UNIVERSITY OF TENNESSEE HEALTH SCIENCE CENTER

HEALTH SCIENCES LIBRARY AND BIOCOMMUNICATIONS CENTER

EMERGENCY AND DISASTER RECOVERY PLAN

Committee Members

David Armbruster
Steve Golanka
Matt Grayson
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Richard Nollan, Chair

2007

EMERGENCY AND DISASTER RECOVERY CALL LIST

CAMPUS EMERGENCY REPORTING PROCEDURES

For all emergencies involving harm (or possible harm) to people call the Campus Police at 448-4444. Do not call 911. If needed 911 will be called by the Campus Police.

For leaking pipes and other minor problems, call the Library Director's office at 448-5694 and/or Facilities at 448-5507.

When reporting any incident be prepared to state the nature of the incident, it's location, and your name.

LIBRARY ADMINISTRATION

	Name Phone	Home Phone	Work
Director	**Tom Singarella**	**372-4895**	**448-5694**
Administrative Assistant	**Brenda Clark**	**542-3495**	**448-5638**
Business Manager	**Maggie White**	**413-0476**	**448-6312**
Business Assistant	**Patsy Whitten**	**323-6311**	**448-6390**

DISASTER RECOVERY TEAM

Richard Nollan	**372-8905**	**448-6053**
Steve Golanka	**274-3306**	**448-5164**
Matt Grayson	**386-2771**	**448-7351**
Brenda Green	**276-7362**	**448-4759**
David Armbruster	**327-2271**	**448-5051**

All phone numbers are 901 unless otherwise noted.

In case of a serious situation that affects collections, call the first person on each list. If they are unavailable, leave a message and call the next person on each list until someone is contacted. Each Person contacted calls the person whose name is below them on the list.

INTRODUCTION

What happens if there is an emergency or disaster in the Health Sciences Library? What should people do? How can we protect life? How can we protect the library and the collection, and how can we provide access to resources and services in the event of a widespread disaster? These are the questions that provided the impetus for the development of this plan: *Emergency and Disaster Recover Plan*.

This document presents a plan of how to react in the case of an emergency (e.g., crime, water leak, fire), or widespread disaster (e.g., earthquake, tornado) that befalls our facility; and as such, it outlines a course or principle of action that we have adopted to protect life, the facility, collections, service provision, and access to library services and materials in time of need to our library patron primary group: UTHSC students, faculty, and staff.

Natural disasters cannot be prevented and can happen to any library. But we hope that the severity of a disaster or emergency situation in our library can be minimized using this recovery plan. Knowing what to do and what not to do before, during and after a disaster can help to prevent panic, lessen the severity of damage, and enable the library to implement an organized recovery operation after the dust settles, the smoke dissipates, or water subsides. We define a disaster as an emergency that has gotten out-of-control, so we prepare for emergencies, and if our planning is successful we will minimize the disaster effect. The plan aims to minimize the damage incurred during an emergency, by providing guidelines for a rapid and effective response to an emergency situation.

The disaster plan consists of two sections: Emergency Procedures and Disaster Response and Recovery Procedures.

Many people had input into the disaster plan. We examined other plans throughout the medical library field in order to determine best practices. Our disaster plan was developed by a library committee, chaired by Richard Nollan, and charged with developing a document and process that would guide library staff in the event of a disaster.

All library staff members should read and have access to this disaster plan.

Thomas Singarella, Ph.D.
Professor and Director
Health Sciences Library and Biocommunications Center
The University of Tennessee Health Science Center

PURPOSE OF THE EMERGENCY AND DISASTER RECOVERY PLAN

Unforeseen crisis situations such as water, smoke, fire, natural disasters and even the possibility of terrorism require emergency preparedness planning. Organized and proactive responses to emergency situations are necessary for the protection of employees and clients, and to prevent total destruction and/or loss.

This Emergency and Disaster Recovery Plan outlines the key components in disaster preparedness, dealing with disaster prevention, immediate response activities, recovery or salvage procedures and rehabilitation of damaged materials. It also contains actions to assist in the management of the Library's collection, disaster preparedness strategies and the roles and functions of response personnel.

Copies of this Disaster Plan should be kept both on-site and off-site. Each member of the disaster team, as well as the library director and special collections librarian will have a personal copy of the full plan to be kept at home. Department heads will have copies of the plan, and will make staff members aware of the plan, train them in its use and discuss with them any revisions to it. A current, electronic copy will be on the library's intranet (library.utmem.edu/staff).

LIBRARY MISSION STATEMENT

The mission of the Health Sciences Library and Biocommunications Center is to provide in environment conducive to student learning and the biomedical information resources necessary for teaching, research, service, and patient care, and to support efforts to improve the health of Tennesseans.

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EMERGENCY PROCEDURES

ELEVATOR EMERGENCY PROCEDURE

In the event someone is trapped in the elevator, talk to the person(s) and tell them that help is forthcoming. Advise them to use the phone if they find that reassuring. The phones are connected to Campus Police. Then observe the following procedures:

During regular working hours:

Call the campus police (**448-4444**) and inform the library director's office (448-5694). They will contact Facilities Operations or call **448-5507** for assistance.

