



Mission Possible: Safety First Emergency Response for Cultural Heritage Institutions in Puerto Rico & USVI

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3rd Annual
Safety and Cultural
Heritage Summit
Preserving Our Heritage
and Protecting Our Health

November 7 2018

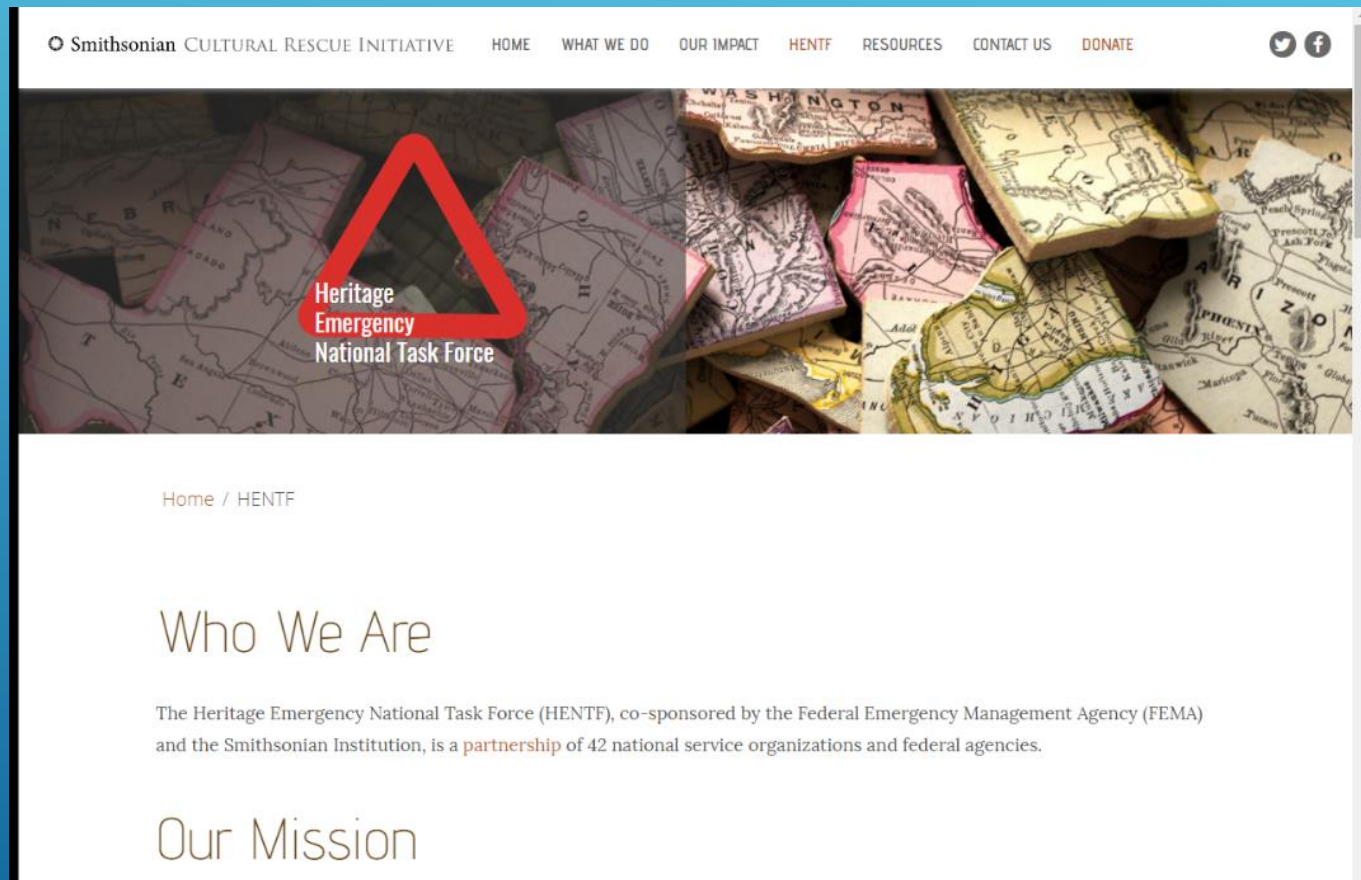
DEPARTMENT OF HOMELAND SECURITY FEDERAL EMERGENCY MANAGEMENT AGENCY MISSION ASSIGNMENT (MA)		See Reverse for Paperwork Burden Disclosure Notice	O.M.B. NO. 1660-0047 Expires March 31, 2014
I. TRACKING INFORMATION (FEMA Use Only)			
State PR (Puerto Rico) Incident:2017091701-Hurricane Maria		NEMIS Number 1509-245098	
Program Code/Event Number 4339DR-PR: HURRICANE MARIA		Date/Time Received 10/19/2017 14:54	
II. ASSISTANCE REQUIRED <input type="checkbox"/> See Attached			
Assistance Requested Request DOI deploy specialty Subject Matter Experts to provide expertise to the Institute of Puerto Rican Culture and the Puerto Rico General Archive in San Juan, PR to support Puerto Rico General Archive's request for technical assistance in response operations. Request 1 Team of 4 Specialists from ESF 11 including Department of Interior, NARA and other Heritage Emergency National Task Force members. Deployment shall be for minimum 2 weeks. Cost for two weeks for 4 people estimated at \$40000 (overtime, travel, per diem and lodging, overhead and misc.)			

