

HOD ACTION: Council on Medical Education Report 7 adopted and the remainder of the report filed.

REPORT 7 OF THE COUNCIL ON MEDICAL EDUCATION (A-10)

Continuing Medical Education in Disaster Medicine and Public Health Preparedness
(Reference Committee C)

EXECUTIVE SUMMARY

Policy D-295-932 calls for our American Medical Association (AMA) to study the current status of disaster preparedness education and training in medical schools and report to the House of Delegates (HOD) at the 2009 Annual Meeting, and in graduate and continuing medical education programs with a report back to the HOD at the 2010 Annual Meeting.

This is the second report to the HOD to address this resolution, and it follows from CME Report 15-A-09, which addressed training in medical schools and residency programs. This report summarizes attempts by the AMA, federal government and other stakeholders to specifically address the need for continuing medical education (CME) in disaster medicine and public health.

The report notes that between 2003 and 2008, the federal government provided funding for curriculum development through the Bioterrorism and Curriculum Development Plan (BTCDDP) originally administered by Health Resources and Services Administration (HRSA) and later by the Office of the Assistant Secretary for Preparedness and Response. Federal funding for the BTCDDP has been discontinued, leaving no dedicated funding stream for training health professionals to respond to disasters and other public health emergencies. Other federal agencies continue to support some education and training in disaster medicine and public health preparedness.

The report traces the AMA's long history of support for disaster training and its role in the development, dissemination, and evaluation of a national education and training initiative, the National Disaster Life Support Program™ (NDLS™). The sequence of courses created by NDLS for various levels of learners is described, including their certification for *AMA PRA Category 1 Credit*™. Also described are other notable disaster support educational activities developed by both private and public entities including the Department of Health and Human Services, the Federal Emergency Management Agency, medical schools and medical specialty societies. Finally the report summarizes existing AMA policy in this area.

The report recommends the following: 1) That Policy H-130.949, "Organized Medicine's Role in the National Response to Terrorism," be reaffirmed; 2) That our American Medical Association (AMA) recommend that formal education and training in disaster medicine and public health preparedness should be incorporated into the curriculum at all medical schools and residency programs; 3) That our AMA support the National Disaster Life Support (NDLS™) Program Office's work to revise and enhance the NDLS courses and supporting course materials, in both didactic and electronic formats, for use in medical schools and residency programs; 4) That our AMA support continued involvement of the National Disaster Life Support Education Consortium in the newly created Federal Education and Training Interagency Group (FETIG); and 5) That our AMA continues to monitor and work with other specialty and stakeholders to coordinate disaster education efforts.

HOD ACTION: Council on Medical Education Report 7 adopted and the remainder of the report filed.

REPORT OF THE COUNCIL ON MEDICAL EDUCATION

CME Report 7-A-10

Subject: Continuing Medical Education in Disaster Medicine and Public Health Preparedness

Presented by: Susan Rudd Bailey, MD, Chair

Referred to: Reference Committee
(Floyd A. Buras, Jr., MD, Chair)

1 Policy D-295-932 “Medical Education in Disaster Response,” calls for our American Medical
2 Association (AMA) to:

3
4 Study the current status of disaster preparedness education and training in medical schools and
5 report to the House of Delegates at the 2009 Annual Meeting, and in graduate and continuing
6 medical education programs with a report back to the House of Delegates at the 2010 Annual
7 Meeting (AMA Policy Database).

8
9 This report summarizes attempts by the AMA, federal government and other stakeholders to
10 address the need for continuing medical education (CME) in disaster medicine and public health.

11
12 **NATIONAL EFFORTS TO ENHANCE EDUCATION AND TRAINING IN DISASTER
13 MEDICINE AND PUBLIC HEALTH PREPAREDNESS**

14
15 A series of natural and human-made disasters in the last decade – including the events of
16 September 11, 2001 and the subsequent anthrax attacks; the tsunami in Indonesia; Hurricane
17 Katrina; SARS; the fear of pandemic influenza; and, most recently, the devastating earthquake in
18 Haiti – have highlighted the need for all healthcare and public health professionals to be prepared
19 to respond to emergency situations. These events have focused federal attention on the need for
20 increased education and training in disaster preparedness and response. Education specifically for
21 trainees and practitioners in the health fields has been a core part of federal preparedness strategies.