Tell them someone is trapped in an elevator and that help is needed immediately.

Give them the number and the location of the elevator that is not working: No. 57 (public elevator right), No. 58 (public elevator left), No. 59 (library elevator), and No. 60 (library service elevator).

Evenings and weekends:

Call the campus police at **448-4444** or Facilities Operations **448-5507.** Notify either Steve Golanka or Gwen Jackson.

VIOLENCE

If suspicious or offensive behavior is observed, ask a supervisor or another staff member to help you evaluate the situation.

If emergency intervention is required, report the incident to campus police at **448-4444**. Give your name. State if it is an emergency. Explain the nature of the problem and your exact location. Answer all questions before hanging up, unless you must move to protect your life.

Do not attempt to detain the person yourself.

Note: You should report ALL incidents or threats. In each event, complete and turn in a library incident report to the director's office.

ACCIDENTS/MEDICAL EMERGENCIES

Medical emergencies involve illness or injury to library patrons or library staff.

General Procedures:

Dial Campus Police at **448-4444.** Do not call 911.

Report location of the person needing assistance.

State that you have a medical emergency and that an ambulance is needed. The call will be transferred to the responding agency. Be prepared to give a basic description of the nature of the injury or illness.

If no ambulance is needed, state injury or medical condition.

If trained, begin first aid.

Do not move the ill/injured person unless failure to do so would cause further injury AND it is safe to do so.

If campus police are not on the scene, send someone outside to direct the emergency responders to the location of the medical emergency.

Note: Campus Police should be notified of all cases of mental health crises (suicide attempts, disorientation, etc.).

Injured library staff members who are ambulatory can obtain medical assistance at the University Health Services (910 Madison, Suite 922) or by calling 448-5630.

In each case, a library incident report should be completed and turned in to the director's office.

FIRE EMERGENCY PROCEDURES

IF YOU DISCOVER FIRE:

Report all fires:

Activate the fire alarm pull station nearest the fire by pulling the lever all the way down.

Call UTHSC police at **448-4444** and give the exact location of the fire (building, floor, room number), what is burning, and any injuries. Give your name.

REMEMBER you must report all fires to the Campus Police in addition to pulling the fire alarm box.

Assist in the evacuation of personnel, if necessary, from the area to a "muster area" (predetermined safe location). It is the responsibility of individual departments to inform staff as to locations designated as "muster areas"). Attempt to provide an accounting of all personnel working in the affected area.

Close the doors as you exit the fire area.

Fight small fires with the proper extinguisher only if you are trained to do so. KNOW and understand the limitations of the equipment. **DON'T TRY TO BE A HERO!**

Remain with the Campus Police until an emergency coordinator has received all pertinent information as to the nature of the problem.

In each case, complete and turn in a library incident report to the director's office.

FIRE EXTINGUISHER AND FIRE ALARM LOCATIONS

Fire Extinguishers

There are sixteen fire extinguishers in the library at the following locations.

Second Floor:
East wall near the circulation desk
South wall in the foyer near the public elevators
West wall between the Multimedia Lab and the Reference office hallway

Third Floor:
East hallway near the mail room
South wall near the emergency stairwell exit
West wall near the Madison Avenue windows

Fourth Floor:
East wall near the south corner
East wall near the Madison Avenue windows
South wall near copy room 407
South wall near room 410
West wall near the Madison Avenue windows

Fifth Floor:
East wall near the Madison Avenue windows
East wall near the south corner
South wall near the west wall
West wall near the south corner
West wall near the Madison Avenue Windows

Fire Alarm Pull Stations

On floors two to five:
By door to west stairs
By Door to the east stairs

IN THE EVENT THAT AN EMERGENCY DOOR IS OPENED AND AN ALARM SOUNDS, SLAM THE DOOR SHUT TO DISCONTINUE THE ALARM.

WATER LEAKS /INTERNAL FLOODS

Non-emergency Situation:

Call the library director's office at **448-5694** and/or Facilities at **448-5507**. Report the problem and the exact location (building, floor, room).

Take any necessary steps to minimize damage using emergency supplies that are located in the library's supply closet.

Emergency Situation:

Call campus police at **448-4444**. Report the nature and severity of the problem and the exact location (building, floor, room). Give your name and a callback number.

Turn off and unplug all electrical equipment in the affected area.

DO NOT STAND IN OR WALK THROUGH WATER THAT MAY BE IN CONTACT WITH LIVE WIRES!

Do not remove affected books from the shelves. Emergency supplies (plastic sheeting, mops, buckets, etc.) are in the library's supply closet (second floor next to the student break room) or in the maintenance closets located on the south end of each floor. See the EMERGENCY SUPPLIES list. For treatment of wet books, please refer to the DISASTER RECOVERY RESPONSE section.

If evacuation is necessary, see LIBRARY EVACUATION PROCEDURES.

Evenings and weekends: After calling **448-4444**, notify the circulation supervisor who will contact the Disaster Recovery Team, if necessary, and other appropriate personnel. If the circulation supervisor is unavailable, notify the director. Home phone numbers are listed on page 18.

LIBRARY-SPECIFIC EVACUATION PROCEDURES

When the library alarm system is activated, several loud beeps will sound.

