A Program of Welfare

and

Progress in Health and Longevity

Chapters 20 and 21 from

A Family of Thirty Million

The Story of the
Metropolitan Life Insurance Company
1868-1943

by

LOUIS I. DUBLIN, PH.D.

CHAPTER 20

A Program of Welfare

IN 1909 AN EVENT of great moment occurred, both for Life insurance and for American public health. In that year the Metropolitan organized its Welfare Division, and launched a program of life conservation as a definite part of its business. A new era for Life insurance, and more particularly for Industrial insurance, was thus inaugurated. These efforts were primarily instituted for the families of wage-earners insured in the Company. Yet the campaign against unnecessary sickness and premature death has reached far beyond these people and has been translated into terms of welfare for the whole Nation.

During the half century prior to the founding of the Welfare Division, knowledge regarding disease had been fabulously enriched and Medicine had made great advances. The establishment of the germ theory of disease in the 1870's by Pasteur was soon followed by the identification of the causes of such important diseases as anthrax, tuberculosis, typhoid fever, diphtheria, and pneumonia. Diphtheria antitoxin and vaccines against smallpox and rabies were becoming widely available. The important role of insects in the spread of diseases had been proved. Surgery was progressing rapidly. The potentialities of good public health administration had just been magnificently demonstrated by the transformation of the Panama Canal Zone from a "white man's grave" to a healthy district. Health officers all over the country were learning that it was possible to control disease, that "public health was purchasable." Knowledge of the basic principles of nutrition was increasing. Medical research was constantly

adding to the store of knowledge which was to make for a richer and more abundant life.

At the same time that progress was being made in life conservation, a new concept of the value of the human factor in industry was also developing. The past 50 years had been a period of tremendous growth in American business. Mass immigration was rapidly pouring such a huge supply of labor into our cities, that it was impossible to give many of these people adequate housing and safe working places. Sweatshops, insanitary tenements, and generally low health standards were the result. Fortunately, a new attitude toward those engaged in industry was in the air, a consciousness that the workingman, no less than the working machine, should be protected against deterioration and damage. Social legislation was being passed to protect him and his family. Sanitation and safeguards in homes and factories, child labor laws, and shorter working hours were gradually making it possible for wage-earners to have greater comforts and health advantages.

The time was indeed ripe for a large-scale attack on public health problems. But facilities for the widespread application of the new medical knowledge were only slowly being contrived. Health departments of cities were often restricted in their activities, held a narrow view of their responsibilities, and frequently suffered from inefficiency. It is significant that the Metropolitan should have felt the propriety and urgency to contribute toward the improvement of the situation. Through its vast network of District Offices and its Agents, it had adequate facilities for reaching a great number of people. Its clientele, so large a proportion of the working population, gave it a real stake. A saving in human lives would prove advantageous in many ways.

It was fortunate also that two men were at hand to focus the current interest in medical and industrial welfare into a program for Metropolitan policyholders. One, Lee K. Frankel, as a scientist and a humanitarian, exemplified the tendencies of the day. An internationally distinguished social worker, he had already acquired knowledge of the health problems of the

poor through his earlier work as director of the United Hebrew Charities of New York. He was a person of warm human sympathies, lovable and inspiring, but also a man of scientific training, with experience in business which few social workers possessed. Not only aware of difficult and pressing social problems, he could see practical solutions as well. He was a great teacher who could win others over to the wisdom of his projects and stimulate them to accomplishment.

But the chief credit for the development of the welfare program belongs to Haley Fiske. By a striking coincidence, the two men first met in December 1908, at a meeting in the Charities Building in New York City, at which Mr. Fiske spoke in defense of Industrial insurance. Dr. Frankel was then numbered among its critics and had just returned from Europe, where he had made a survey of workingmen's insurance for the Russell Sage Foundation. Mr. Fiske listened carefully to Dr. Frankel's constructive ideas. Shortly thereafter, with the warm approval of the Metropolitan's Directors and Officers, he invited Dr. Frankel to join the Company's Official Staff.

The general program was greeted enthusiastically by everyone in the Home Office and in the Field. Dr. Frankel was given free hand to carry out his plans with the full force of Executive authority behind him; and in the fusion of their efforts a service of far-reaching value was created. The rich fruit that this work has borne is due, in large measure, to the recognition by these two men that a great business organization could be a powerful instrument for social good. It was an example, characteristic of the American way of life, of private enterprise promoting public welfare.

On February 1, 1909, the Welfare Division commenced its work. President Fiske informed the policyholders of this new service in the following words: "Today, the Metropolitan is launched upon a new era—an era in which it joins the battle against the forces of disease, and in which it hopes to lead the world in preserving lives from the ravages of mankind's insidious foes."

Henry Street Settlement Nurses in 1909

One of Dr. Frankel's first and most important steps was to organize the Nursing Service for policyholders in the Industrial Department. Early in 1909 he mentioned the work of the Company's Agents "whose business took them regularly into the homes of millions of the people," in the course of a talk before a charitable organization of New York City. In the audience was Miss Lillian D. Wald, the head of the famous Henry Street Settlement and brilliant social worker. His talk fired her with an idea, and afterwards she said to him: "Many of your policyholders aren't getting proper medical care. Why don't you engage Henry Street nurses to visit every (insured) family where Agents see or hear there is illness, so there will be accurate reporting, home instruction, and treatment." Dr. Frankel was quick to see that here was the solution he was seeking. He arranged for Miss Wald to tell the Metropolitan's Officers, about the work of the Henry Street nurses, and the great benefits to the families and to the community resulting from it. The Directors at once recognized the value that such a service would have among the Industrial policyholders, and it was not long before the project was launched.

On June 9, 1909, the first Henry Street nurse visited a sick policyholder. A revolutionary idea, indeed—that a visiting

nurse should give bedside care to a policyholder at the expense of an insurance company. At the outset the Nursing Service was to be tried out for a three-month period in a part of the Borough of Manhattan. So valuable were the results that at the end of this time the plan was at once extended throughout New York City. Soon Managers, Agents, and policyholders elsewhere clamored for the new service. It was extended to the city of Washington on August 11, 1909, and then in quick succession to Baltimore, Boston, Chicago, Cleveland, and St. Louis. In all, 13 affiliations with existing Visiting Nurse associations were completed in that year. In the early part of 1910 Montreal, Worcester, Lowell, Trenton, Philadelphia, Harrisburg, Buffalo, and Cincinnati were added to the list. The establishment of the Montreal service was notable in that it was the first affiliation with the Victorian Order of Nurses, which now does most of the Metropolitan's work for English-speaking policyholders in Canada. Forty-seven nursing affiliations were completed by 1910, and 350 by the following year. Thus, an experiment that had started on a very limited scale grew by leaps and bounds. Later the service was extended to include Group policyholders (1918) and Intermediate policyholders (1926).

In setting up the Nursing Service the Company adopted the principle of utilizing existing public health nursing organizations wherever possible, instead of setting up separate and duplicating units of its own. As the demand for the Nursing Service spread, however, the Company organized its own staff to serve communities which had inadequate or no visiting nurse agencies. Thus, in St. Paul, Minn., in 1910, the Metropolitan first engaged its own Nurse on a direct salary basis. Today, the Metropolitan Nursing Service reaches 7,728 communities throughout the United States and Canada. It has contract affiliations with 819 public health nursing agencies, and its own staff of 571 salaried Nurses.

