PUBLIC HEALTH: A BLURRED VISION

Prepared for presentation April 4, 1994 by
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Lester Breslow Award Recipient

INTRODUCTION

I commend the Los Angeles County Department of Health Services for honoring Dr. Lester Breslow, one of the world's most outstanding public health leaders, through this annual award. Les Breslow has long been one of my public health heroes, as well as being a mentor through his research. During my tenure as a state Cabinet Secretary for Health and Environment, I had Dr. Breslow's research findings regarding the values of life-style summarized on the back of my business cards. And Dr. Caswell Evans should be commended for initiating Public Health Week and promoting the concept nationally.

I have had many constructive involvements with public health professionals in the Los Angeles area throughout my career. In 1968-1969 I was a consultant to the Community Health Action Planning Service of the American Public Health Association which made recommendations regarding the organization and services of the Los Angeles County Health Department.

My presentation today is from the viewpoint of a **practitioner**, as I have spent most of my career working as a public health official striving to **prevent** or solve public health problems. However, my involvement in academia for the past six years **has** allowed me the freedom to think, research, speak, and write without the ideological influence of some Governor or Mayor whom I was serving.

I was particularly impressed by the wording of the letter I received from Dr. Caswell Evans regarding the Lester Breslow Award. Dr. Evans wrote: **"The ongoing theme for Public Health Week is *Public Health - An Investment in the Future,* which emphasizes that the investment we make in prevention today will yield a better future for the community we serve."** That factual statement is highly significant and meaningful -- **"prevention today will yield a better future for the community we serve."** Of course, **public health is prevention.** I will enlarge on the statement to emphasize that properly prioritized and targeted disease prevention, health promotion, and environmental health and protection programs --- all preventive in nature, ---will yield many benefits. Among those benefits are improved health status and longevity; a brighter future for our families; less social problems; less unwanted pregnancies and children; fewer problems for our criminal justice and corrections systems; enhanced educational achievement; a more livable environment; and a better quality of life for all. Furthermore, in many cases, public health programs will lead to lowered health care costs. All of us in public health should know this, and be practicing what we preach. But do we really?

Do we really agree on what public health is? Are we devoting our efforts and careers to good public health practice? I suggest that this may not always be the case.

For example: There is no common definition of public health. I define **public health as *the art and science of preventing disease and disability, prolonging life, promoting health and efficiency of populations, and insuring a healthful environment through organized community effort.*** However, many of my highly respected peers do not agree with this definition. Many appear to mistake the **organizational** responsibilities of the U.S. Public Health Service, or a public health association, or a state health department, or a local health department, or a school of public health with the **field** of public health. If we don't know what we are selling how can it be marketed? Are we selling a horse, a buggy, a Cadillac, a rocket ship, or a disorganized bundle of spare parts for something we do not understand and cannot define? Some assert that there is strength in the diversity of public health, but there is also confusion, competitive priorities, a lack of unity and focus, and lack of understanding by personnel involved in public health as well by our political leaders.

Many appear to confuse public health with anything related to health, including health care. ***Health care, however, is the diagnosis, treatment, or rehabilitation of a patient under care and is practiced on a one-on-one basis.*** **Health care is certainly not public health!**

A PUBLIC HEALTH IDENTITY CRISIS

Public health practitioners appear to be suffering an identity crisis, and a misplaced sense of euphoria. Perhaps they have felt slighted and inadequately funded to the end that they are eager to identify with anything that includes the word "health." Perhaps the identity crisis is due to the fact that there does not appear to be a common definition or uniform understanding of public health. Perhaps the identity crisis is due to the fact that public health is not a unified discipline or profession, but is a cause engaged in by a wide variety of disciplines and interests. Or perhaps some public health practitioners recognize that 96% of total health services dollars are spent on health care, with an estimated 1% of the health services dollars being spent for public health, and they find it seductive to aspire to be an element within the 94% rather than within the 1%. Or perhaps the identity crisis is due to the fact that many public health personnel originally had their professional roots in health care and have overwhelming latent proclivities to practice health care rather than public health. Or perhaps the identity crisis is a manifestation of the reality that many public health practitioners simply do not understand the basic differences between public health and health care. Or perhaps the identity crisis is due to some public health practitioners not really believing in the primacy of disease prevention, health promotion, and environmental health and protection as differed from health care. Or, as I previously stated, perhaps the identity crisis reflects the fact that some practitioners confuse the **field** of public health with the organizational scope of the U.S. Public Health Service or a specific health department, or the programs offered by some school of public health. Or perhaps some public health practitioners do not understand that public health continues to be in eternal competition with health care for the budget dollar, just as certainly as public health must compete with other

