National Guidelines for
First Aid Training in Occupational Settings Project

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Thank you for your interest in this project. The *National Guidelines for First Aid Training in Occupational Settings* is now available for widespread peer-review and public inspection. The National Advisory Board invites you to distribute this document freely, but please do not cite it as an authoritative reference. This is a developmental draft.

You are also invited to make recommendations for change to this document. Please assure any recommendations for changes are submitted on the Official Peer-Reviewer Form with the following criteria; To ensure the validity and strength of any new medical or educational recommendations or changes to this document, recommendations must be supported by authoritative sources and/or scientific evidence. This includes current published EMS texts (revised to meet the new U.S. DOT-First Responder or EMT-B curriculum), or published, peer-reviewed literature. Additionally, all recommendations, should be feasible; i.e., safe, effective, teachable, and easily incorporated into the current practice of the First Aid Provider.

The Official Peer-Reviewer Form is attached. If your would prefer a computer version of this form and have e-mail access, it is available as a Microsoft Word 6.0 document (in table form). Please send e-mail requesting this form to RMShen@aol.com. Please allow one week for returning your mail with the attachment. **Comments submitted on the document itself will not be accepted for review.** The public peer-review and inspection period for this project will last until May 30, 1997. You must return your Official Peer-Reviewer Form postmarked no later than May 30, 1997 for your recommendations to be considered. Please return your form to either the address or fax line above. While we cannot guarantee that all recommendations will be incorporated, we will guarantee that each will be carefully evaluated and considered. Official Peer-Reviewer Forms cannot be returned.

Thank you again for your interest in this important public health document.

Respectfully,

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Co-investigators

National Guidelines for First Aid Training in Occupational Settings Project

Official Public Peer Review Form

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National Guidelines for First Aid Training in Occupational Settings

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Developmental Draft
January 10, 1997

These guidelines are provided by the National Advisory Board for First Aid Training in Occupational Settings. They have been conceived and are offered in the spirit of conscientious and voluntary cooperation with the *sole purpose* of fostering safe, helpful and proper training programs in first aid for those with an occupational requirement to learn these self-preserving or life-supporting skills.

The opinions, findings and conclusions expressed in this publication are a consensus of the National Advisory Board Participants and Peer Reviewers. The National Advisory Board assumes no liability for its contents or the use thereof. The National Advisory Board does not endorse first aid training programs, products, or manufacturers.

National Guidelines
for First Aid Training in Occupational Settings

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Preface

Introduction

In the United States, traditional or formal first aid training (classroom instruction supervised by a qualified instructor) is available through national and local organizations which design and produce first aid training courses for use in an occupational setting. Although many possess a long-standing history in first aid program development, none of these organizations *create* first aid standards and/or guidelines. Rather, these organizations translate the consensus of medical and educational science into standardized first aid training programs to reflect up-to-date information and techniques.

The American Heart Association (AHA) is the organizer of national conferences for developments in cardiopulmonary resuscitation and emergency cardiac care. The resulting guidelines are translated into educational programs in emergency cardiac care for the general public and health care professionals.[1] Unlike the *Guidelines for Cardiopulmonary Resuscitation and Emergency Cardiac Care*, national, consensus built, peer-reviewed first aid training guidelines did not exist (prior to the release of this document) for those persons with an occupational requirement to be first aid trained. Providing a "source authority" for occupational first aid program content is the purpose of these *National Guidelines for First Aid Training in Occupational Settings.*

Background

The First Aid Provider is an important part of the Emergency Medical Services (EMS) System. Therefore, these guidelines are designed to integrate the First Aid Provider into the EMS system by helping them to learn the same priorities of care and general approach to the patient used by professional responders. The result is a continuity of care as the ill or injured person is passed from layperson to professional.

National guidelines for training *professional* emergency responders are the responsibility of the The National Highway Traffic Safety Administration (NHTSA) established by the Highway Safety Act of 1966 (amended). NHTSA is the producer of the *Emergency Medical Technician Basic: National Standard Curriculum* and *First Responder*: *National Standard Curriculum* These courses are part of the National EMS education program for professional out-of hospital care are outlined by the *National EMS Education and Practice Blueprint*.

Additionally, NHTSA is the producer of the *National Standard Curriculum For Bystander Care* (DOT HS 807 872 October 1992). This report describes a program to promote more effective bystander actions in rural highway crashes. This bystander care program explores how the lay public - bystanders and passersby - could learn to provide very basic life-saving care to respond to the most critical needs of the seriously injured victims. The purpose of this project was to determine how lay persons could best be taught how to call EMS, manage the airway, control bleeding and avoid getting hurt. Unlike other approaches, the Bystander Care Project focuses on the front end of the continuum of emergency care - the "Six Simple Steps for Saving Lives":

[1]Emergency Cardiac Care Committee and Sub-Committees, American Heart Association. Guidelines for cardiopulmonary resuscitation and emergency cardiac care, *JAMA* 1992;268.

1. Recognizing the emergency,
2. Deciding to help.
3. Contacting the EMS system,
4. Preventing further injuries,
5. Assessing the victim, and
6. Providing life-sustaining care, if needed.

These simple bystander skills should receive wide-scale implementation and diffusion to mass audiences at the community level using communication media with the broadest possible reach. Citizen bystanders must be encouraged and empowered to use this information to save lives.

There exists however, another important provider of first aid care for which there has previously been no national guidelines for care - those persons who are *occupationally required* to be first aid trained.

First Aid Training in Occupational Settings

People at work are not "bystanders" in the traditional sense, as they may be required by regulation, job description, rule, policy, custom or public perception to receive adequate first aid training. Unlike the bystander who is coincidentally confronted by a fellow citizen in need and who may or may not choose to provide assistance, those with an occupational requirement to be first aid trained may be *expected* to provide care until EMS arrives. These persons include (but are not necessarily limited to) employees subject to federal or state labor regulations, line of duty police officers, firefighters, corrections officers, school teachers, school bus operators, day care workers, pool and ocean lifeguards.

Two examples of federal agencies with regulations requiring people at work to be first aid trained are the Department of Labor, Occupational Safety and Health Administration (OSHA) and the United States Coast Guard. The OSHAct applies to every employer engaged in business affecting commerce who has employees. Employers and employees have a duty to comply with these health and safety standards. Given the positive impact that first aid can provide, eight OSHA standards include first aid requirements.[2] While all employees should be afforded quick and effective first aid attention in the event that an injury occurs on the job, section 1910.151(b) of the Code of Federal Regulations requires that "in the absence of an infirmary, clinic or hospital in near proximity to the workplace which is used for the treatment of all injured employees, a person or persons shall be adequately trained to render first aid." At least one OSH Review Commission Decision has explicitly adopted three minutes as a test of whether medical help is reasonably accessible.[3] Thus, if medical help is not available within a 3 minute response time, employers must assure the presence of personnel trained in first aid at or near those places where employees are working. OSHA does not teach first aid courses or certify first aid training courses for instructors or trainees.