The Nursing Service has been acutely responsive to changing needs of the times. Skilled bedside care of the sick has been emphasized throughout the period, as has maternity

care to women during the months before and after childbirth. But with the years, Metropolitan Nurses have more and more become instructors as well as healers. Their teaching has taken many forms, ranging from the correction of some ignorant, harmful practice in the home, to more general matters such as the diet of the patient's family or removal of accident hazards. Very frequently the Nurse has brought the physician into the home and has insisted upon and arranged for the patient's hospitalization. Her alertness and advice have often prevented the spread of disease to other members of the family. Her knowledge of community agencies and the services they render has often spelled the difference between hardship and adequacy for families under her care. When disaster strikes, Metropolitan Nurses are among the first to offer aid. In typical reports of emergency work, we find such terse statements as: "On duty practically 24 hours every day" . . . "I gave 1,500 inoculations against typhoid" . . . "No doctor to help me, but an accurate check shows that most of my patients are safe."

No effort has been spared to keep standards for the individual Nurses and for the Service as a whole at a high level. The Metropolitan Nurse has been carefully chosen from the ranks of the well-trained and fully qualified professional nurses. She has been encouraged to keep up with developments in her field by postgraduate study. She has been a good citizen, has made herself familiar with local health laws and needs, and has lent effective aid to the health officer in community education and disease prevention.

The Metropolitan has not only encouraged additional training for its own Nurses, but has frequently joined with other interested agencies to sponsor projects for the improvement of public health nursing in general. To meet the pressing need for qualified French-speaking nurses in Canada, it helped to finance a public health nursing course at Montreal University. In cooperation with the National Organization for Public Health Nursing, it prepared a *Manual of Instructions for Visiting Nurses*. The Company has made many studies in

this field, and recommendations growing out of these have been widely applied and have stimulated better all-around performance by nursing agencies.

Cumbersome and antiquated records were kept by some visiting nurse agencies in the early days, but generally the nurses carried records "in their heads." From the beginning of the service Dr. Frankel urged that records be kept in an orderly, uniform, businesslike way so that trustworthy figures might be obtained. These data have helped the nursing agencies to operate on sound business principles and have proved in dollars and cents the worth of the service. They have also helped ascertain how the Nursing Service can best meet the needs of the community, and have defined the methods, training, and supervision to accomplish the desired results. More recently accurate nursing records have provided valuable information on sickness prevalence and have proved to be important material for medical research.

Moreover, the development of a good working relationship between established nursing agencies and the Company, including equitable financial arrangements, has done much to raise the standards of public health nursing throughout the United States and Canada. Before Metropolitan nursing began, these agencies had been almost entirely dependent upon private philanthropy; as a result, their income was often precarious. It takes little imagination to see what a tremendous lift public health nursing received when a strong Company like the Metropolitan joined hands in its work. Since 1909 the Company has spent more than $80,000,000 on nursing service, about half of which has been paid to affiliated nursing agencies. This tremendous sum has not only helped to put the organizations on a firm financial basis, but by adding to the average earnings of visiting nurses and to the regularity of their employment, it has made this work more attractive to women interested in a professional career. Many of the newer visiting nursing agencies now available to the general public owe their founding to Metropolitan initiative and financing. The importance of this support may be judged from

the fact that approximately one quarter of the nursing service budgets to which the Company contributes, represents compensation for services rendered to Metropolitan policyholders.

The modern concept of medicine has two aspects: the curative and the preventive. The Nursing Service was inaugurated to take care of the former; the Agency Staff was to be the pivot around which a great campaign of disease prevention was to be conducted. Dr. Frankel was at once alert to the potentialities of the Metropolitan Field Force, then numbering almost 10,000 men, as instruments to carry out the plans of the new Welfare Division. These men entered the homes of working people in almost every part of the United States and Canada, and visited millions of families weekly. Their friendly and regular contacts with the policyholders afforded a unique opportunity to spread health knowledge. Again and again these Agents had seen poverty and death as the result of sickness and disability. It is easy to understand why they became willing and useful co-workers in the Metropolitan's health program.

One of the first and most effective methods for bringing sound health information to the policyholders was through the distribution of welfare pamphlets. The publication of health information by the Company was not new. Even as far back as 1871 an article entitled "Health Hints" was published in a Company periodical. In 1892, when cholera was prevalent in Europe and health officials feared that the disease might be brought to this country by immigrants, the Company, in cooperation with the Health Department of New York City, published, and its Agents distributed, a popular circular giving facts about the disease and measures to prevent it. In March 1898 appeared the first of the Company's health booklets, *A Friend in Need Is a Friend Indeed*, published for the Canadian policyholders.

When Dr. Frankel launched the welfare work he knew that he must get simple, readable, and accurate information directly to the people. A series of booklets, planned and created by the Welfare Division and distributed to policy-

holders' homes by Company Agents, was his first step. The first Welfare pamphlet, issued in 1909, was *A War on Consumption*—one of the Company's pioneer efforts to turn people away from the self-diagnosis fostered by the old-fashioned "doctor book" and to direct them to a qualified physician. In the course of several years separate editions were published in 12 different languages, and eventually the circulation of this booklet exceeded 12,000,000 copies. Next came the beautifully illustrated pamphlet *The Child*, of which also millions of copies were circulated in American and Canadian homes. These were only the first of a long list of helpful publications, covering more than 100 separate subjects in the fields of personal and community health, and of disease and accident prevention. For the sizable groups of foreign-born or other non-English speaking policyholders, the Metropolitan has translated some of its booklets into German, Italian, French, Spanish, Polish, and Yiddish. From the very beginning requests for supplies of the Company's pamphlets have been received from official agencies in all health and welfare fields, and public health departments of States and cities, and school systems and social agencies throughout the world have made good use of them. Metropolitan health messages have found their way to the four corners of the earth.

These health pamphlets have been revised from time to time, so that the information they contain is literally up to the minute. Thus, Metropolitan health literature has interpreted medical discoveries so that the veriest layman may know of recent scientific progress, and he may learn what is useful and reliable and what is unreliable or outmoded. He has learned to lead a more healthful life; to protect himself and his children against disease; to avoid accidents in the home, on the streets, and at work; and to make good use of the medical facilities available in his community. It is difficult to measure the good done by these booklets, which find their way into thousands of out-of-the-way places in this country and Canada, replacing superstition and old wives' tales with scientific facts. No one can say how much sickness has been prevented—yet the

Metropolitan gets an indication of it sometimes through an occasional letter from some workman or from an obscure housewife, thanking the Company for a timely bit of information which has led directly to the saving of a human life.

In addition to health pamphlets as a tool for advancing public health, Dr. Frankel devised an even more dramatic and effective method—the town health demonstration. The attention of a whole Nation was thus focused upon a small community, which served as the laboratory for testing the efficiency of public health measures. His first major undertaking of this type was in 1916, when the Company launched a demonstration to show how a typical community with an average tuberculosis problem could bring the disease under control through the acceptance of reasonable rules of health, periodic examinations, and treatment where necessary. The 17,000 citizens of Framingham, Mass., and the National Tuberculosis Association joined the Company in carrying out this public health demonstration. Dr. Donald B. Armstrong, a young physician trained in public health work, was in charge of the experiment. His management was so admirable that soon after the close of the demonstration, Dr. Frankel invited him to come as his assistant with the Company.

