

Course Project of CIS 8690

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Part1 :**Scenario:**

The Elite Veterinary Clinic situated in Lindbergh, Atlanta, Georgia, United States is a one-story building consists of two floors with no windows :1st floor has two veterinary's office, Reception, File cabinet room, 2 examination rooms, and a waiting area for owners along with their pets, 2nd floor has a boarding room for cats and dogs, one laboratory room, one Surgical suite, one cold storage room. Designate individuals within the clinic who will be responsible for implementing the disaster recovery plan. Designated individuals include:

- i. Two Veterinarians
- ii. Two veterinary technicians
- iii. Two veterinary assistants
- iv. Receptionist
- v. Animal Facility Supervisor
- v. Two kennel workers and two part- time volunteers.

Each Veterinarian has one veterinary technician, one veterinary assistant, one part time volunteer and a respective filing cabinet for storing medical records.

DRP Plan Statement:

Elite Veterinary Clinic has a disaster recovery plan in place to ensure the safety of animals, staff, and property in the event of a natural disaster. All personnel must comply with the plan.

Pre-Disaster Preparations (Recommend Actions Before Hurricane):

- a. Critical equipment will be secured and supplies are needed in the event of a hurricane, including medical equipment, food and water for the animals, and emergency power sources. Critical equipment includes exam tables, x-ray machines, tablets, laptops, and filing cabinets.

Supplies include drug and supply storage, water, and food and supply storage for cats and dogs. Boarding room is monitored by surveillance cameras and staff, and has a secure emergency entry & exit.

- b. Clinic protection include sandbagging doorways, removing loose debris. Fire extinguisher drills and evacuation drills are conducted regularly to all staff, management and personnel. Our building is equipped with all hurricane and tornado related building codes, active smoke detectors, active fire alarms.
- c. Clinic has a social media group to actively communicate with management, staff and clients in the event of a disaster.
- d. Our clinic has and make sures a safe evacuation of animals and staff if necessary, including transportation to an off-site location or homes. A bus(20 seats capacity) and a large pet transport sprinter van(accommodate up to 30 animals).
- e. Clinic's Insurance covers fire outbreak, hurricane and flood damages. Insurance provider for Elite Veterinary Clinic: American Veterinary Medical Association.
- f. Our clinic has a backup generator and fuel available in case of power outages.
- g. All flash lights should be recharged, limit the use of fire candles which might impose unnecessary risk
- h. Training will be given to staff members, personnel on basic disaster response and recovery procedures based on their roles and responsibilities.
- i. Review service level agreement contract of service provider to ensure backup system for critical data.

Service Provider for Elite Veterinary Clinic: Allscripts

During the Disaster (Recommend actions during the hurricane):

- a. If the building is about to lose its immunity against adverse events, our clinic should evacuate cats and dogs to a safe location with sufficient facilities and supplies, our clinic's offsite with boarding facilities and essential food and water.
- b. Clinic doorways are protected, check if they are shielded properly
- c. Essential emergency kit: which includes
 - i. Water, food for pets, pet's owners, staff,
 - ii. First-aid kit, emergency whistle, waterproof matches/lighter, local area maps, diapers, wipes, formula, and baby food and supplies (if needed).
 - iii. Include face coverings and/or masks to prevent the spread of germs.
 - iv. Include disinfectants, hand sanitizer and other cleaning supplies that clinic may need in an emergency.
- d. All members are advised not to be around doorways of the clinic and aware about your surroundings
- e. Use the established communication plan to keep staff and clients informed about the status of the clinic and any updates on the weather condition's progression.
- f. Monitor cats and dogs with cameras and in person staff to ensure their safety and make sure the animals are getting sufficient food and water on time.
- g. Laboratory equipment, clinic's file cabinets and storages are monitored and protected.

Post-Disaster (Recommend actions after hurricane):

- a. Once the adverse event has passed, assess the damage to the clinic and surrounding area.
- b. Staff should work with local utility companies to restore power and other utilities to the clinic.
- c. Once the clinic is deemed safe, reopen the clinic and resume normal operations.
- d. After the disaster has passed, review the disaster recovery plan and make any necessary updates accordingly.

- e. Contact the local authorities to confirm the safety of the area and report any damages.
- f. Evacuate any animals that are in danger or need medical attention first.
- g. Re-establish communication with the staff and volunteers.
- h. Begin cleaning up the area and restoring basic services such as electricity and water.
- i. Contact insurance company and take a picture of your clinic.
- j. Be safe when cleaning up and making small repairs.
- k. Make sure to properly dispose of damaged or destroyed property or debris.
- l. Make sure to prevent mold and mildew growth.