The United States Coast Guard (USCG) is a special naval force assigned to seaboard duties. In peacetime the U.S. Coast Guard is under the jurisdiction of the Dept. of Transportation; in wartime it is under the control of the U.S. navy. The mission of the USCG includes administration of laws and enforcement of regulations for the promotion of safety of life and property on and under the high seas and waters subject to the jurisdiction of the United States.[4]

[2]General Industry (CFR 1910.151), Construction (CFR 1926.50), Shipyard (CFR 1915.98), Longshoring (CFR 1918.96), Diving (CFR 1940.151), Hazardous Waste and Emergency Response (CFR 1910.120), Temporary Labor Camps (CFR 1910.142), and First Aid and Lifesaving Facilitates (CFR 1917.26).
[3]*The L.E. Meyers Company,* 10 OSHC 1384 (1982).
[4]Organization Manual, Commandant Instruction M5400.7D, A(1) (c) and (2) (e) (7).

To satisfy USCG Regulations in the United States, applicants for original license or certificate of registry are required to present a certificate indicating successful completion of an approved first aid and CPR course within the last 12 months. First aid and CPR training programs must meet with USCG approval.

Definition of First Aid Provider

For the purpose of *this document*, a “First Aid Provider” is defined as a person who has an occupational requirement to be first aid trained, but responds as a “Good Samaritan” (see Table 1). First Aid is emergency care provided for injury or sudden illness in an occupational setting before professional emergency medical care is available. It is the goal of these guidelines to provide students with the core knowledge, skills and attitudes to function in the capacity of a First Aid Provider. It is recognized that there may be additional specific instruction that will be required of First Aid Providers due to their time and distance from EMS. These changes should be consistent with the intent and design of these guidelines. Some first aid program developers, instructors, and employers may need to incorporate additional skills into the scope of practice for the First Aid Provider

Summary

National guidelines for bystanders and for professional emergency responders have been previously established. However, national first aid training guidelines for those with an occupational requirement to be first aid trained did not exist prior to this document. The goal of these guidelines is to provide program developers, institutions teaching first aid courses, consumers of these courses, and regulatory agency personnel who review and/or approve courses, the essential elements of what is considered safe, helpful and effective first aid training.

These guidelines are designed to strengthen the chain of survival by helping First Aid Providers learn the same priorities of care and general approach to the ill or injured person. The result of which is a continuity of care from layperson through professionals. It is the expectation of the National Advisory Board that the widespread use of these guidelines for those persons with a requirement to be first aid trained will improve both the quality of first aid training programs and the emergency care provided in occupational settings.

Continuity of Care Model for Emergency Medical Services System.[5]

Curriculum & Nomenclature	Definition	Description	Source Authority
Bystander	Lay public. Citizen bystanders and passersby's.	Very basic life-saving care to respond to the most critical needs of the seriously injured or ill victims.	*National Standard Curriculum for Bystander Care*, National Highway Traffic Safety Admin., U.S. Dept. of Transportation, HS 807 872 10/92
First Aid Provider	Persons who are occupationally required to be trained in first aid even though they may not be specifically obligated by law to perform first aid.	Uses a limited amount of equipment to perform initial assessment and provide immediate life support and care while awaiting arrival of EMS.	National Guidelines for First Aid Training in Occupational Settings
First Responder	First designated level of professional emergency medical care provider as outlined by the National EMS Education and Practice Blueprint.	Uses a limited amount of equipment to perform initial assessment and intervention and is trained to assist other EMS providers.	National EMS Education and Practice Blueprint and First Responder National Standard Curriculum, 1995, National Highway Traffic Safety Admin., U.S. Dept. of Transportation
Emergency Medical Technician - Basic	Second designated level of professional emergency medical care provider as outlined by the National EMS Education and Practice Blueprint.	Has the knowledge and skills of the first responder but is also qualified to function as the minimum staff for an ambulance	National EMS Education and Practice Blueprint and EMT-Basic National Standard Curriculum, 1994, National Highway Traffic Safety Admin., U.S. Dept. of Transportation
EMT- Intermediate	Third designated level of professional emergency medical care provider as outlined by the National EMS Education and Practice Blueprint.	Has the knowledge and skills of the EMT-Basic but in addition can perform essential advanced techniques and administer a limited number of medications.	National EMS Education and Practice Blueprint and EMT-Basic National Standard Curriculum, 1994, National Highway Traffic Safety Admin., U.S. Dept. of Transportation
Paramedic	Fourth designated level of professional emergency medical care provider as outlined by the National EMS Education and Practice Blueprint.	Has the knowledge and skills of the EMT-Intermediate but can administer additional interventions and medications.	National EMS Education and Practice Blueprint, Paramedic National Standard Curriculum, National Highway Traffic Safety Admin., U.S. Dept. of Transportation (currently under revision).

TABLE 1

[5]An Emergency Medical Services (EMS) system is a network of resources - people, communications and equipment - organized to provide emergency care to victims of sudden illness or injury.

Acknowledgments

From the very beginning of this project, investigators relied on the knowledge, attitudes, and skills of the experts organized by the National Advisory Board. Individual participants sought their own level of involvement and contribution toward accomplishing the goals of this project. These contributions varied from individual to individual, and regardless of the level of involvement, everyone played a significant role in the development of these guidelines. It is essential that those who have assisted with the achievement of this worthy endeavor be recognized for their efforts. For all who have contributed, named and unnamed, thank you for sharing your vision. Your efforts have helped assure that the educational/training needs of First Aid Providers are met so that they can provide appropriate and effective emergency care.

The investigators would also like to recognize the following individuals and/or organizations for their significant contributions to this project:

National Organizations
Individuals

[to be named]

Process

The *National Guidelines for First Aid Training In Occupational Settings* was developed by a National Advisory Board including medical and EMS professionals, representatives from industry, government and recognized first aid training program developers. These experts met in person and via teleconference to review, edit, and critique the developmental document.

Basic Life Support / Cardiopulmonary Resuscitation (BLS/CPR)

These guidelines contain many of the knowledge and skill objectives of BLS/CPR. In order to maintain an up-to-date guideline, the didactic material has not been reproduced. Program developers and/or instructors must utilize the most current version of *Guidelines for cardiopulmonary resuscitation and emergency cardiac care, Emergency Cardiac Care Committee and Subcommittees, American Heart Association.*

Integration with the Blueprint

The National EMS Education and Practice Blueprint, adopted through a national peer review and consensus process, guided the development of the NHTSA curriculum for professional responders as well as these *National Guidelines for First Aid Training In Occupational Settings*. The blueprint constitutes the minimum national knowledge and skill competencies for professional responders, beginning with the First Responder, who is identified in the Blueprint as an individual who:

> *"...uses a limited amount of equipment to perform initial assessment and intervention and is trained to assist other EMS providers."*

As this guidelines is intended to be consistent with the blueprint, the First Aid Provider is identified in this document as an individual who:

> *"...uses a limited amount of equipment to perform initial assessment and intervention while awaiting arrival of EMS."*

The National Advisory Board believes that future integration of these guidelines in the *National EMS Education and Practice Blueprint* would provide direction for constituting the minimum national knowledge and skill competencies for First Aid Providers. As any chain is only as strong as the weakest link, such integration would undoubtedly serve to strengthen the entire chain of survival by allowing laypersons to learn the same priorities of care and general approach to the patient used by professional responders, resulting in a continuity of care as the patient is passed from layperson to professional.

