

Disaster Preparedness White Paper
for Community/Public Health Nursing Educators

Prepared by

Association of Community Health Nursing Educators (ACHNE)

Task Force on Disaster Preparedness

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FORWARD

The Association of Community Health Nursing Educators (ACHNE) has developed a number of documents designed to delineate the scope and function of community/public health nursing educators, researchers, and practitioners.

In response to societal issues, increased emphasis on disaster preparedness in nursing and public health, and requests from partner organizations to contribute to curriculum development endeavors regarding disaster preparedness, the ACHNE Disaster Preparedness Task Force was appointed in spring 2007 for the purpose of developing this document. Task Force members developed an earlier draft of the document in summer and fall 2007, input was solicited and received from ACHNE members in fall 2007, and the document was approved and published in January 2008.

The members of ACHNE extend their appreciation to the members of the Emergency Preparedness Task Force for their efforts: Pam Frable, ND, RN; Sandra Kuntz, PhD, CNS-BC (Chair); Kristine Qureshi, DNSc, CEN, RN; Linda Strong, EdD, RN.

This white paper is aimed at meeting the needs of community/public health nursing educators and clarifying issues for the nursing and public health communities. ACHNE is committed to promotion of the public's health through ensuring leadership and excellence in community and public health nursing education, research, and practice.

Derryl Block, President 2006-2008
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Preface

Responding to sudden and emerging health threats from natural, intentional, or technological disasters challenges all nurses including those in the community/public health sector. The Association of Community Health Nursing Educators (ACHNE), guided by its mission “to promote the public’s health by ensuring leadership and excellence in community and public health nursing education, research, and practice” (Association of Community Health Nursing Educators, 2007), convened a Task Force in Spring 2007 to: (a) identify the leadership role of community/public health nursing educators in disaster preparedness education and (b) suggest possible essential elements for disaster preparedness in undergraduate nursing curricula in the United States (U.S.). Because community/public health nursing courses are delivered to undergraduate students in a variety of formats throughout the country, the Task Force, in addition to addressing the two ACHNE directives, has developed an *Annotated Resource Guide* (see Appendix A) to assist faculty and others locate pertinent disaster curricular resources.

Introduction/Background

Community/public health nurses (C/PHNs) support the mission of public health to carry out, “society’s interest in assuring conditions in which people can be healthy” (Institute of Medicine, 1988, p. 7). This focus targets populations and communities and includes “respond(ing) to disasters and assist(ing) communities in recovery” (Public Health Functions Steering Committee, 1994). Although the disaster objective has received increased attention following the events of September 2001, C/PHNs have historically played a critical role in disaster response activities in the community (American Red Cross, 2007a; Dock & Pickett, 1922). In addition, C/PHN educators have long provided disaster education to all levels of nurses including students (undergraduate and graduate) and professional nurses in population-focused public health nursing practice.

Although all nurses worldwide should possess basic competencies for responding to a disaster (International Nursing Coalition for Mass Casualty Education [INCMCE], 2003), C/PHNs should additionally be grounded in emergency preparedness competencies for public health workers (Columbia University School of Nursing, Center for Disease Control and Prevention, & Association of Teachers of Preventive Medicine, 2002) and public health nurses (Polivka et al., 2008; Stanley, 2005). Public health nurse educators and advanced practice community/public health clinical nurse specialists along with their practice partners are uniquely positioned to collaborate with leaders of the community to develop and implement systems level preparedness and response plans for populations--before, during, and after an event (Association of State and Territorial Directors of Nursing, 2007; National Organization of Nurse Practitioner Faculties, 2007).

Emergent events including sudden mass casualty incidents, unfolding infectious disease outbreaks, or evolving environmental disasters require interdisciplinary response skills of all health care providers throughout the community (Gebbie & Qureshi, 2006). A full and timely

response depends on a competent workforce prepared for both acute and mass casualty needs of the impacted population as well as the long term needs of the community (Weiner, 2006). Preparing the coming workforce to function safely, effectively, and with a commitment to contribute to a disaster response at a future worksite or as a volunteer requires both curricular planning, faculty leadership, and role modeling.

Five Assumptions Regarding the Leadership Role of C/PHN Educators in Disaster Preparedness Education

Assumption 1: Disaster preparedness requires an organized, multi-sector approach.