Preventative Controls and Strategies:

- a. Regularly update and review the disaster recovery plan accordingly.
- b. Review your insurance policies for protection against storm, wind, and flood damage.
- c. Conduct regular safety drills and training sessions to all management & staff members quarterly in a year.
- d. Maintain a sufficient and efficient backup power source and fuel supply.
- e. Store critical equipment, supplies, and medications in a secure and safe location.
- f. Have an efficient plan for evacuation and transportation of animals based on previous hurricane catastrophes.
- g. Regularly check and maintain the building to ensure it meets all hurricane-related building codes.
- h. Establish communication with local authorities, animal shelters, and other veterinary clinics in the area.
- i. Keep a list of emergency contact numbers for staff members, volunteers, and suppliers.

Part 2:**BCP Plan Statement:**

Elite Veterinary Clinic has a Business Continuity Plan (BCP) to provide protection from natural and artificial disasters, minimizing disruption and ensuring the safety and well-being of management, staff, cats & dogs, and owners.

Goals for the BCP plan:

- a. Acts as a recovery guide.
- b. Identifies interim business operations that must be performed during disruptions.
- c. Determines the methods and resources required to aid in recovery.
- d. Identifies vendors, owners, and other parties who must be contacted if a disaster occurs.
- e. Aids in reducing misunderstanding during a crisis by recording, testing, and revising recovery processes.
- f. Locates alternative supplies, resources, and places.
- g. Document storage, protection, and retrieval of crucial records.

Planning Team:

- i. Clinic BCP Co-ordinators- Two veterinarians: BCP Coordinator is responsible for creating plans, maintaining master and backup copies, evaluating and updating plans, launching plans, teaching employees, gathering contact information, authorizing new purchases, payroll, and ongoing costs.

ii. EMR Vendor BCP Co-ordinator - Allscripts - an electronic health record system vendor: Purchases new clinic equipment, aids with data recovery, EMR setup, and examines environment before to adoption.

iii. Clinic Communications Coordinator: Maintains a backup copy of the BCP, communicates with staff, contacts the EMR vendor, the Office of the Information and Privacy Commissioner (OIPC), the media, and other suppliers and providers.

i. Basic activities that must be managed by the BCP for the veterinary clinic include:

- a. Data Backup: Ensure all electronic data of animals and their respective owner's information is backed up regularly and stored securely off-site to protect against data loss during a hurricane.
- b. Business Impact Analysis: Determine the processes required for each equipment in the clinic to continue vital functions during a disruptive action, as well as the length of time each process may be delayed before the consequences to the health centre become unacceptable.
- c. Power Backup: Arrange for backup power sources to be in place in case of power outages, such as a generator or a backup battery system. Make sure power is available at critical business areas such as the boarding facility for pets.
- d. Communications: Ensure that all staff have a reliable means of communication during a hurricane, such as walkie-talkies or cell phones, and have a plan for staying in touch with each other. Contact the EMR provider to access and print pets schedules and contact information if there is an expected duration of the facility loss.
- e. Boarding facility: Boarding facility for cats and dogs are available, make sure to notify the availability slots for cats and dogs to the clients i.e., how many pets can fit in
 - i. non-urgent appointments are cancelled.

- ii. Alternative arrangements are taking place (e.g., home visits) if required.
- iii. Prescription renewal processes are changed during the service interruption.
- f. Supplies and Equipment: Maintain a list of essential supplies and equipment, and have plans in place for securing these items during a hurricane, including shelter, transportation, and storage.
- g. Staffing: Develop a plan for ensuring that the clinic is staffed with the necessary personnel during a hurricane, including arrangements for transportation, housing, and food.
- h. Cats & Dogs Care: Develop a plan for providing care to Cats & Dogs during a hurricane, including arrangements for transportation, housing, and food.
- i. Business Continuity: Update the plan for how the clinic will continue to operate during and after a hurricane, including arrangements for alternate site relocation, and establishing a timeline for returning to normal operations.
- j. Initiate physical facility recovery plan. This may include:
 - i. Sharing facilities with other clinics.
 - ii. Renting temporary or permanent replacement facilities.
 - iii. Bringing in portable facilities if feasible.
 - iv. Arranging for minimum equipment for the temporary facilities

ii. Alternate Site Relocation & estimated monthly budget for the alternate site operations:

- a. Site Selection: The alternate site is located in an area that is safe from the effects of hurricanes, with easy access for employees and Cats & Dogs.
- b. Boarding Facility: Boarding facility capacity has the same capacity and features as capacity of main clinic