- ▶ Background
- ▶ Scope of real-world challenges we've faced in area-wide environmental disaster (post Hurricanes Irma & Maria)
- ▶ Resources
- ▶ Areas for improvement
- ▶ Panel discussion / Q&A

TOPICS



HERITAGE EMERGENCY NATIONAL TASK FORCE (FEMA-HENTF)



Federal Emergency
Management
Agency

Smithsonian Cultural
Rescue Initiative
www.culturalrescue.si.edu



GENERAL / published

Federal Emergency Management Agency Emergency Management Institute <https://training.fema.gov/>

American Institute for Conservation Health and Safety Group *Health and Safety in Emergency Response (2016)*

Office of Safety & Health Administration OSHA Fact Sheets

PREPARATION / RESOURCES



SPECIFIC / internal

Smithsonian Occupational Health Services & Travel Medicine

Department of Interior for NARA, NPS *Emergency Response & Recovery Activities: Storms, Floods, & Hurricanes Safety & Health Guidance*

FEMA JFO / Disaster Safety Officer (DSO)

- ▶ Environmental & Historic Preservation (EHP) DISASTER HAZARD ASSESSMENT PLAN (DHAP)
- ▶ HAZARD IDENTIFICATION, EVALUATION & CONTROL

Potential hazard associated with EHP field activities	Confined Space Entry	Head shall not enter the plane of the manhole, crawl space, or other confined space. Do not enter a confined space. Not identified as a task for this position. Contact the Disaster Safety Officer for guidance. Working in confined spaces requires compliance with 29 CFR 1910 requirements.
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PHASE 1: 60-90 days post-event

- ▶ Rapid site assessments via:
 - ▶ Walkabouts, staff interviews
 - ▶ Compare to self-reported or unreported due to communications outages
- ▶ Report:
 - ▶ Scale & types of damages
 - ▶ Priorities & Needs
 - ▶ Resources: available or interrupted

ENVIRONMENT



PHASE 1: 60-90 days post-event

- **Hot** (avg. 85F)
- **Humid** (avg. 85-90% RH)

GENERALLY HAZARDOUS

- Dark
- Slippery / uneven surfaces
- Water uptake in most materials
- Mold growth evident
 - depending on air circulation, standing water, damp or wet building fabric
- Unstable power
 - frequent blackouts, diesel delivery dependent



ENVIRONMENT



Phase 1: Workshop demonstrations of mold remediation techniques



HENTF Assists Archivists In Puerto Rico

- Navigation
- Search
- Languages

- Multimedia (Photos, Video, and Audio)
- Multimedia Collections
- Documents and Resources
- Document Collections
- Photo, Video Use Guidelines



HENTF Assists Archivists In Puerto Rico



AN, Puerto Rico, December 14, 2017 - Nora Lockshin, Senior Conservator at the Smithsonian Institution Archives, addresses a group of librarians, museum staff and archivists, and explains how to mix cleaning supplies to care for paintings, books and historical artifacts that were affected by Hurricane María. FEMA and the Smithsonian

