



NEMSAC Roundtable on The EMS Education Agenda
For The Future: A Systems Approach
The United States Department of Transportation
Washington, DC, March 28, 2012



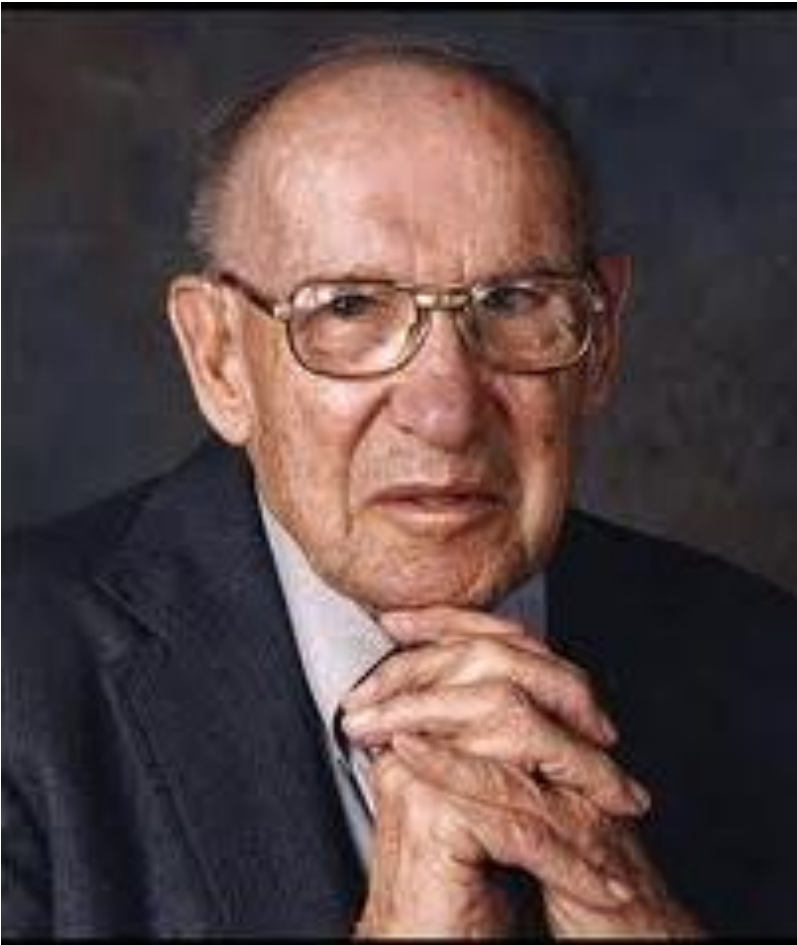
History of the EMS Education Agenda For The Future: A Systems Approach

Arthur Cooper, MD, MS

Columbia University/Harlem Hospital

With special thanks to Ken Threet, Drew Dawson, Jeff Michael, Rick Martinez

Peter Drucker 1909-2005



- Influenced by Joseph Schumpeter to focus on people not products
- Management consultant as well as self described “social ecologist”
- Coined the term [EMS] “knowledge worker”
- Best remembered quote: **“The best way to predict the future is to create it.”**

1910 – Flexner Report



- *Carnegie Foundation Bulletin Number Four*
- Built upon 1905 AMA Council on Medical Education (CME) Report
- Called for high admission and graduation standards, **basic and clinical training**
- Advocated for **university rather than proprietary** medical education

1966 – Accidental Death and Disability: The Neglected Disease of Modern Society



- Committee on Trauma and Committee on Shock, Division of Medical Sciences, National Academy of Sciences and National Research Council
- Three year review of “the present status of initial care and emergency medical services afforded to the victims of accidental injury.”

Ambulance Services

- “There are no generally accepted standards for the competence or training of ambulance attendants. Attendants range from unschooled apprentices lacking training even in elementary first aid to poorly paid employees, public-spirited volunteers, and specially trained full-time personnel of fire, police, or commercial ambulance companies.”

