



Emergency Preparedness Resources for Pharmacists

This document provides guidance for pharmacists interested in exploring opportunities in emergency preparedness. It includes a compilation of Web sites, articles, online training and general recommendations to assist the committed pharmacist in independently navigating some of the various resources available and achieve their goals of becoming more knowledgeable, competent and better prepared to play a contributory role when called upon in an emergency situation.

Completion of some or all of the listed articles and training courses will provide a good baseline of understanding of emergency preparedness and the various roles a pharmacist can play in a successful response effort. In addition to these educational opportunities, it is strongly recommended that you complete the Incident Command Systems (ICS) 100 and 200 level trainings and register as a pharmacist on the MI Volunteer Registry.

A strong pharmacy presence on the MI Volunteer Registry is an added indication that pharmacists are interested in being part of the plan, and therefore an integral part of the solution in the event that a crisis occurs. Registration on this site also ensures that when an exercise is being planned in your community, event planners have a mechanism to reach out to you and other interested pharmacists for assistance in the planning and implementation of the exercise.

Knowledge of the ICS precepts will help ensure that you will be more seamlessly integrated into that response effort when it's initiated. It is the command and control language used by all response agencies today, and we need to become more familiar with the structure and nomenclature of the ICS in order to become a contributing partner in emergency response efforts.

1. Online Educational Programming Opportunities

Complete these self-study programs at your convenience. They will help you gain an understanding of the many types of crisis events that must be planned for, and the role that you as a pharmacist will play.

- <http://www.cdc.gov/Learning/>
- Hospitals, Treatment Centers, and Public Health: Partners in Emergency Planning and Response
 - Mass Antibiotic Dispensing: Alternate Methods
 - Mass Antibiotic Dispensing: Taking Care of Business
 - Mass Antibiotic Dispensing: Taking the Guesswork out of POD Design

- <http://library.scahec.net/>

The Resource Center for Bioterrorism Training and Curriculum Development Program serves as a functional repository that is available to the public for educational materials on disaster preparedness.

- <http://ynhhs.emergencyeducation.org/>

The Yale New Haven Center for Emergency Preparedness and Disaster Response offers a series of online courses on emergency preparedness topics for hospital, healthcare and public health workers

- mi.train.org (must register on this site to access programs)
 - Introduction to the Strategic National Stockpile (SNS) for Volunteers (Course ID # 1018091)
- nccphp.sph.unc.edu/training/index.php
This is the North Carolina Center for Public Health Preparedness Training Web site. You can register and observe programs on chemical events, biological events and radiological events.
- www.pharmacistsletter.com
This site requires a membership subscription. There are three programs available through this Web site that offer continuing education credit if that part of the subscription is active. Access the programs via search code 260610
 - Disaster Preparedness Part 1: Are you Ready?
 - Disaster Preparedness Part 2: Mass Vaccination
 - Disaster Preparedness Part 3: Mass Dispensing

2. Incident Command Systems (ICS) Training

Knowledge of the precepts of incident command is essential to any person involved in disaster response. This organized approach to response allows all responders to work under pre-established guidelines of command and communication that help ensure an organized and successful response effort. These programs are free, and can be completed through the following Federal Emergency Management Agency (FEMA) Independent study Web site addresses:

- <http://training.fema.gov/EMIWeb/IS/is100HCb.asp>
- <http://training.fema.gov/EMIWeb/IS/is200HCa.asp>
- <http://training.fema.gov/EMIWeb/IS/is700.asp>

The first two programs listed are specifically designed for health care institutions. ICS 700 is an introduction to the *National Incident Management System* (NIMS). Following successful completion of each program, a certificate can be printed and saved to show successful completion of these programs.



3. **Basic Disaster Life Support (BDLS) Training (www.ndlsf.org)**



This is a comprehensive, nationally-standardized family of all-hazards training programs developed by the National Disaster Life Support Foundation (NDLSF) consortium of academic, state and federal centers. This is an eight-hour didactic course designed to develop commonality of approach and language to improve the care and coordination of response in Weapon of Mass Destruction (WMD) disasters and public health emergencies. Programming is offered by the various bio-defense regional organizations at various times during the year. Access to your regional contact can be provided by your MPA Emergency Preparedness Coordinator.

4. **MIVolunteerRegistry.org**



- Advance registration by health care providers on this site allows emergency authorities access to qualified and credentialed personnel that may be needed in the event of an emergency.
- Registration on this site does not obligate you to respond during an emergency.
- Registration on this site allows planners to offer you a chance to participate in drills and exercises within your own community so that you have an opportunity to learn experientially what your role may be in the event of an emergency.
- <https://www.mivolunteerregistry.org>

5. **Pandemic Flu Planning Web Sites**

- Centers for Disease Control and Prevention (CDC): www.cdc.gov/flu
- Immunization Action Coalition (IAC): www.immunize.org.
 - Subscribe for access to online newsletters with timely vaccination information, including influenza vaccine issues.
- Michigan Department of Community Health (MDCH): www.michigan.gov/flu
- U.S. Department of Health and Human Services (HHS): www.pandemicflu.gov