The Framingham project lasted seven years, and its cost was largely borne by the Metropolitan, which put $200,000 into it. In the 10 years before the demonstration (1907–1916), the city's death rate from tuberculosis had averaged 121 deaths per 100,000 people; by 1923, when the project closed, the tuberculosis mortality had been cut 68 percent to 38.2 per 100,000. As a secondary result the infant mortality and general death rate were sharply decreased in the same period. The public-spirited citizens of Framingham have kept at the job, and in recent years Framingham has boasted a death rate from tuberculosis which is extraordinarily low for an industrial community of this size. The tuberculosis problem in this town is virtually solved. Out of this demonstration came a new and fully implemented conception as to how a community could organize itself effectively to fight tuberculosis,

DR. DONALD B. ARMSTRONG
Third Vice-President

and hundreds of communities throughout the country have used it and benefited.

Thetford Mines, Quebec, was the scene of another notable test of the demonstration method. This French-Canadian community was in an area where infant mortality was extremely high. The Company set out to show how it might be reduced by educating the mothers in a few simple rules of sanitation and nutrition. At the end of three years the infant mortality rate had dropped from 300 per thousand live births to 96 per thousand. Largely because of the success of this demonstration, the Provincial Government of Quebec appropriated $500,000 for similar child welfare work in other communities, where the infant mortality rate was high. So effective has this demonstration method proved, that it has been adopted widely in the fight on other diseases.

A very considerable part of the Company's welfare work is carried out anonymously, so to speak—in cooperation with

civic agencies, health departments, medical societies, parents' associations, and social groups. Managers, Agents, and Nurses have been active participants—often the key figures—in initiating or spurring on the local effort.

Most striking in its results has been the Metropolitan's campaign against diphtheria. This was waged first and most intensively in New York State, with the cooperation of official and private health and welfare agencies. In 1926, when the work was begun in this State, diphtheria caused 738 deaths, or at a rate of 6.3 per 100,000 persons. By 1930 the rate had been brought down to 2.8 per 100,000. The fight still went on, and the extraordinary results for 1941 marked the culmination of the splendid teamwork of the Health Commissioner of the State, the State Medical Society, the State Charities Aid Association, Metropolitan Agents and Nurses, and local health officers. Among the 6,000,000 people in upper New York State (excluding New York City), where the fight was concentrated, there were, in 1941, only six deaths from diphtheria—a rate of 0.1 per 100,000. Not a single case was reported in more than half the counties of the State or in two thirds of the cities. In like manner the persistent drive against diphtheria among Industrial policyholders generally has yielded extraordinarily good results, as will be described in the next chapter. The day is not far distant when we shall mark the virtual eradication of this disease.

The campaign against pneumonia has also had heartening results. Through its Welfare Division the Metropolitan has itself conducted or given financial support to much important medical research. The outstanding example is the work of its Influenza-Pneumonia Commission, which was constituted in June 1919 with Dr. Milton J. Rosenau, of Harvard University, as its Chairman. In the 24 years since its founding, this Commission of leading scientists has produced valuable results in the control of pneumonia and influenza and of related respiratory conditions. Its activities have contributed materially to the perfection of antipneumococcus sera and to the wide use of the new sulfa drugs, so effective in the treatment

of pneumonia. The amazing success of this new chemotherapy has caused the Company to redouble its educational efforts in this field. Through its national advertising; through popular and scientific literature; through its films, exhibits, and posters, the Metropolitan has sounded the message over the land that pneumonia deaths can be prevented by early treatment, and has thus undoubtedly saved many lives.

Another fruitful example of the Company's health research is the intensive study of diabetes made in cooperation with Dr. Elliott P. Joslin and his associates at the George F. Baker Clinic of the New England Deaconess Hospital in Boston. This project involved the analysis of records of many thousands of diabetics cared for in that clinic since 1898. The discovery of insulin greatly improved the outlook for diabetics, but to secure the full benefit of this discovery required the reeducation of physicians and patients in the treatment of the disease. The publications and scientific exhibits resulting from this joint effort of the Metropolitan with the George F. Baker Clinic have helped to stimulate interest in diabetes, and have brought many cases under early treatment when most can be done for them.

Since so many of its policyholders are industrial workers, the Company has also made a number of studies in the field of industrial hygiene. In 1916 it organized the Industrial Service Bureau, and began actively to work with employers to solve health problems in their particular industries. The growth of Group insurance has given great impetus to this work. The industrial hygiene activities have expanded rapidly, and at present include valuable technical services to Group policyholders to aid them in the control of occupational hazards. Detailed studies dealing with silicosis, asbestosis, and hazards in the ceramic, the leather, and other industries have been made for the benefit of such policyholders, and have been utilized by health officers and others in the field of preventive medicine. Industrial hygiene pamphlets and posters in popular style have likewise been issued for workers and their families. The maintenance of an exceptionally well-

equipped laboratory in the Home Office has meant life-saving service to Group policyholders, and has resulted in important contributions to disease control in industry.

The Welfare Division has also a special Bureau to promote health education in the schools. It has been increasingly active in spreading knowledge on nutrition, as rapid advances in this field have stimulated the need for such a program. Technical publications of the Division, including monographs, special reports, and pamphlets, have been prepared to meet the needs of industrial managers, health officers, school administrators, classroom teachers, and workers in preventive medicine, social service, and scientific research.

The story of the Metropolitan's contribution to popular health education would be incomplete without reference to its unique magazine advertising. Because it was not designed to sell Life insurance, but to bring important health information to all the people of this country, this campaign has won a host of new friends for the Company. The advertisements, dramatically worded and well illustrated, have continuously stressed three themes: the importance of keeping fit; the danger of neglecting even minor illnesses and injuries; and the need for periodic medical examination for the early detection of chronic disease. The Company's advertising has appeared regularly in magazines with national circulations running into the tens of millions; it has aroused such public interest that as many as 50,000 requests have been received in a single month for some health booklet referred to in an advertisement. This effective campaign has won prizes awarded by the advertising profession, and has, in fact, set a style for dignity and utility in institutional promotion.

Supplementing its advertising campaign, the Welfare Division has developed a series of motion pictures, exhibits, posters, and radio presentations to popularize knowledge on health and safety. The motion picture has been used very extensively. In 1924 appeared the Company's first professional film, "One Scar or Many," in which the value of smallpox vaccination was convincingly brought out. Other effective

Metropolitan films have dealt with diphtheria immunization, the value of periodic medical examination, the avoidance and correction of obesity, nutrition, and street and highway safety. The two most recent Metropolitan films, shown in theaters throughout the United States and Canada, are "A New Day," a dramatic presentation of the modern treatment of pneumonia, and "Proof of the Pudding," illustrating the value of proper nutrition in the promotion of health, growth, and vitality. The quality of these latest films is attested by the fact that the United States Public Health Service has joined the Company in sponsoring them. Professional Hollywood actors and producers have given them popular value as good entertainment as well as excellent public health education.

Metropolitan exhibits in the field of health and safety have been of two general types: popular exhibits for the use of industry and educational and social agencies; and technical exhibits for showing at scientific meetings. The lay exhibits for many years were prepared for showing at county fairs. More ambitious were those prepared for the New York World's Fair 1939 and 1940 and for the Golden Gate Exposition at San Francisco in the same years. At these Fairs the Company dramatized its work with charts and animated displays covering all its operations, but featuring especially the work of the Welfare Division. The attendance at the Company's exhibits at these two fairs was in excess of 6,000,000.

