The Public Health Training Program Of New York State

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ANY STATE health department training program naturally should be based on the needs, problems, and public health organizations existing in that State. For this reason, it is desirable to review briefly certain pertinent facts about New York.

New York State, covering an area of about 50,000 square miles, has a population, according to the 1950 census, of 14,830,192, with 7,891,957 in New York City. In addition, there are 11 other cities in the State with a population of over 50,000. There are 57 counties, exclusive of the 5 counties fully within New York City, and 929 towns, 549 villages, and 51 cities under 50,000 population. Town and city government is relatively stronger than either village government or county administration with the exception of the few counties in the State which have adopted an optional form of strong county government permitted by legislative action in the last several years. State government is well organized and many governmental services are performed by law by the State.

Local health services are provided through various administrative patterns. Each town, village, and city is required to have a health

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officer and may employ other public health personnel. Under permissive legislation, any county may establish a county health department, and if it does so, all towns and villages within such county become a part of the county health district. Cities within the county may and usually are included also. Fourteen county health departments are established, serving populations varying from 24,000 to nearly 1,000,000. Ten cities with a population of over 50,000 and located in counties without county health departments have full-time, well-staffed health departments. The remainder of the State receives its public health services from the employees of the towns, the villages, and the counties, supervised and supplemented by the staffs of the State district health offices. which may, in many respects, be considered as multicounty health departments.

According to a recent tabulation, there are 3,548 positions budgeted for public health professional workers in major categories, exclusive of those in laboratories and hospitals (see table).

History of Program

Since 1913, the State public health council has had authority to establish qualifications for certain public health personnel employed by the State or its political subdivisions. In 1921, the State civil service commission was established, with authority to stipulate minimum qualifications for all State employees in classified positions. Similar provisions for minimum qualifications for employees of counties, cities, towns, and villages were added at a later date so that by 1945 at least minimum professional qualifications were required of all public health workers.

Full-time	public	health	profession	onal	positions	in
	New	York St	ate, July	1952	2	

		Employing health department			
Professional category	Total	State	County and city ¹	New York City	
Physicians	227	76	59	92	
Nurses	$2, \overline{269}$	129	943	1, 197	
Dentists	3 9	4	3	32	
Sanitary engineers Other sanitation per-	108	52	51	5	
sonnel	762	35	316	411	
Statisticians	81	25	8	48	
Nutritionists	41	9	4	$\overline{28}$	
Health educators	$\overline{21}$	7	12	2	
Totals	3, 548	337	1, 396	1, 815	

¹ Only the cities over 50,000 included unless part of county health department; New York City not included.

In 1932, the public health council established certain minimum qualifications for public health personnel. These included graduate academic training or practical public health experience, or both, for all full-time health officers and all public health nurses. It was felt then that provision of an adequate number of public health physicians and public health nurses to satisfy the needs demanded by these regulations could be made only by developing a State training program. Plans for a program of health officer training were developed and put into operation in 1934. Expansion of the program has resulted in the training of public health nurses since 1936, of statisticians since 1938, of nutritionists since 1945, of health educators since 1948, and of sanitation personnel since 1951. Training has been received by more than 100 physicians, 600 public health nurses, 15 statisticians, 8 nutritionists, and 20 health educators.

Present Scope

The training provided at any given time depends upon analysis and evaluation of the needs. This is done annually prior to the submission of the training budget. Some training activities have been discontinued and others decreased or increased as the needs varied.

In general, all training may be grouped in two categories:

Preservice training which may be required for the person to be eligible for appointment to the beginning permanent position.

In-service training needed for the permanent appointee to remain qualified for the position or to become eligible for a more responsible or more specialized position.

The need for preservice training is determined by position vacancies, both present and expected, by the qualifications established for the position, and by the supply of qualified applicants for the position and of the available applicants for training. Determination of the need for in-service training requires an analysis of the public health programs, both as to content and knowledge available, and the education, aptitude, and ability of the permanent workers.