6. **General Web Sites of Interest**

- Johns Hopkins Bloomberg School of Public Health
 - <http://www.jhsph.edu/preparedness/training/online/index.html>

- Online training courses for chemical, biological, radiological or nuclear terror events
- Agency for Healthcare Research and Quality: <http://archive.ahrq.gov/prep/>
 - i. Sign up to receive Emergency Preparedness e-mail updates. This site also list several documents of interest:
 - ii. Altered Standards of Care in Mass Casualty Events
 - iii. Community-Based Mass Prophylaxis: A Planning Guide for Public Health Preparedness
 - iv. Mass Medical Care with Scare Resources: The Essentials
- Centers for Disease Control and Prevention: www.bt.cdc.gov. This site lists all possible agents and CDC response recommendations. This should be the first site you always access, and it strongly recommended you become familiar with the navigation of this site.
- CDC Morbidity and Mortality Weekly Report (MMWR): www.cdc.gov/mmwr/about.html. Sign up to receive e-mail updates from MMWR, which includes yearly influenza recommendations as well as many other resources as listed.
- University of Pittsburgh Medical Center (UPMC) Center for Biosecurity: www.upmc-biosecurity.org. This site sends daily articles via e-mail that provide good current bioterrorism information, links to other sites of interest, etc.
- Northwest Public Health Emergency Preparedness resources: www.nwpublichealth.org/web-specials/emergency-preparedness.
- Radiation Emergency Medical Management. <http://www.remm.nlm.gov> Goals of the site are:
 - i. Provide guidance for health care providers, *primarily physicians*, about clinical diagnosis and treatment of radiation injury during radiological and nuclear emergencies
 - ii. Provide just-in-time, evidence-based, usable information with sufficient background and context to make complex issues understandable to those *without* formal radiation medicine expertise
 - iii. Provide web-based information that is also downloadable in advance, so that it would be available during an event if the internet is not accessible
- Chemical Hazards Emergency Medical Management:
 - i. <http://chemm.nlm.nih.gov/index.html>

7. Articles of Interest

- *Closing the Seams*
 - Describes an integrated approach to health-system disaster preparedness.
 - PricewaterhouseCoopers' Health Research Institute, 2007. Available at: www.pwc.com/us/en/healthcare/publications/closing-the-seams.jhtml (online registration required for free access).

- *The Copper Book*
 - Describes the Modular Emergency Medical System (MEMS). This is the system adopted by the state of Michigan to allow our health-systems to expand their ability to respond during a crisis event when they have reached surge capacity and beyond.
 - MEMS: Expanding Local Healthcare Structure in a Mass Casualty Terrorism Incident, 2002. Available at: www.accem.org/pdf/mems_copper_book.pdf
- *Emergency Preparedness in Health-System Pharmacies*
 - Continuing education (CE) article that describes the different types of emergencies, the role of pharmacy in emergency preparedness and the importance of practice drills (CE available until Sept. 1, 2010).
 - Bardas SL, Cooper E, Vongspanich A. *CJHP*, Sept/Oct 2007. Available at: www.cshp.org/index.php/cjhp-ce.
- *JAMA series*

The Working Group on Civilian Biodefense has developed several consensus-based recommendations for measures to be taken by medical and public health professionals if any CDC category A biologic agents listed below are used against a civilian population:

 - Anthrax as a biological weapon (Inglesby TV et al. *JAMA*. 2002;287:2236-52).
 - Botulinum toxin as a biological weapon (Arnon SS et al. *JAMA*. 2001;285:1059-70).
 - Hemorrhagic fever viruses as a biologic weapon (Borio L et al. *JAMA*. 2002;287:2391-405).
 - Plague as a biological weapon (Inglesby TV et al. *JAMA*. 2000;283:2281-90).
 - Smallpox as a biological weapon (Henderson DA et al. *JAMA*. 1999;281:2127-37).
 - Tularemia as a biological weapon (Dennis DT et al. *JAMA*. 2001;285:2763-73).

8. Reference Books

- *PDR Guide to Terrorism Response* (Montvale, NJ: Thomson PDR; 2005).
 - This is a good comprehensive reference with sections covering biologic agents, chemical agents, radiological incidents and medical management.
- *Biological and Chemical Terrorism* (Krenzelok E. Bethesda, MD: American Society of Health-System Pharmacists; 2003).
 - This book contains many informative articles, including the *JAMA* articles listed above.

9. Experience

Nothing will teach you the value and expertise that you will bring as a pharmacist in response to a crisis event like participation in an exercise or drill. Make every effort to attend and participate in any exercise opportunity that is offered to you. This will not only help guide you in your preparedness training, but will allow you to build contacts and develop relationships with other decision makers.

If you are employed by a hospital or health care system in the state of Michigan, volunteer to attend meetings of your Regional Bio-defense Network Hospital Pharmacy Workgroup. This is the group that works at a regional level to develop and maintain pharmaceutical caches, and other pharmacy-related emergency preparedness plans.

For questions, please contact:

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