



# Emergency Response Training

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**Speaking at this conference has given me the opportunity to draw together from many experiences over the years, participating in responses and recovery and training in emergency preparedness.**





# Response that minimizes loss

Communication

Training

Resource delivery

Teamwork

**For me, training fits into emergency preparedness planning, as a synergistic activity along with the communications and supply elements tied together tightly with teamwork. To achieve the objective of minimizing the loss, which is the most important objective, a number of elements must be in place at the same time. Lacking any one of these can undo all the**

**others.**

- If no one calls anyone to respond, there will be no response.**
- If the person who is called is not trained well, they won't know what to do.**
- If you don't have at least the minimal resources you need, or don't know where to get them quickly, you can't complete the response within the time necessary to minimize the loss.**
- And if there is no team, the person who responds will become exhausted quickly and the response will fail.**



## Thanks to:

All of the Library of Congress, Preservation Directorate, and Conservation Office staff, ICCROM and all the students in courses in Brazil, Chile, & Rome,  
National Task Force on Emergency Preparedness, Response & Recovery, Heritage Preservation & AIC,  
Regina Phelps, “Emergency Preparedness Exercises”, 2001 Disaster Resource Guide.

**I'd like to thank all the people that have participated in exercises over the last ten years. This includes all of the Library of Congress, Preservation Directorate, and Conservation Office staff.**

**The Conservation Office staff have participated in training as well as many real incidents annually. They are always**

**professional and we rarely lose collections.**

**ICCROM and all the students in courses in Brazil, Chile, & Rome have taught us a great deal about training and many have gone on to prepare emergency plans for their institutions or communities and have played important roles in natural disasters in their home countries.**

**The National Task Force on Emergency Preparedness, Response & Recovery, Heritage Preservation & AIC have all worked hard to make disaster training a solid curriculum which is now being used regionally to prepare teams of conservators and allied professionals to respond to emergencies in cultural institutions in the United States.**



# Emergency Response Training

The most important skills

Efficient

Effective

Creative

**A good response is defined as one that is efficient, effective and creative. No two incidents ever look alike. This means that the responder needs to be sufficiently calm to be able to assess the damage, decide on a course of action, carry out the action and evaluate the results. Emergency response training is not providing a recipe, but psychologically preparing the staff to**

**respond efficiently, effectively and creatively without undue stress.**





# Experience

**Experience is a wonderful teacher. Many people in the field have learned through experience at one time or another. What is often lacking in both the real and simulated experiences, like a “mock-drill” is sufficient focus on the de-briefing communication/s. Each person responding will individually have learned many things from their own perspective in the**

**response. What we need to do as a profession is what is being done in this conference; communicating our experiences with each other to learn from them for future events. It is extremely important that we use every opportunity we can to communicate what happened, how it happened and what the results were**



**In every event, there will be things that require improvement because no emergency recovery is done perfectly. This is the opportunity to make improvements to the emergency preparedness plans within an institution. The image of library materials damaged by both fire and water is horrific to the librarian/archivist and conservator. What we need to be able**

**to do is focus, not on the horror, but on how to recover the most we can.**



**The material that was flooded in the basement of the University of Colorado Library in the flash floods in Fort Collins, Colorado flood was severely damaged. It took eight days to get the water out of the basement and pack all the books for freezing. They were then stacked frozen in a local freezer while decisions were made for the recovery.**





**The books were distorted and filled with mud, sticks and ceiling tile material. The floodwaters elsewhere were gone quickly. But there was no source of water nearby to remove the debris and reshape the books. The result was that the books had to be thawed and washed before they could be freeze-dried, which entailed a large time and cost.**

**The University has published an account of all the recovery efforts that went into returning the University Library to its full functioning, including innovative gift and exchange programs.**





**Mold is our most significant enemy in the recovery of library and archival materials. It is mold that drives with speed and efficiency the response. Within a relatively short time one can have significant loss just from active mold. The informational content can be lost and the recovery become much more complex.**





**Once mold is present the responders have to wear full-face respirators with air supply to be perfectly safe and ensure that none of the responders becomes sensitized to mold. The responders have to wear gloves, full cover of clothing and ensure that the mold is not carried on clothing or in the air, elsewhere. All waste from the cleaning process has to be properly**