22
23 Between 2003 and 2008, a key component of the federal government’s preparedness efforts was
24 the Bioterrorism and Curriculum Development Plan (BTCDDP). Originally administered under the
25 auspices of the Health Resources and Services Administration (HRSA) – and later administered by
26 the Office of the Assistant Secretary for Preparedness and Response (ASPR) – the BTCDDP was
27 created by the Public Health Security and Bioterrorism Preparedness and Response Act of 2002 to
28 address health professionals’ need for education and training in disaster preparedness and response.
29 While multiple programs and funding streams across several federal agencies were focused on
30 building capacities in the emergency management and public health sectors, the BTCDDP was
31 uniquely dedicated to training both students and practicing health professionals in all-hazards
32 preparedness and response. The BTCDDP awarded \$118,300,000 to support the training of students
33 (by funding curriculum development projects at twenty-three professional schools) as well as
34 health professionals in practice (by funding twenty-six continuing education and training
35 initiatives).

1 Federal funding for the BTCDP has been discontinued, leaving no dedicated funding stream for
2 training health professionals to respond to disasters and other public health emergencies. Other
3 agencies, such as the Centers for Disease Control and Prevention (CDC) and the Department of
4 Homeland Security, continue to support some education and training in disaster medicine and
5 public health preparedness. The CDC funds various academic Centers for Public Health
6 Preparedness within schools and colleges of public health, medicine, nursing, veterinary medicine,
7 pharmacy, biological sciences, community colleges, and several medical and health science
8 centers. The Centers for Public Health Preparedness collaborate with state and local health
9 agencies to develop, deliver, and evaluate disaster preparedness education based on community
10 needs.

11
12 In December 2006, passage of the Pandemic and All-Hazards Preparedness Act (PAHPA) created
13 important opportunities for the public and private sectors to build upon and standardize disaster
14 preparedness education through various programs at the federal, state, and local levels. PAHPA
15 called for the development of integrated, interdisciplinary, and consistent public health and medical
16 disaster response curricula that would be available both to health professionals and health
17 professions schools. Section 304 of the Act states that the Health and Human Services (HHS)
18 Secretary, “in collaboration with the Secretary of Defense, and in consultation with relevant public
19 and private entities, shall develop core health and medical response curricula and training by
20 adapting applicable existing curricula and training programs to improve responses to public health
21 emergencies.”

22
23 As directed by PAHPA, public health and medical response training programs may include
24 coursework related to:

- 25
- 26 • Medical management of casualties, taking into account the needs of at-risk individuals;
 - 27
 - 28 • Public health aspects of public health emergencies;
 - 29
 - 30 • Mental health aspects of public health emergencies;
 - 31
 - 32 • National incident management, including coordination among federal, state, local, tribal,
33 international agencies, and other entities; and
 - 34
 - 35 • Protecting healthcare workers and healthcare first responders from workplace exposures during
36 a public health emergency.
 - 37

38 Movement toward a more coordinated federal approach resulted in an October 2007 Homeland
39 Security Presidential Directive-21 (HSPD-21), entitled “Public Health and Medical Preparedness.”
40 HSPD-21 called for coordinated efforts to develop public health and medical disaster preparedness
41 and response curricula and training programs.

- 42
- 43 • Paragraph 32 requires the HHS Secretary, in coordination with the Secretaries of Defense,
44 Veterans Affairs, and Homeland Security to ensure that core public health and medical
45 curricula and training (developed pursuant to PAHPA) address the need to improve individual,
46 family, and institutional public health and medical preparedness.
 - 47
 - 48 • Paragraph 37 requires that the secretaries of the five lead federal agencies build on Section 304
49 of PAHPA to develop a mechanism to coordinate public health and medical disaster
50 preparedness and response core curricula and training across executive departments and
51 agencies to ensure standardization and commonality of knowledge, procedures, and terms of

1 reference within the federal government, which can be communicated to state and local
2 government entities, as well as academia and the private sector.

- 3
- 4 • Paragraph 38 calls upon the Secretaries of Health and Human Services and Defense, in
5 coordination with the Secretaries of Veterans Affairs and Homeland Security, to establish an
6 academic Joint Program for Disaster Medicine and Public Health housed at a new National
7 Center for Disaster Medicine and Public Health at the Uniformed Services University of the
8 Health Sciences (located in Bethesda, MD).

