

# Librarian First Responders: Investigations of Public Librarians' Health Information Services and Community Members' Information Needs Following a Catastrophic Flood

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Information Science



south carolina  
**STATE LIBRARY**

#E4GDH



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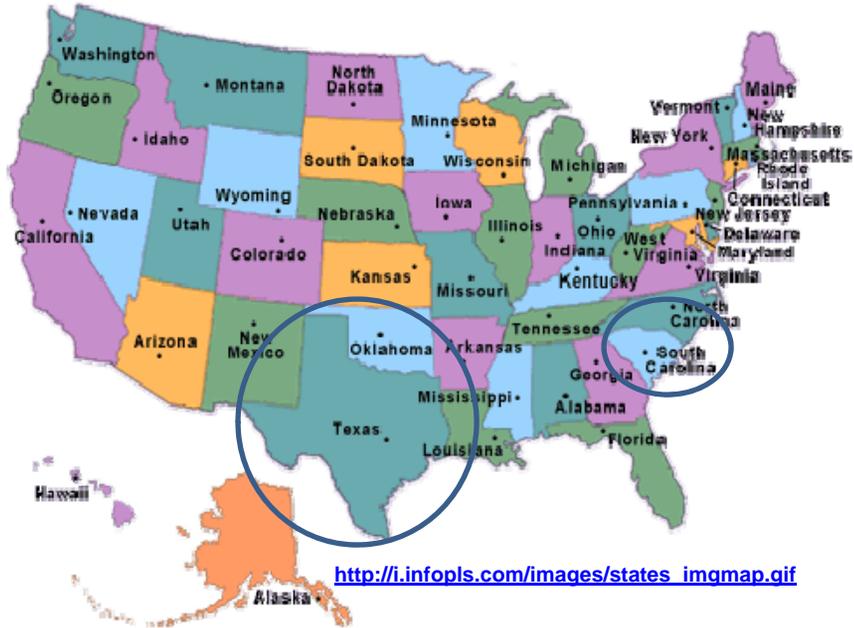
Ms. April Hobbs