- c. Equipment and Supplies: Alternate site clinic is equipped with the necessary equipment and supplies, such as medical equipment, supplies, and medications, to provide the same level of care as the main clinic.
- d. Communications: Establish a plan for maintaining communication with employees and owners of Cats & Dogs during a hurricane, including a reliable means of communication, such as walkie-talkies or cell phones, and a plan for staying in touch with each other.
- e. Staffing: Clinic has a clear chain of command and staffed with the necessary personnel during a hurricane, including arrangements for transportation, housing, and food.
- f. Estimated Monthly Budget for Alternate Site Operations for Veterinary Clinic:
 - i. Rent: \$2,000
 - ii. Utilities: \$500
 - iii. Supplies and Equipment: \$7000
 - iv. Backup Generator: 8000
 - v. Staffing: \$8,000
 - vi. Transportation: \$1,000
 - vii. Food and Housing: \$2,000

Total estimated monthly budget for alternate site operations for the veterinary clinic is
\$28,500

Part 3:**Georgia State University Emergency Operations Plan:****Features:****1. Hazard Vulnerability Assessment:**

Severe weather is a major threat to Georgia, with potential tornadoes, hurricanes, flooding, lightning and ice/snow. Coordination with the Office of Homeland Security-Georgia Emergency Management Agency (OHS-GEMA) and the Disaster Resistant University (DRU) project is ongoing, and the Police Department and Office of Emergency Management (OEM) monitor NOAA Severe Weather Radios, local weather channels and Accuweather.com forecasts. Georgia State has ten outdoor emergency speaker systems with full-voice capability and can be activated remotely. GSU Fire Safety works hard to educate, prevent and improve fire safety measures on campus, including fire extinguisher training, Facilities Zone Chiefs, and fire evacuation drills. Additionally, the Higher Education Opportunity Act now specifies campus fire safety reporting requirements. GSU PD, OEM, and the Office of Research Integrity (ORI) work together to educate, train and equip first responders to mitigate, respond and recover from an accidental release. ORI coordinates an inspection and continuing education program to promote a safer environment and is on call 24/7 to respond to hazardous materials or chemical spill incidents. The GSU Cybersecurity program is responsible for strategic planning, conducting cybersecurity risk management activities, and delivering daily security operational activities to protect enterprise systems, networks, and ancillary services. To align with GSU's strategic imperatives, the Cybersecurity program manages implementation of

initiatives focused on people, processes, and technology that are geared to protect the computer infrastructure and its users.

2. Crisis Plan:

The Georgia State University Crisis Communication Plan provides clear, effective and timely communications during and after critical incidents to ensure the safety and security of the community and property. The system can be activated by the President, Senior Vice President, University Attorney, VP Public Relations and Marketing Communications, Chief of Police, Director of Emergency Management, Communications Centre Manager, and any Police Command Staff member.

Emergency Outdoor Warning Sirens, Indoor PA System, Mass Notification System (Rave Alert), Emergency Desktop Alert System, University Homepage, Social Media, and Campus Broadcast will be deployed as part of the system. PRMC confers with appropriate GSU official and the committee is notified of a crisis. Georgia State University is prepared to provide crisis counselling if a mass casualties incident or disaster calls for it, with services from GSU Counselling and Psychological Services, other licensed mental health clinicians, CDA, and Off-Campus Counselling Partners.

3. Incident command System:

The Incident Command System (ICS) is established when an event occurs or is threatening and meets the need for ICS. The Incident Commander (IC) has overall responsibility for all incident emergency activities, including development, implementation, review of strategic decisions, and post event assessment. The Incident Command Group (IC, Command Staff and Section Chiefs) focuses on the response and stabilization efforts and has the authority granted by their position assigned. It is important to maintain accurate and complete documentation of planning efforts, incident utilization of resources, costs and contracts used, and risk

management issues. Pre-designated, trained and qualified Incident Commanders and Section Chiefs will greatly enhance continued operational efforts.

4. Evacuation, Trainings, Drills & Exercises:

Volunteers must obtain evacuation training, two or more trained volunteers should conduct the evacuation, and proper lifting techniques should be used to avoid injury to rescuers' backs. If an outage occurs during the day, people with disabilities should move to a window with natural light and access to a working telephone. Call University Police from a campus telephone to request evacuation assistance. The GSU Police Training Office and Office of Emergency Management will conduct training in the Emergency Operations Plan, overview of the Incident Command System and/or response specific plans, review of the EOP or applicable components, increased employee awareness, community training, and incident command system training. Evacuation drills will be conducted during normal business hours and evaluated by a member of the fire Safety team.

Deficiencies:

Seems a very well organized and articulated plan. But regular practices can make much more effective. In my observance,

1. Better to have a Datacentre disaster recovery plan
2. Better to have a different method which includes parallel test, full-interruption test and simulation test to test this plan. Considering the magnitude of University's operation, this can be tricky and time-consuming. It might also be an expensive affair, so University should consider all the possibilities and make sure to include this while budgeting for DRP efforts. Its better to test the plan regularly.

References

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