9

10 These federal directives are currently being addressed by the recently authorized Federal Education
11 and Training Interagency Group (FETIG). FETIG's primary charge is to identify and implement a
12 national strategy for the education and training of health professionals in disaster medicine and
13 public health preparedness. This includes the identification of core competencies and standards
14 across federal departments and agencies, as well as state and local government entities, the
15 academic community, and the private sector in relation to public health emergency and disaster
16 response. The AMA-sponsored National Disaster Life Support Education Consortium™
17 (NDLSEC™) has been invited to participate in this effort. Such involvement provides an
18 important opportunity to assist federal efforts to:

- 19
- 20 • Coordinate the implementation of laws and directives related to education and training in
21 medical and public health preparedness and response to disaster;
 - 22
 - 23 • Delineate core competencies and education and training standards for all potential health
24 system responders;
 - 25
 - 26 • Create a National Center for Disaster Medicine and Public Health at the Uniformed Services
27 University of the Health Sciences;
 - 28
 - 29 • Facilitate the translation of research findings to disaster-related medical and public health
30 practice; and
 - 31
 - 32 • Enhance communication with federal, state, local, and tribal entities; academia; and the private
33 sector on issues affecting education and training in disaster medicine and public health
34 preparedness.

35

36 Stimulated by these federal events, other stakeholders began creating informational resources for
37 disaster preparedness. Notably, the CDC developed a detailed Web site (www.emergency.cdc.gov)
38 that provided information on a number of hazards. Other associations (including specialty
39 societies) created their own informational materials as well.

40

41 THE AMA AND THE NATIONAL DISASTER LIFE SUPPORT PROGRAM™

42

43 It is interesting to note that AMA support for disaster training has historic precedence. From 1954
44 to 1968, the Department of Defense sponsored a voluntary program in US medical schools, entitled
45 "Medical Education for National Defense" (MEND). The program began at the request of a joint
46 committee of the AMA and the Association of American Medical Colleges to improve the training
47 and motivation of medical students with regard to military and disaster medicine. The curriculum
48 included disaster medicine; management of mass casualties; public health (including impact of
49 chemical, biological, and nuclear events); tropical medicine; and environmental medicine.

1 Although the MEND Program was voluntary, all 92 medical schools that existed at the time
2 participated. In 1968, the General Accounting Office issued a negative report on the program,
3 citing the lack of performance criteria and its significant fiscal impact. This was countered in 1969
4 by a report from the National Research Council's Division of Medical Science, which strongly
5 recommended that the program be reinstated. The primary finding of the report was the great
6 need for all physicians to have disaster medical training for the good of the general public as well
7 as for its relevance to potential future military service. While the AMA also expressed support for
8 reinstatement of the MEND Program, the program was discontinued for lack of federal funding.
9

10 In December 2003, the AMA House of Delegates adopted policy calling for the AMA to work
11 collaboratively with the Federation in the development, dissemination, and evaluation of a national
12 education and training initiative called the National Disaster Life Support Program™
13 (NDLS™). Under the auspices of the NDLS program, the AMA joined with four major academic
14 centers – including the Medical College of Georgia, the University of Georgia, the University of
15 Texas Southwestern Medical Center at Dallas, and the School of Public Health at Houston to
16 provide physicians, medical students, emergency responders, and other health professionals with a
17 fundamental understanding and working knowledge of their integrated roles and responsibilities in
18 disaster management and response efforts (AMA Policy H-130.946). In June 2004, the HOD
19 further called upon the AMA to pursue actively the creation of a national training network for the
20 NDLS Program coordinated through a newly-developed AMA-based NDLS Program Office (AMA
21 Policy D-130.979).
22

23 The NDLS Program Office has been instrumental in the creation of a sequence of courses with an
24 all-hazards approach to disaster preparedness. These courses, developed under the umbrella of the
25 NDLS Program, have been certified for *AMA PRA Category 1 Credit™*, and are designed for
26 various levels of learners as follows:
27