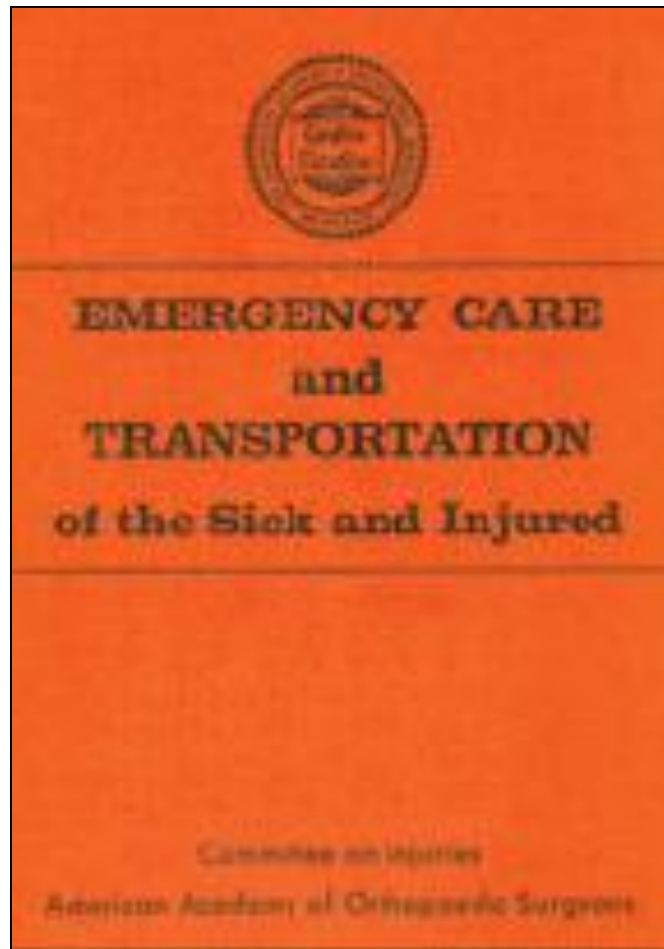
Ambulance Services

- “Certification or licensure of attendants is a rarity. In a recent survey, it was found that over 48 different courses of instruction are provided with at least a score of different books and brochures being used as texts. There is no standard or uniformity in these courses, though the standard and advanced Red Cross courses are prerequisites for most.”

Ambulance Services

- “There is need for delineation of a standard course of instruction, a more generally acceptable text, and training aids to ensure training beyond that of the Red Cross program in first aid. . . .”
- “Recommendations. 1: Implementation of recent traffic legislation, to ensure completely adequate standards . . . for the qualifications and supervision of ambulance personnel.”

1971 “Orange Book” – Emergency Care and Transportation of the Sick and Injured

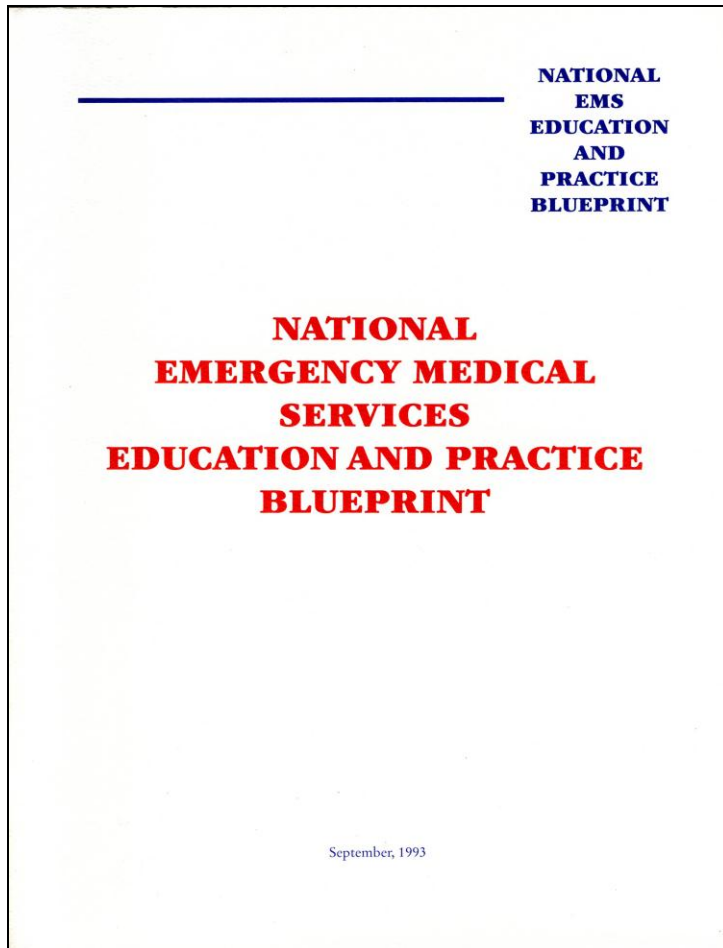


- Committee on Injuries, American Academy of Orthopaedic Surgeons
- Edited by Walter Hoyt
- Preliminary manuscript consisting of 60 chapters prepared in 1969 by an editorial advisory board led by Charles Rockwood
- **Basis for first National Standard Curriculum by Dunlap and Associates**