The current training program includes 38 separate and distinct training activities, not including the orientation program for all new public health, workers, nor the clinical training conducted as a routine function in the hospitals, nor the on-the-job training constantly in effect through staff meetings, conferences, or short courses provided wholly within the department.

Fourteen training programs are for physicians. One provides a year's supervised experience and residency training approved by the American Board of Preventive Medicine. Another permits physicians to be sent, on stipend, to an approved school of public health for one academic year. Tuberculosis public health physicians are trained in a 14-month program which includes 6 months' clinical training in a tuberculosis hospital, 2 months' general experience in public health, and 6 months' specialized experience in tuberculosis control. Physicians may be trained for maternal and child health positions for a year at a school of public health supplemented by 6 months' planned experience in a local health department. One year of clinical training in tuberculosis is given to physicians to qualify them for beginning clinical positions in the State health depart-

ment. Specialized training in rheumatic fever includes 1 year of clinical experience supplemented by a year in a school of public health. Training for physicians in laboratory work consists of 1 year of practical experience under close supervision which, when added to the qualifications the physician must have to enter such training, permits him to meet the requirements for director of a local laboratory. Clinical training in cancer, heart disease, or cerebral palsy can be given to physicians not employed by an official health agency but who will subsequently be contributing to official health programs. Short, formal courses in public health administration varying from 3 days to 2 weeks are provided for public health physicians. Short courses in clinical subjects such as poliomyelitis, tuberculosis, cancer, or heart disease are also arranged for this group.

The department aids in providing postgraduate medical education for the 30,000 private practitioners in the State in several ways. In a cooperative program with the State medical society, honorariums are paid to lecturers at local medical meetings and special short courses are arranged on the subjects of rheumatic fever and rheumatic heart disease, cardiovascular diseases, pediatrics, and obstetrics. In a joint program with the University of Buffalo School of Medicine, comprehensive postgraduate medical education is provided.

The provision of practical public health experience for a limited number of medical students is another important activity. Known as the junior public health intern program, it accepts 30 of the State's 900 medical students for 1 to 4 months' training. The students work under the immediate supervision of a wellqualified public health physician in the State health department or in a selected local health department. Their public health training is comparable to the clinical training at hospitals they receive while in medical school.

The single training program for dentists consists of a 2 weeks' course in children's dentistry for practicing dentists in the State.

Twelve of the training programs are for nurses. One consists of 6 months' supervised field experience with a general public health nurse. Another is an academic year in public health nursing, which leads to qualification as public health nurse for field service. Further academic training of 1 year is provided for nurses who will be responsible for supervising or directing other public health nurses. Training in the care of premature infants and the newborn, in pediatrics, in cancer, in tuberculosis, or in physical therapy is given to public health nurses or nurses employed by other health agencies and by hospitals.

Short courses for nurses, consisting of 4 weeks or less of academic or clinical instruction, observation, and training, are also provided in several specialized subjects. Nurses may be sent for a 3 weeks' course in contact investigation in venereal disease. Two months' experience in public health is provided for student nurses from the schools of nursing whose graduates are then qualified as public health nurses for field service.

One program for nutritionists provides a 12month apprenticeship under the guidance and supervision of a public health nutritionist.

There are three programs for public health educators. One provides supervised field experience for 1 year, and another provides for sending these trainees to schools of public health. Short courses in health education techniques are made available for health educators in the State. One training program for statisticians sends them to a school of public health for an academic year. Six programs are for groups of sanitation personnel. One program for public health engineers and sanitarians consists of short courses of 1 to 2 weeks' duration in such subjects as epidemiology, public health administration, and public health education.

A 1 to 2 weeks' course is conducted to qualify water and sewage treatment plant operators. A 2 weeks' course is offered at least once each year for dairy and milk inspectors. A 12 weeks' course for sanitary inspectors is given jointly by the State health department and the Public Health Service in a field training center at Yonkers. Other shorter courses for sanitary inspectors are also given at this school. Short courses lasting from 1 day to 1 week are given for employees and operators of camps, restaurants, swimming pools, and similar facilities. There is no provision at present for fullyear academic training in the school of public health for public health engineers and sanitarians, but this is the next step planned for the development of the sanitation training program, which has been in operation for only 1 year.

