## PILOT STUDY ON IMPROVING EMERGENCY MEDICAL SERVICES (EMS)

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About the cover symbol: The blue "Star of Life" symbol was developed as an alternative to the red or orange Greek cross (which has been restricted by the Geneva Convention for use by or under the authorization of the International Red Cross organization). It is a symbol intended to designate emergency medical care in the civilian sector. Its use on an international basis was proposed at the Emergency Medical Services Project Meeting of the Committee on the Challenges of Modern Society of NATO (North Atlantic Treaty Organization) in May 1975 at Munich, Germany. It is currently in wide use by EMS systems in many countries throughout the world.

One of the most important challenges faced by governments throughout the free world is how to respond to the ever growing need for prompt, appropriate medical care in emergency situations. The need to improve emergency health care stems from two factors: (1) the rapidly increasing incidence of emergency cases such as cardiac and respiratory conditions as well as accidents of all kinds, particularly traffic accidents, and (2) the increased possibility of saving lives through prompt medical intervention, brought about by recent advancements in several fields of health care.

Since 1971, through participation in several international projects sponsored by NATO's Committee on the Challenges of Modern Society (CCMS), experts in emergency medicine from 21 nations have worked together to meet this challenge.

Between 1971 and 1977, two projects on the subject of emergency medical services were sponsored by the Committee. The first was a project under CCMS's Pilot Study on Road Safety. This EMS project initially focused on finding the most effective ways of responding to victims of motor vehicle accidents -- a problem of global concern since accidents are one of the leading causes of death and the number one cause of death among youth.

The project participants broadened the scope of their efforts because the techniques appropriate to dealing with road accidents are applicable to all critical accidents and illnesses. Another EMS project was therefore activated under the ongoing CCMS Pilot Study on Advanced Health Care.

Together these projects explored ways of improving national and international EMS communications and transport systems, both in urban and rural areas, developed standardized symbols for emergency vehicles and communications, began to frame standards for training and accreditation of emergency medical personnel, studied legal and administrative frameworks for improving emergency care, and explored ways of improving citizen access to the EMS network. All the programs initiated at the national level in the participating nations were developed with the fullest extent of international cooperation.

The CCMS Pilot Study on Improving Emergency Medical Services, which is the subject of this report, is an outgrowth of these two earlier projects. Because of the continued international interest in the work accomplished through the previous international information exchanges and the practical results evident in EMS systems in many countries, NATO elevated the EMS work to pilot study status in September 1978. One year earlier, 45 delegates -- all experts in emergency medical care -- from 14 nations that had participated in the second EMS project urged the Committee to allow them to continue this productive international collaboration in several specific areas under the umbrella of a full-fledged pilot study focused on emergency medical care systems. The United States agreed to serve as lead nation.

Since 1969, the Committee on the Challenges of Modern Society has sponsored twenty-nine "pilot studies" on various areas of worldwide concern of a non-military nature. The pilot studies have all been led by a NATO country. The lead nation accepts responsibility for developing, conducting, and disseminating the results of the work. Both NATO countries and non-NATO countries may participate. The countries share the workload according to their interest and each country is free to choose where to best apply its resources and expertise.

This report summarizes the accomplishments of the nations who have participated in the specific projects in the Pilot Study on Improving Emergency Medical Services, particularly the work done by Canada, France, Italy, Portugal and the United States. These countries served as lead nations of sub-projects, such as an international survey of EMS systems in eleven participating countries and four projects on key aspects of EMS systems such as: the organization and management of the system, training and public education, transportation and communications, and poison control. But all 21 nations contributed to the accomplishments of these studies.

During the past two years of the CCMS/EMS Pilot Study, the World Health Organization's Regional Office for Europe has co-sponsored the study. Since the Pilot Study concludes with the publication of this report, WHO has provisionally agreed to sponsor the follow-up work of the participants, which will continue until 1982. As lead nation of the study, we want to reiterate our enthusiastic thanks for this offer of support. If WHO does become the major sponsor of the follow-up work, many more non-NATO countries, particularly nations in the Third World, will be encouraged to actively participate.

The United States looks forward to continuing its leadership of international efforts to improve national and multinational EMS information exchange throughout the free world. We hope, with the help of all those nations who have worked in this critical area of health care, to meet one of modern society's most difficult challenges — to diminish the number of deaths, disabilities and long-term suffering that so often results from accidents, injuries and sudden illness.

George I. Lythcott, M.D. Assistant Surgeon General and Administrator Health Services Administration U.S. Department of Health and Human Services

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As the second and final year of the Pilot Study draws to a close, I want to thank all of the people in the international community who have contributed to its success. The research and demonstration projects carried out by the participating nations, which are summarized in the following pages, will undoubtedly have a definitive impact on the state-of-the-art of emergency medical systems throughout the free world for many years to come.

First, I would like to extend my thanks to the governments of the twenty-one nations that have participated in the Pilot Study over the past two years. Their support has made it possible for international experts in emergency medicine to exchange information with colleagues from other nations, host seminars on specific EMS topics, and work on research and demonstration projects that have promoted international action to improve EMS systems in many countries.

I would also like to thank the directors of the Pilot Study's five special projects and those who have assisted them in breaking new ground in key areas of emergency medical care. Their individual efforts during the past two years -- indeed, for almost ten years, in many cases -- have helped to usher in a new era of excellence in international emergency health care.

The project directors join me in expressing thanks to the staff of the Committee on the Challenges of Modern Society (CCMS). They have enthusiastically supported and encouraged international cooperation in this critical area of health care since 1971, when the first EMS project began under the capable leadership of the U.S. Department of Transportation as a part of the CCMS Road Safety Pilot Study. Their commitment continued when the project expanded and became part of the CCMS Advanced Health Care Pilot Study in 1974 and ultimately became a full-fledged Pilot Study on Improving Emergency Medical Services.

All of the participating nations join me in reiterating our gratitude to the World Health Organization for acting as co-sponsor of the present Pilot Study. We look forward to the continued support of WHO's Regional Office for Europe during the follow-up period of the study, 1981-1982. WHOs sponsorship during this period would permit the productive information exchange by international EMS experts to continue unabated and foster the participation of WHO member nations.

Finally, I would like to thank the U.S. State Department, particularly the desk officers and Embassy personnel, for facilitating the many meetings, seminars and other information exchanges that have taken place in Europe and the United States during the last few years in conjunction with this international health project.

William R. Gemma, Ph.D. Chairman NATO/CCMS Pilot Study on Improving Emergency Medical Services This report is made pursuant to Contract Number HSA-80-179(P). The amount charged to HSA for the work resulting in this report (inclusive of the amounts so charged for any prior reports submitted under this contract) is \$9,595. The names of the persons employed or retained by Birch & Davis Associates, Inc., the Contractor, with managerial or professional responsibility for such work, or for the content of the report, are as follows:

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