- 28 • Core Disaster Life Support (CDLS®): The CDLS course is an introduction to all-hazards
29 preparedness for basic EMTs, allied health workers and technicians, law enforcement officials,
30 administrators and planners, entry-level Medical Reserve Corps, dentists, pharmacists, office-
31 based physicians and nurses, and anyone needing an introductory program. The CDLS course
32 is presented in a four-hour didactic format and provides an overview of natural and man-made
33 disasters, including traumatic and explosive, nuclear and radiological, biological, and chemical
34 events. The overall goal is to introduce participants to basic concepts and terms reinforced in
35 greater detail in the Basic Disaster Life Support® and Advanced Disaster Life Support®
36 courses. The CDLS course can be presented to large audiences (more than 100 participants),
37 limited only by classroom size. CDLS activities are certified for a maximum of 4.5 *AMA PRA*
38 *Category 1 Credits™*. Since its inception, over 100 CDLS courses have been offered, with
39 over 200 physicians claiming credit. The CDLS course is also available in an online format
40 (eCDLS®). eCDLS is certified for *AMA PRA Category 1 Credit™* as well.
41
- 42 • Basic Disaster Life Support (BDLS®): The BDLS course is a review of the all-hazards topics
43 covered in the CDLS course and adds critical information on the health care professional's role
44 in the public health and incident management systems, community mental health, and special
45 needs of vulnerable populations. The target audience for the course is physicians, physician
46 assistants, nurses, dentists, pharmacists, allied health professionals, public health professionals,
47 and veterinarians. The course is primarily didactic with a flexible format that can be delivered
48 in one day or in multiple sessions. The BDLS course can be presented to large audiences
49 (more than 100 participants), limited only by classroom size. The BDLS course meets the
50 Occupational Safety and Health Administration's (OSHA) Code of Federal Regulations (CFR)
51 1910.120 requirement for Hazardous Materials Awareness. BDLS activities are certified for a

1 maximum of 7.5 *AMA PRA Category 1 Credits*[™]. Since its inception, over 500 BDLS
2 courses have been offered, with over 1,700 physicians claiming credit. The BDLS course is
3 also available in an online format (eBDLS[®]). eBDLS is certified for *AMA PRA Category 1*
4 *Credit*[™] as well.

- 5
6 • **Advanced Disaster Life Support (ADLS[®]):** The ADLS course is a more advanced practicum
7 course for individuals who have completed the BDLS course. It is an intensive course that
8 trains students in mass casualty decontamination, use of personal protective equipment,
9 essential skills, and mass casualty incident information systems and technology applications.
10 The course uses simulated all-hazards scenarios, interactive sessions, and drills with high-
11 fidelity mannequins and volunteer patients to gain a true-to-life, practical experience in
12 treatment and response. The course is presented over two days: day one is primarily didactic,
13 while day two consists of hands-on training distributed over four ADLS course training
14 stations. The ADLS course meets the OSHA Code of Federal Regulations (CFR) 1910.120
15 requirement for Hazardous Materials Operations. ADLS courses are certified for a maximum
16 of 15.5 *AMA PRA Category 1 Credits*[™]. Since its inception, over 200 ADLS courses have
17 been offered, with nearly 1,000 physicians claiming credit.

18
19 In 2007, the National Disaster Life Support Education Consortium[™] (NDLSEC[™]) was formed to
20 provide multidisciplinary expertise for the regular review and revision of the NDLS courses, as
21 well as guidance for the continued expansion and deployment of the NDLS program. The
22 NDLSEC is convened by the AMA and exists as an unincorporated association between the AMA
23 and the National Disaster Life Support Foundation. NDLSEC is currently reviewing and revising
24 the content for each of the NDLS courses to ensure relevance and currency. Content revisions are
25 expected to be finalized in 2010.

26
27 Additionally, in July 2007, the AMA launched *Disaster Medicine and Public Health Preparedness*,
28 one of the first comprehensive and authoritative journals emphasizing public health preparedness
29 and disaster response for all health care and public health professionals globally. The articles
30 published in *Disaster Medicine and Public Health Preparedness* offer physician learners the
31 opportunity to gain knowledge that helps them prepare to play an active role in responding to
32 disasters and other public health emergencies. Beginning in 2010, one article in each issue of
33 *Disaster Medicine and Public Health Preparedness* will be certified for 1 *AMA PRA Category 1*
34 *Credit*[™].

