Fifty Years of Health

IN ROCHESTER, NEW YORK

1900-1950



DAVID B. BRADY Commissioner of Public Safety

ALBERT D. KAISER, M. D. Health Officer

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Mid-century is a good time to review some of the important events of the last five decades. One would, of course, expect much to happen in such a long period. Have the years brought greater or less happiness to man or must one yearn for the return of the so-called good old days often referred to before the beginning of the twentieth century.

Many factors enter any true appraisal of a long period of time. The pages of this bulletin will attempt to review only the significant experiences in the field of health as they influenced the people of this community during the first half of the present century. Inasmuch as one's state of health is the most important single factor in human existence, an analysis of community health may answer the query whether the past fifty years have brought greater or less happiness to the people of this community.

Rochester at the Turn of the Century

Rochester began the 20th century as a thriving industrial city of 162,455 after a 20 percent growth during the nineties. Already the 3rd city in the State. it could boast of 118 churches, 6 hospitals, 4 theaters, 52 schools, l high school and 4 orphan asylums. Industrially, it was first in the country in the manufacture of photographic and optical supplies; third in the manufacture of clothing and fourth in the manufacture of boots and shoes. Seven operating railroads and 11 passenger stations gave witness of prosperity. In 1900, the "Horseless Age" was being forecast and the first automobile agency selling the "Locomobile" was opened. Nearly 40,000 bicycles were licensed and "scorching" was the major traffic violation.

Unlike some of the larger cities in the east, Rochester was not famed for its medical institutions. A number of prominent physicians had been practising in Rochester for a number of years. The quality of medical care given by the physicians and the hospitals of this city undoubtedly measured up to the average available in our American cities. In 1900, the physicians of Rochester organized the Academy of Medicine which became the edu-

cational center of the practising physicians. Only in the larger American cities were the physicians sufficiently interested in improving their professional usefulness to the community through the organization of an Academy.

The responsibility of protecting the community against epidemic diseases was early recognized by the city fathers. A Board of Health had been functioning for many years in giving the people of Rochester some of the basic services such as, an excellent water supply, sewage disposal and facilities for recording vital statistics.

Among the eminent physicians was one whose interest was centered in community health. Fortunately for the citizens of Rochester, this young doctor, George W. Goler, was a man of vision and courage who looked upon disease and premature death as something that could be controlled. Even before the new century arrived. efforts were initiated by him to attack some of the unsolved health menaces of the day. During the economic depression of the late nineties, he established summer milk stations for children and mothers of the city poor. These stations emphasized the need for

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Corner Main Street And St. Paul Street, 1900.



Corner Main Street And St. Paul Street, 1950.

cleaner and safer milk and paved the way for the phenomenal sanitary improvements made in the milk industry and the consequent saving of many lives.

Fundamental discoveries in the field of medical science, notably those of Louis Pasteur in France, paved the way for a golden era in disease control the like of which has never been known before. As one medical discovery after another was announced at the turn of the century, disease control was gradually lifted from the field of mystery and uncertainty to a

more definite science with reasonable prospects of accomplishing some cures and even more prevention.

Rochester Physicians were not remiss in availing themselves of these new medical facts. Hospitals expanded. Medical and nursing personnel prepared themselves to offer the needy whatever medical science dictated. To be sure, there was no great medical center here as was the case in our namesake city, Rochester, Minnesota, but health, individual and community, was not neglected in this community.

Health And Longevity At The Mid-Century

The efforts of the past half century against preventable sickness and premature death has been extraordinarily successful in our country. Rochester has profited by this favorable trend. The marked gains reflect the advances in medical science and practice, the increase in the facilities for the care of the sick, the improvement in sanitation, the measures taken against occupational hazards and, quite generally, the rise in the standard of living.

The improvement in mortality that has been going on for more than four decades accounts for the steady gain in expectation of life. Every age period has benefited from the decline in mortality, but the decreases have been largest in childhood and early adult life. In the past four decades, the reduction in the age groups under 35 years amounted to more than 70 percent for males and to well over 80 percent for females, truly an astonishing record. But even at ages 65-74 the improvement came to 37 percent and 47 percent for males and females, respectively.

Prevention and better control of a number of diseases have been largely responsible for the favorable mortality record of recent years. The drop in mor-

tality from the principal communicable diseases of childhood has been nothing short of spectacular. The relatively low incidence of the respiratory diseases, with the added effect of the new methods of treatment, has reduced sharply the death rate from pneumonia. Even more notable has been the record for tuberculosis. In the past 40 years, this disease has dropped from first to seventh in rank as a cause of death. The hazards incidental to child bearing, which had long resisted efforts to control them, have been greatly reduced in recent years. Other important diseases in there has been a substantial decline in death rate are syphilis, appendicitis, enteritis and typhoid fever.

In contrast with the marked downward trend in the mortality from many of the infectious diseases, the recorded death rates from the diseases of middle and later life have shown little change, or have increased in the past 50 years. Much, if not all, of these increases, however, arise from the aging of the population.

Remarkable progress has been made in improving the health and longevity of our people in the past half century, and the outlook is bright for future gains. More effective use of the measures which have already proved so successful will yield a still greater harvest of life. More available medical and hospital facilities and services will likewise make a contribution toward this end. as will the intensive program of health education. Major efforts, from now on, need to be concentrated on solving the problem of the chronic diseases. which have become the chief cause of premature deaths in our country.

Expectation of Life at Birth

Calendar	Expectation
Year	in Years
1890	34.00
1900	40.00
1905	43.00
1910	46.00
1915	48.00
1920	51.00
1925	55.00
1930	57.00
1935	60.00
1940	63.00
1945	65.00
1950	67.00

Figures based upon industrial employees of Metropolitan Life Insurance Company.



Rochester's Health Organization

Prior to the new century, the health responsibility of this city was vested in a Board of Health with no full time medical direction. In 1900, the White Charter required a complete revision of city government. The old Board of Health was abolished and the health activities were placed in the Health Bureau, a division of the Department of Public Safety.

The first Health Officer was appointed in 1876 on a part time capacity. Under the charter, the City Council was authorized to appoint from 4 to 6 physicians "to attend gratuitously, the poor of the city." The latter

is the origin of the employment and deployment of today's Public Health Physicians. However, the appointment of Dr. George Goler as Health Officer in 1892 marked the actual beginning of planned health protection. He directed the health activities of the city for the next 40 years.

Health offices were in the City Hall until 1906, when an abandoned school building, No. 11 on Chestnut Street, was taken over. It is significant to note that when all the belongings of the Health Bureau were out of the City Hall, the Mayor ordered a "thorough flushing of the floors



Dr. George W. Goler.

to get rid of the microbes. It seems that some citizens with smallpox were in the habit of appealing for assistance directly and the officials at City Hall felt the need of removing this menace elsewhere. A serious fire, in 1944, forced another move to the present location in an unused school, No. 12, at 44 Marshall Street.

Since organization, the Rochester Health Bureau has had only 3 Health Officers: Dr. George W. Goler, 1900 to 1952; Dr. Arthur M. Johnson, 1932 to 1945 and the present incumbent, Dr. Albert D. Kaiser. As a resume of its duties in the early days, we find listed, apparently in order of their importance, the following: control of nuisances of all kinds; control of the installation and repair of plumbing and

drainage in dwellings (water flushed conveniences were then becoming popular); the receipt and record of all births, deaths and marriages; supervision of all food supplies including milk and issuance of licenses to milk dealers, plumbers, scavengers and garbage collectors.

The Bureau's report for 1900 proudly relates such accomplishments as: "the cleaning and disinfectant corps visited 676 houses where diphtheria or scarlet fever had been reported; cleaned 1,537 rooms: cleaned and disinfected 37.513 pieces of furniture, bedding, clothing, etc., and burned 3.947 pounds of sulphur." Gleaned from vital statistics. one notes that in the same year there were 415 cases of diphtheria, with 46 deaths: 434 cases of scarlet fever, with 11 deaths: 133 cases of typhoid fever, with 30 deaths. There were 333 deaths in children under one year and 165 deaths between 1 and 5 years. When contrasted with comparable statistics of the last few years, one notes a remarkable decline in the deaths of infants and children.

Rochester pioneered in the establishment of Child Welfare Clinics in 1897. They were introduced as milk stations. During the hot summer months, bottled milk for infants, obtained from a city maintained and supervised farm, was sold at

cost at these stations. With the milk went the advice of a trained nurse in all stations and a volunteer physician in most of them. Anyone unable to employ a private physician was at liberty to bring their babies for medical supervision to the clinics.

As early as 1903, the Health Officer urged a system of school medical examinations and at least visiting nurse was permanently attached to the Health Bureau. Later, the Rochester Public Health Association, a voluntary health organization, with the assistance of Captain Henry Lomb, offered the services of 5 part time physicians to carry on "experiments" in medical school inspection. The following year, these positions were added to the budget, bringing the medical staff to 12 part time physicians. The first nurse was added in the same manner. in 1906.

The duties of the Public Health Physicians are found in the Health Bureau Report of 1911. As to their responsibilities in caring for the poor people unable to call a private physician, they made sick calls at homes and attended patients in their offices. Confinement cases were managed by the city physicians where private physicians could not be employed. Few confinement cases were handled in hos-

pitals at that time. Mental cases requiring commitment to the State Hospital were also examined.

In addition to the care of the indigent sick, the city physician was expected to make a call at each school once a week to examine about 50 school children. If time permitted, the physician was expected to lecture on health to the upper grades, which was about the only health instruction school children received prior to 1912. From these beginnings, the work of the Health Bureau gradually expanded.

The present organization of the Health Bureau embraces a number of new activities. With the reorganization of the welfare department, the care of the indigent sick was transferred to the medical division of that department.

The important activities are centered in the Departments of Vital Statistics, School Health Services, Environmental Sanitation, Laboratory Services, Public Health Nursing, Communicable Disease Control, Public Health Education, Rehabilitation Services and Advisory Services in the field of Mental Hygiene.

In addition to these direct services, the overall supervision of The Municipal Hospital rests in the Health Bureau.

Communicable Diseases Less Dangerous

At the beginning of the present century, practising physicians spent a large part of their time attending children and adults with communicable diseases. No specific preventive measures were known at that time, except in the case of smallpox. Likewise, the methods for treating these common infections were largely empirical. Thus, it is not surprising that such infections were prevalent and trequently resulted in death.

Fortunately, for mankind, a new era of medical discoveries, beginning with those of Louis Pasteur, in France, in the last quarter of the nineteenth century, paved the way for great advances in the treatment of infectious disease during the present century. When the real cause of such diseases as tuberculosis, diphtheria, syphilis and typhoid fever was revealed, the path was cleared for further progress in treatment and prevention. Un-

fortunately, the practical application of these basic discoveries was not promptly achieved due, perhaps, to the many disappointments physicians had experienced over the years in utilizing unsuccessful "cures." This situation, 50 years ago, was quite different from the eagerness with which the laity and physicians accept announced new discoveries today.

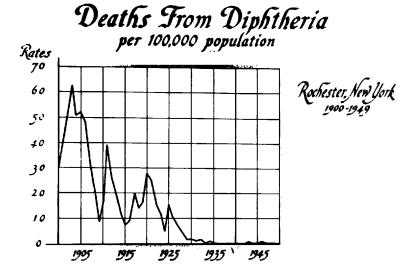
There can be no doubt that the advance made in the control of the communicable diseases, during the past 50 years, has been the principal cause of the lowered death rate in children and in young adults. This saving of life in the early years has materially advanced the average duration of life for our community.

To appreciate the gains that have been made, it is well to examine the course some of the well known diseases have taken in the last few decades.

Diphtheria Becoming A Rare Disease

Few families escaped the ravages of this disease a half century ago. Children were the chief sufferers, but adults did not escape. The early symptoms, usually occurring in the throat or larynx, do

not immediately become alarming. They are frequently overlooked until the disease has progressed. This factor accounted for the high fatality rate in young children and emphasized the



need of a method of prevention.

The discovery of the diphtheria bacillus, as the cause of this disease, was of great importance. It was not until diphtheria antitoxin was proved to be successful in the treatment of this disease that a reduction in the death rate occurred. In contrast to our present incidence of 1 to 5 cases a year, it was the usual experience of this city to have from 500 to 1000 cases every year, with 50 to 100 deaths a year with a population less than half of the present one. The discovery of diphtheria antitoxin changed this grim picture. However, antitoxin, a new method

for the treatment of disease, was not always obtainable when needed. To make antitoxin available to Rochester physicians, this important substance was prepared by the Rochester Health Bureau for a period of 4 years until the New York State Department of Health took over the manufacture and general distribution of diphtheria antitoxin. General use of this method of treatment brought about a gradual decline of diphtheria.

However, it was not until the introduction of toxin-antitoxin, the active preventive treatment in 1916, that this disease was

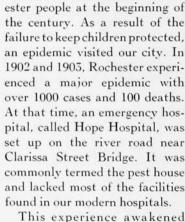
brought under control. Epidemics still occurred due to failure of wide acceptance of this important method of immunization. As late as 1926, Rochester recorded 510 cases and 52 deaths. The vital need of protecting infants and young children finally was impressed upon the parents of our community, resulting in an excellent response which gave protection to a larger percentage

of young children each year. Now that more refined vaccines are available to every child, a high percentage of infants and children have been protected. A recent survey shows that about 95 percent of our children are protected against diphtheria when they enter school. If this preventive program can be maintained, diphtheria will be, as it has in the last decade, a rare disease.

Smallpox Should Be A Banished Disease

Though a successful method of vaccination against this disease has been known for over a hundred years, it has not been eradicated in all parts of the world. During the nineteenth century, repeated outbreaks of smallpox occurred in Rochester.

Following an epidemic, many people would be vaccinated. This protected the community for a period of years. Failure to maintain the practice of vaccinating all children, as they entered school, resulted in many



susceptible individuals. Such a

period was experienced by Roch-

This experience awakened Rochester to the hazards of smallpox. Since that time, a high percentage of its inhabitants have been protected against this disease. In 1900, the Public Health Law of the state was amended. It gave the Health Officer power to enforce the vaccina-



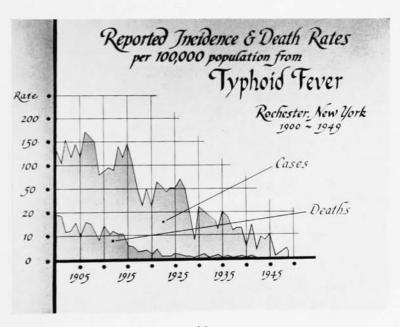
Old Hope Hospital.

tion of school children in cities of over 50,000. Today, the average protection rate in our schools exceeds 98 percent. The protection of the preschool population is estimated at over 75 percent. No cases of smallpox have occurred in Rochester since 1950.

Typhoid Fever On The Decline

Only a few decades back, about 550 cases of typhoid fever with 50 to 40 deaths was an average annual expectancy for Rochester. The city has had no deaths from typhoid fever since 1946. Only a few sporadic cases were reported, mostly acquired while on vacation or from picnics nearby, where unsupervised water was used. Sixty-eight cities in the

United States reported no deaths from typhoid fever for 1947. In 78 large cities, the mortality dropped from 20.5 deaths per 100,000 population in 1910 (4,675 cases), to 0.15 deaths (55 cases) in 1946. This dramatic decline is attributable largely to preventive measures as no effective specific therapy was known until recently. The purification and



chlorination of the municipal water supply, the development of sewage disposal plants, the pasteurization of milk and the inspection of plumbing are all contributory factors to this favorable situation.

The detection and supervision of typhoid carriers has also been important in the decline of typhoid fever. Many patients secrete the bacilli of typhoid fever for varying periods after their illness. About 5 percent become chronic or life long carriers. The city still has 8 known typhoid carriers under regular supervision. They are restrained from certain occupations, such foodhandling; the household contacts are kept immunized. A few are even paid a small stipend to compensate for the forced change of employment, as in the case of a cook.

Strict supervision of the important sanitary measures known to safeguard a community against typhoid fever, periodic check on the registered typhoid fever carriers and immunization with typhoid vaccine assure reasonable protection against this serious disease.

While the chart shows an aver-

age of over 100 cases reported prior to 1915, the reader is reminded that only the most evident cases were then diagnosed. Today, very few are missed due to the ease of laboratory confirmation.

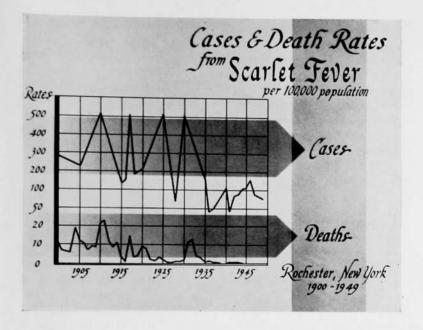
The Salmonella (Paratyphoid) infections are similar to typhoid fever. They are much milder clinically; therefore, they are not as often diagnosed. It is only in recent years that these intestinal infections have been separated from typhoid fever, chiefly by laboratory methods and a registry of organisms established in the New York State Department of Health. Epidemiologically, this is important since these are the bacteria of food infections and transmission results from foods improperly prepared and handled.

