

Keynote Address - Environmental Health,  
Everybody's Responsibility \*

Larry J. Gordon, M.S., M.P.H.

My current responsibilities as Deputy Secretary for Health and Environment for the State of New Mexico include all the public health, health planning, laboratory, and environmental health activities of our Department. For many years I was more heavily involved in environmental health issues and therefore I feel confident in addressing such issues as an important part of this AMA conference.

Many of us experienced public health workers have not lost sight of the need for prevention, and of the cost-benefit superiority of prevention over treatment. Therefore we watch with frustration and dismay while staggering billions are poured into sickness treatment systems of our communities, states, and nation, with expensive but unsatisfactory impact on the health of our citizens. Apparently someone erroneously concluded that treating sickness is sufficient to improve people's health. Our political and health leaders are now realizing that sickness treatment with its huge expenditures is not a panacea, and the escalating expenditures have become a national issue.

It may be desirable to discuss the terminology, "environmental health." Many of us remember the days when the majority of environmental health programs were organized within the framework of the traditional state public health departments. But with emphases on consumer protection, comprehensive programming, organizational visibility, citizen input and participation, and regulatory action, the organizational picture has changed radically within the past decade.

Some states have chosen to reorganize and emphasize something called "pollution control." Such states have usually confined such "pollution control" programs to air, water and wastes. Others have retained the terminology, "environmental sanitation" or "environmental health," and consigned such programs to state health departments. Still others have used terminology like "environmental protection," "environmental improvement," "ecology," or "environmental quality." A few have intertwined programs of environmental health with programs of environmental utilization and development in departments of conservation or of natural resources. The latter is inherently dangerous in that the mixture of missions and goals poses a classic conflict of interest, with environmental health being most likely to be the victim of the fox in the henhouse.

In spite of the varied terminology or institutional arrangements, we may define environmental health programs as organized methods of solving environmental problems with significant health components, through the manipulation or management of the environment. Problems like air pollution, water pollution, solid wastes, environmental injuries, biological insults, environmental chemicals, food safety, radiation, noise pollution, and shelter are addressed through programs like those relating to air quality, food quality, radiation protection, solid waste management, occupational health and safety, insect and rodent control, safe water, noise, environmental control of recreational areas, institutional environmental control, hazardous wastes, product safety, and housing conservation and rehabilitation.

---

\* Current and Future Issues in Environmental, Public, and Occupational Health, Proceedings of an AMA Conference, November, 1978, Chicago.

Many of the foregoing programs address an almost identical group of environmental health problems, thus emphasizing the economic, ecological, and administrative need to have major regulation centralized in environmental health, rather than fragmented among a variety of competing agencies, which may result in skewed priorities, program duplication and gaps, ineffectiveness and citizen confusion.

It must be noted in passing that other societal problems such as overpopulation, transportation, land use, and resource development and consumption are even more basic and important than the environmental health issues I have listed. Environmental health problems are frequently the by-products of these more basic concerns of society and will not be solved without understanding and addressing them.

The organizational placement of state environmental health programs is another matter. In the late 1960s, public and political clamor and concern over the rapidly deteriorating environment caused a widespread reevaluation of environmental health problems, goals, support and effectiveness, and organizational settings. Programs were shifted to new or different agencies for a variety of reasons -- some valid and some questionable. Eager citizen environmentalists and citizen action groups sometimes confused change with progress. Public health and environmental health officials generally exhibited a high degree of territorial defense and a relatively low titer of knowledge about organization and program management.

Powerful polluter lobbyists delighted in opportunities to retard and confuse environmental health measures through repeated reorganizations and by placing environmental health personnel and programs in positions of greater "political responsiveness." The federal government must share the responsibility of imposing narrowly oriented, single-program laws on states, conceived with tunnel vision. Federal codes and regulation relating to such programs as food, milk, occupational health and safety, air pollution and radiation provide examples of administrative problems raised by single issue codes, which only result in a greater array of bureaucracies and a larger burden for taxpayers.

Regardless of the organization of environmental health, the goal should be to insure an environment that will confer optimal health and safety on this and future generations. The mission should be one of citizen and environmental protection rather than of environmental utilization and development. Some environmental health agencies have not fully developed their concepts of mission and have been ready prey for polluters and others they are charged with regulating, with the result they end up promoting the polluters' interests.

