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THE ROLE OF THE PHARMACIST
IN NATIONAL DISASTER

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U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
PUBLIC HEALTH SERVICE
Washington, D. C.



THE ROLE OF THE PHARMACIST IN NATIONAL DISASTER

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OFFICE OF CIVIL DEFENSE, DEPARTMENT OF THE ARMY

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OCD Review Notice

This report has been reviewed in the Office of Civil Defense and approved for publication. Approval does not signify that the report necessarily reflects views and policies of the Office of Civil Defense.

ABSTRACT

The American Pharmaceutical Association's Committee on Disaster and National Security has developed a report outlining the role of the pharmacist in national disaster planning, under a contract from the Office of Civil Defense, Department of Defense, and the Division of Health Mobilization, Public Health Service.

After describing the current positions of the American Pharmaceutical Association on civil defense, and reviewing the methods of approach used in this study, the Committee presented a professional profile of the pharmacist, identifying pharmacists in community practice, hospital practice, pharmacists in industry, pharmacists in wholesaling, pharmacists in government, pharmacists in education, pharmacists in association work, pharmacists in journalism, pharmacists as advisors and consultants and pharmacists involved in international activities.

The role of the pharmacist in disaster preparedness was recorded, setting forth priorities on pharmacists in different types of practice.

Recommendations for implementation of the report include the creation of an awareness of the problems by all pharmacists, the motivation of pharmacists to better equip themselves for assuming responsibilities in disaster programs, and the establishment of suitable educational or training mechanisms to achieve these results. To do this, closer coordination with Federal, State, and local governments is urged, more use by pharmacists of the training materials of the the Medical Self-Help Program, and an evaluation of better utilization of the pharmaceutical resources of the community in shelter programs. Specifically, the Committee has recommended:

1. The establishment of Joint Councils of Health Professions for Disaster Preparedness.
2. The development, publication and distribution of a Basic Orientation Manual for Pharmacists.
3. The establishment of a Pharmacy Liaison Officer for Civil Defense.

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THE ROLE OF THE PHARMACIST

IN NATIONAL DISASTER

I. Introduction

Members of the American Pharmaceutical Association Committee on Disaster and National Security

Thomas A. Foster, Chairman, APhA Committee on Disaster and National Security; Honorary President of the American Pharmaceutical Association; Medical Supply Consultant; formerly Chief, Office of Civilian Health Requirements; PHS and Health Supply Liaison Officer, OCDM. 919 18th Street, N. W., Washington, D. C.

R. David Anderson, Assistant Director, Pharmacy Central Supply Services, Ohio State University Hospital; Chairman, American Society of Hospital Pharmacists Committee on Safety Practices and Procedures. 935 Faculty Drive, Columbus, Ohio.

Arnold H. Dodge, Assistant Chief, Division of Health Mobilization, U. S. Public Health Service, Department of Health, Education and Welfare, Washington, D. C.

Jack A. Karlin, Community pharmacist in Cleveland, Ohio; Chairman of the Ohio State Pharmaceutical Association Civil Disaster Committee, 2594 Dysart Road, Cleveland, Ohio.

John R. Kenny, Jr., Industrial pharmacist; Assistant Director, Trade Distribution Department, E. R. Squibb and Sons, 745 Fifth Avenue, New York, New York.

John E. Preston, Pharmaceutical Consultant, California State Department of Social Welfare, 3120 Mountain View Avenue, Sacramento, California.

Curtis H. Waldon, Professor of Pharmacology, School of Pharmacy, University of Colorado, Boulder, Colorado.

William S. Apple (ex officio), Executive Director, American Pharmaceutical Association, 2215 Constitution Avenue, N.W., Washington, D. C.

Consultant

Earl A. Schwerman, Jr., Assistant Chief Pharmacist, Methodist Hospital, Rochester, Minnesota.

APhA Staff Liaison

George B. Griffenhagen, Director, Division of Communications, American Pharmaceutical Association; Editor, Journal of the American Pharmaceutical Association, 2215 Constitution Avenue, N.W., Washington, D. C.

Background and Current Position of the American Pharmaceutical Association

Since the American Pharmaceutical Association is the national professional society for pharmacists in the U. S. A., it is important that APhA have a stated policy regarding the proper utilization of pharmacists during periods of national disaster.

Historically, support of civil defense programs by APhA has closely paralleled that of government civil defense activities. During World War I, when U. S. Civil Defense was little more than a booster of morale, APhA addressed a letter to President Woodrow Wilson, "pledging the loyal support of the Association" and noting, "it is ready and willing to help the country in any way it can and holds itself in readiness to be advised by you and by your orders."