35 36 OTHER NOTABLE EDUCATIONAL INITIATIVES

37
38 A major national initiative is the annual Integrated Medical, Public Health, Preparedness and
39 Response Training Summit sponsored by HHS. This summit brings together HHS partners
40 including the National Disaster Medical System (NDMS), the Office of the Civilian Volunteer
41 Medical Reserve Corps, the Emergency System for Advance Registration of Volunteer Health
42 Professionals, and the Office of Force Readiness and Deployment. The mission of the summit is to
43 provide a “forum for conducting training, discussing issues, sharing information, and networking
44 amongst the constituent groups of various national-level organizations involved in preparing for
45 and responding to public health and medical emergency events.” HHS works with Accreditation
46 Council for Continuing Medical Education-accredited providers to certify the summit for *AMA*
47 *PRA Category 1 Credit*[™].

48
49 The Federal Emergency Management Agency (FEMA) maintains an online emergency
50 management institute that offers several distance learning activities. Individual modules offered by
51 FEMA are part of a larger curriculum comprised of the following major topic areas: Mitigation,

1 Preparedness and Technology, Disaster Operations and Recovery and Integrated Emergency
2 Management.

3
4 Susan Briggs, MD, MPH, a trauma surgeon at Massachusetts General Hospital and
5 an assistant professor of surgery at Harvard Medical School, has developed the Advanced Disaster
6 Medical Response Provider Course to train multidisciplinary medical response personnel in the
7 “ABCs” of basic medical and public health disaster care, medical response to terrorism, weapons
8 of mass destruction, specific injuries (blast, crush), and special considerations such as
9 psychological response to disasters. This program is offered at various host sites nationally and is
10 certified for *AMA PRA Category 1 Credit*TM.

11
12 Another notable national effort involves the National Education Strategy Team (NEST), which
13 consists of seven centers designated by the Office of the Assistant Secretary for Preparedness and
14 Response of the US Department of Health and Human Services. NEST consists of the following
15 centers that focus on providing continuing education and training on bioterrorism and all-hazards
16 preparedness training for health professionals in the United States:

- 17
- 18 • Columbia University: New York Consortium for Emergency Preparedness Continuing
19 Education;
- 20 • Mather LifeWays: PREPARE;
- 21 • Medical College of Georgia: National Disaster Support Life Foundation;
- 22 • Nova Southeastern University: Center for Bioterrorism and All-Hazards Preparedness (CBAP);
- 23 • The Medical University of South Carolina: Disaster Preparedness and Response Training
24 Network;
- 25 • University of Texas Health Science Center at Houston: Center for Biosecurity and Public
26 Health Preparedness; and
- 27 • Yale University: Yale New Haven Center for Emergency Preparedness and Disaster Response.

28
29 Several specialty societies have developed notable educational initiatives surrounding disaster
30 preparedness for physicians in practice, including:

- 31
- 32 • The American College of Emergency Physicians (ACEP) served as the lead in developing the
33 “Bombings: Injury Patterns and Care” curriculum through the Terrorism Injuries Information,
34 Dissemination and Exchange (TIIDE) project, a cooperative agreement with the CDC. Current
35 TIIDE partners include, in addition to ACEP, the AMA, the American Trauma Society, the
36 National Association of County and City Health Officials, the National Association of EMS
37 Physicians, and the Southern Nevada Health District. A multidisciplinary task force of subject
38 matter experts representing medicine, nursing, and emergency medical services designed the
39 curriculum that is intended to be the minimum content on blast related injuries from terrorism
40 to be included in any all-hazards disaster education and training program. This curriculum,
41 along with other disaster preparedness and response resources, is available at the ACEP EMS
42 and Disaster Preparedness Web page. In addition, ACEP maintains an active Disaster
43 Preparedness and Response Committee whose objectives include developing guidelines and
44 educational materials on disaster preparedness and a Disaster Medicine Section.
- 45
- 46 • The American Trauma Society served as the lead in developing a series of clinical primers that
47 include review articles and fact sheets on key bombing injury patterns. These clinical primers
48 were developed through the TIIDE project to augment the bombing injury curriculum. Topics
49 include: Blast Injuries: Essential Facts; Injury Care: Prehospital; Lung Injury: Prehospital Care;
50 Lung Injury; Radiological Diagnosis; Crush Injury and Crush Syndrome; Post Exposure

1 Prophylaxis for Bloodborne Pathogens; Abdominal Injuries; Extremity Injuries; Ear Injuries;
2 Eye Injuries; Thermal Injuries; Pediatrics; Older Adults; and Bombings and Mental Health.
3 These fact sheets are available at the ACEP EMS and Disaster Preparedness Web page and at
4 the CDC Web site.

