**Mission**

To develop and provide access to health information resources and technology for disaster preparedness, response, and recovery.

Connect people to quality disaster health information and foster a culture of community resiliency.

St. John’s Hospital, Joplin, MO after 2011 tornado
Disaster Health Information

- Peer-reviewed scholarly literature
  - Journal articles
  - Books

- “Grey” Literature
  - Reports
  - Summaries
  - Surveillance data
  - Training materials
  - Conference proceedings
What is “Good Information”?

The “CRAP” test:

* **Currency** -
  – How recent is the information?
  – How recently has the website been updated?
  – Is it current enough for your topic?

* **Reliability**
  – What kind of information is included in the resource?
  – Is content of the resource primarily opinion? Is it balanced?
  – Does the creator provide references or sources for data or quotations?

* **Authority** -
  – Who is the creator or author?
  – What are the credentials?
  – Who is the publisher or sponsor?
  – Are they reputable?
  – What is the publisher's interest (if any) in this information?
  – Are there advertisements?

* **Purpose/Point of View** -
  – Is this fact or opinion?
  – Is it biased?
  – Is the creator/author trying to sell you something?
NLM Selection Guidelines

• Authoritative and Credible Source
• Relatively Current
• No Point of View/No Advertisements
• Audience Appropriate
• Accessible and Available
• Language Appropriate
Disaster Workforce
DIMRC Web Site

Information Tool Kit

- NLM/DIMRC Topic Pages
- Disaster Lit
- PubMed
- Hazmat Tools
- Disaster Apps
- MedlinePlus
- Social Media
- Information Specialists/Librarians!
Topic Page: Example

- Information resources selected from many types of government, private, NGO, international sources

- Focus is on professional level resources not consumer
Disaster Lit:
The Resource Guide for Disaster Medicine and Public Health

- Grey Literature
  - Training
  - Guidelines
  - Planning docs
  - Reports
- Enter search term or phrase

Disaster Lit: the Resource Guide for Disaster Medicine and Public Health is a database of links to disaster medicine and public health documents available on the Internet at no cost. Documents include expert guidelines, research reports, conference proceedings, training classes, fact sheets, websites, databases, and similar materials selected from over 700 organizations for a professional audience. Materials selected are from non-commercial publishing sources and supplement disaster-related resources from PubMed (biomedical journal literature) and MedlinePlus (health information for the public).
Disaster Lit

- Six resources on community reception centers
- Limit by source, publication type, year, author
- Link to document
• American Journal of Disaster Medicine
• Biosecurity and Bioterrorism: Biodefense Strategy, Practice and Science
• Disaster Medicine and Public Health Preparedness
• Disasters
• Disaster Management and Response (2003-2007)
• Journal of Business Continuity and Emergency Planning
• Journal of Special Operations Medicine
• PLOS Currents (includes Disaster section)
• Prehospital and Disaster Medicine
• Risk Analysis
• Western Pacific Surveillance and Response Journal
• Wilderness and Environmental Medicine
Free Full-Text in PubMed

Display Settings: Summary, 20 per page, Sorted by Recently Added

Results: 1 to 20 of 27

Filters activated: Free full text available. Clear all to show 68 items.

1. Post-sandy preparedness policies lag as sea levels rise.
   Knowlton K, Rotton-Ellman M, Sheffield P.

2. The long road to recovery: environmental health impacts of Hurricane Sandy
   Manuel J.

3. Respiratory health effects associated with restoration work in post-Hurricane Katrina New Orleans
   Randol RJ, Lefante JJ, Freyder LM, Jones RN.

4. The Head-off Environmental Asthma in Louisiana (HEAL) study—methods and study population

New feature
Try the new Display Settings option - Sort by Relevance

Titles with your search terms

Mold exposure and health effects following hurricanes Katrina [Annu Rev Public Health. 2010]
Disaster preparedness: occupational and environmental health profiss [AAOHN J. 2007]
Mold prevention strategies and possible health effects in the aftermath [MMWR Recomm Rep. 2006]

See more...