Small animals and mice also have a part in the spread of paratyphoid. It is one of the few diseases that the dog is known to transmit to humans. Otherwise, this large group of infections are subject to the same control measures as for typhoid fever. Except for small sporadic outbreaks, Rochester has had very few cases of paratyphoid fever.

Scarlet Fever And Streptococcal Infections Less Severe

Scarlet fever was one of the most dreaded infections, particularly

in childhood, in the early decades of the century. The severity



of the symptoms, the length of the illness and the high incidence of serious complications justified the fear people manifested. Even apparent recovery gave no assurance that late complications, such as heart and kidney trouble, would not develop. No effective method of treatment was available until about 15 years ago.

The cause of scarlet fever remained a mystery until the relationship of this disease to other streptococcal infections was clarified. It had long been recognized that in epidemics of scarlet fever some individuals had severe throat infections, termed septic sore throat, without a rash;

others had severe rashes with milder throat infections. In both instances, secondary infections, involving the ears and glands, frequently occurred. Studies ultimately revealed the close relationship of these different clinical manifestations. A particular type of streptococcus was responsible for both types of infections; the individual's response to the streptococcus decided whether or not a rash would result. Since this association to the streptococcus has been established. scarlet fever and other streptococcal infections are considered one and the same disease.

For a period, attempts were

made to immunize individuals against scarlet fever. Since these methods did not prove to be of great value, they were abandoned a number of years ago. Fortunately, the introduction of the sulfa drugs, followed by the more effective antibiotics, contributed much to the successful

treatment of scarlet fever and related streptococcal infections.

In recent years, this much dreaded disease has assumed a far less imposing role. Cases of scarlet fever and streptococcal infections still occur. When treated promptly, these cases recover without former complications.

Meningitis No Longer A Fatal Disease

Fortunately, meningitis never was a prevalent disease. However its seriousness was well recognized. Actually, in the early part of the century, few cases of meningitis recovered and if they did, some crippling complication usually resulted. Meningitis, whether caused by the meningococcus, streptococcus, influenza bacillus or tubercle bacillus. was always dreaded. The first successful attempt in treating this disease followed the use of meningococcus antitoxin which lowered the mortality for one type of meningitis. This method of treatment was available during World War I when meningitis was epidemic in many camps. With this method of treatment. about 30 percent of the patients recovered. When the sulphonomide and antibiotic drugs became available, real progress was made in the treatment of most types of meningitis. In contrast to the high mortality that existed during World War I is the excellent record in World War II when more than 95 percent of the patients recovered from the same disease.

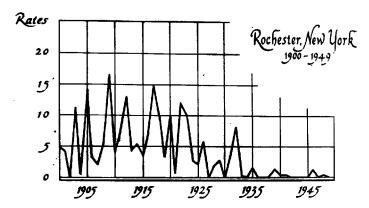
In civil life, meningitis is less likely to occur in epidemics, but cases develop at all times of the year, especially in children. Phenomenal improvement is now usually noted in a few days after specific drug treatment is employed. At mid-century, meningitis has been nearly conquered.

Measles Still Appears But Partially Controlled

Measles is as prevalent today as a half century ago. This is due to the fact that practically no

children are naturally immune to this disease. With no decline in the incidence of the disease,

Death's From Measlesper 100,000 population



there has been a marked decrease in the number of deaths charged to measles.

Many and serious complications are associated with measles. Though these complications still occur, they are less frequent and, in many instances, can be prevented or promptly treated with the new drugs now available. It is also felt that children tolerate measles better because of the improved nutritional state noted in most of our children.

The use of gamma globulin, a concentrated fraction of human blood, has been widely used in recent years to modify an attack of measles. If a small amount of

this material is injected into the tissues of a child exposed to measles, the attack, in most instances, is modified and less severe. When larger amounts are given early in the exposure, it may even prevent an attack from that exposure. The employment of this method of modification of measles has undoubtedly made measles less severe in the injected children. The number of deaths have been greatly reduced in recent years, as noted in the chart. There are, however, long lasting complications involving the bronchial tubes which one hopes to avoid. The occasional fatalities are usually the result of encephalitis following measles.

German measles was considered an extremely mild disease. Recently, however, several investigators have pointed out that certain congenital deformities of the new born seemed to bear some relationship to the mother's attack of German measles during the pregnancy. Thus, the disease has assumed greater importance. The evidence seems to be accumulating that if a pregnant woman develops German measles during the first

three months after pregnancy, the foetus may suffer from the virus supposed to be responsible for the disease. Though the mother may be only slightly ill, considerable damage can ensue to the developing child.

Efforts are now being made to safeguard a pregnant woman against exposure to German measles if she has not had the disease before her pregnancy. Further study will be necessary to completely understand this relationship to congenital abnormalities.

Whooping Cough (Pertussis) Less Serious

Whooping cough has always been dreaded by parents of young children. Few children escaped an attack of this disease. If it came in the first two years of life. it carried a high fatality rate. No method of prevention was known other than isolation until a protective vaccine was developed some years ago. The early vaccines did not prove very effective. The more recent concentrated vaccines have proved highly beneficial in preventing the disease and in some instances. where prevention failed, modification was noted. During the past decades, many methods of treatment have been employed. No specific cure has vet been developed. However, aureomycin.

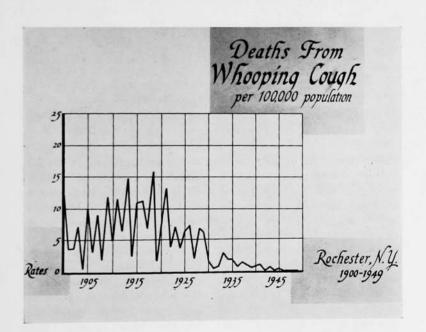
a recent antibiotic, has been of real value in the treatment.

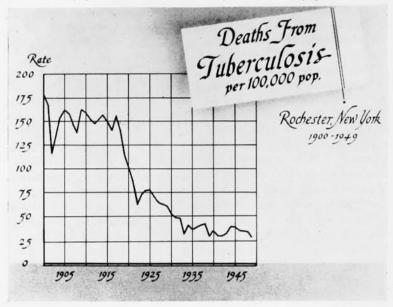
The disease is still particularly hazardous to infants. In most communities, the death rate for the first year of life remains higher than that for scarlet fever, diphtheria and measles combined. Reference to the table shows that only 50 years ago, the death rate from whooping cough was as high as 9 per 100,000 inhabitants. Today, in Rochester, we seldom have a death from this cause. Much of the credit for this great improvement goes to the protective immunization along with better infant and child care. Credit must also be given to earlier diagnosis by physicians and the isolation of these children. Rochester was one of the first health units to make general use of the throat swab for definite identification of the whooping cough bacillus in the early stages of the disease, when the diagnosis is mostly clinical conjecture. Early diagnosis permits isolation of the patient and the reduction of secondary cases. It is to be expected that further progress will be made in the control of pertussis when vaccination is universally applied.

Whooping Cough Deaths Annual Average by Decade 1900-1949

	Annual Average No. of Deaths
Years	No. of Deaths
1900-09	11.8
1910-19	22.5
1920-29	19.8
1930-39	5.1
1940-49	0.8

Since the majority of whooping cough deaths involve infants, the earlier they are immunized the better. The protection should begin about the third month.





Tuberculosis Important Factors In The Decline

At the beginning of the present century, consumption, as it was generally called, was looked upon as man's greatest enemy. It merited the title of Great White Plague. Infants, children and young adults were usually the victims. When a case developed in a family, it invariably spread to other members of the family and not infrequently was responsible for the death of several people in a household. Fortunately, since 1900, tuberculosis has been reduced from its position

as the leading cause of death to eighth in importance. Today's death rate is only 20 percent of that prevalent at the turn of the century. The prospects of turther control are good.

The impetus of the modern campaign against tuberculosis came from Loch's discovery of the tubercle bacillus. From his experimental work, the inference was clear that this lung disease could be prevented if infection with the tubercle bacillus could be avoided. The growth of the

present special hospital and sanatorium development, occurring almost entirely within the last 50 years, has been based upon this premise—the isolation and treatment of the open or sputum positive case. Due to the irradication of tuberculosis in dairy herds and following the pasteurization of milk, bovine type tuberculosis of man, formerly so prevalent, has reached the vanishing point in this area.

Voluntary Health Agencies Take Active Steps To Control Tuberculosis

No reference to this disease could be complete without a consideration of the voluntary agencies who initiated, demonstrated and sponsored many of the control measures of today. Rochester's first recorded effort began with the formation of the Rochester Public Health Association. in 1895, largely furthered and financed by Captain Henry Lomb. This society was chiefly concerned with public education and stimulated the public to do something about this disease. As a result of the society's effort, a 100 bed hospital, known as the Rochester Municipal Hospital, was constructed by the city on Waring Road. In view of the recent smallpox epidemic, it was utilized mainly for smallpox and diphtheria patients. It was Dr. Goler's plan to utilize this hospital for tuberculosis, as well as for other communicable diseases. It was not until 1904, however, that the Mayor permitted this hospital to be used by the association under the direction of the Health Officer as a sanatorium for tuberculosis.

In 1909, a state law was passed making it permissive for counties to erect sanatoria for the care of tuberculosis. In the same year, Monroe County set aside 25 acres on the county penitentiary farm, partly in Brighton township and in Rochester, for this purpose. Residents of the area objected to a tuberculosis sani-



Doctor Explains Results Of Chest X-ray To Patient.

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torium. The need of beds for other communicable diseases at the Waring Road Hospital imposed a hazard on the more chronic, long-term tuberculosis patients, through overcrowding and cross infection.

In October, 1910, Iola opened its doors to the public in an old barn, a portable house and a number of tents. Under Dr. Montgomery Leary's direction, 10 patients were transferred from Waring Road Hospital on a Saturday so that injunction proceedings could not be involved against the new institution over the weekend. The first Iola buildings were erected in 1911 and the present infirmary in 1915. The Rochester Public Health Association became inactive in 1915, but the Health Officer and several local social agencies were instrumental in persuading the

New York State Charities Aid Society to sponsor, in November, 1917, the Rochester Committee for the Prevention of Tuberculosis, the forerunner of the present active Health Association of Rochester and Monroe County. Their first complete report for 1918 showed a staff of 10 visiting nurses. However, their efforts of that year were largely devoted to the emergency of the influenza epidemic.

A dispensary and intake office for Iola was established at the association headquarters in 1918, on Chestnut Street. In 1921, an x-ray unit was purchased. Thus, patients no longer had to go to Iola for chest x-rays. This convenience was moved to Iola in 1925, where it has since remained as an outpatient treatment and chest diagnostic clinic.

Health Bureau Establishes A Tuberculosis Control Division

In June, 1918, the Health Bureau, conforming to State Law, estab-



Iola Sanitorium Mobile Chest X-ray Unit.

lished a Tuberculosis Control Division. Concerned with the needs of the tuberculosis soldier of World War I, a special ward was established at the Rochester General Hospital, under the direction of Dr. John Lloyd, the medical director at Iola. In the fall of 1919, a Public Health Nursing Association was formed to promote all forms of home



Public Health Nurse Explains Tuberculosis To A Patient.

nursing on a district basis. The Rochester Tuberculosis Association, as it was then called, turned over all its nurses in 1920 to the new association for supervision. These nurses were authorized agents of the Health Officer and were privileged, by law, to visit all cases of tuberculosis. This stimulated reporting by physicians and aided and abetted their efforts in home treatment.

About 1935, communicable disease nursing was gradually assumed by the Health Bureau from the Visiting Nurse Association. However, a generalized nursing service (except bedside care) was not a formal part of the Health Bureau Nursing Program until 1945.

Gradually, the emphasis on isolation and treatment was

augmented by a case finding program, hoping to find and hospitalize a higher percentage of early lesions. The present roster. with its check system on the examination of the household and family contacts of known cases and deaths, was begun at the Health Bureau in 1938 It was based on records formerly kept by the Tuberculosis Association. This procedure produces the highest yield of new cases and furnishes the Health Officer with information leading to the prevention of secondary cases. In 1944, Iola began a community survey service with the assistance of the Tuberculosis and Health Association by means of a chestmobile. This mobile x-ray unit visited industries, schools and was made available to the general public for free chest x-ray examinations. Thousands of people were reached by this method. In 1946, the State Department of Health began to encourage chest x-ray examination of hospital patients over 15 years of age by loaning x-ray equipment and sustaining cash payment to hospitals with over 7,000 annual admissions. This has paid dividends in the earlier diagnosis of tuberculosis and in finding other chest conditions, as well as tuberculosis. Six Rochester hospitals are now participants in this program.

Rochester, beginning the century with a death rate of approximately 175 per 100,000 population, can, at the half way mark, boast a rate of only 34 per 100,000 population. Streptomycin, introduced in 1947, and advanced surgical techniques are restoring many victims to gainful life.

Tuberculosis in infancy and childhood has showed a satisfactory decline. Even in early adult life, where the largest number of deaths formerly occurred, the disease has been partially controlled.

Unfortunately, many cases are now being found in middle life and among the older age groups. Thus, it is apparent that more effort should be made to discover the disease in its early stages in this particular group. Satisfactory progress has certainly been made in the control of tuberculosis. In order to eradicate it, however, much work remains to be done.

The Venereal Diseases Marked Progress In Control

The problem presented by syphilis, gonorrhea and related diseases has always been associated with the movement and instability of population, whether caused by economic depression or war. Wherever the controlling influence of family life in a population is great, there is less venereal disease. Large scale promiscuity is a part of unsettled conditions and insecurity. Incorrigibles are always present and against these no amount of suppression seems practical. The suppression of organized vice, however, has an enormous deterring power on a large precentage who otherwise would expose themselves to infection.

The entire history of venereal disease control has occurred dur-

ing the last 50 years. Schaudinn and Hoffman discovered the casue of syphilis in 1905. In 1909, a serological diagnostic test first became available. In 1907. Ehrlich introduced arsphenamine for treatment. This reached a stage of refinement in 1933, when Chagrin demonstrated a rapid treatment technique. This was supplanted in 1943, by Mahonev's application of penicillin to the problem. Where treatment schedules of early syphilis formerly covered years, they are now compressed into a few days with over 90 percent cures in the first course, which can be repeated if necessary.

In the treatment of gonorrhea, the first specific treatment, sulphonamides, appeared in 1941. Penicillin has now replaced sulphonamides and the majority of uncomplicated infections now respond to a single intramuscular injection.

These treatment advances have greatly reduced the number of secondary cases. The significant educational effort by public health organizations has also contributed. In 1938, New York State began requiring blood tests on all pregnant women, with the object of controlling congenital syphilis. In 1939, further legislation required premarital blood examination. Today, this serological examination is a part of every hospital record. Of great significance is the confidential investigation of each case of venereal disease. This is an effort to find both the source of infection and secondary cases. An important public health measure has been the inauguration of free treatment clinics and free drugs distributed to private physicians for prompt treatment; thus, an early control of communicability is possible.

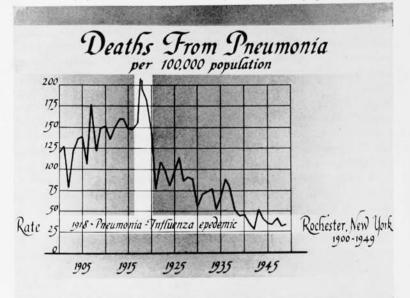
Rochester was a pioneer city in the control of these diseases. In 1914, a clinic was opened by the Health Bureau for the diagnosis and treatment of venereal and other infectious diseases. Dr. Joseph Roby for many years effectively directed the activities of this clinic. The systematic follow-up of early and presumably infectious cases was also begun about this time. In 1926. the public health laboratory took over, from the state and several local hospitals, the task of supplying serological diagnostic examinations to physicians. As late as 1934, the annual newly discovered cases of syphilis in Rochester exceeded 1,000. For 1949, only 259 cases were reported, an accurate figure, since all serological examination is under the supervision of the Health Officer. The actual experience of gonorrhea, today an easily concealed and self treated disease, is unknown. The reported incidence of 283, for 1949, is probably much greater.

The satisfactory control of the venereal diseases can only be maintained if all of the measures developed during the last four decades are meticulously enforced. Public support and education are absolutely essential to maintain the gains and to extend them.

Pneumonia

During the past 50 years, lobar pneumonia has decreased stead-

ily in the United States as a cause of death. Rochester has



shared this favorable trend. At the beginning of this century, more people died of pneumonia at all ages than from any other acute disease. At mid-century, pneumonia no longer holds first place as a cause of death. The frequency of its occurrence has lessened considerably.

Though it occurs at all times of the year, it is more likely to be prevalent in the winter and spring months, quite often following outbreaks of colds, measles and influenza.