basic governmental functions such as public safety, public welfare, public works, corrections, public education, and national defense.

Public health practitioners should ingest a healthy dose of skepticism regarding the current national health care debates, while **enhancing** their efforts to improve the delivery of properly designed and prioritized public health and environmental health and protection services delivered primarily through our varied and complex system of state and local health agencies.

HEALTH CARE IS NOT PUBLIC HEALTH, AND PUBLIC HEALTH IS NOT HEALTH CARE

I practiced public health and environmental health and protection in the trenches as well as at the policy levels at the city, county, district, state and national levels. In various leadership roles and as a state cabinet secretary for health and environment, I dealt with local, state and federal legislative bodies for almost forty years and was **consistently** enlightened that **health care is not public health, public health is not health care, and certainly environmental health and protection is not health care.** As a cabinet secretary, I invariably determined that any reasonable requests to expand my health care budget would probably be granted, and in fact, my health care budget was frequently increased in the absence of a departmental request. Not so for public health or environmental health and protection. My number one priority has always been public health and environmental health and protection. But while always advocating public health and environmental health and protection as my priorities, my health care budget was increased disproportionately. I frequently found it somewhere between difficult and impossible to gain approval for one more public health nurse, or one more environmental health scientist, or one more public health educator, or one more public health physician, or one more public health dentist, or one more public health nutritionist, or one more public health laboratory scientist while being criticized by legislators for not requesting more for our department's health care programs. On many occasions, I experienced legislative bodies transferring funds from public health to support health care. On one occasion, my environmental health and protection budget was reduced in order to shore up the constantly escalating Medicaid budget. During legislative budget hearings, the rooms were filled with effective health care advocates wearing their caps, banners and badges. Only once in my years of experience did a non-departmental advocate for public health appear to testify. That individual was a public health nurse. We do not have an organized constituency for prevention. Society takes the marvelous successes of public health for granted.

Those public health personnel who are demonstrating euphoria and giddiness by believing that health care reform will enhance public health programs may be in for a rude awakening and become disillusioned victims of worshipping the god of health care in vain, rather than pursuing the cause of public health. The national health care reform efforts are designed to contain health care costs and improve access to health care services ---, not public health services or environmental health and protection services. In fact, the price tag for revamping our nation's health care system may well utilize revenues that might otherwise be

available to support or enhance public health and environmental health and protection services. By the time our political leaders are through utilizing funding sources for national health care reform, even less federal and state resources may be available for basic public health and environmental health and protection measures.

THE SUPERIORITY OF PUBLIC HEALTH

Few of our political leaders appear to understand that basic public health and environmental health and protection services delivered through state and local agencies have done more, and can continue to do more, to enhance the health **status** and **quality of life** of our citizens than can health care measures. Public health, properly staffed and supported, stands ready to effectively attack the current leading causes of death and disability as it has in the past.

Many public health activities are highly cost effective for preventing disease and disability, but more importantly, public health must be also **marketed** on the basis of improved **quality** of life, **extended** life span, and enhanced **quality** of the environment. While public health measures **do** prevent disease and enhance life quality and longevity, all such activities do not reduce health care costs. Each public measure must be evaluated individually and in all its dimensions. A few examples, however, indicate that:

· Prevention of only 3 percent of the incidence of coronary by-pass operations can achieve a reduction amounting to nearly $240 million a year.
· Lead abatement of a typical pre-1950 housing unit can prevent nearly $3,000 in treatment costs for each case of lead toxicity.
· Prevention of only two major communicable disease outbreaks per state each year with each affecting 200 people, could achieve a savings of up to $10 million a year.
· Prevention of one new HIV infection for every five persons identified as HIV-positive results in savings of $15 to $25 for every $1 spent in counseling, testing, referral, and partner notification and counseling.
· The estimated cost of water fluoridation for an individual's lifetime is equal to or less than the cost of one dental restoration to treat a tooth with caries.
· For each dollar invested in a smoking cessation program for pregnant women, about $6 is saved in neonatal intensive care costs and long-term care associated with low birth weight.

