Public Health Reports

Vol. 65 • DECEMBER 8, 1950 • *No. 49*

Public Health: 1950

Since 1872, members of the several professions making up the public health movement in the United States have assembled annually* to take stock of professional growth and development, to report new facts, and to exchange views and opinions. They have met as members of the American Public Health Association and of a growing group of related organizations. They have come not only from the Western Hemisphere, but, increasingly, from nations across the seas.

This year, almost 4,000 members and friends of the APHA and associated groups met in St. Louis. They heard and, in most cases, participated in presentations by more than 450 of their colleagues. Subjects ranged from aureomycin to yeast, from atomic energy to water resources.

No one person attending the meetings could possibly take part in more than a very few sessions, no matter how far-ranging his interests. Yet, without doubt, those at the conference as well as those who remained at home want to be informed—as promptly as possible—of at least the main trends of discussions, of the important new developments, of the significant contributions in their own fields and in the total field of public health.

With these needs in mind and through the cooperation of Dr. Reginald M. Atwater, Executive Secretary of the Association, the Public Health Service has undertaken to provide a reporting service on the entire meeting. The result of our efforts appears in this and the next issue of PUBLIC HEALTH REPORTS.

This account does not present either abstracts or summaries of the papers presented, or a chronological accounting or editorial evaluation of the meeting. It is news-type reporting of the highlights of many of the sessions . . . a panorama of "Public Health: 1950."

We have dealt only with the scientific sessions of the meetings. Association business has not been reported, this being a function of the official Journal. And no full papers, of course, are published. Complete texts of the leading papers have already begun to appear in the American Journal of Public Health, and others will appear in appropriate specialty journals.

*Except for 1945.

Our primary sources have been the advance abstracts, press releases, and texts available through the press-room facilities of the Association in St. Louis. This accounts for much of the selective character of the report. Material which was not available in some script form obviously could not be included.

It should be reemphasized that this is basically a "news" approach aiming at highlights and items of broad interest. We have attempted to give the essence of the presentations reported upon, but by no means the complete story in each case. We have endeavored to reflect accurately the intent of each speaker, although we have had to take somewhat extensive editorial liberties in the interest of brevity. The source of each report is stated and it must be clear that the author—not the Public Health Service—is the authority in each instance.

Because of the large number of presentations involved, two full issues of PUBLIC HEALTH REPORTS are being devoted to this reporting service. Material has been organized topically. In the present issue, the topics covered are: defense and world health, public health practice, and environmental health. In the next issue we will report on epidemiology, chronic disease, child health, and medical care.

The material is put forth on a more or less experimental basis both as to content and presentation. We hope our readers will give us the benefit of their comments and suggestions.

This report was prepared under the direction of Howard Ennes, M.P.H., Office of the Surgeon General, Public Health Service. Appreciation is expressed to the more than 20 members of the Public Health Service staff who aided in the collection and summarization of the material, and to the editorial staff of PUBLIC HEALTH REPORTS who participated in the summarizations in addition to editing the material for publication.

INTERNATIONAL HEALTH

Major Factor in Foreign Policy

World-wide health improvement—a major factor in economic and social progress, and thus in the preservation of peace—has become a major concern of American foreign policy, Willard L. Thorp, Assistant Secretary of State for Economic Affairs told the APHA.

Our stake in the well-being of other peoples is based on a deep conviction that the very survival of our democratic society depends upon the creation of a free, peaceful, orderly, and prosperous world society, he said.

Mr. Thorp pointed out that our concern for the health and well-being of other peoples did not arise out of the current conflict although "that struggle has helped to focus public attention on unsatisfactory living conditions on which communism feeds."

Public health improvement in underdeveloped countries constitutes an excellent investment not only for the country concerned but also for others, he stated. A malaria expert has stated that imports into the United States from malaria-ridden countries carry a hidden malaria tax of about 5 percent due to increased cost of production under such conditions. This would mean that in 1938 malaria in foreign countries cost the United States $175,000,000. Today it is probably more. That is a huge sum in comparison with what we are now spending on health improvement outside our own country.

Integration Necessary

Terming health, food production, and education the foundation stones of decent living conditions, Mr. Thorp stressed their interdependence.

"People who are sickly and weak cannot produce effectively and have little interest in learning. People who are poorly fed are more susceptible to disease and indifferent to education. People who are ignorant will not readily understand the reasons for sanitation and better farming practices," he said.

World Health Organization teams are already doing valuable work in many parts of the world. There are malaria, tuberculosis, and VD teams in India. There are yaws eradication teams in Indonesia. WHO sanitary engineers are working among the Arab refugees from

Palestine. Expert advisers are stationed in many countries. An important fellowship program is slowly building a pool of trained people who are destined to staff national health administrations.

Although the World Health Organization today stands ready to promote a large-scale campaign for health improvements in those parts of the world which need it most, Mr. Thorp pointed out that the success of the health program will depend in part on how closely and how well it can be integrated with the United Nations program of technical aid to underdeveloped areas.

The UN program was conceived last June at the first Technical Assistance Conference of the United Nations. Fifty nations have contributed more than 20 million dollars for the first year's budget. In the meantime Congress has launched the American Point IV program with a 34½ million dollar appropriation.

Calls for Volunteers

Mr. Thorp appealed for volunteers in the work of building a healthier world. The greatest need, he said, will be for people who are not only good technicians but good teachers; people who are not only good Americans, but good internationalists. The Public Health Service will backstop these programs as far as it can, but it has not enough personnel to do it alone.

Today over 150 American health technicians of all kinds are out in the field on technical assistance projects under the United States Government auspices. By next June, we hope to have an additional 300 new people. Mr. Thorp expects the number to be proportionately larger the following year.

Cooperation will also be needed in providing hospitality, orientation, and training to the many visitors, trainees, and graduate students who come here to observe and study American techniques and health organization, he pointed out. In the past 4 months alone more than 500 such people have come to the United States, and many more are expected.

WORLD SANITATION

Clean Environment Key to Health

The sanitary engineers of America—in almost unique fashion—hold the key to the problem of the rapid and effective development of world health, Henry van Zile Hyde, M.D., told public health engineers and the Conference of State Sanitary Engineers at the APHA meeting.

Dr. Hyde, who represents the United States on the executive board of the World Health Organization and is also Director of Health and

Sanitation for the Institute of Inter-American Affairs, said the problem is in "the first instance one of sanitation."

Except in the Americas, he said, the basic position of the sanitary engineer is not fully recognized with the result that the importance of sanitation, though recognized at an intellectual level, lacks the driving force sanitary engineers put behind it here. Accordingly, sanitation in many parts of the world is miserably inadequate while health sciences academically may be highly developed.

The major world health problem today, he maintained, is not death but the chronic infection and infestation which converts man from a productive unit to a liability to society. Most of this is due to the fact that 1½ billion persons are living in conditions of primitive sanitation, where health officers drink wine for their own safety rather than the water they are responsible for.

The multilateral (such as WHO) and bilateral (such as the IIAA) types of international health activity were explained and contrasted. The speaker urged strengthening and expanding the bilateral type until true multilateral internationalism can attack the world's health problems.

United States Takes Lead

"The United States alone cannot, of course, remedy the existing situation," he said. "The peoples themselves must eventually clean their own environment, and keep it clean." But the United States can take and is taking the leadership in moving the world toward this necessary goal by—

Continual insistence, in the health councils of the world, on the fundamental importance of a sanitary environment;

Insistence, in economic and political councils, upon the basic importance of man's productive capacity as an element in economic progress;

Demonstration abroad through cooperative programs of the techniques that improve public health, and

Education of leaders in these techniques in our schools or through loans of our teachers.

"But the United States will not be satisfied with a program of WHO until that program shows full evidence of vigor in attacking the problems of basic sanitation and until it recognizes that the engineer trained specifically for this is the person most competent to do it," Dr. Hyde emphasized.

Water Supply Selling Point

Visitors to the underdeveloped countries are impressed, he noted, with the great interest being shown toward better public health by the governments and their people. The current demand for health

action can be attributed to the training given thousands of technicians during the past few years and to the many demonstrations of public health techniques. "Indeed," he stated, "we would be poor salesmen if we failed to develop broad markets for our particular product now that we have some resources to use in advertising it."

Dr. Hyde showed how the installation of a water supply system in many backward areas stimulates increasing and continuing interest in public health and related how, on IIAA projects, the contribution made by many communities was not and could not be in cash but was made, nevertheless, in terms of back-breaking labor by the people who eventually benefited from the work.

ENVIRONMENTAL CONTROL

Water Supplies Demand Priority

In a war situation, public water supplies and related sanitary engineering services will again demand top priority consideration of our public health services, according to Mark D. Hollis, C.E., PHS Assistant Surgeon General and Chief Sanitary Engineer.

Surreptitious efforts to spread poisons or infections is a possibility we must prepare for, he stated. One practical step is extension of coordinated research into detection of noxious matters and protection against them. The PHS Communicable Disease Center is moving into the field of airborne pathogens and epidemic intelligence, and the Service's Environmental Health Center is working on techniques for using the new microscopic filter as a laboratory tool for application in sanitary bacteriology. With some modifications, the filter may prove valuable in purifying small quantities of drinking water. It promises to be a quick and economical method for general bacteriological examination. It can be produced inexpensively, and it is easy to use.

A new sterilizing agent containing a silver compound may prove to be another defense against bacteria in water. Preliminary reports indicate that this material, under specified conditions, is not only an effective bactericide but also appears to have unusual residual qualities, Mr. Hollis observed.

Public water supplies may be designed for greater protection. A system of dual clear wells with sufficient capacity can be alternated in use to gain the advantages of long retention in each. Animal testing combined with this system will further safeguard against poisons in the water supply. Another advantage may be gained from use of valves designed on the differential pressure principle for preventing backflow. The valves are now on the commercial market and are proving highly satisfactory, Mr. Hollis reported.

Must Streamline Present Operations

Where does peacetime disease control leave off and wartime disease control begin?

In a report to a special APHA session, W. Palmer Dearing, M.D., Public Health Service Deputy Surgeon General, and J. O. Dean, M.D., Assistant Surgeon General, pointed out that the solution of wartime disease control problems demands not a revolution but a strengthening and streamlining of operations.

The familiar tools of reporting, identification, and control are at hand to deal with communicable disease from whatever source, the conference was reminded. A period of mobilization or a war emergency simply requires that these tools be in good repair, that they be available, and that they be used effectively, the doctors said.

Revised Reporting Planned

The Public Health Service has prepared a tentative plan for improving the present system of communicable disease reporting. Preliminary trial of the plan will begin January 1, 1951. It will provide for (1) a new minimum list of diseases for reporting by local health officials to the State and, in turn, to the Public Health Service, some by telegram, the others by mail; (2) periodic statistical reports which will furnish the base line of expected cases; (3) minimum content of a general morbidity case report form. In addition, the plan will foster telephoned reports of unusual diseases occurring in the community or of unusual outbreaks of usual diseases, the PHS officials added.

As a part of epidemic intelligence, local health officials were advised to consider, at least on a sampling basis, records of absenteeism in selected industrial or educational establishments. Significant illness would show up first in absence from work. Hospital reports on bed occupancy probably would also serve as a valuable index to a sudden increase in disease.

To make the best use of the information reported, epidemiological teams, backed by competent laboratory services, must be set up, they stated. For services not available locally, health departments may want to turn to universities, research centers, or other areas of special competence, such as the cooperative influenza listening post of the National Institutes of Health. The Communicable Disease Center of the Public Health Service is prepared to assist States in both reference laboratory service and in epidemiologic field investigation.

