

This Annex Suggests General Considerations and Best Practices for Data Management Contingency Plans in the Event of an Emergency or Disaster

ARE YOU READY?

- *Who has access to vital records?*
- *Are accreditation certificates, permits and licenses kept current and in a safe location?*
- *If a computer or network crashes, is the information lost?*
- *Are electronic data maintained by a server off-premise?*
- *Are personnel data kept confidential, protected and safely backed up?*

Basic Steps When Writing and Implementing Data Management Contingency Plans

- 1. Conduct Preparation and Development**
- 2. Draft the Data Management Section of the Contingency Plan**
- 3. Train Personnel for Emergency Situations**
- 4. Schedule Trainings and Subsequent Evaluations**

Types of data may include: veterinary, animal management, administrative, financial, hazardous materials, research data, training and maintenance schedules, security, inventories, payroll records and human resources.

Well-managed data and recordkeeping are important to the welfare of the animals, handling human resources, and accessing financial information and other vital records. In the event of a power outage or a flood, for example, these types of data could be lost or compromised.

If there is an emergency, protecting or restoring data and minimizing the loss of information will not be a priority to first responders. Pre-written data contingency plans and protocols, and training, will be extremely helpful for operating and maintaining a successful facility. Backing up data is of utmost importance.

1. Conduct Preparation and Development

Before drafting contingency plans for data management, the Facility Contingency Planners (FCPs) and/or stakeholders need to identify the current data management practices. The following pages offer a variety of options to consider while evaluating and developing the contingency plan, and training strategies.

- Assemble a planning team and collaborators linked with any data management activities (see page3).
- Identify the potential risks. See *Risk Assessment Annex*.
- Identify and evaluate current plan(s), practices and protocols to maintain data operations during emergencies or disasters.

2. Draft the Data Management Section of the Contingency Plan

After evaluating the current standard operating procedures and backup plans (1) draft or edit the contingency plan that includes strategies for backing up data and preserving vital records, (2) monitor the progress of writing the plan and (3) develop a system for application of the plan. Best practice information for the following topics is provided beginning page 3.

- General Data Management and Recordkeeping Protocols*
- Types of Administrative and Financial Data to Consider*
- Types of Human Resources Data to Consider*
- Types of Animal Husbandry Data to Consider*
- Monitor the Drafting and Implementation of the Data Management Plan*

3. Train Personnel for Emergency Situations

Develop the types of emergency preparedness exercises/drills and assess training effectiveness.

- Train personnel on procedures and their specific roles to manage and protect data.
- Train personnel on the various types of recordkeeping.
- Train personnel on their roles and protocols in emergency procedures.

4. Schedule Training and Subsequent Evaluations

- Schedule training and emergency drills for appropriate personnel and volunteers.
- Evaluate the success of the exercises and modify the training, as needed. If an emergency occurred, was training adequate?
- Revisit the plan as equipment, software and procedures change.

The following considerations are good business practices that may be helpful while developing the data management plan. Contingency plans will vary depending on the size of the facility, number of personnel, computerization/electronics and other factors. Not every consideration is appropriate for every managed wildlife facility.

Stakeholders and Experts to Consult on the Objectives and Policies for Data Management

- Who are the potential consultants for data management?
 - Management, administrative personnel and owners
 - Human resources experts
 - Information technology specialists and vendors
 - Veterinary personnel
 - Professional business counselors to guide on potential liabilities and vulnerabilities (e.g., U.S. Small Business Administration, accountants, attorneys, business consultants)

General Data Management and Recordkeeping Protocols

The protocols for achieving a high standard of performance for emergency-ready recordkeeping and data management will vary. Following are best practice considerations.

- Are individuals assigned to protect and manage data for the facility?
- If applicable, are recordkeeping/data storage procedures in compliance with any specific regulations or requirements?
 - U.S. Department of Agriculture (USDA)
 - US Fish and Wildlife Service
 - CITES (Convention on International Trade in Endangered Species)
 - International Species Information System
 - State veterinary practice acts
 - Occupational Safety and Health Act
 - Department of Labor
 - Internal Revenue Service
 - State tax boards
 - Other state-specific laws
 - Accreditations
 - Licensing
 - Other
- Are vital documents clearly labeled? Are any copies laminated for safekeeping?
- Are original documents placed in safekeeping with duplicate copies used as backup?
- Are all data management and recordkeeping equipment inventoried? See *Administration Annex*.
- Are electrical and telecommunication outlets, power surge protectors and wiring adequate and in good working order to operate the data management equipment? Is there adequate backup power? See *Facility Operations Annex*.

