incident (From historic events at your MC with < 5 victims)								0%
Chemical Exposure, External								0%
Small-Medium Sized Internal Spill								0%
Large Internal Spill								0%
Terrorism, Chemical								0%
Radiologic Exposure, Internal								0%
Radiologic Exposure, External								0%
Terrorism, Radiologic								0%
AVERAGE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%

<sup>\*</sup>Threat increases with percentage.





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