Day-to-day sanitary practices will be the principal bulwark against induced disease, they advised. Normal controls for safeguarding public water supplies and for preventing the entry of unauthorized persons to treatment plant premises, the supervision of

913933—50——2

milk plants and dairy farms, the exercise of controls over food processing establishments, drugs and biological products, and many other forms of surveillance take on added significance in the present situation.

Fortunately, the development of simpler and more effective environmental safeguards has been going forward in recent years, they reported. And efforts are being redoubled to develop known sanitizing agents and detecting devices and to create new ones that can be generally applied with safety and effectiveness in water, food, or atmospheric bacteriology.

The overriding problem in planning for wartime disease control, the PHS officials stated, will be in maintaining a state of readiness over a long period of time for an eventuality that may never occur.

"Like many other nations, we will have to strike a pace of preparedness that will provide us with at least optimum safeguards and, at the same time, one we can sustain. Failure in attaining a balance between these two extremes is to court disaster, from without on the one hand, from within on the other. To attain such a balance is the prime challenge of the times," Drs. Dearing and Dean said.

Also at this special session Norvin C. Kiefer, M.D., Director of the Health Resources Office, National Security Resources Board, spoke of the role of health services in civil defense, and Howard A. Rusk, M.D., Chairman of the Health Resources Advisory Committee, NSRB, discussed health resources and services in a national emergency. Herman E. Hilleboe, M.D., New York State Commissioner of Health, described the health officer's responsibility in civil defense as illuminated by British experience and as now being carried out in New York State.*

BIOLOGICAL WARFARE

Preventive Medicine in Reverse

Many exaggerated and sensational statements have appeared as to the deadliness of biological warfare (BW), while the fact is that an enemy could not spread thinly or widely enough any BW agent to produce illness or death over great parts of the country, Frank R. Philbrook, M.D., Deputy Director of the Preventive Medicine Division, Bureau of Medicine and Surgery, Navy Department, told the Laboratory Section.

* The essential content of these three papers was included in the remarks of these officials as reported in PUBLIC HEALTH REPORTS, Nov. 17, 1950, pp. 1497–1499, 1508.

Three key questions concerning BW were defined as: What are the agents likely to be used? Where and how they will be used? What constitutes our defense? It is impossible to state which of the one or two dozen possible agents would be used, Commander Philbrook said, noting that bacteria, viruses, rickettsia, and certain fungi are likely candidates.

Targets for BW are large civilian or military population areas. Air attack could be used with explosives. The biological agents would be neither effective nor detectable until incubated. A second method of dissemination is sabotage. Sabotage of water would have to take place at a point where chlorine residuals are low, not at reservoirs where water purification starts. Food sabotage would be directed at foods eaten uncooked, he said.

Since biological warfare is essentially public health and preventive medicine in reverse, it follows that we must strengthen our efforts in these fields, Commander Philbrook said. Some principles of defense against biological warfare he listed as:

Coordination of BW defense with other warfare defense; preparation of professional and technical personnel for variations of the usual disease characteristics due to unusually high dosage, unusual portal of entry, or simultaneous occurrence of two or more diseases; early institution of epidemic control measures to minimize the effects of BW agents, with the possibility of specialized reporting, such as daily reporting of industrial and school absenteeism; rapid diagnosis and rapid therapy of communicable diseases; immediate availability of chemotherapeutic and antibiotic substances; intensified research in immunization to develop more vaccines; possible distribution of gas masks to the civilian as well as to the military population; sterilization of drinking water immediately upon suspicion of contamination; use of educational means and radio and press for allaying fear and avoiding panic; preparation of nontarget communities for provision of help in case of BW attack.

LOCAL RESPONSIBILITY

World Statistics Group Sets Pattern

National committees, patterned after or analogous to the national committees set up to serve as links with the Expert Committee on Health Statistics of the World Health Organization, are one effective way of developing needed local responsibility for world health, Lowell J. Reed, Ph.D., Vice President of Johns Hopkins University and President of the APHA, said in a general session.

Pointing out that establishment of a fine, democratically operated

headquarters at Geneva was not enough, Dr. Reed stated, "a democracy is successful only if there is an intense and active interest in it on the part of a wide variety of people at the local level."

Dr. Reed stated that the decennial revisions of the International List of Causes of Death is one of the best examples of international cooperation stimulated from a national level. In fact, the formation of the WHO Expert Committee on Health Statistics resulted from recommendation of the Paris Congress on the revision of the list.

The speaker noted various projects undertaken by the Expert Committee which had been reassigned to the national committees "deliberately to encourage decentralized work with widespread participation." The national committees remain national and formally are not part of the international structure, but they undertake to see that all interested agencies in the country have the chance to aid in developing any aspect of medical statistics. They do this in the ways suitable to their own governments and social structures.

Dr. Reed suggested that WHO avoid the dangers of bureaucracy by developing broadening instead of in-growing programs. He suggested, as an example, that the WHO public health school at Geneva undertake a leadership role in the development of methods of education in the field of public health that would be suitable to various parts of the world and all stages of the educational process—rather than just another school like those at London, Calcutta, Boston, or one to train persons for WHO or for careers in their own country.

ATOMIC ENERGY

Gap in Radiation Protection Administration

By most criteria hitherto used in the public health field, atomic energy appears a matter of great importance to public health practitioners, Abel Wolman, D.Eng., Professor of Sanitary Engineering at Johns Hopkins University, told the special APHA session on civil defense.

As obvious as this fact is, he remarked, few if any of the official agencies have developed the necessary staff or administrative procedures. "That such a major gap in health department responsibility should be permitted to continue is one of the mysteries of the last decade," he said, and "for the welfare and health of the Nation the gap should be closed."

Skilled Professionals Needed

Dr. Wolman felt that a minimum requirement for State and local activity in this field was development of at least a few key profes-

sionals in each department who are familiar with and skilled in the atomic energy field. He noted that the United States Atomic Energy Commission points out in its report for the first 6 months of 1950 that "in such large concentrations of material, either naturally radioactive or made so in various operations of the program, these same types of radiation create potential hazards. Workers must be protected against them when they are generated in manufacturing processes. The public must be protected by safe handling of the unique industrial wastes. Special safeguards must be set up and maintained in research that involves radioactive material or release of radiation."

Whether for reasons of the mystery of the industry and its products, or of the secrecy which has surrounded many of its operations, or whether because the measurement of its effects is still complex, it is difficult to say, but most of the official agencies have decided consciously or subconsciously to ignore the existence of the trade, its products, and its wastes, Dr. Wolman pointed out.

Public Will Demand Local Control

Some have said that the problems are so complex that a Federal health agency should look after them and let both information and control filter downward rather than upward from the local areas. This is "a departure from principles hitherto controlling in this country," he noted, that also "will prove untenable, for as the uses expand and the difficulties increase, the public will require more rather than less local supervision and control."

Relatively few health agencies are trying to "live with radiation administratively," and this is a strange situation, Dr. Wolman observed. Certainly during the last half century no health department has decided to ignore the hazardous trades either because of their mystery or because of their complexity.

State and local programs should be developed, and staff trained, that will assure the evolution of both peacetime and wartime rules of action which would gradually encompass responsibility for the control of the hazards potentially inherent in nuclear fission operations and in the use of their products. The public health profession and the atomic energy industry, Dr. Wolman felt, jointly have a grave responsibility as well as a great opportunity to serve the public.

PREVENTIVE MEDICINE

Metamorphosis Seen in Teaching

The role of preventive medicine in the future development of medicine and education for medicine within medical schools will be shaped by the merger of scientific medicine, public health, and psychiatry, Lester J. Evans, M.D., Executive Associate of the Commonwealth Fund, told the Conference of Professors of Preventive Medicine.

In our modern educational system, Dr. Evans said, the university hospital has become the symbol of scientific medicine. It is there that the findings of the basic science laboratory are translated into study of human physiology and pathology.

The principal original contribution from public health to scientific procedures has been the brilliant application of the quantitative method of the study of community and other mass phenomena. It is thus that medicine has had opened up to it the opportunity to study man in relation to the events taking place in his natural environment.

The "Life Situation"

Modern psychiatry has helped us to understand that man really functions as an integrated whole, he said. The evidence comes strikingly from the joint efforts of psychiatry and scientific medicine in the study of the relationship of such phenomena as hypertension, asthma, gastric ulcer, and headache to the life situation of patients.

"The expression 'life situation' immediately calls for a conception, in terms of movement through time and in relation to the total environment, of the human as well as the infectious, physical, or nutritious elements. Thus, the dynamic nature of life processes is further emphasized and the human element of environment stands out in bold relief," he continued.

Dr. Evans discussed how preventive medicine could make contributions through research, teaching, patient care, and departmental organization. Environmental components, longitudinal studies in community settings through quantitative methods, social science in medicine, preventive medicine at the "living level" involving normal psychology and physiology, and the family, individual, and community needs for medical care were pointed to as areas of fruitful research.

The Patient as a Person

Teaching tasks in preventive medicine include techniques of prevention of communicable disease, understanding of epidemiology and quantitative methods, sensitization to opportunities for arresting the development of noncommunicable disease. The medical student should be made aware of the patient as a person and should be shown how medicine can help to maintain or increase productive energy in both normal and handicapped individuals, Dr. Evans said.

If preventive medicine is to survive, it must play some role in patient care such as emphasizing continuity and integration. The patient as seen in the outpatient department, at home, and through the work of the general physician offers this opportunity.

Teachers of preventive medicine, Dr. Evans felt, must give increased attention to problems of departmental organization and staff. Should it be a medical school department in the ordinary sense, or an administrative function? Should new money be found for financing, or old money moved to new uses? Basically, the total staff must be equipped to look at the patient in his social and environmental setting.

The nature of this "metamorphosis" will depend on the philosophy in each school, Dr. Evans felt. The current survey of medical education can be very significant if it thaws the present structure of medical education and medical school organization and philosophy. Any basic contribution which preventive medicine may make in the future is most likely to happen in an educational institution where there is fluidity and flexibility in action as well as thinking.

PUBLIC HEALTH ADMINISTRATION

Services Dispersed, Authority Divided

In the past 10 years State health services have grown greatly in extent and variety . . . and the division of authority is more pronounced, health officers at the APHA were told by Joseph W. Mountin, M.D., Assistant Surgeon General and Associate Chief of the Bureau of State Services, PHS.

The decennial survey of State health activities and administration being conducted by the PHS reveals that many new activities have been added and programs already in operation have been expanded. There is, however, wide dispersion in the assignment of health activities among the various agencies of State government. This complexity of organization has particular significance at this time, Dr. Mountin felt, when State health agencies may be called upon to undertake new and unusual tasks in connection with the developing national emergency.

Not only are numerous agencies engaged in most health activities but also the combinations of agencies involved differ greatly from State to State. In fact, no pattern or common set of principles seems to exist either in division of responsibilities or in assignment of functions. Greater effort is being made, however, to form a coherent program out of the independent health activities of numerous agencies.

The extreme dispersion of responsibility among a multiplicity of agencies complicates Federal, State, and local relationships for both routine and special demands. If the existing structure of State government is to be used effectively across the Nation to meet emergency requirements, it is important that some degree of similarity should prevail for handling comparable problems. Dr. Mountin emphasized that complete and permanent changes cannot be made overnight. But he pointed out that if State health agencies are to maintain and strengthen their position of leadership in all matters pertaining to health—particularly in the critical days immediately ahead—they must endeavor to effect working arrangements for drawing together common health functions.