With the war-clouds of World War II gathering over Europe and with the organization of a U. S. Office of Civilian Defense in 1941 to coordinate federal, state and local civilian defense programs, APhA through official resolution the same year urged pharmacists "in every community

of this country to seek membership in all defense councils and local Red Cross units and to participate actively in their work." The Association also promised to maintain necessary relations and cooperation with all governmental agencies engaged in public health services, including the Office of Civilian Defense. One of the really solid achievements of APhA during World War II was the collection of over four tons of quinine which was in short supply following the Japanese seizure of the chinchona plantations of the Dutch East Indies.

Soon after the conclusion of World War II, procedures and methods established for conventional weapons had become outmoded, and the addition of nuclear bombs to our weapons arsenal changed all previous concepts of coping with an enemy attack on our country.

At the beginning of the Korean conflict the Federal Civil Defense Act of 1950 created the Defense Production Administration which became the Office of Defense Mobilization; this agency was charged with the responsibility of coordinating all emergency planning. Also in 1950 Congress authorized the establishment of the Federal Civil Defense Administration with authority to establish a medical stock pile and to cooperate with the states in their civil defense efforts.

Even before the new Federal Civil Defense Administration in 1951 formally announced its plan of action, APhA called on "all officers of state and local pharmaceutical associations to keep a close watch on announcements and be prepared to respond to calls for committee service and advisory data," and emphasized that "the place of the pharmacist in civil defense planning is as a part of the public health team."

The APhA Journal carried complete details of the Federal Civil Defense Administration's publications and plans in January 1951, including a comprehensive report on the "assignments to pharmacists" and the "scope of pharmaceutical services" as conceived by those in charge of the new FCDA. In 1952, APhA through resolution urged

all schools of pharmacy to cooperate with the Civil Defense Administration in making available courses of training to prepare pharmacists in the various elements of civil defense.

In 1959, the Office of Civil Defense Mobilization was created with the merger of the Federal Civil Defense Administration and the Office of Defense Mobilization. But again, even before OCDM plans went into action, APhA participated actively with the civil defense authorities and with the Civilian Health Requirements Office of the U. S. Public Health Service in obtaining information on community pharmacy inventories of essential survival items.

Since the end of the Korean war, APhA has had as an integral part of its organizational structure a standing committee on National Defense and Security (renamed in 1961 as the Committee on Disaster and National Security).

In October 1960, the Journal of the American Pharmaceutical Association devoted its entire issue to the pharmacist's role in civil defense which described in detail the health mobilization program of public health service, and reviewed the activities of pharmacists at the national, regional, state and local levels. In a guest editorial in this issue, Public Health Service Surgeon General Leroy E. Burney stated that they were placing "heavy reliance on our headquarters pharmacists to develop plans and operational programs in the field of emergency supply availability, stockpiling, distribution and utilization. I wish to express my personal appreciation for the interest of APhA in civil defense."

The American Pharmaceutical Association recognizes that it is only through the concerted disaster preparedness efforts of all pharmacists as members of the health profession team that we can hope to establish a firm basis for emergency medical care programs of the type anticipated under a post-nuclear attack situation. The Association also recognizes the need for the effective utilization of over 100,000 pharmacists to assure proper care of the surviving population in the event of a national disaster.

The American Pharmaceutical Association considers that all pharmacists have an obligation to cooperate with the proper state and local organizations and responsible federal agencies as well as to assist materially in the establishment of guidelines for the participation and utilization of pharmacists in civil defense operations. The Association endorses the position that the pharmacist, as a member of the health professions, has the responsibility to assume a role in disaster preparedness and emergency care operations. These responsibilities include:

- (1) The pharmacist by his education and training as a medication expert should be intimately involved in all elements of the procurement, storage, handling, compounding and dispensing of drugs and medical supplies in planning for, as well as during, any national emergency.
- (2) The pharmacist by his education in anatomy, physiology and pharmacology is well equipped to assist in the emergency medical treatment of patients and for training the public in medical self-help.
- (3) The pharmacist by his constant contact with other members of the health team as well as a significant portion of his community, provides unique potential for coordinating preparedness measures, and establishing meaningful standby emergency plans.

In view of these responsibilities, it shall further be the policy of the American Pharmaceutical Association:

- (1) to cooperate with all responsible agencies and departments of the Federal Government;
 - (2) to provide leadership and guidance for the profession of pharmacy by properly assuming its role with other health profession organizations at the national level;
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- (3) to assist and cooperate with all national specialty pharmaceutical organizations to provide assistance and coordination in civil defense matters relevant to their area or concern;
- (4) to encourage and assist state and local pharmaceutical associations in their efforts to cooperate with the state and local governments as well as the state and local health profession organizations in order that the pharmacist may assume his proper place in civil defense planning and operations; and
- (5) to provide leadership, guidance and encouragement so that the individual pharmacist can contribute his services to civil defense and disaster planning, training and operations in a manner consistent with his position as a member of the health team.

