Emergency Planning

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Every year a small percentage of museums and historical societies face a major disaster, most commonly a fire or flood. Although one often presumes a disaster results from an act of nature—a hurricane, volcanic activity, or a flash flood—a mechanical failure, such as an electrical fire in an elevator shaft or a break in a city water main, can cause just as much damage. Personnel must cope with these emergencies and assume responsibility for dealing with the problems that arise. Their success depends upon their ability to cope with such events.

Disaster Management
The knowledge of what is likely to go wrong, and where, can be the most important factor in managing a disaster. For this reason many experts recommend an assessment that includes the following elements:

A Hazards Survey of Both the Building and the Surrounding Environment. One must ask what sections of an institution are the most susceptible to damage? What back-up systems, such as electrical generators, are in place? Can different areas of an institution be shut down in sections? Are there fire doors, divisions within the HVAC system?

Installation of a Complete Fire and Floor Protection System. This would include smoke detectors, heat detectors, and a fire extinguishing system that is zone specific. Early warning water detectors should be installed in sensitive areas, on the top floor beneath a flat roof, or on floors below the level of the main water lines.

Implementation of a Maintenance and Monitoring Program. While a large flood seldom goes unnoticed, a damaged steam pipe in a storage area can go undetected for weeks. Mold and insect infestations are also another type of damage best found and controlled through a maintenance and monitoring program.

Assessment of Environmental Risk. The location of an institution can affect its vulnerability to a disaster. In a rural setting, large nearby trees with shallow roots may pose a risk; for urban museums, the municipal infrastructure of steam heat systems, gas mains, and sewage and water conduits can greatly increase the risk of damage to a building. If construction or subterranean transport is taking place nearby, vibrations can affect structural elements of a building as well as objects.

Assessment of Storage Within a Building. The location and placement of storage within a building should be chosen carefully and be made as safe as possible. Shelves and units should be raised several inches above the floor, extraneous storage materials and equipment
with unfavorable burning characteristics should be removed. Specific measures will depend on the type of collection and the type of institution; a glass museum will require precautions different from those of a textile museum because the hazards for these materials are not the same.

**Assessment of Collection Priority.**
The degree of vulnerability of objects and their importance to the collection must be considered. Some stored records may be vulnerable, but have low priority in the event of a flood. Other objects might have a high curatorial priority, but may not be easily damaged.

**Disaster Contingency Plans**
In preparing an emergency plan it is helpful to pose the following questions. Have collections been surveyed, inventoried, and reviewed recently by a registrar or curatorial staff, by conservation staff, a regional center, or an affiliated conservator and/or by local building inspection agencies? Does staff have adequate knowledge, equipment, and supplies to handle the materials and media of collections in an emergency? Have emergency measures and methods been discussed and have written instructions been provided by a conservator? Are duplicate copies of these instructions available to key staff?

Once an institution has established the goal of creating an emergency preparedness policy and has focused on specific problem areas, a coordinator or committee must take responsibility for implementing a contingency plan.

**Recommendations are to:**
- Choose one member of the staff to act as coordinator in an emergency situation. That person will be responsible for assessing damage, obtaining supplies, instructing volunteers, and contacting other staff and authorities. Some institutions permanently assign a staff member to this role. Others use a weekly rotation system in which a staff member is on call and must be available by telephone evenings and weekends.
- Provide local authorities who will respond to emergencies with the home telephone numbers for key staff members. Conversely, staff members should have the names and telephone numbers of liaisons to fire, police, and water authorities. Procedures must be developed in advance with these agencies, before an emergency arises.
- Instruct all staff members in procedures with turning off electricity, water, and gas lines, as well as in the use of hand-held fire extinguishers. One should make sure that staff know the location of all of these terminals and units.
- Create and maintain a list with the names and telephone numbers of important suppliers and experts: conservators, freezer facilities, truck rental agencies, paper suppliers, etc. This file will need to be updated and checked on a regular basis. An alternative storage site for the collection is a disaster may be included in this list.
- Keep a supply of emergency materials on hand: flashlights, plastic sheeting, blotters, and rolls of paper. Extra tools can be set aside on special carts so that designated staff need not waste time trying to locate emergency supplies nor be burdened with having to carry them to a site.
- Maintain duplicate sets of current records—catalogue cards, storage and exhibition lists; one set should be stored away from the institution's premises. This is very expensive; however, back-up systems are essential. If only one set of records exists, it must be a high priority item during salvage or evacuation.