A few words about environmental health manpower. When one grasps the magnitude, variety and scope of environmental problems, understands their vital importance to this and future generations, scans the maze of organizational arrangements for providing services, and views the variety of useful program methods, it is obvious that the variety of needed skills is great. Persons are necessary from the lowest assistant or inspector through a wide variety of doctoral level environmentalists. The effort and the programs demand an alliance of physical, life, and social scientists, physicians, engineers, planners, technicians, laboratory scientists, lawyers and veterinarians. While the list is endless and all are necessary, the mantle of environmental leadership will fall on those who earn it, be they doctors, lawyers, or professors.

Within recent months and years, our leaders have become increasingly aware of

the staggering costs of environmentally-related conditions like cancer and heart and lung disease. They are aware of reports an estimated 60% to 90% of chronic and fatal diseases are environmentally induced and preventable. They have been forcefully reminded of the unacceptable annual burden of \$100 billion for cancer, heart, and lung disease, much of which is preventable through known environmental health measures. They have increasingly realized that improving the quality of life depends on keeping people healthy. They have recognized that we must build a conscience for prevention. Our leaders know we are going to be spending increasing amounts for health care, with little overall impact on health status, unless we improve environmental quality. They are increasingly recognizing that without more effective environmental and preventive measures, any national health insurance program will be doomed to failure and spiraling costs, and that without such measures a national insurance program will be another expensive experiment with misplaced priorities and improper timing.

Finally, our leaders are recognizing that we must stop expecting medicine to bail us out from the consequences of our own foolishness, and that we must stop waiting for tragedy before taking action. And they are realizing that the concern of environmentalists with wildlife and the natural environment is a sound manifestation of interest in the entire natural system of which the human animal is part, and that environmental effects on wildlife serve as an "early warning" or a "preview of coming attractions" in accordance with the proved ecological maxim, "Everything is connected to everything else." And they are learning that sound environmental health measures must be for tomorrow as well as today.

I cannot conscientiously address priorities in environmental health without noting the impact of other social issues on environmental problems. Overpopulation and the resulting consumption and destruction of non-renewable resources is the single greatest issue affecting the environment. Population stabilization is the only really preventive endeavor, for programs to control the secondary problems of environmental degradation, energy shortages, transportation, land use, congestion, crime, and famine have not been effective, and will not be, without resolving the basic issue of overpopulation.

Environmental health professionals should support specific national and global actions and agreements to stabilize human population levels through education, racial justice, sexual equality, technology sharing, birth control, re-education about social values and attitudes, demographic research and planning, and economic and fiscal policies and incentives.

Inappropriate land use is another factor which society and our elected officials have not addressed, except in limited areas and situations. Improper land use contributes to, or creates, many of the environmental health problems we face.

Power for homes, industries, and transportation, through non-polluting, renewable energy sources, is the final major issue having an impact on environmental health problems. For a number of reasons, including industry monopolies, union agreements, and governmental conflicts-of-interests, the nation has not made even a token commitment to solar energy.

As for specific environmental health priorities, I would include 1) those which are irreversible in nature and will damage the environment and/or human health over a long period of time; and 2) those having acute and/or chronic health effects. According to those priorities, I would list air and water pollution, hazardous and radioactive wastes, environmental chemicals, injuries, safe drinking water, and the problems of our inner city

urban environments.

Underlying all the previously mentioned environmental and societal issues are ignorance and poverty, which must be addressed and solved if there is to be substantial, permanent, long-range progress toward our goals of "an environment that will confer optimal health and safety on this and future generations," and "helping people to die young--as late as possible."

It is of serious concern that the human animal sometimes seems more willing to suffer the health, social and economic consequences of disease and pollution than to pay for environmental quality for this and future generations. Perhaps the human animal can slightly adapt to some degree of environmental degradation, but it is indeed alarming that humans might attempt merely to survive through disease-ridden adaptations, rather than to thrive through environmental quality.

It is most gratifying to observe the continued interest of the American Medical Association in environmental health, as evidenced by this conference. Physicians have always numbered among those dedicated to solving environmental health problems. I hope the discussions at this meeting will lead to strategies enabling the AMA, state medical societies, and individual physicians to become more knowledgeable, more involved, and more effective in the struggle for a healthful environment.