II. Methods of Approach to Current Study

Through a series of meetings in the Spring of 1963, between representatives of the Division of Health Mobilization, Public Health Service, Department of Health, Education and Welfare and the American Pharmaceutical Association, contact was made, supported by the Office of Civil Defense, Department of Defense, to "compile and prepare a report on the Role of the Pharmacist in National Disaster." The broad objectives of the report, according to the official contract, were to review:

- (1) Expanded functions in own discipline.
- (2) Additional functions for each discipline (dentists, veterinarians and pharmacists).
- (3) Additional functions common to all three disciplines.
- (4) Recommendations for the utilization of assistants to those professional disciplines, e. g., dental assistants, etc.
- (5) Relationship to the medical profession's overall emergency medical care program.

- (6) Recommendations for accomplishing preparedness in these expanded roles.
- (7) Identification of current professional training, capabilities and functions for each discipline within the health and medical service field.

The standing Committee on Disaster and National Security of the American Pharmaceutical Association was expanded to include representatives from community practice, hospital practice, industry, federal government, state government, and pharmaceutical education (see page 1 for complete listing) to undertake the study. A two-day briefing session of the Committee was held in Washington, D. C. on August 1-2, 1963, which included the following:

G. P. Ferrazzano, M. D., Chief, Division of Health Mobilization, U. S. Public Health Service, presented a review of the Emergency Health Services Preparedness Program, and this was followed by a description of the Shelter Program by Colonel Louis J. Hackett, Jr., (M. C.), Medical Advisor, Office of Civil Defense, Department of Defense.

Catherine M. Sullivan, Chief, Professions Training Program, Division of Health Mobilization, U. S. Public Health Service, discussed the Medical Care in the Shelter Program, and Paul S. Parrino, M. D., Chief, Research Branch, Division of Health Mobilization, reviewed the Medical Care Program of the Post-Attack Period. The Civil Defense Emergency Hospital Program was outlined by Arnold Dodge, Assistant Chief, Division of Health Mobilization, U. S. Public Health Service.

A second meeting of the American Pharmaceutical Association's Committee on Disaster and National Security was held in Rochester, New York, October 21-22, using the opportunity to actively participate in the 12th Annual Conference of the U.S. Civil Defense Council. A preliminary draft of this report was subsequently prepared as a result of the deliberations of the Rochester meeting, and was submitted to the Committee, as well as to HEW and DOD and other pharmaceutical organizations, for comment.

Following a one-day meeting in Washington, D. C., on January 31, 1964, with representatives of the veterinary medicine and dentists' committees, a final meeting of the American Pharmaceutical Association's Committee on Disaster and National Security was held in Washington, D. C. on March 5-6, 1964, to consider all recommendations made on the preliminary draft, and to complete this report for submission April 10, 1964.

III. Summary and Conclusions

The American Pharmaceutical Association's Committee on Disaster and National Security has developed a report outlining the role of the pharmacist in national disaster planning, under a contract from the Office of Civil Defense, Department of Defense, and the Division of Health Mobilization, Public Health Service.

After describing the current positions of the American Pharmaceutical Association on civil defense, and reviewing the methods of approach used in this study, the Committee presented a professional profile of the pharmacist, identifying pharmacists in community practice, hospital practice, pharmacists in industry, pharmacists in wholesaling, pharmacists in government, pharmacists in education, pharmacists in association work, pharmacists in journalism, pharmacists as advisors and consultants, and pharmacists involved in international activities.

The role of the pharmacist in disaster preparedness was recorded, setting forth priorities on pharmacists in different types of practice. Pharmacists in each specialty who were given the highest priority for service are summarized as follows:

Community pharmacists have been judged to be best equipped to handle storage and distribution of drugs and health supplies; provide regional and local inventory control and supervision of storage methods; establish and maintain systems of drug-accounting, coordination with health departments and civil defense officials; manage distribution programs; and supervise the stored Civil Defense Emergency Hospitals

Hospital pharmacists' best utilization in emergency programs includes storage and distribution of drugs and health supplies, maintenance and operation of central sterile supply, regional and local control inventory, control and supervision of storage methods, supervision of systems for providing pyrogen-free water, supervision of emergency drug manufacture, and supervision of stored Civil Defense Emergency Hospitals.