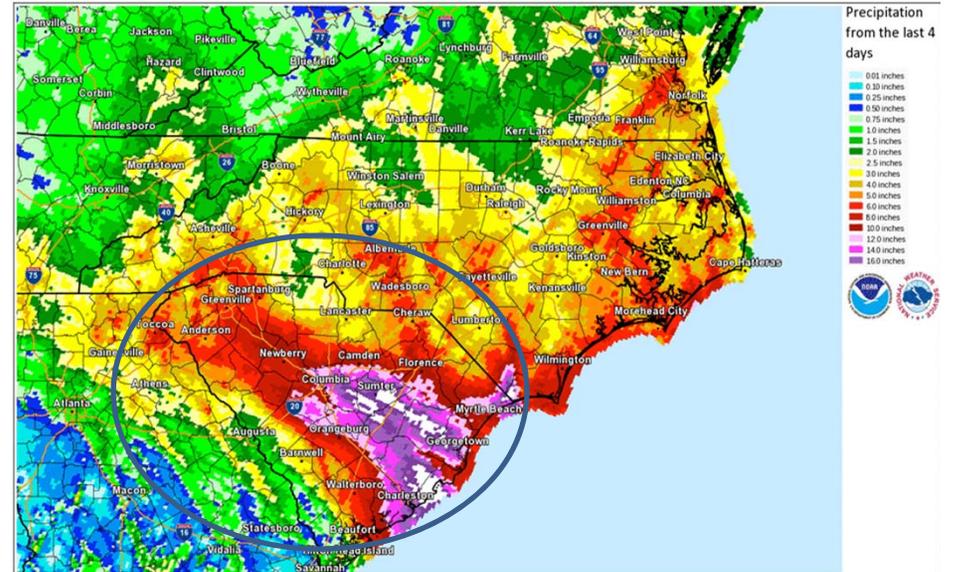
Ms. Carol Hull



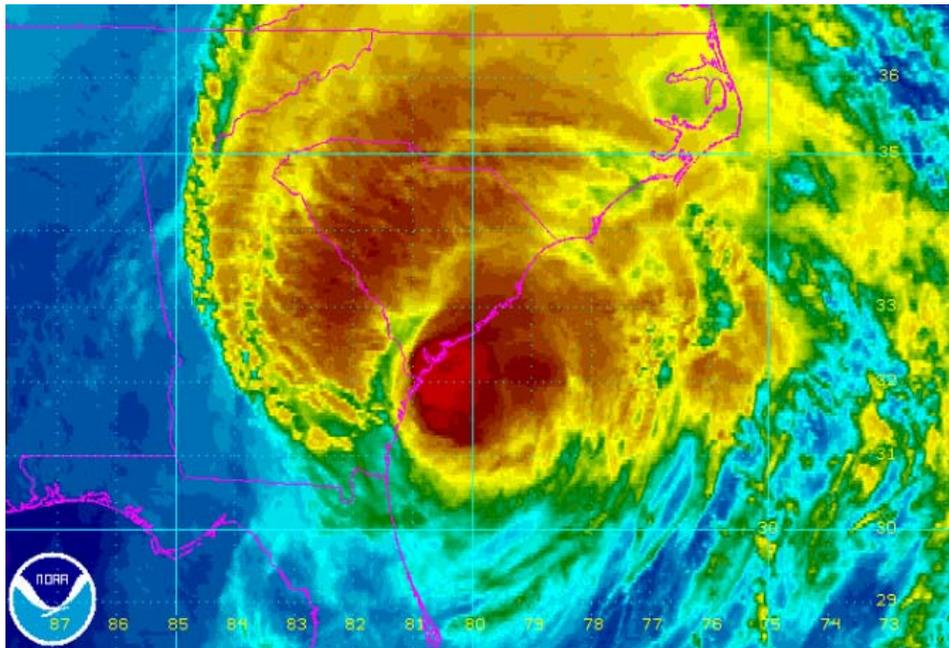
Dr. Hassan Zamir



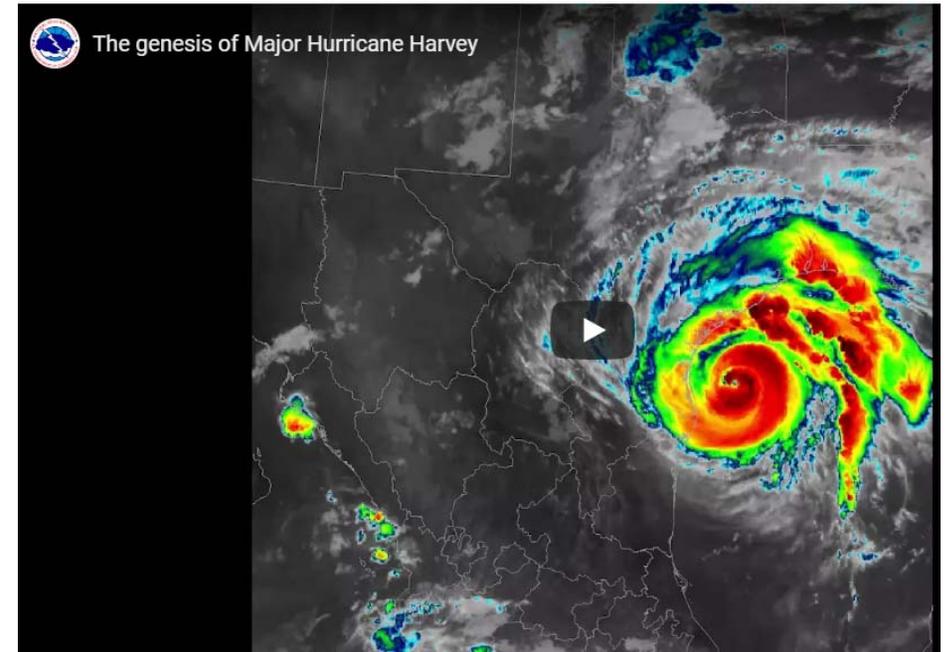
[http://i.infopls.com/images/states\\_imgmap.gif](http://i.infopls.com/images/states_imgmap.gif)



<https://www.weather.gov/ilm/2015climatesummary>



<https://www.weather.gov/chs/hurricanemattew-oct2016>



The genesis of Harvey from a Depression to a Major Hurricane: 542 PM CDT 08/23/17 to 657 PM CDT 08/26/17

[https://www.weather.gov/crp/hurricane\\_harvey](https://www.weather.gov/crp/hurricane_harvey)