Physicians became skillful in the diagnosis of pneumonia even before such diagnostic aids as the x-ray became available. How-

ever skillful in the detection of this disease, the attending physician, during the first quarter of the century, possessed relatively few specific measures in the treatment of his patients. Recognizing the congestion that existed in the lungs, the physician insisted that his patient receive an abundance of fresh air. Practically all patients with pneumonia, young and old, were placed in front of a wide open window to get plenty of fresh air. Patiently, doctor, nurse and family awaited the hour of crisis. Even mild cases of pneumonia were feared and rightly so, with a general mortality of about 25 percent. A series of important medical discoveries, beginning with the practical use of the x-ray for chest examination, brightened the picture for those afflicted with the disease.

Progress in bacteriological studies of the pneumococcus germ, the cause of 95 percent of the cases of lobar pneumonia, paved the way to develop a new type of antitoxin for the treatment of pneumonia. Wide use of pneumococcus serum of certain types contributed measurably to lowering the mortality of this disease in the second quarter century. The availability of a useful antitoxin for many types of pneumonia, assisted by the use of oxygen when necessary, brought about a gradual decline in the high mortality rate that was associated with this dreaded disease

Greater discoveries were to follow during the depression years with the introduction of the sulfa drugs. A more rapid and more successful cure was now more available when the use of these drugs was thoroughly understood. The death rate declined still further. Progress once begun seems to continue and so in this disease, still better drugs became known to the medical profession. In the fourth decade of this century, the antibiotics were discovered. Today, penicillin and, for certain types of pneumonia,



Old Pneumonia Treatment—Patient In Bed At Open Window.

other antibiotics, such as streptomycin and aureomycin, are routinely used, with almost phenomenal results. A disease that defied the best medical treatment less than 30 years ago can now be treated successfully in at least 90 percent of the cases.

The most devastating disease of the past 50 years was the great influenza pandemic of 1918-1920. In the terrible pandemic that occurred at the end of World War I, there were at least



Modern Pneumonia Treatment—Use Of Oxygen, Serum, Sulfa Drugs, Antibiotics.

10,000,000 deaths from the disease throughout the world.

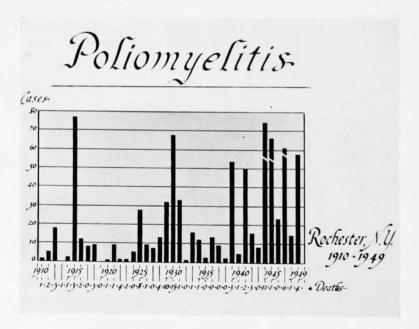
In the United States alone, within a few months, beginning in October, 1918, over 20,000,000 people were stricken with the disease, with 450,000 deaths. In 1918, Rochester recorded 1,542 deaths from pneumonia and influenza. Fortunately, no severe epidemic of influenza has visited

this community since that time,

The significant progress made in the management of pneumonia during the last 10 years and suggestive benefits from the newest antibiotic drugs in the treatment of virus pneumonia infections augurs well for the management of lung infections during the next decade.

Poliomyelitis Not Yet Under Control

Although the reported incidence of this disease has shown a consistent increase over the years, there are indications that this is due more to the increasing population than to any increase in the virulence of the infection. Since 1940, in the United States, there



has been an increase of approximately 7.5 millions in the age group under 15 years, where this disease is largely concentrated. Housing shortages and resulting overcrowding may have favored the spread, since the majority of cases acquire their infection by close association with infected persons. With less isolation of our farming population, it is not surprising that the rural areas report more cases annually. Then, too, reporting today is far more accurate and includes an increasing percentage of abortive cases. The latter are patients without any evident signs of muscular involvement. Physicians, too. are increasingly alert to diagnose this disease.

Effective preventive measures have not been developed, although the cause of polio is known and the means of transfer has been demonstrated. The problem is complicated since during an epidemic many normal individuals probably carry the virus. Thanks to medical progress, however, the trend in the death rate and residual paralyses has been lessening in the age groups under 10 years. Over 10 years of age, the trend is increasing. This is probably reflected in the degree of control over the patient. Certainly, those who remain active after onset of the disease have a far greater degree of muscular involvement. Bed



Hydrotherapy Builds Muscle Strength Of Poliomyelitis Patient.

rest is indicated for all individuals with an unexplained temperature where the disease is prevalent. Several methods of treatment have been employed since the first big epidemic in Rochester in 1915. The use of hot packs and early exercise is the usual procedure. It appears to be more effective than the splinting method formerly used. If we accept the usual annual incidence of cases in the United States as 10 per 100,000 people, Rochester's comparative experience has been favorable. Prior to 1910, there are no records of epidemics, despite extensive reports on other communicable diseases. Since 1910, only 7 years have shown an incidence above 10 per 100,000 people. However, 5 of these fall within the past decade. Deaths have, fortunately, steadily decreased. This may be due to better treatment facilities. There have only been 23 deaths in the past 10 years in

Rochester and the number of patients with residual paralyses are far fewer than in the earlier epidemics.

Throughout the country, and locally, the National Foundation for Infantile Paralysis has contributed much to the care of the individuals with poliomyelitis. Of the money contributed to the March of Dimes, 50 percent goes

to the national organization to further research and the rest furnishes care and treatment to local patients.

Progress is being made in the research efforts. No successful cure has yet been discovered. It is hoped, that during the present decade, this disease will be added to the many other infectious diseases now well under control.

Rheumatic Fever Still An Unsolved Problem

Early in the century, rheumatic fever was usually termed inflammatory rheumatism. It probably occurred more frequently then, but, not being a reportable disease, records are not available except for fatal cases.

Rheumatic fever manifests itself in many ways and for that reason it is sometimes overlooked in its early stages. If it were not for the involvement of the heart. which occurs in more than half of the people who develop rheumatic fever, the disease would not be looked upon with much concern. The onset of this disease is usually in childhood, but can occur at any age. The likelihood of recurrent attacks emphasizes the need of such preventive measures which are likely to assist in safeguarding the rheumatic individual.

There has been a decline in the number of deaths due to rheumatic fever during the last 20 years. The decline has not been as great as for other diseases which attack children. Today, this disease stands second as a cause of death between 5 and 14 years, being outranked only by accidents. Besides the disability to children, it is responsible for a major part of the



Experts And Facilities Are Necessary For Accurate Diagnosis Of Rheumatic Fever.

mortality from heart disease in the early and middle adult years. Considerable progress has already been made in reducing its ravages. Although the cause is yet to be established, the early detection and more adequate treatment of cases is steadily reducing the death rate in both adults and children.

In June, 1946, the Health Bureau, in cooperation with the Cardiac Committee of the Medical Society of the County of Monroe, established a diagnostic clinic in the Municipal Hospital to which children and adolescents who manifest any symptoms suggestive of rheumatic fever are accepted for further study. Referral is made by the family physician or any clinic by appointment.

This service has grown considerably and received wide use. The school health service also makes use of this diagnostic clinic. The medical rehabilitation program provides acute or chronic hospital service when necessary. For convalescent and long range care, children are sent to the Convalescent Hospital at Charlotte which has served the rheumatic child since 1928.

Gradual control of streptococcal infections, which are assumed to play a part in the causation of rheumatic fever, undoubtedly contributes to the lessening of the serious types of this disease. Ultimately, it is hoped that one of the several new drugs being discovered will prove effective in the successful treatment of rheumatic fever.

Cerebral Palsy And Other Neuromuscular Diseases Receive More Attention

Cerebral palsy, with its manifold symptoms involving the nerves and muscles of the body, is a well known condition but, until recent years, has not received its full share of medical support. The handicaps resulting from the damage done to the brain not infrequently affect the speech and the special senses which gave the impression that many of the victims of cerebral

palsy were mentally defective. Also, the type of therapy required to improve the impediments was difficult to obtain, costly and slow in its accomplishments. These factors tended to overlook the importance of adequate therapy for those stricken with cerebral palsy and other neuromuscular disturbances. A few outstanding clinics in the country have demon-

strated the beneficial results of concentrated effort to help these children. Public opinion, likewise, has supported the request of parents of cerebral palsy children to give more attention to these unfortunate individuals. Rochester, through its health facilities, did respond to this need.

Special facilities now exist in this area for the study and treatment of these diseases. In 1947. the Edith Hartwell Clinic was established at LeRov under the supervision of members of the Medical School. This clinic represents a unique effort on the part of the University of Rochester, the State of New York and the National Foundation for Infantile Paralysis to work out, on a long term basis, the more rapid rehabilitation of patients with neuromuscular disorders. A diagnostic clinic located at the Strong Memorial Hospital since March. 1946, selects patients most likely to benefit by special study and treatment. For all others, the Cerebral Palsy Association on East Avenue opened, in 1946, " treatment center for children and the Rochester Rehabilitation Center on Alexander Street



Guard Rails Give Confidence To The Child Learning To Walk.

offered treatment by the day for older individuals. All three units maintain extensive physical and occupational therapy sections. The Rehabilitation Center has, in addition, a work adaptability and training division. It acquired its present name, in 1946, when physio-therapy was added.

Twenty-five years ago a dream, today, this positive approach to reablement of the handicapped is the "open sesame" to life for many.

Medical Rehabilitation Available To More

This service by the Health Bureau has for its objective the correction of all the physical defects

of children, up to 21 years of age. This is accomplished by keeping these children under medical supervision and encouraging parental cooperation with the physician or dentist. Where financial assistance is necessary, local and state funds are made available.

Patients come under supervision in one of several ways. Birth certificates are examined for any report of congenital defect, such as hare lip or cleft palate; school physical examinations often reveal unsuspected physical conditions; and reports are received from private physician, hospital or clinic. Supervision is maintained by the Public Health Nurse with a roster at the Health Bureau.

The list of chronic physical defects covered is large. A grouping may give the reader some idea of the scope of the program:

Orthodontia, the correction of malposition of the teeth and jaws; congenital defects, club feet, dislocated hips, etc.; neuromuscular and bone disorders, such as chronic osteomyelitis, poliomyelitis or the complications of encephalitis and meningitis; cardiac ailments—limited to rheumatic fever, congenitally defective hearts correctable by surgery; and, in general, any



Music Is Used In Physical Therapy Since Rhythm Helps The Child To Coordinate Muscular Movements.

chronic disabling illness or result of accident which can be benefited by medical care. For financial assistance, a prognosis indicating a minimum amount of rehabilitation or reablement of function is necessary.

Economically self sufficient and physically sound adults are an asset to the community. Corrective care of this type prevents long term custodial or partial assistance at a later age. The surgery, if indicated, and medical care must conform to the best standards prevalent in the community. Only physicians who can meet certain requirements set by the State Medical Society for their specialty are used.

This service, in Rochester, is a development of the last two years. Prior to that time, it was carried on by the New York State Department of Health on a more limited scale. All agencies rendering medical services are utilized under a physician's prescription.

For school children, special rehabilitation units are located in the schools. They serve children from all parts of the city and certain neighboring communities through the cooperation of the Division of Special Education and the Health Bureau.

SIGHT-SAVING UNIT: Two classes for children with seriously impaired vision are located at



Physical Therapist Adjusts Brace For Child.

No. 31 Elementary School. Special facilities, such as fluorescent lighting which provides 20 to 30 candle meters of light, desks with tops at movable angles, clear-type readers and clear-type maps are available.

HEARING CONSERVATION UNIT: There is 1 class for children with seriously impaired hearing at No. 51 Elementary School. The classroom is acoustically treated and a group audiophone is provided. Individual aids are used also by certain children. Individual instruction in lip reading, auricular training, speech and voice work is given.

Health Emphasis Unit: The Health Emphasis Unit is made up of two classes located at No. 1 Elementary School. This unit is designed for the child with lowered vitality who has had some acute or long standing ailment which requires a simplified program providing rest and freedom from the strain of a large classroom. Some of these children have a cardiac condition. Rest and dietary facilities are provided.

ORTHOPEDIC UNIT: At No. 5 Elementary School there are 6 classes for children who have orthopedic handicaps which require special medical follow-up and physical therapy. There is a well-equipped physical therapy department. Rest and lunchroom facilities are provided. Transportation to and from school is provided.

At Jefferson High School, the educational and rehabilitation program is carried on for older children. Elevators and a swimming pool class are part of the supportive therapy.

In addition to the agencies mentioned, the New York State Education Department, Division of Vocational Rehabilitation at 65 Broad Street, offers services to the handicapped, 14 years of age and older. The emphasis is placed upon employability. The following type of aid is offered:

Vocational counseling and guidance; therapeutic treatment or work therapy; corrective surgery and hospitalization; vocational training, school or job; assistance in securing suitable employment.

Fifty years ago this approach to public health was unheard of; 25 years back, the basis of legislation was being passed.

The Dental Health Movement Progresses

The development of the dental health program is largely a product of the present century and now occupies an important place in the community public health activities. In 1895, the Rochester General Hospital fostered a free dental clinic which was discontinued, after 2 years, for lack of support. In 1904, the Rochester Dental Society, with the assistance of the Rochester Public Health Association, established a free dental clinic. This was

shortly followed by the addition of 2 more clinics in schools No. 14 and No. 26. In 1912, the dental Society also staffed and contributed service to a dental dispensary at Iola Sanatorium. These clinics supplied acute care and extraction service rather than preventive therapy. In 1915, the dental facilities were greatly enlarged when George Eastman constructed the Rochester Dental Dispensary with unexcelled facilities for all dental needs.



Rochester Eastman Dental Dispensary In Action.

Under the able directorship of Dr. Harvey J. Burkhart, the Rochester Dental Dispensary became one of the outstanding dental institutions in the world. With the opening of the University of Rochester School of Medicine and Dentistry in 1925. the dental health movement was further expanded. Although the Dental School never became a reality, the Dental Research Fellowships, which have become an intrinsic part of this institution, have produced leaders in many fields of dentistry.

The dental dispensary furnishes, free or at cost, dental services to all children unable to obtain private services in the area up to 17 years. In addition, every school child in the City of Rochester receives each year

a dental prophylaxis by dental hygienists, provided by the Dispensary, who visit the schools twice a year. Dental defects are noted and the public health nurse notifies the parent as to the dental needs of the child. Where families are unable to consult a private dentist, clinic facilities are offered at the Dental Dispensary. A dental health educator assists the schools in developing a teaching program. Since founding, the dispensary has maintained a school for dental hygienists and an internship for young dentists interested in children's dentistry. At present, the organization consists of departments of restorative dentistry and orthodontia and maintains extensive research activities. The department for oral surgery functioned until 1940. Many children in need of tonsillectomy were treated there when other facilities were not available.

After Mr. Eastman's death. the name of the dispensary was changed to The Eastman Dental Dispensary. Since 1948, the directorship of the dispensary has been under the guidance of Dr. Basil G. Bibby. Though prophylactic dental services have been freely supplied to the children of Rochester, dental decay has not been eradicated or even controlled. In recent years, a new approach is being made to the prevention of dental caries. Research work, much of it done in the medical school here, points to the relationship of sodium fluoride to dental caries. Demonstrations of the local application of sodium fluoride to the teeth of children are being carried on in a number of schools. Based on the favorable experience of



Regular Examination Of Child's Mouth Is Necessary For A Healthy Mouth.

several cities in adding the proper amount of sodium fluoride to the communal drinking water for tooth protection, it is planned to carry on such a demonstration in Rochester. It is anticipated that about 40 percent of the children will appreciably benefit from this program.

Chronic Illness Becomes Number One Medical Problem

Because of the medical advances in prolonging life expectancy, 25 percent of the current population is beyond the age of 45. That same 25 percent requires 50 percent of the medical services. Taking the entire population of a community, it is roughly esti-

mated that 75 percent of all illness today is due to chronic disease.

Chronic illness is defined as an impairment in health that requires an extended period of medical supervision. This may involve ambulatory, home, hos-

pital or other institutional care or various combinations of these. Every chronic illness represents a protracted impairment of the health of the individual. The most important of the chronic diseases are: heart diseases, arteriosclerosis. hypertension, nervous and mental diseases. the several forms of arthritis. diseases of the kidneys, tuberculosis, cancer, diabetes and asthma. It is common for several of these diseases to co-exist in the same patient. While this group of diseases may be encountered at almost any age, their prevalence increases in the later periods of life.

Chronic illness is not a product of the last 50 years. It has always been present and probably in the same form as it is known today. Advances in medical science are not always a complete blessing. Newer knowledge of therapy for certain conditions that formerly were fatal will sometimes completely restore the sick individual to health. In other instances, the life will be saved but an impairment persists that results in a chronic illness. A good example of this is noted in the individuals who contract meningitis. A half century ago, nearly all individuals afflicted with this serious disease died. Then came some hope for recovery when antitoxin was used, followed by the discovery of effective drugs, such as the sulfa drugs and the antibiotics. The vast majority of meningitis victims now completely recover. Those who formerly died now survive with some impairment, such as deafness, blindness or mental changes. Thus, a new source of chronic illness has developed. Added to these unsuccessfully treated acute cases are the great number of older people who formerly did not survive to the age where chronic illness is more likely to occur.

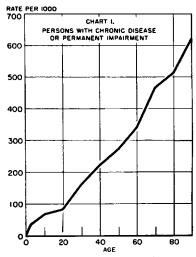
A better understanding and more successful management of the acute illnesses has focused attention on those with chronic illness. Now that the problem of chronic illness is recognized, more intensive interest is taken in the prevention and control.