While I am not deprecating the need to deal with access and economic problems of the health **care** system, it should be understood that health **care** reform in the absence of improved public health services will be not deal effectively with the health problems of our communities. *Health care reform in the absence of improved public health services will be another expensive experiment and a misplaced priority.*

Health services must be viewed as a **continuum,** with environmental health and protection, disease prevention, and health promotion preceding health care on the continuum (see

attachment). However, the most important **precursors** to improved human health status include genetic potential, economic vitality, and educational achievement.

I have always believed that it is inappropriate for **public health** departments to deliver more than minimal health **care** services. Many health departments have, however, become deeply involved in health care as a matter of choice as providers of last resort, or due to political necessity. Public health has seemingly become obsessed by, or subsumed by, health care, resulting in a lack of clarity, focus, definition, priority, and emphasis for public health, as well as ineffective marketing of public health. Public health may have collectively "shot itself in the foot" by making health care reform such a priority rather than focusing on the priority of marketing public health services and improving the health status and quality of life of the public.

In short, ***public health has become a blurred vision.***

MARKETING PUBLIC HEALTH

Public health leaders believe that public health is an excellent and essential product, but why hasn't the product -- enhanced health status of the public -- been better recognized and supported? Do we have a problem with the product, the need, the marketing, or the sales persons? Public health organizations should take a page from the private sector and commission a comprehensive national marketing analysis to develop recommendations to succinctly define the product, determine priority needs and demands, describe the market, recommend marketing strategies, and implement effective marketing recommendations.

Health care reform may require that many clinical preventive services currently delivered on a population basis through community public health departments be delivered through the health care system. And health care reform could result in public health departments re-emphasizing those public health services remaining within their domain. Or it could result in a de-emphasis of population based community public health measures.

With regards to public health efforts being strengthened by health care reform, I am reminded of a statement occasionally made by one the Governors for whom I worked. Particularly during legislative sessions he would say, *"Blessed are those who expect little, for they shall not be disappointed."*

Many who are imbued with conventional public health wisdom and public health egocentrism do not view the world as our political leaders do. It would be interesting and very useful to study why so many in public health are so politically naive, and often disdainful of the political process. Do we attract and retain a certain type of individuals and culture, or do we fail to properly train public health personnel to understand and constructively impact the various public policy elements within our political systems?

ENVIRONMENTAL HEALTH AND PROTECTION

I use the terminology "environmental health and protection" rather than environmental health **or** environmental protection, because all environmental health and protection programs share a public health goal and are usually based on public health standards. The differences are in their organizational settings rather than logical or definable differences in programs, missions, or goals. This distinction is artificial, and has led to inappropriate organizational separation of activities which share the common goal of protecting the public's health and enhancing environmental quality. In many cases, the separate terminology has created organizational barriers. We should be building and traveling bridges between all the organizations involved in the struggle for public health protection and environmental quality, rather than being parties to terminology and turf barriers.

Concern for the quality of our environment and related public health implications has never been more intense. Political leaders and ordinary citizens, whether liberal, moderate or conservative, express concern over the quality of our environment, as well as the need for professional environmental health and protection leadership.

The scope of environmental health and protection has changed significantly within the past 25 years. Priorities, program methods, and even goals have also continued to evolve. Ecological considerations have become an increasingly important component.

There is widespread disagreement regarding environmental health and protection priorities, acceptable risk, and organizational issues.