Pharmacists in industry as well as wholesalers vary widely in their priority to serve in emergency programs. A similar situation exists for pharmacists in government service. Those pharmacists who have been singled out as best providing national direction on establishing programs for drug and health supply planning and for coordinating pharmacy manpower requirements and assistance in supportive services include pharmacists in hospital administration, pharmacy industry and wholesaling executives, pharmacists administering government health programs, pharmacists in educational administration, pharmacists serving as association executives, and pharmacists serving as journalists and special consultants.

Recommendations for implementation of the report include the creation of an awareness of the problems by all pharmacists, the motivation of pharmacists to better equip themselves for assuming responsibilities in disaster programs, and the establishment of suitable educational or training mechanisms to achieve these results. To do this, closer

coordination with Federal, state and local governments is urged, more use by pharmacists of the training materials of the Medical Self-Help Program, and an evaluation of better utilization of the pharmaceutical resources of the community in shelter programs. Specifically, the Committee has recommended:

- (1) The establishment of Joint Councils of Health Professions for disaster preparedness.
- (2) The development, publication and distribution of a Basic Orientation Manual for Pharmacists.
- (3) The establishment of a Pharmacy Liaison Officer for Civil Defense.

IV. Professional Profile of the Pharmacist

A. Community Pharmacists.

1. The practice of community pharmacy.
 - a. Compounding and dispensing.
 - b. Distribution of health and surgical supplies.
 - c. Patron and professional consultation.
 - d. Procurement and inventory control.
 - e. Storage of medicinals.
 - f. Medical legal records and files.
 - g. Training and education (including internship).
 - h. Health services outside the community (as in small hospitals and nursing homes).

2. Related management activities.

- a. Personnel.
- b. Public relations and advertising.
- c. Business administration (bookkeeping, cost accounting; taxes, real estate).
- d. Maintenance, operation and repair of equipment and real estate.

3. Community service.

- a. Roles on boards of health and pharmacy boards.
- b. Trustees of hospitals.
- c. Roles in voluntary health agencies and service organizations.
- d. Participation with community health projects.

B. Hospital Pharmacists.

- 1. Management - including planning, personnel, budget, records and reports, policy and procedures, and procurement and storage.
- 2. Education and consultation - including professional consultation and in-service training.
- 3. Manufacturing - including bulk compounding, specialty formulation, sterile products, pre-packaging.
- 4. Product control.
- 5. Radio-isotopes.

6. Central sterile supply.
7. Ward and clinic service - including compounding and dispensing, issues and controls, and poison control.
8. Hospital administration - pharmacists now serving as hospital administrators.
9. Community service.
 - a. Roles on boards of health and pharmacy boards.
 - b. Trustees of hospitals.
 - c. Roles in voluntary health agencies and service organizations.
 - d. Participation with community health projects.

C. Pharmacists in Industry.

1. Scientific - including research in pharmacology, pharmacognosy, pharmaceutical chemistry; biological control; quality control; product development; and radio-isotopes.
2. Production - including pharmaceutical solutions, tableting, capsulating, injectables, etc.
3. Marketing - including market research, computer systems, research and sales coordination.
4. Advertising and promotion.
5. Relations - including professional relations, trade relations, customer relations, and public relations.
6. Sales - including product sales management, branch office management, field personnel management, field personnel training, pricing and quotations, and medical service representatives.

7. International - including marketing, advertising, relations, and sales.
 8. Legal - including pharmacists-lawyers, customer contracts, and liaison with regulatory agencies.
 9. Executive management - pharmacists in top administrative positions in industry.
- D. Pharmacists in Wholesaling.
1. Executive administration.
 2. Inventory control - including storage of medicinals.
 3. Procurement.
 4. Professional and trade consultation - including drug information and business administration.
 5. Sales - including medical service representatives.
 6. Distribution - including shipments and delivery.
- E. Pharmacists in Government.
1. Institutional practicing pharmacists - including Army, Navy, Air Force, Public Health Service, Veterans Administration, and other government hospitals.
 2. Regulatory and control - including rules and regulations (FDA, FTC, Bureau of Narcotics, State Boards of Pharmacy); field enforcement; and laboratory testing.
 3. Procurement and distribution - including depot system management.
 4. Research and development.
 5. Administration of various health programs - including radiological health, nuclear and biological warfare,

research grants, health mobilization, poison control, hospitals and nursing homes.

F. Pharmacists in Education.

1. Education administrators - including college presidents, deans and administrative assistants.
2. Teachers - including professors, associate professors, assistant professors and instructors in pharmacy, in pharmaceutical chemistry, pharmacology, pharmacognosy, public health, and pharmaceutical administration.
3. Graduate instruction.
4. Extension instruction - including organization of post graduate courses, seminars, and conferences.