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[http://www.gillscreekwatershed.org/gills\\_creek\\_flood\\_2015.html](http://www.gillscreekwatershed.org/gills_creek_flood_2015.html)



[https://www.youtube.com/watch?v=JB1Kud\\_r8wg](https://www.youtube.com/watch?v=JB1Kud_r8wg)



<https://www.cnb.com/video/2017/08/29/heres-what-texas-looked-like-before-and-after-hurricane-harvey-hit.html>

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# Outline

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- **Situation specific research**
- **Public librarians' collaborations between health sciences librarians and professionals from other sectors**
- **Use of multiple channels and technology (including social media)**
- **Professional librarians' required knowledge skills and competencies**

# Research Design: Situation-specific Case Research

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- **In 2015-2016**
  - public librarians' use of multiple channels and technology for information distribution and services
  - public libraries' collaboration with multi-level agencies to facilitate emergency response and recovery
- **In 2017**
  - community members' use of disaster information sources and evaluation of the information's credibility
- **In 2018-2019**
  - role played by local public libraries in Houston, Texas
  - community members' access to information during the catastrophic hurricane and flooding in the Houston metropolitan area

# Framework

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**Public health experts recommend a framework for effective risk communication preparedness and implementation in dealing with pandemic influenza:**

- 1. Process** -use of multiple channels and technology for information distribution and services
- 2. People** -use of community-first approaches for the provision of services
- 3. Partners** -libraries' collaboration with multi-level agencies to facilitate emergency response and recovery

Vaughan, E., & Tinker, T. (2009). Effective health risk communication about pandemic influenza for vulnerable populations. *American Journal of Public Health, 99*(Suppl. 2), S324-S332.

# Methodology: Study in 2015-2016

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- **Public Libraries' Partnerships and Librarians' Operations**
  - Three focus-group meetings with public library administrators and librarians
- **Public Libraries' Partnerships with Other Agencies**
  - An in-depth interview with a Federal Emergency Management Agency (FEMA) agent

# Methodology: Study in 2017

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- **Community Members' Information Access**
- **Disaster information sources the community members used**
- **How people shared information with others (for instance, social media such as Facebook, etc.)**
  - **A survey of adult community members (18 years or older)**

**Three sets of survey questionnaires in printed and in electronic formats were used.**

# Methodology: 2018-2019

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- **Public libraries serving as community catalysts to facilitate the building of community capacity and resources for emergency response and recovery**
  - <https://www.imls.gov/sites/default/files/publications/documents/community-catalyst-report-january-2017.pdf>
  - Five focus-group meetings with Houston Public Library’s administrators and librarians
- **Community Members’ Information Access**
  - A survey of adult community members (18 years or older) in the Houston Metropolitan area in Texas
    - To be conducted

# Public Libraries' Collaborations with Multiple Organizations and Their Legitimacy as Partners of Public Health Agencies

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- **Public libraries' successful collaborations with private and public sectors, including public health agencies, show the magnitude of their involvement in facilitating emergency response and recovery before, during, and after the disasters.**
  - **Richland Library, Columbia, South Carolina**
    - FEMA established disaster centers in Richland Library Main and its branches.
  - **Georgetown County Library, Georgetown, South Carolina**
    - The Library is partnering with the Georgetown County Emergency Operations Center (EOC) and serves in the EOC's public information officer section, in its communications center, and in its documentation area.
    - *Maximize the Potential of Your Public Library:*  
[https://icma.org/sites/default/files/302161\\_MaximizeYourPublicLibrary.pdf](https://icma.org/sites/default/files/302161_MaximizeYourPublicLibrary.pdf)
  - **Charleston County Public Library, Charleston, South Carolina -- John's Island Regional Library**
    - The Library served as a satellite administrative office for the local fire department.
  - **Houston Public Library, Houston, Texas**
    - The Library system is an integral part of the city's emergency response and recovery team.



## Emergency Preparedness & Disaster Recovery Resources

[Overview](#)[Animal Health Resources](#)[Recommended Readings](#)[Library, School and Medical Association Resources](#)[What You Can Do](#)[Disaster Plan Templates/Samples](#)[Additional Materials](#)[NLM Resources](#)

To help mitigate the impact of disasters on healthcare providers and their patients, the National Network of Libraries of Medicine (NNLM) has developed and oversees an emergency preparedness and response plan to help Network members maintain their information services in the event of a disaster.