UNSTABLE ELECTRICAL ENVIRONMENT

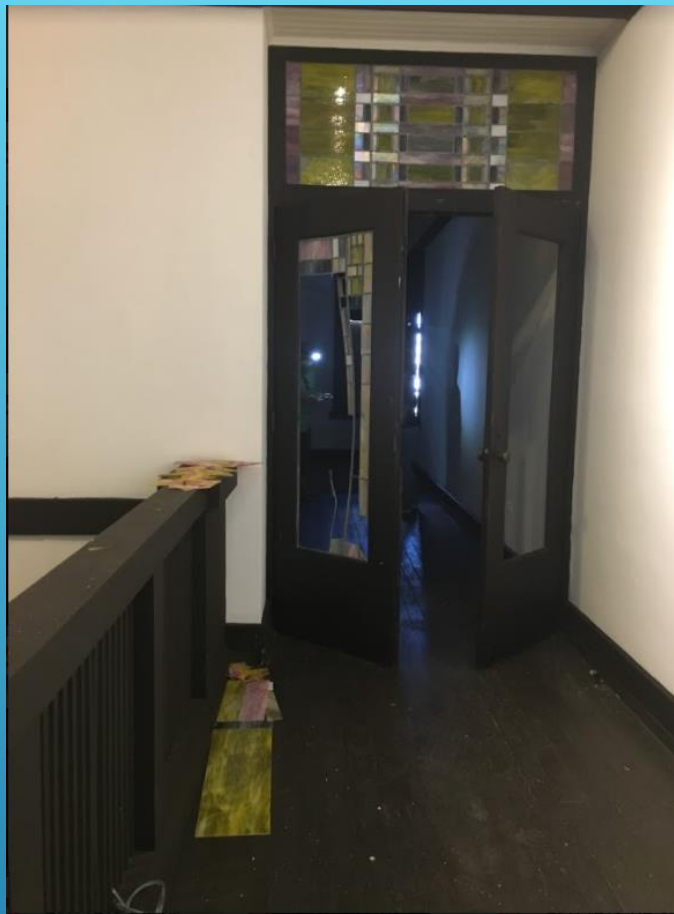


Universidad de Puerto Rico
librarians providing critical
reference services to students
outside while building was closed.



SITUATIONAL PRESSURES

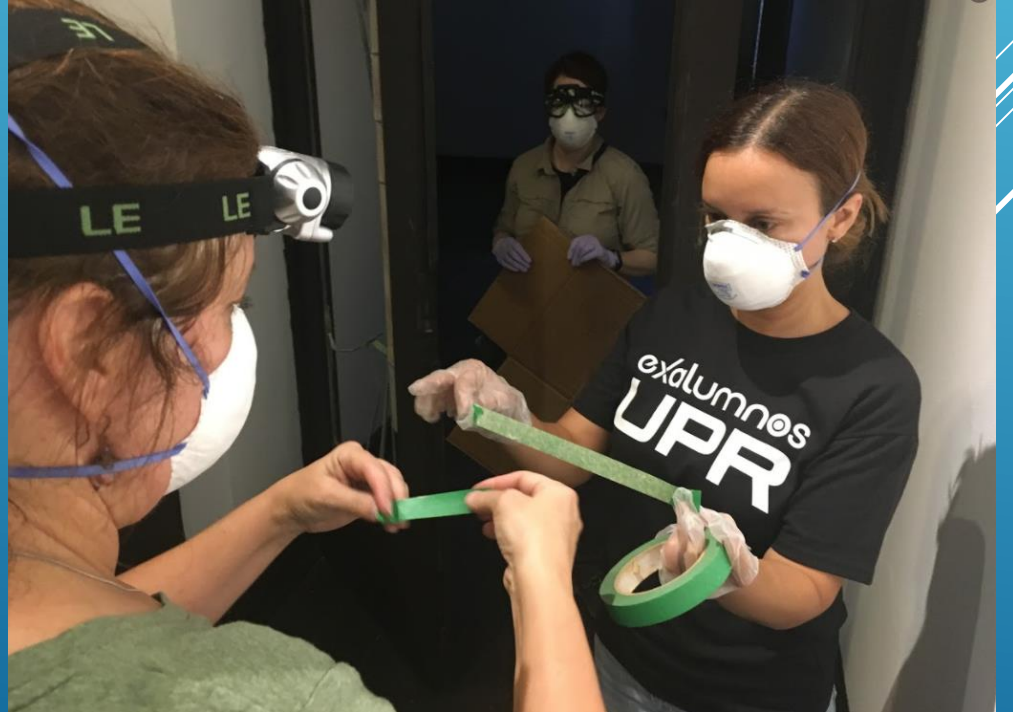




Maintaining awareness of head injury, electrical, & laceration risks

MITIGATING RISK ONSITE

“Field dressing” interventions for people & objects at imminent risk



HOME » NEWS » UKNEWS » LAW AND ORDER

Two art lovers rescued after being locked in a bank vault installation

Firefighters use coring drills, reciprocating saws, heavy breaching and breaking equipment to free pair from a bank vault in Cardiff



ARCHIVES | 2000

Woman Dies of Suffocation After Locking Herself in a Vault

By ELISSA GOOTMAN JULY 29, 2000

A woman working at a financial services company died Thursday night after accidentally locking herself in a vault and triggering a fire extinguishing system that filled the chamber with carbon dioxide, the police said yesterday.