G. Pharmacists in Association Work.

Those pharmacists employed on a full-time basis in association work (at the national, state and local levels).

H. Pharmacists in Journalism.

Those pharmacists engaged on a full-time basis as publishers, editors, or editorial staff members in the preparation of pharmaceutical publications.

I. Advisors and Consultants.

Those pharmacists engaged on a full-time basis in advising public or governmental agencies or as private pharmaceutical consultants.

J. International.

Those pharmacists serving in a professional capacity with private voluntary agencies and as missionaries at the international level, as well as with W. H. O. and other international government-sponsored agencies.

V. Role of the Pharmacist in Disaster Preparedness.

A. Health Operations - Administration.

1. Clinical.

- a. Storage and distribution of drugs and health supplies: Includes the proper identification of emergency drug supplies (composition, chemical and pharmacological properties, purity and strength) storage, extemporaneous compounding and dispensing upon proper authorization, with pursuant maintenance of proper records, professional consultation on proper dosage, administration and use. All categories of pharmacists can serve in this capacity, but all community and hospital pharmacists are particularly well suited for this continuation of services which they perform on a day-to-day basis. It is extremely important that community and hospital pharmacists be assigned to insure that adequate pharmaceutical service will be available through qualified pharmacists. When this requirement has been fulfilled, excess pharmacists should assume duties in other essential fields.
- b. Maintenance and operation of central sterile supply: Hospital pharmacists, many of whom are already actively engaged in such services, are particularly suited for this emergency function.
- c. Emergency screening for medical care: Daily responsibilities and practice of community and hospital pharmacists in particular makes them especially suited for emergency screening routine. Large segments of the population now rely on the pharmacists for guidance and direction on self-medication. Since the segment of the

population which suffers from diseases, injuries and accidental poisoning will be greatly increased in a period of emergency or disaster, the position of the pharmacist in this function is extremely important.

- d. **Emergency laboratory and X-ray operations:**
By virtue of basic training, pharmacists in most specialties can be utilized for the emergency manufacture of culture media, diagnostic agents, stains, X-ray solutions and allied items required for the operation of an emergency laboratory and X-Ray department. Clinical laboratory procedures in serology, blood chemistry, urinalysis, haematology, and basic bacteriology are also functions readily assimilated by most pharmacists. Detailed laboratory and X-ray procedures will, in most cases, require additional training, but some pharmacists in hospitals, industry and teaching, will have had extensive professional training that will permit them to provide such services with a minimum of direction.
- e. **Emergency hospital administration:** Hospital pharmacists and government practicing pharmacists have considerable knowledge in the general administration of hospitals, and community pharmacists, pharmacists in industry and other specialties would be able to contribute administrative services with a minimum of additional training. Pharmacists in all categories, and particularly community and hospital pharmacists may be suitable administrators of Civil Defense Emergency Hospitals.
- f. **Auxiliary Medic:**
 - (1) **First aid and other lifesaving and survival measures.** Includes controlling hemorrhage, recognizing and giving immediate treatment for shock, cleansing and caring for wounds and burns, immobilizing fractures, bandaging

and splinting, use of lavage as required, artificial respiration, managing normal deliveries, preparation of casualties for evacuation. The pharmacist's education enables him to carry out these emergency lifesaving and survival measures with little or no additional training.

- (2) **Emergency administration of drugs.**
Pharmacists in all specialties are able to administer lifesaving drugs, including those for oral and rectal administration; to assist in the administration of anesthetics; and in intramuscular, subcutaneous and intravenous administration, including plasma and whole blood, with a minimum of direction or training.
- (3) **Professional and technical assistance in triage, surgical procedures, and any other emergency procedures, are all potential functions of the pharmacist with a minimum of training.**

2. Preventive medicine.

- a. **Communicable disease:** Pharmacist's professional knowledge qualifies him to assist in mass immunization programs for tetanus, smallpox, typhoid and paratyphoid fevers, poliomyelitis, pertussis, and diphtheria, including guidance or direction on proper age groups, dosage, and methods of emergency quarantine of segments of the public not previously immunized.
- b. **Vector control:** Pharmacist's knowledge of the chemistry, pharmacology and toxicology of pesticides (including insecticides and rodenticides) makes him a logical choice to direct or assist in the direction of emergency vector control. This includes fumigation procedures, as well as the use of appropriate traps, and the control of safety storage procedures for pesticides.