If the library is to be evacuated, suggested wording for the public announcement is:

It is necessary to evacuate the building at this time. Please take your belongings with you and leave immediately, using the nearest exit. [If there is a fire, add: "Do not use the elevators."] You will be advised when it is safe to re-enter the building.

REPEAT

Circulation Staff Procedures:

The Circulation Supervisor will check to see if the building is clear, assisted by designated floor monitors (weekdays).

Floor Monitors

5th Floor: Matt Grayson, Rod Brown
4th Floor: Jennifer Watson, Collections Development Librarian
3rd Floor: Tom Singarella, David Armbruster, Brenda Clark, Brenda Green
2nd Floor: Steve Golanka, Richard Nollan

Evacuation of Persons with Disabilities:

Week Day Staff

Floor monitors will also be responsible for assisting evacuation of persons with disabilities. In case of fire or power failure, take people in wheelchairs and with other mobility impairments to the south emergency stairwell exits. You are not required to stay with them. Tell them you will report their location and situation to the nearest emergency personnel (fireman, police, EMTs) who will return to evacuate them. Direct emergency personnel as they arrive to the location of people who need assistance in leaving the building.

Once everyone is alerted, leave the building. Don't take unnecessary risks. People who refuse to leave must take responsibility for their actions.

Supervisors are responsible for making sure all of their staff members are accounted for at a pre-designated location outside the building.

Do not re-enter the building until the campus police, health and safety officer, or the fire marshal gives approval.

Evening and Weekend Staff

Follow the procedure above. Notify the Circulation Supervisor who will call other appropriate personnel. If the Circulation Supervisor is unavailable, notify the Director or the next person on the Disaster Recovery Call List.

People on duty should follow the Evacuation of Persons with Disabilities instructions on the previous page.

Supervisors will account for all personnel in their departments.

TORNADO

When a tornado warning has been announced, all staff and patrons should move to the basement of the Alexander Building and proceed to the tunnel system underneath the General Education Building. As soon as the warning announcement has been made, the Circulation staff member scheduled at the Circulation Desk should repeat the announcement over the public address system in case the campus alert was not heard in all parts of the building. **Suggested announcement**:

The University has just issued a campus-wide tornado warning, which applies to all library patrons and staff. Please take your belongings with you and go to the basement of the Alexander Building until we are advised that the warning has been cancelled.

Once the public address announcement has been made, most staff should immediately proceed to the basement. Office doors should be closed but not locked. Individuals are designated to check each floor of the building to remind patrons to leave or go to the basement. It is not necessary to insist that patrons depart: once alerted, their safety is their own concern.

Designated floor monitors:

5th Floor: Matt Grayson, Rod Brown
4th Floor: Jennifer Watson,
3rd Floor: Tom Singarella, David Armbruster, Brenda Clark, Brenda Green
2nd Floor: Steve Golanka, Richard Nollan

People on duty at the Circulation Desk should go to the basement and not worry about unauthorized exit and entry.

Supervisors will account for all personnel in their departments.

TERRORISM

Bomb Threats

Telephone Threats
Most bomb threats are made by telephone and are directed to a specific building or department. The employee who receives such a call should:

a. Keep the caller on the phone as long as possible. Have someone else immediately notify Campus Police. Ask the caller to repeat the message. If possible, write down every word spoken by the caller.
b. Note the date and time of the call and the telephone number that was called.
c. Ask the following questions:
    1. When is the bomb going to explode?
    2. Where is the bomb right now?
    3. What kind of bomb is it? Dynamite? Black Powder? TNT? Plastic?
    4. What does it look like?
    5. How will the device be set off? Timing device? Heat? Chemical?
    6. Why did you place the bomb?
    7. Where are you calling from?
    8. What is your name and telephone number?
d. Get a description of the caller's voice. If possible, include approximate age (old or young), sex, accent, and tone of voice.
e. Pay attention to and record any background noises such as motors running, music playing, or any other noise, which may give a clue as to caller's location.
f. Was the voice familiar? If so, who did it sound like?
g. Record the time that the caller hung up, and anything else that appears pertinent.

Written Threats
When a threat is written, it is important to save all materials, including the envelope. Notify Campus Police immediately and try to avoid any unnecessary handling. Every effort should be made to retain evidence such as fingerprints, writing or typewriting paper, or postal marks.

Bomb Explosion

In a building explosion, clear the Library using the evacuation plan. Get out of the building as quickly and calmly as possible. If items are falling off of bookshelves or from the ceiling, get under a sturdy table or desk. If there is a fire:

- Stay low to the floor and exit the building as quickly as possible.
- Cover nose and mouth with a wet cloth.
- When approaching a closed door, use the palm of your hand and forearm to feel the lower, middle and upper parts of the door. If it is not hot, brace yourself against the door and open it slowly. If it is hot to the touch, do not open the door--seek an alternate escape route.
- Heavy smoke and poisonous gases collect first along the ceiling. Stay below the smoke at all times.

