

Vulnerability Analysis

Conducting a vulnerability analysis of one's LTC community serves as a foundation for the development of strategies to deal with potential disasters – both manmade and natural, for allocating resources, and for helping set priorities and standards in ensuring the safety of residents and staff.

Identifying potential emergencies involves the use of all available information to determine what types of disasters may affect a LTC community and how often these events may occur.

All effective Emergency Operations Plans (EOPs) should begin with an assessment of the most likely catastrophic events, based on the unique characteristics of one's LTC community. Natural disasters – including earthquakes, tornadoes, brush fires, and mudslides – have a variable likelihood of occurring based on a community's location. Still other major events, including fire, terrorism, elopement and infectious disease outbreaks, must be carefully considered.

Vulnerability Analysis refers to the process used to determine the impact these events and collateral effect that may impact residents and staff in your LTC Community.

Objectives

- Identify the types of disasters or emergencies that can affect LTC community.
- Determine how these events can affect staff and residents
- Assess community's ability to respond to disasters or emergencies.

Areas of Vulnerability

Consider the following questions first in relationship to the city, town, or region where your LTC Community is located.

- Historical record – What types of disasters or emergencies have impacted your city, town, or region in the past? Consider both manmade and natural/disasters/emergencies.
- Technological – What could happen in your city, town, or region from a failure in your communications equipment, information system, power failure, heating/cooling system?
- Physical Plant – What types of emergencies could result from the design of your city, town or region? Could changes be implemented to enhance safety of your city, town or region?

Now, consider the same questions related to your LTC community's areas of vulnerability:

- Historical record – What types of disasters or emergencies have impacted your LTC community in the past? Consider both manmade and natural disasters/emergencies.
- Technological – What could happen from a failure in your communications equipment, information system, power failure, heating/cooling system in your LTC community?
- Physical Plant – What types of emergencies could result from the design or construction of your buildings? Could the design be changed to enhance safety?

The Vulnerability Assessment Tool – Part 1 is designed to identify potential disaster/emergency situations in your facility. (See attached example)

1. Estimate the probability of each emergency on a scale from 1 to 5, with 5 being high.
2. Analyze the potential of human impact of each emergency of a scale of 1 to 5, with 5 being high.
3. Do the same for property impact and service impact using the same five point scale.
4. Count the totals for each type of emergency and list each type of emergency from highest to lowest. Emergencies with the highest score are the ones your facility is most vulnerable to, especially the ones that have a higher probability of happening.

Next, using the Vulnerability Assessment Tool – Part 2 (see attached example) assess capability of your internal resources to respond to the 10 emergencies with the highest scores using a five point scale with one being strong capability.

1. Rate your external resources in the same manner. The lower the score the better your ability to respond.
2. For each emergency determine if you have sufficient capability internally or externally to respond to the emergency.
3. If yes, move on to the next type of emergency. If no, determine what can be done to improve your internal or external response capability.

VULNERABILITY ASSESSMENT *Example Part 1*

Potential Emergencies	Probability of Occurrence	Potential Human Impact	Potential Property Impact	Potential Service Impact	TOTAL SCORE
List all that are likely to occur in your facility or community	Estimate the probability of each event on a scale of 1-5, with 5 being the high	Estimate the probability of each event on a scale of 1-5, with 5 being the high	Estimate the probability of each event on a scale of 1-5, with 5 being the high	Estimate the probability of each event on a scale of 1-5, with 5 being the high	
1. Bioterrorist Attack	2	5	1	5	13
2. Earthquake	4	5	5	5	19

VULNERABILITY ASSESSMENT *Example Part 2*

EMERGENCY Assess Highest Scored First	Capability of Internal resources to respond Rate on a scale of 1-5 ("1" is highest capability to respond)	Sufficient Capability Yes or No? (circle)	External Resources to Respond Rate on a scale of 1-5 ("1" is highest capability to respond)	Sufficient Capability Yes or No? (circle)	If No, determine what can be done to improve response capability
1. Earthquake	1	YES NO	2	YES NO	Staff training including a disaster drill.
2. Bioterrorist Attack	4	YES NO	4	YES NO	Staff training including a disaster drill and simulations.

VULNERABILITY ASSESSMENT TOOL - PART 1

Potential Disasters/Emergencies List all that are likely to occur in your LTC community.	Probability of Occurrence Estimate the probability of each event on a scale of 1-5, with "5" being the highest probability	Potential Human Impact Estimate the probability of each event on a scale of 1-5, with "5" being the greatest impact	Potential Property Impact Estimate the probability of each event on a scale of 1-5, with "5" being the greatest impact	Potential Service Impact Estimate the probability of each event on a scale of 1-5, with "5" being the greatest impact	TOTAL SCORE

VULNERABILITY ASSESSMENT TOOL - PART 2

DISASTER/ EMERGENCY Assess Highest Scored First	Capability of Internal resources to respond Rate on a scale of 1-5 ("1" is highest capability to respond)	Sufficient Capability Yes or No? (circle)	External Resources to Respond Rate on a scale of 1-5 ("1" is highest capability to respond)	Sufficient Capability Yes or No? (circle)	If no, determine what can be done to improve response capability
		YES NO		YES NO	
		YES NO		YES NO	
		YES NO		YES NO	