As part of a consistent, organized, nationwide approach to the education of First Aid Providers, training agencies or regulatory offices may wish to supplement these guidelines with additional knowledge and skills. However, to be consistent with the intent and philosophy of the *National EMS Education and Practice Blueprint,* local additions to the First Aid Provider's education and

scope of care should reflect the Blueprint's continuum of knowledge and skills. Each level of knowledge and skill includes all previous levels. If knowledge or skill items are "out of synch" with the logical continuum, the utility and value of the Blueprint is significantly decreased. When knowledge and skills are added to the First Aid Provider's scope of care, the additional information should be consistent with the corresponding levels of the next higher level of national curriculum.

Automated External Defibrillators

The 1992 *National Conference on Cardiopulmonary Resuscitation and Emergency Cardiac Care* strongly endorsed the principle of early defibrillation, which states that all personnel whose jobs require that they perform basic CPR be trained to operate and permitted to use defibrillators, particularly automated external defibrillators (AED's).[6] Additionally, experts estimate that nationally 20,000 to 100,000 lives could be saved annually by greater public access to automated external defibrillators.[7] American Heart Association training materials on AED's are provided in the AHA's *Instructors Manual for Basic Life Support* and are intended to provide a standardized, national curriculum and course content that can be adapted for local use.[8] Program developers, employers, and first aid instructors are encouraged to develop AED programs using the AHA's authoritative curriculum to supplement these *National Guidelines for First Aid Training in Occupational Settings.* **Currently, rescuers must operate AED's under the authority of the medical license of a medical director and the enabling administrative codes of the state.**

Supplemental Emergency Oxygen

Supplemental oxygen should be used during cardiopulmonary emergencies as soon as it is available.[9] Masks equipped with a one-way valve that diverts the victim's exhaled gas and a standard oxygen (insufflation) inlet are recommended for mouth-to-mask ventilation by appropriately trained rescuers.[10] Bag-Valve-Mask (BVM) devices are <u>not</u> recommended for use by persons who are occupationally required to be first aid trained.

Supplemental oxygen should be used for victims of serious illness or injury by First Aid Providers who have been properly instructed in it's use. Program developers are encouraged to implement supplemental oxygen in their training programs. An enrichment program for emergency oxygen use by those with an occupational requirement to be first aid trained and specially trained rescuers has been developed as a complement to these *National Guidelines for First Aid Training in Occupational Settings.* Rescuers should know the indications for and techniques of using adjunctive equipment. **Adjunctive equipment should not divert attention or effort from basic first aid efforts.**

[6]Emergency Cardiac Care Subcommittees, American Heart Association. Guidelines for cardiopulmonary resuscitation and emergency cardiac care; *JAMA*. 1992;268:2199.
[7]*Currents in Emergency Cardiac Care*, Spring 1995, ©American Heart Association, Inc.
[8]American Heart Association, Textbook of Basic Life Support for Healthcare Providers, ©1994 American Heart Association, 9-11.
[9]*JAMA*. 1992;268:2199.
[10]Ibid.

First Aid Program Development

The ultimate liability for standardized instructional programs rests with the producer.[11] An organization promoting a standardized instructional system designed and tested by a professional body, drawing on the talent and experience of recognized experts in the field and outside consultants should be willing and able to easily identify and document not only their source for appropriate medical treatment guidelines, but also be readily capable of producing reasonably acceptable criteria for;

- Course curriculum and lesson format.
- Successful completion of the course by learners.
- Instructor certification measures, including revocation procedures with due process.
- Administration and course record management.
- Ongoing quality assurance

Medical oversight is paramount in ensuring the highest quality out-of-hospital care. Program developers should work with medical professionals to review first aid training program curriculum in order to achieve a sound method of continuous quality improvement.

Implementation

Some alterations to the content of first aid training programs may be necessary to fulfill the intent of these guidelines. Revising programs to meet the intent of these guidelines would undoubtedly serve to strengthen the entire chain of survival and the continuity of patient care. Revision takes time. Any changes to program content deemed necessary should be accomplished when program developers have conceived thorough plans to do so. Program developers who wish to create *new* programs following the release of this guidelines should consider this an influential document that provides guidelines for appropriate content and flow of material. Lesson plans should be based upon this guidelines and adapted to authoritative instructional design methodology.

[11]Dougherty, NJ, Trends in Education, The professionally standardized instructional system: a valuable tool in the reduction of program and instructor liability. *The Undersea J ournal* ©1988 International PADI, Inc.

National Guidelines for First Aid Training in Occupational Settings

Course Guide

History

The *National Guidelines for First Aid Training in Occupational Settings* came about as a result of the reality that no current document existed to standardize first aid training program content for those with an occupational requirement to be first aid trained. A well meaning attempt to define what constituted "basic and essential elements of a first aid program" in the workplace had been previously released. These guidelines recommended everything from very minor injuries to diagnostic differentiation and management of a major illness or significant trauma as course content.[12] This was a commendable attempt to provide guidelines for workplace first aid training in the absence of any national consensus document. However, these 1991 guidelines are not consistent with national guidelines for EMS training programs released in 1995.[13]

The First Aid Provider is an integral part of the Emergency Medical Services System. The chain of survival would doubtlessly be strengthened by helping those persons with an occupational requirement to be first aid trained learn the same priorities of care and general approach to the patient used by professional responders. The expectant result being a continuity of care as the ill or injured person is passed from layperson to professional. Thus, these guidelines are based upon and are derived from NHTSA's revised *First Responder: National Standard Curriculum*.

A successful state-wide pilot project to standardize first aid program content for industry was originated by the Washington State First Aid Training Task Force (WSFATTF) and organized by the State of Washington Department of Labor and Industries (appendix A & B). Using a formal group process, the participants identified the priority needs for first aid training in Washington State based upon the aforementioned documents. Following successful consensus and peer-review of a first aid standard guidelines in Washington State, revisions were made to the Washington State guidelines to produce one with a national perspective. This revision was followed by a national peer-review process.

To ensure the validity and strength of any recomendations or changes in the peer-review process, recommendations were supported by authoritative sources and/or scientific evidence. This included current published EMS texts (revised to meet the new DOT-First Responder or EMT-B curriculum), or published, peer-reviewed scientific literature. Additionally, recommendations had to be feasible; i.e., safe, effective, teachable, and easily incorporated into the current practice for the First Aid Provider.

The following are priorities from the 1994-1996 Washington State First Aid Training Task Force meetings:

- Review and development of guidelines for first aid based on national consensus of practice for professional responders. Identify "need to know" versus "nice to know" content. (What really needs to be done in first aid ? What makes a difference? Define what First Aid Provider's need to do).

- Establish an on-going committee to provide for future revision.

- Emphasize an assessment-based format rather than a diagnostic-based format.

- Ensure that there is adequate focus on primary skills of assessment and ABCs.

[12]OSHA Guidelines for First Aid Training Programs CPL 2-2.53 1991. III; General Program Elements.
[13]First Responder National Standard Curriculum, 1995, National Highway Traffic Safety Admin., U.S. Dept. of Transportation.