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- Are software licenses, warranties, anti-virus software and maintenance/service contracts kept in a secure location, if applicable? See Administration Annex.
- Are software program installation disks stored safely in case restoration is necessary?
- Are electronic data backed up regularly and stored in a secure location?
 - On-line storage website
 - Tape backup
 - Compact discs (CD)
 - External hard drive
 - Flash drive
 - Off-site server
 - Private residence
 - Neighboring facility
 - Fireproof/waterproof container
 - Safety deposit box
 - Safe
 - Other
- Are cyber security protections in place to safeguard computers/equipment and networks? Are the safeguards verified on a regular basis, if applicable?
 - Anti-theft
 - Anti-hacking
 - Firewalls
 - Spyware
 - Security update patches
 - Privacy
 - Hard-to-guess passwords?
 - Encryption codes
 - Anti-virus software
 - Network passwords
 - Software installation keys
 - Other
- Are personnel cross-trained to access backed-up data in an emergency? Do they have current passwords?
- Does the off-site server have a backup system, if applicable? For example, if the facility is in Ohio and the server is located in Atlanta, are both sites protected?
- Will data and/or equipment be relocated for extreme weather emergency warnings?
- What equipment and supplies are necessary to relocate data and/or documents to a dry and safe location, if applicable?
 - Insulated containers
 - Waterproof containers
 - Power strips
 - Tapes and/or disks
 - Computer battery backup system
 - Plastic zip-type bags
 - Other
- Is at least one complete set of critical animal records stored in a fireproof/waterproof container (e.g., ownership information, registration papers, and permanent identification)?
- Is animal recordkeeping software used for animal management? See Emergency Animal Care Annex.
- Are animal data uploaded regularly to an animal information management system, if applicable?

Data management is the lifeblood of a facility. It may be managed by multiple people and/or multiple departments depending on the size of the facility. Finding a specific piece of information or vital data during an emergency can make the difference between a positive and a negative outcome. Knowing how to access information at any time is a best practice state-of-readiness. Below is a sample format for managing data (page 5). Following the sample are data considerations listed by category.

Data Management Annex

To evaluate and update current standard procedures for data management, it may be helpful to draft a chart or spreadsheet that identifies the following: (See sample below.)

- (1) Basic categories of data and information.**
- (2) The degree of confidentiality required and who has access.**
- (3) How long data must be kept.**
- (4) Whether it is in electronic or paper form.**
- (5) Where data are located.**
- (6) Where backup data are stored.**

Sample Data Management System					
Category	Level of Confidentiality? Who has access?	Amount of time to retain?	Paper or electronic?	Where data are stored?	Where data are backed up?
Administrative					
Accreditations					
Software licenses					
Contracts					
Permitting					
Insurance Policies					
MOUs / MAAs					
Contacts					
Financial					
Accounting					
Payroll					
Taxes					
Receipts					
Investments					
Human Resources					
Personnel files					
Training Schedules					
Certifications					
Personnel Handbook					
Animal Husbandry					
Species Inventory					
Veterinary records					
Dietary information					
Pharmacy inventory					
Suppliers and services					