- c. **Food, milk, water and drug inspection and analysis:** The pharmacist is qualified, after minimal training, to establish and supervise the clearance process before suspected food, milk, water and drugs are consumed by the public during an emergency. This includes routine clearance procedures for food, milk, water and drugs where recognized storage measures or normal supply sources have been disrupted, the performance of standardized tests and analysis of purity and safety, and the condemnation and destruction of products that are beyond reclamation if they are apt to become a public health hazard.
 - d. **Control and disposal of sewage and garbage:** Pharmacists with minimal training can direct emergency sanitary control measures. These include the ability to organize and supervise emergency methods of routine garbage and waste materials, and the planning and supervision of emergency latrine systems complete with measures for insect control.
 - e. **Detection of radioactivity and decontamination procedures:** Pharmacists with additional training can provide radiological monitoring, and supervise decontamination procedures. Decontamination procedures associated with shelter survival can be handled by most pharmacists.
3. **Medical Self-Help Training Program:** Pharmacists in all specialties are ideally suited to direct and/or assist in the use of training materials to the general public under the Medical Self-Help Training Program.

B. Health Materiel.**1. Supplies.**

a. **Drug and health supply planning:** Pharmacists, at executive and policy making levels, are able to assume responsible positions at the national and regional levels in overall drug and health supply planning. They can also serve as a nucleus for training at other operational levels. This includes the establishment of policy, development of requirements, a knowledge of production capabilities, standards and procedures as applied to the procurement, storage and distribution of drugs (bulk and dosage form) and health supplies (including manufacturing equipment, surgical supplies and hospital supplies). Specific phases of such planning operations include:

- (1) Establishment of recommendations for strategic locations of drug and health supplies in coordination with emergency planned stocks or stockpile of private, city, county, state, or federal agencies.**
- (2) Determination of sources of supply based on probability of shortages due to a national emergency.**
- (3) Establishment of a standard supply list complete with estimates of quantities needed with complete specifications.**
- (4) With appropriate professional advice and consultation, compile a list of comprehensive therapeutic and other equivalents to serve as a guide when a choice of drugs and health supplies may be hampered due to the emergency.**
- (5) Assist in the development of plans whereby stockpiles of drug and health supplies can be rapidly relocated as emergencies occur.**

- (6) Determine over-all operational costs for budget purposes. Studies may incorporate plans for central purchasing methods and any other procedures which will provide the most economical use of funds.
 - (7) Assist in the development of plans for a nationally controlled distribution system.
 - (8) Planning for emergency manufacturing, including simplification in processing raw materials, use of substitute raw materials, and conversion of other manufacturing plants and equipment into pharmaceutical manufacturing facilities.
- b. Procurement, storage and distribution of drugs and health supplies: Pharmacists from all specialties can direct any or all of the following programs and emergency operations:
- (1) Inventory control of all supplies under their jurisdiction, including necessary precautions pertaining to dangerous or habit-forming drugs. Establishment of systems whereby perishable items will be properly rotated or replenished. Compliance with established policies to quickly replace items that become in short supply during an emergency.
 - (2) Supervision of storage methods so that all legal and official storage requirements are met. Compliance with all recommended methods for storage of devices or instruments for protection from deterioration and obsolescence.
 - (3) Supervision of a system for providing pyrogen-free water and other sterile fluid preparations under emergency conditions.

- (4) Supervision of a system of inspection of supplies upon arrival and also before issue (especially as it relates to items that are damaged or salvaged from a destructed or inundated area). This inspection will include, if necessary, inspection for radioactivity and biological and chemical warfare agents.
- (5) Provisions for methods of improvisation as it relates to storage of thermolabile items, procurement of supplies from damaged surrounding areas, emergency bottling, packaging, and compounding.
- (6) Establishment of a system of cost accounting which will be part of inventory control.
- (7) Coordination with State health departments and local civil defense authorities regarding critical drug and health supplies.
- (8) Assistance in the development of a system of emergency "kits" to be utilized in case of suspected use of biological and chemical warfare agents.
- (9) Management of distribution programs, including rationing procedures and allocation of both raw material and dosage from pharmaceuticals.
- (10) Direction of emergency compounding and manufacturing facilities and programs.

C. Related Activities.

1. **Manpower requirements:** Pharmacists in executive positions with the industry, government, pharmaceutical associations, and in Colleges of Pharmacy, would be particularly useful in coordinating pharmacy manpower requirements, distribution and utilization, during an emergency.

2. Shelter program: Pharmacists in all specialties can provide the various services outlined in Sections I and II of the Shelter Program, including custodian of medical supplies and Emergency Medical Care, as well as service as Shelter Managers. Pharmacists currently can assist in public education to cope with shelter environment problems and as a source of emergency shelter location identification. Inventories of community and hospital pharmacists are also an important source of supplemental medical supplies for the shelter.
3. Supporting services: Pharmacists should be available in various adjunct services to Emergency Health Program Administration, serving as a channel of communications for over-all health needs, and to advise on special pharmaceutically related problems.