- Include review of published EMS textbooks when revising guidelines and curricula.
- Emphasize rescuer and injured/ill person safety components, including infection control, in all curricula.
- Ensure adequate emphasis as appropriate and/or desired for children and infants by integrating optional information throughout the guidelines.
- Utilize measurable educational objectives (knowledge, skills, judgment) to determine individuals' learning needs.

Goals

This course guide has been designed and developed to assist the program developer, instructors, and others in planning, managing and teaching first aid in occupational settings. Through the use of these guidelines those with an occupational requirement to be first aid trained will learn the core knowledge and skills to provide basic life supporting care to ill or injured person prior to the arrival of professional EMS personnel.

The “Toolbox” Concept

A toolbox is a compartmentalized box or chest in which tools are kept. While the box organizes the tools, it does not determine the order that they are selected and put to use. This is the job of the craftsman. Like a toolbox, these guidelines (specifically the modules) contain the information and skills (tools) to be used in the training of First Aid Providers. Program developers (craftsmen) are responsible for selecting the order in which modules are presented and the instructional methodology used to present them.

First Aid Provider Core Elements

These guidelines are designed to instruct a student to the level of First Aid Provider, who serves as a vital link in the chain of survival. The First Aid Provider Core Elements include the minimum knowledge and skills necessary for the individual to provide first aid with a limited amount of equipment. After successful completion of a training program based on the First Aid Provider Core Elements, the student will be able to:

- Explain the Roles and Responsibilities of the First Aid Provider
- Explain the Importance of Scene Safety and Body Substance Isolation
- Explain the Good Samaritan Law, Consent and Confidentiality
- Perform an Emergency Move and Place a Person in the Recovery position
- Open and Maintain an Airway
- Provide Rescue Breathing
- Manage an Obstructed Airway
- Perform Scene Assessment
- Perform Initial and On-Going Assessments of the Injured/Ill Person
- Perform Adult One Rescuer CPR
- Explain the “Warning Signs and Symptoms” of Medical Problems
- Care for a Decreased Level of Responsiveness
- Control External Bleeding, Recognize Internal Bleeding and Care for Shock
- Stabilize Suspected Spinal Injury
- Provide Manual Stabilization of Suspected Skeletal Injuries

Skill Practice

The National Advisory Board wishes to stress that emphasis should be placed on the skills of the First Aid Provider Core Elements. **The majority of the class time should be used for skill practice.** Program developers and instructors should limit presentations to the essential knowledge needed by the First Aid Provider to perform the skill.

Barriers to Action in an Emergency

Exploring the First Aid Provider's barriers to action in an emergency is one of several fundamental first steps in curriculum design. Traditionally, receiving first aid instruction has been no guarantee that a First Aid Provider will respond to another person in need of immediate life support and care. It is apparent that many First Aid Providers do not provide emergency care when it is indicated. The reasons cited generally fall into two categories; (1) poorly designed programs which are not objectively developed and fail to adhere to fundamental rules of curriculum development, and (2) specific lay person characteristics within the social/cultural and psychological/emotional domain.[14]

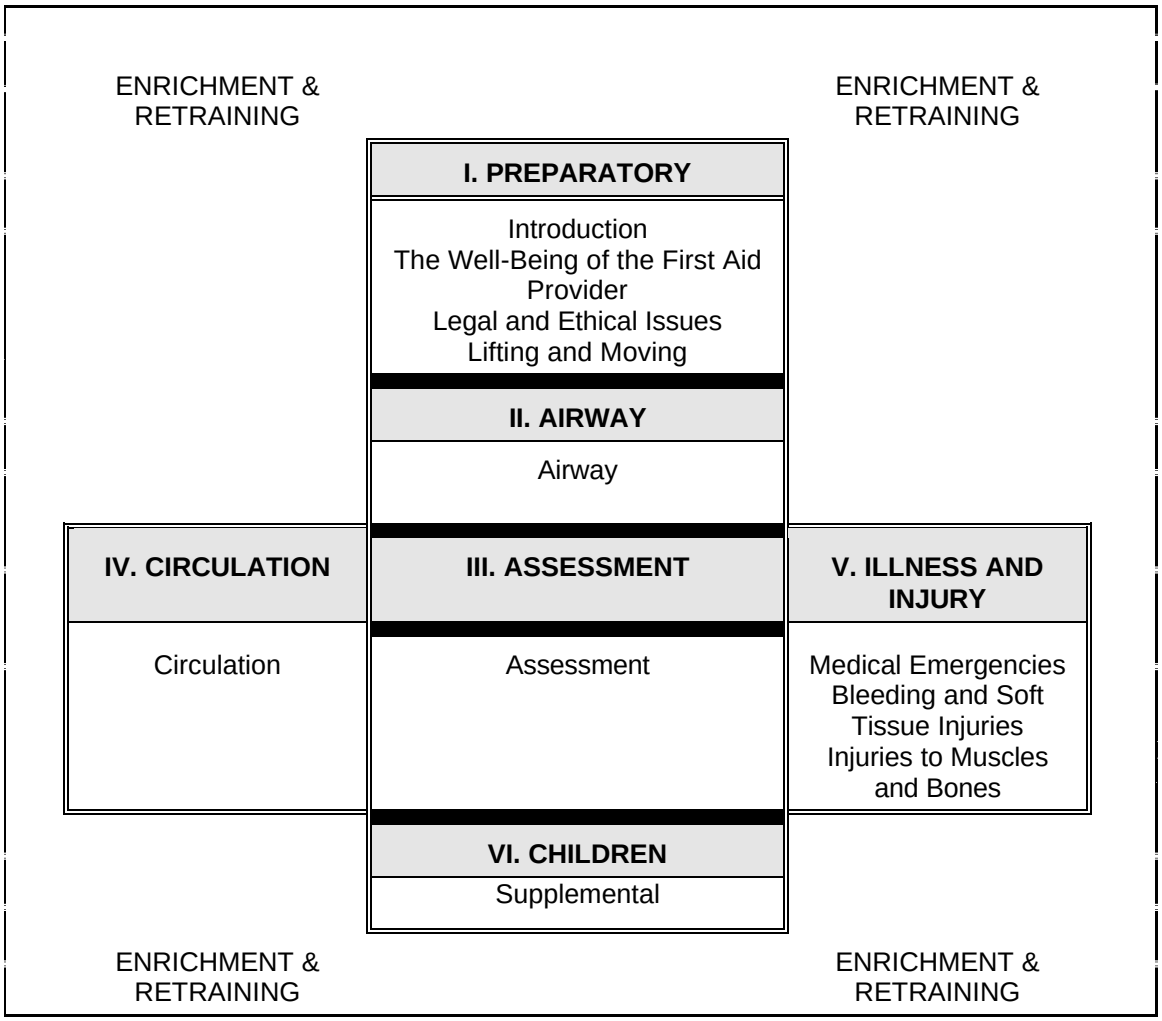
First aid program developers and instructors are responsible for helping First Aid Providers overcome barriers to action in an emergency. Factors that are key to bridging obstacles include basing content and instructional decisions on objective criteria and assuring that instructor preparation focuses on the cultural and psycho-social needs of the students (in addition to program knowledge and skills).[15]

One of the most common and intense emotions at the time of a medical emergency is fear (fear of death, fear of failure and fear of negative consequences) which can quickly result in panic. Panic may result in improper action or inaction by the First Aid Provider. First aid curricula need to focus on skills and confidence building, not medical facts and information.[16] Information concerning common barriers to actions and knowledge of what constitutes appropriate action, should be combined with skill practice to build confidence that can be translated into effective action.