Environmental health and protection continues to be a matter of local, national and global debate. Globally, priority issues include species extinction, possible global warming and stratospheric ozone depletion, wastes, desertification, deforestation, planetary toxification and, most importantly, overpopulation. Excessive population contributes to all the foregoing as well as to famine, war, disease, social disruptions, economic woes, and resource and energy shortages.

At the national level, a 1990 Roper poll found that, in terms of public perception, at least 20% of the public considered hazardous waste sites to be the most significant environmental issue.

But contrary to public perception, the 1990 report of the Environmental Protection Agency's prestigious Science Advisory Board lists ambient air pollutants, worker exposure to chemicals, indoor air pollution and drinking water pollutants as the major risks to human health. In my opinion, food protection, unintentional injuries, and housing conditions, --- while not EPA programs, should be added to any list of environmental priorities impacting human health.

A December 1991 survey conducted by the Institute for Regulatory Policy of nearly 1300

health professionals indicated that:

> *"Over eighty-one percent (81%) of the professionals surveyed believe that public health dollars for reduction of environmental health risks in the United States are improperly targeted."*

Taking all of this into consideration, it must be emphasized that sound epidemiology, risk assessment and risk communication are among the most critical environmental issues of today and tomorrow. While resources should be allocated to address actual and significant risks, public perception drives the response of elected officials and public agencies. Environmental health and protection professionals usually have greater expertise in dealing with technical program issues than those in such areas as risk assessment, epidemiology, prioritization, fiscal impacts, risk communication, agency management and public policy.

As public health practitioners:

· We should understand the role of science in determining public policy, and place a high value on science in developing public policy.

· We should recognize the misuse or absence of science in an effort to justify a position or alarm the public.

· We should be scientifically critical. Too many so called "professionals" are actually only regulators and functionaries, ever ready to accept, promote and enforce the current party line or misinformation.

· We should recognize the difference between science-based facts and public perception.

· We should recognize that the some of the news media are frequently a conduit for an abundance of misinformation and a shortage of critical scientific inquiry behind many of the various "catastrophe-of-the week" issues.

· We should recognize that if all the alleged environmental catastrophes were scientifically factual, our nation would have many times the actual morbidity and mortality rates.

· We should question reports which base a problem on finding one anecdotal example, e.g., one cancer patient near a hazardous waste site that capitalizes on appeal to the emotions. Many epidemiologists term this the "I know a person who ...." syndrome.

· We should beware of individuals and organizations purporting to use "science" to front and further their organizational and political objectives. Peer-reviewed science does not depend on media manipulation, Hollywood personalities, or slick public relations.

· We should beware of "predicted" morbidity and mortality figures pulled out of the air by self-styled "experts."

· We should learn and practice the art of risk communication. Few public health personnel understand and practice effective risk communication. Instead, risk communication is usually considered to be a speech, a press release, a letter or a leaflet. This is one of the reasons that public perception of risk is frequently at variance with that of scientists.

· We should always question, challenge, investigate alternative solutions, and analyze

existing and proposed regulations and standards to determine the validity of their scientific base. Existing programs, standards and regulations tend to be magical, take on lives of their own, and are seldom challenged. A standard in motion tends to remain in motion in a straight line unless impeded by an equal and opposite force. Public health professionals should provide the scientific "equal and opposite force" to challenge any prevailing misunderstanding of risk.

· We should understand that an unnecessary or poorly designed or overly expensive program becomes even more difficult to stop or alter once a bureaucracy or an industry is developed to promote the program.

· We should remember that people tend to overestimate risk from rare but dramatic events. People also tend to underestimate common events such as violence, unintentional injuries and deaths, and slow tobacco induced homicide and suicide. People disdain changing preconceived notions about risks and priorities. People are quick to dismiss evidence as erroneous or biased if the information contradicts their preconceived opinions.

· We should understand that many Americans, and even some public health practitioners, seem to exhibit a love of calamity. Some groups are applauded and profit from false predictions of environmental calamity, some of which become translated into public hysteria and public perception, thence into political action, and finally into expensive and unnecessary programs and public policy. Those promoting such hysteria accept no responsibility for their false statements and prognostications.