410-706-2855 is the Emergency Assistance Number and will connect you to the Southeastern/Atlantic Regional Medical Library. Call this number whenever disaster strikes and your local resources/plans are unable to keep your core services available, so we can help implement the response plan!

#E4GDH

<https://nmlm.gov/sea/guides/emergencypreprecovery>

# Emergency Preparedness & Disaster Recovery Resources

Overview Animal Health Resources Recommended Readings Library, School and Medical Association Resources

What You Can Do Disaster Plan Templates/Samples Additional Materials NLM Resources

- dPlan<sup>®</sup> is perfect for small and medium-sized institutions that do not have in-house preservation staff. dPlan is also valuable for large library systems or museum campuses that need to develop separate but related plans for multiple buildings, locations, or branches." (Northeast Document Conservation Center)

dPlan™ The Online Disaster-Planning Tool for Cultural and Civic Institutions



[Home](#)  
[Before You Begin](#)  
[Demo](#)  
[New User](#)  
[FAQ](#)  
[Contact NEDCC](#)  
[Log In](#)



dPlan was prepared by [Northeast Document Conservation Center \(NEDCC\)](#) and the [Massachusetts Board of Library Commissioners \(MBLC\)](#). The development of the template was funded by the [National Center for Preservation Technology and Training \(NCPTT\)](#) and the [Institute of Museum and Library Services \(IMLS\)](#).

## BEFORE YOU BEGIN

dPlan is a free online tool that simplifies the process of writing a disaster plan for your collections. It provides a comprehensive fill-in-the-blank template into which you enter information about your institution. dPlan generates a printed disaster plan specific to your institution.

dPlan was developed to assist non-profit organizations that hold cultural collections, such as libraries, archives, historical societies, museums, town clerk offices, and others. **We are sorry, but for-profit corporations cannot use dPlan at this time.**

dPlan was prepared by Northeast Document Conservation Center (NEDCC) and the Massachusetts Board of Library Commissioners (MBLC). The development of the template was funded by the National Center for Preservation Technology and Training (NCPTT) and the Institute of Museum and Library Services (IMLS).

### General Tips for Using dPlan

- Before signing up, explore the [Demo](#) but do not use the Demo to create your disaster plan, since that data may be overwritten by others at any time.
- Find out if anyone else in your institution has created a dPlan account before you begin, to avoid duplication of work and confusion due to multiple accounts.
- Use only one dPlan account, even if your institution has multiple buildings. You can "clone" your original plan and modify it as needed for multiple facilities.
- Start with **dPlan Lite**, which creates a "quick reference" disaster response and recovery plan.
- Plan for multiple sessions of data entry. Print and use the [Data Collection Forms](#) to collect information offline between sessions.
- Use Plan Management to give additional users access to part or all of your plan. Delegating tasks can speed up data collection and data entry.

### Creating an Account

Go to the [New User](#) page and enter the information requested. The login for your account must be a valid email address. We suggest using a general email address associated with your institution that does not change frequently. Keep a record of your login and password. Provide email addresses for the primary contact person and an alternate contact person for your dPlan account. All emails from NEDCC regarding your dPlan account will be sent to these email addresses.

dPlan™ The Online Disaster-Planning Tool for Cultural and Civic Institutions



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## New User Information

Before submitting your request for an account, make sure that no one else at your institution has created an account.

Please provide the information requested below. Create a login and password for your account and provide a name for your plan. The login for your account must be a valid email address. We suggest using a general email address associated with your institution that is unlikely to change frequently. **Keep a record of your login and password.**

Accounts are processed Monday-Friday, and approval may take up to 48 hours. After 48 hours, try logging in with your login and password. If you're unsuccessful, [contact us](#).

Once you have indicated that your plan is complete on dPlan's Check My Progress page, your institution will be contacted automatically every six months with a reminder to update the information in your plan.

See the [Before You Begin](#), [FAQ](#), and [Demo](#) sections of this site for additional information about dPlan.

## About Your Institution

Name of Institution:   
Address line 1:   
Address line 2:   
City:   
State:   
Zip:   
Type of institution:

Enter a login and password for your account, and provide a name for your plan. Remember to keep a record of your login and password, and to keep them secure. Access to the password should be limited, but not to just one person, as this increases the chance that the password will be lost or forgotten.