Although the Company's technical exhibits have reached smaller audiences, these have included picked groups of physicians, educators, public health experts, engineers, industrial executives, and others active in health and safety administration. Metropolitan exhibits on tuberculosis, diabetes, nutrition, and accidents have been shown at meetings of professional societies, including the American Medical Association, the American Public Health Association, the American Nurses Association, the National Safety Council, the National Education Association, and similar National and State bodies. Since these exhibits are generally based upon material growing out

LOUIS I. DUBLIN
Third Vice-President and Statistician

of the Company's own experience or research activities, they are recognized as important and valuable scientific contributions in their respective fields.

From the very beginning, Dr. Frankel insisted that the work he planned for the Company should justify itself by concrete results. He believed that progress could be achieved only on a basis of solid fact. He insisted at the very outset on accurate record-keeping and on sound analysis of the data collected. With this in mind, in 1909 he invited Dr. Louis I. Dublin, a young man fresh from his training in statistical methods, to furnish advice on how to measure the effectiveness of the work of the new Division. Dr. Dublin outlined a plan for the study of the nursing records and the death records of the Company. In 1911 he was appointed head of the new Statistical Bureau which has been closely associated with the Welfare Division as its research agency. Every year, it has collected and analyzed data on the millions of policyholders.

This has been not only a measure of the Company's efforts in lowering mortality, but has also served as a guide to new welfare projects. Statistical research based on this experience has been valuable to outside health agencies as well, and has stimulated and set standards for the use of such methods by Federal, State, and city health departments. Since the Bureau has made use of millions of records, it has developed one of the best organizations in the country for mechanical tabulation. So effective, in fact, is the Tabulating Section, that it has served as a laboratory for development of techniques which have become increasingly important tools in the conduct of business, government, and research throughout the world.

Through the Statistical Bureau the Company has been a force in the improvement of the Nation's vital statistics. When this Bureau was established in 1911, satisfactory data on births and deaths were lacking for large sections of the United States. In cooperation with others the Company sought to correct this situation. It even utilized its Field-Men to work with legislatures and local authorities for adequate registration of births and deaths. At present every State has machinery for the reporting and tabulating of such records. Furthermore, in order to improve the quality of mortality statistics, it has been necessary from time to time to modify the classification of causes of death, in order to keep abreast of new medical knowledge. For this purpose a representative of the Statistical Bureau has served regularly on the committee charged with the periodic revision of the International List of Causes of Death.

The Statistical Bureau has made studies of mortality according to occupation, and others on the frequency of physical impairments and their effect on longevity. Its library on vital statistics has been invaluable in the health research activities of the Company, and of service also to welfare workers and agencies outside the Company. The Bureau answers thousands of inquiries each year from physicians and others, even from distant countries, on all phases of vital statistics and demographic research.

The varied research activities of the Bureau are embodied in hundreds of reports and papers on mortality, population problems, sickness surveys, expectation of life, both in scientific publications and in popular articles. These articles and other researches have served as the basis for many books, notably, *Mortality Statistics of Insured Wage-Earners and Their Families* (1919); *Health and Wealth* (1928), which has been translated into several foreign languages and has spurred on public health efforts abroad; *The Money Value of a Man* (1930); *Length of Life: A Study of the Life Table* (1936); *Twenty-Five Years of Health Progress* (1937). Since 1920 the Bureau has published a *Statistical Bulletin*, in which are given current mortality data on the Company's policyholders, the results of Bureau research, and accounts of important developments in public health. The *Statistical Bulletin* is recognized as an authoritative source, and is probably the most widely quoted periodical of its type in the United States and Canada.

The Company over the years has conducted many original investigations into various social and economic problems. In 1915 it launched a series of surveys on the extent of unemployment in the industrial population of the United States. The data were collected by the Agents of the Company, and the findings constituted the first significant report on the amount and kind of unemployment in this country. The wide and practical results of this study demonstrated the feasibility of conducting similar investigations, and the next study was launched in nine different population centers, on the character and amount of sickness in wage-earning populations. Both investigations were made on behalf of the Federal Government and were later published by the U. S. Bureau of Labor Statistics. In 1922 the Company began a series of studies on the cost of medical care, and in 1929 gathered such information among its Industrial policyholders. These studies constituted a pioneer effort in this field.

In 1920 the Company helped to organize the Committee on Administrative Practice of the American Public Health Association, which made a systematic investigation of the

work of the larger health departments throughout the country. The work of this committee, originally financed by the Metropolitan, brought about much improvement in standards by developing methods of measuring the effectiveness of health departments.

The ability thus to evaluate city health work through accurate records has opened an approach to stimulate community leaders to more active public health campaigns in their own cities. This has made possible the City Health Conservation Contest, launched by the American Public Health Association in 1919, with financial support by the Metropolitan and other Life insurance companies and with the cooperation of the Chamber of Commerce of the United States. These contests bring out vividly the actual achievements of communities in the health field, as well as the improvements made from year to year. Since the project was inaugurated, more than 500 American cities have enrolled and without exception have reported improved health conditions and lowered mortality. Separate contests under other auspices have been developed for rural communities and for Canada, and have given great impetus to the health services of many outlying towns.

It is significant that Dr. Frankel's last effort should be concerned with the newer developments of social insurance in Europe and with its possible applications to American life. In the summer of 1931 he went abroad with Actuary James D. Craig to survey the scope and administration of such programs. This survey was an expression of a fundamental interest which dominated his life: to bring ever-increasing security to wage-earners through the medium of insurance. He was fortunately able to bring the work to a substantial conclusion before his sudden death in Paris on July 25, 1931. This study proved a fitting climax to a career of service to his Company and to his country. As was noted in chapter 18, it constituted the groundwork for new types of private insurance and helped in the development of our present Federal system of unemployment and old-age insurance.

It is difficult to evaluate a personality as fertile and constructive as that of Dr. Frankel. His activities covered many fields, but he was always the servant of mankind. The creation of the Welfare Division of the Company was his greatest achievement. He put the mark of his humanity on the Metropolitan, helping to transform it from a typical business organization into an institution for social progress. The whole field of Life insurance has felt the effect of this effort. He also brought new vigor to American public health work, both official and voluntary. In 1919 he served as President of the American Public Health Association. He found new sources of financial support for it, and as a result the Association has grown in prestige and effectiveness. He was a prime mover in the formation of the National Health Council, which brought together various national associations in each field of public health, enabling them to further their common aims and to prevent wasteful duplication of effort. He held high office and served on important committees in virtually all the leading health organizations. His influence on the American health movement has been deep and lasting.

In September of 1931 the Board of Directors designated Dr. Armstrong and Dr. Dublin, both of whom had been intimately associated with Dr. Frankel for many years, to carry on the health activities of the Company. Working together, they have continued the tradition of Dr. Frankel in the conduct of the welfare program and in stimulating and supporting a wide range of outside health organizations. The work Dr. Frankel envisioned has been richly fulfilled, and the Company has continued increasingly to be a force in the life conservation activities of the country.