- 5
- 6 • The Society of Critical Care Medicine’s Fundamental Disaster Management Course. Topics
7 covered include studying the intensive care unit microcosm within disaster medical response;
8 augmenting critical care capacity during a disaster; critical care management of chemical
9 exposures; intentional and natural outbreaks of infectious disease; critical care management of
10 radiological exposures; conventional explosions and blast injuries; mass casualty burn care;
11 disasters produced by natural phenomena; caring for critically ill children; delivering acute care
12 to chronically ill adults in shelters; palliative care and mental health issues; disaster triage and
13 allocation of scarce resources; sustained mechanical ventilation outside of traditional intensive
14 care units; and personal protective equipment and decontamination management strategies.
15
- 16 • The American College of Surgeons’ (ACS) Disaster Management and Emergency
17 Preparedness (DMEP) Course, which emphasizes an all-hazards approach, emphasizing that
18 many principles apply to disasters of all kinds regardless of specific mechanism. Surgical
19 problems and the role of surgeons in disasters are emphasized even with non-surgical forms of
20 injury. DMEP is a one-day course that is both didactic and interactive. It addresses core
21 competencies as outlined by the ACS Committee on Trauma’s (COT) Disaster and Mass
22 Casualty Management Committee. Major topics addressed include planning, triage, incident
23 command, injury patterns and pathophysiology, and consideration for special populations.
24 Small group discussions are based on illustrative scenarios.
25
- 26 • The American Academy of Pediatrics’s Disaster Preparedness for Pediatric Practices, which
27 helps practitioners develop a working preparedness plan to reduce risks, maintain practice
28 operations, and ensure a medical home for children.
29
- 30 • The National Association of EMS Physicians has participated as a strategic partner in the
31 TIIDE project to develop the “Bombings: Injury Patterns and Care” curriculum, serve as the
32 lead in the Model Communities Project, and convene a consensus review panel to develop a
33 national standard for mass casualty triage.
34

35 Several state initiatives have also focused on providing disaster preparedness training for
36 physicians. Notable examples include the Medical Society of the State of New York’s series of
37 emergency preparedness seminars in which New York state physicians can be educated on
38 bioterrorism threats, and the California Emergency Medical Services Authority (EMSA) Hospital
39 Incident Command System (HICS) course, a methodology for using the Incident Command System
40 in a hospital/healthcare environment.
41

42 COMPETENCIES IN DISASTER MEDICINE AND PUBLIC HEALTH PREPAREDNESS

43

44 The abundance of information emanating from multiple sources has the potential to create
45 confusion for curriculum planners and for learners. A need was recognized to determine what,
46 among all the possible content, learners at various levels should know. This requires assessment
47 and delineation of the knowledge, skills, attitudes, and proficiencies needed by healthcare and
48 public health professionals and others (e.g., citizen responders) for the management of all
49 populations in day-to-day emergencies and during catastrophic mass casualty events. As
50 recommended in the Institute of Medicine Future of Emergency Care report series, all health
51 professions schools, institutions, and entities responsible for the training, continuing education,

1 credentialing, and certification of health professionals need to define and incorporate adult and
2 pediatric disaster preparedness and emergency care competencies into discipline-specific
3 educational curricula at the undergraduate, graduate, and postgraduate (continuing education)
4 levels.

5
6 To prepare health professionals to respond appropriately and to assist professional schools and
7 continuing education providers to meet this challenge, various organizations and universities have
8 developed competencies for health professionals and other emergency responders. To date, these
9 efforts have been limited primarily to individual specialties or targeted professionals (e.g.,
10 physicians, nurses, emergency medical technicians, public health workers). For example,
11 guidelines for preclinical bioterrorism curriculum were developed using experts from
12 microbiology, immunology, and infectious disease. Another effort defined competencies
13 applicable to medical, dental, nursing, and public health students.

14
15 As yet, little effort has been devoted to the integration of these competencies across health
16 specialties and professions that have a significant role in disaster medicine and public health
17 preparedness. This has resulted in a lack of definitional uniformity across professions with respect
18 to education, training, and best practices.