No longer can society be content to provide hospitals and custodial institutions for chronic invalids. It must mobilize its medical resources to discover the origins and roots of these diseases and control them. New methods of approach are urgently needed to screen the population to discover the early manifestations of chronic disease. This need involves medical techniques, community organization and education, both lay and professional. Hospitals, for instance, need facilities and services to care for the patient requiring prolonged care that differ from

those needed by acutely ill persons. Similarly, prolonged illness at home usually necessitates special services. Families who can organize themselves to care for a sick relative for a short period of time often cannot plan for a long term illness without the help of organized community services, such as the public health nurse and visiting homemaker. Moreover, the patient with a long term illness will often require the services of physiotherapists, occupational therapists and others of the medical team who are not regularly needed for short term care.

Fundamentally, the problem of chronic disease is social and cultural. It will be solved only if the programs developed consistently take account of social, psychological and economic factors. Assuring the chronically ill person the opportunity to live to the utmost of his capacity is an inescapable medical and social responsibility.

Persons With Chronic Disease or Permanent Impairment



Source: National Health Survey (1935-36), Preliminary Reference.

Chronic Diseases Not Yet Under Control Arthritis, Cancer, Heart Disease

Arthritis and rheumatism victimize more than 7,000,000 persons or 1 out of every 20 Americans. Treatment may arrest progress of the disease in some cases, but is ineffectual, except for symptomatic relief, in many; in others, permanent disability supervenes. One chief problem confronting physicians in man-

agement of arthritis and rheumatism is lack of specific therapy based on exact etiology of these diseases. Various causes have been advanced, but proof is lacking to support any of these theories. Crippling arthritis occurs in people in all walks of life. It occurs more frequently in people past middle life. No age



Crippling Effects Of Arthritis.

Reproduced by courtesy of Parke Davis & Company's Therapeutic Notes.

is exempt and even children are afflicted.

Though the joints are usually the seat of trouble, muscles and nerves may be involved. Naturally, in a disease of this type that causes pain and crippling over periods of years, many forms of treatment would be employed. Early in the century, emphasis was placed on the value of mineral baths, therapeutic lamps and changes of climate. When the action of vitamins was better understood, their use became popular. Within the last year, a new form of medication was announced in the form of a glandular preparation, cortisone and acth. Phenomenal improvement has been experienced following the use of these drugs. Unfortunately, the benefits have been only temporary. Some hazards exist in prolonged use of these preparations. However, a new approach to the treatment has been suggested which may ultimately prove to be the answer to the control of the Number 1 crippler of mankind.

Cancer has assumed a much more prominent position in community health. Among the reported causes of death for all ages, it now holds second place. At the beginning of the century, it was not even among the 6 leading causes of death. It is quite likely that cancer was frequently unrecognized during the period when diagnostic aids were not available. The increasing number of elderly people is another factor in the greater number of cancer patients.

Little was known about cancer 50 years ago and relatively few patients were successfully treated. Diagnosis of cancer in the early stages, made possible by the many laboratory tests that have been developed, has changed the picture from a hopeless disease to one which can be cured in some instances and controlled in many more so that years of life can be added.

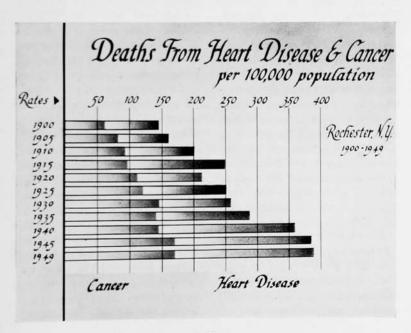
Cancer is a disease which will affect approximately 20 percent of all persons in our community. Although it may occur at any age, its incidence increases with advancing years. The majority of cases are among adults. It is a chronic disease requiring an average of 3 years to run its course. The essential cause of cancer is unknown, although some

known agents are factors in the causation of cancer in humans.

Most forms and most cases of cancer are curable with existing methods during the early stage of their course. The chief problem is to discover and to treat the disease during this early stage. Treatment is directed toward the complete destruction of the cancer cells. This may be accomplished by complete surgical removal or by the destructive action on cancer cells of x-rays, radium rays or related forms of radiation.

Only during the last 10 years have sufficient statistics been collected to give some idea as to the effectiveness of treatment. Five year survivals after treatment are usually looked upon as cures. Reports in New York State reveal that when all treated cases are considered, 26 percent have survived over 5 years. If all cases were early, 50 percent would be cured. Obviously, the problem is to bring to the people the need for early detection of cancer.

Diagnostic methods for early detection are constantly being improved. The Rochester hospitals and laboratories are alert to the problem and are making available to the physicians and to the public every aid known



to medical science. Public education, sponsored by the Cancer Committee of the Medical Society of the County of Monroe, the local Cancer Society and the Health Bureau, aims to bring the known facts to the public.

There is in Rochester every known facility for cancer treatment: tumor clinics, detection centers, free pathological diagnostic service, statistical reports, nursing services and radium.

Heart ills have been and probably will continue to be common occurrences in man. For ages the human heart has been cloaked in mysticism. Today, it is giving up its secrets as a result of more intensified research, improved diagnosis and daring surgery. Damaged hearts today take the terrifying toll of more than 636.-000 lives a year in the United States. At least 8 times that number are forced to change their ways of living and to cater to narrowing limitations of weakened and diseased hearts.

Fortunately, progress is being made in providing a broad base for research against all forms of heart disease. Already, the benefits of research are measurable in the reduction of certain heart ailments. Rheumatic heart disease, the heart ailment most common in childhood and early adult life, is definitely on the decline. This probably is due to the reduction of rheumatic fever resulting from the use of the sulfa drugs in combating streptococcus infections.

A decade ago, congenital heart lesions were considered incurable. Today, surgery has made possible complete restoration to normal functioning many malformed hearts that either invalided the child or threatened to terminate life prematurely.

Coronary heart disease and congestive heart failure are the forms most likely to occur at middle and later life. The increase in the number of deaths from these causes is largely due to the increased number of people in the age brackets where these ailments usually occur. Much research is now going on seeking to find out the causes of these conditions. Better methods of diagnosis are available and some treatment procedures have proved effective in relieving symptoms and prolonging and making more comfortable the lives of those so affected

Mental Health Becomes Important

The past 50 years have brought great changes in the communi-

ty's attitude toward mental disturbances. It has been recog-



Mental Health In Childhood-Development Of Group Play.

nized, as never before, that the human mind can be thrown out of focus by the impingement of pernicious environmental factors. These factors may be present at birth or in early infancy: they may accumulate over a considerable portion of the life span; or they may suddenly develop at any given period. Sometimes, they are clear-cut and obvious to the trained observer. Often, they are obscured by a tangled web of emotional relationships that must be patiently unraveled in the course of psychiatric study, diagnosis and treatment. Most mental disorders can be ascribed to the inability of the patient to adjust to inner conflicts and outer stresses. Some cases are due to purely physical causes, such as a head injury, syphilitic infection of the nervous system (general paresis), or hardening of the arteries (arteriosclerosis) of the brain. Another frequent cause of derangement among persons over 60 is senility, the general mental deterioration that may accompany advanced age.

It must be understood that, in general, mental illness is the collapse of a personality with normal intellectual capacities; the ultimate goal of treatment is the restoration of normal capacities.



Psychiatric Unit At The Medical Center Of The University Of Rochester.

There is another group of unfortunates, however, whose minds never reach full normal development; they are permanently arrested at one of the various stages of childhood. There are the mental defectives, whose deficiency exists at birth or develops during early childhood and is static throughout life, although some measure of improvement is possible. These may be the children who cannot keep pace with their contemporaries in school, whose habits and attitudes remain infantile, whose learning difficulties preclude adjustment to the simple requirements of every day living. Others may adjust reasonably well to grade school, but later become involved in social difficulties because of their inadequate judgment.

The problem of caring for these mentally incapacitated persons has existed since the beginnings of society. Today, it is being approached scientifically as a function of government on a scale unprecedented in history.

The magnitude of the problem is indicated, to some degree, by the fact that under the stresses of our complex modern civilization, mental illness occurs in 1 of every 5 families. Then, too, 1 person in 12 suffers at some time during his life from a mental disorder which requires institutional

care.

The official health agency of this city became interested early in the century in aiding physicians to direct mental cases to designated mental institutions established to give custodial care to these unfortunates. Under the direction of the New York State Department of Mental Hygiene, a state hospital for the care of mental cases had been established in Rochester, prior to the turn of the century Mental cases requiring custodial care were sent to this institution.

During the last 50 years, a new concept of complete scientific care for the mentally ill developed. It includes: the satisfaction of physical needs in medical attention, clean comfortable living quarters and nourishing food; the treatment of the mental disturbance through various prescribed therapies; the planning of a coordinated daily regime which leaves a minimum of unoccupied time; and the provision of the human values which influence morale and emotional adjustment.

This concept goes beyond the

walls of the hospital into the patient's home, evaluating the mental disorder in terms of his environment and effecting such changes as are necessary to maintain recovered health after return to the community. Finally, it extends the benefits of psychiatric advice and clinical treatment to the restored patient for a considerable period after discharge from the institution.

The importance of a mental hygiene program was recognized in this community. A program of psychiatric services was set up for borderline cases. Psychiatric examinations were made available to delinguents, court cases and others in need of them. The Rochester schools were among the first to develop a mental hygiene program. At the Municipal Hospital, psychiatric services were extended to out-patients and a detention ward for observation purposes was opened in the hospital.

Before the first half century ended, one of the most modern and complete psychiatric units was opened at the medical center of the University of Rochester.

Years Of Life Added To Victims Of Diahetes And Pernicious Anemia

Diabetes belongs to the group of "degenerative" diseases in that, essentially, it is a disease which

occurs in persons who have passed middle life.

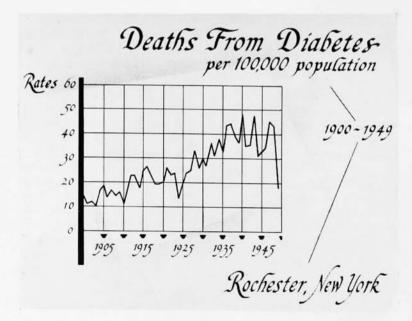
It is much more prevalent in



Dr. Frederick G. Banting.

obese persons than in thin people. It does occur in children and in young adults, but far less frequently than in the older age group. Hereditary factors play an important role in diabetic incidence.

In 1900, the death rate from diabetes mellitus was around 10 for each 100,000 population. This death rate has increased to approximately 25 per 100,000 in 1940. This increase has occurred in spite of a much better understanding of the disease and greatly improved therapeutic procedures. During this period, the longevity of an individual who had diabetes has increased. A diabetic at the age of 10 years



had a life expectancy of about 1 year in 1900; in 1940, the same age child had a life expectancy of at least 35 years.

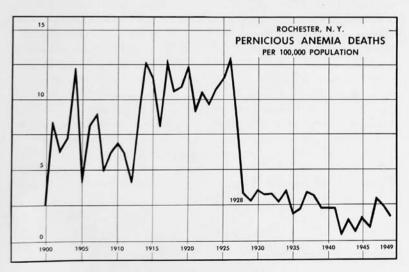
Progress had been made in the management of the diabetic during the first 2 decades of the century, particularly in the case of elderly people, but dietary control of children and young adults benefited the patient only a short time. The outstanding discovery of insulin by Dr. Banting of Toronto in the early twenties changed the outlook of the diabetic. The death rate from coma is now 99 percent less than in pre-insulin years. Similarly, death from gangrene has become far less frequent in older people. The use of insulin has added years of life to diabetics.

The use of insulin has made



Dr. George H. Whipple.

possible the resumption of a normal life for most diabetics. Though it appears from statis-



tics that there has been an increase in the number of deaths due to diabetes, the death rate from diabetes is actually declining. The increase in the reported cases is due to the phenomenon of our ageing population and to a better understanding of the disease, which has resulted in more complete reporting of diabetes. Elderly people now die with, not from, diabetes.

In recent years, greater stress has been placed on the preventive aspects of this disease, which ultimately should bring further gains in the control of diabetes.

Pernicious anemia, a disease in which the blood undergoes changes, though not as prevalent as diabetes, has been an extremely serious disease, usually terminating fatally within a year or two. Until 1927, about 20 people died each year from this disease in Rochester. Except for repeated blood transfusions, little could be done for the sufferers from this serious disease.

As in the case of diabetes, another basic medical discovery was made which was destined to alter the course of this dreaded ailment. A scientist in our own city, Dr. George H. Whipple, Dean of the University of Rochester School of Medicine and

Dentistry, discovered the elements in the liver that were destroved in this disease. Utilizing this basic discovery, Doctors Minot and Murphy, in Boston, treated patients afflicted with pernicious anemia with the liver extract preparation. Brilliant results followed. In practically all cases, a restoration of the normal elements in the blood and striking general improvement in the patient occurred. The continuous use of liver extract kept the patient well. Years of comfortable living have been added to individuals with pernicious anemia.

Since liver extract has been used in the treatment of this disease, less than half as many people die annually from pernicious anemia. Practically none of the sufferers of this disease die until they reach the period of old age. With the knowledge now available on this serious disease, liver in some preparation is given to countless individuals as a preventive for this condition.

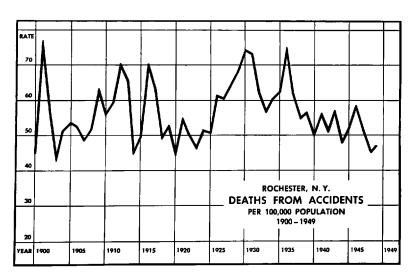
The progress made in the last 25 years in the control of diabetes and pernicious anemia is of great significance. This progress is charting the course for further progress in the better management of degenerative diseases.

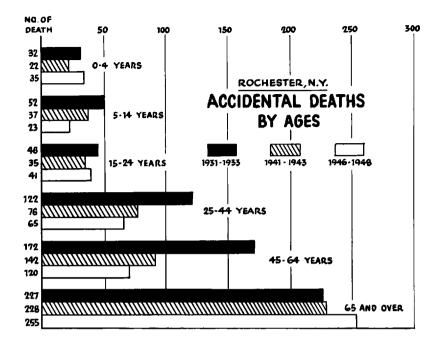
Public Health Becomes Interested In Accident Prevention

Accidental deaths have always occurred and. unfortunately. have not decreased in number as rapidly as have deaths from a number of diseases. Since the beginning of the present century. the type of fatal accidents have not varied greatly. Accidental falls were responsible for more deaths than any other type of accident. Little progress has been made in reducing the number of fatal accidents due to a fall. Actually, there has been an increase in this number because of the increased number of elderly people who are more likely to have falls. Motor vehicle fatalities are a close second. Nearly 2,000

people were killed as a result of motor vehicle accidents in Rochester during the first half century. In spite of the increase in the number of automobiles, there has been a slight decrease in the number of fatalities in recent years.

In the early part of the century, railroad and street car accidents caused the third highest number of fatal accidents. Fatalities from this type of conveyance occur seldom now. Burns, including scalding, have been and are still responsible for many deaths among children and elderly people. Poison gas and drowning rank next as causes of





accidental deaths. Improved facilities and supervised bathing facilities have reduced the number of deaths from these causes. Industrial accidents have shown a marked decline in recent decades. A substantial saving of lives is due to the excellent safety devices installed on machinery.

Fatal accidents occurred more frequently in males from all causes except falls. Boys and men generally engage in more dangerous pursuits and perhaps are more careless. Even motor vehicles killed two and one-half times as many males as females.

Fatalities due to accidents do

not give the complete picture of the seriousness of the many accidents that occur annually. Thousands of individuals have been seriously injured and permanently handicapped. To this must be added the tremendous economic loss that many people suffer.

It is encouraging to note the widespread effort that is being made to reduce the number of accidents. Many groups, such as safety councils in industry, schools, health agencies, civic organizations and others, through education and publicity, have accomplished a great deal in

teaching people to guard against accidents.

In certain age groups, notably in the productive period of life, fewer accidents occur. However, in early childhood and at the other extreme of life, practically no reduction of accidents has occurred.

Effective efforts are under way to publicize child safety programs. Recently physicians and health agencies have joined with others in calling attention to the many hazards to which children are subjected. Medical clinics are becoming aware of the responsibility of not only treating the individuals who have been injured, but to carry on educational programs in the home to prevent a recurrence of acci-

dents. Attempts are being made to study the reasons why certain families are so-called accident prone families and why repeated accidents occur in the same people.

Accident prevention has assumed equal importance to disease prevention in the Health Bureau program of education. Public health nurses in home visitation bring to the parent's attention the importance of safeguarding the children against such home accidents as: burns. electric shock, misuse of caustics and medicines. Continued emphasis on these matters should bring about a reduction in the number of accidents and thereby lessen the fatalities that are attributed to accidents.