MEDICAL JUDGMENT

How Much Medical Administration Is Nonmedical?

One of the acute problems in the Nation's public health manpower shortage is that of meeting the increasing demands for public health trained medical personnel to fill administrative positions. If physicians could be relieved of the administrative details which do not involve medical judgment, it would serve to stretch available medical manpower and would make public health careers more attractive.

But just what do medical administrators do—and how much of their job requires medical judgment and how much could be done by other administrative personnel? Health officers at APHA heard some answers developed from a PHS staff study and reported by Harald M. Graning, M.D., M.P.H., Chief of the State and Local Health Services Branch, Division of State Grants, PHS. Detailed 1-week work reports were provided by 173 physicians in administrative positions in 34 States. Almost 11,000 "individual occurrences of activity" were analyzed in terms of time and type.

Somewhat less than three-fourths of all activities and time involved medical judgment, it was reported. There were no activities for which all time was reported as not involving medical judgment. The highest percentage of time for a single activity in which medical judgment was not involved was housing with 74. Travel time was 69 percent nonmedical, purchasing and equipment supervision, 56 percent each.

Medical administrative personnel spend around 60 percent of their time in programs other than their own, suggesting that the traditional concept that categorical program division directors get experience in but one field needs revision, Dr. Graning observed.

Although the results of the study do not point to any single activity or group of activities which can be definitely marked as suitable under all circumstances for delegation to nonmedical administrative assistants, it is evident that there are certain types of activities which were frequently considered as not involving medical judgment. Delegations to competent nonmedical administrative personnel would sometimes involve new positions. On the other hand, Dr. Graning suggested, examination of the resources of a department might disclose that these duties could be assigned to persons already employed. It might also be found that by pooling certain activities in which medical judgment is not involved and are now carried on by several medical administrators, there would be a full-time position which would warrant the addition of a well-trained nonmedical administrative assistant.

The maximum utilization of nonmedical administrative assistant personnel is necessarily dependent upon their availability and competence. The activities reported as not involving medical judgment should serve as guides in planning the recruitment and training of nonmedical administrative assistant personnel. Postgraduate schools might well consider the potential market for trained administrative assistant personnel, for State health departments are but one of the groups that might profitably employ them, Dr. Graning felt.

PERSONNEL SELECTION

Choosing Health Administrators

"Is there a science of personnel selection?" was one of the problems grappled with by APHA members interested in merit system service. Three men of experience attempted an evaluation.

Milton M. Mandell, Chief of Administrative Management and Testing of the United States Civil Service Commission, reported that current research indicates that a person who is basically a technician in his interests is not generally a good administrator, and that interest in theoretical matters is related to administrative success. There seems to be a negative relationship between desire for monetary reward and success as a public administrator. Knowledge of administrative structure and policies of the place of employment seem to bear a relationship to administrative success.

913933—50——3

In the measurement of personal characteristics, emotional stability and buoyancy should be looked for, Mr. Mandell noted. Currently, the most satisfactory method of measuring these is by a thorough investigation of the individual through personal discussions with people competent to judge. Proper questions must be asked, the right people must be sought for their opinions and observations, and great skill should be used in evaluating the information collected.

Philip Hunter DuBois, Ph.D., Professor of Psychology at Washington University, St. Louis, underscored the importance of the interviewer knowing a great deal about the job to be filled as well as being expert at interviewing techniques.

John M. Stalnaker, Director of the Division of Student Personnel Studies of the Association of American Medical Colleges, reviewed recent developments in aptitude testing. He noted that each of the 79 medical schools has developed its own system of screening and evaluating applicants and students.

BUSINESS MANAGEMENT

Role of Nonmedical Administrators

With shortages of skilled medical and other technical public health personnel, it has become increasingly important to provide for the most effective utilization of scarce skills and to guard against their dispersal in tasks where they are not essential prerequisites for effective performance, Murray R. Nathan, Director of the Office of Planning for the New York State Department of Health, said in moderating a panel discussion on the use of nonmedical administrators in public health. This was one of two key topics—the other had to do with patterns of State-local fiscal relations—at the American Public Health Association meetings of the Association of Business Management in Public Health.

Mr. Nathan pointed out that there is a growing realization that personnel engaged in public health work can no longer be neatly divided into "medical, nursing, and engineering personnel" and "clerks, typists, and stenographers." Between these two fields there have always been the responsibilities for such administrative practices as personnel administration, fiscal management, administrative planning and analysis. Proper discharge of these responsibilities requires special training and skills not as a rule found in public health professionals.

Paced by a panel consisting of Russell O. Saxvik, M.D., North Dakota State Health Officer; Cecil G. Sheps, M.D., Associate Professor of Public Health Administration at the University of North

Carolina; and Charles B. Frasher, Field Consultant for the American Public Health Association Merit System Service, discussion developed the point that in the broad field of public health there is a job of management—of people, finances, facilities, equipment, supplies—which although closely related to the technical practice of public health is in itself a special task requiring preparation and skill.

There is need for persons skilled in general administration to relieve the already overburdened medical, nursing, and sanitation personnel. But it was also strongly pointed out that the medical health officer with his special knowledge and skills in public health could never be supplanted by nonmedically trained personnel. It was felt that tasks beyond already established ones of personnel and fiscal management should be defined. The question of whether administrative training should precede or follow orientation in public health was left up in the air, but it was agreed that schools of public health should include, as part of their curriculum, some training in specific tasks of management.

State-Local Fiscal Relationships

An objective formula basis for local grants-in-aid is in effect in only a third of the States, and many of the plans do not contain the elements of an effective joint financial assistance plan, Clifford H. Greve, Chief of the Analysis and Reports Branch of the Public Health Service Division of State Grants, reported. He was moderator of a panel including Stephen C. Newitt, Director of the Division of Administrative Services, Louisiana State Department of Health; Paul B. Shanks, Administrative Assistant, West Virginia Department of Health; George A. Dame, M.D., Director of the Bureau of Local Health Service, Florida State Board of Health; and Clifford C. Shoro, Director of the Office of Business Administration, New York State Department of Health.

Discussion indicated that while most States pay grant funds on some type of reimbursement basis, there is little uniformity in other phases. It was emphasized that no one plan can be applicable to all States, but that there are basic concepts which can be utilized effectively.

CURRENT STATISTICAL PROBLEMS

Comparability of Entries in International Lists

The APHA Statistics Section and the American Association of Registration Executives heard discussions of three important current problems. One was the effect of single versus multiple causes of death

under the 5th and 6th International Lists. This was reviewed by O. K. Sagen, Ph.D., Chief of the Division of Vital Statistics and Records of the Illinois State Department of Health. The basis for his paper was a cross-tabulation of cause of death data (Illinois death certificates) coded by the 5th and 6th revisions. A "comparability factor" was applied, using as one of the elements the number of causes coded in the same entity under the two classification systems. When a single cause of death was given on the death certificate, the comparability factor was closer to 1 than when multiple causes appeared.

Iwao M. Moriyama, Ph.D., of the PHS National Office of Vital Statistics, pointed out (in comments read by Dr. Halbert A. Dunn) that it is important to know the frequency distributions for the other rubrics in the cross-tabulations. It was suggested that a "comparability ratio" be used, with the important fact being whether or not this ratio is sufficiently close to 1.0 so as to make the correction for the transition in classification change unnecessary. Since ratios are being used to smooth out time trends, it is not necessary to compute them separately for single and multiple cause reporting. Other discussions indicated interest in multiple cause tabulations on a repetitive basis and crossed by such characteristics as age, race, and sex. Question was raised concerning the detail of such tabulations, and the problem of interpreting a large mass of data was mentioned.

Occupational Mortality Analysis

Relating reports of occupation and industry on death certificates to a census enumeration population and interpretation of these data are important considerations in the making of occupational and industrial mortality studies, according to W. Thurber Fales, Sc.D., Director of the Statistical Section, Baltimore City Department of Health.

Difficulties have been overemphasized, Dr. Fales felt. Occupation and industry are sufficiently stable in the older ages, and these reports are derived fundamentally from the same kind of statistics which are used in other types of mortality analysis. Also, a continuous campaign to improve the statements of occupation and industry on death certificates has produced marked advances in the quality of entries. Such analyses should not be expected to provide measurement of the precise risk of the various occupations. Rather, computations by occupation and industry will furnish valuable leads for further study of both morbidity and mortality.

Robert C. Strauss, Biostatistician with the NOVS, found that occupation was generally well reported on death certificates for the Nation (95 percent of the entries were classifiable). The reporting of industry was not as complete (88 percent were classifiable). He also noted that while population data on occupation and industry from

the 1950 census enumeration will cover only the labor force, satisfactory data will be available to compute occupational and industrial mortality rates for males 20 to 64 years of age.

Robert J. Vane of the Metropolitan Life Insurance Co., and Chairman of the Committee on Occupational and Industrial Mortality Statistics of the Statistics Section of the APHA, reviewed the efforts of this committee to encourage and coordinate statistics in this field. NOVS and 10 States are conducting occupational mortality studies.

An index number designed to overcome difficulties inherent in the age-adjusted death rate was presented by Jacob Yerushalmy, Ph.D., Professor of Biostatistics at the University of California School of Public Health. Essentially, the index summarizes proportionate changes in age-specific death rates, giving equal weights to the age-specific rates regardless of their magnitude.

Robert D. Grove, Ph.D., of NOVS, felt that the method should be subjected to an analysis of the results obtained in comparisons between areas and in descriptions of mortality trends. One factor is, he said, that the index ignores several elements such as the number of persons affected by differences in rates. Mortimer Spiegelman, Assistant Statistician of the Metropolitan Life Insurance Co., and Miss Margaret Shackelford, Director of the Division of Statistics, Oklahoma State Department of Health, mentioned that it was important to develop a summary measure which could be computed readily by State offices of vital statistics and interpreted by them for general consumption.

Statistical Sampling

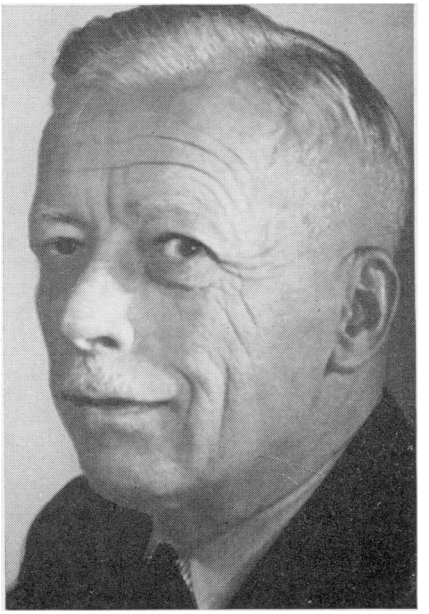
Public health statisticians at APHA heard three experts on problems of design of population samples point out some of the pitfalls and techniques in the use of samples in public health surveys. Although sampling theory is well established, it is not well known and applied, they felt. Recent developments also make possible greater accuracy for money spent. Speakers were: William G. Cochran, Professor of Biostatistics at the Johns Hopkins School of Hygiene and Public Health; Morris H. Hansen, Assistant Director of Statistical Standards, Bureau of the Census; and Jerome Cornfield of the Office of Biometrics, National Institutes of Health.