If you are trapped in debris:

- Use a flashlight.
- Stay in your area so that you don't kick up dust. Cover your mouth with a handkerchief or clothing.
- Tap on a pipe or wall so that rescuers can hear where you are. Use a whistle if one is available. Shout only as a last resort--shouting can cause a person to inhale dangerous amounts of dust.
- Untrained persons should not attempt to rescue people who are inside a collapsed building. Wait for emergency personnel to arrive.

Chemical Agents

Chemical agents are poisonous gases, liquids or solids that have toxic effects on people, animals or plants. Most chemical agents cause serious injuries or death. Severity of injuries depends on the type and amount of the chemical agent used, and the duration of exposure. Were a chemical agent attack to occur, authorities would instruct citizens to either seek shelter where they are and seal the premises or evacuate immediately. Exposure to chemical agents can be fatal. Leaving the shelter to rescue or assist victims can be a deadly decision. There is no assistance that the untrained can offer that would likely be of any value to the victims of chemical agents.

Biological Agents

Biological agents are organisms or toxins that have illness-producing effects on people, livestock and crops. Because biological agents cannot necessarily be detected and may take time to grow and cause a disease, it is almost impossible to know that a biological attack has occurred. If government officials become aware of a biological attack through an informant or warning by terrorists, they would most likely instruct citizens to either seek shelter where they are and seal the premises or evacuate immediately. A person affected by a biological agent requires the immediate attention of professional medical personnel. Some agents are contagious, and victims may need to be quarantined. Also, some medical facilities may not receive victims for fear of contaminating the hospital population.

Note: You should report ALL incidents or threats. In each event, complete and turn in a library incident report to the director's office.

Safe Mail Handling

Identifying Suspicious Packages and Envelopes

Some characteristics of suspicious packages and envelopes include the following:

- Inappropriate or unusual labeling
- Excessive postage
- Handwritten or poorly typed addresses
- Misspellings of common words
- Strange return address or no return address
- Incorrect titles or title without a name
- Not addressed to a specific person
- Marked with restrictions, such as "Personal," "Confidential," or "Do not x-ray"
- Marked with any threatening language
- Postmarked from a city or state that does not match the return address

Appearance

- Powdery substance felt through or appearing on the package or envelope
- Oily stains, discolorations, or odor
- Lopsided or uneven envelope
- Excessive packaging material such as masking tape, string, etc.

Other suspicious signs

- Excessive weight
- Ticking sound
- Protruding wires or aluminum foil

If a package or envelope appears suspicious, **DO NOT OPEN**

Handling of Suspicious Packages or Envelopes

- Do not shake or empty the contents of any suspicious package or envelope
- Do not carry the package or envelope, show it to others or allow others to examine it
- Put the package or envelope down on a stable surface; do not sniff, touch, taste, or look closely at it or at any contents which may have spilled
- Alert others in the area about the suspicious package or envelope
- Leave the area, close any doors, and take actions to prevent others from entering the area
- If possible, shut off the ventilation system
- WASH hands with soap and water to prevent spreading potentially infectious material to face or skin

- Call campus police at 448-4444 and the library director's office
- Create a list of people who were in the room or area when this suspicious letter or package was recognized and a list of persons who also may have handled this package or letter
- Give this list to both the local public health authorities, law enforcement officials, and the library director's office

Note: You should report ALL incidents or threats. In each event, complete and turn in a library incident report to the director's office.

DISASTER RESPONSE AND RECOVERY PROCEDURES

DISASTER RECOVERY ASSIGNMENTS

- **WHO IS IN CHARGE**
  Richard Nollan, or first available Disaster Recovery Team member

- **ARRANGEMENTS FOR EQUIPMENT, SUPPLIES, CONSULTANTS**
  Brenda Clark, Maggie White

- **LIAISON WITH POLICE, FIRE, SECURITY, FACILITIES OPERATIONS**
  Normal work hours: Tom Singarella, Brenda Clark.
  Nights and Weekends: Steve Golanka, Gwen Jackson

- **BIBLIOGRAPHIC CONTROL**
  Jennifer Watson, Wanda Wade Booker

- **MEDIA/PUBLIC RELATIONS**
  David Armbruster

- **WHO CAN SIGN IF AUTHORIZATION NEEDED FOR EXPENDITURES**
  Tom Singarella, Maggie White

- **VOLUNTEER RECRUITMENT AND TRAINING**
  Matt Grayson, Brenda Green

- **TELEPHONE COMMAND POST**
  Brenda Clark, Maggie White, Patsy Whitten

- **NON-PRINT MEDIA SALVAGE**
  Jennifer Watson, Matt Grayson

- **RECORDER/DAMAGE PHOTOGRAPHER**
  Rod Brown or Multimedia Lab Coordinator

DISASTER RECOVERY RESPONSE

The disaster plan focuses on what happens when there is extensive water damage. Ninety-five percent of all disasters will result in water-damaged materials.