Key Interim Developments

- 1970 National Registry of Emergency Medical Technicians
 - Led to voluntary national certification for all EMS provider levels
- 1973 Comprehensive EMS Systems Act (PL 93-154)
 - Provided funds to support regional EMS training and workforce
- 1975 Paramedicine deemed allied health by AMA CME
 - Joint Review Committee formed, *Essentials* adopted in 1978
- 1980s National Standard Curricula revised “ad hoc”
 - Little system involvement, inconsistent length, content formats
- 1990 NHTSA Consensus Workshop on EMS Training
 - Led to the development of the Blueprint and revised NSC

1993 – EMS Education and Practice Blueprint

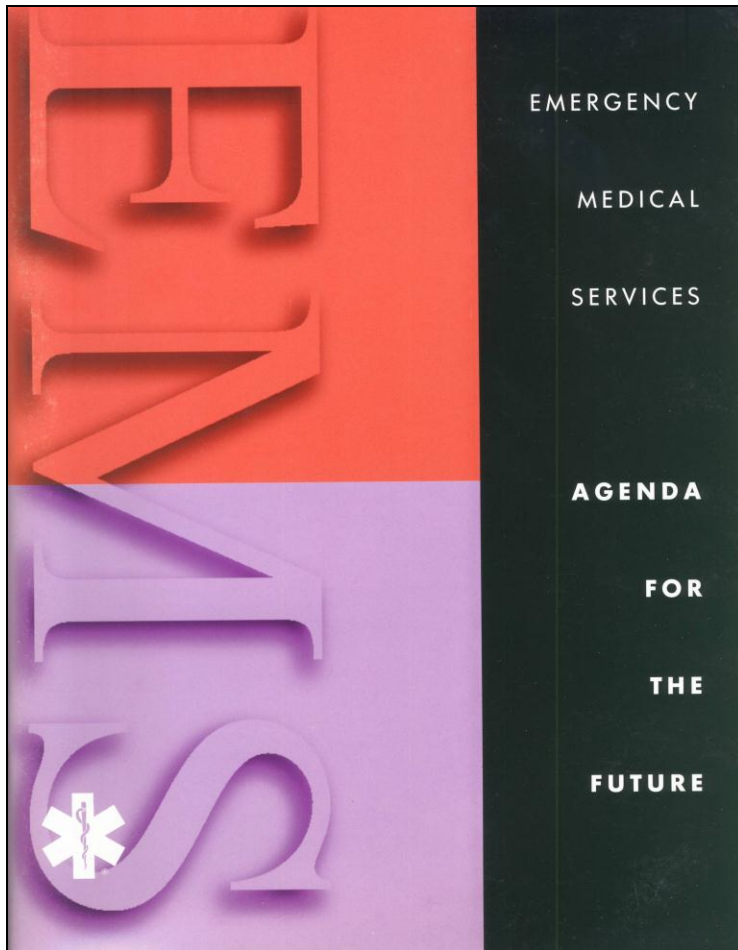


- Convened by NREMT with special thanks to Ken Threet, Montana State EMS TC, who was cited for developing the original concept and design
- Task Force: Drew Dawson, Bill Brown, John Chew, Herb Garrison, Michael O'Keefe
- **First to explicitly link scopes of practice and education**

Acknowledgement

- “For nearly ten years, Ken has been insisting there can be a better way – that there can be a nationwide systematized approach to EMS training. . . . Finally, we all listened and have benefitted from his foresight. Although the task force members fleshed out the details, Ken was responsible for the original concept and design of this blueprint.”