NURSING RESEARCH

More Planned Studies Needed

The nursing profession is beginning to assume responsibility for doing its own research at a level to stand the test of the scientific

R. E. Dyer Awarded 1950 Sedgwick Medal



Dr. Rolla E. Dyer

Rolla E. Dyer, M.D., recently the Director of the National Institutes of Health, Public Health Service, and now Director of Research at Emory University, Atlanta, has been awarded the Sedgwick Memorial Medal presented by the APHA "for distinguished service in public health."

A Public Health Service officer for 34 years, Dr. Dyer was Director of NIH from 1942 to 1950.

Dr. Dyer's reputation for outstanding research on Rocky Mountain spotted fever, typhus, and Q fever are well known, and he has received many honors, including the Lasker Award from APHA, the Carlos J. Finlay Medal of Cuba, the U. S. A. Typhus Commission Medal, and the War Department Certificate of Merit. On November 9 of this year he was again honored by the American Society of Tropical Medicine in Savannah, Ga., where he received the Walter Reed Medal. He has been among the more fortunate of the research scientists who have survived laboratory infections—in Dr. Dyer's case, both typhus fever and Q fever.

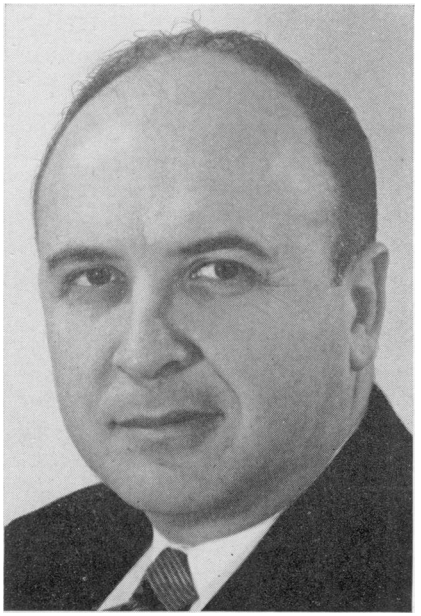
Upon retirement from the Service, friends and colleagues of Dr. Dyer's at the National Institutes of Health and elsewhere presented him with a scroll announcing the establishment of the R. E. Dyer Lectureship at the Institutes.

---

method, Marion Ferguson, Ph.D., of the Public Health Nursing Division, PHS, said as moderator of a panel on research before the Public Health Nursing Section. Reports of methods and techniques in four current studies were reported.

Factors involving nurses when making their choices of first level public health positions, particularly in official agencies outside the large cities, are under study in Kansas, said Therese Jenniges of the State Health Department. From the Indiana State Health Department, Lucille Wall reported a study of methods to stimulate interest on the part of public health nurses in chronic disease and gerontology. Cost analysis procedures, extent of use, and next steps were discussed by Ruth Fisher, Associate Director of the National Organization of Public Health Nursing. Dorothy Carroll of the Communicable Disease Center, PHS, reported on the bacteriological procedures being applied in a study of thermometer techniques.

Discussion indicated the desirability of inclusion in basic and



Dr. William H. Sebrell, Jr.

W. H. Sebrell Named New Director of NIH

William H. Sebrell, Jr., M.D., became the new director of the National Institutes of Health on October 1, succeeding Dr. Rolla E. Dyer upon his retirement from the Public Health Service.

Dr. Sebrell was formerly director of the Experimental Biology and Medicine Institute of the National Institutes of Health. He began his research career under Dr. Joseph Goldberger, the world famous Public Health Service scientist who discovered that pellagra is a dietary deficiency disease. Besides his own work on pellagra, Dr. Sebrell covered much of the field of vitamin B complex research and has made important contributions to our knowledge of dietary needs and deficiencies.

Dr. Sebrell was instrumental in drawing up the first international standards of nutrition for the League of Nations. He is also credited with having pioneered in gaining acceptance of scientific nutrition as a regular function of modern States and local health departments.

In recognition of his research achievements, Dr. Sebrell has received the Mead Johnson Award of the American Institute of Nutrition, the Research Medal of the Southern Medical Association, and the Army Legion of Merit.

---

advanced curricula for nurses at least stimulation of positive attitudes toward research, and emphasized the need for training nurses in research methods. Advisability of a master plan for research in nursing was suggested and the current status of the recently established Clearing House on Studies in Nursing was described.

SOCIAL SCIENCE

Must Understand Community Trends

Any unit of public health activity which disregards the increasing democratization of American life and goes on its way "doing something for" its constituents is moving counter to recognized trends in community life, said Earl Lomon Koos, Ph.D., Professor and Chairman of the Department of Sociology at the University of Rochester.

He spoke in a discussion of economics, psychology, and sociology in public health before the Health Officers, Public Health Education, Public Health Nursing, and School Health Sections.

If public health administration is to be effective, Dr. Koos said, and if it is to maintain itself on a level with other activities in the community, it must think in terms of the functioning groups in the community, of the effective leadership in these groups, and must work with that leadership in gaining acceptance of health goals and in developing health practices. Sociology and anthropology can make real contributions to public health by aiding in the identification of the "natural communities" which are the effective groups for action, and in describing and understanding the cultural and other social patterns which delimit individual and community action.

Contributions of economics to public health, and their close relationships, were analyzed by Dwayne Orton, Director of Education for International Business Machines Corporation. Psychology in public health was reviewed by O. H. Mowrer, Ph.D., Research Professor of Psychology at the University of Illinois. He felt that perhaps the greatest single obstacle to advances in mental health is the belief, widely shared in professional circles and in the population at large, that mental disorder arises because of biological frustration.

HEALTH EDUCATION

Building Health Practices a Team Job

Since the term "health education" was created in 1918, tremendous strides have been made in health promotion. But the dream of its originators—a world of healthy people—has not yet come true even though better health is within the grasp of every American, Sally Lucas Jean, R.N., Consultant in Health Education to the National Foundation for Infantile Paralysis, reminded the Health Education Section.

To get the public to translate health knowledge into health practices is not easy, declared Miss Jean. It is a job not only for the professional health educators but also for teachers, nurses, physicians, and all others concerned in better health practices. The advances already made in improved health of the American people, such as sturdier and more robust school children, are gratifying, but health educators cannot take sole credit for achieving these gains. Other factors which have made these gains possible have been better care of infants, advances of medical science in conquering many childhood diseases, an increase in general medical knowledge, and better facilities for medical care.

As a means for improving health practices, Miss Jean advocated teaching respect for scientific knowledge, especially in the secondary schools. In addition to respect for knowledge, an emotional stimulus is required to create a desire in the student to apply that knowledge as a health practice. Health educators were advised to study the techniques of large commercial advertisers who so adeptly create a desire on the part of the consumer for a particular product. It is Miss Jean's contention that such commercial techniques translated to the health field may pay dividends in bringing about a greater desire for better health habits.

Now It's "Perception"

We not only perceive things in terms of our own past experiences, but information alone is not strong enough to change our perceptions if they appear contrary to our experiences, health educators concluded at a demonstration-discussion sponsored by the Committee on Research and Evaluation of the Public Health Education Section.

The demonstration was of a visual perception device from the Ames-Cantrill laboratories at Princeton and Dartmouth Universities. The discussion, led by Andie L. Knutson, Ph.D., of the Division of Public Health Education, PHS, suggested that a clearer understanding of the principles of perception might help public health workers understand why a cancer patient who knows the seven signs of cancer never applies them to himself, or why there is great difficulty in getting executive boards or committees interested in health programs. Educators say, "We must start where people are." How can they find out where people are? What are the perceptions which groups have of each other? How do assumptions about health educators, doctors, teachers, and other classifications of people handicap perceptions and action?

It was pointed out that many perceptions, including those of health educators, are involved in any community situation. Change, or the prospect of it, usually arouses feelings of insecurity and discomfort and may produce resistance. The group asked whether health programs are being planned to take this factor into account.

INTERPERSONAL RELATIONS

Charts Are Communication Channels

Nearly 1,000 members and fellows at the APHA's first special session of the 1950 meeting participated in a spontaneous group presentation of problems involved in everyday staff relationships and learned that a preconference institute on interpersonal relations had concluded:

913933—50——4

That organization charts ought not to be used as indicating status or authority. They are really maps for communication. Once the communication is established everyone in the organization is at the same level. The only person who knows all about his own job, whether it be the janitor or the health officer, is the man who holds it. The dignity of each person is equal to that of every other worker, no matter what profession or training.

That everyone looks at problems differently and that these different views are the result of personal experience and of training. These must be taken into account for mutual understanding.

That the aim of the study of interpersonal relations is not to eliminate problems, but rather to recognize them and appreciate them as evidence of change that might lead to progress.

From official and voluntary health agencies about 100 physicians, nurses, engineers, health educators, sanitarians, psychologists, and administrators participated in the 2½-day institute directed by Paul Lemkau, M.D., Director of the Mental Hygiene Study at the School of Hygiene and Public Health, Johns Hopkins University. The focus was on group discussion, initiated by a sociodrama, and included formal lectures by Dr. Jules Coleman of the Institute of Human Relations, Yale University, and Professor B. A. Lindberg of the Graduate School of Business Administration, Harvard University. The report included a sociodrama by members of the institute, audience participation in problem analysis, and discussion of audience questions by a panel of institute members.

HEALTH COUNCILS

1,200 Health Planning Groups

The extent of community health planning groups—some 1,200 in 2,843 counties surveyed—was reported to the Conference of Health Council Work by Thomas D. Dublin, M.D., Executive Director of the National Health Council.

He reported on a county-wide study by the National Health Council which was carried out in cooperation with the American Medical Association, the American National Red Cross, Community Chests and Councils, and the National Organization for Public Health Nursing, among the national organizations, and with a number of State agricultural extension services, health departments, and tuberculosis associations.

Dr. Dublin said the study revealed 34 State health councils in 31 States organized for the purpose of studying the health needs of their States and for planning and promoting measures and programs to

meet those needs. There are 445 independent multicounty, county, city, district, and neighborhood councils. These are associations of official and voluntary local organizations interested in health, and individual citizens organized independently or with groups to study and meet local health needs.

The survey indicated the existence of 240 local public health advisory councils and committees, and 220 health sections, divisions, or committees of multicounty, county, and city community planning bodies. There are some 285 other community, welfare, citizens' and similar councils without specifically constituted health sections which concern themselves with community health planning in broad aspects.

Philip E. Nelbach, Associate Director of the National Health Council, described the reasons for formation of State health councils. There are five main ones, he said: fact finding, arousing public support, need for active citizen interest, need for common planning, and reluctance to lose wartime gains in cooperative efforts.

Samuel Peskin, Research Fellow of the National Health Council, presented findings of a study of independent health councils, their background, structure, and functions. He said that independent councils have most frequently been established in communities of smaller size and with predominately rural populations. Organization of independent councils showed a marked rise from 1935 to 1945, and a very sharp rise since 1945, he said.

Environmental Health

A NEW CONCEPT

Whole Continent of Unfinished Business

It is time to take new bearings and to reset our course—after the example of Shattuck and his associates a century ago—and to realize that our strategic objective in public health today is not so much a mere shift in emphasis but a new concept of health, Mark D. Hollis, C.E., Assistant Surgeon General and Chief Sanitary Engineer, PHS, told the Engineering Section and the Conferences of Municipal Health Engineers and State Sanitary Engineers.

He pointed out that the primary public health problems of the first part of this century, communicable diseases, are now under reasonable control. Now we can think in positive terms of protecting and promoting the health and vigor of the individual and the community. This modern concept of health concerns all the relations of man with his environment—his natural surroundings, his diet, his housing, his working and travel conditions, his recreation—all of the physical give-and-take between the individual and the world which gives him his life. The resources of the health professions, the sociologists, and the educators, and the health departments of all our branches of government find a natural alliance in this concept.

