

# #2055

## Poster Board Number 112

### ABSTRACT

Chemical Hazards Emergency Medical Management (CHEMM) is an online and downloadable interactive tool. It is designed to enable first responders, first receivers, other healthcare providers, and planners to plan for, respond to, recover from, and mitigate the effects of mass-casualty incidents involving chemicals. Content has been developed via NLM staff, CHEMM contractors, and Federal government and non-Federal government subject matter experts (SMEs). CHEMM includes chemical-specific, acute patient care guidelines for pre-hospital and emergency department/hospital management for exposures to selected groups of chemicals. The information is divided into sections for response in the Hot Zone, Decontamination Zone, and Support Zone/Treatment Area, and each chemical page includes chemical specific information on substance identification, rescuer protection, triage, pediatric/geriatric/obstetric vulnerabilities, clinical symptoms, antidotes, and more.

### BACKGROUND INFORMATION

The mission of the (U.S.) National Library of Medicine (NLM) is to collect, organize, preserve, and disseminate health-related information. NLM's efforts to assist first responders and others include three tools for emergency response that are provided free to users. These tools in NLM's "disaster-response triad" include WISER (Wireless Information System for Emergency Responders), REMM (Radiation Emergency Medical Management), and CHEMM (Chemical Hazards Emergency Medical Management).

WISER, REMM, and CHEMM are designed to be easy to use, intuitive, and able to provide accurate, trustworthy information when and where it is needed, e.g., on-site for first responders at an emergency. WISER's focus is to assist first responders in hazardous material incidents involving chemicals, while REMM and CHEMM enable first responders, first receivers, and other healthcare providers to plan for, respond to, recover from, and mitigate the effects of mass-casualty radiation and chemical incidents, respectively. Each tool includes extensive educational and training resources.

### NLM's Challenges

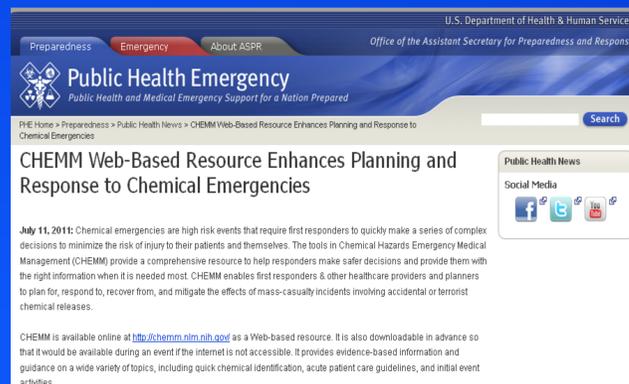
- Need to compile authoritative, trustworthy information
- Information needs to meet the needs of the users
- Users need to have access when and where they need it
- Users need easy access, e.g., during emergencies
- Information evolves
- Ways to deliver and access the information evolve

# Chemical Hazards Emergency Medical Management (CHEMM): Chemical Specific Acute Patient Care Guidelines for Pre-hospital and Emergency Department/Hospital Management

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### Introduction of A Key Component: Medical Management Content

- Detailed step-by-step medical management guidelines for first responders at the scene and providers in the hospital including the emergency department and intensive care
- Guidelines for children, pregnant women, and elderly patients
- Extensive input from physicians and other experts



### CHEMM – Overarching Goals

Provide a comprehensive, user-friendly resource that will enable first responders, first receivers, other healthcare providers, and planners to plan for, respond to, recover from, and mitigate the effects of a mass-casualty incident involving chemicals

Be available on the Internet and also for download so that it can be used in an emergency even without an Internet connection

Scope – to be used for:

- Training
- Planning
- Response at time of an emergency

### Role-based Navigation and Key Features



<http://chemm.nlm.nih.gov/>

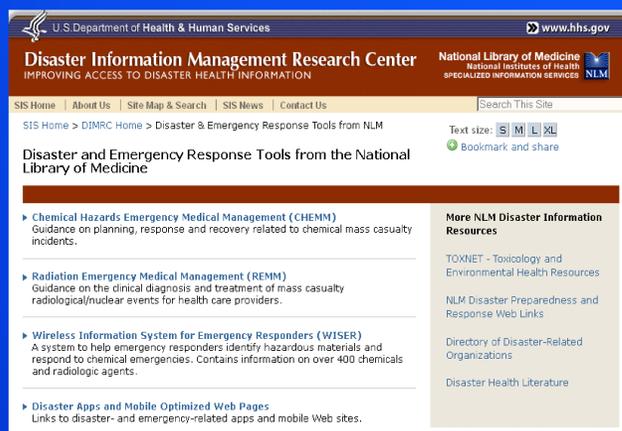


The first version of CHEMM was released in mid-2011. Recent efforts include work to add over 50 new chemicals and over 20 chemical countermeasures and supportive agents. These will be added later in 2013 after further expert review.

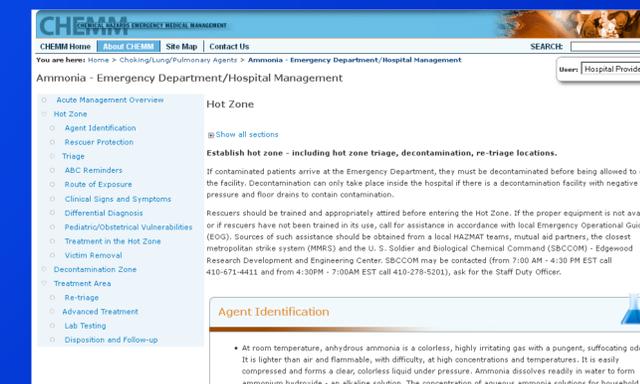
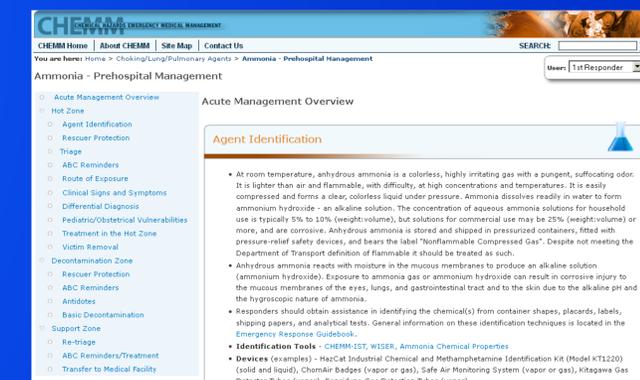
NLM's efforts to provide easy access to this information include the development of downloadable and Web-based versions of WISER, REMM, and CHEMM, and the development of WISER and REMM apps for iPhone, BlackBerry, and Android smartphones. Apps for WISER will soon be including access to CHEMM content. [CHEMM and REMM are the result of collaborative efforts between the U.S. Department of Health and Human Services, Office of the Assistant Secretary for Preparedness and Response (ASPR) - Office of Preparedness and Emergency Operations (OPEO) and NLM's Division of Specialized Information Services (NLM SIS). The addition of more chemicals and the chemical countermeasures and supportive agents to CHEMM is being done with funding from the NIH CounterACT program [http://www.ninds.nih.gov/research/counterterrorism/counterACT\\_home.htm](http://www.ninds.nih.gov/research/counterterrorism/counterACT_home.htm).)

### NLM Disaster and Emergency Response Tools

Wireless Information System for Emergency Responders (WISER) --- released about nine years ago  
 Chemical Hazards Emergency Medical Management (CHEMM) --- released in mid-2011  
 Radiation Emergency Medical Management (REMM) --- released about five years ago



<http://disasterinfo.nlm.nih.gov/>



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