



Title: Flood Response			
Number	EH&S – 2-5	Revision	8/1/08
Date	9/94	Pages	7

PURPOSE: To prevent unnecessary exposure to patients, visitors and staff from microbial contamination.

POLICY: Staff responding to flood emergencies will follow the systematic procedures delineated in this policy.

SCOPE: Hospital wide.

DEFINITIONS:

Flood: An abundant quantity of water, gray water or sewage (not chemical or radioactive in nature) that is deemed to be a physical, health or environmental hazard.

PROCEDURES:

I. Notifications

- A. Upon discovery of a flood, call the hospital switchboard by dialing “0” or 4-1077. Provide information to the Operator regarding the location of the flood. The Operator will make the following notifications:
 - o University Hospital Physical Plant (4-2400)
 - o Hospital Custodial Services (4-1455)
 - o ADN

- B. A Hospital Custodial Services supervisor in collaboration with a Physical Plant supervisor and ADN will notify Healthcare Epidemiology and the Department of Environmental Health and Safety (EH&S) as necessary. Healthcare Epidemiology must be notified for all major floods, floods affecting sterile environments, or flood affecting multiple areas.

- C. Healthcare Epidemiology will contact EH&S when microbial air sampling may be required.

II. Evacuation/Perimeter Control

- A. In a situation where floods are uncontrolled or involve infectious waste or other hazards, staff may be instructed to evacuate the area.
- B. Perimeter control must be established by staff in the area with assistance from Hospital Custodial Services, Physical Plant or other responders.

III. Pre-abatement

- A. Responders entering the affected areas will wear the appropriate personal protective equipment (i.e., impervious boots, impervious gloves, goggles and face shield and protective clothing if splashing is likely).
- B. To control the spread of potentially infectious material to clean areas, Hospital Custodial Services or Physical Plant will establish a Decontamination Zone as follows:
 - 1. Hospital approved disinfectant (HAD) soaked disposable absorbent pads on a clean area of the floor adjacent to flood.
 - 2. Clean dry disposable absorbent pads at the end of the Decontamination Zone to dry material passing through.
 - 3. All persons leaving the affected area shall walk across the Decontamination Zone.
 - 4. All equipment used for remediation of the flood must be decontaminated with HAD, in the Decontamination Zone, prior to leaving the flood area or discarded. This includes all plumbing and housekeeping tools and flood response equipment.

IV. Containment Materials

- A. Hospital Custodial Services and Physical Plant shall maintain spill containment materials.
- B. Responders shall place spill barriers around the affected areas in order to contain the flood.
- C. Reusable spill barriers shall be decontaminated by responders with HAD and returned to storage.

- V. **Abatement** (Refer to Appendix 1 – Flood Abatement Response)
- A. Floods related to clogged grease traps or local drains will be handled by Physical Plant. Physical Plant shall be responsible to take measures necessary to correct floods related to building utilities. All employees entering the affected areas shall wear the appropriate personal protective equipment (see Section III).
 - B. If entry into a manhole or other confined space is required, Physical Plant shall obtain a Confined Space Entry Permit from the EH&S Fire Marshals.
 - C. Hospital Custodial Services shall remove all fluid by mopping or using a wet vacuum. All collected liquid must be poured into the sanitary sewer system – do not empty into a storm drain.
 - D. Hospital Custodial Services staff shall clean the area and affected equipment with HAD.
 - E. Staff shall remove wet items from the floor to allow items and floor to be cleaned (if possible) and dried. Food and supplies which are contaminated and cannot be cleaned shall be discarded.
 - F. Physical Plant shall follow abatement requirements outlined in Appendix A.
 - G. Physical Plant shall install dehumidifiers in affected area to aid in the drying process. Physical Plant shall remove cove base, if sheetrock was wetted, to aid in the drying of the sheetrock. Physical Plant, using a moisture meter, shall measure moisture content in sheetrock.
 - H. Contaminated ceiling tiles and thermal insulation (i.e., pipe or duct insulation) shall be removed by the Physical Plant within 24 hours. The ceiling tiles shall be replaced as soon as possible, but not before the source of the flood has been remedied.
 - I. Non-essential contaminated files and paper shall be discarded. Remove essential paperwork from the flooded area to a location where it can be dried, photocopied, and discarded. Leave all file cabinet and desk drawers open to facilitate air-flow and drying. Never let paper products become moldy. Refer to Appendix B for document restoration and flood remediation companies.
 - J. Contaminated carpet or carpet tiles shall be removed by Physical Plant within 24 hours after gray water or sewage flooding (not after clean water flooding). If the carpet cannot be removed without disturbing underlying flooring, EH&S will coordinate the sampling of the flooring and mastic. If any of the materials are determined to be asbestos-containing materials

(ACM), EH&S or Hospital Facilities shall arrange for the abatement of the ACM.