Disaster preparedness is comprised of knowledge, skills, and values that are situated in the universal commitment of nursing as a *united* profession, to provide illness care, disease and disability prevention, and health promotion to individuals, families, and communities. The contribution and leadership role of C/PHN educators is derived from the public health core functions and essential public health services including (a) assessment of community assets and needs; (b) assurance of competent entry-level practitioners prepared for basic and advanced practice through undergraduate and graduate nursing education programs; and, (c) advocacy for populations through contributions to policy development. The C/PHN educator's skills related to collaboration and coalition development help to build bridges between community practice settings and the educational environment.

Assumption 2: C/PHN educator's practice is based on professional ethics and established standards of practice and professional performance.

The leadership role of C/PHN educators related to disaster preparedness is established in at least three guiding documents. The *Code of Ethics for Nurses* (American Nurses Association, 2001), advises that: "the nurse owes the same duties to self as to others, including the responsibility to preserve integrity and safety, to maintain competence, and to continue personal and professional growth." (p. 18). This ethical statement reinforces the importance of self-care, safety, and lifelong learning. The *Principles of Ethical Practice of Public Health* supports values inherent in advocacy, respect for human diversity, and policies developed with input from community members (American Public Health Association, 2001). Finally, the new *Public Health Nursing: Scope and Standards of Practice* (American Nurses Association, 2007), outlines professional performance standards which specifically relate to disaster preparedness activities. Standard 10 calls for the public health nurse to "establish collegial partnerships . . . and contribute to the professional development of peers, students, colleagues, and others. Standards 11-14 and 16 address collaboration, ethics, research, resource utilization, and advocacy. Standard 15 identifies the professional leadership role and specifically directs the public health nurse to "function as a public health team leader in emergency preparedness and response situations. . ." (pp. 31-38).

Assumption 3: C/PHN educators serve as leaders in the development, recommendations, and/or integration of disaster content in the curriculum.

Historically, most disaster education curricular content in baccalaureate programs has been embedded in community/public health nursing courses. Leading C/PHN textbooks have long included a chapter or section on community health nursing's role in disaster preparedness (Allender & Spradley, 2005; Clark, 2008; Lundy & Janes, 2001; Smith & Maurer, 2000; Stanhope & Lancaster, 2004). However, the threat of overt and covert mass casualty events in an

era of global unrest, increased seismic, weather-related, and other natural disasters, and an increased awareness of the long-term psychosocial impact of disaster in communities requires a macro-approach to disaster education. To achieve this outcome the C/PHN educator articulates the need for disaster education in the curriculum, determines the perceptions of faculty colleagues towards disaster education, measures nursing faculty readiness and motivation to engage in curricular integration for inclusion of disaster preparedness content and skills, and supports the distribution of both general and specialty disaster competencies to interested faculty. For instance, faculty teaching psychiatric nursing might incorporate a disaster mental health case study when covering post traumatic stress disorder; pediatric faculty might discuss the special needs of children during a disaster; medical-surgical faculty might develop mass casualty lab scenarios. C/PHN educators collaborate with nursing faculty to provide faculty development, assure student entry level competence, and promote one fundamental message: disaster preparedness is the shared responsibility of all members of a community.

Assumption 4: C/PHN educators serve as role models to students and faculty through both professional and community service activities.

C/PHN educators are proactive role models who first recognize the importance of personal and family disaster preparedness (American Red Cross, 2007b). As leaders in the community, C/PHN educators teach students and colleagues the critical importance of ready access and familiarity with up-to-date emergency preparedness plans for the facilities and communities where they work. Educators promote participation in facility or community-wide exercises and drills (James & Wenzel, 2007). Awareness is raised related to mass casualty triage systems, emergency communication systems, and the organization of disaster response based on compliance with the National Incident Management System (NIMS). Choices available for serving as a volunteer with the American Red Cross, Medical Reserve Corps, or other local, state, or national response groups such as the National Nurse Response Team or Disaster Medical Assistance Team are outlined and emphasis is given to the importance of advanced registration and training (Peterson, 2006).

Assumption 5: C/PHN educators recognize the value of established national emergency preparedness competencies, training programs, and curriculum resources.