· We should define problems before proposing solutions, and fit solutions to problems rather than the problems to solutions. Some groups seem to consistently have solutions waiting for problems.

· We should realize that the proper standard for environmental health and protection is not always "zero-risk", but should be "net benefit", or "net impact." Zero-risk may not be economically or practically attainable, and the cost of pursuing zero-risk for one particular issue may preclude resources essential for addressing more important problems. Unnecessary emphasis on zero-risk may also lead to false expectations and undue public alarm.

And finally:

· We should be wary of accepting problems based only on extrapolations and correlations rather than on good epidemiological and toxicological studies.

If we consider correlations only, we would probably conclude that:

CARROTS WILL KILL YOU! After all,

· Nearly all sick people have eaten carrots. Obviously the effects are cumulative.

· An estimated 99.9% of all people who die from cancer have eaten carrots.

· 99.9% of people involved in auto accidents ate carrots within 30 days prior to the accident.

· Some 93.1% of juvenile delinquents come from homes where carrots are served frequently.

· Among people born in 1849 who later ingested carrots, there has been a 100% mortality.
· All carrot eaters born between 1900 and 1910 have wrinkled skin, have lost most of their teeth, and have brittle bones and failing eyesight, if the ills of eating carrots have not already caused their deaths.

Additionally, we would conclude that:

STORKS BRING BABIES

The number of storks in Europe has been decreasing for decades. Concurrently, the European birth rate has also been declining.

Obviously, we would be foolish to accept these correlations as evidence that storks bring babies or carrots cause illness and death.

The science of epidemiology attempts to sort out from myriad chance correlations those meaningful ones which might involve cause and effect. It is important to understand, however, that epidemiological methods are inherently difficult and that it is not easy to obtain convincing evidence. There are also many sources of bias. For example, because there are so many different types of disease, by chance alone one or more of them may occur at a different frequency in any given small population. The science of toxicology helps provides evidence as to whether a relationship is credible.

ENVIRONMENTAL HEALTH AND PROTECTION ORGANIZATIONS

As you know here in California, environmental health and protection programs continue to be diversified and transferred to state "EPAs" as they were more than 20 years ago at the federal level. There are many agencies which administer environmental health and protection programs at all levels of government. There is no standard organizational model for environmental health and protection programs.

Environmental health and protection has increasingly ceased being a responsibility of public health **departments** at the state and federal levels since the creation of the U.S. Environmental Protection Agency in 1970. At the local level, however, public health departments tend to be the lead agencies for a number of traditional environmental health activities.

For many years, I suggested that something like 75% of state environmental health and protection activities were administered by environmental health and protection agencies other than state health **departments.** A recent study conducted by the Johns Hopkins School of Public Health indicates that I have been wrong. The figure is greater than I had been suggesting --- more like 85% to 90% of state level environmental health and protection activities are

administered outside the purview of state health departments. By comparing state level environmental health and protection expenditures with other public health expenditures as reported by the Public Health Foundation, we find that states spend approximately the same total amounts on environmental health and protection as they do on all other public health programs administered by state health departments. This fact suggests that those in the broad **field** of public health should have greater recognition of the size and importance of environmental health and protection efforts as a key component of the field of public health. Just to exemplify what this would mean, I offer the following:

·The document *Year 2000 Health Objectives for the Nation* would have as many chapters dealing with environmental health and protection as it does with all other public health activities, instead of just one chapter titled environmental health.
·The Institute of Medicine Report of *The Future of Public Health* would provide significantly greater balance for environmental health and protection.
·Academic institutions training public health professionals would insure that a more comprehensive scope of environmental health and protection competencies are taught, and that more effective linkages are developed with the various agencies responsible for delivering environmental health and protection services.
· Public health textbooks would provide coverage of environmental health and protection in balance with other public health programs.

Most local environmental health and protection programs are components of local health departments. However, a number of jurisdictions, including some here in California, have established separate environmental protection or environmental management departments. Environmental health and protection activities are also administered by such local agencies as public works, housing, planning, solid waste management, special purpose districts, and regional authorities.