- K. Physical Plant will dry all light fixtures after securing power under the Lockout/Tagout policy.
- L. Physical Plant shall introduce 100% outdoor air to remove any odors, if possible.
- M. All staff shall use the Decontamination Zone when leaving the flood area.
- N. Responders shall place contaminated disposable items (i.e. personal protective equipment, wet carpet and ceiling tiles) in plastic bags, and discard in the regular trash. Reusable flood response equipment shall be disinfected with HAD in the Decontamination Zone.

VI. Exposure Procedures

- A. If someone has come in contact with sewage flood water, the following should occur:
 - 1. Remove contaminated clothing and follow the Linen Services policy Management of Contaminated Personal Clothing, Manual Code 1021-A.
 - 2. Wash affected area with soap and water.
 - 3. Go to Employee Health Services or the Emergency Department (off hours) for follow-up treatment.

VII. Post Cleanup Recordkeeping

- A. Responding department(s) shall complete and maintain documentation that includes:
 - a. Cause of flood (e.g. sanitary water backup, broken water pipe)
 - b. Location of flood, flood material and estimate of volume
 - c. PPE worn
 - d. Remediation performed
 - e. Any necessary follow-up
 - f. Names of exposed personnel
- B. Healthcare Epidemiology shall complete a flood report and make any required notification, when deemed necessary.

INQUIRIES/REQUESTS:

Environmental Health and Safety
HSC, L1, 059
Zip= 8017
Main Office: 444-6783
FAX: 444-6845

RELATED FORMS:

Flood Abatement Response (Appendix A)
Document Restoration Companies (Appendix B)

RELATED DOCUMENTS:

Confined Space Entry, Policy 1-6
Lockout/Tagout, Policy 3-2
Management of Contaminated Personal Clothing, Manual
Code 1021-A, Linen Services

APPENDIX A – FLOOD ABATEMENT RESPONSE (Page 1 of 2)

FLOOD TYPE AND RESPONSE TIME	AREA AFFECTED			
	<i>LABS</i>	<i>HIGH RISK AREAS</i> OR, L&D, Burn Unit, Cardiac Cath Lab, Radiology Special Procedures, Central Sterile Supply, Dietary, and Pharmacy Admixture Rooms <i>(Sampling for airborne fungi is required after completed abatement)</i>	<i>OFFICES</i>	<i>PATIENT CARE</i>
CLEAN WATER (Response WITHIN 24 hours)	If sheetrock wetted, remove cove base to facilitate drying of sheetrock. Use commercial dehumidifier to dry area. Check process with moisture meter. Remove and replace affected ceiling tiles and thermal insulation.	If sheetrock wetted, remove cove base to facilitate drying of sheetrock. Use commercial dehumidifier to dry area. Check process with moisture meter. Remove and replace affected ceiling tiles and thermal insulation	If sheetrock wetted, remove cove base to facilitate drying of sheetrock. Use commercial dehumidifier to dry area. Check process with moisture meter. Remove and replace affected ceiling tiles and thermal insulation.	If sheetrock wetted, remove cove base to facilitate drying of sheetrock. Use commercial dehumidifier to dry area. Check process with moisture meter. Remove and replace affected ceiling tiles and thermal insulation.
CLEAN WATER (Response AFTER 24 hours)	Use commercial dehumidifier to dry area. Remove and replace affected ceiling tiles and thermal insulation. Remove any affected carpet (1)* Check sheetrock with moisture meter and cut sheetrock at least 12” from the moisture mark (2)	Use commercial dehumidifier to dry area. Remove and replace affected ceiling tiles and thermal insulation. Remove any affected carpet (1) * Check sheetrock with moisture meter and cut sheetrock at least 12” from the moisture mark (2)	Use commercial dehumidifier to dry area. Remove and replace affected ceiling tiles and thermal insulation. Remove any affected carpet (1)* Check sheetrock with moisture meter and cut sheetrock at least 12” from the moisture mark (2)	Use commercial dehumidifier to dry area. Remove and replace affected ceiling tiles and thermal insulation. Remove any affected carpet (1)* Check sheetrock with moisture meter and cut sheetrock at least 12” from the moisture mark (2)