Three training programs are for technicians. One consists of a year's training in photofluorography. Two others of short duration are for laboratory technicians.

This listing of public health training given shows the present scope of the program. It is not exactly the same as it was in 1951 nor as it will be in 1953, but it shows the variety of content included and method of providing training.

Administrative Organization

Training is a vital part of public health administration. As such, it must be carried out by many people in administrative positions, including those in the local health departments as well as those in the State health department. Various schools, of course, also have an important part in providing adequate training for public health workers.

The administrative organization of training within the State health department is the result of evolution over the 18 years it has performed this function. Naturally, the training for any specific group of personnel can be done best by those providing service in that category; therefore, as new training programs were added, units were established within the appropriate division, bureau, or office to conduct the training of the members of that unit. As the training function of the department began to assume major proportions, it became evident that an office to integrate and correlate the training activities was needed. In 1948, the office of professional training was established as a part of the executive division and was delegated this responsibility. There was continued recognition of the need for providing training within the service units, however, and one or more professional workers in many of these units are today devoting full or part time to the administration of the training programs outlined.

The immediate staff of the office of professional training consists only of the director of the office and necessary stenographic assistance. Three nurses give full time to a training unit in the bureau of public health nursing and one sanitary engineer devotes full time to a training unit in the bureau of environmental sanitation. In addition, one person in the office of health education, one in the division of medical services, one in the bureau of nutrition, one in the office of vital statistics, one in the division of laboratories and research, and two in the division of tuberculosis control devote part time to training activities.

Unification of training functions, including the common utilization of training facilities, determination of uniform policies and procedures, and equitable distribution of funds, is accomplished by frequent conferences among the members of the department who have a primary responsibility for professional training activities and by a regularly scheduled monthly meeting of all these persons. Reports to the commissioner of health on training policies and procedures and the training budget are submitted through the office of professional training. These reports and the budget represent the combined thoughts, interests, and needs of all persons concerned with training.

Budget Provisions

Adequate budgetary provisions are essential for the conduct of public health training programs. This year, the State health department has a training budget of \$624,495. Of this amount, \$252,000 is a State appropriation and the remainder is allocated from Federal funds. Salaries of a few of the people devoting full time to training are included in this budget, and the remainder is for the payment of stipends, travel expenses, and tuition for trainees. Other items of training expense not included in the training budget are the salaries and expenses of the many persons doing training on a part-time basis, the production of materials, and incidental items of expense incurred in connection with training. These are absorbed in the regular budgets.

Stipends of trainees are determined according to a formula which is acceptable to both the health department and the budget director's office. This formula provides that persons in preservice field training be paid 75 percent of the beginning salary of the position for which they are training, those in academic preservice training who have dependents, 65 percent of the beginning salary, and those who have no dependents, 50 percent; those in in-service academic training, 80 percent of their salary at the time they go on leave of absence if they have dependents and 60 percent of such salary if they do not have dependents.

Typical Training Program

A description of the health officer training program will show the general pattern of all programs.

Advisory Committee

Seven members compose the advisory committee for the health officer training program. The deputy commissioner, the assistant commissioner for local health services, and the director of the office of professional training serve ex officio. Other members are the dean of a medical school, a county health commissioner, the assistant State commissioner of education, and the executive director of a voluntary health agency. The latter was formerly director of a school of public health, and if this were not so there would be an additional member representing that field.

The committee has no executive function but advises on policy and procedural matters. It meets regularly to consider qualifications of applicants, length of training, content of training, educational methods employed, or specific problems arising from time to time. Although the committee has no authority of direction, the advice given is usually decisive in future action.

Trainee Qualifications

Trainees must be graduates of an approved medical school; must have interned 1 year in an approved hospital; must be United States citizens or give assurance that they will be citizens upon completion of their training; must be licensed to practice medicine in the State or have reasonable expectation of being licensed upon completion of training; and preferably should be not over 35. The citizenship and license requirements are necessary to qualify for permanent appointment. The age requirement is not absolute, but exception is made only under unusual circumstances. Experience has shown a more probable expectation of success both during and after training for those who enter the field of public health early in their professional careers.