Notify

Library Administration
Tom Singarella (448-5694)

Disaster Recovery Team
Richard Nollan (448-6053), Steve Golanka448-5164), Matt Grayson (448-7351), Brenda Green (448-4759), David Armbruster (448-5051)

Stabilize the environment

Enter the building as soon as dearance is received from the Fire Marshall or Health and Safety Officer. If extensive water damage has occurred, it is important to act quickly. **The environment must be stabilized to prevent the growth of mold**. **Ideal conditions for a recovery operation are 65 degrees F and 50% relative humidity**. Get help from the campus facilities office (448-5507) to turn off water and heat, turn on the air conditioning, mop or pump out any standing water, set up portable fans to circulate air and if possible, vent air from the area. A portable generator may be necessary if electric power is unreliable. Pumps and/or wet/dry vacuums may be needed to remove standing water. It may be necessary to remove soaked carpeting. A portable dehumidifier can be used if the area is small and enclosed and its operation doesn't increase room temperature. Monitor temperature and humidity with thermometers, hygrometers.

Assess the situation

When the Disaster Recovery Team arrives, the damage must be assessed. Wear protective clothing if necessary. Walk through the entire area and take extensive notes **in pencil** asking the following questions:

How much damage has occurred?

What kind of damage (water, fire, smoke, soot, sewage)?

Is damage confined to one area or is the entire library affected?

How much of the collection is affected?

What kinds of materials are damaged (books, journals, documents, photos, equipment)?

What salvage priorities have been placed on the damaged items?

Can damaged materials be salvaged by the Disaster Recovery Team or will outside help be needed?

What hazards need to be eliminated before the Recovery Team can begin salvage (fallen debris, gas, live wires)?

REMEMBER: WET BOOKS, PAPER FILES, AUDIO AND VIDEO TAPES MUST BE SALVAGED WITHIN 48 HOURS TO PREVENT MOLD GROWTH.

Throughout the initial period of damage assessment and stabilization, it is essential to restrict access to the affected area(s). Security is necessary to prevent theft and additional damage to collections and to keep unauthorized personnel from interfering with disaster recovery operations.

Call in the entire Disaster Recovery Team and **review assignments**.

Establish a command post to direct recovery operations.

Arrange for workspace, services, and equipment.

Arrange for an area large enough to handle salvage operations. Get supplies from the supply closet (Room OD10A). If working space is not available on campus, it may be necessary to locate space offsite. Arrange for freezer space, trucks, or vacuum freeze-drying as necessary.

Consult the Manual for the Directory of Consultants, Services and Supplies for sources of assistance.

If necessary, activate the plan for **salvage of water-damaged materials.**

Recruit volunteers and organize their efforts. Keep spirits up by frequent breaks, food, and encouragement.

Document activity by photos and a chronological log.

Restore the area.

Arrange for cleaning with campus Environmental Services Dept. or a professional cleaner. Walls, floors, œilings, and all furniture and equipment must be scrubbed with soap, water, and fungicide. Get professional help if area must be fumigated. Continue to ensure good air circulation.

Follow-up assessment

A written report, including photographs, should be prepared as soon as possible after the recovery operation is concluded. A critical assessment should be made of the effectiveness of the plan and an evaluation given of all sources of supply, advice, and support, both on and off campus. Append a copy of the report to all copies of the disaster plan. Revise the plan as needed in light of the lessons learned.

IN-HOUSE EMERGENCY SUPPLIES

A basic emergency recovery kit is located in the library supply closet. The room can be unlocked with a library master key that is available in library administration.

Photocopy of: Peter Waters, *Procedures for Salvage of water-damaged library materials,* 2nd rev. ed., 1979. (Z 701 W37 1979)

SALVAGE PRIORITIES

FIRST PRIORITY

Rare books, Manuscripts	Room 508
Archives	Room 508 and 407a
Pre-1900 journals	Fifth Floor Stacks
Administrative Records	Room 331 – 2 four-drawer file cabinets Room 333 – 1 four-drawer file cabinet Room 338 – 1 two-drawer lateral file cabinet 1 four-drawer lateral file cabinet 1 five-drawer file cabinet Room 340 – 2 two-drawer lateral file cabinet
Server Backup Data Cartridges	Room 234B

SECOND PRIORITY

Current Journals	Second Floor and Fourth Floor
Audiovisual Collection	Multimedia Lab
Older Journals	Fifth Floor

THIRD PRIORITY

Circulating Monographs	Second Floor and Fifth Floor
Reference Books	Second Floor
Reserve Books	Second Floor

NO SALVAGE

Indexes & abstracts	Second and Fifth Floor
Leisure reading	Second Floor
Computers, other equipment	Throughout Library

SALVAGE PROCEDURES FOR WATER-DAMAGED MATERIALS

DO NOT, UNDER ANY CIRCUMSTANCES,

- **ENTER AN AREA UNTIL IT HAS BEEN DECLARED SAFE**
- **ATTEMPT TO OPEN A WET BOOK**
- **ATTEMPT TO CLOSE AN OPEN BOOK THAT IS SWOLLEN**
- **USE MECHANICAL PRESSES TO SQUEEZE WATER FROM WET MATERIALS**
- **ATTEMPT TO SEPARATE BOOKS THAT ARE STUCK TOGETHER**
- **WRITE ON WET PAPER**
- **USE BLEACHES, DETERGENTS, WATER-SOLUBLE FUNGICIDES, ADHESIVE TAPES (OR ADHESIVES OF ANY KIND), PAPER CLIPS, OR STAPLES ON WET MATERIALS**
- **USE COLORED OR PRINTED PAPER OF ANY KIND DURING SALVAGE AND RECOVERY OPERATIONS**
- **PACK NEWLY DRIED MATERIALS IN BOXES OR LEAVE THEM UNATTENDED FOR MORE THAN TWO DAYS UNLESS YOU ARE CERTAIN THERE IS NO DANGER FROM MOLDSALVAGE PROCEDURES FOR WATER-DAMAGED MATERIALS**