[14]Braslow, A. (1994) *Standarization of Medical Training for the Non-Medical Professional*. Presented at the Eleventh Annual International Aircraft Cabin Safety Symposium and Technical Conference, Long Beach, CA.
[15]Braslow, A. CPR; A Skill for Everyone? in*: Proceedings of the Australian Resuscitation Council Spark of Life Conference*. Melbourne, Victoria, Australia: Australian Resuscitation Council; 1993:18.
[16]National Standard Curriculum for Bystander Care, National Highway Traffic Safety Admin., U.S. Dept. of Transportation, 1992. 17-20.

First Aid Training Guidelines

DIAGRAM OF INSTRUCTIONAL MODEL



Program developers are responsible for selecting the order in which modules are presented and the instructional methodology used to present them.

Course Design

Module 1: Preparatory

Lesson 1-1
Introduction
Familiarizes the First Aid Provider with the introductory aspects of first aid . Topics include the Emergency Medical Services system and roles and responsibilities of the First Aid Provider.

Lesson 1-2
Well-Being of the First Aid Provider
Covers the emotional aspects of first aid, stress management, scene safety, body substance isolation (BSI), personal protection equipment (PPE), and safety precautions that can be taken prior to performing the role of a First Aid Provider.

Lesson 1-3
Legal and Ethical Issues
Explores the scope of practice, moral and ethical responsibilities, consent, refusals, abandonment, negligence, confidentiality.

Lesson 1-4
Lifting and Moving Injured/Ill persons
Provides students with knowledge of emergency lifting and carrying techniques, and principles of moving injured/ill persons when necessary to protect life or prevent further injury.

Module 2: Airway

Lesson 2-1
Airway
Addresses airway anatomy and physiology, how to maintain an open airway, rescue breathing, *optional* variations for infants and children, as well as injured/ill persons with stomas. The barrier devices will be discussed in this lesson. Also included is the management of foreign body airway obstructions.

Module 3: Assessment

Lesson 3-1
Assessment
Enhances the First Aid Provider's ability to evaluate a scene for potential hazards, to determine the number of injured/ill persons, summon EMS, and to evaluate the mechanism of injury or nature of illness. This lesson provides the knowledge and skills to properly perform the initial assessment. In this session, the student will learn about forming a general impression, determining responsiveness, and assessing the airway, breathing, and circulation. Students will discuss how to determine priorities of emergency care. This lesson also teaches the knowledge and skills required to continue the assessment and management of the ill or injured person.

Module 4: Circulation

Lesson 4-1
Circulation
This lesson provides the First Aid Provider with the knowledge and skills of Basic Life Support/Cardio- Pulmonary Resuscitation (BLS/CPR) for adults*(children, and infants optional).*

Module 5: Illness and Injury

Lesson 5-1
Medical Emergencies
Discusses the recognition and management of general medical problems, seizures, levels of responsiveness, environmental emergencies, typical emergency care situations.

Lesson 5-2
Bleeding, Shock and Soft Tissue Injuries
Reviews the cardiovascular system, describes the care of the injured/ill person with internal and external bleeding, and teaches the management of soft tissue injuries and burns. Techniques of dressing and bandaging wounds will also be taught in this lesson.

Lesson 5-3
Injuries to Muscles and Bones
Reviews the anatomy of and injuries to the muscles and bones. Presents information about injuries of the skeletal system. Reviews the anatomy. Discusses injuries to the spine and head, including the mechanism of injury, signs and symptoms of injury, and assessment.

Module 6: Children (supplemental)

Lesson 6-1
Infants and Children
Presents information concerning anatomical differences in infants and children, discusses common medical and trauma situations.

Course Descriptions

Length and Depth of First Aid Training Programs

The National Advisory Board recognizes the need for the length and depth of first aid training programs to be targeted at occupational risk and EMS accessibility. Employers are understandably concerned with the financial impact that first aid training programs create. Workers taken out of production and presented with extensive, non-essential first aid information unrelated to their specific occupational needs expends resources needlessly. Occupationally targeted first aid training based upon occupational hazards and time and distance from EMS is essential. As an example, the core program might be considered adequate for a clerical worker in an urban/suburban office. Conversely, a supplemental and/or enrichment program may be desired to adequately prepare a worker in a rural setting 25 minutes or more from EMS and/or in a high hazard work environment.

The method of estimating these variable risk factors and matching them to appropriate knowledge categories and skill proficiencies (to ensure reasonably effective first aid can be provided at the work site) is the responsibility of employers with the assistance of first aid training program developers, safety professionals and first aid instructors. However, caution is warranted. Too much flexibility in program content may result in presentations that lack an organized approach to the care of the ill or injured person.

Core Programs

The Core Program is based in part upon the concept of Life Supporting First Aid,[17]adapted for use within an occupational setting. Core programs are appropriate for many low risk worksites and is the minimum information and skills in which persons with an occupational requirement should be trained (Table 2). At worksites with low occupational hazards and short EMS response times, first aid training should focus on information, assessment and skills that will protect life or prevent further injury during the brief interval (4-6 minutes under normal circumstances) between incident and EMS arrival. The core program should minimally consist of the modules and lessons that appear in the table on the following page. Coverage of these modules and lessons with proper emphasis will help assure presentation of essential life-supporting first aid information.

[17]Safar P, International Resuscitation Research Institute, Pittsburgh, PA.

First Aid Provider Core Elements

Core Topic	Emphasis
Module 1: Preparatory Lesson 1-1 Introduction Lesson 1-2 The Well-Being of the First Aid Provider Lesson 1-3 Legal and Ethical Issues Lesson 1-5 Moving and Positioning of Injured/Ill Persons	• Roles and Responsibilities of the First Aid Provider • Personal Safety, Scene Safety and Body Substance Isolation • Good Samaritan Law, Consent and Confidentiality • Emergency Moves and Recovery position
Module 2: Airway Lesson 2-1 Airway	• Opening and Maintaining an Airway • Rescue Breathing • Managing an Obstructed Airway
Module 3: Assessment Lesson 3-1 Assessment	• Scene Assessment • Initial Assessment of the Injured/Ill Person • On-Going Assessment of the Injured/Ill Person
Module 4: Circulation Lesson 4-1 Circulation	• One Rescuer CPR
Module 5: Illness and Injury Lesson 5-1 Medical Emergencies Lesson 5-2 Bleeding, Shock and Soft Tissue Injuries Lesson 5-3 Injuries to Muscles and Bones	• Recognize the “Warning Signs and Symptoms” of Medical Problems. • Recognize and Care for a Decreased Level of Responsiveness • Control of External Bleeding • Recognize Internal Bleeding • Recognize and Care for Shock • Recognize and Stabilize Suspected Spinal Injury • Manual Stabilization of Suspected Skeletal Injuries

Table 2

Program developers are responsible for selecting the order in which modules are presented and the instructional methodology used to present them.