Public Health Officials Cooperate With Practising Physicians

The problems of the practising physician of the last century showed the need for certain public or community health services. Then and today, the practising physician, in many areas, carries on the functions of a health official. The multitudinous responsibilities placed upon public health officials required the full time services of physicians. Thus, during the last quarter century, a new medical specialty developed,

known as public health physicians. They have gradually taken over much of the work formerly done by practising physicians. In Rochester, a full time public health staff has been serving the city since about 1920.

Though the public health department of the city is concerned with certain functions not directly related to those of the practising physicians, efficient health services cannot be assured



Rochester Academy Of Medicine Of Monroe County Medical Society.

a community unless there is genuine cooperation between the public health agency, the physicians and the hospitals. For example, the accurate recording of birth and death certificates



Doctors Receive Many Biological Products From Health Bureau.

would be impossible if the physicians in charge of the patients involved failed to give prompt and correct statements. The epidemiological work, so important in combating the spread of communicable diseases, such as diphtheria, typhoid fever, tuberculosis and syphilis, would be of little avail without the initial reporting and subsequent assistance of the practising physician.

Effective medical practice is dependent upon many diagnostic aids which are either costly or impossible for individual physicians to attain without the public health facility. To further assist the physicians in the prevention and treatment of some infectious diseases, a number of drugs, vaccines and antitoxins are supplied by the Health Bureau without charge to the phy-

sician or to the patient.

In certain responsibilities assigned to the public health agency, the practising physicians assist the official group. This is particularly true in the school health services, venereal disease clinic and rheumatic diagnostic clinic. Health Bureau staff physicians work with important committees of the County Medical Society and members of the Medical Society give advisory services to the official health agency.

This desirable relationship existing between the Health Bureau staff and the medical group is noted in the friendly and mutually cooperative spirit that exists with the Rochester hospitals and the Medical School. Whenever assistance and advice is sought from the Health Bureau by any individual or group engaged in health work, an effort is made to supply it.

As new health problems arise in a community, it is hoped that concerted efforts will be made to find the proper solution and that public health officials will continue to cooperate with the medical and nursing groups in our community.

Rochester Undertakes a Regional Hospital Program

Hospital facilities, including hospital organization and personnel, developed to a high degree of efficiency in many urban areas. Hospitals in small cities and in the rural areas rarely were able to conform to the same high standards of medical care. Utilizing the Rochester hospitals as a medical center, an experiment was undertaken in 1946 by the Commonwealth Fund to organize a regional hospital council; its membership included 30 hospitals in the 11 county area known as the Rochester Region. The purpose of this demonstration was to stimulate and assist the smaller hospitals in evaluating their existing services and to encourage them in the correction of any deficiencies that might improve the medical care available in that community. Largely supported by an annual grant from the Commonwealth Fund, an executive staff was organized



To Provide Better Medical Care.

to undertake this new program in medical care. Health Bureau personnel participated in this organization along with the Rochester hospitals and the Medical School.

In a pioneer effort, the professional and lay workers of each member hospital were organized on a regional level so that hospital problems relating to hospital trustees could be discussed at joint meetings. In a similar way, hospital administrators, physicians, nurses and related groups were organized to study their functions. A detailed survey of each hospital was made by members of the executive staff to bring to the hospital's attention the areas in which improvements could be made. The availability of a capital fund grant of \$200,000 a year for a 5 year period to assist the smaller hospitals in improving their physical plants acted as an incentive to these institutions in needed reorganization.

Significant results have been achieved in the last 4 years which promise to benefit the communities served by member hospitals and to set a pattern of regional hospital organization in other areas of the country.

Following the organization of the various interested groups in the area hospitals, a service program was prepared and made available by request rather than on a compulsory basis. Institutes for hospital trustees were conperiodically; hospital board members participated under the leadership of trained hospital administrators. Courses of instruction were given at the University of Rochester for the hospital administrators. Special orientation courses were given in the Rochester hospitals to medical record librarians. dietitians and other essential hospital personnel. For the medical and nursing staff, educational facilities were made available in the form of clinical conferences at the small hospital or for short postgraduate courses in a variety of subjects in the large hospitals or at the Medical School, Interne and resident physicians on a rotation basis were made available to 5 area hospitals unable to supply such service without the assistance of the metropolitan hospitals. The business aspect of the hospitals were not overlooked. Consultants in accounting and other practices were made available to any hospital. A central purchasing service offered substantial savings to the participating hospitals.

Added to these measurable benefits are a number of intangible advantages, such as a better relationship between the large urban hospitals and the small community institutions. The general practitioner of the rural

area has been made welcome in the medical center and a friendly cooperative understanding has developed among all serving the health needs of the entire region. Much remains to be done in this regional health demonstration, but it offers a solution for some of the inequities that exist in the medical care services of our country.

A Medical School Comes To Rochester

The establishment of the Rochester Dental Dispensary (now Eastman Dental Dispensary) by George Eastman, in 1916, proved to be the initial step in the expansion of health facilities in this city. The excellent facilities offered by the Dispensary for dental care suggested the need of a dental school. In exploring the possibilities of financial aid from



Dr. Rush Rhees.

the Rockefeller Foundation in the building of a dental school, the Institute surveyed the Rochester situation and later suggested to President Rush Rhees the desirability of creating a modern school of medicine and dentistry as a department of the University of Rochester, Conferences between Dr. Simon Flexner, representing the Rockefeller Foundation, President Rhees and Mr. Eastman resulted in an agreement to establish such a school. A gift of \$5,000,000 from George Eastman was matched by a similar gift from the Rockefeller Foundation. A subsequent gift of \$1,000,000 from Henry Strong provided the means for the construction of the Strong Memorial Hospital. Few medical schools in the country at that time were able to be launched under such favorable financial conditions.

The most important step that followed this announcement was the appointment of Dr. George H. Whipple as Dean of the new Medical School. The difficult



Mr. George Eastman.

task of planning the construction and securing the personnel for this new Medical School was undertaken by Dr. Whipple immediately upon his arrival in Rochester, in 1921. In this stupendous undertaking, the University of Rochester was substantially assisted by the City of Rochester through its able Health Officer, Dr. George W. Goler. The plans for a new municipal hospital, to be built on the site of the Old Municipal Hospital at Waring Road, were abandoned. A larger general hospital of 300 beds was authorized by the City to be built on property adjoining the projected University Hospital. A contract agreed upon between the City of Rochester

and the University provided for the operation of the hospital by the same professional staff that was to serve the Strong Memorial or University hospital. This unusual but highly desirable arrangement had no precedent in our country, but has proved to be of inestimable value to the citizens of Rochester and to the University in the training of physicians and nurses.

In 1925, the construction of the Medical School, the Strong Memorial and Municipal Hospitals were completed, permitting the admission of the first class of medical students. From the very beginning, the new medical institution conducted a school of the highest order. Eminent teachers were brought to Rochester from other medical schools and local physicians were called upon to assist on the teaching staff. Medical research was carried on in several fields and the most advanced medical services were introduced into the new hospitals.

Only a few years elapsed before international recognition was given to the significant research work conducted by Dr. Whipple. In 1934, for his fundamental discovery of the factors that produce anemia, he was a co-winner of the coveted Nobel Prize. Not only were many eminent scientists and physicians brought to Rochester, but, with-



University of Rochester Medical Center And Municipal Hospital Today.

in their own ranks, medical men were trained who have made important contributions to medical science. The leadership and inspiration of an outstanding medical institution influenced the other hospitals in Rochester, resulting in a general improvement of all the medical institutions. The past quarter century has seen continuous improvement in all the health facilities of this community. The community at large shares these improved health facilities with professional groups.

Medical Care Facilities Keep Apace With Rochester's Growth

At the turn of the century, Rochester's population was 162,000, less than half its present size. Four community or general hospitals were already in operation. St. Mary's Hospital and the Rochester City Hospital, later called the Rochester General Hospital, were founded in the middle of the nineteenth century. The Homeopathic and Hahneman Hospitals, later known as the Genesee and Highland Hospitals, were organized in the lat-

ter part of the century. There were also 2 private hospitals, one known as Dr. Whitbeck's Hospital, ultimately Park Avenue Hospital and Dr. Lee's Hospital. The City of Rochester operated no hospital at the turn of the century, but the severe smallpox epidemic of 1901-2 forced the city to construct a temporary institution along the Genesee River near Clarissa Street bridge which was called Hope Hospital, but commonly

Central Library of Rochester and Monroe County · Historic Monographs Collection

alluded to as the pest house. No institution for the care of tuber-culosis cases had been provided. Mental cases were given care at the Rochester State Hospital and sick infants were given care during the summer at the Infant's Summer Hospital at Charlotte.

Had hospitals been used as freely 50 years ago as they are today, these facilities would have been grossly inadequate, considering the high incidence of infectious disease. Except in the case of severe illness, hospital admission was generally avoided. Only complicated maternity cases were admitted to hospitals. Few individuals were sent to hospitals for diagnostic purposes.

The outstanding discoveries in the field of bacteriology, serology and surgical technique in the eighties and nineties of the last century prepared the way for more effective medical and surgical treatment. Physicians found that the hospital offered the best facilities for the application of these new medical discoveries when needed by their patients. The attitude of the public changed towards the hospitals. Patients not only were willing to accept hospital care when indicated, but demanded such treatment when occasion arose.

Early in this century hospital expansion began. Clinical laboratories, x-ray equipment and special diagnostic services were deemed essential features of a modern hospital. Out-patient clinics for the diagnosis and treatment of ambulatory patients were established. As the specialties were recognized by the medical profession, various departments were set up in a general hospital, such as medical, surgical, obstetrical, pediatric



Old Municipal Hospital.

and others. Nursing education became an important hospital responsibility. The demand for hospital beds forced the various hospital boards to increase the size of their institutions.

The value of special institutions for the care of tuberculosis was now generally recognized. Isolation and rest, with adequate nutrition, could be supplied to the tuberculosis patients as effectively in Rochester as in Saranac or Denver, A County Tuberculosis Sanitarium, later to be known as Iola, was established in Rochester early in the century. To meet the need of isolation facilities for communicable diseases, the City of Rochester constructed the first Municipal Hospital on Waring Road where all types of infectious diseases were treated.

In addition to the hospitals which provided in and out patient services, active clinics for neighborhood groups were established at Baden Street Dispensary, Lewis Street and, for



Horsedrawn Ambulance.

awhile, at a Children's Clinic on Troup Street.

The establishment of the medical school of the University of Rochester included a large modern general hospital, Strong Memorial Hospital, which greatly augmented the existing hospital facilities. At the same time, the City of Rochester decided to construct its new Municipal Hospital adjacent to the new University Hospital in order to provide general medical services of the highest order to indigent patients. This new medical facility added over 500 hospital beds to those already existing.

The steady decline in the incidence of certain infectious diseases and a few nutritional diseases did not effect hospital usage. Medical science made available new techniques, diagnostic facilities and other aids which hospitals alone could supply. More and more maternity cases were delivered in the hospitals. Diagnostic problems were studied under more favorable conditions than exist in homes or in doctor's offices. Undoubtedly, the more crowded living conditions in the urban communities contributed to the demands for hospital beds in time of illness.

Hospitals, like home and factories, wear out and certain parts become obsolete. In 1945, a survey of the Rochester hospital



Proposed Genesee Hospital.

facilities revealed the need for considerable rehabilitation and for the addition of at least 200 beds. Before the first half of the present century was ended, the citizens of Rochester and its environs contributed \$7,000,000 to modernize and enlarge its hospital facilities. Upon the completion of this construction program, all of the community hos-

pitals will be modernly equipped and a new hospital, to be known as the North Park Hospital, will be made available to people living far removed from the existing institutions.

Rochester has always recognized its responsibilities in supplying adequate medical care facilities and in so doing has kept apace with the new developments in medical science.

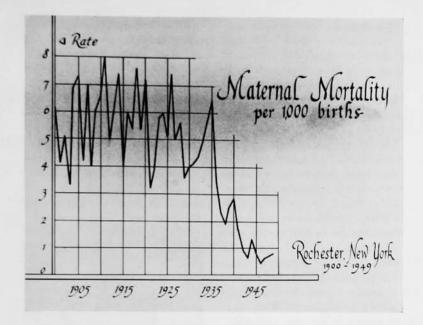


Proposed Highland Hospital.

Motherhood—Healthier And Safer

"Every woman with child and every woman bearing a child should have thrown about them all the safeguards of modern, scientific medicine" was a motto evolved and carried into practice by Dr. George W. Goler, first Health Officer of Rochester. The early endeavors of the Rochester Health Bureau centered in the development of adequate hospital facilities for the care of mothers during confinement.

From 1922 to 1924, 4 prenatal clinics were established in 4 schools—No. 18, No. 27, No. 5 and No. 17 A physician and Health Bureau nurse staffed each clinic, held weekly. The majority of primipara patients were referred to the hospital for confinement; multipara remained home, upon recommendation of the physician, receiving medical and nursing care during confinement and the postpartal period.



With the establishment of the prenatal clinics, there developed a more extensive educational program for mothers, stressing the need for early and continuous medical supervision for the expectant mother as well as during the postpartal period. The decrease in maternal mortality points up, to some degree, the effectiveness of this maternal education, accompanied with advancements in medical science.

To quote from early reports of these clinics "all was not clear sailing." Many patients had to be re-oriented in their thinking. Many were accustomed to the services of a midwife, some insisted upon staying in homes unfit for confinement, while others who had satisfactory homes insisted upon hospital confinements. However, most patients seemed appreciative of the service and willing to learn.

From 1922 to 1927, the Visiting Nurse Association also conducted a maternity center under the guidance of Dr. William Dean. Weekly antepartal clinics were conducted, as well as a home delivery service. Classes for expectant mothers (and occasionally for fathers too) were organized by the V.N.A. and taught by a well qualified nurse. This group instruction for expectant mothers has continued to be a part of the V.N.A. program.

As hospital out-patient departments developed their maternity services and hospital confinements became more popular than home confinements, the ante-partal clinics and home delivery nursing services rendered by the Health Bureau and V.N.A. were discontinued. However, the educational program for expectant mothers, as well as postpartal instruction and care in the home, was maintained as it is at the present time by the 2 nursing services.

In 1944, the Federal Government provided Maternal and Child Health Services to families of service men, the so-called E.M.I.C. program. With the inauguration of this program, hospital deliveries and antepartal supervision under a private physician increased, hence raising the standard of maternal care for an even greater number of families. As of the present, 99 percent of confinements in Rochester are in hospitals.

Remarkable strides have been made in the reduction of the maternal mortality rate over the past 50 years (see chart). There is still need for continuous education as to the importance of continuous medical supervision and knowledge regarding the hygiene of pregnancy to assure every expectant mother a happy, satisfying experience with a minimal amount of discomfort, maximum amount of safety and the reward of a vital, healthy baby.



Mother And Public Health Nurse Talk Over Plans For Arrival Of New Baby.

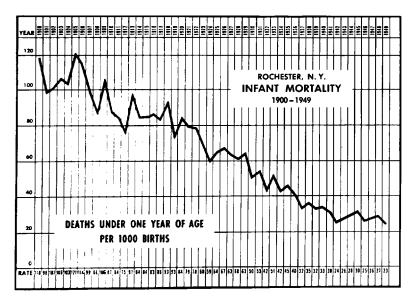
The Child Comes Into His Own

At the turn of the century, Luther Burbank made the significant statement, "If no more attention were given to the plant life of our country than is given to child life, we would be living in a jungle of weeds." Diphtheria, scarlet fever, intestinal

diseases, tuberculosis, pneumonia and other infections claimed the lives of many infants and children. The treatment for these diseases was generally ineffective and recovery rarely occurred in the severe cases. Other diseases such as whooping cough, measles and rickets, though infrequently fatal, caused long periods of illness and serious complications. Recreational facilities were not generally provided for children and the accident rate was high among children. Though interest in the child was as apparent 50 years ago as it is today, it was taken for granted that many child fatalities must occur and that little could be done to prevent them.

Fortunately, before and after the turn of the century, a number of events occurred that favorably influenced the child's welfare. Fundamental discoveries in bacteriology, immunology and nutrition removed much of the

mystery surrounding illness and paved the way for more intelligent and satisfactory treatment of some of the serious infections. At the same time, a new interest in the child became evident in most communities. There was a sincere desire to protect the child against illness and to supply all types of protective services. Child welfare groups were organized. Unfortunate children were given institutional or foster home care. School health activities were inaugurated. Parents and teachers met together for the first time to discuss the needs of the children. Recreation facilities were established, such as playgrounds, clubs and bath-



ing beaches. Children's hospitals. clinics and special institutions were constructed. Amazing results were obtained when the new methods of prevention and treatment were employed. Diphtheria deaths promptly declined with the use of diphtheria antitoxin. A decade later, a satisfactory form of inoculation against diphtheria was discovered which, when widely used, nearly eradicated this disease. The removal of tuberculosis patients from homes prevented many family contacts and reduced the incidence of this disease in children. The removal of tuberculosis cattle from the milk farm and general pasteurization of milk further safeguarded the infants and children against tuberculosis and intestinal infections. Other sanitary methods safeguarding water and food supplies were instrumental in saving many lives.