## Plan Name

Name for this plan:   
(limited to 50 characters)

## Plan Type

Plan Type:  In Depth:  Lite

## dPlan Administrator Login Information

Login:   
The login MUST be a valid email address.  
Login Confirmation:   
Password:   
Password Confirmation:

Upon completion of this signup process, your institution will be contacted automatically every six months with a reminder to update the information in your plan. Please provide a name, title, phone number, and email address for the primary contact person. All emails from NEDCC regarding your dPLAN account will be sent to this address and the alternate contact person.

## Contact Person

First name:   
Last name:

# Significant Technology Access:

Internet, Websites, Facebook, Twitter, YouTube, Flickr, Instagram, etc.

The Internet was predominantly used during and after the disaster.

Social media served as main channels to provide real-time information services.

On the **Richland Library's Facebook site**, the library's posts were **shared 1,386 times**, an average of 98 shares for each post. "...our [**Facebook**] posts reached a total of **109,882 people**. They had **6,200 impressions per day ...**" [Library Administrator/Librarian Subject #7 in Richland Library]

"... **on the library website**, much of that information on each location page **was updated pretty immediately after the storm occurred to let customers know that these were the impacted locations. ...**" [Library Administrator/Librarian Subject #4 in Houston Public Library]

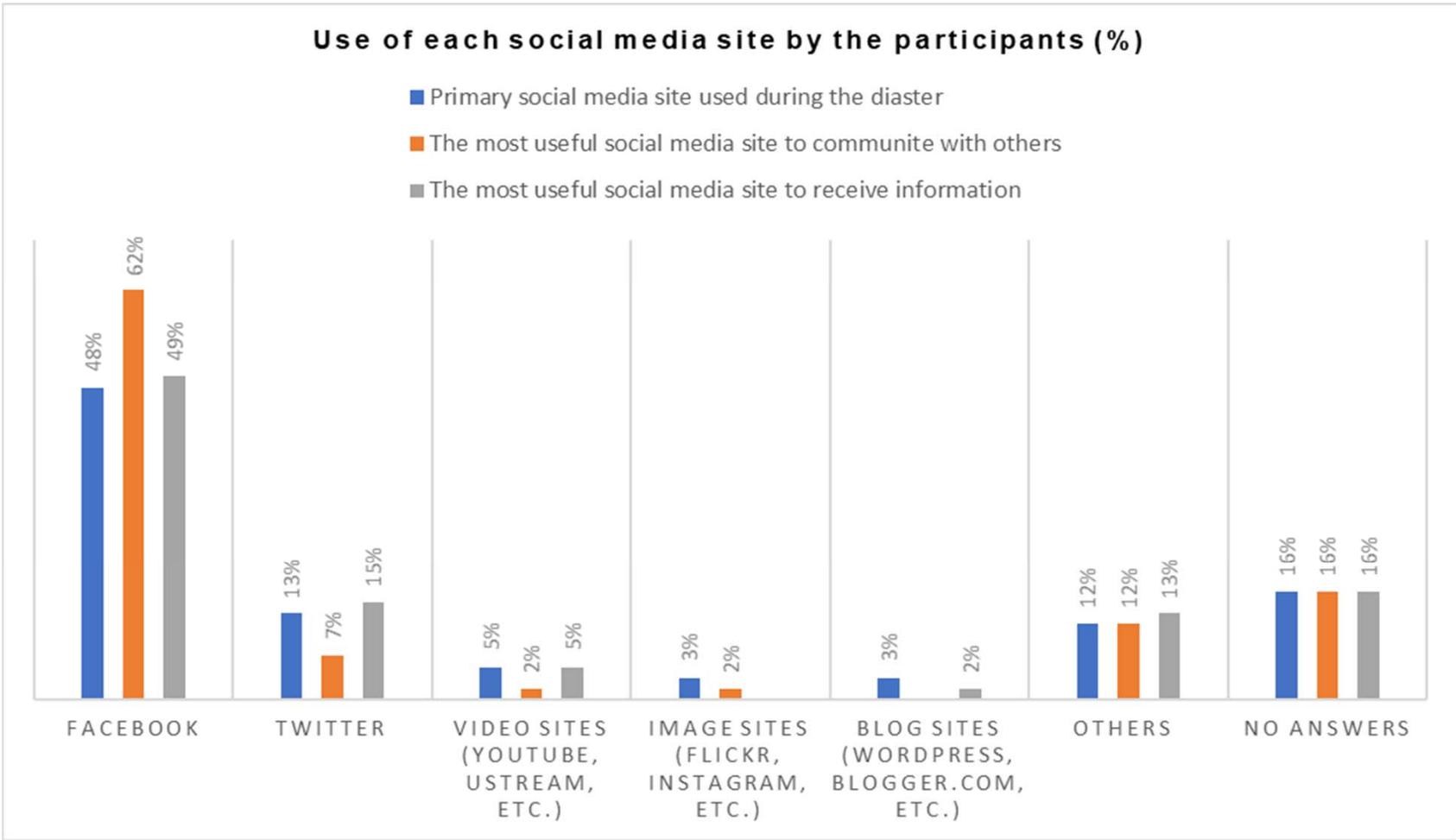
"... Our communications is very **centralized**. It really comes from the communications division [of the city of Houston] and they are the ones who did Facebook, Twitter, Instagram. All of the social media goes through them. We don't send out locally. ..."