At the time of this writing, several important documents guide identification of disaster preparedness curriculum content for all nurses including C/PHNs. The Nursing Emergency Preparedness Education Coalition (NEPEC) [formerly known as the International Nursing Coalition for Mass Casualty Education (INCMCE)] has identified disaster competencies applicable to all professional nurses in any practice setting (Weiner, 2005). These competencies are based on the *Essentials of Baccalaureate Education for Professional Nursing Practice* framework and recognize the potential for integration with existing nursing curriculum. Disaster preparedness competencies specifically targeting C/PHNs include the *Public Health Nurse Competencies for Surge* (Polivka et al., 2008) and a companion document entitled the *ExploreSurge Trailguide* (Stanley et al., 2008). *The Bioterrorism and Emergency Readiness Competencies for All Public Health Workers* (Columbia University School of Nursing et al., 2002) also provide broad guidance for the public health workforce caring for populations. The C/PHN educator recognizes that the setting and focus of the health care provider may require different competencies. For instance, clinicians are guided by the *Clinician Competencies During Initial Assessment and Management of Emergency Events* (Association for Prevention

Teaching and Research, Columbia University School of Nursing, & Center for Disease Control and Prevention, 2005). Nurses working in acute care facilities will reference the *Emergency Preparedness and Response Competencies for Hospital Workers* (Columbia University Mailman School of Public Health, Columbia University School of Nursing, & Greater New York Hospital Association, 2004). Competency-based education for emergency preparedness requires a multidisciplinary and systems approach with communication among partners facilitated through common language and shared training plans (Agency for Healthcare Research and Quality, 2004).

Essential Undergraduate Curricular Elements for Disaster Preparedness

In 2003 the Health Resources and Services Administration funded the *Bioterrorism Training and Curriculum Development Program (BTCDP)* to help develop the present and coming health care workforce to recognize an event, meet the acute care needs of the populations, participate in a coordinated multi-disciplinary response, and alert the public health system of a possible event. Products developed by a number of project sites are available for curriculum integration including the online modules developed by the INCMCE group (International Nursing Coalition for Mass Casualty Education [INCMCE], 2003). The following website outlines the curriculum plan for these modules: <http://www.mc.vanderbilt.edu/nursing/incmce/curriculum.html>

The resources mentioned above are useful as a basis for developing competency-based emergency preparedness curriculum. This approach recognizes that competency in emergency preparedness as demonstrated by professional performance is a product of knowledge, skills, and abilities acquired through a variety of learning experiences that are applied to real-world situations (Center for Health Policy Columbia University School of Nursing & Association of Teachers of Preventive Medicine, 2004; Voorhees, 2001; Weiner, 2006). Secondly, this approach acknowledges that at the preparatory level there is a basic level of knowledge and skill that all nursing graduates must possess to function as entry-level professionals regardless of the clinical practice site. The articulation of essential curricular elements in emergency preparedness is consistent with the work identifying the essential competency categories for public health nursing (Cross et al., 2006).

Basic essential curricular content for public health nursing emergency preparedness begins with the recognition that effective management of a disaster event requires the integration of activities from multiple community systems including emergency response, acute care, and public health. An organized response is guided by an incident command structure that manages commands, controls, communicates, and coordinates multiple resources. Community/public health nurses serve within this management system in a variety of disaster-related roles while maintaining a focus on populations including groups most vulnerable during disaster events (Minnesota Public Health Nursing Section, 2001). The following suggested essential curricular content for public health nursing is adapted from basic competencies established by the Association for Prevention Teaching and Research (2005), Columbia University Mailman School of Public Health (2004), and the Columbia University School of Nursing (2002).

Basic Essential Curricular Content for Public Health Nursing Emergency Preparedness

Competencies for assessment and planning

- Describe the stages of disaster and your expected role in a range (all-hazard) of emergencies on behalf of the service population.
- Locate the agency disaster response plan and be aware of the importance of “exercising” the plan; develop and maintain a personal/family disaster plan.
- Recognize an illness or injury as potentially resulting from exposure to a biologic, chemical or radiological agent possibly associated with an outbreak or a terrorist event
 - a. Recognize uncommon presentations of common diseases and distinguish these from common presentations of uncommon diseases that may be related to a terrorist event or emerging infectious disease
 - b. Recognize emerging patterns or clusters of unusual presentations
- Report identified cases or events to the public health system to facilitate surveillance and investigation using the established institutional or local communication protocol.

Competencies for implementing interventions

- Initiate patient/population-based care within your professional scope of practice and arrange for prompt referral appropriate to the identified condition(s)
- Institute appropriate steps to limit spread of an agent, including infection control measures, decontamination techniques and use of appropriate personal protective equipment.
- Respond to an emergency event within the incident or emergency management system established by the organization or the lead community agency.
- Identify key system resources for referring matters that exceed knowledge, skill, and authority limits.
- Communicate consistently with key partners within the established incident management system.
- Identify and manage the expected stress/anxiety associated with emergency events, making referrals for mental health services if needed.
- Use reliable information sources (e.g. infection control department, state or local public health agency, Centers for Disease Control and Prevention) for current referral and management guidelines.
- Provide reliable information to others (e.g. institutional administration, patients, population groups) as relevant to the specific population served and within the emergency response system.