ROLE OF THE PHARMACIST IN NATIONAL DISASTER (Emergency Assignment Guide)

RATING DEFINITION																				
<p>A rating is first priority with no additional training required</p> <p>B rating is second priority with no additional training except a subject review</p> <p>C rating requires minimal training (week course)</p> <p>D rating requires extensive training (month or more course)</p> <p>F rating indicates general lack of suitability</p>	Community pharmacists	Hospital pharmacists	Hospital administration	Industry, scientific	Industry, production	Industry, marketing	Industry, sales	Industry, legal, international, advertising	Industry, associate	Wholesaling, executive	Wholesaling, other	Wholesaling, other practice	Dept. laboratory	Dept. government	Dept. research	Dept. administration of health programs	Education Administrators	Educators	Asst. Executive	Associates, etc.
CLINICAL																				
Storage and Distribution of Drugs and Health Supplies	A	A	A	B	A	C	C	C	C	C	C	A	C	B	C	C	B	B	C	C
Maintenance and Operation of Central Sterile Supply	C	A	A	C	C	C	C	C	C	D	D	A	C	C	C	C	C	C	D	D
Emergency Screening for Medical Care	C	C	C	C	C	C	C	C	C	C	C	A*	C	C	C	C	C	C	C	C
Emergency Laboratory and X-Ray Operations	C	C	C	B	C	C	C	C	C	D	D	C	C	C	C	C	C	C	D	D
Emergency Hospital Administration	C	B	A	C	C	D	D	D	D	D	D	B	D	C	C	C	C	C	C	D
First Aid and other Lifesaving Measures	B	B	B	B	C	C	C	C	C	C	C	B	C	C	C	C	B	B	B	B
Emergency Administration of Drugs	B	B	B	C	C	C	C	C	C	C	C	B	C	C	C	C	C	C	C	C
Professional and Technical Assistance as Auxiliary Medic	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
PREVENTIVE MEDICINE																				
Communicable Disease; Immunization programs and emergency quarantine	B	B	B	B	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
Vector Control	B	B	B	B	C	C	C	C	C	C	C	C	B	B	B	B	B	B	C	C
Food, Milk, Water and Drug Inspection and Analysis	C	C	C	C	C	C	C	C	C	D	D	C	C	C	C	C	C	C†	D	D
Control and Disposal of Sewage and Garbage	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Detection of Radioactivity and Decontamination Procedures	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
Medical Self-Help Training	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
HEALTH MATERIEL																				
National Drug and Health Supply Planning	F	F	A	F	F	F	F	F	A	A	F	F	F	F	F	A	F	F	A	A
Regional and Local Inventory Control and Supervision of Storage Methods	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	B	B
Supervision of system for providing pyrogen-free water and direction of emergency manufacturing	B	A	A	B	B	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
Supervision of inspection of supplies, and assistance in developing emergency kits	C	C	C	B	B	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
Establishment of system of cost-accounting, coordination with health departments, CD authorities, and management of distribution programs.	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	B	B	B
RELATED ACTIVITIES																				
Coordinating Pharmacy Manpower Requirements, and assistance in supportive services	F‡	F	A	F	F	F	A	F	A	A	F	B	B	B	B	A	A	B	A	A
Source of direction as well as medical supplies for shelters	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Supervision of Civil Defense Emergency Hospitals	A	A	A	F	F	F	F	F	B	F	F	F	F	F	F	F	B	B	F	F

* Military Corpomen only; all others a C
 † Except Pharmaceutical Chemists which rate A
 ‡ Except for certain administrative positions in large chains

VI. Role of Ancillary Personnel.

There are between 10,000 and 12,000 students attending the 76 Colleges of Pharmacy in the United States, and approximately one-third of them are serving on a part-time basis as interns in community or hospital pharmacies.

Many pharmacies, hospital pharmacies in particular, employ the services of technical aids (helpers) who also might be considered under the heading of ancillary personnel in pharmacy.

In each instance, ancillary personnel should be considered as possible sources of manpower in emergency situations. Many (third and fourth year students and interns in particular) will be able to assist in several capacities, under supervision, as the situation demands. However, it is important to note that their services should be employed only under supervision and as their qualifications and competency dictate.

VII. Recommendations for Implementation.

The American Pharmaceutical Association's Committee on Disaster and National Security reaffirms previously established positions that the pharmacist should be intimately involved in all phases of emergency medical care, particularly as they relate to the procurement, storage, handling, compounding and dispensing of drugs and medical supplies in planning for, as well as during, any national emergency.