This chapter would be incomplete without a tribute to the contribution of the Company's Agents. They have been of the greatest service in bringing sick policyholders under nursing care, and in carrying popular health education into the home. But their efforts have not been limited to propaganda alone. In the early stages of the Company's fight against diphtheria, it was the Metropolitan Agents who often

set the example in the community by first having their own children inoculated. They have carried through many nation-wide educational campaigns against specific diseases and accidents. Working side by side with civic and health agencies, Metropolitan Agents have helped in vital research, such as the Company's unemployment and sickness surveys. They have given generously of their time and interest, and have labored fruitfully.

It is not surprising, therefore, that their welfare work has been a rewarding experience. Many Agents can tell of lives that have been saved and communities made healthier and happier places in which to live as the result of their efforts. Since the organization of the Welfare Division, in 1909, the policyholders on their debits have been enabled to share in the gifts conferred by recent discoveries of science, and by the operation of public health measures. Close to 25,000,000 people in the United States and Canada are now eligible to receive skilled nursing care during illness.

The welfare work of the Company has surely been worth while in terms of lives saved and deaths postponed, and in the consequent lowering of the cost of insurance. In the third of a century since the founding of the Welfare Division, its Nurses have made more than 92,000,000 home visits to approximately 20,000,000 policyholders. Considerably more than 1,200,000,000 copies of Metropolitan health pamphlets have been distributed in this country and Canada. Its motion pictures have been seen since 1924 by nearly 127,000,000 persons at theaters, schools, and other centers. Certainly no one agency working alone could have reached out to change the health attitudes and practices of so many millions of individuals. In the movement which through the years has achieved longer and more abundant life for the American people, the Metropolitan is proud to have played its part.

CHAPTER 21

Progress in Health and Longevity

IN THE PERIOD of 75 years during which the Metropolitan Life Insurance Company has been operating, and especially the last third of a century during which its welfare work has developed, there has been phenomenal progress in the health of the Nation. Some of the death rates that prevailed in our population 75 years ago would, on modern standards, appear calamitous. In 1868, the year that the Company was chartered, the mortality in New York City was 28 per 1,000 population. In many cities death rates exceeding 30 per 1,000 were common. From such figures the step to current rates of about 10 per 1,000 reflects epoch-making advances in public health, medicine, and general standards of living. Infant mortality in those days was so high that, of every thousand children born, from 150 to 200 failed to attain their first birthday. Today infant deaths number only about 40 in 1,000 live births and even less in many areas, including New York and Chicago and some of our other large cities.

Time and again during the early period of the Company's history, epidemics of yellow fever, cholera, malaria, smallpox, typhus, and other diseases swept the country, with terrifyingly high crests. Particularly dreaded, years ago, were epidemics of diphtheria, which ravaged the child population. Today an epidemic of any magnitude from this cause is very unlikely indeed. Typical of the excellent current situation is the record in seven States covered by the Company's Pacific Coast Head Office, where only three deaths from diphtheria were reported among Industrial policyholders in the entire year of

1941. Typhoid fever, another disease that recurrently visited the country in severe epidemics, is now reduced to a minor position among the causes of death. That the occurrence of any epidemic of this disease, under modern conditions, is a sign of culpable neglect on the part of the community is attested by the fact that in some instances damage suits have successfully been brought against municipalities by victims of the disease or their surviving relatives.

As the result of the high mortality, the average length of life in the general population three quarters of a century ago was correspondingly low—only about 40 years as against close to 64 years today. This increase in longevity is due in considerable measure to the large reduction in mortality in infancy and childhood. It has been at the early periods of life that the improvement has been particularly marked. Yet it must not be supposed that the gains have been restricted to young persons. Appreciable reductions in mortality since the beginning of the century have been registered among white men at every age up to 60, and among white women up to age 80. We shall see later in the chapter that the increase in longevity among Metropolitan policyholders has been even more impressive than that for the population as a whole.

Only fragmentary statistical information on mortality, both for the general population and for Metropolitan policyholders, is available for the first 40 years of the period under survey. With the establishment of the Welfare Division in 1909 it was realized that full and accurate information regarding the mortality of policyholders was necessary. As was pointed out in the preceding chapter, the Company's Statistical Bureau was organized for this purpose.

The records prepared each year since 1911 by this Bureau tell a dramatic story of Metropolitan achievement in the field of public health. They show the progress which has been made in controlling a number of diseases, the most important of which have been tuberculosis, diphtheria, and pneumonia. Campaigns against each of these in turn have constituted a major objective in the welfare program at a particular period.

Moreover, these campaigns have generally been so conducted as to reach beyond the policyholder group to the general population. Thus entire communities and areas have benefited, and the downward trend of mortality in the whole country has been accelerated—a fact to be kept in mind when comparisons are made between improvements in the Metropolitan group and in the general population.

In 1911 the death rate from all causes among Metropolitan Industrial policyholders, ages 1 to 74, was 13.5 per 1,000. Current rates are less than half this figure. Today there are 6.1 deaths per 1,000 (adjustment being made here, and in the figures that follow, for changes which have taken place in the age and sex composition of the group). Speaking in terms of longevity, according to the mortality of 1911 the average length of life of these policyholders was 46.6 years. In 1942 it was close to 64 years, a gain of 17 years. If we look back to the earliest records for the Company's Industrial policyholders covering the period from 1879 to 1890, we find that their average length of life was about 34 years. Thus the longevity of wage-earners and their families has almost doubled in the course of the Company's history.

These figures, striking enough in themselves, gain particular significance when compared with the corresponding figures for the general population. Broadly comparable data for the two experiences are available only from 1920 onward. In that year the death rate among the Industrial policyholders, ages 1 to 74, was 10.4 deaths per 1,000 persons, as against 9.0 in the general population. Currently, the mortality in each of these groups is about 6 per 1,000. Thus, the Industrial policyholders, starting as they did on a considerably less favorable mortality level, have now caught up with the general population. This has naturally been reflected in the figures on longevity. At the beginning of this period the average length of life was more than four years greater in the general population than among the Industrial policyholders. Today, only two decades later, this advantage over the insured group has been virtually wiped out.

This remarkable achievement certainly is no accident, and is in part at least the result of the Company's welfare program. In gradually raising the health status of an economically less favored group to the level of the American people as a whole, we have a splendid example of the working of the democratic process. Moreover, over the years methods of underwriting Industrial insurance have greatly improved, and this, too, has undoubtedly been reflected in improved current mortality.

It must be remembered, however, that our Industrial policyholders consist primarily of wage-earners and their families. They are not wealthy people. They cannot, when the occasion arises, call in a famous specialist. These wage-earners engage in a variety of occupations, some of which involve exceptional risks to life, and many of which impose considerable wear and tear on the physical organism. Moreover, these policyholders are not a group selected by a strict medical examination at the time of insurance, though persons obviously ill or seriously impaired have been excluded. The great majority of the insured are urban dwellers, and urban mortality commonly runs higher than rural mortality. Yet today this Industrial group has achieved practically the same mortality experience as prevails in the general population of one of the healthiest nations in the world.

The improvement in mortality has been unevenly distributed over the various ages. The greatest advances have been made against those diseases which have been most amenable to public health control and which the Metropolitan has particularly attacked. A spectacular change has occurred in infant mortality, and this improvement shows up in practically all the major causes of death characteristic of the period of infancy. The most abrupt decline, in the first year of life, has occurred in the death rate from diarrhea and enteritis, formerly the outstanding threat to infant life. Today, thanks largely to the education of mothers and to the modern methods of preparation, handling, and distribution of foods, especially milk, this death rate has been reduced to just about one fifth the figure for 1920.