1996 – EMS Agenda For The Future



- Vision
 - “Emergency medical services (EMS) of the future will be community-based health management that is fully integrated with the overall health care system. It will have the ability to identify and modify illness and injury risks, provide acute illness and injury care and follow-up, and contribute to treatment of chronic conditions and community health monitoring. . . . **EMS will remain the public’s emergency medical safety net.**”

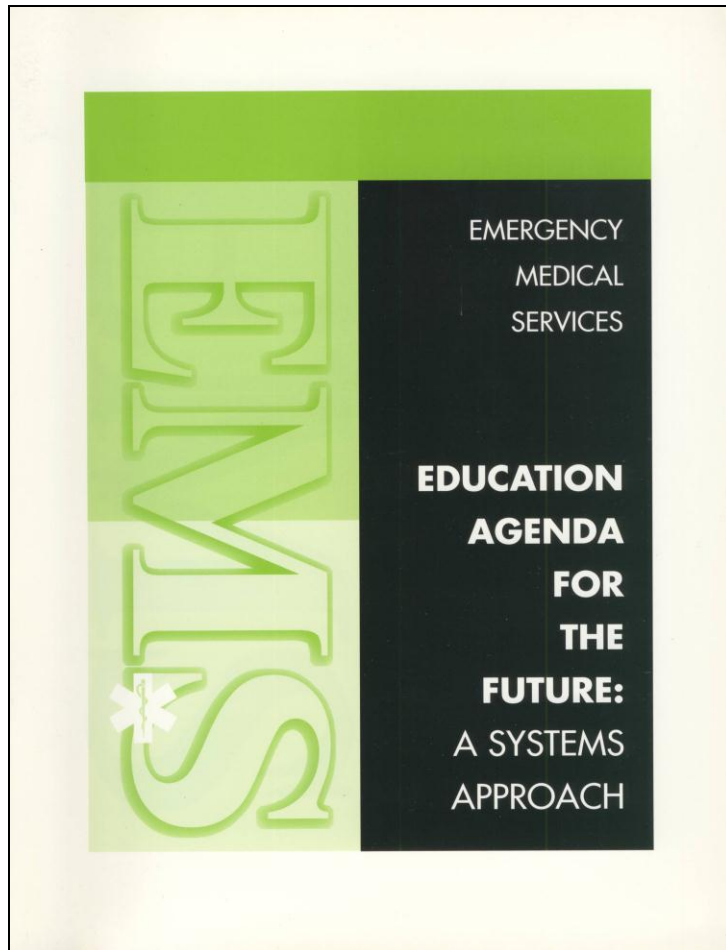
Education Systems

- Where We [We]re
 - EMS education programs prepare for certification
 - Little data on suitability to meet public expectations
- Where We Want[ed] To Be
 - Sound educational principles, life long learning
 - Congruency with public expectations of EMS care
 - Education based on core content and provider level
 - Academic basis to facilitate professional discipline
- How [We Wanted] To Get There
 - Accreditation by nationally recognized agency
 - Affiliations with postsecondary academic institutions

Follow Up

- 1996 EMS Education Conference to determine next logical steps in implementing EMS Agenda
 - Blueprint is a valuable component of the system
 - Educational standards are needed rather than NSC
 - Periodic, timely revision cycle must be established
- 1998 Blueprint Modeling Group empaneled to develop procedures for revising the Blueprint
 - Quickly determined Blueprint itself was insufficient
 - Other elements needed for comprehensive system
 - Name changed to EMS Education Agenda Task Force

2000 – EMS Education Agenda For The Future



- **“A Systems Approach”**
- Task Force broadly representative of EMS provider, regulator, and educator communities
- Technical writers: Gregg Margolis, Steve Mercer
- Community involvement sought through national Blue Ribbon Conference followed by final revisions

Vision

- Competence in areas needed to serve the public
 - Educational outcomes match public expectations
- Quality education based on national standards
 - Intersection of EMS with formal education system
- Basic level education via a variety of formats
 - Traditional vs. nontraditional, distance learning
- Advanced level education in academic setting
 - Sponsored by academic institutions, college credit
- Public assured of quality providers, programs
 - Provider certification, program accreditation

Have We Created Our Future?

- Yes, Peter, we have embarked on our journey
 - Core content produced, led by providers
 - Scopes of practice established, led by regulators
 - Education standards created, led by educators
 - **Learning is now based on practice, not vice versa**
- No, Peter, we haven't quite arrived there yet
 - It is now time to update content, scope, standards
 - National certification and accreditation are lagging
 - Full integration with formal education is uneven
 - **We have areas of unfinished business: DM, PH**

1966 – Accidental Death and Disability: Care of Casualties Under Conditions of Natural Disaster

- “It is apparent that the problems of care of disaster victims differ from those of the care of individually injured persons in that they are concerned with unexpected expansion of first aid, rescue, communication, sorting, distribution, and medical care. No plan for emergency care in disaster is likely to succeed unless it provides for an orderly utilization of currently functioning facilities.”