Competencies for evaluation of process and outcomes

- Participate in post-event feedback and assessment of response with the local public health system.
- Take necessary steps to improve a future all-hazard response.

Measurement of competency achievement can be accomplished through the use of traditional means of evaluation such as classroom discussion and dialogue, case-study, problem-based learning, and testing. However, real-life experiences by participating in drills, simulations, and table-top exercises provide for a better measurement of competency achievement as these

methods capture experiences that might occur during an actual event. Participation in drills, full-scale exercises, and table-top exercises can identify weaknesses, gaps and overlap. Students benefit from role-playing with application of knowledge, skills and abilities in a controlled environment. Finally, schools of nursing should provide students with actual-event experiences whenever possible by enabling students to participate during local disaster response efforts. Lessons learned can provide the acquisition of knowledge that can be drawn upon throughout a lifetime of professional service.

Summary

Nearly one million nurses work in community and public health settings in the U.S. This number represents approximately 40% of the nation's 2.2 million practicing registered nurses (U.S. Department of Health and Human Services Health Resources and Services Administration [HRSA], 2001). Responding to disasters and assisting communities in recovery is a core function of public health and germane to the role of every C/PHN in the nation. Every school of nursing should include disaster/emergency preparedness content in the curriculum. C/PHN educators support the competencies for disaster education by serving as curriculum integration leaders and role models for volunteerism in the practice setting. ACHNE recognizes the numerous available resources that can be used to guide the development of undergraduate and graduate level nursing education as well as professional continuing education. All educational activities should be grounded in the nationally recognized disaster preparedness competencies. Disaster preparedness and response represents an essential responsibility for community/public health nurses. ACHNE supports and encourages the development of this critical role for C/PHNs.

References

- Agency for Healthcare Research and Quality. (2004). Bioterrorism and health system preparedness. Retrieved August 28, 2007, from <http://www.ahrq.gov/news/ulp/btbriefs/btbrief7.pdf>
- Allender, J., & Spradley, B. (2005). *Community health nursing: Promoting and protecting the public's health* (6th ed.). Philadelphia, PA: Lippincott Williams & Wilkins.
- American Nurses Association. (2001). *Code of ethics for nurses with interpretive statements*. Washington, DC: American Nurses Association.
- American Nurses Association. (2007). *Public health nursing: Scope and standards of practice*. Silver Spring, MD: Nursesbooks.org.
- American Public Health Association. (2001). Public Health Code of Ethics. Retrieved August 12, 2007, from <http://www.apha.org/programs/education/progeduethicalguidelines.htm>
- American Red Cross. (2007a). American Red Cross Museum. Retrieved August 8, 2007, from <http://www.redcross.org/museum/history/>
- American Red Cross. (2007b). Preparing for a disaster: Family disaster plans. Retrieved August 8, 2007, from http://www.redcross.org/services/disaster/0,1082,0_601_,00.html
- Association for Prevention Teaching and Research, Columbia University School of Nursing, & Center for Disease Control and Prevention. (2005). Clinician competencies during initial assessment and management of emergency events. Retrieved September 4, 2007, from <http://www.cumc.columbia.edu/dept/nursing/chphsr/pdf/ClinicianCompetenciesBroch070625.pdf>
- Association of Community Health Nursing Educators. (2007). Mission statement. Retrieved August 8, 2007, from http://www.achne.org/About_ACHNE.htm
- Association of State and Territorial Directors of Nursing. (2007). *The role of public health nurses in emergency preparedness and response*. Retrieved January 1, 2008, from <http://www.astdn.org/downloadablefiles/ASTDN%20EP%20Paper%20final%2010%2029%2007.pdf>
- Center for Health Policy Columbia University School of Nursing, & Association of Teachers of Preventive Medicine. (2004). *Competency-to-curriculum toolkit: Developing curricula for public health workers* (No. U50/CCU300860).
- Clark, M. J. (2008). *Community health nursing: Advocacy for population health* (5th ed.). Upper Saddle River, NJ: Pearson Prentice Hall.
- Columbia University Mailman School of Public Health, Columbia University School of Nursing, & Greater New York Hospital Association. (2004). Emergency preparedness and response competencies for hospital workers. Retrieved August 8, 2007, from <http://www.cumc.columbia.edu/dept/nursing/chphsr/pdf/hospcomps.pdf>
- Columbia University School of Nursing, Center for Disease Control and Prevention, & Association of Teachers of Preventive Medicine. (2002). Bioterrorism & emergency readiness: Competencies for all public health workers. Retrieved June 18, 2007, from <http://training.fema.gov/emiweb/downloads/BioTerrorism%20and%20Emergency%20Readiness.pdf>
- Cross, S., Block, D., Josten, L., Reckinger, D., Keller, L., Stohschein, S., et al. (2006). Development of the public health nursing competency instrument. *Public Health Nursing*, 23(2), 108-114.