To best achieve this goal, the Committee recognizes that it is first necessary to create an awareness of the problem to all pharmacists, overcoming recognized apathy toward disaster preparedness programs, to motivate the pharmacist to better equip himself for assuming responsibilities in disaster programs at all levels, and to assist in the establishment and continuation of educational or training programs to achieve these objectives.

The first step of motivation is one of proper publicity through all media available, including preparation and distribution of suitable flyers and other mailings through national, as well as state and local pharmaceutical

associations, articles, news and editorials in pharmaceutical publications, programs at meetings of national, state and local pharmaceutical associations, establishment of committees at all levels of organized pharmacy, and closer contacts of pharmacists and pharmaceutical organizations with civil defense officials at all levels.

Establishment of suitable educational training mechanisms should also, in the opinion of the Committee, bring into play all available sources, including pharmaceutical associations at all levels, all colleges of pharmacy, the pharmaceutical industry, governmental civil defense agencies, and related professional societies.

1. Cooperation with the Federal Government.

The profession of pharmacy should continue to cooperate with all responsible agencies of the Federal Government by:

- a. Providing advice and consultation to all Federal medical and health programs involving emergency planning, through the American Pharmaceutical Association's Committee on Disaster and National Security.
- b. Keeping the pharmacies informed of Federal Government activities in disaster planning through association publications at the national as well as regional, state and local levels.

2. Medical Self-Help Program.

As outlined under potential responsibilities of pharmacists in disaster programs, the pharmacist should make use of the training materials to the general public in every possible way that will further the Medical Self-Help Program. These include the following:

- a. Continuing education program among pharmacists through programs at national, state and local pharmaceutical association meetings.
- b. Establishment of adequate undergraduate programs, as well as refresher and postgraduate courses, at all colleges of pharmacy to better qualify pharmacists as Medical Self-Help training educators. These should include
 - (1) mass management of the sick and injured;
 - (2) medical supply management;
 - (3) supply and requirement resource planning (including supplies, facilities and manpower);
 - (4) training courses in Medical Self-Help and/or first aid.
- c. Organized training programs coordinated by state and local pharmaceutical associations working in close cooperation with medical societies, public health departments, civil defense organizations, Red Cross units, and associations representing other members of the health professions.

3. Shelter Programs.

In an effort to expand the drug supplies potentially available for shelter programs through utilization of the pharmaceutical resources of the community, the Committee has recommended the development and testing of various programs which have been proposed by civil defense-oriented pharmaceutical associations. These include the following:

- a. Use of red tape strips on the shelves under those drugs stocked in the prescription laboratory which are considered essential for shelter

survival, thereby readily identifying those items which are to be taken along to a shelter by a pharmacist in the case of a disaster.

- b. Use of certain designated shelves in the prescription laboratory to hold the same essential drugs to speed up the process of selecting items to be taken to the shelter in an emergency.
 - c. Development of a program similar to that of the Summit County (Ohio) Pharmaceutical Association, calling for pharmacists to stock a kit with essential drugs which are part of the pharmacy inventory, but which are ready to move immediately to the shelter, after adding to the kit only those items requiring refrigeration.
4. **Joint Councils of Health Professions.**

The Committee urges the establishment of Joint Councils of Health Professions for Disaster Preparedness Planning to include all health professions (medicine, dentistry, veterinary medicine, nursing and pharmacy, as well as hospital administrators and representatives of government civil defense organizations). Formation of these Joint Councils is to be encouraged at all levels, including national, state and local, to permit close liaison and planning among the health professions and civil defense agencies for disaster preparedness.

5. **Basic Orientation Manual for Pharmacists.**

The Committee strongly urges the development, publication and distribution of a basic orientation manual for pharmacists. This manual would outline the role of the pharmacist in disaster preparedness as set forth in this report, and supplement the information with details on specific courses which should be offered through all available agencies, professional associations and schools, to equip the pharmacist for maximum utilization in emergency situations.

6. Pharmacy Liaison Officer for Civil Defense.

To further the recommendations for implementation of this report, with particular reference to full utilization of available media for motivation of pharmacists, the establishment of suitable educational or training mechanisms, closer cooperation with the Federal Government, expansion of potentials offered by the Medical Self-Help Program, full exploration of better utilization of pharmaceutical resources at the community level in shelter programs, the establishment of Joint Councils of Health Professions on Disaster Preparedness, and the development of the Basic Orientation Manual for Pharmacists, this Committee recommends the establishment of a Pharmacy Liaison Officer on the staff of the American Pharmaceutical Association in Washington, D. C.

VIII. Acknowledgment.

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