The trend to organizationally diversify environmental health and protection programs will probably continue in response to the increasing complexity and importance of environmental health and protection, in response to the demands of environmental advocates, and in response to the changing priorities of many health departments as they become increasingly involved in health care issues in addition to public health. It is unrealistic to develop programmatic relationships between hazardous waste management, for example, and any one of a number of health care treatment and rehabilitation programs. The drift of federal, state and local health departments toward more and more health care (as providers of last resort) may translate into less and less leadership for environmental health within such health departments. However, regardless of the titles or organizational arrangement, the lead agencies for environmental health and protection should be comprehensive in programmatic scope; staffed by personnel having the requisite public health competencies and leadership skills; have program design and priorities based on sound epidemiology, toxicology and risk assessment data; and have adequate analytical, data, legal and fiscal resources.

We must believe that anything as important as environmental health and protection deserves and demands organizational support, visibility and effectiveness which may translate into organizational diversification and programmatic change, and we must understand that environmental constituents and political leaders frequently demand such change.

We should develop improved methods to prevent environmental problems, as differed from curative efforts and clean-up. While the field of environmental health and protection identifies with prevention, a preponderance of effort is devoted to solving problems created as a result of earlier decisions and actions taken by the public or private sectors. Therefore, public health personnel must become effectively involved in the planning and design stages of energy production and alternatives, land use, transportation methodologies, facilities construction, and resource utilization: as well as design, development and production of products which may negatively impact human health or delicate ecological balances. Environmental policy must be based on prevention if there is to be any hope of preventing further resource depletion, ecological dysfunction, and minimizing the health impacts of environmental contaminants.

And finally, we must realize that the scope of environmental health and protection concerns now includes ecological issues as a full partner. Whatever long-term health threats may be, the public also knows that pollution kills fish, dirties the air, creates a foul stench, ruins rivers, destroys recreational areas, and endangers species.

AND, IN CONCLUSION

Public health continues to be difficult to sell, whereas health care continues to be demanded and better funded. Public health programs, unlike health care issues, lack an effective constituency. Public health has always been a rocky road, as it provides no immediate gratification or feedback. It requires the ability to look to the future, which is not a customary trait of our political leaders who are looking to the next election rather than the status of their constituents health in coming decades. Public health **does** have the glamour associated with hospitals, organ transplants, emergency medicine, diagnosis, treatment and rehabilitation. However, the excitement and effectiveness of the products of public health have not been convincingly marketed, and public health has not competed well with health care. Seventy-five years ago, a warning about inattention to public health agencies was issued to the Medical faculty of Maryland, and except for the decimal points the following statement is still true:

> *"With the appropriations for health insurance running into millions of dollars annually, it goes without saying that legislative bodies will not materially increase the appropriations for their health departments. Owing to this fact, there is a decided probability of sickness insurance acts endangering the very existence of State health department by absorbing all of the funds available for health work. Our statesmen and lawmakers must, therefor, be careful that proper and ample provisions are made for health machinery in any sickness insurance act."*

Leadership on the road to improved public health and environmental quality is not an easy route. There are many potholes in the course of providing effective, priority services. The journey requires vision and steadfastness of purpose, as it is beset by emotional pressures, tempting comfortable detours, political surprises, and frequently offers no short-term gratification or pay-off. There are no rest stops along the way.

The public health arena is bright for those professionals who have the necessary knowledge and skills, and who demonstrate vigorous leadership in marketing and implementing disease prevention, health promotion, and environmental control strategies that target priority public health and environmental problems. Many of these priority threats are linked to lifestyle risk factors and environmental hazards.

We should be affirmative regarding public health and understand, explain, promote, market, sell, interpret, propose, advocate, and communicate the need for improved public health services. We should not allow public health services to be left halfway between leprosy and quarantine stations.

We should have a clear, crisp, definable, and marketable vision of public health and its potential for the enhancement of health status, our quality of life, and the future well-being of our families and communities.

If the national public health community cannot agree on the definition of, and destination required for improved public health, then it doesn't make much difference which road is taken to get there.