The authorities are investigating what went wrong around 9 o'clock, when the woman, Esther Penn, 35, became trapped in the 10,000-square-foot vault while storing stock receipts.

Before pulling the fire alarm, Ms. Penn used an in-house telephone in the vault to call her supervisor, leaving a message on his voice mail that she was trapped, the police said.

She then apparently panicked, pulling a lever marked "fire suppression" and unwittingly activating the extinguisher system instead of merely summoning help.

CONFINED SPACE ENTRY
WHAT DOES IT LOOK LIKE TO A CULTURAL HERITAGE RESPONDER?



FEMA-HENTF TEAM'S OWN RISK ASSESSMENT – TRAINING TO ENABLE MASS SCALE, LONG-TERM, SELF-DIRECTED RECOVERY

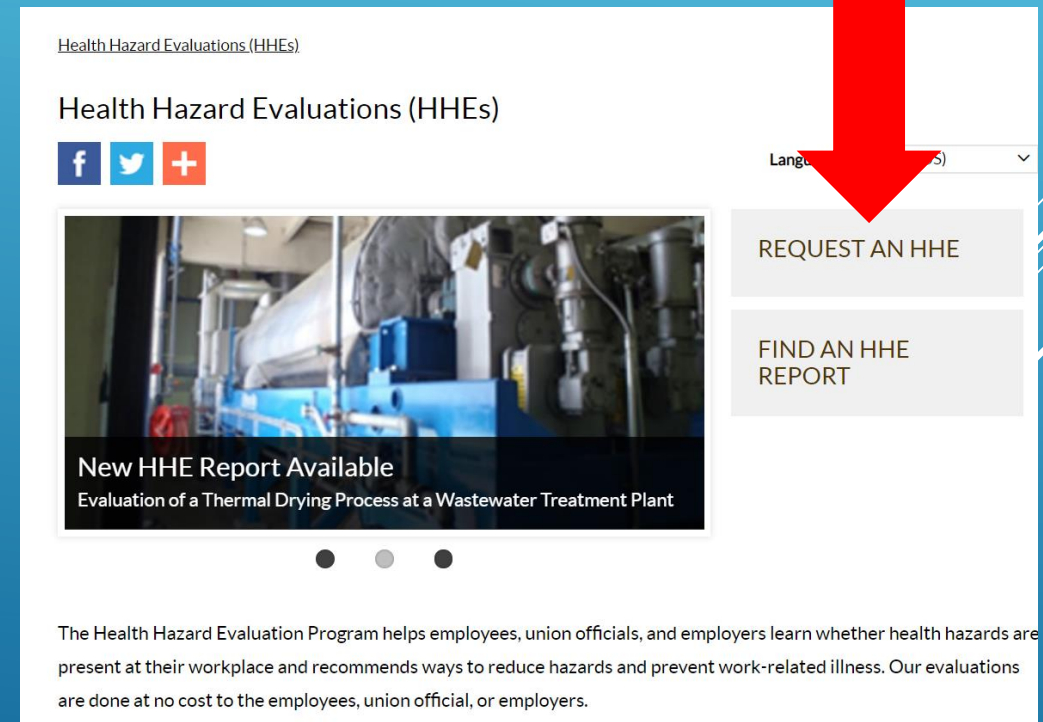
Mission Assignment Goal: to “provide expertise & technical assistance” in recovery.

Inform workers of strategies, resources, responsibilities and revised priorities for cultural heritage orgs in recovery.

- Can we do our part better by asking for partnership regarding health & safety?

YES!

- Invoke NIOSH/CDC's Health Hazard Evaluation program
- <https://www.cdc.gov/niosh/hhe/>



Health Hazard Evaluations (HHEs)

Health Hazard Evaluations (HHEs)

f t +

Language (s) ▾

REQUEST AN HHE

FIND AN HHE REPORT

New HHE Report Available
Evaluation of a Thermal Drying Process at a Wastewater Treatment Plant

The Health Hazard Evaluation Program helps employees, union officials, and employers learn whether health hazards are present at their workplace and recommends ways to reduce hazards and prevent work-related illness. Our evaluations are done at no cost to the employees, union official, or employers.