NOTE 1: IF THE CARPET CANNOT BE REMOVED WITHOUT DAMAGING THE FLOORING, CONTACT EH&S (2-6410) TO DETERMINE IF FLOORING CONTAINS ASBESTOS. A SAMPLE OF THE FLOOR TILE AND MASTIC WILL NEED TO BE COLLECTED BY EH&S AND ABATEMENT MAY BE NECESSARY.

* IF CARPET TILES ARE INVOLVED, REMOVE ALL SOILED TILES PLUS TWO FEET BEYOND AFFECTED TILES.

NOTE 2: ANY DEVIATION FROM THE 12” RULE MUST BE APPROVED BY HEALTHCARE EPIDEMIOLOGY (4-7430).

APPENDIX A – FLOOD ABATEMENT RESPONSE (Page 2 of 2)

FLOOD TYPE	AREA AFFECTED			
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GRAY WATER	Use commercial dehumidifier to dry area. Remove and replace affected ceiling tiles and thermal insulation. Remove any affected carpet (1) * Check sheetrock with moisture meter and cut sheetrock at least 12” from the moisture mark (2) Clean or discard contaminated items.	Use commercial dehumidifier to dry area. Remove and replace affected ceiling tiles and thermal insulation. Remove any affected carpet (1) * Check sheetrock with moisture meter and cut sheetrock at least 12” from the moisture mark (2) Clean or discard contaminated items.	Use commercial dehumidifier to dry area. Remove and replace affected ceiling tiles and thermal insulation. Remove any affected carpet (1) * Check sheetrock with moisture meter and cut sheetrock at least 12” from the moisture mark (2) Clean or discard contaminated items.	Use commercial dehumidifier to dry area. Remove and replace affected ceiling tiles and thermal insulation. Remove any affected carpet (1) * Check sheetrock with moisture meter and cut sheetrock at least 12” from the moisture mark (2) Clean or discard contaminated items.
SEWAGE	Use commercial dehumidifier to dry area. Remove and replace affected ceiling tiles and thermal insulation. Remove any affected carpet (1) * Check sheetrock with moisture meter and cut sheetrock at least 12” from the moisture mark (2) Discard contaminated items.	Use commercial dehumidifier to dry area. Remove and replace affected ceiling tiles and thermal insulation. Remove any affected carpet (1) * Check sheetrock with moisture meter and cut sheetrock at least 12” from the moisture mark (2) Discard contaminated items.	Use commercial dehumidifier to dry area. Remove and replace affected ceiling tiles and thermal insulation. Remove any affected carpet (1) * Check sheetrock with moisture meter and cut sheetrock at least 12” from the moisture mark (2) Discard contaminated items.	Use commercial dehumidifier to dry area. Remove and replace affected ceiling tiles and thermal insulation. Remove any affected carpet (1) * Check sheetrock with moisture meter and cut sheetrock at least 12” from the moisture mark (2) Discard contaminated items.

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APPENDIX B

Document Restoration and Flood Remediation Companies

Document Restoration Companies

Munters Corporation

160 Raritan Center Parkway
Raritan Center, Suite 11
Edison, NJ 08837
Phone: (800) MUNTERS (686-8377)
Contact: Bob Harrison (LI/Manhattan)
www.muntersamerica.com

Blackmon-Mooring-Steamatic Catastrophe, Inc. (BMS)

75 Maiden Lane, Suite 212
New York, NY 10038
Contact: Fehmi Ilkson
Phone: (800) 433-2940
Mobile: (917) 941-9157
www.blackmonmooring.com

Cotton Restoration Inc.

Corporate Headquarters
14345 Northwest Freeway
Houston, Texas 77040
Phone: (713) 849-9300
24 Hour Call Center (877) 511-2962
www.cottoncat.com

Flood Remediation Company

SERVPRO® of Port Jefferson

525 Route 112
Port Jefferson Station, NY 11776
Phone: (631) 476-5300 Fax: (631) 476-5302
www.servpropj.com