[Library Administrator/Librarian Subject #5 in Houston Public Library]

# Community Members' Uses of Technology and Social Media

The Internet was widely used during and after the disasters.

- Use of each social media site by survey participants (%)



# Community Members' Information Access

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**The general public's lack of skill in using technology to access information is a large problem.**

“... we [FEMA agents] were able to help ... One of them, I'm really proud of because **I had to really fight to get her what she needed. Because there's always some interpretation in this stuff ... we have a thin line of helping them write appeal letters. ... I mean, if you don't know how to spell appeal, and you think that means beg- - it's a legal term-- ... you don't even have to be illiterate to be overwhelmed by our letters-- they're very hard to read. ... literacy was an issue. ...**” [FEMA Agent]

# Community Members' Uses of Creditable Sources and Preferences in Finding Information about A Disaster

Flooding Disaster in 2015		Hurricane Matthew in 2016		Disasters in Both 2015 and 2016	
Total: 61		Total: 64		Total: 20	
Male=9 (15%)	Female=42 (69%)	Male=12 (19%)	Female=47 (73%)	Male=5 (25%)	Female=14 (70%)
No Answer: 10 (16%)		No Answer: 5 (8%)		No Answer: 1 (5%)	

	Flooding Disaster in 2015	Hurricane Matthew in 2016	Disasters in Both 2015 and 2016
<b>Very easy</b>	22 (36%)	22 (43%)	<b>12 (60%)</b>
<b>Easy</b>	<b>31 (44%)</b>	<b>31 (48%)</b>	6 (30%)
Neither easy nor difficult	3 (5%)	6 (9%)	1 (5%)
Difficult		1 (2%)	1 (5%)
Very difficult			
Don't know			
No Answer	9 (15%)	1 (2%)	

Target population for survey was adult public library users. A small response rate was expected.

# Provision of Critical Information Services

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- **Public librarians were **not** fully prepared to provide sufficient essential disaster and health information for adult users online.**
  - **Not proactive in disseminating and promoting access to critical disaster information in English and other languages**
  - “... **I wish we had health sciences librarians to help with [health] information needs** ... I worked with health sciences librarians [for these purposes] before in Texas... ..” [Library Administrator/Librarian Subject #3]

# Provision of Critical Information Services

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- **Public libraries and librarians:**
  - **connect with health sciences librarians in responding to the community members' information needs**
  - **select and disseminate trustworthy digital health resources for adult users**
  - **provide health information and technology literacy training to the general public**
  - **promote the use of selected credible resources in multiple languages and services by the public libraries' websites anytime, anywhere**
  - **deliver collaborative real-time health information services via online platforms**



# Houston Public Library

Linking YOU to The World

Search Our Catalog

Search Our Website

find books, ebooks, videos & more

Search

Find It

Learn & Explore

Research

Get Involved

Home > LEARN & EXPLORE > Hurricane Preparedness



## Hurricane Preparedness



[State of Texas Emergency Assistance Registry \(STEAR\)](#)

[Disaster Assistance.gov](#)

[Find open Red Cross Shelters](#)

[FEMA Evacuee Hotel List - Listado de Hoteles de FEMA para Desalojados](#)