**disposed of. In order for this not to happen there has to be an effective, efficient and probably creative response to get everything dry quickly.**



**When the response is done properly, there will be an inspection of all areas that might have been affected. This inspection can take a great deal of time unless sufficient personnel are devoted to the task.**

**The assessment is one area where the larger number of trained personnel that an institution has at its disposal will make a big difference in the speed of an accurate assessment. Often there is just one person trying to make the entire assessment. This is extremely inefficient. Ideally one can work in a team, provide the information to a coordinator, and the coordinator will make the decisions as to the response required.**



**And the most important part of all is the de-briefing session after the incident. This is when everyone has a chance to exchange what did and did not work. One could have one to de-brief on the processes and if there was extensive damage, another debriefing later to go over the results of the recovery. Often one is surprised at how much was able to be**

**recovered with the right level of effort, efficiently carried out.**





# Today

Lectures

Mock drills

Experience

**Today in preparing for emergency response for cultural property, we are extensively using these methodologies to train conservators. Lectures can be exciting, but they don't provide the experience needed. Experience is a very stressful teacher. And mock drills are quite time-consuming to prepare. They also consume cultural objects – something of a**

**conflict when what we are trying to show is how to preserve them. These exercises generally work best with professionals who are already expert at handling objects that are dry.**



# Why exercise?

**What works for your body, works here too. Reading about and watching videos of exercise will do nothing to reduce the size of the “love handles.” You have to work it.**

**The most important part of being prepared for an emergency or disaster is the exercises. Experience will hopefully be**

**gained through practical and real-time exercises rather than waiting for the first time that one is faced with inevitable, but trying circumstances.**



# What is an exercise?

Actions to test or evaluate plans,  
procedures and resources (people,  
facilities and supplies)

Psychological preparation

**Exercise in emergency preparedness is action. Actions get at the essence of the response that is desired. Good exercises target the key areas of planning, of assessment of the damage, of handling both the simple and the homogenous collections, or how to use the supplies and resources effectively and most importantly in this field – how to**

**preserve the most material, with the least loss or damage with the most efficient use of resources.**

**And good exercises provide an inoculation against the psychological shock in an emergency. Psychological preparation is important because emergencies are inherently stressful. They require immediate team-building and quick and precise decision-making.**

**If one is frozen by shock or highly nervous, one cannot protect one's own and others physical safety, participate on a team or provide assistance with effective decision-making. This is why we exercise these skills.**



# Types of exercises

Orientation

Drill

Tabletop

Functional within Institution/Among  
Colleagues

Full-scale – Community

**The main types of exercises that have been developed in the field of emergency management are orientations, drills, tabletops, functional exercises and full-scale exercises. In the conservation community we have tended to focus on the functional – or “mock-drill” - and full-scale exercises. We need to use other training modes to build response capacity and**

**to engage other members of the institution and community. The team will include all of these in a real emergency.**





# Orientation exercise

Purpose – familiarization and motivation

When to use:

- No previous experience

- A new written plan – never tested

- New staff or management

Should be informal, no more than two hours and no more than a month to prepare

**An orientation exercise should be carried out when an institution wants to prepare or has prepared a plan, and wants to provide basic information to the staff. This session should include basic health and safety issues – at least call attention to the basic principle of life safety first, could include the communication system so everyone knows where the emergency**

**alert call should go, who will play what role in the emergency response, and where the basic supplies are kept or where to get the basic supply needs.**

**The orientation can be used to motivate management support or to begin to build a sense of a team within an institution or region.**



# Drill

Purpose - tests, develops or maintains a specific skill

When to use:

- Train new staff in a specific area

- Safety Issues - Evacuation in a fire or earthquake drill

- Handling wet materials

**Drills provide special skills or can be used to test specific components of the emergency plan. The classic drill in an institution should be evacuation for a fire. This is a legal requirement.**

**Other drills could include how to handle un-bound or over-sized wet paper materials, how to handle photographic**

**materials, how to use a fire-extinguisher, basic first aid.**

**The list is long of specific skills that may be needed in an emergency.**

**Confidence in the use of any of these skills will make the actual incident less stressful. The more one practices these skills the more automatic they become. The less one has to refer to a guide - or spends time looking for the guide – the more efficient the response will be.**



