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FACILITY HAZARD VULNERABILITY ASSESSMENT TOOL
VERSION 1.4 USER'S GUIDE

This User's Guide is intended for use with the Hospital HVA Tool V 1.4 for individual hospital hazard vulnerability assessments. This tool is to be used by an individual hospital to identify and rank various risk and mitigating factors related to hospital emergency preparedness. The purpose of the HVA matrix is to evaluate the ability of the medical facility to provide medical care for the community and/or current patients and staff in the event of an emergency or disaster. The ratings are subjective and are designed to reflect the general preparedness of a facility to respond to an incident. Facilities should utilize the results of this HVA to perform a gap analysis of the hospital's preparedness program. This gap analysis may then be used for prioritizing projects related to hospital emergency preparedness. It is strongly recommended that this tool be used by a hospital in coordination with local emergency management and other preparedness and response partners.

The Hospital HVA Tool V 1.4 is an Excel spreadsheet with one worksheet that contains the entire HVA tool. The left column lists specific incidents for the facility to consider in preparedness. Across the top of the page are various criteria to which to score the incident. Score rankings are also identified with the criteria. The appropriate score should be entered into the corresponding box for which the incident and criteria axis intersect. The page has one sample score entered. The Risk for each event is automatically calculated and displayed at the right side of the sheet for each event. An average score for each criterion is also automatically calculated and displayed at the bottom of the worksheet.

The HVA tool is intended to assist facilities in identifying preparedness gaps to address in the hospital's emergency management program. Some gaps identified may be eligible for Kansas Preparedness Program funding available through the Kansas Department of Health and Environment's Bureau of Community Health Systems (BCHS). The gap analysis may include activities such as writing, revising, or exercising of a plan, purchasing additional equipment, identifying a need for training, etc. When performing the gap analysis, facilities should also consider the multi-use or all-hazards use of any activity proposed to minimize an identified gap.

BCHS may be contacted for assistance completing the HVA, gap analysis, planning efforts, and equipment, training, and exercising recommendations. BCHS staff may be contacted at 785-296-2700.

Incident definitions
1. Bomb Threat – Reported threat of an explosive device within the facility or on the facility's campus.
2. Workplace Violence – Violence against one or more employees by another employee or person of the public within the facility or on facility's campus including active shooter scenarios.
3. Tornado – A violently rotating column of air with circulation reaching the ground. This may include the direct impact of the tornado upon the facility.
4. Severe Thunderstorm – A thunderstorm that produces a tornado, winds of at least 58 mph (50 knots), and/or hail at least ¾" in diameter. Structural wind damage may imply the occurrence of a severe thunderstorm. A thunderstorm wind equal to or greater than 40 mph (35 knots) and/or hail of at least ½" is defined as approaching severe. Consider severe storm damage in total, additional specific items may be addressed in later events.
5. Winter Storm
    a. Snow Fall – A snow that is an intense, but limited duration, period of moderate to heavy snowfall, accompanied by strong, gusty surface winds and possibly lightning (generally moderate to heavy snow showers). Snow accumulation may be significant.
    b. Blizzard – A storm with dry, driving snow, strong winds, and intense cold.
    c. Ice Storm – Occasions when damaging accumulations of ice are expected during freezing rain situations. Significant ice accumulations are usually accumulations of ¼" or greater.
    d. Low temperatures – unusually cold winter temperatures which may be associated with a Wind Chill Warning.
6. Flood – High water incident caused by rupture(s) of facility water line(s), heavy rainfall, or snow melt incidents that directly impact the facility or campus.
7. Fire – Internal to the facility or campus that requires the response of the local fire department and evacuation of at least one area of the hospital.
8. Power Outage – Failure of primary and/or secondary electrical supply.
9. Information Systems Failure – Failure of the facility's primary information system including but not limited to the patient information system, billing system, and laboratory information system.
10. HVAC Failure – Failure of the facility's primary HVAC system, including related facility heating and cooling system.
11. Water Service Failure – Failure of the primary water and/or sewer system that services the facility.
12. Phone Service Failure – Failure of the facility's primary telephone system.
13. Medical Gas Failure – Failure of the facility's primary medical gas system.
14. Medical Vacuum Failure – Failure of the facility's primary medical vacuum system.
15. Disease Outbreak – A condition characterized by spreading rapidly and extensively by infection and affecting many individuals in an area or a population at the same time. This may include a reduction in available staff, strain on medical supplies, and increased patient load.
16. Mass Casualty Incident – An incident that produces more patients than available resources can manage using routine procedures.
17. Hazmat Exposure – An incident that produces casualties that have been exposed to hazardous materials that may require decontamination and treatment. Evaluate the effectiveness of a medical facility to provide care for patients and staff in the event a hazmat related emergency. The facility's hazmat procedures, including patient decontamination, may be reviewed in association with these criteria. An evaluation of the facility's personal protective equipment's breakthrough time for various chemicals present in the community should also be considered.
18. Supply Shortage – Normal supply chain(s) have been disrupted due to an incident. Many event types may disrupt supply chain(s) including winter storms or work stoppages.
19. VIP Situation – Event that includes a visit, or possible visit, to the facility of a VIP. This visit may require additional security or treating the VIP for injuries.
20. Infant Abduction – The illegal removal of a child from the facility or department.

Probability

The Probability column rates the incident's likelihood of occurring over a defined time span with the highest scores being given to those incidents likely within the next year to three years.

Human Impact
The Human Impact column rates the incident's possibility of injury or death to staff or community members.

Property Impact
The Property Impact column rates the incident's possibility of severely damaging the facility. Severe damage can be considered that damage that limits or eliminates a portion of the facility for operation, impacting the facility's ability to provide care.

Facility Impact
The Facility Impact column rates the incident's impact on interruption or termination of a facility's services. Interruption of services in a facility may drastically impair the facility's ability to provide care to patients and the community and may include the loss of equipment or personnel.

Warning Time
The Warning Time column rates the anticipation time for the identified incident. This criteria provides an opportunity to score how long staff and the community have to implement plans and procedures for the incident.

Duration
The Duration column rates the anticipated time that the incident may occur impacting the facility or community.

Planning
The Planning column rates the prior incident planning that a facility has done to prepare for the identified incident. This criterion is based on the completeness and evaluation of a facility's emergency management/emergency operations plan(s) in addressing the incident.

Training and Equipment
The Training and Equipment column rates the completeness of staff training and availability of necessary equipment for staff to successfully complete tasks outlined in the facility's emergency operations/emergency management plan.