Slightly wet

Air-drying may be attempted if volumes are just damp or only the edges are wet. **DO NOT ATTEMPT TO AIR-DRY VOLUMES WITH COATED PAPER**. The pages will stick together and become inseparable. Place white blotting paper on the table. Stand the book on edge, lightly fanned, and in a current of moving air. If the binding is damper than the text block, place paper towels or Reemay between the boards and the text. Change the paper every two or three hours from between pages and underneath the book. Do not reuse the paper. Turn the book over, alternating on its head and bottom edge. When almost dry, lay the book flat, push the back and boards gently into position, and place a lightweight on top. Lightweight volumes (loose issues of journals or very thin paperbacks) may be hung on thin monofilament line (not more than 1/32") or placed flat on white paper towels, interleaving every 20 pages. Turn pages to give the most exposure to air. **Do not** return books to the stacks until they are completely dry and there is no danger of mold spreading to other books. An Aqua-Boy or other moisture meter can be used to determine the moisture content left in the books.

Very wet, on coated paper, evidence of mold, color or ink running

If more than 100 volumes have been damaged, books are very wet, paper is coated, color or ink is running, or books are very dirty, they should be prepared for freezing. This will prevent mold growth while decisions are made on what rehabilitation measures to take. **MOLD WILL BEGIN TO GROW WITHIN 48 HOURS. FREEZING AS QUICKLY AS POSSIBLE IS THE BEST HOPE FOR SALVAGING THESE MATERIALS.**

Pack materials as quickly as possible. It is easier to inventory if they can be removed from the shelves in order. Wrap wet books in freezer paper (waxed side next to the book) to keep binding color from staining. Pack **spine down** in plastic milk crates or Rescubes (heavy cardboard boxes if nothing else is available). Try to pack books of similar sizes together. Pack snugly so that the books don't move but don't crush. Wrap open books as found and place on top of a packed container with a layer of freezer paper under the open volume. Do not place more than one open volume in a container. If books are stuck together, do not attempt to separate. Pack books as found. Don't attempt to close open volumes or open closed volumes. Seal all books with evidence of mold in clear plastic bags and mark as "moldy".

Inventory by labeling each container with the library's name and an assigned number. Use pencil or Sharpie laundry pen. In a separate logbook, record the container number, the first and last call numbers of the volumes packed, and the total number of books in

the container. If they are not in call number order, note the location where they were found. **Transport to a freezer facility within 48 hours.** If the containers are sent to more than one freezer, note which containers are sent to what freezer. Keep records of discarded items**.** Books will emerge from freezing in pretty much the same condition as they went in.

If books are dirty, it is best to **let them dry and then brush off the dirt**. Under no circumstances should you wash the following: Full or partial leather bindings, vellum or parchment bindings or pages, open or swollen volumes, fragile or brittle materials, manuscripts.

Set volumes on their heads, opening covers slightly to support the volume. Put Reemay or paper towels between the text block and binding to absorb water. Each time the wet paper is changed, reverse the direction of the volume. **Remove wet paper from the area promptly** to reduce humidity. Make sure that air is circulated constantly with fans, use dehumidifiers if available, and keep the temperature as low as possible.

Interleave wet books **ONLY** once they have been partially dried. Open the book very carefully (wet paper is easily torn) and interleave from the back with white paper towels or Reemay cut slightly larger than the book. Interleave about every 25 pages. Leave the book lying flat until some of the water is absorbed. Then if it can support the weight, stand it upright, head down. Use fans to keep the air moving. Change interleaving when it becomes damp and interleave different pages each time.

Wrap with freezer paper, pack, and inventory as described above. **Transport** to a freezer facility.

NON-BOOK MATERIALS

<u>Documents, Unbound Materials</u>

Freeze documents in folders as they are found. Pack in boxes by laying the box on its side so that the folders don't need support as they are loaded. Interleave folders every two inches with waxed or freezer paper. Fill the space between the documents and the sides of the box with loosely crumpled paper towels or other absorbent non-printed paper to prevent the contents from shifting when the boxes are moved.

Wet sheets can be separated by the following technique:

Place a sheet of polyester film on top of a stack of wet, unbound papers.
Rub gently with a bone folder - surface friction causes the wet paper to adhere to the film.

Place the polyester film with the document adhered to it on top of a piece of polyester Reemay, and then remove the film.

Place another piece of polyester Reemay on top of the wet sheet.

Repeat the entire process as many times as necessary.

Air dry with good air circulation. Papers may be flattened when they are almost dry by placing them between sheets of blotting paper and applying even pressure with weights.

Photographs

Priorities

Salvage prints first, then film (film is more stable).

Salvage color prints before black and white. **Note:** Color prints may be very difficult to salvage since color layers separate quickly.