**A first-aid orientation exercise could save lives particularly in areas where local services are not quickly available. These are skills everyone should practice and continue practicing annually.**



**In a region where the local fire department is far away and where there are no legal obstructions to their use, an orientation and drill in the use of fire extinguishers is important.**





**Demonstrations and drills that include the handling of wet and damaged materials are critical for learning skills in handling fragile materials. Instructive in this exercise is the amount of space and labor required.**





## INSTRUCTIONS

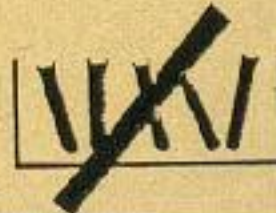
1. Pack all books spine down.



2. Pack books in single row.



3. Pack books snugly.



4. Pack oversize books flat with largest on the bottom.



**This is another form of providing information useful in a drill, and handy for future reference. Each component is a separate skill. It is best not to overwhelm people with all of them at once, but to select important components that require training and provide the appropriate skill.**





# Tabletop Exercise

## Purpose:

familiarizes departments with  
specific roles

practice in problem-solving in a  
group

builds the team

refining plans

**Tabletop exercises are beginning to be more widely used and in my experience they are a very important component of the training. Once one has the orientation and some of the practical skills, this is an important way of developing the interdepartmental or regional roles of the various actors without taking up too much of decision-makers time.**





# Tabletop Exercise - Described

Simulated event with narrative

May introduce additional “messages”  
during exercise and use assistants

Group brainstorms to solve problems  
described in event

Usually 2-4 hours with a half-hour to hour  
“de-briefing”

**A tabletop exercise can start with planned events, for example at a regular monthly meeting. Once experienced, it is good to introduce an element of surprise.**

**It is only with the surprise exercise that the institutions can learn how long it will take to pull together a team and what**

**happens when a regular member of the team is missing.**

**This is fundamental to the exercise. These things happen all the time in real life. Normally, the surprise event will lead to more cross-training and the importance of inter-disciplinary knowledge.**



# When to Use Tabletop Exercises

Need to engage all affected groups  
in emergency response

Need to test problem-solving

Regular up-dating of training

**One important element of the tabletop is to add “messages” that are brought to the situation by the planners. Typical messages might be that one of the team members has suddenly become ill from heat exhaustion – what happens next? One thing to be wary of, as a planner, is not to create a “mega-constant-disaster” where the messages keep coming and**

**become more and more intense – an earthquake, followed by a gas line explosion, followed by a storm and a mudslide. This can lead to the team being overwhelmed and demoralized. Many events have a simultaneous occurrence and naturally come together – such as fire and water damage. Early in training exercises, this is sufficient tension.**





# Functional Exercise/"Mock Drill"

Fully simulated with objects,  
simulated safety hazards

More complex or escalating  
"messages"

Engages both decision-makers and  
teamwork

**A functional exercise is what we call a "mock drill" in the conservation field.**

**It is your test of all your previous training. A recovery plan that is not tested is of little or no use. So if there is a plan and it hasn't been tested, it should be tested soon by one of these forms of exercises.**





# Uses of Functional Exercises

Evaluate communication between different groups

Assess effectiveness of previous exercises

Assess manpower and resource needs

Assess adequacy of current procedures and policies

**The de-briefing from a functional exercise will include evaluating the communication between different groups, assessment of the effectiveness of the drills, assessment of the manpower and resource needs and assessment of the adequacy of the current procedures and policies.**

**This is where a plan becomes individualized to the institution – to the level of manpower available, to the decision-makers, to the kinds of resources on hand, and perhaps regional resources.**

**Some of the issues will emerge in a table-top, but the psychological toughening of the team occurs in a more real situation where everyone can practice their role.**



**Functional exercises that ICCROM teaches in Brazil, Chile and Rome bring together participants from many regions of the world, but include an element of experiencing training others in the exercises so that the participants can use the training skills in their own institutions and countries.**





**The functional exercises in emergency preparedness, response and recovery can be used to initiate team-building for other purposes within an institution, can be used to familiarize staff to the content and vulnerabilities of the collections and can be practical if an emergency occurs before the emergency planning is completed.**