Of even greater significance was the new knowledge relating to the child's nutrition. Quantity of food alone did not assure in all instances satisfactory growth and development. Certain food ingredients proved to be essential if nutritional disorders were to be avoided. Vitamins, minerals and the proper ratio of food elements promoted wholesome growth. Many of these facts were now known and could be successfully applied.

The physicians realized the

importance of offering medical supervision to the growing child and by careful physical examination detected any abnormalities that needed correction. Surgery and rehabilitation techniques were successfully applied where indicated so that many children were spared a permanent crippling deformity.

The installation of public health nurses in the schools, medical supervision and health education contributed much to the welfare of the child during the school years.

Estimated Savings of Lives of Children under 10 from certain diseases

	No. of deaths in 1900 Est. Pop. 162,000	No. of deaths in 1949 Est. Pop. 340,500
Enteritis	143	1
Pneumonia,		
bronchitis	89	20
Meningitis	45	6
Diphtheria	46	0
Scarlet fever	11	0
Whooping cou	gh 20	0
Measles	6	0
Total deaths	360	27

With the discovery of the sulfa drugs and antibiotics in the third and fourth decades of this century, effective treatment became available for other diseases, such as scarlet fever, meningitis and pneumonia. Illness of all types, with the possible exception of infantile paralysis, has been substantially reduced in the child population. The infant mortality rate is about one fifth as high as it was 50 years ago and only one fourth as many children die during school age as was the case at the beginning of the century.

During the last few decades.

men and women trained in all phases of child care have been employed in hospitals, schools, camps, playgrounds and in other places to give our children the best opportunity to develop mentally and physically. It has truly been the child's century and, as a result, a larger proportion of children are entering adult life well equipped to carry on the activities assigned them.

Health For The School Age Child

The health of the school age child in Rochester has received considerable attention over the past 40 years. The Rochester school health program has been a fourfold cooperative venture as it has evolved. This cooperative venture has utilized facilities provided by the Board of Education, the Catholic Office of Education, the Rochester Health Bureau, community health and social agencies including the private physicians, dentists, the parents and the home.

The Rochester school system, in its organization and administration of the school health services and health education program, has always viewed the program to be a cooperative enterprise involving the active interest and participation of all teaching personnel in the various departments, the physician and

nurse. This team functions under the leadership of the school principal.

The whole child has been considered in relation to his total experiences which influence habits, attitudes, and knowledge relating to total individual health as well as community health. Hence, not only the child's physical health but his mental, emotional and social health needs have all been given attention and services geared accordingly.

A school health program in general is classified into three broad areas of responsibility—health services, environment and education. In Rochester, a division of direct responsibility has been made as follows: Health Services—Rochester Health Bureau; Health Education—Board of Education or Catholic Office of Education. Environment—

shared jointly by the above three organizations.

The Rochester Health Bureau provides medical and nursing services to both public and parochial schools. In 1911, 4 public health nurses were appointed by the Health Bureau to service 4 public schools located in the more needy areas of the city, namely-Schools No. 14. 5. 9 and 20. The health services consisted, for the most part, of first aid, the control of communicable disease through pupil inspection and immunizations, and physical examinations with follow-up for correction of physical defects. In the early days of service, the control of pediculosis (head lice) was a major problem. As the medical and nursing staffs increased and the incidence of communicable disease and physical defects among children lessened, particularly in the less chance areas of the city, these services were extended to all public and parochial schools.

As advancements have been made in medical science, with resultant improved standards of child health, school health services have been revamped. More individualized physical examinations, done by the family physician or the school physician, have been given children upon entering school and at the 5th and 9th grade levels. This type of examination has replaced the former annual inspections per-



Tuberculin Testing Part Of School Health Program.



Public Health Nurse, Principal And Teacher Discuss Plans For School Health Registration.

formed by squads or teams of doctors and nurses. First aid and pupil inspection has been shared by teacher and nurse. This plan has allowed more time for the nurse to work with individual pupils in the school and home. More emphasis has been placed on services for the rehabilitation of the physically handicapped child.

The health of the school child has been the active concern of the Rochester Board of Education. Since 1914, the Department of Health Education of the Board has taught health in the classroom as well as stimulated teacher interest and participation in individual student health. Much of the teacher participation took place through school health councils. In fact. Rochester was well known for its development along this line. In addition to the physical education program, classes were held for individual students where special corrective exercises were given. Safety and recreational programs have also contributed to the health of students.

Psychological and social services, as well as special education classes, and programs for mentally and physically retarded children were developed through the Child Study Department now known as the Guidance Department.

In 1945, through the financial assistance of the State Youth Commission, a Child Guidance Clinic for school age children was organized. Here both parents and children can be assisted in acquiring social and emotional health.

The inauguration of better nutrition for the school child increased the use of lunch rooms



Doctor, Public Health Nurse, And Parent Participate In Child's Physical Examination.

and cafeterias under capable direction.

As health services rendered by the above agencies have continuously progressed, the need for coordinated planning and evaluation became increasingly important. Hence, a school Health Council was established in 1946, with representation from the Board of Education, the Health Bureau, Office of Catholic Education, and other contributing agencies and professions. This council has been and will continue to function as a medium through which health education and health services will be studied and implemented toward the maintenance of total health in our citizens of tomorrow.

The Public Health Nurse Serves

The statement has been made that "Public Health Nursing is the backbone of a Health Department." The public health nurses serving the community for the past 42 years have ably demonstrated the above statement.

With the establishment of milk stations in the early 1900's, it was the public health nurse who served in the stations distributing clean milk to the mothers; she instructed mothers in the technique of preparing clean and safe infant formulae. It was the public health nurse who assisted mothers in collecting breast milk for distribution to premature babies. It was the public health nurse who assisted physicians in preparing and transporting children to the tonsil emergency hospital set up in Convention Hall where as many as 150-200 operations were performed per week. In turn, the nurse followed the case in the home for post-operative supervision and instruction.

Concomitant with the development of the science of immunology, it was the public health nurse who visited thousands of homes per year to instruct parents as to the importance of immunization against diphtheria and smallpox; and to instruct them where these immunizations could be obtained, the private physician or child welfare clinics. She also assisted the physicians in the immunization.

The influenza epidemic of 1918 saw the nurse again responding to call, working days and evenings, visiting homes to alleviate distress and arrange for care in the emergency hospitals.

As science developed methods for the control of communicable diseases, the nurse served in the



Teaching Mother How To Bathe Her Baby.

schools, attempting to prevent transmission of disease among school children. As one of the early appointed Health Bureau public health nurses stated, "We were so busy overcoming acute problems we did not have the time to stress prevention as the public health nurse of 1950 can so ably do."

As early as 1903, Dr. Goler, Health Officer for the Rochester Health Board, recognized the need for and employed part-time public health nurses to take nursing care and health instruction into the homes and schools. It was not until 1909 that his plans were realized with the permanent appointment of 4 public health nurses to the Health Bureau.

At this time, no special preparation aside from professional nursing training and the passing of a civil service examination was required. These nurses were assigned to areas of the city having the densest population and most urgent health needs. Service was given both in the home and in the school. Emphasis was placed on the control of communicable disease and particularly for maternal and child health. The latter service developed, to a greater degree, after 1922 with the establishment of antepartal clinics and the appointment of so-called "Prenatal or Maternity Nurses." These nurses assisted in the clinics and provided instruction and prenatal and postpartal care in the homes.

Recognizing the need for more public health nurses and the need for extensive home nursing care, following the influenza epidemic of 1918, interested lay people organized, in 1919, the Visiting Nurse Association. Two nurses from the Female Charitable Organization, 1 visiting nurse from the Rochester General Hospital and the Genesee Hospital made up the nucleus of the first V.N.A. staff. This organization, under the able direction of Miss Mary Laird and her successors, has developed into a sizeable organization consisting of approximately 45 field nurses plus supervisory and administrative staff.

Early in 1920, a nutrition program was inaugurated and from 1921 to 1925 there was a large staff of nutritionists. They and the nursing staff participated in the milk stations that were financed by the Rotary Club. They also worked with the Vital Economics Department of the University of Rochester in carrying out important nutritional studies. This was one of the earliest nutrition projects undertaken by any V.N.A. and it has continued as an integral part of the program to the present day.

As the health needs of the community were recognized, the Health Bureau Nursing Division, under the able direction of Mrs. Nellie Russ and her successor Miss Gertrude O'Hern, also expanded into the present staff of 66 field nurses, 1 chief clinic nurse, 5 Supervisors, 1 Assistant Director, and a Director. A Medical Social Worker on loan from the Health Associa-

tion of Rochester and Monroe County is a new addition to the Health Bureau Staff.

The growth and development of the Health Bureau Nursing Division and the Visiting Nurse Association during the past 42 years, although not without growing pains, has been marked with the healthy sign of constant adjustment and flexibility in services to meet community needs.

The V. N. A. for the most part centers its bedside care and instructive services in the home; the Health Bureau centers its emphasis on supervision and instruction in the schools and the home. Both agencies, working with allied medical and social agencies, assist individuals and tamilies toward the goal of improved individual and family health.

Although one can not see into the future, one can foresee trends. Accordingly, one can predict that Public Health Nursing forces of the Health Bureau and Visiting Nurse Association will more and more endeavor to study community nursing needs and attempt to share, distribute, and consolidate the nursing power of both agencies in the giving of community service and in the education and training of professional nurses for future service.

Milk Inspection Points Way To Better Health

The sanitary and quality control of milk, as we know it today, has been the result of years of effort on the part of many interested groups in our community. The crusade for clean milk began at the turn of the century. Since 1900, we have gone a long way in providing the consuming public with a clean, safe milk supply. Now, the reliance on the safety and purity of milk is taken for granted.

In 1886, the first records of infant deaths under 1 year of age revealed a total of 530. By 1900, this had been reduced to 333, only to increase to 446 in 1910. Public concern was directed to the need for a safer, cleaner milk supply as milk-borne epidemics of scarlet fever, diphtheria, typhoid fever, tuberculosis, cholera infantum, dysentery or "Summer Complaint" began to grow.

Milk dealers and producers resisted the Health Bureau's efforts to provide clean milk. Court arrests were made for skimming off the cream, watering, use of preservatives and gross contamination from dirt and bacteria. The first decade of milk inspection required constant vigilance by inspectors to see that milk was not sold from tuberculous cows, was not adulterated, preserved, dirty or produced in unclean stables or environment.

During the second decade, "clean milk," not cleaned milk, was the slogan as the inspector was armed with the sediment test. The small top milking pail was introduced to keep the dust, chaff and straw from dropping into the pail during milking time. Bacteria standards on prepasteurized milk were reduced from around 1,000,000 per cubic centimeter allowed in 1900 to 200,000 per cubic centimeter in 1950.

Official scoring of milk in the bottle was introduced but used usually in grading competitions only. The grading of odor, flavor, sediment, butterfat, bacteria and condition of the bottle and cap, largely quality factors, are just now beginning to be recognized in merchandising and selling of milk. Refrigeration and pasteurization have been the two major safeguards to milk safety in checking and controlling bacterial growth in milk. Better methods of feeding, milking and care of cows are now being revealed in better quality. Sanitary equipment, pasteurizers, homogenizers, coolers and bottlers have made production of quality milk much easier. The milk sanitarian of today depends on the laboratory to reveal the safety and quality of the finished milk products sold in Rochester.

The results of the past 50 years show 1 low incidence of infant diarrheal disease deaths and elimination of the milk-borne outbreaks of illness, which worried the mothers of a generation ago. This achievement was not easily gained as we glance back at the early records of sanitary milk control.

Healthy Cows For Safer Milk

As our city began to grow, fresh milk from cows kept in the city and nearby farms was an important item of food. In 1898. Robert Koch had announced that Bovine Tuberculosis could be transferred to humans through cow's milk. The Board of Health had requested a survey "to ascertain to what extent cattle were diseased within the city or on farms supplying milk." Rochester undertook to test its milk supply by using the expensive "guinea pig test." Immediate prosecutions of milk vendors whose milk showed the presence of the tubercle bacillus were pressed. By 1910, around 500 guinea pigs were used annually to test the supply from some 8,000 cattle supplying 185 retailers selling milk in Rochester.

This expensive procedure, with inadequate coverage, was later replaced by the Bovine T.B. Eradication Program, which was established nationwide. With

veterinarians in the picture, the area plan of removing and destroving tuberculous "reactors" advanced under State supervision. The ophthalmic and intradermic test on the cow replaced the guinea pig test of the milk. Today, the incidence of Bovine T.B. infection is less than 1/2 of 1 percent of some 30,000 dairy cows in the Rochester Milk Shed comprising an area of seven counties. The general good physical health of cattle under examination annually by 50 private practicing veterinarians attests to the 50 years of progress in herd health. Other diseases of cattle, such as mastitis, facing the veterinarian and sanitarian today, offer a challenge to its solution in the future, as did the eradication of Bovine Tuberculosis back in 1900.



Production Of Safe Milk Begins With Healthy Cows And Good Sanitary Conditions On the Farm.

Farm Inspection

Farm inspection of the sources of milk supply have done much in 50 years to bring about a marked change for the better in dairy barns, stables, barn vards, milk houses, equipment, utensils, and methods of cleaning, refrigeration and handling of milk. In 1900, cows were housed in dirty unkept barns and sheds, poorly lighted and ventilated, which, no doubt, contributed to the incidence of Bovine Tuberculosis. In 1914, dairy barn standards and inspection procedures were developed to provide a uniform score card for milk inspectors and producers to follow. Physicians, social workers and others became interested in better dairy herds and environment. Medical Milk Commissions were created to set up standards for milk production for "Certified" raw milk. These standards served a useful purpose and exercised an important influence on the improvement of milk quality. Then, about 1940, the improvement of pasteurized milk and the low demand for "Certified" milk caused the disappearance of Certified milk from the market.

About 85 percent of the farms today are equipped with sanitary milking machines. Over 50 percent of our farms are now provided with flush toilets in place of the outside privy on nearly all farms 50 years ago.



During Delivery, Milk Is Checked By Sanitarians To Insure Safe Milk For The Consumer.

Milk Distribution

To the oldtimer, milk distribution can well be remembered as the milk vendor drove up with his horse and wagon and ladled out his orders from a milk can in a measuring dipper. He took an occasional dip from a can of cool water carried along to stretch out his supply. Contamination of milk with flies, dirty utensils, contaminated water, and dirty hands was the common occurrence. The customer furnished the receptacle as the vendor delivered his milk on the step or "Stoops." Usually a pan, pot or pitcher collected the milk and other filth as it remained outside waiting for the milkman. An occasional cat or dog might have shared the family milk supply unless the milk were brought in at once.

The advent of the returnable jar or milk bottle required bot-

tling rooms and cleaning operations. Farmers, too busy to peddle milk routes, sold their milk to these milk peddlers or retailers. These early peddlers became the nucleus of the fresh fluid milk daily delivery system. The development of the bottling plants in barns, garages and rooms grew. Bottling equipment, cleaning sinks and cleaning compounds became necessary, as well as coolers or refrigerators to hold milk until delivery. Milk soured so rapidly from excessive bacteria that sediment testing to check the amount of dirt in the milk and heat treatment was necessary to save on sour milk losses.

By 1914, the State Department of Health established the first pasteurization law in the State establishing a uniform time and temperature of 142 degrees F. for 20 minutes for any milk to carry the "Pasteurized" label.

Economic factors, duplication of deliveries and the need for better sanitary inspection and control resulted in marked changes and a local pasteurization ordinance in 1922. This law set up rigid requirements for dealers selling milk undergoing a heating process labeled as "Pasteurized." Three grades of milk were permitted: Rochester Standard Pasteurized, Rochester Standard Raw, and Certified Milk.



Laboratory Tests Help Determine The Safe And Sanitary Quality Of Milk.

Test for Pasteurized Milk Developed

In 1929, the Health Bureau, in cooperation with the laboratory, started a series of tests on milk for presence or absence of enzymes in milk destroyed by the pasteurization process. While all pasteurizers were required to be equipped with a recording thermometer to register the time and temperature of pasteurization, 143 degrees F. for 30 minutes, milk dealers and operators could manipulate recorders and shortcut the pasteurization process. By 1930, it was revealed by these enzyme tests that about 30 percent of the milk was being improperly processed.

The early pioneer work of the Health Bureau and laboratory was later developed by the State Health Department until the final development of the "Phosphatase" test for the detection of underpasteurized milk. This test has been rated second in importance to the process of pasteurization itself as a boon to health authorities in its use to control milk-borne outbreaks and underpasteurized milk. In 1931, the average bacteria count for the year on all samples collected on pasteurized milk dropped to the lowest on record of less than 9,000 bacteria per cubic centimeter.