In general, wet photographs should be air dried or frozen as quickly as possible. Once stabilized by either of these methods, there is time to decide what future course of action to pursue.

Air-drying photographs

Separate photos from their enclosures, frames, and from each other. If stuck together or adhered to glass, set them aside for freezing.

Allow excess water to drain off.

Spread the photos out to dry, face up, laying flat on an absorbent material such as blotters, unprinted newsprint, paper towels, or a dean doth.

Photos may curl during drying. They can be flattened later.

Freezing photographs

If immediate air-drying of photos is not possible, or if photos are stuck together, freeze them. Loose photos can be interleaved with Reemay or waxed paper to make them easier to separate later. Place them in small plastic bags for freezing.

Drying frozen photographs

Frozen photos are best dried by thawing, followed by air-drying on a clean, absorbent surface.

Vacuum thermal drying is not recommended. Vacuum freeze-drying is OK but surface gloss may be lost.

Slides

Slides can be rinsed and dipped in "photo-flo" slide cleaner, or a similar commercial product and air dried by hanging on a monofilament line or propping on edge. They should be removed from their paper frames and remounted.

Slides mounted between glass must be removed from the glass or they will not dry.

INFORMATION TECHNOLOGY

In the near future the library will have an off-site backup system to protect library data and files. This system will protect library data and make it possible to restore access to electronic resources and services after a disruptive event. Generally, computer hardware will be evaluated to determine functionality. If damaged, computer hardware will not be recovered.

Faculty and Staff Workstations

Faculty and staff workstations will be restored on an "as needed" order depending on necessity, available computer hardware, and the requirements and availability of related library services.

Servers

Priority will be given to restoring functionality of the production web server so as to ensure prompt restoration of access to online resources. The remaining servers will be restored on an "as needed" basis depending on necessity, available server hardware, and the requirements and availability of related library services.

Public Workstations

Public workstations will be restored after faculty/staff workstations and library servers, as resources are available.

Online Resources

Access to online resources should be restored as soon as possible. However, as access provision is dependent upon the campus network infrastructure, immediate restoration of online services may not be possible. In such a scenario, library servers should be restored to a state where they are ready to provide access as soon as network connectivity allows.

In the event that campus network will be unavailable for an indeterminate length of time, arrangements should be sought out where possible with individual vendors to provide access directly to users.

. SALVAGE OPTIONS

Vacuum freeze drying

This is the safest and most successful method, but it is the most expensive. The chamber uses high vacuum and heat and turns the ice crystals in the frozen material to water vapor which is collected on a cold panel. This option must be considered if there is a large amount of material that must be salvaged. Materials **must** be frozen before they can be vacuum freeze dried. See the Directory for vacuum freeze drying services.

Freeze drying

The UTHSC currently does not have the facilities for freeze drying. See the list of suppliers for local freeze drying businesses.

Vacuum thermal drying

This is not recommended as heat may damage paper, ink may run, and bindings distort. Cannot be used for coated paper, film, or photos. Microwave ovens should not be used for the same reasons.

Air drying

Can be used for a fairly small number of volumes if a place can be found to let the books dry over a period of time. It is labor intensive because pages have to be fanned and air circulated continuously. This method **cannot be used for coated paper.** See salvage procedures for details on air drying.

MOLD

Mold spores are always present in the air and can grow rapidly when the right conditions are reached. Mold can develop within 48 hours if the temperature is over 70 degrees Fahrenheit and the relative humidity is over 55%.

Mold can be harmful to human health. Work outdoors with moldy material whenever possible. Wear disposable gloves, washable clothing, and a toxic dust mask or respirator with a filter that can be changed frequently. People with mold allergies should take extra precautions.

Locate the Cause

Check humidity and temperature. Look for sources of moisture. Ask Facilities Operations to see if HVAC is functioning properly (especially heat-exchange coils). Is ventilation poor? Remedy any obvious problems immediately.

Isolation

When mold is discovered, assess the extent of the damage and decide whether the problem can be dealt with in-house. If the number of items affected is manageable, separate the affected material and move it to a clean area with proper temperature and humidity. If the infestation is severe, call for professional help.

Drying

Drying will cause mold to become inactive.

If only a few items are moldy, they can be air-dried outside with careful monitoring. Sunlight will kill some mold spores.

If working outdoors isn't possible, find an area inside that can be ventilated to the outside. Put clean paper towels on a table. Spread papers and fan book pages. Air circulation can be improved with fans but use a low fan speed and direct the air so that spores are flushed outside and not spread around the room.

If there is too much to deal with at one time, moldy material may be frozen and removed from the freezer later in manageable portions. Freezing will arrest mold growth but will probably not kill the spores.

Cleaning Moldy Material

When the items are dry, cleaning can begin. Continue to wear protective gear and remove contaminated paper towels, rags, etc., from the area frequently.

The best way to dean moldy material is with a filtered vacuum. Change the filter frequently. Go over all surfaces and repeat the process with a dry chemical sponge. A soft brush can be used if the mold is not active.

Book bindings can be wiped gently with a 70% alcohol and water solution.