**Disaster Recovery Plan**
The course of a disaster can be divided into three phases:
- Discovery and assessment.
- Assessment and rescue.
- Recovery and reconstruction.

**Phase I: Discovery and Assessment**
The first phase has the shortest duration, but it is crucial. Once disaster has affected an area has been discovered by two staff members or more. These persons should be able to articulate what constitutes invaluable art and artifacts. Their task is to make a conscientious assessment of the situation. The initial assessment must be as complete as possible. For example:
- Which objects are most threatened by further damage?
- Which objects are in exceptional condition if moving is necessary?
- If objects are in a category, what is a place to recover them?
- What special equipment will be needed to move the objects speedily?

Hasty action will do more harm than good. Objects must be protected from transportation, storage, and handling. Preliminary conservation measures are planned. Those objects that can be moved to a clean, secure environment—furniture, tables, paper, and artwork—fans for air circulation, storage racks—will accommodate them. A place will be needed to protect them.
Disaster Recovery Plan

The course of a disaster can be divided into three phases:

- Discovery and review of the damage.
- Assessment and recording of the destruction.
- Recovery and repair of the damages.

Phase I. The first phase, while of the shortest duration, is the most crucial. Once disaster has struck, and after an affected area has been declared safe, one or two staff members should begin surveying the site. These persons should have a clear idea of what constitutes imminent danger to a work of art. They handle nothing; their task is to make a quick but thorough survey of the situation. At this stage photographic documentation of the damage is essential, not only for future operations, but also for insurance purposes. This documentation is also helpful in damage assessment. In this preliminary survey, the following questions must be considered:
  - Which objects are in imminent danger of further damage?
  - Which objects are in danger of additional damage if moved?
  - If objects are in a condition to be moved, is there a place to move them to?
  - What special equipment or personnel is needed to move the objects safely and speedily?

Hasty action will do more harm than good. Objects must not be moved until transportation, storage at another site, and preliminary conservation have been planned. Those objects that will be subject to further damage if they remain in their present environment should be moved to a clean, secure area where flat tables, paper, and appropriate equipment—fans for air circulation, temporary storage racks—have been set up to accommodate them. At this stage, workers will be needed to prepare spaces to receive objects, to transport them, and to begin stabilization procedures. (It may be necessary to obtain advice from conservation specialists on how to perform these procedures.) Any action taken should involve a minimum of movement and treatment of a given object—just enough to insure its physical safety. During this phase of the operation, the staff members who first surveyed the damage should supervise any supplementary workers. When all objects have been reviewed, the first phase is completed.

Phase II. Upon completion of the initial, general review, objects are surveyed singly and/or in groups. Staff use standard procedures to deal with the collections. Every object must be documented, inventoried, and reviewed against existing accession cards and gallery or storage lists. Objects should be classified by media, category or technique, and degree of damage. Changes in dimension, appearance, and texture must be noted. Damage appraisal is laborious, tedious, and time-consuming; it is, however, crucial for determining the future treatment of the objects, for museum records, and for the proper disposition of insurance claims. During this inventory, patterns of damage or categories of conservation problems will show up. Specialists can now be called in to review the situation and propose treatments. Supplies and equipment can be ordered. The affected areas can be checked for structural damages. Objects previously left in situ can be removed for treatment. While the first phase may have lasted a day or a week, the second phase will last at least several months and perhaps even as long as several years.

Phase III. By the time the final phase is under way, the majority of an institution’s staff has returned to its normal duties. At this stage lawyers and insurance adjusters review claims based on the documentation; galleries and storage areas are reno-
vated, and major conservation or restoration treatments are begun. This phase may take several years to complete.

The toll that a disaster exacts from an institution can be very high. Disrupted services and programs, lost staff time, destroyed masterpieces, and ruined records can never be replaced. Although only a small percentage of institutions are affected each year, disaster strikes more often than one thinks. Emergency planning and disaster management will insure that losses are low, and that damage to cultural property is minimal.

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Conservation Concerns

A Guide for Collectors and Curators

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