21 free full-text articles in PubMed Central

Post sandy preparedness policies lag as sea levels rise
The long road to recovery: environmental health impacts of Hurricane Sandy
Respiratory health effects associated with restoration work in post-Hurricane Katrina New Orleans

See all (21)
Free Full-text: PubReader Format

Public Talks and Science Listens: A Community-Based Participatory Approach to Characterizing Environmental Health Risk Perceptions and Assessing Recovery Needs in the Wake of Hurricanes Katrina and Rita

J. Sullivan, B. Parras, [..], and P. Diamond

Abstract

In response to the human health threats stemming from Hurricanes Katrina and Rita, inter-disciplinary working groups representing P30-funded Centers of the National Institute Environmental Health Science (NIHES) assess threats posed by chemical toxicants, including those from selected sites throughout the United States. Because of proximities to the Louisiana State University Medical Center in Environmental Health Sciences, the NIHES coordinators and partners, primarily in south Louisiana, utilized the resources of the University of Texas Medical Branch/NIHES Center for Cancer and Environmental Disease Prevention and Control Education Core, in coordination with NIHES coordinators and partners at The University of Southern Mississippi, Cancer Center @ St. Jude Medical Research Center, and the University of Louisiana. One group of volunteers delivered humanitarian supplies, while a second group, ranging from Tangipahoa Parish to Orleans Parish, delivered additional supplies. The primary research focus was on Chalmette, rural Terrebonne Parish, and uptown New Orleans. The study utilized a mixed-methods design, including surveys, interviews, and focus groups with diverse stakeholders. The study aimed to understand the community's environmental health concerns and recovery needs, with a particular focus on exposure to toxicants. The results highlighted the importance of collaboration between academic and community partners to address environmental health issues effectively. The study also emphasized the need for continued monitoring and support in the affected areas to ensure long-term recovery.
Free Biomedical Literature Resources

Free Articles via PubMed

Search citations to biomedical and life sciences articles dating from the 1950s to the present at http://pubmed.gov.

- Free full-text articles are available for selected PubMed citations. See a description of PubMed icons that indicate free text is available.
- See these instructions to restrict your PubMed search results to free articles.
- To search for free articles in PubMed by journal title, see this list of journals that provide some freely available full text via PubMed. Click on the links for a journal by year to search PubMed for free full text articles for the year and journal selected. For more information about the LinkOut program, see: http://www.ncbi.nlm.nih.gov/entrez/linkout/doc/linkout.html

PubMed Central (PMC)

PubMed Central is a growing digital archive of free biomedical and life sciences journal literature developed by NLM. To access free full-text articles, go to http://pubmedcentral.gov.

NCBI Bookshelf

The Bookshelf is a growing collection of biomedical books that can be searched and read online.

Other Resources

- Open access journals are available from the following sources:
  - Public Library of Science
  - BioMed Central
  - Directory of Open Access Journals (See "Health Sciences")

See more information on Open Access.
- Highwire Press has an archive of free full-text science articles.
- Your local medical library can also provide assistance with identifying and locating useful information free of charge.

Hazmat/CBRN Tools

- Wireless Information System for Emergency Responders (WISER)
- Chemical Hazards Emergency Medical Management (CHEMM)
- Radiation Emergency Medical Management (REMM)
What is in WISER?
Wireless Information System for Emergency Responders

- Data on 400+ chemicals, 20+ radiologic agents, and CDC Category A biologic agents
- Tools and reference materials
- Triage algorithms, ERG 2012, WMD Response Guidebook

Information about Substances

**Known**

- Chlorinated Camphene
- Toxaphene
- Chlorindan
- Chlordane
- Chlorine
- Chlorine Dioxide
- Chlorine Fluoride
- Chlorine Trifluoride
- Chlorine Fluoride (Cl2...)
- Chlorine Trifluoride
- Chlorine Fluoride (ClF3)

**Unknown**

- WISER Help Identify
- Search for chemicals
- Select criteria for your search
- Properties
- Symptoms
- Categories
- NFPA
- Transport
- Results
- 160 of 438 chemicals
- 438 of 438 chemicals

Body Temp
Skin

U.S. National Library of Medicine
Ammonia – Medical Info

Outline Info
- Treatment
- Health Effects
- AEGL
- IDLH
- Threshold Limits
- NIOSH Recommend.
- OSHA Standards
- Skin/Eye/Resp. Irrit.
- Preventive Measures

Treatment
Ammonia (alias of Ammonia, Anhydrous)
CAS RN: 7664-41-7

0.4.2 ORAL EXPOSURE
A) MANAGEMENT OF MILD TO MODERATE ORAL TOXICITY
   1) Perform early (within 12 hours) endoscopy in patients with stridor, drooling, vomiting, significant oral burns, difficulty swallowing or abdominal pain, and in all patients with deliberate ingestion. If burns are absent or grade I severity, patient may be discharged when