Selection

Applicants with the qualifications outlined are interviewed by a committee composed of three members of the State health department. Agreement on the suitability of a candidate must be unanimous before he is accepted for training.

Content

The training consists of the two parts previously listed as separate training programs: a year's residency training, and an academic year at an approved school of public health. A part or all of the residency training must be completed prior to attending the school of public health if such attendance is on stipend from the State health department. Usually, the minimum period which must be completed is 6 months, a requirement serving a threefold purpose: It permits the physician to determine whether public health is the field he wishes to enter; it permits the State health department to evaluate the physician before committing itself to financing the academic training; and it gives the trainee a background for attending a school of public health.

Representatives of the schools have concurred that such training is necessary for physicians not otherwise possessing some public health experience if they are to receive the maximum benefit from their academic experience.

During the first 6 months of the residency program, the physician follows closely a guide for residency training, which outlines the experiences in all phases of public health practice that he will likely encounter when he accepts a position as health officer. During the second 6 months, the resident serves as an assistant to a county or city health commissioner or district health officer, performing designated duties under close supervision.

The residents are brought into the central office in small groups for three 1-week periods for orientation in the State health department state-wide programs, procedures, and policies. Several short group courses or experiences are arranged for the residents. These consist of clinical training in certain acute communicable diseases or tuberculosis, cancer, or heart disease. Once each month, all of the residents, together with the physicians with whom they are working, meet with the director of the program. At this time, ideas and experiences are exchanged, and instruction is given in such subjects as elements of supervision, parliamentary procedure, public speaking, legal responsibilities, office practice, and budgeting.

Reports and Review

The progress of each trainee is followed very carefully during both field and academic training. During field training, reports are received from the preceptor at semimonthly intervals and from the resident at monthly intervals. These are supplemented by at least monthly conferences of the director of the program, the trainee, and the preceptor. At the time of appointment, the resident understands that his progress must be satisfactory during the first 6 nionths if further training is to be given. At the end of 6 months, commitment is made on both sides to complete both the field and academic training, and the school to which the trainee will be sent is selected.

Stipends

The resident public health physician receives \$425 per month; the physician with dependents who is attending school, \$368 per month; and the physician without dependents who is attending school, \$283 per month. In addition, all office and other business expenses, travel expenses for the trainee when he is in the field or going to and from the school of public health, and tuition and other academic expenses are paid by the health department.

Commitments

Inasmuch as the number of physicians selected for training is based on the need for physicians in the State, the health department agrees to offer a position to the trainee when training is completed. The trainee agrees to accept a position in public health in New York State and to serve in public health within the State for a period equal to his period of training. He may be offered a position in one or more of the counties or cities as well as in the State health department. In this event he is free to accept the position of his choice.

Results

One hundred and forty physicians have entered the training program since it began in 1934. Ninety-six have completed their training and become qualified health officers in New York State; 8 are now in training. Of the remaining 36, many discontinued voluntarily and a few by request.

Of the 96 who have completed the training, 45 are now in official public health positions in New York State, and 17 are known to be in official public health positions in other States or in the Public Health Service. Eleven have accepted positions in organizations or schools where their work is of prime public health importance. Thus, a total of 73 of the 96 are presently working in public health. Eleven physicians are known to have returned to private practice; three are deceased; one is permanently disabled; one is retired; one is in the Army; one is in the Veterans Administration; and the whereabouts of the other five is unknown.

Summary

Training is a major and vital function of public health practice. Prior to the development of a training program, a careful analysis of the training needs must be made. Only a small full-time staff is required to administer the program, but the conduct of the training must be considered a function of a large number of the public health workers who are giving direct service to the communities. Provision must be made for adequate funds to pay stipends and other expenses, as well as to insure that sufficient time is available for the administration and conduct of training without interference with service duties. Training needs must be constantly re-evaluated and the training program revised to meet these needs if maximum results are to be obtained.