Raw Milk Abolished

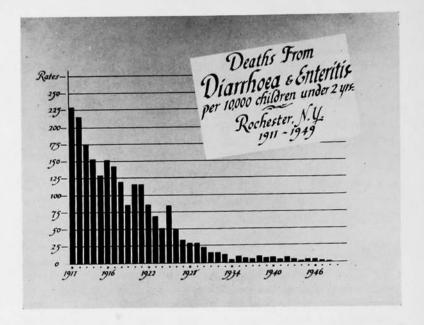
By 1934, only 21 milk producers were producing Rochester Standard Raw Milk, representing about 2 percent of the city's milk supply. At the recommendation of Dr. A. M. Johnson, Health Officer, an ordinance to abolish all raw milk, except Certified milk, was adopted.

Adoption of Economic and Quality Control Measures

With the added protection of universal pasteurization, the Health Bureau undertook the improvement of safety and quality of the milk supply. By 1933, milk strikes and adverse marketing factors brought about, in 1939, the adoption and acceptance by the local producers of a State Milk Marketing Order No. 129, a quasi-utility set of regulations covering economic condi-

tions in the milk industry. This order was voted in by the producers in the Rochester Milk Marketing Area and administered by a market administrator the State Department Agriculture and Markets. The effect of this order on the sanitary quality of milk in controlling surplus milk and assuring the producer cost of production for his product corrected the evils of marketing which produced the disastrous milk strikes of the early 30's and simplified the sanitary control program. The milk industry today has set the example and pattern of how business and government agencies have worked together in the development of high standards of sanitation, quality and service to the public. These groups, now well organized and with a definite job of public service to do, consist of farmers, farm bureaus, dairy herd improvement associations, veterinarians, colleges, public utilities, dairy equipment and supply concerns, health departments, milk dealers, cooperatives, State agencies, laboratory technicians, and last, but not least, the milk sanitarian. He has done this job quietly and unheralded as he pointed out the trouble spots in the 50 years of progress toward our goals achieved today.

While safety of milk is assured today, the challenge of the future



is milk quality and increased consumption so that the nutritive benefits of our nearly perfect food can be more fully appreciated and realized. The saving of lives, through 50 years of progress in milk sanitation, is shown in one phase alone, the infant diarrheal disease deaths under l year of age, shown on the chart above. While not all attributed to milk, milk sanitation has played an important part in this reduction or saving of lives.

Food Inspection And Control

In the early part of the century, there were few regulations pertaining to foods other than milk. "Spoiled" food was considered only as an economic loss rather than a health problem. Toxic poisoning was not recognized. The housewife discovered by inspection any dangers from food

purchased and either prevented trouble by washing, cooking, or returning the food to the food merchant or throwing it away. Home canning, baking and food preparation was an art which was shared among housewives. Packaging was in large containers in bulk or open barrels which the grocer sold by weight or numbers. The grocer of yesterday, however conscientious, was handicapped as a result of the deficiencies of the times. Compare the modern well maintained grocery with those of the past and all phases of the trends in food handling are readily seen.

Cleanliness and sanitation are now a part of modern merchandising as we have learned more about food contamination, spoilage and display. Clean, white, well lighted stores with grocery displays in neat packages or cans or food under glass cases, with perishable foods under refrigeration, testify to the transition in food merchandising in the past 50 years. The open barrels of fish, flour and sugar have been practically eliminated. Contamination by rodents and insects is kept at a minimum. Gone are the sticky wooden floors with the odor of spoiled food, which rose to discourage the customer from an expected purchase.

Restaurants and Eating Places

For years, restaurants have been considered as having little significance with public health because of the difficulty of tracing back food-borne illness to a particular eating place or meal consumed. Food was either good or bad and the customer refused it or withdrew patronage. Restaurant sanitation, until the past decade or two, was largely what was developed by the industry itself. Years ago, the accepted public health evaluation of restaurant sanitation in a Health Department was given a value of 1 percent, which hampered the establishment of regulatory laws and adequate inspection.

For years, restaurants were inspected under general food laws and on complaint. There was little trouble from Rochester restaurants with respect to foodborne illness. However, in 1938, a series of food-borne outbreaks were traced to restaurants. banquets and picnics in and around Rochester. This was the first evidence where the facts justified the necessity for better restaurant sanitation and control. In 1939, the State Sanitary Code was amended which provided a new approach to the restaurant problem. Sanitary inspection of all eating places was renewed under the new State Sanitary Code.

During World War II, the State Department of Agriculture took over the inspection of restaurants in war plants and others. In August, 1943, a food poisoning outbreak in a large industrial plant again brought out the need for better sanitary control of eating places. In December, 1946, national magazine articles began to carry stories about the disgraceful conditions existing be-



Clean Restaurants Make Eating Out Safe And Pleasurable.

hind the scenes of our modern restaurants, On March 24, 1947. the model restaurant ordinance recommended by the Mayor's Conference of New York State was adopted by the City Council to provide for licensing and inspection of all eating and drinking establishments in the city of Rochester. Since the passage of this ordinance, considerable improvement in Rochester's restaurants and facilities has been accomplished. Food handler training sessions have been conducted and the ground work is laid for an expanded program of restaurant sanitation, education and food handler training. Progress in restaurant sanitation has been late in arriving during the

past 50 years, but has been phenomenal in its progress in the past 5 years. The achievements in this direction have given the restaurant industry cause for justifiable pride and patrons a feeling of assurance as they "eat out" in Rochester's 1200 eating places.

Commercial Food Processing

Food processing and canning in modern establishments have replaced the home canning industry and are now carried on in hygienic food plants under inspection by Federal, State and Local inspection agencies. In the past 50 years, scientific planning and construction of buildings. with more attention to proper light, ventilation, working conditions, food handling, food protection, storage and refrigeration have played an important part in better health protection. The modern bakery, too, has witnessed this trend and, through its trade organizations, is reminded periodically of sanitary precautions with respect to perishable foods such as cream filled baked goods.

The present care and refrigeration with certain baked items has done much to eliminate the old food-borne epidemics of several years ago. Bakeries have been regulated, since 1914, under authority of the State Labor Law. Sanitary Certificates for compliance with this bakery law are issued annually by the Health Officer after inspection and approval. The bakery counters, full of baked goods, pastries and novelties, conveniently available to the modern housewife, has all but replaced the home baking of bread and other baked goods in the modern home.

Safer Ice Production

Considered part of the food supply, because of its potential danger to food, has been the sanitary control of ice. The early ice houses on Irondequoit Bay, where ice was harvested for city consumers, always posed the danger of a typhoid fever outbreak. In 1900, the Health Officer became worried because the city's ice supply was obtained from "Shallow ponds and areas whose waters received canal, sewer and vault drainage."

As late as 1930, over 50 percent of our stores where milk was sold were storing milk in metal wash tubs with ice or in old ice refrigerators where food was exposed to contamination from ice dripping. In 1934, to effect better control of the sale of ice, an ordinance was passed giving the Health Officer authority over the approval of sources of ice and protection of ice on sale from ice stations or vehicles.

Today, all ice is manufactured in plants licensed and approved

by the Health Bureau or produced by the consumer in his own refrigerator from the city water supply. The use of ice in restaurants for food or drink is handled today by tongs or scoops to prevent undue contamination from dirty hands of a possible disease carrier. The early dangers from contaminated ice have been minimized by better handling and control, the modern refrigerator and sanitary control of sources of water in its manufacture.

Frozen Desserts and Frozen Foods

The first homemade ice cream, served by "Dolly" Madison, wife of one of our early Presidents, was still a popular homemade delicacy, in 1900. It was usually made with eggs, cream, corn starch and sugar, plus a freezer, ice and salt. By 1910, the commercial manufacturer of ice cream had reached such proportions that the Health Officer became worried over the safety of the sources of cream from which it was made. With milk being rejected at the time as unsafe for human consumption, an ordinance was passed giving the Health Officer authority to condemn milk or cream that was "adulterated, contaminated, putrid, infected or unwholesome, or any article of food made therefrom." Inspection of dairies

supplying cream for coffee or ice cream was begun about 1910. By 1920, samples of cream and ice cream were regularly sampled and tested for bacteria and butterfat. By 1930, all manufacturers of ice cream and all creameries supplying cream for this purpose were placed under regular inspection by the Health Officer. Shipments of cheap western cream began to enter Rochester and find their way into coffee cream, ice cream and bakerv use. In many instances, it was preserved for a time with neutralizers. New York City and Rochester were the only two cities in New York State prohibiting western cream in their communities. The Gover-



The Stamp: "Rochester Inspected And Passed."

nor called a conference of some 30 health officers and departmental heads to appraise the situation. New York City and Rochester Health Officers were requested to support their decisions. The Governor, supported by the statements of the two Health Officers directed new State laws and stricter controls for the manufacture of ice cream. Today, ice cream is produced in hygienic food plants made from pasteurized milk products, but not all from Rochester inspected sources. It is sampled and tested regularly to assure its purity and safety.

Frozen Foods

With food shortages during the second world war and rationing, food locker plants expanded to take care of the general public's desires to store perishable foods. The deep freezer lockers adopted for home use, came into being. The natural freshness of frozen foods took hold of the public fancy until frozen food displays of meats, fruits and vegetables in the modern food store vie with the shelves of canned foods for the consumer's preference. The safety, quality and protection to the consumer of his home food supply has gone a long way in 50 years of health protection

Meat Inspection

Previous to the enactment of the Rochester Meat Ordinance in 1941, conditions were very poor as regards the safety and sanitation under which meat was handled. Farm slaughtering was a common practice; animals diseased or dying would often be killed by a butcher or farmer to salvage whatever possible; there were no safeguards to prevent diseased animals from being sold to unsuspecting buyers. There was a tendency to rely upon cooking by the consumer to prevent disease. Slaughter houses were filthy, odorous, fly and rodent infested, lacking even a semblance of sanitation.

On July 1, 1941 a meat inspection ordinance was adopted by the city of Rochester. The effect of this law was to improve the quality of meats consumed in Rochester through ante-mortem and post-mortem inspection of animals, the control of sanitation in abattoirs, markets, meat processing plants, sausage plants, freezer and locker plants and in poultry establishments.

All meat now sold in Rochester must bear a stamp indicating it has been inspected by the Health Bureau or an "approved municipality" having the same standards as those of the municipal code, or the U.S. Bureau of Animal Industry. Today, Rochester is one of the few cities re-

quiring both ante-mortem and post-mortem inspection of animals slaughtered, assuring a safe quality of meats slaughtered under sanitary conditions and displayed and sold in clean markets. Meat Processing establishments and sausage plants are now inspected to assure a wholesome and clean product, prepared under sanitary conditions.

Previous to 1941, a most dangerous condition existed in which some sausage containing raw pork was sold and eaten without cooking by the unsuspecting consumer and resulted in sporadic cases of human trichinosis. Now, all such sausage is stamped "Contains raw pork—cook before eating."

All meats are subject to inspection at all times, from the arrival of the animal at the abattoir to the time it is purchased in the retail meat markets. Poulterers are also subject to inspection and licensing, and here, too, the improvement has been considerable and the standard is that of safety and sanitation.

The housewife now purchasing meat can be assured that every effort has been made to enable her to procure a product which has been produced under sanitary conditions and is not contaminated, tainted or diseased. The modern trend toward precut, wrapped cuts of meat displayed in deep freeze refrigera-

tion units today is a far cry from farm slaughtering, pickling, smoking and storage of home cured meats of a generation ago.

Animal Disease Control

Rabies

The diseases which animals transmit to man remain of concern. Certain diseases, over the past 50 years, such as bovine tuberculosis and glanders have lent themselves to control measures and have practically ceased to exist as menaces to man. Other diseases, on the other hand, such as brucellosis, encephalitis, Q fever and others, have increased in importance

Some diseases have existed from year to year or are periodically endemic enough to cause



Immunization Of Dogs Prevent The Spread Of Rabies.

constant concern. These include rabies and trichinosis. As recent as 1946. Rochester experienced a rabies outbreak in animals but an extensive rabies-control program of the Health Bureau in cooperation with a County-wide program prevented its spread and resulted in not a single case of human infection. Due to the ever present danger of rabies, a continued program of investigation is necessary. Trichinosis infection from the consumption of raw infected pork has been gradually diminishing over the past 50 years. More stringent requirements in the manufacture of sausage containing raw pork, along with an educational program for proper cooking of pork. has been an important step towards overcoming trichina infection.

It has been through the constant vigilance and cooperation of veterinarians and public health authorities that many of these diseases have been controlled or eliminated. Over the past 50 years such measures as the pasteurization of milk and meat inspection have acted as safeguards towards protecting the consuming public.

Sanitation



Environmental Sanitation

An environmental sanitation program has been in effect since the Bureau was established. It has always been a homespun, commonsense program dealing with the basic essentials for clean, wholesome living. This work was made difficult 50 years ago and for some succeeding vears, due to the great influx of immigrants of many nationalities with as great a variety of customs and personal habits as was probably assembled at Babylon in biblical days. Tolerance and understanding played an important part in educating these people to our way of life.

It took a few years to accomplish the transition from a semi-farm life to an urban life; it also entailed a great deal of work to rid the city of contaminated wells, outside privies, goat farms, goose ranches, cattle farms and chicken farms. It was in those days that the sanitary services of garbage and rubbish collecting were stressed to improve the sanitation in the immediate vicinity of the home.

In 1900, there were still many wells and privies existing in Rochester which were always a source of worry and concern to the Health Officer as a possible cause of a typhoid fever outbreak. The horse stables remained until the early '20s when horses began to be replaced by automobiles. It was in this period that "Swat the Fly" and "Kill the Rat" were published to eliminate these pests and to improve the health condition in the home. Efforts were made to rid premises of bedbugs and cockroaches by educational methods. Leaflets were distributed to those affected explaining the best eradication methods.

Today, our waste products, garbage and refuse are gathered by the city and incinerated or treated and disposed of without offensive odors or smoke, instead of being dumped in the corner lot or the canal. Our homes are equipped with modern plumbing facilities instead of the septic tank or privy vaults—installed so there is no danger of infection.

In the past 50 years, we have come from kerosene lamps to gas to electricity for lighting; we have learned to insulate our homes from heat and cold and to ventilate them to increase our comfort; we have replaced the parlor stove with central heating; we even study the use of color schemes to increase the enjoyment of our homes. The electric refrigerator or modern ice box has replaced the dark, cold cellar bottom as a means of preserving food.

Our children are taught in fireproof school buildings, constructed so that they spend their time in well lighted and ventilated rooms; scientifically constructed seats, luncheon and playground facilities are provided for our children. Civic programs of health and sanitation are taught and carried on by our youngsters in school.

Our factories are equipped with devices to eliminate industrial hazards, with rest rooms, cafeterias and hygienic working conditions. Our institutions and hospitals are keeping pace with modern sanitary practices both structurally and in their methods of operation in the care of the sick. Nursing homes provide

a haven for the aged to spend their time in wholesome surroundings with their friends.

Today, paved streets, electrically lighted and kept clean, planned realty divisions, with space and air, with trees and gardens, have replaced the dirt roads with dust or mud, littered with refuse and manure. Sidewalks replace lanes thru weeds. The garage has replaced the barn with its smelly manure box attracting rats and flies. No longer do we see cows and goats tied in vacant lots. Beautiful parks and playgrounds provide enjoyment and recreation for our families and visitors.

And not content with these changes and improvements, we are planning improved housing projects, even more play area, more hospital space, more ways to improve our way of life.

Pest Control

While man and rats and vermin have lived closely for centuries, it is only when aroused by epidemics of far reaching and devastating proportions that man rises to pit his intelligence and energies against the rat. Rats and all ectoparasites dependent upon them and vectors of certain rat-born diseases were introduced into the country in the early colonial days and followed the settling of this country. By 1923, every state and

city. including Rochester, was inhabited by rats. Early in the summer of 1924, a plague of a virulent type appeared on the Pacific coast.

The U. S. Department of Agriculture, studying the problem, recommended the use of barium carbonate poison as effective in killing rats. The Health Bureau distributed thousands of free packages of barium carbonate mixed with feed grains for use by the public. Inspectors left packages on rat complaints. All the complainant had to do was to add water and mix to a paste consistency and place the baits.

In 1928, the International Rat Congress in Paris announced the use of Red Squill as an effective rat poison and relatively harmless to pets and children. The Health Bureau abandoned the barium carbonate poison baits and recommended, through letters and pamphlets, the use of Red Squill as a rodenticide for killing rats. In 1925, the Womens' Clubs of Rochester urged and backed a Public Works ordinance for standard receptacles to handle ashes, garbage and rubbish. Health Bureau inspectors began to recommend better garbage receptacles as an effective control measure to help starve out the rat. Garbage sheds were rat-proofed or torn down. Accumulations of garbage and refuse were ordered cleaned up.

Nuisances and complaints of rats showed a close correlation with the careless handling of refuse and garbage by householders, tradesmen and at city dumps.

Following the 2nd world war, lack of metal receptacles for garbage and rubbish, plus careless handling of refuse throughout the city, permitted the rat population to again flourish. In 1945, the Health Bureau established a Rat Control Program to develop a continuing program designed to Starve the Rat. Clean Out the Rat. Build Out the Rat and Kill the Rat. This four-point program, which gained national recognition, is still in progress. Educational programs plus cooperation with food industries and health agencies in neighborhood programs have done much to reduce the rat population in Rochester and made the public aware of the menace of the rat to comfortable, healthful living.