1966 – Accidental Death and Disability: Care of Casualties Under Conditions of Natural Disaster

- “For this reason, emphasis should be placed on employment of all elements of disaster services on a day-to-day basis so that they will be functioning smoothly when the load of casualties suddenly increases.
- Because disasters occur repeatedly in this country and because progress has been slow in solving problems of caring for mass civilian casualties, medical problems encountered in disaster should be under continued study. . . .”

1966 – Accidental Death and Disability: Care of Casualties Under Conditions of Natural Disaster

- “The need for integration of public resources in coping with material damage in disaster is apparent, but the community role in handling human casualties is less well prescribed. . . . In no single large disaster do we have precise information on the causes of death, the numbers and types of injuries of survivors, or the rewards of efficiency and the penalties of inefficiency in rescue, first aid, transportation, and medical care.”

1966 – Accidental Death and Disability: Care of Casualties Under Conditions of Natural Disaster

- “Recommendation. Development of a center to document and analyze types and numbers of casualties in disasters, to identify by on-site medical observation problems encountered in caring for disaster victims, and to serve as a national educational and advisory body to the public and the medical profession in the orderly expansion of day-to-day emergency services to meet the needs imposed by disaster or national emergency.”

What About Public Health?

- 1988 Institute of Medicine Report
 - Three core functions of public health
- 1994 Core Public Health Functions
 - Ten essential services of public health
- Core functions, essential services merged
 - Ongoing application to all Federal programs
- EMS & Trauma Agendas led by PH experts
 - EMS: our disaster medicine/public health infantry!