Sanitation—a Universal Necessity

The concept of environmental health rests on the essentials of existence—man's need for and man's use of air, water, food, and shelter. The protective lining of this foundation is sanitation. It is the one health necessity that is universal. The problems of sanitation are common to all peoples. Difference among areas are not differences of kind, but only differences in complexity.

Despite great achievement in the past 50 years, there lies before us a whole continent of unfinished business. To our credit, Mr. Hollis noted, some intelligence has been shown about clearing a few health barriers ahead of orderly national growth. This was true in municipal water supply and liquid waste collection, of action against insect-borne diseases, and of attacks on animal-borne diseases communicable to man.

But there is no cause for complacency in the history of milk sanitation, shellfish sanitation, and sanitation of bathing waters, nor are there grounds for congratulations on the national record of controlling

water pollution, on school and institutional sanitation, and unsolved questions of food sanitation. What, Mr. Hollis asked, is the national plan on air pollution, including control of irritating pollens? And what about the hygiene of housing and home accident prevention? What do we know about unhealthful aspects of faulty community planning of substandard recreational facilities, and abnormal noise. Most certainly rural sanitation cannot be viewed with pride, Mr. Hollis felt, when more than 25 million of the rural population who have been able to obtain electric power are still without running water and water-carried waste systems.

Health Not a Statistical Zero

It is merely negative to measure environmental health progress in terms of low mortality or even low morbidity. Environmental health is more than a zero sign on our statistical tables. Today qualitative measures of the environment in which we live, work, and play are needed, Mr. Hollis continued. A measure of general well-being, pride, and confidence must be sought. The National Sanitation Foundation expresses this standard as "a way of life."

Outstanding contributions have already been made to public health by the professions of sanitary engineering, bacteriology, biology, and chemistry. But there are big jobs still ahead. Mr. Hollis noted several:

Sewage Disposal. Perhaps it was an error to disassociate the production and delivery of safe water from the collection and disposal of the inevitable liquid byproduct wastes. Public opinion ordinarily insists upon a satisfactory water supply and upon effective collection of sewage, but has been slow to give funds for the proper treatment of sewage. Could the defect be remedied by a single service charge to cover both the delivery of water and the collection and proper disposal of its waste byproducts?

Stream Pollution. In what we know about treating organic and most chemical waste, we are, as a society, far ahead of what we do. Figuring at 1950 prices, the cities of America need to invest 4½ billion dollars in the next 10 years simply to meet the more obvious needs for sewage treatment works. This is about three times the current rate. Industrial waste treatment needs are about as great.

The idea of "conflicting interests" in the use of natural water resources, Mr. Hollis maintained, suggests a false base. The several legitimate uses of natural waters constitute an "allied interest," with each use entitled to its proper emphasis. That it is impractical and unnecessary to purify waste completely prior to discharge into streams is well known, Mr. Hollis commented. The known natural purification phenomena of surface streams should be utilized to an extent compatible with down stream water uses.

Water pollution control today is a State problem. It should and will remain a State problem provided the States pursue an aggressive policy of remedial action and cooperate fully with each other on problems interstate in character. The Federal activity is geared to supporting the efforts of States.

General Sanitation. Milk and food sanitation suffers from confusion and irregularity. Needs include a uniform ordinance and code, local administration by well-trained personnel, and establishment of some central testing facility for equipment. The 13 million pounds of fluid milk shipped daily in interstate traffic might benefit from application of general techniques which have proved successful in shellfish sanitation. Other pressing problems loom up in industrial hygiene, use of synthetics in food processing, sanitation in public institutions, and in the control of the fly-borne diarrheas and equine encephalitis.

Radiological Health. Eventually, the responsibility of protecting the population against harmful effects of ionizing radiation will fall upon public health officials. A new personality—health physicist—is entering the public health family. Mr. Hollis noted the importance of adding to the long familiar X-ray and other radiological hazards the increasing use of radioactive isotopes—about 4,000 shipments annually. He pointed out the implications of security controls of the Atomic Energy Commission and the importance of the wise administration of "safe" limits of contamination which have been set by the National Committee on Radiation Protection.

The PHS radiological health program has four objectives: (1) To develop a group of experts in radiological health; (2) to furnish State health agencies with pertinent information as it becomes available through security channels, and with consultation on emergency problems; (3) to develop at the Environmental Health Center at Cincinnati a training facility for State and local health personnel; and (4) in collaborating with AEC to carry out essential research, particularly on handling and disposal of radioactive wastes, detection in and decontamination of public water supplies.

Research and Development. Industrialization and urban congestion have created environmental problems which current research and development can scarcely expect to solve within 10 years. PHS, Mr. Hollis noted, is encouraging research through research grants and fellowships, and in direct investigations. If a small percentage of annual appropriations was given by State health departments for research and developmental activities relating to environmental health problems peculiar to their respective locations, the investment would be well warranted.

There is need, also, Mr. Hollis said, for working out machinery for indexing the national research effort that would permit critical review by national associations and other professional groups.

Healthful Housing Vital to National Health

Starting with the congressional declaration in the Housing Act of 1949 "that the general welfare and security of the Nation and the health and living standards of its people . . . require a decent home and a suitable living environment for every American family," engineers and health officers at the APHA probed several aspects of housing and health.

The Surgeon General of the Public Health Service was quoted to the effect that every action to improve the quality of housing has behind it the recognition that the home environment plays a significant role in determining the health status of the individual, the family, and the community. In seeking higher levels of national health an aggressive program for improving the quality of housing is a necessary adjunct to the provision of better health services.

Health Officers and Housing Law Enforcement

During much of our Nation's history of housing reform, health regulations have been a fundamental basis for housing improvement and health officials have played a significant role, Ralph J. Johnson, M.S., Hygiene of Housing Consultant to the Division of Engineering Resources, PHS, said. Although the relation between health and housing has been recognized for more than a century, today it is of greater importance than ever that the health officer appreciate and exercise his role. There has been increased activity by health departments since the end of World War II.

Education of the public regarding housing conditions is the first essential for housing law enforcement. The value of active newspaper support—the Baltimore Sun and St. Louis Post-Dispatch were cited—as well as full use of health education techniques were points emphasized.

Specific information about housing conditions must also be obtained, Mr. Johnson emphasized, in order to provide a basis for policy and action. The APHA Appraisal Method for Measuring the Quality of Housing has now been used by over 30 departments of local government, mostly health departments. More than 150,000 dwellings have been studied. Training in the use of this method is now being given by arrangement with APHA at PHS housing training stations at Atlanta, Ga., and Syracuse, N. Y.

Efficient Administration Essential

Once specific information has been obtained, standards and laws for enforcement can be formulated intelligently. Housing regulations

from the public health viewpoint should include standards of health, safety, and amenity for new family dwellings of all kinds and for their environment. Regulations should also cover standards of occupancy and maintenance for existing family dwellings; for trailer camps, dormitories, and rooming houses; and for the extension of suitable controls beyond the built-up areas.

Laws are not self-enforcing. Once they are established the actual accomplishments of enforcement stand or fall on the judgment, the efficiency, and the impartiality with which the laws are administered.

Mr. Johnson suggested that responsibility for administering laws or regulations relating to housing should be centered. Visualized was a board consisting of heads of the departments directly responsible and one or two others vitally concerned. To carry out the job, an adequate budget is necessary, as are competent personnel and means of maintaining their continued interest and efficiency. In-service training and changes in areas of operation were mentioned. Likewise, a systematic scheme of record keeping is essential, he felt.

In the entire enforcement process there must be a truly democratic effort by the administrator to balance coercion against education and persuasion. This process begins with rule making and involves all aspects of enforcement. Persons affected should be given an opportunity to be heard, to present evidence or opinion, and—significantly—to define for the administrator the level of community acceptance. Study of housing law-enforcement problems leads directly to the conclusion that adherence to good administrative legal practices is essential for effective results, Mr. Johnson asserted.

Health Departments Making Progress

Health departments in many parts of the country are making real headway in the promotion of healthful housing, the APHA sections were told. In 2 years, over 2,100 dwelling units have been substantially improved in Baltimore. In Washington, D. C., the health qualities of some 500 dwellings will be improved this year. Progress was reported in Memphis, Atlanta, Miami, Birmingham, and Brookline.

From Los Angeles, Charles L. Senn, Engineer-Director of the Sanitation Bureau of the City Health Department, reported on the use of the APHA Appraisal Method. The factual information it produces is valuable in beginning a housing improvement program. The data are useful not only to the health department, but also to city planning and housing authorities. The information is also recognized as objective evidence in the courts.

From Milwaukee, E. R. Krumbiegel, M.D., Commissioner of the City Health Department, reviewed recent developments and discussed the responsiblities of public health in housing. From St.

Louis, J. Earl Smith, M.D., Health Commissioner, told of the place of the health officer in a coordinated attack on the municipal housing problem by the Health Division, the City Plan Commission, and the Division of Building Inspection. He said action is being focused on individual neighborhoods in need of rehabilitation. After data are evaluated, plans are submitted to residents, property owners, and other interested groups in the particular neighborhood. The final plan, integrating constructive suggestions of the people concerned, will be applied to the neighborhood with the intent of minimizing all the factors which make the area less desirable to live in. The rejuvenation of these neighborhoods will naturally include the repair of deteriorated houses.

AIR POLLUTION

We Know How To Do the Job

Industry and government now have the knowledge necessary for the control of air pollution, and corrective action—backed up by increased research activity—has begun in many plants, Arthur C. Stern and Leonard Greenburg, M.D., of the Division of Industrial Hygiene and Safety Standards, New York State Department of Labor, reported to the Industrial Hygiene Section.

Public and professional interest reached a high in 1950, they said, pointing out that during the past 2 years there has been a consolidation and organization of much scattered existing knowledge that can now be applied. "We know how to do the job," they said, "but frequently have our hands tied when it comes to applying our know-how."

Mr. Stern and Dr. Greenburg reviewed recent developments, noting, among others, findings on fluoride damage to livestock, air-contamination standards, jet dilution of stack effluents, air sampling and analysis. Interpreting data reported by PHS in the case of the Donora smog episode, they concluded that sulfur dioxide was probably the etiological agent.

They also said that industry is more alert to its responsibility to be a good neighbor, and less is heard of the argument that "we were here first and those people knew it when they built their homes near us." They cited as one evidence of this more enlightened attitude the recent sponsorship by the American Iron and Steel Institute of an air-pollution study by the Industrial Hygiene Foundation of America to include steel mill processes and the atmospheric contaminants they emit.

In the field of administrative regulation, Mr. Stern and Dr. Green-

burg saw as the immediate task the coordination of the efforts of city, county, and State administrative groups. Last year, both the New Jersey and Maryland legislatures authorized air-pollution studies, and three air-pollution bills were introduced in the 81st Congress. It is highly likely that cities and counties throughout the country will make their air-pollution-control regulations more stringent. They will have to rely heavily on their local and State public health officials for leadership and guidance.

Micro-Meteorology Developments

Another field in which much progress was reported is meteorology, particularly in study of the types of small-scale weather phenomena necessary to the solution of local air-pollution problems. Edward M. Brooks, Sc.D., Associate Professor of Geophysics of St. Louis University, pointed out that industrial hygiene and meteorology are connected through their relationships to air pollution both inside and outside of industrial plants, and that quantitative relationships between meteorology and industrial hygiene can be determined by gathering and correlating statistical data.