Normal practice

- ▶ Stable, known conditions & expectations
- ▶ Knowledgeable staff make best practice decisions

vs. Response & Recovery

- ▶ Stress on people, objects and systems
- ▶ Knowledgeable staff make risk-based, prioritized decisions
- ▶ Much written guidance is short-term
- ▶ Long term recovery = long term stress
 - ▶ OPERATIONAL STRESS CONTROL
 - ▶ TRAUMA INFORMED APPROACH
 - ▶ Substance Abuse and Mental Health Services Administration (SAMHSA) **Disaster Distress Helpline**
 - ▶ <https://www.samhsa.gov/find-help/disaster-distress-helpline>
 - ▶ **1-800-985-5990 / TTY 1-800-846-8517**
 - ▶ **Text SMS: TalkWithUs to 66746**

LONG-TERM RECOVERY



NOBODY TRAINS FOR IGUANAS

ANIMAL CONTROL AND OTHER BIOHAZARDS





DISPLACED WILDLIFE

POTENTIAL DANGERS OF REGION SPECIFIC ANIMALS

BITES & LACERATIONS





INFECTIOUS DISEASES FROM BATS





MOLD THE SHEER EXTENT AFTER A DISASTER



- ▶ Water purification bottles
- ▶ Yellow Card/Traveler's Vaccinations
- ▶ Emergency medicine (antibiotics, rehydration salts etc.)



FOOD/WATER BORNE ILLNESS TRAVEL PREP





PPE & PRACTICES



More awareness & focus on:

- ▶ MANAGING RISKS & EXPECTATIONS
- ▶ MENTAL HEALTH SKILLS & TOOLS
 - ▶ OPERATIONAL STRESS CONTROL
 - ▶ TRAUMA INFORMED APPROACH
- ▶ CONFINED SPACE ENTRY
 - ▶ Usually more highlighted for Search & Rescue; or structural & facilities operations staff
 - ▶ *what does it look like to a cultural heritage responder?*
- ▶ FALL RISKS
- ▶ ELECTRICAL RISKS
- ▶ HEAT STRESS
- ▶ ANIMAL CONTROL
- ▶ PERSONAL SAFETY
 - ▶ TRAVEL SECURITY
 - ▶ RESIDENCE SAFETY
 - ▶ BUDDY SYSTEMS

NEEDS FOR RESPONDERS & SUPPORT STAFF



Travel teams:

- ▶ Donald Booher, CDC
- ▶ Beatriz Centeno-Pineiro, Vicki Lee, Abigail Aldritch NARA
- ▶ Elizabeth Milnarik, Diana Pardue, NPS
- ▶ Ashley Jehle, NMAfA
- ▶ Rebecca Kennedy, NPM
- ▶ Nora Lockshin, SIA
- ▶ Katie Wagner SIL
- ▶ Stacy Bowe, Cori Wegener, SCRI,
- ▶ Viviana Dominguez, Art Conservators Lab LLC

Supporters:

- ▶ Smithsonian Office of Safety Environmental Health and Management, Travel Medicine
- ▶ Richard Kurin, Scott Millar, Smithsonian Institution
- ▶ Anne Van Camp, Liza O'Leary, RoseMaria Estevez, SIA
- ▶ Katelynn Averyt, Stacy Bowe, Cori Wegener, SCRI
- ▶ Ana Villas Boas, Kathleen Fleming, SI TMO
- ▶ Lori Foley, Lois Coulter, David Jones, FEMA
- ▶ John McDade, Keenan Adams, FWS / FEMA-NCRR
- ▶ Jennifer Groman, NASA / FEMA-EHP
- ▶ Ann Hitchcock, NPS
- ▶ John Nelson, ESF #11 NCH/COOP
- ▶ Preston Huff, William Bosanko, NARA
- ▶ Jayna Marques, Angela Chongo, Constellation Travel

WITH THANKS TO OUR
PUERTO RICO & US VIRGIN
ISLAND HOSTS



Panel Q&A

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WITH THANKS TO
POTOMAC AIHA
SMITHSONIAN INSTITUTION
WASHINGTON CONSERVATION GUILD