Supplemental Programs

Supplemental programs should be used at worksites with moderate to high occupational hazards and/or lengthened EMS response times. First aid training should include the core program components and some or all of the supplemental information on physical assessment (Lesson 3-1), emergency care for specific medical and environmental emergencies (Lesson 5-1), emergency care for specific soft tissue injuries (Lesson 5-2) and Children (Lesson 6-1).The length and depth of the supplemental topics is dependent on occupational risk and worksite requirements.

Enrichment Programs

Enrichment programs are necessary in some occupational settings when the employer, instructor or program developer determines additional training beyond the core and supplemental programs is necessary to meet occupational risk. Examples of these topics may include (but are not limited to), advanced lifting and moving techniques, splinting of injured bones, specific treatment for exposure to hazardous materials used in the workplace, information relative to daycare for infants/children and commercial or recreational scuba diving accidents.

Occupational risk or extended time and distance from EMS resources may indicate a need for training beyond the Core Program. Each work environment should be surveyed to determine the appropriate level of training that workers should receive.

How to Use the Modules

There are six modules of instruction in the core content. Each lesson has the following components:

Objectives

The objectives are divided into three categories: Cognitive, Affective, and Psychomotor.

Cognitive	Affective	Psychomotor
thinking--	**emotional response--**	**physical process--**
knowledge	feelings	physical movement
comprehension	emotional intensity	skilled activities
application		

To assist with the design and development of a specific lesson, each objective has a numerical value, e.g., 3-1.1. The first number is the module of instruction, followed by a hyphen and the number of the specific lesson. For example, 3-1.1 is:

Module 3: Patient Assessment
Lesson 3-1: Patient Assessment
Objective 3-1.1 Recognize hazards/potential hazards. (C-1)

At the end of each objective is a letter for the type of objective: C = Cognitive; A = Affective; and P = Psychomotor. (The example above is cognitive). The number following the type of objective represents the level of objective: 1 = Knowledge; 2 = Application; and 3 = Problem Solving. (The example above is knowledge).

Preparation

Motivation -- Each lesson has a motivational statement that should presented prior to teaching the lesson. It is important to be familiar with its content and to be able to prepare the students or explain why this lesson is important.

Prerequisites

Prior to starting a lesson, the instructor should assure that the students have completed the necessary prerequisites.

Materials

Audio Visual (AV) Equipment -- In recent years, high quality video materials have become available for first aid. They should be used as an integral part of the instruction in this program. The course coordinator should ensure in advance that the necessary types of AV equipment are available for the class. If possible, the course administrator should have a video library available for the student.

Equipment

Each lesson plan contains a list of equipment that should be available for instruction.

Recommended Time to Complete

The time to complete each lesson will vary according to factors such as instructional design, the varying nature of adult learners and their number in a given class. The recommended time to complete all lessons and present cognitive, affective and psychomotor objectives of the core guidelines is within four to six hours. However, it is important to recognize that first aid training can be both general and specific to the unique hazards of a particular industry or process. Therefore, it is impossible to state that recommended minimum times to complete the core elements will satisfy all occupational requirements.

Programs of greater length (more than 6 hours) and depth in knowledge and/or skill components may be necessary to ensure compliance with state or federal regulations, provide training for specific occupational risks or to prepare for extended EMS response times. These programs will contain the core program as well as additional supplemental and/or enrichment information. The length of these extended programs is determined by the scope and depth of the additional information and skills presented.

Presentation

Declarative (What) -- This is the cognitive lesson plan, the information that the instructor provides the students. This may be accomplished by various methods, including lectures, small group discussion, and the use of audio-visual materials. Demonstrations, if the instructor desires, may be used as part of the instruction. The instructor must be well versed in the entire content of the lesson plan. These *Guidelines for First Aid Training Curriculums* should be considered an influential document that provide guidelines for the appropriate flow of information. **These guidelines are not intended to be the instructors lesson plans.** The instructor's lesson plans should be based upon these guidelines, instructional design methodology, and local practice. The program developer and/or instructor should make their own lesson plans according to authoritative instructional design methodology.

Application

Procedural (How)
This is the skills portion of the program. The students should be able to demonstrate reasonable proficiency in all skills listed in each section. **Emphasis should be placed on the development of psychomotor skills. Instructors and program developers should develop lesson plans that allow for the majority of class time to be spent doing hands-on practice.** If the declarative (what) content was presented as a lecture, the instructor should perform demonstrations prior to having the students perform the skills. If the instructor performed a demonstration as part of the declarative component, the students may begin by practicing skills in the practical setting. When this component of the lesson is being conducted, student to instructor ratio's (SIR) should be consistent with authoritative instructional design methodology. In order to maintain the optimal teaching environment, the SIR should not exceed 12:1 and a student to manikin ratio of 6:1. Exceeding these ratios will significantly increase the instructional time frames.

Students should be praised for their progress. For those students having difficulty performing a skill or skills, remediation is required. It is well known that a demonstration must be followed by practice in which skills are reproduced. Reproductive skills are simple skills that involve very little planning or strategy on the learners' part. For example, performing a "head-tilt, chin-lift" maneuver. The instructor demonstrates the skill and the learner reproduces it. Reproductive skills improve with repetition. Reproductive skills for new learners usually require only the

amount of information necessary to reasonably perform the skill.[18] Periodic practice of new skills is necessary to maintain a reasonable level of competency.

It has been argued that a personal "threshold" exists for mastery of reproductive skills. Forcing the learner to perform at a level beyond this personal threshold does not increase ability; on the contrary, attempting to do so increases the error rate and eventually leads to a "total breakdown" of the skilled performance.[19]

Contextual (When, Where, and Why)
This section is designed to help the students understand the application of their knowledge and skills relating to their performance as First Aid Providers. This section relates back to the motivational statement and represents the reasoning as to why, where, and when a First Aid Provider would need to use the knowledge or perform the skills. It is important that the instructor be familiar with the intent of this section and relay that intent to the students.

Student Activities
Students learn by various methods. The three learning styles are auditory, visual, and kinesthetic (A-V-K). The intent of this section is to ensure that the content of the guidelines is presented to meet the needs of the three different types of learning styles. These three areas should not necessarily be used separately from the lesson plan, but as an adjunct to it. An attempt to provide instruction to the student with these three types of modalities will enhance student learning. Instructors should feel free to add additional A-V-K experiences appropriate for each lesson.

Auditory (Hearing)
This section allows information to be presented verbally. Students who learn best by hearing will benefit from this method of instruction.

Visual (Seeing)
This section allows the instructor to provide material through visual representations. Visual learners will benefit from this method of instruction.

Kinesthetic (Doing)
This section allows the instructor to teach material by having the students perform the skill. Those students who learn best by doing will benefit from this method of instruction.