During a normal weather sequence, he reported, the worst pollution generally occurs just after the passage of a high pressure area. This is characterized by light winds, warm dry air aloft, and no precipitation. Pollution is worst in small valleys with steep walls, usually during the fall. Maximum pollution usually occurs between sunrise and noon because of the mixing of surface air with polluted air aloft, the arrival of a polluted sea breeze in coastal cities, photochemical effects of sunlight, or the commencement of plant operations.

WATER RESOURCES

Conservation by Pollution Control

Members of the Engineering Section concerned with problems of water pollution control heard four reports dealing with broad issues of water resources. W. W. Horner, Consulting Engineer with Horner and Shifrin of St. Louis, reported on the development of "A Statement of Desirable Policy with Respect to the Conservation, Development, and Use of the National Water Resources" which has been filed with the President's Water Resources Policy Commission.

Conservation by pollution control was discussed by Edward J. Cleary, Executive Director and Chief Engineer of the Ohio River Valley Water Sanitation Commission. The Missouri River Basin plan was reported by George S. Knapp, Chief Engineer of the Division of Water Resources of the Arkansas State Board of Agriculture.

Legislation and control measures increasingly have been directed toward conserving the national asset of clean, adequate water resources, Louis F. Warrick, Chief of the Technical Services Branch, PHS, Division of Water Pollution Control, observed. Basically, the success of any program of water pollution control rests on the ability and willingness of municipalities, industries, and others to carry out the details of such a program. There are many technical, legal, and economic aspects to be considered. Close harmony—teamwork—is indicated.

Mr. Warrick said that estimates of over-all national needs show that some 6,000 new treatment plants, replacements, extensions, or enlargements are necessary. He noted that while joint treatment of municipal and industrial wastes has been possible, some industrial wastes interfere with the usual biological methods. Industrial wastes often need separate attention, and in this field additional research is important. He reported on action in this and related areas by the National Technical Task Committee on Industrial Wastes which was set up in May 1950 by PHS under the Federal Water Pollution Control Act.

HOME ACCIDENTS

Deadlier Than Disease

Accidents kill 15 times as many children as die of poliomyelitis in nonepidemic years, and deaths and injuries from accidents in all ages are 60 times greater than for poliomyelitis, Leona Baumgartner, M.D., Assistant Commissioner of Health for New York City and Consultant to the Children's Bureau, told a session on home accident prevention arranged by the Subcommittee on Accident Prevention of the Committee on Administrative Practice.

Dr. Baumgartner contrasted the intense interest over poliomyelitis with the relative complacence toward accident fatalities and noted that there is more that can be done about preventing accidents than about preventing the disease. Accidents kill more children over 1 year of age than any single disease, she reported. They are fatal also to more children from 1 to 14 than all the diseases combined, including poliomyelitis, scarlet fever, diphtheria, meningitis, diarrhea and enteritis, measles, pneumonia, and whooping cough.

Prevention Reduces Death Rate

Speaking on a home accident prevention research project in Kalamazoo, Mich., Winston B. Prothro, M.D., Medical Director of the City-County Health Department, said that during the first year

(1949) the death rate dropped from a 15-year average of 27.2 to 21.0, the lowest rate ever recorded for the community.

Dr. Prothro said the health department, with financial support from the W. K. Kellogg Foundation, began a 3-year research program on home accident prevention on January 1, 1949, based on five major objectives: To demonstrate the possibility of bringing about a significant reduction in home accident mortality and morbidity rates; to define the most practical and effective home-safety programs for local health departments; to develop an awareness in the community of the need for and value of home-safety programs; to experiment with activities and techniques not previously attempted in this field; to explore contributions that can be made by official and volunteer agencies in a community and to demonstrate agency coordination.

The New Start in Oregon

In 1948 accidents killed 50 percent more Oregonians than all communicable diseases combined, and roughly 30 percent of these accidental deaths were in the home, Harold M. Erickson, M.D., State Health Officer, said. Describing the State-wide, coordinated program, he said that in Oregon two very strong beliefs have developed about home accident prevention efforts. The first is that a real home accident prevention program cannot be developed without knowing what the problem really is. Second, the old saw about the three E's of safety—education, engineering, and enforcement—is obsolete. The "M" for medical must be added, he asserted.

"We can educate, and engineer, and enforce forever, but still lose countless lives because of faulty vision, poor hearing, or other impairments. There is a medical and a public health responsibility," he emphasized. Dr. Erickson then explained that a pilot program is being conducted in a representative county to develop information and techniques applicable to a State-wide prevention program.

Instruction for Older Persons

Older people are more likely to suffer accidents because with age come degenerative diseases which produce faulty coordination, impaired vision, faulty hearing, emotional changes, bone and muscular debilities, and disturbances in the deep reflexes, James H. Ready, M.D., Medical Director of the General American Life Insurance Co., noted. Many minor accidents in the home are disabling or fatal to old people. He listed typical mishaps in the home as stumbling over objects on steps, slipping on throw rugs insecurely fixed to highly polished floors, slipping in bathtubs which do not contain rubber suction mats, bumping into or falling over chairs and other obstacles in dark passageways.

Dr. Ready said the medical profession should assume the responsi-

bility for instructing older patients on the precautions which must be taken to avoid home accidents, and keep alert for early degenerative diseases and immediately institute treatment to allay their rapid progression. Early detection and control of degenerative disease is a paramount factor involved in preventing serious accidents and their complications, he concluded.

INDUSTRIAL HYGIENE STATISTICS

11½ Years More Life for Workers

In little more than a generation, 11½ years have been added to the industrial workers' life expectancy at age 20, Louis I. Dublin, Ph. D., Second Vice President and Statistician of Metropolitan Life Insurance Co., reported to the Industrial Hygiene and Statistics Sections in a discussion of the application of statistical procedures to industrial hygiene.

In the past 40 years, Dr. Dublin said, longevity has increased more rapidly among industrial wage earners than among other workers. In 1911–12 the expectation of life among white male industrial policyholders at age 20 insured by the Metropolitan Life Insurance Co. was nearly 6 years less than that for white males of the same age in the general population. At present, the industrial policyholders fall short by only 1 year. An industrial wage earner aged 20 starting out on his career today can look forward to 48.4 additional years of life. About 40 years ago, an average worker of that age might have expected to live only 36.87 additional years. Influences contributing to this longevity are the development of industrial medicine, the passage of workmen's compensation legislation, the reduction of hours of labor, and improvements in the economic status of the worker, together with benefits from general advances in medical science and sanitation.

Sickness Records

Poor management practices, poor scheduling, and a feeling of job insecurity, as well as poor environmental working conditions, are reflected in sickness absenteeism records, W. G. Hazard, of the General Industrial Relations Division, Owens-Illinois Glass Co., Toledo, Ohio, told the meeting. He pointed out the need to look for variations between plants and departments within each company, and described results of sickness absenteeism studies conducted in 15 plants, employing over 17,000 people.

The great lack of industrial morbidity and mortality data in the United States and the limited applicability of existing data was reemphasized by Victoria Trasko of the Division of Industrial Hygiene,

PHS. Current material of use to divisions of industrial hygiene on occupational diseases consists, she said, of officially reported cases, data uncovered in scientific studies of health hazards, and independent accounts of disease experience. Material on over-all disabling sickness is found in previous general sickness surveys and in the records of sick benefit and group insurance organizations. New sources of morbidity and mortality material are the pilot study on reporting of occupational diseases currently conducted by the PHS Division of Industrial Hygiene, and the proposed occupational and industrial mortality study of the PHS National Office of Vital Statistics. A potential source may be in the records kept in connection with State disability insurance programs.

A statistical program in industrial hygiene, consisting of services for the development and guidance of the program and services to plants, was discussed by Ruth R. Puffer, Dr.P.H., and Sara Lou Hatcher, M.A., of the Tennessee Department of Public Health, who emphasized that a practical statistical program should contribute materially to the development and extension of industrial hygiene programs.

INDUSTRIAL NUTRITION

Need More Research in Plant Feeding

The urgent need for more work in the field of nutrition in industry and especially for research into the direct relationship of food and the effects of toxic materials was emphasized at a joint session of the Food and Nutrition and Industrial Hygiene Sections.

Both Maurice E. Shils, Sc.D., Assistant Professor of Nutrition at Columbia University School of Public Health, and Frank Princi, M.D., of the Kettering Laboratories of Applied Physiology, University of Cincinnati College of Medicine, discussed the existing data on toxicity and nutrition. Approaching the problem from the viewpoint of protecting the industrial worker, Dr. Shils said, two main questions present themselves from our existing knowledge: First, is there adequate evidence for accepting the viewpoint that nutritional factors can influence susceptibility to toxic agents, and second, are the requirements for any nutritional factors raised by exposure to such agents? Dr. Princi emphasized the scarcity of our knowledge at present, the need for specific research, and the importance of good general nutritional habits in relation to occupational exposures.

In time of national emergency special efforts should be made by all industrial groups and departments of health to recognize the hazard of poor nutrition and the potentials of outbreaks of active food poison-

ing and infections, Margaret P. Zealand, Nutritionist for the New Jersey State Department of Health, said. She reported on in-plant feeding programs, finding that improper meals served to workers are often responsible for a great loss in productivity. Except in a few instances, her surveys indicated, industrial plants have been too preoccupied to take an active interest in workers' nutritional problems.

FROZEN FOODS

Nutritive Values Can Be Maintained

Research indicates that the nutritive values of frozen fruits and vegetables can be retained during preparation and marketing by controlling microorganisms and enzymic and chemical actions, Donald K. Tressler, Ph.D., Consulting Food Technologist of Westport, Connecticut, and Carl S. Pederson, Ph.D., Professor of Bacteriology at the State Agricultural Experiment Station, Cornell University, told the Food and Nutrition and Laboratory Sections.

The approximate number of microorganisms in frozen fruits and vegetables is important because it indicates the condition of the food before it was processed. It also is evidence of the degree of promptness with which the food was handled, sanitary practices, and possible growth of organisms prior to freezing. Drs. Tressler and Pederson said high counts thus should reveal to control officials and processors any gross contamination which in itself may not be serious but which may become so if allowed to continue.

Viable Bacterial Cells Found

Dorothy L. Hussemann, Ph.D., Associate Professor of Home Economics at the University of Wisconsin, reported that all of the frozen precooked food examined during her studies contained viable bacterial cells, but the number per gram varied greatly. Chicken à la king showed the greatest contamination, she said. Beef stew and creamed fish also were examined in the course of the study. Dr. Hussemann said cooking reduced the number of microorganisms but did not sterilize the food, and when food was stored in a refrigerator, subsequent to cooking, bacteria multiplied in a majority of the cases.

The Food and Nutrition and Laboratory Sections also heard discussion of "Studies on Frozen Concentrated Milk and on the Effects of Surface-Active Agents on Reconstituted Milk."

In a report on two studies carried out at the Naval Medical Field Research Laboratory at Camp Lejeune, N. C., where he is head of the Epidemiology and Sanitation Section of the Department of Preventive Medicine, Lt. Commander Leon P. Eisman, M.S.C., U.S.N.,

said fresh fluid milk was concentrated to approximately one-third its original volume without the application of any more heat than is required for pasteurization. Moreover, the milk was frozen and stored for long periods without deteriorating, and was capable of being reconstituted to a product indistinguishable from fresh fluid milk.