From the very beginning of the Company's welfare program, emphasis was placed upon maternal care. This work has been carried out through millions of visits by Company Nurses to maternity cases, through education of the family by the Nurse, and through special literature. In consequence, along with the marked improvements in infant mortality, there has been a marked reduction in the death rate from conditions incidental to pregnancy and childbirth. The maternal mortality was 19.0 per 100,000 policyholders in 1911, and had fallen to only 4.6 per 100,000 by 1941. Although part of this decline is attributable to the fall in the birth rate, a very large share of it represents an actual reduction in maternal mortality. Analysis of Company records shows that its extensive maternity nursing program has had a definite effect in lowering the death rate among the many mothers receiving such care.

In the childhood ages from 1 to 14 there has likewise been an extraordinary improvement in mortality—no less than four fifths for Metropolitan Industrial policyholders since 1911. Childhood is the period of life when mortality is at its lowest. In recent years the minimum point, at age 10, has fallen to less than one death per 1,000, and it is gratifying to find that conditions among the children of Industrial families are now as favorable as in the population at large.

Each of the principal communicable diseases of childhood—measles, whooping cough, scarlet fever, and diphtheria—has experienced a precipitous decline in mortality and has contributed its full share to the improvement in the death rate among children. But outstanding in this group is diphtheria. A news item in a Company periodical issued to our policyholders some 50 years ago described three claims paid on the deaths, within five days, of three children in one family, all victims of diphtheria. Even a single death from this cause today implies culpable neglect on somebody's part. The toll has been reduced to insignificance, thanks first to the extensive use of antitoxin in the treatment of the disease, and later to the general preventive inoculation against it. The Company

has worked continuously and intensively in the popularization of these treatments. At every point in the campaign during the last 30 years, the Metropolitan has been active in educating mothers, stimulating health officers, organizing communities—in fact, whole States—toward the very desirable objective of "No More Diphtheria."

At the very beginning of its life conservation activities the Company directed its attention to the urgent problem of tuberculosis. The disease was the leading cause of death among Industrial policyholders in 1911, with a death rate of more than 340 per 100,000. Scarcely a family but counted one or more victims among its members. Death claim payments for tuberculosis accounted for more than one fifth of the total paid out each year, and were greater than for any other single cause. At present tuberculosis has been brought down to seventh place in the list of causes of death, with a rate around 40 per 100,000. The claim payments for this cause are now only about 5 percent of the total and, despite the great increase in the amount of insurance in force, are actually less in amount than in 1911. A particularly pernicious feature about tuberculosis in the past was that it claimed so many victims in the most productive ages of life. In 1911 it accounted for almost two fifths of the deaths in the age group from 25 to 44 among white men, and almost one third among white women. By 1941 only one seventh of the deaths in this age group were due to tuberculosis; the death rate from this cause, among white men, had been reduced to less than one eighth, and among white women to less than one seventh of its level of 30 years ago. The improvement in tuberculosis mortality alone has meant the saving of hundreds of thousands of lives among Industrial policyholders.

The successful attack against pneumonia, in which the Company has played a prominent part, has been described in the preceding chapter. The campaign against this disease has been one of the most brilliant triumphs of contemporary medicine. With the introduction first of serum therapy, and more recently of the sulfa drugs, the mortality from pneu-

monia among Metropolitan Industrial policyholders has been reduced to less than one half the levels of only a few years ago. The achievements in the field of chemotherapy are so new and so considerable that their full implications are not yet generally appreciated.

A discussion of pneumonia would be incomplete, however, without reference to the influenza epidemic of 1918–1919. Such epidemics have always produced a sharp rise in the pneumonia rate. It is estimated that more than 500,000 deaths occurred in the United States from influenza and pneumonia, or from their complications, in the winter of 1918–1919. The death rate from these diseases in the Industrial Department at the peak of the epidemic was more than 20 times the normal rate. For 1918 as a whole the effect of the epidemic was to increase the death rate from all causes by about one third over the rate of the prepandemic years. The extra claim payments by American Life insurance companies as a result of the epidemic amounted to about $200,000,000. Of this sum the Metropolitan alone paid out more than $26,000,000; and at that time it had less than one sixth of the present amount of insurance in force. It was this epidemic, among other things, that spurred the Company to form the Influenza-Pneumonia Commission, whose work has contributed so much to the successful fight on pneumonia.

Past mid-life, the so-called degenerative conditions begin to figure prominently among the causes of death, and their control still presents many unsolved problems to science and to the medical profession. Nevertheless, the death rate has registered notable improvement since 1911, especially among white women. In these fields the effect of the Company's welfare work is also discernible. Many cases of degenerative disease have been prevented through the reduction in the frequency and severity of infections in childhood and early adult life; others have been postponed in their course through education in personal hygiene and in nutrition. Furthermore, Metropolitan Nurses have helped to carry many sufferers through acute phases of these chronic conditions, and such

service on a large scale may well have had a salutary effect on the course of the death rate. All in all, the diseases characteristic of late life now constitute the major item in mortality, and their importance will increase with time.

With regard to cancer, another disease that claims its victims mainly after mid-life, the report is not too encouraging. Recently the cost of this disease to the Company, in terms of claim payments, has been more than $25,000,000 a year, or 14 percent of the total for all death claims; in 1911 the proportion was only 6 percent. It is true that among white women there has been a slight decline in the death rate from cancer, perhaps because some of the common forms of the disease in women are in relatively accessible sites, and thus amenable to surgery and X-ray or radium treatment. But among white men the death rate from this cause, *as reported*, has shown an appreciable increase in the past three decades. The increase in reported deaths from this cause is in some degree misleading, and must not be taken to mean that the extensive campaign of research and public education on the subject of cancer has been fruitless. In former years many deaths now reported as due to cancer would probably have been incorrectly diagnosed and attributed to some other cause. In this way increased accuracy of diagnosis has had the effect of raising the reported cancer death rate. But until greater success crowns the efforts to gain an understanding of the cancer problem, the most effective measures are early diagnosis and early treatment. This message has been a prominent item in the Company's campaign against the disease.

Diabetes, which is a fairly important cause of death past mid-life, presents a paradox in that the development of insulin therapy has saved the lives of many thousands of diabetics, while at the same time the death rate has shown an actual increase since preinsulin days. In explanation it must be remembered, first, that the very success of this therapy has drawn greater attention to diabetes, and has undoubtedly brought to light many cases which previously would have escaped proper diagnosis; and second, insulin has added to

the length of life of the average diabetic, without curing him. Deaths thus postponed tend to accumulate at the higher ages. An important fact, however, is that diabetics, thanks to insulin, can now generally lead normal lives. That many reap the advantage of modern treatment is in no small measure due to the efforts of the Metropolitan, which has spread the knowledge of the drug far and wide for many years. It has also made a number of important statistical researches in this field which have clarified the natural history of diabetes.

Appendicitis, a disease without a marked age incidence, has declined sharply in recent years. The current mortality among policyholders is the lowest in Metropolitan history. This improvement reflects not only important advances in diagnosis and surgery, but also productive efforts along public health lines by the Company and other agencies. These have disseminated information to the public to help them recognize the early signs of the disease, when prompt medical and surgical treatment is of most avail; and have prevented many serious complications by warning against the use of laxatives in the presence of abdominal pain. The extensive use of the sulfa drugs during the last two years in cases of appendicitis with peritonitis has also played an important role in bringing the death rate down to its present low level.