Instructor Activities

This section is to remind the instructors that they should always supervise student practice and praise progress. They should use positive reinforcement in the cognitive, affective, and psychomotor domains. Occasionally some learners may perform less than adequately or fall short of the necessary objectives to receive a successful completion card within the time constraints of the program. They should be offered remediation and remediation opportunities should be accessible to all. Professionalism, patience and positive coaching in a relaxed environment of mutual respect should assist most in reaching their goal of successful completion.

Testing and Evaluation of First Aid Training Course Participants

[18]Romiszowski AJ, *Designing Instructional Systems. Decision making in course planning and curriculum design,* ©1981 Kogan Page, London/Nichols Publishing, New York: 300-303.
[19]Ibid.

The purpose of occupationally regulated first aid training for laypersons should be to educate, not to test or certify competence. It is the responsibility of course instructors to assess the student's skill and knowledge of course content, and determine if he or she has successfully completed the course.

First aid course participants are not medical professionals and thus are accountable only by personal choice - the sense of ethical and moral responsibility - for application of knowledge or skill. Furthermore, difficulties with literacy and language are a common impediment as the American public and labor pool continue to diversify. Subsequently, formal written evaluation (testing) is discretionary at the level of First Aid. Informal evaluation (including prompt feedback of knowledge and skills gained) should always be used. This will allow the learner, with the considerate guidance of a qualified instructor, to evaluate his or her own skills, knowledge, and to correct insufficiencies.

The goal for each individual who participates in occupationally required first aid training is to succeed to his or her highest level of performance. Individuals experiencing problems in learning should be offered positive reinforcement and assistance to reach a reasonable performance level within the constraints of time.

Persons with special needs who express a desire to learn first aid should be provided a positive learning experience. Many (if not most), people with special needs are entirely capable of successful completion. Routine instructional strategies may have to be adjusted to meet their special needs.

Evaluatory tools used to rate learner performance should be maintained by instructors or their organizations and used to demonstrate reasonable achievement of the course objectives by the learner. This is especially true in this setting, where government regulations compel first aid training within an occupational setting.

Remediation

The intent of this section is to ensure that the instructor meets the needs of those students who are experiencing difficulty understanding the material or performing practical skills.

Enrichment

This section is designed to allow the program designers, instructors, and employers to add additional information, or augment the guidelines content. Anything that is unique to your occupational setting should be added.

Additionally, brief safety messages and injury/illness prevention information may be included to enhance accident reduction and wellness programs. Stressing prevention of workplace accidents and illnesses is an important aspect of occupationally required first aid training.

Instructors

Assessing Student Achievement

All written examinations used within the program should be valid and reliable and conform to psychometric standards. Instructors should be encouraged to use outside sources to validate examinations and/or as a source of classroom examination items.

The primary purpose of this course is to prepare students to meet the expectations for a First Aid Provider. Each student, therefore, should demonstrate attainment of knowledge, attitude, and skills in each area taught in the course. It is the responsibility of the program administrator, primary instructor, and employer to assure that students obtain proficiency. The level of knowledge, attitude and skills attained by a student in the program will be reflected in first aid performance.

Successful Completion

Successful completion of a training program in first aid for non-dutied laypersons indicates completion of a course which follows generally recognized medical treatments that are safe, indicated and helpful. A successful completion card or certificate should be issued when a qualified instructor;

- Respects the course curriculum and lesson format
- Identifies each students understanding of the cognitive, affective and psychomotor objectives of these guidelines.
- Observes each students comfort with, and reasonable performance of essential psychomotor skills.
- Uses an appropriate evaluation tool to document the students successful performance.

Program Developer

The primary responsibility of the program developer is instructional design consistent with these guidelines. This is fundamentally a diagnostic enterprise. It involves planning sequences of learning experiences that will produce a desired result.[20] This involves diligent effort towards selecting the most effective methods and techniques for producing this result.

Instructor Supervision

Technology based approaches for learning first aid such as computer-based learning, audio-cassettes, film and television have been recommended.[21] These technologies hold promise, especially in disseminating knowledge content. Limited integration with guided feedback has been accomplished[22] but is generally limited to dutied emergency medical care personnel. More complex first aid interventions involve psychomotor skills. Reasonable proficiency in skill requires guided supervision for reliable reproduction. Classic research has demonstrated that expositive methods (demonstration and prompted practice) of the entire task or special exercises

[20]Knowles MS, *The Modern Practice of Adult Education, From Pedagogy to Andragogy*, Cambridge, The Adult Education Company, 1980:26.
[21]ibid.,54.
[22]Anderson PB, Interactive Training for Emergency Medical Personnel, 1994 *Presentation,* NAEMSP Winter Meeting.

are required to reach a reasonable, but not necessarily high, standard of performance. Instructor supervision is necessary to prevent unsatisfactory performance and to prevent the learner from "drifting" from correct procedures through lack of corrective feedback.[23,24]

Education in first aid can be separated into approaches which are dependent upon instructor supervision and feedback and those that are not. For the purpose of meeting occupational or regulatory demands, computer-based learning, audio or video cassettes, film and television are useful adjuncts to initial learning and continuing education but currently should not be considered adequate when used alone.

Acceptable first aid training programs for meeting occupational or regulatory concerns should include supervision by qualified instructors. Thus, reliable learning programs to develop qualified instructors are an undeniable necessity for first aid training programs which offer evidence of successful completion to participants.

Primary Instructor: The Primary Instructor must be knowledgeable in aspects of first aid and BLS/CPR, in methods of adult education, and in managing resources and personnel. This individual should have attended and successfully completed a standardized course of instruction in First Aid at the instructor level.

Assistant Instructor: This person assists the Primary Instructor of any lesson in the demonstration and practice designed to develop and evaluate student skill competencies. This individual should have successfully completed a standardized course of instruction in first aid.

Philosophy Regarding Adult Learners

Individuals participating in this educational program should be considered adult learners even in those programs instructing students younger than age 18. Adult learners are responsible for their own learning. There are several characteristics regarding the adult learner as a First Aid Provider student.

1. Students usually want to utilize knowledge and skills they have learned soon after they have learned them.

2. Students are interested in learning new concepts and principles; they enjoy situations that require problem-solving, not necessarily learning facts.

3. Adult learners learn better if they are active participants rather than passive learners.

4. Adult learners want to relate the material they are learning to past experiences of their own.

5. Students will learn best if they are able to proceed at a reasonable pace.

6. Motivation is increased when the content is relevant to the immediate interests and concerns of the student.

[23]Romiszowski AJ, *Designing Instructional Systems, Decision making in course planning and curriculum design,* Kogan Page, London/Nichols Publishing, New York: 300-303.
[24]Thorndike E, *Adult Learning*, New York, MacMillian, 1928.

7. Immediate feedback is essential to the student, who needs to be kept continuously informed of progress.

One intent of these guidelines is to alter the methods of instruction used by the instructor. These guidelines has been designed and developed to reduce the amount of lecture time and move towards an environment of discussion and practical skills. This way both learners and instructors are active in the process of learning.

Some Principles of Adult Education

Gain and maintain the attention of the first aid student.

To be successful, instructors need to gain and maintain the attention of the students. There are many methods that may be used to gain the student's attention, e.g., telling a *brief and immediately relevant* anecdote (not inappropriate "war stories"), posing a unique situation, or asking how they would solve a problem. Once the attention of the student is gained, it must be maintained throughout the entire lesson. After about 15-20 minutes of presentation, it is essential that the student be reinvolved in the learning process.