- Dock, L., & Pickett, S. (1922). *History of American Red Cross Nursing*. New York: MacMillan Company.
- Gebbie, K., & Qureshi, K. (2006). A historical challenge: nurses and emergencies. *Online J Issues Nurs*, 11(3), 2.
- Institute of Medicine. (1988). *The future of public health*. Washington, DC: National Academy Press.
- International Nursing Coalition for Mass Casualty Education [INCMCE]. (2003). Educational competencies for registered nurses responding to mass casualty incidents. Retrieved June 18, 2007, from <http://www.mc.vanderbilt.edu/nursing/incmce/>
- James, D., & Wenzel, K. (2007). Utilizing nursing students for mass immunization operations EXERCISES: Issues to consider. Retrieved January 11, 2008, from <http://www.cdph.state.co.us/oll/resources.html>
- Lundy, K., & Janes, S. (2001). *Community health nursing: Caring for the public's health*. Boston, MA: Jones Bartlett Publishers.
- Minnesota Public Health Nursing Section. (2001). *Public health interventions: Applications for public health nursing practice*. St Paul, MN: Minnesota Department of Health.
- National Organization of Nurse Practitioner Faculties. (2007). APRN education for emergency preparedness and all hazards response: Resources and suggested content. Retrieved August 8, 2007, from <http://www.nonpf.com/NONPF2005/APRN%20Emergency%20Preparedness.htm>
- Peterson, C. (2006). Be safe, be prepared: emergency system for advance registration of volunteer health professionals in disaster response. *Online J Issues Nurs*, 11(3), 3.
- Polivka, B. J., Stanley, S., Gordon, D., Taulbee, K., McCorkle, S., & Kieffer, G. (2008). Public Health Nursing competencies for public health surge events. *Public Health Nursing*.
- Public Health Functions Steering Committee. (1994). *Public Health in America*. Retrieved August 8, 2007, from <http://www.health.gov/phfunctions/public.htm>
- Smith, C., & Maurer, F. (2000). *Community health nursing: Theory and practice* (2nd ed.). Philadelphia: Harcourt Brace & Company.
- Stanhope, M., & Lancaster, J. (2004). *Community and public health nursing* (6th ed.). St. Louis, MO: Mosby.
- Stanley, J. M. (2005). Disaster competency development and integration in nursing education. *Nursing Clinics of North America*, 40(3), 453-467.
- Stanley, S. A., Polivka, B. J., Gordon, D., Taulbee, K., Kieffer, G., & McCorkle, S. (2008). The *ExploreSurge* trailguide and hiking workshop: Discipline specific education for public health nurses. *Public Health Nursing*.
- U.S. Department of Health and Human Services Health Resources and Services Administration [HRSA]. (2001). U. S. National Advisory Council on Nurse Education and Practice: First report to the Secretary of Health and Human Services and the Congress Retrieved September 5, 2007, 2007, from <http://bhpr.hrsa.gov/nursing/NACNEP/reports/first/3.htm>
- Voorhees, R. A. (2001). Competency-based learning models: A necessary future. *New Directions for Institutional Research*, Summer(110), 5-13.
- Weiner, E. (2005). A national curriculum for nurses in emergency preparedness and response. *Nursing Clinics of North America*, 40(3), 469-479.
- Weiner, E. (2006). Preparing nurses internationally for emergency planning and response. *Online J Issues Nurs*, 11(3), 4.