The record of achievement in disease control would be incomplete without mention of the virtual elimination of typhoid fever. In 1911 it was an important cause of death among Metropolitan policyholders, but for many years now mortality from this disease has been negligible. While community efforts, through the provision of pure water supplies and adequate sewage systems, are largely responsible for wiping out typhoid, the Metropolitan did yeoman service in organizing public sentiment in support of bond issues to pay for these sanitary improvements and in the promotion of other measures for the control of the disease.

Accidents have an importance for Life insurance companies beyond their actual magnitude as causes of death. The Metropolitan, as well as most other companies, has developed

special benefits which provide for an additional payment equal to the face value of the policy in the event of death by accidental means. Industrial policies, with certain broad exceptions, grant this benefit without specific extra premiums to policyholders; Ordinary policies make this available to the insured at a small extra cost. Claim payments on the Double Indemnity provision currently average about $4,500,000 a year in the Metropolitan.

Just as the physician and the public health worker have been successful in their fight against disease, so various agencies, including the Metropolitan, have engaged in equally productive efforts to control accidents. The mortality rate from accidents in 1941 among the Company's Industrial policyholders was about six tenths of what it was in 1911. While accidents generally constitute a very considerable item in the total death rate, they rise to first place in the list of causes at ages 5 to 14 among girls and 5 to 39 among boys and men.

Accidents, like diseases, have their characteristic age and sex incidence. Even the infant in the very first year of life is exposed to hazards peculiar to that age, among them accidental suffocation. Nevertheless, the decline in accident mortality in early childhood has been greater than at any other period of life. There has been a marked reduction in the death rate from falls, burns, and drownings throughout the childhood ages. Even the frequency of automobile accidents among children has fallen off appreciably in the past decade or more.

In the main productive ages of life many of the accident hazards are occupational, especially among men. Great improvement has been recorded in this field, although the death rate from such accidents varies with the level of business activity. The lowest rates are usually recorded in depression years and the highest in boom periods. In wartime the death rate from job accidents is further adversely affected by the influx of large numbers of "green" workers into industry and by the speed-up of production. In recent years the mortality from occupational accidents among men insured in the Com-

pany has been about one third lower than the average for the 1920's, and about one half the maximum rate recorded in 1913. The minimum rate was recorded in 1939. This drop is notable because employment was much better in that year than in 1933, in which the previous minimum death rate from occupational accidents had been registered. A good part of the improvement in mortality from accidents on the job can be attributed to safer working conditions in industry, which, in turn, are to be credited largely to the stimulus of Workmen's Compensation Insurance and to accident-prevention programs. In the development of such programs, the Company has actively participated for more than 25 years.

The aged, though in some ways less exposed to risk because of their more sheltered lives, are, on the other hand, more vulnerable when an accident does occur; and among them the fatal accident rate reaches a high figure. The trend of fatal accidents among older policyholders has, however, been downward, largely as a result of the reduction in fatalities from burns, falls, and gas poisoning. Among these people even the rate for automobile fatalities in the last two or three years has been well below the peak and, in fact, is now lower than in the late 1920's.

The two revolutionary advances in transportation—the use of the automobile and the airplane—made since the beginning of the century, have brought with them new hazards. For many years now the automobile has been a major factor in the accident picture. Thus far, civilian aviation, because of its limited use, has caused relatively few deaths each year, but postwar development in this field may seriously affect the accident toll.

The death rate from automobile accidents among Metropolitan policyholders prior to the second World War reached a figure about nine times as high as that for 1911. For the Company as a whole, annual claim payments from this cause in the year 1941 have exceeded $8,500,000, a sum appreciably in excess of that paid out on account of tuberculosis. In order to see the automobile accident hazard in proper perspective

Canadian policyholders is just about the same as that of the white policyholders for the Company as a whole.

The differences in mortality at certain ages are definitely referrable to specific causes of death. The disadvantage among Canadians at the younger ages arises mainly from the higher incidence of the communicable diseases — diarrhea and enteritis, tuberculosis, pneumonia, and typhoid fever. Canadian policyholders also have a higher death rate from puerperal causes; but the major part of this excess is attributable to the much higher birth rate prevailing among the French-speaking population. At the older ages Canadians enjoy the advantage of lower mortality from the degenerative diseases characteristic of this period of life, as well as from accidents, homicides, and suicides.

The mortality among Canadian policyholders has likewise shown marked improvement. In the past 10 years alone the total death rate (unadjusted for changes in age distribution) has declined more than 15 percent. For the principal communicable diseases of childhood as a group, and for diarrhea and enteritis, the reduction has been more than 70 percent. Approximately the same reduction has been brought about for typhoid fever. The death rates from pneumonia and from diseases of childbearing have been cut by one half, and that from tuberculosis by about one third in the decade. The recent improvement in health facilities throughout Canada has been marked, and promises even greater gains in the immediate future unless the country is adversely affected by the continuance of war conditions.

The excellence of the current mortality record among Metropolitan Industrial policyholders as a whole is surpassed by that for the Pacific Coast. There the death rate in recent years has been 6 percent lower than in the rest of the United States. The record is remarkably good with respect to childhood diseases, reflecting in part the lower incidence of the communicable diseases in Pacific Coast families. Diphtheria has been practically wiped out. In the past 10 years the mortality from puerperal conditions has declined 70 percent,

and tuberculosis and the respiratory diseases generally have dropped to half their former levels. Likewise, the mortality in middle and later life from diseases of the heart and other conditions associated with hardening of the arteries, from cancer and diabetes, is somewhat lower than in the rest of the country. On the other hand, the record for violent deaths on the Pacific Coast has been worse, largely because of the high death rate from automobile accidents.

The Company's varied activities in the health field, although primarily designed for Industrial policyholders, have also been helpful in reducing mortality among those insured in the Ordinary and Group Departments. Among Ordinary policyholders the welfare effort has been largely, though not altogether, indirect. In so far as many of them are breadwinners and heads of families whose members are protected by Industrial insurance, they are reached by the Company's broad program of health education. Moreover, one fifth of them are also insured in the Industrial or Group Departments and thus receive the direct benefit of the Company's Nursing Service during acute illness. Finally, the practice of periodic health examination has been particularly encouraged among Ordinary policyholders and, under an offer first made in 1914, nearly 2,000,000 such examinations have been provided for owners of Ordinary policies at Company expense. There is some evidence that these examinations have had a favorable effect on the health and longevity of the policyholders using the Life Extension service.

Although, for technical reasons, we do not have the same detail of figures for policyholders in the Ordinary and Group Departments as in the Industrial, nevertheless some idea of their improved mortality is afforded by records running back to 1911 for those insured in the Standard Ordinary branch. Since that year there has been a reduction of approximately 30 percent in the death rate among Ordinary policyholders. (This figure is based on the facts for the broad age group from 10 to 74 years, adjusted to allow for changes in the age and sex composition of these policyholders). The death rate

in recent years has been about five per 1,000 persons. The reduction has been roughly the same for men as for women.

