NLM HAZMAT-RELATED INFORMATION RESOURCES

CHEMM – Chemical Hazards Emergency Medical Management - chemm.nlm.nih.gov
Provides a comprehensive, user-friendly resource for 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. Now included in WISER!

Guidance for health care providers, primarily physicians, about clinical diagnosis and treatment during mass casualty radiological/nuclear events

TOXNET - Toxicology Data Network - toxnet.nlm.nih.gov
Databases on hazardous chemicals, environmental health, and toxic releases, including:

   Comprehensive, peer-reviewed toxicological data and other information for over 6,000 chemicals

ChemIDplus - chem.nlm.nih.gov/chemidplus/
Dictionary of almost 400,000 chemicals (names, synonyms, structures); includes links to NLM databases and other resources

Haz-Map - hazmap.nlm.nih.gov
Links jobs and hazardous agents with occupational diseases and their symptoms

CTD - Comparative Toxicogenomics Database - toxnet.nlm.nih.gov/newtoxnet/ctd.htm
Access to extensive data describing cross-species chemical-gene/protein interactions, chemical- and gene-disease relationships, and exposures

TOXMAP - toxmap.nlm.nih.gov
Geographic representation of U.S. Environmental Protection Agency’s Toxics Release Inventory (TRI) and Superfund Program data and other data sets, with links to other TOXNET resources

NLM’S CONSUMER AND OUTREACH INFORMATION RESOURCES

MedlinePlus - medlineplus.gov
Consumer health resource with links to information for over 900 health topics including environmental health issues

A self-paced tutorial covering the key principles of toxicology, with the content similar to what is taught in university programs

Tox Town - toxtown.nlm.nih.gov
Interactive guide to potentially toxic substances and environmental health issues in everyday places

Household Products Database - householdproducts.nlm.nih.gov
Potential health effects of chemicals for over 13,000 common household products

**WISER (Wireless Information System for Emergency Responders)** is a mobile application designed to assist first responders in hazardous material incidents. Standalone versions are currently available for the Microsoft Windows™, iOS, and Android platforms. A web-based version (WebWISER) supports web browsers for PCs and mobile devices. Developed by the National Library of Medicine (NLM), WISER provides a wide range of information on hazardous substances, including chemical identification support, physical characteristics, and human health, containment, and suppression information. In addition to chemicals, WISER now includes radioisotopes and biological agents.

**WISER: Information from Authoritative Sources**

First responders in general, and HAZMAT units in particular, must make many decisions quickly in handling hazardous materials incidents. They need accurate information about the hazardous substances, the emergency resources available, and the surrounding environmental conditions to save lives and minimize the impact on the environment and physical property. The WISER application extracts content from the Hazardous Substances Data Bank (HSDB) and the Chemical Hazards Emergency Medical Management (CHEMM) website - authoritative, peer-reviewed resources maintained by NLM.

**Substance ID Support**

A key feature of WISER is support for identifying unknown chemicals. WISER helps identify and validate an unknown chemical based on physical properties of the substance gathered by observation or sensors, signs/symptoms of victims of exposure, transportation placard/container, and more.

**Features of WISER**

- **Rapid access to the most important information** about a hazardous substance
- **Mobile support**, providing first responders critical information where they need it, when they need it
- **Intuitive, simple, logical user interface** developed by working with experienced first responders
- **Comprehensive decision support**, including assistance in identification of an unknown chemical or chemical syndrome and guidance on the immediate actions necessary to save lives and protect the environment
- **GIS support** provides for isolation/protective distance overlays on a map of the incident
- **Access to NLM’s Hazardous Substances Data Bank (HSDB) and Chemical Hazards Emergency Medical Management (CHEMM) content**, which contains a wealth of detailed, peer-reviewed information on hazardous substances
- **User Profiles** enable users to specify the role they are currently playing at the scene of an incident: first responder, HAZMAT specialist, EMS specialist, hospital provider, or preparedness planner. The application interface is customized so that so that the information most relevant to the respective job can be quickly accessed.
- **Tools and reference materials**, including the seven toxic syndromes (toxidromes) in the CHEMM Intelligent Syndromes Tool (CHEMM-IST 2.0), triage tools, radiological incident support, WMD response guidelines, and an electronic version of the **ERG 2016**

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