A basketball coach would say, "Let's get back to the basics." Perhaps we need a spirited half-time change in our game plan. Let's get realistic, and put and end to our identity crisis, our misplaced euphoria, our fantasies, and an end to our ***blurred vision of public health.***

Larry Gordon is an Adjunct Professor, University of New Mexico. He has served as:

New Mexico Cabinet Secretary for Health and Environment,
Deputy Cabinet Secretary for Health and Environment,
New Mexico State Health Officer,
Founding Director, New Mexico Scientific Laboratory System,
Founding Director, New Mexico Environmental Improvement Agency (NM Environment Dept),
Founding Director, Albuquerque-Bernalillo County Environmental Health Department,
Chief Sanitarian, Albuquerque Health Department,
State Food Sanitarian,
District Sanitarian,
County Sanitarian,
and is a Commissioned Officer (Navy Captain), U.S. Public Health Service Inactive Reserve.

Gordon also served as President of the 55,000 member American Public Health Association; Chair of the National Conference of Local Environmental Health Administrators; President of the New Mexico Environmental Health Association; Chair of the APHA Section on Environment; Co-Chair of the APHA Action Board; a member of the APHA Science Board; and is a consultant to numerous national public and private groups such as Underwriters Laboratories.

He was a founder of the Council on Education for Public Health (the national accrediting agency for schools of public health), a founder of the American Intersociety Academy for the Certification of Sanitarians (now the American Academy of Sanitarians), as well as a long time member of the National Environmental Health Science and Protection Accreditation Council (the national accrediting agency for environmental health and protection academic programs.)

He has over 240 professional and technical publications.

Gordon is a recipient of the:

National Society for Public Administration (New Mexico Chapter) Distinguished Public Administrator Award - 1996
Univ. of Michigan School of Public Health Alumni Society Distinguished Alumnus Award - 1995
Distinguished Leadership in Environmental Management Award, American Society for Public Administration - 1994
County of Los Angeles Lester Breslow Award for Distinguished Service in Public Health - 1994
University of New Mexico Alumni Association Zimmerman Award for bringing credit to UNM- 1993
New Mexico Governors' Distinguished Public Service Award - 1988
American Public Health Association Sedgwick Award (the highest honor bestowed by the APHA) - 1987
American Lung Association Clinton P. Anderson Award for Outstanding Efforts to Improve the Health and Environment of New Mexicans - 1987
New Mexico Public Health Association Larrazola Award - 1987
American Academy of Sanitarians Wagner Award for Leadership Ability and Professional Commitment - 1984
New Mexico Hospital Association Commendation for Leadership in Health Care - 1981
Honorary Fellow Royal Society of Health for Distinguished Work in Connection With the Promotion of Health, London, - 1981
National Environmental Health Association Snyder Award - 1978
New Mexico Public Health Association Award for Distinguished Service - 1970
National Secretaries Association International, Boss of the Year Award - 1970

New Mexico Sanitarians Association Award for Outstanding Contributions to Sanitation - 1967
Sanitarians Distinguished Service Award, International Sanitarians Assoc. - 1962
Western Branch, American Public Health Association Sippy Award for Meritorious Service to Western Public Health - 1962
National Environmental Health Association Mangold Award for Outstanding Contributions to Professional Advancement - 1961
Samuel J. Crumbine Award for Outstanding Development of an Environmental Sanitation Program - 1959

Gordon planned and gained legislative authorization for the:

Albuquerque-Bernalillo County Environmental Health Department,
New Mexico Scientific Laboratory System,
New Mexico Environmental Improvement Agency (now the Environment Dept.), and the
New Mexico State Health Agency.

He also developed and gained enactment of numerous state and local public health and environmental health statutes, regulations and ordinances; testified before the Presidential Committee on Executive Reorganization recommending the creation and scope of the Environmental Protection Agency, and testified before Congressional Committees supporting the passage of several key federal environmental health statutes.

Gordon is listed in:

Who's Who in America, 1988 - current
Who's Who in the West, 1970 - current

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