SANITATION

Home Garbage Grinders Under Study

The engineering, legal, and operational aspects of use of household grinders on a mass scale for disposing of garbage were described by Blucher A. Poole, Director of the Bureau of Environmental Sanitation, Indiana State Board of Health, before the Engineering Section.

Mr. Poole discussed highlights of the Jasper, Ind., project, where mass installation of household grinders has almost supplanted the conventional methods of garbage collection and disposal. He said the project is being studied by PHS and the Indiana State Board of Health for its effect on the general sanitation of the community.

Poultry Practices Need Improvement

Disease outbreaks attributable to poultry and poultry dishes are the result mainly of poor sanitation practices, R. J. Helvig, D.V.M., and Sanitary Engineer Russell W. Hart, both of PHS, reported to the Engineering Section. They said that of 9,962 cases of disease traced to foods other than milk in 1948, 2,492 were attributable to poultry and poultry dishes.

Dr. Helbig and Mr. Hart underscored the need for proper sanitation practices in the poultry industry by pointing out that in 1939 poultry constituted the greatest reservoir of paratyphoid infection among domestic animals in the United States. The PHS Recommended Ordinance and Code Regulating Eating and Drinking Establishments offers a pattern, they felt, which States and municipalities might follow in developing sanitation provisions for a model poultry inspection ordinance, adding that it was applicable to a large extent to poultry dressing plants and paves the way for reciprocal inspection.

Free Iodine as Sanitizing Agent

The potency of free iodine when used as a sanitizing agent for eating utensils was discussed by Louis Gershenfeld, D.Sc., and Bernard Witlin, D.Sc., of the Department of Bacteriology, Philadelphia College of Pharmacy and Science, before the Laboratory Section. They reported on testing techniques which demonstrated that 100 ppm of free iodine can kill *E. coli* within 1 second. They recom-

mended a 200 ppm solution, however, for the routine sanitization of eating utensils, especially those used in sickrooms.

Pullorum Transmissible to Man

Pullorum disease, common in poultry, is transmissible to man, in whom it produces a dysentery-like disease, and its germ is found in eggs, certain tissues, and droppings of infected birds, Henrik J. Stafseth, Ph.D., Head of the Department of Bacteriology and Public Health, Michigan State College, told the Laboratory Section.

The infecting organism, *Salmonella pullorum*, was found in eggs stored at 4° C. for 5 months, and in 9-month stored eggs at 25° C. The organism, Dr. Stafseth and his associates (Margaret M. Cooper, M.S., and Alfred M. Wallbank) reported, was not always destroyed by the usual methods of cooking. Boiling, frying, and poaching were ineffective; scrambling, however, resulted in 100 percent kill after 1½ minutes over the fire.

VECTOR CONTROL

DDT Dusting Effective in Typhus

Incidence of human cases of murine typhus fever, prevalence of complement-fixing antibodies in the domestic rat reservoir, and the abundance of rat fleas were significantly reduced as a result of county-wide DDT dusting of rat runs and harborage, said Elmer L. Hill, M.D., M.P.H., of the New York State Health Department; and Harvey B. Morlan, M.S., Bernice C. Utterback, and Joseph H. Schubert, Ph.D., of the PHS Communicable Disease Center.

They reported on a quantitative evaluation of DDT dusting as a procedure in murine typhus control in county-wide treatment of two counties in southern Georgia. Favorable results have persisted for 2 years in the project counties. A clean-up drive in the county seat of the "untreated county" did produce a significant reduction in human incidence in that one town during 1947.

A moderate rise in prevalence of murine typhus complement-fixing antibodies in the domestic rat reservoir in the two treated counties in 1949 accompanied by a moderate increase in abundance of rat fleas suggests the necessity for further surveillance, they said, holding, however, that the rationale of including DDT dusting procedures in the murine typhus control program is supported by the findings of this evaluation study.

Infections of Rocky Mountain spotted fever occurring in mammalian hosts of the vectors are transitory and mild or inapparent, although such hosts may serve as transient reservoirs, John K.

Miller, M.D., Associate Director of the Division of Laboratories and Research, New York State Department of Health, said. Uninfected feeding ticks may ingest pathogenic rickettsiae if an infected tick, feeding simultaneously on the same host, inoculated rickettsiae into the host's blood.

Epidemiological and laboratory aspects of brucellosis were discussed by Sir Weldon Dalrymple-Champneys, Deputy Chief Medical Officer of the Ministry of Health, London. Reviewing the problems, he noted that in 1929 only 14 cases of brucellosis of endemic origin had been described in England and Wales, while this year he was able to report on a series of 983 cases collected in intervening years. He discussed, among other aspects, the agglutination test, noting its desirability at regular intervals on the blood serum of persons in groups exposed or likely to be exposed to *Brucella* infection. Also discussed were blood cultures and intradermal tests.

VETERINARY MEDICINE

Emergency May Increase Animal Diseases

The veterinarian—no less than the physician, the nurse, the engineer, and the bacteriologist—has an important contribution to make in the total health effort, the Conference of Public Health Veterinarians was told at APHA.

Veterinary medicine and control activities will be an important factor during a national emergency, Frank A. Todd, D.V.M., M.P.H., of the Veterinary Corps, U. S. Army, said in predicting that an increase of animal-borne disease may be anticipated. The factors to which this may be attributed, he felt, included the confusion that may exist in disease-control agencies during general mobilization. Also, the movement of troops and equipment and animals through disease-infected areas during maneuvers may act as a means of spread.

New Diseases May Be Introduced

Returning troops and equipment from foreign countries where various devastating animal diseases exist could introduce new diseases into this country, Lt. Col. Todd said, and clandestine activities of spreading of current infections or introducing exotic ones should not be overlooked. He reviewed the experiences of military veterinary services overseas, and pointed out areas of development and activity in this country.

From the point of view of agriculture, Clarence W. Pals, D.V.M., Assistant Chief of Meat Inspection Services, U. S. Department of Agriculture Bureau of Animal Industry, noted that poorly nourished,

parasitized or diseased herds and flocks produce little acceptable meat, milk, or eggs.

Dr. Pals reviewed animal disease control accomplishments and said that veterinarians must remain alert to prevent the entrance of new or foreign diseases into this country and to control or eradicate those diseases which are a threat to our livestock economy.

Integration With Public Health

James H. Steele, D.V.M., Chief of Veterinary Public Health Services of the Communicable Disease Center, PHS, pointed out that in an era when professional isolationism is losing much of its glamour it seems particularly appropriate to stress the essential unity of all public health activities and to recognize the value of veterinary medicine which is integrated with other preventive health programs.

During World War II, he noted, diseases like Q fever in southern Europe, Japanese B encephalitis in the Pacific Theater, Venezuelan encephalomyelitis in Trinidad, glanders and pseudo-glanders in China and southeast Asia arose as new problems that required the integration of veterinary medicine into preventive medicine. Diseases now under cooperative study are rabies, brucellosis, creeping eruption, salmonellosis, leptospirosis, Q fever, and trichinosis.

In the PHS, Dr. Steele reported, veterinary medicine has participated in communicable disease control, with primary emphasis on the control of animal diseases transmissible to man; in research; in sanitation, especially as it pertains to food products of animal origin; in administration of interstate quarantine regulations that relate to animals; and in liaison with Federal and State veterinary agencies, professional associations, and practitioners.

Incidence of Disease

No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring

UNITED STATES

Reports From States for Week Ended November 18, 1950

Whooping Cough

A total of 2,052 cases of whooping cough was reported in the United States for the current week as compared with 2,140 for the same week of 1949, and a 5-year median of 2,140. The total number of cases reported for the "disease" year beginning October 1 is 11,426 as compared with 10,797 for the previous year.

Influenza

A total of 2,219 cases of influenza was reported for the current week. About three-fourths of this total was reported in two States, Virginia and Texas.

Comparative Data for Cases of Specified Reportable Diseases: United States

[Number after diseases are International List numbers, 1948 revision]

Disease	Total for week ended—		5-year median 1945–49	Seasonal low week	Cumulative total since seasonal low week		5-year median 1944–45 through 1948–49	Cumulative total for calendar year		5-year median 1945–49
	Nov. 18, 1950	Nov. 19, 1949			1949–50	1948–49		1950	1949	
Anthrax (062)	1	2	(1)	(1)	(1)	(1)	(1)	41	47	(1)
Diphtheria (055)	177	254	358	27th	2, 180	3, 170	4, 214	5, 308	6, 938	10, 511
Acute infectious encephalitis (082)	29	21	7	(1)	(1)	(1)	(1)	886	708	579
Influenza (480–483)	2, 219	2, 366	2, 162	30th	20, 433	16, 487	17, 078	266, 692	92, 354	160, 158
Measles (085)	1, 863	1, 602	1, 696	35th	10, 674	7, 656	10, 258	298, 845	596, 174	569, 190
Meningococcal meningitis (057.0)	55	65	65	37th	537	516	516	3, 336	3, 032	3, 070
Pneumonia (490–493)	1, 146	1, 524	------	(1)	(1)	(1)	(1)	[2] 72, 181	68, 639	------
Acute poliomyelitis (080)	958	733	463	11th	[3] 29, 628	39, 590	23, 427	[3] 30, 759	40, 503	23, 894
Rocky Mountain spotted fever (104)	3	2	2	(1)	(1)	(1)	(1)	449	555	544
Scarlet fever (050)	1, 097	1, 295	1, 586	32d	8, 300	8, 866	11, 498	48, 470	66, 532	72, 892
Smallpox (084)	------	------	------	35th	3	4	6	29	45	153
Tularemia (059)	9	15	15	(1)	(1)	(1)	(1)	793	994	847
Typhoid and paratyphoid fever (040, 041) [4]	54	62	65	11th	2, 645	3, 103	3, 103	3, 154	3, 591	3, 591
Whooping cough (056)	2, 052	2, 140	2, 140	39th	11, 426	10, 797	11, 699	108, 621	57, 399	87, 574

[1] Not computed.
[2] Additions: Tennessee and Texas, week ended Nov. 11, 68 and 9 cases respectively.
[3] Deductions: Michigan, weeks ended Sept. 30 and Oct. 21, 1 case each; Georgia, week ended Nov. 11, 3 cases· Arkansas, week ended Oct. 28, 1 case; Texas, week ended Nov. 11, 9 cases.
[4] Including cases reported as salmonellosis.

In August an influenza-like disease appeared in Honolulu and rural areas of Oahu; by the end of September cases were recognized on Molokai; and in October on the Island of Hawaii there was a total of 263 reported cases. Five of nine pairs of serum showed a significant antibody rise for type A influenza virus when examined by the regional laboratory at Berkeley, Calif. In the opinion of the epidemiologist of the board of health, the infection may have been introduced by a troopship from Japan in July as there was an unusual incidence of respiratory illness on board and subsequently among the Federal inspectors who boarded the ship at Honolulu. In view of an antibody rise for type A influenza virus in several persons suffering from an influenza-like disease in Hawaii, a report of 544 new cases for the current week suggests the occurrence of an outbreak of type A influenza in that area.

Other Diseases

There was an increase of poliomyelitis cases (958) reported as compared with the previous week (890) and 733 for the same week last year. Corrections in four States (Arkansas, Georgia, Michigan, and Texas) reduced the total for the previous week from 902 to 890. The total number for the present "disease" year is now 29,628 as compared with 39,590 for last year. There were increases over the previous week in reported cases of all the diseases except for meningococcal meningitis which decreased from 74 last week to 55, and smallpox for which no cases were reported. One case of anthrax was reported in Pennsylvania.