Keep material isolated for several weeks and monitor for reappearance of mold. Return to the original location only when there is no sign of regrowth and the environment is stable.

Cleaning the Storage Area

Clean the storage area (shelves, wall, floor) thoroughly with lysol or chlorox. Be sure the area is well ventilated. Clean carpets and drapes if necessary. Vacuum up dust. If odor remains, place charcoal briquettes or bowls of baking soda in the area to absorb odors.

Follow-up After a Mold Outbreak

Monitor all affected material on a regular basis to look for renewed mold growth or after effects of treatment or cleaning.

Monitor temperature and humidity in the affected area. Make sure housekeeping and air circulation are adequate.

Relocate material in any areas that are unstable.

Undertake any necessary repairs and upgrades to prevent a recurrence.

Circulation staff should be on the alert for any books that are returned wet. These should not be returned to the shelves until they are dried. Any signs of mold that appear during reshelving should be reported.

REHABILITATION

After damaged materials have been dried, decisions must be made on whether they can be rehabilitated. This will usually be done on a case-by-case basis.

CONSIDER:

Discarding

Replacement

Cleaning

Rebinding

Recasing

Repairing

Microfilming

Photocopying

DIRECTORY OF CONSULTANTS, SERVICES, AND SUPPLIES

Disaster Consultants

National Library of Medicine
Preservation and Collection Management Section
RM B1 E21
8600 Rockville Pike
Bethesda MD 20894
http://nnlm.gov/sea/services/disaster.html
contact: Mary Kate Dugan, 301-435-7113, Mary_Kate_Dugan@nlm.nih.gov OR
Margaret Byrnes, 301-435-7110, Margaret_Byrnes@nlm.nih.gov

National Network of Libraries of Medicine
Southeast Atlantic Region
University of Maryland, Baltimore
Health Sciences and Human Services Library
601 W. Lombard Street
Baltimore, MD 21201
http://nnlm.gov/sea/outreach/disasterrelief.html

SOLINET (Southeastern Library Network, Inc.)
1438 W. Peachtree St. NW, Suite 200
Atlanta, Georgia 30309-2955
1-800-999-8558
404-892-0943
http://www.solinet.net/preservation/preservation_home.cfm

AMIGOS Preservation Service
14400 Midway Road
Dallas TX 75244
1-800-843-8482
http://www.amigos.org/
contact: Marian Green, Preservation Field Services Officer
green@amigos.org, x2844

TEMA - Tennessee Emergency Management Agency
3041 Sidco Drive
Nashville, TN 37204
PHONE: 615-741-0001
FAX: 615-242-9635

http://www.nashville.gov/oem/oem_matters.htm

Memphis Emergency Management Agency
P.O. Box 111249
Memphis, TN 38111
Phone: (901) 458-1515
Fax: (901) 458-40160
http://www.cityofmemphis.org/framework.aspx?page=251

Cold Storage Facilities

Americold Corporation
1100 E. Parkway St.
Memphis, TN 38114
901-452-1611
Fax: 901-452-1620
1-888-484-4877
http://www.americold.net/facilities/warehouses/tn_memphis.html

ServiceMaster
National Claim Processing Center
860 Ridge Lake Blvd.
Memphis, TN 38120-9447
800-737-7663
http://corporate.servicemaster.com

Vacuum Freeze-Drying Services

Belfor U.S.A.
4044 Summer Ave.
Memphis, TN 38122
Contact: Chuck Shoffnar
http://www.belforusa.com
901-452-0251

American Freeze Dry Corporation
P.O. Box 264
Runnemede, NJ 08078
Phone: 856-546-0777
1-800-817-1007
Emergency: 609-458-0510

Moisture Control Services

Munters Moisture Control Services
331 Corporate Circle, Suite A
Golden, CO 80401
1-800-959-7901
303-279-4812
Contact: Tim Lema
http://www.muntersmcs.com

Fire and Water Damage Restoration

Servpro
67 Whitten Drive
Bartlett, TN
901-754-9061

Servicemaster
9362 Marbella Cove
Cordova, TN
901-624-9200

Dugan Restoration Services
2942 Overton Crossing St.
Memphis, TN
901-358-0864

Media Recovery and Reprocessing

SPECS Bros.
PO Box 5
Ridgefield Park, NJ 07660
201-440-6589, 800-852-7732
www.specsbros.com
Magnetic media restoration and reformatting

VidiPax
450 West 31st Street
4th Floor
New York, NY 10001
212-563-1999, 800-653-8434
www.vidipax.com
Magnetic media restoration, magnetic media reformatting, consulting

Equipment and Transportation Rental

Penske Truck Rental and Leasing
Medical Center Book/supl
737 Madison Ave.
Memphis TN 38103-2306
Call for availability.

(901) 527-6261

Ryder Truck Rental and Leasing
4874 US Highway 78
Memphis, TN 38118
(901) 365-1666

Supplies

University Products, Inc.
P.O. Box 101
517 Main St.
Holyoke MA 01041
1-800-336-4847
1-800-532-9281 (fax)
www.universityproducts.com

Protext
P.O. Box 30423
Bethesda MD 20824
301-320-7231
www.protext.net
Source of Rescube (corrugated plastic box) and other recovery supplies