Conducting Emergency Care Scenarios in the Classroom

Adults desire hands on training. One very effective method of teaching is the use of emergency care scenarios in the classroom. This is the acting out of a first aid situation. This provides the student an opportunity to respond, evaluate the scene, assess the injured/ill person, control life threats and do any of the treatments covered in the course that would be appropriate while waiting for EMS. Scenarios give students the opportunity to demonstrate integration of the course's cognitive, affective, and psychomotor objectives into a real life scenario while working with a team of First Aid Providers. This is an application which "puts it all together" for the student by incorporating their ability to hear, see, and do as well as begin to emphasize teamwork and leadership skills.

A possible limitation of scenarios is the creation of a false sense of security on the part of learner(s) who successfully complete the program. There is some concern that a bad simulation may simplify complex reality to such an extent that the learner gets a "dangerous illusion of perfect understanding."[25] Such superficial understanding may result in emotional distress when the learner recognizes that the real world does not always reflect the simulation.[26] To lessen the potential impact on especially new learners, instructors should be careful to point out a scenario is, at best, an *imperfect simulation* of reality.

Retraining

Retraining is an important issue. Emergency medical care is increasingly being studied. Changes in procedure occur with escalating frequency. Acquired first aid skills and knowledge deteriorate at a variable rate. Though little objective research exists, organizations that develop training programs determine how often knowledge and skills remain viable based on past performance and well-grounded practical experience. Any dependable local or national

[25]Sivasailam T, Stolovitah HD, *Instructional Simulation Games*, in; *The Instructional Design Library*, Educational Technology Publications, Englewood Cliffs, NJ., ©1978:60.
[26]Ibid.

organization promoting reliable, safe and effective first aid training sets limits for the effective duration of acquired knowledge and skills.
Responsible organizations should be readily capable of defending self-imposed limits. In the absence of objective and reliable research to base durational limits, any reliable organization who can show an established course curriculum and lesson format for retraining with reasonably acceptable time limits should be regarded as an acceptable program.

Limits for setting the effective duration of acquired knowledge and skills should not be one dimensional. The factors which determine retraining course frequency that should be considered are:

1. Federal or state regulations.
2. Occupational risk.
3. Time and distance from Emergency Medical Services.

Persons working in high risk occupations or activities or for who time and distance from EMS or other sources of professional medical care is excessive should receive more frequent retraining.

Students

Description - First Aid Provider

The First Aid Provider may function in the context of a broader role, i.e., law enforcement, fire rescue, or industrial response. With a limited amount of equipment, the First Aid Provider performs initial assessment and provides immediate life support and care while awaiting arrival of EMS. After receiving notification of an emergency, the First Aid Provider safely responds to the location given.

- Has a basic understanding of scene safety;
- Has an understanding of body substance isolation;
- Understands basic legal and ethical concepts relative to first aid.
- Functions within the scope of first aid care as defined by regulatory agencies;

Before initiating emergency care, the First Aid Provider will "size-up" the scene to determine that the scene is safe, to identify the mechanism of injury or nature of illness, and the total number of injured/ill persons, and to request EMS. Using a limited amount of equipment, renders first aid based on assessment findings. Responsibilities include but are not limited to:

- Opening and maintaining an airway;
- Ventilating ill/injured persons;
- Administering cardiopulmonary resuscitation;
- Providing first aid of simple and multiple system trauma such as:
    - Controlling hemorrhage,
    - Wound care,
    - Manually stabilizing injured extremities.
- Providing first aid to:
    - Manage general medical problems, levels of responsiveness, seizures, environmental emergencies.
- Searching for medical identification emblems as a guide to identify preexisting conditions.
- Reassuring injured/ill persons and bystanders.
- Avoiding mishandling or further harm to the injured/ill person.
- Ongoing assessment of the injured/ill person while awaiting EMS.
- Administers additional care as indicated.
- Orally reports their observations and first aid of the injured/ill person to EMS. Upon request, provides assistance to EMS personnel.
- Attends continuing education and refresher education programs as required.

Environment

Educational Environment

The intent of these guidelines is to allow for greater interaction between students and instructors. The instruction should be experiential and interactive. By using the procedural (how) section of the application area of the lesson plan as well as the kinesthetic (do) component of the student activity section, the instructor should be able to enhance the educational experience for the students.

Maintaining Records

It is recommended that the Program Developer/Administrator and/or instructor maintain, as a minimum, information on the following:

- Student attendance and performance, including comments as appropriate regarding need for improvement in skills, knowledge, and attitudes.
- Results of evaluation.
- Number and qualifications of the instructional team.
- Student's evaluation of the instructor and course.
- Lists of enrichments and add-on courses taught in conjunction with the program.

Equivalency and Reciprocity

It is important to recognize that possession of a successful completion card from one training agency *does not* imply equivalency with another. While possession of a card indicates successful completion of a course, an employer has a right to use the program of their choice and a need to confirm individual competence. Though there may be local variance, *none* of the national programs currently have pure reciprocity - the *mutual and unconditional* acceptance of each others successful completion certificates.

Students should understand that reciprocity is not guaranteed. They should check with the agency for specific course requirements prior to registering, paying for, or completing a class. Alerting the student to possible complications in this regard is primarily the responsibility of the instructor or instructor's organization. Employers and consumers are encouraged to seek out the program and agency which best serves their need. Costs and materials will vary.

Program Evaluation

On-going evaluation of the program should be conducted to identify instructional or organizational deficiencies affecting student performance. The evaluation process should be two-fold in nature, objective and subjective. Two main methods of objective evaluation generally used are:

1) How well do students measure up to evaluation?
2) How well do First Aid Providers perform?

Group and individual deficiencies may indicate problems in the training program. The training program should be evaluated by how well the objectives relate to the learning activities.

Subjective evaluation should be conducted at regular intervals by providing students with instruments to gather their opinion of the program's strengths and weaknesses. Students should be given the opportunity to comment on the primary and assistant instructors, presentation styles and effectiveness. Students should also be asked to comment on the quality and quantity of psychomotor skills.

The purpose of this evaluation process is to strengthen future training efforts. All information obtained as part of the subjective evaluation should be reviewed for legitimacy and possible incorporation into the course. Due to the important nature of this educational program, every effort should be made to ensure instruction of the highest quality.

Facilities

The physical environment of the First Aid program is a critical component for the success of the overall program. The facility should have sufficient space for seating all students. Abundant space should be made available for demonstrations. Additional rooms or adequate space should be available as practice areas. Facilities should also be evaluated for their ability to meet requirements for students with special needs.

The facility should be well lit for adequate viewing of various types of visual aids and demonstrations. Heating and ventilation should assure student and instructor comfort. A chalkboard (flip chart or grease board) and appropriate audio visual equipment should be available. If possible, light switches should be conveniently located in the presentation area. The practice areas should be carpeted and large enough to accommodate students and instructor(s) and the necessary equipment. Inadequate facilities may increase course length and negatively impact student learning.

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