EMS, Disaster Medicine, and Public Health – Where We Are Now

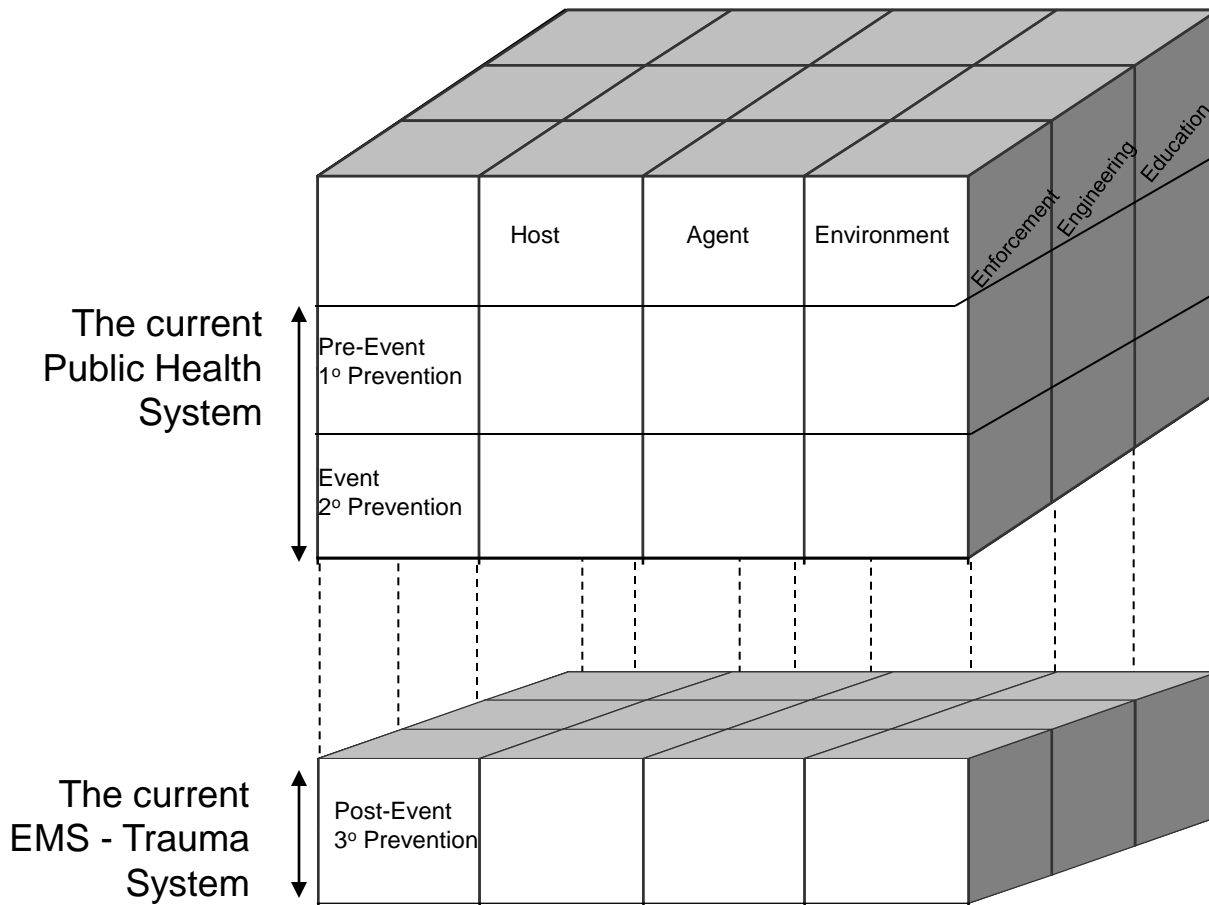


Figure: The current system maintains an artificial separation between the pre-event/event and post-event of illness/injury control.

EMS, Disaster Medicine, and Public Health – Where We Want To Be

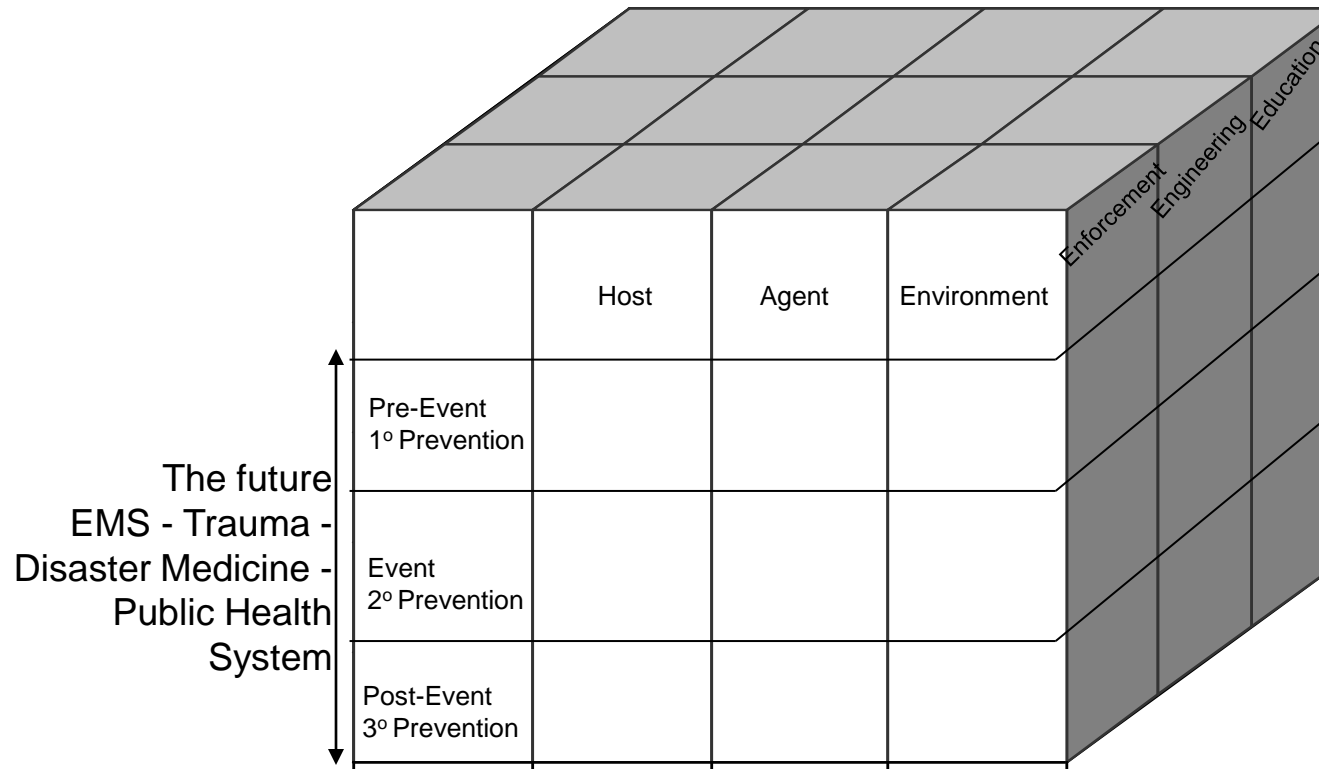


Figure: The comprehensive public health approach integrates all phases of illness/injury control into a single system.