Deaths During Week Ended November 18, 1950

Data for 94 large cities of the United States:	*Week ended Nov. 18, 1950*	*Corresponding week, 1949*
Total deaths	8,990	9,874
Median for 3 prior years	9,257	----------
Total deaths, first 46 weeks of year	420,622	421,089
Deaths under 1 year of age	663	686
Median for 3 prior years	686	----------
Deaths under 1 year of age, first 46 weeks of year	28,691	30,065
Data from industrial insurance companies:		
Policies in force	69,639,076	70,047,254
Number of death claims	12,904	12,813
Death claims per 1,000 policies in force, annual rate	9.7	9.5
Death claims per 1,000 policies, first 46 weeks of year, annual rate	9.2	9.1

Reported Cases of Selected Communicable Diseases: United States, Week Ended Nov. 18, 1950

[Numbers under diseases are International List numbers, 1948 revision]

Area	Diphtheria (055)	Encephalitis, infectious (082)	Influenza (480–483)	Measles (085)	Meningitis, meningococcal (057.0)	Pneumonia (490–493)	Poliomyelitis (080)
United States	**177**	**29**	**2,219**	**1,863**	**55**	**1,146**	**958**
New England	**5**	**1**		**58**	**2**	**42**	**28**
Maine	1			2		1	3
New Hampshire	1						
Vermont				12	1		
Massachusetts	3	1		29			12
Rhode Island				1			1
Connecticut				14	1	41	12
Middle Atlantic	**8**	**4**	**5**	**351**	**8**	**371**	**150**
New York	6	2	[1] 5	133	4	274	106
New Jersey	1	2		75	1	37	25
Pennsylvania	1			143	3	60	19
East North Central	**9**	**6**	**23**	**524**	**11**	**104**	**262**
Ohio	2		3	114	3		67
Indiana		1	1	9		7	31
Illinois	2	3		134	4	58	61
Michigan	4			70	2	31	67
Wisconsin	1	2	19	197	2	8	36
West North Central	**5**	**6**	**6**	**127**	**1**	**47**	**128**
Minnesota	3	4	1	18		9	49
Iowa	1			5		3	17
Missouri		1	1	68		16	13
North Dakota		1	3	20	1	16	
South Dakota	1			7			18
Nebraska				1			19
Kansas			1	8		3	12
South Atlantic	**54**	**3**	**318**	**73**	**10**	**126**	**122**
Delaware	1			4			
Maryland	2	1	1		2	16	20
District of Columbia						16	4
Virginia	11	1	198	20	3	29	29
West Virginia	2	1	81	39	3	20	11
North Carolina	15			6	1		9
South Carolina	4		21	1		11	9
Georgia	18		17			15	23
Florida	1			3	1	19	17
East South Central	**51**	**1**	**42**	**177**	**8**	**65**	**29**
Kentucky	14			127	1	19	7
Tennessee	13		19	20	3		13
Alabama	12		18	5	1	19	6
Mississippi	12	1	5	25	3	27	3
West South Central	**40**	**2**	**1,641**	**146**	**6**	**311**	**68**
Arkansas	5		107	49	1	34	13
Louisiana	3		1	3		16	13
Oklahoma	3		70	10	1	13	6
Texas	29	2	1,463	84	4	248	36
Mountain	**2**	**1**	**174**	**184**	**3**	**44**	**25**
Montana			20	5	1		2
Idaho			8	20		5	5
Wyoming	1			3			1
Colorado			9	133		10	10
New Mexico			1	5	1	4	6
Arizona	1	1	136	10	1	25	1
Utah				6			
Nevada				2			
Pacific	**3**	**5**	**10**	**223**	**6**	**36**	**146**
Washington				46	2		36
Oregon	1		4	12	1	15	20
California	2	5	6	165	3	21	90
Alaska							2
Hawaii			544	1			2

[1] New York City only.
Anthrax: Pennsylvania, 1 case.

Reported Cases of Selected Communicable Diseases: United States, Week Ended Nov. 18, 1950—Continued

[Numbers under diseases are International List numbers, 1948 revision]

Area	Rocky Mountain spotted fever (104)	Scarlet fever (050)	Smallpox (084)	Tularemia (059)	Typhoid and paratyphoid fever [1] (040, 041)	Whooping cough (056)	Rabies in animals
United States	**3**	**1,097**		**9**	**54**	**2,052**	**105**
New England		**94**			**2**	**378**	
Maine		8			1	68	
New Hampshire						15	
Vermont		3				95	
Massachusetts		65				99	
Rhode Island		4				65	
Connecticut		14			1	36	
Middle Atlantic		**108**			**6**	**307**	**33**
New York		[2] 46			2	123	33
New Jersey		24				115	
Pennsylvania		38			4	69	
East North Central		**283**		**2**	**7**	**432**	**6**
Ohio		101			2	70	2
Indiana		15		2		29	
Illinois		37			4	39	1
Michigan		113			1	118	3
Wisconsin		17				176	
West North Central		**66**		**3**	**3**	**159**	**7**
Minnesota		16			1	14	3
Iowa		13				22	4
Missouri		15		3	1	37	
North Dakota						3	
South Dakota		1				1	
Nebraska		6				7	
Kansas		15			1	75	
South Atlantic	**2**	**149**		**1**	**8**	**217**	**12**
Delaware		2				2	
Maryland		4				35	
District of Columbia		10				1	
Virginia	1	17		1	1	45	
West Virginia	1	16			1	25	1
North Carolina		70				64	
South Carolina		5				4	7
Georgia		19			5	20	4
Florida		6			1	21	
East South Central		**133**		**2**	**8**	**129**	**14**
Kentucky		52			2	27	8
Tennessee		60		1	3	23	4
Alabama		14				63	1
Mississippi		7		1	3	16	1
West South Central	**1**	**65**			**9**	**214**	**32**
Arkansas	1	8			2	46	2
Louisiana		2			2	4	
Oklahoma		14			1	21	2
Texas		41			4	143	28
Mountain		**43**		**1**	**4**	**118**	
Montana		8				32	
Idaho		3			1	12	
Wyoming		1					
Colorado		5				24	
New Mexico		6			3	2	
Arizona		3				43	
Utah		17		1		5	
Nevada							
Pacific		**156**			**7**	**98**	**1**
Washington		32				31	
Oregon		6			1	8	
California		118			6	59	1
Alaska						1	
Hawaii		1					

[1] Including cases reported as salmonellosis.
[2] Including cases reported as streptococcal sore throat.

FOREIGN REPORTS

CANADA

Reported Cases of Certain Diseases—Week Ended Nov. 4, 1950

Disease	Newfoundland	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Total
Brucellosis					2	1					3
Chickenpox	2		56		147	206	47	99	71	170	798
Diphtheria					3			3			6
Dysentery, bacillary					9	8				6	23
German measles			1		1	45	1	16	7	10	81
Influenza			30				7				37
Measles			6		141	444	24	24	11	211	861
Meningitis, meningococcal	1		1			2					4
Mumps	15		3		87	171	22	60	115	97	570
Poliomyelitis						6		6	3	3	18
Scarlet fever	4		4		55	22	18	9	58	48	218
Tuberculosis (all forms)	6		3	16	81	21	6	12	2	26	173
Typhoid and paratyphoid fever	1			1	9	1				3	15
Venereal diseases:											
Gonorrhea	4		5	4	77	56	25	19	39	58	287
Syphilis	6		11	1	44	17	5	14	6	4	108
Primary	1			1	4	1		3	1		11
Secondary	3				3	2		2	1		11
Other syphilis	2		11		37	14	5	9	4	4	86
Whooping cough	2		4	2	59	113	11	2	3	34	230

FINLAND

Reported Cases of Certain Diseases—September 1950

Disease	Cases	Disease	Cases
Diphtheria	72	Scarlet fever	821
Dysentery	6	Typhoid fever	16
Malaria	1	Venereal diseases:	
Meningitis, meningococcal	7	Gonorrhea	699
Paratyphoid fever	130	Syphilis	33
Poliomyelitis	60		

NEW ZEALAND

Reported Cases of Certain Diseases and Deaths—5 Weeks Ended Sept. 30, 1950

Disease	Cases	Deaths	Disease	Cases	Deaths
Brucellosis	4		Meningitis, meningococcal	12	
Diphtheria	8		Ophthalmia neonatorum	2	
Dysentery:			Poliomyelitis	6	
Amebic	7		Puerperal fever	3	
Bacillary	14	1	Scarlet fever	108	
Erysipelas	15		Tetanus	2	
Food poisoning	6		Tuberculosis (all forms)	223	53
Malaria	1		Typhoid fever	13	

REPORTS OF CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER RECEIVED DURING THE CURRENT WEEK

The following reports include only items of unusual incidence or of special interest and the occurrence of these diseases, except yellow fever, in localities which had not recently reported cases. All reports of yellow fever are published currently. A table showing the accumulated figures for these diseases for the year to date is published in the PUBLIC HEALTH REPORTS for the last Friday in each month.

Cholera

India. During the week ended November 11, 1950 cholera was reported in India as follows: Calcutta 53 cases, Madras 49 cases, and Nagapatinam 7 cases.

India (French). For the week ended November 4, 1950, 14 cases of cholera were reported in Karikal and 8 in Pondicherry. During the week ended October 28, 10 cases were reported in Karikal.

Smallpox

India. Smallpox was reported in ports of India as follows: For week ended November 11, 1950, Calcutta 90 cases, Madras 29 cases, Bombay 3 cases; for week ended November 4, Nagpur 4 cases.

India (French). Pondicherry reported cases of smallpox as follows: Week ended November 4, 1950, 32, October 28, 18, and October 21, 34.

Iran. During the week ended November 4, 1950, smallpox was reported in Iran as follows: Hamadan 1 case, Ispahan 5 cases, Kermanchah 3 cases, Sanindedj 2 cases, Teheran 1 case.

Typhus fever

Gold Coast. A case of typhus fever was reported in Accra for the week ended September 23, 1950.

Iran. During the week ended November 4, 1950, one case of typhus fever was reported in Tabriz. For the weeks ended September 1 and 8, 1950, 3 and 6 cases, respectively, were reported in Departments of Iran.

Iraq. One fatal case of typhus fever was reported in Bagdad during the week ended November 11, 1950.

Yellow fever

Gold Coast. One suspected case of yellow fever was reported in Akwatia on November 5, 1950, and on November 9 a suspected fatal case in a 4-year-old African male was reported in Taquah Aboso.

Examination for Bacteriologists

Examinations for scientists and sanitarians (bacteriologists) in the Regular Corps of the Public Health Service will be held February 12–14, 1951, in various cities throughout the country. Completed applications must be in the Washington office by January 15.

Appointments are permanent and provide opportunities for career service in research and public health activities. Benefits include periodic pay raises and promotions; liberal retirement provision; medical care; annual and sick leave.

Appointments will be made in the grade of assistant and senior assistant, equivalent to Navy ranks of lieutenant, j. g., and lieutenant, respectively. Entrance pay is $4,486 for assistant (with dependents) and $5,346 for senior assistant, including rental and subsistence allowance.

Candidates must have at least 7 years of professional training and experience beyond high school, and must have, or expect to receive by November 1951, a master's or doctor's degree in bacteriology.

For application forms and additional information, write to: Surgeon General, United States Public Health Service, Federal Security Agency, Washington 25, D. C. Attention: Division of Commissioned Officers.