[National Flood Insurance Program \(NFIP\) - How Do I File My Flood Claim?](#)

### Learn & Explore

[Storytimes & Playgroups](#)

[Homework Resources](#)

[Kids Book Lists](#)

[Online Learning](#)

[Homework Resources](#)

[Career Resources](#)

[Computer Classes](#)

[Exhibits](#)

[Kids](#)

[Tweens](#)

[Teens](#)

[Library Events](#)

[Career Online High School](#)

[Book a Librarian](#)

# Required Knowledge Skills and Competencies

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- **Change management/Leadership development**
  - Collaborations with professionals from other sectors
  - Politically savvy
    - Working with local government agencies and local community members
  - Financial management
  - Planning of facilities
  - Communication and interpersonal skills
- **Community involvement/Community engagement**
- Emergency management
- Crisis communication, public relations, and public speaking
- Technology policies, applications, and management, including social media applications
- Government resources for disaster management
- Salvaging damaged collections

How library and information science education programs can do better

- Librarians' Comments:
  - **Not necessary** to cover disaster preparedness, response, and recovery in the regular coursework
  - Essential to public librarians' professional development: **continuing education (CE)**

Home > Disaster Information Specialist : Training/Education

About the Disaster  
Information Specialist  
Program

Training/Education

Webinars

Bibliography

Librarian Competencies

Outreach Awards 2011-  
2015

Stay Connected

## Training Courses for the Disaster Information Specialist Program

One of the [core competencies](#) in disaster health is to be able to “communicate effectively with others in a disaster or public health emergency, including identifying authoritative sources for information and strategies for appropriate sharing of that information.” (Source: [National Center for Disaster Medicine and Public Health](#))

This page is a collection of resources on free training and education for professionals interested in identifying, using, and sharing disaster health information.

### Continuing Education

#### MLA Disaster Information Specialization Certificate

- Basic Level
- Advanced Level

#### Basic Level Required Courses

#### Additional CE Options

#### Locating Additional Resources

### Continuing Education

Some of these courses provide continuing education credit (CE) through the Medical Library Association (MLA). If you are taking a course for MLA CE credit, please register and complete the class through our free online registration system. There is a link to the registration system on the Introduction page of each course.



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TALKING BOOK & BRAILLE CENTER ▾

SERVICES FOR LIBRARIES ▾

ABOUT THE STATE LIBRARY ▾

## Disaster Preparedness & Recovery

### Librarian's Disaster Planning and Community Resiliency Guidebook and Workbook

National Preparedness Month takes place every September and is sponsored by the Federal Emergency Management Agency (FEMA) in the US Department of Homeland Security. One goal of Homeland Security is to educate the public about how to prepare for emergencies, including natural disasters, mass casualties, biological and chemical threats, radiation emergencies, and terrorist attacks.

Would you be ready if there were an emergency? Would your library? Be prepared: assemble an emergency supply kit, make your emergency plans, stay informed, and get involved in helping your family, your library, and your community be ready for emergencies.

PrepareAthon! is a grassroots campaign by FEMA for action to increase community preparedness and resilience. With that goal in mind, the New Jersey State Library commissioned the **Librarian's Disaster Planning and Community Resiliency Guidebook** and **Workbook** to help libraries in New Jersey and across the country to be better prepared to accept the new mantle of responsibility being thrust on them as a safe haven in times of crises. First, these new resources will help make your library more resilient so that you can return to operations quickly. Second, we have provided guidance on how libraries can help speed the recovery of their community, and are key contributors to a resilient community.

For further information contact: Michele Stricker, Deputy State Librarian for Lifelong Learning at [mstricker@njstatelib.org](mailto:mstricker@njstatelib.org)

- **Librarian's Disaster Planning and Community Resiliency Guidebook** (PDF)

### SERVICES FOR LIBRARIES

New Jersey Library Construction Bond Act

Continuing Education

#### - Lifelong Learning

+ Business, Workforce Development & Technology

#### **Disaster Preparedness & Recovery**

Diversity and Literacy Services

Preservation

+ Training for Librarians

+ Youth Services

+ Library Support Services

+ Innovation & Strategic Partnerships

NJSL Office of Communications, Marketing & Outreach

+ Statewide Services

### SPOTLIGHT



# Questions? Comments?

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