Appendix A Annotated Faculty Resource Guide

Disaster Nursing Curricula Guides

- **Undergraduate Nursing Curricula Plan for Disaster Nursing Education**
International Nursing Coalition for Mass Casualty Education [INCMCE]. (2003). *Educational Competencies for Registered Nurses Responding to Mass Casualty Incidents*. Retrieved June 18, 2007, from <http://www.mc.vanderbilt.edu/nursing/incmce/> This publication provides an outline of key elements for undergraduate nursing curricula that in totality cover all essential components of disaster nursing education for the undergraduate student.
- **Graduate Nursing Curricula Plan for Disaster Nursing (All APRN Programs)**
National Organization of Nurse Practitioner Faculties (2007). *Advanced Practice Registered Nurse Education for Emergency Preparedness and All Hazards Response: Resources and Suggested Content*. Retrieved August 8, 2007, from <http://www.nonpf.com/NONPF2005/APRN%20Emergency%20Preparedness.htm>. This document outlines the essential elements of disaster nursing education for advanced practice nursing education. It recognizes the key roles advanced practice nurses may play before, during, and after a community/public health emergency.

Emergency Preparedness Competencies Applicable to Nurses

- Columbia University School of Nursing, Center for Disease Control and Prevention. (2002). *Bioterrorism & emergency readiness: Competencies for all public health workers*. Retrieved June 18, 2007, from <http://training.fema.gov/emiweb/downloads/BioTerrorism%20and%20Emergency%20Readiness.pdf>
- Association for Prevention Teaching and Research, Columbia University School of Nursing, & Center for Disease Control and Prevention. (2005). *Clinician competencies during initial assessment and management of emergency events*. Retrieved September 4, 2007, from <http://www.cumc.columbia.edu/dept/nursing/chphsr/pdf/ClinicianCompetenciesBroch070625.pdf>
- Columbia University Mailman School of Public Health, Columbia University School of Nursing, & Greater New York Hospital Association. (2004). *Emergency preparedness and response competencies for hospital workers*. Retrieved August 8, 2007, from <http://www.cumc.columbia.edu/dept/nursing/chphsr/pdf/hospcomps.pdf>

Community Disaster Education, Training, and Volunteerism

- **American Red Cross (ARC):**
American Red Cross. *Introduction to Disaster Services*. Retrieved January 8, 2008, from http://www.redcross.org/flash/course01_v01/
“Although the American Red Cross is not a government agency, its authority to provide disaster relief was formalized when, in 1905, the Red Cross was chartered by Congress to carry on a system of national and international relief in time of peace and apply the same in mitigating the sufferings caused by pestilence, famine, fire, floods, and other great national calamities, and to devise and carry on measures for preventing the same.” The first course essential to becoming a volunteer, *Introduction to Disaster Services*, can be taken online.

- Centers for Public Health Preparedness Resource Centers:**
 Center for Disease Control and Prevention. Centers for Public Health Preparedness Resource Centers. Retrieved January 8, 2008, from <http://www.asph.org/acphp/phprc.cfm>
 This website is a free online repository of more than 1200 terrorism and emergency response training and educational resources developed by the CDC-funded Centers for Public Health Preparedness. The resources address a wide-array of public health and emergency response topics and are presented in various formats including CD-ROM, webcast, exercise/drill/tabletop manuals, comprehensive course outlines and much more. This information is intended for public health professionals and is relevant for nurses in all fields, especially C/PHNs. All courses from this site meet the standards of the national response plan.
- Federal Emergency Management Agency:**
 Federal Emergency Management Agency (FEMA). FEMA Training. Retrieved January 8, 2008, from <http://www.fema.gov/about/training/index.shtm>
 The FEMA website hosts a multitude of courses which may be of value to the C/PHN. Especially important are the following two courses: Incident Command System (ICS 100) and the National Incident Management System ((IS700). Each of these courses may be taken for free online. NIMS and ICS constitute the basic foundation for all emergency response in the U.S.
- Medical Reserve Corps (MRC):**
 Medical Reserve Corps (MRC). MRC Office of Civilian Volunteers. Retrieved January 8, 2008, from <http://www.medicalreservecorps.gov/HomePage>
 Established in 2002, the mission of the MRC is to “improve the health and safety of communities across the country by organizing and utilizing public health, medical and other volunteers.” The MRC website includes a complete description of the purpose and activities of this federally organized agency (see MRC 101) and a locator link to find established MRCs in each state.
- Mass Immunization Operations:**
 James, D., & Wenzel, K. (2007). Utilizing nursing students for mass immunization operations EXERCISES: Issues to consider. Retrieved January 11, 2008, from <http://www.cdphe.state.co.us/oll/resources.html>
 Incorporating nursing students into mass immunization operation exercises (and actual events) challenges planners, legal consultants, agency and school decision makers. The authors offer information created by Colorado public health nurses about specific issues to consider when using nursing students for simulated or actual events. The document can serve as a resource during the planning process and includes liability considerations, supervision and basic training requirements and includes a sample Cooperative Education Agreement.