19
20 To address these gaps, the AMA Center for Public Health Preparedness and Disaster Response
21 convened an expert working group to develop a consensus-based educational framework and set of
22 competencies from which educators could devise learning objectives and curricula tailored to the
23 needs of all health professionals. The group conducted a broad-based literature and document
24 review, which formed the basis of a comprehensive set of competencies. These were subject to
25 extensive review and finalized through expert consensus. The competencies can be adapted for all
26 health professions and all levels of learners from student to leader and cover seven domains: 1)
27 preparation and planning; 2) detection and communication; 3) incident management and support
28 systems; 4) safety and security; 5) clinical/public health assessment and intervention; 6)
29 contingency, continuity, and recovery; and 7) public health law and ethics. The competency set was
30 approved by the NDLSEC in May 2008. The availability of this national competency-based
31 framework supports the intent of HSPD-21.2.

32 33 EXISTING AMA POLICY

34
35 The AMA supports the development of training programs that address medical and public health
36 aspects of biological and chemical terrorism, as well as community disaster planning and
37 emergency response procedures in the event of such terrorism (Policy H-130.949). As noted, the
38 AMA is working to revise the National Disaster Life Support sequence of courses (D-130.979).

39
40 Education and training in disaster medicine and public health preparedness should be integrated as
41 a basic element of life-long learning for all clinical and public health professionals. Core curricula
42 and training programs are needed to provide a consistent learning experience for physicians-in-
43 training, as well as other health professionals. This requires consensus on competencies and
44 learning objectives to ensure that course content is based on a well-defined and testable body of
45 knowledge, skill set, and methodology.

46
47 In general, though there are examples of programs in disaster preparedness in the published
48 literature, there has been no comprehensive “curriculum” covering all relevant aspects of the
49 subject. More guidance is needed in developing such curricula. At a minimum, the curricula
50 should: 1) use an all-hazards approach; 2) cover the full spectrum of disaster prevention,
51 mitigation, response, and recovery; 3) provide specific information to address clinical and public

1 health aspects, including mental health, ethical, and legal issues, and the needs of particular at-risk
2 populations (e.g., children, pregnant women, the disabled, frail elderly); 4) use a common
3 vocabulary (e.g., glossary of terms and definitions) to provide standard information across
4 professions; 5) include active learning methods, such as tabletop exercises and mock drills; 6)
5 stress the development of mutual understanding and working knowledge of the integrated roles and
6 responsibilities of health professionals and other responders at a disaster scene; and 7) provide
7 mechanisms to verify that learners have attained a defined level of knowledge and skill.

8
9 Developing comprehensive curricula to train physicians and other health professionals for disasters
10 and other public health emergencies presents a daunting challenge. That is because terrorism and
11 other disasters can occur in multiple types of situations, with diverse clinical and public health
12 outcomes, many of which are not addressed in current health professions education. Despite the
13 challenges of integrating new content into existing health professional curricula, the risk of not
14 doing so can no longer be ignored.

15 RECOMMENDATIONS

16
17
18 The Council on Medical Education recommends that the following recommendations be adopted
19 and that the remainder of this report be filed.

- 20
21 1. That our American Medical Association (AMA) reaffirm Policy H-130.949, “Organized
22 Medicine’s Role in the National Response to Terrorism.” (Reaffirm HOD Policy)
23
- 24 2. That our AMA reaffirm Policy H-295.868, “Education in Disaster Medicine and Public Health
25 Preparedness During Medical School Residency Training,” which recommends that formal
26 education and training in disaster medicine and public health preparedness should be
27 incorporated into the curriculum at all medical schools and residency programs; and supports
28 the AMA’s National Disaster Life Support (NDLS) Program Office’s work to revise and
29 enhance the NDLS courses and supporting course materials, in both didactic and electronic
30 formats, for use in medical schools and residency programs; and supports continued
31 involvement of the National Disaster Life Support Education Consortium in the newly created
32 Federal Education and Training Interagency Group (FETIG). (Reaffirm HOD Policy)
33
- 34 3. That our AMA continue to work with other specialties and stakeholders to coordinate and
35 encourage provision of disaster preparedness education and training in medical schools and in
36 graduate and continuing medical education. (New HOD Policy)
37
- 38 4. That Policy D-295.932 be rescinded.

Fiscal Note: \$1,000 for staff time.

Complete references are available from the Group on Medical Education.