In 1945, a one-day rat control course was put on in Rochester by the U.S. Fish and Wildlife Service. Over 50 Health Officers in Western New York attended this conference. A definite rat control program has demonstrated tangible community benefits. Numerous rat control projects have since been developed, consisting mainly of education of the public, includ-



Plumbing Inspection Essential Part Of Public Health Work.

ing school children, in methods for carrying out rat control work and the reasons for it. The city Department of Public Works developed an active program of poisoning rats on city dumps and other infested city owned properties. Three times a year, a specially trained crew does this work.

In 1947, under the guidance of a trained Health Bureau Sanitarian, the Rochester Rat Control Council was established. This council consists of: The Health Association, Chamber of Commerce, Board of Education, Pest Control Operators, League of Women Voters and organized neighborhood groups. All these agencies joined in a cooperative effort to control the rat. Only by organizing groups of people in our community to do something about the rat problem can we expect to cope with the rat.

Plumbing Inspection

Like all other phases of health work, the plumbing industry has made great strides toward the betterment of sanitation and the resultant safeguarding of the health of the community during the past 50 years. Old-timers can recall the inconveniences due to lack of modern plumbing at the turn of the century. The outside privy vault and the Saturday night bath mark this period well. The washtub usually placed close to the kitchen stove, especially in winter, was supplied with hot water from a reservoir in the back of the wood or coal burning kitchen range usually supplemented by a couple of kettles of water heated on top of the stove. Shower baths are now the common convenience in modern homes. The automatic heater for domestic hot water has supplanted the old stove reservoir. the side arm gas water heater which had made obsolete the old furnace coil and stove hot water front.

In 1900, only a limited number of homes were equipped with the luxury of an old, hightank water closet, a copper bathtub and marble topped lavatory with the old china bowl. The high tank closet later was replaced by the low-down tank with bowl which is now being replaced by the still lower one-piece silent action combination in homes. In public buildings, the flushometer valve has replaced the closet combination and at the present time, the wall hung closet is taking the place of the floor set closet.

In schools, offices and public buildings, the modern drinking fountain has replaced the old germ-laden water glass. Our homes are now equipped with garbage disposals, dishwashing machines, automatic washing machines, oil and gas fired heating systems.

Our Federal, State and Local governments have done much by legislation to eliminate the pollution of our lakes, streams and water supplies. They are planning still more programs along this line of essential protection. Since 1900, the sanitary engineers have accomplished much in the treatment and safe disposal of municipal sewage; this is another safeguard to health which must be extended to both rural and urban sections of the community.

Further developments are in the making in the field of air conditioning for our stores, theaters, offices, shops and homes toward a more comfortable and



Pool Operators Learn To Check Water.

healthful atmosphere while at work or play.

Swimming Pools

Fifty years ago, a very small percentage of the population of Rochester were able to swim. The probable cause was that swimming pools, at that time, were only in the planning stages and a trip to the lake at Charlotte or some other nearby beach was an event that was looked forward to with much joy and anticipation. Even for the people who were able to frequent these beaches, bathing, not swimming was the sport of the day and only the brave ventured out into

chest deep water.

Early in the twentieth century, the first swimming pool was installed. After a trial period and several changes in method of operation, which included installation of circulating systems, filters and water sterilization, the value of the pools was accepted to such an extent that today 24 artificial swimming pools offer safe and healthful recreation in Rochester.

At the turn of the century, the "Ole Swimming Hole" was frequented by tired and hot city dwellers in waters grossly polluted with drainage from cess pools, septic tanks, sewers and trade waste from the growing industrial plants in Rochester. Drownings were frequent as bathers ventured out beyond their depth. The hazards of contaminated waters were always present. Today, through our fine swimming pool programs in the public schools and American Red Cross training classes, plus the cooperation of local newspapers, many "Learn

to Swim' classes have been conducted so that many of our youth today have learned to swim at an early age to afford this life-saving protection to themselves.

Today, the 24 artificial swimming pools in Rochester are inspected weekly; the samples of water show a high degree of sanitation far removed from the contamination of the "Ole Swimming Hole." Two bathing beaches, Durand Eastman and Ontario Beach, are under constant protection to the bathers under health and safety regulations. The modern swimming pools provide year around healthful recreation for our adults and youths. These pools must meet rigid State requirements covering construction, drainage, chlorination. cleaning, locker rooms, safety equipment and daily tests of the purity of the water. As an indication of the vital part the swimming pools played in the city of Rochester, in 1949, 755,-469 bathers enjoyed this healthful recreation

Hygiene Of Housing

Rochester has grown into a city of homes, gardens, parks and recreation areas that has made for comfortable living during the past 50 years. The high percentage of home ownership and de-

velopment of real estate tracts has made this possible.

During the past 2 decades, war and economic stress have caused deterioration of structures, overcrowding, lack of essential facilities and proper maintenance, up to minimum health standards. Lack of suitable housing at various income and rent levels aggravated the situation. Overcrowded and substandard dwellings and buildings had to be utilized. By 1948, construction of new private and public housing projects, new home buildings and rehabilitation of old buildings, to provide more rental units temporarily, took up the influx of returning veterans. With many dwelling units in sub-standard areas needing rehabilitation or demolition. the city undertook to activate such a program by the passage of an ordinance, "The Hygiene of Housing," which became effective on July 15, 1949.

The advent of the Health Bureau into the housing phase of environmental sanitation near the mid-century emphasizes the basic human need for comfortable safe shelter in a clean environment. This means plenty of clean potable water, safe plumbing facilities, sufficient living space with adequate windows for light and ventilation, adequate and safe heating units, rat-proofed dwelling units, vermin control and the proper disposal of garbage and rubbish.

The Hygiene of Housing Law points the way to maintenance of Rochester homes, dwellings or apartments to the minimum basic standards for healthful living. Its application to an area of sub-standard homes and buildings, deteriorating for over 125 years, has brought about Rochester's first large scale public housing project planned in the Baden-Ormond area. As our city grows and buildings deteriorate,



Before





After

rehabilitation or demolition of sub-standard dwelling units and development of an environmental sanitation program should do much in the next years to preserve our standards and way of life in Rochester, a city of homes.

What Will The Next Decades Bring?

With the gains that have been recorded during the first half century, one can predict that further progress will be made in safeguarding health.

In some fields, maximum benefits have nearly been achieved and death rates are already exceedingly low. The problem is to make these benefits available to more people. Maternal mortality, for example, is extremely low where all safeguards are applied, but not all mothers enjoy the assurance that they will safely complete their pregnancy.

Much needs to be learned about certain unsolved problems of infancy and childhood. Can congenital deformities in the new born be prevented? Already there is increasing evidence that some congenital malformations result from certain virus diseases in the mother early in pregnancy. Further studies may clarify this age-old mystery and preventive measures can then be employed.

Blood diseases, notably leukemia, rheumatic fever and polio are the unsolved problems of childhood. Research in these

diseases will continue unabated until a solution for their control is found.

Will cancer ultimately be so well understood that the disease can be prevented? That is not impossible in the light of previous discoveries.

Can the great toll of heart disease be reduced or at least deferred to old age? The last year has witnessed the most intensive investigations in all phases of heart ailments. New facts are being brought to light which ultimately will make possible better control of heart disease.

So much has happened in recent years to improve the comforts of home it is hard to imagine further improvements. However, there will be more. The many conveniences available to those who can afford them will probably become standard for modest homes. No one should be denied a pleasant and safe environment unless they do not desire it.

The years to come will not bring answers to all of our problems, but human ingenuity will solve many of them. New ones will arise as our society becomes more congested and complex. Of greatest importance will be the

need of holding the gains already made which have contributed so much to man's happiness during the past 50 years.

COMMUNICABLE DISEASE CASES 1948-1949

Year	Per	tussis	M.	easles		arlet ver		ph- ria		ohoid ver		neu- onia	Т	. В.	Po	lio		rly hilis
Mo.	'48	'49	'48	'49	'48	'49	'48	'49	′48	'49	′48	'49	'48	'49	'48	'49	'48	'49
Jan.	17	9	3	146	55	57	1	0	0	0	101	86	33	20	1	-į	11	9
Feb. Mar.	8	8 11	5	477 1182	36 41	59 39	0	0	0	0	79 104	85 78	12 30	29 32	0	ľ	12	5 5
Apr.	2	19	10	1068	27	23	ŏ	ŏ	۱ĭ	ŏ	67	118	31	19	ò	ĭ	4	2
May	2	17	io	651	33	21	Ŏ	ŏ	ō	ŏ	73	74	19	Žĺ	ŏ	ō	4	6
June	4	31	40	181	16	17	0	0	1	0	83	67	18	22	0	0	6	5
July	7	36	16	41	8	4	0	0	1	0	45	54	22	26	1	2	11	4
Aug.	14	48	5	3	4	0	0	0	0	0	46	53	24	30	3	25	6	3
Sept.	2	33	3	1	1	1	0	0	0	0	44	63	10	15	4	13	10	2
Oct.	0	9	24	1	13	6	0	1	1	0	65	90	20	20	4	14	4	0
Nov.	5	30	44	0	25	4	0	1	0	0	94	69	20	14	0	1	5	2
Dec.	_6	27	80	2	50	5	0_	0	0	0	70	133	16	17	0	0	11	1
Total	75	278	245	3753	309	236	1	2	4	0	871	970	255	265	14	58	93	44

VITAL STATISTICS OCTOBER, NOVEMBER, DECEMBER, 1949 JANUARY, FEBRUARY, MARCH, 1950

	BIR	THS	DE	ATHS	AGE GROUPS			
	1949 1950	1948 1949	1949 1950	1948 1949		1949 1950	1948 1949	
Total recorded Resident	5166 3353 19.6 5145 72	5263 3491 20.6 5243 98	25	1965 1906 11.2 Mortality 24 under one 1,000 live	Under one 1- 5 5-10 10-15 15-30 30-50 50-70 70 and over	147 24 5 4 28 207 888 964	139 19 9 2 32 174 770 820	

DEATHS FROM SELECTED CAUSES OCTOBER, NOVEMBER, DECEMBER, 1949 JANUARY, FEBRUARY, MARCH, 1950

	1949 1950	1948 1949
Appendicitis	4	
Arteriosclerosis	91	71
Cancer (all forms)	39î	310
Diabetes mellitus	37	54
Diphtheria	ĭ	7
Heart diseases	89Î	733
Intracranial lesions of vascular origin.	198	167
Kidney diseases	48	63
Liver diseases	37	32
Meningitis	37	32
Pneumonia	87	- 1
Puerperal state	٥/	59
Syphilis.	Ģ	Ş
Tuberculosis (all forms)	6	1
Accidents—total	56	48
Motor-vehicle accidents.	89	87
Motor-vehicle accidents	24	2 6
Suicides. Homicides	20	19
Homicides	l	_ 1
All other causes of death	330	375

Rochester Health Bureau Staff-August 1, 1950

General Administration

ALBERT D. KAISER, M.D.,	
	Health Officer Deputy Health Officer ternal and Child Health Services
ELIZABETH C. SMITH	 Administrative Assistant Senior Account Clerk

Clerical Staff

Carmela Castellano lean Clancy Maric A. De Prez Joseph De Tample Patrick J. Fedele Honora Flanigan Beatrice S. Flynn Pauline R. Gaver Marie Guarrera Dolores McBride Marie Maltese

Theresa M. Meloni Elizabeth K. Myer Daisy Preston Kathryn A. Reynell Mildred I. Reynolds Adeline L. Sedgwick Carol R. Sherman Frank Sherwood Nathan Strom Louise Thesing Ruth E. Vogler

Adelaide Walters

Food and Sanitation

GEORGE A. WEST, B.S. Associate Sanitarian
MILTON H. COVERT, D.V.M. Veterinarian

Sanitary Personnel

Leo C. Andrus, Ph.G. Frank J. Ciarpelli Walter J. Corcoran Dirk Das Edgar W. Dobberton Francis P. Doyle Leon J. Fischer Michael J. Fortuna, B.S. Joseph W. Freeman Charles H. Hertel David B. Hill Edmund C. Kataskas Walter A. Kucharski Fermin I. Lanigan

Frederick J. Leathers
Nathan Lawrence
Joseph J. Lorson
Carl A. Lupo
George Mustardo
Arthur W. Oliver
Herbert E. Olney
Hubert L. Poole
John R. Quinn
William L. Raab
Nicholas L. Rittersbach
Max H. Schapiro
Walter F. Stoepel
Harold Wesche

Health Bureau Laboratories

HOWARD SLAVIN, M.D.

E. P. OFFUTT, Ph.D.

JACOB KOOMEN, M.D.

Director of Laboratories

Research Associate

Senior Technicians

Hester Austin, B.S., R.M.T.

Harold Wingate, B.S.

Carol M. Plass, A.B.

Technicians

Penelope Davis Elizabeth Gavett Dorothy Grahame Edith Howard Mary Kinnerney Edith Lipphardt Dorothy Miller Harriet Parkhurst Joyce Roeding Mary Ellen Shea

Medical Social Work

Plumbing

Plumbing Inspectors

Bernard A. Clicquennoi Thomas J. Gavaghan Philip McCaffrey James E. Riggs

Public Health Education

MARY KARPIAK, M.A., M.P.H.Ed. Public Health Educator

Public Health Nursing

KATHERINE C. NEILL, R.N., B.S....... Director of Public Health Nursing Grace B. CHILMAN, R.N., B.S..... Assistant Director of Public Health Nursing

Supervising Public Health Nurses

Jean M. Daniels, R.N., B.S. Marv Di Candia, R.N., M.A. Ruby R. Hendryx, R.N., B.S. Marie H. Mou, R.N., B.S.

Wanda Pestke, R.N., B.S.

Clinic Nurses

Estelle Furstoss, R.N.

Florence Naylon, R.N.

Staff Public Health Nurses

Madeline Affleck, R.N. Virginia Almarode, R.N. Elva Balling, R.N. Margaret Barber, R.N. Corinne Barnett, R.N. Irene Bowes, R.N. Mary Cavanaugh, R.N. Mary A. Clement, R.N. Mary K. Clement, R.N. Ruby Cody, R.N. Virginia Colburn, R.N. Margaret Cook, R.N., Margaret Cook, R.N., B.S. Marion Costello, R.N. Dorothy Costich, R.N.

Loretta Dean, R.N.
Frances Dolan, R.N.
Frances Donehew, R.N.
Grace Dowdle, R.N.
Helen Egan, R.N.
Catherine Foster, R.N.
Lillian Franks, R.N.
Emma Frey, R.N.
Rose Fritz, R.N.
Phyllis Gammiero, R.N.
Louise Griswold, R.N.
Frances Heaney, R.N.
Madeline Hoctor, R.N.
Kathryn Holyer, R.N.
Emma Ide, R.N.

Nancy Kelly, R.N.
Angela Latin, R.N.
Ann Legnini, R.N.
Iona Lerkins, R.N.
Grace MacFarland, R.N.
Gertrude McDonald, R.N.
Ethel Miller, R.N.
Helen Mishia, R.N.
Helen Moriarty, R.N.
Ruth Murphy, R.N.
Ethel Myers, R.N., B.S.
Madeline O'Keefe, R.N.
Mary O'Neill, R.N.
Iola Peth, R.N., B.S.
Ann Pettibone, R.N.
Helen Rausch, R.N.

Anna Resch, R.N.
Sadie Riebe, R.N.
Helen Sauer, R.N.
Helen Scalzo, R.N.
Elizabeth Schiller, R.N.
Suzanne Sessler, R.N.
Cecelia Shaw, R.N.
Geraldine Sorg, R.N.
Stella Spearin, R.N.
Florence Trentman, R.N.
Elizabeth Van Neil, R.N.
Glenna Virkus, R.N.
Ardis Vokes, R.N., B.S.
Ruby Wagner, R.N.
Mary Walsh, R.N.
Barbara Walter, R.N.
Ella Whitmer, R.N.

Marjorie Winograd, R.N.

Public Health Physicians

George Bantleon, M.D.
Robert Butler, M.D.
Sam Cassara, M.D.
Edgar Cook, M.D.
Lucy Baker Foster, M.D.
Roland Goldstein, M.D.
Joseph Hallett, M.D.
John A. Heffernan, M.D.
Leo Hofschneider, M.D.
Charles Kaufman, M.D.

J. Eugene Kraft, M.D.
William Levinstein, M.D.
Saul Moress, M.D.
Lawrence Nacey, M.D.
Edward Nugent, M.D.
Mary Saxe, M.D.
John Schreiber, M.D.
Rocco Stio, M.D.
Willard Van Graafeiland, M.D.
Albert H. Waffle, M.D.

Lucy White, M.D.

Vital Statistics

HENRY LIEBERWURST. Registrar
ARTHUR E. BERNHARDT Assistant Registrar
ANTHONY E. VOELKL Photostat Operator

Building Maintenance

Theresa Bruckner Charles M. Doyle Roy A. Fetzer Mary J. Goethals Merrill Ketchell Sam Muscarella Vivian C. Toellner William Wade