**One outcome of the exercise is that non-conservator personnel can experience the fact that paper-based and book materials can actually be rescued well if the skills are known. When the skills are not known there is a tendency to believe that material will not respond to recovery and to claim a complete loss before that step is necessary.**





**It is also necessary to note here that a full-scale exercise that uses expendable materials must be conscious of the use of these materials. In some countries large quantities of appropriate expendable material are extremely difficult to find. In some cases carrying out a functional exercise, but demonstrating techniques of handling the actual materials in a drill**

**allows for re-using a smaller number of objects by allowing everyone to handle one smaller group of objects.**



**One useful mechanism for initiating such training is to invite another institution that is already carrying out such exercises and training to demonstrate their techniques. This borrows a page from the well-known book that an outsider is listened to more closely than a person from within.**





# Full-Scale Exercise

Evaluates the operational capabilities interdepartmentally both within and in the local or regional community

Involves extensive coordination of information and testing of communication channels

Tests negotiation skills and interdepartmental cooperation

**The separation of the full-scale exercise from the functional exercise is that the regional resources become involved. Some regions of the country and some countries in the world practice such drills regularly. Japan conducts full-scale exercises within communities for earthquakes. Some regions of the United States that are regularly hit by serious natural disasters**

**– such as earthquakes, hurricanes and floods also conduct full-scale exercises, however these exercises rarely include the cultural institutions within their domains. During these exercises, cultural institutions need to make themselves known to the disaster planners before an incident and request participation in any exercises held. These exercises require long-term planning because they involve metropolitan police, fire departments and health services which must be prepared to continue carrying out daily operations during the full-scale exercises.**





**A fire department often has personnel well-trained and equipped for emergency response, particularly in the area of life safety. Many fire departments also take seriously the role of training in the community. We should not imagine - unless we change professions - that we could or should attempt to replace the role of the well-**

**trained professional where life safety is involved. We need to make sure that we not doing anything to impede this function.**

**Preparations for security and restrictions of access must always take into account the protection of life. Emergencies inherently are high-risk. However risks must be minimized during an exercise.**



# Who Should Participate?

Depending on exercise, invite appropriate groups

**The question of who should participate in each type of exercise is key to the success of the training effort. One wants the correct training without waste of time for each member of the team. Remember that the ultimate goal should be to minimize loss.**

**For example, all staff should know about the basics of emergency preparedness and response. Orientation is the key for them. Many institutions place key elements of the plan into the telephone directory so that all staff receive a copy of the basics as soon as they come to work at the institution. This provides them with necessary information immediately.**



**Drills should target the individuals who will use the skills. However in a real emergency one will need a lot of trained people.**

**More is better for the drills as well as the orientation.**

**Tabletop exercises need to have all the key areas of actions represented and should include all the necessary decision-makers.**

**Functional exercises should engage the decision-makers and the action teams.**

**Be sure to have the key players in each and repeat the exercise often enough to train newcomers.**



# Where to Begin?

“Just do it”

**It is important in contemplating an emergency preparedness training program to start immediately and from the current situation in the institution.**

**One never knows when an emergency will occur. Often the impetus comes from a recent event. The energy that comes out**

**of a recent incident can be useful to harness in training for future events.**





# What you will need to do

Obtain Commitment

Define the Purpose

Define Objectives

**It is important in each stage of planning your emergency response training to think clearly about the purpose and objectives and obtain the commitment of others so that there is no wasted effort. Training for emergencies is hard to fit onto busy schedules.**

**Make sure that no one is wasting their time.**



# What about failures?

Just as important as successes

Important to discuss in de-briefing

No blame allowed in discussion

**Failures during an exercise are just as important as successes. Discovering weaknesses is just as important as success. This is how one discovers what areas need more work.**

**The failures during exercises are critical to the development of the plan.**

**It is important however in discussing failures to do so without assigning blame. The debriefing is critical but should never be about who is responsible for a failure.**

**It is up to the organizer of the debriefing to make sure that the responsibility is generalized and does not create a defensive atmosphere.**

**This should be stated at the beginning of the debriefing and the meeting should be monitored closely to make sure that fault-finding and blame do not evolve out of the discussions.**