The experience among the younger Ordinary policyholders during this period has been exceptionally favorable. The death rates of men under 35 and of women under 25 have dropped to one half what they were 30 years ago. In fact, the actual level of the rates at the younger ages among Ordinary policyholders is already as low as any likely to be achieved in the general population for many years to come, even on the most optimistic estimates. The chief reason for this remarkable showing lies in the select character of these insured persons. Death rates between the ages of 35 and 44 have declined about one third for each sex. There have been consistent reductions at every age past 45, but these have been smaller than among younger persons. This favorable trend in mortality reflects, in part, the improved methods of underwriting in the Ordinary Department.

For the most part, the trends of mortality from individual causes of death differ only in degree from those already reported for Industrial policyholders; yet certain features have a special significance. Outstanding in the improved mortality record of the Ordinary Department is the decline in the death rate from tuberculosis. Prior to 1910 tuberculosis was a leading cause of death even among policyholders of this group, and was responsible for nearly one quarter of the deaths at ages 15 to 30. In the last 30 years alone the death rate from tuberculosis among Metropolitan Ordinary policyholders has been reduced by more than two thirds. Current death rates among these insured are so low as to suggest that the virtual eradication of the disease is definitely in sight. Indeed, among women insured in the Standard Ordinary branch of the Department, the death rate is already well below 20 per 100,000.

Notable improvement has likewise been registered for other infectious diseases. Current death rates from pneumonia are only one fourth of what they were in 1911–1915; the rate of decline has been especially rapid in the last five years, reflecting the benefit of the sulfa-drug treatment among

Ordinary policyholders. Relatively the greatest decline has been recorded in the mortality from typhoid fever. Death rates from this disease are now well below one per 100,000, as compared with 17 in 1911-1915 among the Company's Ordinary policyholders, and with a rate of about 50 among policyholders of the large companies in the period 1885 to 1909.

The accident record among Ordinary policyholders, so important because of the supplemental Double Indemnity benefits available to them, has also shown a highly satisfactory trend. The death rate from accidents has declined one quarter in the past 30 years. This achievement is particularly gratifying because, on the one hand, workingmen form a large proportion of those insured in the Ordinary Department of the Metropolitan, and on the other hand, because the improvement in the death rate from all accidents combined has taken place in a period of sharply rising death rates from accidents due to the increasing use of the automobile.

The mortality from civilian aviation activities has thus far been but a small part of the accident toll in the Ordinary Department. Nevertheless, the Company pays close attention to this risk particularly because of the substantial extra hazard involved in nonpassenger flying and because the risk is greatest among those who carry relatively large amounts of insurance. The Company has been increasingly aware of the importance of aviation to the Nation, and has therefore taken active part in the investigation of aviation hazards. On the basis of its studies, schedules of ratings for those operating or using planes have been made and revised from time to time. The trend has been to liberalize rates as the statistics gathered have shown improvement in safety in commercial planes. Today, nearly all passengers using scheduled air lines in the United States and Canada are insured without extra premiums.

Declining mortality has a financial aspect of special importance to policyholders of a mutual Life insurance company like the Metropolitan. There is a direct relation between the death rate among policyholders and the cost of insurance. The reduction in mortality, when translated into claim pay-

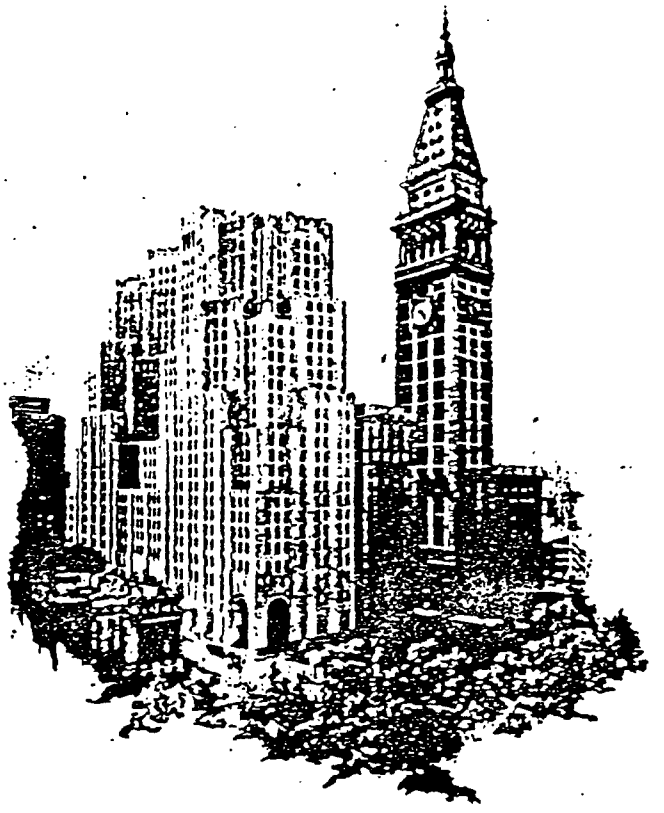
ments averted or postponed, represents huge sums of money. In the Metropolitan it has meant a saving of many million dollars over the past 30 years. These savings have been reflected in the net cost of insurance to policyholders, and have made possible the addition of many valuable features to their policies. The importance of these reductions in mortality has never been greater than in recent years. For, as more fully set forth in an earlier chapter, they have helped to offset a part of the decrease in investment return resulting from the sharp decline in the interest rate. The Company's efforts in life conservation have helped to keep the cost of Life insurance at a level at which large numbers of people are able to purchase and maintain their policies.

Certainly no single figure can represent with any exactness the aggregate results of the Metropolitan's program of life conservation over the many years. It has unquestionably meant the saving of hundreds of thousands of lives. A significant proportion of these have been men and women at the most productive ages, when their family responsibilities were greatest. The economic value of these people to their families runs into billions of dollars. Their economic value to their country has likewise been conserved. The Metropolitan, together with other agencies, has played its part in saving for the war effort the lives of large numbers which might otherwise have been lost through premature death.

In the final analysis, however, the real measure of the Metropolitan's welfare work is not in dollars and cents. The true significance of the Company's welfare efforts lies in what it has contributed to human values, in what it has added to the sum total of human health and happiness. To appreciate this we must think of the thousands of families kept together and saved from want and suffering; we must think in terms of the many children who have grown up healthy in good homes under the loving care of their parents; of many people living on to a happy and productive old age. Who can assay the value of these blessings? Medical and public health authorities throughout the world look upon the Metropolitan's pro-

gram of public health service as tangible proof of the value of such preventive activity.

And what of the future? It is clear that public health work will shift its emphasis from the infectious diseases of youth to the chronic conditions of middle and later life—to heart disease, cancer, and diabetes. Research currently being carried on in the field of nutrition and into the physiological action of the hormones may point the way to a further rise in the expectation of life—may indeed create a whole new concept of "the prime of life." To realize the promises implied in the current work, it is vital to bring this life-saving knowledge to the people and to teach them how to use it in their daily lives. It is a task for which the Metropolitan's organization is well equipped and in which it has proved its worth. And when the expectation of life has reached new frontiers, the Company must still labor unceasingly with its fellow workers to hold the territory which has been won.



METROPOLITAN LIFE INSURANCE COMPANY

HOME OFFICE: NEW YORK

Pacific Coast Head Office: San Francisco · Canadian Head Office: Ottawa

M. L. I. CO. PRESS—68171—PRINTED IN U.S.A.