Acute Care (CHEMM)
- Acute Management
- Hot Zone
- Decontamination Zone
- Support Zone

Clinical Signs/Symptoms (CHEMM)
- Ammonia (alias of Ammonia, Anhydrous)
  CAS RN: 7664-41-7

Clinical Symptoms
- Respiratory - the extent of injury produced by exposure to ammonia depends on the duration of the exposure, the concentration of the gas, and the depth of inhalation. Even fairly low airborne concentrations (50 ppm)
CHEMM
Chemical Hazards Emergency Medical Management

• Tool for *mass casualty* chemical events

• Scope:
  • Training
  • Planning
  • Response during event

Accessing CHEMM:
• Download to PC/laptop
• Web version
REMM
Radiation Emergency Medical Management

- Radiation principles (e.g., exposure vs. contamination)
- Patient management algorithms
- Initial onsite activities
- Decontamination procedures
- Assess internal contamination
- Countermeasures

Access to REMM:
- Download to Windows and Mac
- Mobile REMM
  - Android
  - iPhone®
  - BlackBerry®
  - Windows Mobile®
- Web version
  http://www.remm.nlm.gov
Disaster Apps: Digital Go-Bag

- Internet can be unreliable in emergencies
- Information portability
- Space saver; nearly unlimited capacity
- Information literally at your fingertips
Types of Apps

- What’s the difference?
  - Stand-alone/Native
  - Mobile-optimized Website
  - Hybrid
Types of Apps

• What’s the difference?
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The need for connectivity!
Disaster Apps & Mobile Optimized Web Pages

Page adjusts for web, tablet, or smartphone

http://disaster.nlm.nih.gov/apps
Hurricane Apps

National Weather Service
National Hurricane Center
Last update:
Thu, 21 Feb 2013 17:36:33 UTC

Atlantic-Carib-Gulf Mex
The Atlantic hurricane season runs from June 1st through November 30th.

East Pacific
The East Pacific hurricane season runs from May 15th through November 30th.

Tropical Weather Discussion
Atlantic
105 PM EST THU FEB 21 2013
Organizing your Apps
For Consumers: MedlinePlus

- Consumer-oriented materials
- Carefully selected links
- 17 topic pages related to disaster content
Partners in Information Access for Public Health Workforce

Collaboration of U.S. government agencies, public health organizations, and health sciences libraries which provides timely, convenient access to selected public health resources on the Internet.

http://phpartners.org
Social Media

• Communication
• Situational awareness

Information is a Two-Way Street
Getting Help With Information Needs

Information specialists and libraries are service-oriented, community-based resources.
Working with Libraries

- Supporting Incident Command Centers
- Participating in call centers taking questions from the public
- Developing FAQs for local emergency preparedness and response and making them easy to locate
- Monitoring social media and authenticating information for situational awareness
- Aggregating and compiling information to support public health decision-making

[Images of a smartphone app, people at an event, and a computer screen with a public health interface]
Disaster Health Information Outreach and Collaboration Projects

• Collaborations between disaster/emergency organizations and libraries for improving access to disaster medicine and public health information for the disaster health workforce

• One year: $15,000 – $30,000

• 17 projects funded over past three years

Connecting with Information Specialists

- DISASTR-OUTREACH-LIB listserv; 1000+ subscribers
  http://disasterinfo.nlm.nih.gov/list
- Monthly webinars that are open to all
- Follow us on Twitter: @NLM_DIMRC
- Training classes
- Funding opportunities
Regional Medical Libraries

- **Region 1**: Delaware, New Jersey, New York, Pennsylvania
- **Region 2**: Alabama, Florida, Georgia, Maryland, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia, District of Columbia, Puerto Rico, U.S. Virgin Islands
- **Region 3**: Iowa, Illinois, Indiana, Kentucky, Michigan, Minnesota, North Dakota, Ohio, South Dakota, Wisconsin
- **Region 4**: Colorado, Kansas, Missouri, Nebraska, Utah, Wyoming
- **Region 5**: Arkansas, Louisiana, New Mexico, Oklahoma, Texas
- **Region 6**: Alaska, Idaho, Montana, Oregon, Washington
- **Region 7**: Arizona, California, Hawaii, Nevada and the U.S. Territories in the Pacific Basin
- **Region 8**: Connecticut, Massachusetts, Maine, New Hampshire, Rhode Island, Vermont

1-800-338-7657
Thank you!

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Disaster Information Management Research Center
Specialized Information Services
U.S. National Library of Medicine