Types of Administrative and Financial Data to Consider

- Architectural/engineering/facility plans and maps
- Deeds and mortgages
- Titles of ownership
- Corporations/Partnerships registration
- Business licensing records
- Permitting records
- Registration papers
- Tax records/returns
- Financial statements
- Important receipts
- Accounting journals and ledgers
- Supporting documents (e.g., checks, invoices)
- Investments
- Contact information/phone trees/databases
- Creditor contact information
- Payroll
- Accreditations and certifications
- Contracts and agreements
- MOUs and MAAs
- Insurance policies/coverage and agent contact information
- Photos (inside and out)
- Furniture and equipment inventory
- Vehicle Inventory
- VIN numbers for each vehicle
- Vehicle registration documents
- Driver's license verifications
- Computer software inventory list
- Software licenses
- Computer hardware inventory list
- Computer networking diagrams
- Peripheral inventory list (modem, zip drives, CPU, etc.)
- Warrantees
- Instructions for equipment
- Passwords
- Voice mail box # and remote password
- Suppliers and service vendors
- Emergency suppliers and vendors
- Authorized passage under emergency conditions memo or letter
- Fundraising
- Marketing
- Memberships
- Charitable contributions
- Donor information
- Board of Director Minutes
- Strategic plans
- Fiscal budgets
- Formulas and trade secrets
- Proprietary information
- Research
- Master visitor map
- Retail store inventory
- Food service operations
- Training schedules
- Maintenance schedules
- Second set of animal records
- Backup files/tapes or server(s) of electronic data
- Other

Types of Human Resources Data to Consider

- Personnel files
- Timesheets
- Payroll records
- Employee taxes and filings
- Personnel handbook
- Volunteer records
- Certifications
- Training schedules
- Enrichment programs
- Contact information/databases
- Other

Types of Animal Husbandry Data to Consider

- Species inventory
- Priority or endangered species
- Permitting and licensing records
- Transfer/shipment records

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- Veterinary records
- Health Certificates
- Species acquisition and terms
- Dietary information
- Instructions for animal-handling equipment
- Special studies or research
- Species and body part dispositions
- Species deaths
- Historical species records
- Pharmacy inventory
- Training and enrichment schedules
- Habitat maintenance schedules
- Contact information/databases
- Suppliers and services
- Other

Monitoring the Drafting and Implementation of the Plan

FCPs should monitor the progress of (1) the plan development; (2) drafting the plan and (3) developing a system for application of the plan.

- Who will be responsible for determining possible agency filing requirements?
- What is the timeframe for developing and writing the contingency plan?
- Is new equipment needed to establish best practices for the plan?
- Who will develop or adapt the training program?
- Who will monitor the training of personnel?
- Where will the Contingency Plan be located?

Training Considerations for Data Management

Training and practice drills increase the likelihood that data are easily located and safely backed up. The following considerations relate specifically to data. See the [*Training Annex*](#) for general training guidance.

Best practice activities and training considerations for **data management personnel** may include:

- Train and cross train personnel for specific IT roles.
- Offer professional development courses for specific data management procedures.
- Offer professional development courses to IT personnel.
- Test emergency backup procedures for electronic data.
- Conduct drills to test a computer battery backup system.
- Research new equipment and techniques for safe management of data.
- Train for specific tasks to protect vital data or equipment if an emergency is predicted, such as moving items off the ground floor or covering equipment with plastic to protect from ceiling leaks.

Sample Table-top Scenarios

Responses to emergency scenarios during a table-top exercise may vary depending upon the location of the 'incident,' time of day or night and the animals that might be involved. Develop and personalize multiple scenarios for discussions that reflect the facility and its environment, based on the Facility Risk Assessment. These could then be modified for drills and exercises. The following are sample data management scenarios.

- ❖ Potential Water Damage: The animal hospital is flooding because of a ruptured water main and must be evacuated.
 - What vital paper records should be removed as part of the evacuation procedure?
 - What are the priorities and responsibilities of personnel related directly to data management?
- ❖ Severe Weather: The facility must close due to pending flood warnings. Priority animals need to be relocated. The biological and medical information/ documentation are needed for transport.
 - Where can it be found?
 - What are the priorities and responsibilities of personnel related directly to data management?
- ❖ Network Malfunction: The computer network crashes during an audit.
 - How can the information be accessed or recovered?
 - What are the priorities and responsibilities of personnel related directly to data management?

Schedule Training and Subsequent Evaluations of the Plan

- Schedule specific table-top exercises and drills for data management personnel.
- After training exercises, or an actual incident, meet with personnel to evaluate the plan's effectiveness; modify the Data Management plan and training, as necessary.
- Schedule regular maintenance for all necessary data management equipment and technology.
- Verify cyber-safeguards.

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